Part 61

Licensing: Pilots, Flight Instructors, and Ground Instructors

TABLE OF CONTENTS

Subpart A
General

61.1 Applicability and definitions.

(a) This part prescribes:
  (1) The requirements for issuing pilot, flight instructor, and ground instructor licenses, certificates, and/or ratings; the conditions under which those licenses and ratings are necessary; and the privileges and limitations of those licenses and ratings.
  (2) The requirements for issuing pilot, flight instructor, and ground instructor authorizations; the conditions under which those authorizations are necessary; and the privileges and limitations of those authorizations.
  (3) The requirements for issuing pilot, flight instructor, and ground instructor licenses and ratings for persons who have taken courses approved by the Egyptian Civil Aviation Authority (ECAA) under other parts of the Egyptian Civil Aviation Regulations (ECARs).

(b) For the purpose of this part:
  (1) Aeronautical experience means pilot time obtained in an aircraft, flight simulator, or flight training device used for meeting the appropriate training and flight time requirements for an airman license, rating, flight review, or recency of flight experience requirements of this part.
  (2) Authorized instructor means :
    (i) A person who holds a valid ground instructor license issued under Part 61 of the ECARs when conducting ground training in accordance with the privileges and limitations of his or her ground instructor license;
    (ii) A person who holds a current flight instructor license issued under Part 61 of the ECARs when conducting ground training or flight training in accordance with the privileges and limitations of his or her flight instructor license; or
    (iii) A person authorized by the ECAA to provide ground training or flight training under Part 61, 121, or 142 of the ECARs when conducting ground training or flight training in accordance with that authority.
  (3) Cross-country time means :
    (i) Except as provided in paragraphs (b)(3)(ii) through (b)(3)(v) of this section, time acquired during flight:
      (A) Conducted by a person who holds a pilot license;
      (B) Conducted in an aircraft;
      (C) That includes a landing at a point other than the point of departure; and
      (D) That involves the use of dead reckoning, pilot age, electronic navigation aids, radio aids, or other navigation systems to navigate to the landing point.
    (ii) For the purpose of meeting the aeronautical experience requirements (except for a rotorcraft category rating), for a private pilot license, a commercial pilot license, or an instrument rating, time acquired during a flight:
      (A) Conducted in an appropriate aircraft;
      (B) That includes a point of landing that was at least a straight-line distance of more than 50 nautical miles from the original point of departure; and
      (C) That involves the use of dead reckoning, pilot age, electronic navigation aids, radio aids, or other navigation systems to navigate to the landing point.
    (iii) For the purpose of meeting the aeronautical experience requirements for any pilot license with a rotorcraft category rating or an instrument-helicopter rating, time acquired during a flight :
      (A) Conducted in an appropriate aircraft;
      (B) That includes a point of landing that was at least a straight-line distance of more than 25 nautical miles from the original point of departure; and
      (C) That involves the use of dead reckoning, pilot age, electronic navigation aids, radio aids, or other navigation systems to navigate to the landing point.
    (iv) For the purpose of meeting the aeronautical experience requirements for an airline transport pilot license (except with a rotorcraft category rating), time acquired during a flight :
      (A) Conducted in an appropriate aircraft;
      (B) That is at least a straight-line distance of more than 50 nautical miles from the original point of departure; and
      (C) That involves the use of dead reckoning, pilot age, electronic navigation aids, radio aids, or other navigation systems.

(v) For a military pilot who qualifies for a commercial pilot license (except with a rotorcraft category rating) under 61.73 of this part, time acquired during a flight:
(A) Conducted in an appropriate aircraft;
(B) That is at least a straight-line distance of more than 50 nautical miles from the original point of departure; and
(C) That involves the use of dead reckoning, pilot age, electronic navigation aids, radio aids, or other navigation systems.

(4) Examiner means any person who is authorized by the ECAA to conduct a pilot proficiency test or a practical test in accordance with the ECAA Examination Standards Handbook for an airman license or rating issued under this part, or a person who is authorized to conduct a knowledge test under this part.

(5) Flight simulator means a device that;

(i) Is a full-size aircraft cockpit replica of a specific type of aircraft, or make, model, and series of aircraft;
(ii) Includes the hardware and software necessary to represent the aircraft in ground operations and flight operations;
(iii) Uses a force cueing system that provides cues at least equivalent to those cues provided by a 3 degree freedom of motion system;
(iv) Uses a visual system that provides at least a 45 degree horizontal field of view and a 30 degree vertical field of view simultaneously for each pilot; and
(v) Has been evaluated, qualified, and approved by the ECAA or by the civil aviation authority of a contracting State to the Convention on International Civil Aviation in a manner accepted by the ECAA.

(6) Flight training means that training, other than ground training, received from an authorized instructor in flight in an aircraft.

(7) Flight training device means a device that:

(i) Is a full-size replica of the instruments, equipment, panels, and controls of an aircraft, or set of aircraft, in an open flight deck area or in an enclosed cockpit, including the hardware and software for the systems installed, that is necessary to simulate the aircraft in ground and flight operations;
(ii) Need not have a force (motion) cueing or visual system; and
(iii) Has been evaluated, qualified, and approved by the ECAA or by the civil aviation authority of a contracting State to the Convention on International Civil Aviation in a manner accepted by the ECAA.

(8) Ground training means that training, other than flight training, received from an authorized instructor.

(9) Instrument approach means an approach procedure as defined in Annex 4 to the Convention on International Civil Aviation.

(10) Instrument training means that time in which instrument training is received from an authorized instructor under actual or simulated instrument conditions.

(11) Knowledge test means a test on the aeronautical knowledge areas required for an airman license or rating that can be administered in written form or by a computer.

(12) Pilot time means that time in which a person:
(i) Serves as a required pilot flight crewmember;
(ii) Receives training from an authorized instructor in an aircraft, flight simulator, or flight training device; or
(iii) Gives training as an authorized instructor in an aircraft, flight simulator, or flight training device.

(13) Practical test means a test on the areas of operations for an airman license, rating, or authorization that is conducted by having the applicant respond to questions and demonstrate maneuvers in flight, in a flight simulator, or in a flight training device.

(14) Set of aircraft means aircraft that share similar performance characteristics, such as similar airspeed and altitude operating envelopes, similar handling characteristics, and the same number and type of propulsion systems.

(15) Training time means training received:
(i) In flight from an authorized instructor;
(ii) On the ground from an authorized instructor; or
(iii) In a flight simulator or flight training device from an authorized instructor.

61.3 Requirement for licenses, ratings, and authorizations.

(a) Pilot license. A person may not act as pilot in command or in any other capacity as a required pilot flight crewmember of a civil aircraft of A.R.E registry, unless that person
  (1) Has a valid pilot license or special purpose pilot authorization issued under this part in that person's physical possession or readily accessible in the aircraft when exercising the privileges of that pilot license or authorization., and
  (2) Has a photo identification that is in that person's physical possession or readily accessible in the aircraft when exercising the privileges of that pilot license or authorization. The photo identification must be a:
    (i) Government identification card issued by the Egyptian government;
    (ii) A.R.E Armed Forces' identification card;
    (iii) Official passport; or
    (iv) Other form of identification that the ECAA finds acceptable.

(b) Required pilot license for operating a foreign-registered aircraft. A person may not act as pilot in command or in any other capacity as a required pilot flight crewmember of a civil aircraft of foreign registry within Egypt, unless that person's pilot license:
  (1) Is valid and in that person's physical possession, or readily accessible in the aircraft when exercising the privileges of that pilot certificate; and
  (2) Has been issued under this part, or has been issued or validated by the country in which the aircraft is registered.

(c) Medical certificate.
  (1) Except as provided for in paragraph (c)(2) of this section, a person may not act as pilot in command or in any other capacity as a required pilot flight crewmember of an aircraft, under a license issued to that person under this part, unless that person has a current and appropriate medical certificate that has been issued under part 67 of the ECARs.
  (2) A person is not required to meet the requirements of paragraph (c)(1) of this section if that person:
    (i) Is exercising the privileges of a flight instructor license, provided the person is not acting as pilot in command or as a required pilot flight crewmember;
    (ii) Is exercising the privileges of a ground instructor license;

(d) Flight instructor license.
  (1) A person who holds a flight instructor license issued under this part must have that license, or other documentation acceptable to the ECAA, in that person's physical possession or readily accessible in the aircraft when exercising the privileges of that flight instructor license.
  (2) Except as provided in paragraph (d)(3) of this section, no person other than the holder of a flight instructor license issued under this part with the appropriate rating on that license may:
    (i) Give training required to qualify a person for solo flight and solo cross-country flight;
    (ii) Endorse an applicant for a:
      (A) Pilot license or rating issued under this part;
      (B) Flight instructor license or rating issued under this part; or
      (C) Ground instructor license or rating issued under this part;
    (i) Endorse a pilot logbook to show training given; or
    (ii) Endorse a student pilot license and logbook for solo operating privileges.
  (3) A flight instructor license issued under this part is not necessary:
    (i) Under paragraph (d)(2) of this section, if the training is given by a person who is qualified in accordance with subpart C of part 142 of the ECARs, provided the training is conducted in accordance with an approved part 142 training program;
    (ii) Under paragraphs (d)(2)(i), (d)(2)(ii)(C), and (d)(2)(iii) of this section, if the training is given by the holder of a ground instructor license in accordance with the privileges of the license;

(e) Instrument rating. No person may act as pilot in command of a civil aircraft under IFR or in weather conditions less than the minimums prescribed for VFR flight unless that person holds:
  (1) The appropriate aircraft category, class, type (if required), and instrument rating on that person's pilot license for any airplane, helicopter, or powered-lift being flown;
  (2) An airline transport pilot license with the appropriate aircraft category, class, and type rating (if required) for the aircraft being flown;

(f) Category II pilot authorization. Except for a pilot conducting Category II operations under part 121, a person may not:
  (1) Act as pilot in command of a civil aircraft during Category II operations unless that person:

(i) Holds a current Category II pilot authorization for that category or class of aircraft, and the type of aircraft, if applicable; or
(ii) In the case of a civil aircraft of foreign registry, is authorized by the country of registry to act as pilot in command of that aircraft in Category II operations.

(2) Act as second in command of a civil aircraft during Category II operations unless that person:
(i) Holds a valid pilot license with category and class ratings for that aircraft and a current instrument rating for that category aircraft;
(ii) Holds an airline transport pilot license with category and class ratings for that aircraft; or
(iii) In the case of a civil aircraft of foreign registry, is authorized by the country of registry to act as second in command of that aircraft during Category II operations.

(g) Category III pilot authorization. Except for a pilot conducting Category III operations under part 121, a person may not:
(1) Act as pilot in command of a civil aircraft during Category III operations unless that person:
(i) Holds a current Category III pilot authorization for that category or class of aircraft, and the type of aircraft, if applicable; or
(ii) In the case of a civil aircraft of foreign registry, is authorized by the country of registry to act as pilot in command of that aircraft in Category III operations.

(2) Act as second in command of a civil aircraft during Category III operations unless that person:
(i) Holds a valid pilot license with category and class ratings for that aircraft and a current instrument rating for that category aircraft;
(ii) Holds an airline transport pilot license with category and class ratings for that aircraft; or
(iii) In the case of a civil aircraft of foreign registry, is authorized by the country of registry to act as second in command of that aircraft during Category III operations.

(h) Category A aircraft pilot authorization. The ECAA may issue a certificate of authorization for a Category II or Category III operation to the pilot of a small aircraft that is a Category A aircraft, if:
(1) The ECAA determines that the Category II or Category III operation can be performed safely by that pilot under the terms of the certificate of authorization; and
(2) The Category II or Category III operation does not involve the carriage of persons or property for compensation or hire.

(i) Ground instructor license.
(1) Each person who holds a ground instructor license issued under this part must have that license in that person's physical possession or immediately accessible when exercising the privileges of that license.
(2) Except as provided in paragraph (i)(3) of this section, no person other than the holder of a ground instructor license, issued under this part, with the appropriate rating on that license may:
(i) Give ground training required to qualify a person for solo flight and solo cross-country flight;
(ii) Endorse an applicant for a knowledge test required for a pilot, flight instructor, or ground instructor license or rating issued under this part; or
(iii) Endorse a pilot logbook to show ground training given.
(3) A ground instructor license issued under this part is not necessary:
(i) Under paragraph (i)(2) of this section, if the training is given by the holder of a flight instructor license issued under this part in accordance with the privileges of that license;
(ii) Under paragraph (i)(2) of this section, if the training is given by a person who is qualified in accordance with subpart C of part 142 of this chapter, provided the training is conducted in accordance with an approved part 142 training program;
(iii) Under paragraph (i)(2)(iii) of this section, if the training is given by an authorized flight instructor under section 61.41 of this part.

(j)Age limitation for certain operations:

Definitions.

*"International air service," as used in paragraph (j) of this section, means scheduled air service performed in airplanes for the public transport of passengers, mail, or cargo, in which the service passes through the airspace over the territory of more than one country.

*"International air transportation," as used in paragraph (j) of this section, means air transportation performed in airplanes for the public transport of passengers, mail, or cargo, in which the service passes through the airspace over the territory of more than one country.

(1) The ECAA having issued pilot licences, shall **not permit** the holders thereof to act as **Pilot** of an aircraft engaged in international commercial air transport operations if the licence holders have attained their 60th birthday in the case of operations with one pilot,or;

(2) The ECAA having issued pilot licences, shall **permit** the holders thereof to act as **Pilot** of an aircraft engaged in international commercial air transport operations if the licence holders have attained their 65th birthday, in the case of operations with more than one pilot,

(3) The age limitations for certain operation as mentioned in (j) (1) & (2) above shall permit under the following conditions:

(i) Such person shall meets all requirements to act as a pilot in that capacity, including meeting the requirements of class I medical assessment not less than once every six calendar months before reaching his or her 65th birthday, as specified in ECAR Part 67.9(d),(e) and;

(ii) Such person shall not be allowed to exceed a maximum 75% of required accumulative flying hours for pilots during any 30 consecutive day mentioned in ECAR Part 121.515(b) subpart Q.

(4) No Egyptian operator can hire any person to serve as a pilot over 60th years age, unless authorization is issued by the ECAA to such operator for each person once after reaching his or her 60th birthday until reaching his or her 65th birthday.

(5) The ECAA may allow a person to serve as an aircraft flight instructor or check airman or designated pilot examiner on aircraft with a maximum take off weight more than 5700 KG before reached his or her 65th birthday and;

(6) No person may serve as a pilot on any aircraft operated in international air transportation by any foreign air carrier within or through any Egyptian airspace, if that person has reached his or her 65th birthday; and

(7) The ECAA may allow a person who has reached his or her 60th birthday, but has not reached his or her 65th birthday, to act in non-revenue operation only as: a private pilot, flight instructor for aircraft with maximum take off weight equal to or less than 5700 kg, in domestic flights only before reached his or her 65th birthday and;

(8) The ECAA may allow a person who has reached his or her 60th birthday, but has not reached his or her 65th birthday, to act as a pilot on any aircraft engaged in sight seeing, agricultural operations or banner towing operations for compensation or hire in domestic flights only.

(k) Special purpose pilot authorization. Any person that is required to hold a special purpose pilot authorization, issued in accordance with section 61.77 of this part, must have that authorization and the person's foreign pilot license in that person's physical possession or have it readily accessible in the aircraft when exercising the privileges of that authorization.

(l) Inspection of license. Each person who holds an airman license, medical certificate, authorization, or license required by this part must present it and their photo identification as described in paragraph (a)(2) of this section for inspection upon a request from:

(1) The ECAA;

(2) An authorized representative of the MCA Central Administration for Aviation Accidents; or

(3) Any Governmental Officer.

61.4 Qualification and approval of flight simulators and flight training devices.

(a) Except as specified in paragraph (b) or (c) of this section, each flight simulator and flight training device used for training, and for which an airman is to receive credit to satisfy any training, testing, or checking requirement under the ECARs, must be qualified and approved by the ECAA for:

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

(2) Each particular maneuver, 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) Any device used for flight training, testing, or checking that has been determined to be acceptable to or approved by the ECAA prior to April 1, 2006, which can be shown to function as originally designed, is considered to be a flight training device, 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 ECAA may approve a device other than a flight simulator or flight training device for specific purposes.

61.5 Licenses and ratings issued under this part.

(a) The following licenses are issued under this part to an applicant who satisfactorily accomplishes the training and licensing requirements for the license sought:

(1) Pilot licenses:

(i) Student pilot.
(ii) Private pilot.
(iii) Commercial pilot.
(iv) Airline transport pilot.

(2) Flight instructor license.

(3) Ground instructor license.

(b) The following ratings are placed on a pilot license (other than student pilot) when an applicant satisfactorily accomplishes the training and licensing requirements for the rating sought:

(1) Aircraft category ratings:

(i) Airplane.
(ii) Rotorcraft.
(iii) Powered-lift.

(2) Airplane class ratings:

(i) Single-engine land.
(ii) Multiengine land.
(iii) Single-engine sea.
(iv) Multiengine sea.

(3) Rotorcraft class ratings:

(i) Helicopter.
(ii) Gyroplane.

(4) Aircraft type ratings:

(i) Large aircraft.
(ii) Turbojet-powered airplanes.
(iii) Other aircraft type ratings specified by the ECAA through the aircraft type certification procedures.
(iv) Aircraft that is certificated for operations with a minimum crew of at least two pilots.
(v) helicopters and powered-lifts certificated for single-pilot operation except where a class rating has been issued under
(vi) any aircraft whenever considered necessary by the Licensing Authority.

(5) Instrument ratings (on private and commercial pilot licenses only):

(i) Instrument—Airplane.
(ii) Instrument—Helicopter.
(iii) Instrument—Powered-lift.

(c) The following ratings are placed on a flight instructor license when an applicant satisfactorily accomplishes the training and certification requirements for the rating sought:

(1) Aircraft category ratings:
(i) Airplane.
(ii) Rotorcraft.
(iii) Powered-lift.

(2) Airplane class ratings:
(i) Single-engine.
(ii) Multiengine.

(3) Rotorcraft class ratings:
(i) Helicopter.
(ii) Gyroplane.

(4) Instrument ratings:
(i) Instrument—Airplane.
(ii) Instrument—Helicopter.
(iii) Instrument—Powered-lift.

(d) The following ratings are placed on a ground instructor license when an applicant satisfactorily accomplishes the training and licensing requirements for the rating sought:

(1) Basic.

(2) Advanced.
(3) Instrument.

(e) the provision of EAC 61-01 shall apply with regard to adding aircraft types to pilot license

61.7 Obsolete licenses and ratings.

Except for instructors authorized under part 121 of the ECARs the holder of a pilot license that bears a trainer rating may not exercise the privileges of that rating after 01 January 2008.

61.11 Expired pilot licenses and resistance.

(a) No person who holds an expired pilot license or rating may:
(1) Exercise the privileges of that pilot license or rating; or
(2) Act as pilot in command or as a required pilot flight crewmember of an aircraft of the same category and class specified on the expired pilot license or rating.
(b) A pilot license issued on the basis of a foreign pilot license will expire on the date the foreign license expires unless otherwise specified on the A.R.E. pilot license. A license without an expiration date is issued to the holder of the expired license only if that person meets the requirements of section 61.75 for the issuance of a pilot license based on a foreign pilot license.

61.13 Issuance of airman licenses, ratings, and authorizations.

(a) Application.
(1) An applicant for an airman license, rating, or authorization under this part must make that application on a form and in a manner acceptable to the ECAA.
(2) An applicant who is neither a citizen of the Arab Republic of Egypt nor a resident alien of the Arab Republic of Egypt may be refused issuance of any A.R.E. airman licenses, rating, or authorization by the ECAA.
(3) Except as provided in paragraph (a)(2) of this section an applicant who satisfactorily accomplishes the training and certification requirements for the license, rating, or authorization sought is entitled to receive that airman license, rating, or authorization.

(b) Limitations.

(1) An applicant who cannot comply with certain areas of operation required on the practical test because of physical limitations may be issued an airman license, rating, or authorization with the appropriate limitation placed on the applicant's airman license provided the:
(i) Applicant is able to meet all other certification requirements for the airman license, rating, or authorization sought;
(ii) Physical limitation has been recorded with the ECAA on the applicant's medical records; and
(iii) ECAA determines that the applicant's inability to perform the particular area of operation will not adversely affect safety.
(2) A limitation placed on a person's airman license may be removed, provided that person demonstrates for an examiner satisfactory proficiency in the area of operation appropriate to the airman license, rating, or authorization sought.

(c) Additional requirements for Category II and Category III pilot authorizations.
(1) A Category II or Category III pilot authorization is issued by a letter of authorization as part of an applicant's instrument rating or airline transport pilot license.
(2) Upon original issue, the authorization contains the following limitations:
(i) For Category II operations, the limitation is 1,600 feet RVR and a 150-foot decision height; and
(ii) For Category III operations, each initial limitation is specified in the authorization document.

(3) The limitations on a Category II or Category III pilot authorization may be removed as follows:

(i) In the case of Category II limitations, a limitation is removed when the holder shows 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.
(ii) In the case of Category III limitations, a limitation is removed as specified in the authorization.

(4) To meet the experience requirements of paragraph (c)(3) of this section, and for the practical test required by this part for a Category II or a Category III pilot authorization, a flight simulator or flight training device may be used if it is approved by the ECAA for such use.

(d) Application during suspension or revocation.

(1) Unless otherwise authorized by the ECAA, a person whose pilot, flight instructor, or ground instructor license has been suspended may not apply for any license, rating, or authorization during the period of suspension.

(2) Unless otherwise authorized by the ECAA, a person whose pilot, flight instructor, or ground instructor license has been revoked may not apply for any license, rating, or authorization for 1 year after the date of revocation.

61.14 Refusal to submit to a drug or alcohol test.

(a) This section applies to an employee who performs a function listed in appendix I to part 121 or appendix J to part 121 of the ECARs directly or by contract for a part 121 air carrier.

(b) Refusal by the holder of a license issued under this part to take a drug test required under the provisions of appendix I to part 121 or an alcohol test required under the provisions of appendix J to part 121 is grounds for:

(1) Denial of an application for any license, rating, or authorization issued under this part for a period of up to 1 year after the date of such refusal; and

(2) Suspension or revocation of any license, rating, or authorization issued under this part.

61.15 Offenses involving alcohol or drugs.

(a) A conviction for the violation of any Governmental statute relating to the growing, processing, manufacture, sale, disposition, possession, transportation, or importation of narcotic drugs, marijuana, or depressant or stimulant drugs or substances is grounds for:

(1) Denial of an application for any license, rating, or authorization issued under this part for a period of up to 1 year after the date of final conviction; or

(2) Suspension or revocation of any license, rating, or authorization issued under this part.

(b) Committing an act prohibited by parts of the ECARs is grounds for:

(1) Denial of an application for a license, rating, or authorization issued under this part for a period of up to 1 year after the date of that act; or

(2) Suspension or revocation of any license, rating, or authorization issued under this part.

(c) For the purposes of paragraphs (d), (e), and (f) of this section, a motor vehicle action means:

(1) The violation of any Governmental statute relating to the operation of a motor vehicle while intoxicated by alcohol or a drug, while impaired by alcohol or a drug, or while under the influence of alcohol or a drug;

(2) The cancellation, suspension, or revocation of a license to operate a motor vehicle for a cause related to the operation of a motor vehicle while intoxicated by alcohol or a drug, while impaired by alcohol or a drug, or while under the influence of alcohol or a drug; or

(3) The denial of an application for a license to operate a motor vehicle for a cause related to the operation of a motor vehicle while intoxicated by alcohol or a drug, while impaired by alcohol or a drug, or while under the influence of alcohol or a drug.

(d) Except for a motor vehicle action that results from the same incident or arises out of the same factual circumstances, a motor vehicle action occurring within 3 years of a previous motor vehicle action is grounds for:

(1) Denial of an application for any license, rating, or authorization issued under this part for a period of up to 1 year after the date of the last motor vehicle action; or

(2) Suspension or revocation of any license, rating, or authorization issued under this part.

(e) Each person holding a license issued under this part shall provide a written report of each motor vehicle action to the ECAA, Civil Aviation Security Division, Airport Road Ministry of Civil Aviation Complex, Cairo, Egypt, not later than 60 days after the motor vehicle action. The report must include:

(1) The person's name, address, date of birth, and airman license number;

(2) The type of violation that resulted in the conviction or the administrative action;

(3) The date of the conviction or administrative action;

(4) The Governmental Authority that holds the record of conviction or administrative action; and

(5) A statement of whether the motor vehicle action resulted from the same incident or arose out of the same factual circumstances related to a previously reported motor vehicle action.

(f) Failure to comply with paragraph (e) of this section is grounds for:

(1) Denial of an application for any license, rating, or authorization issued under this part for a period of up to 1 year after the date of the motor vehicle action; or

(2) Suspension or revocation of any license, rating, or authorization issued under this part.

61.16 Refusal to submit to an alcohol test or to furnish test results.

A refusal to submit to a test to indicate the percentage by weight of alcohol in the blood, when requested by a law enforcement officer in accordance with section 91.17(c) of the ECARs, or a refusal to furnish or authorize the release of the test results requested by the ECAA in accordance with section 91.17(c) or (d) of the ECARs, is grounds for:

(a) Denial of an application for any license, rating, or authorization issued under this part for a period of up to 1 year after the date of that refusal; or

(b) Suspension or revocation of any license, rating, or authorization issued under this part.

61.17 Drug test and ECAA enforcement action for initial and renewal license assessment:-

(From 01/01/2023) this regulation will be applied

(A)Drug Testing For Psychoactive Substances :

(a) Applicants / License holders of all classes shall undergo a drug screening test as part of their initial /renewal medical examination. and they will not intend to exercise the privileges of their license and related rating while under the influence of psychoactive substance which might render them unable to safely and properly exercise these privileges.

(b) Applicant / License holder shall not engage in any problematic use of substances.

(c) Applicant/License holder may be subjected to random test according to AME decision to indicate the use of Alcohol and /or psychoactive substances.

(d) Samples (urine sample , …….) for drug testing shall be examined only by ECAA approved laboratories at Aero medical Council Central Administration

(e)Procedures for Collecting urine samples to detect drug abuse is according to EAC 67-01 regulations

List of the drugs to be tested:

1) Cannabis (Marijuana) and its metabolites.

2) Cocaine and its metabolites.

3) Opiates with Morphine and metabolites.

4) Amphetamines.

5) Barbiturates.

6) Benzodiazepines

7) others if needed

(B)Positive Drug Testing :

Drug testing results are positive for prohibited drugs in the following conditions :

(1) Positive for cannabinoids , cocaine and / or hallucinogens .
(2) Positive for sedative hypnotics , opioids and / or amphetamine proved to be for non medical use
(3) Refusal to submit to drug testing .
(4) Leaving the Aeromedical council if a confirmatory test is required
(5) Refusal or not comply with ECAA procedure for urine samples to detect drug abuse stated EAC 67-01

(a)Consequences of Positive Drug testing:

A second sample is obtained at once for a confirmatory test in accordance with EAC 67-01 regulations
If second sample is positive for :

1- Cannabnois, cocain , or hallucinogens :
Notify ECAA to take the proper enforcement action.
2- Sedative hypnotics (Benzodiazepines , Barbiturates , …..), opioids and amphetamine:
The applicant / License holder must be evaluated by the neuropsychiatrist to confirm if the drug test is positive because of certain medical use of a specific drug that contain a prohibited substance,

the applicant/license holder must provide evidence of this medical use such as a written prescription or a written physician's recommendation. And the applicant / License holder has to be grounded for 1 week or until he or she is no longer under influence of this substance. After 1 week a new drug test shall be performed and the applicant / License holder is evaluated by the neuropsychiatrist.

a- If the drug test is negative and the candidate is properly evaluated by the neuropsychiatrist and the second stated that the applicant / License holder is no longer under influence or taking a prohibited drug for a non-medical or addiction use the applicant / License holder , he will be issued the license and subjected to follow up according to ECAA medical regulations
b- If not complied by (a) he or she will be denied their license and ECAA is notified to take the proper enforcement action .

(b)A positive drug testing after confirmatory sample as in (B : 1 , 2 or as 3,4 and 5) the following shall be done :

i. The applicant / license holder shall be notified immediately by e-mail , SMS , recorded phone message or WhatsApp message .
ii. In case of rejecting the results the applicant / License holder has the right to appeal within two (2) working days and upon his request ; the objected sample (the previously confirmed + ve sample for drugs) shall be re-examined , and the results are final .
iii. ECAA shall be officially notified with the final result for implementing the proper enforcement action according to related laws and regulations .

(C) Enforcement :

(1) For first time (confirmed positive drug test) the ECAA will suspend the license for two years .
(2) For second time (confirmed positive drug test) the ECAA will revoke the license and the applicant can not apply for any kind of aviation license .

Definitions :

- Suspended : temporary withholding the license .
- Revoked : completely termination (cancel) of the license .

61.18 Security disqualification.

(a) Eligibility standard. No person is eligible to hold a license, rating, or authorization issued under this part when the Department of National Security (DNS) has notified the ECAA in writing that the person poses a security threat.

(b) Effect of the issuance by the DNS of a Notification of Security Threat.

(1) The ECAA will suspend any person's license, rating, or authorization issued under this part if the DNS notifies the ECAA of a security threat investigation involving that person.

(2) The ECAA will revoke any license, rating, or authorization issued under this part if the person under investigation is determined to pose a security threat.

61.19 Duration of pilot and instructor licenses.

(a) General. The holder of a license with an expiration date may not, after that date, exercise the privileges of that license.

(b) Student pilot license. A student pilot license expires 24 calendar months from the month in which it is issued.

(c) The holder of a pilot license issued on the basis of a foreign pilot license may exercise the privileges of that license only while that person's foreign pilot license is effective.

(d) Flight instructor license. A flight instructor license:

is effective only while the holder has a current pilot license .

(e) Ground instructor license. A ground instructor license issued under this part is issued without a specific expiration date.

(f) Surrender, suspension, or revocation. Any license issued under this part ceases to be effective if it is surrendered, suspended, or revoked.

(g) Return of licenses. The holder of any license issued under this part that has been suspended or revoked must return that license to the ECAA when requested to do so by the ECAA.

61.21 Duration of a Category II and a Category III pilot authorization (for other than part 121 use).

(a) A Category II pilot authorization or a Category III pilot authorization expires at the end of the sixth calendar month after the month in which it was issued or renewed.

(b) Upon passing a practical test for a Category II or Category III pilot authorization, the authorization may be renewed for each type of aircraft for which the authorization is held.

(c) A Category II or Category III pilot authorization for a specific type aircraft for which an authorization is held will not be renewed beyond 12 calendar months from the month the practical test was accomplished in that type aircraft.

(d) 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 holder is considered to have passed it during the month the authorization expired.

Note: cat II and cat III authorizations are obtained according to the requirements of EAC 91-11 and EAC 91-12.

61.23 Medical certificates: Requirement and duration.

(a) Operations requiring a medical certificate. Except as provided in paragraphs (b) and (c) of this section, a person:

(1) Must hold a first-class medical certificate:

(i) when exercising the privileges of an airline transport pilot license;

(ii) when exercising the privileges of a commercial pilot license; or

(2) Must hold at least a second-class medical certificate:

(i) When exercising the privileges of a student pilot license;

(ii) When exercising the privileges of a private pilot license;

(3) when exercising the privileges of a flight instructor license the person must hold the medical assessment appropriate to the privileges of the pilot license required.

(4) Instrument rating applicants holding a private pilot license shall establish their hearing acuity on the basis of compliance with the hearing requirements for the issue of a first-class medical certificate.

(b) Operations not requiring a medical certificate. A person is not required to hold a valid medical certificate:

(1) When exercising the privileges of a ground instructor license;

(2) When serving as an examiner or check airman during the administration of a test or check for a license, rating, or authorization conducted in a flight simulator or flight training device; or

(3) When taking a test or check for a license, rating, or authorization conducted in a flight simulator or flight training device.

(c) Duration of a medical certificate.

Ref. to ECAR Part 67.9

61.25 Change of name.

(a) An application to change the name on a license issued under this part must be accompanied by the applicant's:

(1) Current airman license; and

(2) A copy of the marriage certificate, court order, or other document verifying the name change.

(b) The documents in paragraph (a) of this section will be returned to the applicant after inspection.

61.26 Language proficiency.

(a) Aero plane, airship, helicopter and powered-lift pilots, air traffic controllers and aeronautical station operators shall demonstrate the ability to speak and understand the language used for radiotelephony communications to the level specified in the language proficiency requirements.

(b) Aero plane, airship, helicopter and powered-lift pilots, air traffic controllers and aeronautical station operators, shall demonstrate the ability to speak and understand the language used for radiotelephony communications to the level specified in the language proficiency requirements in (EAC00_21). The language proficiency required must be at least Operational Level (level 4) of the ICAO Language Proficiency Rating (EAC 00_21)

(c) Aero plane, airship, helicopter and powered-lift pilots, air traffic controllers and aeronautical station operators who demonstrate proficiency below the Expert Level (Level 6) as specified in the language proficiency requirements in (EAC00_21) shall be formally evaluated by the ECAA or an organization approved by the ECAA at intervals in accordance with an individual's demonstrated proficiency level as follows:

(1) Those demonstrating language proficiency at the Operational Level (Level 4) should be evaluated at least once every three years; and

(2) Those demonstrating language proficiency at the Extended Level (Level 5) should be evaluated at least once every six years.

(d) existing licenses shall have a Language Proficiency endorsement.

(e) Flight engineers, and glider and free balloon pilots should have the ability to speak and understand the language used for radiotelephony communications

(f) Flight navigators required to use the radiotelephone aboard an aircraft shall demonstrate the ability to speak and understand the language used for radiotelephony communications.

61.27 Voluntary surrender or exchange of license.

(a) The holder of a license issued under this part may voluntarily surrender it for:

(1) Cancellation;

(2) Issuance of a lower grade license; or

(3) Another license with specific ratings deleted.

(b) Any request made under paragraph (a) of this section must include the following signed statement or its equivalent: "This request is made for my own reasons, with full knowledge that my (insert name of certificate or rating, as appropriate) may not be reissued to me unless I again pass the tests prescribed for its issuance."

61.29 Replacement of a lost or destroyed airman license or medical certificate or knowledge test report.

(a) A request for the replacement of a lost or destroyed airman license issued under this part must be made by letter to the Ministry of Civil Aviation, ECAA, Airmen Licensing Branch, Ministry of civil aviation complex Airport Road, Cairo, Egypt, and must be accompanied by a check or money order for the appropriate fee payable to the ECAA.

(b) A request for the replacement of a lost or destroyed medical certificate must be made by letter to the Ministry of Civil Aviation, ECAA, Aero medical Certification Branch, Ministry of civil aviation complex Airport Road, Cairo, Egypt,, and must be accompanied by a check or money order for the appropriate fee payable to the ECAA.

(c) A request for the replacement of a lost or destroyed knowledge test report must be made by letter to the Ministry of Civil Aviation, ECAA, Airman Licensing Branch, Ministry of civil aviation complex Airport Road, Cairo, Egypt, and must be accompanied by a check or money order for the appropriate fee payable to the ECAA.

(d) The letter requesting replacement of a lost or destroyed airman license, medical certificate, or knowledge test report must state:

(1) The name of the person;

(2) The permanent mailing address (including ZIP code), or if the permanent mailing address includes a post office box number, then the person's current residential address;

(3) The national ID number;

(4) The date and place of birth of the license or certificate holder; and

(5) Any available information regarding the:

(i) Grade, number, and date of issuance of the license, certificate, and the ratings, if applicable;

(ii) Date of the medical examination, if applicable; and

(iii) Date the knowledge test was taken, if applicable.

61.31 Type rating requirements, additional training, and authorization requirements.

(a) Type ratings required. A person who acts as a pilot in command of any of the following aircraft must hold a type rating for that aircraft:

(1) Large aircraft .

(2) Turbojet-powered airplanes.

(3) Other aircraft specified by the ECAA through aircraft type certificate procedures.

(4) Aircraft that is certificated for operations with a minimum crew of at least two pilots.

(5) helicopters and powered-lifts certificated for single-pilot operation except where a class rating has been issued under.

(b) Aircraft category, class, and type ratings: Limitations on the carriage of persons, or operating for compensation or hire. Unless a person holds a category, class, and type rating (if a class and type rating is required) that applies to the aircraft, that person may not act as pilot in command of an aircraft that is carrying another person, or is operated for compensation or hire. That person also may not act as pilot in command of that aircraft for compensation or hire.

(c) Aircraft category, class, and type ratings: Limitations on operating an aircraft as the pilot in command. To serve as the pilot in command of an aircraft, a person must:

(1) Hold the appropriate category, class, and type rating (if a class rating and type rating are required) for the aircraft to be flown;

(2) Be receiving training for the purpose of obtaining an additional pilot license and rating that are appropriate to that aircraft, and be under the supervision of an authorized instructor; or

(3) Have received training required by this part that is appropriate to the aircraft category, class, and type rating (if a class or type rating is required) for the aircraft to be flown, and have received the required endorsements from an instructor who is authorized to provide the required endorsements for solo flight in that aircraft.

(4) Type rating as required by (a) in this section, The applicant shall have gained, under appropriate supervision, experience in the applicable type of aircraft and/or flight simulator in the following:

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

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

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

(iv) For the issue of an aero plane category type rating, upset prevention and recovery training; and

Note 1.— Procedures for upset prevention and recovery training are contained in the Procedures for Air Navigation Services — Training (PANS-TRG, Doc 9868)

Note 2.— Guidance on upset prevention and recovery training is contained in the Manual on Aero plane Upset Prevention and Recovery Training (Doc 10011)

Note 3.— The Manual of Criteria for the Qualification of Flight Simulation Training Devices (Doc 9625) provides guidance on the approval of flight simulation training devices for upset prevention and recovery training

Note 4.— The aero plane upset prevention and recovery training may be integrated in the type rating programme or be conducted immediately after, as an additional module

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

Note. — Attention is called to subpart (G) for flight instructor on the qualifications required for pilots giving flight Training

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

(vii) Demonstrated, at the airline transport pilot licence level, an extent of knowledge determined by the Licensing Authority on the basis of the requirements specified in 61.155

Note.— See the Manual of Procedures for Establishment and Management of a State's Personnel Licensing System (Doc 9379) for guidance of a general nature on cross-crew qualification and cross-credit

(d) Additional training required for operating complex airplanes.

(1) Except as provided in paragraph (e)(2) of this section, no person may act as pilot in command of a complex airplane (an airplane that has a retractable landing gear, flaps, and a controllable pitch propeller; or, in the case of a seaplane, flaps and a controllable pitch propeller), unless the person has:

(i) Received and logged ground and flight training from an authorized instructor in a complex airplane, or in a flight simulator or flight training device that is representative of a complex airplane, and has been found proficient in the operation and systems of the airplane; and

(ii) Received a one-time endorsement in the pilot's logbook from an authorized instructor who certifies the person is proficient to operate a complex airplane.

(2) The training and endorsement required by paragraph (e)(1) of this section is not required if the person has logged flight time as pilot in command of a complex airplane, or in a flight simulator or flight training device that is representative of a complex airplane prior to January 1,2006.

(e) Additional training required for operating high-performance airplanes.

(1) Except as provided in paragraph (f)(2) of this section, no person may act as pilot in command of a high-performance airplane (an airplane with an engine of more than 200 horsepower), unless the person has:

(i) Received and logged ground and flight training from an authorized instructor in a high-performance airplane, or in a flight simulator or flight training device that is representative of a high-performance airplane, and has been found proficient in the operation and systems of the airplane; and

(ii) Received a one-time endorsement in the pilot's logbook from an authorized instructor who certifies the person is proficient to operate a high-performance airplane.

(2) The training and endorsement required by paragraph (f)(1) of this section is not required if the person has logged flight time as pilot in command of a high-performance airplane, or in a flight simulator or flight training device that is representative of a high-performance airplane prior to January 1,2006.

(f) Additional training required for operating pressurized aircraft capable of operating at high altitudes.

(1) no person may act as pilot in command of a pressurized aircraft (an aircraft that has a service ceiling or maximum operating altitude, whichever is lower, above 25,000 feet MSL), unless that person has received and logged ground training from an authorized instructor and obtained an endorsement in the person's logbook or training record from an authorized instructor who certifies the person has satisfactorily accomplished the ground training. The ground training must include at least the following subjects:

(i) High-altitude aerodynamics and meteorology;

(ii) Respiration;

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

(iv) Duration of consciousness without supplemental oxygen;

(v) Effects of prolonged usage of supplemental oxygen;

(vi) Causes and effects of gas expansion and gas bubble formation;

(vii) Preventive measures for eliminating gas expansion, gas bubble formation, and high-altitude sickness;

(viii) Physical phenomena and incidents of decompression; and

(ix) Any other physiological aspects of high-altitude flight.

(2) no person may act as pilot in command of a pressurized aircraft unless that person has received and logged training from an authorized instructor in a pressurized aircraft, or in a flight simulator or flight training device that is representative of a pressurized aircraft, and obtained an endorsement in the person's logbook or training record from an authorized instructor who found the person proficient in the operation of a pressurized aircraft. The flight training must include at least the following subjects:

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

(ii) Proper emergency procedures for simulated rapid decompression without actually depressurizing the aircraft; and

(iii) Emergency descent procedures.

(g) Additional aircraft type-specific training. No person may serve as pilot in command of an aircraft that the ECAA has determined requires aircraft type-specific training unless that person has:

(1) Received and logged type-specific training in the aircraft, or in a flight simulator or flight training device that is representative of that type of aircraft; and

(2) Received a logbook endorsement from an authorized instructor who has found the person proficient in the operation of the aircraft and its systems.

(h) Additional training required for operating tail wheel airplanes.
no person may act as pilot in command of a tail wheel airplane unless that person has received and logged flight training from an authorized instructor in a tail wheel airplane and received an endorsement in the person's logbook from an authorized instructor who found the person proficient in the operation of a tail wheel airplane. The flight training must include at least the following maneuvers and procedures:

(1) Normal and crosswind takeoffs and landings;

(2) Wheel landings (unless the manufacturer has recommended against such landings); and

(3) Go-around procedures.

(i) Exceptions.

(A) This section does not require a category and class rating for aircraft not type-certificated as airplanes, rotorcraft, or powered-lifts, weight-shift-control aircraft.

(B) The rating limitations of this section do not apply to:

(i) An applicant when taking a practical test given by an examiner;

(ii) The holder of a student pilot license;

(iii) The holder of a pilot license when operating an aircraft under the authority of:

(A) A provisional type license; or

(B) An experimental license, unless the operation involves carrying a passenger;

61.33 Tests: General procedure.

Tests prescribed by or under this part are given at times and places, and by persons designated by the ECAA.

61.35 Knowledge test: Prerequisites and passing grades.

(a) An applicant for a knowledge test must have:

(1) Received an endorsement, if required by this part, from an authorized instructor certifying that the applicant accomplished the appropriate ground-training or a home study course required by this part for the license or rating sought and is prepared for the knowledge test; and

(2) Proper identification at the time of application that contains the applicant's:

(i) Photograph;

(ii) Signature;

(iii) Date of birth, which shows the applicant meets or will meet the age requirements of this part for the license sought before the expiration date of the airman knowledge test report; and

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

(b) The ECAA shall specify the minimum passing grade for the knowledge test.

61.37 Knowledge tests: Cheating or other unauthorized conduct.

(a) An applicant for a knowledge test may not:

(1) Copy or intentionally remove any knowledge test;

(2) Give to another applicant or receive from another applicant any part or copy of a knowledge test;

(3) Give assistance on, or receive assistance on, a knowledge test during the period that test is being given;

(4) Take any part of a knowledge test on behalf of another person;

(5) Be represented by, or represent, another person for a knowledge test;

(6) Use any material or aid during the period that the test is being given, unless specifically authorized to do so by the ECAA; and

(7) Intentionally cause, assist, or participate in any act prohibited by this paragraph.

(b) An applicant who the ECAA finds has committed an act prohibited by paragraph (a) of this section is prohibited, for 1 year after the date of committing that act, from:

(1) Applying for any license, rating, or authorization issued under the ECARs; and

(2) Applying for and taking any test under the ECARs.

(c) Any license or rating held by an applicant may be suspended or revoked if the ECAA finds that person has committed an act prohibited by paragraph (a) of this section.

61.39 Prerequisites for practical tests.

(a) Except as provided in paragraphs (b) and (c) of this section, to be eligible for a practical test for a license or rating issued under this part, an applicant must:

(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 training and obtained the aeronautical experience prescribed by this part for the license or rating sought;

(4) Hold at least a appropriate class medical certificate, if a medical certificate is required;

(5) Meet the prescribed age requirement of this part for the issuance of the license or rating sought;

(6) Have an endorsement, if required by this part, in the applicant's logbook or training record that has been signed by an authorized 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; and

(7) Have a completed and signed application form.

(b) Notwithstanding the provisions of paragraphs (a)(1) and (2) of this section, an applicant for an airline transport pilot license or an additional rating to an airline transport license may take the practical test for that license or rating with an expired knowledge test report, provided that the applicant:

(1) Is employed as a flight crewmember by a certificate holder under part 121 of the ECARs at the time of the practical test and has satisfactorily accomplished that operator's approved:

(i) Pilot in command aircraft qualification training program that is appropriate to the license and rating sought; and

(ii) Qualification training requirements appropriate to the license and rating sought; or

(2) Is employed as a flight crewmember in scheduled A.R.E. military air transport operations at the time of the practical test, and has accomplished the pilot in command aircraft qualification training program that is appropriate to the license and rating sought.

(c) A person is not required to comply with the provisions of paragraph (a)(6) of this section if that person:

(1) Holds a foreign-pilot license issued by a contracting State to the Convention on International Civil Aviation that authorizes at least the pilot privileges of the airman license sought;

(2) Is applying for a type rating only, or a class rating with an associated type rating; or

(3) Is applying for an airline transport pilot license or an additional rating to an airline transport pilot license in an aircraft that does not require an aircraft type rating practical test.

(d) If all increments of the practical test for a license or rating are not completed on one date, all remaining increments of the test must be satisfactorily completed not more than 60 calendar days after the date on which the applicant began the test.

(e) If all increments of the practical test for a license or a rating are not satisfactorily completed within 60 calendar days after the date on which the applicant began the test, the applicant must retake the entire practical test, including those increments satisfactorily completed.

61.41 Flight training received from flight instructors not certificated by the ECAA.

(a) A person may credit flight training toward the requirements of a pilot license or rating issued under this part, if that person received the training from a flight instructor of an Egyptian Armed Force in a program for training military pilots of the Arab Republic of Egypt.

(b) A flight instructor described in paragraph (a) of this section is only authorized to give endorsements to show training given.

61.43 Practical tests: General procedures.

(a) Except as provided in paragraph (b) of this section, the ability of an applicant for a license or rating issued under this part to perform the required tasks on the practical test is based on that applicant's ability to safely:

(1) Perform the tasks specified in the areas of operation for the license or rating sought within the approved standards;

(2) Demonstrate mastery of the aircraft with the successful outcome of each task performed never seriously in doubt;

(3) Demonstrate satisfactory proficiency and competency within the approved standards;

(4) Demonstrate sound judgment; and

(5) Demonstrate single-pilot competence if the aircraft is type certificated for single-pilot operations.

(b) If an applicant does not demonstrate single pilot proficiency, as required in paragraph (a)(5) of this section, a limitation of “Second in Command Required” will be placed on the applicant's airman license. The limitation may be removed if the applicant passes the appropriate practical test by demonstrating single-pilot competency in the aircraft in which single-pilot privileges are sought.

(c) If an applicant fails any area of operation, that applicant fails the practical test.

(d) An applicant is not eligible for a license or rating sought until all the areas of operation are passed.

(e) 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.

(f) If a practical test is discontinued, the applicant is entitled credit for those areas of operation that were passed, but only if the applicant:

(1) Passes the remainder of the practical test within the 60-day period after the date the practical test was discontinued;

(2) Presents to the examiner for the retest the original notice of disapproval form or the letter of discontinuance form, as appropriate;

(3) Satisfactorily accomplishes any additional training needed and obtains the appropriate instructor endorsements, if additional training is required; and

(4) Presents to the examiner for the retest a properly completed and signed application.

61.45 Practical tests: Required aircraft and equipment.

(a) General. Except as provided in paragraph (a)(2) of this section or when permitted to accomplish the entire flight increment of the practical test in a flight simulator or a flight training device, an applicant for a license or rating issued under this part must furnish:

(1) An aircraft of A.R.E. registry for each required test that:

(i) Is of the category, class, and type, if applicable, for which the applicant is applying for a license or rating; and

(ii) Has a current standard airworthiness certificate or special airworthiness certificate in the limited, or primary category.

(2) At the discretion of the examiner who administers the practical test, the applicant may furnish:

(i) An aircraft that has a current airworthiness certificate other than a standard airworthiness certificate or special airworthiness certificate in the limited, or primary category, but that otherwise meets the requirements of paragraph (a)(1) of this section;

(ii) An aircraft of the same category, class, and type, if applicable, of foreign registry that is properly certificated 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 license or rating.

(b) Required equipment (other than controls).

(1) Except as provided in paragraph (b)(2) of this section, an aircraft used for a practical test must have:

(i) The equipment for each area of operation required for the practical test;

(ii) No prescribed operating limitations that prohibit its use in any of the areas of operation required for the practical test;

(iii) Except as provided in paragraphs (e) of this section, at least two pilot stations with adequate visibility for each person to operate the aircraft safely; and

(iv) Cockpit and outside visibility adequate to evaluate the performance of the applicant when an additional jump seat is provided for the examiner.

(2) An applicant for a license or rating may use an aircraft with operating characteristics that preclude the applicant from performing all of the tasks required for the practical test. However, the applicant's license or rating, as appropriate, will be issued with an appropriate limitation.

(c) Required controls. An aircraft used for a practical test must have 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 maneuvering an aircraft solely by reference to instruments must 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 ECAA.

(e) Aircraft with single controls. A practical test may be conducted 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.

61.47 Status of an examiner who is authorized by the ECAA to conduct practical tests.

(a) An examiner represents the ECAA for the purpose of conducting practical tests for licenses and ratings issued under this part and to observe an applicant's ability to perform the areas of operation on the practical test.

(b) The examiner is not the pilot in command of the aircraft during the practical test unless the examiner agrees to act in that capacity for the flight or for a portion of the flight by prior arrangement with:

(1) The applicant; or

(2) A person who would otherwise act as pilot in command of the flight or for a portion of the flight.

(c) Notwithstanding the type of aircraft used during the practical test, the applicant and the examiner (and any other occupants authorized to be on board by the examiner) are not subject to the requirements or limitations for the carriage of passengers that are specified in this chapter.

61.49 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.

(b) An applicant for a flight instructor license with an airplane category rating who has failed the practical test due to deficiencies in instructional proficiency on stall awareness, spin entry, spins, or spin recovery must:

(1) Comply with the requirements of paragraph (a) of this section before being retested;

(2) Bring an aircraft to the retest that is of the appropriate aircraft category for the rating sought and is certificated for spins; and

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

61.51 Pilot logbooks.

(a) Training time and aeronautical experience. Each person must document and record the following time in a manner acceptable to the ECAA:

(1) Training and aeronautical experience used to meet the requirements for a license, rating, or flight review of this part.

(2) The aeronautical experience required for meeting the recent flight experience requirements of this part.

(b) Logbook entries. For the purposes of meeting the requirements of paragraph (a) of this section, each person must enter the following information for each flight or lesson logged:

(1) General:

(i) Date.

(ii) Total flight time or lesson time.

(iii) Location where the aircraft departed and arrived, or for lessons in a flight simulator or flight training device, the location where the lesson occurred.

(iv) Type and identification of aircraft, flight simulator, or flight training device, as appropriate.

(v) The name of a safety pilot, if required by section 91.109(b) of the ECARs.

(2) Type of pilot experience or training:

(i) Solo.

(ii) Pilot in command.

(iii) Second in command.

(iv) Flight and ground training received from an authorized instructor.

(v) Training received in a flight simulator or flight training device from an authorized instructor.

(3) Conditions of flight:

(i) Day or night.

(ii) Actual instrument.

(iii) Simulated instrument conditions in flight, a flight simulator, or a flight training device.

(c) Logging of pilot time. The pilot time described in this section may be used to:

(1) Apply for a license or rating issued under this part or a privilege authorized under this part; or

(2) Satisfy the recent flight experience requirements of this part.

(d) Logging of solo flight time A pilot may log as solo flight time only that flight time when the pilot is the sole occupant of the aircraft.

(e) Logging pilot-in-command flight time.

(1) A private, or commercial pilot may log pilot-in-command time only for that flight time during which that person:

(i) Is the sole manipulator of the controls of an aircraft for which the pilot is rated or has privileges;

(ii) Is the sole occupant of the aircraft; or

(iii) Is acting as pilot in command of an aircraft on which more than one pilot is required under the type certification of the aircraft or the regulations under which the flight is conducted.

(2) An airline transport pilot may log as pilot-in-command time all of the flight time while acting as pilot-in-command of an operation requiring an airline transport pilot license.

(3) An authorized instructor may log as pilot-in-command time all flight time while acting as an authorized instructor.

(4) A student pilot may log pilot-in-command time only when the student pilot:

(i) Is the sole occupant of the aircraft.

(ii) Has a current solo flight endorsement as required under section 61.87 of this part; and

(iii) Is undergoing training for a pilot license or rating.

(f) Logging second-in-command flight time. A person may log second-in-command time only for that flight time during which that person:

(1) Is qualified in accordance with the second-in-command requirements of section 61.55 of this part, and occupies a crewmember station in an aircraft that requires more than one pilot by the aircraft's type certificate; or

(2) Holds the appropriate category, class, and instrument rating (if an instrument rating is required for the flight) for the aircraft being flown, and more than one pilot is required under the type certification of the aircraft or the regulations under which the flight is being conducted.

(g) Logging instrument flight time.

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

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

(3) For the purposes of logging instrument time to meet the recent instrument experience requirements of section 61.57(c) of this part, the following information must be recorded in the person's logbook:

(i) The location and type of each instrument approach accomplished; and

(ii) The name of the safety pilot, if required.

(4) A flight simulator or approved flight training device may be used by a person to log instrument time, provided an authorized instructor is present during the simulated flight.

(h) Logging training time.

(1) A person may log training time when that person receives training from an authorized instructor in an aircraft, flight simulator, or flight training device.

(2) The training time must be logged in a logbook and must:

(i) Be endorsed in a legible manner by the authorized instructor; and

(ii) Include a description of the training given, the length of the training lesson, and the authorized instructor's signature, license number, and license expiration date.

(i) Presentation of required documents.

(1) Persons must present their pilot license, medical certificate, logbook, or any other record required by this part for inspection upon a reasonable request by:

(i) The ECAA;

(ii) An authorized representative from the MOCA Ministry of civil aviation (Central Administration for Aviation Accidents).

(2) A student pilot must carry the following items in the aircraft on all solo cross-country flights as evidence of the required authorized instructor clearances and endorsements:

(i) Pilot logbook;

(ii) Student pilot license; and

(iii) Any other record required by this section.

61.52 Use of aeronautical experience obtained in ultra light vehicles.

(a) A person may use aeronautical experience obtained in an ultra light vehicle to meet the requirements for a private pilot license with a weight-shift-control or powered parachute category rating issued under this part:

(b) A person may use aeronautical experience obtained in an ultra light vehicle to meet the provisions of section 61.69.

(c) A person using aeronautical experience obtained in an ultra light vehicle to meet the requirements for a license or rating specified in paragraph (a) of this section or the requirements of paragraph (b) of this section must:

(1) Have been a registered ultra light pilot with an ECAA-recognized ultra light organization when that aeronautical experience was obtained;

(2) Document and log that aeronautical experience in accordance with the provisions for logging aeronautical experience specified by an ECAA-recognized ultra light organization and in accordance with provisions for logging pilot time in aircraft as specified in section 61.51; and

(3) Obtain the experience in a category and class of vehicle corresponding to the rating or privileges sought.

61.53 Prohibition on operations during medical deficiency.

Operations that require a medical certificate. Except as provided for in paragraph (b) of this section, a person who holds a current medical certificate issued under part 67 of the ECARs shall not act as pilot in command, or in any other capacity as a required pilot flight crewmember, while that person:

(a) Knows or has reason to know of any medical condition that would make the person unable to meet the requirements for the medical certificate necessary for the pilot operation; or

(b) Is taking medication or receiving other treatment for a medical condition that results in the person being unable to meet the requirements for the medical certificate necessary for the pilot operation.

61.55 Second-in-command qualifications.

(a) A person may serve as a second-in-command of an aircraft type certificated for more than one required pilot flight crewmember or in operations requiring a second-in-command pilot flight crewmember only if that person holds:

(1) At least a current commercial pilot license with the appropriate category and class rating; and

(2) An instrument rating or privilege that applies to the aircraft being flown if the flight is under IFR; and

(3) The appropriate pilot type rating for the aircraft .

(b) Except as provided in paragraph (e) of this section, no person may serve as a second-in-command of an aircraft type certificated for more than one required pilot flight crewmember or in operations requiring a second-in-command unless that person has within the previous 6 calendar months:

(1) Become familiar with the following information for the specific type aircraft for which second-in-command privileges are requested:

(i) Operational procedures applicable to the power plant, equipment, and systems.

(ii) Performance specifications and limitations.

(iii) Normal, abnormal, and emergency operating procedures.

(iv) Flight manual.

(v) Placards and markings.

(2) Performed and logged pilot time in the type of aircraft or in a flight simulator that represents the type of aircraft for which second-in-command privileges are requested, which includes:

(i) Three takeoffs and three landings to a full stop as the sole manipulator of the flight controls;

(ii) Engine-out procedures and maneuvering with an engine out while executing the duties of pilot in command; and

(iii) Crew resource management training.

(c) If a person complies with the requirements in paragraph (b) of this section in the calendar month before or the calendar month after the month in which compliance with this section is required, then that person is considered to have accomplished the training and practice in the month it is due.

(d) A person may receive a second-in-command pilot type rating for an aircraft after satisfactorily completing the second-in-command familiarization training requirements under paragraph (b) of this section in that type of aircraft provided the training was completed within the 6 calendar months before the month of application for the SIC pilot type rating. The person must comply with the following application and pilot certification procedures:

(1) The person who provided the training must sign the applicant's logbook or training record after each lesson in accordance with section 61.51(h)(2) of this part. In lieu of the instructor, it is permissible for a qualified management official within the organization to sign the applicant's training records or logbook and make the required endorsement. The qualified management official must hold the position of Chief Pilot, ECAA of Training, ECAA of Operations, or another comparable management position within the organization that provided the training and must be in a position to verify the applicant's training records and that the training was given.

(2) The instructor or qualified management official must make an endorsement in the applicant's logbook that states "[Applicant's Name and Pilot License Number] has demonstrated the skill and knowledge required for the safe operation of the [Type of Aircraft], relevant to the duties and responsibilities of a second in command."

(3) If the applicant's flight experience and/or training records are in an electronic form, the applicant must present a paper copy of those records containing the signature of the instructor or qualified management official to an ECAA Airmen Licensing Branch or Examiner.

(4) The applicant must complete and sign an Airman License and/or Rating Application, and present the application to an ECAA Airmen Licensing Branch or to an Examiner.

(5) The person who provided the ground and flight training to the applicant must sign the "Instructor's Recommendation" section of the Airman License and/or Rating Application. In lieu of the instructor, it is permissible for a qualified management official within the organization to sign the applicant's Airman License and/or Rating Application.

(6) The applicant must appear in person at a ECAA Airmen Licensing Office or to an Examiner with his or her logbook/training records and with the completed and signed Airman License and/or Rating Application.

(7) There is no practical test required for the issuance of the "SIC Privileges Only" pilot type rating.

(e) A person may receive a second-in-command pilot type rating for the type of aircraft after satisfactorily completing an approved second-in-command training program, proficiency check, or competency check under part 121, as appropriate, in that type of aircraft provided the training was completed within the 12 calendar months before the month of application for the SIC pilot type rating. The person must comply with the following application and pilot certification procedures:

(1) The person who provided the training must sign the applicant's logbook or training record after each lesson in accordance with section 61.51(h)(2) of this part. In lieu of the instructor, it is permissible for a qualified management official within the organization to sign the applicant's training records or logbook and make the required endorsement. The qualified management official must hold the position of Chief Pilot, ECAA of Training, ECAA of Operations, or another comparable management position within the organization that provided the training and must be in a position to verify the applicant's training records and that the training was given.

(2) The instructor or qualified management official must make an endorsement in the applicant's logbook that states "[Applicant's Name and Pilot License Number] has demonstrated the skill and knowledge required for the safe operation of the [Type of Aircraft], relevant to the duties and responsibilities of a second in command."

(3) If the applicant's flight experience and/or training records are in an electronic form, the applicant must provide a paper copy of those records containing the signature of the trainer or qualified management official to an ECAA Airmen Licensing Branch, an Examiner, or an Aircrew Program Designee.

(4) The applicant must complete and sign an Airman License and/or Rating Application, and present the application to an ECAA Airmen Licensing Office or to an Examiner.

(5) The person who provided the ground and flight training to the applicant must sign the "Instructor's Recommendation" section of the Airman License and/or Rating Application, In lieu of the instructor; it is permissible for a qualified management official within the organization to sign the applicant's Airman License and/or Rating Application.

(6) The applicant must appear in person at an ECAA Airmen Licensing Office or to an Examiner . With his or her logbook/training records and with the completed and signed Airman License and/or Rating Application.

(7) There is no practical test required for the issuance of the "SIC Privileges Only" pilot type rating.

(f) The familiarization training requirements of paragraph (b) of this section do not apply to a person who is:

(1) Designated and qualified as pilot in command under part 121 of the ECARs in that specific type of aircraft;

(2) Designated as the second in command under part 121 of the ECARs in that specific type of aircraft;

(3) Designated as the second in command in that specific type of aircraft for the purpose of receiving flight training required by this section, and no passengers or cargo are carried on the aircraft; or

(4) Designated as a safety pilot for purposes required by section 91.109(b) of the ECARs.

(g) For the purpose of meeting the requirements of paragraph (b) of this section, a person may serve as second in command in that specific type aircraft provided:

(1) The flight is conducted under day VFR or day IFR; and

(2) No person or property is carried on board the aircraft, other than necessary for conduct of the flight.

(h) The training under paragraphs (b) and (d) of this section and the training, proficiency check, and competency check under paragraph (e) of this section may be accomplished in a flight simulator that is used in accordance with an approved training course conducted by a training center certificated under part 142 of this chapter part 121 of the ECARs.

(i) When an applicant for an initial second-in-command qualification for a particular type of aircraft receives all the training in a flight simulator, that applicant must satisfactorily complete one takeoff and one landing in an aircraft of the same type for which the qualification is sought. This requirement does not apply to an applicant who completes a proficiency check under part 121 for the particular type of aircraft.

61.56 Flight review.

(a) Except as provided in paragraphs (e) of this section, a flight review consists of a minimum of 1 hour of flight training and 1 hour of ground training. The review must include:

(1) A review of the current general operating and flight rules of part 91 of the ECARs; and

(2) A review of those maneuvers and procedures that, at the discretion of the person giving the review, is necessary for the pilot to demonstrate the safe exercise of the privileges of the pilot license.

(b) Except as provided in paragraphs (c), (d), and (f) of this section, no person may act as pilot in command of an aircraft unless, since the beginning of the 24th calendar month before the month in which that pilot acts as pilot in command, that person has:

(1) Accomplished a flight review given in an aircraft for which that pilot is rated by an authorized instructor and

(2) A logbook endorsed from an authorized instructor who gave the review certifying that the person has satisfactorily completed the review.

(c) A person who has, within the period specified in paragraph (b) of this section, passed a pilot proficiency check conducted by an examiner, an approved pilot check airman, for a pilot license, rating, or operating privilege need not accomplish the flight review required by this section.

paragraph (a) of this section (d) A person who has, within the period specified in paragraph (b) of this section, satisfactorily accomplished one or more phases of an ECAA-sponsored pilot proficiency award program need not accomplish the flight review required by this section.

(e) A person who holds a current flight instructor license who has, within the period specified in paragraph (b) of this section, satisfactorily completed a renewal of a flight instructor license under the provisions in section 61.197 need not accomplish the 1 hour of ground training specified in p.

(f) A student pilot need not accomplish the flight review required by this section provided the student pilot is undergoing training for a license and has a current solo flight endorsement as required under section 61.87 of this part.

(g) The requirements of this section may be accomplished in combination with the requirements of section 61.57 and other applicable recent experience requirements at the discretion of the authorized instructor conducting the flight review.

(h) A flight simulator or flight training device may be used to meet the flight review requirements of this section subject to the following conditions:

(1) The flight simulator or flight training device must be used in accordance with an approved course conducted by a training center certificated under part 142 of the ECARs.

(2) Unless the flight review is undertaken in a flight simulator that is approved for landings, the applicant must meet the takeoff and landing requirements of section 61.57(a) or section 61.57(b) of this part.

(3) The flight simulator or flight training device used must represent an aircraft or set of aircraft for which the pilot is rated.

61.57 Recent flight experience: Pilot in command.

(a) General experience.

(1) Except as provided in paragraph (e) of this section, no person may act as a pilot in command of an aircraft carrying passengers or of an aircraft certificated for more than one pilot flight crewmember unless that person has made at least three takeoffs and three landings within the preceding 90 days, and:

(i) The person acted as the sole manipulator of the flight controls; and

(ii) The required takeoffs and landings were performed in an aircraft of the same category, class, and type (if a type rating is required), and, if the aircraft to be flown is an airplane with a tail wheel, the takeoffs and landings must have been made to a full stop in an airplane with a tail wheel.

(2) For the purpose of meeting the requirements of paragraph (a)(1) of this section, a person may act as a pilot in command of an aircraft under day VFR or day IFR, provided no persons or property are carried on board the aircraft, other than those necessary for the conduct of the flight.

(3) The takeoffs and landings required by paragraph (a)(1) of this section may be accomplished in a flight simulator or flight training device that is:

(i) Approved by the ECAA for landings; and

(ii) Used in accordance with an approved course conducted by a training center certificated under part 142 of the ECARs.

(b) Night takeoff and landing experience.

(1) Except as provided in paragraph (e) of this section, no person may act as pilot in command of an aircraft carrying passengers during the period beginning 1 hour after sunset and ending 1 hour before sunrise, unless within the preceding 90 days that person has made at least three takeoffs and three landings to a full stop during the period beginning 1 hour after sunset and ending 1 hour before sunrise, and:

(i) That person acted as sole manipulator of the flight controls; and

(ii) The required takeoffs and landings were performed in an aircraft of the same category, class, and type (if a type rating is required).

(2) The takeoffs and landings required by paragraph (b)(1) of this section may be accomplished in a flight simulator that is:

(i) Approved by the ECAA for takeoffs and landings, if the visual system is adjusted to represent the period described in paragraph (b)(1) of this section; and

(ii) Used in accordance with an approved course conducted by a training center certificated under part 142 of the ECARs.

(c) Instrument experience. Except as provided in paragraph (e) of this section, no person may act as pilot in command under IFR or in weather conditions less than the minimums prescribed for VFR, unless within the preceding 6 calendar months, that person has:

For the purpose of obtaining instrument experience in an aircraft, performed and logged under actual or simulated instrument conditions, either in flight in the appropriate category of aircraft for the instrument privileges sought or in a flight simulator or flight training device that is representative of the aircraft category for the instrument privileges sought:

(1) At least six instrument approaches;

(2) Holding procedures; and

(3) Intercepting and tracking courses through the use of navigation systems.

(d) Instrument proficiency check. Except as provided in paragraph (e) of this section, a person who does not meet the instrument experience requirements of paragraph (c) of this section within the prescribed time, or within 6 calendar months after the prescribed time, may not serve as pilot in command under IFR or in weather conditions less than the minimums prescribed for VFR until that person passes an instrument proficiency check consisting of a representative number of tasks required by the instrument rating practical test.

(1) The instrument proficiency check must be:

(i) In an aircraft that is appropriate to the aircraft category;

(ii) in a flight simulator or flight training device that is representative of the aircraft category; or

(iii) in a single-engine airplane .

(2) The instrument proficiency check must be given by:

(i) An examiner;

(ii) A person authorized by the A.R.E. Armed Forces to conduct instrument flight tests, provided the person being tested is a member of the A.R.E. Armed Forces;

(iii) A company check pilot who is authorized to conduct instrument flight tests under part 121 of the ECARs, and provided that both the check pilot and the pilot being tested are employees of that operator or fractional ownership program manager, as applicable;

(iv) An authorized instructor; or

(v) A person approved by the ECAA to conduct instrument practical tests.

(e) Exceptions.

(1) This section does not apply to a pilot in command who is employed by an air carrier certificated under part 121 and is engaged in a flight operation under part 91, or 121 for that air carrier if the pilot is in compliance with section 121.437 and 121.439 of the ECARs, as appropriate.

(2) Paragraph (b) of this section does not apply to a pilot in command of a turbine-powered airplane that is type certificated for more than one pilot crewmember, provided that pilot has complied with the requirements of paragraph (e)(2)(i) or (ii) of this section:

(i) The pilot in command must hold at least a commercial pilot license with the appropriate category, class, and type rating for each airplane that is type certificated for more than one pilot crewmember that the pilot seeks to operate under this alternative, and:

(A) That pilot must have logged at least 1,500 hours of aeronautical experience as a pilot;

(B) In each airplane that is type certificated for more than one pilot crewmember that the pilot seeks to operate under this alternative, that pilot must have accomplished and logged the daytime takeoff and landing recent flight experience of paragraph (a) of this section, as the sole manipulator of the flight controls;

(C) Within the preceding 90 days prior to the operation of that airplane that is type certificated for more than one pilot crewmember, the pilot must have accomplished and logged at least 15 hours of flight time in the type of airplane that the pilot seeks to operate under this alternative; and

(D) That pilot has accomplished and logged at least 3 takeoffs and 3 landings to a full stop, as the sole manipulator of the flight controls, in a turbine-powered airplane that requires more than one pilot crewmember. The pilot must have performed the takeoffs and landings during the period beginning 1 hour after sunset and ending 1 hour before sunrise within the preceding 6 months prior to the month of the flight.

(ii) The pilot in command must hold at least a commercial pilot license with the appropriate category, class, and type rating for each airplane that is type certificated for more than one pilot crewmember that the pilot seeks to operate under this alternative, and:

(A) That pilot must have logged at least 1,500 hours of aeronautical experience as a pilot;

(B) In each airplane that is type certificated for more than one pilot crewmember that the pilot seeks to operate under this alternative, that pilot must have accomplished and logged the daytime takeoff and landing recent flight experience of paragraph (a) of this section, as the sole manipulator of the flight controls;

(C) Within the preceding 90 days prior to the operation of that airplane that is type certificated for more than one pilot crewmember, the pilot must have accomplished and logged at least 15 hours of flight time in the type of airplane that the pilot seeks to operate under this alternative; and

(D) Within the preceding 12 months prior to the month of the flight, the pilot must have completed a training program that is approved under part 142 of the ECARs. The approved training program must have required and the pilot must have performed, at least 6 takeoffs and 6 landings to a full stop as the sole manipulator of the controls in a flight simulator that is representative of a turbine-powered airplane that requires more than one pilot crewmember. The flight simulator's visual system must have been adjusted to represent the period beginning 1 hour after sunset and ending 1 hour before sunrise.

61.58 Pilot-in-command proficiency check: Operation of aircraft requiring more than one pilot flight crewmember.

(a) Except as otherwise provided in this section, to serve as pilot in command of an aircraft that is type certificated for more than one required pilot flight crewmember, a person must within the preceding 6 calendar months, complete a pilot-in-command proficiency check in an aircraft that is type certificated for more than one required pilot flight crewmember .

(b) This section does not apply to persons conducting operations under part 121 of the ECARs.

(c) The pilot-in-command proficiency check given in accordance with the provisions of part 121 of the ECARs may be used to satisfy the requirements of this section.

(d) The pilot-in-command proficiency check required by paragraph (a) of this section may be accomplished by satisfactory completion of one of the following:

(1) A pilot-in-command proficiency check conducted by a person authorized by the ECAA, consisting of the maneuvers and procedures required for a type rating, in an aircraft type certificated for more than one required pilot flight crewmember;

(2) The practical test required for a type rating, in an aircraft type certificated for more than one required pilot flight crewmember;

(3) The initial or periodic practical test required for the issuance of a pilot examiner or check airman designation, in an aircraft type certificated for more than one required pilot flight crewmember; or

(4) A military flight check required for a pilot in command with instrument privileges, in an aircraft that the military requires to be operated by more than one pilot flight crewmember.

(e) A check or test described in paragraphs (d)(1) through (d)(4) of this section may be accomplished in a flight simulator under part 142 of the ECARs, subject to the following:

(1) Except as provided for in paragraphs (e)(2) and (e)(3) of this section, if an otherwise qualified and approved flight simulator used for a pilot-in-command proficiency check is not qualified and approved for a specific required maneuver:

(i) The training center must annotate, in the applicant's training record, the maneuver or maneuvers omitted; and

(ii) Prior to acting as pilot in command, the pilot must demonstrate proficiency in each omitted maneuver in an aircraft or flight simulator qualified and approved for each omitted maneuver.

(2) If the flight simulator used pursuant to paragraph (e) of this section is not qualified and approved for circling approaches:

(i) The applicant's record must include the statement, “Proficiency in circling approaches not demonstrated”; and

(ii) The applicant may not perform circling approaches as pilot in command when weather conditions are less than the basic VFR conditions described in part 91 of the ECARs, until proficiency in circling approaches has been successfully demonstrated in a flight simulator qualified and approved for circling approaches or in an aircraft to a person authorized by the ECAA to conduct the check required by this section.

(3) If the flight simulator used pursuant to paragraph (e) of this section is not qualified and approved for landings, the applicant must:

(i) Hold a type rating in the airplane represented by the simulator; and

(ii) Have completed within the preceding 90 days at least three takeoffs and three landings (one to a full stop) as the sole manipulator of the flight controls in the type airplane for which the pilot-in-command proficiency check is sought.

(f) For the purpose of meeting the pilot-in-command proficiency check requirements of paragraph (a) of this section, a person may act as pilot in command of a flight under day VFR conditions or day IFR conditions if no person or property is carried, other than as necessary to demonstrate compliance with this part.

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

61.59 Falsification, reproduction, or alteration of applications, licenses, logbooks, reports, or records.

(a) No person may make or cause to be made:

(1) Any fraudulent or intentionally false statement on any application for a license, rating, authorization, or duplicate thereof, issued under this part;

(2) Any fraudulent or intentionally false entry in any logbook, record, or report that is required to be kept, made, or used to show compliance with any requirement for the issuance or exercise of the privileges of any license, rating, or authorization under this part;

(3) Any reproduction for fraudulent purpose of any license, rating, or authorization, under this part; or

(4) Any alteration of any license, rating, or authorization under this part.

(b) The commission of an act prohibited under paragraph (a) of this section is a basis for suspending or revoking any airman license, rating, or authorization held by that person.

61.60 Change of address.

The holder of a pilot, flight instructor, or ground instructor license who has made a change in permanent mailing address may not, after 30 days from that date, exercise the privileges of the license unless the holder has notified in writing the ECAA, Airman Licensing Branch, Airport Road ECAA Complex Cairo, Egypt, of the new permanent mailing address, or if the permanent mailing address includes a post office box number, then the holder's current residential address.

Subpart B
Aircraft Ratings and Pilot Authorizations

61.61 Applicability.

This subpart prescribes the requirements for the issuance of additional aircraft ratings after a pilot license is issued, and the requirements for and limitations of pilot authorizations issued by the ECAA.

61.62 Class and type rating

(a) Pilots shall complete differences training or familiarization in order to extend their privileges to another variant of aircraft within one class or type rating. In the case of variants within a class or type rating, the differences training or familiarization shall include the relevant elements defined in the OSD, where applicable an.

(b) The differences training shall be conducted at any of the following:

(1) an ATO;

(2) an AOC holder having an approved differences training programme for the relevant class or type.

(c) Notwithstanding the requirement in point (b), differences training for TMG, single-engine piston (SEP), single-engine turbine (SET) and multi-engine piston (MEP) aeroplanes may be conducted by an appropriately qualified instructor unless otherwise provided in the OSD.

(d) If pilots have not flown the variant within 2 years following the training listed in point (b), a further differences training or a proficiency check in that variant shall be completed, except for types or variants within the SEP and TMG class ratings.

(e) The differences training or the proficiency check in that variant shall be entered in the pilots' logbook or equivalent record and signed by the instructor or examiner as appropriate.

61.63 Additional aircraft ratings (other than on an airline transport pilot license).

(a) General. To be eligible for an additional aircraft rating to a pilot license, for other than an airline transport pilot license, an applicant must meet the appropriate requirements of this section for the additional aircraft rating sought.

(b) Additional category rating. An applicant who holds a pilot license and applies to add a category rating to that pilot license:

(1) Must have received the required training and possess the aeronautical experience prescribed by this part that applies to the pilot license for the aircraft category and, if applicable, class rating sought;

(2) Must have an endorsement in his or her logbook or training record from an authorized instructor, and that endorsement must attest that the applicant has been found competent in the aeronautical knowledge areas appropriate to the pilot license for the aircraft category and, if applicable, class rating sought;

(3) Must have an endorsement in his or her logbook or training record from an authorized instructor, and that endorsement must attest that the applicant has been found proficient on the areas of operation that are appropriate to the pilot license for the aircraft category and, if applicable, class rating sought;

(4) Must pass the required practical test that is appropriate to the pilot license for the aircraft category and, if applicable, class rating sought; and

(5) Need not take an additional knowledge test, provided the applicant holds an airplane, rotorcraft, powered-lift, rating at that pilot license level.

(c) Additional class rating. Any person who applies for an additional class rating to be added on a pilot license:

(1) Must have an endorsement in his or her logbook or training record from an authorized instructor and that endorsement must attest that the applicant has been found competent in the aeronautical knowledge areas appropriate to the pilot license for the aircraft class rating sought;
(2) Must have an endorsement in his or her logbook or training record from an authorized instructor, and that endorsement must attest that the applicant has been found proficient in the areas of operation appropriate to the pilot license for the aircraft class rating sought;
(3) Must pass the required practical test that is appropriate to the pilot license for the aircraft class rating sought;
(4) Need not meet the specified training time requirements prescribed by this part that apply to the pilot license for the aircraft class rating sought unless the person holds a lighter-than-air category rating with a balloon class rating and is seeking an airship class rating and
(5) Need not take an additional knowledge test, provided the applicant holds an airplane, rotorcraft, powered-lift, or airship rating at that pilot license level.

(d) Additional type rating. Except as specified in paragraph (d)(7) of this section, a person who applies for an additional aircraft type rating to be added on a pilot license, or the addition of an aircraft type rating that is accomplished concurrently with an additional aircraft category or class rating:

(1) Must hold or concurrently obtain an instrument rating that is appropriate to the aircraft category, class, or type rating sought;
(2) Must have an endorsement in his or her logbook or training record from an authorized instructor, and that endorsement must attest that the applicant has been found competent in the aeronautical knowledge areas appropriate to the pilot license for the aircraft category, class, or type rating sought;

(3) Must have an endorsement in his or her logbook, or training record from an authorized instructor, and that endorsement must attest that the applicant has been found proficient in the areas of operation required for the issuance of an airline transport pilot license for the aircraft category, class, and type rating sought;

(4) Must pass the required practical test appropriate to the airline transport pilot license for the aircraft category, class, and type rating sought;

(5) Must perform the practical test in actual or simulated instrument conditions, unless the aircraft's type certificate makes the aircraft incapable of operating under instrument flight rules. If the practical test cannot be accomplished for this reason, the person may obtain a type rating limited to “VFR only.” The “VFR only” limitation may be removed for that aircraft type when the person passes the practical test in actual or simulated instrument conditions. When an instrument rating is issued to a person who holds one or more type ratings, the type ratings on the amended pilot license shall bear the “VFR only” limitation for each aircraft type rating for which the person has not demonstrated instrument competency;

(6) Need not take an additional knowledge test, provided the applicant holds an airplane, rotorcraft, powered-lift, rating on their pilot license; and
(7) In the case of a pilot employee of a certificate holder operating under part 121 of the ECARs, must have:

(i) Met the appropriate requirements of paragraphs (d)(1), (d)(4), and (d)(5) of this section for the aircraft type rating sought; and

(ii) Received an endorsement in his or her flight training record from the certificate holder attesting that the applicant has completed the certificate holder's approved ground and flight training program appropriate to the aircraft type rating sought.

(8) until 5 march 2025 the ECAA may endorse a type rating for aircraft of the powered- lift category on an aeroplane or helicopter pilot licence. The endorsement of the rating on the licence shall indicate that the aircraft is part of the powered-lift category. The training for the type rating in the powered-lift category shall be completed during a course of approved training, shall take into account the previous experience of the applicant in an aeroplane or a helicopter as appropriate and incorporate all relevant aspects of operating an aircraft of the powered-lift category

(e) Use of a flight simulator or flight training device for an additional rating in an airplane. The areas of operation required to be performed by paragraphs (b), (c), and (d) of this section shall be performed as follows:

(1) Except as provided in paragraph (e)(2) of this section, the areas of operation must be performed in an airplane of the same category, class, and type, if applicable, as the airplane for which the additional rating is sought.

(2) Subject to the limitations of paragraph (e)(3) through (e)(12) of this section, the areas of operation may be performed in a flight simulator or flight training device that represents the airplane for which the additional rating is sought.

(3) The use of a flight simulator or flight training device permitted by paragraph (e)(2) of this section shall be conducted in accordance with an approved course at a training center certificated under part 142 of the ECARs.

(4) To complete all training and testing (except preflight inspection) for an additional airplane rating without limitations when using a flight simulator:

(i) The flight simulator must be qualified and approved as Level C or Level D; and

(ii) The applicant must meet at least one of the following:

(A) Hold a type rating for a turbojet airplane of the same class of airplane for which the type rating is sought, or have been appointed by a military service as a pilot in command of an airplane of the same class of airplane for which the type rating is sought, if a type rating in a turbojet airplane is sought.

(B) Hold a type rating for a turbo propeller airplane of the same class of airplane for which the type rating is sought, or have been designated by a military service as a pilot in command of an airplane of the same class of airplane for which the type rating is sought, if a type rating in a turbo propeller airplane is sought.

(C) Have at least 2,000 hours of flight time, of which 500 hours is in turbine-powered airplanes of the same class of airplane for which the type rating is sought.

(D) Have at least 500 hours of flight time in the same type airplane as the airplane for which the rating is sought.

(E) Have at least 1,000 hours of flight time in at least two different airplanes requiring a type rating.

(5) Subject to the limitation of paragraph (e)(6) of this section, an applicant who does not meet the requirements of paragraph (e)(4) of this section may complete all training and testing (except for preflight inspection) for an additional rating when using a flight simulator if:

(i) The flight simulator is qualified and approved as a Level C or Level D; and

(ii) The applicant meets at least one of the following:

(A) Holds a type rating in a propeller-driven airplane if a type rating in a turbojet airplane is sought, or holds a type rating in a turbojet airplane if a type rating in a propeller-driven airplane is sought; or

(B) Since the beginning of the 12th calendar month before the month in which the applicant completes the practical test for an additional airplane rating, has logged:

(1) At least 100 hours of flight time in airplanes of the same class for which the type rating is sought and which requires a type rating; and

(2) At least 25 hours of flight time in airplanes of the same type for which the rating is sought.

(6) An applicant meeting only the requirements of paragraph (e)(5) of this section will be issued an additional rating with a limitation.

(7) The limitation on a license issued under the provisions of paragraph (e)(6) of this section shall state, “This license is subject to pilot-in-command limitations for the additional rating.”

(8) An applicant who has been issued a pilot license with the limitation specified in paragraph (e)(7) of this section:

(i) May not act as pilot in command of that airplane for which the additional rating was obtained under the provisions of this section until the limitation is removed from the pilot license; and

(ii) May have the limitation removed by accomplishing 15 hours of supervised operating experience as pilot in command under the supervision of a qualified and current pilot in command, in the seat normally occupied by the pilot in command, in the same type of airplane to which the limitation applies.

(9) An applicant who does not meet the requirements of paragraph (e)(4) or paragraph (e)(5) of this section may be issued an additional rating after successful completion of one of the following requirements:

(i) Compliance with paragraphs (e)(2) and (e)(3) of this section and the following tasks, which must be successfully completed on a static airplane or in flight, as appropriate:

(A) Preflight inspection;

(B) Normal takeoff;

(C) Normal ILS approach;

(D) Missed approach; and

(E) Normal landing.

(ii) Compliance with paragraphs (e)(2), (e)(3), and (e)(10) through (e)(12) of this section.

(10) An applicant meeting only the requirements of paragraph (e)(9)(ii) of this section will be issued an additional rating with a limitation.

(11) The limitation on a license issued under the provisions of paragraph (e)(10) of this section shall state, "This license is subject to pilot-in-command limitations for the additional rating."

(12) An applicant who has been issued a pilot license with the limitation specified in paragraph (e)(11) of this section:

(i) May not act as pilot in command of that airplane for which the additional rating was obtained under the provisions of this section until the limitation is removed from the pilot certificate; and

(ii) May have the limitation removed by accomplishing 25 hours of supervised operating experience as pilot in command under the supervision of a qualified and current Check Airman, in the seat normally occupied by the pilot in command, in that airplane of the same type to which the limitation applies.

(f) Use of a flight simulator or flight training device for an additional rating in a helicopter. The areas of operation required to be performed by paragraphs (b), (c), and (d) of this section shall be performed as follows:

(1) Except as provided in paragraph (f)(2) of this section, the areas of operation must be performed in a helicopter of the same type for the additional rating sought.

(2) Subject to the limitations of paragraph (f)(3) through (f)(12) of this section, the areas of operation may be performed in a flight simulator or flight training device that represents that helicopter for the additional rating sought.

(3) The use of a flight simulator or flight training device permitted by paragraph (f)(2) of this section shall be conducted in accordance with an approved course at a training center certificated under part 142 of the ECARs.

(4) To complete all training and testing (except preflight inspection) for an additional helicopter rating without limitations when using a flight simulator:

(i) The flight simulator must be qualified and approved as Level C or Level D; and

(ii) The applicant must meet at least one of the following if a type rating is sought in a turbine-powered helicopter:

(A) Hold a type rating in a turbine-powered helicopter or have been appointed by a military service as a pilot in command of a turbine-powered helicopter.

(B) Have at least 2,000 hours of flight time that includes at least 500 hours in turbine-powered helicopters.

(C) Have at least 500 hours of flight time in turbine-powered helicopters.

(D) Have at least 1,000 hours of flight time in at least two different turbine-powered helicopters.

(5) Subject to the limitation of paragraph (f)(6) of this section, an applicant who does not meet the requirements of paragraph (f)(4) of this section may complete all training and testing (except for preflight inspection) for an additional rating when using a flight simulator if:

(i) The flight simulator is qualified and approved as Level C or Level D; and

(ii) The applicant meets at least one of the following:

(A) Holds a type rating in a turbine-powered helicopter if a type rating in a turbine-powered helicopter is sought; or

(B) Since the beginning of the 12th calendar month before the month in which the applicant completes the practical test for an additional helicopter rating, has logged at least 25 hours of flight time in helicopters of the same type for which the rating is sought.

(6) An applicant meeting only the requirements of paragraph (f)(5) of this section will be issued an additional rating with a limitation.

(7) The limitation on a license issued under the provisions of paragraph (f)(6) of this section shall state, "This license is subject to pilot-in-command limitations for the additional rating."

(8) An applicant who is issued a pilot license with the limitation specified in paragraph (f)(7) of this section:

(i) May not act as pilot in command of that helicopter for which the additional rating was obtained under the provisions of this section until the limitation is removed from the pilot license; and

(ii) May have the limitation removed by accomplishing 15 hours of supervised operating experience as pilot in command under the supervision of a qualified and current pilot in command, in the seat normally occupied by the pilot in command, in the same type of helicopter to which the limitation applies.

(9) An applicant who does not meet the requirements of paragraph (f)(4) or paragraph (f)(5) of this section may be issued an additional rating after successful completion of one of the following requirements:

(i) Compliance with paragraphs (f)(2) and (f)(3) of this section and the following tasks, which must be successfully completed on a static helicopter or in flight, as appropriate:

(A) Preflight inspection;

(B) Normal takeoff;

(C) Normal ILS approach;

(D) Missed approach; and

(E) Normal landing.

(ii) Compliance with paragraphs (f)(2), (f)(3), and (f)(10) through (f)(12) of this section.

(10) A applicant meeting only the requirements of paragraph (f)(9)(ii) of this section will be issued an additional rating with a limitation.

(11) The limitation on a license issued under the provisions of paragraph (f)(10) of this section shall state, "This license is subject to pilot-in-command limitations for the additional rating."

(12) An applicant who has been issued a pilot license with the limitation specified in paragraph (f)(11) of this section:

(i) May not act as pilot in command of that helicopter for which the additional rating was obtained under the provisions of this section until the limitation is removed from the pilot license; and

(ii) May have the limitation removed by accomplishing 25 hours of supervised operating experience as pilot in command under the supervision of a qualified and current Check Airman, in the seat

normally occupied by the pilot in command, in that helicopter of the same type as to which the limitation applies.

(g) Use of a flight simulator or flight training device for an additional rating in a powered-lift. The areas of operation required to be performed by paragraphs (b), (c), and (d) of this section shall be performed as follows:

(1) Except as provided in paragraph (g)(2) of this section, the areas of operation must be performed in a powered-lift of the same type for the additional rating sought.

(2) Subject to the limitations of paragraphs (g)(3) through (g)(12) of this section, the areas of operation may be performed in a flight simulator or flight training device that represents that powered-lift for the additional rating sought.

(3) The use of a flight simulator or flight training device permitted by paragraph (g)(2) of this section shall be conducted in accordance with an approved course at a training center certificated under part 142 of the ECARs.

(4) To complete all training and testing (except preflight inspection) for an additional powered-lift rating without limitations when using a flight simulator:

(i) The flight simulator must be qualified and approved as Level C or Level D; and

(ii) The applicant must meet at least one of the following if a type rating is sought in a turbine powered-lift:

(A) Hold a type rating in a turbine powered-lift or have been appointed by a military service as a pilot in command of a turbine powered-lift.

(B) Have at least 2,000 hours of flight time that includes at least 500 hours in turbine powered-lifts.

(C) Have at least 500 hours of flight time in turbine powered-lifts.

(D) Have at least 1,000 hours of flight time in at least two different turbine powered-lifts.

(5) Subject to the limitation of paragraph (g)(6) of this section, an applicant who does not meet the requirements of paragraph (g)(4) of this section may complete all training and testing (except for preflight inspection) for an additional rating when using a flight simulator if:

(i) The flight simulator is qualified and approved as Level C or Level D; and

(ii) The applicant meets at least one of the following:

(A) Holds a type rating in a turbine powered-lift if a type rating in a turbine powered-lift is sought; or

(B) Since the beginning of the 12th calendar month before the month in which the applicant completes the practical test for an additional powered-lift rating, has logged at least 25 hours of flight time in powered-lifts of the same type for which the rating is sought.

(6) An applicant meeting only the requirements of paragraph (g)(5) of this section will be issued an additional rating with a limitation.

(7) The limitation on a license issued under the provisions of paragraph (g)(6) of this section shall state, “This license is subject to pilot-in-command limitations for the additional rating.”

(8) An applicant who is issued a pilot license with the limitation specified in paragraph (g)(7) of this section:

(i) May not act as pilot in command of that powered-lift for which the additional rating was obtained under the provisions of this section until the limitation is removed from the pilot license; and

(ii) May have the limitation removed by accomplishing 15 hours of supervised operating experience as pilot in command under the supervision of a qualified and current pilot in command, in the seat normally occupied by the pilot in command, in the same type of powered-lift to which the limitation applies.

(9) An applicant who does not meet the requirements of paragraph (g)(4) or paragraph (g)(5) of this section may be issued an additional rating after successful completion of one of the following requirements:

(i) Compliance with paragraphs (g)(2) and (g)(3) of this section and the following tasks, which must be successfully completed on a static powered-lift or in flight, as appropriate:

(A) Preflight inspection;

(B) Normal takeoff;

(C) Normal ILS approach;

(D) Missed approach; and

(E) Normal landing.

(ii) Compliance with paragraphs (g)(2), (g)(3), and (g)(10) through (g)(12) of this section.

(10) An applicant meeting only the requirements of paragraph (g)(9)(ii) of this section will be issued an additional rating with a limitation.

(11) The limitation on a license issued under the provisions of paragraph (g)(10) of this section shall state, "This license is subject to pilot-in-command limitations for the additional rating."

(12) An applicant who has been issued a pilot license with the limitation specified in paragraph (g)(11) of this section:

(i) May not act as pilot in command of that powered-lift for which the additional rating was obtained under the provisions of this section until the limitation is removed from the pilot license; and

(ii) May have the limitation removed by accomplishing 25 hours of supervised operating experience as pilot in command under the supervision of a qualified and current Check Airman, in the seat normally occupied by the pilot in command, in that powered-lift of the same type as to which the limitation applies.

(h) Aircraft not capable of instrument maneuvers and procedures. An applicant for a type rating who provides an aircraft not capable of the instrument maneuvers and procedures required by the appropriate requirements contained in section 61.157 of this part 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 contained in section 61.157 or section 61.73 of this part.

(i) Multiengine, single-pilot station airplane. An applicant for a type rating in a multiengine, single-pilot station airplane may meet the requirements of this part in a multiseat version of that multiengine airplane.

(j) Single-engine, single-pilot station airplane. An applicant for a type rating in a single-engine, single-pilot station airplane may meet the requirements of this part in a multiseat version of that single-engine airplane.

(k) Waivers. Unless the ECAA requires certain or all tasks to be performed, the examiner who conducts the practical test may waive any of the tasks for which the ECAA approves waiver authority.

61.65 Instrument rating requirements.

(a) General. A person who applies for an instrument rating must:

(1) Hold at least a current private pilot license with an airplane, helicopter, or powered-lift rating appropriate to the instrument rating sought;

(2) Be able to read, speak, write, and understand the English language. If the applicant is unable to meet any of these requirements due to a medical condition, the ECAA may place such operating limitations on the applicant's pilot license as are necessary for the safe operation of the aircraft;

(3) Receive and log ground training from an authorized instructor or accomplish a home-study course of training on the aeronautical knowledge areas of paragraph (b) of this section that apply to the instrument rating sought;

(4) Receive a logbook or training record endorsement from an authorized instructor certifying that the person is prepared to take the required knowledge test;

(5) Receive and log training on the areas of operation of paragraph (c) of this section from an authorized instructor in an aircraft, flight simulator, or flight training device that represents an airplane, helicopter, or powered-lift appropriate to the instrument rating sought;

(6) Receive a logbook or training record endorsement from an authorized instructor certifying that the person is prepared to take the required practical test;

(7) Pass the required knowledge test on the aeronautical knowledge areas of paragraph (b) of this section; however, an applicant is not required to take another knowledge test when that person already holds an instrument rating; and

(8) Pass the required practical test on the areas of operation in paragraph (c) of this section in:

(i) An airplane, helicopter, or powered-lift appropriate to the rating sought; or

(ii) A flight simulator or a flight training device appropriate to the rating sought and for the specific maneuver or instrument approach procedure performed. If an approved flight training device is used for the practical test, the instrument approach procedures conducted in that flight training device are limited to one precision and one no precision approach, provided the flight training device is approved for the procedure performed.

(b) Aeronautical knowledge. A person who applies for an instrument rating must have received and logged ground training from an authorized instructor or accomplished a home-study course on the following aeronautical knowledge areas that apply to the instrument rating sought:

(1) Air law. Rules and regulations relevant to flight under IFR; related air traffic services practices and procedures;

(2) Aircraft general knowledge

(i) use, limitation and serviceability of avionics and instruments necessary for the control and navigation of aero planes under IFR and in instrument meteorological conditions; use and limitations of automation;

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

(3) Flight performance and planning

(i) pre-flight preparations and checks appropriate to flight under IFR;

(ii) operational flight planning; preparation and filing of air traffic services flight plans under IFR; altimeter setting procedures;

(4) Human performance relevant to instrument flight in airplanes;

(5) Meteorology

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

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

(6) Navigation

(i) Practical air navigation using navigation systems;

(ii) Use, accuracy and reliability of navigation systems used in departure, en-route, approach and landing phases of flight; identification of navigation sources; Operational procedures

(iii) 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;

(iv) Precautionary and emergency procedures; safety practices associated with flight under IFR;

(7) Radiotelephony procedures and phraseology as applied to aircraft operations under IFR; action to be taken in case of communication failure.

(c) Flight proficiency. A person who applies for an instrument rating must receive and log training from an authorized instructor in an aircraft, or in a flight simulator or flight training device, in accordance with paragraph (e) of this section, that includes the following areas of operation:

(1) Preflight 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) Preflight preparation including pre-flight inspection, use of checklists, taxiing and pretake-off checks;

(3) Air traffic control clearances and procedures;

(4) Flight by reference to instruments including in-flight maneuvers and particular flight characteristics.

(5) Navigation systems;

(6) Instrument approach procedures to specified minima including missed approach procedures;

(7) Normal, Abnormal and Emergency operations including

(i) Transition to instrument flight on take-off;

(ii) Standard instrument departures and arrivals;

(iii) en-route IFR procedures;

(iv) Holding procedures;

(v) Landings from instrument approaches; and

(8) Post flight procedures.

(d) Aeronautical experience. A person who applies for an instrument rating must have logged the following:

(1) At least 50 hours of cross-country flight time as pilot in command, of which at least 10 hours must be in airplanes for an instrument—airplane rating; and

(2) A total of 40 hours of actual or simulated instrument time on the areas of operation of this section, to include:

(i) At least 15 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;

(iii) For an instrument—airplane rating, instrument training on cross- country flight procedures specific to airplanes that includes at least one cross-country flight in an airplane that is performed under IFR, and consists of:

(A) A distance of at least 250 nautical miles along airways or ATC-directed routing;

(B) An instrument approach at each airport; and

(C) Three different kinds of approaches with the use of navigation systems;

(iv) For an instrument—helicopter rating, instrument training specific to helicopters on cross-country flight procedures that includes at least one cross-country flight in a helicopter that is performed under IFR, and consists of:

(A) A distance of at least 100 nautical miles along airways or ATC-directed routing;

(B) An instrument approach at each airport; and

(C) Three different kinds of approaches with the use of navigation systems; and

(v) For an instrument—powered-lift rating, instrument training specific to a powered-lift on cross-country flight procedures that includes at least one cross-country flight in a powered-lift that is performed under IFR and consists of:

(A) A distance of at least 250 nautical miles along airways or ATC-directed routing;

(B) An instrument approach at each airport; and

(C) Three different kinds of approaches with the use of navigation systems.

(e) Use of flight simulators or flight training devices. If the instrument training was provided by an authorized instructor in a flight simulator or flight training device:

(1) A maximum of 30 hours may be performed in that flight simulator or flight training device if the training was accomplished in accordance with part 142 of the ECARs; or

(2) A maximum of 20 hours may be performed in that flight simulator or flight training device if the training was not accomplished in accordance with part 142 of the ECARs.

61.67 Category II pilot authorization requirements.

(a) General. A person who applies for a Category II pilot authorization must hold:

(1) At least a private or commercial pilot license with an instrument rating or an airline transport pilot license;

(2) A type rating for the aircraft for which the authorization is sought if that aircraft requires a type rating; and

(3) A category and class rating for the aircraft for which the authorization is sought.

(b) Experience requirements. An applicant for a Category II pilot authorization must have at least:

(1) 50 hours of night flight time as pilot in command.

(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 a flight simulator or flight training device; or

(ii) 40 hours of simulated instrument flight time if accomplished in an approved course conducted by an appropriately rated training center certificated under part 142 of the ECARs.

(3) 250 hours of cross-country flight time as pilot in command.

(c) Practical test requirements.

(1) A practical test must be passed by a person who applies for:
(i) Issuance or renewal of a Category II pilot authorization; and

(ii) The addition of another type aircraft to the applicant's Category II pilot authorization.

(2) To be eligible for the practical test for an authorization under this section, an applicant must:

(i) Meet the requirements of paragraphs (a) and (b) of this section; and

(ii) If the applicant has not passed a practical test for this authorization during the 12 calendar months preceding the month of the test, then that person must:

(A) Meet the requirements of section 61.57(c); and

(B) 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 must have been conducted without the use of an approach coupler.

(3) The approaches specified in paragraph (c)(2)(ii)(B) of this section:
(i) Must be conducted under actual or simulated instrument flight conditions;

(ii) Must be conducted to the decision height for the ILS approach in the type aircraft in which the practical test is to be conducted;

(iii) Need not be conducted to the decision height authorized for Category II operations;

(iv) Must be conducted to the decision height authorized for Category II operations only if conducted in a flight simulator or flight training device; and

(v) Must be accomplished 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 a flight simulator that:

(A) Represents an aircraft of the same category and class, and type, as applicable, as the aircraft in which the authorization is sought; and

(B) Is used in accordance with an approved course conducted by a training center certificated under part 142 of the ECARs.

(4) The flight time acquired in meeting the requirements of paragraph (c)(2)(ii)(B) of this section may be used to meet the requirements of paragraph (c)(2)(ii)(A) of this section.

(d) Practical test procedures. The practical test consists of an oral increment and a flight increment.

(1) Oral increment. In the oral increment of the practical test an applicant must demonstrate knowledge of the following:

(i) Required landing distance;

(ii) Recognition of the decision height;

(iii) Missed approach procedures and techniques using computed or fixed attitude guidance displays;

(iv) Use and limitations of RVR;

(v) Use of visual clues, their availability or limitations, and altitude at which they are normally discernible at reduced RVR readings;

(vi) Procedures and techniques related to transition from no visual to visual flight during a final approach under reduced RVR;

(vii) Effects of vertical and horizontal winds hear;

(viii) Characteristics and limitations of the ILS and runway lighting system;

(ix) Characteristics and limitations of the flight director system, auto approach coupler (including split axis type if equipped), auto throttle system (if equipped), and other required Category II equipment;

(x) Assigned duties of the second in command during Category II approaches, unless the aircraft for which authorization is sought does not require a second in command; and

(xi) Instrument and equipment failure warning systems.

(2) Flight increment. The following requirements apply to the flight increment of the practical test:

(i) The flight increment must 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 a flight simulator that:

(A) Represents an aircraft of the same category and class, and type, as applicable, as the aircraft in which the authorization is sought; and

(B) Is used in accordance with an approved course conducted by a training center certificated under part 142 of the ECARs.

(ii) The flight increment must consist of at least two ILS approaches to 100 feet AGL including at least one landing and one missed approach.

(iii) All approaches performed during the flight increment must be made with the use of an approved flight control guidance system, except if an approved auto approach coupler is installed, at least one approach must be hand flown using flight director commands.

(iv) If a multiengine airplane with the performance capability to execute a missed approach with one engine inoperative is used for the practical test, the flight increment must include the performance

of one missed approach with an engine, which shall be the most critical engine, if applicable, set at idle or zero thrust before reaching the middle marker.

(v) If a multiengine flight simulator or multiengine flight training device is used for the practical test, the applicant must execute a missed approach with the most critical engine, if applicable, failed.

(vi) For an authorization for an aircraft that requires a type rating, the practical test must be performed in coordination with a second in command who holds a type rating in the aircraft in which the authorization is sought.

(vii) Oral questioning may be conducted at any time during a practical test.

61.68 Category III pilot authorization requirements.

(a) General. A person who applies for a Category III pilot authorization must hold:

(1) At least a private pilot license or commercial pilot license with an instrument rating or an airline transport pilot license ;

(2) A type rating for the aircraft for which the authorization is sought if that aircraft requires a type rating; and

(3) A category and class rating for the aircraft for which the authorization is sought.

(b) Experience requirements. An applicant for a Category III pilot authorization must have at least:

(1) 50 hours of night flight time as pilot in command.

(2) 75 hours of instrument flight time during actual or simulated instrument conditions that may include not more than:

(i) A combination of 25 hours of simulated instrument flight time in a flight simulator or flight training device; or

(ii) 40 hours of simulated instrument flight time if accomplished in an approved course conducted by an appropriately rated training center certificated under part 142 of the ECARs.

(3) 250 hours of cross-country flight time as pilot in command.

(c) Practical test requirements.

(1) A practical test must be passed by a person who applies for:

(i) Issuance or renewal of a Category III pilot authorization; and

(ii) The addition of another type of aircraft to the applicant's Category III pilot authorization.

(2) To be eligible for the practical test for an authorization under this section, an applicant must:

(i) Meet the requirements of paragraphs (a) and (b) of this section; and

(ii) If the applicant has not passed a practical test for this authorization during the 12 calendar months preceding the month of the test, then that person must:

(A) Meet the requirements of section61.57(c); and

(B) 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 must have been conducted without the use of an approach coupler.

(3) The approaches specified in paragraph (c)(2)(ii)(B) of this section:

(i) Must be conducted under actual or simulated instrument flight conditions;

(ii) Must be conducted to the alert height or decision height for the ILS approach in the type aircraft in which the practical test is to be conducted;

(iii) Need not be conducted to the decision height authorized for Category III operations;

(iv) Must be conducted to the alert height or decision height, as applicable, authorized for Category III operations only if conducted in a flight simulator or flight training device; and

(v) Must be accomplished 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 a flight simulator that:

(A) Represents an aircraft of the same category and class, and type, as applicable, as the aircraft for which the authorization is sought; and

(B) Is used in accordance with an approved course conducted by a training center certificated under part 142 of the ECARs.

(4) The flight time acquired in meeting the requirements of paragraph (c)(2)(ii)(B) of this section may be used to meet the requirements of paragraph (c)(2)(ii)(A) of this section.

(d) Practical test procedures. The practical test consists of an oral increment and a flight increment.

(1) Oral increment. In the oral increment of the practical test an applicant must demonstrate knowledge of the following:

(i) Required landing distance;

(ii) Determination and recognition of the alert height or decision height, as applicable, including use of a radar altimeter;

(iii) Recognition of and proper reaction to significant failures encountered prior to and after reaching the alert height or decision height, as applicable;

(iv) Missed approach procedures and techniques using computed or fixed attitude guidance displays and expected height loss as they relate to manual go-around or automatic go-around, and initiation altitude, as applicable;

(v) Use and limitations of RVR, including determination of controlling RVR and required transmissometers;

(vi) Use, availability, or limitations of visual cues and the altitude at which they are normally discernible at reduced RVR readings including:

(A) Unexpected deterioration of conditions to less than minimum RVR during approach, flare, and rollout;

(B) Demonstration of expected visual references with weather at minimum conditions;

(C) The expected sequence of visual cues during an approach in which visibility is at or above landing minima; and

(D) Procedures and techniques for making a transition from instrument reference flight to visual flight during a final approach under reduced RVR.

(vii) Effects of vertical and horizontal wind shear;

(viii) Characteristics and limitations of the ILS and runway lighting system;

(ix) Characteristics and limitations of the flight director system auto approach coupler (including split axis type if equipped), auto throttle system (if equipped), and other Category III equipment;

(x) Assigned duties of the second in command during Category III operations, unless the aircraft for which authorization is sought does not require a second in command;

(xi) Recognition of the limits of acceptable aircraft position and flight path tracking during approach, flare, and, if applicable, rollout; and

(xii) Recognition of, and reaction to, airborne or ground system faults or abnormalities, particularly after passing alert height or decision height, as applicable.

(2) Flight increment. The following requirements apply to the flight increment of the practical test:

(i) The flight increment may be conducted in an aircraft of the same category and class, and type, as applicable, as the aircraft for which the authorization is sought, or in a flight simulator that:

(A) Represents an aircraft of the same category and class, and type, as applicable, as the aircraft in which the authorization is sought; and

(B) Is used in accordance with an approved course conducted by a training center certificated under part 142 of the ECARs.

(ii) The flight increment must consist of at least two ILS approaches to 100 feet AGL, including one landing and one missed approach initiated from a very low altitude that may result in a touchdown during the go-around maneuver;

(iii) All approaches performed during the flight increment must be made with the approved automatic landing system or an equivalent landing system approved by the ECAA;

(iv) If a multiengine aircraft with the performance capability to execute a missed approach with one engine inoperative is used for the practical test, the flight increment must include the performance of one missed approach with the most critical engine, if applicable, set at idle or zero thrust before reaching the middle or outer marker;

(v) If a multiengine flight simulator or multiengine flight training device is used, a missed approach must be executed with an engine, which shall be the most critical engine, if applicable, failed;

(vi) For an authorization for an aircraft that requires a type rating, the practical test must be performed in coordination with a second in command who holds a type rating in the aircraft in which the authorization is sought;

(vii) Oral questioning may be conducted at any time during the practical test;

(viii) Subject to the limitations of this paragraph, for Category IIIb operations predicated on the use of a fail-passive rollout control system, at least one manual rollout using visual reference or a combination of visual and instrument references must be executed. The maneuver required by this paragraph shall be initiated by a fail-passive disconnect of the rollout control system:

(A) After main gear touchdown;

(B) Prior to nose gear touchdown;

(C) In conditions representative of the most adverse lateral touchdown displacement allowing a safe landing on the runway; and

(D) In weather conditions anticipated in Category IIIb operations.

61.69 Reserved

61.71 Graduates of an approved training program other than under this part: Special rules.

(a) A person who graduates from an approved training program under part 141 or part 142 of the ECARs is considered to have met the applicable aeronautical experience, aeronautical knowledge, and areas of operation requirements of this part if that person presents the graduation certificate and passes the required practical test within the 60-day period after the date of graduation.

(b) A person may apply for an airline transport pilot license, type rating, or both under this part, and will be considered to have met the applicable requirements under section 61.157 of this part for that license and rating, if that person has:

(1) Satisfactorily accomplished an approved training program and the pilot-in-command proficiency check for that airplane type, in accordance with the pilot-in-command requirements under subparts N and O of part 121 of the ECARs; and

(2) Applied for the airline transport pilot license, type rating, or both within the 60-day period from the date the person satisfactorily accomplished the approved training program and pilot-in-command proficiency check for that airplane type.

61.73 Military pilots or former military pilots: Special rules.

(a) General. Except for a rated military pilot or former rated military pilot who has been removed from flying status for lack of proficiency, or because of disciplinary action involving aircraft operations, a rated military pilot or former rated military pilot who meets the applicable requirements of this section may apply, on the basis of his or her military training, for:

(1) A commercial pilot license;

(2) An aircraft rating in the category and class of aircraft for which that military pilot is qualified;

(3) An instrument rating with the appropriate aircraft rating for which that military pilot is qualified; or

(4) A type rating, if appropriate.

(b) Military pilots on active flying status within the past 12 months. A rated military pilot or former rated military pilot who has been on active flying status within the 12 months before applying must:

(1) Pass a knowledge test on the appropriate parts of the ECARs that apply to pilot privileges and limitations, air traffic and general operating rules, and accident reporting rules;

(2) Present documentation showing compliance with the requirements of paragraph (d) of this section for at least one aircraft category rating; and

(3) Present documentation showing that the applicant is or was, at any time during the 12 calendar months before the month of application:

(i) A rated military pilot on active flying status in an armed force of the Arab Republic of Egypt; or

(ii) A rated military pilot of an armed force of a foreign contracting State to the Convention on International Civil Aviation, assigned to pilot duties (other than flight training) with an armed force of the Arab Republic of Egypt and holds, at the time of application, a current civil pilot license issued by that contracting State authorizing at least the privileges of the pilot license sought.

(c) Military pilots not on active flying status during the 12 calendar months before the month of application. A rated military pilot or former rated military pilot who has not been on active flying status within the 12 calendar months before the month of application must:

(1) Pass the appropriate knowledge and practical tests prescribed in this part for the license or rating sought; and

(2) Present documentation showing that the applicant was, before the beginning of the 12th calendar month before the month of application, a rated military pilot as prescribed by paragraph (b)(3)(i) or paragraph (b)(3)(ii) of this section.

(d) Aircraft category, class, and type ratings. A rated military pilot or former rated military pilot who applies for an aircraft category, class, or type rating, if applicable, is issued that rating at the commercial pilot license level if the pilot presents documentary evidence that shows satisfactory accomplishment of:

(1) An official A.R.E. military pilot check and instrument proficiency check in that aircraft category, class, or type, if applicable, as pilot in command during the 12 calendar months before the month of application;

(2) At least 10 hours of pilot-in-command time in that aircraft category, class, or type, if applicable, during the 12 calendar months before the month of application; or

(3) An ECAA practical test in that aircraft after:

(i) Meeting the requirements of paragraphs (b)(1) and (b)(2) of this section; and

(ii) Having received an endorsement from an authorized instructor who certifies that the pilot is proficient to take the required practical test, and that endorsement is made within the 60-day period preceding the date of the practical test.

(e) Instrument rating. A rated military pilot or former rated military pilot who applies for an airplane instrument rating, a helicopter instrument rating, or a powered-lift instrument rating to be added to his or her commercial pilot license may apply for an instrument rating if the pilot has, within the 12 calendar months preceding the month of application:

(1) Passed an instrument proficiency check by an A.R.E. Armed Force in the aircraft category for the instrument rating sought; and

(2) Received authorization from an A.R.E. Armed Force to conduct IFR flights on Governmental airways in that aircraft category and class for the instrument rating sought.

(f) Aircraft type rating. An aircraft type rating is issued only for aircraft types that the ECAA has certificated for civil operations.

(g) Aircraft type rating placed on an airline transport pilot license. A rated military pilot or former rated military pilot who holds an airline transport pilot license and who requests an aircraft type rating to be placed on that person's airline transport pilot license may be issued that aircraft type rating at the airline transport pilot license level, provided that person:

(1) Holds a category and class rating for that type of aircraft at the airline transport pilot license level; and

(2) Passed an official A.R.E. military pilot check and instrument proficiency check in that type of aircraft as pilot in command during the 12 calendar months before the month of application.

(h) Evidentiary documents. The following documents are satisfactory evidence for the purposes indicated:

(1) An official identification card issued to the pilot by an armed force may be used to demonstrate membership in the armed forces.

(2) An original or a copy of a certificate of discharge or release may be used to demonstrate discharge or release from an armed force or former membership in an armed force.

(3) Current or previous status as a rated military pilot with an A.R.E. Armed Force may be demonstrated by:

(i) An official A.R.E. Armed Force order to flight status as a military pilot;

(ii) An official A.R.E. Armed Force form or logbook showing military pilot status; or

(iii) An official order showing that the rated military pilot graduated from an A.R.E. military pilot school and received a rating as a military pilot.

(4) A certified A.R.E. Armed Force logbook or an appropriate official A.R.E. Armed Force form or summary may be used to demonstrate flight time in military aircraft as a member of a A.R.E. Armed Force.

(5) An official A.R.E. Armed Force record of a military checkout as pilot in command may be used to demonstrate pilot in command status.

(6) A current instrument grade slip that is issued by an A.R.E. Armed Force, or an official record of satisfactory accomplishment of an instrument proficiency check during the 12 calendar months preceding the month of the application may be used to demonstrate instrument pilot qualification.

61.75 Pilot license issued on the basis of a foreign pilot license.

(a) General. A person who holds a current foreign private , commercial, or airline transport pilot license issued by a contracting State to the Convention on International Civil Aviation may apply for and be issued a pilot license with the appropriate ratings when the application is based on the foreign pilot license that meets the requirements of ICAO ANNEX 1 .

(b) License issued. An A.R.E. private pilot license that is issued under this section shall specify the person's foreign license number and country of issuance. A person who holds a current foreign private pilot license issued by a contracting State to the Convention on International Civil Aviation may be issued a private pilot license based on the foreign pilot license without any further showing of proficiency, and a person who holds a foreign commercial or an airline transport pilot license is issued an A.R.E commercial or airline transport pilot license with further showing of proficiency provided the applicant:

(1) Meets the requirements of ICAO ANNEX 1;

(2) Holds a foreign pilot license that:

(i) Is not under an order of revocation or suspension by the foreign country that issued the foreign pilot license; and

(ii) Does not contain an endorsement stating that the applicant has not met all of the standards of ICAO for that license;

(3) Does not currently hold an A.R.E. pilot license;

(4) Holds a current medical certificate issued under part 67 of the ECARs or a current medical certificate issued by the country that issued the person's foreign pilot license; and

(5) Is able to read, speak, write, and understand the English language.

(6) Holds a high school education or equivalent .

(7) The applicant's who holds a foreign commercial or an airline transport pilot license shall successfully complete the ECAA written exam on ECAR as determined by the ECAA;

(8) The applicant's who holds a foreign commercial or an airline transport pilot license shall successfully complete practical test on an aircraft listed on a his foreign pilot license

(c) Aircraft ratings issued.

(1) Aircraft ratings listed on a person's foreign private pilot license, may be placed on that person's A.R.E. pilot license.

(2) Aircraft ratings listed on a person's foreign commercial pilot license, may be placed on that person's A.R.E. pilot license after satisfactorily accomplish practical test on an aircraft that meets commercial pilot license requirements of this part.

(3) Aircraft ratings listed on a person's foreign airline transport pilot license, may be placed on that person's A.R.E. pilot license after satisfactorily accomplish practical test on an aircraft that meets airline transport pilot license requirements of this part.

(d) Instrument ratings issued. A person who holds an instrument rating on the foreign pilot license issued by a contracting State to the Convention on International Civil Aviation may be issued an instrument rating on an A.R.E. private, commercial or an airline transport pilot license provided:

(1) The person's foreign pilot license authorizes instrument privileges;

(2) Within 24 months preceding the month in which the person applies for the instrument rating, the person passes the appropriate knowledge test; and

(3) The person is able to read, speak, write, and understand the English language

(e) Operating privileges and limitations. A person who receives an A.R.E. private, commercial or an airline transport pilot license that has been issued under the provisions of this section:

(1) May act as a pilot of a civil aircraft of A.R.E. registry in accordance with the private, commercial or an airline transport pilot license privileges authorized by this part;

(2) Is limited to the privileges placed on the license by the ECAA;

(3) Is subject to the limitations and restrictions on the person's A.R.E. license and foreign pilot license when exercising the privileges of that A.R.E. pilot license in an aircraft of A.R.E. registry operating within or outside the Arab Republic of Egypt; and

(4) Shall not exercise the privileges of that A.R.E. private, commercial or an airline transport pilot license when the person's foreign pilot license has been revoked or suspended.

(f) Limitation on licenses used as the basis for an A.R.E. license. Only one foreign pilot license may be used as a basis for issuing an A.R.E. private, commercial or an airline transport pilot license. The foreign pilot license and medical certification used as a basis for issuing an A.R.E. private, commercial or an airline transport pilot license under this section must be in the English language.

61.76 Certification of foreign pilots, flight-instructors and ground instructors

(a) Except as provided for in paragraph (b) of this section, an airman license issued under this Part may not be issued to a person who is not Egyptian citizen unless that person passes the appropriate practical test within Egypt.

(b) A person who is not an Egyptian citizen may be issued an airman validation certificate and the practical test for that certificate may be administered outside Egypt when:

(1) The ECAA determines the person needs a pilot license to operate as a required cockpit crewmember of a civil aircraft of Egyptian. registry;

(2) The ECAA determines the person needs a flight instructor license or ground instructor license to train persons who are Egyptian citizens;

(3) The validation certificate is for an addition of a category, class, instrument, or type rating onto an existing Egyptian pilot validation certificate, provided that the airman has not been issued a license on the basis of a foreign pilot license;

(4) The certificate is for an addition, renewal, or reinstatement of a category, class, or instrument rating onto an existing Egyptian flight instructor validation certificate; or

(5) The certificate is for an addition of a rating onto an existing Egyptian ground instructor validation certificate.

(c) Training centers and their satellite training centers certificated under Part 142 may, outside Egypt:

(1) Prepare and recommend applicants for additional ratings and endorsements to certificates issued under this Part, and issue additional ratings and provide endorsements within the authority granted to that training center by the ECAA; and

(2) Prepare and recommend Egyptian citizen applicants for airman licenses, and issue license to Egyptian citizens within the authority granted to that training center by the ECAA.

(d) Validation of foreign licenses:

(1) General: It is not an obligation to ECAA to validate foreign licenses, it is rather a privilege extended by ECAA:

Licenses of foreign personnel can be validated when:

(A) Operating newly purchased or leased types of Egyptian registered aircraft at an Egyptian operator; or

(B) Traveling from different countries with their private Egyptian registered aircraft.

Validations are of short duration not exceeding 6 months, and not extended beyond the period of currency of either the original license or, in the case of a “non-expiring” license, the medical assessment and competency checks required. After six months, the ECAA will consider either issuing an equivalent Egyptian license based on the foreign license or renew the validation certificate for a further period of six months after ensuring the maintenance of continuing competency. Each time, the continued currency of the foreign license will be checked with regard to recent experience requirements of the foreign issuing authority. A similar check will be made of the medical assessment;

Validated license privileges and limitations will not exceed beyond the original license privileges;

The ECAA will exercise the same level of control over the foreign license holders as it does with its own nationals, and will ensure that safe levels of medical fitness and competency are being maintained; and

Validations are in the form of a certificate to be carried with the original license.

(1) Issue validation certificate for holders of foreign commercial pilot licenses and airline transport pilot licenses: To be eligible for the issuance, or renewal, of a validation certificate, an applicant must satisfactorily pass an examination on Egyptian Civil Aviation Law and appropriate regulations and any medical or proficiency tests required by ECAA as necessary. In addition he must present the following to the ECAA:

(i) A current foreign pilot license issued by the licensing authority of a foreign Contracting State issued in conformance with ICAO Annex 1 minimum requirements. The certificate or license must authorize the applicant to perform the duties authorized by a certificate issued under this section on the aircraft type as the leased aircraft;

(ii) An Egyptian work permit and security permit;

(iii) A current certification by the operator and/or lessee of the aircraft;

(A) Stating that the operator and/or lessee is employing the applicant; and

(B) Specifying the aircraft type on which the applicant will perform his duties.

(iv) Official documentation showing that the applicant currently meets the medical standards for the foreign license required by the State that issued the applicant's foreign license;

(v) Official documentation demonstrating that the applicant complies with all training, proficiency and recency of experience requirements; and

(vi) The applicant's aviation background check, (containing information such as violations, incidents/accidents and enforcement actions in which he has been involved).

(3) Privileges: The holder of a validated license may exercise the same privileges as those shown on the license specified in this section, subject to the limitations specified in this section.

(4) Limitations. Each certificate issued under this section is subject to the following limitations:

(i) It is valid only:

(A) While the license required by paragraph (d)(2)(i) of this section is in the certificate holder's personal possession and is current;

(B) While the permits required by paragraph (d)(2)(ii) of this section are valid; and while the certificate holder is employed by the person to whom the aircraft described in the certification required by paragraph (3) of this section is owned, operated and/or leased;

(C) While the certificate holder is performing his duties on the registered civil aircraft described in the certification required by paragraph (d)(2)(iii) of this section; and

(D) While the medical documentation required by paragraph (d)(5)(iv) of this section is in the certificate holder's personal possession and is currently valid.

(ii) Each validation certificate issued under this section contains at least the following:

(A) The name of the person to whom the registered civil aircraft are owned, operated and/or leased;

(B) The type of aircraft; and

(C) Any additional limitations placed on the certificate that the ECAA considers necessary.

(5) Termination: Each validation certificate issued under this section terminates:

(i) When the type of aircraft endorsed on this validation certificate is removed from the operator's operation specification;

(ii) When the aircraft is removed from the Egyptian registry;

(iii) When the permits required by paragraph (d)(2)(ii)of this section expire;

(iv) When the foreign license, authorization, or the medical documentation required is suspended, revoked, or no longer valid; or

(v) After 6 months the certificate was issued.

(6) Renewal: The certificate holder may have the certificate renewed once by complying with the requirements of this section at the time of application for renewal and following the procedures for renewal as defined in the appropriate ECAA approved policy and procedures manuals.

61.77 Special purpose pilot authorization:

Operation of A.R.E.-registered civil aircraft leased by a person who is not an A.R.E. citizen.

(a) General. The holder of a foreign pilot license issued by a contracting State to the Convention on International Civil Aviation who meets the requirements of this section may be issued a special purpose pilot authorization by the ECAA for the purpose of performing pilot duties:

(1) On a civil aircraft of A.R.E. registry that is leased to a person who is not a citizen of the Arab Republic of Egypt, and

(2) For carrying persons or property for compensation or hire on that aircraft.

(b) Eligibility. To be eligible for the issuance or renewal of a special purpose pilot authorization, an applicant must present the following to an ECAA Licensing Branch:

(1) A current foreign pilot license that has been issued by the aeronautical authority of a contracting State to the Convention on International Civil Aviation from which the person holds citizenship or resident status and that contains the appropriate aircraft category, class, instrument rating, and type rating, if appropriate, for the aircraft to be flown;

(2) A current certification by the lessee of the aircraft:

(i) Stating that the applicant is employed by the lessee;

(ii) Specifying the aircraft type on which the applicant will perform pilot duties; and

(iii) Stating that the applicant has received ground and flight instruction that qualifies the applicant to perform the duties to be assigned on the aircraft.

(3) Documentation showing when the applicant will reach the age of 60 years (an official copy of the applicant's birth certificate or other official documentation);

(4) Documentation that the applicant meets the medical standards for the issuance of the foreign pilot license from the aeronautical authority of the contracting State to the Convention on International Civil Aviation where the applicant holds citizenship or resident status;

(5) Documentation that the applicant meets the recent flight experience requirements of this part (a logbook or flight record); and

(6) A statement that the applicant does not already hold a special purpose pilot authorization; however, if the applicant already holds a special purpose pilot authorization, then that special purpose pilot authorization must be surrendered to either the ECAA Licensing Branch that issued it, or the ECAA Licensing Branch processing the application for the authorization, prior to being issued another special purpose pilot authorization.

(c) Privileges. A person issued a special purpose pilot authorization under this section:

(1) May exercise the privileges prescribed on the special purpose pilot authorization; and

(2) Must comply with the limitations specified in this section and any additional limitations specified on the special purpose pilot authorization.

(d) General limitations. A special purpose pilot authorization is valid only:

(1) For flights between foreign countries or for flights in foreign air commerce within the time period allotted on the authorization;

(2) If the foreign pilot license required by paragraph (b)(1) of this section, the medical documentation required by paragraph (b)(4) of this section, and the special purpose pilot authorization issued under this section are in the holder's physical possession or immediately accessible in the aircraft;

(3) While the holder is employed by the person to whom the aircraft described in the certification required by paragraph (b)(2) of this section is leased;

(4) While the holder is performing pilot duties on the A.R.E.-registered aircraft described in the certification required by paragraph (b)(2) of this section; and

(5) If the holder has only one special purpose pilot authorization as provided in paragraph (b)(6) of this section.

(e) Age limitation. No person who holds a special purpose pilot authorization issued under this part, and no person who holds a special purpose pilot license issued under this part before April 25, 2006, shall serve as a pilot on a civil airplane of A.R.E. registry if the person has reached his or her 60th birthday, in the following operations:

(1) Scheduled international air services carrying passengers in turbojet-powered airplanes;

(2) Scheduled international air services carrying passengers in airplanes having a passenger-seat configuration of more than nine passenger seats, excluding each crewmember seat;

(3) Nonscheduled international air transportation for compensation or hire in airplanes having a passenger-seat configuration of more than 30 passenger seats, excluding each crewmember seat; or

(4) Scheduled international air services, or nonscheduled international air transportation for compensation or hire, in airplanes having a payload capacity of more than 3,400 Kegs.

(f) Definitions.

(1) International air service, as used in paragraph (e) of this section, means scheduled air service performed in airplanes for the public transport of passengers, mail, or cargo, in which the service passes through the air space over the territory of more than one country.

(2) International air transportation, as used in paragraph (e) of this section, means air transportation performed in airplanes for the public transport of passengers, mail, or cargo, in which service passes through the air space over the territory of more than one country.

(g) Expiration date. Each special purpose pilot authorization issued under this section expires:

(1) 60 calendar months from the month it was issued, unless sooner suspended or revoked;

(2) When the lease agreement for the aircraft expires or the lessee terminates the employment of the person who holds the special purpose pilot authorization;

(3) Whenever the person's foreign pilot license has been suspended, revoked, or is no longer valid; or

(4) When the person no longer meets the medical standards for the issuance of the foreign pilot license.

(h) Renewal. A person exercising the privileges of a special purpose pilot authorization may apply for a 60-calendar-month extension of that authorization, provided the person:

(1) Continues to meet the requirements of this section; and

(2) Surrenders the expired special purpose pilot authorization upon receipt of the new authorization.

(i) Surrender. The holder of a special purpose pilot authorization must surrender the authorization to the ECAA within 7 days after the date the authorization terminates.

61.78 Rendering a lincence valid pursuant to a formal agreement between A.R.E and any other state.

(A) The licenses of other contracting state may be automatically rendered valid if A.R.E and such state have:

1. Adopted common licenses regulations which are compliant with annex 1.
2. Entered into a formal agreement recognizing the automatic validation process.
3. Established a surveillance system to ensure the continuing implementation of the common licensing regulations.
4. Registered the agreement with ICAO pursuant to article 83 of the convention on international civil aviation.

(B) The endorsement shall appear on license rendered valid pursuant to item (A) indicating that the license is automatically validated under the agreement described in item (A) and referencing the ICAO registration number of the agreement .the endorsement shall further include a list of all states that are party to the agreement.

61.79 Rules applicable to pilot to operate more than one aircraft type.

This section stipulates when pilots may operate more than one aircraft type or aircraft type variant at any one time for compensation and hire (provided that they meet the training requirements established in part 121 – subpart N , Part 61-subpart A-sec 61.5 , and the operator complies with all requirement in 121.418 for each type) as follows :

(a) Pilots may operate at any one time either aero planes or helicopters only one type over 5700 Kgm maximum take off gross weight in addition to only one type under 5700 Kgm maximum take –off gross weight.

(b) Pilot may operate at any one time :

(1) Only two aircraft types of the same manufacturer provided that the two types meet the mixed fleet flying concept of (cockpit layout , flight management computers and display system , type and number of power plants , and aircraft basic performance have very limited differences) ; or

(2) Only three variants of the same type.

Subpart C

Student Pilots

61.81 Applicability.

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

61.83 Eligibility requirements for student pilots.

To be eligible for a student pilot license, an applicant must:

(a) Be at least 16 years of age, for

(b) Be able to read, speak, write, and understand the English language. If the applicant is unable to meet one of these requirements due to medical reasons, then the Director may place such operating limitations on that applicant's pilot license as are necessary for the safe operation of the aircraft.

(c) Medical fitness the applicant shall hold a current class 2 medical assessment .

61.85 Application.

An application for a student pilot license is made on a form and in a manner provided by the Director and is submitted to:

(a) A designated aviation medical examiner if applying for an ECAA medical certificate under part 67 of the ECARs;

(b) An examiner; or

(c) An ECAA, Airman Licensing Branch.

61.87 Solo requirements for student pilots.

(a) General. A student pilot may not operate an aircraft in solo flight unless that student has met the requirements of this section. The term “solo flight” as used in this subpart means that flight time during which a student pilot is the sole occupant of the aircraft.

(b) Aeronautical knowledge. A student pilot must demonstrate satisfactory aeronautical knowledge on a knowledge test that meets the requirements of this paragraph:

(1) The test must address the student pilot's knowledge of:

(i) Applicable sections of parts 61 and 91 of the ECARs;

(ii) Airspace rules and procedures for the airport where the solo flight will be performed; and

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

(2) The student's authorized instructor must:

(i) Administer the test; and

(ii) At the conclusion of the test, review all incorrect answers with the student before authorizing that student to conduct a solo flight.

(c) Pre-solo flight training. Prior to conducting a solo flight, a student pilot must have:

(1) Received and logged flight training for the maneuvers and procedures of this section 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 maneuvers and procedures required by this section in the make and model of aircraft or similar make and model of aircraft to be flown.

(d) Maneuvers and procedures for pre-solo flight training in a single-engine airplane. A student pilot who is receiving training for a single-engine airplane rating or privileges must receive and log flight training for the following maneuvers and procedures:

(1) Proper flight preparation procedures, including preflight planning and preparation, power plant operation, and aircraft systems;

(2) Taxiing or surface operations, including rumpus;

(3) Takeoffs and landings, including normal and crosswind;

(4) Straight and level flight, and turns in both directions;

(5) Climbs and climbing turns;

(6) Airport traffic patterns, including entry and departure procedures;

(7) Collision avoidance, wind shear avoidance, and wake turbulence avoidance;

(8) Descents, with and without turns, using high and low drag configurations;

(9) Flight at various airspeeds from cruise to slow flight;

(10) Stall entries from various flight attitudes and power combinations with recovery initiated at the first indication of a stall, and recovery from a full stall;

(11) Emergency procedures and equipment malfunctions;

(12) Ground reference maneuvers;

(13) Approaches to a landing area with simulated engine malfunctions;

(14) Slips to a landing; and

(15) Go-rounds.

(e) Maneuvers and procedures for pre-solo flight training in a multiengine airplane. A student pilot who is receiving training for a multiengine airplane rating must receive and log flight training for the following maneuvers and procedures:

(1) Proper flight preparation procedures, including preflight planning and preparation, power plant operation, and aircraft systems;

(2) Taxiing or surface operations, including rumpus;

(3) Takeoffs and landings, including normal and crosswind;

(4) Straight and level flight, and turns in both directions;

(5) Climbs and climbing turns;

(6) Airport traffic patterns, including entry and departure procedures;

(7) Collision avoidance, winds hear avoidance, and wake turbulence avoidance;

(8) Descents, with and without turns, using high and low drag configurations;

(9) Flight at various airspeeds from cruise to slow flight;

(10) Stall entries from various flight attitudes and power combinations with recovery initiated at the first indication of a stall, and recovery from a full stall;

(11) Emergency procedures and equipment malfunctions;

(12) Ground reference maneuvers;

(13) Approaches to a landing area with simulated engine malfunctions; and

(14) Go-rounds.

(f) Maneuvers and procedures for pre-solo flight training in a helicopter. A student pilot who is receiving training for a helicopter rating must receive and log flight training for the following maneuvers and procedures:

(1) Proper flight preparation procedures, including preflight planning and preparation, power plant operation, and aircraft systems;

(2) Taxiing or surface operations, including rumpus;

(3) Takeoffs and landings, including normal and crosswind;

(4) Straight and level flight, and turns in both directions;

(5) Climbs and climbing turns;

(6) Airport traffic patterns, including entry and departure procedures;

(7) Collision avoidance, wind shear avoidance, and wake turbulence avoidance;

(8) Descents with and without turns;

(9) Flight at various airspeeds;

(10) Emergency procedures and equipment malfunctions;

(11) Ground reference maneuvers;

(12) Approaches to the landing area;

(13) Hovering and hovering turns;

(14) Go-a rounds;

(15) Simulated emergency procedures, including auto rotational descents with a power recovery and power recovery to a hover;

(16) Rapid decelerations; and

(17) Simulated one-engine-inoperative approaches and landings for multiengine helicopters.

(g) Maneuvers and procedures for pre-solo flight training in a gyroplane. A student pilot who is receiving training for a gyroplane rating or privileges must receive and log flight training for the following maneuvers and procedures:

(1) Proper flight preparation procedures, including preflight planning and preparation, power plant operation, and aircraft systems;

(2) Taxiing or surface operations, including rumps;

(3) Takeoffs and landings, including normal and crosswind;

(4) Straight and level flight, and turns in both directions;

(5) Climbs and climbing turns;

(6) Airport traffic patterns, including entry and departure procedures;

(7) Collision avoidance, wind shear avoidance, and wake turbulence avoidance;

(8) Descents with and without turns;

(9) Flight at various airspeeds;

(10) Emergency procedures and equipment malfunctions;

(11) Ground reference maneuvers;

(12) Approaches to the landing area;

(13) High rates of descent with power on and with simulated power off, and recovery from those flight configurations;

(14) Go-a rounds; and

(15) Simulated emergency procedures, including simulated power-off landings and simulated power failure during departures.

(h) Maneuvers and procedures for pre-solo flight training in a powered-lift. A student pilot who is receiving training for a powered-lift rating must receive and log flight training in the following maneuvers and procedures:

(1) Proper flight preparation procedures, including preflight planning and preparation, power plant operation, and aircraft systems;

(2) Taxiing or surface operations, including rumps;

(3) Takeoffs and landings, including normal and crosswind;

(4) Straight and level flight, and turns in both directions;

(5) Climbs and climbing turns;

(6) Airport traffic patterns, including entry and departure procedures;

(7) Collision avoidance, winds hear avoidance, and wake turbulence avoidance;

(8) Descents with and without turns;

(9) Flight at various airspeeds from cruise to slow flight;

(10) Stall entries from various flight attitudes and power combinations with recovery initiated at the first indication of a stall, and recovery from a full stall;

(11) Emergency procedures and equipment malfunctions;

(12) Ground reference maneuvers;

(13) Approaches to a landing with simulated engine malfunctions;

(14) Go-a rounds;

(15) Approaches to the landing area;

(16) Hovering and hovering turns; and

(17) For multiengine powered-lifts, simulated one-engine-inoperative approaches and landings.

(i) Limitations on student pilots operating an aircraft in solo flight. A student pilot may not operate an aircraft in solo flight unless that student pilot has received:

(1) An endorsement from an authorized instructor on his or her student pilot license for the specific make and model aircraft to be flown; and

(2) An endorsement in the student's logbook for the specific make and model aircraft to be flown by an authorized instructor, who gave the training within the 90 days preceding the date of the flight.

(j) Limitations on student pilots operating an aircraft in solo flight at night. A student pilot may not operate an aircraft in solo flight at night unless that student pilot has received:

(1) Flight training at night on night flying procedures that includes takeoffs, approaches, landings, and go-a rounds at night at the airport where the solo flight will be conducted;

(2) Navigation training at night in the vicinity of the airport where the solo flight will be conducted; and

(3) An endorsement in the student's logbook for the specific make and model aircraft to be flown for night solo flight by an authorized instructor who gave the training within the 90-day period preceding the date of the flight.

(k) Limitations on flight instructors authorizing solo flight.

(1) No instructor may authorize a student pilot to perform a solo flight unless that instructor has:

(i) 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;

(ii) Determined the student pilot is proficient in the maneuvers and procedures prescribed in this section ;

(iii) Determined the student pilot is proficient in the make and model of aircraft to be flown;

(iv) Ensured that the student pilot's license has been endorsed by an instructor authorized to provide flight training for the specific make and model aircraft to be flown; and

(v) Endorsed the student pilot's logbook for the specific make and model aircraft to be flown, and that endorsement remains current for solo flight privileges, provided an authorized instructor updates the student's logbook every 90 days thereafter.

(2) The flight training required by this section must be given by an instructor authorized to provide flight training who is appropriately rated and current.

61.89 General limitations.

(a) A student pilot may not act as pilot in command of an aircraft:

(1) That is carrying a passenger;

(2) That is carrying property for compensation or hire;

(3) For compensation or hire;

(4) In furtherance of a business;

(5) On an international flight;

(6) With a flight or surface visibility of less than 3 statute miles during daylight hours or 5 statute miles at night;

(7) When the flight cannot be made with visual reference to the surface; or

(8) In a manner contrary to any limitations placed in the pilot's logbook by an authorized instructor.

(b) A student pilot may not act as a required pilot flight crewmember on any aircraft for which more than one pilot is required by the type certificate of the aircraft or regulations under which the flight is conducted, and no person other than a required flight crewmember is carried on the aircraft.

61.93 Solo cross-country flight requirements.

(a) General.

(1) Except as provided in paragraph (b) of this section , a student pilot must meet the requirements of this section before—

(i) Conducting a solo cross-country flight, or any flight greater than 25 nautical miles from the airport from where the flight originated.

(ii) Making a solo flight and landing at any location other than the airport of origination.

(2) Except as provided in paragraph (b) of this section , a student pilot who seeks solo cross-country flight privileges must:

(i) Have received flight training from an instructor authorized to provide flight training on the maneuvers and procedures of this section 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 maneuvers and procedures of this section to an authorized instructor;

(iii) Have satisfactorily accomplished the pre-solo flight maneuvers and procedures required by section 61.87 of this part 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 authorized instructor's endorsement that are required by paragraph (c) of this section .

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

(b) Authorization to perform certain solo flights and cross-country flights. A student pilot must obtain an endorsement from an authorized instructor to make solo flights from the airport where the student pilot normally receives training to another location. A student pilot who receives this endorsement must comply with the requirements of this paragraph.

(1) Solo flights may be made to another airport that is within 25 nautical miles from the airport where the student pilot normally receives training, provided—

(i) An authorized instructor has given the student pilot flight training at the other airport, and that training includes flight in both directions over the route, entering and exiting the traffic pattern, and takeoffs and landings at the other airport;

(ii) The authorized instructor who gave the training endorses the student pilot's logbook authorizing the flight;

(iii) The student pilot has current solo flight endorsements in accordance with section 61.87 of this part;

(iv) The authorized instructor has determined that the student pilot is proficient to make the flight; and

(v) The purpose of the flight is to practice takeoffs and landings at that other airport.

(2) Repeated specific solo cross-country flights may be made to another airport that is within 50 nautical miles of the airport from which the flight originated, provided—

(i) The authorized instructor has given the student flight training in both directions over the route, including entering and exiting the traffic patterns, takeoffs, and landings at the airports to be used;

(ii) The authorized instructor who gave the training has endorsed the student's logbook certifying that the student is proficient to make such flights;

(iii) The student has current solo flight endorsements in accordance with section 61.87 of this part; and

(iv) The student has current solo cross-country flight endorsements in accordance with paragraph (c) of this section ; however, for repeated solo cross-country flights to another airport within 50 nautical miles from which the flight originated, separate endorsements are not required to be made for each flight.

(c) Endorsements for solo cross-country flights. Except as specified in paragraph (b)(2) of this section , a student pilot must have the endorsements prescribed in this paragraph for each cross-country flight:

(1) Student pilot license endorsement. A student pilot must have a solo cross-country endorsement from the authorized instructor who conducted the training, and that endorsement must be placed on that person's student pilot license for the specific category of aircraft to be flown.

(2) Logbook endorsement.

(i) A student pilot must have a solo cross-country endorsement from an authorized instructor that is placed in the student pilot's logbook for the specific make and model of aircraft to be flown.

(ii) For each cross-country flight, the authorized instructor who reviews the cross-country planning must make an endorsement in the person's logbook after reviewing that person's cross-country planning, as specified in paragraph (d) of this section . The endorsement must—

(A) Specify the make and model of aircraft to be flown;

(B) State that the student's preflight planning and preparation is correct and that the student is prepared to make the flight safely under the known conditions; and

(C) State that any limitations required by the student's authorized instructor are met.

(d) Limitations on authorized instructors to permit solo cross-country flights. An authorized instructor may not permit a student pilot to conduct a solo cross-country flight unless that instructor has:

(1) Determined that the student's cross-country planning is correct for the flight;

(2) Reviewed the current and forecast weather conditions and has determined that the flight can be completed under VFR;

(3) Determined that the student is proficient to conduct the flight safely;

(4) Determined that the student has the appropriate solo cross-country endorsement for the make and model of aircraft to be flown; and

(5) Determined that the student's solo flight endorsement is current for the make and model aircraft to be flown.

(e) Maneuvers and procedures for cross-country flight training in a single-engine airplane. A student pilot who is receiving training for cross-country flight in a single-engine airplane must receive and log flight training in the following maneuvers and procedures:

(1) Use of aeronautical charts for VFR navigation using pilot age and dead reckoning with the aid of a magnetic compass;

(2) Use of aircraft performance charts pertaining to cross-country flight;

(3) Procurement and analysis of aeronautical weather reports and forecasts, including recognition of critical weather situations and estimating visibility while in flight;

(4) Emergency procedures;

(5) Traffic pattern procedures that include area departure, area arrival, entry into the traffic Pattern, and approach;

(6) Procedures and operating practices for collision avoidance, wake turbulence precautions, and winds hear avoidance;

(7) Recognition, avoidance, and operational restrictions of hazardous terrain features in the geographical area where the cross-country flight will be flown;

(8) Procedures for operating the instruments and equipment installed in the aircraft to be flown, including recognition and use of the proper operational procedures and indications;

(9) Use of radios for VFR navigation and two-way communications;

(10) Takeoff, approach, and landing procedures, including short-field, soft-field, and crosswind takeoffs, approaches, and landings;

(11) Climbs at best angle and best rate; and

(12) Control and maneuvering solely by reference to flight instruments, including straight and level flight, turns, descents, climbs, use of radio aids, and ATC directives.

(f) Maneuvers and procedures for cross-country flight training in a multiengine airplane. A student pilot who is receiving training for cross-country flight in a multiengine airplane must receive and log flight training in the following maneuvers and procedures:

(1) Use of aeronautical charts for VFR navigation using pilot age and dead reckoning with the aid of a magnetic compass;

(2) Use of aircraft performance charts pertaining to cross-country flight;

(3) Procurement and analysis of aeronautical weather reports and forecasts, including recognition of critical weather situations and estimating visibility while in flight;

(4) Emergency procedures;

(5) Traffic pattern procedures that include area departure, area arrival, entry into the traffic pattern, and approach;

(6) Procedures and operating practices for collision avoidance, wake turbulence precautions, and winds hear avoidance;

(7) Recognition, avoidance, and operational restrictions of hazardous terrain features in the geographical area where the cross-country flight will be flown;

(8) Procedures for operating the instruments and equipment installed in the aircraft to be flown, including recognition and use of the proper operational procedures and indications;

(9) Use of radios for VFR navigation and two-way communications;

(10) Takeoff, approach, and landing procedures, including short-field, soft-field, and crosswind takeoffs, approaches, and landings;

(11) Climbs at best angle and best rate; and

(12) Control and maneuvering solely by reference to flight instruments, including straight and level flight, turns, descents, climbs, use of radio aids, and ATC directives.

(g) Maneuvers and procedures for cross-country flight training in a helicopter. A student pilot who is receiving training for cross-country flight in a helicopter must receive and log flight training for the following maneuvers and procedures:

(1) Use of aeronautical charts for VFR navigation using pilot age and dead reckoning with the aid of a magnetic compass;

(2) Use of aircraft performance charts pertaining to cross-country flight;

(3) Procurement and analysis of aeronautical weather reports and forecasts, including recognition of critical weather situations and estimating visibility while in flight;

(4) Emergency procedures;

(5) Traffic pattern procedures that include area departure, area arrival, entry into the traffic pattern, and approach;

(6) Procedures and operating practices for collision avoidance, wake turbulence precautions, and winds hear avoidance;

(7) Recognition, avoidance, and operational restrictions of hazardous terrain features in the geographical area where the cross-country flight will be flown;

(8) Procedures for operating the instruments and equipment installed in the aircraft to be flown, including recognition and use of the proper operational procedures and indications;

(9) Use of radios for VFR navigation and two-way communications; and

(10) Takeoff, approach, and landing procedures.

(h) Maneuvers and procedures for cross-country flight training in a gyroplane. A student pilot who is receiving training for cross-country flight in a gyroplane must receive and log flight training in the following maneuvers and procedures:

(1) Use of aeronautical charts for VFR navigation using pilot age and dead reckoning with the aid of a magnetic compass;

(2) Use of aircraft performance charts pertaining to cross-country flight;

(3) Procurement and analysis of aeronautical weather reports and forecasts, including recognition of critical weather situations and estimating visibility while in flight;

(4) Emergency procedures;

(5) Traffic pattern procedures that include area departure, area arrival, entry into the traffic pattern, and approach;

(6) Procedures and operating practices for collision avoidance, wake turbulence precautions, and winds hear avoidance;

(7) Recognition, avoidance, and operational restrictions of hazardous terrain features in the geographical area where the cross-country flight will be flown;

(8) Procedures for operating the instruments and equipment installed in the aircraft to be flown, including recognition and use of the proper operational procedures and indications;

(9) Use of radios for VFR navigation and two-way communications; and

(10) Takeoff, approach, and landing procedures, including short-field and soft-field takeoffs, approaches, and landings.

(i) Maneuvers and procedures for cross-country flight training in a powered-lift. A student pilot who is receiving training for cross-country flight training in a powered-lift must receive and log flight training in the following maneuvers and procedures:

(1) Use of aeronautical charts for VFR navigation using pilot age and dead reckoning with the aid of a magnetic compass;

(2) Use of aircraft performance charts pertaining to cross-country flight;

(3) Procurement and analysis of aeronautical weather reports and forecasts, including recognition of critical weather situations and estimating visibility while in flight;

(4) Emergency procedures;

(5) Traffic pattern procedures that include area departure, area arrival, entry into the traffic pattern, and approach;

(6) Procedures and operating practices for collision avoidance, wake turbulence precautions, and winds hear avoidance;

(7) Recognition, avoidance, and operational restrictions of hazardous terrain features in the geographical area where the cross-country flight will be flown;

(8) Procedures for operating the instruments and equipment installed in the aircraft to be flown, including recognition and use of the proper operational procedures and indications;

(9) Use of radios for VFR navigation and two-way communications;

(10) Takeoff, approach, and landing procedures that include high-altitude, steep, and shallow takeoffs, approaches, and landings; and

(11) Control and maneuvering solely by reference to flight instruments, including straight and level flight, turns, descents, climbs, use of radio aids, and ATC directives.

61.95 Operations in Class B airspace and at airports located within Class B airspace.

(a) A student pilot may not operate an aircraft on a solo flight in Class B airspace unless:

(1) The student pilot has received both ground and flight training from an authorized instructor on that Class B airspace area, and the flight training was received in the specific Class B airspace area for which solo flight is authorized;

(2) The logbook of that student pilot has been endorsed by the authorized instructor who gave the student pilot flight training, and the endorsement is dated within the 90-day period preceding the date of the flight in that Class B airspace area; and

(3) The logbook endorsement specifies that the student pilot has received the required ground and flight training, and has been found proficient to conduct solo flight in that specific Class B airspace area.

(b) A student pilot may not operate an aircraft on a solo flight to, from, or at an airport located within Class B airspace pursuant to section 91.131(b) of the ECARs unless:

(1) The student pilot has received both ground and flight training from an instructor authorized to provide training to operate at that airport, and the flight and ground training has been received at the specific airport for which the solo flight is authorized;

(2) The logbook of that student pilot has been endorsed by an authorized instructor who gave the student pilot flight training, and the endorsement is dated within the 90-day period preceding the date of the flight at that airport; and

(3) The logbook endorsement specifies that the student pilot has received the required ground and flight training, and has been found proficient to conduct solo flight operations at that specific airport.

Subpart D
Private Pilots

61.102 Applicability.

This subpart prescribes the requirements for the issuance of private pilot licenses and ratings, the conditions under which those licenses and ratings are necessary, and the general operating rules for persons who hold those licenses and ratings.

61.103 Eligibility requirements: General.

To be eligible for a private pilot license, a person must:

(a) Be at least 17 years of age , and shall hold current class (2) medical assessment.
(b) Be able to read, speak, write, and understand the English language. If the applicant is unable to meet one of these requirements due to medical reasons, then the ECAA may place such operating limitations on that applicant's pilot license as are necessary for the safe operation of the aircraft.
(c) Receive a logbook endorsement from an authorized instructor who:
  (1) Conducted the training or reviewed the person's home study on the aeronautical knowledge areas listed in section 61.105(b) of this part that apply to the aircraft rating sought; and
  (2) Certified that the person is prepared for the required knowledge test.
(d) Pass the required knowledge test on the aeronautical knowledge areas listed in section 61.105(b) of this part.
(e) Receive flight training and a logbook endorsement from an authorized instructor who:
  (1) Conducted the training in the areas of operation listed in section 61.107(b) of this part that apply to the aircraft rating sought; and
  (2) Certified that the person is prepared for the required practical test.
(f) Meet the aeronautical experience requirements of this part that apply to the aircraft rating sought before applying for the practical test.
(g) Pass a practical test on the areas of operation listed in section 61.107(b) of this part that apply to the aircraft rating sought.
(h) Comply with the appropriate sections of this part that apply to the aircraft category and class rating sought.

61.105 Aeronautical knowledge.

(a) General. A person who is applying for a private pilot license must receive and log ground training from an authorized instructor or complete a home-study course on the aeronautical knowledge areas of paragraph (b) of this section that apply to the aircraft category and class rating sought.
(b) Aeronautical knowledge areas.
  (1) Air law. Rules and regulations relevant to the holder of a private pilot license — airplane; rules of the air; appropriate air traffic services practices and procedures;
  (2) Aircraft general knowledge;
    (i) principles of operation of power plants, systems and instruments;
    (ii) operating limitations of power plants; relevant operational information from the flight manual or other appropriate document;
  (3) Flight performance and planning
    (i) effects of loading and weight distribution on flight characteristics; weight and balance calculations;
    (ii) use and practical application of take-off, landing and other performance data;
    (iii) pre-flight and en-route flight planning appropriate to private operations under VFR; preparation and filing of air traffic services flight plans; appropriate air traffic services procedures; position reporting procedures; altimeter setting procedures; operations in areas of high-density traffic;
  (4) Human performance relevant to the private pilot — airplane license;
  (5) Meteorology. application of elementary aeronautical meteorology; use of, and procedures for obtaining, meteorological information; altimetry;
  (6) Navigation. practical aspects of air navigation and dead-reckoning techniques; use of aeronautical charts;
  (7) Operational procedures
    (i) use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;
    (ii) appropriate precautionary and emergency procedures, including action to be taken to avoid hazardous weather, wake turbulence and other operating hazards;
  (8) Principles of flight.

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

61.107 Flight proficiency.

(a) General. A person who applies for a private pilot license must receive and log ground and flight training from an authorized instructor on the areas of operation of this section that apply to the aircraft category and class rating sought.

(b) Areas of operation.

(1) For an airplane category rating with a single-engine class rating:
- (i) Preflight preparation and operation including weight and balance determination, aero plane inspection and servicing;
- (ii) Preflight procedures;
- (iii) Airport and seaplane base operations including operations to, from and transiting controlled airports, compliance with air traffic services procedures, radiotelephony procedures and phraseology, traffic pattern operations, collision avoidance precautions and procedures;
- (iv) Takeoffs, landings, and go-arounds including normal and cross-wind take-offs and landings, maximum performance (short field and obstacle clearance) take-offs; short-field landings;
- (v) Performance maneuvers;
- (vi) Ground reference maneuvers;
- (vii) Navigation including cross-country flying using visual reference, dead reckoning and, where available, radio navigation aids
- (viii) Slow flight and stalls including spin awareness and flight at critically high airspeeds; recognition of, and recovery from, spiral dives;
- (ix) Basic instrument maneuvers including a 180° turn
- (x) Emergency operations including simulated airplane equipment malfunctions;
- (xi) Night operations; and
- (xii) Post flight procedures.

(2) For an airplane category rating with a multiengine class rating:
- (i) All areas of operation outlined under 61.107(b)(1);and
- (ii) Multiengine operations.

(3) For a rotorcraft category rating with a helicopter class rating:
- (i) Preflight preparation including pre-flight operations, weight and balance determination, helicopter inspection and servicing;
- (ii) Preflight procedures;
- (iii) Airport and heliport operations including airport and traffic pattern operations, collision avoidance precautions and procedures; operations to, from and transiting controlled airports, compliance with air traffic services procedures, radiotelephony procedures and phraseology.
- (iv) Hovering maneuvers;
- (v) Takeoffs, landings, and go-arounds including take-offs and landings with minimum necessary power; maximum performance take-off and landing techniques; restricted site operations; quick stops;
- (vi) Performance maneuvers;
- (vii) Navigation including cross-country flying using visual reference, dead reckoning and, where available, radio navigation aids, including a flight of at least one hour;
- (viii) Emergency operations including simulated helicopter equipment malfunctions; authoritative approach and landing;
- (ix) Night operations; and
- (x) Post flight procedures.

(4) For a rotorcraft category rating with a gyroplane class rating:
- (i) Preflight preparation;
- (ii) Preflight procedures;
- (iii) Airport operations;
- (iv) Takeoffs, landings, and go-arounds;
- (v) Performance maneuvers;
- (vi) Ground reference maneuvers;
- (vii) Navigation;
- (viii) Flight at slow airspeeds;
- (ix) Emergency operations;
- (x) Night operations, except as provided in section 61.110 of this part; and
- (xi) Post flight procedures.

(5) For a powered-lift category rating:

(i) Preflight preparation;

(ii) Preflight procedures;

(iii) Airport and heliport operations;

(iv) Hovering maneuvers;

(v) Takeoffs, landings, and go-rounds;

(vi) Performance maneuvers;

(vii) Ground reference maneuvers;

(viii) Navigation;

(ix) Slow flight and stalls;

(x) Basic instrument maneuvers;

(xi) Emergency operations;

(xii) Night operations; and

(xiii) Post flight procedures.

61.109 Aeronautical experience.

(a) For an airplane single-engine rating. Except as provided in paragraph (f) of this section, a person who applies for a private pilot license with an airplane category and single-engine class rating must log at least 40 hours of flight time that includes at least 20 hours of flight training from an authorized instructor and 10 hours of solo flight training in the areas of operation listed in section 61.107(b)(1) of this part, and the training must include at least:
  (1) 3 hours of cross-country flight training in a single-engine airplane;
  (2) 3 hours of night flight training in a single-engine airplane that includes:
    (i) One cross-country flight of over 100 nautical miles total distance; and
    (ii) 10 takeoffs and 10 landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport.
  (3) 3 hours of flight training in a single-engine airplane on the control and maneuvering of an airplane solely by reference to instruments, including straight and level flight, constant airspeed climbs and descents, turns to a heading, recovery from unusual flight attitudes, radio communications, and the use of navigation systems/facilities and radar services appropriate to instrument flight;
  (4) 3 hours of flight training in preparation for the practical test in a single-engine airplane, which must have been performed within 60 days preceding the date of the test; and
  (5) 10 hours of solo flight time in a single-engine airplane, consisting of at least:
    (i) 5 hours of solo cross-country time;
    (ii) One solo cross-country flight of at least 150 nautical miles total distance, with full-stop landings at a minimum of three points, and one segment of the flight consisting of a straight-line distance of at least 50 nautical miles between the takeoff and landing locations; and
    (iii) Three takeoffs and three landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport with an operating control tower.

(b) For an airplane multiengine rating. Except as provided in paragraph (f) of this section, a person who applies for a private pilot license with an airplane category and multiengine class rating must log at least 40 hours of flight time that includes at least 20 hours of flight training from an authorized instructor and 10 hours of solo flight training in the areas of operation listed in section 61.107(b)(2) of this part, and the training must include at least:
  (1) 3 hours of cross-country flight training in a multiengine airplane;
  (2) 3 hours of night flight training in a multiengine airplane that includes:
    (i) One cross-country flight of over 100 nautical miles total distance; and
    (ii) 10 takeoffs and 10 landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport.
  (3) 3 hours of flight training in a multiengine airplane on the control and maneuvering of an airplane solely by reference to instruments, including straight and level flight, constant airspeed climbs and descents,

turns to a heading, recovery from unusual flight attitudes, radio communications, and the use of navigation systems/facilities and radar services appropriate to instrument flight;

(4) 3 hours of flight training in preparation for the practical test in a multiengine airplane, which must have been performed within the 60-day period preceding the date of the test; and

(5) 10 hours of solo flight time in an airplane consisting of at least:

(i) 5 hours of solo cross-country time;

(ii) One solo cross-country flight of at least 150 nautical miles total distance, with full-stop landings at a minimum of three points, and one segment of the flight consisting of a straight-line distance of at least 50 nautical miles between the takeoff and landing locations; and

(iii) Three takeoffs and three landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport with an operating control tower.

(c) For a helicopter rating. Except as provided in paragraph (f) of this section, a person who applies for a private pilot license with rotorcraft category and helicopter class rating must log at least 40 hours of flight time that includes at least 20 hours of flight training from an authorized instructor and 10 hours of solo flight training in the areas of operation listed in section 61.107(b)(3) of this part, and the training must include at least:

(1) 3 hours of cross-country flight training in a helicopter;

(2) 3 hours of night flight training in a helicopter that includes:

(i) One cross-country flight of over 50 nautical miles total distance; and

(ii) 10 takeoffs and 10 landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport.

(3) 3 hours of flight training in preparation for the practical test in a helicopter, which must have been performed within 60 days preceding the date of the test; and

(4) 10 hours of solo flight time in a helicopter, consisting of at least:

(i) 3 hours cross-country time;

(ii) One solo cross-country flight of at least 75 nautical miles total distance, with landings at a minimum of three points, and one segment of the flight being a straight-line distance of at least 25 nautical miles between the takeoff and landing locations; and

(iii) Three takeoffs and three landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport with an operating control tower.

(d) For a gyroplane rating. Except as provided in paragraph (f) of this section, a person who applies for a private pilot license with rotorcraft category and gyroplane class rating must log at least 40 hours of flight time that includes at least 20 hours of flight training from an authorized instructor and 10 hours of solo flight training in the areas of operation listed in section 61.107(b)(4) of this part, and the training must include at least:

(1) 3 hours of cross-country flight training in a gyroplane;

(2) Except as provided in section 61.110 of this part, 3 hours of night flight training in a gyroplane that includes:

(i) One cross-country flight of over 50 nautical miles total distance; and

(ii) 10 takeoffs and 10 landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport.

(3) 3 hours of flight training in preparation for the practical test in a gyroplane, which must have been performed within the 60-day period preceding the date of the test; and

(4) 10 hours of solo flight time in a gyroplane, consisting of at least:

(i) 3 hours of cross-country time;

(ii) One solo cross-country flight of over 75 nautical miles total distance, with landings at a minimum of three points, and one segment of the flight being a straight-line distance of at least 25 nautical miles between the takeoff and landing locations; and

(iii) Three takeoffs and three landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport with an operating control tower.

(e) For a powered-lift rating. Except as provided in paragraph (f) of this section, a person who applies for a private pilot license with a powered-lift category rating must log at least 40 hours of flight time that includes at least 20 hours of flight training from an authorized instructor and 10 hours of solo flight training in the areas of operation listed in section 61.107(b)(5) of this part, and the training must include at least:

(1) 3 hours of cross-country flight training in a powered-lift;

(2) 3 hours of night flight training in a powered-lift that includes:

(i) One cross-country flight of over 100 nautical miles total distance; and

(ii) 10 takeoffs and 10 landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport.

(3) 3 hours of flight training in a powered-lift on the control and maneuvering of a powered-lift solely by reference to instruments, including straight and level flight, constant airspeed climbs and descents, turns

to a heading, recovery from unusual flight attitudes, radio communications, and the use of navigation systems/facilities and radar services appropriate to instrument flight;

(4) 3 hours of flight training in preparation for the practical test in a powered-lift, which must have been performed within the 60-day period preceding the date of the test; and

(5) 10 hours of solo flight time in an airplane or powered-lift consisting of at least:

(i) 5 hours cross-country time;

(ii) One cross-country flight of at least 150 nautical miles total distance, with landings at a minimum of three points, and one segment of the flight being a straight-line distance of at least 50 nautical miles between the takeoff and landing locations; and

(iii) Three takeoffs and three landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport with an operating control tower.

(f) Permitted credit for use of a flight simulator or flight training device.

(1) Except as provided in paragraphs (f)(2) of this section, a maximum of 2.5 hours of training in a flight simulator or flight training device representing the category, class, and type, if applicable, of aircraft appropriate to the rating sought, may be credited toward the flight training time required by this section, if received from an authorized instructor.

(2) A maximum of 5 hours of training in a flight simulator or flight training device representing the category, class, and type, if applicable, of aircraft appropriate to the rating sought, may be credited toward the flight training time required by this section if the training is accomplished in a course conducted by a training center certificated under part 142 of the ECARs.

(3) Except when fewer hours are approved by the ECAA, an applicant for a private pilot license with an airplane, rotorcraft, or powered-lift rating, who has satisfactorily completed an approved private pilot course conducted by a training center certificated under part 142 of the ECARs, need only have a total of 35 hours of aeronautical experience to meet the requirements of this section.

61.110 Night flying exceptions.

A person who does not meet the night flying requirements in section 61.109(d)(2), may be issued a private pilot license with the limitation "Night flying prohibited." This limitation may be removed by an examiner if the holder complies with the requirements of section 61.109(d)(2), as appropriate.

61.113 Private pilot privileges and limitations: Pilot in command.

(a) Except as provided in paragraphs (b) through (f) of this section, no person who holds a private pilot license may act as pilot in command of an aircraft that is carrying passengers or property for compensation or hire; nor may that person, for compensation or hire, act as pilot in command of an aircraft.

(b) A private pilot may, for compensation or hire, act as pilot in command of an aircraft in connection with any business or employment if:

(1) The flight is only incidental to that business or employment; and

(2) The aircraft does not carry passengers or property for compensation or hire.

(c) A private *pilot* may not pay less than the pro rata share of the operating expenses of a flight with passengers, provided the expenses involve only fuel, oil, airport expenditures, or rental fees.

(d) A private pilot may be reimbursed for aircraft operating expenses that are directly related to search and location operations, provided the expenses involve only fuel, oil, airport expenditures, or rental fees, and the operation is sanctioned and under the direction and control of:

(1) A local, State, or Governmental agency; or

(2) An organization that conducts search and location operations.

(e) A private pilot who is an aircraft salesman and who has at least 200 hours of logged flight time may demonstrate an aircraft in flight to a prospective buyer.

(f) A private *pilot* who meets the requirements of section 61.69 may act as a pilot in command of an aircraft towing a glider or empowered ultra light vehicle.

61.115 Reserved

61.117 Private pilot privileges and limitations: Second in command of aircraft requiring more than one pilot.

Except as provided in section 61.113 of this part, no private pilot may, for compensation or hire, act as second in command of an aircraft that is type certificated for more than one pilot, nor may that pilot act as second in command of such an aircraft that is carrying passengers or property for compensation or hire.

61.119 Renewal requirement:

Refer to ECAR 61.56, 61.57 and 61.58.

Subpart E
Commercial Pilots

61.121 Applicability.

This subpart prescribes the requirements for the issuance of commercial pilot licenses and ratings, the conditions under which those licenses and ratings are necessary, and the general operating rules for persons who hold those licenses and ratings.

61.123 Eligibility requirements: General.

To be eligible for a commercial pilot license, a person must:

(a) Be at least 18 years of age and shall hold a current class 1 medical assessment
(b) Be able to read, speak, write, and understand the English language. If the applicant is unable to meet one of these requirements due to medical reasons, then the ECAA may place such operating limitations on that applicant's pilot license as are necessary for the safe operation of the aircraft.
(c) Receive a logbook endorsement from an authorized instructor who:
  (1) Conducted the required ground training or reviewed the person's home study on the aeronautical knowledge areas listed in section 61.125 of this part that apply to the aircraft category and class rating sought; and
  (2) Certified that the person is prepared for the required knowledge test that applies to the aircraft category and class rating sought.
(d) Pass the required knowledge test on the aeronautical knowledge areas listed in section 61.125 of this part;
(e) Receive the required training and a logbook endorsement from an authorized instructor who:
  (1) Conducted the training on the areas of operation listed in section 61.127(b) of this part that apply to the aircraft category and class rating sought; and
  (2) Certified that the person is prepared for the required practical test.
(f) Meet the aeronautical experience requirements of this subpart that apply to the aircraft category and class rating sought before applying for the practical test;
(g) Pass the required practical test on the areas of operation listed in section 61.127(b) of this part that apply to the aircraft category and class rating sought;
(h) Hold at least a private pilot license issued under this part or meet the requirements of section 61.73; and
(i) Comply with the sections of this part that apply to the aircraft category and class rating sought.

61.125 Aeronautical knowledge.

(a) General. A person who applies for a commercial pilot license must receive and log ground training from an authorized instructor, or complete a home-study course, on the aeronautical knowledge areas of paragraph (b) of this section that apply to the aircraft category and class rating sought .
(b) Aeronautical knowledge areas.
  (1) Air law. rules and regulations relevant to the holder of a commercial pilot license, rules of the air; appropriate air traffic services practices and procedures;
  (2) Aircraft general knowledge;
    (i) principles of operation and functioning of power plants, systems and instruments;
    (ii) operating limitations of appropriate aircraft and power plants; relevant operational information from the flight manual or other appropriate document;
    (iii) use and serviceability checks of equipment and systems of appropriate aircraft;
    (iv) maintenance procedures for airframes, systems and power plants of appropriate aircraft;
  (3) Flight performance and planning;
    (i) Effects of loading and weight distribution on handling, flight characteristics and performance; weight and balance calculations;
    (ii) Use and practical application of take-off, landing and other performance data;
    (iii) Pre-flight and en-route flight planning appropriate to operations under VFR; preparation and filing of air traffic services flight plans; appropriate air traffic services procedures; altimeter setting procedures;
  (4) Human performance relevant to the commercial pilot license;
  (5) Meteorology
    (i) interpretation and application of aeronautical meteorological reports, charts and forecasts; use of, and procedures for obtaining, meteorological information, pre-flight and in-flight; altimetry;
    (ii) aeronautical meteorology; climatologic 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; hazardous weather avoidance; Navigation

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

(6) Operational procedures
   (i) use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;
   (ii) appropriate precautionary and emergency procedures;
   (iii) operational procedures for carriage of freight; potential hazards associated with dangerous goods;
   (iv) requirements and practices for safety briefing to passengers, including precautions to be observed when embarking and disembarking from airplanes;

(7) Principles of flight
   (i) Principles of flight.
   (ii) Radiotelephony procedures and phraseology as applied to VFR operations; action to be taken in case of communication failure.

(8) Night and high-altitude operations;

61.127 Flight proficiency.

(a) General. A person who applies for a commercial pilot license must receive and log ground and flight training from an authorized instructor on the areas of operation of this section that apply to the aircraft category and class rating sought.

(b) Areas of operation.
   (1) For an airplane category rating with a single-engine class rating:
      (i) Preflight preparation and operations, including weight and balance determination, aero plane inspection and servicing;
      (ii) Preflight procedures;
      (iii) Airport and seaplane base operations including operations to, from and transiting controlled airports, compliance with air traffic services procedures, radiotelephony procedures and phraseology, traffic pattern operations, collision avoidance precautions and procedures
      (iv) Takeoffs, landings, and go-arounds including normal and cross-wind take-offs and landings, maximum performance (short field and obstacle clearance) take-offs; short-field landings;
      (v) Performance maneuvers including flight at critically high airspeeds; recognition of, and recovery from, spiral dives;;
      (vi) Ground reference maneuvers;
      (vii) Navigation including cross-country flying using visual reference, dead reckoning and radio navigation aids; diversion procedures;
      (viii) Slow flight and stalls including basic flight maneuvers and recovery from unusual attitudes by reference solely to basic flight instruments; spin avoidance;
      (ix) Emergency operations including abnormal and emergency procedures and maneuvers;
      (x) High-altitude operations; and
      (xi) Post flight procedures.
   (2) For an airplane category rating with a multiengine class rating:
      (i) Preflight preparation and operations, including weight and balance determination, aero plane inspection and servicing;
      (ii) Preflight procedures;
      (iii) Airport and seaplane base operations including operations to, from and transiting controlled airports, compliance with air traffic services procedures, radiotelephony procedures and phraseology, traffic pattern operations, collision avoidance precautions and procedures
      (iv) Takeoffs, landings, and go-arounds including normal and cross-wind take-offs and landings, maximum performance (short field and obstacle clearance) take-offs; short-field landings;
      (v) Performance maneuvers including flight at critically high airspeeds; recognition of, and recovery from, spiral dives;;
      (vi) Navigation including cross-country flying using visual reference, dead reckoning and radio navigation aids; diversion procedures;
      (vii) Slow flight and stalls including basic flight maneuvers and recovery from unusual attitudes by reference solely to basic flight instruments; spin avoidance;
      (viii) Emergency operations including abnormal and emergency procedures and maneuvers;
      (ix) Multiengine operations;
      (x) High-altitude operations; and

(xi) Post flight procedures.

(3) For a rotorcraft category rating with a helicopter class rating:
- (i) Preflight preparation including pre-flight operations, weight and balance determination, helicopter inspection and servicing;
- (ii) Preflight procedures;
- (iii) Airport and heliport operations including airport and traffic pattern operations, collision avoidance precautions and procedures; operations to, from and transiting controlled airports, compliance with air traffic services procedures, radiotelephony procedures and phraseology.
- (iv) Hovering maneuvers;
- (v) Takeoffs, landings, and go-a rounds;
- (vi) Performance maneuvers including rapid deceleration (quick stop);
- (vii) Navigation including cross-country flying using visual reference, dead reckoning and radio navigation aids; diversion procedures;
- (viii) Emergency operations, including settling with power; simulated helicopter equipment malfunctions; authoritative approach and landing;
- (ix) Special operations; and
- (x) Post flight procedures.
- (xi) basic flight maneuvers and recovery from unusual attitudes by reference solely to basic flight instruments; and

(4) For a rotorcraft category rating with a gyroplane class rating:
- (i) Preflight preparation;
- (ii) Preflight procedures;
- (iii) Airport operations;
- (iv) Takeoffs, landings, and go-a rounds;
- (v) Performance maneuvers;
- (vi) Navigation;
- (vii) Flight at slow airspeeds;
- (viii) Emergency operations; and
- (ix) Post flight procedures.

(5) For a powered-lift category rating:
- (i) Preflight preparation;
- (ii) Preflight procedures;
- (iii) Airport and heliport operations;
- (iv) Hovering maneuvers;
- (v) Takeoffs, landings, and go-a rounds;
- (vi) Performance maneuvers;
- (vii) Ground reference maneuvers;
- (viii) Navigation;
- (ix) Slow flight and stalls;
- (x) Emergency operations;
- (xi) High-altitude operations;
- (xii) Special operations; and
- (xiii) Post flight procedures.

61.129 Aeronautical experience.

(a) For an airplane single-engine rating. Except as provided in paragraph (f) of this section, a person who applies for a commercial pilot license with an airplane category and single-engine class rating must log at least 250 hours of flight time as a pilot that consists of at least:

(1) 100 hours in powered aircraft, of which 50 hours must be in airplanes.

(2) 100 hours of pilot-in-command flight time, which includes at least:
- (i) 50 hours in airplanes; and
- (ii) 50 hours in cross-country flight of which at least 10 hours must be in airplanes.

(3) 20 hours of training on the areas of operation listed in section 61.127(b)(1) of this part that includes at least:
- (i) 10 hours of instrument training of which at least 5 hours must be in a single-engine airplane;
- (ii) 10 hours of training in an airplane that has a retractable landing gear, flaps, and a controllable pitch propeller, or is turbine-powered, or for an applicant seeking a single-engine seaplane rating, 10 hours of training in a seaplane that has flaps and a controllable pitch propeller;

(iii) One cross-country flight of at least 2 hours in a single-engine airplane in day VFR conditions, consisting of a total straight-line distance of more than 100 nautical miles from the original point of departure;
(iv) One cross-country flight of at least 2 hours in a single-engine airplane in night VFR conditions, consisting of a total straight-line distance of more than 100 nautical miles from the original point of departure; and
(v) 3 hours in a single-engine airplane in preparation for the practical test within the 60-day period preceding the date of the test.

(4) 10 hours of solo flight in a single-engine airplane on the areas of operation listed in section 61.127(b)(1) of this part, which includes at least:
(i) One cross-country flight of not less than 300 nautical miles total distance, with landings at a minimum of three points, one of which is a straight-line distance of at least 250 nautical miles from the original departure point; and
(ii) 5 hours in night VFR conditions with 10 takeoffs and 10 landings (with each landing involving a flight in the traffic pattern) at an airport with an operating control tower.

(b) For an airplane multiengine rating. Except as provided in paragraph (f) of this section, a person who applies for a commercial pilot license with an airplane category and multiengine class rating must log at least 250 hours of flight time as a pilot that consists of at least:
(1) 100 hours in powered aircraft, of which 50 hours must be in airplanes.
(2) 100 hours of pilot-in-command flight time, which includes at least:
(i) 50 hours in airplanes; and
(ii) 50 hours in cross-country flight of which at least 10 hours must be in airplanes.
(3) 20 hours of training on the areas of operation listed in section 61.127(b)(2) of this part that includes at least:
(i) 10 hours of instrument training of which at least 5 hours must be in a multiengine airplane;
(ii) 10 hours of training in a multiengine airplane that has a retractable landing gear, flaps, and controllable pitch propellers, or is turbine-powered, or for an applicant seeking a multiengine seaplane rating, 10 hours of training in a multiengine seaplane that has flaps and a controllable pitch propeller;
(iii) One cross-country flight of at least 2 hours in a multiengine airplane in day VFR conditions, consisting of a total straight-line distance of more than 100 nautical miles from the original point of departure;
(iv) One cross-country flight of at least 2 hours in a multiengine airplane in night VFR conditions, consisting of a total straight-line distance of more than 100 nautical miles from the original point of departure; and
(v) 3 hours in a multiengine airplane in preparation for the practical test within the 60-day period preceding the date of the test.
(4) 10 hours of solo flight time in a multiengine airplane or 10 hours of flight time performing the duties of pilot in command in a multiengine airplane with an authorized instructor (either of which may be credited towards the flight time requirement in paragraph (b)(2) of this section), on the areas of operation listed in section 61.127(b)(2) of this part that includes at least:
(i) One cross-country flight of not less than 300 nautical miles total distance with landings at a minimum of three points, one of which is a straight-line distance of at least 250 nautical miles from the original departure point; and
(ii) 5 hours in night VFR conditions with 10 takeoffs and 10 landings (with each landing involving a flight with a traffic pattern) at an airport with an operating control tower.

(c) For a helicopter rating. Except as provided in paragraph (f) of this section, a person who applies for a commercial pilot license with a rotorcraft category and helicopter class rating must log at least 150 hours of flight time as a pilot that consists of at least:
(1) 100 hours in powered aircraft, of which 50 hours must be in helicopters.
(2) 100 hours of pilot-in-command flight time, which includes at least:
(i) 35 hours in helicopters; and
(ii) 10 hours in cross-country flight in helicopters.
(3) 20 hours of training on the areas of operation listed in section 61.127(b)(3) of this part that includes at least:
(i) 10 hours of instrument training in an aircraft;
(ii) One cross-country flight of at least 2 hours in a helicopter in day VFR conditions, consisting of a total straight-line distance of more than 50 nautical miles from the original point of departure;
(iii) One cross-country flight of at least 2 hours in a helicopter in night VFR conditions, consisting of a total straight-line distance of more than 50 nautical miles from the original point of departure; and

(iv) 3 hours in a helicopter in preparation for the practical test within the 60-day period preceding the date of the test.

(4) 10 hours of solo flight in a helicopter on the areas of operation listed in section 61.127(b)(3) of this part, which includes at least:

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

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

(d) For a gyroplane rating. A person who applies for a commercial pilot license with a rotorcraft category and gyroplane class rating must log at least 150 hours of flight time as a pilot (of which 5 hours may have been accomplished in a flight simulator or flight training device that is representative of a gyroplane) that consists of at least:

(1) 100 hours in powered aircraft, of which 25 hours must be in gyroplanes.

(2) 100 hours of pilot-in-command flight time, which includes at least:

(i) 10 hours in gyroplanes; and

(ii) 3 hours in cross-country flight in gyroplanes.

(3) 20 hours of training on the areas of operation listed in section 61.127(b)(4) of this part that includes at least:

(i) 5 hours of instrument training in an aircraft;

(ii) One cross-country flight of at least 2 hours in a gyroplane in day VFR conditions, consisting of a total straight-line distance of more than 50 nautical miles from the original point of departure;

(iii) One cross-country flight of at least 2 hours in a gyroplane in night VFR conditions, consisting of a total straight-line distance of more than 50 nautical miles from the original point of departure; and

(iv) 3 hours in a gyroplane in preparation for the practical test within the 60-day period preceding the date of the test.

(4) 10 hours of solo flight in a gyroplane on the areas of operation listed in section 61.127(b)(4) of this part, which includes at least:

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

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

(e) For a powered-lift rating. Except as provided in paragraph (f) of this section, a person who applies for a commercial pilot license with a powered-lift category rating must log at least 250 hours of flight time as a pilot that consists of at least:

(1) 100 hours in powered aircraft, of which 50 hours must be in a powered-lift.

(2) 100 hours of pilot-in-command flight time, which includes at least—

(i) 50 hours in a powered-lift; and

(ii) 50 hours in cross-country flight of which 10 hours must be in a powered-lift.

(3) 20 hours of training on the areas of operation listed in section 61.127(b)(5) of this part that includes at least:

(i) 10 hours of instrument training, of which at least 5 hours must be in a powered-lift;

(ii) One cross-country flight of at least 2 hours in a powered-lift in day VFR conditions, consisting of a total straight-line distance of more than 100 nautical miles from the original point of departure;

(iii) One cross-country flight of at least 2 hours in a powered-lift in night VFR conditions, consisting of a total straight-line distance of more than 100 nautical miles from the original point of departure; and

(iv) 3 hours in a powered-lift in preparation for the practical test within the 60-day period preceding the date of the test.

(4) 10 hours of solo flight in a powered-lift on the areas of operation listed in section 61.127(b)(5) of this part, which includes at least:

(i) One cross-country flight of not less than 300 nautical miles total distance with landings at a minimum of three points, one of which is a straight-line distance of at least 250 nautical miles from the original departure point; and

(ii) 5 hours in night VFR conditions with 10 takeoffs and 10 landings (with each landing involving a flight in the traffic pattern) at an airport with an operating control tower.

(f) Permitted credit for use of a flight simulator or flight training device.

(1) Except as provided in paragraph (i)(2) of this section, an applicant who has not accomplished the training required by this section in a course conducted by pilot school certificated under part 141 of the ECARs may:

(i) Credit a maximum of 20 hours toward the total aeronautical experience requirements for an airplane or powered-lift rating, provided the aeronautical experience was obtained from an

authorized instructor in a flight simulator or flight training device that represents that class of airplane or powered-lift category and type, if applicable, appropriate to the rating sought; and

(ii) Credit a maximum of 10 hours toward the total aeronautical experience requirements of this section for a helicopter rating, provided the aeronautical experience was obtained from an authorized instructor in a flight simulator or flight training device that represents a helicopter and type, if applicable, appropriate to the rating sought.

(2) Except when fewer hours are approved by the ECAA, an applicant for a commercial pilot license with an airplane or a powered-lift rating who has satisfactorily completed an approved commercial pilot course conducted by pilot school certificated under part 141 of the ECARs need only have 190 hours of total to meet the aeronautical experience requirements of this section.

61.133 Commercial pilot privileges and limitations.

(a) Privileges:

General. A person who holds a commercial pilot license may act as pilot in command of an aircraft:

(1) Carrying persons or property for compensation or hire, provided the person is qualified in accordance with this part and with the applicable parts of the ECARs that apply to the operation; and

(2) For compensation or hire, provided the person is qualified in accordance with this part and with the applicable parts of the ECARs that apply to the operation.

(b) Limitations.

A person who applies for a commercial pilot license with an airplane category or powered-lift category rating and does not hold an instrument rating in the same category and class will be issued a commercial pilot license that contains the limitation, “The carriage of passengers for hire in (airplanes) (powered-lifts) on cross-country flights in excess of 50 nautical miles or at night is prohibited.” The limitation may be removed when the person satisfactorily accomplishes the requirements listed in section 61.65 of this part for an instrument rating in the same category and class of aircraft listed on the person's commercial pilot license.

61.135 Renewal requirement

Refer to ECAR 61.56, 61.57 and 61.58

Subpart F
Airline Transport Pilots

61.151 Applicability.

This subpart prescribes the requirements for the issuance of airline transport pilot licenses and ratings, the conditions under which those licenses and ratings are necessary, and the general operating rules for persons who hold those licenses and ratings.

61.153 Eligibility requirements: General.

To be eligible for an airline transport pilot license, a person must:

(a) Be at least 21 years of age;
(b) Be able to read, speak, write, and understand the English language. If the applicant is unable to meet one of these requirements due to medical reasons, then the ECAA may place such operating limitations on that applicant's pilot license as are necessary for the safe operation of the aircraft;
(c) Be of good moral character;
(d) Meet at least one of the following requirements:
  (1) Hold at least a commercial pilot license and an instrument rating;
  (2) Meet the military experience requirements under section 61.73 of this part to qualify for a commercial pilot license, and an instrument rating if the person is a rated military pilot or former rated military pilot of an Armed Force of the Arab Republic of Egypt; or
  (3) Hold either a foreign airline transport pilot or foreign commercial pilot license and an instrument rating, without limitations, issued by a contracting State to the Convention on International Civil Aviation.
(e) Meet the aeronautical experience requirements of this subpart that apply to the aircraft category and class rating sought before applying for the practical test;
(f) Pass a knowledge test on the aeronautical knowledge areas of section 61.155(c) of this part that apply to the aircraft category and class rating sought;
(g) Pass the practical test on the areas of operation listed in section 61.157(d) of this part that apply to the aircraft category and class rating sought; and
(h) Comply with the sections of this part that apply to the airplane, helicopter and power-lift category ratings sought.

61.155 Aeronautical knowledge.

(a) General. The knowledge test for an airline transport pilot license is based on the aeronautical knowledge areas listed in paragraph (c) of this section that are appropriate to the aircraft category and class rating sought.
(b) Aircraft type rating. A person who is applying for an additional aircraft type rating to be added to an airline transport pilot license is not required to pass a knowledge test if that person's airline transport pilot license lists the aircraft category and class rating that is appropriate to the type rating sought.
(c) Aeronautical knowledge areas.
  (1) Air law. Rules and regulations relevant to the holder of an airline transport pilot license rules of the air; appropriate air traffic services practices and procedures;
  (2) Aircraft general knowledge;
    (i) General characteristics and limitations of electrical, hydraulic, pressurization and other systems; flight control systems, including autopilot and stability augmentation;
    (ii) Principles of operation, handling procedures and operating limitations of power plants; effects of atmospheric conditions on engine performance; relevant operational information from the flight manual or other appropriate document;
    (iii) Operating procedures and limitations of appropriate effects of atmospheric conditions on performance;
    (iv) Use and serviceability checks of equipment and systems.
    (v) Flight instruments; compasses, turning and acceleration errors; gyroscopic instruments, operational limits and precession effects; practices and procedures in the event of malfunctions of various flight instruments;
    (vi) Maintenance procedures for airframes, systems and power plants.
    (vii) For helicopters and powered-lifts, transmission (power trains) where applicable.
  (3) Flight performance and planning

(i) Effects of loading and mass distribution on handling, flight characteristics and performance; mass and balance calculations;
(ii) Use and practical application of take-off, landing and other performance data, including procedures for cruise control;
(iii) Pre-flight and en-route operational flight planning; preparation and filing of air traffic services flight plans; appropriate air traffic services procedures; altimeter setting procedures;
(iv) In the case of helicopters and powered-lifts, effects of external loading on handling.

(4) Human performance. Relevant to the airline transport pilot license, including principles of threat and error management;

(5) Meteorology
(i) Interpretation and application of aeronautical meteorological reports, charts and forecasts; codes and abbreviations; use of, and procedures for obtaining, meteorological information, pre-flight and in-flight; altimetry;
(ii) Aeronautical meteorology; climatologic of relevant areas in respect of the elements having an effect upon aviation; the movement of pressure systems; the structure of fronts, and the origin and characteristics of significant weather phenomena which affect take-off, en-route and landing conditions;
(iii) Causes, recognition and effects of engine and airframe icing; frontal zone penetration procedures; hazardous weather avoidance;
(iv) Practical high altitude meteorology, including interpretation and use of weather reports, charts and forecasts; jet streams;

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

(7) Operational procedures
(i) Interpretation and use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations, and instrument procedure charts for departure, en-route, descent and approach;
(ii) Precautionary and emergency procedures; safety practices associated with flight under IFR;
(iii) Operational procedures for carriage of freight and dangerous goods;
(iv) Requirements and practices for safety briefing to passengers, including precautions to be observed when embarking and disembarking .

(8) Principles of flight subsonic aerodynamics; compressibility effects, maneuver 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;

(9) Radiotelephony procedures and phraseology; action to be taken in case of communication failure.

(d) In addition to the above subjects, the applicant for and airline transport pilot licence applicable to the aero plane or powered-lift category shall have met the knowledge requirements for the instrument rating at ECAR 61.65

61.157 Flight proficiency.

(a) General.
(1) The practical test for an airline transport pilot license is given for:
(i) An airplane category rating;
(ii) A helicopter category rating;
(iii) A powered-lift category rating; and

(2) A person who is applying for an airline transport pilot practical test must meet:
(i) The eligibility requirements of section 61.153 of this part; and
(ii) The aeronautical knowledge and aeronautical experience requirements of this subpart that apply to the airplane, helicopter and power-lift category ratings sought.

(b) Aircraft type rating. Except as provided in paragraph (c) of this section, a person who is applying for an aircraft type rating to be added to an airline transport pilot license:
(1) Must receive and log ground and flight training from an authorized instructor on the areas of operation in this section that apply to the aircraft type rating sought;

(2) Must receive a logbook endorsement from an authorized instructor certifying that the applicant completed the training on the areas of operation listed in paragraph (e) of this section that apply to the aircraft type rating sought; and

(3) Must perform the practical test in actual or simulated instrument conditions.

(c) Exceptions. A person who is applying for an aircraft type rating to be added to an airline transport pilot license or an aircraft type rating concurrently with an airline transport pilot license, and who is an employee of a certificate holder operating under part 121 of the ECARs, need not comply with the requirements of paragraph (b) of this section if the applicant presents a training record that shows satisfactory completion of that certificate holder's or program manager's approved pilot-in-command training program for the aircraft type rating sought.

(d) The applicant shall have demonstrated the ability to perform, as pilot-in-command of an aircraft within the appropriate category required to be operated with a co-pilot, the following procedures and manoeuvres as provided in (f) below.

(e) Areas of operation.

(1) For an airplane category rating:

(i) Preflight preparation;
(ii) Preflight procedures including the preparation of the operational flight plan and filing of the air traffic services flight plan;
(iii) Takeoff and departure phase including transition to instrument flight on take-off;
(iv) Normal flight procedures and manoeuvres during all phases of flight;
(v) Instrument procedures including en-route IFR procedures;
(vi) Landings and approaches to landings;
(vii) Abnormal and emergency procedures and manoeuvres related to failures and malfunctions of equipment, such as engine, systems and airframe.
(viii) procedures for crew incapacitation and crew coordination, including allocation of pilot tasks, crew cooperation and use of checklists;
(ix) Procedures and manoeuvres for instrument flight described in ECAR 61.65 (c) including simulated engine failure.
(x) The applicant shall have demonstrated the ability to perform the procedures and manoeuvres described in 61.157 (e) as pilot-in-command of a multi-engined airplane.
(xi) Post flight procedures.

(2) For a helicopter category rating:

(i) Preflight preparation;

(ii)Preflight procedures including the preparation of the operational flight plan and filing of the air traffic services flight plan;

(iii)Takeoff and departure phase including transition to instrument flight on take-off;

(iv)Normal flight procedures and manoeuvres during all phases of flight;

(v)Instrument procedures including en-route IFR procedures;

(vi)Landings and approaches to landings;

(vii) Abnormal and emergency procedures and manoeuvres related to failures and malfunctions of equipment, such as engine, systems and airframe.

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

(ix) Post flight procedures.

(3) For a powered-lift category rating:
(i) Preflight preparation;
(ii) Preflight procedures including the preparation of the operational flight plan and filing of the air traffic services flight plan;
(iii) Takeoff and departure phase including transition to instrument flight on take-off;
(iv) Normal flight procedures and manoeuvres during all phases of flight;
(v) Instrument procedures including en-route IFR procedures;
(vi) Landings and approaches to landings;

(vii) Abnormal and emergency procedures and manoeuvres related to failures and malfunctions of equipment, such as engine, systems and airframe.
(viii) Procedures for crew incapacitation and crew coordination, including allocation of pilot tasks, crew cooperation and use of checklists;
(ix) Procedures and manoeuvres for instrument flight described in ECAR 61.65 (c) including simulated engine failure.
(x) Post flight procedures.

(f) The applicant shall have demonstrated the ability to perform the procedures and maneuvers described in 61.157 (d) with a degree of competency appropriate to the privileges granted to the holder of an airline transport pilot licence, and to:
(i) Recognize and manage threats and errors;
(ii) Smoothly and accurately, manually control the aircraft within its limitations at all times, such that the successful outcome of a procedure or manoeuvre is assured;
(iii) Operate the aircraft in the mode of automation appropriate to the phase of flight and to maintain awareness of the active mode of automation;
(iv) Perform, in an accurate manner, normal, abnormal and emergency procedures in all phases of flight;
(v) Exercise good judgement and airmanship, to include structured decision making and the maintenance of situational awareness; and
(vi) Communicate effectively with other flight crew members and demonstrate the ability to effectively perform procedures for crew incapacitation, crew coordination, including allocation of pilot tasks, crew cooperation, adherence to standard operating procedures (SOPs) and use of checklists.

(g) Proficiency checks conducted under part 121.
(1) Successful completion of A proficiency check under section 121.441 of the ECARs.
(2) The check specified in paragraph (f)(1) of this section must be conducted by an authorized designated pilot examiner or ECAA aviation safety inspector.

61.159 Aeronautical experience: Airplane category rating.

(a) Except as provided in paragraphs (b), (c), and (d) of this section, a person who is applying for an airline transport pilot license with an airplane category and class rating must have at least 1,500 hours of total time as a pilot on airplane that includes at least:

(1) 500 hours as pilot-in-command under supervision or 250 hours, either as pilot-in-command, or made up by not less than 70 hours as pilot-in-command and the necessary additional flight time as pilot-in-command under supervision;.

(2) 200 hours of cross-country flight time, of which not less than 100 hours shall be as pilot in command or as pilot in command under supervision;

(3) 75 hours of instrument flight time, in actual or simulated instrument conditions, subject to the following:

(i) A maximum of 30 hours of training in a flight simulator or flight training device may be credited toward the instrument flight time if the training was accomplished in a course conducted by a training center certificated under part 142 of the ECARs.

(ii) Training in a flight simulator or flight training device must be accomplished in a flight simulator or flight training device, representing an airplane.

(4) 100 hours of night flight time.

(5)Not more than 100 hours of the total aeronautical experience requirements of paragraph (a) of this section may be obtained in a flight simulator or flight training device that represents an airplane of which not more than 25 hours shall have been acquired in a flight procedure trainer or a basic instrument flight trainer.

(b) When the pilot has flight time as a pilot of aircraft in other categories such experience shall not be acceptable by ECAA toward the flight time requirements of (a) above.

Note:The applicant shall have received the dual flight instruction required at 61.127(b)(1)(2) for the issue of the commercial pilot licence and at 61.65(c) for the issue of the instrument rating or at 61.223(c) for the issue of the multi-crew pilot licence

61.161 Aeronautical experience: Helicopter category rating.

(a) A person who is applying for an airline transport pilot license with helicopter category rating, shall have completed at least 1,000 hours of flight time as a pilot of helicopters that includes at least:
(1) 250 hours, either as pilot in command, or made up of not less than 70 hours as pilot in command and the necessary additional flight time as pilot in command under supervision;
(2) 200 hours of cross-country flight time, of which not less than 100 hours shall be as pilot in command or as pilot in command under supervision;
(3) 30 hours of instrument flight time, of which not more than 10 hours may be instrument ground time;
(4) 50 hours of night flight time.
(5) Not more than 100 hours of the total aeronautical experience requirements of paragraph (a) of this section may be obtained in a flight simulator or flight training device that represents an airplane of which not more than 25 hours shall have been acquired in a flight procedure trainer or a basic instrument flight trainer.

(b) When the pilot has flight time as a pilot of aircraft in other categories such experience shall not be acceptable by ECAA toward the flight time requirements of (a) above.

Note -1: The applicant shall have received the dual flight instruction required at 61.127(b)(3) for the issue of the commercial pilot licence.

Note-2: The instrument time specified in 61.161(a)(3) and the night flying time specified in 61.161(4) do not entitle the holder of the airline transport pilot licence — helicopter to pilot helicopters under IFR.

61.163 Aeronautical experience: Powered-lift category rating.

(a) A person who is applying for an airline transport pilot license with a powered-lift category rating shall have completed at least 1500 hours of total flight time as a pilot in powered-lifts that includes at least:
(1) 250 hours, either as pilot in command, or made up of not less than 70 hours as pilot in command and the necessary additional flight time as pilot in command under supervision;

(2) 100 hours of cross-country flight time, of which not less than 50 hours shall be as pilot in command or as pilot in command under supervision;

(3) 75 hours of instrument flight time, of which not more than 30 hours may be instrument ground time;

(4) 25 hours of night flight time.

(5) Not more than 100 hours of the total aeronautical experience requirements of paragraph (a) of this section may be obtained in a flight simulator or flight training device that represents an airplane of which not more than 25 hours shall have been acquired in a flight procedure trainer or a basic instrument flight trainer

(b) When the pilot has flight time as a pilot of aircraft in other categories such experience shall not be acceptable by ECAA toward the flight time requirements of (a) above.

Note -1: The applicant shall have received the dual flight instruction required at 61.127(b)(5) for the issue of the commercial pilot licence and at 61.65(c)for the issue of the instrument rating.

61.165 Additional aircraft category and class ratings.

(a) Helicopter rating. A person applying for an airline transport license with helicopter rating who holds an airline transport pilot certificate with another aircraft category rating must:
(1) Meet the eligibility requirements of section 61.153 of this part;
(2) Pass a knowledge test on the aeronautical knowledge areas of section 61.155(c) of this part;
(3) Comply with the requirements in section 61.157(b) of this part, if appropriate;
(4) Meet the applicable aeronautical experience requirements of section 61.161 of this part; and
(5) Pass the practical test on the areas of operation of section 61.157(d),(e)(2) of this part.

(b) Airplane category rating with a single-engine class rating. A person applying for an airline transport certificate with an airplane category and single-engine class rating who holds an airline transport pilot certificate with another aircraft category rating must:
(1) Meet the eligibility requirements of section 61.153 of this part;

(2) Pass a knowledge test on the aeronautical knowledge areas of section 61.155(c) of this part;
(3) Comply with the requirements in section 61.157(b) of this part, if appropriate;
(4) Meet the applicable aeronautical experience requirements of section 61.159 of this part; and
(5) Pass the practical test on the areas of operation of section 61.157(e)(1) of this part.

(c) Powered-lift category. A person applying for an airline transport pilot license with a powered-lift category rating who holds an airline transport license with another aircraft category rating must:
(1) Meet the eligibility requirements of section 61.153 of this part;
(2) Pass a required knowledge test on the aeronautical knowledge areas of section 61.155(c) of this part;
(3) Comply with the requirements in section 61.157(b) of this part, if appropriate;
(4) Meet the applicable aeronautical experience requirements of section 61.163 of this part; and
(5) Pass the required practical test on the areas of operation of section 61.157(d)(3) of this part.

(d) Additional class rating within the same aircraft category. A person applying for an airline transport license with an additional class rating who holds an airline transport license in the same aircraft category must:
(1) Meet the eligibility requirements of section 61.153, except paragraph (f) of that section;
(2) Comply with the requirements in section 61.157(b) of this part, if applicable;
(3) Meet the applicable aeronautical experience requirements of subpart F of this part; and
(4) Pass a practical test on the areas of operation of section 61.157(e) appropriate to the aircraft rating sought.

61.167 Privileges.

(a) A person who holds an airline transport pilot license is entitled to the same privileges as those afforded a person who holds a private and commercial pilot license in an aircraft within the appropriate aircraft category and, in the case of a licence for the aero plane and powered-lift categories, of the instrument rating; and

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

(c) An airline transport pilot may instruct only as provided in this section when the airline transport pilot holds a flight instructor license, in which case the holder may exercise the instructor privileges of subpart G of part 61 for which he or she is rated

(d) When the holder of an airline transport pilot licence in the aero plane category has previously held only a multi-crew pilot licence, the privileges of the licence shall be limited to multi-crew operations unless the holder has met the requirements established in ECAR 61.225 as appropriate. Any limitation of privileges shall be endorsed on the licence.

Subpart G

Flight Instructors

61.181 Applicability.

This subpart prescribes the requirements for the issuance of flight instructor licenses and ratings, the conditions under which those licenses and ratings are necessary, and the limitations on those licenses and ratings.

61.183 Eligibility requirements.

To be eligible for a flight instructor license or rating a person must:

(a) Be at least 18 years of age;
(b) Be able to read, speak, write, and understand the English language.
(c) Hold either a commercial pilot license or airline transport pilot license with:
  (1) An aircraft category and class rating that is appropriate to the flight instructor rating sought; and
  (2) An instrument rating, or privileges on that person's pilot license that are appropriate to the flight instructor rating sought, if applying for:
    (i) A flight instructor license with an airplane category and single-engine class rating;
    (ii) A flight instructor license with an airplane category and multiengine class rating;
    (iii) A flight instructor license with a powered-lift rating; or
    (iv) A flight instructor license with an instrument rating.
(d) Receive a logbook endorsement from an authorized instructor on the fundamentals of instructing listed in section 61.185 of this part appropriate to the required knowledge test;
(e) Pass a knowledge test on the areas listed in section 61.185(a)(1) of this part, unless the applicant holds a flight instructor license or ground instructor license issued under this part;
(f) Pass a knowledge test on the aeronautical knowledge areas listed in section 61.185(a)(2) and (a)(3) of this part that are appropriate to the flight instructor rating sought;
(g) Receive a logbook endorsement from an authorized instructor on the areas of operation listed in section 61.187(b) of this part, appropriate to the flight instructor rating sought;
(h) Pass the required practical test that is appropriate to the flight instructor rating sought in an:
  (1) Aircraft that is representative of the category and class of aircraft for the aircraft rating sought; or
  (2) Flight simulator or approved flight training device that is representative of the category and class of aircraft for the rating sought, and used in accordance with a course at a training center certificated under part 142 of the ECARs.
(i) Log at least 15 hours as pilot in command in the category and class of aircraft that is appropriate to the flight instructor rating sought; and
(j) Comply with the appropriate sections of this part that apply to the flight instructor rating sought.

61.185 Aeronautical knowledge.

(a) A person who is applying for a flight instructor certificate must receive and log ground training from an authorized instructor on:
  (1) Except as provided in paragraph (b) of this section, the fundamentals of instructing, including:
    (i) The learning process;
    (ii) Elements of effective teaching;
    (iii) Student evaluation and testing training philosophies;
    (iv) Course development;
    (v) Lesson planning; and
    (vi) Classroom instructional/training techniques.
    (vii) techniques of applied instruction;
    (viii) assessment of student performance in those subjects in which ground instruction is given;
    (ix) training programmer development;
    (x) use of training aids;
    (xi) analysis and correction of student errors;
    (ix) human performance relevant to flight instruction; and
    (x) hazards involved in simulating system failures and malfunctions in the aircraft.

(2) The aeronautical knowledge areas for a private, and commercial pilot license 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 holder of a flight instructor license or ground instructor license issued under this part does not need to comply with paragraph (a)(1) of this section .

61.187 Flight proficiency.

(a) General. A person who is applying for a flight instructor license must receive and log flight and ground training from an authorized instructor on the areas of operation listed in this section that apply to the flight instructor rating sought. The applicant's logbook must contain an endorsement from an authorized instructor certifying that the person is proficient to pass a practical test on those areas of operation.

(b) Areas of operation.

(1) For an airplane category rating with a single-engine class rating:
(i) Fundamentals of instructing;
(ii) Technical subject areas;
(iii) Preflight preparation;
(iv) Preflight lesson on a maneuver to be performed in flight;
(v) Preflight procedures;
(vi) Airport and seaplane base operations;
(vii) Takeoffs, landings, and go-a rounds;
(viii) Fundamentals of flight;
(ix) Performance maneuvers;
(x) Ground reference maneuvers;
(xi) Slow flight, stalls, and spins;
(xii) Basic instrument maneuvers;
(xiii) Emergency operations; and
(xiv) Post flight procedures.

(2) For an airplane category rating with a multiengine class rating:
(i) Fundamentals of instructing;
(ii) Technical subject areas;
(iii) Preflight preparation;
(iv) Preflight lesson on a maneuver to be performed in flight;
(v) Preflight procedures;
(vi) Airport and seaplane base operations;
(vii) Takeoffs, landings, and go-a rounds;
(viii) Fundamentals of flight;
(ix) Performance maneuvers;
(x) Ground reference maneuvers;
(xi) Slow flight and stalls;
(xii) Basic instrument maneuvers;
(xiii) Emergency operations;
(xiv) Multiengine operations; and
(xv) Post flight procedures.

(3) For a rotorcraft category rating with a helicopter class rating:
(i) Fundamentals of instructing;
(ii) Technical subject areas;
(iii) Preflight preparation;
(iv) Preflight lesson on a maneuver to be performed in flight;
(v) Preflight procedures;
(vi) Airport and heliport operations;
(vii) Hovering maneuvers;
(viii) Takeoffs, landings, and go-arounds;
(ix) Fundamentals of flight;
(x) Performance maneuvers;
(xi) Emergency operations;
(xii) Special operations; and
(xiii) Post flight procedures.

(4) For a rotorcraft category rating with a gyroplane class rating:
(i) Fundamentals of instructing;

(ii) Technical subject areas;

(iii) Preflight preparation;

(iv) Preflight lesson on a maneuver to be performed in flight;

(v) Preflight procedures;

(vi) Airport operations;

(vii) Takeoffs, landings, and go-arounds;

(viii) Fundamentals of flight;

(ix) Performance maneuvers;

(x) Flight at slow airspeeds;

(xi) Ground reference maneuvers;

(xii) Emergency operations; and

(xiii) Post flight procedures.

(5) For a powered-lift category rating:
(i) Fundamentals of instructing;
(ii) Technical subject areas;
(iii) Preflight preparation;
(iv) Preflight lesson on a maneuver to be performed in flight;
(v) Preflight procedures;
(vi) Airport and heliport operations;
(vii) Hovering maneuvers;
(viii) Takeoffs, landings, and go-a rounds;
(ix) Fundamentals of flight;
(x) Performance maneuvers;
(xi) Ground reference maneuvers;
(xii) Slow flight and stalls;
(xiii) Basic instrument maneuvers;
(xiv) Emergency operations;
(xv) Special operations; and
(xvi) Post flight procedures.

(6) For an instrument rating with the appropriate aircraft category and class rating:
(i) Fundamentals of instructing;
(ii) Technical subject areas;
(iii) Preflight preparation;
(iv) Preflight lesson on a maneuver to be performed in flight;
(v) Air traffic control clearances and procedures;
(vi) Flight by reference to instruments;
(vii) Navigation aids;
(viii) Instrument approach procedures;
(ix) Emergency operations; and
(x) Post flight procedures.

(c) The flight training required by this section may be accomplished:
(1) In an aircraft that is representative of the category and class of aircraft for the rating sought; or
(2) In a flight simulator or flight training device representative of the category and class of aircraft for the rating sought, and used in accordance with an approved course at a training center certificated under part 142 of the ECARs.

61.189 Flight instructor records.

(a) A flight instructor must sign the logbook of each person to whom that instructor has given flight training or ground training.
(b) A flight instructor must maintain a record in a logbook or a separate document that contains the following:
  (1) The name of each person whose logbook or student pilot license that instructor has endorsed for solo flight privileges, and the date of the endorsement; and
  (2) The name of each person that instructor has endorsed for a knowledge test or practical test, and the record shall also indicate the kind of test, the date, and the results.
(c) Each flight instructor must retain the records required by this section for at least 3 years.

61.191 Additional flight instructor ratings.

(a) A person who applies for an additional flight instructor rating on a flight instructor license must meet the eligibility requirements listed in section 61.183 of this part that apply to the flight instructor rating sought.
(b) A person who applies for an additional rating on a flight instructor license is not required to pass the knowledge test on the areas listed in section 61.185(a)(1) of this part.

61.193 Flight instructor privileges.

A person who holds a flight instructor license is authorized within the limitations of that person's flight instructor license and ratings to give training and endorsements that are required for, and relate to:

(a) A student pilot license;
(b) A pilot license;
(c) A flight instructor license;
(d) A ground instructor license;
(e) An aircraft rating;
(f) An instrument rating;
(g) A flight review, operating privilege, or recency of experience requirement of this part;
(h) A practical test; and
(i) A knowledge test.

61.195 Flight instructor limitations and qualifications.

A person who holds a flight instructor license is subject to the following limitations:

(a) Hours of training. In any 24-consecutive-hour period, a flight instructor may not conduct more than 8 hours of flight training.
(b) Aircraft ratings. A flight instructor may not conduct flight training in any aircraft for which the flight instructor does not hold:
  (1) A pilot license and flight instructor license with the applicable category and class rating; and
  (2) If appropriate, a type rating.
(c) Instrument Rating. A flight instructor who provides instrument flight training for the issuance of an instrument rating or a type rating not limited to VFR must hold an instrument rating on his or her flight instructor license and pilot license that is appropriate to the category and class of aircraft in which instrument training is being provided.
(d) Limitations on endorsements. A flight instructor may not endorse a:
  (1) Student pilot's license 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 part; and
    (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.
  (2) Student pilot's license and logbook for a solo cross-country flight, unless that flight instructor has determined 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;
  (3) Student pilot's license 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 of section 61.56(a) of this part; or

(5) Logbook of a pilot for an instrument proficiency check, unless that instructor has tested that pilot in accordance with the requirements of section 61.57(d) of this part.

(e) Training in an aircraft that requires a type rating. A flight instructor may not give flight training in an aircraft that requires the pilot in command to hold a type rating unless the flight instructor holds a type rating for that aircraft on his or her pilot license.

(f) Training received in a multiengine airplane, a helicopter, or a powered-lift. A flight instructor may not give training required for the issuance of a license or rating in a multiengine airplane, a helicopter, or a powered-lift unless that flight instructor has at least 5 flight hours of pilot-in-command time in the specific make and model of multiengine airplane, helicopter, or powered-lift, as appropriate.

(g) Position in aircraft and required pilot stations for providing flight training.

(1) A flight instructor must perform all training from in an aircraft that complies with the requirements of section 91.109 of the ECARs.

(2) A flight instructor who provides flight training for a pilot license or rating issued under this part must provide that flight training in an aircraft that meets the following requirements:

(i) The aircraft must have at least two pilot stations and be of the same category, class, and type, if appropriate, that applies to the pilot license or rating sought.

(ii) For single-place aircraft, the pre-solo flight training must have been provided in an aircraft that has two pilot stations and is of the same category, class, and type, if appropriate.

(h) Qualifications of the flight instructor for giving training first-time flight instructor applicants.

(1) The ground training provided to an initial applicant for a flight instructor license must be given by an authorized instructor who:

(i) Holds a current ground or flight instructor license with the appropriate rating, has held that license for at least 24 months, and has given at least 40 hours of ground training; or

(ii) Holds a current ground or flight instructor license with the appropriate rating, and has given at least 100 hours of ground training in an ECAA-approved course.

(2) Except for an instructor who meets the requirements of paragraph (h)(3)(ii) of this section, a flight instructor who provides training to an initial applicant for a flight instructor license must:

(i) Meet the eligibility requirements prescribed in section 61.183 of this part;

(ii) Hold the appropriate flight instructor license and rating;

(iii) Have held a flight instructor license for at least 24 months;

(iv) For training in preparation for an airplane, rotorcraft, or powered-lift rating, have given at least 200 hours of flight training as a flight instructor; and

(3) A flight instructor who serves as a flight instructor in an ECAA-approved course for the issuance of a flight instructor rating must hold a current flight instructor license with the appropriate rating and pass the required initial and recurrent flight instructor proficiency tests, in accordance with the requirements of the part under which the ECAA-approved course is conducted, and must:

(i) Meet the requirements of paragraph (h)(2) of this section; or

(ii) Have trained and endorsed at least five applicants for a practical test for a pilot license, flight instructor license, ground instructor license, or an additional rating, and at least 80 percent of those applicants passed that test on their first attempt; and Given at least 400 hours of flight training as a flight instructor for training in an airplane, a rotorcraft, or for a powered-lift rating.

(i) Prohibition against self-endorsements. A flight instructor shall not make any self-endorsement for a license, rating, flight review, authorization, operating privilege, practical test, or knowledge test that is required by this part.

(j) Additional qualifications required to give training in Category II or Category III operations. 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, pursuant to section 61.67 or section 61.68 of this part, as applicable.

(k) The ECAA, having issued a pilot licence, shall not permit the holder thereof to carry out flight instruction required for the issue of a pilot licence or rating, unless such holder has received proper authorization from the ECAA licensing authority.

Proper authorization shall comprise:

(1) A flight instructor rating on the holder's licence; or

(2) The authority to act as an agent of an approved organization authorized by the ECAA Licensing Authority to carry out flight instruction; or
(3) A specific authorization granted by the ECAA Licensing Authority which issued the licence

(l) The ECAA shall not permit a person to carry out instruction on a flight simulation training device required for the issue of a pilot licence or rating unless such person holds or has held an appropriate licence or has appropriate flight training and flight experience and has received proper authorization from the ECAA Licensing Authority.

61.197 Renewal of flight instructor licenses.

(a) A person who holds a flight instructor license that has not expired may renew that license by:
(1) Passing a practical test for:
(i) One of the ratings listed on the current flight instructor license; or
(ii) An additional flight instructor rating; or
(1) Presenting to an authorized ECAA Flight Standards Inspector:
(i) A record of training students showing that, during the preceding 24 calendar months, the flight instructor has endorsed at least five students for a practical test for a license or rating and at least 80 percent of those students passed that test on the first attempt;
(ii) A record showing that, within the preceding 24 calendar months, the flight instructor has served as a company check pilot, chief flight instructor, company check airman, or flight instructor in a part 121 operation, or in a position involving the regular evaluation of pilots; or
(iii) A graduation certificate showing that, within the preceding 3 calendar months, the person has successfully completed an approved flight instructor refresher course consisting of ground training or flight training, or a combination of both.

(c) The expiration month of a renewed flight instructor license shall be 24 calendar months from:
(1) The month the renewal requirements of paragraph (a) of this section are accomplished; or

(2) The month of expiration of the current flight instructor license provided:
(i) The renewal requirements of paragraph (a) of this section are accomplished within the 3 calendar months preceding the expiration month of the current flight instructor license, and
(ii) If the renewal is accomplished under paragraph (a)(2)(iii) of this section, the approved flight instructor refresher course must be completed within the 3 calendar months preceding the expiration month of the current flight instructor license.

(d) The practical test required by paragraph (a)(1) of this section may be accomplished in a flight simulator or flight training device if the test is accomplished pursuant to an approved course conducted by a training center certificated under part 142 of the ECARs.

61.199 Expired flight instructor licenses and ratings.

(a) Flight instructor licenses. The holder of an expired flight instructor license may exchange that license for a new license with the same ratings by passing a practical test as prescribed in section 61.183(h) of this part for one of the ratings listed on the expired flight instructor license.

(b) Flight instructor ratings.
(1) A flight instructor rating or a limited flight instructor rating on a pilot license is no longer valid and may not be exchanged for a similar rating or a flight instructor license.
(2) The holder of a flight instructor rating or a limited flight instructor rating on a pilot license may be issued a flight instructor license with the current ratings, but only if the person passes the required knowledge and practical test prescribed in this subpart for the issuance of the current flight instructor license and rating.

Subpart H
Ground Instructors

61.211 Applicability.

This subpart prescribes the requirements for the issuance of ground instructor licenses and ratings, the conditions under which those licenses and ratings are necessary, and the limitations upon those licenses and ratings.

61.213 Eligibility requirements.

(a) To be eligible for a ground instructor license or rating a person must:
  (1) Be at least 18 years of age;
  (2) Be able to read, write, speak, and understand the English language. If the applicant is unable to meet one of these requirements due to medical reasons, then the ECAA may place such operating limitations on that applicant's ground instructor certificate as are necessary;
  (3) Except as provided in paragraph (b) of this section, pass a knowledge test on the fundamentals of instructing to include:
    (i) The learning process;
    (ii) Elements of effective teaching;
    (iii) Student evaluation and testing;
    (iv) Course development;
    (v) Lesson planning; and
    (vi) Classroom training techniques.
  (4) Pass a knowledge test on the aeronautical knowledge areas in:
    (i) For a basic ground instructor rating section 61.105;
    (ii) For an advanced ground instructor rating sections 61.105, 61.125, and 61.155; and
    (iii) For an instrument ground instructor rating, section 61.65.

(b) The knowledge test specified in paragraph (a)(3) of this section is not required if the applicant:
  (1) Holds a ground instructor license or flight instructor license issued under this part;
  (2) Holds a current teacher's certificate issued by Egyptian Ministry of Higher Education that authorizes the person to teach at an educational level of high school or higher; or
  (3) Is employed as a teacher at an accredited college or university.

61.215 Ground instructor privileges.

(a) A person who holds a basic ground instructor rating is authorized to provide:
  (1) Ground training in the aeronautical knowledge areas required for the issuance of a private pilot license, or associated ratings under this part;
  (2) Ground training required for a private pilot flight review; and
  (3) A recommendation for a knowledge test required for the issuance of private pilot license under this part.

(b) A person who holds an advanced ground instructor rating is authorized to provide:
  (1) Ground training in the aeronautical knowledge areas required for the issuance of any license or rating under this part;
  (2) Ground training required for any flight review; and
  (3) A recommendation for a knowledge test required for the issuance of any license under this part.

(c) A person who holds an instrument ground instructor rating is authorized to provide:
  (1) Ground training in the aeronautical knowledge areas required for the issuance of an instrument rating under this part;
  (2) Ground training required for an instrument proficiency check; and
  (3) A recommendation for a knowledge test required for the issuance of an instrument rating under this part.

(d) A person who holds a ground instructor license is authorized, within the limitations of the ratings on the ground instructor license, to endorse the logbook or other training record of a person to whom the holder has provided the training or recommendation specified in paragraphs (a) through (c) of this section.

61.217 Recent experience requirements.

The holder of a ground instructor license may not perform the duties of a ground instructor unless, within the preceding 12 months:

(a) The person has served for at least 3 months as a ground instructor; or

(b) The person has received an endorsement from an authorized ground or flight instructor certifying that the person has demonstrated satisfactory proficiency in the subject areas prescribed in section 61.213 (a)(3) and (a)(4), as applicable.

Subpart I

Multi-crew pilot license appropriate to the aero plane category

61.221.A MPL - Minimum age

An applicant for an MPL shall be at least 18 years of age.

61.223.A MPL - Privileges

(a) The privileges of the holder of an MPL are to act as co-pilot in an aeroplane required to be operated with a co-pilot.

(b) The holder of an MPL may obtain the extra privileges of:

(1) the holder of a PPL(A), provided that the requirements for the PPL(A) specified in Subpart C are met;

(2) a CPL(A), provided that the requirements specified in the following requirements are met:

Specific conditions for MPL holders Before exercising the privileges of a CPL(A), the holder of an MPL shall have completed in aeroplanes:

(a) 70 hours of flight time:

(b) as PIC; or

(1) made up of at least 10 hours as PIC and the additional flight time as PIC under supervision (PICUS).

Of these 70 hours, 20 shall be of VFR cross-country flight time as PIC, or cross-country flight time made up of at least 10 hours as PIC and 10 hours as PICUS. This shall include a VFR cross-country flight of at least 540 km (300 NM) in the course of which full-stop landings at two different aerodromes shall be flown as PIC;

(B) **the elements of the CPL(A) modular course as specified in THE FOLLOWING ITEMS**:

EXPERIENCE

The applicant for a CPL(A) shall have completed at least 200 hours flight time, including at least:

- 100 hours as PIC, of which 20 hours of cross-country flight as PIC, which shall include a VFR cross- country flight of at least 540 km (300 NM), in the course of which full stop landings at two aerodromes different from the aerodrome of departure shall be made;

SKILL TEST

1. Upon completion of the flying training and relevant experience requirements the applicant shall take the CPL(A) skill test on either a single-engine or a multi-engine aeroplane.

the CPL(A) skill test, in accordance with THE FOLLOWING :

- An applicant for a CPL shall pass a skill test in accordance with Appendix 1 to this regulation to demonstrate the ability to perform, as PIC of the appropriate aircraft category, the relevant procedures and manoeuvres with the competency appropriate to the privileges grante

(c) The holder of an MPL shall have the privileges of his/her IR(A) limited to aeroplanes required to be operated with a co-pilot. The privileges of the IR(A) may be extended to single-pilot operations in aeroplanes, provided that the licence holder has completed the training necessary to act as PIC in single-pilot operations exercised solely by reference to instruments and passed the skill test of the IR(A) as a single-pilot.

61.225.A MPL - Training course and theoretical knowledge examinations

(a) Course. An applicant for an MPL shall have completed a training course of theoretical knowledge and flight instruction at an ATO in accordance with Appendix 2 to this regulation.

(b) Examination. An applicant for an MPL shall have demonstrated a level of knowledge appropriate to the holder of an ATPL(A), in accordance with following

ATPL - Training course and theoretical knowledge examinations

(a) Course. Applicants for an ATPL shall have completed a training course at an ATO. The course shall be either an integrated training course or a modular course,

(b) Examination. Applicants for an ATPL shall demonstrate a level of knowledge appropriate to the privileges granted in the following subjects:

(1) Air Law,

(2) Aircraft General Knowledge - Airframe/Systems/Power plant,

(3) Aircraft General Knowledge - Instrumentation,

(4) Mass and Balance,

(5) Performance,

(6) Flight Planning and Monitoring,

(7) Human Performance,

(8) Meteorology,

(9) General Navigation,

(10) Radio Navigation, (11)Operational

Procedures, (12)Principles of Flight,

(13)VFR Communications,
, and of a multi-pilot type rating. This may be achieved through the conduct of a Mastery of Competence examination(s) in a ECAA approved MPL training course.

61.227.A MPL - Practical skill

(a) An applicant for an MPL shall have demonstrated through continuous assessment the skills required for fulfilling all the competency units specified in Appendix 2 to this regulation, as pilot flying and pilot not flying, in a multi-engine turbine-powered multi-pilot aeroplane, under VFR and IFR.

(b) On completion of the training course, the applicant shall pass a skill test in accordance with Appendix 3 to this regulation, to demonstrate the ability to perform the relevant procedures and manoeuvres with the competency appropriate to the privileges granted. The skill test shall be taken in the type of aeroplane used on the advanced phase of the MPL integrated training course or in an FFS representing the same type.

Appendix 1 – Skill test for the issue of a CPL

A. General

1. An applicant for a skill test for the CPL shall have received instruction on the same class or type of aircraft to be used in the test.
2. An applicant shall pass all the relevant sections of the skill test. If any item in a section is failed, that section is failed. Failure in more than one section will require the applicant to take the entire test again. An applicant failing only in one section shall only repeat the failed section. Failure in any section of the retest, including those sections that have been passed on a previous attempt, will require the applicant to take the entire test again. All relevant sections of the skill test shall be completed within 6 months. Failure to achieve a pass in all relevant sections of the test in two attempts will require further training.
3. Further training may be required following any failed skill test. There is no limit to the number of skill tests that may be attempted.

CONDUCT OF THE TEST

4. Should the applicant choose to terminate a skill test for reasons considered inadequate by the Flight Examiner (FE), the applicant shall retake the entire skill test. If the test is terminated for reasons considered adequate by the FE, only those sections not completed shall be tested in a further flight.
5. At the discretion of the FE, any manoeuvre or procedure of the test may be repeated once by the applicant. The FE may stop the test at any stage if it is considered that the applicant's demonstration of flying skills requires a complete re-test.
6. An applicant shall be required to fly the aircraft from a position where the PIC functions can be performed and to carry out the test as if no other crew member is present. Responsibility for the flight shall be allocated

in accordance with national regulations.

7. An applicant shall indicate to the FE the checks and duties carried out, including the identification of radio facilities. Checks shall be completed in accordance with the checklist for the aircraft on which the test is being taken. During pre-flight preparation for the test, the applicant is required to determine power settings and speeds. Performance data for take-off, approach and landing shall be calculated by the applicant in compliance with the operations manual or flight manual for the aircraft used.
8. The FE shall take no part in the operation of the aircraft except where intervention is necessary in the interests of safety or to avoid unacceptable delay to other traffic.

B. Content of the skill test for the issue of a CPL — Aeroplanes

1. The aeroplane used for the skill test shall meet the requirements for training aeroplanes, and shall be certificated for the carriage of at least four persons, have a variable pitch propeller and retractable landing gear or a Turbine aircraft certificated for the carriage of at least four persons with retractable landing gear.

2. The route to be flown shall be chosen by the FE and the destination shall be a controlled aerodrome. The applicant shall be responsible for the flight planning and shall ensure that all equipment and documentation for the execution of the flight are on board. The duration of the flight shall be at least 90 minutes.
3. The applicant shall demonstrate the ability to:

(a) operate the aeroplane within its limitations;
(b) complete all manoeuvres with smoothness and accuracy;
(c) exercise good judgement and airmanship;
(d) apply aeronautical knowledge; and
(e) maintain control of the aeroplane at all times in such a manner that the successful outcome of a procedure or manoeuvre is never seriously in doubt.

FLIGHT TEST TOLERANCES

4. The following limits shall apply, corrected to make allowance for turbulent conditions and the handling qualities and performance of the aeroplane used.

Height	
normal flight	± 100 feet
with simulated engine failure	± 150 feet Tracking on radio aids ± 5°
Heading	
normal flight	± 10°
with simulated engine failure	± 15°
Speed	
take-off and approach	± 5 knots
all other flight regimes	± 10 knots

CONTENT OF THE TEST

5. Items in section 2(c) and (e)(iv), and the whole of sections 5 and 6 may be performed in an FNPT II or an FFS. Use of the aeroplane checklists, airmanship, control of the aeroplane by external visual reference, anti-icing/de-icing procedures and principles of threat and error management apply in all sections

SECTION 1 — PRE-FLIGHT OPERATIONS AND DEPARTURE	
a	Pre-flight, including: Flight planning, Documentation, Mass and balance determination, Weather brief, NOTAMS
b	Aeroplane inspection and servicing
c	Taxiing and take-off
d	Performance considerations and trim
e	Aerodrome and traffic pattern operations
f	Departure procedure, altimeter setting, collision avoidance (lookout)
g	ATC liaison – compliance, R/T procedures
SECTION 2 — GENERAL AIRWORK	
a	Control of the aeroplane by external visual reference, including straight and level, climb, descent, Lookout
b	Flight at critically low airspeeds including recognition of and recovery from incipient and full stalls
c	Turns, including turns in landing configuration. Steep turns 45°
d	Flight at critically high airspeeds, including recognition of and recovery from spiral dives
e	Flight by reference solely to instruments, including: (i) level flight, cruise configuration, control of heading, altitude and airspeed (ii) climbing and descending turns with 10°–30° bank (iii) recoveries from unusual attitudes (iv) limited panel instruments
f	ATC liaison – compliance, R/T procedures
SECTION 3 — EN-ROUTE PROCEDURES	
a	Control of aeroplane by external visual reference, including cruise configuration Range/Endurance considerations
b	Orientation, map reading
c	Altitude, speed, heading control, lookout
d	Altimeter setting. ATC liaison – compliance, R/T procedures
e	Monitoring of flight progress, flight log, fuel usage, assessment of track error and re-establishment of correct tracking
f	Observation of weather conditions, assessment of trends, diversion planning
g	Tracking, positioning (NDB or VOR), identification of facilities (instrument flight). Implementation of diversion plan to alternate aerodrome (visual flight)
SECTION 4 — APPROACH AND LANDING PROCEDURES	
a	Arrival procedures, altimeter setting, checks, lookout
b	ATC liaison – compliance, R/T procedures
c	Go-around action from low height
d	Normal landing, crosswind landing (if suitable conditions)
e	Short field landing
f	Approach and landing with idle power (single-engine only)
g	Landing without use of flaps
h	Post flight actions
SECTION 5 — ABNORMAL AND EMERGENCY PROCEDURES	
This section may be combined with sections 1 through 4	
a	Simulated engine failure after take-off (at a safe altitude), fire drill
b	Equipment malfunctions including alternative landing gear extension, electrical and brake failure
c	Forced landing (simulated)
d	ATC liaison - compliance, R/T procedures
e	Oral questions

SECTION 6 — SIMULATED ASYMMETRIC FLIGHT AND RELEVANT CLASS OR TYPE ITEMS	
This section may be combined with sections 1 through 5	
a	Simulated engine failure during take-off (at a safe altitude unless carried out in an FFS)
b	Asymmetric approach and go-around
c	Asymmetric approach and full stop landing
d	Engine shutdown and restart
e	ATC liaison – compliance, R/T procedures, Airmanship
f	As determined by the FE — any relevant items of the class or type rating skill test to include, if applicable: (i) aeroplane systems including handling of autopilot (ii) operation of pressurisation system (iii) use of de-icing and anti-icing system
g	Oral questions

C. Content of the skill test for the issue of the CPL — Helicopters

1. The helicopter used for the skill test shall meet the requirements for training helicopters.
2. The area and route to be flown shall be chosen by the FE and all low level and hover work shall be at an approved aerodrome/site. Routes used for section 3 may end at the aerodrome of departure or at another aerodrome and one destination shall be a controlled aerodrome. The skill test may be conducted in 2 flights. The total duration of the flight(s) shall be at least 90 minutes.
3. The applicant shall demonstrate the ability to:

(a) operate the helicopter within its limitations;
(b) complete all manoeuvres with smoothness and accuracy;
(c) exercise good judgement and airmanship;
(d) apply aeronautical knowledge; and
(e) maintain control of the helicopter at all times in such a manner that the successful outcome of a procedure or manoeuvre is never seriously in doubt.

FLIGHT TEST TOLERANCES

4. The following limits shall apply, corrected to make allowance for turbulent conditions and the handling qualities and performance of the helicopter used.

Height
normal flight ± 100 feet
simulated major emergency ±
150 feet Tracking on radio aids ±
10°
Heading
normal flight ± 10°
simulated major emergency ± 15°

Speed
take-off and approach multi-engine± 5
knots all other flight regimes ± 10
knots
Ground drift

T.O. hover I.G.E. ± 3 feet landing no sideways or backwards movement CONTENT OF THE TEST

5. Items in section 4 may be performed in a helicopter FNPT or a helicopter FFS. Use of helicopter checklists, airmanship, control of helicopter by external visual reference, anti-icing procedures, and principles of threat and error management apply in all sections.

SECTION 1 — PRE-FLIGHT/POST-FLIGHT CHECKS AND PROCEDURES	
A	Helicopter knowledge (e.g. technical log, fuel, mass and balance, performance), flight planning, documentation, NOTAMS, weather
b	Pre-flight inspection/action, location of parts and purpose
C	Cockpit inspection, starting procedure
d	Communication and navigation equipment checks, selecting and setting frequencies
e	Pre-take-off procedure, R/T procedure, ATC liaison-compliance
f	Parking, shutdown and post-flight procedure
SECTION 2 — HOVER MANOEUVRES, ADVANCED HANDLING AND CONFINED AREAS	
a	Take-off and landing (lift-off and touchdown)
b	Taxi, hover taxi
c	Stationary hover with head/cross/tail wind
d	Stationary hover turns, 360° left and right (spot turns)
e	Forward, sideways and backwards hover manoeuvring
f	Simulated engine failure from the hover
g	Quick stops into and downwind
h	Sloping ground/unprepared sites landings and take-offs
i	Take-offs (various profiles)
j	Crosswind, downwind take-off (if practicable)
k	Take-off at maximum take-off mass (actual or simulated)
l	Approaches (various profiles)
m	Limited power take-off and landing
n	Autorotations (FE to select two items from — Basic, range, low speed, and 360° turns)
o	Autorotative landing
p	Practice forced landing with power recovery
q	Power checks, reconnaissance technique, approach and departure technique

SECTION 3 — NAVIGATION — EN-ROUTE PROCEDURES	
a	Navigation and orientation at various altitudes/heights, map reading
b	Altitude/height, speed, heading control, observation of airspace, altimeter setting
c	Monitoring of flight progress, flight log, fuel usage, endurance, ETA, assessment of track error and re-establishment of correct track, instrument monitoring
d	Observation of weather conditions, diversion planning
e	Tracking, positioning (NDB and/or VOR), identification of facilities
f	ATC liaison and observance of regulations, etc.
SECTION 4 — FLIGHT PROCEDURES AND MANOEUVRES BY SOLE REFERENCE TO INSTRUMENTS	
a	Level flight, control of heading, altitude/height and speed
b	Rate 1 level turns onto specified headings, 180° to 360° left and right
c	Climbing and descending, including turns at rate 1 onto specified headings
d	Recovery from unusual attitudes
e	Turns with 30° bank, turning up to 90° left and right
SECTION 5 — ABNORMAL AND EMERGENCY PROCEDURES (simulated where appropriate)	
Note (1): Where the test is conducted on a multi-engine helicopter a simulated engine failure drill, including a single-engine approach and landing, shall be included in the test.	
Note (2): The FE shall select 4 items from the following:	
a	Engine malfunctions, including governor failure, carburetor/engine icing, oil system, as
b	Fuel system malfunction
c	Electrical system malfunction
d	Hydraulic system malfunction, including approach and landing without hydraulics, as
e	Main rotor and/or anti-torque system malfunction (FFS or discussion only)
f	Fire drills, including smoke control and removal, as applicable
g	Other abnormal and emergency procedures as outlined in appropriate flight manual, including for multi-engine helicopters: (i) Simulated engine failure at take-off: (ii) Rejected take-off at or before TDP or safe forced landing at or before DPATO, shortly after TDP or DPATO. (iii) Landing with simulated engine failure: (iv) Landing or go-around following engine failure before LDP or DPBL, (v) Landing or go-around following engine failure after LDP or safe forced landing after DPBL.

D. Content of the skill test for the issue of a CPL — Airships

1. The airship used for the skill test shall meet the requirements for training airships.
2. The area and route to be flown shall be chosen by the FE. Routes used for section 3 may end at the aerodrome of departure or at another aerodrome and one destination shall be a controlled aerodrome. The skill test may be conducted in 2 flights. The total duration of the flight(s) shall be at least 60 minutes.
3. The applicant shall demonstrate the ability to:

(a) operate the airship within its limitations;

(b) complete all manoeuvres with smoothness and accuracy;

(c) exercise good judgement and airmanship;

(d) apply aeronautical knowledge; and

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

FLIGHT TEST TOLERANCES

4. The following limits shall apply, corrected to make allowance for turbulent conditions and the handling qualities and performance of the airship used.

Height

normal flight ±
100 feet simulated major emergency ±
150 feet

Tracking on radio aids ± 10°

Heading

normal flight ± 10° simulated major emergency ± 15°

CONTENT OF THE TEST

5. Items in sections 5 and 6 may be performed in an Airship FNPT or an airship FFS. Use of airship checklists, airmanship, control of airship by external visual reference, anti-icing procedures, and principles of threat and error management apply in all sections.

SECTION 1 — PRE-FLIGHT OPERATIONS AND DEPARTURE	
a	Pre-flight, including:
b	Airship inspection and servicing
c	Off-mast procedure, ground manoeuvring and take-off
d	Performance considerations and trim
e	Aerodrome and traffic pattern operations
f	Departure procedure, altimeter setting, collision avoidance (lookout)
g	ATC liaison – compliance, R/T procedures
SECTION 2 — GENERAL AIRWORK	
a	Control of the airship by external visual reference, including straight and level, climb, descent, lookout
b	Flight at pressure height
c	Turns
d	Steep descents and climbs
e	Flight by reference solely to instruments, including: (i) level flight, control of heading, altitude and airspeed (ii) climbing and descending turns (iii) recoveries from unusual attitudes (iv) limited panel instruments
f	ATC liaison – compliance, R/T procedures
SECTION 3 — EN-ROUTE PROCEDURES	
a	Control of airship by external visual reference, Range/Endurance considerations
b	Orientation, map reading
c	Altitude, speed, heading control, lookout
d	Altimeter setting, ATC liaison – compliance, R/T procedures
e	Monitoring of flight progress, flight log, fuel usage, assessment of track error and reestablishment of correct tracking
f	Observation of weather conditions, assessment of trends, diversion planning
g	Tracking, positioning (NDB or VOR), identification of facilities (instrument flight). Implementation of diversion plan to alternate aerodrome (visual flight)
SECTION 4 — APPROACH AND LANDING PROCEDURES	
a	Arrival procedures, altimeter setting, checks, lookout
b	ATC liaison – compliance, R/T procedures
C	Go-around action from low height
D	Normal landing
E	Short field landing
F	Approach and landing with idle power (single-engine only)
g	Landing without use of flaps
h	Post-flight actions

SECTION 5 — ABNORMAL AND EMERGENCY PROCEDURES	
This section may be combined with sections 1 through 4	
a	Simulated engine failure after take-off (at a safe altitude), fire drill
b	Equipment malfunctions
c	Forced landing (simulated)
d	ATC liaison – compliance, R/T procedures
e	Oral questions
SECTION 6 — RELEVANT CLASS OR TYPE ITEMS	
This section may be combined with sections 1 through 5	
a	Simulated engine failure during take-off (at a safe altitude unless carried out in an FFS)
b	Approach and go-around with failed engine(s)
c	Approach and full stop landing with failed engine(s)
d	Malfunctions in the envelope pressure system
e	ATC liaison – compliance, R/T procedures, Airmanship
f	As determined by the FE — any relevant items of the class or type rating skill test to include, if applicable: (i) airship systems (ii) operation of envelope pressure system
g	Oral questions

Appendix 2 – Integrated MPL training course

GENERAL

1. The aim of the MPL integrated course is to train pilots to the level of proficiency necessary to enable them to operate as co-pilot of a multi-engine multi-pilot turbine-powered air transport aeroplane under VFR and IFR and to obtain an MPL.
2. Approval for an MPL training course shall only be given to a ECAA approved ATO that is part of a commercial air transport operator certificated in accordance with Part-OPS and the applicable air operations requirements or having a specific arrangement with such an operator. The license shall be restricted to that specific operator until completion of the airline operator's conversion course An applicant wishing to undertake an MPL integrated course shall complete all the instructional stages in one continuous course of training at a ECAA approved ATO. The training shall be competency based and conducted in a multi-crew operational environment.
3. Only ab-initio applicants shall be admitted to the course.
4. The course shall comprise:

(a) theoretical knowledge instruction to the ATPL(A) knowledge level;

(b) visual and instrument flying training;

(c) training in MCC for the operation of multi-pilot aero planes; and

(d) type rating training.

5. An applicant failing or unable to complete the entire MPL course may apply to the ECAA for the theoretical knowledge examination and skill test for a licence with lower privileges and an IR, if the applicable requirements are met.

THEORETICAL KNOWLEDGE

6. An approved MPL theoretical knowledge course shall comprise at least 750 hours of instruction for the ATPL(A) knowledge level, as well as the hours required for theoretical knowledge instruction for the relevant type rating, in accordance with Subpart H.

FLYING TRAINING

7. The flying training shall comprise a total of at least 240 hours, composed of hours as PF and PNF, in actual and simulated flight, and covering the following 4 phases of training:

(a) Phase 1 — Core flying skills

Specific basic single-pilot training in an aeroplane.

(b) Phase 2 — Basic

Introduction of multi-crew operations and instrument flight.

(c) Phase 3 — Intermediate

Application of multi-crew operations to a multi-engine turbine aeroplane certified as a high performance aeroplane in accordance with CAR 21 or equivalent.

(d) Phase 4 — Advanced

Type rating training within an airline oriented environment.

Flight experience in actual flight shall include all the experience requirements of Subpart H, upset recovery training, night flying, flight solely by reference to instruments and the experience required to achieve the relevant airmanship. MCC requirements shall be incorporated into the relevant phases above. Training in asymmetric flight shall be given either in an aeroplane or an FFS.

8. Each phase of training in the flight instruction syllabus shall be composed of both instruction in the underpinning knowledge and in practical training segments.
9. The training course shall include a continuous evaluation process of the training syllabus and a continuous assessment of the students following the syllabus. Evaluation shall ensure that:

(a) the competencies and related assessment are relevant to the task of a co-pilot of a multi-pilot aeroplane; and

(b) the students acquire the necessary competencies in a progressive and satisfactory manner.

10. The training course shall include at least 12 take-offs and landings to ensure competency. These take- offs and landings shall be performed under the supervision of an instructor in an aeroplane for which the type rating shall be issued.

ASSESSMENT LEVEL

11. The applicant for the MPL shall have demonstrated performance in all 9 competency units specified in paragraph 13 below, at the advanced level of competency required to operate and interact as a co- pilot in a turbine-powered multi-pilot aeroplane, under visual and instrument conditions. Assessment shall confirm that control of the aeroplane or situation is maintained at all times, to ensure the successful outcome of a procedure or manoeuvre. The applicant shall consistently demonstrate the knowledge, skills and attitudes required for the safe operation of the applicable aeroplane type, in accordance with the MPL performance criteria.

COMPETENCY UNITS

12. The applicant shall demonstrate competency in the following 9 competency units:

(1) apply human performance principles, including principles of threat and error management;

(2) perform aeroplane ground operations;

(3) perform take-off;

(4) perform climb;

(5) perform cruise;

(6) performdescent;

(7) perform approach;

(8) perform landing; and

(9) perform after landing and aeroplane post-flight operations.

SIMULATED FLIGHT

13. Minimum requirements for FSTDs:

(a) Phase 1 — Core flying skills

E-training and part tasking devices approved by the ECAA that have the following characteristics:

(i) involve accessories beyond those normally associated with desktop computers, such as functional replicas of a throttle quadrant, a side-stick controller, or an FMS keypad, and

(ii) involve psychomotor activity with appropriate application of force and timing of responses.

(b) Phase 2 — Basic

An FNPT II MCC that represents a generic multi-engine turbine-powered aeroplane.

(c) Phase 3 — Intermediate

An FSTD that represents a multi-engine turbine-powered aeroplane required to be operated with a co-pilot and qualified to an equivalent standard to level B, additionally including:

(i) a daylight/twilight/night visual system continuous cross-cockpit minimum collimated visual field of view providing each pilot with 180° horizontal and 40° vertical field of view, and
(ii) ATC environment simulation.
(d) Phase 4 — Advanced

An FFS which is fully equivalent to level D or level C with an enhanced daylight visual system, including ATC environment simulation.

GM1 to Appendix 2 Integrated MPL training course

GENERAL

(a) In broad terms, the MPL holder is expected to be able to complete the airline operators' conversion course with a high probability of success and within the time frame normally allowed for this phase. The standard is equivalent to what is currently expected from graduates of the ATP(A) integrated course who have completed type rating training.

(b) The general approach is to use the existing ATP(A) integrated training course as a reference and to implement progressively the MPL integrated training course and specifically the transfer from actual flight to simulated flight.

(c) This transfer should be organised in a way that is similar to the approach used for ETOPS. Successive evolutions of the training syllabus introduce progressively a higher level of simulated flight and a reduction of actual flight. Change from one version to the next should only take place after enough experience has been gained and once its results, including those of airline operator conversion courses, have been analysed and taken into account.

MPL TRAINING SCHEME

(d) The following scheme should be applied:

Phases of training	Training items	Flight and simulated flight training media - Minimum level requirement		Ground training media
Phase 4 – advanced Type rating training within an airline oriented environment	•CRM •Landing training •All weather •LOFT •Abnormal procedures •Normal procedures	Aeroplane: ME Multi-crew certified _____ FSTD FS level D or C + ATC simulation	12 take-offs and landings as PF _____ PF/PNF	• CBT • E-learning • Part task trainer • Class room
Phase 3 – intermediate Application of multi-crew operations in a high performance ME turbine aeroplane	• CRM • LOFT • Abnormal procedures • Normal procedures • Multi-crew • Instrument flight	FSTD: *representing an ME turbine powered aeroplane to be operated with a co- pilot and qualified to an equivalent standard to level B + ATC simulation*	PF/PNF	• CBT • E-learning • Part task Trainer • Class room
Phase 2 – basic Introduction of multi-crew operations and instrument flight	• CRM • PF/PNF complement • IFR cross-country • Instrument flight • Upset Recovery	Aeroplane: SE or ME _____ FSTD: FNPT II + MCC	PF/PNF	
Phase 1 – core flying skills Specific basic SP training	• CRM • VFR Cross-country • Solo/SPIC flight • Basic Instrument flight • Principles of flight • Cockpit procedures • Upset recovery • Night flight	Aeroplane: SE or ME _____ FSTD: FNPT I/BITD	PF	

Integrated TEM principles

THEORETICAL KNOWLEDGE INSTRUCTION

(e) The 750 hours of theoretical knowledge instruction can include classroom work, interactive video, slide or tape presentation, learning carrels, computer-based training, and other media as approved by the competent authority, in suitable proportions.

COMPETENCY UNITS, COMPETENCY ELEMENTS AND PERFORMANCE CRITERIA

(f) Apply human performance principles, including principles of threat and error management:

(1) cooperation;

(2) leadership and managerial skills;

(3) situation awareness;

(4) decision making.

These behaviour categories are intended to help in the effective utilisation of all available resources to achieve safe and efficient operations.

These behaviour categories may be adapted and extended to incorporate issues like communication and use of automation if it is considered to be relevant to the development of the curriculum.

(g) Perform Aircraft Ground and Pre-Flight Operations

List of competency elements and performance criteria:

(1) demonstrate attitudes and behaviours appropriate to the safe conduct of flight, including recognising and managing potential threats and errors;

Duty	**Observation and assessment**	**Satisfactory (S)**	**Unsatisfactory (U)**
(2) perform dispatch duties:			(S) or (U)
(i) verifies technical condition of the a/c,	PF/PNF including adequate use of MEL;		
(ii) checks technical bulletins and notices;		PF/PNF	
(iii) determines operational environment and pertinent weather;		PF/PNF	
(iv) determines impact of weather on aircraft performance;		PF/PNF	
(v) applies flight planning and load procedures;		PF/PNF	
(vi) determines fuel requirement;		PF/PNF	
(vii) files an ATS flight plan (if required).		PF/PNF	
(3) provide flight crew and cabin crew briefings;			(S) or (U)
(i) briefed flight crew in all relevant matters;		PF	
(ii) briefed cabin crew in all relevant matters.		PF	
(4) perform pre-flight checks and cockpit preparation:			(S) or (U)

(i) ensures the airworthiness of the aircraft;	PF
(ii) performs the cockpit preparation and briefings;	PF/PNF
(iii) performs FMS initialisation, data insertion and confirmation;	PF/PNF
(iv) optimises and checks take-off performance and take-off data calculation.	PF/PNF
(5) perform engine start:	(S) or (U)
(i) asks for, receives acknowledges and checks ATC clearance;	PNF
(ii) performs engine start procedure;	PF/PNF
(iii) uses standard communication procedures with ground crew and ATC.	PF/PNF
(1) perform taxi out:	(S) or (U)
(i) receives, checks and adheres to taxi clearance;	PNF
(ii) taxis the aircraft, including use of exterior lighting;	PF
(iii) complies to taxi clearance;	PF/PNF
(iv) maintains look-out for conflicting traffic and obstacles;	PF/PNF
(v) operates thrust, brakes and steering;	PF
(vi) conducts relevant briefings;	PF
(vii) uses standard communication **procedures with crew and ATC;**	**PNF**
(viii) completes standard operating **procedures and checklists;**	**PF/PNF**
(ix) updates and confirms FMS data;	PF/PNF
(x) manages changes in performance and **departure route;**	**PF/PNF**
(xi) completes de or anti-ice procedures.	PF/PNF
(2) manage abnormal and emergency situations:	(S) or (U)

(i) identifies the abnormal condition; PF/PNF

(ii) interprets the abnormal condition; PF/PNF

(iii) performs the procedure for the **abnormal condition.** **PF/PNF**

(3) communicate with cabin crew, passengers and company: (S) or (U)

(i) communicates relevant information **with cabin crew;** **PF**

(ii) communicates relevant information **with company;** **PF/PNF**

(iii) makes passenger announcement when **appropriate.** **PF/PNF**

(h) Perform take-off

List of competency elements and performance criteria:

(1) demonstrate attitudes and behaviours appropriate to the safe conduct of flight, including recognising and managing potential threats and errors.

(2) perform pre-take-off and pre-departure preparation: (S) or (U)

(i) checks and acknowledges line up **clearance;** **PF/PNF**
(ii) checks correct runway selection ; PF/PNF
(iii) confirms validity of performance data; PF/PNF
(iv) checks approach sector and runway are **clear;** **PF/PNF**
(v) confirms all checklists and take-off **preparations completed;** **PF/PNF**
(vi) lines up the aircraft on centerline **without losing distance;** **PF**
(vii) checks weather on departure sector; PF/PNF
(viii) checks runway status and wind. PF/PNF

(3) perform take-off roll: (S) or (U)

(i) applies take-off thrust; PF
(ii) checks engine parameters; PNF
(iii) checks air speed indicators; PF/PNF
(iv) stays on runway centreline. PF

(4) perform transition to instrument flight rules: (S) or (U)

(i) applies v1 procedures; PF/PNF
(ii) rotates at vr to initial pitch attitude; PF
(iii) establishes initial wings level attitude; PF
(iv) retracts landing gear; PNF
(v) maintains climb out speed. PF

(5) perform initial climb to flap retraction altitude: (S) or (U)

(i) sets climb power; PF
(ii) adjusts attitude for acceleration; PF

(iii) selects flaps according flap speed schedule; **PF/PNF**

(iv) observes speed restrictions; PF

(v) completes relevant checklists. PF/PNF

(6) perform rejected take-off: (S) or (U)

(i) recognises the requirement to abort the take-off; **PF**

(ii) applies the rejected take-off procedure; PF

(iii) assesses the need to evacuate the aircraft. **PF/PNF**

(7) perform navigation: (S) or (U)

(i) complies to departure clearance; PF

(ii) complies with published departure procedures, for example speeds; **PF**

(iii) monitors navigation accuracy; PF/PNF

(iv) communicates and coordinates with ATC. **PNF**

(8) manage abnormal and emergency situations: (S) or (U)

(i) identifies the abnormal condition; PF/PNF

(ii) interprets the abnormal condition; PF/PNF

(iii) performs the procedure for the abnormal condition. **PF/PNF**

(i) Perform climb

List of competency elements and performance criteria:

(1) demonstrate attitudes and behaviours appropriate to the safe conduct of flight, including recognising and managing potential threats and errors;

(2) perform SID or en-route navigation: (S) or (U)

(i) complies with departure clearance and procedures; **PF**

(ii) demonstrates terrain awareness; PF/PNF

(iii) monitors navigation accuracy; PF/PNF

(iv) adjusts flight to weather and traffic conditions; **PF**

(v) communicates and coordinates with ATC; **PNF**

(vi) observes minimum altitudes; PF/PNF

(vii) selects appropriate level of automation; PF

(viii) complies with altimeter setting
procedures. **PF/PNF**

(3) complete climb procedures and checklists: (S) or (U)

(i) performs the after take-off items; PF/PNF

(ii) confirms and checks according
checklists. **PF/PNF**

(4) modify climb speeds, rate of climb and cruise
(S) or (U) altitude:

(i) recognises the need to change speed, rate PF of climb or cruise altitude;

(ii) selects and maintains the appropriate climb PF speed or rate of climb;

(iii) selects optimum cruise flight level. PF/PNF

(5) perform systems operations and procedures: (S) or (U)

(i) monitors operation of all systems; PF/PNF

(ii) operates systems as required. PF/PNF

(6) manage abnormal and emergency situations: (S) or (U)

(i) identifies the abnormal condition; PF/PNF

(ii) interprets the abnormal condition; PF/PNF

(iii) performs the procedure for the
abnormal condition. **PF/PNF**

(7) communicate with cabin crew, passengers and
(S) or (U) company:

(i) communicates relevant information
with cabin crew; **PF**

(ii) communicates relevant information
with company; **PF/PNF**

(iii) makes passenger announcements
when appropriate. **PF**

(j) Perform cruise

List of competency elements and performance criteria.

(1) demonstrate attitudes and behaviours appropriate to the safe conduct of flight, including recognising and managing potential threats and errors;

(2) monitor navigation accuracy:	(S) or (U)
(i) demonstrates adequate area **knowledge;**	**PF/PNF**
(ii) demonstrates adequate route **knowledge;**	**PF/PNF**
(iii) navigates according to flight plan and **clearance;**	**PF**
(iv) adjusts flight to weather and traffic **conditions;**	**PF**
(v) communicates and coordinates with **ATC;**	**PNF**
(vi) observes minimum altitudes;	PF/PNF
(vii) uses all means of automation.	PF
(3) monitor flight progress:	(S) or (U)
(i) selects optimum speed; PF	
(ii) selects optimum cruise flight level;	PF
(iii) monitors and controls fuel status;	PF/PNF
(iv) recognises the need for a possible **diversion;**	**PF/PNF**
(v) creates a diversion contingency plan if **required.**	**PF/PNF**
(4) perform descent and approach planning:	(S) or (U)
(i) checks weather of destination and	

alternate airport;	**PF/PNF**
(ii) checks runway in use and approach **procedure;**	**PF/PNF**
(iii) sets the FMS accordingly;	PNF
(iv) checks landing weight and landing **distancerequired;**	**PNF**
(v) checks MEA, MGA and MSA;	PF/PNF
(vi) identifies top of descent point.	PF
(5) perform systems operations and procedures:	(S) or (U)
(i) monitors operation of all systems;	PF/PNF
(ii) operates systems as required.	PNF
(6) manage abnormal and emergency situations:	(S) or (U)
(i) identifies the abnormal condition;	PF/PNF
(ii) interprets the abnormal condition;	PF/PNF
(i) performs the procedure for the **abnormal condition.**	**PF/PNF**
(7) communicate with cabin crew, passengers and company:	(S) or (U)
(ii) communicates relevant information **with cabin crew;**	**PF**
(iii) communicates relevant information **with company;**	**PF/PNF**
(iv) makes passenger announcements **when appropriate.**	**PF**

(k) Perform descent

List of competency elements and performance criteria:

(1) Demonstrate attitudes and behaviours appropriate to the safe conduct of flight, including recognising and managing potential threats and errors;

(2) initiate and manage descent:	(S) or (U)
(i) starts descent according to ATC **clearance or optimum descent point;**	**PF**

(ii) selects optimum speed and descent rate; **PF**

(iii) adjusts speed to existing environmental conditions; **PF**

(iv) recognises the need to adjust the descent path; **PF**

(v) adjusts the flight path as required; PF

(vi) utilises all means of FMS descent information. **PF**

(3) monitor and perform en route and descent navigation: (S) or (U)

(i) complies with arrival clearance and procedures; **PF**

(ii) demonstrates terrain awareness; PF/PNF

(iii) monitors navigation accuracy; PF/PNF

(iv) adjusts flight to weather and traffic conditions; **PF**

(v) communicates and coordinates with ATC; **PNF**

(vi) observes minimum altitudes; PF/PNF

(vii) selects appropriate level or mode of automation; **PF**

(viii) complies with altimeter setting procedures. **PF/PNF**

(4) re-planning and update of approach briefing: (S) or (U)

(i) re-checks destination weather and runway in use; **PNF**

(ii) briefs or re-briefs about instrument approach and landing as required; **PF**

(iii) reprograms the FMS as required; PNF

(iv) re-checks fuel status. PF/PNF

(5) perform holding: (S) or (U)

(i) identifies holding requirement; PF/PNF

(ii) programs FMS for holding pattern;	PNF
(iii) enters and monitors holding pattern;	PF
(iv) assesses fuel requirements and **determines max holding time;**	**PF/PNF**
(v) reviews the need for a diversion;	PF/PNF
(vi) initiates diversion. PF	

(6) perform systems operations and procedures:	(S) or (U)
(i) monitors operation of all systems;	PF/PNF
(ii) operates systems as required.	PF/PNF
(7) manage abnormal and emergency situations:	(S) or (U)
(i) identifies the abnormal condition;	PF/PNF
(ii) interprets the abnormal condition;	PF/PNF
(iii) performs the procedure for the **abnormal condition.**	**PF/PNF**
(8) communicate with cabin crew, passengers and company:	(S) or (U)
(i) communicates relevant information **with cabin crew;**	**PF**
(ii) communicates relevant information **with company;**	**PF/PNF**
(iii) makes passenger announcements **when appropriate.**	**PF**

(l) Perform approach

List of competency elements and performance criteria:

(1) demonstrate attitudes and behaviours appropriate to the safe conduct of flight, including recognising and managing potential threats and errors;

(2) perform approach in general: (S) or (U)

(i) executes approach according to **procedures and situation;** **PF**

(ii) selects appropriate level or mode of **automation;** **PF**

(iii) selects optimum approach path; PF

(iv) operates controls smooth and coordinated; PF

(v) performs speed reduction and flap extension; PF/PNF

(vi) performs relevant checklists; PF/PNF

(vii) initiates final descent; PF

(viii) achieves stabilised approach criteria; PF

(ix) ensures adherence to minima; PF/PNF

(x) initiates go-around if required; PF

(xi) masters transition to visual segment. PF

(3) perform precision approach: (S) or (U)

(i) performs ILS approach; PF
(ii) performs MLS approach. PF

(4) perform non-precision approach: (S) or (U)

(i) performs VOR approach; PF
(ii) performs NDB approach; PF
(iii) performs SRE approach; PF
(iv) performs GNSS approach; PF
(v) performs ILS loc approach; PF
(vi) performs ILS back beam approach. PF

(5) perform approach with visual reference to (S) or (U) ground:

(i) performs standard visual approach; PF
(ii) performs circling approach. PF

(6) monitor the flight progress: (S) or (U)

(i) insures navigation accuracy; PF/PNF
(ii) communicates with ATC and crew members; PNF
(iii) monitors fuel status. PF/PNF

(7) perform systems operations and procedures: (S) or (U)

(i) monitors operation of all systems; PF
(ii) operates systems as required. PF

(8) manage abnormal and emergency situations: (S) or (U)

(i) identifies the abnormal condition; PF/PNF
(ii) interprets the abnormal condition; PF/PNF
(iii) performs the procedure for the abnormal condition. PF/PNF

(9) perform missed approach and go-around: (S) or (U)

(i) initiates go-around procedure; PF
(ii) navigates according to missed approach procedure; PF
(iii) completes the relevant checklists; PF/PNF
(iv) initiates approach or diversion after the go- around; PF
(v) communicates with ATC and crew members. PNF

(10) communicate with cabin crew, passengers and (S) or
(U) company

(i) communicates relevant information with cabin crew; PF
(ii) communicates relevant information with company; PF/PNF
(iii) makes passenger announcements when appropriate; PF
(iv) initiates go-around procedure. PF

(m) Perform landing

List of competency elements and performance criteria:

(1) demonstrate attitudes and behaviours appropriate to the safe conduct of light, including recognising and managing potential threats and errors;

(2) land the aircraft; (S) or (U)

(i) maintains a stabilised approach path during visual
segment; **PF**
(ii) recognises and acts on changing conditions for windshift or wind shear segment; **PF**
(iii) initiates flare; **PF**
(iv) controls thrust; **PF**
(v) achieves touchdown in touchdown zone on centreline; **PF**
(vi) lowers nose wheel; **PF**
(vii) maintains centreline; **PF**
(viii) performs after-touchdown procedures; **PF**

(ix)	makes use of appropriate braking and reverse thrust;	**PF**
(x)	vacates runway with taxi speed.	**PF**

(3)	perform systems operations and procedures:	(S) or (U)
(i)	monitors operation of all systems;	PF
(ii)	operates systems as required.	PF

(4)	manage abnormal and emergency situations:	(S) or (U)
(i)	identifies the abnormal condition;	**PF/PNF**
(ii)	interprets the abnormal condition;	**PF/PNF**
(iii)	performs the procedure for the abnormal condition.	**PF/PNF**

(n) Perform after landing and post flight operations

List of competency elements and performance criteria:

(1) demonstrate attitudes and behaviours appropriate to the safe conduct of flight, including recognising and managing potential threats and errors;

(2)	perform taxiing and parking:	(S) or (U)
(i)	receives, checks and adheres to taxi clearance;	PNF
(ii)	taxies the aircraft including use of exterior lighting;	PF
(iii)	controls taxi speed;	PF/PNF
(iv)	maintains centreline;	PF
(v)	maintains look-out for conflicting traffic and obstacles;	PF
(vi)	identifies parking position;	PF/PNF
(vii)	complies with marshalling or stand guidance;	PF/PNF
(viii)	applies parking and engine shut down procedures;	PF
(ix)	completes with relevant checklists.	PF/PNF

(3)	perform aircraft post-flight operations:	(S) or (U)
(i)	communicates to ground personnel and crew;	PF
(ii)	completes all required flight documentation;	PF/PNF
(iii)	ensures securing of the aircraft;	PF
(iv)	conducts the debriefings.	PF

(4)	perform systems operations and procedures:	(S) or (U)
(i)	monitors operation of all systems;	PF/PNF
(ii)	operates systems as required.	PF/PNF

(5)	manage abnormal and emergency situations:	(S) or (U)
(i)	identifies the abnormal condition;	PF/PNF
(ii)	interprets the abnormal condition;	PF/PNF
(iii)	performs the procedure for the abnormal condition.	PF/PNF
(6)	communicate with cabin crew, passengers and company:	(S) or (U)
(i)	communicates relevant information with cabin crew;	PF
(ii)	communicates relevant information with company;	PF/PNF
(iii)	makes passenger announcements when appropriate.	PF

PRINCIPLES OF THREAT AND ERROR MANAGEMENT

(o) One model that explains the principles of threat and error management is the TEM model.

(1) The components of the TEM model:

There are three basic components in the TEM model, from the perspective of flight crews: threats, errors and undesired aircraft states. The model proposes that threats and errors are part of everyday aviation operations that must be managed by flight crews, since both threats and errors carry the potential to generate undesired aircraft states. Flight crews must also manage undesired aircraft states, since they carry the potential for unsafe outcomes. Undesired state management is an essential component of the TEM model, as important as threat and error management. Undesired aircraft state management largely represents the last opportunity to avoid an unsafe outcome and thus maintain safety margins in flight operations.

(2) Threats:

(i) Threats are defined as events or errors that occur beyond the influence of the flight crew, increase operational complexity, and which must be managed to maintain the margins of safety. During typical flight operations, flight crews have to manage various contextual complexities. Such complexities would include, for example, dealing with adverse meteorological conditions, airports surrounded by high mountains, congested airspace, aircraft malfunctions, errors committed by other people outside of the cockpit, such as air traffic controllers, flight attendants or maintenance workers, and so forth. The TEM model considers these complexities as threats because they all have the potential to negatively affect flight operations by reducing margins of safety;

(ii) Some threats can be anticipated, since they are expected or known to the flight crew. For example, flight crews can anticipate the consequences of a thunderstorm by briefing their response in advance, or prepare for a congested airport by making sure they keep a watchful eye on other aircraft as they execute the approach;

(iii) Some threats can occur unexpectedly, such as an in-flight aircraft malfunction that happens suddenly and without warning. In this case, flight crews must apply skills and knowledge acquired through training and operational experience;

(iv) Lastly, some threats may not be directly obvious to, or observable by, flight crews immersed in the operational context, and may need to be uncovered by safety analysis. These are considered latent threats. Examples of latent threats include equipment design issues, optical illusions, or shortened turn-around schedules;

(v) Regardless of whether threats are expected, unexpected, or latent, one measure of the effectiveness of a flight crew's ability to manage threats is whether threats are detected with the necessary anticipation to enable the flight crew to respond to them through deployment of appropriate countermeasures;

(vi) Threat management is a building block to error management and undesired aircraft state management. Although the threat-error linkage is not necessarily straightforward, and although it may not be always possible to establish a linear relationship, or one-to-one mapping between threats, errors and undesired states, archival data demonstrates that mismanaged threats are

normally linked to flight crew errors, which in turn are often linked to undesired aircraft states. Threat management provides the most proactive option to maintain margins of safety in flight operations, by voiding safety-compromising situations at their roots. As threat managers, flight crews are the last line of defence to keep threats from impacting flight operations;

(vii) Table 1 presents examples of threats, grouped under two basic categories derived from the TEM Model. Environmental threats occur due to the environment in which flight operations take place. Some environmental threats can be planned for and some will arise spontaneously, but they all have to be managed by flight crews in real time. Organisational threats, on the other hand, can be controlled (for example removed or, at least, minimised) at source by aviation organisations. Organisational threats are usually latent in nature. Flight crews still remain the last line of defence, but there are earlier opportunities for these threats to be mitigated by aviation organisations themselves.

(viii)

Environmental threats	Organisational threats
(A) weather: thunderstorms, turbulence, icing, wind shear, cross or tailwind, very low or high temperatures; (B) ATC: traffic congestion, ACAS RA/TA, ATC command, ATC error, ATC language difficulty, ATC non- standard phraseology, ATC runway change, ATIS communication or units of measurement (QFE/meters); (C) airport: contaminated or short runway; contaminated taxiway, lack of, confusing, faded signage, markings, birds, aids unserviceable, complex surface navigation procedures or airport constructions; (D) terrain: high ground, slope, lack of references or 'black hole'; (E) other: similar call-signs.	(A) operational pressure: delays, late arrivals or equipment changes; (B) aircraft: aircraft malfunction, automation event or anomaly, MEL/CDL; (C) cabin: flight attendant error, cabin event distraction, interruption, cabin door security; (D) maintenance: maintenance event or error; (E) ground: ground-handling event, de-icing or ground crew error; (F) dispatch: dispatch paperwork event or error; (G) documentation: manual error or chart error; (H) other: crew scheduling event.

Table 1. Examples of threats (list is not exhaustive)

(3) Errors:

(i) Errors are defined actions or inactions by the flight crew that lead to deviations from organizational or flight crew intentions or expectations. Unmanaged or mismanaged errors frequently lead to undesired aircraft states. Errors in the operational context thus tend to reduce the margins of safety and increase the probability of adverse events;

(ii) Errors can be spontaneous (for example without direct linkage to specific, obvious threats), linked to threats, or part of an error chain. Examples of errors would include the inability to maintain stabilised approach parameters, executing a wrong automation mode, failing to give a required callout, or misinterpreting an ATC clearance;

(iii) Regardless of the type of error, an error's effect on safety depends on whether the flight crew detects and responds to the error before it leads to an undesired aircraft state and to a potential unsafe outcome. This is why one of the objectives of TEM is to understand error management (for example detection and response), rather than to solely focus on error causality (for example causation and commission).

(iv) From the safety perspective, operational errors that are timely detected and promptly responded to (for example properly managed), errors that do not lead to undesired aircraft states, do not reduce margins of safety in flight operations, and thus become operationally inconsequential. In addition to its safety value, proper error management represents an example of successful human performance, presenting both learning and training value;

(v) Capturing how errors are managed is then as important, if not more, as capturing the prevalence of different types of error. It is of interest to capture if and when errors are detected and by whom, the response(s) upon detecting errors, and the outcome of errors. Some errors are quickly detected and resolved, thus becoming operationally inconsequential, while others go undetected or are mismanaged. A mismanaged error is defined as an error that is linked to or induces an additional error or undesired aircraft state;

(vi) Table 2 presents examples of errors, grouped under three basic categories derived from the TEM model. In the TEM concept, errors have to be 'observable' and therefore, the TEM model uses the 'primary interaction' as

the point of reference for defining the error categories;

(vii) The TEM model classifies errors based upon the primary interaction of the pilot or flight crew at the moment the error is committed. Thus, in order to be classified as aircraft handling error, the pilot or flight crew must be interacting with the aircraft (for example through its controls, automation or systems). In order to be classified as procedural error, the pilot or flight crew must be interacting with a procedure (for example checklists; SOPs; etc.). In order to be classified as communication error, the pilot or flight crew must be interacting with people (ATC, ground crew, other crewmembers, etc.);

(viii) Aircraft handling errors, procedural errors and communication errors may be unintentional or involve intentional non-compliance. Similarly, proficiency considerations (for example skill or knowledge deficiencies, training system deficiencies) may underlie all three categories of error. In order to keep the approach simple and avoid confusion, the TEM model does not consider intentional non-compliance and proficiency as separate categories of error, but rather as sub-sets of the three major categories of error.

(ix)

Aircraft handling errors	(A) manual handling, flight controls: vertical, lateral or speed deviations, incorrect flaps or speed brakes, thrust reverser or power settings; (B) automation: incorrect altitude, speed, heading, auto throttle settings, incorrect mode executed or incorrect entries; (C) systems, radio, instruments: incorrect packs, incorrect anti- icing, incorrect altimeter, incorrect fuel switches settings, incorrect speed bug or incorrect radio frequency dialled; (D) ground navigation: attempting to turn down wrong taxiway or runway, taxi toofast, failure to hold short or missed taxiway or runway.

Procedural errors	(A) SOPs: failure to cross-verify automation inputs; (B) checklists: wrong challenge and response; items missed, checklist performed late or at the wrong time; (C) callouts: omitted or incorrect callouts; (D) briefings: omitted briefings; items missed; (E) documentation:wrong weight and balance, fuel information, ATIS, or clearance information recorded, misinterpreted items on paperwork; incorrect logbook entries or incorrect application of MEL procedures.
Communication errors	(A) crew to external: missed calls, misinterpretations of instructions, incorrect read-back, wrong clearance, taxiway, gate or runway communicated; (B) pilot to pilot: within crew miscommunication or mis-interpretation.

Table 2. Examples of errors (list is not exhaustive)

(4) Undesired aircraft states:

(i) Undesired aircraft states are flight crew-induced aircraft position or speed deviations, misapplication of flight controls, or incorrect systems configuration, associated with a reduction in margins of safety. Undesired aircraft states that result from ineffective threat or error management may lead to compromising situations and reduce margins of safety in flight operations. Often considered at the cusp of becoming an incident or accident, undesired aircraft states must be managed by flight crews;

(ii) Examples of undesired aircraft states would include lining up for the incorrect runway during approach to landing, exceeding ATC speed restrictions during an approach, or landing long on a short runway requiring maximum braking. Events such as equipment malfunctions or ATC controller errors can also reduce margins of safety in flight operations, but these would be considered threats;

(iii) Undesired states can be managed effectively, restoring margins of safety, or flight crew response(s) can induce an additional error, incident, or accident;

(iv) Table 3 presents examples of undesired aircraft states, grouped under three basic categories derived from the TEM model;

(v)

Aircraft handling	(A) aircraft control (attitude); (B) vertical, lateral or speed deviations; (C) unnecessary weather penetration; (D) unauthorised airspace penetration; (E) operation outside aircraft limitations; (F) unstable approach; (G) continued landing after unstable approach; (H) long, floated, firm or off-centreline landing.
Ground navigation	(A) proceeding towards wrong taxiway or runway; Wrong taxiway, ramp, gate or hold spot.
Incorrect aircraft configurations	(A) incorrect systems configuration; (B) incorrect flight controls configuration; (C) incorrect automation configuration; (D) incorrect engine configuration; (E) incorrect weight and balance configuration.

Table 3. Examples of undesired aircraft states (list is not exhaustive)

(vi) An important learning and training point for flight crews is the timely switching from error management to undesired aircraft state management. An example would be as follows: a flight crew selects a wrong approach in the FMC. The flight crew subsequently identifies the error during a cross-check prior to the FAF. However, instead of using a basic mode (for example heading) or manually flying the desired track, both flight crew members become involved in attempting to reprogram the correct approach prior to reaching the FAF. As a result, the aircraft 'stitches' through the localiser, descends late, and goes into an unstable approach. This would be an example of the flight crew getting 'locked in' to error management, rather than switching to undesired aircraft state management. The use of the TEM model assists in educating flight crews that, when the aircraft is in an undesired state, the basic task of the flight crew is undesired aircraft state management instead of error management. It also illustrates how easy it is to get locked in to the error management phase;

(vii) Also from a learning and training perspective, it is important to establish a clear differentiation between undesired aircraft states and outcomes. Undesired aircraft states are transitional states between a normal operational state (for example a stabilised approach) and an outcome. Outcomes, on the other hand, are end states, most notably, reportable occurrences (for example incidents and accidents). An example would be as follows: a stabilised approach (normal operational state) turns into an unstabilised approach (undesired aircraft state) that results in a runway excursion (outcome);

(viii) The training and remedial implications of this differentiation are of significance. While at the undesired aircraft state stage, the flight crew has the possibility, through appropriate TEM, of recovering the situation, returning to a normal operational state, thus restoring margins of safety. Once the undesired aircraft state becomes an outcome, recovery of the situation, return to a normal operational state, and restoration of margins of safety is not possible.

(5) Countermeasures:

(i) Flight crews must, as part of the normal discharge of their operational duties, employ countermeasures to keep threats, errors and undesired aircraft states from reducing margins of safety in flight operations. Examples of countermeasures would include checklists, briefings, call-outs and SOPs, as well as personal strategies and tactics. Flight crews dedicate significant amounts of time and energies to the application of countermeasures to ensure margins of safety during flight operations. Empirical observations during training and checking suggest that as much as 70 % of flight crew activities may be countermeasures- related activities.

(ii) All countermeasures are necessarily flight crew actions. However, some countermeasures to threats, errors and undesired aircraft states that flight crews employ build upon 'hard' resources provided by the aviation system. These resources are already in place in the system before flight crews report for duty, and are therefore considered as systemic-based countermeasures. The following would be examples of 'hard' resources that flight crews employ as systemic-based countermeasures:

(A) ACAS;

(B) TAWS;

(C) SOPs;
(D) checklists;

(E) briefings;

(F) training;

(G) etc.

(iii) Other countermeasures are more directly related to the human contribution to the safety of flight operations. These are personal strategies and tactics, individual and team countermeasures that typically include canvassed skills, knowledge and attitudes developed by human performance training, most notably, by CRM training. There are basically three categories of individual and team countermeasures:

(A) planning countermeasures: essential for managing anticipated and unexpected threats;

(B) execution countermeasures: essential for error detection and error response;

(C) review countermeasures: essential for managing the changing conditions of a flight.

(iv) Enhanced TEM is the product of the combined use of systemic-based and individual and team countermeasures. Table 4 presents detailed examples of individual and team countermeasures. Further guidance on countermeasures can be found in the sample assessment guides for terminal training objectives (PANS-TRG, Chapter 3, Attachment B) as well as in the ICAO manual, Line Operations Safety Audit (LOSA) (Doc 9803).

Planning countermeasures		
SOP briefing	The required briefing was interactive and operationally thorough	(A) Concise, not rushed, and met SOP requirements; (B) Bottom lines were established
Plans stated	Operational plans and decisions were communicated and acknowledged	Shared understanding about plans: 'Everybody on the same page'
Workload assignment	Roles and responsibilities were defined for normal and non-normal situations	Workload assignments were communicated and acknowledged
Contingency management	Crew members developed effective strategies to manage threats to safety	(A) Threats and their consequences were anticipated; (B) Used all available resources to manage threats

Execution countermeasures		
Monitor and cross-check	Crew members actively monitored and cross-checked systems and other crew members	Aircraft position, settings, and crew actions were verified
Workload management	Operational tasks were prioritised and properly managed to handle primary flight duties	(A) Avoided task fixation; (B) Did not allow work overload
Automation management	Automation was properly managed to balance situational and workload requirements	(A) Automation setup was briefed to other members (B) Effective recovery techniques from automation anomalies
Review countermeasures		
Evaluation and modification of plans	Existing plans were reviewed and modified when necessary	Crew decisions and actions were openly analysed to make sure the existing plan was the best plan
Inquiry	Crew members asked questions to investigate and/or clarify current plans of action	Crew members not afraid to express a lack of knowledge: 'Nothing taken for granted' attitude
Assertiveness	Crew members stated critical information or solutions with appropriate persistence	Crew members spoke up without hesitation.

Table 4. Examples of individual and team countermeasures

Appendix 3 – Training, skill test and proficiency check for MPL, ATPL, type and class ratings, and proficiency check for IRs

A. General

1. An applicant for a skill test shall have received instruction on the same class or type of aircraft to be used in the test.
2. Failure to achieve a pass in all sections of the test in two attempts will require further training.
3. There is no limit to the number of skill tests that may be attempted.
4. Any training flying activities related to the conversion of licence or MPL shall be authorised by the ECAA. CONTENT

   OF THE TRAINING, SKILL TEST/PROFICIENCY CHECK

5. Unless otherwise determined in the operational suitability data established in accordance with CAR 21 or equivalent, the syllabus of flight instruction shall comply with this Appendix. The syllabus may be reduced to give credit for previous experience on similar aircraft types, as determined in the operational suitability data established in accordance with CAR 21 or equivalent.

6. Except in the case of skill tests for the issue of an ATPL, when so defined in the operational suitability data established in accordance with CAR 21 or equivalent for the specific type, credit may be given for skill test items common to other types or variants where the pilot is qualified.
7. In cases of skill test for a multi pilot aircraft rating; the applicant shall demonstrate the skill and knowledge required for the safe operation of the applicable type of aircraft, relevant to the duties of a pilot-in-command or a co-pilot as required to be endorsed on the licence.

CONDUCT OF THE TEST/CHECK

8. The examiner may choose between different skill test or proficiency check scenarios containing simulated relevant operations developed and approved by the ECAA. Full flight simulators and other training devices, when available, shall be used, as established in this regulation.
9. During the proficiency check, the examiner shall verify that the holder of the class or type rating maintains an adequate level of theoretical knowledge.
10. Should the applicant choose to terminate a skill test for reasons considered inadequate by the examiner, the applicant shall retake the entire skill test. If the test is terminated for reasons considered adequate by the examiner, only those sections not completed shall be tested in a further flight.
11. At the discretion of the examiner, any manoeuvre or procedure of the test may be repeated once by the applicant. The examiner may stop the test at any stage if it is considered that the applicant's demonstration of flying skill requires a complete re-test.
12. An applicant shall be required to fly the aircraft from a position where the PIC or co-pilot functions, as relevant, can be performed and to carry out the test as if there is no other crew member if taking the test/check under single-pilot conditions. Responsibility for the flight shall be allocated in

accordance with national regulations.

13. During pre-flight preparation for the test the applicant is required to determine power settings and speeds. The applicant shall indicate to the examiner the checks and duties carried out, including the identification of radio facilities. Checks shall be completed in accordance with the check-list for the aircraft on which the test is being taken and, if applicable, with the MCC concept. Performance data for take-off, approach and landing shall be calculated by the applicant in compliance with the operations manual or flight manual for the aircraft used. Decision heights/altitude, minimum descent heights/altitudes and missed approach point shall be agreed upon with the examiner.
14. The examiner shall take no part in the operation of the aircraft except where intervention is necessary in the

interests of safety or to avoid unacceptable delay to other traffic.

SPECIFIC REQUIREMENTS FOR THE SKILL TEST/PROFICIENCY CHECK FOR MULTI-PILOT AIRCRAFT TYPE RATINGS, FOR SINGLE-PILOT AEROPLANE TYPE RATINGS, WHEN OPERATED IN MULTI-PILOT OPERATIONS, FOR MPL AND ATPL

15. The skill test for a multi-pilot aircraft or a single-pilot aeroplane when operated in multi-pilot operations shall be performed in a multi-crew environment. Another applicant or another type rated qualified pilot may function as second pilot. If an aircraft is used, the second pilot shall be the examiner or an instructor.
16. The applicant shall operate as PF during all sections of the skill test, except for abnormal and emergency procedures, which may be conducted as PF or PNF in accordance with MCC. The applicant for the initial issue of a multi-pilot aircraft type rating or ATPL shall also demonstrate the ability to act as PNF. The applicant may choose either the left hand or the right hand seat for the skill test if all items can be executed from the selected seat.
17. The following matters shall be specifically checked by the examiner for applicants for the ATPL or a type rating for multi-pilot aircraft or for multi-pilot operations in a single-pilot aeroplane extending to the duties of a PIC, irrespective of whether the applicant acts as PF or PNF:

(a) management of crew cooperation;

(b) maintaining a general survey of the aircraft operation by appropriate supervision; and

(c) setting priorities and making decisions in accordance with safety aspects and relevant rules and regulations appropriate to the operational situation, including emergencies.

18. The test/check should be accomplished under IFR, if the IR rating is included, and as far as possible be accomplished in a simulated commercial air transport environment. An essential element to be checked is the ability to plan and conduct the flight from routine briefing material.

19. When the type rating course has included less than 2 hours flight training on the aircraft, the skill test may be conducted in an FFS and may be completed before the flight training on the aircraft. In that case, a certificate of completion of the type rating course including the flight training on the aircraft shall be forwarded to the ECAA before the new type rating is entered in the applicant's licence.

B. **Specific requirements for the aeroplane category**

PASS MARKS

1. In the case of single-pilot aeroplanes, with the exception of for single-pilot high performance complex aeroplanes, the applicant shall pass all sections of the skill test or proficiency check. If any item in a section is failed, that section is failed. Failure in more than one section will require the applicant to take the entire test or check again. Any applicant failing only one section shall take the failed section again. Failure in any section of the re-test or re-check including those sections that have been passed at a previous attempt will require the applicant to take the entire test or check again. For single-pilot multi- engine aeroplanes, section 6 of the relevant test or check, addressing asymmetric flight, shall be passed.
2. In the case of multi-pilot and single-pilot high performance complex aeroplanes, the applicant shall pass all sections of the skill test or proficiency check. Failure of more than five items will require the applicant to take the entire test or check again. Any applicant failing five or less items shall take the failed items again. Failure in any item on the re-test or re-check including those items that have been passed at a previous attempt will require the applicant to take the entire check or test again. Section 6 is not part of the ATPL or MPL skill test. If the applicant only fails or does not take section 6, the type rating will be issued without CAT II or CAT III privileges. To extend the type rating privileges to CAT II or CAT III, the applicant shall pass the section 6 on the

appropriate type of aircraft.

FLIGHT TEST TOLERANCE

3. The applicant shall demonstrate the ability to:

(a) Operate the aeroplane within its limitations;

(b) complete all manoeuvres with smoothness and accuracy;

(c) exercise good judgement and airmanship;

(d) apply aeronautical knowledge;

(e) maintain control of the aeroplane at all times in such a manner that the successful outcome of a procedure or manoeuvre is always assured;

(f) understand and apply crew coordination and incapacitation procedures, if applicable; and

(g) communicate effectively with the other crew members, if applicable.

4. The following limits shall apply, corrected to make allowance for turbulent conditions and the handling qualities and performance of the aeroplane used:

Height	
Generally	**± 100 feet**
Starting a go-around at decision height	**+ 50 feet/– 0 feet**
Minimum descent height/altitude	**+ 50 feet/– 0 feet**
Tracking	
on radio aids	
Precision approach	**half scale deflection, azimuth and glide path Heading**
all engines operating	**± 5°**
with simulated engine failure	**± 10°**
Speed	
all engines operating	**± 5 knots**
with simulated engine failure	**+ 10 knots/– 5 knots**

CONTENT OF THE TRAINING/SKILL TEST/PROFICIENCY CHECK

5. Single-pilot aeroplanes, except for high performance complex aeroplanes:

(a) The following symbols mean:

P = Trained as PIC or Co-pilot and as Pilot Flying (PF) and Pilot Not Flying (PNF)

X = Flight simulators shall be used for this exercise, if available, otherwise an aeroplane shall be used if appropriate for the manoeuvre or procedure

P# = The training shall be complemented by supervised aeroplane inspection

(b) The practical training shall be conducted at least at the training equipment level shown as (P), or may be conducted on any higher level of equipment shown by the arrow (——>). The following abbreviations are used to indicate the training equipment used:

A = Aeroplane

FFS = Full Flight Simulator

FTD = Flight Training Device (including FNPT II for ME class rating)

(c) The starred (*) items of section 3B and, for multi-engine, section 6, shall be flown solely by reference to instruments if revalidation/renewal of an IR is included in the skill test or proficiency check. If the starred (*) items are not flown solely by reference to instruments during the skill test or proficiency check, and when there is no crediting of IR privileges, the class or type rating will be restricted to VFR only.

Section 3A shall be completed to revalidate a type or multi-engine class rating, VFR only, where **the required experience of 10 route sectors within the previous 12 months has not been completed. Section 3A is not required if section 3B is completed.**

(d) Where the letter 'M' appears in the skill test or proficiency check column this will indicate the mandatory exercise or a choice where more than one exercise appears.

(e) An FFS or an FNPT II shall be used for practical training for type or multi-engine class ratings if they form part of an approved class or type rating course. The following considerations will apply to the approval of the course:

(i) the qualification of the FFS or FNPT II as set out in Part-OR;

(ii) the qualifications of the instructors;

(iii) the amount of FFS or FNPT II training provided on the course; and

(iv) the qualifications and previous experience on similar types of the pilot under training.

(f) When a skill test or proficiency check is performed in multi-pilot operations, the type rating shall be restricted to multi-pilot operations.

SINGLE-PILOT AEROPLANES, EXCEPT FOR HIGH PERFORMANCE COMPLEX AEROPLANES		PRACTICAL TRAINING				CLASS OR TYPE RATING SKILL TEST/PROF. CHECK	
Manoeuvres/Procedures		FTD	FFS	A	Instructor initials when training completed	Checked in FFS A	Examiner initials when test completed
SECTION 1							
1 1.1	Departure Pre-flight including: Documentation Mass and Balance Weather briefing NOTAM						
1.2	Pre-start checks						
1.2.1	External	P#		P			
1.2.2	Internal			P		M	
1.3	Engine starting: Normal Malfunctions	P --- >	---->	---->		M	
1.4	Taxiing		P -->	---->		M	
1.5	Pre-departure checks: Engine run-up (if applicable)	P --- >	---->			M	
1.6	Take-off procedure: Normal with Flight Manual flap settings Crosswind (if conditions available)		P -->	---->			
1.7	Climbing: Vx/Vy Turns onto headings Level off		P -->	---->		M	

1.8	ATC liaison – Compliance, R/T procedure						
SECTION 2							
2 2.1	Airwork (VMC) Straight and level flight at various airspeeds including flight at critically low airspeed with and without flaps (including approach to VMCA when applicable)		P -->	---->			
2.2	Steep turns (360° left and right at 45° bank)		P -->	---->		M	
2.3	Stalls and recovery: (i) Clean stall (ii) Approach to stall in descending turn with bank with approach configuration and power (iii) Approach to stall in landing configuration and power (iv) Approach to stall, climbing turn with take- off flap and climb power (single engine aeroplane only)		P--- >	---->		M	
2.4	Handling using autopilot and flight director (may be conducted in section 3) if applicable		P--- >	---->		M	
2.5	ATC liaison – Compliance, R/T procedure						
SECTION 3A							
3A 3A.1	En-route procedures VFR (see B.5 (c) and (d)) Flight plan, dead reckoning and map reading						
3A.2	Maintenance of altitude, heading and speed						
3A.3	Orientation, timing and revision of ETAs						
3A.4	Use of radio navigation aids (if applicable)						

3A.5	Flight management (flight log, routine checks including fuel, systems and icing)						
3A.6	ATC liaison – Compliance, R/T procedure						
SECTION 3B							
3B 3B.1*	Instrument flight Departure IFR		P-- >	---->		M	
3B.2*	En-route IFR		P--- >	---->		M	
3B.3*	Holding procedures		P--- >	---->		M	
3B.4*	ILS to DH/A of 200 ft (60 m) or to procedure minima (autopilot may be used to glideslope intercept)		P-- >	---->		M	
3B.5*	Non-precision approach to MDH/A and MAP		P-- >	---->		M	
3B.6*	Flight exercises including simulated failure of the compass and attitude indicator: rate 1 turns, recoveries from unusual attitudes	P --- >	---->	---->		M	
3B.7*	Failure of localiser or glideslope	P --- >	---->	---->			
3B.8*	ATC liaison – Compliance, R/T procedure						
SECTION 4							
4 4.1	Arrival and landings Aerodrome arrival procedure		P-- >	---->		M	
4.2	Normal landing		P--- >	---->		M	
4.3	Flapless landing		P--- >	---->		M	
4.4	Crosswind landing (if suitable conditions)		P-- >	---->			
4.5	Approach and landing with idle power from up to 2000 ft above the runway (single-engine aeroplane only)		P-- >	---->			
4.6	Go-around from minimum height		P-- >	---->		M	
4.7	Night go-around and landing (if applicable)	P --- >	---->	---->			
4.8	ATC liaison – Compliance, R/T procedure						
SECTION 5							

5	Abnormal and emergency procedures (This section may be combined with sections 1 through 4)						
5.1	Rejected take-off at a reasonable speed		P--- >	---->		M	
5.2	Simulated engine failure after take-off (single- engine aeroplanes only)			P		M	
5.3	Simulated forced landing without power (single- engine aeroplanes only)			P		M	
5.4	Simulated emergencies: (i) fire or smoke in flight, (ii) systems' malfunctions as appropriate	P --- >	---->	---->			
5.5	Engine shutdown and restart (ME skill test only) (at a safe altitude if performed in the aircraft)	P --- >	---->	---->			
5.6	ATC liaison – Compliance, R/T procedure						
SECTION 6							
6 6.1*	Simulated asymmetric flight (This section may be combined with sections 1 through 5) Simulated engine failure during take- off (at a safe altitude unless carried out in FFS or FNPT II)	P --- >	---->	--->X		M	
6.2*	Asymmetric approach and go- around	P --- >	---->	--->X		M	
6.3*	Asymmetric approach and full stop landing	P --- >	---->	--->X		M	
6.4	ATC liaison – Compliance, R/T procedure						

6. Multi-pilot aeroplanes and single-pilot high performance complex aeroplanes:

(a) The following symbols mean:

P = Trained as PIC or Co-pilot and as PF and PNF for the issue of a type rating as applicable.

X = Simulators shall be used for this exercise, if available; otherwise an aircraft shall be used if appropriate for the manoeuvre or procedure.

P# = The training shall be complemented by supervised aeroplane inspection

(b) The practical training shall be conducted at least at the training equipment level shown as (P), or may be

conducted up to any higher equipment level shown by the arrow (———>). The following abbreviations are used to indicate the training equipment used:

A = Aeroplane
FFS = Full Flight Simulator FTD = Flight Training Device
OTD = Other Training Devices

(c) The starred items (*) shall be flown solely by reference to instruments. If this condition is not met during the skill test or proficiency check, the type rating will be restricted to VFR only.

(d) Where the letter 'M' appears in the skill test or proficiency check column this will indicate the mandatory exercise.

(e) An FFS shall be used for practical training and testing if the FFS forms part of an approved type rating course. The following considerations will apply to the approval of the course:

(i) the qualification of the FFS or FNPT II;

(ii) the qualifications of the instructors;

(iii) the amount of FFS or FNPT II training provided on the course; and

(iv) the qualifications and previous experience on similar types of the pilot under training.

(f) Manoeuvres and procedures shall include MCC for multi-pilot aeroplane and for single-pilot high performance complex aeroplanes in multi-pilot operations.

(g) Manoeuvres and procedures shall be conducted in single-pilot role for single-pilot high performance complex aeroplanes in single-pilot operations.

(h) In the case of single-pilot high performance complex aeroplanes, when a skill test or proficiency check is performed in multi-pilot operations, the type rating shall be restricted to multi-pilot operations. If privileges of single-pilot are sought, the manoeuvres/procedures in 2.5, 3.9.3.4, 4.3,

5.5 and at least one manoeuvre/procedure from section 3.4 have to be completed in addition as single-pilot.

(i) In case of a restricted type rating issued in accordance with FCL.720.A(e), the applicants shall fulfil the same requirements as other applicants for the type rating except for the practical exercises relating to the take-off and landing phases.

MULTI-PILOT AEROPLANES AND SINGLE-PILOT HIGH-PERFORMANCE COMPLEX AEROPLANES	PRACTICAL TRAINING					ATPL/MPL/TYPE RATING SKILL TEST OR PROF. CHECK	
Manoeuvres/Procedures	OTD	FTD	FFS	A	Instructor initials when training completed	Checked in FFS A	Examiner initials when test completed
SECTION 1							
1 Flight preparation 1.1 Performancecalculation	P						
1.2 Aeroplane external visual inspection; location of each item and purpose of inspection	P#			P			
1.3 Cockpit inspection		P --->	----->	----->			
1.4 Use of checklist prior to starting engines, starting procedures, radio and navigation equipment check, selection and setting of navigation and communication frequencies	P--->	----->	----->	----->		M	
1.5 Taxiing in compliance with air traffic control or instructions of instructor			P -- >	----->			
1.6 Before take-off checks		P >	----->	----->		M	
SECTION 2							
2 Take-offs 2.1 Normal take-offs with different flap settings, including expedited take-off			P--->	----->			
2.2*Instrument take-off; transition to instrument flight is required during rotation or immediately after becoming airborne			P--->	----->			
2.3 Crosswind take-off			P--->	----->			
2.4 Take-off at maximum take-off mass (actual or simulated maximum take-off mass)			P--->	----->			

2.5 Take-offs with simulated engine failure: 2.5.1*shortly after reaching V2 (In aeroplanes which are not certificated as transport category or commuter category aeroplanes, the engine failure shall not be simulated until reaching a minimum height of 500 ft above runway end. In aeroplanes having the same performance as a transport category aeroplane regarding take- off mass and density altitude, the instructor may simulate the engine failure shortly after reaching V2)			P--- >	----->			
2.5.2*between V1 and V2			P	X		M FFS Only	
2.6 Rejected take-off at a reasonable speed before reaching V1			P--- >	---->X		M	
SECTION 3							
3 Flight Manoeuvres and Procedures 3.1 Turns with and without spoilers			P --->	---->			
3.2 Tuck under and Mach buffets after reaching the critical Mach number, and other specific flight characteristics of the aeroplane (e.g. Dutch Roll)			P --->	---->X An aircraft may not be used for this exercise			
3.3 Normal operation of systems and controls engineer's panel	P >	----->	----->	----->			

Normal and abnormal operations of following systems:						M	A mandatory minimum of 3 abnormal shall be selected from 3.4.0 to 3.4.14 inclusive
3.4.0 Engine (if necessary propeller)	P >	----->	----->	----->			
3.4.1 Pressurisation and air-conditioning	P >	----->	----->	----->			
3.4.2 Pitot/static system	P >	----->	----->	----->			
3.4.3 Fuel system	P >	----->	----->	----->			
3.4.4 Electrical system	P >	----->	----->	----->			
3.4.5 Hydraulic system	P >	----->	----->	----->			
3.4.6 Flight control and Trim system	P >	----->	----->	----->			
3.4.7 Anti-icing/de- icing system, Glare shield heating	P >	----->	----->	----->			
3.4.8 Autopilot/Flight t director	P >	----->	----->	----->		M (single pilot only)	
3.4.9 Stall warning devices or stall avoidance devices, and stability augmentation devices	P >	----->	----->	----->			
3.4.10 Ground proximity warning system, weather radar, radio altimeter, transponder		P --->	----->	----->			
3.4.11 Radios, navigation equipment, instruments, flight management system	P >	----->	----->	----->			
3.4.12Landing gear and brake	P >	----->	----->	----->			
3.4.13 Slat and flap system	P >	----->	----->	----->			
3.4.14 Auxiliary power unit	P >	----->	----->	----->			
Intentionally left blank							

3.6 Abnormal and emergency procedures:						M	A mandatory minimum of 3 items shall be selected from 3.6.1 to 3.6.9 inclusive
3.6.1Fire drills e.g. engine, APU, cabin, cargo compartment, flight deck, wing and electrical fires including evacuation		P--- >	----->	----->			
3.6.2 Smoke control and removal		P--- >	----->	----->			
3.6.3 Engine failures, shutdown and restart at a safe height		P--- >	----->	----->			
3.6.4 Fuel dumping (simulated)		P--- >	----->	----->			
3.6.5 Wind shear at take-off/landing			P	X		FFS only	
3.6.6 Simulated cabin pressure failure/emergency descent			P --->	----->			
3.6.7 Incapacitation of flight crew member		P--- >	----->	----->			
3.6.8 Other emergency procedures as outlined in the appropriate Aeroplane Flight Manual		P--- >	----->	----->			
3.6.9ACAS event	P >	----->	----->	An aircraft may not be used		FFS only	
3.7 Steep turns with 45° bank, 180° to 360° left and right		P--- >	----->	----->			

3.8 Early recognition and counter measures on approaching stall (up to activation of stall warning device) in take-off configuration (flaps in take- off position), in cruising flight configuration and in landing configuration (flaps in landing position, gear extended) 3.8.1 Recovery from full stall or after activation of stall warning device in climb, cruise and approach configuration			P--- > P	----->X			
3.9 Instrument flight procedures							
3.9.1*Adherence to departure and arrival routes and ATC instructions		P --->	----->	----->		M	
3.9.2* Holding procedures		P --->	----->	----->			
3.9.3*Precision approaches down to a decision height (DH) not less than 60 m (200 ft)							
3.9.3.1*manually, without flight director			P--- >	----->		M (skill test only)	
3.9.3.2*manually, with flight director			P--- >	----->			
3.9.3.3*with autopilot			P--- >	----->			

3.9.3.4*manually, with one engine simulated inoperative; engine failure has to be simulated during final approach before passing the outer marker (OM) until touchdown or through the complete missed approach procedure. In aeroplanes which are not certificated as transport category aeroplanes (JAR/FAR 25) or as commuter category aeroplanes (SFAR 23), the approach with simulated engine failure and the ensuing go-around shall be initiated in conjunction with the non-precision approach as described in 3.9.4. The go-around shall be initiated when reaching the published obstacle clearance height (OCH/A), however not later than reaching a minimum descent height/altitude (MDH/A) of 500 ft above runway threshold elevation. In aeroplanes having the same performance as a transport category aeroplane regarding takeoff mass and density altitude, the instructor may simulate the engine failure in accordance with 3.9.3.4.			P >	----->		M	
3.9.4*Non-precision approach down to the MDH/A			P*--->	----->		M	

3.9.5 Circling approach under following conditions: (a) *approach to the authorised minimum circling approach altitude at the aerodrome in question in accordance with the local instrument approach facilities in simulated instrument flight conditions; followed by: (b) circling approach to another runway at least 90° off centreline from final approach used in item (a), at the authorised minimum circling approach altitude. Remark: if (a) and (b) are not possible due to ATC reasons, a simulated low visibility pattern may be performed.			P*--->	----->			
SECTION 4							
4 Missed Approach Procedures 4.1 Go-around with all engines operating* after an ILS approach on reaching decision height			P*--->	----->			
4.2 Other missed approach procedures			P*--->	----->			
4.3*Manual go-around with the critical engine simulated inoperative after an instrument approach on reaching DH, MDH or MAPt			P*--->	----->		M	
4.4 Rejected landing at 15 m (50 ft) above runway threshold and go-around			P -->	----->			

SECTION 5							
5 Landings 5.1 Normal landings* also after an ILS approach with transition to visual flight on reaching DH			P				
5.2 Landing with simulated jammed horizontal stabiliser in any out-of-trim position			P >	An aircraft may not be used for this exercise			
5.3 Crosswind landings (a/c, if practicable)			P---->	----->			
5.4 Traffic pattern and landing without extended or with partly extended flaps and slats			P---->	----->			
5.5 Landing with critical engine simulated inoperative			P---->	----->		M	
5.6 Landing with two engines inoperative: - aeroplanes with 3 engines: the centre engine and 1 outboard engine as far as practicable according to data of the AFM; - aeroplanes with 4 engines: 2 engines at one side.			P	X		M FFS only (skill test only)	
General remarks: Special requirements for extension of a type rating for instrument approaches down to a decision height of less than 200 feet (60 m), i.e. Cat II/III operations.							

SECTION 6							
Additional authorisation on a type rating for instrument approaches down to a decision height of less than 60 m (200 ft) (CAT II/III) The following manoeuvres and procedures are the minimum training requirements to permit instrument approaches down to a DH of less than 60 m (200 ft). During the following instrument approaches and missed approach procedures all aeroplane equipment required for type certification of instrument approaches down to a DH of less than 60 m (200 ft) shall be used.							
6.1*Rejected take-off at minimum authorised RVR			P* >	An aircraft may not be used for this exercise		M*	

>X

6.2*ILS approaches: in simulated instrument flight conditions down to the applicable DH, using flight guidance system. Standard procedures of crew coordination (task sharing, call out procedures, mutual surveillance, information exchange and support) shall be observed			P >	----->		M	
6.3*Go-around: after approaches as indicated in 6.2 on reaching DH. The training shall also include a go-around due to (simulated) insufficient RVR, wind shear, aeroplane deviation in excess of approach limits for a successful approach, andground/airborne equipment failure prior to reaching DH and, go-around with simulated airborneequipment failure			P >	----->		M*	
6.4*Landing(s): with visual reference established at DH following an instrument approach. Depending on the specific flight guidance system, an automatic landing shall be performed			P >	----->		M	

NOTE: *CAT II/III operations shall be accomplished in accordance with the applicable air operations requirements.*

7. Class ratings – sea

Section 6 shall be completed to revalidate a multi-engine class rating sea, VFR only, where the required experience of 10 route sectors within the previous 12 months has not been completed.

CLASS RATING SEA	**PRACTICAL**	
Manoeuvres/Procedures	Instructor's initials when training completed	Examiner's initials when test completed
SECTION 1		
1 Departure 1.1 Pre-flight including: Documentation Mass and Balance Weather briefing NOTAM		
1.2 Pre-start checks External/internal		
1.3 Engine start-up and shutdown Normal malfunctions		
1.4 Taxiing		
1.5 Step taxiing		
1.6 Mooring: Beach Jetty pier Buoy		
1.7 Engine-off sailing		
1.8 Pre-departure checks: Engine run-up (if applicable)		
1.9 Take-off procedure: Normal with Flight Manual flap settings Crosswind (if conditions available)		
1.10 Climbing Turns onto headings Level off		
1.11 ATC liaison – Compliance, R/T procedure		
SECTION 2		
2 Airwork (VFR) 2.1 Straight and level flight at various airspeeds including flight at critically low airspeed with and without flaps (including approach to VMCA when applicable)		

2.2 Steep turns (360° left and right at 45° bank)		
2.3 Stalls and recovery: (i) clean stall; (ii) approach to stall in descending turn with bank with approach configuration and power; (iii) approach to stall in landing configuration and power; (iv) approach to stall, climbing turn with take- off flap and climb power (single-engine aeroplane only)		
2.4ATC liaison – Compliance, R/T procedure		
SECTION 3		
3 En-route procedures VFR 3.1 Flight plan, dead reckoning and map reading		
3.2 Maintenance of altitude, heading and speed		
3.3 Orientation, timing and revision of ETAs		
3.4 Use of radio navigation aids (if applicable)		
3.5 Flight management (flight log, routine checks including fuel, systems and icing)		
3.6 ATC liaison – Compliance, R/T procedure		
SECTION 4		
4 Arrivals and landings 4.1 Aerodrome arrival procedure (amphibians only)		
4.2 Normal landing		
4.3 Flapless landing		
4.4 Crosswind landing (if suitable conditions)		
4.5 Approach and landing with idle power from up to 2000´ above the water (single-engine aeroplane only)		
4.6 Go-around from minimum height		
4.7 Glassy water landing Rough water landing		
4.8 ATC liaison – Compliance, R/T procedure		
SECTION 5		
5 Abnormal and emergency procedures (This section may be combined with sections 1 through 4) 5.1 Rejected take-off at a reasonable speed		
5.2 Simulated engine failure after take-off (single-engine aeroplane only)		

5.3 Simulated forced landing without power (single- engine aeroplane only)		
5.4 Simulated emergencies: (i) fire or smoke in flight (ii) systems' malfunctions as appropriate		
5.5 ATC liaison – Compliance, R/T procedure		
SECTION 6		
6 Simulated asymmetric flight (This section may be combined with sections 1 through 5)		
6.1 Simulated engine failure during take-off (at a safe altitude unless carried out in FFS and FNPT II)		
6.2 Engine shutdown and restart (ME skill test only)		
6.3 Asymmetric approach and go-around		
6.4 Asymmetric approach and full stop landing		
6.5 ATC liaison – Compliance, R/T procedure		

C. Specific requirements for the helicopter category

1. In case of skill test or proficiency check for type ratings and the ATPL the applicant shall pass sections 1 to 4 and 6 (as applicable) of the skill test or proficiency check. Failure in more than five items will require the applicant to take the entire test or check again. An applicant failing not more than five items shall take the failed items again. Failure in any item of the re-test or re-check or failure in any other items already passed will require the applicant to take the entire test or check again. All sections of the skill test or proficiency check shall be completed within 6 months.

2. In case of proficiency check for an IR the applicant shall pass section 5 of the proficiency check. Failure in more than three items will require the applicant to take the entire section 5 again. An applicant failing not more than three items shall take the failed items again. Failure in any item of the re-check or failure in any other items of section 5 already passed will require the applicant to take the entire check again.

FLIGHT TEST TOLERANCE

3. The applicant shall demonstrate the ability to:

(a) operate the helicopter within its limitations;

(b) complete all manoeuvres with smoothness and accuracy;

(c) exercise good judgement and airmanship;

apply aeronautical knowledge;

(d) maintain control of the helicopter at all times in such a manner that the successful outcome of a procedure or manoeuvre is never in doubt;

(e) understand and apply crew coordination and incapacitation procedures, if applicable; and

(f) communicate effectively with the other crew members, if applicable.

4. The following limits shall apply, corrected to make allowance for turbulent conditions and the handling qualities and performance of the aeroplane used.

(a) IFR flight limits Height: Generally

± 100 feet

Starting a go-around at decision height/altitude + 50 feet/– 0 feet Minimum descent height/altitude + 50 feet/– 0 feet Tracking:
On radio aids ± 5°

Precision approach half scale deflection, azimuth and glide path Heading:

Normal operations ± 5°

Abnormal operations/emergencies ± 10°

Speed:
Generally ± 10 knots

With simulated engine failure + 10 knots/– 5 knots

VFR flight limits Height:

Generally ± 100 feet

Heading:

Normal operations ± 5°

Abnormal operations/emergencies

± 10° Speed:
Generally ± 10 knots

With simulated engine failure + 10 knots/– 5 knots Ground drift:
T.O. hover I.G.E. ± 3 feet

Landing ± 2 feet (with 0 feet rearward or lateral flight)

CONTENT OF THE TRAINING/SKILL TEST/PROFICIENCY CHECK GENERA

5. The following symbols mean:

P = Trained as PIC for the issue of a type rating for SPH or trained as PIC or Co-pilot and as PF and PNF for the issue of a type rating for MPH.

6. The practical training shall be conducted at least at the training equipment level shown as (P), or may be conducted up to any higher equipment level shown by the arrow (——>).

The following abbreviations are used to indicate the training equipment used: FFS = Full Flight Simulator

FTD = Flight Training Device H = Helicopter

7. The starred items (*) shall be flown in actual or simulated IMC, only by applicants wishing to renew or revalidate an IR(H), or extend the privileges of that rating to another type.

8. Instrument flight procedures (section 5) shall be performed only by applicants wishing to renew or revalidate an IR(H) or extend the privileges of that rating to another type. An FFS or FTD 2/3 may be used for this purpose.

9. Where the letter 'M' appears in the skill test or proficiency check column this will indicate the mandatory exercise.

10. An FSTD shall be used for practical training and testing if the FSTD forms part of a type rating course. The following considerations will apply to the course:

(i) the qualification of the FSTD as set out in Part-OR;

(ii) the qualifications of the instructor and examiner;

(iii) the amount of FSTD training provided on the course;

(iv) the qualifications and previous experience in similar types of the pilot under training; and

(v) the amount of supervised flying experience provided after the issue of the new type rating. MULTI-PILOT HELICOPTERS

11. Applicants for the skill test for the issue of the multi-pilot helicopter type rating and ATPL(H) shall take only sections 1 to 4 and, if applicable, section 6.

12. Applicants for the revalidation or renewal of the multi-pilot helicopter type rating proficiency check shall take only sections 1 to 4 and, if applicable, section 6.

SINGLE / MULTI-PILOT HELICOPTERS		PRACTICAL TRAINING				SKILL TEST OR PROFICIENCY. CHECK	
Manoeuvres/Procedures		FTD	FFS	H	Instructor initials when training completed	Checked in FFS **H**	Examiner initials when test completed
SECTION 1 — Pre-flight preparations and checks							
1.1	Helicopter exterior visual inspection; location of each item and purpose of inspection			P		M (if performed in the helicopter)	
1.2	Cockpit inspection		P	---->		M	
1.3	Starting procedures, radio and navigation equipment check, selection and setting of navigation and communication frequencies	P	---->	---->		M	
1.4	Taxiing/air taxiing in compliance with air traffic control instructions or with instructions of an instructor		P	---->		M	
1.5	Pre-take-off procedures and checks	P	---->	---->		M	
SECTION 2 — Flight manoeuvres and procedures							
2.1	Take-offs (various profiles)		P	---->		M	
2.2	Sloping ground or crosswind take-offs & landings		P	---->			

2.3	Take-off at maximum take- off mass (actual or simulated maximum take- off mass)	P	---->	---->			
2.4	Take-off with simulated engine failure shortly before reaching TDP or DPATO		P	---->		M	
2.4.1	Take-off with simulated engine failure shortly after reaching TDP or DPATO		P	---->		M	
2.5	Climbing and descending turns to specified headings	P	---->	---->		M	
2.5.1	Turns with 30° bank, 180°to 360° left and right, by sole reference to instruments	P	---->	->		M	
2.6	Autorotative descent	P	---->	>		M	
2.6.1	Autorotative landing (SEH only) or power recovery		P	>		M	
2.7	Landings, various profiles		P	>		M	
2.7.1	Go-around or landing following simulated engine failure before LDP or DPBL		P	>		M	
2.7.2	Landing following simulated engine failure after LDP or DPBL		P	>		M	
SECTION 3 — Normal and abnormal operations of the following systems and procedures							
3	Normal and abnormal operations of the following systems and procedures:					M	A mandatory minimum of 3 items shall beselected from this section
3.1	Engine	P	---->	>			
3.2	Air conditioning (heating, ventilation)	P	---->	>			
3.3	Pitot/static system	P	---->	>			
3.4	Fuel System	P	---->	>			
3.5	Electrical system	P	---->	>			
3.6	Hydraulic system	P	---->	>			
3.7	Flight control and Trim system	P	---->	>			

3.8	Anti-icing and de-icing system	P	---->	>			
3.9	Autopilot/Flight director	P	--->				
3.10	Stability augmentation devices	P	---->	>			
3.11	Weather radar, radio altimeter, transponder	P	---->	>			
3.12	Area Navigation System	P	---->	->			
3.13	Landing gear system	P	----->	----->			
3.14	Auxiliary power unit	P	---->	---->			
3.15	Radio, navigation equipment, instruments flight management system	P	---->	---->			
SECTION 4 — Abnormal and emergency procedures							
4	Abnormal and emergency procedures					M	A mandatory minimum of 3 items shall be selected from this section
4.1	Fire drills (including evacuation if applicable)	P	---->	---->			
4.2	Smoke control and removal	P	---->	---->			
4.3	Engine failures, shutdown and restart at a safe height	P	---->	---->			
4.4	Fuel dumping (simulated)	P	---->	---->			
4.5	Tail rotor control failure (if applicable)	P	---->	---->			
4.5.1	Tail rotor loss (if applicable)	P	---->	Helicopter may not be used for this exercise			
4.6	Incapacitation of crew member – MPH only	P	---->	---->			
4.7	Transmission malfunctions	P	---->	---->			

4.8	Other emergency procedures as outlined in the appropriate Flight Manual	P	---->	---->			
SECTION 5 — Instrument Flight Procedures (to be performed in IMC or simulated IMC)							
5.1	Instrument take-off: transition to instrument flight is required as soon as possible after becoming airborne	P*	---->*	---->*			
5.1.1	Simulated engine failure during departure	P*	---->*	---->*		M*	
5.2	Adherence to departure and arrival routes and ATC instructions	P*	---->*	---->*		M*	
5.3	Holding procedures	P*	---->*	---->*			
5.4	ILS approaches down to CAT I decision height	P*	---->*	---->*			
5.4.1	Manually, without flight director	P*	---->*	---->*		M*	
5.4.2	Precision approach manually, with or without flight director	P*	---->*	---->*		M*	
5.4.3	With coupled autopilot	P*	---->*	---->*			
5.4.4	Manually, with one engine simulated inoperative. (Engine failure has to be simulated during final approach before passing the outer marker (OM) until touchdown or until completion of the missed approach procedure)	P*	---->*	---->*		M*	

5.5	Non-precision approach down to the minimum descent altitude MDA/H	P*	---->*	---->*		M*	
5.6	Go-around with all engines operating on reaching DA/DH or MDA/MDH	P*	---->*	---->*			
5.6.1	Other missed approach procedures	P*	---->*	---->*			
5.6.2	Go-around with one engine simulated inoperative on reaching DA/DH or MDA/MDH	P*				M*	
5.7	IMC autorotation with power recovery	P*	---->*	---->*		M*	
5.8	Recovery from unusual attitudes	P*	---->*	---->*		M*	
SECTION 6 — Use of Optional Equipment							
6	Use of optional equipment	P	---->	---->			

D. Specific requirements for the powered-lift aircraft category

1. In the case of skill tests or proficiency checks for powered-lift aircraft type ratings, the applicant shall pass sections 1 to 5 and 6 (as applicable) of the skill test or proficiency check. Failure in more than five items will require the applicant to take the entire test or check again. An applicant failing not more than five items shall take the failed items again. Failure in any item of the re-test or re-check or failure in any other items already passed will require the applicant to take the entire test or check again. All sections of the skill test or proficiency check shall be completed within 6 months.

FLIGHT TEST TOLERANCE

2. The applicant shall demonstrate the ability to:

(a) operate the powered-lift aircraft within its limitations;

(b) complete all manoeuvres with smoothness and accuracy;

(c) exercise good judgement and airmanship;
(d) apply aeronautical knowledge;

(a) maintain control of the powered-lift aircraft at all times in such a manner that the successful outcome of a procedure or manoeuvre is never in doubt;

(b) understand and apply crew coordination and incapacitation procedures; and

(c) communicate effectively with the other crew members.
3. The following limits shall apply, corrected to make allowance for turbulent conditions and the handling qualities and performance of the powered-lift aircraft used.

(a) IFR flight limits:
Height:

Generally	**± 100 feet**
Starting a go-around at decision height/altitude	**+ 50 feet/–**
0 feet Minimum descent height/altitude	**+ 50 feet/– 0**
feet Tracking:	
On radio aids	**± 5°**
Precision approach and glide path	**half scale deflection, azimuth**
Heading:	
Normal operations	**± 5°**
Abnormal operations/emergencies	**± 10° Speed:**
Generally	**± 10 knots**
With simulated engine failure	**+ 10 knots/– 5 knots**

(b) VFR flight limits: Height:

Generally	**± 100 feet**
Heading:	
Normal operations	**± 5°**
Abnormal operations/emergencies	**± 10°**
Speed	
Generally	**± 10 knots**
With simulated engine failure	**+ 10 knots/– 5**
knots Ground drift:	
T.O. hover I.G.E.	**± 3 feet**
Landing	**± 2 feet (with 0 feet rearward or**
lateral flight)	

CONTENT OF THE TRAINING/SKILL TEST/PROFICIENCY CHECK

1. The following symbols mean:

P = Trained as PIC or Co-pilot and as PF and PNF for the issue of a type rating as applicab

2. The practical training shall be conducted at least at the training equipment level shown as (P), or may be conducted up to any higher equipment level shown by the arrow (——>).

3. The following abbreviations are used to indicate the training equipment used: FFS = Full Flight Simulator

FTD = Flight Training Device OTD = Other Training Device PL =

Powered-lift aircraft

(c) Applicants for the skill test for the issue of the powered-lift aircraft type rating shall take sections 1 to 5 and, if applicable, section 6.

(d) Applicants for the revalidation or renewal of the powered-lift aircraft type rating proficiency check shall take sections 1 to 5 and, if applicable section 6 and/or 7.

(e) The starred items (*) shall be flown solely by reference to instruments. If this condition is not met during the skill test or proficiency check, the type rating will be restricted to VFR only.

4. Where the letter 'M' appears in the skill test or proficiency check column this will indicate the mandatory exercise.

5. Flight Simulation Training Devices shall be used for practical training and testing if they form part of an approved type rating course. The following considerations will apply to the approval of the course:

the qualification of the flight simulation training devices as set out in Part-OR; the qualifications of the instructor.

POWERED-LIFT AIRCRAFT CATEGORY		**PRACTICAL TRAINING**					**SKILL TEST OR PROFICIENCY CHECK**	
Manoeuvres/Procedures						**Instructor's initials when training completed**	**Checked in**	**Examiner's initials when test completed**
		OTD	**FTD**	**FFS**	**PL**		**FFS PL**	
SECTION 1 — Pre-flight preparations and checks								
1.1	Powered-lift aircraft exterior visual inspection; location of each item and purpose of inspection				P			
1.2	Cockpit inspection	P	---->	---->	---->			
1.3	Starting procedures, radio and navigation equipment check, selection and setting of navigation and communication frequencies	P	---->	---->	---->		M	
1.4	Taxiing in compliance with air traffic control instructions or with instructions of an instructor		P	---->	---->			
1.5	Pre-take-off procedures and checks including Power Check	P	---->	---->	---->		M	
SECTION 2 — Flight manoeuvres and procedures								

2.2	Take-off at maximum take-off mass (actual or simulated maximum take-off mass)		P	---->				

2.1	Normal VFR take-off profiles; Runway operations (STOL and VTOL) including crosswind Elevated heliports Ground level heliports		P	---->	---->		M	

2.3.1	Rejected take-off: during runway operations during elevated heliport operations during ground level operations		P	---->			M	
2.3.2	Take-off with simulated engine failure after passing decision point: during runway operations during elevated heliport operations during ground level operations		P	---->			M	
2.4	Autorotative descent in helicopter mode to ground (an aircraft shall not be used for this exercise)	P	---->	---->			M F F S only	
2.4.1	Windmill descent in aeroplane mode (an aircraft shall not be used for this exercise)		P	---->			M F F S only	
2.5	Normal VFR landing profiles; runway operations (STOL and VTOL) elevated heliports ground level heliports		P	---->	---->		M	
2.5.1	Landing with simulated engine failure after reaching decision point: during runway operations during elevated heliport operations during ground level operations							
2.6	Go-around or landing following simulated engine failure before decision point		P	---->			M	
SECTION 3 — Normal and abnormal operations of the following systems and procedures:								

3	Normal and abnormal operations of the following systems and procedures (may be completed in an FSTD if qualified for the exercise)						M	A mandatory minimum of 3 items shall be selected from this section
3.1	Engine	P	---->	---->				
3.2	Pressurisation and air conditioning (heating, ventilation)	P	---->	---->				
3.3	Pitot/static system	P	---->	---->				
3.4	Fuel System	P	---->	---->				
3.5	Electrical system	P	---->	---->				
3.6	Hydraulic system	P	---->	---->				
3.7	Flight control and Trim-system	P	---->	---->				
3.8	Anti-icing and de-icing system, glare shield heating (if fitted)	P	---->	---->				
3.9	Autopilot/Flight director	P	---->	---->				
3.10	Stall warning devices or stall avoidance devices and stability augmentation devices	P	---->	---->				
3.11	Weather radar, radio altimeter, transponder, ground proximity warning system (if fitted)	P	---->	---->				
3.12	Landing gear system	P	---->	---->				
3.13	Auxiliary power unit	P	---->	---->				
3.14	Radio, navigation equipment, instruments and flight management system	P	---->	---->				
3.15	Flap system	P	---->	---->				
SECTION 4 — Abnormal and emergency procedures								

4	Abnormal and emergency procedures (may be completed in an FSTD if qualified for the exercise)						M	A mandatory minimum of 3 items shall be selected from this section
4.1	Fire drills, engine, APU, cargo compartment, flight deck and electrical fires including evacuation if applicable	P	---->	---->				
4.2	Smoke control and removal	P	---->	---->				
4.3	Engine failures, shutdown and restart (an aircraft shall not be used for this exercise) including OEI conversion from helicopter to aeroplane modes and vice versa	P	---->	---->			FFS only	
4.4	Fuel dumping (simulated, if fitted)	P	---->	---->				
4.5	Wind shear at take-off and landing (an aircraft shall not be used for this exercise)			P			FFS only	
4.6	Simulated cabin pressure failure/emergency descent (an aircraft shall not be used for this exercise)	P	---->	---->			FFS only	
4.7	ACAS event (an aircraft shall not be used for this exercise)	P	---->	---->			FFS	
4.8	Incapacitation of crew Member	P	---->	---->				

4.9	Transmission Malfunctions	P	---->	---->			FFS only	
4.10	Recovery from a full stall (power on and off) or after activation of stall warning devices in climb, cruise and approach configurations (an aircraft shall not be used for this exercise)	P	---->	---->			FFS only	
4.11	Other emergency procedures as detailed in the appropriate Flight Manual	P	---->	---->				
SECTION 5 — Instrument Flight Procedures (to be performed in IMC or simulated IMC)								
5.1	Instrument take-off: transition to instrument flight is required as soon as possible after becoming airborne	P*	---->*	---->*				
5.1.1	Simulated engine failure during departure after decision point.	P*	---->*	---->*			M*	
5.2	Adherence to departure and arrival routes and ATC instructions.	P*	---->*	---->*			M*	
5.3	Holding procedures.	P*	---->*	---->*				
5.4	Precision approach down to a decision height not less than 60 m (200 ft).	P*	---->*	---->*				
5.4.1	Manually, without flight director	P*	---->*	---->*			M* (Skill test only)	
5.4.2	Manually, with flight Director	P*	---->*	---->*				
5.4.3	With use of autopilot	P*	---->*	---->*				

5.4.4	Manually, with one engine simulated inoperative; engine failure has to be simulated during final approach before passing the outer marker (OM) and continued either to touchdown, or through to the completion of the missed approach procedure)	P*	---->*	---->*			M*	
5.5	Non-precision approach down to the minimum descent altitude MDA/H	P*	---->*	---->*			M*	
5.6	Go-around with all engines operating on reaching DA/DH or MDA/MDH	P*	---->*	---->*				
5.6.1	Other missed approach Procedures	P*	---->*	---->*				
5.6.2	Go-around with one engine simulated inoperative on reaching DA/DH or MDA/MDH	P*					M*	
5.7	IMC autorotation with power recovery to land on runway in helicopter mode only (an aircraft shall not be used for this exercise)	P*	---->*	---->*			M* FFS only	
5.8	Recovery from unusual attitudes (this one depends on the quality of the FFS)	P*	---->*	---->*			M*	
SECTION 6 — Additional authorisation on a type rating for instrument approaches down to a decision height of less than 60 m (CAT II/III)								

6	Additional authorisation on a type rating for instrument approaches down to a decision height of less than 60 m (CAT II/III). The following manoeuvres and procedures are the minimum training requirements to permit instrument approaches down to a DH of less than 60 m (200 ft). During the following instrument approaches and missed approach procedures all powered-lift aircraft equipment required for the type certification of instrument approaches down to a DH of less than 60 m (200 ft) shall be used.							
6.1	Rejected take-off at minimum authorised RVR.		P	---->			M*	
6.2	ILS approaches in simulated instrument flight conditions down to the applicable DH, using flight guidance system. Standard procedures of crew coordination (SOPs) shall be observed.		P	---->	---->		M*	

6.3	Go-around after approaches as indicated in 6.2 on reaching DH. The training shall also include a go-around due to (simulated) insufficient RVR, wind shear, aircraft deviation in excess of approach limits for a successful approach, ground/airborne equipment failure prior to reaching DH, and go-around with simulated airborne equipment failure.		P	---->	---->		M*	
6.4	Landing(s) with visual reference established at DH following an instrument approach. Depending on the specific flight guidance system, an automatic landing shall be performed		P	---->			M*	
SECTION 7 Optional equipment								
7	Use of optional equipment		P	---->	---->			

A. Specific requirements for the airship category

1. In the case of skill tests or proficiency checks for airship type ratings the applicant shall pass sections 1 to 5 and 6 (as applicable) of the skill test or proficiency check. Failure in more than five items will require the applicant to take the entire test/check again. An applicant failing not more than five items shall take the failed items again. Failure in any item of the re-test/re-check or failure in any other items already passed will require the applicant to take the entire test/check again. All sections of the skill test or proficiency check shall be completed within 6 months.

FLIGHT TEST TOLERANCE

Manoeuvres/Procedures	OTD	FTD	FFS	As	initials when training	FFS As	Examiner's initials when test

2. The applicant shall demonstrate the ability to:

(i) operate the airship within its limitations;

(ii) complete all manoeuvres with smoothness and accuracy;

(iii) exercise good judgement and airmanship;

(iv) apply aeronautical knowledge;

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

(vi) understand and apply crew coordination and incapacitation procedures; and

(vii) communicate effectively with the other crew members.

3. The following limits shall apply, corrected to make allowance for turbulent conditions and the handling qualities and performance of the airship used.

(a) IFR flight limits: Height:

Generally **± 100 feet**

Starting a go-around at decision height/altitude **+ 50 feet/– 0**
feet Minimum descent height/altitude **+ 50 feet/– 0**
feet Tracking:

On radio aids **± 5°**

Precision approach **half scale deflection, azimuth and glide path**

Heading:

Normal operations **± 5°**

Abnormal operations/emergencies ± 10°

(b) VFR flight limits: Height:

Generally **± 100 feet**

Heading:

Normal operations **± 5°**

Abnormal operations/emergencies **±**
10° CONTENT OF THE TRAINING/SKILL TEST/PROFICIENCY CHECK

4. The following symbols mean:

P = Trained as PIC or Co-pilot and as PF and PNF for the issue of a type rating as applicable.

SECTION 1 — Pre-flight preparations and checks								
1.1	Pre-flight inspection				P			
1.2	Cockpit inspection	P	---->	---->	---->			
1.3	Starting procedures, radio and navigation equipment check, selection and setting of navigation and communication frequencies		P	---->	---->		M	
1.4	Off Mastprocedure and Ground Manoeuvring			P	---->		M	
1.5	Pre-take-offprocedures and Checks	P	---->	---->	---->		M	
SECTION 2 — Flight manoeuvres and procedures								
2.1	Normal VFR take-off Profile			P	---->		M	
2.2	Take-off with simulated engine failure			P	---->		M	
2.3	Take-off with heaviness > 0 (Heavy T/O)			P	---->			
2.4	Take-off with heaviness < 0 (Light/TO)			P	---->			
2.5	Normal climb Procedure			P	---->			
2.6	Climb to Pressure Height			P	---->			
2.7	Recognising of Pressure Height			P	---->			
2.8	Flight at or close to Pressure Height			P	---->		M	
2.9	Normal descent and approach			P	---->			
2.10	Normal VFR landing Profile			P	---->		M	
2.11	Landing with heaviness > 0 (Heavy Ldg.)			P	---->		M	
2.12	Landing with heaviness < 0 (Light Ldg.)			P	---->		M	
	Intentionally left blank							

The practical training shall be conducted at least at the training equipment level shown as (P), or may be conducted up to any higher equipment level shown by the arrow (——>).

5. The following abbreviations are used to indicate the training equipment used: FFS = Full Flight Simulator

FTD = Flight Training Device OTD = Other Training Device As = Airship

(a) Applicants for the skill test for the issue of the airship shall take sections 1 to 5 and, if applicable, section 6.

(b) Applicants for the revalidation or renewal of the airship type rating proficiency check shall take sections 1 to 5 and, if applicable section 6.

(c) The starred items (*) shall be flown solely by reference to instruments. If this condition is not met during the skill test or proficiency check, the type rating will be restricted to VFR only.

6. Where the letter 'M' appears in the skill test or proficiency check column this will indicate the mandatory exercise.

7. Flight Simulation Training Devices shall be used for practical training and testing if they form part of a type rating course. The following considerations will apply to the a course:

(a) the qualification of the flight simulation training devices as set out in Part-OR;

(b) the qualifications of the instructor.

AIRSHIP CATEGORY	**PRACTICAL TRAINING**					**SKILL TEST OR PROFICIENCY CHECK**	
					Instructor's	**Checked in**	

SECTION 3 — Normal and abnormal operations of the following systems and procedures								
3	Normal and abnormal operations of the following systems and procedures (may be completed in an FSTD if qualified for the exercise):						M	A mandatory minimum of 3 items shall be selected from this section
3.1	Engine	P	---->	---->	---->			
3.2	Envelope Pressurisation	P	---->	---->	---->			
3.3	Pitot/static system	P	---->	---->	---->			
3.4	Fuel system	P	---->	---->	---->			
3.5	Electrical system	P	---->	---->	---->			
3.6	Hydraulic system	P	---->	---->	---->			
3.7	Flight control and Trim-system	P	---->	---->	---->			
3.8	Ballonet system	P	---->	---->	---->			
3.9	Autopilot/Flight director	P	---->	---->	---->			
3.10	Stability augmentation devices	P	---->	---->	---->			

3.11	Weather radar, radio altimeter, transponder, ground proximity warning system (if fitted)	P	---->	---->	---->			
3.12	Landing gear system	P	---->	---->	---->			
3.13	Auxiliary power unit	P	---->	---->	---->			
3.14	Radio, navigation equipment, instruments and flight management system	P	---->	---->	---->			
	Intentionally left blank							
SECTION 4 — Abnormal and emergency procedures								
4	Abnormal and emergency procedures (may be completed in an FSTD if qualified for the exercise)						M	A mandatory minimum of 3 items shall be selected from this section
4.1	Fire drills, engine, APU, cargo compartment, flight deck and electrical fires including evacuation if applicable	P	---->	---->	---->			
4.2	Smoke control and Removal	P	---->	---->	---->			
4.3	Engine failures, shutdown and restart In particular phases of flight, inclusive multiple engine failure	P	---->	---->	---->			
4.4	Incapacitation of crew Member	P	---->	---->	---->			
4.5	Transmission/Gearbox malfunctions	P	---->	---->	---->		FFS only	

4.6	Other emergency procedures as outlined in the appropriate Flight Manual	P	---->	---->	---->			
SECTION 5 — Instrument Flight Procedures (to be performed in IMC or simulated IMC)								
5.1	Instrument take-off: transition to instrument flight is required as soon as possible after becoming airborne	P*	---->*	---->*	---->*			
5.1.1	Simulated engine failure duringdeparture	P*	---->*	---->*	---->*		M*	
5.2	Adherence to departure and arrival routes and ATC instructions	P*	---->*	---->*	---->*		M*	
5.3	Holding procedures	P*	---->*	---->*	---->*			
5.4	Precision approach down to a decision height not less than 60 m (200 ft)	P*	---->*	---->*	---->*			
5.4.1	Manually, without flight director	P*	---->*	---->*	---->*		M* (Skill test only)	
5.4.2	Manually, with flight Director	P*	---->*	---->*	---->*			
5.4.3	With use of autopilot	P*	---->*	---->*	---->*			

5.4.4	Manually, with one engine simulated inoperative; engine failure has to be simulated during final approach before passing the outer marker (OM) and continued to touchdown, or until completion of the missed approach procedure	P*	---->*	---->*	---->*		M*	
5.5	Non-precisionapproach down to the minimum descent altitude MDA/H	P*	---->*	---->*	---->*		M*	
5.6	Go-around with all engines operating on reaching DA/DH or MDA/MDH	P*	---->*	---->*	---->*			
5.6.1	Other missed approach Procedures	P*	---->*	---->*	---->*			
5.6.2	Go-around with one engine simulated inoperative on reaching DA/DH or MDA/MDH	P*					M*	
5.7	Recovery from unusual attitudes (this one depends on the quality of the FFS)	P*	---->*	---->*	---->*		M*	
SECTION 6 — Additional authorisation on a type rating for instrument approaches down to a decision height of less than 60 m (CAT II/III)								

6	Additional authorisation on a type rating for instrument approaches down to a decision height of less than 60 m (CAT II/III). The following manoeuvres and procedures are the minimum training requirements to permit instrument approaches down to a DH of less than 60 m (200 ft). During the following instrument approaches and missed approach procedures all airship equipment required for the type certification of instrument approaches down to a DH of less than 60 m (200 ft) shall be used.							
6.1	Rejected take-off at minimum authorised RVR		P	---->			M*	
6.2	ILS approaches In simulated instrument flight conditions down to the applicable DH, using flight guidance system. Standard procedures of crew coordination (SOPs) shall be observed		P	---->			M*	

6.3	Go-around After approaches as indicated in 6.2 on reaching DH. The training shall also include a go-around due to (simulated) insufficient RVR, wind shear, aircraft deviation in excess of approach limits for a successful approach, and ground/airborne equipment failure prior to reaching DH and, go-around with simulated airborne equipment failure.		P	---->			M*	
6.4	Landing(s) With visual reference established at DH following an instrument approach. Depending on the specific flight guidance system, an automatic landing shall be performed.		P	---->			M*	
SECTION 7 — Optional equipment								
7	Use of optional Equipment		P	---->				

AMC1 to Appendix 3
Training, skill test and proficiency check for MPL,
APPLICATION AND REPORT FORM

If applicable, this form is also the certificate of completion of the type rating course for ZFTT.

AMC2 to Appendix 3

Training, skill test and proficiency check for MPL

TRAINING, SKILL TEST AND PROFICIENCY CHECK: SP AEROPLANES

Section 3.B of the training and skill test and proficiency check content for SP aeroplanes included in Appendix 9.B should include training on a circling approach, after an IFR approach.

APPLICATION AND REPORT FORM

ATPL, MPL, TYPE RATING, TRAINING, SKILL TEST AND PROFICIENCY CHECK AEROPLANES (A) AND HELICOPTERS (H)

1 Theoretical training for the issue of a type or class rating performed during period		
From:	**To:**	**At:**
Mark obtained:	**% (Pass mark 75%):**	**Type and number of licence:**
Signature of HT:		**Name(s) in capital letters:**

2 FSTD		
FSTD (aircraft type):	**Three or more axes: Yes No**	**Ready for service and used:**
FSTD manufacturer:	**Motion or system:**	**Visual aid: Yes No**
FSTD operator:		**FSTD ID code:**

Total training time at the controls:	**Instrument approaches at aerodromes to a decision altitude or height of:**
Location, date and time:	**Type and number of licence:**
Type rating instructor Class rating instructor..... instructor	

Signature of instructor:		**Name(s) in capital letters:**
3 Flight training: in the aircraft in the FSTD (for ZFTT)		
Type of aircraft:	**Registration:**	**Flight time at the controls:**
Take-offs:	**Landings:**	**Training aerodromes or sites (take-offs, approaches and landings):**
Take-off time:		**Landing time:**
Location and date:		**Type and number of licence held:**
Type rating instructor	**Class rating instructor**	
Signature of instructor:		**Name(s) in capital letters:**
4 Skill test	**Proficiency check**	
Skill test and proficiency check details:		
Aerodrome or site:		**Total flight time:**
Take-off time:		**Landing time:**
Pass	**Fail**	**Reason(s) why, if failed:**
Location and date:		**SIM or aircraft registration:**
Examiner's certificate number (if applicable):		**Type and number of licence:**
Signature of examiner:		**Name(s) in capital letters:**