

## Part FCL2

### Flight Crew Licensing (Helicopter)

This part of Jordanian Civil Aviation Regulations is hereby issued under the authority and provisions of article 12-B of the Civil Aviation Law No. (41) dated 2007, as amended.



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**Chief Commissioner/CEO**  
**Civil Aviation Regulatory Commission**



### Record of Revisions

Amendment No.	Effective date	Subpart	Paragraph
Original	July 1 <sup>st</sup> , 2011	All	All
1	Oct. 1 <sup>st</sup> 2018	H	FCL2.330B Replace All Part 67 with part FCL3 Replace All part 61 with FCL1
2	Feb. 4 <sup>th</sup> , 2021	I	FCL2.455
3	Nov. 21 <sup>st</sup> , 2022	A	Appendix 1-a to FCL2.055, para 3

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## **SUBPART- A GENERAL REQUIREMENTS**

### **FCL2.001 Definitions and Abbreviations.**

(See IEM FCL2.001)

**Category (of aircraft):** Categorisation of aircraft according to specified basic characteristics, e.g. aeroplane, helicopter, glider, free balloon.

**Conversion (of a license):** The issue of a JCAR FCL2 license on the basis of a license issued by a foreign State.

**Co-pilot:** “Co-pilot” means a pilot operating other than as pilot-in-command of a multi-pilot helicopter, but excluding a pilot who is on board the aircraft for the sole purpose of receiving flight instruction for a license or rating.

**Dual instruction time:** Flight time or instrument ground time during which a person is receiving flight instruction from a properly authorised instructor.

**Flight time:** The total time from the moment a helicopter’s rotor blades start turning until the moment the helicopter finally comes to rest at the end of the flight, and the rotor blades are stopped.

**Flight Simulation Training Device (FSTD):** Any synthetic training device replicating in part or completely, a helicopter type, systems, and including a generic device used for general (non-specific) procedures as part of a training course and which has been approved for this purpose in accordance with JCAR-FSTD(H).

**Instrument time:** Instrument flight time or instrument ground time.

**Instrument flight time:** Time during which a pilot is controlling an aircraft in flight solely by reference to instruments.

**Instrument ground time:** Time during which a pilot is receiving instruction in simulated instrument flight in synthetic training devices (FSTDs).

**Multi-crew co-operation:** The functioning of the flight crew as a team of co-operating members led by the pilot-in-command.



**Multi-pilot helicopters:** A type of helicopter that is required to be operated with a co-pilot as specified in the flight manual or by the air operator certificate or equivalent document.

**Multi-pilot operation:** An operation approved by the Commission requiring at least two pilots using multi-crew co- operation on multi-pilot helicopters.

**Night:** The period between the end of evening civil twilight and the beginning of morning civil twilight, or such other period between sunset and sunrise as may be prescribed by the appropriate authority.

**Private pilot:** A pilot who holds a license which prohibits the piloting of aircraft in operations for which remuneration is given.

**Professional pilot:** A pilot who holds a license which permits the piloting of aircraft in operations for which remuneration is given.

**Proficiency checks:** Demonstrations of skill to revalidate or renew ratings, and including such oral examination as the examiner may require.

**Rating:** An entry in a license stating special conditions, privileges or limitations pertaining to that license.

**Renewal (of e.g. a rating or approval):** The administrative action taken after a rating or approval has lapsed that renews the privileges of the rating or approval for a further specified period consequent upon the fulfillment of specified requirements.

**Revalidation (of e.g. a rating or approval):** The administrative action taken within the period of validity of a rating or approval that allows the holder to continue to exercise the privileges of a rating or approval for a further specified period consequent upon the fulfillment of specified requirements.

**Single-pilot helicopters:** Helicopters certificated for operation by one pilot.

**Single-pilot operations:** Operations conducted by only one pilot.

**Skill tests:** Skill tests are demonstrations of skill for license or rating issue, including such oral examination as the examiner may require.

**Solo flight time:** Flight time during which a student pilot is the sole occupant of an aircraft.

**Flight time as student pilot-in-command (SPIC):** Flight time during which the flight instructor will only observe the student acting as pilot-in- command

and shall not influence or control the flight of the aircraft.

**Touring Motor Glider (TMG):** A motor glider having a certificate of airworthiness issued or accepted by JCAR having an integrally mounted, non-retractable engine and a non-retractable propeller plus those listed in Appendix 1 to JCAR FCL1.215. It shall be capable of taking off and climbing under its own power according to its flight manual.

**Type (of aircraft):** All aircraft of the same basic design, including all modifications except those modifications which result in a change of handling, flight characteristics or flight crew complement.

*(For abbreviations see IEM JCAR FCL2.001)*

### **FCL2.005 Applicability.**

(See Appendix 1 to JCAR FCL2.005), (See AMC JCAR FCL2.005 & 2.015)

(See JCAR FCL2.010(a)(4)).

#### **(a) General:**

(1) The requirements set out in JCAR FCL2 shall apply to all arrangements made for training, testing and applications for the issue of licenses, ratings, authorisations, approvals or certificates received by CARC from 1 January 2011.

(2) (i) Whenever licenses, ratings, authorisations, approvals or certificates are mentioned in JCAR FCL2, these are meant to be licenses, ratings, authorisations, approvals or certificates issued in accordance with JCAR FCL2. In all other cases these documents are specified as foreign licenses.

(ii) Whenever experience requirements mention flight time, this means flight time in helicopters, unless specified otherwise.

(3) Reserved.

(4) All synthetic training devices mentioned in JCAR FCL2 substituting an aircraft for training purposes are to be device qualified in accordance with JCAR- STD(H) and user approved in accordance with JCAR FCL2 for the exercises to be conducted.

(5) Whenever a reference is made to aeroplanes this does not include micro-lights, unless otherwise specified.

(6) A license issued on the basis of the training performed outside Jordan, except training done according to JCAR FCL 2.055(a)(1), shall have an entry to limit the privileges to aircraft registered in the State of license issue.

(7) Rating(s) issued on the basis of training performed outside Jordan except training performed according to JCAR FCL2.055(a)(1), shall be limited to aircraft registered in the State of license issue.

(b) Transitional arrangements.

(1) Training commenced prior to 1 January 2011 according to JCAR FCL1 will be acceptable for the issue of JCAR FCL1 licenses or ratings provided that training and testing is completed before 1 July 2012 for the applicable license or rating

(2) Licenses and ratings, authorizations, approvals or medical certificates issued in accordance with the JCAR FCL1 regulations before 1 January 2011 or issued in accordance with paragraph (1) above, shall continue to be valid with the same privileges, ratings and limitations, if any, provided that after 1 July 2012 all requirements for revalidation or renewal of such licenses or ratings, authorizations, approvals or medical certificates shall be in accordance with the requirements of JCAR FCL2, except as specified in sub paragraph (4)

(3) Holders of a license issued in accordance with the JCAR FCL1 before 1 January 2011 or in accordance with (b)(1) above, may apply to CARC for the issue of the equivalent license specified in JCAR FCL 2 (H). For the issue of such licenses, the holder shall meet the requirements set out in Appendix 1 to JCAR FCL 2.005

(4) Holders of a license issued in accordance with the JCAR FCL1 who do not fully meet the requirements of JCAR part FCL3 (Medical) shall be permitted to continue to exercise the privileges of the JCAR FCL1 license held.

(5) a. A CARC shall:

(i) Include a Language Proficiency endorsement in accordance with JCAR FCL2.010(a)(4) in all new and re-issued licenses. A pilot may have an endorsement for more than one language. (see the Note in JCAR FCL2.010(a)(4));

(ii) introduce a procedure so that existing licenses have a Language Proficiency endorsement included in accordance with JCAR FCL2.075(a)(2)(XIII).

b. Holders of licenses prior to 5 March 2008 Based on existing assessment methods, the Commission may make a language proficiency endorsement at level 4 (operational level) for license holders with a radiotelephony operator certificate in English and other language, as appropriate.

(c) Continuation of examiners holding CARC authorisations.

Examiners holding CARC authorisations prior 1 January 2011 may be authorised as FCL2 examiner provided that they have demonstrated a knowledge of JCAR FCL2 and JCAR OPS3 to CARC. The authorisation will be for a maximum of (one) year. Thereafter re-authorisation will be subject to completion of the requirements set out in JCAR FCL2.425(a) and (b).

**FCL2.010 Basic authority to act as a flight crew member.**

(See Appendix 1 to JCAR FCL2.010), (See AMC No. 1 to JCAR FCL2.010)

(a) License and rating:

(1) A person shall not act as a flight crew member of a civil helicopter registered in Jordan unless that person holds a valid license and rating complying with the requirements of JCAR FCL 2 and appropriate to the duties being performed, or an authorisation as set out in JCAR FCL2.085 and/or 2.230. The license shall have been issued by:

(i) CARC; or

(ii) Another ICAO Contracting State and rendered valid in accordance with JCAR FCL 2.015(b) or (c)

(2) Pilots holding Jordanian motor gliders licenses/ratings/authorisations are also permitted to operate touring motor gliders under the applicable JCARs.

(3) Pilots holding a restricted private pilot's license are permitted under national regulations to operate helicopters registered in the State of license issue within that State's airspace.

(4) Applicants for a license and license holders who are required to use the radio telephone shall demonstrate the ability to speak and understand the language used for radiotelephony communications in accordance with Appendix 1 to JCAR FCL2.010. The language proficiency required must be at least Operational Level (level4) of the ICAO Language Proficiency Rating (see Appendix 2 to JCAR FCL2.010 and AMC No. 1 to JCAR FCL2.010).

Note: These provisions refer to ICAO Annex 10, Volume II, Chapter 5, whereby the language used for radiotelephony communications may be the language normally used by the station on the ground or English. In practise, therefore, there will be situations whereby a license holder will only need to speak the language normally used by the station on the ground.

(b) Exercise of privileges.

The holder of a license, rating or authorisation shall not exercise privileges other than those granted by that license, rating or authorisation.

(c) Appeals, Enforcement

(1) CARC may at any time in accordance with the national procedures act on appeals, limit privileges, or suspend or revoke any license, rating, authorisation, approval or certificate it has issued in accordance with the requirements of JCAR FCL 2 if it is established that an applicant or a license holder has not met, or no longer meets, the requirements of JCAR FCL2.

(2) Reserved.

### **FCL2.015 Acceptance of licenses, ratings, authorisations, approvals or certificates.**

(See Appendix 1 to JCAR FCL2.015), (See Appendix 2 to JCAR FCL2.015), (See AMC JCAR FCL2.005 & 2.015)

(a) Licenses, ratings, authorizations, approvals or certificates issued by ICAO contracting state.

(1) Where a person, an organization or a service has been licensed, issued with rating, authorization, approval or certificate in accordance with the requirements of JCARs and associated procedures, such licenses ,ratings, authorizations, approvals or certificates will be accepted after the approval of CARC.

(2) Reserved.

(b) Validation of Licenses issued by an ICAO contracting states.

(1) A license issued by an ICAO contracting state may be rendered valid at the discretion of CARC for use on aircraft registered in Jordan in accordance with Appendix 1 to JCAR FCL2.015

(2) Validation of a professional pilot license and a private pilot license with instrument rating shall not exceed (6) months from the date of validation, provided that the basic license remains valid. Any further validation for use on aircraft registered in Jordan is subject to acceptance by CARC. The user of a license validated by CARC shall comply with the requirements stated in JCAR FCL 2

(3) The requirements stated in (1) and (2) above shall not apply where aircraft registered in Jordan are leased to a non-Jordanian operator, provided that the non-Jordanian operator has accepted for the period of lease the responsibility for the technical and / or operational supervision in accordance with JCAR OPS 3.165. The national licenses of the flight crews of the operator may be validated at the discretion of CARC, provided that the privileges of the flight crew license validation are restricted for use during the lease period only on nominated aircraft in specified operations not involving a Jordanian operator, directly or indirectly, through a wet lease or other commercial arrangement.

(c) Conversion of a license issued by an ICAO contracting state.

(1) A professional pilot license and/or IR issued by an ICAO State may be converted to a JCAR FCL 2 license provided that an arrangement exists between CARC and the ICAO contracting State. This arrangement shall be established on the basis of reciprocity of license acceptance and shall ensure that an equivalent level of safety exists between the training and testing requirements of CARC and the ICAO contracting State. Any arrangement entered into will be reviewed periodically, as agreed by the ICAO contracting State and CARC. A license converted according to such an arrangement shall have an entry indicating the ICAO contracting State upon which the conversion is based.

(2) A private pilot license issued by an ICAO contracting state may be converted to a JCAR FCL2 license with single-pilot type ratings by complying with the requirements shown in Appendix 2 to JCAR FCL2.015.

(d) When the Commission issues a license which deviates from JCAR FCL2 , an endorsement shall be made on the license, under item XIII.

**FCL2.016 Credit given to a holder of a license issued by an ICAO Contracting State.**

(a) An applicant for a JCAR FCL2(H) license and IR(H), if applicable, already holding at least an equivalent license issued in accordance with ICAO Annex 1 by an ICAO contracting state shall meet all the requirements of JCAR FCL, except that the requirements of course duration, number of lessons and specific training hours may be reduced.

(b) The holder of an ATPL(H) with valid IR(H) issued in accordance with ICAO Annex 1 who meets the 1 000 hours flying experience requirements on multi-pilot helicopters as PIC or co-pilot of Appendix 1 to JCAR FCL2.015, at the discretion of CARC, may be exempted from the requirements to undergo approved training prior to undertaking the theoretical knowledge examinations and the skill test, provided that the license contains a valid multi-pilot type rating as PIC with IR(H) privileges for the helicopter to be used for the ATPL(H) and IR skill test in accordance with JCAR FCL2.295.

(c) The holder of an ATPL(H) issued in accordance with ICAO Annex 1 who meets the 1000 hours flying experience requirements on multi-pilot helicopters as PIC or co-pilot of Appendix 1 to JCAR FCL2.015 at the discretion of CARC may be exempted from the requirements to undergo approved training prior to undertaking the theoretical knowledge examinations and the skill test, provided that the license contains a valid multi- pilot helicopter type rating as PIC for the helicopter to be used for the ATPL(H) skill test in accordance with JCAR FCL2.295.

### **FCL2.017 Authorisations/Ratings for special purposes.**

Authorisations/Ratings for special purposes associated with a license (e.g. IMC flying, cropdusting, mountain flying, firefighting, etc.) may be established by CARC in accordance with the requirements of the JCARS for use solely within the Jordan airspace. The use of such an authorisation/rating in another State's airspace requires the prior agreement of the State(s) visited, except where a bilateral agreement exists.

### **FCL2.020 Credit for military service.**

(See Appendix 1 to JCAR FCL2.005)

Application for credit: flight crew members served in Jordanian Military forces applying for licenses and ratings specified in JCAR FCL2 shall apply to CARC. The knowledge, experience and skill gained in military service will be credited towards the relevant requirements of JCAR FCL2 licenses and ratings at the discretion of the Commission.

### **FCL2.025 Validity of licenses and ratings.**

(See JCAR FCL2.010(a)(4)), (See IEM JCAR FCL2.025)

(a) A license holder shall not exercise the privileges granted by any license or rating issued by CARC unless the holder maintains competency by meeting

the relevant requirements of JCAR FCL2 .

(b) Validity of the license and revalidation of a rating:

(1) The validity of the license is determined by the validity of the ratings contained therein and the medical certificate(see IEM JCAR FCL2.025) [and, with reference to the use of radiotelephony in JCAR FCL2.010(A)(4), a valid language proficiency endorsement.

(2) When issuing or revalidating/ renewing a rating, CARC may extend the validity period of the rating until the end of the month in which the validity would otherwise expire, that date remains the expiry date of the rating.

(c) The license will be issued for a maximum period of 3 years. Within this period of 3 years the license will be re-issued by the Commission:

(1) After initial issue or renewal of a rating;

(2) When paragraph XII in the license is completed and no further spaces remain;

(3) For any administrative reason; or

(4) At the discretion of the Commission when a rating is revalidated.

★Valid ratings will be transferred to the new license document by CARC.

★The license holder shall apply to CARC for the re-issue of the license.

★The application shall include the necessary documentation.

### **FCL2.026 Recent experience for pilots operating in accordance with JCARs.**

(a) A pilot shall not operate a helicopter as pilot-in-command carrying passengers unless that pilot has made three circuits, each to include take-offs and landings, as pilot flying in a helicopter of the same type or a flight simulator of the helicopter type to be used, in the preceding 90 days; and

(b) A co-pilot shall not operate as pilot at the flight controls of a helicopter carrying passengers during take-off and landing unless that co-pilot has operated as pilot flying during take-off and landing in a helicopter of the same type or a flight simulator, of the helicopter type to be used, in the preceding 90 days.

(c) The holder of a license which does not include a valid instrument rating (helicopter) shall not act as pilot-in-command of a helicopter carrying



passengers at night unless during the previous 90 days the license holder fulfilled the requirements of JCAR FCL2.026(a) by night.

### **FCL2.030 Arrangements for testing.**

(a) Authorisation of examiners. The Commission will designate and authorise as examiners suitably qualified persons of integrity to conduct on its behalf, skill tests and proficiency checks. The minimum qualifications for examiners are set out in JCAR FCL2 Subpart I. Examiners' responsibilities and privileges will be notified to them individually in writing by CARC.

(b) Will determine the number of examiners it requires, taking into account the size of the air operating certificate holders

(c) Notification of examiners.

(1) CARC will maintain a list of all examiners it has authorized stating for which roles they are authorized. The list will be made available to the air operator certificate holders and registered facilities

(2) CARC will advise each applicant of the examiner(s) it has designated for the conduct of the skill test for the issue of an ATPL(H).

(d) Examiners shall not test applicants to whom flight instruction has been given by them for that license or rating except with the expressed consent in writing of CARC.

(e) Pre-requisites for applicants undergoing a skill test. Before a skill test for the issue of a license or rating is taken the applicant shall have passed the associated theoretical knowledge examination, provided that exceptions may be made by CARC for applicants undergoing a course of integrated flying training. Instruction for the associated theoretical knowledge examination shall always have been completed before such skill tests are taken. Except for ATPL issue, the applicant for a skill test shall be recommended for the test by the organisation/person responsible for the training.

### **FCL2.035 Medical fitness.**

(a) Fitness. The holder of a medical certificate shall be mentally and physically fit to exercise safely the privileges of the applicable license.

(b) Requirement for medical certificate. In order to apply for or to exercise the privileges of a license, the applicant or the holder shall hold a medical certificate issued in accordance with the provisions of CARC medical requirements Part FCL3 and appropriate to the privileges of the license.

(c) Aeromedical disposition.

After completion of the examination the applicant shall be advised whether fit, unfit or referred to CARC. The authorised medical examiner (AME) shall inform the applicant of any condition(s) (medical, operational or otherwise) that may restrict flying training and/or the privileges of any license issued.

**FCL2.040 Decrease in medical fitness.**

(See IEM JCAR FCL2.040)

(a) Holders of a medical certificate shall not exercise the privileges of their licenses, related ratings or authorisations at any time when they are aware of any decrease in their medical fitness which might render them unable to safely exercise those privileges.

(b) Holders of a medical certificate shall not take any prescription or non-prescription medication or drug, or undergo any other treatment, unless they are completely sure that the medication, drug or treatment will not have any adverse effect on their ability to perform safely their duties. If there is any doubt, advice is to be sought from the AMS, an AMC, or an AME. Further advice is given JCAR PART FCL3.

(c) Holders of a medical certificate shall, without undue delay, seek the advice of the AMS, an AMC or an AME when becoming aware of:

- (1) Hospital or clinic admission for more than 12 hours; or
- (2) Surgical operation or invasive procedure; or
- (3) The regular use of medication; or
- (4) The need for regular use of correcting lenses.

(d) Holders of medical certificates who are aware of:

- (1) Any significant personal injury involving incapacity to function as a member of a flight crew; or
- (2) Any illness involving incapacity to function as a member of a flight crew throughout a period of 21 days or more; or
- (3) Being pregnant, shall inform CARC in writing of such injury or pregnancy, and as soon as the period of 21 days has elapsed in the case of illness. The medical certificate shall be deemed to be suspended upon the occurrence of such injury or the elapse of such period of illness or the confirmation of the pregnancy, and:

(4) In the case of injury or illness the suspension shall be lifted upon the holder being medically examined under arrangements made by CARC and being pronounced fit to function as a member of the flight crew, or upon CARC exempting, subject to such conditions as it thinks fit, the holder from the requirement of a medical examination; and

(5) In the case of pregnancy, the suspension may be lifted by CARC for such period and subject to such conditions as it thinks fit and shall cease upon the holder being medically examined under arrangements made by CARC after the pregnancy has ended and being pronounced fit to resume her functions as a member of the flight crew.

### **FCL2.045 Special circumstances.**

(a) It is recognised that the provisions of all parts of JCAR FCL 2 will not cover every possible situation. Where the application of a FCL would have anomalous consequences, or where the development of new training or testing concepts would not comply with the requirements, an applicant may ask CARC for an exemption. An exemption may be granted only if it can be shown that the exemption will ensure or lead to at least an equivalent level of safety.

(b) Exemptions are divided into short-term exemptions (less than 6 month) and long-term exemptions (6 months and more).

### **FCL2.050 Crediting of flight time and theoretical knowledge.**

(See Appendix 1 to JCAR FCL2.050),(See Appendix 2 to JCAR FCL2.050)

(See Appendix 3 to JCAR FCL2.050),(See Appendix 4 to JCAR FCL2.050)

(a) Crediting of flight time:

(1) Unless otherwise specified in JCAR FCL 2 , flight time to be credited for a license or rating shall have been flown in the same category of aircraft for which the license or rating is sought.

(2) Pilot-in-command or under instruction

(i) An applicant for a license or rating is credited in full with all solo, dual instruction or pilot-in-command flight time towards the total flight time required for the license or rating.

(ii) A graduate of an airline transport pilot integrated flying

training course is entitled to be credited with up to 50 hours of student pilot-in-command time towards the pilot-in-command time required for the issue of the airline transport pilot license, commercial pilot license and a multi-engine type rating.

(3) Co-pilot:

(i) The holder of a pilot license, when acting as co-pilot, is entitled to be credited with all of the co-pilot time towards the total flight time required for a higher grade of pilot license.

(ii) The holder of a pilot license, when acting as co-pilot performing under the supervision of the pilot-in-command the functions and duties of a pilot-in-command, shall be entitled to be credited in full with this flight time towards the total flight time required for a higher grade of pilot license, provided that the method of supervision is agreed with CARC.

(b) Crediting of theoretical knowledge:

(1) The holder of a IR(A) will be exempted from the theoretical knowledge instruction and examination requirement for a IR(H).

(2) In order to obtain a PPL(H), the holder of a PPL(A), CPL(A) or ATPL(A) shall fulfill the requirements specified in Appendix 1 to JCAR FCL2.050.

(3) In order to obtain a CPL(H), the holder of a CPL(A) or (ATPL(A) shall fulfill the requirements specified in Appendix 2 to JCAR FCL2.050.

(4) In order to obtain an ATPL(H), the holder of an ATPL(A) shall fulfill the requirements specified in Appendix 3 to JCAR FCL2.050.

(5) The credits specified in paragraphs (b)(2), (b)(3) and (b)(4) above shall also apply to applicants having passed the theoretical knowledge examination in all subjects required for the issue of the relevant aeroplane pilot license, provided they meet the acceptance period in accordance with JCAR FCL1.495.

(6) An applicant having passed the theoretical knowledge examination for an ATPL(H) is credited with the theoretical knowledge requirements for PPL(H) and CPL(H).

(7) An applicant having passed the theoretical knowledge examination for a CPL(H) is credited with the theoretical knowledge requirements

for a PPL(H).

(8) An applicant having passed the relevant theoretical knowledge examination for CPL(H) or IR(H) shall be credited with the theoretical knowledge requirements as specified in Appendix 4 to JCAR FCL2.050.

(9) thru(11) Reserved. .

### **FCL2.055 Training organisations and registered facilities.**

(See Appendix 1a, 1b, 1c, and Appendix 2 to JCAR FCL2.055)

(See Appendix 2 to JCAR FCL2.125), (See Appendix 3 to JCAR FCL2.055)

(a) (1) Flying training organizations (FTOs) wishing to offer training for licenses and associated ratings whose principal place of business and registered office is located in Jordan, will be granted approval by CARC when in compliance with JCAR FCL2. Requirements for approval of FTOs are given in Appendix 1(a) to JCAR FCL2.055. Part of the training may be performed outside Jordan (see also Appendix 1(b) to JCAR FCL2.055)

(2) FTOs wishing to offer training for licenses and associated ratings whose principal place of business and registered office is located outside Jordan, may be granted approval by CARC in respect of any such location:

(i) If an arrangement has been agreed between CARC and the ICAO contracting state Authority in which the FTO has its principal place of business and registered office, providing for the participation of that Authority in the approval process and provide regulatory oversight of the FTO; or

(ii) (A) If adequate jurisdiction and supervision by the approving Authority can be assured;

(B)The relevant additional requirements of Appendix 1c to JCAR FCL2.055 are satisfied; and

(C) An approval process in accordance with the administrative procedures accepted by CARC is applied by the approving Authority.

(b) (1) Type rating training organisations (TRTOs) located in Jordan, wishing to offer training for type ratings will be granted approval when in compliance with JCAR FCL2 and the approval will be given by CARC. Requirements for approval of TRTOs are given in Appendix 2 to JCAR FCL2.055.

(2) For TRTOs located outside Jordan, approval will be granted when in compliance with JCAR FCL2, by CARC which receives the application. Requirements for approval of TRTOs are given in Appendix 2 to JCAR FCL2.055.

(c) Facilities wishing to offer training for PPL only and located in Jordan shall register for that purpose with CARC (see JCAR FCL2.125).

### **FCL2.060 Curtailment of privileges of license holders aged 60 years or more.**

(a) Age 60–64. The holder of a pilot license who has attained the age of 60 years shall not act as a pilot of an aircraft engaged in commercial air transport operations except:

(1) As a member of a multi-pilot crew and provided that,

(2) Such holder is the only pilot in the flight crew who has attained age 60.

(b) Age 65. The holder of a pilot license who has attained the age of 65 years shall not act as a pilot of an aircraft engaged in commercial air transport operations.

### **FCL2.065 State of license issue.**

Reserved.

### **FCL2.070 Normal residency.**

Normal residency means the place where a person usually lives for at least 185 days in each calendar year because of personal and occupational ties or, in the case of a person with no occupational ties, because of personalities which show close links between that person and the place where she or he is living.

### **FCL2.075 Format and specifications for flight crew licenses.** (See Appendix 1 to JCAR FCL2.075)

The flight crew license issued by CARC in accordance with JCAR FCL 2 will conform to the following specifications.

(a) Content. The item number shown will always be printed in association with the item heading. A standard Jordanian license format is shown in Appendix 1 to JCAR FCL2.075. Items I to XI are the ‘permanent’ items and items XII to XIV are the ‘variable’ items which may appear on a separate or detachable part of the main form. Any separate or detachable part shall be clearly identifiable as part of the license.

## (1) Permanent items:

(I) State of license issue.

(II) Title of license.

(III) Serial number commencing with the postal code of the issuing State and followed by a code of numbers and/or letters in Arabic numerals and in Roman script.

(IV) Name of holder, (in Roman alphabet, if script of national language is other than Roman).

(V) Holder's address.

(VI) Nationality of holder.

(VII) Signature of holder.

(VIII) CARC and, where necessary, conditions under which the license was issued.

(IX) Certification of validity and authorisation for the privileges granted.

(X) Signature of the officer issuing the license and the date of issue.

(XI) Seal or stamp of CARC.

## (2) Variable items:

(I) Ratings – class, type, instructor, etc., with dates of expiry. Radio telephony (R/T) privileges may appear on the license form or on a separate certificate.

(II) Remarks– i.e.special endorsements relating to limitations and endorsements for privileges, including endorsements of language proficiency (see JCAR FCL2.005(b)(5)).

(III)Any other details required by CARC.

(b) Material. The paper or other material used will prevent or readily show any alterations or erasures. Any entries or deletions to the form will be clearly authorised by CARC.

(c) Reserved.

(d) Language. Licenses shall be written in the national language and in English and such other languages as CARC deems appropriate.

### **FCL2.080 Recording of flight time.**

(a) Details of all flights flown as a pilot shall be kept in a reliable record in a logbook format acceptable to CARC (see IEM JCAR FCL2.080). Details of flights flown under JCAR OPS 3, may be recorded in an acceptable computerised format maintained by the operator. In this case an operator shall make the records of all flights operated by the pilot, including differences and familiarisation training, available on request to the flight crew member concerned.

(b) The record shall contain the following information:

(1) Personal details:

Name and address of the holder

(2) For each flight:

(i) Name of Pilot-in-command

(ii) Date (day, month, year) of flight

(iii) Place and time of departure and arrival (times (UTC) to be block time)

(iv) Type helicopter make, model and variant) and registration of helicopter

(v) SE, ME

(vi) Total time of flight

(vii) Accumulated total time of flight

(3) For each simulator or FNPT session:

(i) Type and qualification number of training device

(ii) Synthetic training device instruction

(iii) Date (d/m/y)

(iv) Total time of session

(v) Accumulated total time

(4) Pilot function:



- (i) Pilot-in-command (including solo, SPIC, PICUS time)
- (ii) Co-pilot
- (iii) Dual
- (iv) Flight instructor/Flight examiner
- (v) A remarks column will be provided to give details of specific functions e.g. SPIC, PICUS, instrument flight time\*, etc.

\* A pilot may log as instrument flight time only that time during which he operates the helicopter solely by reference to instruments, under actual or simulated instrument flight conditions.

(5) Operational conditions:

(i) Night

(ii) IFR

(c) Logging of time:

(1) Pilot-in-command flight time:

(i) The holder of a license may log as pilot-in-command time all of the flight time during which he is the pilot-in-command

(ii) The applicant for or the holder of a pilot license may log as pilot-in-command time all solo flight time and flight time as student pilot-in-command provided that such SPIC time is countersigned by the instructor.

(iii) The holder of an instructor rating may log as pilot-in-command all flight time during which he acts as an instructor in a helicopter.

(iv) The holder of an examiner's authorisation may log as pilot-in-command all flight time during which he occupies a pilot's seat and acts as an examiner in a helicopter.

(v) A co-pilot acting as pilot-in-command under the supervision of the pilot-in-command on a multi-pilot helicopter may log all flight time as pilot-in-command under supervision, provided such pilot-in-command time under supervision is countersigned by the pilot in command. (see (c)(5))

(vi) If the holder of a license carries out a number of flights upon the same day returning on each occasion to the same place of departure and the interval between successive flights does not exceed thirty minutes, such series of flights are to be recorded as a single entry.

(2) Co-pilot flight time.

The holder of a pilot license occupying a pilot seat as co-pilot may log all flight time as co-pilot flight time on a multi-pilot helicopter.

(3) Reserved.

(4) Instruction time.

A summary of all time logged by an applicant for a license or rating as flight instruction, instrument flight instruction, instrument ground time, etc. shall be certified by the appropriately rated and/or authorised instructor from whom it was received.

(5) PICUS (Pilot-in-command under supervision).

Provided that the method of supervision is acceptable to CARC, a co-pilot may log as PIC flight time flown as PICUS, when all of the duties and functions of PIC on that flight were carried out, such that the intervention of the PIC in the interest of safety was not required.

(d) Presentation of flight time record.

(1) The holder of a license or a student pilot shall without undue delay present his flight time record for inspection upon request by an authorised representative of CARC.

(2) A student pilot shall carry his flight time record logbook with him on all solo cross- country flights as evidence of the required instructor authorisations.

(e) Recording of flight time in multi-pilot helicopters.

CARC may approve a helicopter to be operated as a multi-pilot helicopter if it is:

(1) A multi-engine helicopter; and

(2) Adequately and permanently equipped for multi-pilot operations with at least:

(i) Dual flight controls; and two independent sets of flight instruments, one in front of each pilot station; and

(ii) All controls necessary for the safe operations of the helicopter can be operated from either pilot seat.; and

(3) To be operated by a crew of at least two pilots qualified in accordance with JCAR FCL 2.250, and the approved flight procedures of the operator.

**Appendix-1 to JCAR FCL2.005.****Minimum requirements for the issue of a JCAR FCL2 license / authorization on the basis of JCAR part FCL1 license / authorization.**

(See JCAR FCL2.005(b)(3)), (See AMC JCAR FCL2.005 & 2.015)

1. Pilot licenses

A pilot license issued by CARC in accordance with JCAR part FCL1 requirements may be Replaced by a JCAR FCL2 license subject, where applicable, to conditions. For the Replacement of such licenses the holder shall:

(a) complete, as a proficiency check, the type and instrument rating (IR, if applicable) revalidation requirements of JCAR FCL2.245(b) relevant to the privileges of the license held;

(b)(i) for ATPL(H) and CPL(H) demonstrate to the satisfaction of CARC that a knowledge of the relevant provisions of JCAR OPS 3 and JCAR FCL 2 (see AMC JCAR FCL2.005 & 2.015) has been acquired;

(ii) for PPL(H) only demonstrate to the satisfaction of CARC that a knowledge of the relevant provisions of JCARs Requirements (see AMC JCAR FCL2.125) has been acquired;

(c) demonstrate a knowledge of English in accordance with JCAR FCL2.200 if IR privileges are held;

(d) comply with the experience requirements and any further requirements as set out in the tabl below:

JCAR FCL1 license held	Total flying hours experience	Any further CARC Requirements	Replacement JCAR FCL2 license and conditions (where applicable)	Removal of conditions	
(1)	(2)	(3)	(4)	(5)	
ATPL(H) valid IR(H)	>1 000 as PIC on multi-pilot helicopters	None	ATPL(H) and IR	Not applicable	(a)
ATPL(H) no IR(H) privileges	>1 000 as PIC on multi-pilot helicopters	None	ATPL(H)		(b)

ATPL(H) valid IR(H)	>1 000 on multipilot helicopters	none	ATPL(H), and IR with type rating restricted to co-pilot	demonstrate ability to act as PIC as required by Appendix 1 to JCAR FCL 2 2.240 and 2.295 paras 9 to 15.	(c)
ATPL(H) no IR(H) privileges	>1 000 on multipilot helicopters	None	ATPL(H) type Rating restricted to co-pilot	demonstrate ability to act as PIC as required by Appendix 1 to JCAR FCL 2 2.240 and 2.295 paras 9 to 15.	(d)
ATPL(H) valid IR(H)	>500 on multi- pilot helicopters	Demonstrate to CARC a knowledge of flight planning and flight performance as required by Appendix 1 to JCAR FCL2.470	as (4)(c)	as (5)(c)	(e)
ATPL(H) no IR(H) privileges	>500 on multi- pilot helicopters	as (3)(e)	as (4)(d)	as (5)(d)	(f)
CPL/IR (H) and passed an ICAO ATPL (H) theory test in the ICAO Member State of license issue*	>500 on multi- pilot helicopters	(i) demonstrate to the CARC a knowledge of flight planning and flight performance as required by Appendix 1 to JCAR FCL 2.470; (ii) meet remaining requirements of JCAR FCL2.250(a)	CPL/IR(H) With JCAR-FCL ATPL(H) theory credit	Not applicable	(g)
CPL/IR(H)	>500 hrs on multi- pilot helicopters	(i) to pass an examination for JCAR FCL ATPL(H) theoretical knowledge in JORDAN*(see text below table) (ii) meet remaining requirements of JCAR FCL2.250(a)	CPL/IR(H) with JCAR FCL2 ATPL(H) theory credit	Not applicable	(h)
CPL/IR(H)	>500 as PIC on single- pilot helicopters	None	CPL/IR(H) with type ratings restricted to single-pilot helicopters		(i)

CPL/IR(H)	<500 as PIC on single-pilot helicopters	Demonstrate to CARC a knowledge of flight planning and flight performance as required by JCAR FCL 2.470 Appendix 1 to	as (4)(h)	type rating as required by JCAR FCL2.240	
CPL(H)	>500 as PIC on single-pilot helicopters	night qualification, if applicable	CPL(H), with type ratings restricted to single-pilot helicopters		(j)
CPL(H)	<500 as PIC on single-pilot helicopters	night qualification, if applicable, demonstrate to CARC a knowledge of flight performance and planning as required by Appendix 1 to JCAR FCL 2.470	as (4) (j)		(k)

JCAR FCL1 license held	Total flying hours experience	Any further CARC requirements	Replacement JCAR FCL2 license and conditions (where applicable)	Removal of conditions	
(1)	(2)	(3)	(4)	(5)	
PPL/IR(H)	≥75 in accordance with IFR	night qualification; if night flying privileges are not included in the instrument rating	PPL/IR(H) (the IR restricted to PPL)	demonstrate to CARC a knowledge of flight performance and planning as required by Appendix 1 to JCAR FCL 2 2.470.	(m)
PPL(H)	≥75 on helicopters	demonstrate the use of radio navigation aids.	PPL (H)		(n)

\* CPL holders already holding a type rating for a multi-pilot helicopter are not required to have passed an examination for ATPL theoretical knowledge whilst they continue to operate that same helicopter type, but will not be given ATPL theory credit for a JCAR–FCL2 license. If they require another type rating for a different multi-pilot helicopter, they must pass an examination in JCAR–FCL ATPL(H) knowledge.

\* CPL holders already holding a type rating or not holding type rating for a multi-pilot helicopter are required to have passed an examination for ATPL theoretical knowledge.

## 2. Instructor ratings

JCAR FCL1 rating, authorization or privileges held	Experience	Any further CARC requirements	Replacement JCAR FCL 2 rating
(1)	(2)	(3)	(4)
FI(H)/IRI(H)/TRI( H)	as required under JCAR FCL2 (Helicopter) for the relevant rating	demonstrate a knowledge of the relevant parts of JCAR FCL2 (Helicopter) and JCAR OPS 3 as set out in AMC FCL 2.005 and 2.015	FI(H)/IRI(H)/TRI(H)*

\*Jordanian instructors fulfilling all the above replacements requirement, but unable to obtain relevant JCAR FCL 2 license/rating(s) due to present implementation status of the State of license issue, may be accepted to instruct for JCAR FCL 2 license and/or rating(s).

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**3 . SFI Authorisation**

A SFI authorization issued by an ICAO State in accordance with the national requirements of that State may be replaced by a JAR–FCL authorisation provided that the holder complies with the experience requirements and any further requirements as set out in the table below A SFI authorization issued by CARC in accordance with the JCAR FCL1 requirements of CARC may be replaced by a JCAR FCL1 authorization provided that the holder complies with the experience requirements and any further requirements as set out in the table below:

JCAR FCL1 authorization held	Experience	Any further CARC requirements	Replacement CARC authorization
(1)	(2)	(3)	(4)
SFI(H)	>1 000 hrs as pilot of MPH	(i) Hold or have held a professional pilot license(H) issued by an ICAO Member State or a non JCAR FCL1 professional license(H) acceptable to CARC.  (ii) have completed the simulator content of the applicable type rating course including MCC	SFI(H)
SFI(H)	3 years recent experience as a SFI acceptable to the Authority	have completed the simulator content of the applicable type rating course including MCC	SFI(H)

This authorisation will be for a maximum period of one year. Further re-authorization will be subject to completion of the requirements set out in JCAR–FCL 2.415

**4.STI Authorisation**

A STI authorisation issued by CARC in accordance with the JCAR FCL1 requirements of CARC may be replaced by a JCAR FCL2 authorisation provided that the holder complies with the experience requirements and any further requirements as set out in the table below:

JCAR FCL1 authorization	Experience	Any further CARC requirements	Replacement CARC authorisation
(1)	(2)	(3)	(4)
STI(H)	> 500 hrs as pilot on SPH	(i) hold or have held a pilot license issued by JORDAN or ICAO Contracting state license acceptable Commission  (ii) have completed a proficiency check in accordance with appendix 3 to JCAR FCL2.240 in a FSTD appropriate to the instruction intended	STI(H)
STI(H)	3 years recent experience as a STI acceptable to CARC.	have completed a proficiency check in accordance with appendix 3 to JCAR FCL2.240 in a FSTD appropriate to the instruction intended	STI(H)

This authorization will be for a maximum period of one years. Further re-authorization will be subject to completion of the requirements set out in JAR–FCL 2.360F



**Appendix- 1 to FCL2.010**  
**Requirements for proficiency in languages used for radio telephony communications.**

(See JCAR FCL2.010(a)(4)),(See AMC No. 1 to JCAR FCL2.010)

(See AMC No. 2 to JCAR FCL2.010),(See IEM JCAR FCL2.010)

1. The language proficiency requirements are applicable to the use of both phraseologies and plain language.
2. To meet the language proficiency requirements contained in JCAR FCL2.010(a)(4), an applicant for a license or a license holder shall demonstrate, in a manner acceptable to CARC, the ability to:
  - a) communicate effectively in voice-only (telephone/radiotelephone) and in face-to-face situations;
  - b) communicate on common, and work-related topics with accuracy and clarity;
  - c) use appropriate communicative strategies, to exchange messages and to recognize and resolve misunderstandings (e.g. to check, confirm, or clarify information) in a general or work-related context;
  - d) handle successfully the linguistic challenges presented by a complication or unexpected turn of events that occurs within the context of a routine work situation or communicative task with which they are otherwise familiar; and
  - e) use a dialect or accent which is intelligible to the aeronautical community.
3. The Language Proficiency shall be formally re-evaluated at intervals determined by CARC (see AMC No.2 to JCAR FCL2.010 paragraphs 4 and 5).
4. The method of assessment and re-evaluation shall be determined by CARC (see AMC No. 2 to JCAR FCL2.010).
5. A language assessment body offering service on behalf of an Authority of an ICAO Member State shall be acceptable to CARC (see AMC No. 2 to JCAR FCL2.010).
6. Where the language assessment referred to above meets the requirements stated in Appendix 1 to JCAR FCL2.200, it may be used for the purpose of extending the radiotelephony privileges in English in accordance with JCAR FCL2.200 paragraph (b).

## Appendix-2 to JCAR FCL2.010 Language Proficiency Rating Scale.

(See JCAR FCL2.010(a)(4)), (See AMC No. 1 to JCAR FCL2.010), (See AMC No. 2 to JCAR FCL2.010), (See IEM JCAR FCL2.010)

LEVEL	PRONUNCIATION	STRUCTURE	VOCABULARY	FLUENCY	COMPREHENSION	INTERACTIONS
	Assumes a dialect and/or accent intelligible to the aeronautical community	Relevant grammatical structures and sentence patterns are determined by language functions appropriate to the task				
Operational (Level 4)	Pronunciation, stress, rhythm, and intonation are influenced by the first language or regional variation but only sometimes interfere with ease of understanding.	Basic grammatical structures and sentence patterns are used creatively and are usually well controlled. Errors may occur, particularly in unusual or unexpected circumstances, but rarely interfere with meaning.	Vocabulary range and accuracy are usually sufficient to communicate effectively on common, concrete, and work related topics. Can often paraphrase successfully when lacking vocabulary particularly in unusual or unexpected circumstances .	Produces stretches of language at an appropriate tempo. There may be occasional loss of fluency on transition from rehearsed or formulaic to spontaneous interaction, but this does not prevent communication. Can make limited use of discourse markers and connectors. Fillers are not distracting.	Comprehension is mostly accurate on common, concrete, and work related topics when the accent or variety used is sufficiently intelligible for an international community of users. When the speaker is confronted with a linguistic or situational complication or an unexpected turn of events, comprehension may be slower or require clarification strategies.	Responses are usually immediate, appropriate, and informative. Initiates and maintains exchanges even when dealing with an unexpected turn of events. Deals adequately with apparent misunderstandings by checking, confirming, or clarifying.

Note: The Operational Level (Level 4) is the minimum required proficiency level for Radiotelephony communication.

**Appendix -1 to JCAR FCL2.015****Minimum requirements for the validation of pilot licenses of ICAO contracting States.**

(See JCAR FCL2.015)

1. The minimum requirements for the validation of a pilot license of an ICAO contracting State by CARC are specified below (instructor and examiner ratings indorsed on the license shall not be validated and may be authorized at the discretion of CARC).

2. A pilot license issued in accordance with ICAO Annex 1 by an ICAO contracting State may be validated subject to conditions by CARC in order to permit flights (other than for flight instruction) in helicopters registered in Jordan. To validate such licenses, the holder shall:

(a) complete, as a skill test, the type rating revalidation requirements of JCAR FCL2.245 relevant to the privileges of the license held;

(b) demonstrate to the satisfaction of CARC that a knowledge of the relevant provisions of JCAR FCL 2 (see AMC JCAR FCL2.005 and 2.015) has been acquired;

(c) demonstrate a knowledge of English in accordance with JCAR FCL2.200;

(d) hold a valid JCAR part FCL3 Class 1 medical certificate;

(e) meet any published additional requirements that CARC deems necessary; and

(f) comply with the experience requirements set out in column (2) of the following table in relation to the validation conditions specified in column (3):

License held	Total flying hours experience	Validation conditions	
(1)	(2)	(3)	
ATPL(H) valid IR	1 000 hours as PIC on multi-pilot helicopters	Commercial air transport in multi-pilot helicopters as PIC in VFR and IR operations	(a)
ATPL(H) no IR privileges	1 000 hours as PIC on multi-pilot helicopters	Commercial air transport in multi-pilot helicopters as PIC in VFR operations	(b)
ATPL(H) valid IR	1 000 hours as pilot on multi-pilot helicopters	air transport in multi-pilot Commercial helicopters as co-pilot in VFR and IFR operations	(c)
ATPL(H) no IR Privileges	1 000 hours as pilot on multi-pilot helicopters	Commercial air transport in multi-pilot helicopters as co-pilot in VFR operations	(d)
CPL(H)/IR	1 000 hours as pilot on multi-pilot helicopters	Commercial air transport in multi-pilot helicopters as co-pilot	(e)
CPL(H)/I	1 000 hours as PIC in commercial air transport since gaining an IR	Commercial air transport in single-pilot helicopters as PIC	(f)
CPL(H) *	700 hours in helicopters other than those certificated under JAR 27/29, including 200 hours in the activity role for which validation is sought, and 50 hours in that role in the last 12 months	Activities in helicopters other than commercial air transport	

\*CPL/IR holders on multi-pilot helicopters shall have demonstrated JCAR ATPL level knowledge before Validation.

### Private pilot licenses with Instrument Rating

3. A private pilot license with instrument rating issued in accordance with ICAO Annex 1 by an ICAO contracting state may be validated subject to conditions set by CARC in order to permit flights (other than flight instruction) in helicopters registered in Jordan. To validate such licenses, the holder shall:

(a) complete, as a skill test, all sections of the type skill test in accordance with Appendix 1 and 3 to JCAR FCL2.240;

(b) demonstrate to the satisfaction of CARC in accordance with Subpart J, that a knowledge of Air Law and the Aeronautical Weather codes, subject number 050 10 03 01, as well as the Flight Planning & Performance (IR), subject number 030 00 00 00, Human Performance subject number 040 00 00 00 in accordance with Appendix 1 to JCAR FCL2.470 has been acquired;

(c) demonstrate a knowledge of English in accordance with JCAR FCL2.200;

(d) hold at least a valid JCAR FCL3 Class 2 medical certificate, including hearing requirements in accordance with JCAR MED PART FCL3.

(e) hold R/T privileges acceptable to CARC,

(f) comply with the experience requirements set out in column (2) of the following table:

License held (1)	Total flying hours experience (2)
PPL(H)/IR	> 100 hrs PIC instrument flight time

**Appendix- 2 to JCAR FCL2.015 .  
Conversion of a PPL(H) issued by an ICAO Contracting State .**

(See JCAR FCL2.015(c)(2))

The minimum requirements for the conversion of a private pilot license(H) issued by an ICAO contracting state are:

(a) the applicant shall hold a license issued in accordance with ICAO Annex I;

(b) the applicant shall hold at least a JCAR PART FCL3 Class 2 medical certificate;

(c) to hold R/T privileges acceptable to CARC,

(d) the applicant shall comply with the requirements set out in the table below:

CARC license held.	Experience requirement	Any further CARC requirements
Current and valid ICAO member state PPL(H)	100 hours as pilot of helicopters	<p>(a) Pass a written examination in Air Law and Human Performance and Limitations</p> <p>(b) Pass the PPL(H) skill test as set out in Appendix 1 to JCAR FCL2.130 and 2.135 and Appendix 2 to JCAR FCL2.135</p> <p>(c) Fulfill the relevant requirements of Subpart F</p>

**Appendix -3 to JCAR FCL2.015****Validation of pilot licenses of an ICAO Contracting States for specific tasks of definite duration.**

(See JCAR FCL2.015), (See Appendix 1 to JCAR FCL2.015)

**TEMPORARY VALIDATION / AUTHORISATION OF ICAO PILOT LICENSES FOR HELICOPTER MANUFACTURER'S PILOTS**

1. A pilot license issued in accordance with ICAO Annex 1 by an ICAO contracting State, including an instructor rating or examiner authorisation issued by that State may be validated or otherwise authorised subject to conditions, for a maximum of one year, by CARC in order to permit flights to demonstrate, operate, ferry or test a helicopter registered in Jordan. When validating a license under the provisions of this Appendix, the ICAO license holder may be exempt from the requirements for validation of an ICAO license contained in Appendix 1 to JCAR FCL2.015, subject to the following conditions:

To be eligible for validation of such a license, the holder shall:

- (a) Possess an appropriate license, medical certificate, type ratings, and qualifications, to include instructor rating on type or examiner authorisation on type, valid in the ICAO State for the duties proposed, and
- (b) Be employed by a helicopter manufacturer or a TRTO performing training on behalf of a helicopter manufacturer, and
- (c) Be limited to performing flight instruction and testing for initial issue of type ratings, the supervision of initial line flying by the operators' pilots, delivery or ferry flights, initial line flying, flight demonstrations or test flights.

2. Whenever conducting or supervising line flying, the pilot shall also be required to meet the relevant requirements of JCAR OPS3 as determined by CARC.

**Appendix- 1 to JCAR FCL2.050****Crediting of theoretical knowledge - Bridge instruction and examination requirements**

(See JCAR FCL2.050(b)(2))

For the issue of a PPL(H), the holder of an aeroplane license shall pass PPL(H) theoretical knowledge examinations (from AMC-JCAR FCL2.125 Syllabus of theoretical knowledge for the Private Pilot License (Helicopter)) in the following topics:

Aircraft General Knowledge; Flight Performance and Planning; Operational Procedures and Principles of Flight.

**Appendix- 2 to JCAR FCL2.050****Crediting of theoretical knowledge for the issue of a CPL(H) –**

**Bridge instruction and examination requirements.**

(See JCAR FCL2.050(b)(3))

1. An applicant shall have received theoretical knowledge bridge instruction on an approved course at an approved flying training organisation (FTO) according to the syllabus subjects and headline topics below (refer to the Theoretical Knowledge Learning Objectives):

021	00	0000	<b>AIRCRAFT GENERAL KNOWLEDGE - AIRFRAME AND SYSTEMS, ELECTRICS, POWERPLANT, EMERGENCY EQUIPMENT</b>
021	02	00 00	AIRFRAME
021	04	00 00	LANDING GEAR, WHEELS, TYRES, BRAKES
021	05	00 00	FLIGHT CONTROLS
021	06	0000	PNEUMATICS - PRESSURISATION AND AIR CONDITIONING
021	11	00 00	TURBINE ENGINES
021	13	0000	OXYGEN SYSTEMS
021	14	0000	HELICOPTER: MISCELLANEOUS SYSTEMS
021	15	00 00	HELICOPTER: ROTOR HEADS
021	16	0000	HELICOPTER: TRANSMISSION
021	17	00 00	HELICOPTER: BLADES

022	00	0000	<b>AIRCRAFT GENERAL KNOWLEDGE - INSTRUMENTATION (H)</b>
022	02	0000	MEASUREMENT OF AIR DATA PARAMETERS
022	07	0000	HELICOPTER: AUTOMATIC FLIGHT CONTROL SYSTEMS
022	12	0000	ALERTING SYSTEMS, PROXIMITY SYSTEMS
022	13	0000	INTEGRATED INSTRUMENTS - ELECTRONIC DISPLAYS
022	14	0000	MAINTENANCE, MONITORING AND RECORDING SYSTEMS

030	00	0000	<b>FLIGHT PERFORMANCE AND PLANNING</b>
031	00	00 00	MASS AND BALANCE – HELICOPTERS
031	01	00 00	PURPOSE OF MASS AND BALANCE CONSIDERATIONS
031	02	00 00	LOADING

033	00	00 00	<b>FLIGHT PLANNING AND FLIGHT MONITORING</b>
033	03	00 00	FUEL PLANNING
034	00	00 00	<b>PERFORMANCE – HELICOPTERS</b>
034	01	00 00	GENERAL
034	02	00 00	PERFORMANCE CLASS 3— SINGLE-ENGINE HELICOPTERS ONLY
034	03	00 00	PERFORMANCE CLASS 2
034	05	00 00	PERFORMANCE CLASS 1 - HELICOPTERS CERTIFICATED UNDER CS 29 ONLY

070	00	00 00	<b>OPERATIONAL PROCEDURES - HELICOPTER</b>
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071	01	00 00	GENERAL REQUIREMENTS
071	02	00 00	SPECIAL OPERATIONAL PROCEDURES AND HAZARDS (GENERAL ASPECTS)
071	03	00 00	HELICOPTER EMERGENCY PROCEDURES

082	00	00 00	<b>PRINCIPLES OF FLIGHT – HELICOPTER</b>
082	01	00 00	SUBSONIC AERODYNAMICS
082	02	00 00	TRANSONIC AERODYNAMICS and COMPRESSIBILITY EFFECTS
082	03	00 00	ROTORCRAFT TYPES
082	04	0000	MAIN ROTOR AERODYNAMICS
082	05	0000	MAIN ROTOR MECHANICS
082	06	0000	TAIL ROTORS
082	07	0000	EQUILIBRIUM, STABILITY AND CONTROL
082	08	00 00	HELICOPTER FLIGHT MECHANICS

2. An applicant shall demonstrate a level of knowledge appropriate to the privileges granted to the holder of a CPL(H) and shall meet the requirements set out in JCAR FCL2 Subpart J.

The applicant shall pass theoretical bridge examinations in the following subjects: Aircraft General Knowledge, Flight Performance and Planning, Operational Procedures and Principles of Flight, as follows:

(a) the examination papers in subjects Flight Performance and Principles of Flight are those defined in JCAR FCL2.470(b).

(b) the examination papers in subjects Airframe and Systems, Electrics, Powerplant, Emergency Equipment, Instrumentation, Mass and Balance, Flight Planning and Flight Monitoring, and Operational Procedures shall cover the bridge topics defined in the syllabus above.



**Appendix- 3 to JCAR FCL2.050**  
**Crediting of theoretical knowledge for the issue of a ATPL(H)–**  
**Bridge instruction and examination requirements**

(See JCAR FCL2.050(b)(4))

1. An applicant shall have received theoretical knowledge bridge instruction on an approved course at an approved flying training organisation (FTO) according to the syllabus subjects and headline topics below (refer to the Joint Implementation Procedures for the detailed bridge syllabus) :

021	00	00 00	<b>AIRCRAFT GENERAL KNOWLEDGE - AIRFRAME AND SYSTEMS, ELECTRICS, POWERPLANT, EMERGENCY EQUIPMENT</b>
021	02	00 00	AIRFRAME
021	04	00 00	LANDING GEAR, WHEELS, TYRES, BRAKES
021	05	00 00	FLIGHT CONTROLS
021	06	00 00	PNEUMATICS - PRESSURISATION AND AIR CONDITIONING
021	11	00 00	TURBINE ENGINES
021	13	00 00	OXYGEN SYSTEMS
021	14	0000	HELICOPTER: MISCELLANEOUS SYSTEMS
021	15	00 00	HELICOPTER: ROTOR HEADS
021	16	0000	HELICOPTER: TRANSMISSION
021	17	00 00	HELICOPTER: BLADES

022	00	0000	<b>AIRCRAFT GENERAL KNOWLEDGE - INSTRUMENTATION (H)</b>
022	02	0000	MEASUREMENT OF AIR DATA PARAMETERS
022	07	0000	HELICOPTER: AUTOMATIC FLIGHT CONTROL SYSTEMS
022	12	0000	ALERTING SYSTEMS, PROXIMITY SYSTEMS
022	13	0000	INTEGRATED INSTRUMENTS - ELECTRONIC DISPLAYS
022	14	0000	MAINTENANCE, MONITORING AND RECORDING SYSTEMS

030	00	0000	<b>FLIGHT PERFORMANCE AND PLANNING</b>
031	00	0000	MASS AND BALANCE – HELICOPTERS
031	01	0000	PURPOSE OF MASS AND BALANCE CONSIDERATIONS
031	04	0000	MASS AND BALANCE DETAILS OF AIRCRAFT
033	00	00 00	FLIGHT PLANNING AND FLIGHT MONITORING
033	03	00 00	FUEL PLANNING
034	00	00 00	<b>PERFORMANCE – HELICOPTERS</b>
034	01	00 00	GENERAL
034	02	0000	PERFORMANCE CLASS 3— SINGLE-ENGINE HELICOPTERS ONLY
034	03	00 00	PERFORMANCE CLASS 2
034	05	0000	PERFORMANCE CLASS 1 - HELICOPTERS CERTIFICATED UNDER CS 29 ONLY
070	00	00 00	<b>OPERATIONAL PROCEDURES - HELICOPTER</b>

071 01 00 00	GENERAL REQUIREMENTS
071 02 00 00	SPECIAL OPERATIONAL PROCEDURES AND HAZARDS (GENERAL ASPECTS)
071 03 0000	HELICOPTER EMERGENCY PROCEDURES

082 00 00 00	<b>PRINCIPLES OF FLIGHT – HELICOPTER</b>
082 01 0000	SUBSONIC AERODYNAMICS
082 02 0000	TRANSONIC AERODYNAMICS and COMPRESSIBILITY EFFECTS
082 03 0000	ROTORCRAFT TYPES
082 04 0000	MAIN ROTOR AERODYNAMICS
082 05 0000	MAIN ROTOR MECHANICS
082 06 0000	TAIL ROTORS
082 07 0000	EQUILIBRIUM, STABILITY AND CONTROL
082 08 00 00	HELICOPTER FLIGHT MECHANICS

2. An applicant shall demonstrate a level of knowledge appropriate to the privileges granted to the holder of a ATPL(H) and shall meet the requirements set out in JCAR FCL2 (Helicopter) Subpart J.

The applicant shall pass theoretical bridge examinations in the following subjects: Aircraft General Knowledge, Flight Performance and Planning, Operational Procedures and Principles of Flight (Helicopter), as follows:

(a) the examination papers in subjects Flight Performance and Principles of Flight (Helicopter) are those defined in JCAR FCL2.470(a).

(b) the examination papers in subjects Airframe and Systems, Electrics, Powerplant, Emergency Equipment, Instrumentation, Mass and Balance, Flight Planning and Flight Monitoring, and Operational Procedures shall cover the bridge topics defined in the syllabus above.

**Appendix- 4 to JCAR FCL2.050****Crediting of theoretical knowledge requirements for the issue of a CPL(H), an IR(H) or an ATPL(H).**

(See JCAR FCL2.050(b)(8))

1. An applicant for an IR(H) having passed the relevant theoretical examinations for a CPL(H) is credited towards the theoretical knowledge requirements in the following subjects:
  - Human Performance and Limitations
  - Meteorology
  
2. An applicant for a CPL(H) having passed the relevant theoretical examinations for an IR(H) is credited towards the theoretical knowledge requirements in the following subjects:
  - Human Performance and Limitations
  - Meteorology
  
3. An applicant for an ATPL(H), or an applicant for an ATPL(H) with an IR(H), having passed the relevant theoretical examinations for a CPL(H) is credited towards the theoretical knowledge requirements in the following subjects:
  - Performance (Helicopter)
  - Principles of Flight (Helicopter)
  - VFR Communications
  
4. An applicant for an ATPL(H) with an IR(H) having passed the relevant theoretical examinations for an ATPL(H) is credited towards the theoretical knowledge requirements in the following subjects:
  - Aircraft General Knowledge – Airframe/Systems/Powerplant
  - Aircraft General Knowledge – Instrumentation
  - Mass and Balance
  - Performance (Helicopter)
    - Human Performance and Limitations
    - Meteorology
    - General Navigation
    - Principles of Flight (Helicopter)
    - VFR Communications

## **Appendix- 1a to JCAR FCL2.055**

### **Flying Training Organisations for pilot licenses and ratings.**

(See JCAR FCL2.055), (See AMC-JCAR FCL2.261(c)(2)), (See IEM No. 1 to JCAR FCL2.055), (See IEM No. 2 to JCAR FCL2.055), (See IEM No. 3 to JCAR FCL2.055), (See IEM No. 4 to JCAR FCL2.055)

#### INTRODUCTION.

1. A Flying Training Organisation (FTO) is an organisation staffed, equipped and operated in a suitable environment offering flying training, and/or synthetic flight instruction and/or theoretical knowledge instruction for specific training programmes.
2. An FTO wishing to offer approved training to meet JCAR FCL2 requirements shall obtain the approval of CARC. No such approval will be granted by CARC unless:
  - (a) CARC can enforce the JCAR FCL2 requirements; and
  - (b) the FTO meets all requirements of JCAR FCL2.

This Appendix gives the requirements for the issue, revalidation and variation of the approval of an FTO. An FTO needs only to meet the requirements relevant to the instruction it is providing.

#### OBTAINING APPROVAL

3. An FTO seeking approval shall provide to CARC such operations and training manuals as required by paragraphs 32 and 33. An FTO shall establish procedures acceptable to CARC to ensure compliance with all relevant JCAR FCL2 requirements. The procedures shall include a quality system (See AMC-JCAR FCL2.055 and IEM No. 1 to JCAR FCL2.055) within the FTO to readily detect any deficiencies for self-remedial action. After consideration of the application the FTO will be inspected to ensure that it meets the requirements set out in this Appendix. Subject to satisfactory inspection, approval of the FTO will be granted for a period of (2) years, revalidation of the approval may be granted for further periods of (2) years. CARC is not obliged to grant an approval for an FTO outside Jordan if the personnel resources are not available or the cost of processing the application for approval and inspections puts undue burden on CARC.
4. All training courses shall be approved (see IEM JCAR FCL2.055 (to be developed)).
5. CARC will monitor course standards and will sample training flights with students. During such visits, access shall be given by the FTO to

training records, authorisation sheets, technical logs, lectures, study notes and briefings and any other relevant material. A copy of the report on a visit to an FTO will be made available by CARC to that FTO.

6. Approval will be varied, suspended or revoked by CARC if any of the approval requirements or standards cease to be maintained to the minimum approved level.

7. If an FTO wishes to make changes to an approved course or to its operations or training manual the approval of CARC shall be obtained before the changes are implemented. FTOs need not advise CARC of minor changes in day-to-day operations. Where any doubt exists as to whether a proposed change is minor, CARC shall be consulted.

8. An FTO may make training arrangements with other training organisations or make use of alternative base aerodromes as part of its overall training organisation, subject to the approval of CARC.

### **Financial resources**

9. (a) An FTO shall satisfy CARC that sufficient funding is available to conduct training to the approved standards. (see IEM No. 2 to JCAR FCL2.055).

(b) An FTO shall nominate a person acceptable to CARC who shall satisfy CARC that sufficient funding is available to conduct training to approved standard. Such person shall be known as the Accountable Manager.

### **MANAGEMENT AND STAFFING**

10. The management structure shall ensure supervision of all grades of staff by persons having the experience and qualities necessary to ensure the maintenance of high standards. Details of the management structure, indicating individual responsibilities, shall be included in the FTO's Operations Manual.

11. The FTO shall satisfy CARC that an adequate number of qualified, competent staff are employed. For integrated courses, three persons on the staff shall be employed full time in the following positions:

Head of Training (HT)

Chief Flying Instructor (CFI)

Chief Ground Instructor (CGI)

For modular training courses, these positions may be combined and filled by one or two persons, full time or part time, depending upon the scope of training offered. At least one person on the staff must be full time. At FTOs conducting theoretical knowledge instruction only, the positions of HT and

CGI may be combined. The nominated person shall have a sound managerial capability, hold or have held a professional pilot license related to the course to be conducted with ratings as appropriate and shall meet the requirements set out in paragraph 19 below.

12. The number of part time instructors in relation to the scope of training offered shall be acceptable to CARC.

13. The ratio of all students to flight instructors, excluding the HT, shall not normally exceed 6:1. Class numbers in ground subjects involving a high degree of supervision or practical work shall not normally exceed 12 students.

#### HEAD OF TRAINING (HT)

14. The HT shall have overall responsibility for ensuring satisfactory integration of flying training, synthetic flight training and theoretical knowledge instruction, and for supervising the progress of individual students. The HT shall have had extensive experience in training as a flight instructor for professional pilot licenses and possess a sound managerial capability. The HT shall hold or have held in the three years prior to first appointment as a HT, a professional pilot license and rating(s) issued in accordance with ICAO Annex 1, related to the flying training courses conducted.

#### CHIEF FLYING INSTRUCTOR (CFI)

15. The CFI shall be responsible for the supervision of flight and synthetic flight instructors and for the standardisation of all flight instruction and synthetic flight instruction. The CFI shall:

(a) hold the highest professional pilot license related to the flying training courses conducted;

(b) hold the rating(s) related to the flying training courses conducted;

(c) hold a flight instructor authorisation for at least one of the types of helicopter used on the course; and

(d) have completed on helicopters 1 000 hours pilot-in-command flight time of which a minimum of 500 hours shall be on helicopters flying instructional duties related to the flying courses conducted of which 200 hours may be instrument ground time.

#### INSTRUCTORS, OTHER THAN SYNTHETIC FLIGHT INSTRUCTORS AND SYNTHETIC TRAINING INSTRUCTORS

16. Instructors shall hold:

(a) a professional pilot license and rating(s) related to the flying training

courses they are appointed to conduct;

(b) an instructor rating relevant to the part of the course being conducted e.g. instrument rating

instructor, flight instructor, type/rating instructor, as appropriate; or

(c) an authorisation from CARC to conduct specific training in an FTO (see JCAR FCL2.305).

17. The maximum flying hours, maximum flying duty hours and minimum rest time between instructional duties of instructors shall be acceptable to CARC.

### **INSTRUCTORS FOR SYNTHETIC FLIGHT TRAINING.**

18. For flight training duties on a FTD and a FNPT I, instructors shall hold or have held 3 years prior to the first appointment, a professional pilot license and rating(s), except for SFIs having an authorisation according to item 3 of Appendix 1 to JCAR FCL2.005, appropriate to the training courses they are appointed to conduct, and have had instructional training experience. For flight training duties on a flight simulator and/or FNPT II, instructors shall hold an FI(H) rating or a TRI (MPH) rating or a SFI(H) authorisation.

### **CHIEF GROUND INSTRUCTOR (CGI)**

19. The CGI shall be responsible for the supervision of all ground instructors and for the standardisation of all theoretical knowledge instruction. The CGI shall have a practical background in aviation and have undergone a course of training in instructional techniques or have had extensive previous experience in giving theoretical knowledge instruction.

### **THEORETICAL KNOWLEDGE INSTRUCTORS**

20. Ground Instructors in license and ratings examination subjects shall have appropriate experience in aviation and shall, before appointment, provide proof of their competency by giving a test lecture based on material they have developed for the subjects they are required to teach.

### **RECORDS**

21. An FTO shall maintain and retain the following records for a period of at least 5 years, using appropriate administrative staff:

(a) details of ground, flying, and simulated flight training given to individual students;

(b) detailed and regular progress reports from instructors including

assessments, and regular progress flight tests and ground examinations;  
and

(c) personal information, e.g. expiry dates of medical certificates, ratings, etc.

22. The format of the student training records shall be specified in the Training Manual.

23. The FTO shall submit training records and reports as required by CARC.

#### TRAINING PROGRAMME

24. A training programme shall be developed for each type of course offered. This programme shall include a breakdown of flying and theoretical knowledge instruction in either a week-by-week or phase presentation, a list of standard exercises and a syllabus summary. In particular, synthetic flight training and theoretical knowledge instruction shall be phased in such a manner as to ensure that students shall be able to apply to flying exercises the knowledge gained on the ground. Arrangements should be made so that problems encountered in instruction can be resolved during subsequent training. The content and sequence of the training programme shall be acceptable to CARC.

#### TRAINING AND TESTING HELICOPTER(S)

25. An adequate number of training and testing helicopters appropriate to the courses of training and testing shall be provided. This number may be affected by the availability of STDs. Each helicopter shall be fitted with duplicated primary flight controls for use by the instructor and the student. Swing-over flight controls shall not be acceptable. The helicopter(s) shall include, as appropriate to the courses of training, helicopter(s) suitable for auto-rotation demonstration and helicopter(s) suitably equipped to simulate instrument meteorological conditions, and suitably equipped for the instrument flight training and testing required. For flight training and testing for IR(H), an adequate number of IFR certificated helicopters shall be available.

26. Only helicopter(s) approved by CARC for training purposes shall be used. If the helicopter used for the skill test is of a different type from the FS used for the visual training, the maximum credit shall be limited to that allocated for the FNPT II/III in the relevant flight training programme.

#### AERODROMES AND SITES.

27. The base aerodrome, and any alternative base aerodrome, at which training is being conducted shall meet the following requirements.

(a) Have at least one runway or take-off/landing area that allows training



helicopter to make a normal take-off or landing at the maximum take-off or maximum landing mass authorised, and touch down autorotation as appropriate:

(i) under calm wind (not more than four knots) conditions and temperatures equal to the mean high temperature for the hottest month of the year in the operating area;

(ii) clearing all obstacles in the take-off flight path by at least 50 feet;

(iii) with the powerplant operation and the landing gear (if applicable) recommended by the manufacturer; and

(iv) with a smooth transition from lift-off to the best rate of climb speed without exceptional piloting skills or techniques.

(b) Have a wind direction indicator that is visible at ground level from the ends of each runway, take-off/landing area.

(c) Have adequate runways/take-off/landing area lights if used for night training.

(d) Have an air traffic control service except where, with the approval of CARC, the training requirements may be satisfied safely by another means of air/ground communications.

28. Sites shall be available for:

- confined area operation training
- simulated engine off autorotation
- sloping ground operation

#### FLIGHT OPERATIONS ACCOMMODATION.

29. The following accommodation shall be available:

(a) An operations room with facilities to control flying operations.

(b) A flight planning room with the following facilities:

- appropriate current maps and charts
- current AIS information
- current meteorological information
- communications to ATC and the operations room
- maps showing standard cross-country routes

- maps showing current prohibited, danger and confined areas
  - any other flight safety related material.
- (c) Adequate briefing rooms/cubicles of sufficient size and number.
- (d) Suitable offices for the supervisory staff and room(s) to allow flying instructors to write reports on students, complete records, etc.
- (e) Furnished crew-rooms for instructors and students.

### THEORETICAL KNOWLEDGE INSTRUCTION FACILITIES

30. The following facilities for theoretical knowledge instruction shall be available:

- (a) Adequate classroom accommodation for the current student population.
- (b) Suitable demonstration equipment to support the theoretical knowledge instruction.
- (c) An R/T training and testing facility.
- (d) A reference library containing publications giving coverage of the syllabus.
- (e) Offices for the instructional staff.

### REQUIREMENTS FOR ENTRY TO TRAINING

31. A student accepted for training shall possess the appropriate medical certificate for the license required and shall meet the entrance requirements approved by CARC.

### TRAINING MANUAL AND OPERATIONS MANUAL

32.

a. A FTO shall prepare and maintain a Training Manual and Operations Manual containing information and instructions to enable staff to perform their duties and to give guidance to students on how to comply with course requirements, FTO shall make available to staff and students the information contained in the Training Manual, the operations Manual and the FTO's approval documentation. The amendment procedure shall be stated and amendments properly controlled

b. The Training Manuals shall state the standards, objectives and training goals for each phase of training that the students are required to comply with and shall include the following:

Part 1 - The Training Plan

Part 2 - Briefing and Air Exercises

Part 3 - Synthetic Flight Training

Part 4 - Theoretical Knowledge Instruction

For further guidance see IEM No. 3 to JCAR FCL2.055.

33. The Operations Manual shall provide relevant information to particular groups of staff, e.g. FIs, synthetic flight instructors, ground instructors, operations and maintenance staff, etc., and shall include the following:

(a) General

(b) Technical

(c) Route

(d) Staff Training

For further guidance see IEM No. 3 to JCAR FCL2.055.

**Appendix- 1b to JCAR FCL2.055  
Partial Training outside Jordan.**

(See JCAR FCL2.030), (See JCAR FCL2.055(a)(1), (See JCAR FCL2.485)  
(See Appendix 1a to JCAR FCL2.055), (See Appendix 1 to JCAR  
FCL2.305)

FTOs partly training outside Jordan may perform training according to the following:

- (a) Provided the requirements set out in this Appendix are met, approval may be granted. Provided that CARC considers proper supervision to be possible, training will be confined to all or part of the ATP(H) integrated course (see Appendix 1 to JCAR FCL2.305).
- (b) The navigation progress check as in Phase 2 in the ATP(H) integrated course may be conducted by a locally based flight instructor not connected with the applicant's training, provided that the instructor holds a JCAR FCL 2 license containing FI privileges, as appropriate. On completion of the required training, the skill test for a CPL(H) in the ATP(H) integrated course may be taken with a locally based Flight Examiner (Helicopter) (FE(H)), provided that the examiner is authorised in accordance with JCAR FCL 2 Subpart I and completely independent from the relevant FTO.
- (c) The skill test for the instrument rating is to be taken in Jordan at the discretion of CARC. A FTO providing approved training for the instrument rating outside Jordan will need to arrange for the approved course to include acclimatization flying in Jordan prior to any student taking the instrument rating skill test.
- (d) Instruction for ATPL theoretical knowledge may be given at an FTO conducting approved training outside Jordan. The theoretical knowledge examinations for license or rating issue shall be conducted by CARC (see JCAR FCL2.485). The arrangements for testing (see JCAR FCL2.030) shall be carefully considered in regard to their training outside Jordan.
- (e) Instruction may only be given under the direct control of a CFI(H) or nominated deputy holding a JCAR FCL2 license and instructor rating as set out in paragraph 15 of Appendix 1a to JCAR FCL2.055, who is to be present when training is given outside Jordan.

**Appendix -1c to JCAR FCL2.055****Additional Requirements for training in FTOs whose principal place of business and registered offices are located outside Jordan .**

(See JCAR FCL2.055(a)(2), (See Appendix 1a to JCAR FCL2.055),

(See Appendix 1 to JCAR FCL2.305)

**APPROVAL PROCESS**

1. FTOs whose principal place of business and registered office are located outside the JORDAN States wishing to train for JCAR FCL2 licenses and associated ratings shall apply for approval of such courses to CARC. An Approval will be subject to:

(a) The FTO shall meet the requirements of Appendix 1a to JCAR FCL2.055 and any additional requirements of this Appendix; and

(b) CARC considers it possible to discharge its regulatory responsibilities for the approval process and an adequate level of supervision as required by the agreed procedures. The cost and process of approval and supervision shall not put undue burden on the resources of CARC; and

(c) CARC can ensure adequate jurisdiction over the FTO during the approval process and the conduct of subsequent training courses.

(d) The civil Aviation Authority of the ICAO MEMBER State in which the FTO has its principal place of business and registered office may assist CARC in the approval process and provide oversight of training courses subject to an arrangement being agreed on.

2. Subject to satisfactory inspection, the approval of the FTO will be granted for a period of one year, revalidation of the approval may be granted for further periods of one year.

**JURISDICTION**

3. In the context of approval of FTOs located outside JORDAN, the term, 'adequate jurisdiction' shall mean that CARC shall be able to:

(a) conduct initial and routine inspections of the FTO located in that ICAO MEMBER State to ensure compliance with the requirements of JCAR FCL2; and

(b) conduct flight tests and other standardisation checks as deemed necessary by CARC; and

(c) discharge its legal responsibilities for the grant, variation, suspension or revocation of approvals in accordance with the applicable law.

CARC may, subject to an arrangement between ICAO MEMBER State in which the FTO has its principal place of business and registered office, delegate responsibility for the provisions of paragraph 3(a) above to that ICAO MEMBER state authority.

**FTOs TRAINING FOR PROFESSIONAL LICENSES AND RATINGS**

4. Provided that the requirements set out in this Appendix are met, approval may be granted if CARC considers adequate supervision in accordance with procedures to be possible.
5. The skill test for the Instrument Rating shall be conducted in Jordan. FTOs shall arrange for the approved course to include acclimatization flying within Jordan prior to any student taking the instrument rating skill test with an examiner authorized by CARC.
6. The navigation progress test in Phase 2 of the ATP(H) integrated course may be conducted by a locally- based FI(H) approved by CARC and not connected with the applicant's training, provided that the instructor holds a JCAR FCL2 license containing FI(H), as appropriate. On completion of the required training, the skill test for the CPL(H) of the ATP(H) integrated course may be taken with a locally- based FE(H) designated and authorised by CARC, provided that the examiner is authorised in accordance with JCAR FCL2 Subpart I and completely independent from the FTO except with the expressed consent in writing of CARC.

**FTOs TRAINING FOR THE PPL(H) AND ASSOCIATED RATINGS ONLY.**

7. Provided that the requirements of this Appendix are met, approval to conduct courses for the JCAR FCL2 PPL(H) and associated ratings may be granted if CARC considers adequate supervision in accordance with JCAR FCL2 procedures to be possible.
8. Training helicopters, airfields and navigation training routes used for PPL(H) training shall be acceptable to CARC.
9. On completion of the required training the PPL(H) skill test may be taken by a locally-based FE(H) authorised by CARC provided that the examiner has taken no part in the student's flight instruction.
10. The Training and Operations Manuals required by Appendix 1a to JCAR FCL2.055 may, for FTOs conducting training for the PPL(H) and associated ratings only, be combined and contain only those references relevant to training for the PPL(H).

**THEORETICAL KNOWLEDGE**

11. Training for theoretical knowledge may be given at an FTO conducting approved training outside JORDAN. The theoretical knowledge examinations for license or rating issue shall be conducted by CARC (see JCAR FCL2.485).

**Appendix -2 to JCAR FCL2.055****Type Rating Training Organisations for the issue of type ratings only to pilot license holders.**

(See also JCAR FCL2.261(c) and (d) for approval of courses), (See JCAR

FCL2.055),(See also JCAR FCL2.261(c)&(d) for approval of courses), (See IEM No. 1 to JCAR FCL2.055), (See IEM No. 2 to JCAR FCL2.055), (See IEM No. 3 to JCAR FCL2.055), (See AMC JCAR FCL2.261(c)(2))

## INTRODUCTION

1. A Type Rating Training Organisation (TRTO) is an organisation staffed, equipped and operated in a suitable environment offering type rating training, and/or MCC-training, and/or synthetic flight instruction and, if applicable, theoretical instruction for specific training programmes.
2. A TRTO wishing to offer approved training to meet JCAR FCL2 requirements shall obtain the approval of CARC. No such approval will be granted by CARC unless:
  - (a) CARC can enforce the JCAR FCL2 requirements; and
  - (b) the TRTO meets all requirements of JCAR FCL2.

This Appendix gives the requirements for the issue, revalidation and variation of the approval of a TRTO.

## OBTAINING APPROVAL

3. A TRTO seeking approval shall provide to CARC operations and training manuals, including quality systems, and descriptions of its training schemes as required by paragraph 17 and 26 through 27. After consideration of the application, the TRTO will be inspected to ensure that it meets the requirements set out in this Appendix. Subject to satisfactory inspection, approval of the TRTO will initially be granted for a period of one year, revalidation of the approval may be granted for further periods of up to three years. CARC is not obliged to grant an approval for a TRTO outside Jordan if the personnel resources are not available or the cost of processing the application for approval and inspections puts undue burden on CARC.
4. All training courses shall be approved.
5. Approval will be varied, suspended or revoked by CARC if any of the approval requirements or standards cease to be maintained to the minimum approved level.
6. If a TRTO wishes to make changes to an approved course or to its operations or training manual the approval of CARC shall be obtained before the changes are implemented. TRTOs need not advise CARC of minor changes in day-to-day operations. Where any doubt exists as to whether a proposed change is minor, CARC shall be consulted.
7. A TRTO may make contractual training arrangements with other

training organisations or make use of alternative base aerodromes as part of its overall training organisation, subject to the approval of CARC.

## FINANCIAL RESOURCES

8. (a) A TRTO shall satisfy CARC that sufficient funding is available to conduct flying training to the approved standards. (See IEM No. 2 to JCAR FCL2.055)

(b) A TRTO shall nominate a person acceptable to CARC who shall satisfy CARC that sufficient funding is available to conduct training to approved standard. Such person shall be known as the Accountable Manager.

## INSPECTION

9. In addition to the initial inspection, CARC will make certain inspections to determine the TRTO's compliance with JCAR FCL2 requirements and the approval.

10. During such visits, access shall be given by the TRTO to training records, authorisation sheets, technical logs, lectures, study notes and briefings and any other relevant material. A copy of any report on a visit to a TRTO will be made available to that TRTO.

## MANAGEMENT AND STAFFING

11. The management structure shall ensure supervision of all grades of staff by persons having the experience and qualities necessary to ensure the maintenance of high standards. Details of the management structure, indicating individual responsibilities, shall be included in the TRTO's Operations Manual.

12. A Head of Training (HT) acceptable to CARC shall be nominated. The HT's responsibilities shall include ensuring that the TRTO is in compliance with JCAR FCL2 requirements. This person is ultimately directly responsible to CARC.

13. The TRTO shall have adequate personnel necessary to accomplish the training objectives. The duties of each instructor shall be identified and documented.

## TYPE RATING INSTRUCTOR

14. Type Rating Instructors (TRI) shall hold:

(a) a professional pilot license and rating(s) related to the flying training courses they are appointed to conduct;



- (b) a type rating instructor rating for the helicopters used on the course(s); or
- (c) an authorisation from CARC to conduct specific training in a TRTO (see JCAR FCL2.305).

#### INSTRUCTORS FOR SYNTHETIC FLIGHT TRAINING (SFI and STI)

15. For flight training, instructors shall hold or have held, 3 years prior to the first appointment, a professional pilot license, except for SFIs having an authorisation according to item 3 of Appendix 1 to JCAR FCL2.005 and STIs having an authorisation according to item 4 of Appendix 1 to JCAR FCL2.005, and have instructional experience appropriate to the training courses they are appointed to conduct. For multi-pilot type rating and/or MCC flight training on a flight simulator and/or FTD, and/or FNPT II/III, instructors shall hold a TRI(MPH) rating or a SFI(H) authorisation.

#### THEORETICAL KNOWLEDGE INSTRUCTION.

16. The theoretical knowledge instruction shall be conducted by an authorised instructor holding the appropriate type rating or any instructor having appropriate experience in aviation and knowledge of the aircraft concerned, e.g. flight engineer, maintenance engineer, flight operations officer.

#### TRAINING STANDARDS.

17. The TRTO shall establish a system to ensure that the training centre operations and training are run efficiently and effectively. The quality system shall determine the effectiveness of TRTO policies, procedures, and training.

**RECORDS.**

18. A TRTO shall maintain the following records and retain for a period of at least 5 years, using appropriate administrative staff:

(a) pilot trainee's assessments before and during the course;

(b) details of theoretical knowledge, flying, and simulated flight training given to individual trainees; and

(c) personal information, (expiry dates of medical certificates, ratings, etc.) related to TRTO's personnel.

19. The format of the trainee's training records shall be specified in the Training Manual.

20. The TRTO shall submit training records and reports as required by CARC.

**TRAINING PROGRAMME.**

21. A training programme shall be developed for each type of course offered. This programme shall include a breakdown of flying and ground training in either a week-by-week or phase presentation, a list of standard exercises and a syllabus summary. In particular, synthetic flight training and theoretical knowledge instruction shall be phased in such a manner as to ensure that trainees shall be able to apply to flying exercises the knowledge gained on the ground. Arrangements should be made so that problems encountered in instruction can be resolved during subsequent flight training.

**TRAINING HELICOPTERS.**

22. Each helicopter must be equipped as requested in the training specifications concerning the approved course in which it is used, and shall be IFR certificated (if applicable).

**FACILITIES.**

23. Suitable training facilities shall be provided.

**REQUIREMENTS FOR ENTRY TO TRAINING**

24. The TRTOs shall be responsible for ensuring that trainees meet at least the pre-requisite conditions for type rating training as set out in JCAR FCL2.250 or JCAR FCL2.255, as applicable.

**TRAINING MANUAL AND OPERATIONS MANUAL.**

25. A TRTO shall provide and maintain a Training Manual and an Operations Manual containing information and instructions to enable staff to perform their duties and to give guidance to trainees on how to comply with course requirements. A TRTO shall make available to staff and, where appropriate, to trainees the information contained in the Training Manual, the Operations Manual and the TRTO's approval documentation. The amendment procedure shall be stated and amendments properly controlled.

26. The Training Manual shall state the standards, objectives and training goal for each phase of training that the trainees are required to comply with, including stating the entry requirements for each course, as applicable. It shall include the following:

Part 1 - The Training Plan

Part 2 - Briefing and Air Exercises

Part 3 - Synthetic Flight Training

Part 4 - Theoretical Knowledge Instruction

For further guidance see IEM No. 3 to JCAR FCL2.055.

27. The Operations Manual shall provide relevant information to particular groups of staff, e.g. TRIs, synthetic flight instructors, ground instructors, operations and maintenance staff, etc. and shall contain the following:

(a) General

(b) Technical

(c) Route

(d) Staff Training

For further guidance see IEM No. 3 to JCAR FCL2.055.

**Appendix-3 to JCAR FCL2.055****Approval of Modular Theoretical Knowledge Distance Learning Courses.**

(See Appendix 1 to JCAR FCL2.130 & 2.135), (See Appendix 1 to JCAR FCL2.160 & 2.165(a)(3)), (See Appendix 1 to JCAR FCL2.205), (See Appendix 1 to JCAR FCL2.255), (See Appendix 1 to JCAR FCL2.285), (See ACJ JCAR FCL2.160 & 2.165(a)(3), 2.205 & 2.285)

Reserved.

**Appendix- 1 to JCAR FCL2.075 Specifications for flight crew licenses.****GENERAL**

1. A valid license including and a valid medical certificate has always to be carried by the pilot when exercising the privileges of the license.
2. A document containing a photo shall be carried for purposes of identification of the holder of the license.
3. Any medical endorsements (e.g. use of spectacles, etc.) will be entered on the medical certificate (see JCAR FCL3 or IEM to JCAR FCL3 Annex 3.100).
4. In this subpart, the 'Authority' is CARC issuing a license.

## (FRONT BAGE)

<b>I. THE HASHEMITE KINGDOM OF JORDAN</b> Civil Aviation Regulatory Commissior. <b>AMMAN</b>		<b>المملكة الأردنية الهاشمية</b> <b>هيئة تنظيم الطيران المدني</b> <b>عمان</b>
<b>IV. This certifies that</b> ..... تشهد أن		
<b>VI. Address</b> ..... العنوان		
<b>IX. Has been found to be properly qualified to exercise the privileges of :</b> قد أصبح مؤهلاً لامتيازات إجازة :		<div style="border: 1px solid black; padding: 5px; text-align: center;"> <b>PHOTO</b> </div>
<b>II.</b> .....		
<b>III. CARC Lic.No.:</b> ..... رقم الإجازة:		
<b>VIII. Holder's Sign.</b> .....		

## (BACK BAGE)

<b>VII. Nationality</b> .....	الجنسية
<b>V. Date of Birth</b> .....	تاريخ الولادة
<b>XIII. Rating and Limitations:</b> .....	
<b>XVI. English Proficiency : Expiry Date</b>	<b>Level :</b>
<b>Issue Date:</b> .....	<b>XII.</b>
<b>IX. Renwal Date:</b> .....	رئيس مجلس المفوضين
<b>Expiry Date:</b> .....	<b>XI. Chief Commissioner/CEO.</b>
CARC / AWOPS FORM 266 A (Nov. 2007)	

For revalidation of proficiency checks for type, and instrument ratings, the standard CARC license format allows for these pages to have entries made in the license by the examiner undertaking the proficiency checks. Alternatively, at the discretion of CARC, revalidating entries may only be made by CARC.

If a proficiency check performed on a multi-engine helicopter includes the IR part of the check, this will revalidate the IR(H) (with restrictions, if any). If the IR part of a proficiency check is not performed, and IR proficiency checks on other helicopters do not carry across corresponding IFR privileges, the examiner will indicate 'VFR' against the revalidation of that rating.

Instructor ratings may also at the discretion of CARC be revalidated in the license by the examiner who forms a part of the revalidation process. If an examiner is not involved in the revalidation process, the rating entry will be made by CARC.

Ratings that are not validated will be removed from the license at the discretion of CARC and not later than 5 years from the last revalidation.

XII

Rating	Date of test	Valid until	Examiners authorisation no.	Examiners signature

*(Each page will contain 10 spaces for initial issue and revalidation of ratings)*

Page 8:

Abbreviations used in this licence	
PPL	
ATPL	
CPL	
IR	
SE	
ME	
MPH	
SPL	
R/T	
T/R	
FI	
TRI	
IRI	

*[e.g. ATPL (Airline Transport Pilot Licence), CPL (Commercial Pilot Licence), IR (Instrument rating), R/T (Radio Telephony), FI (Flight Instructor), etc....*

**SUBPART- B**  
**STUDENT PILOT (Helicopter)**

**FCL2.085 Requirements.**

(a) A student pilot shall meet requirements specified by CARC. In prescribing such requirements CARC shall ensure that the privileges granted would not permit student pilots to constitute a hazard to air navigation.

(b) A student pilot shall holds a secondary school certificate (Passed Tawjeehi) or equivalent.

(c) A student pilot shall not fly solo unless authorised by a flight instructor.

**FCL2.090 Minimum age.**

A student pilot shall be at least 17 years of age before the first solo flight.

**FCL2.095 Medical fitness**

A student pilot shall hold a valid Class 1 medical certificate in accordance with part FCL3 before the first solo flight (class 2 medical certificate for PPL only).

**SUBPART- C**  
**PRIVATE PILOT LICENSE (Helicopter) – PPL(H)**

**FCL2.100 Minimum age**

An applicant for a PPL(H) shall be at least 17 years of age.

**FCL2.105 Medical fitness**

An applicant for a PPL(H) shall hold a valid Class 1 or 2 medical certificate In order to exercise the privileges of a PPL(H) . Class 2 medical certificate shall be held(for PPL only).

**FCL2.110 Privileges and conditions.****(a) Privileges.**

Subject to any other conditions specified in JCAR's the privileges of the holder of a PPL(H) are to act, but not for remuneration, as pilot-in-command or co-pilot of any helicopter engaged in non-revenue flights.

**(b) Conditions**

(1) An applicant for a PPL(H) who has complied with the conditions specified in JCAR FCL2.100, 2.105, 2.120, 2.125(a) and (b), 2.130, 2.135, 2.261(a) [and, if applicable, 2.010(a)(4) shall have fulfilled the requirements for the issue of a PPL(H) including at least the type rating for the helicopter used in the skill test.

(2)If the privileges of the license are to be exercised at night, the holder shall have complied with JCAR FCL2.125(c).

**FCL2.115 Reserved.****FCL2.120 Experience and crediting.**

An applicant for a PPL(H) shall have completed at least 45 hours flight time as a pilot of helicopters; a total of 5 hours of this 45 hours may have been completed in a FNPT or a flight simulator. Holders of pilot licenses or equivalent privileges for aeroplanes, micro lights having fixed wings and moveable aerodynamic control surfaces acting in all three dimensions, micro light helicopters, gyroplanes, gliders, self-sustaining gliders or self-launching gliders may be credited with 10% of their total flight time as pilot-in- command in such aircraft up to a maximum of 6 hours towards a PPL(H).

**FCL2.125 Training course.**

(See Appendix 1, 2 and 3 to JCAR FCL2.125), (See AMC JCAR FCL2.125).



(a) General.

An applicant for a PPL(H) shall complete at a FTO or an accepted registered facility the required instruction in accordance with the syllabus as set out in Appendix 1 to JCAR FCL2.125. A registered facility is limited to giving training on single-engine helicopters with a maximum certificated seating capacity of not more than 4 persons. In exceptional circumstances existing SE training helicopters may continue to be used when approved in registered facilities for PPL training by CARC under the terms of an exemption. The requirements for registration are set out in Appendix 2 and 3 to JCAR FCL2.125.

(b) Flight instruction.

An applicant for a PPL(H) shall have completed on one type of helicopter, having a certificate of airworthiness issued or accepted by CARC, at least 25 hours dual instruction, to include at least 5 hours instrument dual instruction time, and at least 10 hours of supervised solo flight time, including at least five hours of solo cross-country flight time with at least one cross-country flight of at least 185km (100NM), during which full stop landings at two aerodromes different from the aerodrome of departure shall be made.

(c) Night qualification:

(1) If the privileges of the license are to be exercised at night, the holder of a PPL(H) shall have a night qualification in accordance with Appendix 4 to JCAR FCL2.125.

(2) An applicant who holds, or has held, an IR(A) shall complete in accordance with Appendix 4 to JCAR FCL2.125 exercises 4 to 6, and shall complete a minimum of 5 hours helicopter dual instrument instruction time for exercises 1 to 3 at the discretion of a FI.

(3) This qualification will be endorsed on the license.

**FCL2.130 Theoretical Knowledge Examination.**

(See Appendix 1 to JCAR FCL2.130 and 2.135)

The applicant for a PPL(H) shall have demonstrated to CARC a level of theoretical knowledge appropriate to the privileges granted to the holder of a PPL(H). The requirements and procedures for the theoretical knowledge examinations are set out in Appendix 1 to JCAR FCL2.130 & 2.135 and JCAR FCL2.261(a).

**FCL2.135 Skill.**

(See Appendix 1 to JCAR FCL2.130 and 2.135)

An applicant for a PPL(H) shall have demonstrated the ability to perform as pilot-in-command of a helicopter the relevant procedures and maneuvers

described in Appendix 1 to JCAR FCL2.130 and 2.135 and Appendix 2 to JCAR FCL2.135 with a degree of competency appropriate to the privileges granted to the holder of a PPL(H). The skill test shall be taken within six months of completing the flight instruction (see JCAR FCL2.125(a))

### **Appendix- 1 to JCAR FCL2.125**

#### **PPL(H) Training Course- Summary.**

(See JCAR FCL2.125), (See AMC JCAR FCL2.125)

1. The aim of the PPL(H) course is to train the student pilot to fly safely and efficiently under Visual Flight Rules.

#### **THEORETICAL KNOWLEDGE INSTRUCTION**

2. The theoretical knowledge syllabus of the PPL(H) course shall cover the following:

Air Law, Aircraft General Knowledge, Flight Performance and Planning, Human Performance and Limitations, Meteorology, Navigation, Operational Procedures, Principles of Flight and Communication. Further details of all theoretical knowledge instruction are set out in AMC JCAR FCL2.125.

#### **FLIGHT INSTRUCTION**

3. The PPL(H) flight instruction syllabus shall cover the following:
  - (a) pre-flight operations, including mass and balance determination, helicopter inspection and servicing;
  - (b) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;
  - (c) control of the helicopter by external visual reference;
  - (d) take-offs, landings, hovering, look out turns and normal transitions from and to the hover;
  - (e) emergency procedures, basic autorotations, simulated engine failure, ground resonance recovery if relevant to type;
  - (f) sideways and backwards flight, turns on the spot;
  - (g) incipient vortex ring recognition and recovery;
  - (h) touchdown autorotations, simulated engine-off landings, practice forced landings.

Simulated equipment malfunctions and emergency procedures relating to malfunctions of engines, controls, electrical and hydraulic circuits;

- (i) steep turns;
- (j) transitions, quick stops, out of wind maneuvers, sloping ground landings and take-offs;
- (k) limited power and confined area operations including selection of and operations to and from unprepared sites;
- (l) flight by sole reference to basic flight instruments including completion of a level 180° turn and recovery from unusual attitudes to simulate inadvertent entry into cloud (this training may be conducted by an FI(H));
- (m) cross-country flying by using visual reference, dead reckoning and, where available, radio navigation aids;
- (n) operations to, from and transiting controlled aerodromes; compliance with air traffic services procedures, communication procedures and phraseology;

### **TRAINING AND TESTING HELICOPTER(S)**

4. An adequate number of training and testing helicopters appropriate to the courses of training and testing shall be provided. Each helicopter shall be fitted with duplicated primary flight controls for use by the instructor and the student. Swing-over flight controls shall not be acceptable. The helicopter(s) shall include, as appropriate to the courses of training, helicopter(s) suitable for auto-rotation demonstration and helicopter(s) suitably equipped to simulate instrument meteorological conditions, and suitably equipped for the instrument flight training and testing required. For flight training and testing for IR(H), an adequate number of IFR certificated helicopters shall be available.

Helicopters used for training shall be approved by CARC for training purposes.

### **AERODROMES AND SITES.**

5. The base aerodrome, and any alternative base aerodrome, at which training is being conducted shall meet the following requirements.

- (a) Have at least one runway or take-off/landing area that allows training

helicopter to make a normal take-off or landing at the maximum take-off or maximum landing mass authorised, and touch down autorotation as appropriate:

- (i) under calm wind (not more than four knots) conditions and temperatures equal to the mean high temperature for the hottest month of the year in the operating area;
  - (ii) clearing all obstacles in the take-off flight path by at least 50 feet;
  - (iii) with the powerplant operation and the landing gear (if applicable) recommended by the manufacturer; and
  - (iv) with a smooth transition from lift-off to the best rate of climb speed without exceptional piloting skills or techniques.
- (b) Have a wind direction indicator that is visible at ground level from the ends of each runway, take-off/landing area.
- (c) Have adequate runways/take-off/landing area lights if used for night training.
- (d) Have available a means of air/ground communications acceptable to CARC.

6. Sites shall be available for:

- confined area operation training
- simulated engine off autorotation
- sloping ground training

*(For all details see AMC JCAR FCL2.125.)*

**Appendix-2 to JCAR FCL2.125**  
**Registration Of Facilities For PPL Instruction Only**  
(See JCAR FCL2.125(a))

1. Application for acceptance of registration shall be made by the owner or responsible person in charge of the facility to CARC which will provide the applicant with a registration form.
2. The application form for registration shall contain the information as shown in Appendix 3 to JCAR FCL2.125.
3. Upon receipt of the completed application form CARC will register the facility to conduct PPL training within the State, at the discretion of CARC, without formal approval procedure, unless it has reason to doubt that the instruction can be carried out safely. CARC will inform the applicant to this effect.
4. Any changes to the information entered on this form shall be communicated to CARC.
5. The facility will remain registered until CARC is informed by its operator that PPL training is to cease, or CARC establishes that instruction is not being carried out safely and/or in compliance with JCAR FCL 2. In both these situations the registration of the facility will be revoked.

**Appendix- 3 to JCAR FCL2.125****Contents of an application form for registration of a facility for PPL instruction.**

(See JCAR FCL2.125)

a	Name and address under which the facility operates, i.e. Club, School, Group;
b	Name of Owner(s);
c	Date of intended commencement of operations;
d	Name, address and telephone number of FI's and qualifications;
e	(i) Name and address of aerodrome, if applicable, from which training operations are to be conducted; (ii) Name of aerodrome operator;
f	List of helicopters to be used, including any means of synthetic flight instruction (if applicable) to be used by the facility, stating: Type of helicopters, Registration(s), Registered Owner(s), C of A Categories;
g	Type of training to be conducted by the facility: Theoretical knowledge instruction for PPL(H) (see JCAR-FCL 2.130) Flight instruction for PPL(H) with associated single-engine type rating (see JCAR-FCL 2.125(a)) Night qualification Others (specify) (see JCAR-FCL 2.017)
h	Details of aircraft insurance held;
i	State whether your facility intends to operate full or part time;
j	Any additional information CARC may require;
k	A declaration below by the applicant that the information provided in (a) to (j) above is correct and that training will be conducted in accordance with JCAR-FCL 2.
Date:	
Signature:	

**Appendix- 4 to JCAR FCL2.125**  
**PPL(H) Night Qualification Course.**  
(See JCAR FCL2.125(c))

1. The aim of the course is to qualify PPL(H) holders to exercise the privileges of the license at night.
2. A holder of PPL(H) applying for a night qualification shall have completed at least 100 hours of flight time as pilot of helicopters after the issue of the license, including at least 60 hours as PIC of helicopters and 20 hours cross-country flight.
3. The course shall be completed within 6 months.
4. For license endorsement a certificate of satisfactory completion of the course shall be issued by the FI or Head of Training.

**THEORETICAL KNOWLEDGE**

5. The theoretical knowledge syllabus shall comprise at least five hours of instruction, covering the revision and/or explanation of:

- night VMC minima
- rules regarding airspace control at night and facilities available
- rules regarding aerodrome ground/runway/landing site/obstruction lighting
- aircraft navigation lights and collision avoidance rules
- physiological aspects of night vision and orientation
- dangers of disorientation at night
- dangers of weather deterioration at night
- instrument systems/functions and errors
- instrument lighting and emergency cockpit lighting systems
- map marking for use under cockpit lighting
- practical navigation principles
- radio navigation principles
- planning and use of safety altitude
- danger from icing conditions, avoidance and escape maneuvers

**FLYING TRAINING**

6. In all cases, exercises 4 to 6 of the night qualification flight syllabus shall be completed.
7. For exercises 1 to 3, up to 50 % of the required flight training may be completed in a STD(H)  
  
(- to be developed -). However, all items within each exercise must be practised in a helicopter in flight.
8. Items marked (\*) shall be completed in simulated IMC and may be completed in daylight.
9. Exercises 1 to 3 of flying training syllabus shall comprise at least 10 hours instruction.
10. Exercises 4 to 6 of flying training syllabus shall comprise at least 5 hours, including at least 3 hours dual instruction and 5 solo night circuits. Each circuit shall include a take-off and a landing.
11. The flying exercises shall comprise:
  - Exercise 1  
(repeat as necessary until the student achieves a safe and competent standard)
    - revise basic maneuvers when flying by sole reference to instruments\*
    - explain and demonstrate transition to instrument flight from visual flight\*
    - explain and revise recovery from unusual attitudes by sole reference to instruments\*
  - Exercise 2  
(repeat as necessary until the student achieves a safe and competent standard)
    - explain and demonstrate use of radio navigation aids when flying by sole reference to instruments, to include position finding and tracking\*
  - Exercise 3  
(repeat as necessary until the student achieves a safe and competent standard)
    - explain and demonstrate the use of Radar Assistance \*
  - Exercise 4  
(repeat as necessary until the student achieves a safe and



competent standard)

- explain and demonstrate use and adjustment of landing light
  - explain and demonstrate night hovering:
    - higher and slower than by day
    - avoidance of unintended sideways or backwards movements
  - explain and demonstrate night take-off techniques
  - explain and demonstrate night circuit technique
  - explain and demonstrate night approaches (constant angle) with or without visual approach aids to:
    - heliports
    - illuminated touchdown areas
    - practise take-off's, circuits and approaches
    - explain and demonstrate night Emergency procedures to include:
      - simulated engine failure,  
(to be terminated with power recovery at a safe altitude)
      - simulated engine failure including single engine approach and landing, (multi- engine only)
      - simulated inadvertent entry to IMC (not on base leg or final)
      - simulated hydraulic control failure (to include landing)
      - internal and external lighting failure
      - other Malfunctions and Emergency procedures as required by the Aircraft Flight Manual
- Exercise 5
    - solo night circuits
  - Exercise 6
    - explain and demonstrate night cross country techniques
    - practise night cross country dual and as SPIC to a satisfactory standard

### **Appendix -1 to JCAR FCL2.130 & 2.135**

#### **Theoretical knowledge examination and skill test for the PPL(H).**

(See JCAR FCL2.130 and 2.135)

#### **THEORETICAL KNOWLEDGE EXAMINATION**

1. This procedures for the conduct of the PPL examination will be determined by CARC. This examination shall be in written form and may be taken on one or more days at the discretion of CARC and shall comprise nine Subjects as indicated below. An examination paper may cover several Subjects. There shall be a total of at least 120 questions. The times shall not exceed the following:

Subject	Time (not more than)	Subdivision of times is at the discretion of CARC
Air Law and ATC Procedures		
Aircraft General Knowledge		
Flight Performance and Planning		
Human Performance and Limitations		
Meteorology		
Navigation		
Operational Procedures		
Principles of Flight		
Communications		
Total	6Hours	

Communication practical classroom testing may be conducted at the discretion of CARC.

2. The majority of the questions shall be multiple choice.
3. The examinations will be provided in the language(s) considered appropriate by CARC. CARC shall inform applicants of the language(s) in which the examinations will be conducted.
4. A pass in a Subject will be awarded to an applicant achieving at least 75% of the marks allocated to that Subject. Marks shall only be awarded for correct answers.
5. Subject to any other conditions in JCAR FCL 2 , an applicant shall be deemed to have successfully completed the theoretical examinations for the PPL(H) when awarded a pass in all parts within a period of 18 months, counted from the end of the calendar month when the applicant first attempted an examination. A pass in the theoretical knowledge examination will be accepted for the grant of the private pilot license during the 24 months from the date of successfully completing the examinations .

### **SKILL TEST**

6. An applicant for a skill test for the PPL(H) shall have received instruction on the same type of helicopter to be used for the skill test. The applicant shall be permitted to choose to take the test on a single-engine helicopter or, subject to the experience requirement in JCAR FCL2.255 of 70 hours flight time as pilot-in-command, on a multi-engine helicopter. The helicopter used for the skill test shall meet the requirements for training helicopters (see Appendix 1 to JCAR FCL2.125).

7. The administrative arrangements for confirming the applicant's suitability to take the test, including disclosure of the applicant's training record to the examiner, will be determined by CARC.
8. An applicant shall pass sections 1 through 5 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 one section shall take the failed section again. Failure in any items of the re-test and failure in any other items already passed, will require the applicant to take the entire test again. All sections of the skill test shall be completed within six months.
9. Further training may be required following any one failed skill test. Failure to achieve a pass in all sections of the test in two attempts will require further training as determined by CARC. There is no limit to the number of skill tests that may be attempted.

### **CONDUCT OF THE TEST**

10. CARC will provide the FE with adequate safety advice to ensure that the test is conducted safely.
11. Should the applicant choose to terminate a skill test for reasons considered inadequate by the 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.
12. 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 skill requires a complete re-test.
13. An applicant shall be required to fly the helicopter from a position where the pilot-in-command functions can be performed and to carry out the test as if there is no other crew member. Responsibility for the flight shall be allocated in accordance with national regulations.
14. The area and route to be flown shall be chosen by the FE and all low level and hover work shall be at an accepted aerodrome/site. Routes used for section 3 may end at the aerodrome of departure or at another 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 navigation section of the test, as set out in Appendix 2 to JCAR FCL2.135 shall consist of at least 3 legs, each leg of a minimum duration of 10 minutes. The skill test may be conducted in 2 flights.
15. 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 authorised check list or pilot operating handbook for the helicopter 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 helicopter used.

16. The FE will take no part in the operation of the helicopter except where intervention is necessary in the interests of safety or to avoid unacceptable delay to other traffic.

### **FLIGHT TEST TOLERANCE**

17. The applicant shall demonstrate the ability to:

- operate the helicopter within its limitations;
- complete all manoeuvres with smoothness and accuracy;
- exercise good judgment and airmanship;
- apply aeronautical knowledge; and
- 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.

18. The following limits are for general guidance. The FE will make allowance for turbulent conditions and the handling qualities and performance of the helicopter used.

**Height**

- . →Normal forward flight..... ± 150 feet
- With simulated major emergency..... ± 200 feet
- Hovering I.G.E. flight .....± 2 feet

**Heading / Tracking of radio aids**

- Normal flight .....± 10°
- with simulated major emergency .....± 15°

**Speed**

- Take-off approach..... - 10 knots/+15 knots
- All other flight regimes..... ± 15 knots

**Ground drift**

- T.O. hover I.G.E.....± 3 feet

landing no sideways or backwards movement

**CONTENT OF THE SKILL TEST**

19. The skill test contents and sections set out in Appendix 2 to JCAR FCL2.135 shall be used for the skill test for the issue of a PPL(H) on single- or multi-engine helicopters . Where the skill test is taken on a multi-engine helicopter, the applicant shall fulfill the requirement of JCAR FCL2.255. The format and application form for the skill test may be determined by CARC (see IEM JCAR FCL2.135).

**Appendix- 2 to JCAR FCL2.135****Contents of the skill test for the issue of a PPL(H).**

(See JCAR FCL2.135), (See IEM JCAR FCL2.135)

Note: Use of checklist, airmanship, control of helicopter by external visual reference, anti-icing procedures, etc., apply in all sections.

<b>SECTION 1 PRE-FLIGHT/POST-FLIGHT CHECKS AND PROCEDURES</b>	
a	Helicopter knowledge, (e.g. technical log, fuel, mass and balance, performance), Flight Planning, 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
<b>SECTION 2 HOVER MANOEUVRES, ADVANCED HANDLING AND CONFINED AREAS</b>	
a	Take-off and landing (lift off and touch down)
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 STOP 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

<b>SECTION 3 NAVIGATION - EN ROUTE PROCEDURES</b>	
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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 reestablishment of correct track, instrument monitoring
d	Observation of weather conditions, diversion planning
e	Use of navigation aids (where available)
f	ATC liaison and observance of regulations, etc
<b>SECTION 4</b>	
<b>FLIGHT PROCEDURES AND MANOEUVRES</b>	
a	Level flight, control of heading, altitude/height and speed
b	Climbing and descending turns to specified headings
c	Level turns with up to 30°bank, 180° to 360° left and right
d	Level turns 180° left and right by sole reference to instruments
<b>SECTION 5</b>	
ABNORMAL AND EMERGENCY PROCEDURES (SIMULATED WHERE APPROPRIATE)	
<p>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.</p> <p>Note (2) The FE shall select 4 items from the following:</p>	
a	Engine malfunctions, including governor failure, carburetor/engine icing, oil system, as appropriate
b	Fuel system malfunction
c	Electrical system malfunction
d	Hydraulic system malfunction, including approach and landing without hydraulics, as applicable
e	Main rotor and/or anti-torque system malfunction (flight simulator or discussion only)
f	Fire drills, including smoke control and removal, as applicable
g	<p>Other abnormal and Emergency procedures as outlined in appropriate flight manual and with reference to Appendix 3 to JCAR-FCL 2.240, sections 7 and 8, including for multi-engine helicopters:</p> <ul style="list-style-type: none"> <li>- Simulated engine failure at take-off:</li> <li>- rejected take-off at or before TDP or safe forced landing at or before DPATO Defined Point After Take-off</li> <li>- shortly after TDP or DPATO</li> <li>- Landing with simulated engine failure:</li> <li>- landing or go-around following engine failure before LDP or DPBL</li> <li>- following engine failure after LDP or safe forced landing after DPBL</li> </ul>

**SUBPART- D**  
**COMMERCIAL PILOT LICENSE (Helicopter) – CPL(H)**

**FCL2.140 Minimum age.**

An applicant for a CPL(H) shall be at least 18 years of age.

**FCL2.145 Medical fitness.**

An applicant for a CPL(H) shall hold a valid Class 1 medical certificate. In order to exercise the privileges of the CPL(H) a valid Class 1 medical certificate shall be held.

**FCL2.150 Privileges and conditions.**

(See JCAR FCL2.250)

(a) Privileges. Subject to any other conditions specified in the JCARS the privileges of the holder of a CPL(H) are to:

- (1) Exercise all the privileges of the holder of a PPL(H);
- (2) Act as pilot-in-command or co-pilot of any helicopter engaged in operations other than commercial air transportation;
- (3) Act as pilot-in-command in commercial air transportation in any helicopter certificated for single-pilot operation.
- (4) Act as co-pilot in commercial air transportation in helicopters required to be operated with a co-pilot.

(b) Conditions. An applicant for a CPL(H) who has complied with the conditions specified in JCAR FCL2.140, 2.145, 2.155, 2.160, 2.165, 2.170, 2.261(a) and, if applicable, 2.010(a)(4) shall have fulfilled the requirements for the issue of at least a CPL(H) containing the type rating for the helicopter used on the skill test and, if an instrument rating course and test completed in accordance with JCAR FCL 2 Subpart E are included, the instrument rating.



**FCL2.155 Experience and crediting.**

(See Appendix 1 through 5 to JCAR FCL2.160& 2.165(a)(1))

(See AMC JCAR FCL2.160 & 2.165(a)(1) through (5))

(a) Integrated courses

(1) Experience. An applicant for a CPL(H) who has satisfactorily followed and completed an integrated flying training course shall have completed as a pilot of helicopters having a certificate of airworthiness issued or accepted by a ICAO Member State at least 135 hours of flight time.

(2) Crediting. For details on crediting of flight time required in paragraph(a)(1),see Appendix 1 to JCAR FCL2.160& 2.165(a)(1)paragraph 4 or Appendix 1 to JCAR FCL2.160 & 2.165(a)(2) paragraph 4 or Appendix 1 to JCAR FCL2.160 & 2.165(a)(3) or Appendix 1 to JCAR FCL2.160. & 2.165(a)(4).

(b) Modular courses

(1) Experience. An applicant for a CPL(H) who is not a graduate from an integrated flying training course shall have completed as a pilot on helicopters having a certificate of airworthiness issued or accepted by CARC at least 185 hours of flight time.

(2) Crediting. From the 185 hours of flight time:

(i) 20 hours as pilot-in- command holding a PPL(A); or

(ii) 50 hours as pilot-in- command holding a CPL(A) may have been completed in aeroplanes; or

(iii) 10 hours as pilot-in- command in touring motor gliders or gliders.

(c) Flight time. The applicant shall have completed in helicopters at least (see also JCAR FCL2.050 (a)(3)):

(1) 50 hours as pilot-in-command.

(2) 10 hours of cross-country flight time as pilot-in-command, including a cross-country flight totaling at least 185 km (100 NM) in the course of which full-stop landings at two Aerodromes different from the aerodromes of departure shall be made;

(3) 10 hours of instrument dual instruction time, of which not more

than 5 hours is to be instrument ground time; and

(4) 5 hours of night flight time, as set out in JCAR FCL2.165(b).

**FCL2.160 Theoretical Knowledge.**

(See Appendix 1 to JCAR FCL2.160 & 2.165(a)(1) through (5))

(See AMC JCAR FCL2.160 & 2.165(a)(1) through (5))

(a) Course.

An applicant for a CPL(H) shall have received theoretical knowledge instruction at an approved flying training organization (FTO). The course should be combined with a flying training course as set out in JCAR FCL2.165.

(b) Examination.

An applicant for a CPL(H) shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of a CPL(H) and shall meet the requirements set out in JCAR FCL2.261(a) and Subpart J.

(c) An applicant who has undertaken an integrated flying training course shall demonstrate at least the level of knowledge required by that course, as set out in the relevant Appendix 1 to JCAR FCL2.160 & 2.165(a)(1) through (4)

**FCL2.165 Flight instruction.**

(See Appendix 1 to JCAR FCL2.160 & 2.165(a)(1) through (3) and AMC JCAR FCL2.160 & 2.165(a)(1) through (3))

(a) Course. An applicant for a CPL(H) shall have completed an approved course of integrated or modular flying training (on helicopters having a certificate of airworthiness issued or accepted by CARC) at an approved flying training organisation. The course should be combined with a theoretical knowledge training course. For details of the approved courses see as follows:

(1) ATP(H)/IR integrated course

– Appendix 1 to JCAR FCL2.160 & 2.165(a)(1) and AMC JCAR FCL2.160 & 2.165(a)(1);

(2) ATP(H) integrated course

– Appendix 1 to JCAR FCL2.160 & 2.165(a)(2) and AMC JCAR FCL2.160 & 2.165(a)(2);

(3) CPL(H)/IR integrated course

– Appendix 1 to FL 2.160 & 2.165(a)(3) and AMC JCAR FCL2.160 & 2.165(a)(3);and

(4) CPL(H) integrated course

– Appendix 1 to JCAR FCL2.160 & 2.165(a)(4) and AMC JCAR FCL2.160 & 2.165(a)(4); and

(5) CPL(H) modular course

– Appendix 1 to JCAR FCL2.160 & 2.165(a)(5) and AMC JCAR FCL2.160 & 2.165(a)(5).

(b) Night training. The applicant shall have completed at least 5 hours flight time in helicopters at night comprising at least 3 hours of dual instruction, including at least 1 hour of cross-country navigation, and 5 solo take-offs and 5 full-stop landings, each to include one circuit.

**FCL2.170 Skill.**

(See Appendices 1 and 2 to JCAR FCL2.170), (See Appendix 1 to JCAR FCL2.160 & 2.165(a)(1) through (a)(5))

An applicant for a CPL(H) shall have demonstrated the ability to perform as pilot-in-command of a helicopter the relevant procedures and manoeuvres described in Appendices 1 and 2 to JCAR FCL2.170 with a degree of competency appropriate to the privileges granted to the holder of a CPL(H). An applicant shall take the skill test as required by the relevant Appendix 1 to JCAR FCL2.160 & 2.165(a)(1) through (a)(5), and AMC JCAR FCL2.160 & 2.165(1) through (5).

**Appendix- 1 to JCAR FCL2.160 & 2.165(a)(1)  
ATP(H)/IR Integrated Course.**

(See JCAR FCL2.160, 2.165 and 2.170), (See Appendix 1 and 2 to JCAR FCL2.170), (See Appendix 1 and 2 to JCAR FCL2.210), (See AMC JCAR FCL2.160 & 2.165(a)(1)), (See Appendix 1 to JCAR FCL2.470)  
(See IEM JCAR FCL2.170)

1. The aim of the ATP(H)/IR integrated course is to train pilots to the level of proficiency necessary to enable them to operate as co-pilot on multi-pilot, multi-engine helicopters in commercial air transportation and to obtain the CPL(H)/IR, but not any further specialisation (e.g. aerial work activities).
2. An applicant wishing to undertake an ATP(H)/IR integrated course shall, under the supervision of the Head of Training of an approved flying training organisation (FTO), complete all the instructional stages in one continuous approved course of training as arranged by that FTO.
3. The course shall last for between 12 and 36 months. Special arrangements may be made with the approval of CARC to extend the course beyond 36 months where additional flying training or ground instruction is provided by the FTO.
4. An applicant may be admitted to training either as an ab-initio entrant, or as a holder of a PPL(H) issued in accordance with ICAO Annex 1. An ab-initio entrant shall meet the student pilot requirements of JCAR FCL 2 Subpart B. In the case of a PPL(H) entrant, 50% of the helicopter hours flown by the entrant prior to the course may be credited towards the required flight instruction (see JCAR FCL2.165(a)(1) and Appendix 1 to JCAR FCL2.160 & 2.165(a)(1) paragraph 13), to a maximum of :
  - (a) up to 40 hours, of which up to 20 hours may be dual instruction, or
  - (b) if a helicopter night qualification has been obtained, up to 50 hours, of which up to 25 hours may be dual instruction.

This credit for the hours flown shall be at the discretion of the FTO and entered into the applicant's training record. In case of a student pilot who does not hold a pilot license and with the approval of CARC, a FTO may designate certain dual exercises (see AMC JCAR FCL2.160 & 2.165(a)(1) phase 2 and 3) to be flown in an aeroplane or a TMG up to a maximum of 20 hours.

5. An applicant failing or unable to complete the entire ATP(H)/IR course may apply to CARC for the theoretical knowledge examination and skill test for a lower license and, if applicable, an instrument rating.
6. Any applicant wishing to transfer to another FTO during a course of training shall apply to the CARC for a formal assessment of the further hours of training required at another FTO.

7.The FTO shall ensure that before being admitted to the course the applicant has sufficient knowledge of Mathematics, Physics and English language to facilitate an understanding of the theoretical knowledge instruction content of the course. On completion of the course, the required level of English shall be accordance with Appendix 1 to JCAR FCL2.200.

8. The course shall comprise:

(a) theoretical knowledge instruction to the ATPL(H) and IR knowledge level;

(b) visual and instrument flying training; and

(c) training in multi-crew co-operation for the operation of multi-pilot helicopters (see JCAR FCL2.261(d).

9. The successful completion of the type rating theoretical knowledge training and checking requirements, the theoretical knowledge examination(s) at paragraph 12 and the skill tests at paragraph 14 fulfils the theoretical knowledge and skill requirements for the issue of a CPL(H) including a type rating for the helicopter(s) used in the test(s) and an instrument rating(H).

## **THEORETICAL KNOWLEDGE**

10. The theoretical knowledge syllabus for the ATPL(H)/IR is set out in Appendix 1 to JCAR FCL2.470. The requirements for type ratings are set out in JCAR FCL2.240. An approved ATP(H)/IR theoretical knowledge course shall comprise at least 750 hours (1 hour = 60 minutes instruction) of instruction which can include classroom work, inter-active video, slide/tape presentation, learning carrels, computer based training, and other media as approved by CARC, in suitable proportions.

The 750 hours of instruction shall be divided in such a way that in each subject the minimum hours are:

Subject	hours
Air Law	40
Aircraft General Knowledge	80
Flight Performance & Planning	90
Human Performance & Limitations	50
Meteorology	60
Navigation	150
Operational Procedures	20
Principles of Flight	30

Other sub-division of hours may be agreed between CARC and the FTO.

11. The MCC course shall comprise at least 25 hours of theoretical knowledge instruction exercises. Theoretical knowledge examination

12. An applicant shall demonstrate the level of knowledge appropriate to the privileges of the holder of an ATPL(H) and an IR, in accordance with the requirements in JCAR FCL 2 Subpart J.

### FLYING TRAINING

13. The flying training shall comprise a total of at least 195 hours, to include all progress test. Within the total of 195 hours, applicants shall complete at least:

(a) 140 hours of dual instruction,

(b) 55 hours as pilot-in-command to include at least 14 hours solo day, 1 hour solo night and may include 40 hours as SPIC.

(SPIC time shall be credited as pilot-in-command time, unless the flight instructor had to influence or control any part of the flight. A ground debriefing by the flight instructor does not affect the crediting as pilot-in-command time SPIC time can be replaced by solo time);

(c) 50 hours of cross-country flight, at least 10 hours of cross country flight as student pilot-in-command including a VFR cross country flight totaling at least 185 km (100 nm) in the course of which landings at two different aerodromes from the aerodrome of departure shall be made;

(d) 5 hours flight time in helicopters shall be completed at night comprising 3 hours of dual instruction including at least 1 hour of cross-country navigation and 5 solo night circuits. Each circuit shall include a take-off and a landing; and

(e) 50 hours of dual instrument time comprising:

(i) 10 hours Basic Instrument instruction time; and

(ii) 40 hours Instrument Rating Training, which shall include at least 10 hours in a multi-engine IFR-certificated helicopter.

(f) 15 hours multi-crew co-operation.

- (g) of the 140 hours of dual instruction up to:
- (i) 75 hours visual instruction may include:
    - (1) 30 hours in a helicopter FS level C/D, or
    - (2) 25 hours in a FTD 2,3 or
    - (3) 20 hours in a helicopter FNPT II/III, or
    - (4) 20 hours in an aeroplane or TMG
  - (ii) 50 hours instrument instruction may include:
    - (1) up to 20 hours in a helicopter FS or FTD 2,3 or FNPT II/III, or
    - (2) 10 hours in at least a helicopter FTD 1 or FNPT 1 or aeroplane FNPT 1 or an aeroplane
  - (iii) 15 hours multi-crew co-operation, for which a helicopter FS or helicopter FTD 2,3(MCC) or FNPT II/III(MCC) may be used.

If the helicopter used for the flying training is of a different type from the helicopter FS used for the visual training, the maximum credit shall be limited to that allocated for the helicopter FNPT II/III.

*(See AMC-JCAR FCL2.160 & 2.165(a)(1) for flight instruction syllabus.)*

## **SKILL TESTS.**

14. On completion of the related flying training the applicant shall take the CPL(H) skill test on a multi-engine helicopter in accordance with Appendix 1 and 2 to JCAR FCL2.170 and the instrument rating skill test on either a multi-engine or a single-engine helicopter in accordance with Appendix 1 and 2 to JCAR FCL2.210 and such other tests as are required by JCAR FCL2.262(c).

### **Appendix -1 to JCAR FCL2.160 & 2.165(a)(2)**

#### **ATP(H) integrated course (No Instrument Rating).**

(See JCAR FCL2.160, 2.165 and 2.170), (See Appendix 1 and 2 to JCAR FCL2.170), (See AMC JCAR FCL2.160 & 2.165(a)(2)), (See Appendix 1 to JCAR FCL2.470), (See IEM-JCAR FCL2.170)

1. The aim of the ATP(H) integrated course is to train pilots to the level of proficiency necessary to enable them to operate as co-pilot on multi-pilot, multi-engine helicopters limited to VFR privileges in commercial air transportation and to obtain the CPL(H) but not any further specialisation (e.g. aerial work activities).

2. An applicant wishing to undertake an ATP(H) integrated course shall, under the supervision of the Head of Training of an approved flying training organisation (FTO), complete all the instructional stages in one continuous approved course of training as arranged by that FTO.

3. The course shall last for between 12 and 36 months. Special arrangements may be made with the approval of CARC to extend the course beyond 36 months where additional flying training or ground instruction is provided by the FTO.

4. An applicant may be admitted to training either as an ab-initio entrant, or as a holder of a PPL(H) issued in accordance with ICAO Annex 1. An ab-initio entrant shall meet the student pilot requirements of JCAR FCL 2 Subpart B. In the case of a PPL(H) entrant, 50% of the helicopter hours flown by the entrant prior to the course may be credited towards the required flight instruction (see JCAR FCL2.165(a)(2) and Appendix 1 to JCAR FCL2.160 & 2.165(2) paragraph 13), to a maximum of :

(a) up to 40 hours, of which up to 20 hours may be dual instruction, or

(b) if a helicopter night qualification has been obtained, up to 50 hours, of which up to 25 hours may be dual instruction.

This credit for the hours flown shall be at the discretion of the FTO and entered into the applicant's training record. In case of a student pilot who does not hold a pilot license and with the approval of CARC, a FTO may designate certain dual exercises (see AMC JCAR FCL2.160 & 2.165(a) (2) phase 2 ) to be flown in an aeroplane or a TMG up to a maximum of 20 hours.

5. An applicant failing or unable to complete the entire ATP(H) course may apply to CARC for the theoretical knowledge examination and skill test for a lower license.

6. Any applicant wishing to transfer to another FTO during a course of training shall apply to CARC for a formal assessment of the further hours of training required at another FTO.

7. The FTO shall ensure that before being admitted to the course the applicant has sufficient knowledge of Mathematics, Physics and English language to facilitate an understanding of the theoretical knowledge instruction content of the course.

8. The course shall comprise:

(a) theoretical knowledge instruction to the ATPL(H) knowledge level;



(b) visual and basic instrument flying training; and

(c) training in multi-crew co-operation for the operation of multi-pilot helicopters (see JCAR FCL2.261(d))

9. The successful completion of the type rating theoretical knowledge training and checking requirements, the theoretical knowledge examination(s) at paragraph 12 and the skill tests at paragraph 14 fulfils the theoretical knowledge and skill requirements for the issue of a CPL(H) including a type rating for the helicopter(s) used in the test(s).

## **THEORETICAL KNOWLEDGE**

10. The theoretical knowledge syllabus for the ATPL(H) is set out in Appendix 1 to JCAR FCL2.470. The requirements for type ratings are set out in JCAR FCL2.240. An approved ATPL(H) theoretical knowledge course shall comprise at least 550 hours (1 hour = 60 minutes instruction) of instruction which can include classroom work, inter-active video, slide/tape presentation, learning carrels, computer based training, and other media as approved by CARC, in suitable proportions. The 550 hours of instruction shall be divided in such a way that in each subject the minimum hours are:

Subject	hours
Air Law	30
Aircraft General Knowledge	70
Flight Performance & Planning	65
Human Performance & Limitations	40
Meteorology	40
Navigation	120
Operational Procedures	20
Principles of Flight	30
Communications	25

Other sub-division of hours may be agreed between CARC and the FTO.

11. The MCC course shall comprise at least 20 hours of theoretical knowledge instruction exercises.

Theoretical knowledge examination

12. An applicant shall demonstrate the level of knowledge appropriate to the privileges of the holder of an ATPL (H)/, in accordance with the requirements in JCAR FCL 2 Subpart J.

### **FLYING TRAINING.**

13. The flying training shall comprise a total of at least 150 hours, to include all progress test.. W ithin the total of 150 hours, applicants shall complete at least:

(a)95 hours of dual instruction,

(b) 55 hours as pilot-in-command, to include at least 14 hours solo day, 1 hour solo night and may include 40 hours as SPIC .

SPIC time shall be credited as pilot-in-command time, unless the flight instructor had to influence or control any part of the flight. A ground debriefing by the flight instructor does not affect the crediting as pilot-in-command time. SPIC time can be replaced by solo time.

(c)50 hours of cross-country flight, at least 10 hours of cross country flight as student pilot-in-command including a VFR cross country flight totaling at least 185 km (100 NM) in the course of which landings at two different aerodromes from the aerodrome of departure shall be made;

(d)5 hours flight time in helicopters shall be completed at night comprising 3 hours of dual instruction including at least 1 hour of cross-country navigation and 5 solo night circuits. Each circuit shall include a take-off and a landing;

(e) 10 hours of dual basic instrument instruction time;

(f) 10 hours multi-crew co-operation.

(g) Of the 95 hours of dual instruction up to :

(i) 75 hours visual instruction may include:

- (1) 30 hours in a helicopter FS level C/D, or
- (2) 25 hours in a helicopter FTD 2,3 or
- (3) 20 hours in a helicopter FNPT II/III, or
- (4) 20 hours in an aeroplane or TMG.

(ii) 10 hours basic instrument instruction may include :

5 hours in at least a helicopter FTD 1 or FNPT I or aeroplane FNPT I or

an aeroplane

(iii) 10 hours multi-crew co-operation, for which a helicopter: FS or FTD 2,3(MCC) or FNPT II/III(MCC) may be used.

If the helicopter used for the flying training is of a different type from the helicopter FS used for the visual training, the maximum credit shall be limited to that allocated for the helicopter FNPT II/III.

See AMC-JCAR FCL2.160 & 2.165(a)(1) for flight instruction syllabus.

### **SKILL TESTS**

14. On completion of the related flying training the applicant shall take the CPL(H) skill test on a multi- engine helicopter in accordance with Appendix 1 and 2 to JCAR FCL2.170 and such other tests as are required by JCAR FCL2.262(c).

**Appendix -1 to JCAR FCL2.160 & 2.165(a)(3)  
CPL(H)/IR Integrated Course.**

(See JCAR FCL2.160, 2.165 and 2.170), (See Appendix 1 and 2 to JCAR FCL2.170), (See AMC JCAR FCL2.160 & 2.165(a)(3)), (See Appendix 1 to JCAR FCL2.470), (See IEM-JCAR FCL2.170)

1. The aim of the CPL(H)/IR integrated course is to train pilots to the level of proficiency necessary to operate single-pilot multi engine helicopter and to obtain the CPL(H)/IR multi-engine helicopter .
2. An applicant wishing to undertake a CPL(H)/IR integrated course shall, under the supervision of the Head of Training of an approved flying training organisation (FTO), complete all the instructional stages in one continuous approved course of training as arranged by that FTO.
3. The course shall last for between 9 and 30 months.
4. An applicant may be admitted to training either as an ab-initio entrant, or as the holder of a (PPL(H)) issued in accordance with ICAO Annex 1. An ab-initio entrant shall meet the student pilot requirements of JCAR FCL 2 Subpart B. In the case of a PPL(H) entrant, 50% of the helicopter hours flown by the entrant prior to the course may be credited towards the required flight instruction (see JCAR FCL2.165(a)(3) and Appendix 1 to JCAR-FCL2.160&2.165(a)(3)paragraph 12), to a maximum of:
  - (a) up to 40 hours, of which up to 20 hours may be dual instruction, or
  - (b) if a helicopter night qualification has been obtained, up to 50 hours, of which up to 25 hours may be dual instruction.

This credit for the hours flown shall be at the discretion of the FTO and entered into the applicant's training record. In case of a student pilot who does not hold a pilot license and with the approval of CARC a FTO may designate certain dual exercises (see AMC JCAR FCL2.160 & 2.165 (a) (3) phase 2 and 3 to be flown in an aeroplane or a TMG up to a maximum of 20 hours.
5. An applicant failing or unable to complete the entire CPL(H)/IR course may apply to CARC for the theoretical knowledge examination and skill test for a lower license, and if applicable, an instrument rating.
6. Any applicant wishing to transfer to another FTO during a course of training shall apply to the CARC for a formal assessment of the further hours of training required at another FTO.
7. The FTO shall ensure that before being admitted to the course the applicant has sufficient knowledge of Mathematics, Physics and English language to facilitate an understanding of the theoretical knowledge

instruction content of the course. On completion of the course, the required level of English shall be accordance with Appendix 1 to JCAR FCL2.200.

8. The course shall comprise:

(a) theoretical knowledge instruction to CPL(H) and IR knowledge level, and for the initial MEH type rating, the additional theoretical knowledge requirements according to JCAR FCL2.255(a); and

(b) visual and instrument flying training.

9. The successful completion of the type rating training and checking requirements (see Appendix 1 of JCAR FCL2.261 and AMC JCAR FCL2.261), the theoretical knowledge examinations at paragraph 11 and of the skill test(s) at paragraph 13 fulfill the knowledge and skill requirements for the issue of a CPL(H) including a type rating for the helicopter(s) used in the test(s) and a multi-engine instrument rating (H).

## **THEORETICAL KNOWLEDGE**

10. The theoretical knowledge syllabus for the CPL(H)/IR is set out in Appendix 1 to JCAR FCL2.470. The requirements for type ratings are set out in JCAR FCL2.240. An approved CPL(H)/IR theoretical knowledge course shall comprise at least 500 hours (1 hour = 60 minutes instruction) of instruction which can include classroom work, inter-active video, slide/tape presentation, learning carrels, computer based training, and other media as approved by CARC, in suitable proportions.

The 500 hours of instruction shall be divided in such a way that in each subject the minimum hours are:

Subject	Hours
Air Law	30
Aircraft General Knowledge	50
Flight Performance & Planning	60
Human Performance & Limitations	15
Meteorology	40
Navigation	100
Operational Procedures	10
Principles of Flight	25
Communications	30

Other sub-division of hours may be agreed between CARC and the Flight

Training Organization (FTO).

## THEORETICAL KNOWLEDGE EXAMINATION

11. An applicant shall demonstrate a level of knowledge appropriate to the privileges of the holder of a CPL(H) and an instrument rating, in accordance with the requirements in JCAR FCL 2 Subpart J.

## FLYING TRAINING

12. The flying training shall comprise a total of at least 180 hours include all progress tests. Within the 180 hours, applicants shall complete at least:

(a) 125 hours or of dual instruction ;

(b) 55 hours as pilot-in-command; to include at least 14 hours solo day, 1 hour solo night and may include 40 hours as SPIC .

SPIC time shall be credited as pilot-in-command time, unless the flight instructor had to influence or control any part of the flight. A ground debriefing by the flight instructor does not affect the crediting as pilot-in-command time. SPIC time can be replaced by solo time.

(c) 10 hours dual cross-country flying; 10 hours of cross-country flight as pilot-in-command including a VFR cross-country flight totaling at least 185km (100 NM) in the course of which full stop landings at two different aerodromes from the aerodrome of departure shall be made;

(d) 5 hours flight time in helicopters shall be completed at night comprising 3 hours of dual instruction including at least 1 hour of cross-country navigation and 5 solo night circuits. Each circuit shall include a take-off and a landing;

(e) 50 hours of dual instrument time comprising:

(i) 10 hours Basic Instrument instruction time; and

(ii) 40 hours Instrument Rating Training, which shall include at least 10 hours in a multi-engine IFR- certificated helicopter

(f) Of the 125 hours of dual instruction up to:

(i) 75 hours visual instruction may include:

(1) 30 hours in a helicopter FS level C/D, or

(2) 25 hours in a helicopter FTD 2,3, or

(3) 20 hours in a helicopter FNPT II/III, or

(4) 20 hours in an aeroplane or TMG.

(ii) 50 hours instrument instruction may include :

- (1) up to 20 hours in a helicopter FS or FTD 2,3 or FNPT II,III, or
- (2) 10 hours in at least a helicopter FTD 1 or FNPT I or aeroplane FNPT I or an aeroplane

If the helicopter used for the flying training is of a different type from the FS used for the visual training, the maximum credit shall be limited to that allocated for the FNPT II/III.

#### SKILL TEST

13. On completion of the related flying training, the applicant shall take the CPL(H) skill test on either a multi-engine helicopter or a single-engine helicopter in accordance with Appendix 1 and 2 to JCAR FCL2.170 and instrument rating skill test on a multi-engine helicopter IFR-certificated in accordance with Appendix 1 and 2 to JCAR FCL2.210.

**Appendix- 1 to JCAR FCL2.160 & 2.165(a)(4)  
CPL(H) integrated course.**

(See JCAR FCL2.160, 2.165 and 2.170), (See Appendix 1 and 2 to JCAR FCL2.170), (See AMC JCAR FCL2.160 & 2.165(a)(4), (See Appendix 1 to JCAR FCL2.470), (See IEM-JCAR FCL2.170)

1. The aim of the CPL(H) integrated course is to train pilots to the level of proficiency necessary for the issue of a CPL(H), but not the instrument rating or any further specialisation (e.g. aerial work activities)
2. An applicant wishing to undertake a CPL(H) integrated course shall, under the supervision of the Head of Training of an approved flying training organisation (FTO), complete all the instructional stages in one continuous approved course of training as arranged by that FTO.
3. The course shall last for between 9 and 24 months.
4. An applicant may be admitted to training either as an ab-initio entrant, or as the holder of a private pilot license (helicopter) (PPL(H)) issued in accordance with ICAO Annex 1. An ab-initio entrant shall meet the student pilot requirements of JCAR FCL 2 Subpart B. In the case of a PPL(H) entrant, 50% of the helicopter hours flown by the entrant prior to the course may be credited towards the required flight instruction (see JCAR FCL2.165(a)(4) and Appendix 1 to JCAR FCL2.160 & 2.165 (a)(4) paragraph 12), to a maximum of:
  - (a) up to 40 hours, of which up to 20 hours may be dual instruction, or
  - (b) if a helicopter night qualification has been obtained, up to 50 hours, of which up to 25 hours may be dual instruction.

This credit for the hours flown shall be at the discretion of the FTO and entered into the applicant's training record. In case of a student pilot who does not hold a pilot license and with the approval of CARC a FTO may designate certain dual exercises (see AMC JCAR FCL2.160 & 2.165 (a)(4)phase 2) to be flown in an aeroplane or a TMG up to a maximum of 20 hours.
5. An applicant failing or unable to complete the entire CPL(H) course may apply to CARC for the theoretical knowledge examination and skill test for a lower license.
6. Any applicant wishing to transfer to another FTO during a course of training shall apply to CARC for a formal assessment of the further hours of training required at another FTO.
7. The FTO shall ensure that before being admitted to the course the applicant has sufficient knowledge of Mathematics and Physics to facilitate



an understanding of the theoretical knowledge instruction content of the course.

8. The course shall comprise:

- (a) theoretical knowledge instruction to CPL(H) knowledge level; and
- (b) visual and instrument flying training.

9. The successful completion of the type rating training and checking requirements (see Appendix 1 to JCAR FCL2.261 and AMC JCAR FCL2.261), the theoretical knowledge examinations at paragraph 11 and of the skill test(s) at paragraph 13 fulfill the theoretical knowledge and skill requirements for the issue of a CPL(H) including a type rating for the helicopter(s) used in the test(s).

### **THEORETICAL KNOWLEDGE**

10. The theoretical knowledge syllabus for the CPL(H) is set out in Appendix 1 to JCAR FCL2.470. The requirements for type ratings are set out in JCAR FCL2.240. An approved CPL(H) theoretical knowledge course shall comprise at least 300 hours (1 hour = 60 minutes instruction) of instruction (or 200 hours if the applicant is the holder of a PPL) which can include classroom work, inter-active video, slide/tape presentation, learning carrels, computer based training, and other media as approved by CARC, in suitable proportions.

The 300 hours of instruction shall be divided in such a way that in each subject the minimum hours are:

Subject	Hours
Air Law	25
Aircraft General Knowledge	30
Flight Performance & Planning	25
Human Performance & Limitations	10
Meteorology	30
Navigation	55
Operational Procedures	8

Principles of Flight	20
Communications	10

Other sub-division of hours may be agreed between CARC and the FTO.

### **THEORETICAL KNOWLEDGE EXAMINATION**

11. An applicant shall demonstrate a level of knowledge appropriate to the privileges of the holder of a CPL(H) in accordance with the requirements in JCAR FCL 2 Subpart J.

### **FLYING TRAINING**

12. The flying training shall comprise a total of at least 135 hours, to include all progress tests, of which up to 5 hours for the entire course may be instrument ground time. Within the 135 hours total, applicants shall complete at least:

- (a) 85 hours of dual instruction;
- (b) 50 hours as pilot-in-command; to include at least 14 hours solo day, 1 hour solo night and may include 35 hours as SPIC.

SPIC time shall be credited as pilot-in-command time, unless the flight instructor had to influence or control any part of the flight. A ground de-briefing by the flight instructor does not affect the crediting as pilot-in-command time;

- (c) 10 hours dual cross-country flying;
- (d) 10 hours of cross-country flight as pilot-in-command including a VFR cross-country flight totaling at least 185km (100 NM) in the course of which full stop landings at two different aerodromes from the aerodrome of departure shall be made;
- (e) 5 hours flight time in helicopters shall be completed at night comprising 3 hours of dual instruction including at least 1 hour of cross-country navigation and 5 solo night circuits. Each circuit shall include a take-off and a landing;
- (f) 10 hours of instrument dual instruction time, including at least 5 hours in a helicopter.

(g) Of the 85 hours of dual instruction up to:

- (i) 75 hours visual instruction may include:
  - (1) 30 hours in a helicopter FS level C/D, or

- (2) 25 hours in a helicopter FTD 2,3, or
- (3) 20 hours in a helicopter FNPT II/III, or
- (4) 20 hours in an aeroplane or TMG.

(ii) 10 hours instrument instruction, which may include 5 hours in at least a helicopter FTD I or FNPT I or aeroplane FNPT I or an aeroplane

If the helicopter used for the flying training is of a different type from the FS used for the visual training, the maximum credit shall be limited to that allocated for the FNPT II/III.

*(See AMC-JCAR FCL2.160 & 2.165(a)(2) for flight instruction syllabus.)*

### **SKILL TEST**

13. On completion of the related flying training, the applicant shall take the CPL(H) skill test in accordance with Appendix 1 and 2 to JCAR FCL2.170.

**Appendix-1 to JCAR FCL2.160 & 2.165(a)(5)****CPL(H) Modular Course**

(See JCAR FCL2.160, 2.165 and 2.170), (See Appendix 1 and 2 to JCAR FCL2.170), (See AMC JCAR FCL2.160 & 2.165(a) (5)), (See Appendix 1 to JCAR FCL2.470), (See IEM-JCAR FCL2.170)

1. The aim of the CPL(H) modular course is to train PPL(H) holders to the level of proficiency necessary for the issue of a CPL(H), but not in the instrument rating or any further specialisation (e.g. aerial work activities).
2. Before commencing a CPL(H) modular course an applicant shall:
  - (a) be the holder of a PPL(H) issued in accordance with ICAO Annex 1;
  - (b) have completed 155 hours flight time as a pilot in helicopters, including 50 hours as PIC of which :  
10 hours shall be cross-country (105 hours as pilot in helicopters if holder of a CPL(A), 135 hours as pilot in helicopters if holder of a PPL(A); and
  - (c) have complied with JCAR FCL2.225 and 2.240 if a multi-engine helicopter is to be used on the skill test.
3. An applicant wishing to undertake a modular CPL(H) course shall, under the supervision of the Head of Training of an approved flying training organisation (FTO), complete all the instructional stages in one continuous approved course of training as arranged by that FTO. The theoretical knowledge instruction may be given at an approved FTO conducting theoretical knowledge instruction only, in which case the Head of Training of that organisation shall supervise that part of the course.
4. The course of theoretical knowledge shall be completed within 18 months. The flight instruction and skill test shall be completed within the period of validity of the pass in the theoretical examinations, as set out in JCAR FCL2.495.
5. The FTO shall ensure that before being admitted to the course the applicant has sufficient knowledge of Mathematics and Physics to facilitate an understanding of the theoretical knowledge instruction content of the course.
6. The course shall comprise:
  - (a) theoretical knowledge instruction to CPL(H) knowledge level; and
  - (b) visual and instrument flying training.
7. The successful completion of the theoretical knowledge examination at

paragraph 9 and of the skill test at paragraph 12 fulfil the theoretical knowledge and skill requirements for the issue of a CPL(H) including a type rating for the helicopter used in the test.

## **THEORETICAL KNOWLEDGE**

8. The theoretical knowledge syllabus for the CPL(H) is set out in Appendix 1 to JCAR FCL2.470. The requirements for type ratings are set out in JCAR FCL2.240. An approved CPL(H) theoretical knowledge course shall comprise at least 200 hours (1 hour = 60 minutes instruction) of instruction, which can include classroom work, inter-active video, slide/tape presentation, learning carrels, computer based training, and other media as approved by CARC, in suitable proportions. Approved distance learning (correspondence) courses may also be offered as part of the course at the discretion of CARC.

## **THEORETICAL KNOWLEDGE EXAMINATION.**

9. An applicant shall demonstrate a level of knowledge appropriate to the privileges of the holder of a CPL(H) in accordance with the requirements in JCAR FCL 2 Subpart J.

## **FLYING TRAINING**

10. (a) Applicants without an instrument rating shall be given at least 30 hours dual flight instruction (See AMC JCAR FCL2.160 and 2.165(a)(5) ).

(b) Applicants holding a valid IR(H) shall be fully credited towards the dual instrument instruction time.

(c) Applicants holding a valid IR(A) shall complete at least 5 hours of the dual instrument instruction time in a helicopter

(d) Of the 30 hours dual instruction time, up to:

(i) 20 hours visual instruction may include 5 hours in a helicopter FS or FTD 2,3 or FNPT II,III and

(ii) 10 hours instrument instruction, which may include 5 hours in at least a helicopter FTD 1 or FNPT I or aeroplane FNPT I or an aeroplane.

11. Applicants without a night flying qualification helicopter shall be given additionally at least 5 hours night flight instruction (see JCAR FCL2.125(c) and Appendix 4 to JCAR FCL2.125).

See AMC-JCAR FCL2.160 & 2.165(a) (5) for flight instruction syllabus.

## **SKILL TEST**

12. On completion of the related flying training and relevant experience, the applicant shall take the CPL(H) skill test in accordance with Appendix 1 and 2 to JCAR FCL2.170.

**Appendix- 1 to JCAR FCL2.170****Skill test for the issue of the CPL(H)**

(See JCAR FCL2.170), (See Appendix 2 to JCAR FCL2.170)

(See IEM JCAR FCL2.170)

1. An applicant for a skill test for the CPL(H) shall have satisfactorily completed all of the required training, including instruction on the same type of helicopter to be used in the test. An applicant graduating from an ATP(H) integrated course shall take the test on a multi-engine helicopter. An applicant graduating from a CPL(H) integrated course, or a CPL(H) modular course, may take the test on either a single engine helicopter or, subject to the experience requirement set out in JCAR-FCL 2.255(a) to have 70 hours as pilot in command of helicopters, a multi-engine helicopter. The helicopter used for the skill test shall meet the requirements for training helicopters set out in Appendix 1 to JCAR-FCL 2.055.

2. The administrative arrangements for confirming the applicant's suitability to take the test, including disclosure of the applicant's training record to the examiner, will be determined by CARC.

3. An applicant shall pass sections 1 through 5 of the skill test. Failure in more than one section will require the applicant to take the entire test again. If any item in a section is failed, that section is failed. An applicant failing only one section shall take the failed section again. Failure in any items of the re-test and failure in any other items already passed, will require the applicant to take the entire test again. All sections of the skill test shall be completed within six months.

4. Further training may be required following any failed skill test. Failure to achieve a pass in all sections of the test in two attempts shall require further training as determined by CARC. There is no limit to the number of skill tests that may be attempted.

**CONDUCT OF THE TEST**

5. CARC will provide the FE with adequate safety advice to ensure that the test is conducted safely.

6. Should the applicant choose to terminate a skill test for reasons considered inadequate by the 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.

7. 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 skill requires a complete re-test.
8. An applicant shall be required to fly the helicopter from a position where the pilot-in-command functions can be performed and to carry out the test as if there is no other crew member. Responsibility for the flight shall be allocated in accordance with national regulations.
9. 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 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 skill test may be conducted in 2 flights. The total duration of the flight(s) shall be at least 90 minutes.
10. 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 authorised check list for the helicopter 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 helicopter used.
11. The FE shall take no part in the operation of the helicopter except where intervention is necessary in the interests of safety or to avoid unacceptable delay to other traffic.

#### FLIGHT TEST TOLERANCES

12. The applicant shall demonstrate the ability to:
  - operate the helicopter within its limitations;
  - complete all manoeuvres with smoothness and accuracy;
  - exercise good judgment and airmanship;
  - apply aeronautical knowledge; and
  - 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.
13. The following limits are for general guidance. The FE shall make allowance for turbulent conditions and the handling qualities and



performance of the helicopter used.

**Height**

- normal flight  $\pm 100$  feet
- simulated major emergency  $\pm 150$  feet
- Tracking on radio aids  $\pm 10^\circ$

**Heading**

- normal flight  $\pm 10^\circ$
- simulated major emergency  $\pm 15^\circ$

**Speed**

- take-off and approach multi-engine  $\pm 5$  knots
- all other flight regimes  $\pm 10$  knots

**Ground drift**

- T.O. hover I.G.E.  $\pm 3$  feet
- landing no sideways or backwards movement

**CONTENT OF THE TEST**

14. The skill test contents and sections set out in Appendix 2 to JCAR FCL2.170 shall be used for the skill test. Items in Section 4 may be performed in a FNPT (H) or a flight simulator (H). The format and application form for the skill test may be determined by CARC (see IEM JCAR FCL2.170)

**Appendix- 2 to JCAR FCL2.170****Content of the skill test for the issue of the CPL(H)**

(See JCAR FCL2.170), (See IEM JCAR FCL2.170)

Note: Use of checklist, airmanship, control of helicopter by external visual reference, anti-icing procedures, etc, apply in all sections.

<b>SECTION 1 PRE-FLIGHT/POST-FLIGHT CHECKS AND PROCEDURES</b>	
a	Helicopter knowledge, (e.g. technical log, fuel, mass and balance, performance), Flight Planning, 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
<b>SECTION 2 HOVER MANOEUVRES, ADVANCED HANDLING AND CONFINED AREAS</b>	
a	Take-off and landing, (lift off and touch down)
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 stFCL 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 360turns)
o	Autorotative landing
p	Practice forced landing with power recovery
q	Power checks, reconnaissance technique, approach and departure technique
<b>SECTION 3 NAVIGATION - EN ROUTE PROCEDURES</b>	
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 reestablishment 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.
<b>SECTION 4 FLIGHT PROCEDURES AND MANOEUVRES BY SOLE REFERENCE TO INSTRUMENTS</b>	
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
<b>SECTION 5 ABNORMAL AND EMERGENCY PROCEDURES (SIMULATED WHERE APPROPRIATE)</b>	
<p>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.</p> <p>Note (2) The FE shall select 4 items from the following:</p>	
a	Engine malfunctions, including governor failure, carburetor/engine icing, oil system, as appropriate
b	Fuel system malfunction
c	Electrical system malfunction
d	Hydraulic system malfunction, including approach and landing without hydraulics, as applicable
e	Main rotor and/or anti-torque system malfunction (flight simulator or discussion only)
f	Fire drills, including smoke control and removal, as applicable
g	<p>Other abnormal and Emergency procedures as outlined in appropriate flight manual and with reference to Appendix 3 to JAR-FCL 2.240, sections 7 and 8, including for multi-engine helicopters:</p> <ul style="list-style-type: none"> <li>- Simulated engine failure at take-off: <ul style="list-style-type: none"> <li>- rejected take-off at or before TDP or safe forced landing at or before DPATO - shortly after TDP or DPATO</li> </ul> </li> <li>- Landing with simulated engine failure: <ul style="list-style-type: none"> <li>- landing or go-around following engine failure before LDP or DPBL</li> <li>- following engine failure after LDP or safe forced landing after DPBL</li> </ul> </li> </ul>

**SUBPART- E**  
**INSTRUMENT RATING (Helicopter) – IR(H)**

**FCL2.174 Medical fitness.**

An applicant for an IR (A) shall hold a valid Class 1 medical certification accordance with JCAR FCL 3. In order to exercise the privileges of the IR (A) a valid Class 1 medical certificate shall be held.

**FCL2.175 Circumstances in which an IR(H) is required.**

(a) The holder of a pilot license shall not act in any capacity as a pilot of a helicopter under Instrument Flight Rules (IFR), except as a pilot undergoing skill testing or dual training, unless the holder has an instrument rating (IR) appropriate to the category of aircraft issued in accordance with JCAR FCL 2.

(b)Reserved.

**FCL2.180 Privileges and conditions.**

(a) Privileges.

(1) Subject to the rating restrictions imposed by use of another pilot functioning as a co-pilot (multi-pilot restriction) during the skill test set out in Appendices 1 and 2 to JCAR FCL2.210, and any other conditions specified in JCARS, the privileges of a holder of an IR(H) are to pilot helicopters under IFR with a minimum decision height of 200 feet (60m), except as PIC in MPH. To exercise the privileges as PIC in MPH, the holder must have at least 70 hours of instrument time of which not more than 30 hours may be instrument ground time. For credits for aeroplane instrument time, see JCAR FCL2.280(b).

(2) Decision heights lower than 200 feet (60m) may be authorised by CARC after further training and testing in accordance with OPS3, AMC JCAR FCL2.261(a) paragraph 6 and with Appendix 4toJCARFCL2.240 & 2.295.

(b) Conditions. An applicant who has complied with the conditions specified in JCAR FCL2.174 through JCAR FCL2.210 shall have fulfilled the requirements for the issue of an IR(H).

**FCL2.185 Validity, revalidation and renewal.**

- (a) An IR(H) is valid for one year from the date of issue or renewal, or from the expiry date of a current IR(H) if revalidated in accordance with JCAR FCL2.246(a).
- (b) If the IR(H) is restricted for use in multi- pilot operations only, the revalidation or renewal shall be completed in multi-pilot operations.
- (c) If the IR(H) has not been revalidated/renewed within the preceding 7 years, the holder will be required to retake the IR(H) theoretical knowledge examination and skill test in accordance with Appendix 1 to JCAR FCL2.210.

**FCL2.190 Experience.**

An applicant for an IR(H) shall hold a PPL(H) including a nightqualification or CPL(H) or an ATPL(H) and shall have completed at least 50 hours cross-country flight time as pilot-in- command in helicopters or aeroplanes of which at least 10 hours shall be in helicopters. An applicant who has satisfactorily followed and completed an integrated flying training course as ATPL(H)/IR, ATPL(H), CPL(H)/IR or CPL(H) shall be exempt from the 50 hours requirement.

**FCL2.195 Theoretical knowledge.**

- (a) Course. An applicant for an IR(H) shall have received theoretical knowledge instruction on an approved course at an approved flying training organisation (FTO). The course should, wherever possible, be combined with a flying training course as set out in JCAR FCL2.205.
- (b) An applicant shall demonstrate a level of knowledge appropriate to the privileges granted to the holder of an IR(H) and shall meet the requirements set out in JCAR FCL 2 Subpart J.

**FCL2.200 Use of English Language.**

(See Appendix 1 to JCAR FCL2.200)

- (a) An applicant for an IR(H) or validation shall have demonstrated the ability to use the English language as set out in Appendix 1 to JCAR FCL2.200.
- (b) The holder of an IR(H) issued in accordance with Appendix 1 to JCAR FCL2.200 shall have the PPL(H), CPL(H) or ATPL(H) extended with radiotelephony privileges in English.

**FCL2.205 Flight instruction.**

(See Appendix 1 to JCAR FCL2.205)

An applicant for an IR(H) shall have participated in a course of integrated flying training which includes training for the IR(H) (see JCAR FCL2.165) or shall have completed an approved modular flying training course as set out in Appendix 1 to JCAR FCL2.205. If the applicant is the holder of an IR(A) the total amount of flight instruction required by Appendix 1 to JCAR FCL2.205 may be reduced to 10 hours.

**FCL2.210 Skill.**

(See Appendices 1 and 2 to JCAR FCL2.210)

**General.**

An applicant for an IR(H) shall have demonstrated the ability to perform the procedures and manoeuvres as set out in Appendices 1 and 2 to JCAR FCL2.210 with a degree of competency appropriate to the privileges granted to the holder of an IR(H). An applicant wishing to obtain a type rating for the helicopter used in skill test shall also meet the requirements of JCAR FCL2.240.

**Appendix- 1 to JCAR FCL2.200**  
**IR(H) – Use of English language.**

(See JCAR FCL2.200), (See JCAR FCL2.005(b)(5)), (See JCAR FCL2.010(a)(4)), (See Appendix 1 to JCAR FCL2.005), (See Appendix 1 to JCAR FCL2.015)

**USE OF ENGLISH LANGUAGE**

1. An applicant for or the holder of the IR(H) shall have the ability to use the English language for the following purposes:

(a) flight:

radio telephony relevant to all phases of flight, including emergency situations.

This item is considered to be fulfilled, if the applicant has passed an IR or ATPL skill test or proficiency check during which the two-way radiotelephony communication is performed in English.

(b) ground:

all information relevant to the accomplishment of a flight, e.g.

\*be able to read and demonstrate an understanding of technical manuals written in English, e.g. an Operations Manual, a Helicopter Flight Manual, etc.

\*pre-flight planning, weather information collection, NOTAMs, ATC Flight Plan, etc.

\*use of all aeronautical en-route, departure and approach charts and associated documents written in English. This item is considered to be fulfilled, if the applicant has graduated from a IR or ATP course given in English or if he/she has passed the theoretical IR or ATPL examination in English.

(c) communication:

be able to communicate with other crew members in English during all phases of flight, including flight preparation. This item is considered to be fulfilled, if the applicant for or the holder of an IR(H) has graduated from a MCC-course given in English and is holding a certificate of satisfactory completion of that course in accordance with JCAR FCL2.250 (a)(2) or if he has passed a multi-pilot skill test/proficiency check in accordance with Appendix 1 to JCAR FCL2.240 & 2.295, during which the two-way radiotelephony communication and the communication with other crew members are performed in English.

2. Alternatively, the above stated requirements may be demonstrated by having passed a specific examination given by CARC after having

undertaken a course of training enabling the applicant to meet all the objectives listed in 1(a), (b) and (c) above.

3. Where the examination above-mentioned method or referred to in paragraphs (1) and (2) above meets the language proficiency requirements stated in JCAR FCL2.010(a)(4), it may be used for the purpose of issuing a Language Proficiency endorsement in accordance with JCAR FCL2.005(b)(5).



**Appendix -1 to JCAR FCL2.205 IR(H)  
Modular flying training course.**

(See JCAR FCL2.205)

1. The aim of the IR(H) modular flying training course is to train pilots to the level of proficiency necessary to operate helicopters under IFR and in IMC in accordance with ICAO PANS-FCL Document 8168.
2. An applicant for a modular IR(H) course shall be the holder of a PPL(H) with a night qualification issued in accordance with Appendix 4 to JCAR FCL2.125, or a CPL(H) or an ATPL(H) issued in accordance with ICAO Annex 1. Prior to commencing the IR(H) course, the applicant shall be the holder of the helicopter type rating used for the IR(H) skill test, or have completed approved type rating training on that type. The applicant shall hold a certificate of satisfactory of MCC if the skill test is to be conducted in Multi-Pilot conditions.
3. An applicant wishing to undertake a modular IR(H) course shall be required, under the supervision of the Head of Training of an approved flying training organisation (FTO), to complete all the instructional stages in one continuous approved course of training as arranged by that FTO. The theoretical knowledge instruction may be given at an approved FTO conducting theoretical knowledge instruction only, in which case the Head of Training of that organisation shall supervise that part of the course.
4. The course of theoretical instruction shall be completed within 18 months. The flight instruction and the skill test shall be completed within the period of validity of the pass in the theoretical examinations, as set out in JCAR FCL2.495.
5. The course shall comprise:
  - (a) theoretical knowledge instruction to the instrument rating knowledge level;
  - (b) instrument flight instruction.
6. The successful completion of the theoretical knowledge examination(s) at paragraph 8 and of the skill test at paragraph 14 fulfil the knowledge and skill requirements for the issue of an IR(H).

**THEORETICAL KNOWLEDGE**

7. The theoretical knowledge syllabus for the IR(H) is set out in Appendix 1 to JCAR FCL2.470. An approved modular IR(H) course shall comprise at least 200 hours (1 hour = 60 minutes instruction) of instruction, which can include classroom work, inter-active video, slide/tape presentation, learning carrels, computer based training, and other media as approved by CARC, in suitable proportions. Approved distance learning (correspondence) courses may also be offered as part of the course at the

discretion of CARC.

#### THEORETICAL KNOWLEDGE EXAMINATION

8. An applicant shall demonstrate a level of knowledge appropriate to the privileges of an IR(H) in accordance with the procedures in JCAR FCL 2 Subpart J.

#### FLYING TRAINING

9. A single-engine IR(H) course shall comprise at least 50 hours instrument time under instruction of which;

(a) up to 20 hours may be instrument ground time in a FNPT I(H) or (A). These 20 hours instruction time in FNPT I (H) or (A) may be substituted by 20 hours instruction time for IR(H) in an aeroplane, approved for this course, or

(b) up to 35 hours may be instrument ground time in a helicopter FNPT II/III or FS. The instrument flight instruction shall include at least 10 hours in an IFR-certificated helicopter.

10. A multi-engine IR(H) course shall comprise at least 55 hours instrument time under instruction of which;

(a) up to 20 hours may be instrument ground time in a FNPT I (H) or (A). These 20 hours instruction time in FNPT I (H) or (A) may be substituted by 20 hours instruction time for IR(H) in an aeroplane, approved for this course, or

(b) up to 40 hours may be instrument ground time in a helicopter FNPT II/III or FS.

The instrument flight instruction shall include at least 10 hours in an IFR-certificated multi-engine helicopters.

11. The holder of a PPL(H) with a night qualification issued in accordance with Appendix 4 to JCAR FCL2.125, or a CPL(H) issued in accordance with ICAO Annex 1 may have the total amount of training required in paragraphs 9 or 10 above reduced by 5 hours.

12. The flying exercises up to the IR(H) skill test shall comprise:
- (a) pre-flight procedures for IFR flights, including the use of the flight manual and appropriate air traffic services documents in the preparation of an IFR flight plan;
  - (b) procedure and manoeuvres for IFR operation under normal, abnormal and emergency conditions covering at least
    - transition from visual to instrument flight on take off
    - standard instrument departures and arrivals
    - en-route IFR procedures
    - holding procedures
    - instrument approaches to specified minima
    - missed approach procedures
    - landings from instrument approaches, including circling;
  - (c) in flight manoeuvres and particular flight characteristics;
  - (d) if required, operation of a multi-engine helicopter in the above exercises, including operation of the helicopter solely by reference to instruments with one engine simulated inoperative and engine shut down and restart (the latter exercise to be carried out at a safe altitude unless carried out in a flight simulator or FNPT II).

## SKILL TESTS

13. On completion of the related flying training and relevant experience as stated in JCAR FCL2.190 the applicant shall take the IR(H) skill test in the helicopter type used during the course in accordance with Appendix 1 and 2 to JCAR FCL2.210.

**Appendix -1 to JCAR FCL2.210****IR(H) – Skill test**

(See JCAR FCL2.185 and 2.210), (See IEM JCAR FCL2.210)

1. An applicant for a skill test for the IR(H) shall have received instruction on the same type of helicopter to be used for the skill test. The helicopter used for the skill test shall meet the requirements for training helicopters set out in Appendix 1 to JCAR FCL2.055.
2. The administrative arrangements for confirming the applicant's suitability to take the test, including disclosure of the applicant's training record to the examiner, will be determined by CARC which approved the applicant's training.
3. An applicant shall pass all sections of the skill test. Failure in more than one section will require the applicant to take the entire test again. An applicant failing only one section shall take the failed section again. Failure in any section of the re-test, including those sections that have been passed on a previous attempt, will require the applicant to take the entire test again. All sections of the skill test shall be completed within six months.
4. Further training may be required following any failed skill test. Failure to achieve a pass in all sections of the test in two attempts shall require further training as determined by CARC. There is no limit to the number of skill tests that may be attempted.

**CONDUCT OF THE TEST**

5. The test is intended to simulate a practical flight. The route to be flown shall be chosen by the examiner. An essential element is the ability of the applicant to plan and conduct the flight from routine briefing material. The applicant shall undertake 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 one hour.
6. CARC will provide the examiner with safety advice to be observed in the conduct of the test.
7. 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.
8. 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.

9. An applicant shall fly the helicopter from a position where the pilot-in-command functions can be performed and carry out the test/check as if there is no other crew member. The examiner shall take no part in the operation of the helicopter, except when intervention is necessary in the interests of safety or to avoid unacceptable delay to other traffic. Whenever the examiner or another pilot functions as a co-pilot during the test/check, the privileges of the instrument rating will be restricted to multi-pilot operations. A multi-pilot restriction may be removed by the applicant carrying out a skill test in accordance with Appendix 1 to JCAR FCL2.210 in a single-pilot helicopter with no other crew member, involved in the conduct of the flight. The skill test for this purpose may be conducted in an FTD II/III or a FS.

Responsibility for the flight shall be allocated in accordance with national regulations.

10. Decision heights/altitude, minimum descent heights/altitudes and missed approach point shall be determined by the applicant and agreed by the examiner.

11. An 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 authorised check list for the helicopter 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 helicopter used.

#### FLIGHT TEST TOLERANCES

12. The applicant shall demonstrate the ability to:

- operate the helicopter within its limitations;
- complete all manoeuvres with smoothness and accuracy;
- exercise good judgement and airmanship;
- apply aeronautical knowledge; and
- 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.

13. The following limits are for general guidance. The examiner shall make allowance for turbulent conditions and the handling qualities and

performance of the helicopter used.

**Height**

- Generally  $\pm 100$  feet
- Starting a go-around at decision height +50 feet/-0 feet
- Minimum descent height/MAP/altitude +50 feet/-0 feet

**Tracking**

- on radio aids  $\pm 5^\circ$
- Precision approach path half scale deflection, azimuth and glide

**Heading**

- all engines operating  $\pm 5^\circ$
- with simulated engine failure  $\pm 10^\circ$

**Speed**

- all engines operating  $\pm 5$  knots
- with simulated engine failure +10 knots/-5 knots

**CONTENT OF THE TEST**

14. The skill test contents and sections set out in Appendix 2 to JCAR FCL2.210 shall be used for the skill test. The format and application form for the skill test may be determined by CARC (see IEM JCAR FCL2.210). Section 2 item c, and Section 6 of the skill test may, for safety reasons, be performed in an FTD II/III or FS.

**Appendix- 2 to JCAR FCL2.210****Contents of the skill test for the issue of an IR(H)**

(See JCAR FCL2.185 and 2.210), (See IEM JCAR FCL2.210)

<b>SECTION 1 DEPARTURE</b>	
a	Use of flight manual (or equivalent) especially aircraft performance calculation; mass and balance
b	Use of Air Traffic Services document, weather document
c	Preparation of ATC flight plan, IFR flight plan/log
d	Pre-flight inspection
e	Weather minima
f	Taxying/Air taxi in compliance with ATC or instructions of instructor
g	Pre-take off briefing, procedures and checks
h	Transition to instrument flight
i	Instrument departure procedures
<b>SECTION 2 GENERAL HANDLING</b>	
a	Control of the helicopter by reference solely to instruments, including:
b	Climbing and descending turns with sustained rate one turn
c	Recoveries from unusual attitudes, including sustained 30bank turns and steep descending turns
<b>SECTION 3 EN-ROUTE IFR PROCEDURES</b>	
a	Tracking, including interception, e.g. NDB, VOR, RNAV
b	Use of radio aids
c	Level flight, control of heading, altitude and airspeed, power setting
d	Altimeter settings
e	Timing and revision of ETAs
f	Monitoring of flight progress, flight log, fuel usage, systems management
g	Ice protection procedures, simulated if necessary and applicable
h	ATC liaison and compliance, R/T procedures

<b>SECTION 4 PRECISION APPROACH</b>	
a	Setting and checking of navigational aids, identification of facilities
b	Arrival procedures, altimeter checks
c	Approach and landing briefing, including descent/approach/landing checks
d*	Holding procedure
e	Compliance with published approach procedure
f	Approach timing
g	Altitude, speed, heading control, (stabilised approach)
h*	Go-around action
i*	Missed approach procedure / landing
j	ATC liaison - compliance, R/T procedures
* to be performed in Section 4 or Section 5	
<b>SECTION 5 NON-PRECISION APPROACH</b>	
a	Setting and checking of navigational aids, identification of facilities
b	Arrival procedures, altimeter checks
c	Approach and landing briefing, including descent/approach/landing checks
d*	Holding procedure
e	Compliance with published approach procedure
f	Approach timing
g	Altitude, speed, heading control, (stabilised approach)
h*	Go around action
i*	Missed approach procedure*/landing
7	ATC liaison - compliance, R/T procedures
* to be performed in Section 4 or Section 5	



<b>SECTION 6 ABNORMAL AND EMERGENCY PROCEDURES</b>	
<p>This section may be combined with sections 1 through 5. The test shall have regard to control of the helicopter, identification of the failed engine, immediate actions (touch drills), follow up actions and checks, and flying accuracy, in the following situations:</p>	
a	<p>Engine failure after take-off and on/during approach* (at a safe altitude unless carried out in a flight simulator or FNPT II[III, FTD 2,3]) *Multi' engine helicopter only</p>
b	<p>Failure of stability augmentation devices/hydraulic system (if applicable)</p>
c	<p>Limited panel</p>
d	<p>Autorotation and recovery to a pre-set altitude</p>
e	<p>Precision approach manually without flight director* Precision approach manually with flight director* *only one item to be tested</p>

**SUBPART- F**  
**TYPE RATINGS (Helicopter)**

**FCL2.215 Reserved.**

**FCL2.220 Type ratings (H).**

(a) Criteria. For the establishment of type ratings for helicopters, all of the following shall be considered:

- (1) airworthiness type certificate;
- (2) handling characteristics;
- (3) certificated minimum flight crew complements;
- (4) level of technology.

(b) Divisions.

Type ratings for helicopters shall be established for each type of helicopter.

(c) Listing:

(1) Type ratings for helicopters will be issued in accordance with the associated administrative procedures accepted by CARC. In order to change to another variant of the helicopter within one type rating, differences or familiarization training is required.

(2) Reserved.

(d) The issue and the revalidation/renewal of autogyro/gyroplane type ratings are at the discretion of CARC.

**FCL2.225 Circumstances in which type ratings are required**

The holder of a pilot license shall not act in any capacity as a pilot of a helicopter except as a pilot undergoing skill testing or receiving flight instruction unless the holder has a valid and appropriate type rating. When a type rating is issued limiting the privileges to acting as co-pilot only, or to any other conditions agreed within CARC, such limitations shall be endorsed on the rating.

**FCL2.230 Special authorization of type rating.**

For the special purpose non-revenue flights e.g. aircraft flight testing, special authorisation may be provided in writing to the license holder by CARC in place of issuing the type rating in JCAR FCL2.225. This authorization shall be limited in validity to completing a specific task.

**FCL2.235 Type ratings – Privileges, number and variants.**

(a) Privileges. Subject to JCAR FCL2.220 (a) above, the privileges of the holder of a type rating are to act as a pilot on the type of aircraft specified in the rating.

(b) Number of type ratings held. There is no JCAR FCL 2 limit to the number of ratings that may be held at one time. JCAR OPS 3, however, may restrict the number of ratings that can be exercised at any one time.

(c) Variants. If the variant has not been flown within a period of 2 years following the differences training, further differences training or a proficiency check in that variant will be required.

(1) Differences training requires additional knowledge and training on an appropriate training device or helicopter. The differences training shall be entered in the pilot's logbook or equivalent document and signed by a TRI/SFI(H) or FI(H) as appropriate.

(2) Familiarisation training requires the acquisition of additional knowledge.

This differences training shall be entered in the pilot's logbook or equivalent document and signed by a TRI/SFI(H) or FI(H) as appropriate.

**FCL2.240 Type ratings – Requirements.**

(See Appendices 1 to 3 to JCAR FCL2.240)

(a) General

(1) An applicant for a type rating for a multi-pilot type of helicopter shall comply with the requirements for type ratings set out in JCAR FCL2.250, 2.261 and 2.262; and

(2) An applicant for a type rating for a single-pilot type of helicopter shall comply with the requirements set out in JCAR FCL2.255, 2.261 and 2.262(a).

(3) The type rating course, including theoretical knowledge, shall be completed within the 6 months preceding the skill test.

(4) The holder of an IR(H) valid for a single-engine helicopter type wishing to extend for the first time the IR(H) to a multi-engine helicopter type shall satisfactorily complete a course comprising at least 5 hours dual instrument instruction time of which three hours may be in FS or FTD 2/3 or FNPT II/III, plus a multi engine skill test in accordance with Section 5 of Appendix 2 or 3 to JCAR FCL2.240 on that type, at an approved FTO/TRTO.

(5) At the discretion of CARC, a helicopter type rating may be issued to an applicant who meets the requirements for that rating of an ICAO Member State, provided JCAR FCL2.250 or 2.255 as applicable, are met. Such a rating will be restricted to helicopters registered in that ICAO Contracting State, or operated by an operator of that ICAO Contracting State. The restriction may be removed when the holder has completed at least 500 hours of flight as a pilot on the type and complied with the revalidation requirements of JCAR FCL2.245.

(6) A type rating contained in a license issued by an ICAO Contracting State may be transferred to a JCAR FCL 2 license, subject to the appropriate proficiency check, provided the applicant is in current flying practice and:

(i) for a single-engine turbine and single-engine piston helicopters with a MTOM  $\leq 3.175$  Kg. has not less than 100 hours flying experience as a pilot on that type, provided JCAR FCL2.240(a)(2), 2.250 or 2.255 as applicable, are met.

(ii) for all other helicopters, has not less than 350 hours flying experience as a pilot on that type, provided JCAR FCL2.250 or 2.255 as applicable, are met.

(7) A valid type rating contained in a license issued by an ICAO Contracting State may be transferred to a JCAR FCL 2 license provided it is currently valid and the last revalidation/renewal of the rating was performed in accordance with the requirements of JCAR FCL2.250 or 2.255, as applicable.

(b) Skill test:

(1) The skill test contents and sections for a rating for multi-engine multi-pilot helicopters are set out in Appendices 1 and 2 to JCAR FCL2.240 & 2.295; and

(2) The skill test contents and sections for a rating for multi-engine single-pilot helicopters and for single-engine helicopters are set out in Appendices 1 to JCAR FCL2.240 & 2.295 and 3 to JCAR FCL2.240.

Each applicable item in the appropriate skill test shall be satisfactorily completed within the six months immediately preceding the date of receipt of the application for the rating.

### **FCL2.245 Type ratings- Validity, revalidation and renewal**

(See Appendices 1 and 3 to JCAR FCL2.240)

- (a) Type ratings, helicopter – Validity. Type ratings for helicopters are valid for one year from the date of issue, or the date of expiry if revalidated within the validity period.
- (b) Type ratings, helicopter – Revalidation. For revalidation of type ratings, helicopter, the applicant shall complete:
  - (1) A proficiency check in accordance with Appendix 1 to JCAR FCL2.240 & 2.295 in the relevant type of helicopter within the three months immediately preceding the expiry date of the rating; and
  - (2) At least 2 hours as a pilot of the relevant helicopter type within the validity period of the rating. The proficiency check may be counted towards the two hours.
  - (3) For single-engine piston helicopters, as listed in Appendix 1 to JCAR FCL2.245(b)(3), at least the proficiency check in accordance with JCAR FCL2.245 (b)(1) on one of the applicable types held provided that the applicant has fulfilled at least 2 hours pilot-in-command flight time on the other type(s) during the validity period to which that revalidation proficiency check shall carry across. The proficiency check shall always be performed on the type least recently used for a proficiency check.
  - (4) For single-engine turbine helicopters with a MTOM  $\leq$  3175 Kg., at least the proficiency check in accordance with JCAR FCL2.245(b)(1) on one of the applicable types held provided that the applicant has:
    - (i) completed 300 hours as PIC on helicopters; and
    - (ii) completed 15 hours on each of the type(s) to which that revalidation proficiency check shall carry across; and
    - (iii) fulfilled at least 2 hours pilot- in-command flight time on each of the other type(s) during the validity period to which that revalidation proficiency check shall carry across; and
    - (iv) the proficiency check shall always be performed on the type

least recently used for a proficiency check, unless an individual written permission has been given by CARC,.

(5) The revalidation of an IR(H), if held should be combined with the type rating revalidation requirements in (1) above, in accordance with JCAR FCL2.246.

(c) An applicant who fails to achieve a pass in the type rating proficiency check before the expiry date of the type rating shall not exercise the privileges in that type and types to which it carries across according to JCAR FCL2.245(b)(3) or (b)(4), until the proficiency check has successfully been completed on the same type.

(d) Extension of the validity period or revalidation of ratings in special circumstances:

(1) When the privileges of a helicopter type or instrument rating are being exercised solely on a helicopter registered in ICAO Member State, CARC may at its discretion extend the validity period of the rating, or revalidate the rating provided the requirements of that ICAO Member State are fulfilled.

(2) When the privileges of a helicopter type or instrument rating are being exercised in a Jordanian registered helicopter being operated by an operator of an ICAO Member State under the provisions of Article 83bis of the International Convention on Civil Aviation, Chicago, CARC may at its discretion extend the validity period of the rating, or revalidate the rating provided the requirements of that ICAO Member State are fulfilled.

(3) Any rating revalidated or of which the validity period has been extended under the provisions of (1) or (2) above shall be revalidated in accordance with JCAR FCL2.245(b) and, if applicable, JCAR FCL2.185 before the privileges are exercised on helicopters registered in and operated by an operator of the State.

(4) A rating issued or used in ICAO Member State may remain in a JCAR FCL 2 license at the discretion of CARC provided the requirements of that ICAO Member State are fulfilled and the rating is restricted to helicopters registered in or operated by an operator of that ICAO Member State.

(e) Expired ratings. If a type rating has expired, the applicant shall meet any refresher training requirements as determined by CARC and complete a proficiency check in accordance with Appendix 1 to JCAR FCL2.240 in the relevant type of helicopter. The rating will be valid from the date of completion of the renewal requirements.

(f) Compliance with JCAR OPS3. The revalidation requirements of JCAR FCL2.245(b) will be met when an applicant operating under JCAR OPS3 fulfils the Operating Proficiency Check requirements contained in JCAR OPS 3.965, and if the operator demonstrates to the satisfaction of CARC that the mandatory items from Appendix 2 or 3 to JCAR FCL2.240 are fulfilled in accordance with Appendix 1 to JCAR FCL2.240 during the 12 months prior to the revalidation in accordance with JCAR OPS 1.965(a)(2). For this purpose the Operator Proficiency Check shall be performed in the three months immediately preceding the expiry date of the rating.

### **FCL2.246 Instrument Rating, revalidation and renewal.**

(a) Revalidation.

(1) An IR(H) shall be revalidated within the three months immediately preceding the expiry date of the rating. Whenever possible, revalidation of an IR(H) should be combined with the proficiency check for revalidation of a type rating. An applicant for the revalidation of an IR(H) when combined with a type rating shall complete a proficiency check in accordance with Appendix 1 and 2 to JCAR FCL2.240 & 2.295 or Appendix 3 to JCAR FCL2.240.

(2) An applicant for the revalidation of an IR(H) when not combined with the revalidation of a type rating shall either:

(i) complete section 5 and relevant parts of section 1 of Appendix 3 to JCAR FCL2.240, or;

(ii) complete section 5 and relevant parts of section 1 of Appendix 2 to JCAR FCL2.240 & 2.295.

An FTD II/III or FS may be used, but at least each alternate proficiency check for the revalidation of an IR(H) in these circumstances shall be performed in a helicopter.

(3) **(to be developed).**

(4) An applicant who fails to achieve a pass in the IR(H) proficiency check in accordance with JCAR FCL2.246(a)(1) or (a)(2), before the expiry date of the instrument rating shall not exercise the IR(H) privileges in that type until the proficiency check has successfully been completed.

(b) Renewal: (see also JCAR FCL2.185(c))

(1) If an IR(H) has expired, the applicant shall:

- (i) meet any refresher training and any additional requirements as determined by CARC, and;
- (ii) complete the proficiency check in accordance with JCAR FCL2.246(a)(1) or (a)(2).

**FCL2.250 Type rating, multi-pilot – Conditions.**

(See JCAR FCL2.285), (See JCAR FCL2.150), (See AMC JCAR FCL2.261(d))

(See Appendix 1 to JCAR FCL2.261(d))

(a) Pre-requisite conditions for training:

An applicant for the first type rating course for a multi-pilot helicopter type shall:

(1) Have at least 70 hours as pilot-in-command of helicopters except that an applicant for a multi-pilot type rating graduating from a ATP(H)/IR integrated, ATP(H) integrated, CPL(H)/IR integrated or CPL(H) integrated course who has less than 70 hours as pilot-in-command of helicopters shall have the type rating issued limiting the privileges to co-pilot privileges only.

To remove this limitation, an applicant shall:

(i) have completed 70 hours as pilot-in-command or PICUS of helicopters; and

(ii) have passed the multi-pilot skill test on the applicable helicopter type as pilot-in-command in accordance with JCAR FCL2.262(b).

(2)(i) hold a certificate of satisfactory completion of MCC. If the MCC course is to be added to the type rating course (see JCAR FCL2.261 and 2.262 and AMC JCAR FCL2.261(d) and Appendix 1 to JCAR FCL2.261(d)), this requirement is not applicable; and

(ii) applicants having an experience of at least 500 hours as pilot in multi-pilot operations approved by CARC, on single pilot, multi-engine helicopters shall be considered to meet the requirements of MCC.

(3) meet the requirements of JCAR FCL2.285 as applicable for ATPL(H)

(b) The level of knowledge assumed to be held by holders of the PPL(H) or CPL(H) and type ratings for multi-pilot helicopters issued under requirements other than JCAR FCL 2 will not be a substitute for showing compliance with the requirements of (3) above.



**FCL2.255 Type rating, single-pilot – Conditions.**

(See Appendix 1 to JCAR FCL2.255)

Pre-requisite conditions for training:

An applicant for the issue of a first type rating for a multi-engine helicopter shall:

- (a) Hold a certificate of satisfactory completion of a pre-entry approved course in accordance with Appendix 1 to JCAR FCL2.255 to be conducted by a FTO or a TRTO or have passed at least the ATP(H) theoretical knowledge examinations in accordance with JCAR FCL2.470(a); and
- (b) For an applicant who has not satisfactorily followed and completed an integrated flying training course as ATP(H)/IR; ATP(H), or CPL(H)/IR, shall have completed at least 70 hours as pilot-in-command of helicopters.
- (c) The possession of a certificate of satisfactory completion of the pre-entry approved courses in accordance with Appendix 1 to JCAR FCL2.255 shall not be a substitute for showing compliance with JCAR FCL2.285(b) for the grant of an ATPL(H).

**FCL2.260 Reserved.****FCL2.261 Type ratings – Knowledge and flight instruction.**

(See Appendix 1 to JCAR FCL2.261(a) and AMC JCAR FCL2.261 (a))

(See Appendix 1 and 2 to JCAR FCL2.240 & JCAR FCL2.295

and 3 to JCAR FCL2.240), (See Appendix 2 to JCAR FCL2.055)

(See AMC JCAR FCL2.261(c)(2)), (See AMC JCAR FCL2.261(d)

(See Appendix 1 to JCAR FCL2.261(b)), (See Appendix 1b to JCAR FCL2.261(d))

(a) Theoretical knowledge instruction and checking requirements. An applicant for a type rating for single- or multi-engine helicopters shall have completed the required theoretical knowledge instruction (see Appendix 1 to JCAR FCL2.261(a) and AMC JCAR FCL2.261(a)) and demonstrated the level of knowledge required for the safe operation of the applicable helicopter type.

An applicant already holding a type rating for a helicopter type, performed in either SP or MP role, shall be considered to have fulfilled the theoretical requirements, if applying for a further type rating for the same helicopter type, to be performed in the opposite MP or SP role.

## (b) Flight instruction

- (1) An applicant for a type rating for single-engine and multi-engine single-pilot helicopters shall have completed a course of flight instruction related to the type rating skill test (see Appendix 3 to JCAR FCL2.240).
  - (2) An applicant for a type rating for multi-pilot helicopters shall have completed a course of flight instruction related to the type rating skill test (see Appendix 2 to JCAR FCL2.240).
- (c) Conduct of training courses

(c) (1) Training courses for the above purpose shall be conducted by a FTO or a TRTO. Training courses may also be conducted by a facility or a sub-contracted facility provided by an operator or a manufacturer or, in special circumstances, by a individually authorised instructor.

(2) Such courses shall be approved by CARC (see AMC JCAR FCL2.261(c)(2)) and such facilities shall meet the relevant requirements of Appendix 2 to JCAR FCL2.055, as determined by CARC.

(d) Multi-crew co-operation training (see also JCAR FCL2.250(a)(2))

(1) The course is intended to provide MCC training in two circumstances:

(i) for students attending an ATP integrated course in accordance with the aim of that course (see Appendix 1 to JCAR FCL2.160 & 2.165(a)(1) and Appendix 1 to JCAR FCL2.160 & 2.165(a)(2))

(ii) for PPL(H) and CPL(H) holders who have not graduated from an ATP integrated course but who wish to obtain an initial type rating on multi-pilot helicopters (see JCAR FCL2.250(a)(2)).

(2) The MCC course shall comprise at least:

(i) for MCC/IR: 25 hours of theoretical knowledge instruction and exercises and 20 hours of MCC training. Student attending an ATP(H)/IR integrated course may have the practical training reduced by 5 hours.

(ii) for MCC/VFR: 25 hours of theoretical knowledge instruction and exercises and 15 hours of MCC training. Students attending an (ATP(H) integrated course may have the practical training reduced by 5 hours.

Wherever possible, the MCC training should be combined with the initial type rating course on multi-pilot helicopters.

(3) The MCC training shall be accomplished within six months under the supervision of either the Head of Training of an approved flying training organisation or an approved type rating training organisation or on an approved training course conducted by an operator.

A course conducted by an operator shall meet the relevant requirements of Appendix 2 to JCAR FCL2.055, as determined by CARC. For further details on MCC training see Appendix 1 to JCAR FCL2.261(d) and AMC JCAR FCL2.261(d). A FNPT II, III qualified MCC, FTD 2,3 or a flight simulator shall be used. Whenever possible, the MCC training should be combined with the initial type rating training for a multi-pilot helicopter, in which case the practical MCC training may be reduced to not less than 10 hours for MCC/IR, and not less than 7 hours for MCC/VFR, if the same flight simulator is used for both MCC and type rating training.

### **FCL2.262 Type ratings – Skill**

(See Appendix 1, and 2 to JCAR FCL2.240 & JCAR FCL2.295 and 3 to

## JCAR FCL2.240)

- (a) Single-pilot skill test. An applicant for a type rating for a single-pilot helicopter shall have demonstrated the skill required for the safe operation of the applicable type of helicopter, as set out in Appendices 1 to JCAR FCL2.240 & 2.295 and Appendix 3 to JCAR FCL2.240.
- (b) Multi-pilot skill test. An applicant for a type rating for a multi-pilot helicopter shall have demonstrated the skill required for the safe operation of the applicable type of helicopter in a multi-crew environment as a pilot-in-command or a co-pilot as applicable, as set out in Appendices 1 and 2 to JCAR FCL2.240 & 2.295.
- (c) Multi-crew co-operation. On completion of the MCC training the applicant shall either demonstrate the ability to perform the duties of a pilot on multi-pilot helicopter by passing the type rating skill test on multi-pilot helicopters as set out in Appendices 1 and 2 to JCAR FCL2.240 & 2.295, or shall be given a certificate of completion of MCC as shown in Appendix 1 to AMC JCAR FCL2.261(d).

**Appendix- 1 to JCAR FCL2.240 & 2.295****Skill test and proficiency check for helicopter type ratings and ATPL including proficiency checks for the instrument rating.**

(See JCAR FCL2.240 through 2.262 and 2.295), (See AMC JCAR FCL2.261(a))

(See Appendix 1 to JCAR FCL2.261(a))

1. The applicant shall have completed the required instruction in accordance with the syllabus (see also Appendix 1 to JCAR FCL2.261(a) and Appendices 2 and 3 to JCAR FCL2.240). When recommended and agreed by CARC, the syllabus may be reduced to give credit for previous experience on similar types. The administrative arrangements for confirming the applicant's suitability to take the test, including disclosure of the applicant's training record to the examiner, shall be determined by CARC.

2. Items to be covered in skill tests/proficiency checks are given in the applicable Appendix 2 to JCAR FCL2.240 and 2.295 and Appendix 3 to JCAR FCL2.240. When recommended by and agreed by CARC, credit may be given for skill test items common to other types or variants where the pilot is experienced on that other type. These credits shall not apply during a skill test for the ATPL. With the approval of CARC, several different skill test/proficiency check scenarios may be developed containing simulated line operations. The examiner will select one of these scenarios. Flight simulators, if available and other training devices as approved shall be used. The type rating sections and instrument rating section shall be considered as two separate tests, VFR and IFR, and failure of one of the skill tests/proficiency checks shall not affect the validity of the other.

3. Applicants for the ATPL skill test, the skill test and proficiency check for helicopter type ratings, including proficiency checks for the instrument rating shall complete the relevant requirements as follows:

(a) For a multi pilot helicopter type rating or ATPL;

Pass sections 1 to 4 and 6 (as applicable) of the skill test/proficiency check in Appendix 2 to JCAR FCL2.240 & 2.295. Failure in more than 5 items will require the applicant to take the entire test/check again. An applicant failing not more than 5 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/proficiency check shall be completed within six months.

(b) For a single pilot helicopter type rating ;

Pass sections 1 to 4 and 6 (as applicable) of the skill test/proficiency check in Appendix 3 to JCAR FCL2.240. Failure in more than 5 items will require the applicant to take the entire test/check again. An applicant failing not more than 5 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/proficiency check shall be completed within six months.

(c) For an Instrument rating;

(i) Pass section 5 of the proficiency check in either Appendix 2 to JCAR FCL2.240 & 2.295 or Appendix 3 to JCAR FCL2.240. Failure in more than 3 items will require the applicant to take the entire check again. An applicant failing not more than 3 items shall take the failed items again. Failure in any item of the re-check or failure in any other items already passed will require the applicant to take the entire check again.

(ii) If an additional authorisation for instrument approaches down to a decision height of less than 60m/200ft (CAT II/III) is sought, the applicant shall pass the items in Appendix 4 to JCAR FCL2.240 on the relevant type.

4. Further training may be required after a failed test/check. Failure to achieve a valid pass in all sections in two attempts shall require further training as determined by the examiner. There is no limit to the number of skill/proficiency checks that may be attempted.

#### CONDUCT OF THE TEST/CHECK – GENERAL

5. CARC will provide the examiner with safety criteria to be observed in the conduct of the test/check.

6. Should an applicant choose not to continue with a test/check for reasons considered inadequate by the examiner, the applicant will be regarded as having failed those items not attempted. If the test/check is terminated for reasons considered adequate by the examiner, only those items not completed shall be tested in a further flight.

7. At the discretion of the examiner any manoeuvre of procedure of the test/check may be repeated once by the applicant. The examiner may stop the test/check at any stage if it is considered that the applicant's competency requires a complete re-test/re-check.

8. Checks and procedures shall be completed in accordance with the authorised checklist for the helicopter used in the test/check and, if applicable, with the MCC concept. The applicant, in compliance with the operations manual or flight manual for the helicopter used, shall calculate performance data for take-off, approach and landing. If completing the IR(H) section of the skill test or proficiency check, then decision heights/altitude, minimum descent heights/altitudes and missed approach point shall be determined by the applicant. For the IR proficiency check, the flight should be conducted under actual or simulated IMC and using IFR procedures.

#### SPECIAL REQUIREMENTS FOR THE SKILL TEST/PROFICIENCY CHECK FOR A MULTI-PILOT HELICOPTER TYPE RATING AND SKILL TEST FOR THE ATPL

9. The test/check for a multi-pilot helicopter shall be performed in a multi-crew environment. Another applicant or another pilot, may function as second pilot. If a helicopter, rather than a flight simulator, is used for the test/check, the second pilot shall be an instructor.

10. An applicant shall be required to operate as 'pilot flying' (PF) during all sections of the test/check except normal and abnormal procedure items 3 to 3.15 and abnormal and emergency procedures 4 to 4.7 which may be conducted as PF or PNF in accordance with Multi-Crew Co-operation (in accordance with Appendix 2 to JCAR FCL2.240 & 2.295). The applicant for the initial issue of a multi-pilot helicopter type rating or ATPL(H) shall also demonstrate the ability to act as 'pilot not flying' (PNF). The applicant may choose either the left hand or the right hand seat for the test/check.

11. The following matters shall be specifically checked when testing/checking applicants for a type rating for multi-pilot helicopters extending to the duties of a pilot-in-command, irrespective of whether the applicant acts as PF or PNF:

- (a) management of crew co-operations;
- (b) maintaining a general survey of the helicopter 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.

12. The test/check should be accomplished as far as possible in a simulated commercial air transport environment. An essential element is the ability to plan and conduct the flight from routine briefing material.

#### FLIGHT TEST/CHECK TOLERANCE

13. 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 judgment and airmanship;
- (d) apply aeronautical knowledge;
- (e) 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;
- (f) understand and apply crew co-ordination and incapacitation procedures, if applicable; and g) communicate effectively with the other crew members, if applicable.

14. The following limits are for general guidance. The examiner shall make allowance for turbulent conditions and the handling qualities and performance of the type of helicopter used.

IFR flight limits;

#### Height

Generally	$\pm 100$ feet
Starting a go-around at decision height	+ 50 feet/-0 feet
Minimum descent height/altitude	+ 50 feet/-0 feet

#### Tracking

On radio aids	$\pm 5^\circ$
Precision approach half scale deflection, azimuth and glide path	

#### Heading

normal operations	$\pm 5^\circ$
abnormal operations/emergencies	$\pm 10^\circ$

#### Speed

generally	$\pm 10$ knots
with simulated engine failure	+10 knots/-5 knots

#### VFR flight limits; Height

generally	$\pm 100$ feet
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Heading	
normal operations	$\pm 5^{\circ}$
abnormal operations/emergencies	$\pm 10^{\circ}$
<b>Speed</b>	
generally	$\pm 10$ knots
with simulated engine failure	+10 knots/-5 knots
<b>Ground drift</b>	
T.O. hover I.G.E.	$\pm 3$ feet
Landing	$\pm 2$ feet (with 0 feet rearward or lateral flight)

#### CONTENT OF THE SKILL TEST/PROFICIENCY CHECK

15. The skill test and proficiency check contents and sections are set out in Appendix 2 to JCAR FCL2.240 and JCAR FCL2.295 for multi-pilot helicopters and for the ATPL. For single-pilot helicopters the skill test and proficiency check contents are set out in Appendix 3 to JCAR FCL2.240. For those applicants wishing to complete the IR(H) at the same time, section 5 of the relevant appendix shall be completed. CARC may determine the format and application form for the skill test.

**Appendix- 2 to JCAR FCL2.240 & 2.295****Contents of the skill test and proficiency check for multi-pilot helicopter type ratings and ATPL, including proficiency checks for the instrument rating.**

(See JCAR FCL2.240 through 2.262 and 2.295)

1. The following symbols mean:

P = Trained as Pilot-in-command or Co-pilot and as Pilot Flying (PF) and Pilot Not Flying (PNF) for the issue of a type rating as applicable.

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:

FS = Flight Simulator

FTD = Flight Training Device

H = Helicopter

3.1 (a) 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.

(b) 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.

3.2 Instrument flight procedures (Section 5) shall be performed only by applicants wishing to renew or revalidate an IR(H) for multi-pilot helicopter or extend the privileges of that rating to another multi pilot type.

3.3 The starred items (\*) shall be flown in actual or simulated IMC only by applicants wishing to renew or revalidate an IR(H) for multi-pilot helicopter, or extend the privileges of that rating to another type.

4. Where the letter 'M' appears in the skill test/ proficiency check column this will indicate the mandatory exercise.

5. A flight simulator shall be used for practical training and testing if the flight simulator forms part of an approved type-rating course. The following considerations will apply to the approval of the course:

(a) the qualification of the flight simulator as set out in JAR-STD;

(b) the qualifications of the instructor;

- (c) the amount of line-orientated flight training provided on the course;
- (d) the qualifications and previous line operating experience of the pilot under training; and
- (e) the amount of supervised line flying experience provided after the issue of the new type rating.

		Practical Training				Skill Test/ Proficiency Check	
		Instructor's initials when training completed				Chkd. in	Examiner's initials when test/check passed
Manoeuvres/Procedures (Including MCC)		FTD	FS	H		FTD, FS, H	
<b>SECTION 1 Pre-flight preparations and checks</b>							
1.1	Helicopter exterior visual inspection; location of each item and purpose of inspection			P		M	
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 on instructions of an instructor		P	---->		M	
1.5	Pre take-off procedures and checks	P	---->	---->		M	
<b>SECTION 2 Flight manoeuvres and procedures</b>							
2.1	Take-offs (various profiles)		P	---->		M	
2.2	Sloping ground take-offs & landings		P	---->			
2.3	Take-off at maximum take-off mass (actual or simulated maximum take-off mass)	P	---->	---->			
2.4.1	Take off with simulated engine failure shortly before reaching TDP, or DPATO		P	---->		M	
2.4.2	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 degrees bank, 180 degrees to 360 degrees left and right, by sole reference to instruments	P	---->	---->		M	
2.6	Autorotative descent	P	---->	---->		M	
2.6.1	Autorotative landing 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	

**Appendix -2 to FCL2.240 & 2.295**

Manoeuvres/Procedures (Including MCC)		Practical Training				Skill Test/ Proficiency Check	
		Instructor's initials when training completed				Chkd in	Examiner's initials when test/check passed
		FTD	FS	H			
<b>SECTION 1 Pre-flight preparations and checks</b>							
1.1	Helicopter exterior visual inspection; location of each item and purpose of inspection			P		M	
1.2	Cockpit inspection		P	--->			
1.3	Starting procedures, radio and navigation equipment check, selection and setting of navigation and communication frequencies	P	--->	--->			
1.4	Taxiing/air taxiing in compliance with air traffic control instructions or on instructions of an instructor		P	--->			
1.5	Pre take-off procedures and checks	P	--->	--->			
<b>SECTION 2 Flight manoeuvres and procedures</b>							
2.1	Take-offs (various profiles)		P	---->		M	
2.2	Sloping ground take-offs & landings		P	---->			
2.3	Take-off at maximum take-off mass (actual or simulated maximum take-off mass)	P		---->			
2.4.1	Take off with simulated engine failure shortly before reaching TDP, or DPATO		P	---->		M	
2.4.2	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 degrees bank, 180 degrees to 360 degrees left and right, by sole reference to instruments	P		---->		M	
2.6	Autorotative descent	P		---->		M	
2.6.1	Autorotative landing 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	

		Practical Training				Skill Test/ Proficiency Check	
Manoeuvres/Procedures (Including MCC)		Instructor's initials when training completed				Chkd in	Examiner's initials when test/check passed
<b>SECTION 3 Normal and abnormal operations of the following systems and procedures:</b>							
3	Normal and abnormal operations of the following systems and procedures:					M	mandatory minimum of 3 items shall be selected 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- 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	---->	--->			
<b>SECTION 4 Abnormal and emergency procedures</b>							
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, shut down and restart at a safe height	P	---->	---->			
4.4	Fuel dumping (simulated)	P	---->	---->			
4.5	Tail rotor control failure (if applicable)		---->	Helicopter shall not be used for this exercise			
4.5.1	Tail rotor loss (if applicable)	P	---->	---->			
4.6	Incapacitation of crew member	P	---->	---->			
4.7	Transmission malfunctions	P	---->	---->			
4.8	Other emergency procedures as outlined in the appropriate Flight manual	P	---->	---->			

<b>SECTION 5 Instrument Flight Procedures (To be performed in IMC or simulated IMC)</b>							
5.1	SECTION 5 Instrument Flight Procedures (To be performed in IMC or simulated IMC)	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 1 Decision height	P*	---->*	---->*			
5.4.1	Manually, without flight director	P*	---->*	---->*		M* skill test only	
5.4.2	Manually, without flight director	P*	---->*	---->*			
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*	
<b>SECTION 6 Use of Optional Equipment</b>							
6	Use of optional equipment	P	---->	---->			

**Appendix- 3 to JCAR FCL2.240**

**Contents of the type rating/training/skill test and proficiency check for single-engine and multi- engine single-pilot helicopters including proficiency checks for the instrument rating**

(See JCAR FCL2.240 through 2.262)

(See Appendix 1 to JCAR FCL2.160 & 2.165(a) (3))

1. The following symbols mean:

P = Trained as Pilot-in-command for the issue of a type rating.

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:

FS = Flight Simulator

FTD = Flight Training Device

H = Helicopter

3.1 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.

3.2. 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.

4. Where the letter ‘M’ appears in the skill test/proficiency check column this will indicate the mandatory exercise.

5. A flight simulator shall be used for practical training and testing if the flight simulator forms part of an approved type-rating course. The following considerations will apply to the approval of the course:

(a) the qualification of the flight simulator as set out in JCAR–STD;

(b) the qualifications of the instructor and examiner;

(c) the amount of line-orientated flight training provided on the course;

(d) the qualifications and previous line operating experience of the pilot under training; and

(e) the amount of supervised line flying experience provided after the issue of the new type rating.

Manoeuvres/Procedures	Practical Training			Skill Test/ Proficiency Check	
	Trained in			Chkd. In	Examiner's initials when test/check passed
	FTD	FS	H		FS. H

SECTION 1 Pre-flight preparation and checks							
1.1	Helicopter exterior visual inspection; location of each item and purpose of inspection			P		M	
1.2	Cockpit inspection		P	---->		M	
1.3	Prior to starting engines, 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 on instructions of an instructor		P	---->		M	
1.5	Pre take-off procedures	P	---->	---->		M	
SECTION 2 Flight manoeuvres and procedures							
2.1	Take-offs (various profiles)		P	---->		M	
2.2	Sloping ground take-offs & landings		P	---->			
2.3	Take-off at maximum take-off mass (actual or simulated maximum take-off mass)	P	---->	---->			
2.4.1	Take off with simulated engine failure shortly before reaching TDP, or DPATO		P	---->		M	
2.4.2	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 degrees bank, 180 degrees to 360 degrees left and right, by sole reference to instruments	P	---->	---->		M	
2.6	Autorotative descents	P	---->	---->		M	
2.6.1	Autorotative landing 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 be selected 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- 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						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, shut down 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 shall not be used for this exercise			
4.6	Transmission malfunction	P	---->	---->			
4.7	Other emergency procedures as outlined in the appropriate Flight manual	P	---->	---			
<b>SECTION 5 Instrument Flight Procedures (to be performed in IMC or simulated IMC)</b>							
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 1 decision height	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 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*	
<b>SECTION 6 Use of Optional equipment</b>							
6	Use of optional equipment	P	---	---->			

**Appendix -4 to JCAR FCL2.240****Additional authorisation on a type rating for instrument approaches down to a decision height of less than 60m (200 ft) (CAT II/III).**

(See AMC JCAR FCL2.261(a))

**A. Theoretical knowledge instruction (additional)**

1. Special requirements for extension of a type rating for Instrument Approaches down to a decision height of less than 200 ft (60 m)

2. Equipment, procedures and limitations

**B. Manoeuvres and Procedures (additional)**

Manoeuvres/procedures (including MCC)	Instructor's initials when training completed				Skill test/ proficiency check	
					Chkd In	Examiner's Initials when Test/check passed
	FTD	FS	H		FS, H	
Additional authorisation on a type rating for instrument approaches down to a decision height of less than 60 m (200 ft) (CAT II/III). Following manoeuvres and procedures are to be trained for the purpose of type rating extension to instrument approach down to a DH of less than 60 m (200 ft). During the following instrument approaches and missed approach procedures all equipment necessary for type certification of instrument approaches down to a decision height of less than 60 m (200 ft) shall be used						
1	P*	---->*			M*	
2	P*	---->*			M*	
3 to reaching decision height, furthermore, go-around with airborne equipment failure. Special attention shall be given to go-around procedures with pre-calculated manual or automatic go-around attitude guidance.	P*	---->*			M*	
4	P*	---->*				

**Appendix- 1 to JCAR FCL2.245(b)(3)  
Cross-Crediting of Proficiency Checks for revalidation of type ratings.**

(See JCAR FCL2.245(b)(3) and JCAR FCL2.245(c) )

This Appendix includes a list of single-engine piston helicopter types and license endorsement for the purpose of revalidation of type ratings according to JCAR FCL2.245 (b) (3).

Manufacturer	Helicopter Type and License Endorsement
<b>Agusta-Bell</b>	
- SE piston	Bell47
<b>Bell Helicopters</b>	
- SE piston	Bell47
<b>Brantley</b>	
-SE piston	Brantley B2
<b>Breda Nardi</b>	
- SE piston	HU269
<b>Enstrom</b>	
- SE piston	ENF28
<b>Hiller</b>	
- SE piston	UH12
<b>Hughes/Schweitzer</b>	
- SE piston	HU269
<b>Westland</b>	
- SE piston	Bell47

**Appendix 1 to JCAR FCL2.255****Contents of the approved pre-entry course for the purpose of a first type rating for a multi- engine helicopter**

(See JCAR FCL2.255(a)), (See Appendix 2 to JCAR FCL2.055, paragraph 24)

1. The approved pre-entry course shall comprise the following subjects of the ATP(H) theoretical knowledge course:
  - 020 Aircraft General Knowledge:
    - airframe/systems/power plant
    - instrument/electronics
  - 030 Flight Performance and Planning:
    - mass and balance
    - performance
2. At the end of the course the applicant shall receive a certificate of satisfactory completion.

**Appendix- 1 to JCAR FCL2.261(a)****Theoretical knowledge instruction requirements for skill test/proficiency checking for type ratings**

(See JCAR FCL2.261(a)), (See AMC JCAR FCL2.261(a))

1. The theoretical knowledge instruction shall be conducted by an authorised instructor holding the appropriate type rating or any instructor having appropriate experience in aviation and knowledge of the aircraft concerned, e.g. flight engineer, maintenance engineer, flight operations officer.
2. The theoretical knowledge instruction shall cover the syllabus in AMC JCAR FCL2.261(a), as appropriate to the helicopter type concerned. Depending on the equipment and systems installed, the instruction shall include but is not limited to the following contents:

(a) Helicopter structure, transmissions, rotor and equipment, normal and abnormal operation of systems.

- Dimensions
- Engine including aux. power unit, rotors and transmissions
- Fuel system-
- Air-conditioning
- Ice protection, windshield wipers and rain repellent
- Hydraulic system
- Landing gear
- Flight controls, stability augmentation and autopilot systems
- Electrical power supply
- Flight instruments, communication, radar and navigation equipment
- Cockpit, cabin and cargo compartment
- Emergency equipment

(b) Limitations

- General limitations, according to the helicopter flight manual
- Minimum equipment list

(c) Performance, flight planning and monitoring

- Performance
- Flight planning

(d) Load and balance and servicing

- Load and balance
- Servicing on ground

(e) Emergency procedures

(f) Special requirements for helicopters with electronic flight instrument systems (EFIS)

(g) Optional equipment

3. For the initial issue of helicopters type ratings the written or computer based examination shall comprise at least fifty multiple-choice questions distributed appropriately across the main subjects of the syllabus. The pass mark shall be 75% in each of the main subjects of the syllabus.

4. For proficiency checks multi-pilot and single-pilot multi-engine helicopters theoretical knowledge shall be verified by a multi-choice questionnaire or other suitable methods.

**Appendix- 1 to JCAR FCL2.261(b)****Flight Instruction and Skill Test.**

(See JCAR FCL2.220), (See also JCAR FCL2.262), (See AMC -JCAR FCL2.261( c))

**FLIGHT INSTRUCTION**

1. a) The amount of flight instruction will depend on:

- (i) complexity of the helicopter type, handling characteristics, level of technology
- (ii) category of helicopter (single-engine piston or turbine helicopter, multi-engine turbine and multi pilot helicopter);
- (iii) previous experience of the applicant;
- (iv) the availability of FSTDs.

b) Flight Synthetic Training Devices (FSTDs)

The level of qualification and the complexity of the type will determine the amount of practical training that may be accomplished in FSTDs, including completion of the skill test. Prior to undertaking the skill test, a student shall demonstrate competency in the skill test items during the practical training.

2. Initial issue

The approved flight instruction (excluding skill test) shall comprise a total of at least:

Helicopter types	In Helicopter	In Helicopter and FSTD associated training Credits
SEP (H)	5 hrs	Using FS C/D: At least 2 hrs helicopter and at least 6 hrs total Using FTD 2/3: At least 4 hrs helicopter and at least 6 hrs total
SET (H) under 3175 kg MTOM	5 hrs	Using FS C/D: At least 2 hrs helicopter and at least 6 hrs total Using FTD 2/3: At least 4 hrs helicopter and at least 6 hrs total
SET(H) at or over 3175 kg MTOM	8 hrs	Using FS C/D: At least 2 hrs helicopter and at least 10 hrs total Using FTD 2/3: At least 4 hrs helicopter and at least 10 hrs total
SPH MET (H) JAR/FAR 27 and 29	8 hrs	Using FS C/D: At least 2 hrs helicopter and at least 10 hrs total Using FTD 2/3: At least 4 hrs helicopter and at least 10 hrs total
MPH	10 hrs	Using FS C/D: At least 2 hrs helicopter, and at least 12 hrs total Using FTD 2/3: At least 4 hrs helicopter, and at least 12 hrs total

Holders of an IR(H) wishing to extend the IR(H) to the further types shall have additionally two hours flight training on type by sole reference to instruments according to IFR which may be conducted in a FS C/D level or FTD level 2/3. Holders of SE IR(H) wishing to extend the IR privileges to a ME IR(H) for the first time shall comply with JCAR FCL2.240(a)(4)

3. Additional types

The approved flight instruction (excluding skill test) shall comprise a total of at least:

Helicopter types	In Helicopter	In Helicopter and FSTD associated training Credits
SEP(H) to SEP(H) within Appendix 1 to JCAR FCL 2 2.245(b)(3)	2 hrs	Using FS C/D: At least 1 hr helicopter and at least 3 hrs total Using FTD 2/3: At least 1 hr helicopter and at least 4 hrs total
SEP(H) to SEP(H) not included in Appendix 1 to JCAR FCL 2 2.245(b)(3)	5 hrs	Using FS C/D: At least 1 hr helicopter and at least 6 hrs total Using FTD 2/3: At least 2 hr helicopter and at least 7 hrs total
SET(H) to SET(H)	2 hrs	Using FS C/D: At least 1 hr helicopter and at least 43 hrs total Using FTD 2/3: At least 1 hr helicopter and at least 5 4hrs total
Single Engine difference training	1 hr	N/A
MET(H) to MET(H)	3 hrs	Using FS C/D: At least 1 hr helicopter and at least 6 4 hrs total Using FTD 2/3: At least 2 hrs helicopter and at least 7 5 hrs total
Multi Engine difference training	1 hrs	N/A
MPH to MPH	5 hrs	Using FS C/D: At least 1 hr helicopter and at least 6 hrs total Using FTD 2/3: At least 2 hrs helicopter and at least 7 hrs total

Holders of an IR(H) wishing to extend the IR(H) to further types shall have additionally two hours flight training on type by sole reference to instruments according to IFR which may be conducted in a FS C/D level or FTD level 2/3. Holders of SE IR(H) wishing to extend the IR privileges to a ME IR(H) for the first time shall comply with JCAR FCL2.240(a)(4)

## SKILL TEST

4. On completion of the related flying training, the applicant shall take the type rating skill test including, if relevant, the instrument section, in accordance with the Appendix 1 and 2 to JCAR FCL2.240 & 2.295, or Appendix 1 to JCAR FCL2.240 & 2.295 and Appendix 3 to JCAR FCL2.240 as appropriate.

**Appendix- 1 to JCAR FCL2.261(d)****Multi-crew co-operation course (Helicopter).**

(See JCAR FCL2.261(d)), (See AMC JCAR FCL2.261(d))

1. The aim of the course is to enable pilots to become proficient in multi-crew co-operation (MCC) in order to operate safely multi-pilot helicopters under IFR and VFR (if applicable).

(a) The pilot-in-command fulfils his managing and decision-making functions irrespective whether he is PF or PNF.

(b) The tasks of PF and PNF are clearly specified and distributed in such a manner that the PF can direct his full attention to the handling and control of the aircraft.

(c) Co-operation is effected in an orderly manner appropriate to the normal, abnormal or emergency situations encountered.

(d) Mutual supervision, information and support is ensured at all times.

**INSTRUCTORS**

2. Instructors for MCC training should be thoroughly familiar with human factors and multi-crew co- operation (MCC). They should be current with the latest developments in human factors training and multi- crew co-operation (MCC).

**THEORETICAL KNOWLEDGE**

3. The theoretical knowledge syllabus is set out in AMC JCAR FCL2.261(d).

**FLYING TRAINING**

4. The flying training syllabus is set out in AMC JCAR FCL2.261(d).

**CERTIFICATE OF COMPLETION**

5. On completion of the course, the applicant may be issued with a certificate of satisfactory completion of the course.

**CROSS-CREDITING**

6. A holder of a certificate of completion of MCC training on aeroplanes or experience of more than 500 hours as pilot on multi-pilot aeroplanes shall be exempted from the requirement to complete the theoretical knowledge syllabus as set out in AMC JCAR FCL2.261(d).



**SUBPART- G**  
**AIRLINE TRANSPORT PILOT LICENSE (Helicopter) – ATPL(H)**

**FCL2.265 Minimum age.**

An applicant for an ATPL(H) shall be at least 21 years of age.

**FCL2.270 Medical fitness.**

An applicant for an ATPL (H) shall hold a valid Class 1 medical certificate. In order to exercise the privileges of the ATPL(H), a valid Class 1 medical certificate shall be held.

**FCL2.275 Privileges and conditions.**

(a) Privileges. Subject to any other conditions specified in the JCAR FCL 2, the privileges of the holder of an ATPL(H) are to:

- (1) exercise all the privileges of the holder of a PPL(H) and CPL(H);  
and
- (2) act as pilot-in-command or co-pilot in helicopters engaged in air transportation.

(b) Conditions. An applicant for an ATPL(H) who has complied with the conditions specified in JCAR FCL2.010(a)(4), 2.265, 2.270, 2.280, 2.285, 2.290 and] 2.295 shall have fulfilled the requirements for the issue of an ATPL(H) containing a type rating for the helicopter type used on the skill test.

**FCL2.280 Experience and crediting.**

(a) An applicant for an ATPL(H) shall have completed as a pilot of helicopters at least 1 000 hours of flight time (see also JCAR FCL2.050(a)(3)) of which a maximum of 100 hours may have been completed in a STD, of which not more than 25 hours in a FNPT, including at least:

- (1) 350 hours in multi-pilot helicopter.
- (2) (i) 250 hours either as pilot-in- command or at least 100 hours as pilot-in- command and 150 hours as co-pilot performing, under the supervision of the pilot- in-command the duties and functions of a pilot-in-command provided that the method of supervision is acceptable to CARC; or  
(ii) 250 hours as co-pilot on helicopters operated in accordance with JCAR FCL2.280(a)(1) performing, under the supervision of the pilot-in-command the duties and functions of a pilot-in-command provided that the method of supervision is acceptable to CARC, and the ATPL privileges shall be limited to multi-pilot operations only;
- (3) 200 hours of cross-country flight time of which at least 100 hours

shall be as pilot-in-command or as co-pilot performing under the supervision of the pilot-in-command the duties and functions of a pilot-in-command, provided that the method of supervision is acceptable to CARC;

(4) 30 hours of instrument time of which not more than 10 hours may be instrument ground time; and

(5) 100 hours of night flight as pilot- in-command or as co-pilot.

(b) Holders of a pilot license or equivalent document for other categories of aircraft will be credited with flight time in such other categories of aircraft as set out in JCAR FCL2.155(a) except flight time in aeroplanes which will be credited up to 50% of all the flight time requirements of sub-paragraph (a).

(c) The experience required shall be completed before the skill test given in JCAR FCL2.295 is taken.

#### **FCL2.285 Theoretical knowledge.**

(See Appendix 1 to JCAR FCL2.285), (See Appendix 1 to JCAR FCL2.005)

(a) Course. An applicant for an ATPL(H) shall have received theoretical knowledge instruction at an approved flying training organisation (FTO) An applicant who has not received the theoretical knowledge instruction during an integrated course of training shall take the course set out in Appendix 1 to JCAR FCL2.285.

(b) Examination. An applicant for an ATPL(H) shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of an ATPL(H) and in accordance with the requirements in JCAR FCL 2 Subpart J.

**FCL2.290 Flight instruction**

(See AMC JCAR FCL2.261(d)), (See Appendix 1 to JCAR FCL2.261(d))

An applicant for an ATPL(H) shall be the holder of a CPL(H), a multi-pilot helicopter type rating and have received instruction in multi-crew co-operation VFR as required by JCAR FCL2.261(d) (see Appendix 1 to JCAR FCL2.261(d) and AMC JCAR FCL2.261(d).

**FCL2.295 Skill.**

- (a) An applicant for an ATPL(H) shall have demonstrated the ability to perform as pilot-in-command of a multi-pilot helicopter, the procedures and manoeuvres described in JCAR FCL 2 Appendix 1 and 2 to JCAR FCL2.240 and 2.295 with a degree of competency appropriate to the privileges granted to the holder of an ATPL(H).
- (b) The ATPL(H) skill test may serve at the same time as a skill test for the issue of the license and a proficiency check for the revalidation of the type rating for the helicopter used in the test and may be combined with the skill test for the issue of a multi-pilot type rating.

**Appendix- 1 to JCAR FCL2.285****ATPL(H) – Modular theoretical knowledge course.**

(See JCAR FCL2.285), (See Appendix 1 to JCAR FCL2.470)

1. The aim of this course is to train pilots who have not received the theoretical knowledge instruction during an integrated course to the level of theoretical knowledge required for the ATPL(H).
2. An applicant wishing to undertake an ATPL(H) modular course of theoretical knowledge instruction shall be required under the supervision of the Head of Training of an approved FTO to complete 450 hours (1 hour = 60 minutes instruction) of instruction for ATPL(H) theory within a period of 18 months. An applicant shall be the holder of a PPL(H) issued in accordance with ICAO Annex 1.

Holders of an CPL(H) may have the theoretical instruction hours reduced by 200 hours.
3. The FTO shall ensure that before being admitted to the course the applicant has a sufficient level of knowledge of Mathematics and Physics to facilitate an understanding of the content of the course.
4. The instruction shall cover all items in the relevant syllabi set out in the AMC JCAR FCL2.470(a). An approved course should include formal classroom work and may include the use of such facilities as inter-active video, slide/tape presentation, learning carrels and computer based training and other media as approved by CARC. Approved distance learning (correspondence) courses may also be offered as part of the course at the discretion of CARC.

**SUBPART- H**  
**INSTRUCTOR RATINGS (Helicopter)**

**FCL2.300 Instructor Ratings & Authorisation – Purposes.**

Five instructor categories are recognised.

- (a) Flight Instructor Rating – helicopter (FI(H))
- (b) Type Rating Instructor Rating – helicopter (TRI(H))
- (c) Instrument Rating Instructor Rating – helicopter (IRI(H))
- (d) Synthetic Flight Instructor Authorisation – helicopter (SFI(H))
- (f) Synthetic Training Instructor Authorisation – helicopter (STI(H))

Multi roles. Provided that they meet the qualification and experience requirements set out in this Subpart for each category undertaken, instructors are not confined to a single category.

**FCL2.305 Instructor – General**

(See Appendix 1 to JCAR FCL2.305)

(a) A person shall not carry out the flight instruction required for the issue, revalidation or renewal of any pilot license or rating unless that person has:

(1) a pilot license containing an instructor rating: or

(2) a specific authorisation granted by CARC in cases where:

(i) new helicopters are introduced; or

(ii) vintage helicopters or helicopters of special manufacture are registered, for which no person has an instructor rating; or

(iii) training is conducted outside JORDAN by instructors not holding a JCAR FCL 2 license (see Appendix 1 to JCAR FCL2.305).

(b) A person shall not carry out synthetic instruction unless holding a FI(H), TRI(H) rating or SFI(H), STI(H) authorisations.

**FCL2.310 Instructor Ratings and Authorisations – General.**

(See Appendix 1 & 2 to JCAR FCL2.320E), (See Appendix 1 to JCAR FCL2.470).

(a) Pre-requisites. All instructors shall:

- (1) be at least 21 years of age;
- (2) have met the theoretical knowledge requirements for a CPL(H) as set out in Appendix 1 to JCAR FCL2.470;
- (3) have received at least 10 hours of helicopter instrument flight instruction in an FTO or TRTO, of which not more than five hours may be instrument ground time in a FSTD;
- (4) have completed at least 20 hours of cross-country flight in helicopters as pilot-in-command;
- (5) except for the SFI and STI authorisation, hold at least the license and current type and/or instrument rating for which instruction is being given;
- (6) except for the SFI and STI authorisation, have at least 15 hours experience as pilot on the type of helicopter on which instruction is to be given, of which not more than 7 hours may be in a FSTD;
- (7) except for the SFI and STI authorisation, be entitled to act as pilot-in-command of the helicopter during such training; and meet the specific prerequisites for each instructor category.

The 15 hours relevant experience requirement in paragraph (6) above shall be considered to have been met if a skill test in accordance with Appendix 1 and 2 to JCAR FCL2.320E has been passed on that type.

(b) Credit towards further ratings and for the purpose of revalidation. Applicants for further instructor ratings may be credited with the teaching and learning skills already demonstrated for the instructor rating held. Hours flown as Authorised Examiner during Skill Tests/Proficiency Checks may be credited towards revalidation requirements for instructor ratings held.

(c) Experience. The privileges of the instructor rating shall not be exercised, unless in the preceding 12 months the instructor has completed at least 15 hours of flight/type rating/FSTD or instrument rating instruction. Hours flown in a pilot seat, as Authorised Examiner, during Skill Tests/Proficiency Checks may be credited towards this requirement for instructor ratings held.

If the experience requirements has lapsed, and provided the instructor rating is valid, a skill test in accordance with Appendix 1 and 2 to JCAR FCL2.320E shall be passed.

### **FCL2.315 Instructor Ratings and Authorisations - Period of validity**

(See JCAR FCL2.305(a)(2))

(a) All instructor ratings and authorisations are valid for a period of 3 years in addition to the remainder of the month of issue. If issued within the final 12 calendar months of validity of a previous instructor check, the period of validity

shall extend from the date of issue until 3 years from the expiry date of that previous instructor check. An instructor who revalidates his instructor rating at the same time as his examiner authorisation may have the instructor rating validity period aligned with the examiner authorisation.

(b) The validity period for a specific authorisation (see JCAR FCL2.305(a)(2)) shall not exceed 3 years.

(c) An applicant who fails to achieve a pass in all sections of a proficiency check before the expiry date of an instructor rating shall not exercise the privileges of that rating until a new proficiency check has successfully been completed.

**FCL2.320A FI(H) – Pre Requisite Requirements.**

(See JCAR FCL2.310), (See JCAR FCL2.320C(g))

(See Appendix 3 to JCAR FCL2.240), (See Appendix 1 to JCAR FCL2.470)

Before being permitted to begin an approved course of training for a FI(H) rating an applicant shall;

(a) Have completed at least 250 hours of helicopter flight time of which;

(1) At least 100 hours shall be as pilot- in-command if holding an ATPL(H) or a CPL(H), or

(2) At least 200 hours as pilot-in- command of helicopters, if holding a PPL(H).

(b) Meet the pre-requisites in JCAR FCL2.310 above; and

(c) Have passed a specific pre-entry flight test with an FI(H) qualified in accordance with JCAR FCL2.320C(g) based on the proficiency check as set out in Appendix 3 to JCAR FCL2.240 within the 6 months preceding the start of the course. The flight test will assess the ability of the applicant to undertake the course.

### **FCL2.320B FI(H) Restricted Privileges.**

(See JCAR FCL2.320C(d))

(a) Restricted period. Until the holder of a FI(H) rating has conducted at least 100 hours flight instruction in helicopters and, in addition has supervised at least 25 student solo flight air exercises, the privileges of the rating are restricted. The restriction will be removed from the rating when the above requirements have been met and on the recommendation of the supervising FI(H).

(b) Restrictions. The privileges are restricted to carrying out under the supervision of a FI(H) approved for this purpose:

(1) Flight instruction for the issue of the PPL(H) – or those parts of integrated courses at PPL(H) level – and type ratings for single pilot, single-engine helicopters, excluding approval of first solo flights by day or by night and first solo navigation flight by day or night; and

(2) Night flying instruction, provided a helicopter night qualification is held, the ability to instruct at night has been demonstrated to a FI(H) authorised to conduct FI(H) training in accordance with JCAR FCL2.330C(d) and the night currency requirement of JCAR FCL2.026 is satisfied.

### **FCL2.320C FI(H) – Privileges & Requirements.**

(See JCAR FCL2.026), (See JCAR FCL2.310(a)(5)), (See JCAR FCL2.320B)

(See JCAR FCL2.330B(b), (See JCAR FCL2.330C),

(See JCAR FCL2.330E(b)), (See Appendix 1 to JCAR FCL2.320C & 2.320E)

(See Appendix 1 to JCAR FCL2.320E)

The privileges of the holder of FI(H) rating (for restrictions see JCAR FCL2.320B) are to conduct flight instruction for the issue, revalidation or renewal of:

(a) A PPL(H).

(b) A CPL(H), provided that the FI(H) has completed at least 500 hours of flight time as a pilot of helicopters including at least 200 hours of flight instruction and holds at least a CPL(H).

(c) Type Ratings for single-pilot single- engine helicopters;

(d) A helicopter night qualification, provided a helicopter night qualification is held and the ability to instruct at night has been demonstrated to a (FI(H) authorised to conduct night FI(H) training and the night currency requirement of



JCAR FCL2.026 is satisfied;

(e) An instrument rating (see also JCAR FCL2.310(a)(5), provided that the FI(H) has:

(1) At least 200 hours of instrument flight time in helicopter of which up to 50 hours may be instrument ground time in a flight simulator, FTD or FNPT II; and

(2) Completed as a student an approved course of theoretical knowledge instruction and at least 5 hours of flight instruction in a helicopter or FSTD (see Appendix 1 to JCAR FCL2.340B and AMC JCAR FCL2.340B) and has passed the appropriate skill test as set out in Appendix 1 to JCAR FCL2.320C and 2.320E;

(f) A single-pilot multi-engine type rating, provided that the FI(H) meets the TRI requirements of JCAR FCL2.330B(b) & (d), and JCAR FCL2.330E(b);

(g) A FI(H) Rating and/or IRI(H) Rating, provided that the FI(H) has;

(1) Given at least 500 hours of flight instruction in helicopters;

(2) Demonstrated to a FIE(H) the ability to instruct a FI(H) or IRI(H) as appropriate during a skill test conducted in accordance with Appendix 1 to JCAR FCL2.320E; and

(3) Been authorised by CARC for this purpose.

**FCL2.320D FI(H) – Course.**

(See Appendix 1 to JCAR FCL2.320D), (See AMC JCAR FCL2.320D)

(a) An applicant for the FI(H) rating shall have completed an approved course of theoretical knowledge instruction and flight training at an approved FTO (see Appendix 1 to JCAR FCL2.320D and AMC JCAR FCL2.320D).

(b) The course is intended to train the applicant to give instruction on single-engine single-pilot helicopters up to PPL(H) standard. The flight instruction shall comprise at least 30 hours of flight training, of which 25 hours shall be dual flight instruction. The remaining five hours may be mutual flying (i.e. two applicants flying together to practice flight demonstrations). Of the 25 hours, five hours may be conducted in an FSTD approved for this purpose by CARC. The skill test is additional to the course training time.

**FCL2.320E FI(H) – Skill Test.**

(See Appendix 1 and 2 to JCAR FCL2.320E)

An applicant for a FI(H) rating shall demonstrate to an FIE(H) notified by CARC for this purpose the ability to instruct a student pilot to the level required for the issue of a PPL(H), including pre-flight, post-flight and theoretical knowledge instruction, in accordance with the requirements of Appendices 1 and 2 to JCAR FCL2.320E.

**FCL2.320F FI(H) – Rating Issue.**

(See JCAR FCL2.310), (See JCAR FCL2.320A through 2.320E)

(See JCAR FCL2.320G), (See JCAR FCL2.330B(b) & (d))

(See Appendix 1 to JCAR FCL2.305),

(a) An applicant for a FI(H) rating:

(1) Who has complied with the conditions specified in JCAR FCL2.310, 2.320A through 2.320E; or

(2) Who has been issued a specific authorisation in accordance with Appendix 1 to JCAR FCL2.305, complies with the requirements of JCAR FCL2.320G and holds a JCAR FCL 2 license, shall have fulfilled the requirements for the issue of a FI(H) rating, subject to the initial restrictions set out in JCAR FCL2.320B.

(b) Before the privileges are extended to further types of helicopter, the holder shall:

(1) Meet the requirements of JCAR FCL2.310;

(2) If the additional type is a single-pilot multi-engine helicopter, meet the requirements of JCAR FCL2.330B(b) and (d).

**FCL2.320G FI(H) – Revalidation & Renewal.**

(See Appendices 1 and 2 to JCAR FCL2.320E)

(See AMC JCAR FCL2.320G(a)(2)), (See IEM JCAR FCL2.320G)

(a) For revalidation of a FI(H) rating the holder shall fulfill two of the

following three requirements:

(1) Give at least 50 hours of flight instruction in helicopters as FI(H), TRI(H), IRI(H), or Examiner during the period of validity of the rating, of which at least 15 hours shall be within the 12 months preceding the expiry date of the FI rating;

(2) Attend an instructor refresher seminar (see AMC JCAR FCL2.320G(a)(2)), as approved by CARC, within the validity period of the FI rating;

(3) Pass, as a proficiency check, the skill test set out in Appendices 1 and 2 to JCAR FCL2.320E within the 12 months preceding the expiry date of the FI rating.

(b) For the first revalidation, and for at least each alternating revalidation, the FI(H) shall pass the proficiency check as set out in Appendices 1 and 2 to JCAR FCL2.320E as one of the two requirements to be fulfilled to comply with JCAR FCL2.320G(a).

(c) If the rating has lapsed, the applicant shall meet the requirements as set out in (a)(2) and (a)(3) above within the last 12 months before renewal.

### **FCL2.330A TRI(H) – Privileges**

(See JCAR FCL2.261(d)), (See Appendix 1 to JCAR FCL2.261(d))

(See AMC JCAR FCL2.261(d))

The privileges of the holder of a TRI(H) rating are to instruct license holders for the issue, revalidation or renewal of a type rating, including where applicable, the extension of the IR(H) privileges, and as TRI(MPH) the instruction required for multi-crew co-operation as applicable (see JCAR FCL2.261(d), Appendix 1 to JCAR FCL2/261(d) and AMC JCAR FCL2.261(d)).

**FCL2.330B TRI(H) – Pre-requisites & Requirements**

(See JCAR FCL2.310)

Before being permitted to begin an approved course of training for a TRI(H) rating an applicant shall;

- (a) For a TRI(H) rating for single-pilot single-engine helicopters, have completed at least 250 hours as a pilot of helicopters;
- (b) For a TRI(H) rating for single-pilot multi-engine helicopters, have completed at least 500 hours as pilot of helicopters to include 100 hours as pilot-in-command of single-pilot multi-engine helicopters;
- (c) For a TRI(H) rating for multi-pilot helicopters, have completed at least 1000 hours flight time as a pilot of helicopters, to include at least 350 hours as a pilot of multi-pilot helicopters;
- (d) Meet the pre-requisites in JCAR FCL2.310 above.

**FCL2.330C TRI(H) – Course.**

(See Appendix 1 to JCAR FCL2.330C)

An applicant for the TRI(H) rating shall have completed an approved course of theoretical knowledge instruction and helicopter or synthetic flight training at an approved FTO or TRTO (see Appendix 1 to JCAR FCL2.330C).

**FCL2.330D TRI(H) – Assessment of Competence.**

(See Appendix 1 to JCAR FCL2.320E)

An applicant for an initial TRI(H) rating shall demonstrate to a TRI(H) notified by CARC for this purpose his ability to instruct a pilot to the level required for the issue of a type rating, including pre-flight, post-flight and theoretical knowledge instruction in accordance with the requirements of Appendix 1 and 2 to JCAR FCL2.320E (sections taken as applicable).

**FCL2.330E TRI(H) – Rating issue**

(See JCAR FCL2.250), (See JCAR FCL2.305), (See JCAR FCL2.310)

(See JCAR FCL2.330A through 2/330D), (See JCAR FCL2.330F)

(See Appendix 1 to JCAR FCL2.305), (See Appendix 1 & 2 to JCAR FCL2.320E)

- (a) An applicant for an initial TRI(H) rating;
  - (1) Who has complied with the conditions specified in JCAR FCL2.305, 2.310 and 2.330A through 2.330D; or
  - (2) Who has been issued a specific authorisation in accordance with Appendix 1 to JCAR FCL2.305, complies with the requirements of JCAR FCL2.330F and holds a JAR FCL license.

Shall have fulfilled the requirements for the issue of a TRI(H) rating. Holders of a current FI(H) rating Holders of a current FI(H) rating have fulfilled the requirements for the relevant TRI(H) single pilot helicopter.

(b) Before the privileges are extended to further types of helicopter, the holder shall have conducted sufficient TRI flight training on the applicable type of helicopter or FSTD in order to demonstrate to a TRI(H) notified by CARC for this purpose his ability to instruct a pilot to the level required for the issue of a type rating, including pre-flight, post-flight and theoretical knowledge instruction in accordance with the requirements of Appendix 1 and 2 to JCAR FCL2.320E (sections taken as applicable).

(c) Before the privileges are extended from a single pilot to multi pilot helicopters privileges on the same type, the holder shall meet the requirements of JCAR FCL2.250 and have at least 100 hours in multi-pilot helicopters on this type. An applicant for the first multi-pilot multi-engine TRI(H) rating shall meet the experience requirements of JCAR FCL2.330B(c) except that the 350 hours multi-pilot helicopter may be considered to have been met if they have the 100 hours multi-pilot helicopter on the same type.

#### **FCL2.330F TRI(H) – Revalidation & Renewal.**

(See JCAR FCL2.330D), (See AMC JCAR FCL2.320G(a)(2))

(a) For revalidation of a TRI(H) rating the holder shall have a current FI(H) rating on the type required, or fulfil two of the following three requirements:

(1) Complete at least 50 hours of flight instruction in helicopters or FSTDs as FI, TRI, SFI, STI or IRI or as Examiner during the period of validity of the rating, of which at least 15 hours shall be within the 12 months preceding the expiry date of the TRI rating;

(2) Attend an instructor refresher seminar (see AMC JCAR FCL2.320G(a)(2)), as approved by CARC, within the validity period of the rating;

- (3) Pass, as a proficiency check, the relevant sections of the assessment set out in JCAR FCL2.330D with a TRI(H) notified by CARC for this purpose.
- (b) For the first revalidation, and for at least each alternating revalidation, the TRI(H) shall pass the assessment set out in JCAR FCL2.330D.
- (c) An assessment in accordance with JCAR FCL2.330D on a type will revalidate the TRI rating on other types for which a TRI rating is held. If the TRI(H) rating is revalidated on the basis of a current FI(H) rating, the validity period of the TRI(H) rating will be to the expiry date of the FI(H) rating.
- (d) If the rating has lapsed, the applicant shall meet the requirements as set out in (a)(2) and (a)(3) above, or hold a current FI(H) rating on the type, within the last 12 months before renewal. If the TRI(H) rating is renewed on the basis of a current FI(H) rating, the validity period of the TRI(H) rating will be to the expiry date of the FI(H) rating.

#### **FCL2.340A IRI(H) – Privileges.**

The privileges of the holder of an IR(H) rating are limited to instructing license holders for the issue, revalidation and renewal of an IR(H).

#### **FCL2.340B IRI(H) – Pre-requisites and Requirements.**

(See JCAR FCL2.310)

Before being permitted to begin an approved course of training for an IRI(H) rating an applicant shall;

- (a) Hold a valid IR(H) on the relevant type;
- (b) Hold a valid TRI(H) on the relevant type;
- (c) Have completed at least 500 hours flight time under IFR of which at least 250 hours shall be instrument flight time in helicopters;
- (d) Meet the pre-requisites in JCAR FCL2.310 above.

**FCL2.340C IRI(H) – Course.**

(See Appendix 1 to JCAR FCL2.340C), (See AMC JCAR FCL2.340C)

An applicant for the initial issue of an IRI(H) shall have successfully completed an approved IRI(H) course at an approved FTO (see Appendix 1 to JCAR FCL2.340C and AMC JCAR FCL2.340C) comprising theoretical knowledge instruction and at least 10 hours of flight instruction in a helicopter or FSTD.

**FCL2.340D IRI(H) – Skill Test.**

(See Appendix 1 & 2 to JCAR FCL2.330E)

The applicant shall pass a skill test as set out in Appendix 1 & 2 to JCAR FCL2.320E (sections taken as applicable) with an FIE(H) authorised for this purpose by CARC.

**FCL2.340E IRI(H) – Rating issue.**

(See JCAR FCL2.340A through 2.340D), (See JCAR FCL2.340F)

(See Appendix 1 to JCAR FCL2.305)

An applicant for an IRI(H) rating;

(a) Who has complied with the conditions specified in JCAR FCL2.340A through 2.340D; or

(b) Who has been issued a specific authorisation in accordance with Appendix 1 to JCAR FCL2.305, complies with the requirements of JCAR FCL2.340F and holds a JCAR FCL license, shall have fulfilled the requirements for the issue of a IRI(H) rating.

**FCL2.340F IRI(H) – Revalidation & Renewal**

(See Appendix 1 & 2 to JCAR FCL2.320E), (See AMC JCAR FCL2.320(a)(2))

(a) For revalidation of a IRI(H) rating the holder shall fulfil two of the following three requirements:

(1) Complete at least 50 hours of instrument flight instruction in helicopters or FSTDs as FI, TRI, SFI, STI or IRI or as Examiner during the period of validity of the rating, including at least 15 hours of instrument flight instruction within the 12 months preceding the expiry date of the IRI(H) rating;

(2) Attend an instructor refresher seminar (see AMC JCAR FCL2.320G(a)(2)), as approved by CARC, within the validity period of the IRI(H) rating;

(3) Pass, as a proficiency check, the skill test set out in Appendices 1 and 2 to JCAR FCL2.320E within the 12 months preceding the expiry

date of the IRI rating.

(b) For the first revalidation, and for at least each alternating revalidation, the IRI(H) shall pass the proficiency check as set out in Appendices 1 and 2 to JCAR FCL2.320E as one of the two requirements to be fulfilled to comply with JCAR FCL2.340F(a);

(c) If the rating has lapsed, the holder shall meet the requirements of (a)(2) & (a)(3) above, within 12 months before renewal;

(d) An IRI(H) proficiency check in accordance with Appendices 1 & 2 to JCAR FCL2.320E on a type will revalidate the IRI(H) rating on other types which an IRI(H) rating is held.

### **FCL2.350A SFI(H) – Privileges.**

(See JCAR FCL2.261(d))

The privileges of the holder of a SFI(H) authorisation are to carry out synthetic flight instruction for type ratings, and the instruction required for multi-crew co-operation (see JCAR FCL2.261(d)).

### **FCL2.350B SFI(H) –Pre- requisites & Requirements.**

(See JCAR FCL2.310), (See Appendix 1 to JCAR FCL2.240 & 2.295)

(See Appendix 1 to JCAR FCL2.330C)

An applicant for a SFI(H) authorisation shall:

(a) Hold or have held a professional pilot license issued by CARC or a non JCAR FCL 2 professional license acceptable to CARC;

(b) Have at least 1000 hours flying experience as pilot of helicopters, to include at least 350 hours as a pilot of multi-pilot helicopters;

(c) Have completed an approved TRI(H) course (see Appendix 1 to JCAR FCL2.330C);

(d) Have completed within a period of 12 months preceding the application, a proficiency check as set out in Appendix 1 to JCAR FCL2.240 & 2.295 on a flight simulator of the applicable type;

(e) Have completed within a period of 12 months preceding the application, at least 1 hour flight time as an observer on the flight deck of the applicable type or similar type as agreed by CARC; and

(f) Meet the pre-requisites in JCAR FCL2.350F(a).

### **FCL2.350C SFI(H) – Course.**

(See Appendix 1 to JCAR FCL2.330C)



- (a) Have completed the flight simulator content of the applicable Type Rating course at an approved FTO or TRTO in accordance with Appendix 1 to JCAR FCL2.330C; and
- (b) Have conducted on a complete Type Rating course at least one flight simulator session of at least 3 hours related to the duties of an SFI(H) on the applicable type of helicopter under the supervision and to the satisfaction of a TRI(H) notified by CARC for this purpose.

**FCL2.350D SFI(H) – Assessment of Competence.**

(See Appendix 1 to JCAR FCL2.320E)

An applicant for an initial SFI(H) authorisation shall demonstrate to a TRI(H), notified by CARC for this purpose, the ability to instruct a pilot to the level required for the issue of a type rating, including pre-flight, post-flight and theoretical knowledge instruction in accordance with the requirements of Appendix 1 and 2 of JCAR FCL2.320C and 2.320E (sections taken as applicable).

**FCL2.350E SFI(H) – Authorisation Issue.**

(See JCAR FCL2.340F), (See JCAR FCL2.350B through 2/350E)

(See Appendix 1 to JCAR FCL2.240 & 2.295)

(See Appendix 1 to JCAR FCL2.305), (See Appendix 1 to JCAR FCL2.330C)

- (a) An applicant for an initial SFI(H) authorisation;
  - (1) Who has complied with the conditions specified in JCAR FCL2.350B to 2.350E; or

(2) Who has been issued a specific authorisation in accordance with Appendix 1 to JCAR FCL2.305, complies with the requirements of JCAR FCL2.340F and holds a JAR FCL license, shall have fulfilled the requirements for the issue of a SFI(H) authorisation.

(b) If the privileges are to be extended to further types of helicopter the holder shall;

(1) Have completed an approved TRI(H) course (see Appendix 1 to JCAR FCL2.330C);

(2) Have completed within a period of 12 months preceding the application, at least 1 hour flight time as an observer on the flight deck of the applicable type or simulator type as agreed by CARC;

(3) Have completed within a period of 12 months, preceding the application, a proficiency check as set out in Appendix 1 to JCAR FCL2.240 & 2.295 on a flight simulator of the applicable type;

(4) Conducted on a complete type rating course at least one flight simulator session of at least 3 hours related to the duties of a SFI(H) on the applicable type of helicopter under the supervision and to the satisfaction of a TRI(H) notified by CARC for this purpose.

### **FCL2.350F SFI(H) - Revalidation & Renewal.**

(See JCAR FCL2.350D), (See Appendix 1 & 2 to JCAR FCL2.320E)

(See AMC JCAR FCL2.320(a)(2))

(a) For revalidation of an SFI(H) authorisation the holder shall fulfil two of the following three requirements:

(1) Complete at least 50 hours of flight instruction in FSTDs as SFI, STI or as SFE(H) during the period of validity of the rating, including at least 15 hours of flight instruction within the 12 months preceding the expiry date of the SFI rating;

(2) Attend an instructor refresher seminar (see AMC JCAR FCL2.320G(a)(2)), as approved by CARC, within the validity period of the SFI rating;

(3) Pass, as a proficiency check, the skill test set out in Appendix 1 and 2 to JCAR FCL2.320E (sections taken as applicable) within the 12 months preceding the expiry date of the SFI rating.

(b) For the first revalidation, and for at least each alternating revalidation, the SFI(H) shall pass the assessment as set out in JCAR FCL2.350D as one of the two requirements to be fulfilled to comply with JCAR FCL2.350F(a);

(c) If the rating has lapsed, the holder shall meet the requirements of (a)(2) &

(a)(3) above, within the 12 months before renewal.

**FCL2.360A STI(H) – Privileges.**

(See JCAR FCL2.350F(a)(3))

The privileges of the holder of an STI(H) authorisation are to carry out synthetic flight instruction on single-pilot helicopters for;

(a) The initial issue of a license or night qualification, provided he holds or has held an FI(H) rating;

(b) The initial issue, revalidation or renewal of an instrument rating, provided he holds or has held an IRI(H) rating;

(c) The initial issue, revalidation or renewal of a type rating, provided he holds or has held a TRI(H) rating or meets the requirements of JCAR FCL2.350F(a)(3).

**FCL2.360B STI(H) – Requirements.**

(See JCAR FCL2.310), (See Appendix 3 to JCAR FCL2.240)

An applicant for a STI(H) authorisation shall:

(a) Hold or have held within the previous 3 year a professional pilots license containing an instructional qualification or specific authorisation appropriate to the courses on which instruction is intended or a ICAO MEMBER STAT license acceptable to CARC;

(b) Have received in an FSTD at least 3 hours of flight instruction related to the privileges of an STI(H);

(c) Have completed within a period of 12 months preceding the application a proficiency check in accordance with Appendix 3 to JCAR FCL2.240 in an FSTD of the type of helicopter appropriate to the instruction intended;

(d) Have completed within a period of 12 months, preceding the application, at least 1 hour flight time as an observer on the flight deck of the applicable type, or similar type as agreed by CARC, and

(e) Meet the pre-requisites in JCAR FCL2.310.

**FCL2.360C STI(H) – Course.**

(See Appendix 1 to JCAR FCL2.330C)

(a) Have completed the flight simulator content of the applicable course at an approved FTO or TRTO in accordance with Appendix 1 to JCAR FCL2.330C; and

(b) Have conducted on a complete course at least one flight simulator session of at least 3 hours related to the privileges of an STI(H) on the applicable type of helicopter.

**FCL2.360D STI(H) – Assessment of competence.**

(See JCAR FCL2.360A)

An applicant for an initial STI(H) authorisation shall demonstrate to an FIE(H) the ability to instruct in accordance with the privileges in JCAR FCL2.360A.

**FCL2.360E STI(H) –Authorisation Issue.**

(See JCAR FCL2.360A through 2.360D), (See JCAR FCL2.360F)

(See Appendix 1 to JCAR FCL2.240 & 2.295),

(See Appendix 1 to JCAR FCL2.305),(See Appendix 1 to JCAR FCL2.330C)

(a) An applicant for an initial STI(H) CARC;

(1) Who has complied with the conditions specified in JCAR FCL2.360A to 2.360D); or

(2) Who has been issued a specific authorisation in accordance with Appendix 1 to JCAR FCL2.305, complies with the requirements of JAR FCL 2.360F and holds a JAR FCL license; shall have fulfilled the requirements for the issue of a STI(H) authorisation.

(b) If the privileges are to be extended to further types of helicopter FSTDs, the holder shall:

An applicant for an initial STI(H) CARC;

(1) have completed an approved STI(H) course on the applicable type (see Appendix 1 to JCAR FCL2.330C);

(2) have completed within a period of 12 months, preceding the application, a proficiency check as set out in Appendix 1 to JCAR FCL2.240 & 2.295 on a flight simulator of the applicable type;

(3) have conducted on a complete type rating course at least one FSTD session of at least 3 hours related to the duties of a STI(H) on the applicable type of helicopter under the supervision, and to the satisfaction, of an FIE(H).

**FCL2.360F STI(H) – Revalidation and Renewal.**

(See Appendix 1 to JCAR FCL2.240)

For revalidation of a STI(H) authorisation within the last 12 months of the validity period of the authorisation, the applicant shall have:

(a) Conducted at least 3 hours of instruction in a FSTD as part of a complete CPL, IR or type rating course, and

(b) Completed the applicable proficiency check sections of Appendix 3 to

JCAR FCL2.240 for the appropriate type helicopter in a FSTD on which instruction is routinely conducted.

If the authorisation has lapsed the applicant shall have:

- (c) Completed at least 3 hours refresher training in an FSTD;
- (d) Conducted on a complete CPL, IR or type rating course at least 3 hours instruction under the supervision and to the satisfaction of a examiner notified by CARC for this purpose;
- (e) Completed the applicable proficiency check sections of Appendix 3 to JCAR FCL2.240 for the appropriate type helicopter in a FSTD on which instruction is routinely conducted.

**FCL2.375 Reserved.**

**FCL2.380 Reserved.**

**FCL2.385 Reserved.**

**Appendix-1 to FCL2.305****Requirements for a specific authorisation for instructors not holding a FCL 2 license to instruct in a FTO or TRTO outside Jordan.**

(See JCAR FCL2.305(a)(2)(iii))

1. (a) Instructors seeking to instruct for a JCAR FCL 2 license including instrument ratings shall:

- (i) hold at least a CPL and ratings issued in accordance with ICAO Annex I required by the respective ICAO Member State for the instruction to be given on aircraft registered in that State;
- (ii) have completed at least 500 hours of flight time as a pilot of helicopters of which at least 200 hours shall be as a flight instructor relevant to the intended training to be given and meet the experience requirements of JCAR FCL2.3[ ][20C](a), (b), (c), (d) and /or (e);
- (iii) have completed in accordance with JCAR FCL 2 the approved relevant course(s) of theoretical instruction and flight training. The course may be modified, as approved by CARC, taking into account the previous training and the experience of the applicant, but shall comprise at least 30 hours of ground instruction and 15 hours of dual flight instruction performed by a flight instructor holding a JAR FCL license and rating in accordance with JCAR FCL2.320(C);
- (iv) have passed the skill test set out in JCAR FCL2.320E;
- (v) validity period of the authorisation is at the discretion of the CARC but not exceeding 3 years;
- (vi) revalidation or renewal of any authorisation issued in accordance with para (i) - (iv) above shall be in accordance with JCAR FCL2.320G.

(b) The authorisation will be restricted as follows:

- (i) no instruction for the issue of any instructor ratings;
- (ii) no instruction within JORDAN;

- (iii) instruction to students only who have sufficient knowledge of the language in which the instruction is given;
  - (iv) to those parts of the ATP integrated course where the instructor can demonstrate the experience relevant to the intended training according to paragraph 1 (a)(ii).
  - (v) no instruction for MCC training as defined in Appendix 1 to JCAR FCL2.261(d) and AMC JCAR FCL2.261(d).
2. (a) Instructors seeking to instruct for a JCAR FCL 2 type rating shall:
- (i) hold at least the license and ratings issued in accordance with ICAO Annex I required by the respective ICAO Member State for the instruction to be given on aircraft registered in that State;
  - (ii) comply with the experience requirements of JCAR FCL2.330B(a) and (d) in order to act as TRI(H) or with JCAR FCL2.350B(a)(3) and (7) in order to act as SFI(H);
  - (iii) have completed as a type rating instructor (TRI(H) or equivalent) at least 100 hours of flight or simulator instruction time;
  - (iv) validity period of the authorisation is at the discretion of CARC but not exceeding 3 years;
  - (v) have complied with the revalidation requirements of JCAR FCL2.330F acting as TRI(H) or JCAR FCL2.350F acting as SFI(H).
- (b) The authorisation will be restricted as follows:
- (i) no instruction for the issue of any instructor ratings;
  - (ii) no instruction within JORDAN;
  - (iii) instruction to students only who have sufficient knowledge of the language in which the instruction is given
  - (iv) no instruction for MCC training as defined in Appendix 1 to JCAR FCL2.261(d) and AMC JCAR FCL2.261(d).

**Appendix- 1 to JCAR FCL2.320D**

**Flight Instructor rating (Helicopter) (FI(H)) course.**

(See JCAR FCL2.320D), (See AMC JCAR FCL2.320D)

**COURSE OBJECTIVE**

1. The aim of the FI(H) course is to train helicopter license holders to the level of proficiency necessary for the issue of a FI(H) rating and, for that purpose, to:
  - a. refresh and bring up to date the technical knowledge of the student instructor;
  - b. train the student instructor to teach the ground subjects and air exercises;
  - c. ensure that the student instructor's flying is of a sufficiently high standard; and
  - d. teach the student instructor the principles of basic instruction and to apply them at the PPL level.
2. With the exception of the section on Teaching and Learning, all the subject detail contained in the Ground and Flight Training Syllabus is complementary to the PPL(H) course syllabus and should already be known by the applicant.
3. The FI(H) course shall give particular stress to the role of the individual in relation to the importance of human factors in the man-machine and theoretical knowledge environment interaction. Special attention should be paid to the applicant's maturity and judgment including an understanding of adults, their behavioral attitudes and variable levels of education.
4. During the course, the applicants shall be made aware of their own attitudes to the importance of flight safety. Improving safety awareness shall be a fundamental objective throughout the course. It will be of major importance for the course of training to aim at giving applicants the knowledge, skills and attitudes relevant to a flight instructor's task.
5. On successful completion of the course and final test the applicant may be issued with a FI(H) rating.

## TEACHING AND LEARNING

6. The syllabus is set out in AMC JCAR FCL2.320D part 1. An approved FI(H) theoretical knowledge course shall comprise not less than 125 hours including progress tests. Pilots holding or having held a FI(A) rating are credited with 75 hours towards the 125 hours of the Teaching and Learning part 1 of the FI(H) course.

## FLYING TRAINING.



7. The flying training syllabus is set out in AMC JCAR FCL2.320D part 2. An approved FI(H) course shall comprise not less than 30 hours of flight instruction.

**SKILL TEST.**

On completion of the course, the applicant shall take the skill test in accordance with Appendices 1 and 2 to JCAR FCL2.320D.

**Appendix- 1 to JCAR FCL2.320E and 2.345****Arrangements for the flight instructor rating (FI(H)) skill test, proficiency check and oral theoretical knowledge examination.**

(See JCAR FCL2.320E , 2.345, 2.355 and 2.395)

1. The skill test for a FI(H) rating is set out in Appendix 2 to JCAR FCL2.320E. The test comprises oral theoretical examinations on the ground, pre-flight and post flight briefings and in-flight FI(H) demonstrations during skill tests in a helicopter.
2. An applicant for the skill test shall have received instruction on the same type of helicopter used for the test. The helicopter used for the test shall meet the requirements set out in Appendix 1a to JCAR FCL2.055, paragraph 25.
3. Before taking the skill test an applicant shall have completed the required training. The FTO shall produce the applicant's training records when required by the examiner.
4. Section 1, the oral theoretical knowledge examination part of the skill test, is sub-divided into two parts:
  - (a) the applicant is required to give a lecture under test conditions to other 'student(s)', one of whom will be the examiner. The test lecture is to be selected from items a–h of Section 1. The amount of time for preparation of the test lecture shall be agreed beforehand with the examiner. Appropriate literature may be used by the applicant. The test lecture should not exceed 45 minutes.
  - (b) the applicant is tested orally by an examiner for knowledge of items a–i of Section 1 and the 'teaching and learning' content given in the FI(H) courses.
5. Sections 2, 3 and 7 are for a FI(H) rating for single-engine (SE) single-pilot helicopters SPHs. These parts comprise exercises to demonstrate the ability to be an FI(H) (i.e. instructor demonstration exercises) chosen by the examiner from the flight syllabus of the FI(H) training courses (see AMC JCAR FCL2.320E). The applicant will be required to demonstrate FI(H) abilities, including briefing, flight instruction and de-briefing.
6. Section 4 is intentionally blank and may be used for the inclusion of other FI(H) demonstration exercises, as decided by the examiner and acknowledged by the applicant before the skill test.

7 Section 5 comprises additional instructor demonstration exercises for a FI(H) rating for multi-engine (ME) SPHs. This part, if required, shall use a ME SPH, flight simulator or FNPT II. If a flight simulator or FNPT is used, this shall simulate a ME helicopter. This part shall be completed in addition to sections 2, 3, 4 (if applicable) and 7.

8. Section 6 is intentionally blank. This part will include additional FI(H) rating demonstration exercises, as decided by the examiner and agreed with the applicant before the skill test, for an FI(H) rating for instrument ratings (IR). These exercises will be related to the training requirements for the initial issue of an IR.

9. During the skill test the applicant shall occupy the seat normally occupied by the FI(H). The examiner or another FI(H) shall function as the 'student'. The applicant shall be required to explain the relevant exercises and to demonstrate their conduct to the 'student', where appropriate. Thereafter, the 'student' shall execute the same manoeuvre including typical mistakes of inexperienced students. The applicant is expected to correct mistakes orally and/or, if necessary, by intervening.

10. Sections 1 and 2 through 7 (as relevant) shall be completed within a period of six months but all sections should, wherever possible, be completed on the same day. Failure in any exercise within sections 2, 3 and 4 (if applicable) and 5/6 (if relevant) requires a re-test covering all exercises. Section 1, if failed, may be retaken separately.

11. The examiner may terminate the test at any stage if it is considered that the applicant's demonstration of flying or instructional skills require a re-test.

12. The examiner shall be the pilot-in-command, except in circumstances agreed by the examiner when another FI(H) is designated as pilot-in-command for the flight. Responsibility for the flight shall be allocated in accordance with national regulations.

13. The skill test contents and sections set out in Appendix 2 to JCAR FCL2.320E shall be used for the skill test. The format and application form for the skill test may be determined by CARC (see IEM JCAR FCL2.320E).

**Appendix 2 to JCAR FCL2.320E and 2.345****Contents of the flight instructor rating (FI(H)) skill test, oral theoretical knowledge examination and proficiency check.**

(See JCAR FCL2.320E and 2.345), (See IEM JCAR FCL2.320E)

<b>SECTION 1 THEORETICAL KNOWLEDGE ORAL</b>	
a	Air law
b	Aircraft General Knowledge
c	Flight Performance and Planning
d	Human Performance and Limitations
e	Meteorology
f	Navigation
g	Operational Procedures
h	Principles of Flight
i	Training Administration

**SECTIONS 2 AND 3 SELECTED MAIN EXERCISE:**

<b>SECTION 2 PRE-FLIGHT BRIEFING</b>	
a	Visual Presentation
b	Technical Accuracy
c	Clarity of Explanation
d	Clarity of Speech
e	Instructional Technique
f	Use of Models and Aids
g	Student Participation

<b>SECTION 3 FLIGHT</b>	
a	Arrangement of Demo
b	Synchronisation of Speech with Demo
c	Correction of Faults
d	Helicopter Handling
e	Instructional Technique
f	General Airmanship/Safety
g	Positioning; use of Airspace
<b>SECTION 4 OTHER EXERCISES</b>	
a	
b	
c	
d	
e	
f	
g	

<b>SECTION 5 MULTI-ENGINE EXERCISES</b>	
a	<sup>1</sup> Actions following an Engine failure shortly after take-off
b	1A single-engine approach and go around
c	1A single-engine approach and landing
d	
e	
f g	

<sup>1</sup>These exercises shall be demonstrated at the skill test for the single-pilot multi-engine instructor rating.

<b>SECTION 6 INSTRUMENT EXERCISES</b>	
a	
b	
c	
d	
e	
f	
g	
<b>SECTION 7 POSTFLIGHT DE-BRIEFING</b>	
a	Visual Presentation
b	Technical Accuracy
c	Clarity of Explanation
d	Clarity of Speech
e	Instructional Technique
f	Use of Models and Aids
g	Student Participation

**Appendix 1 to JCAR FCL2.330C****Course for the type rating instructor (helicopter) for, as applicable, single- or multi-pilot helicopters certificated for VFR or IFR operation (TRI(H)).**

(See JCAR FCL2.330A), (See JCAR FCL2.330C), (See JCAR FCL2.330F)

(See Appendix 1 to JCAR FCL2.240 & 2.295), (See Appendix 3 to JCAR FCL2.240),

(See Appendix 1 to JCAR FCL2.261(a)), (See Appendix 1 & 2 to JCAR FCL2.320E)

**GENERAL COURSE OBJECTIVES**

1. The aim of the TRI(H) course is to train helicopter license holders to the level of proficiency necessary for the issue of a TRI(H) rating. The course shall be designed to give adequate training to the applicant in technical and theoretical knowledge instruction, flight instruction and synthetic flight instruction in order to instruct for any single or multi-pilot helicopter type rating for which the applicant is qualified (see JCAR FCL2.330A).
2. The TRI(H) course shall give particular emphasis to the role of the individual in relation to the importance of human factors in the man-machine environment and the role of CRM. Special attention shall be given to the applicant's maturity and judgment including an understanding of adults, their behavioral attitudes and variable levels of learning ability.
3. During the course the applicants shall be made aware of their own attitudes to the importance of flight safety. It will be important during the course of training to aim at giving the applicant the knowledge, skills and attitudes relevant to the role of the Type Rating Instructor.

**TRI COURSE STRUCTURE**

4. The TRI course consists of 3 parts;
  - (a) Part 1 Teaching and Learning Module. The detailed syllabus is set out in AMC JCAR FCL2.320D and shall comprise of not less than 25 hours. Pilots holding or having held one of the following ratings are credited for the TRI(H) Part 1, Teaching and Learning Module of the course: FI(H), IRI(H), SFI(H), STI(H)FI(A), CRI(A), TRI(A), SFI(A), STI(A)
  - (b) Part 2 Technical Training. The technical theoretical knowledge instruction shall comprise of not less than 10 hours training to include the revision of technical knowledge, the preparation of lesson plans and the development of classroom instructional skills to enable the TRI to instruct the technical theoretical knowledge syllabus as set out in Appendix 1 to JCAR FCL2.261(a). If a TRI rating for multi-pilot helicopters is sought, particular attention shall be given to multi-crew cooperation.
  - (c) Part 3 Flight Training. The amount of flight training will vary depending on the complexity of the helicopter type. At least 5 hours flight instruction for a single pilot helicopter and at least 10 hours for a multi-pilot multi-engine helicopter. A similar number of hours shall be used for the instruction and practice of pre-flight and post flight briefing for each

exercise. The flight instruction shall aim to ensure that the applicant is able to teach the air exercises safely and efficiently and shall be related to the type of helicopter on which the applicant wishes to instruct. The content of the training programme shall only cover training exercises applicable to the helicopter type as set out in Appendix 1 & 2 to JCAR FCL2.240 & 2.295 or Appendix 3 to JCAR FCL2.240.

(d) If a TRI rating for revalidation of instrument ratings is sought, then the applicant shall hold a valid instrument rating.

### TRI ASSESSMENT

5. The TRI assessment will be based on the relevant sections of the FI Skill Test (See Appendix 1 & 2 to JCAR FCL2.320E) i.e. pre-flight exercise brief, flight main exercise (with additional exercises), post-flight debrief and questions on the aircraft systems. This final assessment shall be conducted by a TRI(H) notified by CARC for this purpose.

### REVALIDATION AND RENEWAL

6. For the revalidation or renewal of the TRI(H) rating, the candidate will meet the requirements of JCAR FCL2.330F. A TRI assessment on a single engine helicopter type will revalidate the TRI rating on other single engine types for which a TRI rating is held. A TRI rating for multi engine helicopters will revalidate the TRI rating on other multi engine types for which a TRI rating is held

### ADDITIONAL TYPE COURSES

7. TRIs who wish to qualify for further types will conduct the appropriate type technical and not less than 2 hours flight training and pass, as a proficiency check, the relevant sections of the assessment in JCAR FCL2.330D with a TRI(H).



**Appendix -1 to JCAR FCL2.340C****Course for the Instrument Rating Instructor (Helicopter) IRI(H)**

(See JCAR FCL2.340F), (See Appendix 1 to JCAR FCL2.205), (See Appendix 1 & 2 to JCAR FCL2.320E), (See AMC-JCAR FCL2.340C), (See AMC-JCAR FCL2.340D)

**GENERAL COURSE OBJECTIVES**

1. The aim of the IRI(H) course is to train helicopter license holders to the level of proficiency necessary for the issue of a IRI(H) rating.
2. The course shall be designed to
  - (a) give adequate training to the applicant in theoretical knowledge instruction, flight instruction and synthetic flight instruction in order to instruct for an instrument rating helicopters, in accordance with the syllabus at Appendix 1 to JCAR FCL2.205;
  - (b) refresh and bring up to date the theoretical knowledge of the instructor;
  - (c) ensure that the student instructors instrument flying is of a sufficiently high standard.
3. The IRI(H) course shall give particular emphasis to the role of the individual in relation to the importance of human factors in the man-machine environment. Special attention shall be given to the applicant's maturity and judgment including an understanding of adults, their behavioral attitudes and variable levels of learning ability.
4. During the course the applicants shall be made aware of their own attitudes to the importance of flight safety. It will be important during the course of training to aim at given the applicant the knowledge, skills and attitudes relevant to the role of the Instrument Rating Instructor.

**IRI(H) COURSE STRUCTURE**

5. The IRI course consists of 3 parts;
  - (a) Part 1 Teaching and Learning Module. The detailed syllabus is set out in AMC JCAR FCL2.320D Part 1 and shall comprise of not less than 25 hours. Pilots holding or having held one of the following ratings are credited for the TRI(H) Part 1, Teaching and Learning Module of the course:FI(H), TRI(H), SFI(H), STI(H)FI(A), CRI(A), TRI(A), SFI(A), IRI(A), STI(A)
  - (b) Part 2 Instrument Theoretical Knowledge Training. The instrument theoretical knowledge instruction shall comprise not less than 10 hours training to include the revision of instrument theoretical knowledge, the preparation of lesson plans and the development of classroom instructional skills to enable the IRI(H) to instruct the instrument theoretical knowledge

syllabus as set out in AMC JCAR FCL2.340C.

(c) Part 3 Flight Training. An approved IRI(H) course shall comprise of at least 10 hours of flight instruction in a helicopter, flight simulator, FTD 2/3 or FNPT II. A similar number of hours shall be used for the instruction and practice of pre-flight and post-flight briefing for each exercise. The flight instruction shall aim to ensure that the applicant is able to teach the air exercises safely and efficiently. The content of the training program is contained in AMC JCAR FCL2.340C.

#### IRI SKILL TEST

6. The IRI(H) Skill Test will be based on the relevant sections of the FI Skill Test (see Appendix 1 & 2 to JCAR FCL2.320E) i.e. pre-flight exercise brief, flight main exercise (with additional exercises), post-flight debrief and questions on IFR procedures. The Skill Test shall be conducted by an FIE(H).

#### REVALIDATION AND RENEWAL

7. For the revalidation or renewal of the IRI(H) rating, the candidate will meet the requirements of JCAR FCL2.340F. An IRI(H) check on one helicopter type will revalidate the IRI(H) rating on other helicopter types for which an IRI(H) rating is held.

**SUBPART- I**  
**EXAMINERS (Helicopter)**

**FCL2.420 Examiners – Purposes.**

(a) Five categories of examiner are recognised:

- (1) Flight Examiner (FE(H)).
- (2) Type Rating Examiner (TRE(H)).
- (3) Instrument Rating Examiner (IRE(H)).
- (4) Flight Instructor Examiner (FIE(H)).
- (5) Synthetic Flight Examiner (SFE(H)).

(b) Multiple Categories. Provided that they meet the qualification and experience requirements set out in this subpart for each category undertaken, examiners are not confined to a single category of FE(H), TRE(H), IRE(H), FIE(H).

**FCL2.425 Examiners – General.**

(See JCAR FCL2.030(a)), (See Appendix 1 to JCAR FCL2.425)

(See AMC JCAR FCL2.425), (See IEM JCAR FCL2.425)

(a) Pre-requisites. An examiner shall not carry out the tests or checks required for the issue, revalidation or renewal of any pilot license or rating unless that person;

- (1) Holds a license and rating at least equal to the license or rating for which they are authorised to conduct skill tests or proficiency checks and, unless specified otherwise, the privilege to instruct for this license or rating.
- (2) Is qualified to act as pilot-in- command of the aircraft during a skill test or proficiency check, unless specified otherwise, and shall meet the applicable requirements set out in JCAR FCL2.435 through 2.460.

(b) Where no qualified examiner is available and, at the discretion of CARC, examiners/inspectors may be authorised without meeting the relevant instructor/type rating requirements as mentioned above.

(c) Entries in the license: In licenses where revalidation entries may be made by the examiner, the Examiner will:

(1) Complete the following details: ratings, date of check, valid until, authorisation number and signature;

(2) Submit the original of the proficiency check form to the issuing CARC and hold one copy of the proficiency check form on personal file;

(3) In case of revalidation of helicopter type ratings in accordance with JCAR FCL 2.245(b)(2), (b)(3) and (b)(4), enter revalidation dates for all type ratings covered.

(d) Validity period: An examiner's authorisation will be valid for not more than three years in addition to the remainder of the month of issue. Examiners may be re-authorised at the discretion of CARC, and in accordance with Appendix 1 to JCAR FCL2.425.

(e) Compliance with JCARS: Examiners will be authorised in accordance with JCAR FCL2.030(a). The examiner shall comply with the appropriate examiners' standardisation arrangements made or approved by CARC (see Appendix 1 to JCAR FCL2.425, AMC JCAR FCL2.425 and IEM JCAR FCL2.425);

(f) Examiner Authorisation Acceptance Test:

After completion of the standardisation arrangements in JCAR FCL2.425(e), the applicant for any examiner authorisation shall have conducted at least one skill test or proficiency check in the role of examiner for which authorisation is being sought, including briefing, conduct of the skill test or proficiency check, assessment of the applicant to whom the skill test or proficiency check is being given, debriefing and recording/documentation.

This "Examiner Authorisation Acceptance Test" shall be supervised by an inspector of CARC or by a senior examiner specifically authorised by CARC for this purpose.

(g) Re-authorisation:

(1) All examiner authorisations will be valid for a period of not more than 3 years in addition to the remainder of the month of issue. If issued within the final 12 calendar months of validity of a previous examiner check, the period of validity shall extend from the date of issue until 3 years from the expiry date of that previous examiner check. An examiner who is re-authorised at the same time as his instructor rating is revalidated may have the instructor rating validity period aligned with the examiner authorisation.

Within the last 12 months of validity, the examiner shall conduct one skill test or proficiency check, including briefing, conduct of the test or check, assessment of the applicant, debriefing and recording of documentation while being observed by an inspector of CARC or senior examiner specifically authorised by CARC for this purpose.

(2) If the examiner authorisation has expired, then that examiner shall undertake training as specified by CARC prior to conducting another Examiner Authorisation Acceptance Test under supervision.

**FCL2.435 FE(H) – Privileges.**

The privileges of a FE(H) are to conduct:

(a) Skill tests for the issue of the PPL(H) and skill tests and proficiency checks for the helicopter single-pilot single-engine helicopter type rating provided that the examiner has completed not less than 1000 hours flight time as a pilot of helicopters, including not less than 250 hours flight instruction and for single-pilot multi-engine helicopter type ratings provided that the examiner has met the requirements of JCAR FCL2.439(b);

(b) Skill tests for the issue of CPL(H) and skill tests and proficiency checks for the single-pilot single-engine helicopter type ratings provided the examiner has completed not less than 2000 hours flight time as a pilot of helicopters, including not less than 250 hours flight instruction and for single-pilot multi-engine helicopter type ratings provided that the examiner has met the requirements of JCAR FCL2.439(b).

**FCL2.439 TRE(H) – Pre-requisites.**

Before being permitted to become a TRE(H), an applicant must meet the following requirements:

- (a) Multi-pilot helicopters:
  - (1) Have not less than 1500 hours as pilot on multi-pilot helicopters of which at least 500 hours shall be as pilot in command; ,and
  - (2) Hold a TRI(H) rating on the applicable type; and
  - (3) Before the privileges are extended from single-pilot multi-engine helicopter to multi-pilot multi-engine privileges on the same type, the holder shall meet the requirements of JCAR FCL2.250 and have at least 100 hours in multi-pilot helicopters on this type. An applicant for the first multi-pilot multi-engine<sup>1</sup> TRE Authorisation shall meet the experience requirements of JCAR FCL2.439(a)(1) except that the 1500 hours multi-pilot helicopter may be considered to have been met if they have the 500 hours pilot-in-command on the multi- pilot helicopter of the same type.
- (b) Single-pilot Multi-engine helicopters:
  - (1) Have completed not less than 1000 hours as pilot of helicopters of which at least 500 hours shall be as pilot-in-command; and
  - (2) Hold a professional helicopter pilot license, and when applicable, a valid IR(H); and
  - (3) Hold a valid TRI(H) rating for the applicable helicopter.
- (c) Single-pilot Single-engine helicopters:
  - (1) Has completed not less than 750 hours as a pilot of helicopters of which at least 500 hours shall be as pilot-in-command; and
  - (2) Hold a professional helicopter pilot license; and
  - (3) Hold either a valid FI(H) or TRI(H) rating for the applicable helicopter.

**FCL2.440 TRE(H) – Privileges**

The privileges of a TRE(H) are to conduct :

- (a) For multi-pilot helicopters
-

- (1) Skill tests for the issue of type rating;
  - (2) Proficiency checks for revalidation or renewal of multi-pilot type ratings;
  - (3) Proficiency checks for the revalidation or renewal of instrument ratings (H) provided the TRE(H) holds a valid IR(H) and complies with JCAR FCL2.425(e);
  - (4) Skill tests for ATPL(H) issue.
- (b) For single-pilot helicopters
- (1) Skill tests for the issue of type ratings;
  - (2) Proficiency checks for revalidation or renewal of single-pilot helicopter type ratings; and
  - (3) Proficiency checks for the revalidation or renewal of instrument ratings (H) provided the TRE(H) holds a valid IR(H) and complies with JCAR FCL2.425(e).

**FCL2.442 TRE(H) – Authorisation.**

All applicants for the initial issue or reauthorisation of the TRE(H) authorisation shall comply with the requirements of JCAR FCL2.425.

**FCL2.445 IRE(H) – Pre-requisites.**

Before being permitted to become an IRE(H), an applicant must hold an IRI(H) and shall have completed the standardisation arrangements in JCAR FCL2.425(e) and also the following:

- (a) Not less than 2000 hours flight time as pilot of helicopters; and
- (b) Not less than 300 hours of instrument flight time in helicopters, of which 200 hours shall be as an instructor.

**FCL2.450 IRE(H) – Privileges.**

The privileges of an IRE(H) are to conduct skill tests for the initial issue and proficiency checks for the revalidation or renewal of instrument ratings (H).

**FCL2.452 IRE(H) – Authorisation.**

All applicants for the initial issue or re- authorisation of the IRE(H) authorisation shall comply with the requirements of JCAR FCL2.425.

**FCL2.445 SFE(H) – Pre-requisites**

Before being permitted to become an SFE(H), an applicant must have completed the standardisation course in JCAR FCL2.425(e), and:

- (a) Hold an ATPL(H) which includes an IR(H) on the applicable type;
- (b) Has not less than 1000 hours of flight time as a pilot of multi-pilot helicopters; and
- (c) Be entitled to exercise the privileges of an SFI(H) (see JCAR FCL2.350A).

**FCL2.455 SFE (H) – Privileges**

The privileges of an SFE (H) are to conduct in a Full flight simulator (FFS):

- (a) Skill tests and proficiency checks for the issue, revalidation and renewal of type ratings;
- (b) Proficiency checks for the revalidation and renewal of IRs, provided that the SFE complies with the requirements in FCL.2.445 IRE (H) ;
- (c) Skill tests for ATPL(H) issue; and
- (d) Skill tests and proficiency checks for the issue, revalidation or renewal of an SFI(H) certificate, provided that the examiner has completed at least 3 years as an SFE.

**FCL2.457 SFE(H) – Authorisation.**

All applicants for the initial issue or re- authorisation of the SFE(H) authorisation shall comply with the requirements of JCAR FCL2.425.



**FCL2.459 FIE(H) – Pre-requisites.**

Before being permitted to become an FIE(H), an applicant must::

- (a) Hold a valid FI(H), TRI(H) or IRI(H) (as applicable); and
- (b) Hold a FE(H), TRE(H) or IRE(H) Authorisation (as applicable); and
- (c) Have completed not less than 2000 hours as pilot of helicopters; and
- (d) Have not less than 100 hours flight time instructing applicants for a FI(H), or TRI(H), or IRI(H) ratings; and
- (e) Have completed the standardisation course in accordance with JCAR FCL2.425(e).

**FCL2.460 FIE(H) – Privileges**

The privileges of an FIE(H) are to conduct skill tests and proficiency checks for the issue and revalidation or renewal of FI(H), TRI(H), or IRI(H) ratings on single-pilot helicopters.

**FCL2.461 FIE(H) – Authorisation**

All applicants for the initial issue or reauthorisation of the FIE(H) authorisation shall comply with the requirements of JCAR FCL2.425.

**Appendix- 1 to JCAR FCL2.425****Standardisation arrangements for examiners.**

(See JCAR FCL2.425 and 2.430), (See AMC JCAR FCL2.425)

**GENERAL**

1. CARC should have a list of authorised examiners specifying each role and any additional matters for which they have been authorised.
2. Examiners of CARC shall consistently apply JCAR FCL 2 standards during a test/check. However, as the circumstances of each test/check conducted by an examiner may vary, it is also important that an examiner's test/check assessment takes into account any adverse condition(s) encountered during the test/check.

**EXAMINERS DESIGNATION AND AUTHORISATION**

3. An examiner will be designated and authorised in accordance with JCAR FCL 2 and will be:
  - (a) a flight inspector of CARC; or
  - (b) an instructor from a Registered Facility, FTO, TRTO; manufacturer's facility or subcontracted facility; or
  - (c) a pilot holding a specific authorisation from CARC.
4. All Examiners must be suitably trained, qualified and experienced for their role on the relevant type of helicopter. No specific rules on qualification can be made because the particular circumstance of each organisation will differ. It is important, however, that in every instance, the Examiner should, by background and experience, have the professional respect of the aviation community.

**EXAMINER RE-AUTHORISATION**

5. Examiners may be re-authorised in accordance with JCAR FCL2.425. To be re-authorised, the examiner shall have conducted at least two skill tests or proficiency checks in every yearly period within the three year authorisation period. One of the skill tests or proficiency checks given by the examiner within the last 12 months of the validity period of the authorisation shall have been observed by an inspector of CARC or by a senior examiner specifically authorised for this purpose.

**SUBPART- J****THEORETICAL KNOWLEDGE REQUIREMENTS AND PROCEDURES  
FOR THE CONDUCT OF THEORETICAL KNOWLEDGE  
EXAMINATIONS FOR PROFESSIONAL PILOT LICENSES AND**

## INSTRUMENT RATINGS

### **FCL2.465 Requirements.**

An applicant for a professional pilot license or an instrument rating shall demonstrate a level of knowledge appropriate to the privileges of the license or rating for which application is made by passing theoretical knowledge examinations in accordance with the procedures set out in JCAR FCL2.470 through 2.495.

### **FCL2.470 Contents of theoretical knowledge examinations.**

(See Appendix 1 to JCAR FCL2.470)

(a) An applicant for the ATPL(H) shall demonstrate a level of knowledge appropriate to the privileges granted in the following 13 subjects:

Air Law; Aircraft General Knowledge - Airframe/Systems/Powerplant; Aircraft General Knowledge – Instrumentation; Mass and Balance; Performance; Flight Planning and Monitoring; Human Performance; Meteorology; General Navigation; Radio Navigation; Operational Procedures; Principles of flight; VFR Communications. The breakdown of subjects into examination papers and times allowed will be agreed within The State and stated in the associated procedures.

(b) An applicant for the CPL(H) shall demonstrate a level of knowledge appropriate to the privileges granted in the following 9 subjects:

Air Law; Aircraft General Knowledge; Flight Performance and Planning; Human Performance; Meteorology; Navigation; Operational Procedures; Principles of flight; VFR Communications.

The breakdown of subjects into examination papers and times allowed will be agreed with CARC and stated in the associated procedures.

(c) An applicant for an IR(H) shall demonstrate a level of knowledge appropriate to the privileges granted in the following 7 subjects:

Air Law; Aircraft General Knowledge; Flight Performance and Planning; Human Performance ; Meteorology; Navigation; IFR Communications.

The breakdown of subjects into examination papers and times allowed will be set by CARC.

(d) An applicant for the ATPL(H) shall demonstrate a level of knowledge appropriate to the privileges granted in the following 14 subjects:

Air law; Aircraft general Knowledge –Airframe/Systems/Powerplant; Aircraft General Knowledge Instrumentation; Mass and Balance; Performance; Flight Planning and Monitoring; Human Performance; Meteorology; General Navigation; Radio Navigations; Operational Procedures; Principles of flight; VFR Communications; IFR Communications. The breakdown of subjects into examination papers and times allowed will be agreed within The State and stated in the Joint Implementation Procedures.

**FCL2.475 Questions.**

(See IEM JCAR FCL2.475 (a) and (b)), (See Appendix 1 to JCAR FCL2.470)

(a) The Central Question Bank. Questions appropriate to the syllabuses (see Appendix 1 to JCAR FCL2.470) will be held in CARC Central Question Bank (CQB). Questions entered in the CQB will be composed in English, according to a method described in IEM JCAR FCL2.475(a), using abbreviations (see IEM JCAR FCL2.475(b)), and compiled in a computer compatible format. The questions will be in multiple choice format. CARC may exercise discretion in the presentation of questions in an examination according to JCAR FCL2.480.

(b) Publication. Samples of questions and multiple choice answers will be published from time to time by CARC.

**FCL2.480 Examination procedure.**

(See Appendix 1 to JCAR FCL2.470)

(a) Frequency. CARC will provide the opportunity for an applicant to complete the required examinations in accordance with the procedures set out in this Subpart. A complete examination for a license or instrument rating will comprise an examination in each of the subjects detailed in Appendix 1 to JCAR FCL2.470(a), (b) and (c).

(b) Language. The examinations will be provided in the English language.

(c) Content. Questions for an examination will be selected by CARC from the CQB according to a common method which allows coverage of the entire syllabi in each subject. The style of answer to questions requiring numerical computation or graphical interpretation may be varied to other forms considered appropriate by CARC. The examination in Communications may be provided separately from those in other subjects, as decided by CARC. An applicant who has previously passed either or both of the examinations in VFR and IFR Communications will not be re-examined in the relevant sections.

(d) Oral Examinations; Oral examinations will not be conducted in lieu of written or computer based examinations.

(e) Facilities; CARC will determine how to provide suitable charts, maps, data sheets and equipment, as required, to answer the questions.

(f) Security; The identity of the applicant will be established before an examination is taken.

(g) Confidentiality; The contents of the examination papers will retain a confidential status.

**FCL2.485 Responsibilities of the applicant.**

(a) An applicant shall take the entire set of examinations in CARC.

(b) An applicant shall be recommended for an examination by the approved FTO

responsible for applicant's training when the applicant has completed the appropriate elements of the course of theoretical knowledge instruction to a satisfactorily standard. An applicant who has failed to complete the examination within the limits imposed by JCAR FCL2.490 will in addition be required to produce evidence from an approved Training Organisation of further training.

(c) If CARC considers that the applicant is not complying with examination procedures during the examination, this misconduct will be considered with a view to failing the applicant, either in the examination of a single subject or in the examination as a whole.

### **FCL2.490 Pass standards.**

(a) A Pass in an examination paper will be awarded to an applicant achieving at least 75% of the marks allocated to that paper. There is no penalty marking.

(b) Subject to any other conditions in the JCARs, an applicant will be deemed to have successfully completed the required theoretical knowledge examination for the appropriate pilot license or rating when awarded a pass in all of the required subjects within a period of 18 months, counted from the end of the calendar month when the applicant first attempted an examination.

(c) An applicant shall re-enter the complete examination as though for an initial attempt if he has failed to pass any single examination paper within four attempts, or has failed to pass all papers within either six sittings or the period mentioned in paragraph (b) above. Before re-entry to the examinations the applicant shall undertake further training as determined by CARC.

**FCL2.495 Acceptance period.**

(a) A pass in the theoretical knowledge examinations given in accordance with JCAR FCL2.490 will be accepted for the grant of the CPL(H) or IR(H) during the 36 months from the date of gaining a Pass in all the required examination papers.

(b) A pass in the ATPL(H) theoretical knowledge examinations given in accordance with JCAR FCL2.490 will be accepted for the grant of the CPL(H) during the 36 months from the date of gaining a Pass in all the required examination papers and will remain valid indefinitely towards the grant of the ATPL(H) provided that the applicant has a valid type rating entered in the CPL(H).

(c) Provided that an IR(H) is obtained in accordance with (a) above, a pass in the ATPL(H)/IR theoretical knowledge examination will remain valid for a period of 7 years from the last validity date of the IR(H) entered in the CPL(H) for the issuance of an ATPL(H).

**Appendix -1 to JCAR FCL2.470**  
**Theoretical Knowledge Syllabus– ATPL/IR, ATPL, CPL and IR**  
 (See JCAR FCL2.470)

1. An applicant shall have received the relevant theoretical knowledge instruction on an approved course at an approved flying training organisation (FTO) according to the syllabus subjects and headline topics below (refer to the Theoretical Knowledge Learning Objectives):

		Aeroplane		Helicopter		IR
		ATPL	CPL	ATPL	CPL	
010 00 00 00	AIR LAW AND ATC PROCEDURES	x	x	x	x	x
010 01 00 00	INTERNATIONAL LAW : CONVENTIONS, AGREEMENTS ORGANISATIONS					
010 02 00 00	AIRWORTHINESS OF AIRCRAFT					
010 03 00 00	AIRCRAFT NATIONALITY AND REGISTRATION MARKS					
010 04 00 00	PERSONNEL LICENSING					
010 05 00 00	RULES OF THE AIR					
010 06 00 00	PROCEDURES FOR AIR NAVIGATION SERVICES – AIRC OPERATIONS					
010 07 00 00	AIR TRAFFIC SERVICES AND AIR TRAFFIC MANAGEMENT					
010 08 00 00	AERONAUTICAL INFORMATION SERVICE					
010 09 00 00	AERODROMES/HELIPORTS					
010 10 00 00	FACILITATION					
010 11 00 00	SEARCH AND RESCUE					
010 12 00 00	SECURITY					
010 13 00 00	AIRCRAFT ACCIDENT AND INCIDENT INVESTIGATION					

Appendix 1 to JCAR FCL2.470 (continue)

		Aeroplane		Helicopter		IR	
		ATPL	CPL	ATPL	CPL		
021 00 00 00	AIRCRAFT GENERAL KNOWLEDGE – AIRFRAME AND SYSTEMS, ELECTRICAL SYSTEMS, ELECTRICS, POWERPLANT, EMERGENCY EQUIPMENT	x	x	x	x	x	x
021 01 00 00	SYSTEM DESIGN, LOADS, STRESSES, MAINTENANCE						
021 02 00 00	AIRFRAME						
021 03 00 00	HYDRAULICS						
021 04 00 00	LANDING GEAR, WHEELS, TYRES, BRAKES						
021 05 00 00	FLIGHT CONTROLS						
021 06 00 00	PNEUMATICS – PRESSURISATION AND AIR CONDITIONING						
021 07 00 00	ANTI AND DE-ICING SYSTEMS						
021 08 00 00	FUEL SYSTEM						
021 09 00 00	ELECTRICS						
021 10 00 00	PISTON ENGINES						
021 11 00 00	TURBINE ENGINES						
021 12 00 00	PROTECTION AND DETECTION SYSTEMS						
021 13 00 00	OXYGEN SYSTEMS						
021 14 00 00	HELICOPTER: MISCELLANEOUS SYSTEMS						
021 15 00 00	HELICOPTER: ROTOR HEADS						
021 16 00 00	HELICOPTER: TRANSMISSION						
021 17 00 00	HELICOPTER: BLADES						



## Appendix 1 to JCAR FCL2.470 (continue)

		Aeroplane		Helicopter		IR	
		ATPL	CPL	ATPL	CPL		
022 00 00 00	AIRCRAFT GENERAL KNOWLEDGE – INSTRUMENTATION	x	x	x	x	x	x
022 01 00 00	SENSORS AND INSTRUMENTS						
022 02 00 00	MEASUREMENT OF AIR DATA PARAMETERS						
022 03 00 00	MAGNETISM – DIRECT READING COMPASS AND FLUX VALVE						
022 04 00 00	GYROSCOPIC INSTRUMENTS						
022 05 00 00	INERTIAL NAVIGATION AND REFERENCE SYSTEMS						
022 06 00 00	AEROPLANE: AUTOMATIC FLIGHT CONTROL SYSTEMS						
022 07 00 00	HELICOPTER: AUTOMATIC FLIGHT CONTROL SYSTEMS						
022 08 00 00	TRIMS – YAW DAMPER – FLIGHT ENVELOPE PROTECTION						
022 09 00 00	AUTOTHROTTLE – AUTOMATIC THRUST CONTROL SYSTEM						
022 10 00 00	COMMUNICATION SYSTEMS						
022 11 00 00	FLIGHT MANAGEMENT SYSTEM (F.M.S.)						
022 12 00 00	ALERTING SYSTEMS, PROXIMITY SYSTEMS						
022 13 00 00	INTEGRATED INSTRUMENTS – ELECTRONIC DISPLAYS						
022 14 00 00	MAINTENANCE, MONITORING AND RECORDING SYSTEMS						
022 15 00 00	DIGITAL CIRCUITS AND COMPUTERS						

		Aeroplane		Helicopter		IR	
		ATPL	CPL	ATPL	CPL		
030 00 00 00	FLIGHT PERFORMANCE AND PLANNING	x	x	x	x	x	
031 00 00 00	MASS AND BALANCE – AEROPLANES/HELICOPTERS	x	x	x	x	x	
031 01 00 00	PURPOSE OF MASS AND BALANCE CONSIDERATIONS						
031 02 00 00	LOADING						
031 03 00 00	FUNDAMENTALS OF CG CALCULATIONS						
031 04 00 00	MASS AND BALANCE DETAILS OF AIRCRAFT						
031 05 00 00	DETERMINATION OF CG POSITION						
031 06 00 00	CARGO HANDLING						

Appendix 1 to JCAR FCL2.470 (continue)

		Aeroplane		Helicopter			IR
		ATPL	CPL	ATPL	ATPL	CPL	
033 00 00 00	FLIGHT PLANNING AND FLIGHT MONITORING	x	x	x	x	x	x
033 01 00 00	FLIGHT PLANNING FOR VFR FLIGHTS						
033 02 00 00	FLIGHT PLANNING FOR IFR FLIGHTS						
033 03 00 00	FUEL PLANNING						
033 04 00 00	PRE-FLIGHT PREPARATION						
033 05 00 00	ATS FLIGHT PLAN						
033 06 00 00	FLIGHT MONITORING AND IN-FLIGHT RE-PLANNING						

		Aeroplane		Helicopter			IR
		ATPL	CPL	ATPL	ATPL	CPL	
034 00 00 00	PERFORMANCE – HELICOPTERS			x	x	x	
034 01 00 00	GENERAL						
034 02 00 00	PERFORMANCE CLASS 3 SINGLE ENGINE HELICOPTERS ONLY						
034 03 00 00	PERFORMANCE CLASS 2						
034 04 00 00	PERFORMANCE CLASS 1 HELICOPTERS CERTIFICATED UNDER ONLY						

		Aeroplane		Helicopter			IR
		ATPL	CPL	ATPL	ATPL	CPL	
040 00 00 00	HUMAN PERFORMANCE	x	x	x	x	x	x
040 01 00 00	HUMAN FACTORS: BASIC CONCEPTS						
040 02 00 00	BASIC AVIATION PHYSIOLOGY AND HEALTH MAINTENANCE						
040 03 00 00	BASIC AVIATION PSYCHOLOGY						

Appendix 1 to JCAR FCL2.470 (continue)

		Aeroplane		Helicopter		IR
		ATPL	CPL	ATPL	CPL	
050 00 00 00	METEOROLOGY	x	x	x	x	x
050 01 00 00	THE ATMOSPHERE					
050 02 00 00	WIND					
050 03 00 00	THERMODYNAMICS					
050 04 00 00	CLOUDS AND FOG					
050 05 00 00	PRECIPITATION					
050 06 00 00	AIR MASSES AND FRONTS					
050 07 00 00	PRESSURE SYSTEMS					
050 08 00 00	CLIMATOLOGY					
050 09 00 00	FLIGHT HAZARDS					
050 10 00 00	METEOROLOGICAL INFORMATION					

		Aeroplane		Helicopter		IR
		ATPL	CPL	ATPL	CPL	
060 00 00 00	NAVIGATION	x	x	x	x	x
061 00 00 00	GENERAL NAVIGATION	x	x	x	x	x
061 01 00 00	BASICS OF NAVIGATION					
061 02 00 00	MAGNETISM AND COMPASSES					
061 03 00 00	CHARTS					
061 04 00 00	DEAD RECKONING NAVIGATION (DR)					
061 05 00 00	IN-FLIGHT NAVIGATION					

		Aeroplane		Helicopter		IR
		ATPL	CPL	ATPL	CPL	
062 00 00 00	RADIO NAVIGATION	x	x	x	x	x
062 01 00 00	BASIC RADIO PROPAGATION THEORY					
062 02 00 00	RADIO AIDS					
062 03 00 00	RADAR					
062 04 00 00	Intentionally left blank					
062 05 00 00	AREA NAVIGATION SYSTEMS, RNAV/FMS					
062 06 00 00	GLOBAL NAVIGATION SATELLITE SYSTEMS					

Appendix 1 to JCAR FCL2.470 (continue)

		Aeroplane		Helicopter		IR
		ATPL	CPL	ATPL	CPL	
070 00 00 00	OPERATIONAL PROCEDURES	x	x	x	x	x
071 01 00 00	GENERAL REQUIREMENTS					
071 02 00 00	SPECIAL OPERATIONAL PROCEDURES AND HAZARDS (GENERAL ASPECTS)					
071 03 00 00	HELICOPTER EMERGENCY PROCEDURES					

		Aeroplane		Helicopter		IR
		ATPL	CPL	ATPL	CPL	
082 00 00 00	PRINCIPLES OF FLIGHT – HELICOPTER			x	x	x
082 01 00 00	SUBSONIC AERODYNAMICS					
082 02 00 00	TRANSONIC AERODYNAMICS and COMPRESSIBILITY EFFECTS					
082 03 00 00	ROTORCRAFT TYPES					
082 04 00 00	MAIN ROTOR AERODYNAMICS					
082 05 00 00	MAIN ROTOR MECHANICS					
082 06 00 00	TAIL ROTORS					
082 07 00 00	EQUILIBRIUM, STABILITY AND CONTROL					
082 08 00 00	HELICOPTER FLIGHT MECHANICS					

Appendix 1 to JCAR FCL2.470 (continue)

		Aeroplane		Helicopter		IR
		ATPL	CPL	ATPL	CPL	
090 00 00 00	COMMUNICATIONS	x	x	x	x	x
091 00 00 00	VFR COMMUNICATIONS					
091 01 00 00	DEFINITIONS					
091 02 00 00	GENERAL OPERATING PROCEDURES					
091 03 00 00	RELEVANT WEATHER INFORMATION TERMS (VFR)					
091 04 00 00	ACTION REQUIRED TO BE TAKEN IN CASE OF COMMUNICATIONS FAILURE					
091 05 00 00	DISTRESS AND URGENCY PROCEDURES					
091 06 00 00	GENERAL PRINCIPLES OF VHF PROPAGATION AND ALLOCATION OF FREQUENCIES					
092 00 00 00	IFR COMMUNICATIONS					
092 01 00 00	DEFINITIONS					
092 02 00 00	GENERAL OPERATING PROCEDURES					
092 03 00 00	ACTION REQUIRED TO BE TAKEN IN CASE OF COMMUNICATIONS FAILURE					
092 04 00 00	DISTRESS AND URGENCY PROCEDURES					
092 05 00 00	RELEVANT WEATHER INFORMATION TERMS (IFR)					
092 06 00 00	GENERAL PRINCIPLES OF VHF PROPAGATION AND ALLOCATION OF FREQUENCIES					
092 07 00 00	MORSE CODE					