**SUBPART H. CLASS and TYPE RATINGS**

***GM 1.* FCL. 700 Circumstances in which Class or Type Ratings are Required**

 *LIST of CLASS or TYPE RATINGS*

The following tables contain lists of Aeroplanes or TMG that are included in Class Ratings.

***a ) Class Ratings*** *( aeroplane )* :

 *SP and SEP or MEP aeroplane ( land or sea ) :*

|  |  |  |  |
| --- | --- | --- | --- |
| **Manufacturer** |  **Aeroplanes** |  | **Licence Endorsement** |
|   All Manufacturers | SEP ( land )  |  **( D )**  |  **SEP ( land )** |
| SEP ( land ) with  variable pitch propellers |
| SEP ( land ) with  retractable undercarriage |
| SEP ( land ) with  turbo or super charged engines |
| SEP ( land ) with  cabin pressurization |
| SEP ( land ) with tail wheels |
| SEP ( land ) with EFIS  |
| SEP ( land ) with SLPC |
| SEP ( sea ) with  variable pitch propellers |  **( D )**  |  **SEP ( sea )** |
| SEP ( sea ) with  turbo or super charged engines |
| SEP ( sea ) with  cabin pressurization |
| SEP ( sea ) with EFIS |
| SEP ( sea ) with SLPC |
|  All Manufacturers | MEP ( land )  |  **( D )**  |  **MEP ( land )**  |
| MEP ( sea ) |  **MEP ( sea )**  |
|  |  |  |  |
|  |  |  |  |

 ***b ) Class Ratings ( aeroplane ) :***

 *SP and SEP TMG ( land ) :*

|  |  |  |  |
| --- | --- | --- | --- |
| **Manufacturer** |  **Aeroplanes** |  | **Licence Endorsement** |
|  All Manufacturers | *All TMGs having an integrally mounted, non-retractable engine and a non- retractable propeller TMG* |  |   **TMG**  |

c ) Additional Class and Type Rating lists and endorsement lists are published by the Agency ;

d ) Whenever ( D ) is indicated in one of the lists mentioned in paragraphs ( a ) to ( c ), it indicates that differences training in accordance with FCL. 710 is required.

***GM 1.* FCL. 710 Class and Type Ratings — Variants**

 *Differences and Familiarization Training*

***a )*** Differences Training requires the acquisition of additional knowledge and training on an appropriate training device or the aircraft ;

***b )*** Familiarization Training requires the acquisition of additional knowledge.

***AMC 1.* FCL. 725 ( a ) Requirements for the Issue of Class and Type Ratings**

 *SYLLABUS of THEORETICAL KNOWLEDGE for CLASS or TYPE RATINGS*

***I. SE and ME Aeroplanes***

a ) Detailed listing for aeroplane structure and equipment, normal operation of systems and malfunctions :

1 ) dimensions : minimum required runway width for 180 ° turn ;

2 ) engine including auxiliary power unit :

( i ) type of engine or engines ;

( ii ) in general, function of the following systems or components :

*( A ) engine ;*

*( B ) auxiliary power unit ;*

*( C ) oil system ;*

*( D ) fuel system ;*

*( E ) ignition system ;*

*( F ) starting system ;*

*( G ) fire warning and extinguishing system ;*

*( H ) generators and generator drives ;*

*( I ) power indication ;*

*( J ) reverse thrust ;*

*( K ) water injection.*

 ( iii ) on piston or turbine-propeller engines additionally :

*(A) propeller system ;*

*(B) feathering system.*

( iv ) engine controls ( including starter ), engine instruments and indications in the cockpit, their function, interrelation and interpretation ;

( v ) engine operation, including APU, during engine start, start and engine malfunctions, procedures for normal operation in the correct sequence.

3 ) fuel system :

( i ) location of the fuel tanks, fuel pumps, fuel lines to the engines, tank capacities, valves and measuring ;

( ii ) location of the following systems :

*(A) filtering ;*

*(B) heating ;*

*(C) fuelling and defueling ;*

*(D) dumping ;*

*(E) venting.*

( iii ) in the cockpit :

*(A) the monitors and indicators of the fuel system ;*

*(B) quantity and flow indication, interpretation.*

( iv ) procedures :

*(A) fuel procedures distribution into the various tanks ;*

*(B) fuel supply, temperature control and fuel dumping.*

4 ) pressurization and air conditioning :

( i ) components of the system and protection devices ;

( ii ) cockpit monitors and indicators ;

( iii ) interpretation about the operational condition ;

( iv ) normal operation of the system during start, cruise, approach and landing, air

 conditioning airflow and temperature control.

5 ) ice and rain protection, windshield wipers and rain repellent :

( i ) ice protected components of the aeroplane including engines, heat sources, controls and indications ;

( ii ) operation of the anti-icing or de-icing system during take-off, climb, cruise and descent, conditions requiring the use of the protection systems ;

( iii ) controls and indications of the windshield wipers and rain repellent systems operation.

6 ) hydraulic system :

( i ) components of the hydraulic system(s), quantities and system pressure, hydraulically actuated components associated to the respective hydraulic system ;

( ii ) controls, monitors and indicators in the cockpit, function and interrelation and interpretation of indications.

7 ) landing gear :

 ( i ) main components of the :

*(A) main landing gear ;*

*(B) nose gear ;*

*(C) gear steering ;*

*(D) wheel brake system, including anti-skid.*

( ii ) gear retraction and extension *( including changes in trim and drag caused by gear operation ) ;*

( iii ) required tyre pressure, or location of the relevant placard ;

( iv ) controls and indicators including warning indicators in the cockpit in relation to the retraction or extension condition of the landing gear and brakes ;

( v ) components of the emergency extension system.

8 ) flight controls and high lift devices :

( i ) *(A) aileron system ;*

*(B) elevator system ;*

*(C) rudder system ;*

*(D) trim system ;*

*(E) spoiler system ;*

*(F) lift devices ;*

*(G) stall warning system ;*

 *(H) take-off configuration warning system.*

( ii ) flight control system from the cockpit controls to the flight control or surfaces ;

( iii ) controls, monitors and indicators including warning indicators of the systems mentioned

 under ( 8 ) ( i ), interrelation and dependencies.

9 ) electrical power supply :

( i ) number, power, voltage, frequency and location of the main power system ( AC or DC ), auxiliary power system location and external power system ;

( ii ) location of the controls, monitors and indicators in the cockpit ;

( iii ) flight instruments, communication and navigation systems, main and back-up power sources ;

( iv ) location of vital circuit breakers ;

( v ) generator operation and monitoring procedures of the electrical power supply.

10 ) flight instruments, communication, radar and navigation equipment, auto-flight and flight data recorders :

( i ) visible antennae ;

( ii ) controls and instruments of the following equipment in the cockpit during normal operation :

*(A) flight instruments ;*

*(B) flight management systems ;*

*(C) radar equipment, including radio altimeter ;*

*(D) communication and navigation systems ;*

*(E) autopilot ;*

*(F) flight data recorder, cockpit voice recorder and data-link communication recording function ;*

*(G) TAWS ;*

*(H) collision avoidance system ;*

*( I ) warning systems.*

11 ) cockpit, cabin and cargo compartment :

( i ) operation of the exterior, cockpit, cabin and cargo compartment lighting and the emergency lighting ;

( ii ) operation of the cabin and cargo doors, stairs, windows and emergency exits ;

( iii ) main components of the oxygen system and their location, oxygen masks and operation of the oxygen systems for the crew and passengers, required amount of oxygen by means of a table or diagram.

12 ) emergency equipment operation and correct application of the following emergency equipment in the aeroplane :

( i ) portable fire extinguisher ;

( ii ) first-aid kits ;

( iii ) portable oxygen equipment ;

( iv ) emergency ropes ;

( v ) life-jacket ;

( vi ) life rafts ;

( vii ) emergency transmitters ;

( viii ) crash axes ;

( ix) megaphones ;

( x ) emergency signals.

13 ) pneumatic system :

( i ) components of the pneumatic system, pressure source and actuated components ;

( ii ) controls, monitors and indicators in the cockpit and function of the system ;

( iii ) vacuum system.

b ) Limitations :

1 ) general limitations :

( i ) certification of the aeroplane, category of operation, noise certification and maximum and minimum performance data for all flight profiles, conditions and aircraft systems :

( ii ) *(A) maximum tail and crosswind-components at take-off and landing ;*

*(B) maximum speeds for flap extension v****fo*** *;*

*(C) at various flap settings v****fe*** *;*

*(D) for landing gear operation v****lo****, M****lo*** *;*

*(E) for extended landing gear v****le****, M****le*** *;*

*(F) for maximum rudder deflection v****a****, M****a*** *;*

*(G) for tyres ;*

*(H) one propeller feathered.*

*(ii) (A) minimum control speed air v* ***mca*** *;*

*(B) minimum control speed ground v* ***mcg*** *;*

*(C) stall speed under various conditions v* ***so****, v* ***s1*** *;*

*(D) maximum speed v* ***ne****, M* ***ne*** *;*

*(E) maximum speed for normal operation v* ***mo****, M* ***mo*** *;*

*(F) altitude and temperature limitations ;*

*(G) stick shaker activation.*

(iii) *(A) maximum airport pressure altitude, runway slope ;*

*(B) maximum taxi mass ;*

*(C) maximum take-off mass ;*

*(D) maximum lift off mass ;*

*(E) maximum landing mass ;*

*(F) zero fuel mass ;*

*(G) maximum dumping speed v* ***dco****, M* ***dco****, v* ***dce,*** *M* ***dce*** *;*

*(H) maximum load factor during operation ;*

*(I) certificated range of centre of gravity.*

2 ) engine limitations :

 ( i ) operating data of the engines :

*(A) time limits and maximum temperatures ;*

*(B) minimum RPMs and temperatures ;*

*(C) torque ;*

*(D) maximum power for take-off and go-around on pressure altitude or flight altitude and temperature ;*

*(E) piston engines : certified range of mixture ;*

*(F) minimum and maximum oil temperature and pressure ;*

*(G) maximum starter time and required cooling ;*

*(H) time between two start attempts for engines and auxiliary power unit ;*

(I) for propeller : maximum RPM of propeller triggering of automatic feathering device.

 ( ii ) certified oil grades.

3 ) systems limitations :

( i ) operating data of the following systems :

*(A) pressurization, air conditioning maximum pressures ;*

*(B) electrical power supply, maximum load of main power system ( AC or DC ) ;*

*(C) maximum time of power supply by battery in case of emergency ;*

*(D) mach trim system and yaw damper speed limits ;*

*(E) autopilot limitations of various modes ;*

*(F) ice protection ;*

*(G) speed and temperature limits of window heat ;*

 *(H) temperature limits of engine and wing anti-ice.*

 ( ii ) fuel system : certified fuel specifications, minimum and maximum pressures and

 temperature of the fuel.

4 ) Minimum Equipment List.

c ) Performance, flight planning and monitoring :

1 ) performance calculation about speeds, gradients, masses in all conditions for take-off,

en-route, approach and landing according to the documentation available *( for example for take-off V* ***1****, V* ***mbe****, V* ***r****, V* ***lof****, V* ***2****, take-off distance, maximum take-off mass and the required stop distance )* on the following factors :

( i ) accelerate or stop distance ;

( ii ) take-off run and distance available *( TORA, TODA ) ;*

( iii ) ground temperature, pressure altitude, slope, wind ;

( iv ) maximum load and maximum mass *( for example ZFM ) ;*

( v ) minimum climb gradient after engine failure ;

( vi ) influence of snow, slush, moisture and standing water on the runway ;

( vii ) possible single or dual engine failure during cruise flight ;

( viii ) use of anti-icing systems ;

( ix ) failure of water injection system or antiskid system ;

( x ) speeds at reduced thrust, V **1**, V **1red**, V **mbe**, V **mu**, V **r**, V **lof**, V **2** ;

( xi ) safe approach speed V **ref**, on V **mca** and turbulent conditions ;

( xii ) effects of excessive approach speed and abnormal glideslope on the landing distance ;

( xiii ) minimum climb gradient during approach and landing ;

( xiv ) limiting values for a go-around with minimum fuel ;

( xv ) maximum allowable landing mass and the landing distance for the destination and alternate aerodrome on the following factors :

*(A) available landing distance ;*

*(B) ground temperature, pressure altitude, runway slope and wind ;*

*(C) fuel consumption to destination or alternate aerodrome ;*

*(D) influence of moisture on the runway, snow, slush and standing water ;*

*(E) failure of the water injection system or the anti skid system ;*

*(F) influence of thrust reverser and spoilers.*

2 ) flight planning for normal and abnormal conditions :

( i ) optimum or maximum flight level ;

( ii ) minimum required flight altitude ;

( iii ) drift down procedure after an engine failure during cruise flight ;

( iv ) power setting of the engines during climb, cruise and holding under various circumstances, as well as the most economic cruising flight level ;

( v ) calculation of a short range or long range flight plan ;

( vi ) optimum and maximum flight level and power setting of the engines after engine failure.

3 ) flight monitoring.

d ) Load and Balance and servicing :

1 ) load and balance :

( i ) load and trim sheet on the maximum masses for take-off and landing ;

( ii ) centre of gravity limits ;

( iii ) influence of fuel consumption on the centre of gravity ;

( iv ) lashing points, load clamping, maximum ground load.

2 ) servicing on ground, servicing connections for :

( i ) fuel ;

( ii ) oil ;

( iii ) water ;

( iv) hydraulic ;

( v ) oxygen ;

( vi ) nitrogen ;

( vii ) conditioned air ;

( viii ) electric power ;

( ix ) start air ;

( x ) toilet and safety regulations.

e ) Emergency procedures :

1 ) recognition of the situation as well as immediate memory actions in correct sequence and for those conditions recognized as emergencies by the manufacturer and competent authority for certification :

( i ) engine failure during take-off before and after V**1**, as well as in - flight ;

( ii ) malfunctions of the propeller system ;

( iii ) engine overheat, engine fire on ground and in-flight ;

( iv ) wheel well fire ;

( v ) electrical smoke or fire ;

( vi ) rapid decompression and emergency descent ;

( vii ) air-conditioning overheat, anti-ice system overheat ;

( viii ) fuel pump failure ;

( ix ) fuel freezing overheat ;

( x ) electric power failure ;

( xi ) equipment cooling failure ;

( xii ) flight instrument failure ;

( xiii ) partial or total hydraulic failure ;

( xiv ) failures at the lift devices and flight controls including boosters ;

( xv ) cargo compartment smoke or fire.

2 ) actions according to the approved abnormal and emergency checklist :

( i ) engine restart in - flight ;

( ii ) landing gear emergency extension ;

( iii ) application of the emergency brake system ;

( iv ) emergency extension of lift devices ;

( v ) fuel dumping ;

( vi ) emergency descent.

f ) Special requirements for extension of a type rating for instrument approaches down to Decision Heights of less than **200** ft ( **60** m ) :

1 ) airborne and ground equipment :

( i ) technical requirements ;

( ii ) operational requirements ;

( iii ) operational reliability ;

( iv ) fail operational ;

( v ) fail passive ;

( vi ) equipment reliability ;

( vii ) operating procedures ;

( viii ) preparatory measures ;

( ix ) operational downgrading ;

( x ) communications.

2 ) procedures and limitations :

( i ) operational procedures ;

( ii ) crew coordination.

g ) Special requirements for *“ Glass Cockpit “* aeroplanes with EFIS Additional learning objectives :

1 ) general rules of aeroplanes computer hardware and software design ;

2 ) logic of all crew information and alerting systems and their limitations ;

3 ) interaction of the different aeroplane computer systems, their limitations, the possibilities of computer fault recognition and the actions to be performed on computer failures ;

4 ) normal procedures including all crew coordination duties ;

5 ) aeroplane operation with different computer degradations ( basic flying ).

h ) Flight Management Systems ( FMS ).

**II. *SE and ME Helicopters***

a ) Detailed listing for helicopters structure, transmissions, rotors and equipment, normal and abnormal operation of systems :

1 ) dimensions ;

2 ) engine including aux. power unit, rotor and transmissions ; if an initial type rating for a turbine engine helicopter is applied for, the applicant should have received turbine engine instruction :

(i) type of engine or engines;

(ii) in general, the function of the following systems or components :

(A) engine ;

(B) auxiliary power unite ;

(C) oil system;

(D) fuel system;

(E) ignition system;

(F) starting system;

(G) fire warning and extinguishing system;

(H) generators and generator drive;

(I) power indication;

(J) water or methanol injection.

(iii) engine controls (including starter), engine instruments and indications in the cockpit, their function and interrelation and interpretation ;

(iv) engine operation, including APU, during engine start and engine malfunctions, procedures for normal operation in the correct sequence;

(v) transmission system:

(A) lubrication;

(B) generators and generator drives;

(C) freewheeling units;

(D) hydraulic drives;

(E) indication and warning systems.

(vi) type of rotor systems: indication and warning systems.

3 ) fuel system:

(i) location of the fuel tanks, fuel pumps, fuel lines to the engines tank capacities, valves and measuring;

(ii) the following systems:

(A) filtering;

(B) fuelling and de-fuelling heatings ;

(C) dumping;

(D) transferring;

(E) venting.

(iii) in the cockpit: the monitors and indicators of the fuel system, quantity and flow indication, interpretation ;

(iv) fuel procedures distribution into the various tanks fuel supply and fuel dumping.

4 ) air conditioning:

(i) components of the system and protection devices ;

(ii) cockpit monitors and indicators;

***Note :*** *interpretation about the operational condition : normal operation of the system during start, cruise approach and landing, air conditioning airflow and temperature control.*

5 ) ice and rain protection, windshield wipers and rain repellent :

(i) ice protected components of the helicopter, including engines and rotor systems, heat sources, controls and indications;

(ii) operation of the anti-icing or de-icing system during take-off, climb, cruise and descent, conditions requiring the use of the protection systems;

(iii) controls and indications of the windshield wipers and rain repellent system operation.

6 ) hydraulic system :

(i) components of the hydraulic system(s), quantities and system pressure, hydraulically actuated components associated to the respective hydraulic system;

(ii) controls, monitors and indicators in the cockpit, function and interrelation and interpretation of indications.

7 ) landing gear, skids fixed and floats :

(i) main components of the:

(A) main landing gear;

(B) nose gear;

(C) tail gear;

(D) gear steering;

(E) wheel brake system.

(ii) gear retraction and extension;

(iii) required tyre pressure, or location of the relevant placard;

(iv) controls and indicators including warning indicators in the cockpit in relation to the retraction or extension condition of the landing gear ;

(v) components of the emergency extension system.

8 ) flight controls, stab- and autopilot systems: controls, monitors and indicators including warning indicators of the systems, interrelation and dependencies.

9 ) electrical power supply :

(i) number, power, voltage, frequency and if applicable phase and location of the main power system (AC or DC) auxiliary power system location and external power system;

(ii) location of the controls, monitors and indicators in the cockpit;

(iii) main and back-up power sources flight instruments, communication and navigation systems, main and back-up power sources;

(iv) location of vital circuit breakers;

(v) generator operation and monitoring procedures of the electrical power supply.

10 ) flight instruments, communication, radar and navigation equipment, auto-flight and flight data recorders :

(i) antennas;

(ii) controls and instruments of the following equipment in the cockpit:

(A) flight instruments (for example air speed indicator, pitot static system, compass system, flight director);

(B) flight management systems;

(C) radar equipment (for example weather radar, transponder);

(D) communication and navigation system (for example HF, VHF, ADF, VOR/DME, ILS, marker beacon) and area navigation systems;

(E) stabilisation and autopilot system;

(F) flight data recorder, cockpit voice recorder, data-link communication recording function and radio altimeter;

(G) collision avoidance system; (H) TAWS;

( I ) HUMS.

11 ) cockpit, cabin and cargo compartment :

(i) operation of the exterior, cockpit, cabin and cargo compartment lighting and the emergency lighting;

(ii) operation of the cabin doors and emergency exits.

12 ) emergency equipment :

(i) operation and correct application of the following mobile emergency equipment in the helicopter:

(A) portable fire extinguisher;

(B) first-aid kits;

(C) portable oxygen equipment;

(D) emergency ropes;

(E) life-jacket;

(F) life rafts;

(G) emergency transmitters;

(H) crash axes;

( I ) megaphones;

( J ) emergency signals ;

(K) torches.

(ii) operation and correct application of the fixed emergency equipment in the helicopter: emergency floats.

b ) Limitations :

1 ) general limitations, according to the helicopter flight manual ;

2 ) minimum equipment list.

c ) Performance, flight planning and monitoring :

1 ) performance calculation about speeds, gradients, masses in all conditions for take-off, en-route, approach and landing :

(i) take-off :

(A) hover performance in and out of ground effect;

(B) all approved profiles, cat A and B;

(C) HV diagram;

(D) take-off and rejected take-off distance;

(E) take-off decision point (TDP) or (DPATO);

(F) calculation of first and second segment distances;

(G) climb performance.

(ii) en-route:

(A) air speed indicator correction;

(B) service ceiling;

(C) optimum or economic cruising altitude;

(D) max endurance;

(E) max range;

(F) cruise climb performance.

(iii) landing:

(A) hovering in and out of ground effect;

(B) landing distance;

(C) landing decision point (LDP) or (DPBL).

(iv) knowledge or calculation of : Vlo, Vle, Vmo, Vx, Vy, Vtoss, Vne, Vmax range, Vmini.

2 ) flight planning for normal and abnormal conditions :

(i) optimum or maximum flight level;

(ii) minimum required flight altitude;

(iii) drift down procedure after an engine failure during cruise flight;

(iv) power setting of the engines during climb, cruise and holding under various circumstances as well as at the most economic cruising flight level;

(v) optimum and maximum flight level and power setting after an engine failure.

(3) effect of optional equipment on performance.

d ) Load, balance and servicing :

1 ) load and balance :

(i) load and trim sheet on the maximum masses for take-off and landing;

(ii) centre of gravity limits;

(iii) influence of the fuel consumption on the centre of gravity;

(iv) lashing points, load clamping, max ground load.

2 ) servicing on the ground, servicing connections for :

(i) fuel;

(ii) oil, etc.. ;

(iii) and safety regulations for servicing.

(e) Emergency procedures.

(f) Special requirements for extension of a type rating for instrument approaches down to a decision height of less than 200 ft ( 60 m ) :

(1) airborne and ground equipment :

(i) technical requirements;

(ii) operational requirements ;

(iii) operational reliability;

(iv) fail operational;

(v) fail passive;

(vi) equipment reliability;

(vii) operating procedures;

(viii) preparatory measures;

(ix) operational downgrading;

(x) communication.

2 ) procedures and limitations :

(i) operational procedures ;

(ii) crew co-ordination.

g ) Special requirements for helicopters with EFIS.

h ) Optional equipment.

**III. *AIRSHIPS***

a ) Detailed listing for airship structure and equipment, normal operation of systems and malfunctions :

1 ) dimensions ;

(2) structure and envelope :

(i) internal structure;

(ii) envelope;

(iii) pressure system;

(iv) gondola;

(v) empennage.

3 ) flight controls ;

4 ) systems :

(i) hydraulic ;

(ii) pneumatic.

5 ) landing gear ;

6 ) fuel system ;

7 ) fire warning and extinguishing system ;

8 ) emergency equipment ;

9 ) electrical systems ;

10 ) avionics, radio navigation and communication equipment ;

11 ) instrumentation ;

12 ) engines and propellers ;

13 ) heating, ventilation and air-condition ;

14 ) operational procedures during start, cruise, approach and landing :

(i) normal operations;

(ii) abnormal operations.

b ) Limitations :

1 ) general limitations :

(i) certification of the airship, category of operation, noise certification and maximum and minimum performance data for all flight profiles, conditions and aircraft systems ;

(ii) speeds;

(iii) altitudes.

2 ) engine limitations ;

3 ) systems limitations ;

4 ) minimum equipment list.

c ) Performance and flight planning :

1 ) performance calculation ;

2 ) flight planning.

d ) Load and balance and servicing :

1 ) load and balance ;

2 ) servicing.

e ) Emergency procedures :

1 ) recognition of emergency situations ;

2 ) actions according to the approved abnormal and emergency checklist.

***AMC 2.* FCL. 725 ( a ) Requirements for the Issue of Class and Type Ratings**

 *TRAINING COURSE*

***FLIGHT INSTRUCTION FOR TYPE RATINGS :* *Helicopters***

*a )* The amount of flight instruction depends on :

(i) complexity of the helicopter type, handling characteristics, level of technology ;

(ii) category of helicopter *( SEP or SE turbine helicopter, ME turbine and MP helicopter )* ;

(iii) previous experience of the applicant ;

(iv) the availability of FSTDs.

*b ) 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. Before undertaking the skill test, a student should demonstrate competency in the skill test items during the practical training.

*c ) Initial Issue :*

 The Flight Instruction *( excluding Skill Test )* should comprise :

|  |  |  |
| --- | --- | --- |
| **Helicopter Types** | **In Helicopter** |  **In Helicopter and FSTD associated Training Credits** |
|   SEP ( H ) |  **5** *hours* | Using **FFS** 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** *hours* | Using **FFS** 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* |

|  |  |  |
| --- | --- | --- |
| **Helicopter Types** | **In Helicopter** |  **In Helicopter and FSTD associated Training Credits** |
|  SET ( H )  at or over 3175 kg MTOM |  **8** *hours* | Using **FFS** 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 )  CS and FAR  27 and 29 |  **8** *hours* | Using **FFS** 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** *hours* | Using **FFS** 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* |

 *d ) Additional Types*

The Flight Instruction *( excluding Skill Test )* should comprise :

|  |  |  |
| --- | --- | --- |
| **Helicopter Types** | **In Helicopter** |  **In Helicopter and FSTD associated Training Credits** |
| SEP ( H ) to SEP ( H ) within AMC 1. FCL.740. H ( a )( 3 ) |  **2** *hours* | Using **FFS** C / D :  at least **1** hrs helicopter and *at least* ***3***  *hrs total* Using **FTD** 2 / 3 :  at least **1** hrs helicopter and *at least* ***4*** *hrs total* |
|  SEP ( H ) to SEP ( H ) not included in AMC 1. FCL.740. H ( a )( 3 ) |  **5** *hours* | Using **FFS** C / D :  at least **1** hrs helicopter and *at least* ***6***  *hrs total* Using **FTD** 2 / 3 :  at least **2** hrs helicopter and *at least* ***7*** *hrs total* |
|  SET ( H ) to  SET ( H )  |  **2** *hours* | Using **FFS** C / D :  at least **1** hrs helicopter and *at least* ***3***  *hrs total* Using **FTD** 2 / 3 :  at least **1** hrs helicopter and *at least* ***4*** *hrs total* |
| SE ( H ) Differe - - nce Training  |  **1** *hours* |  N / A  |
|  MET ( H )  to  MET ( H ) |  **3** *hours* | Using **FFS** C / D :  at least **1** hrs helicopter and *at least* ***4***  *hrs total* Using **FTD** 2 / 3 :  at least **2** hrs helicopter and *at least* ***5*** *hrs total* |
| ME ( H ) Differe - - nce Training  |  **1** *hours* |  N / A  |
|  MPH  to  MPH |  **5** *hours* | Using **FFS** C / D :  at least **1** hrs helicopter and *at least* ***6***  *hrs total* Using **FTD** 2 / 3 :  at least **2** hrs helicopter and *at least* ***7*** *hrs total* |
| Extend privileges on the same Type Rating from SPH to MPH *( except for initial MP issue ),* or from MPH to SPH |  **2** *hours* | Using **FFS** C / D :  at least **1** hrs helicopter and *at least* ***3***  *hrs total*  |

 *e )* Holders of an IR ( H ) wishing to extend the IR ( H ) to further types should have *additionally* ***2***  *hours flight training on type* by sole reference to instruments according to IFR which may be conducted in an FFS C / D or FTD 2 / 3.

Holders of an SE IR ( H ) wishing to extend the IR privileges to an ME IR ( H ) for the first time should complete at least 5 hours training.

***AMC 1.* FCL. 740 ( b )( 1 ) Validity and Renewal of Class and Type Ratings**

 *RENEWAL of CLASS and TYPE RATINGS : Refresher Training*

a ) Paragraph ( b )( 1 ) of FCL.740 determines that if a Class or Type Rating has lapsed, the applicant shall take refresher training at an ATO. The objective of the training is to reach the level of proficiency necessary to safely operate the relevant type or class of aircraft.

The amount of refresher training needed should be determined on a case-by-case basis by the ATO, taking into account the following factors :

*1 ) the Experience of the Applicant :*

To determine this, the ATO should evaluate the pilot’s Logbook, and, if necessary, conduct a test in an FSTD ;

*2 ) the Complexity of the Aircraft ;*

*3 ) the amount of time lapsed since the expiry of the validity period of the Rating :*

The amount of training needed to reach the desired level of proficiency should increase with the time lapsed. In some cases, after evaluating the pilot, and when the time lapsed is very limited *( less than 3 months ),* the ATO may even determine that no further refresher training is necessary. See *Table* ***1*** *&* ***2*** below, for GDCA recommended practice. When determining the needs of the pilot, the following items can be taken into consideration :

( i ) expiry shorter than 3 months : *no supplementary requirements ;*

( ii ) expiry longer than 3 months, but shorter than 1 year : *a minimum of* ***2***  *( two ) training sessions ;*

( iii ) expiry longer than 1 year but shorter than 3 years : *a minimum of* ***3***  *( three ) training* *sessions, in which the most important malfunctions in the available systems are covered;*

( iv ) expiry longer than 3 years : *the applicant should again undergo the training required for the initial issue of the Rating or, in case of helicopter, the training required for the “ additional type issue “, according to other valid ratings held.*

b ) Once the ATO has determined the needs of the applicant, it should develop an individual training programme that should be based on the initial training for the issue of the rating and focus on the aspects where the applicant has shown the greatest needs ;

c ) After successful completion of the training, the ATO should give a Certificate, or other documental evidence that the training has been successfully achieved to the applicant, to be submitted to the GDCA of RA when applying for the renewal. The certificate or documental evidence needs to contain a description of the training programme.

 **Class & Type Rating Renewal Policy in case of Flight interruption**

 **Minimum required Refresher Training Course after flight interruption :**

***a )*** for fully familiar and experienced Crew [ minimum of 1 *( one )* year operation’s experience

 and completion minimum of **2** *( two )* Proficiency Check ].

Minimum required Refresher Training, which included FFS Training & Flight Training Under Supervision on aircraft during day and night operation’s :

**Phase A -** FFS training :

 **Table 1**

|  |  |  |
| --- | --- | --- |
|  **After an interruption**  |  **Refresher Course + LFUS** |  **Only Refresher Course** |
| **a** |  up to **3** months |  *no supplementary requirements* |
| **b** |  *from* ***6*** *to* ***12*** *months* |   *a minimum of* ***1***  *( one ) FFS*  *training session* | *a minimum of* ***2***  *( two ) FFS*  *training sessions* |
| **c** |  *from* ***12*** *to* ***36*** *months*  | *a minimum of* ***2***  *( two ) FFS*  *training*  *sessions*  | *a minimum of* ***3***  *( three )*  *FFS training* *sessions* |
| **f** |  *above* ***36*** *months* |  *New Type Rating Course* |

**Phase B -** LFUS training :

1 ) Minimum LFUS **4** route sector, with as minimum night **1** Take-off *&* **1** Landing ;

2 ) **2**  route sector Line Check flight.

***b*** *)* for low experienced Crew [ below 1 *( one )* year operation’s experience, and

 without of the completion of 2 *( two )* Proficiency Check and / or accumulate flight

 experience on Type below than **300** hour’s.

 **Table 2**

|  |  |
| --- | --- |
|  **After an interruption**  |  **Refresher Training Course** |
| **a** |  up to **3** months | LFUS **2** route sector + **2**  route sector Line  Check flight |
| **b** |  *from* ***6*** *to* ***12*** *months* |  *CBT*  **2** + **2**  FFS + OPC FFS *session* |
| **c** |  *from* ***12*** *to* ***36*** *months* |  *CBT*  **3** + **3**  FFS + OPC FFS *session*  |
| **d** |  *above* ***36*** *months* |  *New Type Rating Course* |

***Note :*** *CBT* **1** - **1** *( one )* day , **8** hr’s on workstation ;

 *CBT* **2** - **12** hr’s on workstation ;

 *CBT* **3** - **18** hr’s on workstation ;

 Duration of **1** FFS session, as minimum is **4** hr’s.

***AMC 1.*  FCL. 720. A ( b )( 2 )( i ) Experience Requirements & Prerequisites for the Issue**

 **of Class or Type Ratings — *Aeroplanes***

*ADDITIONAL THEORETICAL KNOWLEDGE for a CLASS or TYPE RATING for HIGH PERFORMANCE* ***SP***  *AEROPLANES*

a ) A number of aeroplanes certificated for SP operation have similar performances, systems and navigation capabilities to those more usually associated with MP types of aeroplanes, and regularly operate within the same airspace. The level of knowledge required to operate safely in this environment is not part of, or not included to the necessary depth of knowledge in the training syllabi for the PPL, CPL or IR ( A ) but these licence holders may fly as PIC of such aeroplanes. The additional theoretical knowledge required to operate such aeroplanes safely is obtained by completion of a course at an ATO ;

b ) The aim of the theoretical knowledge course is to provide the applicant with sufficient knowledge of those aspects of the operation of aeroplanes capable of operating at high speeds and altitudes, and the aircraft systems necessary for such operation ;

c ) The course should cover at least the following items of the aeroplane syllabus to the ATPL ( A ) level :

|  |  |
| --- | --- |
|  **LO N 0**  |  **LO TOPICS** |
| **021 00 00 00** |  **AIRCRAFT GENERAL KNOWLEGDE : AIRFRAME and SYSTEMS,**  **ELECTRICS, POWERPLANT and EMERGENCY EQUIPMENT** |
| 021 02 02 01 to021 02 02 03 | Alternating current : general GeneratorsAC power distribution |
| 021 01 08 03  | Pressurization *( Air driven systems - piston engines )* |
| 021 01 09 04 | Pressurization *( Air driven systems - turbojet and turbo-propeller )* |
| 021 03 01 06021 03 01 07021 03 01 08021 03 01 09 | Engine performance - piston enginesPower augmentation *( turbo or supercharging )*FuelMixture |
| 021 03 02 00 to021 03 04 09 | Turbine engines  |
| 021 04 05 00 | Aircraft oxygen equipment |
| **032 03 00 00** |  **PERFORMANCE CLASS B : ME AEROPLANES** |
| 032 03 01 00 to032 03 04 01 | Performance of ME aeroplanes not certificated under CS and FAR to 25 :  *entire subject* |
| **040 00 00 00**  |  **HUMAN PERFORMANCE** |
| 040 02 01 00  to040 02 01 03 | Basic Human Physiology and High altitude environment |
| **050 00 00 00**  |  **METEOROLOGY** |
| 050 02 07 00  to050 02 08 01 | Jet streams CATStanding waves |
| 050 09 01 00  to050 09 04 05 | Flight hazardsIcing and turbulenceThunderstorms |

|  |  |
| --- | --- |
|  **LO N 0**  |  **LO TOPICS** |
| **062 02 00 00** |  **BASIC RADAR PRINCIPLES** |
| 062 02 01 00  to062 02 05 00 | Basic radar principlesAirborne radarSSR |
| **081 00 00 00**  |  **PRINCIPLES OF FLIGHT : *AEROPLANES***  |
| 081 02 01 00  to081 02 03 02 | Transonic aerodynamics : *entire subject*Mach number or shockwavesBuffet margin or aerodynamic ceiling |
|  |  |
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 d ) Demonstration of acquisition of this knowledge is undertaken by passing an examination set by ATO. A successful pass of this examination results in the issue of a certificate indicating that the course and examination have been completed ;

e ) The certificate represents a “ once only “ qualification and satisfies the requirement for the addition of all future high performance aeroplanes to the holder’s licence. The certificate is valid indefinitely and is to be submitted with the application for the first HPA type or class rating ;

f ) A pass in any theoretical knowledge subjects as part of the HPA course will not be credited against meeting future theoretical examination requirements for issue of a CPL ( A ), IR ( A ) or ATPL ( A ).

***AMC 1.* FCL. 725. A ( b )** **Theoretical Knowledge & Flight Instruction for the Issue of**

 **Class and Type Ratings — *Aeroplanes***

 *CLASS RATING SEA*

a ) The theoretical knowledge instruction should be conducted by an instructor having appropriate experience of class rating sea ;

b ) Depending on the equipment and systems installed, the instruction should include, but not be limited to, the following content :

1 ) theoretical knowledge :

( i ) the aim of the training is to teach :

(A) the importance of preparation for flight and the safe planning taking into consideration all the factors for manoeuvring the aircraft on the wind, tidal currents, high and low water times and water movements at sea, river estuaries and lakes. In addition, icing conditions, ice covered water and broken ice flows ;

(B) the techniques about the most critical moments at take - off, landing, taxiing and mooring the aircraft ;

(C) the construction methods and characteristics of floats and water rudders and the importance of checking for leaks in the floats ;

(D) the necessary requirements for the compliance of the rules for the avoidance of collisions at sea, in regard to sea charts, buoys and lights and horns.

( ii ) after completing the training, the student should be able to :

(A) describe the factors that have significance for planning and decision about initiation of seaplane flying and alternative measures for completion of flight ;

(B) describe how the water level is affected by air pressure, wind, tide, regularizations and the flight safety depending on changes in the water level ;

(C) describe the origin of different ice conditions in water areas ;

(D) interpret nautical charts and maps about depths and shoals and risk for water currents, shifts of the wind, turbulence ;

(E) decide what required equipment to bring during seaplane flying according to the operational requirements ;

(F) describe the origin and extension of water waves, swells and water currents and their effect on the aeroplane ;

(G) describe how water and air forces effect the aeroplane on water ;

(H) describe the effect of water resistance on the aeroplanes performance on glassy water and during different wave conditions ;

(I) describe the consequences of taxiing with too high engine RPM ;

(J) describe the effect of pressure and temperature on performance at take-off and climb from lakes located at higher altitude ;

(K) describe the effect of wind, turbulence, and other meteorological conditions of special importance for flight over lakes, islands in mountain areas and other broken ground ;

(L) describe the function of the water rudder and its handling, including the effect of lowered water rudder at take-off and landing ;

(M) describe the parts of the float installation and their function ;

(N) describe the effect of the floats on the aeroplanes aerodynamics and performance in water and in air ;

(O) describe the consequences of water in the floats and fouling of float bottoms ;

(P) describe aviation requirements that apply specifically for the conduct of aircraft activity on water ;

(Q) describe requirements about animal, nature and environment protection of significance for flight by seaplane, including flight in national parks ;

(R) describe the meaning of navigation buoys ;

(S) describe the organization and working methods of the Sea Rescue Service ;

(T) describe the requirements in ICAO Annex 2 as set out in paragraph 3.2.6 “ Water operation “, including relevant parts of the Convention on the International Regulations for Preventing Collisions at Sea.

(2) practical training :

( i ) the aim of the practical training is to learn :

(A) the skills in manoeuvring aeroplanes on water and in mooring the aeroplane ;

(B) the skills required for the reconnaissance of landing and mooring areas from the air, including the take-off area ;

(C) the skills for assessing the effects of different water depths, shoals, wind, height of waves and swell ;

(D) the skills for flying with floats about their effect on performance and flight characteristics ;

(E) the skills for flying in broken ground during different wind and turbulence conditions ;

(F) the skills for take-off and landing on glassy water, different of swell and water current

 conditions.

( ii ) after the training, the student should be able to :

(A) handle the equipment that shall be brought during seaplane flying ;

(B) perform pre-flight daily inspection on aeroplane, float installation and special seaplane equipment, including emptying of floats ;

(C) sail, taxi and turn the aeroplane at swell with correct handling of the water rudder ;

(D) taxi on the step and perform turns ;

(E) establish the wind direction with the aeroplane ;

(F) take necessary actions if loss of steering ability and person falling overboard ;

(G) make land and moor aeroplane at bridge, buoy and beach with the use of appropriate knots to secure the aircraft ;

(H) maintain given rate of descent by means of variometer only ;

(I) perform take-off and landing on glassy water with and without outer references ;

(J) perform take-off and landing under swell ;

(K) perform power-off landing ;

(L) from the air, reconnaissance of landing, mooring and take-off areas, observing ;

(M) wind direction and strength during landing and take-off ;

(N) surrounding terrain ;

(O) overhead wires and other obstacles above and under water ;

(P) congested areas ;

(Q) determine wind direction and assess wind strength from water level and when airborne ;

(R) state, for the aeroplane type in question ;

*(a) maximum wave height allowed ;*

*(b) maximum number of ERPM allowed during taxi ;*

(S) describe how flying with floats affects the performance and flight characteristics of the aeroplane ;

(T) take corrective action at critical moments due to wind shear and turbulence ;

(U) navigate on the water with reference to buoys markers, obstacles and other traffic on the water.

c ) For the initial issue of Class Rating sea for SP, SE and ME aeroplanes, the number of multi-choice questions in the written or computer-based examination *should at least comprise* ***30***  *( thirty ) questions*, and may be conducted by the training organization.

The pass mark should be **75 %.**

***AMC 1.* FCL. 735. A ; FCL. 735. H ; FCL. 735. As**

 *MULTI - CREW COOPERATION COURSE ( MCC )*

a ) Competency is a combination of knowledge, skills and attitudes required to perform a task to the prescribed standard ;

b ) The objectives of MCC training are to develop the technical and non- technical components of the knowledge, skills and attitudes required to operate a multi-crew aircraft ;

c ) Training should comprise both theoretical and practical elements and be designed to achieve the following competencies :

|  |  |  |  |
| --- | --- | --- | --- |
|  **COMPETENCY** | **PERFORMANCE INDICATORS** | **KNOWLEDGE** | **PRACTICAL EXERCISES** |
| **Communication** | a) Know what, how much and who to communicate to ;b) Ensure the recipient is ready and able to receive the information ;c) Pass messages and information clearly, accurately, timely and adequately ;d) Check if the other person has the correct understanding when passing important information ;e) Listen actively, patiently and demonstra-te understanding when receiving information ;f) Ask relevant and effective questions, and offer suggestions ;g) Use appropriate body language, eye contact and tone ;h) Open and receptive to other people’s view. | a) Human Factors, TEM and CRM ;b) Application of TEM and CRM principles to training. | In a commercial air transport environment, apply multi-crew procedures, including principles of TEM and CRM to the following :a) Pre-flight preparation : 1) FMS initialization;2) radio and navigation equipment preparation ;3) flight documentation 4) Computation of take-off performance data.b) Take-off and climb: 1) before take-off checks ; 2) normal take-offs; 3) rejected take-offs; 4) take-offs with abno-rmal and emergency situations included. c) Cruise: emergency descent.d) Descent and approach:1) instrument flight procedures; 2) holding;3) precision approach using raw data ;4) precision approach using flight director ;5) precision approach using autopilot ;6) one-engine-inoperative approach;7) non-precision and circling approaches ;8) computation of approach and landing data ;9) all engines GA ;10) go-around with one engine inoperative;11) wind shear during approach. |
| **Leadership and Team Working** | a) Friendly, enthusiastic, motivating and considerate of others;b) Use initiative, give direction and take responsibility when required;c) Open and honest about thoughts, concerns and intentions ;d) Give and receive criticism and praise well, and admit mistakes;e) Confidently do and say what is important to him or her ;f) Demonstrate respect and tolerance towards other people ;g) Involve others in planning and share activities fairly. |

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| **COMPETENCY** | **PERFORMANCE INDICATORS** | **KNOWLEDGE** | **PRACTICAL EXERCISES** |
| **Situation Awareness** | a) Aware of what the aircraft and its systems are doing;b) Aware of where the aircraft is and its environment;c) Keep track of time and fuel ; d) Aware of the condition of people involved in the operation including passengers ;e) Recognize what is likely to happen, plan and stay ahead of the game ; f) Develop what-if scenarios and make pre-decisions ;g) Identify threats to the safety of the aircraft and of the people.  |  | e) landing : transition from instrument to visual flight on reaching decision altitude or height or minimum descent altitude or height ;f) after landing and post flight procedures ;g) selected emergency and abnormal procedures |
| **Workload Management** | a) Calm, relaxed, careful and not impulsive ;b) Prepare, prioritize and schedule tasks effectively ;c) Use time efficiently when carrying out tasks;d) Offer and accept assistance, delegate when necessary and ask for help early ;e) Review and monitor and cross-check actions conscientiously ;f) Follow procedures appropriately and consistently ;g) Concentrate on one thing at a time, ensure tasks are completed and does not become distracted ;h) Carry out instructions as directed. |  |

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| --- | --- | --- | --- |
| **COMPETENCY** | **PERFORMANCE INDICATORS** | **KNOWLEDGE** | **PRACTICAL EXERCISES** |
| **Problem Solving and Decision Making** | a) Identify and verify why things have gone wrong and do not jump to conclusions or make assumptions ;b) Seek accurate and adequate information from appropriate resources ;c) Persevere in working through a problem ;d) Use and agree an appropriate decision making process ;e) Agree essential and desirable criteria and prioritizes ;f) Consider as many options as practicable ;g) Make decisions when they need to, reviews and changes if required ;h) Consider risks but do not take unnecessary risks.  |  |  |
| **Monitoring and Cross - Checking** | a) Monitor and cross-checks all actions ;b) Monitor aircraft trajectory in critical flight phases ;c) Take appropriate actions in response to deviations from the flight path. | a) SOPs ;b) Aircraft systems ; c) Undesired aircraft states. |
| **Task Sharing** | a) Apply SOPs in both PF and PNF roles ;b) Makes and responds to standard callouts. | a) PF and PNF roles ; b) SOPs. |
| **Use of Competency Checklists**  | Utilize checklists appropriately according to SOPs. | a) SOPs ;b) Checklist philosophy |
|  **Briefings** | Prepare and deliver appropriate briefings. | a) SOPs ;b) Interpretation of FMS data and in-flight documentation. |

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| --- | --- | --- | --- |
| **COMPETENCY** | **PERFORMANCE INDICATORS** | **KNOWLEDGE** | **PRACTICAL EXERCISES** |
| **Flight Management** | a) Maintain a constant awareness of the aircraft automation state ;b) Manage automation to achieve optimum trajectory and minimum workload ;c) Take effective recovery actions from automation anomalies ;d) Manage aircraft navigation, terrain clearance ;e) Manage aircraft fuel state and take appropriate actions. | a) Understanding of aircraft performance and 0onfiguration ;b) Systems ; c) SOPs ;d) Interpretation of FMS data and in-flight documentation ;e) Minimum terrain clearance ;f) Fuel management IFR and VFR regulation. |  |
|  **FMS use**  | Programme, manage and monitorFMS in accordance with SOPs. | a) Systems ( FMS ) ; b) SOPs ;c) Automation. |
| **Systems Normal Operations** | Perform and monitor normal systems operation in accordance with SOPs | a) Systems ; b) SOPs. |
| **Systems Abnormal and Emergency Operations** | a) Perform and monitor abnormal systems operation in accordance with SOPs ;b) Utilize electronic and paper abnormal checklists in accordance with SOPs. | a) Systems ; b) SOPs.c) Emergency and abnormal procedures and checklists;d) Recall items. |
| **Environment, Weather and ATC** | a) Communicate effectively with ATC ;b) Avoid misunderstandings by requesting clarification ;c) Adhere to ATC instructions ; d) Construct a mental model of the local ATC and weather environment. | a) Systems ; b) SOPs ;c) ATC environment and phraseology ;d) Procedures for hazardous weather conditions. |

 *CERTIFICATE OF COMPLETION FORM*

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| --- |
|  **CERTIFICATE of COMPLETION of MCC - TRAINING** |
|  |
| Applicant's Last Name(s)  |  | First Name(s) |  |
| Type of Licence |  | Number |  | State |  |
|  ME / IR |  |  ***or*** |  ME / IR Skill Test |  |
| Issued on |  |  Passed on |  |
|  Date |  |  *Signature of Applicant* |  |
|  |
| *The satisfactory completion of MCC - Training according to requirements is certified below :* |
|  **TRAINING** |
|  **Multi - Crew Co - operation Training Received during Period :** |
| From : |  | To : |  | At : | ATO / Operator \* |
| State |  |  CAA |  |
| Location |  |  Date : |  |
| Signature of Head of ATO *or*  *Authorized Instructor \* :* |  |
| Type & Number of Licence and State of Issue :  \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_  \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_  | Name(s) in Capital Letters of Authorized Instructor :\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ |
|  |

 *\* Delete as appropriate*

***AMC 1.*  FCL. 740. H ( a )( 3 ) Revalidation of Type Ratings — Helicopters**

Only the following SEP helicopter types can be considered for crediting of the Proficiency Check.

Other SEP helicopters *( for example the R22 and R44 )* should not be given credit for.

|  |  |
| --- | --- |
|  **Manufacturer** |  **Helicopter Type and**  **Licence Endorsement** |
| **Agusta - Bell** |  |
|  SEP |  Bell 47 |
| **Bell Helicopters** |  |
|  SEP  |  Bell 47 |
| **Brantley** |  |
|  SEP | Brantley B 2 |
| **Breda Nardl** |  |
|  SEP | HU 269 |
| **Enstrom** |  |
|  SEP  | ENF 28 |
| **Hélicoptères Guimbal** |  |
|  SEP | Cabri G 2 |
| **Hiller** |  |
|  SEP | UH 12 |
| **Hughes or Schweizer** |  |
|  SEP | HU 269 |
| **Westland** |  |
|  SEP | Bell 47 |
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***GM 1.*  FCL. 720. PL Experience Requirements and Prerequisites for the Issue of**

 **Type Ratings — Powered - Lift Aircraft**

The endorsement of a powered-lift Type Rating to an aeroplane or helicopter licence does not confer upon its holder the privileges to fly helicopters or aeroplanes, respectively.

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