

- (10) progress tests, Area 100 KSA assessments and mental maths test(s); and
- (11) other training methods, media and tools approved by the competent authority.

The 650 hours of instruction should be divided in such a way that in each subject the minimum hours are:

- | | |
|---------------------------------------|----------|
| (1) Air law | 30 hours |
| (2) Aircraft general knowledge | 90 hours |
| (3) Flight performance and planning | 90 hours |
| (4) Human performance and limitations | 30 hours |
| (5) Meteorology | 50 hours |
| (6) Navigation | 70 hours |
| (7) Operational procedures | 20 hours |
| (8) Principles of flight | 45 hours |
| (9) Communications | 15 hours |

Other subdivisions of hours may be agreed upon between the competent authority and the ATO.

- (d) The flight instruction is divided into three phases:

- (1) phase 1:

Flight exercises up to the first solo flight comprise a total of not less than 12 hours dual flight instruction on a helicopter, including:

- (i) pre-flight operations, mass and balance determination, helicopter inspection and servicing;
 - (ii) aerodrome and traffic pattern operations, collision avoidance and procedures;
 - (iii) control of the helicopter by external visual reference;
 - (iv) take-offs, landings, hovering, look-out turns and normal transitions from and to the hover;
 - (v) emergency procedures, basic auto-rotations, simulated engine failure, ground resonance recovery if relevant to type.

- (2) phase 2:

Flight exercises until general handling and day VFR navigation progress and basic instrument flying progress check conducted by an FI not connected with the applicant's training. This phase comprises a total flight time of not less than 128 hours, including 73 hours of dual instruction flight time and including at least 5 hours VFR conversion training on an ME helicopter, 15 hours of solo flight and 40 hours flown as student PIC. The instruction and testing contain the following:

- (i) sideways and backwards flight, turns on the spot;
 - (ii) incipient vortex ring recovery;
 - (iii) touchdown or advanced auto-rotations, simulated engine-off landings, practice forced landings. Simulated equipment malfunctions and emergency procedures relating to malfunctions of engines, controls, electrical and hydraulic circuits;

- (iv) steep turns;
- (v) transitions, quick stops, out of wind manoeuvres, sloping ground landings and take-offs;
- (vi) limited power and confined area operations, including low level operations to and from unprepared sites;
- (vii) 10 hours flight by sole reference to basic flight instruments, including completion of a 180 ° turn and recovery from unusual attitudes to simulate inadvertent entry into cloud;
- (viii) cross-country flying by external visual reference, DR and radio navigation aids, diversion procedures;
- (ix) aerodrome and traffic pattern operations at different aerodromes;
- (x) operations to, from and transiting controlled aerodromes, compliance with ATS procedures, R/T procedures and phraseology;
- (xi) application of meteorological briefing arrangements, evaluation of weather conditions for flight and use of AIS;
- (xii) night flight, including take-offs and landings as PIC;
- (xiii) general handling, day VFR navigation and basic instrument flying progress checks in accordance with [Appendix 4](#) to Part-FCL, conducted by an FI not connected with the applicant's training.

(3) phase 3:

Instruction in MCC comprises the relevant training set out in [FCL.735.H](#) and [AMC1 FCL.735.A, FCL.735.H and FCL.735.As](#).

If a type rating for MP helicopter is not required on completion of this part, the applicant should be provided with a certificate of course completion for MCC training.

H. ATP modular theoretical knowledge course: helicopters

- (a) 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.
- (b) An approved course, which also covers the area 100 KSA, may contain in suitable proportions:
 - (1) classroom work;
 - (2) lessons;
 - (3) tutorials;
 - (4) demonstrations, including those supported by demonstration equipment;
 - (5) exercises carried out as groups or individuals and based on pre-flight and en-route planning, communications, presentations and projects;
 - (6) exercises that use demonstration equipment or training devices;
 - (7) directed study including workbook exercises or assignments;
 - (8) aerodrome or aviation industry field trips;