



AltMoC Notification Form

Ref # [chrono/record num.]

Filled in by the Agency 2021-00044 rev 1

1. Notifying competent authority (CA)	
1.1 Name of the CA	DGAC France
1.2 AltMoC focal point	Title: <input type="checkbox"/> Mr <input checked="" type="checkbox"/> Ms
	First Name: Karine
	Name: GAY
	Job title: Head of the ATO, CCA and FSTD department
1.3 Contact details of the AltMoC focal point	E-mail: karine.gay@aviation-civile.gouv.fr
	Tel. No: +33 1 58 09 40 26
2. Alternative means of compliance (AltMoC)	
2.1 Subject	TRI training course – Helicopters LIFUS and landing training
2.2 Regulatory reference	Regulation (EU) n° 1178/2011
2.3 Implementing Rule (IR) paragraph(s)	FCL.930.TRI
2.4 Agency acceptable means of compliance (AMC) available	Yes <input checked="" type="checkbox"/> Ref.: AMC2 FCL.930.TRI
	No <input type="checkbox"/>
2.5 AltMoC proposer	<input type="checkbox"/> Organisation
	Name of the organisation:
	Date when the AltMoC was approved by the CA:
	<input checked="" type="checkbox"/> Competent authority
	Date when the AltMoC was made available to organisations and persons under its oversight: Upon reception of EASA ref number
2.6 AltMoC based on an AltMoC from another CA	Yes <input type="checkbox"/> Name of the CA:
	No <input checked="" type="checkbox"/>
2.7 Summary of the AltMoC	<u>This AltMoc is a revision of the AltMoc 2021-00044 – date : 09/07/2021</u> <u>Modification: corrections of some errors in the text</u> The AltMoc clarifies several points: <ul style="list-style-type: none"> • Definition of LIFUS and LANDING TRAINING






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	<ul style="list-style-type: none"> Parts of the training that must be performed on aircraft prior to the Assessment of Compliance defined in FCL.910.TRI in order to remove the FSTD restriction. Introduction of 2 TRI trainees' option. Introduction of the option of a trainee as observer. End of the arbitrary repartition (FSTD vs aircraft) in term of training. 								
2.8 Summary of the AltMoC assessment	This AltMoC meets the IR both in terms of compliance with the amount of flight activity required and the level safety assured.								
2.9 Attachments to the AltMoC notification form	<i>Please tick in the boxes below to verify that you have attached all the required documentation depending on the AltMoC proposer/user.</i>								
<table border="1"> <thead> <tr> <th>AltMoC proposed by an organisation:</th> <th>AltMoC used by a competent authority itself:</th> </tr> </thead> <tbody> <tr> <td>1) Full organisation's description of the AltMoC, which includes reasoning of the AltMoC <input type="checkbox"/></td> <td>1) Full description of the AltMoC, which includes reasoning of the AltMoC <input checked="" type="checkbox"/></td> </tr> <tr> <td>2) CA's evaluation of the AltMoC <input type="checkbox"/></td> <td>2) Assessment demonstrating that the IR(s) are met <input checked="" type="checkbox"/></td> </tr> <tr> <td>3) CA's signed statement that the AltMoC was assessed¹ by the CA and it establishes compliance with the IR(s) <input type="checkbox"/></td> <td>3) Regulatory wording of the used AltMoC <input checked="" type="checkbox"/></td> </tr> </tbody> </table>		AltMoC proposed by an organisation:	AltMoC used by a competent authority itself:	1) Full organisation's description of the AltMoC, which includes reasoning of the AltMoC <input type="checkbox"/>	1) Full description of the AltMoC, which includes reasoning of the AltMoC <input checked="" type="checkbox"/>	2) CA's evaluation of the AltMoC <input type="checkbox"/>	2) Assessment demonstrating that the IR(s) are met <input checked="" type="checkbox"/>	3) CA's signed statement that the AltMoC was assessed ¹ by the CA and it establishes compliance with the IR(s) <input type="checkbox"/>	3) Regulatory wording of the used AltMoC <input checked="" type="checkbox"/>
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<p>Note: The Agency reserves its right to raise additional questions and request for the following AltMoC documentation in the context of Regulation (EU) No 628/2013 article 5:</p> <ul style="list-style-type: none"> Relevant revisions to manuals/procedures introduced by an organisation or a competent authority, depending on the AltMoC proposer/user; and Risk assessment of the AltMoC performed by an organisation demonstrating that an equivalent level of safety to that established by the Agency AMC is reached. 									
2.10 List of the attachments in addition to the above required if relevant	None								
3. Information									
3.1 Other Member States have been informed about the organisation proposed AltMoC	Yes <input checked="" type="checkbox"/> How: Presentation by DGAC during a TeB meeting in June 2021 No <input type="checkbox"/>								
4. Date and signature	10/02/2022  Le directeur personnels navigants								

Didier ROUZET

¹ The CA's assessment also includes an evaluation of an AltMoC's risk assessment where relevant.





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This Notification should be sent by email to:
European Aviation Safety Agency
altmoc@easa.europa.eu

NOTE: Every AltMoC notification should relate to one AltMoC only.

Completion Instructions

Completion Instructions

Please double-click on the icon to access the completion instructions

1) and 2) AltMoC reasoning and assessment (i.e. demonstrating that the IR is met)**REASONING**

The establishment of the AltMoc allows the evolution and clarification of several points.

- 1- Definition of LIFUS and LANDING TRAINING introduced by the IR (FCL.910.TRI): Reg 1747/2019 introduced in FCL.910.TRI (a)(1) and (2) LIFUS and LANDING TRAINING privileges for the TRI (H), but without defining in FCL.930.TRI. the content of the relevant training. AMC2 FCL.930.TRI has to be completed to provide information on that.
- 2- Clarification of the parts of the training that must be performed on aircraft prior to the Assessment of Compliance (AoC) defined in FCL.910.TRI in order to remove the FSTD restriction.
- 3- Introduction of 2 TRI trainees' option.
- 4- Introduction of the option of a trainee as observer.
- 5- End of the arbitrary repartition (FSTD vs aircraft) in term of training.

ASSESSMENT

This AltMoC meets the IR in terms of compliance.

Indeed:

- At point 1, the AltMoc only defines the training content introduced by the IR.
- At point 2, the AltMoc provides clarity by stating that LANDING TRAINING must be completed prior to taking the competence assessment specified in FCL.910 TRI.
- At point 3, AMC1 FCL.930.TRI Part 3 (F) describes for airplane how two TRIs can be instructed during the course at the same time with the aeroplane. This AMC has been updated by EASA with no other reference or improvement to the AMC related to the helicopter. Since there is no difference in a TRI course if it is related to aeroplane or helicopter, the AMC2 FCL.930.TRI should be updated to extend the same philosophy of the aeroplane to the helicopter.
- At point 4, as the previous point, AMC1 FCL.930.TRI describes now the option for a TRI trainee to be an observer. This disposition doesn't change the minimum training indicated in FCL.930 TRI
- At point 5, current AMC2 FCL.930.TRI Part 3 (I) allows to perform only 3 hours on an FSTD for a TRI(H) course whereas the IR requesting no helicopter (or as less as) when possible.





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3) Regulatory wording of the AltMoC

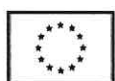
AltMoC to AMC2 FC.930.TRI TRI - Training course

HELICOPTERS

(a) GENERAL

- (1) The aim of the TRI(H) course is to train helicopter license holders to the level of competence defined in FCL.920 and adequate for a TRI or a SFI.
- (2) The training course should be related to the type and the variant of helicopter on which the applicant wishes to instruct. Following qualifications may be aimed:
 - (i) Initial Training for applicants wishing to instruct on FSTD or helicopter or a combination of them
Program should include Part 1, Part 2 and Part 3 as defined below. Applicant to SFI (H) or TRI (H) restricted to FSTD may be exempted from the specific trainings defined in Part 3 point (v).
 - (ii) Training for applicant already holding TRI (H) ~~or~~ qualification on a type and variant but restricted to FSTD, and wishing to instruct on helicopter
Program should include at least the specific training as defined in Part 3 point (v).
 - (iii) Training for applicant already holding a TRI (H) or SFI (H) qualification related to the type, but not to the variant considered and wishing to extend his/her privileges on that variant
Program should include at least relevant items of Part 2 and Part 3.
 - (iv) Training for applicant already holding a TRI (H) or SFI(H) qualification and wishing to extend his /her privileges on a new type.
Program should include at least: relevant items of part 2 and Part 3.
- (3) The training course should develop safety awareness throughout by teaching the knowledge, skills and attitudes relevant to the TRI(H) or SFI(H) task and should be designed to give adequate training to the applicant in theoretical knowledge instruction, flight instruction and/or FSTD instruction to instruct for a helicopter type rating for which the applicant is qualified.
- (4) The TRI(H) or SFI(H) training course should 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.
- (5) Special attention should be given to the applicant's maturity and judgment including an understanding of adults, their behavioral attitudes and variable levels of learning ability. During the training course the applicants should 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 an instructor.
- (6) Airmanship is a vital element of all flight operations. Therefore, the relevant aspects of airmanship should be stressed at the appropriate times during each flight.
- (7) If a TRI(H) or SFI(H) qualification for MP helicopters is sought, particular attention should be given to MCC.
If a TRI(H) qualification pour SP operations is sought, particular attention should be given to the duties in SP operations.

In both cases, appropriate use of behavioral markers should be integrated throughout.





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- (8) If a TRI(H) or SFI(H) certificate for revalidation of instrument ratings is sought, then the applicant should hold a valid instrument rating. The need to add exercises related to IFR flight control should be assessed by the ATO;
- (9) The candidate instructor should learn how to identify common errors and how to correct them properly, which should be emphasised at all times.

(b) CONTENT

The training course consists of three parts:

- Part 1: teaching and learning, that should comply with AMC1 FCL.920;
- Part 2: technical theoretical knowledge instruction (technical training);
- Part 3: flight instruction.

- (1) Part 1 — Teaching and learning. The content of the teaching and learning part of the FI training course, as established in AMC1 FCL.930.FI, should be used as guidance to develop the course syllabus.
- (2) Part 2 — Technical theoretical knowledge instruction syllabus.
 - (i) The technical theoretical knowledge instruction should 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(H) or SFI(H) to instruct the technical theoretical knowledge syllabus.

A proportion of the allotted 10 hours could be integrated into the practical flight instruction lessons of Part 3, using expanded preflight and post flight briefing sessions. Consequently, for practical purposes, Part 2 and Part 3 could be considered complementary to each other

- (ii) The type rating theoretical syllabus should be used to develop instructor's teaching skills in relation to the type technical course syllabus. The course instructor should deliver example lectures from the applicable type technical syllabus and the candidate instructor should prepare and deliver lectures on topics selected by the course instructor from the subject list below:

(A) helicopter structure, transmissions, rotor and equipment, normal and abnormal operation of systems:

- (I) dimensions;
- (II) engine including aux. power unit, rotors and transmissions;
- (III) fuel system;
- (IV) air-conditioning;
- (V) ice protection, windshield wipers and rain repellent;
- (VI) hydraulic system;
- (VII) landing gear;
- (VIII) flight controls, stability augmentation and autopilot systems;
- (IX) electrical power supply;
- (X) flight instruments, communication, radar and navigation equipment;
- (XI) cockpit, cabin and cargo compartment;





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- (XII) emergency equipment.
 - (B) limitations:
 - (I) general limitations, according to the helicopter flight manual;
 - (II) minimum equipment list.
 - (C) performance, flight planning and monitoring:
 - (I) performance;
 - (II) flight planning.
 - (D) load and balance and servicing:
 - (I) load and balance;
 - (II) servicing on ground;
 - (E) emergency procedures;
 - (F) special requirements for helicopters with EFIS;
 - (G) optional equipment.
- (3) Part 3 — Flight instruction
- (i) General
 - (A) The flight instruction should aim to ensure that the applicant is able to teach the air exercises safely and efficiently and related to the type and variant of helicopter on which the applicant wishes to instruct.
 - (B) The applicant for a TRI(H) or SFI(H) certificate should be taught and made familiar with giving instruction from the instructor station seat as well as the pilot's seats, including demonstrations of appropriate handling exercises.
 - (C) Training courses should be developed to give the applicant experience in training a variety of exercises, covering both normal and abnormal operations. The syllabus should be tailored appropriate to the helicopter type, using exercises considered more demanding for the student. This should include engine-out handling and engine-out operations in addition to representative exercises from the type transition course.
 - (D) The applicant should be required to plan, brief, train and debrief sessions using all relevant training techniques
 - (E) The training should be carried out:
 - (I) On simulator only when the privileges sought are those of an instructor exercising on FSTD only;
 - (II) On simulators and helicopter aircraft when the privileges sought are those of a TRI (H) exercising on FSTDs and helicopters;
 - (III) On helicopter only:
 - (1) When there's no simulator representing the type;
 - (2) Where an applicant already holding the TRI (H) qualification but restricted to FSTDs, wishes to extend his/her privileges to helicopter in-flight instruction.





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- (F) The amount of flight training will vary depending on the complexity of the helicopter type. In all cases, the applicant should receive sufficient training in-flight under the supervision of a TRI(H) to a level where the applicant is able to conduct the critical items of the type rating course to a safe standard;
- (G) A similar number of hours should be used for the instruction and practice of pre-flight and post flight briefing for each exercise.
- (ii) Courses where FSTD does exist:
- (A) The applicant for a TRI(H) or SFI (H) certificate should be instructed in using the device and made familiar with its limitations, capabilities, and safety features, including emergency evacuation;
- (B) The syllabus should include engine-out handling and engine-out operations in addition to representative exercises from the type rating course;
- (C) In general, in an FSTD, TRI or SFI training is designed to develop the competencies of a pilot to become an instructor. From this perspective, the training may be provided in several arrangements:
- the candidate instructor is seating in either pilot seat;
 - the candidate instructor is seating at the IOS;
 - the candidate instructor is observing (seating as an observer).

The combination of the above-mentioned training arrangements and the allocation of time to each one of them depends on an analysis of several elements, including but not limited to the following:

- previous experience and curriculum of each candidate (e.g. previous instructor experience, experience on helicopter type, total flight experience, etc.) in isolation and as part of the course group(s);
 - specific requirements for helicopter type and related training exercises;
 - overall maturity and experience of the ATO in providing TRI training courses;
 - type, fidelity level, and reliability of the available devices.
- (D) Subject to particular training arrangements that are determined by the ATO and approved by the competent authority, a TRI (H) ~~or SFI (H)~~ may instruct in parallel two TRI (H) or SFI(H) candidate instructors under the following scenarios:
- one candidate is sitting at the controls (supported by a suitable pilot), while the second candidate is sitting at the IOS; this scenario may be used for demonstration of flight manoeuvres or engine out exercises; or
 - both candidates receive instruction (general introduction and handling) at the IOS.

In this way, both candidates can independently develop specific competencies.

Additional TRI (H) or SFI (H) candidate instructors may be present as observers during such an instruction given in parallel, with no credit of hours for their TRI training.

For an initial TRI (H) or SFI (H) training course, such 'in parallel' instruction should be given only for a reasonable part of the overall TRI training course duration.





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For a TRI (H) or SFI(H) type extension, the number of hours required for such an instruction may be increased.

In any case, the way of instruction largely depends on the experience of the TRI trainer in the various training arrangements and on the general experience of the candidate instructor.

(iii) Courses where FSTD does not exist:

- (A) Where no FSTD exists for the type for which the TRI(H) certificate is sought, a similar course of training should be conducted in the applicable helicopter type and variant.
- (B) Training must include all elements listed under sub paragraphs Part 3 – (iv) of this AMC, however All critical exercises subject to any restrictions related to helicopter flight manual, OSD or safety considerations, should be replaced with appropriate exercises assessed by TEM.

(iv) Content of flight training. The content of the flight training program should cover identified and significant exercises applicable to the helicopter type. At least it should be taking into account of:

- (A) exercises applicable to the helicopter type as set out in Appendix 9 to Part-FCL.
- (B) all exercises and TASE as defined in OSD.
- (C) the features as follow:
 - (I) left hand and right seat familiarizations, in order to cover pilot and co-pilot duties;
 - (II) pre-flight preparation and use of checklists;
 - (III) Use of the training mode or equipment dedicated to flight training;
 - (IV) instrument departure, approach and go-around with one engine simulated inoperative.
- (D) helicopter training techniques such as:
 - (I) methods for giving appropriate commentary;
 - (II) instructor demonstrations of critical manoeuvres with commentary;
 - (III) particularities and safety considerations associated with handling the helicopter in critical manoeuvres such as one-engine-inoperative and autorotation exercises;
 - (IV) where relevant, the conduct of instrument training with particular emphasis on weather restrictions, dangers of icing and limitations on the conduct of critical manoeuvres in instrument meteorological conditions;
 - (V) intervention strategies developed from situations role-played by a TRI(H) or SFI (H) course instructor, taken from but not limited to:
 - (1) incorrect helicopter configuration;
 - (2) over controlling;
 - (3) incorrect control inputs;
 - (4) excessive flare close to the ground;
 - (5) one-engine-inoperative take-off and landings;
 - (6) incorrect handling of autorotation;
 - (7) static or dynamic rollover on take-off or landing;





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- (8) too high on approach with associated danger of vortex ring or settling with power;
- (9) incapacitation in multi pilots environment;
- (10) abnormal and emergency procedures and appropriate methods and minimum altitudes for simulating failures in the helicopter;
- (11) failure of the driving engine during OEI maneuvers.

(v) Specific trainings

The purpose of these section is to depict the minimum air training in aircraft to undergo by applicant ~~prior to the assessment of competence in the aircraft as required in FCL.910.TRI (a).~~

(A) LIFUS training

(not relevant for helicopter)

(B) Landing Training

(I) This training session may be divided in two part.

- (1) If necessary, first part may be done in an FSTD to ensure that maneuvers are correctly known by the trainee.
- (2) The second part should be done on the helicopter to reinforce safety awareness during critical maneuvers. It should cover all content and done under the supervision and to the satisfaction of a TRI (H) trainer who is nominated for that purpose by the ATO . It should be performed by role-play.

(II) Content of training should include the following maneuvers:

- (1) taxiing, ground and air;
- (2) take-off and landings;
- (3) engine failure during take-off and landing ; relevant CAT A and CAT B profiles should be taken into account (if applicable);
- (4) engine inoperative approach and go-around;
- (5) one engine simulated inoperative landing;
- (6) any exercise and TASE as defined in OSD (if applicable and relevant to air exercise);
- (7) use of training modes or equipment dedicated to flight training;
- (8) autorotative landing with/without power recovery.



