

FAQs:

Rotorcraft

Question:

Flight Test Categories for Rotorcraft - examples

Answer:

The flight test category (FTC) determination should result from the engineering analysis done by the applicant on the impact of a given change to type-certificate (TC), restricted typecertificate (RTC) or supplemental type-certificate (STC), from a development or compliance demonstration flight perspective. It is not always possible to link a specific task, such as the installation of a new piece of equipment for instance, to a FTC. Each practical case requires a top-down detailed analysis as detailed hereafter.

"It should be noted that the content of the flight test activity determines its category and the FTC determines the required competence of the crew."

Therefore, for a given flight test campaign performed in the frame of development or certification activities relevant to the issuance of TC, RTC or STC, and changes to those certificates, including different flight tests, different categories may be concurrently selected.

How to determine the appropriate flight test category

The best practice to determine the FTC is to follow a "top-down" approach starting from the definition of Category 1 and moving down, by exclusion, to the other categories until the appropriate category is determined. In order to reach this objective the following flow chart may provide a useful tool.

A thorough knowledge of the activity to be carried out and of the involved flight test techniques are required to perform the assessment.

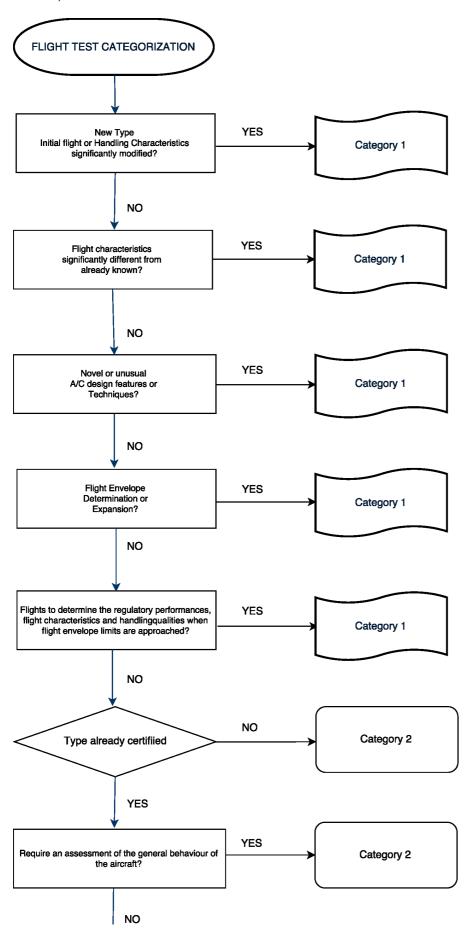
However, some basic principles are provided as guideline in determining the appropriate flight test category:

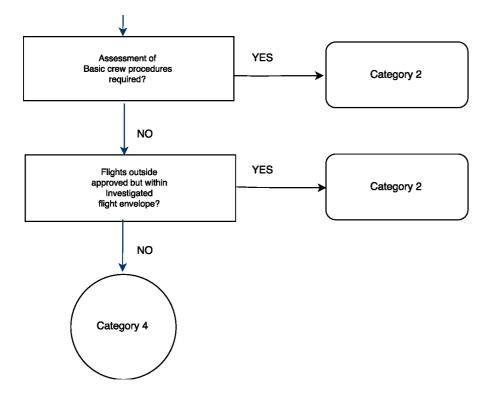
A) Flight Tests of a not yet certified A/C should be considered Cat 1 or 2;

B) Flight Tests for a modification of an already certified A/C may be Cat 1, 2 or 4;

Note: Flight Tests which require manoeuvres/conditions which deviate significantly from the STANDARD OPERATIONAL use of the already certified A/C or require the already certified aircraft to be flown outside of the approved envelope should be classified at least as Category 2 FT;

C) A Cat 3 Flight Test (production flight test) can apply only if a TC or STC has been already issued;





The table of FTC examples under the following link: FTC - Table of examples cannot be considered as an exhaustive list of all types of rotorcraft flight tests and categorization according to Appendix XII to Part 21. These examples are provided with the aim to better explain the fundamental principles behind the rules.

"Acceptable Means of Compliance and Guidance Material" may be found here: Acceptable Means of Compliance and Guidance Material

Note: For Flight Conditions approval, the FTC(s) MUST be identified. If more than one category is foreseen, this must be recorded with the appropriate level of detail.

Last updated:

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Link: https://www.easa.europa.eu/et/faq/45884