



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 29

[Docket No. FAA-2025-0080; Special Conditions No. 29-058-SC]

Special Conditions: Airbus Helicopters Model EC175B Helicopter; Use of 30-Minute All Engines Operating Power Rating

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final special conditions; request for comments.

SUMMARY: These special conditions are issued for the Airbus Helicopters (Airbus) Model EC175B helicopter. This model helicopter will have a novel or unusual design feature when compared to the state of technology envisioned in the airworthiness standards for transport category helicopters. This design feature is a 30-minute all engines operating (AEO) power rating. This rating will be used for hovering at increased power for search and rescue missions. The applicable airworthiness regulations do not contain adequate or appropriate safety standards for this design feature. These special conditions contain the additional safety standards that the Administrator considers necessary to establish a level of safety equivalent to that established by the existing airworthiness standards.

DATES: This action is effective on Airbus on [INSERT DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]. Send comments on or before [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].

ADDRESSES: Send comments identified by Docket No. FAA-2025-0080 using any of the following methods:

- *Federal eRegulations Portal:* Go to www.regulations.gov and follow the online instructions for sending your comments electronically.

- *Mail:* Send comments to Docket Operations, M-30, U.S. Department of Transportation (DOT), 1200 New Jersey Avenue, SE, Room W12-140, West Building Ground Floor, Washington, DC, 20590-0001.
- *Hand Delivery or Courier:* Take comments to Docket Operations in Room W12-140 of the West Building Ground Floor at 1200 New Jersey Avenue, SE, Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.
- *Fax:* Fax comments to Docket Operations at (202) 493-2251.

Docket: Background documents or comments received may be read at www.regulations.gov at any time. Follow the online instructions for accessing the docket or go to Docket Operations in Room W12-140 of the West Building Ground Floor at 1200 New Jersey Avenue, SE, Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Andrew Birkenheuer, Engine and Propulsion Section, AIR-625, Technical Policy Branch, Policy and Standards Division, Aircraft Certification Service, Federal Aviation Administration, 10101 Hillwood Parkway, Fort Worth, TX 76177; telephone (817) 222-5246; email Andrew.J.Birkenheuer@faa.gov.

SUPPLEMENTARY INFORMATION: Substantially identical proposed special conditions have been published in the *Federal Register* for public comment in several prior instances with no substantive comments received. Therefore, the FAA finds, pursuant to title 14, Code of Federal Regulations (14 CFR) 11.38(b), that new comments are unlikely, and notice and comment prior to this publication are unnecessary.

Privacy

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in § 11.35, the FAA will post all comments

received without change to www.regulations.gov, including any personal information you provide. The FAA will also post a report summarizing each substantive verbal contact received about these special conditions.

Confidential Business Information

Confidential Business Information (CBI) is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to these special conditions contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to these special conditions, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and the indicated comments will not be placed in the public docket of these special conditions. Send submissions containing CBI to the individual listed in the For Further Information Contact section above. Comments the FAA receives, which are not specifically designated as CBI, will be placed in the public docket for these special conditions.

Comments Invited

The FAA invites interested people to take part in this rulemaking by sending written comments, data, or views. The most helpful comments reference a specific portion of the special conditions, explain the reason for any recommended change, and include supporting data.

The FAA will consider all comments received by the closing date for comments. The FAA may change these special conditions based on the comments received.

Background

On September 14, 2022, Airbus requested FAA type certificate validation for the Airbus Model EC175B helicopter. The Model EC175B helicopter is a Transport Category, 14 CFR part 29, twin-engine conventional helicopter designed for civil operations. This model will be certificated with Category A performance and under dual pilot instrument flight rules, powered by two Pratt & Whitney Canada PT6C-67E engines with a dual channel Full Authority Digital Engine Control system, has five main rotor blades, a maximum gross weight of 17,196 pounds, and a velocity not exceeding 175 knots. The Model EC175B helicopter features an integrated modular avionics suite with four 6x8-inch multi-function displays called Common Integrated Global Avionics for Light Helicopters. This rotorcraft is capable of carrying 18 passengers and two crew members. Its initial customer base includes offshore oil and search and rescue operations.

Type Certification Basis

Under the provisions of 14 CFR 21.17, Airbus must show that the Model EC175B helicopter meets the applicable provisions of part 29, as amended by amendments 29-1 through 29-52.

If the Administrator finds that the applicable airworthiness regulations (e.g., 14 CFR part 29) do not contain adequate or appropriate safety standards for the Airbus Model EC175B helicopter because of a novel or unusual design feature, special conditions are prescribed under the provisions of § 21.16.

Special conditions are initially applicable to the model for which they are issued. Should the type certificate for that model be amended later to include any other model that incorporates the same novel or unusual design feature, these special conditions would also apply to the other model under § 21.101.

In addition to the applicable airworthiness regulations and special conditions, the Airbus Model EC175B helicopter must comply with the exhaust-emission requirements of part 34 and the noise-certification requirements of part 36.

The FAA issues special conditions, as defined in § 11.19, in accordance with § 11.38, and they become part of the type certification basis under § 21.17(a)(2).

Novel or Unusual Design Feature

The Airbus Model EC175B helicopter will incorporate the following novel or unusual design feature:

A 30-minute AEO power rating.

Discussion

Airbus proposes a novel and unusual design feature for the Model EC175B helicopter: a 30-minute power rating identified in the Pratt & Whitney Canada PT6C-67E engine type certificate data sheet (TCDS) No. E00068EN. Under 14 CFR 1.1, “rated takeoff power” is limited to no more than 5 minutes for takeoff operations. As such, regulations in 14 CFR 29 that reference takeoff power are not adequate to address the use of takeoff power for 30 minutes. Therefore, takeoff power for 30 minutes requires special airworthiness standards, known as special conditions, to address the use of this 30-minute power rating and its effects on the rotorcraft. This power will be limited to 50 minutes per flight due to engine durability considerations. These special conditions will add requirements to evaluate the use of 30-minute takeoff power to the existing airworthiness requirements in § 29.1049, “Hovering cooling test procedures,” requirements to track 30-minute takeoff power usage to the requirements in § 29.1305, “Powerplant instruments,” and limitations on the use of 30-minute takeoff power to the requirements in § 29.1521, “Powerplant limitations.” A summary of the final special conditions is as follows:

1. Cooling Effects (§ 29.1049)

In addition to the hovering cooling test procedures requirements in § 29.1049, because § 29.1049 does not address the evaluation of cooling effects resulting from using a 30-minute power rating, these special conditions require evaluation through testing of aircraft cooling effects resulting from using the 30-minute power rating.

2. Powerplant Instruments (§ 29.1305)

In addition to the powerplant instruments requirements in § 29.1305, because § 29.1305 does not address 30-minute takeoff power, these special conditions require the pilot be provided with means to identify the following with respect to 30-minute takeoff power:

- When the rated engine power level is achieved,
- When the event begins,
- When the time interval expires, and
- When the cumulative time in one flight is reached.

3. Powerplant Limitations (§ 29.1521)

In addition to the powerplant limitations in § 29.1521, because § 29.1521 does not address 30-minute takeoff power, these special conditions limit the use of takeoff power for 30 minutes to:

- No more than 30 minutes per use, and
- No more than 50 minutes per flight.

Additionally, the Model EC175B helicopter flight manual must include the following limitations on the use of the 30-minute power rating per 14 CFR 29.1583(b)(1) (which requires furnishing the limitations required by § 29.1521):

- Continuous use above maximum continuous power (MCP) is limited to 30 minutes, and
- Cumulative use above MCP is limited to 50 minutes per flight.

These special conditions contain the additional safety standards that the Administrator considers necessary to establish a level of safety equivalent to that established by the existing airworthiness standards.

Applicability

As discussed above, these special conditions apply to the Airbus Model EC175B helicopter. Should Airbus later apply for a change to the type certificate to include another model incorporating the same novel or unusual design feature, these special conditions would also apply to that model.

Conclusion

This action affects only a certain novel or unusual design feature on the Airbus Model EC175B helicopter. It is not a rule of general applicability.

List of Subjects in 14 CFR Part 29

Aircraft, Aviation safety, Reporting and recordkeeping requirements.

Authority Citation

The authority citation for these special conditions is as follows:

Authority: 49 U.S.C. 106(f), 106(g), 40113, 44701-44702, and 44704.

The Special Conditions

Accordingly, pursuant to the authority delegated to me by the Administrator, the following special conditions are issued as part of the type certification basis for the Airbus Helicopters Model EC175B helicopter. Unless stated otherwise, all requirements in 14 CFR 29.1049, 29.1305, and 29.1521 remain unchanged.

1. *Section 29.1049, Hovering cooling test procedures.* In addition to the requirements of this section, for this rotorcraft with a 30-minute all engines operating (AEO) power rating, the hovering cooling provisions at the 30-minute AEO power rating must be shown—

a. At maximum weight or at the greatest weight at which the rotorcraft can hover (if less), at sea level, with the power required to hover but not more than the 30-minute power, in the ground effect in still air, until at least five minutes after the occurrence of the highest temperature recorded, or until the continuous time limit of the 30-minute AEO power rating if the highest temperature recorded is not stabilized before.

b. At maximum weight and at the altitude resulting in zero rate of climb for this configuration until at least five minutes after the occurrence of the highest temperature recorded, or until the continuous time limit of the 30-minute AEO power rating if the highest temperature recorded is not stabilized before.

2. *Section 29.1305 Powerplant instruments, at Amendment 29-40.* In addition to the requirements of this section, for this rotorcraft with a 30-minute AEO power rating, a means must be provided to alert the pilot when the engine is at the 30-minute power level, when the event begins, when the time interval expires, and when the cumulative time in one flight is reached.

3. *Section 29.1521 Powerplant limitations, at Amendment 29-41.* In addition to the requirements of this section, the use of the 30-minute AEO power rating must be limited to not more than 30 minutes per use and not more than a 50-minute cumulative time per flight. The use of the 30-minute power must also be limited by:

a. The maximum rotational speed, which may not be greater than—

(1) The maximum value determined by the rotor design; or

(2) The maximum value shown during the type tests;

b. The maximum allowable turbine inlet or turbine outlet gas temperature.

c. The maximum allowable power or torque for each engine, considering the power input limitations of the transmission with all engines operating;

d. The time limit for the use of the power corresponding to the limitations established in this section, sub-paragraphs a. through c. of this section, and

e. The maximum allowable engine and transmission oil temperatures.

Issued in Kansas City, Missouri, on April 11, 2025.

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[FR Doc. 2025-06440 Filed: 4/15/2025 8:45 am; Publication Date: 4/16/2025]