

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 April 16, 2025. Send comments on or before June 2, 2025.

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, subparagraphs 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.

Patrick R. Mullen,

Manager, Technical Policy Branch, Policy and Standards Division, Aircraft Certification Service.

[FR Doc. 2025-06440 Filed 4-15-25; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2024-2417; Project Identifier AD-2024-00336-E; Amendment 39-23012; AD 2025-07-10]

RIN 2120-AA64

Airworthiness Directives; General Electric Company Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is superseding Airworthiness Directive (AD) 2020-20-17 and AD 2021-15-05 for all General Electric Company (GE) Model GE90-110B1 and GE90-115B engines. AD 2020-20-17 prohibits dispatch of an airplane if certain status messages are displayed on the engine indicating and crew alerting system (EICAS) and if certain conditions are present; and as terminating action, requires revision of the existing FAA-approved minimum equipment list (MEL) by incorporating the dispatch restrictions into the MEL. AD 2021-15-05 requires initial and repetitive replacement of the full authority digital engine control (FADEC) integrated circuit (MN4) microprocessor. Since the FAA issued AD 2020-20-17 and AD 2021-15-05, the manufacturer has developed a software revision for the electronic engine control (EEC) FADEC that further mitigates the unsafe condition. This AD retains all the actions of AD 2020-20-17 and AD 2021-15-05, and also requires upgrading the EEC FADEC software to an EEC FADEC software version eligible for installation as a terminating action. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective May 21, 2025.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of May 21, 2025.

The Director of the Federal Register approved the incorporation by reference of certain other publications listed in this AD as of October 23, 2020 (85 FR 63443, October 8, 2020); and September 13, 2021 (86 FR 43409, August 9, 2021).

ADDRESSES:

AD Docket: You may examine the AD docket at *regulations.gov* under Docket No. FAA-2024-2417; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

Material Incorporated by Reference:

- For GE material identified in this AD, contact GE, 1 Neumann Way, Cincinnati, OH 45215; phone: (513) 552-3272; email: *aviation.fleetsupport@ge.com*; website: *ge.com*.

- You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call (817) 222-5110. It is also available at *regulations.gov* under Docket No. FAA-2024-2417.

FOR FURTHER INFORMATION CONTACT:

Alexander Thickstun, Aviation Safety Engineer, FAA, 2200 South 216th Street, Des Moines, WA 98198; phone: (202) 267-8292; email: *alexander.m.thickstun@faa.gov*.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2020-20-17, Amendment 39-21273 (85 FR 63443, October 8, 2020) (AD 2020-20-17) and AD 2021-15-05, Amendment 39-21652 (86 FR 43409, August 9, 2021) (AD 2021-15-05). AD 2020-20-17 and AD 2021-15-05 applied to all GE Model GE90-110B1 and GE90-115B engines. The NPRM published in the **Federal Register** on November 1, 2024 (89 FR 87317). The NPRM was prompted by an in-service occurrence of loss of engine thrust control resulting in uncommanded high thrust. Degradation of the MN4 integrated circuit

microprocessor solder balls in the FADEC can result in the engine not following throttle commands. In the NPRM, the FAA proposed to continue to prohibit dispatch of an airplane if certain status messages are displayed on the EICAS and if certain conditions are present; and as terminating action, require revision of the existing FAA-approved MEL by incorporating the dispatch restrictions into the MEL. The FAA also proposed to continue to require initial and repetitive replacement of the FADEC MN4 microprocessor. In the NPRM, the FAA also proposed to require upgrading the EEC FADEC software to an EEC FADEC software version eligible for installation as a terminating action for the actions retained from AD 2020-20-17 and AD 2021-15-05.

Discussion of Final Airworthiness Directive

Comments

The FAA received comments from five commenters. The commenters were the Air Line Pilots Association, International (ALPA), The Boeing Company (Boeing), FedEx Express (FedEx), GE Aerospace (GE), and United Airlines (UAL). The following presents the comments received on the NPRM and the FAA's response to each comment.

Support for the NPRM

ALPA expressed support for the proposed AD. FedEx concurred with the intent and scope of the proposed AD and stated that the FedEx fleet has already upgraded the EEC FADEC software version to A.0.8.6. UAL indicated that it had no objections to the proposed AD.

Request for Updated Definition

GE requested that the FAA update the Material Incorporated by Reference under 14 CFR part 51 paragraph and revise the definition specified in paragraph (i)(1)(ii) of the NPRM to include a later revision of the acceptable service information. GE mentioned that the FAA has approved a global alternative method of compliance (AMOC) to the corresponding paragraph in AD 2021-15-05, which allowed the use of the later service information. GE pointed out that including the later service information would prevent similar requests for AMOCs to the NPRM.

The FAA agrees with the request. The FAA has revised the Material Incorporated by Reference under 14 CFR part 51 paragraph and paragraph (i)(1)(ii) of this AD to include reference to GE GE90-100 Service Bulletin 73-