Rules and Regulations

Federal Register
Vol. 80, No. 10
Thursday, January 15, 2015

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2014–1058; Directorate Identifier 2014–SW–065–AD; Amendment 39–18053; AD 2014–26–02]

RIN 2120–AA64

Airworthiness Directives; Airbus Helicopters (Previously Eurocopter France)

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule; request for comments.

SUMMARY: We are adopting a new airworthiness directive (AD) for Airbus Helicopters (previously Eurocopter France) Model EC155B1 and AS 365 N3 helicopters with a certain automated flight control system (AFCS) and with a Garmin global positioning system (GPS) installed. This AD requires revising the Rotorcraft Flight Manual (RFM) to prohibit using the autopilot coupled with a Localizer/Instrument Landing System (LOC/ILS) or Very High Frequency Omnidirectional Range (VOR) approach. This AD is prompted by a report of unpredictable and unexpected roll oscillations during coupled LOC or VOR approaches.This condition, if not corrected, could result in loss of helicopter control.

DATES: This AD becomes effective January 30, 2015.

We must receive comments on this AD by March 16, 2015.

ADDRESSES: You may send comments by any of the following methods:

- *Federal eRulemaking Docket:* Go to *http://www.regulations.gov.* Follow the online instructions for sending your comments electronically.
- *Fax:* 202–493–2251.
- *Mail:* Send comments to the U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590–0001.
- *Hand Delivery:* Deliver to the ''Mail'' address between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Examining the AD Docket

You may examine the AD docket on the Internet at *http://www.regulations.gov* or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the economic evaluation, and other information. The street address for the Docket Operations Office (telephone 800–647–5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

For service information identified in this AD, contact Airbus Helicopters, Inc., 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641–0000 or (800) 232–0323; fax (972) 641–3775; or at *http://www.airbushelicopters.com/techpub.* You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

FOR FURTHER INFORMATION CONTACT: George Schwab, Aviation Safety Engineer, Safety Management Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222–5110; email *george.schwab@faa.gov.*

SUPPLEMENTARY INFORMATION:

Comments Invited

This AD is a final rule that involves requirements affecting flight safety, and we did not provide you with notice and an opportunity to provide your comments prior to it becoming effective. However, we invite you to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, or federalism impacts that resulted from adopting this AD. The most helpful comments reference a specific portion of the AD, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit them only one time. We will file in the docket all comments that we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning this rulemaking during the comment period. We will consider all the comments we receive and may conduct additional rulemaking based on those comments.

Discussion

We were informed that an Airbus Helicopter Model EC155B1 helicopter experienced intermittent, unpredictable roll oscillations while attempting to capture the inbound course during coupled ILS and LOC approaches. Airbus Helicopters analyzed the issue through flight and laboratory tests and determined that, under certain circumstances related to physical location of the helicopter during initialization of the GPS, the Garmin GPS equipment declares the helicopter's position as invalid on the data output bus, even though the GPS correctly displays the position and other information. APM2000, part number 416–00297–163, an Airbus Helicopters AFCS, utilizes this GPS position from the output data bus to estimate ground speed. When the helicopter's position is declared invalid, the APM2000 AFCS calculates the estimated ground speed at zero, causing an adverse effect on the vectoring calculations (angle, speed, intercepts, etc.), which results in the unpredictable and unexpected roll oscillations.

Airbus Helicopters reported that while it plans further tests on Model EC155 helicopters to determine short- and long-term solutions, it proposes in the interim that pilots, shortly before taxiing, confirm that the Garmin equipment is properly displaying the helicopter's ''true present position'' and then press the AP RST (autopilot reset) switch overhead. Airbus Helicopters states that these steps will ensure the system functions correctly. The European Aviation Safety Agency has declined to issue an AD.

We have determined that an unsafe condition exists whenever a helicopter with this part-numbered autopilot system installed attempts a coupled

LOC/ILS or VOR approach, and that this condition is not corrected by resetting the autopilot before taxiing. Rather, the issue continues until the autopilot system is manually disconnected. The pilot is not alerted that an issue exists until the VOR, LOC, and glide slope indications on the flight instrument panel when the intercept course capture fails to perform as expected. The autopilot system is intended to reduce a pilot's workload and for that reason is required to be functional when a single pilot is operating the helicopter under instrument flight rules. We are including the Model AS 365 N3 helicopter in this AD because these helicopters may have the same technology installed and could experience the same unsafe condition.

FAA's Determination

These helicopters have been approved by the aviation authority of France and are approved for operation in the United States. We are issuing this AD because we evaluated all the relevant information and determined the unsafe condition exists and is likely to exist or develop on other helicopters of these same type designs.

Related Service Information

Airbus Helicopters has issued Technical Agreement AE–155–14–003–22, dated June 27, 2014, for Model EC155B1 helicopters, which advises of two procedures in order to prevent an anomaly with the autopilot in the LOC mode. The first procedure is to only stay on the GPS test page for a short time, and the second procedure is to reset the autopilot before taxiing.

AD Requirements

This AD requires before further flight, revising the RFM by inserting a copy of this AD or by making pen-and-ink changes to prohibit using the autopilot coupled with a LOC/ILS or VOR approach. This AD also requires, for Model EC155B1 helicopters, revising the RFM to prohibit certain procedures for resetting the autopilot before taxiing.

Interim Action

We consider this AD to be an interim action. The design approval holder is currently developing a modification that will address the unsafe condition identified in this AD. Once this modification is developed, approved, and available, we might consider additional rulemaking.

Costs of Compliance

We estimate that this AD will affect 16 helicopters of U.S. Registry and that labor costs average $85 an hour. Based on these estimates, we expect that making pen-and-ink changes to the flight manual will require a half work-hour for a labor cost of about $43 per helicopter, or $688 for the U.S. fleet. No parts are needed.

FAA's Justification and Determination of the Effective Date

Providing an opportunity for public comments prior to adopting these AD requirements would delay implementing the safety actions needed to correct this known unsafe condition. Therefore, we find that the risk to the flying public justifies waiving notice and comment prior to the adoption of this rule because the unsafe condition can adversely affect control of the helicopter and the required corrective actions must be accomplished before further flight.

Since an unsafe condition exists that requires the immediate adoption of this AD, we determined that notice and opportunity for public comment before issuing this AD are impracticable and contrary to the public interest and that good cause exists for making this amendment effective in less than 30 days.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. ''Subtitle VII: Aviation Programs,'' describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in ''Subtitle VII, Part A, Subpart III, Section 44701: General requirements.'' Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify that this AD:

1. Is not a ''significant regulatory action'' under Executive Order 12866;

2. Is not a ''significant rule'' under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);

3. Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and

4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39—AIRWORTHINESS DIRECTIVES

■ 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

■ 2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2014–26–02 Airbus Helicopters (Previously Eurocopter France): Amendment 39–18053; Docket No. FAA–2014–1058; Directorate Identifier 2014–SW–065–AD.

(a) Applicability

This AD applies to Model EC155B1 and AS 365 N3 helicopters with an automated flight control system APM2000 Auto Pilot Module, part number 416–00297–163, with a Garmin GNS- or GTN-series global positioning system (GPS) installed, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as an autopilot software design that incorrectly calculates the estimated ground speed at zero. This condition results in unpredictable roll oscillations during a coupled Very High Frequency Omnidirectional Range (VOR) or Localizer/Instrument Landing System (LOC/ILS) approach, which could result in loss of helicopter control.

(c) Effective Date

This AD becomes effective January 30, 2015.

(d) Compliance

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

(e) Required Actions

Before further flight, insert a copy of this AD in the Rotorcraft Flight Manual or make the following pen-and-ink changes:

(1) In the Eurocopter EC 155B1 Flight Manual, under Limitations (Prohibited Maneuvers) add: ''Coupled LOC/VOR approaches.''

(2) In the Airbus Helicopters Flight Manual EC155B1:

(i) Under Limitations, add: ''Autopilot coupled with a LOC/ILS or VOR approach is prohibited.''

(ii) Under Normal Procedures, remove paragraphs 4.2 (Power-on GPS on Ground or In Flight) and 4.3 (Pre-taxiing checklist) in their entirety. Performing the procedures in Paragraphs 4.2 and 4.3 is prohibited.

(3) In the Eurocopter Flight Manual AS 365 N3, under Limitations, add: ''Autopilot coupled with a LOC/ILS or VOR approach is prohibited.''

(f) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: George Schwab, Aviation Safety Engineer, Safety Management Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222–5110; email *george.schwab@faa.gov.*

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

(g) Additional Information

For service information identified in this AD, contact Airbus Helicopters, Inc., 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641–0000 or (800) 232–0323; fax (972) 641–3775; or at *http://www.airbushelicopters.com/techpub.* You may review a copy of the service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

(h) Subject

Joint Aircraft Service Component (JASC) Code: 2210, Autopilot System.

Issued in Fort Worth, Texas, on December 4, 2014.

Lance T. Gant,

Acting Directorate Manager, Rotorcraft Directorate, Aircraft Certification Service.

[FR Doc. 2015–00543 Filed 1–14–15; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2014–0582; Directorate Identifier 2014–NM–065–AD; Amendment 39–18060; AD 2014–26–09]

RIN 2120–AA64

Airworthiness Directives; Bombardier, Inc. Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are superseding Airworthiness Directive (AD) 2014–03–05, for certain Bombardier, Inc. Model BD–700–1A10 airplanes. AD 2014–03–05 required modification of the air data probes and sensors. This new AD continues to require modification of the air data probes and sensors. This new AD also adds airplanes to the applicability. This AD was prompted by a report that the manufacturer has determined that some completion centers used the heater current/brake temperature monitor unit (HBMU) logic circuit to control the line voltage of the drain mast heaters. We are issuing this AD to detect and correct an unannunciated failure of two pitot static probe heaters, which could affect controllability of the airplane in icing conditions.

DATES: This AD becomes effective February 19, 2015.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of April 1, 2014 (79 FR 10331, February 25, 2014).

ADDRESSES: You may examine the AD docket on the Internet at *http://www.regulations.gov/#!docketDetail;D=FAA-2014-0582;* or in person at the Docket Management Facility, U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC.

For service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514–855–5000; fax 514–855–7401; email *thd.crj@aero.bombardier.com;* Internet *http://www.bombardier.com.* You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425–227–1221.

FOR FURTHER INFORMATION CONTACT: Assata Dessaline, Aerospace Engineer, Avionics and Flight Test Branch, ANE–172, FAA, New York Aircraft Certification Office, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516–228–7301; fax 516–794–5531.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2014–03–05, Amendment 39–17742 (79 FR 10331, February 25, 2014).

AD 2014–03–05 applied to certain Bombardier, Inc. Model BD–700–1A10 airplanes. The NPRM published in the **Federal Register** on August 26, 2014 (79 FR 50880).

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian Airworthiness Directive CF–2012–32, dated December 13, 2012 (referred to after this as the Mandatory Continuing Airworthiness Information, or ''the MCAI''), to correct an unsafe condition for certain Bombardier, Inc. Model BD–700–1A10 airplanes. The MCAI states:

> The aeroplane manufacturer has determined that some completion centers used the Heater/Brake Monitoring Unit (HBMU) logic circuit to control the line voltage of the drain mast heaters. This same logic circuit is also used to control the line voltage of the number 2 pitot static (PS) probe heater. Since the drain mast heaters are connected in parallel with the number 2 PS probe heater circuit, a number 2 PS probe heater failure may not be detected by the fault monitoring capabilities of the HBMU.
>
> The unannunciated failure of two PS probe heaters could adversely affect the aeroplane's flight characteristics in icing conditions.
>
> This [Canadian] AD mandates a modification to the existing drain mast heater wiring to correct the fault-monitoring capabilities of the HBMU and eliminate the potential dormant failure of the number 2 PS probe heater.

You may examine the MCAI in the AD docket on the Internet at *http://www.regulations.gov/#!documentDetail;D=FAA-2014-0582-0002.*

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (79 FR 50880, August 26, 2014) or on the determination of the cost to the public.

Conclusion

We reviewed the available data and determined that air safety and the