



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2018-0764; Product Identifier 2018-NM-074-AD; Amendment 39-19502; AD 2018-23-15]**

**RIN 2120-AA64**

**Airworthiness Directives; Airbus SAS Airplanes**

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

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for all Airbus SAS Model A330-200 Freighter series airplanes, Model A330-200 and -300 series airplanes, and Model A340-200 and -300 series airplanes. This AD was prompted by defects found during production tests of ram air turbine (RAT) units; investigation revealed that the defects were due to certain RAT hydraulic pumps having an alternative manufacturing process of the pump pistons. This AD requires replacing any defective RAT hydraulic pump with a serviceable part and re-identifying the RAT module part number. We are issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For Airbus SAS service information identified in this final rule, contact Airbus SAS, Airworthiness Office – EIAS, Rond-Point Emile Dewoitine No: 2, 31700 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; email [account.airworth-eas@airbus.com](mailto:account.airworth-eas@airbus.com); Internet <http://www.airbus.com>. For UTC Aerospace service information identified in this final rule, contact UTC Aerospace Systems Goodrich Corporation, Actuation Systems, Stafford Road, Fordhouses, Wolverhampton, West Midlands WV10 7EH, England; phone: +44 (0) 1902 624644938; fax: +44 (0) 1902 788100624947; email: [techpubs.wolverhampton@goodrich.com](mailto:techpubs.wolverhampton@goodrich.com); Internet: <https://www.customers.utcaerospacesystems.com>. You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0764.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0764; 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, the regulatory evaluation, any comments received, and other information. The address for Docket Operations (phone: 800-647-5527) 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.

**FOR FURTHER INFORMATION CONTACT:** Vladimir Ulyanov, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax: 206-231-3229.

**SUPPLEMENTARY INFORMATION:**

**Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all Airbus SAS Model A330-200 Freighter series airplanes, Model A330-200 and -300 series airplanes, and Model A340-200 and -300 series airplanes. The NPRM published in the Federal Register on August 31, 2018 (83 FR 44514). The NPRM was prompted by defects found during production tests of RAT units; investigation revealed that the defects were due to certain RAT hydraulic pumps having an alternative manufacturing process of the pump pistons. The NPRM proposed to require replacing any defective RAT hydraulic pump with a serviceable part and re-identifying the RAT module part number. We are issuing this AD to address low performance of the pump, which, following a total engine flame-out, or during a total loss of normal electrical power generation, could result in reduced control of the airplane.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2018-0062, dated March 20, 2018 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for all Airbus SAS Model

A330-200 Freighter series airplanes, Model A330-200 and -300 series airplanes, and Model A340-200 and -300 series airplanes. The MCAI states:

Four A330 RAT units were returned to the supplier due to low discharge pressure. These defects were detected during Airbus production tests. Subsequent investigations by the RAT manufacturer UTAS (formerly Hamilton Sundstrand) revealed that some RAT hydraulic pumps, [part number] P/N 5916430, were involved in an alternative manufacturing process of the pump pistons. This resulted in form deviations (rough surface finish and sharp edges), which caused excessive wear and damage to the bore where the pistons moved.

This condition, if not corrected, could lead to low performance of the pump, possibly resulting in reduced control of the aeroplane, particularly if occurring following a total engine flame out, or during a total loss of normal electrical power generation.

To address this potential unsafe condition, Airbus published [Service Bulletin] SB A330-29-3130 and SB A340-29-4098, providing instructions for identification and replacement of the affected parts.

For the reasons described above, this [EASA] AD requires replacement of the affected parts. This [EASA] AD also requires re-identification of the RAT module.

You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0764.

### **Comments**

We gave the public the opportunity to participate in developing this final rule. We have considered the comment received. The Air Line Pilots Association, International indicated its support for the NPRM.

## **New Service Information**

We received UTC Aerospace Systems Service Bulletin ERPS06M-29-22, Revision 2, dated May 24, 2018. We referred to UTC Aerospace Systems Service Bulletins ERPS06M-29-22, dated March 17, 2017; and Revision 1, dated June 27, 2017; as the appropriate sources of service information for identifying certain affected serial numbers and parts therein. Revision 2 of the service information adds Hamilton Sundstrand and Parker hydraulic pump part number (P/N) 5917648 (Parker P/N 4207905) and alternate Hamilton Sundstrand and Parker hydraulic pump P/N 5916485 (Parker P/N 4207903) to table 3 and table 6 for clarification.

We have added UTC Aerospace Systems Service Bulletin ERPS06M-29-22, Revision 2, dated May 24, 2018, to the Related Service Information under 1 CFR part 51 section of this AD as an appropriate source of service information. We have also added Revision 2 of the service information to the definitions specified in paragraph (g)(1) of this AD.

## **Conclusion**

We reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting this final rule with the change described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this final rule.

**Related Service Information under 1 CFR part 51**

Airbus SAS has issued Service Bulletins A330-29-3130 and A340-29-4098, both dated May 3, 2017. This service information describes procedures for replacing any affected RAT hydraulic pump with a serviceable part and re-identifying the RAT module part number. These documents are distinct since they apply to different airplane models.

UTC Aerospace Systems has issued Service Bulletins ERPS06M-29-22, dated March 17, 2017; Revision 1, dated June 27, 2017; and Revision 2, dated May 24, 2018. This service information identifies affected part and serial numbers for the RAT hydraulic pump. These documents are distinct since each one applies to different hydraulic pump part numbers.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

**Costs of Compliance**

We estimate that this AD affects 103 airplanes of U.S. registry. We estimate the following costs to comply with this AD:

**Estimated costs**

<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Up to 14 work-hours X \$85 per hour = Up to \$1,190	\$0	Up to \$1,190	Up to \$122,570

## **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.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes and associated appliances to the Director of the System Oversight Division.

## **Regulatory Findings**

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 above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, 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.

**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):

**2018-23-15 Airbus SAS:** Amendment 39-19502; Docket No. FAA-2018-0764; Product Identifier 2018-NM-074-AD.

**(a) Effective Date**

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

This AD affects AD 2016-14-01, Amendment 39-18582 (81 FR 44983, July 12, 2016; corrected August 16, 2016 (81 FR 51097, August 3, 2016)) (“AD 2016-14-01”).

**(c) Applicability**

This AD applies to the airplanes identified in paragraphs (c)(1), (c)(2), (c)(3), (c)(4), and (c)(5) of this AD, certificated in any category, all manufacturer serial numbers.

(1) Airbus SAS Model A330-223F and -243F airplanes.

(2) Airbus SAS Model A330-201, -202, -203, -223, and -243 airplanes.

(3) Airbus SAS Model A330-301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes.

(4) Airbus SAS Model A340-211, -212, -213 airplanes.

(5) Airbus SAS Model A340-311, -312, and -313 airplanes.

**(d) Subject**

Air Transport Association (ATA) of America Code 29, Hydraulic Power.

**(e) Reason**

This AD was prompted by defects found during production tests of ram air turbine (RAT) units; investigation revealed that the defects were due to certain RAT hydraulic pumps having an alternative manufacturing process of the pump pistons. We are issuing this AD to prevent low performance of the pump, which, following a total engine flame-out, or during a total loss of normal electrical power generation, could result in reduced control of the airplane.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Definitions for this AD**

(1) An affected part is a RAT hydraulic pump having part number (P/N) 5916430 and a serial number identified in UTC Aerospace Systems Service Bulletin ERPS06M-29-22, dated March 17, 2017; Revision 1, dated June 27, 2017; or Revision 2, dated May 24, 2018.

(2) A serviceable part is a RAT hydraulic pump identified as acceptable in Airbus Service Bulletin A330-29-3130 or A340-29-4098, both dated May 3, 2017, as applicable.

(3) Group 1 airplanes are airplanes on which an affected part is installed.

(4) Group 2 airplanes are airplanes on which no affected part is installed. A Model A330 airplane on which Airbus SAS Modification 206604 has been embodied in production is a Group 2 airplane, provided that the airplane remains in that configuration.

**(h) Replacement and Re-identification for Group 1 Airplanes**

(1) Within 18 months after the effective date of this AD, replace any affected RAT hydraulic pump with a serviceable part, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-29-3130 or A340-29-4098, both dated May 3, 2017, as applicable.

(2) Concurrently with the replacement required by paragraph (h)(1) of this AD, re-identify the part number of the RAT module, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-29-3130 or A340-29-4098, both dated May 3, 2017, as applicable.

Note 1 to paragraph (h)(2) of this AD: Airbus Service Bulletins A330-29-3130 and A340-29-4098, both dated May 3, 2017, provide guidance for re-identification of the part numbers of the RAT hydraulic pumps that are not affected, and the part numbers of the RAT modules that are not equipped with an affected hydraulic pump.

**(i) Compliance with AD 2016-14-01**

After re-identification of a RAT module on an airplane, as required by paragraph (h)(2) of this AD, the airplane remains compliant with the RAT module re-identification requirements of AD 2016-14-01 for that airplane.

**(j) Parts Installation Prohibition**

(1) For Group 1 airplanes: After replacement of any affected RAT hydraulic pump as required by paragraph (h)(1) of this AD, do not install any affected RAT hydraulic pump.

(2) For Group 2 airplanes: As of the effective date of this AD, do not install any affected RAT hydraulic pump.

**(k) Other FAA AD Provisions**

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, International Section, Transport Standards Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to the attention of the person identified in paragraph (l)(2) of this AD. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any

approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) *Contacting the Manufacturer:* For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or The European Aviation Safety Agency (EASA); or Airbus SAS's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

**(l) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2018-0062, dated March 20, 2018, for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0764.

(2) For more information about this AD, contact Vladimir Ulyanov, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax: 206-231-3229.

**(m) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Airbus Service Bulletin A330-29-3130, dated May 3, 2017.

(ii) Airbus Service Bulletin A340-29-4098, dated May 3, 2017.

(iii) UTC Aerospace Systems Service Bulletin ERPS06M-29-22, dated March 17, 2017.

(iv) UTC Aerospace Systems Service Bulletin ERPS06M-29-22, Revision 1, dated June 27, 2017.

(v) UTC Aerospace Systems Service Bulletin ERPS06M-29-22, Revision 2, dated May 24, 2018.

(3) For Airbus SAS service information identified in this AD, contact Airbus SAS, Airworthiness Office – EIAS, Rond-Point Emile Dewoitine No: 2, 31700 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; email [account.airworth-eas@airbus.com](mailto:account.airworth-eas@airbus.com); Internet <http://www.airbus.com>.

(4) For UTC Aerospace service information identified in this final rule, contact UTC Aerospace Systems Goodrich Corporation, Actuation Systems, Stafford Road, Fordhouses, Wolverhampton, West Midlands WV10 7EH, England; phone: +44 (0) 1902 624644938; fax: +44 (0) 1902 788100624947; email: [techpubs.wolverhampton@goodrich.com](mailto:techpubs.wolverhampton@goodrich.com); Internet: <https://www.customers.utcaerospacesystems.com>.

(5) You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(6) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:  
<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Des Moines, Washington, on November 8, 2018.

Chris Spangenberg,  
Acting Director,  
System Oversight Division,  
Aircraft Certification Service.

[FR Doc. 2018-25387 Filed: 11/21/2018 8:45 am; Publication Date: 11/23/2018]