



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2015-8465; Directorate Identifier 2014-NM-239-AD; Amendment 39-18535; AD 2016-11-08]**

**RIN 2120-AA64**

**Airworthiness Directives;** Airbus Defense and Space S.A. (Formerly Known as Construcciones Aeronauticas, S.A.)

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

**ACTION:** Final rule.

**SUMMARY:** We are superseding Airworthiness Directive (AD) 2001-12-18 for certain CASA Model CN-235 series airplanes. AD 2001-12-18 required modification of the rigging of the engine control cable assembly and replacement of either the entire engine control cable assembly or a segment of the control cables. This new AD would retain the requirements of AD 2001-12-18. This new AD also requires repetitive replacements of each power lever and condition lever Teleflex cable with a new or serviceable part, and removes airplanes from the applicability. This AD was prompted by reports of new occurrences of cable disruption on a certain part number; the disruption is caused by microcracks along the cable surface. We are issuing this AD to prevent fatigue of the engine control cables, leading to breakage of the cables, which could result in reduced controllability of the airplane.

**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 a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain other publication listed in this AD as of July 25, 2001 (66 FR 33014, June 20, 2001).

**ADDRESSES:** For service information identified in this final rule, contact EADS-CASA, Military Transport Aircraft Division (MTAD), Integrated Customer Services (ICS), Technical Services, Avenida de Aragón 404, 28022 Madrid, Spain; telephone +34 91 585 55 84; fax +34 91 585 55 05; email MTA.TechnicalService@casa.eads.net; Internet <http://www.eads.net>. 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. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-8465.

#### **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-2015-8465; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments

received, and other information. The address for the Docket Office (telephone 800-647-5527) is 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 20590.

**FOR FURTHER INFORMATION CONTACT:** Shahram Daneshmandi, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1112; fax 425-227-1149.

**SUPPLEMENTARY INFORMATION:**

**Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2001-12-18, Amendment 39-12274 (66 FR 33014, June 20, 2001) (“AD 2001-12-18”). AD 2001-12-18 applied to certain CASA Model CN-235 series airplanes. The NPRM published in the Federal Register on January 19, 2016 (81 FR 2783) (“the NPRM”).

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Airworthiness Directive 2014-0262, dated December 5, 2014 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Airbus Defense and Space S.A. Model CN-235-100 and -200 airplanes. The MCAI states:

Three occurrences of cable disruption were reported in 1999. The failed parts, having a part number (P/N) 7-44728-20, were part of the engine control system assembly P/N 7-44728-12. Two cables were connected to the Power Lever and one cable to the Condition Lever control. Service records of the affected parts showed that each cable accumulated more than 14,000 flight cycles (FC).

The subsequent investigation determined that the disruption was attributed to fatigue related crack.

This condition, if not corrected, could lead to failure of the engine control system resulting in a loss of the affected engine control.

Prompted by this unsafe condition, DGAC [Dirección General de Aviación Civil] Spain issued AD 03/00 [which corresponds to FAA AD 2001-12-18] to require rigging of the throttle stops, and one-time replacement of the affected engine control cable assembly (P/N 7-44728-12), or the affected cable (P/N 7-44728-20) before exceeding 12,000 FC.

After that [DGAC Spain] AD was issued, a new occurrence of cable (P/N 72830-20) disruption was reported. In that case, the affected cable was part of the Condition Lever control and had accumulated 8,497 flight hours (FH) and 8,858 FC. Fractographic analysis of the affected cable identified that the fatigue nucleation seemed to have been induced by microcracks along the cable surface. Additionally, another case of control cable (P/N 72830-20) failure was reported, where the affected part accumulated 9,936 FH and 10,552 FC and was part of the Power Lever control. Investigation of the latter case identified again a fatigue nucleation to be the cause of the cable failure.

To address this potentially unsafe condition, Airbus Military issued Alert Operators Transmission (AOT) AOT-CN235-76-0001 to provide a repetitive replacement interval and instructions.

For the reasons described above, this [EASA] AD retains the requirements of DGAC Spain AD No. 03/00, which is superseded, but requires repetitive replacement [at reduced thresholds] of the affected Teleflex cables.

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-2015-8465.

### **Comments**

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM or on the determination of the cost to the public.

### **Clarification of Applicability**

We have clarified the Applicability in paragraph (c) of this AD. For Model CN-235 airplanes, the affected serial numbers (S/N) are C-001 through C-015 inclusive. We have removed S/N C-074 for Model CN-235 airplanes because there are no Model CN-235 airplanes with that serial number.

For Model CN-235-100 and -200 airplanes, the affected serial numbers are C-016 through C-073 inclusive. We have removed S/Ns C-001 through C-015 inclusive and C-074 for CN-235-100 and -200 airplanes because there are no Model CN-235-100 and -200 with those serial numbers.

### **Conclusion**

We reviewed the available data and determined that air safety and the public interest require adopting this AD with the changes 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 correcting 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 AD.

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

Airbus Defense and Space S.A. has issued Airbus Military Alert Operators Transmission AOT-CN235-76-0001, dated May 27, 2014. This service information describes repetitive replacements of each power lever and condition lever Teleflex cable having a certain part number with a new or serviceable part. This service information also provides a new life limit of 5,000 flight cycles. 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 3 airplanes of U.S. registry.

The rigging required by AD 2001-12-18, and retained in this AD takes about 8 work-hours per product, at an average labor rate of \$85 per work-hour. Based on these figures, the estimated cost of the rigging that was required by AD 2001-12-18 is \$680 per product.

The replacement required by AD 2001-12-18, and retained in this AD takes about 47 work-hours per product, at an average labor rate of \$85 per work-hour. Required parts

cost about \$1,444 per product. Based on these figures, the estimated cost of the replacement that was required by AD 2001-12-18 is \$5,439 per product.

We also estimate that it would take about 47 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Required parts would cost about \$6,480 per product. Based on these figures, we estimate the cost of this AD on U.S. operators to be \$31,425, or \$10,475 per product.

### **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 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 removing Airworthiness Directive (AD) 2001-12-18, Amendment 39-12274 (66 FR 33014, June 20, 2001), and adding the following new AD:

**2016-11-08 Airbus Defense and Space S.A. (formerly known as Construcciones Aeronauticas, S.A.):** Amendment 39-18535; Docket No. FAA-2015-8465; Directorate Identifier 2014-NM-239-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 replaces AD 2001-12-18, Amendment 39-12274 (66 FR 33014, June 20, 2001) (“AD 2001-12-18”).

**(c) Applicability**

This AD applies to Airbus Defense and Space S.A. (formerly known as Construcciones Aeronauticas, S.A.) Model CN-235 airplanes, serial numbers C-001 through C-015 inclusive; and Model CN-235-100 and -200 airplanes, serial numbers C-016 through C-073 inclusive; certificated in any category.

**(d) Subject**

Air Transport Association (ATA) of America Code 76, Engine Controls.

**(e) Reason**

This AD was prompted by reports of new occurrences of cable disruption on a certain part number; the disruption is caused by microcracks along the cable surface. We are issuing this AD to prevent fatigue of the engine control cables, leading to breakage of the cables, which could result in reduced controllability of the airplane.

**(f) Compliance**

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

**(g) Retained Action for the Power Lever and Condition Lever Control Stops, with No Changes**

This paragraph restates the requirements of paragraph (a) of AD 2001-12-18.

Within 15 days after July 25, 2001 (the effective date of AD 2001-12-18): Rig the power lever and condition lever control stops, in accordance with CASA COM 235-140, Revision 01, dated March 21, 2000.

**(h) New Requirement of this AD: Replacement**

At the applicable compliance times specified in table 1 to paragraph (h) of this AD: Replace each power lever and condition lever Teleflex cable having part number (P/N) 72830-20 with a new or serviceable part, in accordance with Airbus Military Alert Operators Transmission AOT-CN235-76-0001, dated May 27, 2014. Repeat the replacement thereafter at intervals not to exceed an accumulation of 5,000 total flight cycles on each Teleflex cable having P/N 72830-20.

**Table 1 to Paragraph (h) of this AD – Replacement Compliance Time**

<b>Total flight cycles accumulated on the Teleflex cable having P/N 72830-20 (since first installation on an airplane) as of the effective date of this AD</b>	<b>Compliance Time</b>
Fewer than 4,700 total flight cycles	Before accumulating 5,000 total flight cycles.
Equal to or more than 4,700 total flight cycles, but fewer than 6,000 total flight cycles	Within 300 flight cycles or 12 months after the effective date of this AD, whichever occurs first.
Equal to or more than 6,000 total flight cycles, but fewer than 7,000 total flight cycles	Within 200 flight cycles or 6 months after the effective date of this AD, whichever occurs first.
Equal to or more than 7,000 total flight cycles	Within 100 flight cycles or 3 months after the effective date of this AD, whichever occurs first.

**(i) Parts Installation Limitations**

As of the effective date of this AD, no person may install, on any airplane, a Teleflex cable having P/N 72830-20, unless the cable has accumulated fewer than 5,000 total flight cycles since its first installation on an airplane.

**(j) Other FAA AD Provisions**

The following provisions also apply to this AD:

**(1) Alternative Methods of Compliance (AMOCs):** The Manager, International Branch, ANM-116, Transport Airplane Directorate, 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 ATTN: Shahram Daneshmandi, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1112; fax 425-227-1149. 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. The AMOC approval letter must specifically reference this AD.

**(2) Contacting the Manufacturer:** As of the effective date of this AD, 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 Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety

Agency (EASA); or EADS CASA's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

**(k) Related Information**

Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2014-0262, dated December 5, 2014, 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-2015-8465.

**(l) 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.

(3) The following service information was approved for IBR on [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(i) Airbus Military Alert Operators Transmission AOT-CN235-76-0001, dated May 27, 2014.

(ii) Reserved.

(4) The following service information was approved for IBR on July 25, 2001 (66 FR 33014, June 20, 2001).

(i) CASA COM 235-140, Revision 01, dated March 21, 2000.

(ii) Reserved.

(5) For service information identified in this AD, contact EADS-CASA, Military Transport Aircraft Division (MTAD), Integrated Customer Services (ICS), Technical Services, Avenida de Aragón 404, 28022 Madrid, Spain; telephone +34 91 585 55 84; fax +34 91 585 55 05; email [MTA.TechnicalService@casa.eads.net](mailto:MTA.TechnicalService@casa.eads.net); Internet <http://www.eads.net>.

(6) You may view this 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.

(7) 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 Renton, Washington, on May 20, 2016.

Victor Wicklund,  
Acting Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 2016-12594 Filed: 5/31/2016 8:45 am; Publication Date: 6/1/2016]