Federal Aviation Administration

14 CFR Part 39


RIN 2120–AA64

Airworthiness Directives;
Construcciones Aeronauticas, S.A.

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for the products listed above. This proposed AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product.

The FAA has been notified by the Joint Aviation Authorities (JAA) that the European Aviation Safety Agency (EASA), which is the Technical Agent for the European Community, has issued EASA Airworthiness Directives Directive 2007–0007, dated January 9, 2007, to correct an unsafe condition for the specified products. The MCAI states:

The proposed AD would require actions that are intended to address the unsafe condition described in the MCAI.

DATES: We must receive comments on this proposed AD by November 16, 2007.

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

• Fax: (202) 493–2251.

• Mail: U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue, SE., Washington, DC 20590.

• Hand Delivery: Room W12–140 on the ground floor of the West Building, 1200 New Jersey Avenue, SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

• Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments.

Examinig 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 proposed AD, the regulatory evaluation, any comments received, 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 FURTHER INFORMATION CONTACT:


SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA–2007–0048; Directorate Identifier 2007–NM–181–AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to http://dms.dot.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA Airworthiness Directive 2007–0007, dated January 9, 2007 (referred to after this as “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

Subsequent to accidents involving Fuel Tank System explosions in flight * * * and on ground, * * * Special Federal Aviation Regulation 88 (SFAR 88) * * * required a safety review of the aircraft Fuel Tank System * * *.

Fuel Airworthiness Limitations is items arising from a systems safety analysis that have been shown to have failure mode(s) associated with an ‘‘unsafe condition’’ * * *.

These are identified in Failure Conditions for which an unacceptable probability of ignition risk could exist if specific tasks and/or practices are not performed in accordance with the manufacturers’ requirements.

The proposed AD would require actions that are intended to address the unsafe condition described in the MCAI.

DATES: We must receive comments on this proposed AD by November 16, 2007.

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

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Amendments 21
Requirements
Review, Flammability Reduction and
Airplane Fuel Tank System Design
actions was set at 01
published compliance dates (see EASA
committed themselves to the EASA
harmonised design review results. On a
global scale the TC (type certificate) holders
committed themselves to the EASA
published compliance dates (see EASA
policy statement). The EASA policy
statement has been revised in March 2006:
The date for the unsafe related
actions was set at 01–07–2006.
Fuel Airworthiness Limitations are items
arising from a systems safety analysis that
have been shown to have failure mode(s)
associated with an ‘unsafe condition’ as
defined in 14 CFR 121.391 (SFAR 88–
Mandatory Action Decision Criteria’.
These are identified in Failure Conditions for
which an unacceptable probability of ignition
risk could exist if specific tasks and/or
practices are not performed in accordance
with the manufacturers’ requirements.
This EASA Airworthiness Directive
mandates the Fuel System Airworthiness
Limitations (comprising maintenance/
inspection tasks and Critical Design
Configuration Control Limitations (CDCCL))
for the type of aircraft, that resulted from the
design reviews and the JAA recommendation
and EASA policy statement mentioned
above.
The corrective action is revising the
Airworthiness Limitations Section of
the Instructions for Continued
Airworthiness to incorporate new
limitations for fuel tank systems. You
may obtain further information by
examining the MCAI in the AD docket.
The FAA has examined the
underlying safety issues involved in fuel
tank explosions on several large
transport airplanes. Including the
adequacy of existing regulations, the
service history of airplanes subject to
those regulations, and existing
maintenance practices for fuel tank
systems. As a result of those findings,
we issued a regulation titled ‘Transport
Airplane Fuel Tank System Design
Review, Flammability Reduction and
Maintenance and Inspection
Requirements’ (66 FR 23086, May 7,
2001). In addition to new airworthiness
standards for transport airplanes and
new maintenance requirements, this
rule included Special Federal Aviation
Regulation 14 CFR 88 (SFAR 88–
Amendment 21–78, and subsequent
Amendments 21–82 and 21–83).

Among other actions, SFAR 88
requires certain type design (i.e., type
certificate (TC) and supplemental type
certificate (STC)) holders to substantiate
that their fuel tank systems can prevent
ignition sources in the fuel tanks. This
requirement applies to type design
holders for large turbine-powered
transport airplanes and for subsequent
modifications to those airplanes. It
requires them to perform design reviews
and to develop design changes and
maintenance procedures if their designs
do not meet the new fuel tank safety
standards. As explained in the preamble
to the rule, we intended to adopt
airworthiness directives to mandate any
changes found necessary to address
unsafe conditions identified as a result
of these reviews.
In evaluating these design reviews, we
have established four criteria intended
to define the unsafe conditions
associated with fuel tank systems that
require corrective actions. The
percentage of operating time during
which fuel tanks are exposed to
flammable conditions is one of these
criteria. The other three criteria address
the failure types under evaluation:
Single failures, single failures in
combination with a latent condition(s),
and in-service failure experience. For all
four criteria, the evaluations included
consideration of previous actions taken
that may mitigate the need for further
action.
The Joint Aviation Authorities (JAA)
have issued a regulation that is similar to
SFAR 88. (The JAA is an associated
body of the European Civil Aviation
Conference (ECAC) representing the
civil aviation regulatory authorities of
a number of European States who have
agreed to co-operate in developing and
implementing common safety regulatory
standards and procedures.) Under this
regulation, the JAA stated that all
members of the ECAC that hold type
certificates for transport category
airplanes are required to conduct a
design review against explosion risks.
We have determined that the actions
identified in this AD are necessary to
reduce the potential of ignition sources
inside fuel tanks, which, in combination
with flammable fuel vapors, could result
in fuel tank explosions and consequent
loss of the airplane.

Relevant Service Information
European Aeronautical Defense and
Space Company (EADS) CASA has
issued CN–235/295 Technical
Document DT–00–C00–05001, Issue C,
dated October 2006. The actions
described in the MCAI in order to follow FAA
policies. Any such differences are
highlighted in a Note within the
proposed AD.

Costs of Compliance
Based on the service information, we
estimate that this proposed AD would
affect 8 products of U.S. registry. We
also estimate that it would take about 1
work-hour per product to comply with
the basic requirements of this proposed
AD. The average labor rate is $80 per
work-hour. Based on these figures, we
estimate the cost of the proposed AD on
U.S. operators to be $640, or $80 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 civilian 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 proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 this proposed regulation:
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); and
3. 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 a regulatory evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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 AD:

Construcciones Aeronauticas, S.A. (CASA):


Comments Due Date

(a) We must receive comments by November 16, 2007.

Affected ADs

(b) None.

Applicability

(c) This AD applies to all CASA Model CN–235, CN–235–100, CN–235–200, CN–235–300, and C–295 airplanes; certificated in any category.

Note 1: This AD requires revisions to certain operator maintenance documents to include new inspections. Compliance with these inspections is required by 14 CFR 91.403(c). For airplanes that have been previously modified, altered, or repaired in the areas addressed by these inspections, the operator may not be able to accomplish the inspections described in the revisions. In this situation, to comply with 14 CFR 91.403(c), the operator must request approval for an alternative method of compliance according to paragraph (g) of this AD. The request should include a description of changes to the required inspections that will ensure the continued operational safety of the airplane.

Subject

(d) Air Transport Association (ATA) of America Code 28: Fuel.

Reason

(e) The mandatory continuing airworthiness information (MCAI) states: Subsequent to accidents involving Fuel Tank System explosions in flight * * * and on ground, the FAA published Special Federal Aviation Regulation 88 (SFAR 88) in June 2001. SFAR 88 required a safety review of the aircraft Fuel Tank System to determine that the design meets the requirements of FAR (Federal Aviation Regulation) § 25.901 and § 25.981(a) and (b). A similar regulation has been recommended by the JAA (Joint Aviation Authorities) to the European National Aviation Authorities in JAA letter 04/00/02/ 07/03–L024 of 3 February 2003. The review was requested to be mandated by NAA’s (National Aviation Authorities) using JAR (Joint Aviation Regulation) § 25.901(c), § 25.1309.

In August 2005 EASA published a policy statement on the process for developing instructions for maintenance and inspection of Fuel Tank System ignition source prevention (EASA D 2005/CPR0, www.easa.eu.int/home/ cert_policy_statements_en.html) that also included the EASA expectations with regard to compliance times of the corrective actions on the unserviceable part of the harmonised design review results. On a global scale the TC (type certificate) holders committed themselves to the EASA published compliance dates (see EASA policy statement). The EASA policy statement has been revised in March 2006: the date of 31–12–2005 for the unserviceable related actions was set at 01–07–2006. Fuel Airworthiness Limitations are items arising from a systems safety analysis that have been shown to have failure mode(s) associated with an ‘unsafe condition’ as defined in FAA’s memo 2003–112–15 ‘SFAR 88—Mandatory Action Decision Criteria’. These are identified in Failure Conditions for which an unacceptable probability of ignition risk could exist if specific tasks and/or practices are not performed in accordance with the manufacturers’ requirements. This EASA Airworthiness Directive mandates the Fuel System Airworthiness Limitations (comprising maintenance/inspection tasks and Critical Design Configuration Control Limitations (CDCCL)) for the type of aircraft, that resulted from the design reviews and the JAA recommendation and EASA policy statement mentioned above.

The corrective action is revising the Airworthiness Limitations Section of the Instructor for Continued Airworthiness to incorporate new limitations for fuel tank systems.

Actions and Compliance

(f) Unless already done, do the following actions:

(1) Within 3 months after the effective date of this AD, or before December 16, 2008, whichever occurs first, revise the Airworthiness Limitations section of the Instructions for Continued Airworthiness to incorporate the Fuel Airworthiness Limitation maintenance and inspection tasks as defined in European Aeronautic Defense and Space Company (EADS) CASA CN–235/C295 Technical Document DT–0–C00–05001, Issue C, dated October 2006. For all tasks identified in Technical Document DT–0–C00–05001, the initial compliance times start from the later of the times specified in paragraphs (f)(1)(i) and (f)(1)(ii) of this AD, and the repetitive inspections must be accomplished thereafter at the interval specified in Technical Document DT–0–C00– 05001, except as provided by paragraph (f)(3) of this AD.

(i) The effective date of this AD.

(ii) The date of issuance of the original Spanish standard airworthiness certificate or the date of issuance of the original Spanish export certificate of airworthiness.

(2) Within 6 months after the effective date of this AD, or before December 16, 2008, whichever occurs first, revise the Airworthiness Limitations section of the Instructions for Continued Airworthiness to include the CDCCL data contained in EADS CASA CN–235/C–295 Technical Document DT–0–C00–05001, Issue C, dated October 2006.

(3) Except as provided by paragraph (g) of this AD: After accomplishing the actions specified in paragraphs (f)(1) and (f)(2) of this AD, no alternative inspection, inspection intervals, or CDCCLs may be used.

FAA AD Differences

Note 2: This AD differs from the MCAI and/or service information as follows: No differences.

Other FAA AD Provisions

(g) The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, ANM–116, International Branch, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Shahram Daneshmandi, Aerospace Engineer, International Branch, ANM–116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW, Renton, Washington 98057–3350; telephone (425) 227–1112; fax (425) 227–1149. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.
SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for certain Boeing Model 737–600, –700, –700C, –800, and –900 series airplanes. This proposed AD would require replacing the drain tube assemblies and support clamps on the aft fairings of the engine struts. This proposed AD results from reports of failure of the drain tube assembly and clamp on the aft fairings of an engine strut. We are proposing this AD to prevent failure of the drain tube assemblies and clamps on the aft fairings of the engine struts. Such a failure could allow leaked flammable fluids in the drain systems to discharge on to the heat shields of the aft fairings of the engine struts, which could result in an undetected and uncontrollable fire.

DATES: We must receive comments on this proposed AD by December 3, 2007.

ADDRESSES: You may send comments by any of the following methods:
• Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments.
• Fax: 202–493–2251.
• Mail: U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue, SE., Washington, DC 20590.

Examining the AD Docket
You may examine the AD docket on the Internet at http://www.regulations.gov. 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 proposed AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (telephone 800–647–5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT:

SUPPLEMENTARY INFORMATION:
Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA–2007–0049; Directorate Identifier 2007–NM–168–AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to http://www.regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion
We have received reports of failure of the drain tube assembly and support clamp on the aft fairing of an engine strut. In most of the reports, the failure occurred at the brazed joint between the tube and the drain cast fitting. Failure of the drain tube assembly and support clamp on the aft fairing of an engine strut, if not corrected, could allow leaked flammable fluids in the drain system to discharge on to the heat shield of the aft fairing of an engine strut, which may result in an undetected and uncontrollable fire.

Related Service Information
We have reviewed Boeing Special Attention Service Bulletin 737–54–1043, dated May 2, 2007. The service information describes procedures for replacing the drain tube assemblies and support clamps on the aft fairings of the struts of the number 1 and number 2 engines with new drain tube assemblies and new support clamps. Accomplishing the actions specified in the service information is intended to adequately address the unsafe condition.

FAA’s Determination and Requirements of the Proposed AD
We have evaluated all pertinent information and identified an unsafe condition that is likely to exist or develop on other airplanes of this same type design. For this reason, we are proposing this AD, which would require accomplishing the actions specified in the service information described previously.

Costs of Compliance
There are about 2,058 airplanes of the affected design in the worldwide fleet. This proposed AD would affect about 721 airplanes of U.S. registry. The proposed actions would take about 4 work hours per airplane, at an average labor rate of $80 per work hour. Required parts would cost about $2,351 per airplane. Based on these figures, the estimated cost of the proposed AD for U.S. operators is $1,925,791, or $2,671 per airplane.

Authority for This Rulemaking
Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I,