Document No.	Pages	Revi-sion	Date
54H60–61–A133 ..... Total Pages: 9.	1–9	1	May 29, 1997.

This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Hamilton Standard, Attn: Publications Mail Stop 6–B12, One Hamilton Rd., Windsor Locks, CT 06096–1010; telephone (860) 654–6876, fax (860) 654–6906. Copies may be inspected at the FAA, New England Region, Office of the Assistant Chief Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(f) This amendment becomes effective on July 28, 1997.

Issued in Burlington, Massachusetts, on June 13, 1997.

Jay J. Pardee,

Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. 97–16281 Filed 6–26–97; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 96–ANE–38; Amendment 39–10057; AD 97–13–10]

RIN 2120–AA64

Airworthiness Directives; General Electric Aircraft Engines CF700 Series Turbofan Engines

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to General Electric Aircraft Engines CF700 series turbofan engines, that requires replacement of existing fan guards with new, improved fan guards. This amendment is prompted by a report of uncontained fan blades which separated from the engine during an overspeed. The actions specified by this AD are intended to prevent an overspeed of the aft fan disk from resulting in an uncontained engine failure and damage to the aircraft.

DATES: Effective August 26, 1997.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of August 26, 1997.

ADDRESSES: The service information referenced in this AD may be obtained from GE Aircraft Engines, 1000 Western Ave., Lynn, MA 01910; telephone (617) 594–3140, fax (617) 594-4805. This information may be examined at the Federal Aviation Administration (FAA), New England Region, Office of the Assistant Chief Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Dave Keenan, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803–5299; telephone (617) 238–7139, fax (617) 238–7199.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to General Electric Aircraft Engines (GE) CF700 series turbofan engines was published in the **Federal Register** on February 19, 1997 (62 FR 7387). That action proposed to require, within two years after the effective date of this AD, replacement of existing fan guards with new, improved fan guards in accordance with GE Service Bulletin (SB) No. (CF700) 72–154, dated December 20, 1996.

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received.

Eight commenters state that the AD should be withdrawn, since there has only been one fan guard related uncontained failure event in 30 years with 10 million operating hours fleet-wide. The FAA does not concur. Implicit in the comment is the assumption that since there has been only one such event to date, that necessarily means that there can be no other like events until the fleet has operated for another 30 years and 10 million hours. As a result of the uncontained failure and subsequent crash, the FAA has identified a new critical failure mode in the GE CF700 engine. This mode, exacerbated by the CF700 having a passive aft fan without overspeed protection, can result in an unsafe condition that needs addressing through an AD. The FAA has, therefore, determined that safety in air commerce requires that this new failure mode is addressed through the issuance of this AD.

Seven commenters state that the AD should be withdrawn due to the excessive financial burden of compliance. The FAA does not concur. The FAA is aware of the high cost of the improved containment guards; however, the basis for the AD is that an unsafe condition has been identified and needs to be addressed. During the certification of the affected engine's type design, the FAA determined that the design met applicable airworthiness requirements that established a cost beneficial level of safety. The FAA's current finding, that an unsafe condition exists requiring an AD, reflects only that in order to maintain the level of safety already established by the regulations at the time of type certification operators must perform certain required actions. Since these requirements do not add an additional regulatory burden, but merely return the affected engines to that level of safety, a full cost-benefit analysis is not required. The FAA has provided a cost analysis, and General Electric has reduced the cost of these fan guards for early orders to help offset this burden on operators.

Six commenters state that the AD should be withdrawn since the FAA and NTSB did not directly participate in the accident investigation. The FAA does not concur. Although the FAA and NTSB did not participate directly in the investigation, the FAA worked closely with representatives from GE's Flight Safety office, who were involved in the investigation with the French Authorities. This investigation involved hardware inspections, witness reports, and cockpit voice recorder information.

Two commenters state that the AD should be withdrawn since the increased weight of containment hardware would reduce the payload capacity and range of the aircraft. The FAA does not concur. The FAA has determined that the actions required in this AD are necessary to maintain the level of safety established by the certification basis at the time of type certification. This action is consistent with the FAA's statutory mandate to ensure safety in air commerce. While the FAA need not consider indirect costs, such as any reduction in the payload capacity or range of aircraft on

which the affected engines are installed, the FAA finds that the increase of 80 pounds of aircraft weight is more than offset by the need to address this unsafe condition, which could result in an overspeed of the aft fan disk, an uncontained engine failure, and damage to the aircraft.

One commenter states that the AD should be withdrawn since the new aft fan guard will not prevent an overspeed of the engine in a similar circumstance. The FAA does not concur. The new fan guard is not intended to prevent an overspeed for occurring, but to prevent uncontained debris resulting from an overspeed of the fan from damaging the aircraft. While preventing fan overspeed might constitute one method of addressing this unsafe condition, the FAA finds that requiring the installation of a new fan guard offers the best method for addressing this problem on this engine, considering the required design changes, availability of parts, difficulty of making the necessary engine modifications, and timeliness of completion.

One commenter states that this containment requirement should be imposed on every turbofan engine currently in service, as every turbofan engine in service has the same probability of experiencing a similar event. The FAA does not concur. The GE CF700 engine is a unique design in that it has a passive aft fan module without any overspeed protection. The FAA is not aware of any other similar type design engine that could exhibit such a failure condition.

One commenter states that the correct name for the Marcel Avions Dassault Falcon 20 aircraft listed in the applicability paragraph should be Dassault-Aviation Fan Jet Falcon 20. The FAA concurs and has revised this AD accordingly.

Since issuance of the NPRM, the FAA has received updated economic information from the manufacturer, decreasing the cost of parts to reflect current pricing. The FAA has revised the economic analysis of this final rule accordingly.

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule with the changes described previously. The FAA has determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

There are approximately 826 engines of the affected design in the worldwide fleet. The FAA estimates that 414 engines installed on aircraft of U.S. registry will be affected by this AD, that it will take approximately 20 work hours per engine to accomplish the required actions, and that the average labor rate is $60 per work hour. Required parts will cost approximately $40,000 per engine. Based on these figures, the total cost impact of the AD on U.S. operators is estimated to be $17,056,800.

The regulations adopted herein will not have substantial direct effects 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. Therefore, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this action (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); 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. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the rules docket at the location provided under the caption **ADDRESSES.**

List of Subjects in 14 CFR Part 39

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

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (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. Section 39.13 is amended by adding the following new airworthiness directive:

99–13–10 General Electric Aircraft Engines: Amendment 39–10057. Docket 96–ANE–38.

Applicability: General Electric Aircraft Engines (GE) CF700 series turbofan engines, installed on but not limited to Dassault-Aviation Fan Jet Falcon 20, and Sabreliner NA265 series aircraft.

Note 1: This airworthiness directive (AD) applies to each engine identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For engines that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent an overspeed of the aft fan disk from resulting in an uncontained engine failure and damage to the aircraft, accomplish the following:

(a) Within 2 years after the effective date of this AD, replace existing fan guards with new, improved fan guards, in accordance with GE Service Bulletin (SB) No. (CF700) 72–154, dated December 20, 1996.

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Engine Certification Office. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Engine Certification Office.

Note 2: Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the Engine Certification Office.

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the aircraft to a location where the requirements of this AD can be accomplished.

(d) The actions required by this AD shall be done in accordance with the following GE SB:

Document No.	Pages	Date
(CF700) 72–154 Total Pages: 9.	1–9	Dec. 20, 1996.

This incorporation by reference was approved by the Director of the **Federal Register** in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from GE Aircraft Engines, 1000 Western Ave., Lynn, MA 01910; telephone (617) 594–3140, fax (617) 594–4805. Copies may be inspected at the FAA, New England Region, Office of the Assistant Chief Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street NW., suite 700, Washington, DC.

(e) This amendment becomes effective on August 26, 1997.

Issued in Burlington, Massachusetts, on June 11, 1997.

Jay J. Pardee,

Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. 97–16695 Filed 6–26–97; 8:45 am]

BILLING CODE 4910–13–U

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 97–NM–28–AD; Amendment 39–10060; AD 97–14–03]

RIN 2120–AA64

Airworthiness Directives; Boeing Model 737–100, –200, –300, –400, and –500 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to all Boeing Model 737–100, –200, –300, –400, and –500 series airplanes, that requires installation of a newly designed rudder-limiting device and yaw damper system. This amendment is prompted by a report indicating that a full rudder input, either commanded or uncommanded, could result in a rapid roll upset; and by reports of malfunctions of the yaw damper system. The actions specified by this AD are intended to prevent excessive rudder authority and consequent reduced controllability of the airplane; and malfunctions of the yaw damper system, which could result in sudden uncommanded yawing of the airplane and consequent injury to passengers and crewmembers.

EFFECTIVE DATE: August 1, 1997.

ADDRESSES: Information concerning this amendment may be obtained from or examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington.

FOR FURTHER INFORMATION CONTACT: T. Tin Truong, Aerospace Engineer, Systems and Equipment Branch, ANM–130S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055–4056; telephone (425) 227–2552; fax (425) 227–1181.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to all Boeing Model 737–100, –200, –300, –400, and –500 series airplanes was published in the **Federal Register** on March 14, 1997 (62 FR 12121). That action proposed to require installation of a newly designed rudder-limiting device and yaw damper system.

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received.

Support for the Proposal

Three commenters support the proposed AD.

Request To Revise Discussion Section of Proposal

One commenter requests that the second paragraph of the Discussion section that appeared in the preamble to the proposed rule be revised to remove any reference to wear of any bearing in the yaw damper coupler as the cause of the identified unsafe condition. The commenter states that its evaluations of the rate gyroscope from uncommanded yaw incidents do not support the conclusion that rudder kicks can be caused by wear of rotor bearings in the yaw damper coupler; therefore this commenter does not support replacement of the existing yaw damper couplers. The commenter also suggests that the word ''gimbal'' (in reference to the bearings) should be referenced in the proposal in lieu of ''rotor.''

The FAA concurs partially. The FAA is aware of a number of incidents of failure of the rate gyroscope of the yaw damper coupler as a result of wear of the rotor bearing. Such wear causes increased vibration within the yaw damper coupler, which can lead to brinnels (i.e., dents) in the gimbal bearings. This situation can cause faults in the gyroscope at certain input rates, which could result in the identified unsafe condition. Therefore, while wear of the rotor bearing alone does not cause rudder kicks, it does contribute to the unsafe condition.

The FAA agrees that the word ''gimbal'' could be referenced in place of ''rotor.'' However, the Discussion section of a proposal does not reappear in a final rule. Therefore, the FAA finds that no change to this final rule is necessary.

Request To Extend the Comment Period of the Proposal

Several commenters request an extension of the public comment period for the proposed AD. These commenters state that such an extension will enable operators to better understand the issues surrounding the proposed actions and to review material that Boeing will present. The FAA does not concur. The FAA is unaware of material from Boeing and, therefore, is unable to extend the public comment period based on this request. Further, the FAA finds that to delay issuance of this final rule would be inappropriate, since the FAA has determined that an unsafe condition exists and the actions required by this AD are necessary to ensure continued safety.

Request To Delay Issuance of Final Rule

One commenter requests that the FAA delay issuance of the final rule until Boeing can release the service bulletins containing procedures for installation of a newly designed yaw damper system and rudder-limiting device. The commenter states that neither Boeing nor its suppliers have completed engineering the proposed design changes; therefore, the commenter is unable to provide meaningful or technically relevant comments regarding the actions specified in the proposed AD.

In light of the critical nature of the addressed unsafe condition, the FAA does not consider that delaying this action until after the release of Boeing's planned service bulletins is warranted. Furthermore, the FAA disagrees with the commenter's assertion that it is unable to submit meaningful comments on this AD until Boeing's design changes are completed. On the contrary, the proposed AD provided extensive information on the nature of the unsafe condition, the proposed corrective actions, and the proposed compliance times for those actions. The only information not provided (because it was not available) was reference to a specific service document providing details on specific methods for accomplishing the proposed actions.

The FAA considers that this proposed AD has complied fully with the requirements of the Administrative Procedure Act to provide the public with a reasonable opportunity to comment by including in the proposal ''either the terms or substance of the proposed rule or a description of the subjects and issues involved.''

Requests To Reduce Compliance Time for Modification

One commenter requests a revision to the proposed compliance time of 3 years for accomplishment of the requirements of this proposed AD. The commenter requests that the requirements proposed by the AD be accomplished by