§ 1238.3 Annual stress test.
(a) * * *
(1) Shall complete an annual stress test of itself based on its data as of December 31 of the preceding calendar year;
* * * * *
(b) Scenarios provided by FHFA. In conducting its annual stress tests under this section, each regulated entity must use scenarios provided by FHFA, which shall be generally consistent with and comparable to those established by the FRB, that reflect a minimum of three sets of economic and financial conditions, including a baseline, adverse, and severely adverse scenario. Not later than 30 days after the FRB publishes its scenarios, FHFA will issue to all regulated entities a description of the baseline, adverse, and severely adverse scenarios that each regulated entity shall use to conduct its annual stress tests under this part.
* * * * *
§ 1238.5 Required report to FHFA and the FRB of stress test results and related information.
(a) Report required for stress tests. On or before May 20 of each year, the Enterprises must report the results of the stress tests required under § 1238.3 to FHFA, and to the FRB, in accordance with paragraph (b) of this section; and on or before August 31 of each year, the Banks must report the results of the stress tests required under § 1238.3 to FHFA, and to the FRB, in accordance with paragraph (b) of this section;
* * * * *
3. Amend § 1238.5 by revising paragraph (a) to read as follows:
§ 1238.5 Required report to FHFA and the FRB of stress test results and related information.
(a) Report required for stress tests. On or before May 20 of each year, the Enterprises must report the results of the stress tests required under § 1238.3 to FHFA, and to the FRB, in accordance with paragraph (b) of this section; and on or before August 31 of each year, the Banks must report the results of the stress tests required under § 1238.3 to FHFA, and to the FRB, in accordance with paragraph (b) of this section;
* * * * *
§ 1238.7 Publication of results by regulated entities.
(a) Public disclosure of results required for stress tests of regulated entities. The Enterprises must disclose publicly a summary of the stress test results for the severely adverse scenario not earlier than August 1 and not later than August 15 of each year. Each Bank must disclose publicly a summary of the stress test results for the severely adverse scenario not earlier than November 15 and not later than November 30 of each year. The summary may be published on the regulated entity’s Web site or in any other form that is reasonably accessible to the public;
* * * * *
Melvin L. Watt,
Director, Federal Housing Finance Agency.
[FR Doc. 2015–20613 Filed 8–20–15; 8:45 am]
BILLING CODE 8070–01–P
Current part 23 airworthiness regulations do not contain appropriate safety standards for an Auto Throttle System (ATS) installation; therefore, special conditions are required to establish an acceptable level of safety. Part 25 regulations contain appropriate safety standards for these systems, making the intent for this project to apply the language in § 25.1329 for the auto throttle, while substituting § 23.1309 and § 23.143 in place of the similar part 25 regulations referenced in § 25.1329. In addition, malfunction of the ATS to perform its intended function shall be evaluated per the Loss of Thrust Control (LOTC) criteria established under part 33 for electronic engine controls. An analysis must show that no single failure or malfunction or probable combinations of failures of the ATS will permit the LOTC probability to exceed those established under part 33 for an electronic engine control.

Type Certification Basis

Under the provisions of 14 CFR 21.17, Cirrus must show that the Model SF50 meets the applicable provisions of part 23, as amended by amendments 23–1 through 23–62 thereto.

If the Administrator finds that the applicable airworthiness regulations (i.e., 14 CFR part 23) do not contain adequate or appropriate safety standards for the SF50 because of a novel or unusual design feature, special conditions are prescribed under the provisions of § 21.16.

Special conditions are initially applicable to the model for which they are issued. Should the type certificate for that model be amended later to include any other model that incorporates the same or similar novel or unusual design feature, the special conditions would also apply to the other model under § 21.101.

In addition to the applicable airworthiness regulations and special conditions, the SF50 must comply with the fuel vent and exhaust emission requirements of 14 CFR part 34 and the noise certification requirements of 14 CFR part 36 and the FAA must issue a finding of regulatory adequacy under § 611 of Public Law 92–574, the Noise Control Act of 1972.

The FAA issues special conditions, as defined in 14 CFR 11.19, in accordance with § 11.38, and they become part of the type-certification basis under § 21.17(a)(2).

Novel or Unusual Design Features

The SF50 will incorporate the following novel or unusual design features: An ATS as part of the automatic flight control system. The ATS utilizes a Garmin “smart” autopilot servo with a physical connection to the throttle quadrant control linkage. The auto throttle may be controlled by the pilot with an optional auto throttle control panel adjacent to the throttle lever. The auto throttle also provides an envelope protection function which does not require installation of the optional control panel.

Discussion

Part 23 currently does not sufficiently address auto throttle (also referred to as auto thrust) technology and safety concerns. Therefore, special conditions must be developed and applied to this project to ensure an acceptable level of safety has been obtained. For approval to use the ATS during flight, the SF50 must demonstrate compliance to the intent of the requirements of § 25.1329, applying the appropriate part 23 references to § 23.1309 (to include performing a functional hazard assessment or system safety assessment to determine the applicable Software and Airborne Electronic Hardware assurance levels, and compliance to DO–178C & DO–254, as required) and § 23.143.

In addition, a malfunction of the ATS to perform its intended function is an LOTC event, and may result in a total loss of thrust control, transients, or uncommanded thrust changes. The classification of the failure condition for an LOTC event on a Class II single-engine aircraft is hazardous for aircraft that stall at or below 61 knots. From Figure 2, an LOTC event would have to exceed 1X10^-6. In-service data for LOTC in single-engine turbine aircraft shows LOTC events exceed this probability; therefore, part 33 requirements for engine control probabilities will be accepted for the part 23 LOTC requirement.

The probabilities of failure for an LOTC event on a turbine engine shall not exceed the following (see AC33.28–1 and ANE–1993–33.28TLD–R1 for further guidance):

1. Average Events per Million Hours: 10 (1X10^-5 per hour).
2. Maximum Events per Million Hours: 100 (1X10^-4 per hour).

Note: The maximum events per flight hour are intended for Time Limited Dispatch (TLD) operation where the risk exposure is mitigated by limiting the time in which the aircraft is operated in the degraded condition.

Applicability

As discussed above, these special conditions are applicable to the Model SF50. Should Cirrus apply at a later date for a change to the type certificate to include another model incorporating the same novel or unusual design feature, the special conditions would apply to that model as well.

Conclusion

This action affects only certain novel or unusual design features on one model of airplanes. It is not a rule of general applicability.

List of Subjects in 14 CFR Part 23

Aircraft, Aviation safety, Signs and symbols.

Authority: 49 U.S.C. 106(g), 40113, 44701, 44702, 44704.

The Proposed Special Conditions

Accordingly, the Federal Aviation Administration (FAA) proposes the following special conditions as part of the type certification basis for Cirrus Aircraft Corporation Model SF50 airplanes:

1. Certification of auto throttle system under part 23.
   (a) Quick disengagement controls for the auto thrust functions must be provided for each pilot. The auto thrust quick disengagement controls must be located on the thrust control levers. Quick disengagement controls must be readily accessible to each pilot while operating the thrust control levers.
   (b) The effects of a failure of the system to disengage the auto thrust functions when manually commanded by the pilot must be assessed in accordance with the requirements of § 23.1309.
   (c) Engagement or switching of the flight guidance system, a mode, or a sensor may not cause the auto thrust system to affect a transient response that alters the airplane’s flight path any greater than a minor transient, as defined in paragraph (l)(1) of this section.
   (d) Under normal conditions, the disengagement of any automatic control function of a flight guidance system may not cause a transient response of the airplane’s flight path any greater than a minor transient.
   (e) Under rare normal and non-normal conditions, disengagement of any automatic control function of a flight guidance system may not result in a transient any greater than a significant transient, as defined in paragraph (l)(2) of this section.
   (f) The function and direction of motion of each command reference
control, such as heading select or vertical speed, must be plainly indicated on, or adjacent to, each control if necessary to prevent inappropriate use or confusion.

(g) Under any condition of flight appropriate to its use, the flight guidance system may not produce hazardous loads on the airplane, nor create hazardous deviations in the flight path. This applies to both fault-free operation and in the event of a malfunction, and assumes that the pilot begins corrective action within a reasonable period of time.

(h) When the flight guidance system is in use, a means must be provided to avoid excursions beyond an acceptable margin from the speed range of the normal flight envelope. If the airplane experiences an excursion outside this range, a means must be provided to prevent the flight guidance system from providing guidance or control to an unsafe speed.

(i) The flight guidance system functions, controls, indications, and alerts must be designed to minimize flight crew errors and confusion concerning the behavior and operation of the flight guidance system. Means must be provided to indicate the current mode of operation, including any armed modes, transitions, and reversion.

(j) Following disengagement of the auto thrust function, a caution (visual and auditory) must be provided to each pilot.

(k) During auto thrust operation, it must be possible for the flight crew to move the thrust levers without requiring excessive force. The auto thrust may not cause a potential hazard when the flight crew applies an override force to the thrust levers.

(l) For purposes of this section, a transient is a disturbance in the control or flight path of the airplane that is not consistent with response to flight crew inputs or environmental conditions.

(1) A minor transient would not significantly reduce safety margins and would involve flight crew actions that are well within their capabilities. A minor transient may involve a slight increase in flight crew workload or some physical discomfort to passengers or cabin crew.

(2) A significant transient may lead to a significant reduction in safety margins, an increase in flight crew workload, discomfort to the flight crew, or physical distress to the passengers or cabin crew, possibly including non-fatal injuries. Significant transients do not require, in order to remain within or recover to the normal flight envelope, any of the following:

i. Exceptional piloting skill, alertness, or strength.

ii. Forces applied by the pilot which are greater than those specified in §23.143(c).

iii. Accelerations or attitudes in the airplane that might result in further hazard to secured or non-secured occupants.

Cirrus must also demonstrate, through tests and analysis, that no single failure or malfunction or probable combinations of failures of the auto thrust system components results in the probability for LOTC, or un-commanded thrust changes and transients that result in an LOTC event, to exceed the following:

1. Average Events per Million Hours: 10 (1X10–05 per hour)

2. Maximum Events per Million Hours: 100 (1X10–04 per hour)

Note: The term "probable" in the context of "probable combination of failures" does not have the same meaning as used for a safety assessment process. The term "probable" in "probable combination of failures" means "foreseeable," or those failure conditions anticipated to occur one or more times during the operational life of each airplane.

Issued in Kansas City, Missouri, on August 13, 2015.

Earl Lawrence,
Manager, Small Airplane Directorate, Aircraft Certification Service.
[FR Doc. 2015–20756 Filed 8–20–15; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration

14 CFR Part 39


RIN 2120–AA64

Airworthiness Directives; Dassault Aviation

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain Dassault Aviation Model FALCON 900EX airplanes and FALCON 2000EX airplanes. This proposed AD was prompted by a report of significant fuel leakage at the middle position of the left outboard slat. This proposed AD would require modifying the assembly of the slat extension mechanical stop. We are proposing this AD to prevent failure of the assembly slat extension mechanical stop, which if not corrected, could lead to a significant fuel leak and result in an uncontained fire.

DATES: We must receive comments on this proposed AD by October 5, 2015.

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

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


- Hand Delivery: U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Dassault Falcon Jet, P.O. Box 2000, South Hackensack, NJ 07606; telephone 201–440–6700; Internet http://www.dassaultfalcon.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.

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–2015–3144; 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 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.