

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2002-NM-65-AD; Amendment 39-12696; AD 2002-07-02]

RIN 2120-AA64

Airworthiness Directives; Israel Aircraft Industries, Ltd., Model Galaxy Airplanes and Model Gulfstream 200 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This amendment adopts a new airworthiness directive (AD) that is applicable to certain Israel Aircraft Industries, Ltd., Model Galaxy airplanes and Model Gulfstream 200 series airplanes. This action requires repetitive inspections of the main landing gear (MLG) actuators for leakage of hydraulic fluid, a one-time inspection of the MLG actuators for internal abrasions or scratches, and replacement of the MLG actuator with a new or serviceable or new, improved actuator, if necessary. This action also provides an optional terminating action for the repetitive inspections. This action is necessary to prevent failure of an MLG actuator to fully extend and retract, which could prevent proper engagement of the downlock mechanism and result in collapse of the MLG during landing. This action is intended to address the identified unsafe condition.

DATES: Effective April 18, 2002.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of April 18, 2002.

Comments for inclusion in the Rules Docket must be received on or before May 3, 2002.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2002-NM-65-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9:00 a.m. and 3:00 p.m., Monday through Friday, except Federal holidays. Comments may be submitted via fax to (425) 227-1232. Comments may also be sent via the Internet using the following address: 9-anm-iarcomment@faa.gov. Comments sent via fax or the Internet must contain "Docket No. 2002-NM-65-AD" in the subject line and need not be submitted in triplicate. Comments sent via the Internet as attached electronic files must be formatted in Microsoft Word 97 for Windows or ASCII text.

The service information referenced in this AD may be obtained from Gulfstream Aerospace Corporation, P.O. Box 2206, Mail Station D25, Savannah, Georgia 31402. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Tim Dulin, Aerospace Engineer, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2141; fax (425) 227-1149.

SUPPLEMENTARY INFORMATION: The Civil Aviation Administration of Israel (CAAI), which is the airworthiness authority for Israel, notified the FAA that an unsafe condition may exist on certain Israel Aircraft Industries, Ltd., Model Galaxy airplanes and Model Gulfstream 200 series airplanes. The CAAI advises of an incident in which the main landing gear (MLG) would not lock in the "up" or "down" position. Although the airplane landed safely, the MLG remained unlocked. Investigation revealed severe internal abrasion of an MLG actuator, which caused metal chips to accumulate in the MLG actuator, preventing full travel of the actuator piston and proper engagement of the downlock mechanism. The severe abrasion has been attributed to metal-to-metal contact between the MLG actuator and piston. Subsequent to the original report, similar conditions have been found on several other airplanes. This condition, if not corrected, could result in failure of an MLG actuator to fully extend and retract, which could prevent proper engagement of the downlock mechanism and result in collapse of the MLG during landing.

Explanation of Relevant Service Information

Israel Aircraft Industries has issued Galaxy Alert Service Bulletin GALAXY-32A-125, Revision 1, dated February 4, 2002, which describes procedures for repetitive visual inspections of the left and right MLG actuators for leakage of hydraulic fluid, and a one-time detailed inspection of the MLG actuators for internal abrasions or scratches. If leakage of hydraulic fluid or internal abrasions or scratches outside certain limits specified in the service bulletin are found on the MLG actuator, the service bulletin specifies that the existing MLG actuator be replaced with either a new, improved actuator, or a new or serviceable actuator that has been inspected for and is without internal abrasions or scratches. Replacement of existing MLG actuators with new, improved actuators eliminates the need for the repetitive inspections. The CAAI classified this service bulletin as mandatory and issued Israeli emergency airworthiness directive 32-02-01-24, dated February 13, 2002, in order to assure the continued airworthiness of these airplanes in Israel.

FAA's Conclusions

These airplane models are manufactured in Israel and are type certificated for operation in the United States under the provisions of section 21.29 of the Federal Aviation Regulations (14 CFR 21.29) and the applicable bilateral airworthiness agreement. Pursuant to this bilateral airworthiness agreement, the CAAI has kept the FAA informed of the situation described above. The FAA has examined the findings of the CAAI, reviewed all available information, and determined that AD action is necessary for products of these type designs that are certificated for operation in the United States.

Explanation of Requirements of Rule

Since an unsafe condition has been identified that is likely to exist or develop on other airplanes of the same type designs registered in the United States, this AD is being issued to prevent failure of the MLG actuator to fully extend and retract, which could prevent proper engagement of the

downlock mechanism and result in collapse of the MLG during landing. This AD requires accomplishment of the actions specified in the service bulletin described previously, except as discussed below. This AD also provides for an optional replacement of the existing MLG actuators with new, improved actuators, which ends the repetitive inspections.

Interim Action

This is considered to be interim action. The FAA is currently considering requiring the replacement of the existing MLG actuators with new, improved actuators, which will end the repetitive inspections required by this AD. However, the planned compliance time for the replacement is sufficiently long so that notice and opportunity for prior public comment will be practicable.

Differences Between This AD, the Service Bulletin, and the Foreign AD

This AD differs from the service bulletin and the parallel Israeli emergency airworthiness directive described previously in the following ways:

- The service bulletin and Israeli emergency airworthiness directive specify that the initial inspection for hydraulic leakage must be performed before the next flight. However, this AD specifies that the initial inspection must be done within 3 days after the effective date of this AD. In developing an appropriate compliance time for this AD, the FAA considered not only the CAAI's recommendation, but the degree of urgency associated with addressing the subject unsafe condition, and the average utilization of the affected fleet. In light of these factors, the FAA finds a 3-day compliance time for completing the required actions to be warranted, in that it represents an appropriate interval of time allowable for affected airplanes to continue to operate without compromising safety.
- The service bulletin and Israeli emergency airworthiness directive specify that the inspection for leakage of hydraulic fluid must be done before each flight for 100 flights (flight cycles), at which time the MLG actuators must be replaced with new, improved actuators. This AD provides for such replacement as an option that, if accomplished, ends the required repetitive inspections. As explained previously in the "Interim Action" section of this AD, the FAA is currently considering requiring the replacement of existing MLG actuators with new, improved actuators. Since this AD does not require such replacement, this AD requires the repetitive inspections for leakage to continue until the replacement with new, improved MLG actuators is done.

Determination of Rule's Effective Date

Since a situation exists that requires the immediate adoption of this regulation, it is found that notice and opportunity for prior public comment hereon are impracticable, and that good cause exists for making this amendment effective in less than 30 days.

Comments Invited

Although this action is in the form of a final rule that involves requirements affecting flight safety and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on this rule. Interested persons are invited to comment on this rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified under the caption ADDRESSES. All communications received on or before the closing date for comments will be considered, and this rule may be amended in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

Submit comments using the following format:

- Organize comments issue-by-issue. For example, discuss a request to change the compliance time and a request to change the service bulletin reference as two separate issues.
- For each issue, state what specific change to the AD is being requested.
- Include justification (e.g., reasons or data) for each request.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report that summarizes each FAA-public contact concerned with the substance of this AD will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this rule must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 2002-NM-65-AD." The postcard will be date-stamped and returned to the commenter.

Regulatory Impact

The regulations adopted herein 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. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

The FAA has determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and that it is not a "significant regulatory action" under Executive Order 12866. It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory Policies and Procedures, a final regulatory evaluation will be prepared and placed in the Rules Docket. A copy of it, if filed, 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.

Sec. 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "www.airweb.faa.gov/rgl"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2002-07-02 Israel Aircraft Industries, Ltd.: Amendment 39-12696. Docket 2002-NM-65-AD.

Applicability: Model Galaxy airplanes and Model Gulfstream 200 series airplanes, certificated in any category, serial numbers 003 through 057 inclusive.

Note 1: This AD applies to each airplane 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 airplanes 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 (e) 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 failure of a main landing gear (MLG) actuator to fully extend and retract, which could prevent proper engagement of the downlock mechanism and result in collapse of the MLG during landing, accomplish the following:

Inspections

(a) Do the inspections in paragraphs (a)(1) and (a)(2) of this AD, according to Galaxy (Israel Aircraft Industries) Alert Service Bulletin GALAXY-32A-125, Revision 1, dated February 4, 2002.

(1) Within 3 days after the effective date of this AD, do a general visual inspection of the left and right MLG actuators for leakage of hydraulic fluid. Repeat this inspection before each flight, until paragraph (c) of this AD is accomplished.

Note 2: For the purposes of this AD, a general visual inspection is defined as: "A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or drop-light, and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked."

(2) Within 15 flight cycles after the effective date of this AD, do a one-time detailed inspection of the left and right MLG actuators for internal abrasions or scratches.

Note 3: For the purposes of this AD, a detailed inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

Replacement

(b) If leakage of hydraulic fluid or an internal abrasion or scratch outside the limits specified in Galaxy (Israel Aircraft Industries) Alert Service Bulletin GALAXY-32A-125, Revision 1, dated February 4, 2002, is found on either MLG actuator during any inspection required by paragraph (a) of this AD: Before further flight, replace the discrepant MLG actuator with a new, improved actuator, or with a new or serviceable actuator that has been inspected for and is without internal abrasions or scratches, according to the service bulletin. Replacement of the existing MLG actuator with a new, improved actuator ends the repetitive inspections of that actuator.

Optional Terminating Action

(c) Replacement of the existing left and right MLG actuators with new, improved actuators having part number 4AS2521010-507 (left side) or -508 (right side), as applicable, according to Galaxy (Israel Aircraft Industries) Alert Service Bulletin GALAXY-32A-125, Revision 1, dated February 4, 2002, ends the repetitive inspections required by paragraph (a)(1) of this AD.

Spares

(d) As of the effective date of this AD, no person may install an MLG actuator with part number 4AS2521010-505 (left side) or -506 (right side) on any airplane, unless it has been inspected according to paragraph (a)(2) of this AD and found to be without any internal abrasion or scratch outside the limits specified in Galaxy (Israel Aircraft Industries) Alert Service Bulletin GALAXY-32A-125, Revision 1, dated February 4, 2002.

Alternative Methods of Compliance

(e) 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, International Branch, ANM-116, Transport Airplane Directorate, FAA. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

Note 4: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(f) 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 airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(g) The actions shall be done in accordance with Galaxy (Israel Aircraft Industries) Alert Service Bulletin GALAXY-32A-125, Revision 1, dated February 4, 2002. 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 Gulfstream Aerospace Corporation, P.O. Box 2206, Mail Station D25, Savannah, Georgia 31402. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Note 5: The subject of this AD is addressed in Israeli emergency airworthiness directive 32-02-01-24, dated February 13, 2002.

Effective Date

(h) This amendment becomes effective on April 18, 2002.

Issued in Renton, Washington, on March 25, 2002.
Kalene C. Yanamura,
Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.
[FR Doc. 02-7750 Filed 4-2-02; 8:45 am]
BILLING CODE 4910-13-P