

**§ 39.13 [Amended]**

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

**2004-10-12 McDonnell Douglas:**

Amendment 39-13642. Docket 2002-NM-237-AD.

*Applicability:* Model DC-10-30 airplane, fuselage number 0106; certificated in any category.

*Compliance:* Required as indicated, unless accomplished previously.

To prevent the loss of the auxiliary power unit (APU) generator due to chafing of the generator power feeder cables, and consequent electrical arcing and smoke/fire in the APU compartment, accomplish the following:

**Inspection and Corrective Action(s), if Necessary**

(a) Within 12 months after the effective date of this AD, do a general visual inspection of the power feeder cable assembly of the APU for chafing, correct type (including part number) of clamps, and proper clamp installation, per Boeing Alert Service Bulletin DC10-24A137, Revision 02, dated October 15, 2001.

**Note 1:** 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 from within touching distance unless otherwise specified. A mirror may be necessary to enhance visual access to all exposed surfaces in the inspection area. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or droplight 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."

(1) Condition 1. If no signs of wire chafing are found, and all clamps are of the correct type (including the correct part number) and are installed properly, no further action is required by this AD.

(2) Condition 2. If any wire chafing, incorrect type of any clamp (including incorrect part number), or improper clamp installation is found, before further flight, do the applicable corrective action(s) (e.g., repair, replace, and modify discrepant part) per the Accomplishment Instructions of the service bulletin.

**Actions Accomplished per Previous Issues of Service Bulletin**

(b) Accomplishment of the inspection and any applicable corrective actions, per Boeing Service Bulletin DC10-24-137, dated September 15, 1987; or Boeing Alert Service Bulletin DC10-24A137, Revision 01, dated May 31, 2001; before the effective date of this AD, is considered acceptable for compliance with the requirements of this AD.

**Accomplishment of the Actions per AD 2001-24-22**

(c) Accomplishment of the actions specified in AD 2001-24-22, amendment 39-

12539, is acceptable for compliance with the requirements of this AD.

**Alternative Methods of Compliance**

(d) In accordance with 14 CFR 39.19, the Manager, Los Angeles Aircraft Certification Office, FAA, is authorized to approve alternative methods of compliance for this AD.

**Incorporation by Reference**

(e) Unless otherwise specified in this AD, the actions shall be done in accordance with Boeing Alert Service Bulletin DC10-24A137, Revision 02, dated October 15, 2001. 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 Boeing Commercial Airplanes, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Data and Service Management, Dept. C1-L5A (D800-0024). Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or 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/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

**Effective Date**

(f) This amendment becomes effective on June 25, 2004.

Issued in Renton, Washington, on May 10, 2004.

**Kalene C. Yanamura,**

*Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.*

[FR Doc. 04-11284 Filed 5-20-04; 8:45 am]

**BILLING CODE 4910-13-P**

**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****14 CFR Part 39**

[Docket No. 89-ANE-10-AD; Amendment 39-13644; AD 2004-10-14]

**RIN 2120-AA64**

**Airworthiness Directives; Lycoming Engines (Formerly Textron Lycoming), Direct-Drive Reciprocating Engines**

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

**ACTION:** Final rule.

**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) that supersedes an existing AD, for Lycoming Engines (formerly Textron Lycoming), direct-drive reciprocating engines (except O-145, O-320H, O-360E, LO-360E, LTO-360E, O-435,

and TIO-541 series engines). That AD currently requires inspection of the crankshaft gear installation and rework or replacement of the gears where necessary after a propeller strike, sudden stoppage, at overhaul, or whenever gear train repair is required. This AD requires the same actions but makes the correction that the existing gear retaining bolt and lockplate be removed from service and new hardware installed, and revises the definitions for sudden stoppage and propeller strike. This AD results from a change to the definition of a propeller strike or sudden stoppage. We are issuing this AD to prevent loosening or failure of the crankshaft gear retaining bolt, which may cause sudden engine failure.

**DATES:** This AD becomes effective June 25, 2004. The Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulations as of June 25, 2004.

**ADDRESSES:** You can get the service information identified in this AD from Lycoming Engines, 652 Oliver Street, Williamsport, PA 17701, U.S.A.; telephone (570) 323-6181; fax (570) 327-7101 or from the Lycoming Web site:

[www.lycoming.textron.com.main.jsp](http://www.lycoming.textron.com.main.jsp).

You may examine the AD docket at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA. You may examine the service information at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA; or 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/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

**FOR FURTHER INFORMATION CONTACT:**

Norm Perenson, Aerospace Engineer, New York Aircraft Certification Office, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone (516) 228-7337; fax (516) 794-5531.

**SUPPLEMENTARY INFORMATION:** The FAA proposed to amend 14 CFR Part 39, by superseding an AD with a proposed airworthiness directive (AD). The proposed AD applies to Lycoming Engines direct-drive reciprocating engines (except O-145, O-320H, O-360E, LO-360E, LTO-360E, O-435, and TIO-541 series engines). We published the proposed AD in the **Federal Register** on March 25, 2003 (68 FR 14350). That action proposed to require inspection of

the crankshaft gear installation and rework or replacement of the gears where necessary after a propeller strike, sudden stoppage, at overhaul, or whenever gear train repair is required. That action also proposed to revise the definitions for sudden stoppage and propeller strike.

#### Comments

We provided the public the opportunity to participate in the development of this AD. We have considered the comments received.

#### Provide a Trigger Level for Action

One commenter requests that the proposed AD should provide a trigger level to alert maintenance personnel of the need for action. The commenter states that this is required to avoid having maintenance personnel determine the need for action. Also, this would avoid miscommunication between the pilot and the maintenance personnel. The commenter also states that the proposed AD is too general for proper action in the field.

The FAA does not agree. Section 91.7(b) of the Code of Federal Regulations (14 CFR 91.7(b)) states: "The pilot in command of a civil aircraft is responsible for determining whether that aircraft is in condition for safe flight." The pilot must advise the maintenance technician and inspector of the need to perform maintenance. It is also the responsibility of the maintenance technician and or inspector to advise the pilot when an unsafe condition is found during routine maintenance. The actions required by this AD, like many other situations in aviation, may require some judgment on the part of the pilot, maintenance technician, and or inspector, as well as good communication among all parties. Adding additional conditions will only require more judgment and more decisions by all parties involved.

#### AD as Written Will Require Unneeded Inspections

One commenter states that the proposed AD would require unneeded inspections by "tying the hands" of knowledgeable mechanics. The commenter also states that the final determination regarding needed inspections should be made by the maintenance personnel in the field. The commenter further states that the mechanics are in the best position to evaluate the factors surrounding each incident, and to determine which engine components should be inspected.

The FAA does not agree. The wording in this AD is designed to assist the mechanics when deciding on what action to take in a given situation. Based on Lycoming's engine design knowledge and worldwide service experience, certain situations are known to have caused engine problems. This AD is not designed to "tie the hands of the mechanic". The AD is intended to help the pilot in command and maintenance personnel make the best possible maintenance decision.

#### Correction to the Compliance

As a correction to the compliance, we added paragraphs to require the existing gear retaining bolt and lockplate be removed from service and a new bolt and lockplate be installed, and to prohibit installation of the removed hardware into any engine. This correction places the AD in agreement with the referenced SB.

#### Conclusion

We have carefully reviewed the available data, including the comments received, and determined that air safety and the public interest require adopting the AD with the changes described previously. We have determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD. The assigned paragraph letters in the regulatory section have been changed from what appeared in the proposal, as we are continuing our introduction of plain language into our documents.

#### Regulatory Findings

We have 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 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 summary of the costs to comply with this AD and placed it in the AD Docket. You may get a copy of this summary by sending a request to us at the address listed under **ADDRESSES**.

Include "AD Docket No. 89-ANE-10-AD" in your request.

#### 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 Federal Aviation Administration 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 Amendment 39-6916 (56 FR 33205, July 19, 1991), and by adding the following new airworthiness directive (AD):

**2004-10-14 Lycoming Engines (formerly Textron Lycoming):** Amendment 39-13644. Docket No. 89-ANE-10-AD. Supersedes AD 91-14-22, Amendment 39-6916.

#### Effective Date

(a) This AD becomes effective June 25, 2004.

#### Affected ADs

(b) This AD supersedes AD 91-14-22.

#### Applicability

(c) This AD applies to Lycoming Engines (formerly Textron Lycoming), direct-drive reciprocating engines (except O-145, O-320H, O-360E, LO-360E, LTO-360E, O-435, and TIO-541 series engines).

#### Unsafe Condition

(d) This AD results from a change to the definition of a propeller strike or sudden stoppage. The actions specified in this AD are intended to prevent loosening or failure of the crankshaft gear retaining bolt, which may cause sudden engine failure.

#### Compliance

(e) Compliance with this AD is required as indicated before further flight if the engine has experienced a propeller strike as defined in paragraphs (i) and (j) of this AD, unless already done.

(f) Inspect, and if necessary repair, the crankshaft counter bored recess, the alignment dowel, the bolt hole threads, and the crankshaft gear for wear, galling, corrosion, and fretting in accordance with steps 1 through 5 of Lycoming Mandatory Service Bulletin (MSB) No. 475C, dated January 30, 2003.

(g) Remove the existing gear retaining bolt and lockplate from service, and install a new bolt and lockplate, in accordance with steps 6 and 7 of Lycoming MSB No. 475C, dated January 30, 2003.

**Prohibition of Retaining Bolt and Lockplate**

(h) Do not install the gear retaining bolt and lockplate that were removed in paragraph (g) of this AD, into any engine.

**Definition of Propeller Strike**

(i) For the purposes of this AD, a propeller strike is defined as follows:

(1) Any incident, whether or not the engine is operating, that requires repair to the propeller other than minor dressing of the blades.

(2) Any incident during engine operation in which the propeller impacts a solid object that causes a drop in revolutions per minute (RPM) and also requires structural repair of the propeller (incidents requiring only paint touch-up are not included). This is not restricted to propeller strikes against the ground.

(3) A sudden RPM drop while impacting water, tall grass, or similar yielding medium, where propeller damage is not normally incurred.

(j) The preceding definitions include situations where an aircraft is stationary and the landing gear collapses causing one or more blades to be substantially bent, or where a hanger door (or other object) strikes the propeller blade. These cases should be handled as sudden stoppages because of potentially severe side loading on the crankshaft flange, front bearing, and seal.

**Alternative Methods of Compliance**

(k) The Manager, New York Aircraft Certification Office, has the authority to approve alternative methods of compliance for this AD if requested using the procedures found in 14 CFR 39.19.

**Material Incorporated by Reference**

(l) You must use Lycoming MSB No. 475C, dated January 30, 2003, to perform the inspections and repairs required by this AD. The Director of the Federal Register approved the incorporation by reference of this service bulletin in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. You can get a copy from Lycoming Engines, 652 Oliver Street, Williamsport, PA 17701, U.S.A.; telephone (570) 323-6181; fax (570) 327-7101. You can review copies at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA; or 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/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

**Related Information**

(m) None.

Issued in Burlington, Massachusetts, on May 12, 2004.

**Peter A. White,**

*Acting Manager, Engine and Propeller Directorate, Aircraft Certification Service.*

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**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****14 CFR Part 39**

[Docket No. 2003-CE-39-AD; Amendment 39-13645; AD 2004-10-15]

**RIN 2120-AA64**

**Airworthiness Directives; GARMIN International Inc. GTX 330 Mode S Transponders and GTX 330D Diversity Mode S Transponders**

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

**ACTION:** Final rule.

**SUMMARY:** The FAA adopts a new airworthiness directive (AD) for certain GARMIN International Inc. GTX 330/ GTX 330D Mode S transponders that are installed on aircraft. This AD requires you to install GTX 330/330D Software Upgrade Version 3.03, 3.04, or 3.05. This AD is the result of observations that the GTX 330 and GTX 330D may detect, from other aircraft, the S1 (suppression) interrogating pulse below the Minimum Trigger Level (MTL) and, in some circumstances, not reply. The GTX 330/330D should still reply even if it detects S1 interrogating pulses below the MTL. We are issuing this AD to prevent interrogating aircraft from possibly receiving inaccurate replies due to suppression from aircraft equipped with the GTX 330/330D Mode S Transponders when the pulses are below the MTL. The inaccurate replies could result in reduced vertical separation or unsafe TCAS resolution advisories.

**DATES:** This AD becomes effective on July 9, 2004.

As of July 9, 2004, the Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulation.

**ADDRESSES:** You may get the service information identified in this AD from GARMIN International Inc., 1200 East 151st Street, Olathe, KS 66062, (913) 397-8200.

You may view the AD docket at FAA, Central Region, Office of the Regional Counsel, Attention: Rules Docket No. 2003-CE-39-AD, 901 Locust, Room 506, Kansas City, Missouri 64106. Office hours are 8 a.m. to 4 p.m., Monday through Friday, except Federal holidays.

**FOR FURTHER INFORMATION CONTACT:** Roger A. Souter, FAA, Wichita Aircraft Certification Office (ACO), 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: 316-946-4134; facsimile: 316-946-4107; e-mail address: [roger.souter@faa.gov](mailto:roger.souter@faa.gov).

**SUPPLEMENTARY INFORMATION:****Discussion**

*What events have caused this AD?*  
The GTX 330/GTX 330D may detect from other aircraft the S1 (suppression) interrogating pulse below the MTL and, in some circumstances, does not reply. The GTX 330/330D should still reply even if it detects S1 interrogating pulses below the MTL. GARMIN International Inc. suspected the suppression problem after observation between GARMIN company aircraft that were equipped with the GTX 330 and Ryan Traffic and Collision Alert Device (TCAD). Engineering bench tests and test flights confirmed that this suppression problem existed.

*What is the potential impact if FAA took no action?* Interrogating aircraft could possibly receive inaccurate replies due to suppression from aircraft equipped with the GTX 330/330D Mode S Transponders when the pulses are below the MTL. The inaccurate replies could result in reduced vertical separation or unsafe TCAS resolution advisories.

*Has FAA taken any action to this point?* We issued a proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an AD that would apply to certain GARMIN International Inc. GTX 330/330D Mode S transponders that are installed on aircraft. This proposal was published in the **Federal Register** as a notice of proposed rulemaking (NPRM) on December 30, 2003 (68 FR 75174). The NPRM proposed to require you to install GTX 330/330D Software Upgrade Version 3.03.

**Comments**

*Was the public invited to comment?*  
We provided the public the opportunity to participate in developing this AD. The following presents the comments received on the proposal and FAA's response to each comment:

**Comment Issue: GTX 330/330D Software Upgrade Version 3.03**

*What is the commenter's concern?*  
The NPRM currently requires installation of GTX 330/330D Software Upgrade to Version 3.03 to comply with the proposed AD. Two commenters request a text change of the AD to allow installation of later software upgrade versions to comply with the proposed AD.

*What is FAA's response to the concern?* Since later software upgrade versions will contain, at a minimum, the elements of Version 3.03 and thus will correct the unsafe condition, we agree with their request and have changed the