DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

RIN 2120-AA64

Airworthiness Directives; Honeywell RCZ-833J/K, -851J/K, and -854J Communication (COM) Units, Equipped with XS-852E/F Mode S Transponders; and Honeywell XS-856A/B and -857A Mode S Transponders; Installed on But Not Limited to Certain Transport Category Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Honeywell COM units and transponders, installed on but not limited to certain transport category airplanes. This AD requires a revision to the Normal Procedures section of the airplane flight manual to advise the flightcrew to check the status of the transponder after changing the air traffic control (ATC) code. This AD also requires replacing certain identification plate(s) with new plate(s), testing certain COM units or transponders as applicable, and corrective action if necessary. For certain airplanes, this AD requires replacing the transponders of certain COM units with new or modified transponders. For certain other airplanes, this AD requires installing a modification into certain transponders. This AD results from the transponder erroneously going into standby mode if the flightcrew takes longer than five seconds when using the rotary knob of the radio management unit to change the ATC code. We are issuing this AD to prevent the transponder of the COM unit from going into standby mode, which could increase the workload on the flightcrew and result in improper functioning of the traffic alert and collision avoidance system.

DATES: This AD becomes effective October 17, 2006.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of October 17, 2006.

ADDRESSES: You may examine the AD docket on the Internet at http://dms.dot.gov or in person at the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL-401, Washington, DC.

Go to https://pubs.cas.honeywell.com/ or contact Honeywell International, Inc., Commercial Electronic Systems, 21111 North 19th Avenue, Phoenix, Arizona 85027-2708, for service information identified in this AD.
FOR FURTHER INFORMATION CONTACT: Abby Malmir, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5351; fax (562) 627-5210.

SUPPLEMENTARY INFORMATION:

Examining the Docket

You may examine the airworthiness directive (AD) docket on the Internet at http://dms.dot.gov or in person at the Docket Management Facility office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Management Facility office (telephone (800) 647-5227) is located on the plaza level of the Nassif Building at the street address stated in the ADDRESSES section.

Discussion

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to certain Honeywell RCZ-833J/K, -851J/K, and -854J communication (COM) units, equipped with XS-852E/F mode S transponders; and Honeywell XS-856A/B and -857A mode S transponders; installed on but not limited to certain transport category airplanes. That NPRM was published in the Federal Register on May 3, 2006 (71 FR 25984). That NPRM proposed to require a revision to the Normal Procedures section of the airplane flight manual (AFM) to advise the flightcrew to check the status of the transponder after changing the air traffic control (ATC) code. That NPRM also proposed to require replacing certain identification plate(s) with new plate(s), testing certain COM units or transponders as applicable, and corrective action if necessary. For certain airplanes, that NPRM proposed to require replacing the transponders of certain COM units with new or modified transponders. For certain other airplanes, that NPRM proposed to require installing a modification into certain transponders.

Comments

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

Support for NPRM

The Air Line Pilots Association supports the NPRM.

Request To Revise Applicability

Dassault Falcon Jet (DFJ) requests that we delete Dassault Model Mystere-Falcon 900 airplanes and Model Falcon 2000 airplanes from the applicability of the NPRM. DFJ states that none of the discrepant communication units or transponders are installed on these model airplanes. According to DFJ, the discrepant parts are installed only on Model Falcon 900EX airplanes, serial number (S/N) 97 and S/Ns 120 and subsequent; and Model Falcon 2000EX airplanes, S/N 6 and S/Ns 28 and subsequent.

We agree and have revised paragraph (c) of this AD accordingly.
Request To Revise Compliance Time

Empresa Brasileira de Aeronautica S.A. (EMBRAER) requests that we extend the compliance time for the AFM revision from 5 to 30 days. EMBRAER asserts that the loss of the transponder does not pose so great of a hazard to justify such an urgent compliance time. As justification for extending the compliance time, EMBRAER states that some of the affected airplanes might be on international trips, where it may not be possible to return an airplane to a convenient location and accomplish the AFM revision within 5 days after the effective date of this AD.

We agree that the compliance times can be extended somewhat. We have determined that extending the compliance time to 14 days will not adversely affect safety. Therefore, we have revised paragraph (f) of this AD accordingly.

Request To Revise Address of Part Manufacturer

Honeywell states that its address, as provided in the NPRM, is no longer valid. Therefore, the commenter requests that we include the following address to acquire service information pertaining to this AD: 21111 North 19th Avenue, Phoenix, Arizona 85308.

We agree and have verified with the United States Postal Service that the correct zip code for the address given above is 85027-2708. We have updated the commenter's address in the ADDRESSES section and in paragraph (n) of this AD.

Request To Revise Requirements

Honeywell disagrees with the proposed corrective action to reinstall MOD V into the transponder of the COM unit if the COM unit fails the test described in paragraph (g) of the NPRM. (We proposed to accomplish this corrective action in accordance with Honeywell Alert Service Bulletin 7517400-23-A6015, Revision 001, dated July 29, 2005.) The commenter states that Honeywell Alert Service Bulletin 7510700-23-A0048, dated January 27, 2006, recommends only to verify that MOD AT has been installed and update the part number (P/N) of the COM unit for tracking purposes. Honeywell believes that it would be preferable to have operators inspect the COM unit to determine if MOD AT (transponder MOD V) has been installed. Honeywell adds that if MOD AT is installed, the airplane should be allowed to keep flying even if the COM unit P/N has not been updated. Honeywell's justification is that the airplane has already received the fix and that updating the COM unit P/N adds no value. The commenter further proposes that the NPRM should advise operators that if a COM unit is returned to a shop for any reason, the replacement part must have the new P/N (with MOD AT) before it can be returned to the original equipment manufacturer (OEM) or operator. As justification, Honeywell states that a purge of all old P/Ns will take place once all OEMs have allowed the new P/Ns.

We disagree. Honeywell proposes an alternative action only if a COM unit is inspected and determined to have MOD AT installed. However, the commenter offers no alternative if a COM unit is determined to not have MOD AT installed (i.e., fails the test described in paragraph (g) of this AD). MOD AT is accomplished by installing an XS-852E/F mode S transponder having MOD V into the COM unit. Therefore, if a COM unit fails the test described in paragraph (g) of this AD, we have determined that the corrective action is to reinstall MOD V into the transponder of the COM unit, thereby ensuring that MOD AT has been installed properly. Further, we do not find it acceptable to allow some COM units to remain in service without updated P/Ns, even if MOD AT has been installed. This would create a high rate of confusion among OEMs, operators, and other end users in determining which COM units are in compliance with this AD. We have not revised this AD in this regard.
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.

Costs of Compliance

There are about 1,365 airplanes of the affected design in the worldwide fleet. This AD affects about 1,023 airplanes of U.S. registry. Of those airplanes, about 603 airplanes are equipped with RCZ-833J/K, -851J/K, or -854J COM units, and about 420 airplanes are equipped with XS-856A/B or -857A mode S transponders. The following table provides the estimated costs, at an average labor rate of $80 per work hour, for U.S. operators to comply with this AD.

<table>
<thead>
<tr>
<th>Action</th>
<th>Work hours</th>
<th>Parts</th>
<th>Cost per airplane</th>
<th>Number of U.S.-registered airplanes</th>
<th>Fleet cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFM revision</td>
<td>1</td>
<td>None</td>
<td>$80</td>
<td>1,023</td>
<td>$81,840</td>
</tr>
<tr>
<td>Part identification, testing, and replacement for RCZ-833J/K, -851J/K, and -854J COM units</td>
<td>3</td>
<td>$35</td>
<td>$275</td>
<td>603</td>
<td>$165,825</td>
</tr>
<tr>
<td>Part identification, testing, and installation of software for XS-856A/B and -857A mode S transponders</td>
<td>3 to 8, dependin</td>
<td>$175</td>
<td>$415 to $815, depending on testing procedure</td>
<td>420</td>
<td>$174,300 to $342,300, depending on testing procedure</td>
</tr>
</tbody>
</table>

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 civil 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 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 regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket. See the ADDRESSES section for a location to examine the regulatory evaluation.

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 FAA 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 Federal Aviation Administration (FAA) amends § 39.13 by adding the following new airworthiness directive (AD):

Effective Date

(a) This AD becomes effective October 17, 2006.

Affected ADs

(b) None.

Applicability

(c) This AD applies to the Honeywell parts identified in paragraphs (c)(1) and (c)(2) of this AD, approved under Technical Standard Order TSO-C112, installed on but not limited to Bombardier Model BD-700-1A10 and BD-700-1A11 airplanes; Cessna Model 550 and 560 airplanes; Cessna Model 650 airplanes; Dassault Model Falcon 900EX airplanes, serial number (S/N) 97 and S/Ns 120 and subsequent; Dassault Model Falcon 2000EX airplanes, S/N 6 and S/Ns 28 and subsequent; EMBRAER Model EMB-135BJ, -135ER, -135KE, -135KL, and -135LR airplanes; EMBRAER Model EMB-145, -145ER, -145MR, -145LR, -145XR, -145MP, and -145EP airplanes; Learjet Model 45 airplanes; Lockheed Model 282-44A-05 (C-130B) airplanes; Lockheed Model 382G series airplanes; Raytheon Model Hawker 800 (including variant U-125A), 800XP, and 1000 airplanes; certificated in any category.


2. Mode S transponder XS-856A P/Ns 7517400-865 and -885; XS-856B P/Ns 7517400-866 and -886; and XS-857A P/Ns 7517400-876 and -896.

Unsafe Condition

(d) This AD results from the transponder erroneously going into standby mode if the flightcrew takes longer than five seconds when using the rotary knob of the radio management unit to change the air traffic control code. We are issuing this AD to prevent the transponder of the COM unit from going into standby mode, which could increase the workload on the flightcrew and result in improper functioning of the traffic alert and collision avoidance system.

Compliance

(e) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.
Airplane Flight Manual (AFM) Revision

(f) For all airplanes: Within 14 days after the effective date of this AD, revise the Normal Procedures section of the applicable AFM to include the following statement:

"After completion of any 4096 ATC Code change (also referred to as Mode A Code), check the status of the transponder. If the transponder indicates that it is in standby mode, re-select the desired mode (i.e., the transponder should be in the active mode)."

This may be done by inserting a copy of this AD in the AFM. Accomplishing the actions specified in paragraph (h) or (j), as applicable, of this AD terminates the requirement of this paragraph.

Replacement of Identification Plates for Certain COM Units

(g) For airplanes equipped with any COM unit identified in paragraph (c)(1) of this AD: Within 18 months after the effective date of this AD, replace the product signature plate, identification plate, and MOD plate of the COM unit with new plates and test the COM unit, in accordance with the Accomplishment Instructions of Honeywell Alert Service Bulletin 7510700-23-A0048, dated January 27, 2006. If the COM unit fails the test, before further flight, reinstall MOD V into the transponder of the COM unit in accordance with Honeywell Alert Service Bulletin 7517400-23-A6015, Revision 001, dated July 29, 2005.

(h) For airplanes equipped with any COM unit identified in paragraph (c)(1) of this AD: Before or concurrently with the actions required by paragraph (g) of this AD, replace the XS-852E/F mode S transponder of the COM unit with a new or modified XS-852E/F mode S transponder that has MOD V installed, in accordance with Honeywell Alert Service Bulletin 7510700-23-A0047, Revision 001, dated July 29, 2005. After accomplishing the replacement required by this paragraph, the AFM revision required by paragraph (f) of this AD may be removed from the AFM.


Replacement of Identification Plate for Certain Transponders

(i) For airplanes equipped with any transponder identified in paragraph (c)(2) of this AD: Within 18 months after the effective date of this AD, replace the modification plate of the transponder with a new plate and test the transponder, in accordance with the Accomplishment Instructions of Honeywell Alert Service Bulletin 7517400-23-A0017, dated January 23, 2006. If the transponder fails the test, before further flight, reinstall MOD Y into the transponder as specified in paragraph (j) of this AD.

Installation of MOD Y Into Certain Transponders

(j) For airplanes equipped with any transponder identified in paragraph (c)(2) of this AD: Before or concurrently with the actions required by paragraph (i) of this AD, install MOD Y into the applicable mode S transponder, in accordance with the Accomplishment Instructions of Honeywell Alert Service Bulletin 7517400-23-A6016, dated August 30, 2005. After accomplishing the
replacement required by this paragraph, the AFM revision required by paragraph (f) of this AD may be removed from the AFM.

**Parts Installation**

(k) For all airplanes: As of the effective date of this AD, no person may install any part identified in paragraph (c)(1) or (c)(2) on any airplane, unless the applicable software modification has been installed in the transponder in accordance with paragraph (h) or (j) of this AD, as applicable.

**No Reporting Requirement**

(l) Although the service bulletins referenced in this AD specify to submit certain information to the manufacturer, this AD does not include that requirement.

**Alternative Methods of Compliance (AMOCs)**

(m)(1) The Manager, Los Angeles Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested in accordance with the procedures found in 14 CFR 39.19. (2) Before using any AMOC approved in accordance with § 39.19 on any airplane to which the AMOC applies, notify the appropriate principal inspector in the FAA Flight Standards Certificate Holding District Office.

**Material Incorporated by Reference**

(n) You must use the service information identified in Table 1 of this AD to perform the actions that are required by this AD, unless the AD specifies otherwise.

<table>
<thead>
<tr>
<th>Service Bulletin</th>
<th>Revision Level</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honeywell Alert Service Bulletin 7510700-23-A0047</td>
<td>001</td>
<td>July 29, 2005</td>
</tr>
<tr>
<td>Honeywell Alert Service Bulletin 7517400-23-A6015</td>
<td>001</td>
<td>July 29, 2005</td>
</tr>
<tr>
<td>Honeywell Alert Service Bulletin 7517400-23-A6016</td>
<td>Original</td>
<td>August 30, 2005</td>
</tr>
</tbody>
</table>

(Only the first and second pages of Honeywell Alert Service Bulletin 7510700-23-A0047 and Honeywell Alert Service Bulletin 7517400-23-A6015 contains the revision level of the document.) The Director of the Federal Register approved the incorporation by reference of these documents in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Go to [https://pubs.cas.honeywell.com/](https://pubs.cas.honeywell.com/) or contact Honeywell International, Inc., Commercial Electronic Systems, 21111 North 19th Avenue, Phoenix, Arizona 85027-2708, for a copy of this service information. You may review copies at the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street, SW., Room PL-401, Nassif Building, Washington, DC; on the Internet at [http://dms.dot.gov](http://dms.dot.gov); or at the National Archives
and Records Administration (NARA). For information on the availability of this material at the NARA, call (202) 741-6030, or go to http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on August 31, 2006.
Kalene C. Yanamura,
Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.
[FR Doc. E6-14940 Filed 9-11-06; 8:45 am]