

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. 2002-NM-277-AD; Amendment 39-13616; AD 2004-09-26]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Raytheon Model Hawker 800XP Airplanes**

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule.

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**SUMMARY:** This amendment adopts a new airworthiness directive (AD), applicable to certain Raytheon Model Hawker 800XP airplanes, that requires replacement of certain existing pitot probes with new probes. This action is necessary to prevent loss or fluctuation of indicated airspeed, which could result in hazardous misleading information being provided to the flightcrew. This action is intended to address the identified unsafe condition.

**DATES:** Effective June 15, 2004.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of June 15, 2004.

**ADDRESSES:** The service information referenced in this AD may be obtained from Raytheon Aircraft Company, Department 62, P.O. Box 85, Wichita, Kansas 67201-0085. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Wichita Aircraft Certification Office, 1801 Airport Road, Room 100, Mid-Continent Airport, Wichita, Kansas; 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:** Chris B. Morgan, Aerospace Engineer, Systems and Propulsion Branch, ACE-116W, FAA, Wichita Aircraft Certification Office, 1801 Airport Road, Room 100, Mid-Continent Airport, Wichita, Kansas 67209; telephone (316) 946-4154; fax (316) 946-4407.

**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 certain

Raytheon Model Hawker 800XP airplanes was published in the Federal Register on October 14, 2003 (68 FR 59138). That action proposed to require replacement of certain existing pitot probes with new probes.

## **Comments**

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

### **Request To Restrict Flight in Known Icing Conditions**

The commenter states that a 6-month compliance time for replacement of the pitot probes, as specified in the proposed AD, seems inadequate if flight in known icing remains permissible. The commenter asks that consideration be given to restricting flight in known icing conditions until the proposed AD is complied with, in order to avoid atmospheric conditions that may cause the problem.

The FAA does not agree with the commenter. In consideration of the commenter's request, we have taken into account the early release of a Raytheon Safety Communique and the referenced service bulletin, in addition to the degree of urgency associated with the unsafe condition. The loss of airspeed indication, mach trim warning at high altitudes in the vicinity of clouds, and autopilot disconnect, indicate that there was insufficient heating energy inside the pitot probes. The loss of airspeed indication occurred at high altitude, with high moisture content, and lasted for a short period of time. The Safety Communique that was sent to all owners of Raytheon Model Hawker 800XP airplanes outlined the problem and corrective actions to take if it occurs; which include no abrupt power or altitude changes until the condition clears. We have determined that, in light of the preventive procedures that have been issued, allowing continued flight until the affected pitot probes are replaced will not adversely affect safety. No change to the final rule is necessary in this regard.

### **Request To Change Statement of Unsafe Condition**

The commenter states that the proposed AD uses the term "seriously misleading information" to describe the consequences following the loss of the Captain and First Officer's airspeed information. The commenter asks that the term be changed to "hazardously misleading information," which is the generally understood description in certification terms. The commenter adds that loss of airspeed indication on both sides can be catastrophic.

We agree that the term "hazardously misleading information" is generally used throughout the aircraft industry, and that the loss of airspeed indication for both the pilot and co-pilot could present a hazard to continued safe flight, depending on when it occurs during the flight. Therefore, we have changed the statement of the unsafe condition throughout this final rule accordingly.

### **Other Airplane Models With Rosemount Pitot Probes**

The commenter does not ask for a specific change to the final rule, but states that the referenced service bulletin specifies replacement of certain Rosemount pitot probes, yet the proposed AD is model specific. The commenter adds that it is not clear why the proposed AD does not cover installations on other models having the same pitot probes. The commenter notes that vulnerability to a potentially catastrophic condition could exist, and asks if the pitot probes are exclusive to airplane model.

The unsafe condition found on Raytheon Hawker Model 800XP airplanes has not been reported by owners/operators of other airplane models. The loss of airspeed indication is airplane model specific, due to different operational environments, airplane limitations, and installation locations.

## **Conclusion**

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

## **Cost Impact**

There are about 224 airplanes of the affected design in the worldwide fleet. The FAA estimates that 155 airplanes of U.S. registry will be affected by this AD, that it will take about 50 work hours per airplane to do the actions, and that the average labor rate is \$65 per work hour. Required parts will cost about \$11,425 per airplane. Based on these figures, the cost impact of the AD on U.S. operators is estimated to be \$2,274,625, or \$14,675 per airplane.

The cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

## **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.

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:

# AIRWORTHINESS DIRECTIVE



Aircraft Certification Service  
Washington, DC

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

*We post ADs on the internet at "www.faa.gov"*

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).

**2004-09-26 Raytheon Aircraft Company:** Amendment 39-13616. Docket 2002-NM-277-AD.

**Applicability:** Model Hawker 800XP airplanes having serial number 258266 and serial numbers 258277 through 258500 inclusive, certificated in any category.

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

To prevent loss or fluctuation of indicated airspeed, which could result in hazardously misleading information being provided to the flightcrew, accomplish the following:

## **Replacement**

(a) At the next scheduled 24-month inspection, but no later than 6 months after the effective date of this AD: Replace the existing Rosemount Aerospace 853JF pitot probes with new Rosemount Aerospace 853JF1 pitot probes (includes installing a new ammeter, two new shunts, and improved electrical wiring), by doing all the actions in paragraph 3.A. of the Accomplishment Instructions of Raytheon Service Bulletin SB 34-3412, dated March 2001. Do the actions per the service bulletin.

## **Parts Installation**

(b) As of the effective date of this AD, no person shall install a Rosemount Aerospace 853JF pitot probe, or an ammeter having P/N 2132-01-0017, on any airplane.

## **Alternative Methods of Compliance**

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

## **Incorporation by Reference**

(d) The actions shall be done per Raytheon Service Bulletin SB 34-3412, dated March 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 Raytheon Aircraft Company, Department 62, P.O. Box 85, Wichita, Kansas 67201-0085. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Wichita Aircraft Certification Office, 1801 Airport Road, Room 100, Mid-Continent Airport, Wichita, Kansas; 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**

(e) This amendment becomes effective on June 15, 2004.

Issued in Renton, Washington, on April 27, 2004.

Kevin M. Mullin,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 04-10247 Filed 5-10-04; 8:45 am]

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