

ORDERS: 8300.10 and 8400.10

APPENDIX: 4

BULLETIN TYPE: Joint Flight Standards Information Bulletin  
(FSIB) for Airworthiness (FSAW) and Air  
Transportation (FSAT)

BULLETIN NUMBER: \*FSAW 95-01 and \*FSAT 95-01 (URGENT)

BULLETIN TITLE: ATR-42 and ATR-72 Airworthiness Directive  
T-95-02-51 Compliance Procedures

EFFECTIVE DATE: 01/11/95

TRACKING: NTSB Recommendation: A-94-182; A-94-183;  
A-94-184; A-94-185

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1. PURPOSE. This bulletin contains guidance and information for Flight Standards Service principal operations inspectors (POI) for operation of the ATR-42 and ATR-72 in icing conditions and supersedes previously issued information. Procedures contained in this bulletin are based upon a telegraphic Airworthiness Directive (AD). These procedures are effective immediately upon receipt.

2. CANCELLATION. This bulletin cancels bulletins FSAW 94- 53 and FSAT 94-19, dated 12/12/94.

3. BACKGROUND.

A. On October 31, 1994, an accident involving an ATR-72 airplane occurred when the airplane was en route from Indianapolis to Chicago. The accident occurred during the initial portion of the approach to Chicago. The airplane had been in a holding pattern for more than 30 minutes, and there were icing conditions reported in the area.

B. Although the official cause of the accident has not been determined, preliminary information from the accident investigation indicates that, immediately after the autopilot disconnected, the airplane entered an abrupt roll to the right, which was not corrected before the airplane impacted the ground.

C. On November 16, 1994, a telegraphic AD (number T94-24-51) was issued, (superseded AD numbers T94-23-51 and T94-23-51 R1) applicable to all model ATR-42 and ATR-72 series airplanes. On December 9, 1994, telegraphic AD T94-25-51 was issued, which superseded AD T94-24-51. This AD prohibited operation of the airplane when icing conditions (as defined in the AFM) are forecast or reported.

D. On November 10, 1994, Air Traffic Control (ATC) issued a general notice to ATC personnel, which stated that ATR-42 and ATR-72 pilots had been advised to avoid extended exposure to icing conditions and to

fly at indicated airspeed in excess of 175 knots while holding. ATC personnel were to provide priority handling to ATR-42 and ATR-72 pilots when they request route, altitude, or airspeed deviations to avoid icing conditions.

#### 4. DISCUSSION

A. As part of the Special Certification Review that was conducted by the FAA and DGAC, an extensive icing tanker test program has been accomplished on the ATR-72 at Edwards Air Force Base. Testing conducted to confirm certification compliance was successfully completed with the aircraft meeting all certification standards. Additional testing was conducted with large water droplets (freezing drizzle), which is outside certification standards, and it was found to be possible for ice to accrete aft of the wing boot surface when the aircraft was operated in a flaps 15 degree configuration. ATR 42/72 AFMs now prohibit the dispatch and operation of these airplanes into known or forecast freezing rain and freezing drizzle.

5. ACTIONS. The following guidance has been communicated directly to affected operators that use ATR-42/72 aircraft. POI's shall follow up with their operators and ensure that the following actions are accomplished prior to the dispatch of any ATR aircraft into known or forecast icing conditions in accordance with the AFM and AD T-95-02-51. These actions are considered necessary for safe operation of the ATR-42 and ATR-72 airplanes in air carrier operations:

A. POI's shall ensure that all relevant material from AD T-95-02-51 and all applicable MMEL changes are incorporated in their operator's company manuals.

B. To ensure ATR aircraft will not be dispatched, nor allowed to continue flight, into known or forecast freezing rain or freezing drizzle, the following dispatch procedures will be implemented by each ATR operator.

1. The operator's weather system must include access to forecasts and reports of freezing rain and freezing drizzle at enroute altitudes and at all airports considered in the flight planning process.

2. Dispatchers will review terminal and area forecasts, terminal observations, inflight advisories, pilot reports, radar reports and temperatures aloft to ensure the flight is not planned to operate through freezing rain or freezing drizzle at the departure, destination, alternate airports or along the route of flight.

3. When any company flight, regardless of aircraft type, encounters moderate or greater icing, freezing rain or freezing drizzle, they will immediately advise ATC of those conditions. The flight crew will then notify dispatch, when workload permits, of the

location, altitude, temperature and intensity of the conditions encountered.

4. Reports of moderate or greater icing, freezing rain, or freezing drizzle received by ATC, will be entered into the pilot report (PIREP) system as quickly as possible for the benefit of other aircraft approaching the reported area of the PIREP.

5. When a dispatch facility receives a PIREP of freezing rain or freezing drizzle, the facility must have a system for immediately distributing that information to all dispatchers. Each dispatcher will then determine which of their flights may be affected by this report. They will then contact those flights to ensure the PIREP has been received and coordinate any reroutes, ground delays or flight cancellations that may be required to ensure their flights avoid encountering the reported conditions.

6. To ensure forecasts are of the best quality possible, a system must be in place by which all reports of freezing rain and freezing drizzle are provided on a timely basis to the weather source generating the forecasts.

C. Prior to dispatching a flight into known or forecast icing conditions, each dispatcher must complete an FAA Approved Training Program. This program must include the following elements:

1. Overview of Tanker Tests and Pilot Visual Cues.
2. Meteorological review of conditions likely to cause freezing rain and freezing drizzle.
3. Identification of sources of weather information.
4. Changes to the operator's weather system resulting from the requirement to forecast freezing rain and freezing drizzle.
5. Definition of new information to be provided to the flight crews as a result of these changes.
6. Identification, collection, and dissemination procedures for PIREP's, including ATC coordination.
7. Review of changes to the AFM and MEL resulting from AD T-95-02-51

D. Prior to flight into known or forecast icing conditions, each crew member must complete an FAA Approved Training Program. This program must include the following elements:

1. ATR Technical Background Paper - version 1.0 dated 01-06-95.
2. ATR Icing Procedures Brochure - version 1.0.

3. Air Carrier's Dispatch Procedures including paragraphs C.(5) and (6) above.

4. AFM, FCOM, and MEL changes resulting from AD T-95-02-51

E. POI's shall evaluate the operator's system for providing forecasts and reports of freezing rain and freezing drizzle at en route altitudes to ensure it meets the requirements of AD T-95-02-51 and the intent of this FSIB. POIs shall particularly monitor how feedback from PIREPs and ground weather reports is incorporated into revised forecasts and how the reports are used to improve the forecaster's ability to provide more reliable forecasts.

F. The Seattle AEG will review the ATR-42/72 Flight Standardization Board report to determine if it should be amended.

6. PROGRAM TRACKING AND REPORTING SUBSYSTEM (PTRS) INPUT. POI's and PMI's assigned to operators using ATR 42/72 aircraft shall make a PTRS entry to record the actions directed by this bulletin with each of their operators as outlined in HBAT 94-08, "Program Tracking and Reporting subsystem (PTRS) Documentation of Action Required by Flight Standards Bulletins." The PTRS entry shall be listed as activity code number 1382. POI's should use the comments section to record comments of interaction with the operators.

7. INQUIRIES. This FSIB was developed by AFS-200. Questions regarding this FSIB should be addressed to David Potter, Assistant Manager, Air Transportation Division, AFS-200, at (202) 267-8166; by fax at (202) 267-5229 or to Glenn Diefenderfer, Seattle AEG, at (206) 227-2293; by fax at (206) 227-1270.

8. EXPIRATION. This FSIB will remain in effect until further notice.

/s/ David R. Harrington