

NOTICE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

N 8300.114

6/9/04

Cancellation
Date: 6/9/05

SUBJ: ONE-TIME INSPECTION OF AIRPLANES MODIFIED BY SUPPLEMENTAL TYPE CERTIFICATION (STC) TO UPGRADE CLASS “D” CARGO COMPARTMENTS TO CLASS “C” OR “E” AND ARE OPERATED UNDER 14 CFR PART 121

1. PURPOSE. This notice confirms conformity of pertinent aspects of airplanes that are operated under Title 14 of the Code of Federal Regulations (14 CFR) part 121, and have been modified by Supplemental Type Certificate (STC) to upgrade class “D” cargo compartments to class “C.” Also, the rule allows for an upgrade from class “D” to class “E” for all cargo-configured aircraft.

2. DISTRIBUTION. This notice is distributed to the division level in the Flight Standards Service in Washington headquarters; to the branch level in the regional Flight Standards divisions; to the Flight Standards District Offices, and to the Regulatory Standards Division at the Mike Monroney Aeronautical Center. This notice is also distributed electronically to the division level in the Flight Standards Service in Washington headquarters and to all regional Flight Standards divisions and district offices. This information is also available on the Federal Aviation Administration’s (FAA) Web site at: <http://www.faa.gov/avr/afs/notices/8300/N8300-114.doc>.

3. BACKGROUND. The Transport Airplane Directorate (TAD), ANM-100, developed a fiscal year 2002 (FY-02) business plan item that required chartering a team to evaluate a representative sample of STCs approved by various Aircraft Certification Offices (ACO) that were used to convert class “D” cargo compartments to class “C” and to prepare a report to document findings and recommendations.

a. This evaluation originated as a result of discussion between ANM-100 and the Associate Administrator for Regulation and Certification, AVR-1, regarding the smoke detection and fire suppression systems incorporated by these STCs. The primary purpose of this evaluation was to assess the general health and condition of the population of the class “D” to “C” cargo compartments STCs that have been issued. The evaluation focused on type design data, conformity, maintenance, operations, continued airworthiness, and minimum equipment list of these systems to make this assessment. During the evaluation, the team found that in every case there were pertinent aspects of the STCs that did not conform to the type design. These nonconformities included inadequate sealing of the compartment from air leakage, damage to smoke detectors, damage to smoke detector protective devices, foreign material in fire suppression nozzles, blue water leakage in the vicinity of smoke detectors, and dented fire suppression tubing.

NOTE: For all-cargo aircraft, upgrade of class “D” to “E” is subject to the same issues as the upgrade to class “C.”

b. The outcome of this evaluation was a report issued by the TAD that provides information to the assigned certification offices to properly and consistently address the FAA safety recommendations, highlight issues that may necessitate further review by the responsible ACOs from a continued operational safety standpoint, and highlight issues that may bear further review by the TAD.

4. APPLICABILITY. This notice applies to all principal maintenance inspectors (PMI) assigned to part 121 aircraft that have been modified by an STC to upgrade class “D” cargo compartments to class “C” or “E.”

5. ACTION.

a. PMIs shall provide this information to their respective operators by providing them a copy of this notice or referring them to the URL indicated above.

b. PMIs shall ensure that operators perform a one-time inspection of the smoke detection and fire suppression systems of all airplanes that have been modified by an STC to install these systems. This inspection shall be completed within the next “C” check cycle or scheduled maintenance visit. The inspection should focus on the following:

- (1) Sealing of the compartment;
- (2) Appropriate part numbers installed in the correct location;
- (3) Blue water leakage not impinging on smoke detectors;
- (4) Integrity of smoke detector protective devices;
- (5) Proper installation of placards;
- (6) Physical damage of exposed system components; and
- (7) Foreign material inside of fire suppression nozzles.

c. The operator shall ensure conformity based on affected STCs and provide corrective action when necessary. Any discrepancies noted as a result of this one-time inspection must be recorded in the aircraft maintenance record and corrected to return the aircraft to an airworthy condition. The operator shall make a report to the PMI concerning the results of this inspection.

6. REPORTING. Airworthiness aviation safety inspectors shall make a Program Tracking and Reporting Subsystem (PTRS) entry to record the actions of this notice. Use activity code 3623 to report the aircraft information described in paragraph 5 and list “N8300114” (without the quotes) in the “National Use” field. Use the comments section to record interaction and corrective action.

7. GUIDANCE FOR VALIDATING CONFORMITY OF AIRPLANES. For guidance, refer to the following:

- AC 25-22, Certification of Transport Airplane Mechanical Systems

- FAA Order 8300.10, Airworthiness Inspector's Handbook
- STC Top Drawing
- Part 121, section 121.314

8. DISPOSITION. This notice will not be incorporated into the 8300.10 handbook. Direct any questions concerning the cargo compartment inspections to Emilio Estrada, Aircraft Maintenance Division, AFS-330, at (202) 267-5571 or Steve Edgar, Transport Airplane Directorate, ANM-100, at (425) 227-2025.

/s/ John M. Allen for
James J. Ballough
Director, Flight Standards Service