

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

N 8000.309

10/5/05 Cancellation Date: 10/5/06

SUBJ: DISPATCHING DURING PRECIPITATION CONDITIONS OF ICE PELLETS, SNOW PELLETS, OR OTHER ICING EVENTS FOR WHICH NO HOLD OVER TIMES EXIST

- **1. PURPOSE.** This notice provides guidance to aviation safety inspectors and to all air carrier operators engaged in air transportation on the potential hazards of conducting ground operations and departures during precipitation of ice pellets, snow pellets, or other icing conditions for which hold over times (HOT) do not exist.
- **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/library/manuals/examiners_inspectors/8000/media/N8000-309.doc.
- **3. DISCUSSION.** Ground operations in ice pellets and other icing conditions where HOTs do not exist are a very serious concern to the Flight Standards Service (AFS). The Service has learned that a number of certificate holders continue to operate (dispatch) in these conditions.
- **a.** Such operations must be considered a direct threat to the safety of flight for the following reasons:
- (1) No tests have been conducted for ground icing conditions in ice pellets or other conditions such as heavy snow, snow pellets, moderate and heavy freezing rain, and hail.
- (2) There is no reliable data regarding the changes or characteristics of Type IV fluid when exposed to ice pellet conditions.
- (3) Fluid failure in ice pellet conditions is nearly impossible to determine from inside the cabin of an aircraft during a pretakeoff check.
 - (4) No data exists regarding the adherence affinity of ice pellets in Type IV fluid.
 - (5) No HOTs exist for ice pellets.

(Electronically: A-W(FS)-2; A-X(FS)-2; A-FFS-7)

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b. Dispatching during these conditions is equivalent to operating in unknown performance areas. Pilots have no numerical references, and there is no available supporting data to determine the condition of the deice/anti-ice fluid before takeoff. It has been suggested that a pretakeoff contamination check (PCC) can be done within 5 minutes before departure. This practice would be unreliable at best since no data is available that shows the process of fluid failure subjected to any concentration or intensity of ice pellets/snow pellets.

- **c.** Furthermore, a PCC is conducted only at the expiration of the HOT for operators that have a deicing/anti-icing program approved under Title 14 of the Code of Federal Regulations (14 CFR) part 121, section 121.629(c). There are no HOTs during ice pellets/snow pellets precipitation conditions. Section 121.629(d), which allows only for an outside check of the wings, etc., 5 minutes before departure, was not intended for use by large air carriers with national and international operations.
- **d.** Departures in ice pellets/snow pellets, even for small air carrier operations, present a hazard to the safety of flight and subjects the flying public to a level of safety below that intended by the regulations.
- **4. ACTION.** Principal inspectors should examine the deicing/anti-icing program or plan for all certificate holders for whom they have oversight responsibility to determine whether that certificate holder has authority to dispatch or operate in conditions of ice pellets, snow pellets, and other icing conditions for which no HOTs exist. Any authorization or approval to operate in these conditions should be removed for that certificate holder's program or plan until sufficient scientific data is obtained to show that such operations can be conducted safely.
- **5. TRACKING.** Document the conveyance of the information contained in this notice for each air carrier or fractional ownership program affected.
- **a.** Use Program Tracking and Reporting Subsystem (PTRS) code 1030, Convey Non-Reg. Info.
 - **b.** Enter "N8000309" in the "National Use" field (without the quotes).
- **c.** Once the above information has been provided to the operator's representative, as appropriate, close out the PTRS.
- **6. DISPOSITION.** This notice will not be incorporated into Order 8400.10, Air Transportation Operations Inspector's Handbook. Any questions concerning this notice should be directed to the Air Carrier Operations Branch, AFS-220, at (202) 267-3749.

/s/ Carol E. Giles (for)
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