



U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

NOTICE
8000.313

Effective Date:
10/31/05

Cancellation Date:
10/31/06

SUBJ: Parts 121 and 135 Operations Specification for Deicing/Anti-Icing, Operations in Ice Pellets without Deice/Anti-Ice Fluids

1. PURPOSE. This notice provides guidance and clarification to aviation safety inspectors (ASI) and to all air carrier operators engaged in air transportation concerning rescission or issuance of operations specifications (OpSpec) for deicing/anti-icing programs under Title 14 of the Code of Federal Regulations (14 CFR) sections 121.629(c) and 135.227(b). This notice also provides guidance to ASIs and air carrier operators on the potential hazards of conducting ground operations and departures during ice pellets conditions.

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/N8000-313.doc.

3. DISCUSSION. Following the issuance of Notice 8000.308, Reevaluation of Deicing/Anti-icing Programs, dated October 5, 2005, and Notice 8000.309, Dispatching During Precipitation Conditions of Ice Pellets, Snow Pellets, or Other Icing Events for which No Holdover Times Exist, dated October 5, 2005, the aviation industry and a significant number of FAA principal inspectors (PI) who were affected by these notices expressed several concerns that they felt needed further clarification. These concerns were:

Question 1: If an operator cannot complete the requirements addressed in paragraphs 6a through 6d of N 8000.308 by November 4, 2005, should that operator's OpSpec be removed?

Answer 1: The process prescribed in N 8000.308 is an adjustment process to bring operators with OpSpec A023 into alignment with the regulation and guidance material. This alignment is a major step in achieving the FAA's long-term goal of establishing standardization among programs. The partial completion date of November 4, 2005, is a target date where it is believed that the requirements addressed in paragraphs 6a through 6d of the notice can be completed and, although no completion date was given for paragraphs 6e through 6f, the FAA expects that these

tasks can be completed in a reasonable time period. Both the operator and PI should use the early icing season to evaluate the adequacy of the operator's present program and revise it as necessary. The remainder of the icing season will provide the operator and PI the opportunity to evaluate cold weather operations and adjust the program and processes.

If an operator makes a good faith effort to work with the FAA to reach compliance but due to mitigating circumstances cannot comply by the November 4, 2005, target date, the operator's deicing/anti-icing program OpSpec should not be removed. Rather, the FAA should continue to work with the operator to complete any outstanding tasks as soon as possible. However, if an operator shows no willingness to cooperate with the FAA and makes little or no effort to comply with the regulations, that operator's OpSpec should be removed until proper compliance is achieved. An operator's OpSpec would also be removed if its program and processes contain obviously unacceptable safety risks.

Question 2: Should a 14 CFR part 135 operator, with OpSpec A023, be expected to meet all of the elements of a deicing/anti-icing program approved in accordance with part 121, section 121.629(c)?

Answer 2: Part 135 operators who have OpSpec A023 are expected to fully comply with the requirements of section 121.629(c). If an operator cannot comply with this section, the operator's OpSpec should be removed and a different OpSpec issued. This could be either OpSpec A041 or A042, as appropriate.

Question 3: In N 8000.309, the FAA requested that the authority of an operator to dispatch in ice pellet condition be removed from that operator's deicing/ anti-icing program. Can an operator operate in ice pellets conditions when no anti-ice fluids are used and the ice pellets are not adhering and are not expected to adhere to the aircraft?

Answer 3: In response to N 8000.309, some segments of the aviation industry have asked whether dispatch during ice pellet conditions is acceptable when no anti-ice fluids are used and ice pellets are not adhering and are not expected to adhere to the aircraft. The regulations clearly state "no person may take off an aircraft when frost, ice, or snow is adhering to the wings..." (section 121.629(b)) and "...no person may dispatch, release or take off an aircraft any time conditions are such that frost, ice, or snow may reasonably be expected to adhere to the aircraft..." (section 121.629(c)).

If these conditions are not present, an aircraft may be dispatched or released; however, meteorological conditions that produce ice pellets (sleet) are considerably different from those that produce snow. Snow is produced within clouds and, when a snow crystal has grown to a sufficient size and weight, precipitates from the cloud as snowflakes and remains in that physical state until reaching the ground. Ice pellets, however, result when frozen precipitation liquefies while falling through a layer of air that is above freezing. They then refreeze as they continue to fall through a deep ground layer of air that is below freezing or a ground layer of air that is significantly below freezing. While in a liquid state, these supercooled droplets can, upon striking an object such as an aircraft, instantly freeze to form clear ice. Such icing conditions are

usually outside 14 CFR part 25, Appendix C, which addresses icing certification limits, and continued flight in these conditions may be extremely hazardous.

Therefore, even though ground operations in ice pellets that are not adhering to the aircraft may not create an immediate hazard, takeoff in such conditions may expose the aircraft to a significant risk of inflight icing that may exceed the ability of the ice protection systems of the aircraft to remove the ice. Considering these facts, the FAA does not recommend departing in any ice pellet conditions.

4. ACTION. PIs should advise ASIs assigned to their certificate(s), as appropriate, and the appropriate personnel of all air carrier certificate holders for whom they hold regulatory oversight responsibilities of the contents of this notice.

5. TRACKING. Document the conveyance of the information contained in this notice for each air carrier program affected.

a. Use Program Tracking and Reporting Subsystem (PTRS) code 1030, Convey Non-Reg. Info.

b. Enter "N8000313" 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, or Order 8700.1, General Aviation Operations Inspector's Handbook. Any questions concerning this notice should be directed to the Air Carrier Operations Branch, AFS-220, at (202) 267-3749.

ORIGINAL SIGNED BY
CHESTER D. DALBEY (for)

James J. Ballough
Director, Flight Standards Service