



U.S. Department of Transportation
Federal Aviation Administration
Washington, DC

Ground Deicing Program

Revision: Original

Date: 08/02/23

Summary of Changes to FAA Holdover Times Guidelines and Associated Documents for Winter 2023-2024

Approved by the Federal Aviation Administration (FAA)
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Record of Revisions

Include a brief description of the change and effective date of the revision.

Revision	Description of Change	Effective Date
Original	Original issue	08/01/2023
1		
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1. Purpose. This document details changes to the ground deicing program related documents such as the FAA Holdover Times tables, allowance times tables and other documents detailed below.

2. FAA Holdover Time (HOT) Guidelines. The principal changes from the previous year are briefly detailed below.

a. How to Use this Document. A bullet has been added to the Appendices section describing the purpose of the new Appendix C “Aircraft Deicing Fluid (ADF)/Aircraft Anti-icing Fluid (AAF) Manufacturers”.

b. Holdover Time Tables.

- Fluid specific HOT guidelines have been created for one new fluid: ALAB International PROFLIGHT EG4 (Type IV).
- The HOT guidelines for Newave Aerochemical FCY-2 Bio+ (Type II), Clariant Max Flight 04 (Type IV), JSC RCP Nordix Defrost EG 4 (Type IV), and Shaanxi Cleanway Cleansurface IV (Type IV) have been removed.
- An increase has been made to the Type II generic holdover times in natural snow as a result of the removed fluid.
- Several increases have been made to the Type IV generic holdover times as a result of removed fluids.
- Increases have been made to some of the Type II and Type IV Generic HOTs in the Snow mixed with Freezing Fog HOT table as a result of removed fluids.
- A note was modified in all Type I, II, III, and IV HOT tables indicating that the visibility table must be used in conditions of very light or light snow mixed with rain or drizzle in order to confirm the snowfall intensity.
- A note was added to the Active Frost and Snow mixed with Freezing Fog generic tables indicating that the fluid being used must be listed in the list of fluids (Table 51 - Table 54) in order to use the generic HOTs.
- A caution was added for all Type IV fluids indicating that the HOT tables are for use with aircraft conforming to the SAE AS5900 high speed aerodynamic test criterion.

c. Allowance Times Tables.

- The condition Light Ice Pellets Mixed with Light Drizzle or Moderate Drizzle has been added to all allowance times tables and uses the same allowance time as Light Ice Pellets Mixed with Light Freezing Drizzle or Moderate Freezing Drizzle. An accompanying note was added to indicate that its use is limited to above 0°C.

- The condition Moderate Ice Pellets (or Small Hail) Mixed with Moderate Drizzle has been added to all Type IV allowance times tables. This condition uses the same allowance times as Moderate Ice Pellets (or Small Hail) Mixed with Moderate Freezing Drizzle. An accompanying note was added to indicate that its use is limited to above 0°C.
- Degrees Fahrenheit has been added to the temperature row in all allowance times tables.
- Spaces were added to the mixed conditions METAR codes to more accurately reflect what is reported.

d. Supplemental Guidance.

- A note has been added to The Snowfall Intensities as a Function of Prevailing Visibility table to indicate that when snowfall is combined with an obscuration the visibility table may overestimate the actual snowfall intensity. However, the MANOBS may underestimate the actual snowfall intensity therefore the use of the visibility table is always recommended
- The list of fluids has been updated to include highest on-wing viscosity (HOWV) data for all fluids notes relating to viscosity have been updated.
- The list of fluids (Tables 54, 55, 56 and 57) has been updated to reflect the latest information available on all de/anti-icing fluids.
- The fluid application tables are unchanged.

3. FAA Holdover Time Guidelines Regression Information.

a. Type I Fluid. The Type I regression coefficients are unchanged.

b. Type II Fluid.

- The regression coefficients table and verification table for Newave Aerochemical FCY-2 Bio+ have been removed.
- Several changes were made to the Type II generic holdover times for winter 2023-2024. The Type II generic verification table has been updated accordingly.

c. Type III Fluid. The Type III regression coefficients are unchanged.

d. Type IV Fluid.

- Regression coefficients tables and verification tables have been added for the one new Type IV fluids, added to the holdover time (HOT) guidelines for winter 2023-2024: ALAB International, PROFLIGHT EG4.

- The regression coefficient tables and verification tables for Clariant Produkte Max Flight 04, JSC RCP Nordix Defrost EG 4, and Shaanxi Cleanway Aviation Chemical Cleansurface IV have been removed.
- Several changes were made to the Type IV generic holdover times for winter 2023-2024. The Type IV generic verification table has been updated accordingly.

e. **Guidance.** The guidance section remains unchanged.

4. **FAA Degree-Specific Holdover Time Data.**

- Fluid specific DSHOTs have been created for one new fluid: ALAB International PROFLIGHT EG4 (Type IV).
- The DSHOTs for Newave Aerochemical FCY-2 Bio+ (Type II), Clariant Max Flight 04 (Type IV), JSC RCP Nordix Defrost EG 4, and Shaanxi Cleanway Cleansurface IV (Type IV) have been removed.
- An increase has been made to the Type II generic DSHOTs as a result of the removed fluid.
- Several increases have been made to the Type IV generic DSHOTs as a result of removed fluids.
- Increases have been made to some of the Type II and Type IV Generic Snow mixed with Freezing Fog DSHOTs as a result of removed fluids.

5. **N 8900.667 and General Information Document.** Much of the information contained in the annual publication of the Federal Aviation Administration (FAA)-Approved Deicing Program Notice was removed and placed in the document titled General Information.