



Federal Aviation Administration

National Part 139 CertAlert

****Advisory**Cautionary**Non-Directive**Advisory**Cautionary**Non-Directive**Advisory**Cautionary**Non-Directive****

Date: 1/12/2023 **No. 23-01**

To: All Title 14 CFR Part 139 Certificated Airport Operators
Aircraft Rescue and Fire Fighting (ARFF) Departments and Mutual Aid Providers

Subject: New Military Specification for Performance-Based Standards for Fluorine-Free Aircraft Fire Fighting Foam

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1. **Purpose.** The purpose of this CertAlert is to inform Part 139 Airport operators and industry stakeholders:
 - a. A new performance-based standard for a Fluorine Free Foam (F3) has been developed by Naval Sea Systems Command (NAVSEA). The new performance standard is identified in new Military Specification MIL-PRF-32725, dated January 12, 2023.
 - b. The Federal Aviation Administration (FAA) will accept the airport operator's use of the new F3 extinguishing agent at Certificated Part 139 airports once the agent passes the military performance standards MIL-PRF-32725, *Fire Extinguishing Agent, Fluorine-Free Foam*, qualification testing **and** is added to the Navy's Qualified Products' List (QPL)/Qualified Products' Database (QPD).
 - c. Currently, Certificated Part 139 airports will not be required by the FAA to transition to the new F3. Airport operators are authorized to continue using Aqueous Film Forming Foam (AFFF) listed on the QPL for MIL-F-24385, *Fire Extinguishing Agent, Aqueous Film Forming Foam (AFFF) Liquid Concentrate, for Fresh and Seawater*. Airport operators should check with their state and local municipalities for any local requirements.
2. **Background.**
 - a. The FAA provides guidance to airport operators on aircraft fire extinguishing agents in AC 150/5210-6, *Aircraft Fire Extinguishing Agents*, dated July 7, 2004. The FAA expects to make minimal changes to the AC as a result of this new specification but plans to update the AC within 6 months of its release date.
 - b. Currently, AFFF is the primary firefighting agent used at airports for fighting aircraft fuel fires. On April 7, 2020, to meet the regulatory requirements in 14 Code of Federal Regulation Part 139, the FAA adopted and required the use of the latest version of the Navy's MIL-F-24385, *Aqueous Film Forming Foam (AFFF) Liquid Concentrate, for Fresh and Seawater*.

- c. Similar to products in other manufacturing sectors throughout the US, existing AFFF contains a class of compounds called per- and polyfluoroalkyl substances (PFAS). Two types of PFAS, perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA), may be present in AFFF as a byproduct of manufacture, but are no longer intentionally added. Due to the toxic nature of the foam, the DoD and FAA began seeking a new firefighting agent.
- d. The FAA's William J. Hughes Technical Center and the NAVSEA have been researching F3 to assist in the development of a new military performance standard for aircraft firefighting. The result of several years of research and testing is the new Military Specification MIL-PRF-32725, *Fire Extinguishing Agent, Fluorine-Free Foam*, dated January 12, 2023.

3. Guidance.

- a. Fluorine-free foams lack compatibility with other fluorine-free foams, so they cannot be mixed together. The airport operator should take care to ensure F3 from one manufacturer is not added or mixed with F3 from another manufacturer. Airport operators should actively coordinate with responding mutual aid companies ***before an emergency*** to ensure foam compatibility.
- b. The new F3 firefighting agent is not available in a pre-mixed solution.
- c. When Certificated Part 139 airports transition to the new F3, the operator will find the MILSPEC F3 product identified on the QPL/QPD site.
- d. It is anticipated to take a minimum of 90-120 days from the issuance of the new F3 Military Specification, dated January 12, 2023, for the first products to complete their certification process and be listed on the QPL/QPD. Airport operators should plan for possible delays in distribution or delivery of products.
- e. The FAA will provide more information as it becomes available. Airport operators can find Military Specification MIL-PRF-32725 and, when they are available, certified F3 products at the following locations:
 - i. New Military Specification
ASSIST Database – <https://assist.dla.mil/>
ASSIST Quick Search – <https://quicksearch.dla.mil/qsSearch.aspx>
 - ii. Certified F3 Products
Qualified Products Database – <https://qpldocs.dla.mil/>
- f. Part 139 certificated airport operators using vehicles identified in 14 CFR 139.317(a)(2), “...450 lbs of potassium-based dry chemical and water with a commensurate quantity of AFFF to total 100 gallons for simultaneous dry chemical and AFFF application...”, should contact their assigned FAA Airport Certification Safety Inspector to discuss options for ARFF response.



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1/12/2023

Date