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July 31, 2018

Mr. Daniel K. Elwell
Acting Administrator
Federal Aviation Administration
800 Independence Avenue SW
Washington, DC 20591

Re: Requested Action | Alternatives to Aqueous Film Forming Foams

Dear Mr. Elwell:

I am writing on behalf of Seattle-Tacoma International Airport (STIA) to (1) ask that the Federal Aviation Administration (FAA) move quickly to evaluate and adopt alternatives to fluorinated aqueous film forming foams (AFFF) with the goal of replacing them with non-fluorinated alternatives, and (2) request an immediate suspension of the requirement to calibrate aircraft rescue and firefighting equipment annually by spraying AFFF on the ground to demonstrate application rates.

As I am sure you are aware, there is growing concern over AFFF used for aircraft rescue and firefighting in the United States. A class of chemicals known as per and poly fluorinated alkyl substances (PFAS) are key to the effectiveness of AFFF. Federal Aviation Administration (FAA) Part 139 Certification requires the use of AFFF that meets military specification Mil-F-24385. Section 3.2 of this specification states that concentrates "shall consist of fluorocarbon surfactants," a type of PFAS. PFAS are now widely recognized as environmental contaminants of emerging concern through their use in AFFF and a variety of other products and are the subject of increasing regulation throughout the United States.

AFFF containing PFAS can be released to the environment in multiple ways: through fire or catastrophic events, system discharge or false activation, firefighter training, and system testing. Once released, PFAS may present a high risk to both human health and the environment due to the chemicals' persistence, resistance to degradation in the environment, ability to bio-accumulate, and demonstrated toxic effects. Here in the state of Washington, four sites have been discovered with significant PFAS contamination in drinking water supplies at concentrations above EPA's health advisory levels. Three of these sites are military aviation-related facilities.

In June 2018, the Washington State legislature passed a law immediately prohibiting the use of PFAS-containing AFFF for training purposes, with no exceptions. The law also prohibits the manufacture, sale, and distribution of PFAS-containing AFFF beginning in 2020, with certain exceptions for FAA-certified airports such as STIA to use PFAS-containing AFFF in emergency response efforts (not for training purposes). We anticipate that potential releases to the environment through continued use will be

subject to new and existing Washington State regulations, and regulatory initiatives by the Washington State Department of Ecology may result in remediation obligations at past and future sites of AFFF use.

Here at STIA, best management practices are in place that minimize the risk of AFFF releases to the environment. Although monitoring has been limited, PFAS have not been identified in drinking water wells in the vicinity of STIA. However, given FAA certification requirements it is impossible to eliminate the risks associated with continued use of AFFF containing PFAS.

Given these developments, STIA requests that the FAA move expeditiously to allow alternative, non-fluorinated foams, such as those used in Australia and Europe, with the goal of eliminating the requirement to use AFFF containing fluorocarbon surfactants. Section 203 of the FAA reauthorization bill, recently passed by the House of Representatives, contains language that would allow the use of non-fluorinated foams. According to the Airport Cooperative Research Program's Research Report 173 (2017) these fluorine-free foams meet the requirements of the International Civil Aviation Organization (ICAO) for fire extinguishing performance while meeting both safety and environmental requirements.

Heathrow Airport is currently using fluorine-free foam, Moussol-FF 3/6, and has reported that it compares favorably to the effectiveness of fluorinated AFFF in fighting Class-B fires, while being greater than 90% biodegradable. Avinor AS, the Norwegian airport operator, has been using the same product since 2011 at the 46 airports it operates. Prior to selecting it, Avinor AS conducted a thorough evaluation of foams that included environmental and firefighting performance criteria. This testing included live fire demonstrations of effectiveness. Airservices Australia provides ARFF services to 26 of Australia's busiest airports. Since 2010, Airservices has not used foam containing PFAS of any sort at all civilian airports where they operate.

We understand that the process of authorizing an alternative to AFFF may take some time; as an interim measure, STIA is requesting an immediate suspension of the requirement to calibrate aircraft rescue and firefighting equipment annually by spraying AFFF on the ground to demonstrate application rates. According to our research, equipment is available that would allow in-system demonstrations of application concentrations, such as containment equipment that is designed to contain AFFF during annual calibration testing. STIA would be willing to invest in similar equipment to avoid spraying AFFF into the environment, but its implementation requires FAA approval for use in certification testing.

STIA is just one of many airports in Washington and around the country that are highly concerned about this issue. We, and other airports, support rapid action by the FAA to implement the use of non-fluorinated foams, and to change the certification requirements to immediately eliminate the release of PFAS into the environment in non-emergency settings. We look forward to working with the FAA on this matter, and arriving at solutions that protect both life safety and the environment.

Sincerely,

Lance Lyttle
Managing Director

cc:

Mr. Carl Burleson, Acting Deputy Administrator
Ms. Winsome Lenfert, Acting Associate Administrator, Airports
Mr. Ali Bahrami, Associate Administrator, Safety
Mr. David Suomi, Administrator, Northwest Mountain Region
Mr. Randall Fiertz, Director, Airports Division, Northwest Mountain Region
Ms. Joelle Briggs, Manager, Seattle Airports District Office
U.S. Senator Maria Cantwell
U.S. Representative Rick Larsen
Ms. Deborah McElroy, Executive Vice President, Airports Council International – North America