POLICY AND PROCEDURES MEMORANDUM - AIRPORTS DIVISION

NUMBER : 5220.1
DATE : DEC 1992
SUBJECT : Fire Fighting Training Facilities

REFERENCES: FAR Part 139 Certification and Operations: Land Airports Serving Certain Air Carriers
Policy Guidance Letter No. 22, Dated October 4, 1988
Advisory Circular 150/5220-17, Design Standards for an Aircraft Rescue and Firefighting Training Facility


1. Background. Federal Aviation Regulation Part 139.319 (j) (3) requires that all firefighters, assigned to firefighting duties at FAA certificated airports participate in at least one live-fire training exercise every 12 months.

Policy Guidance Letter #22, received from AAS-300, October 4, 1988, states, "A simulated aircraft fire must include a pit fire or fire with an aircraft mock-up or similar device using enough fuel to provide a fire intensity which simulates realistic firefighting conditions. The conditions would simulate the type of fire which could be encountered on an air carrier aircraft at the airport."

Because of environmental concerns, a majority of previously used firefighting training pits have been closed and many certificated airports have had difficulty obtaining the required training for their rescue and firefighting personnel.

2. Policy/Procedures. The purpose of this PPM is to establish considerations for the siting of firefighting training facilities in the Great Lakes Region.

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State Aviation Directors
(for information through ADO)
Although all training specified in FAR Part 139.319 (j) is required on an annual basis, such training, with the exception of the live fire training, can be conducted "in-house" without the necessity for travel. Therefore, we anticipate Federal participation to be limited generally to the construction of a facility required to conduct live firefighting training and not ancillary items such as dormitories, classrooms, libraries, and the like. For this reason, we recommend burn pits be constructed at or near airports, or other firefighting training facilities, that can presently provide housing, classroom space, dining, and any other support required.

At stand-alone firefighting facilities, where classrooms are not currently available, it may be necessary to provide same. In addition, the nature of the training will require restrooms, showers, and lockers. The facility must also accommodate the ARFF equipment needed to support the training. It is expected that one or two ARFF vehicles will be required for training purposes. The required facilities and equipment would be AIP eligible.

It should be recognized that certain existing firefighting training facilities may only require limited improvements in order to function as a regional training facility, reducing the investments necessary to provide this service.

It is recommended firefighting training facilities be located no more than one day’s driving time away, or approximately 300 miles under typical driving conditions, for participating airports that have agreed to use the facility for training. Under some conditions, a one-day drive might be excessive from a manpower utilization standpoint. For example, many of the Index A airports use maintenance personnel to fulfill the firefighting requirement. Their absence will have an adverse effect on the airport’s ability to sustain routine maintenance functions. Also, since driving times may vary according to road conditions and weather, a reduced separation distance may be justified on the basis of accessibility.

Typically, at least three certificated airports should formally agree to use a regional firefighting training facility. The actual number of airports required for adequate justification will vary depending upon the number of firefighting personnel being served and the cost of the facility, i.e. a cost/benefit study should be performed. An exception to this separation criterion could be a large Index E airport, which normally has adequate firefighting personnel, in addition to mutual aid units, to justify a training facility without regard to participation by other airports. However, such a sponsor will only receive Federal funding for a regional firefighting training facility, if other airport operators are permitted to use the facility for training.
A firepit for an airport operator's own exclusive use will be eligible for Federal funding, as long as the airport operator has an ARFF training requirement under FAR Part 139 and the Federal investment can be justified on a cost/benefit basis. The airport should be located outside the 300-mile driving distance service area of a regional training facility. If an airport sponsor provides its own training facility, the sponsor's airports will be excluded from the regional firefighting training facility service area.

Normally a proposal for a regional firefighting training facility should not be considered within a 450-mile driving distance of an existing or planned regional facility. ADO review of the grant application should assure that airports used to justify the proposed facility do not include airports that already have access to a regional training facility, i.e., are within the 300-mile driving distance service area of another existing or planned regional facility, or have their own training facility.

AGL-620 will maintain and provide a list of existing and planned regional firefighting training facilities to the ADO's. The ADO's will coordinate regional training facility proposals with the other ADO's, and AGL-620 will coordinate the proposals with contiguous regions. The ADO's will determine if new proposed locations meet the siting criteria. Since the decision to fund a regional firefighting training facility is a programming responsibility, approval of justification for Federal participation resides with the ADO's.

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WHAT IS MEANT BY THE TERM "LIVE - FIRE DRILL" IN SECTION 139.319(j)(3).

In the context of this section "live-fire drill" has the same meaning as "simulated aircraft fire".

The expected performance is described in NFPA 1003-1987, Chapter 16, Fire Fighting Operations, quoted as follows:

16-1.4 The airport firefighter, given an airport-type foam firefighting vehicle(s) shall demonstrate the control and extinguishing of a simulated aircraft fire using handlines and/or turrets.

16-1.5 The airport firefighter, given an airport firefighting vehicle(s), shall demonstrate using fire streams to protect firefighters and occupants.

16-1.6 The airport firefighter, given each type, other than foam-type firefighting vehicle(s), shall demonstrate control and extinguishing of a simulated aircraft fire using handlines and turrets.

The aircraft to be simulated are the same as those identified under the performance of 5-1.1 Chapter 5, Aircraft Familiarization, NFPA 1003-1987; i.e., those associated with the particular airport ARFF Index.

WHAT IS AN ACCEPTABLE SIMULATED AIRCRAFT FIRE?

A simulated aircraft fire must include a pit fire or fire with an aircraft mock-up or similar device using enough fuel to provide a fire intensity which simulates realistic firefighting conditions. The conditions would simulate the type of fire which could be encountered on an air carrier aircraft at the airport. AC 150/5220-17, Design Standards for an Aircraft Rescue and Firefighting Training Facility, provides more detailed guidance on recommended standards for the burning area structure.