

ORDER

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8/12/76

Initiated

by: AFS-140

SUBJECT: FIRE EXTINGUISHING REQUIREMENTS FOR APU COMPARTMENTS

1. PURPOSE. This order provides information concerning compliance with the fire extinguishing requirements for Auxiliary Power Unit (APU) compartments.

2. DISTRIBUTION. This order is distributed to all Flight Standards offices in Washington, to the branch level; and to all Flight Standards offices in the regions, to the section level.

3. BACKGROUND.

a. FAR Section 25.1195(a) requires a fire extinguisher system for each designated fire zone. Further, FAR Section 25.1195(b) states an individual one-shot system may be used for auxiliary power units, fuel burning heaters and other combustion equipment. For other designated fire zones, two discharges must be provided each of which produce adequate concentrations. It must be possible to direct each of these discharges to any main engine installation.

b. The question has arisen as to whether or not one of the two shots required for other zones could be used for an APU compartment. The rule permits an individual one-shot system solely for the APU but does not imply that it must be isolated from the two-shot system for main powerplant fire zones. The purpose in requiring a two-shot system for a main fire zone is not to provide a surplus of extinguishing agent, but rather to provide a backup shot in the event of failure of the first shot or to deal with a reignition of a fire.

c. This question may have come about because in many installations a separate one-shot system for the APU is provided in addition to the two or more system units for the other fire zones. This was not because such a configuration was mandatory but rather because it was a more convenient and feasible arrangement created by distance and sizing factors.

4. ACCEPTABLE COMPLIANCE. The one-shot extinguishment system required for the APU may either be independent of the system for other fire zones or utilize one of the two shots intended for main engine fire zones. The same concept applies to FAR Section 29.1195(b).

/s/ JAMES O. ROBINSON, Chief

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