

AEROSPACE RECOMMENDED PRACTICE

SAE ARP4277A

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Superseding ARP4277

Placard and Marking Standards for Operation
of Inflatable Slides and Slide/Rafts

RATIONALE

The information in this ARP is outdated as a stand-alone document and is available with similar information in FAA TSO C69c.

CANCELLATION NOTICE

This document has been declared "CANCELLED" as of January 2009. By this action, this document will remain listed in the Numerical Section of the Aerospace Standards Index.

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1. SCOPE:

This SAE Aerospace Recommended Practice (ARP) provides standardized guidelines for the design and identification of slide or slide/raft operating features. Review of the inflatable evacuation and ditching devices in service on the current airline fleet reveals the existence of a wide variety of design and labeling configurations related to the inflation and release of these devices from the aircraft structure. Due to the critical safety nature of these specific operating functions, a common and consistent approach to the design and identification of the inflation and release features is considered warranted. In addition, definition of other features requiring labelling is warranted.

2. REFERENCES:

ARP495 Passenger Evacuation Devices
ARP503 Emergency Evacuation Illumination
ARP577 Emergency Placarding
ARP1146 Combination Evacuation Slide/Rafts
ARP1282 Survival Kit, Life Rafts and Slide/Rafts

3. DEFINITIONS:

3.1 PLACARDING:

As used in this ARP, the term "placarding" is any durable visual intelligence, fixed in place, which provides instructions for locating and/or operating inflatable aircraft emergency evacuation equipment.

3.2 DESIGN:

The term "design" in this ARP is intended to apply only to the location and accessibility of operating features directly related to the inflation and/or separation of the evacuation device from the aircraft or use as a flotation device. The evacuation device is intended to consist of only the inflatable slide, or slide/raft assembly installed on transport category aircraft.

3.3 GIRT:

The term "girt" utilized throughout the ARP is defined as the assembly that connects the evacuation device to the aircraft at a floor-level exit and is typically constructed of coated fabric materials and may have more than one component.

4. DETAIL RECOMMENDATIONS:

4.1 Functional Design of Emergency Evacuation Equipment:

4.1.1 Manual Inflation Handle Location Requirements: The static location of the manual inflation handle, following extraction of the uninflated slide or slide/raft assembly from the aircraft stowage location, shall be on the right hand side of the girt assembly, as viewed from within the aircraft. The center of the handle assembly shall be located not more than 6 in from the right edge of the girt assembly and readily accessible from within the aircraft.

4.1.2 Slide or Slide/Raft Disconnect Handle Location Requirements: The disconnect feature of the slide or slide/raft assembly shall be designed such that release of the evacuation device from the aircraft is accomplished by activation of the release device that is located on the opposite side of the girt assembly from the manual inflation handle. In addition, the release device shall be covered and be located such that the handle is not readily visible or susceptible to inadvertent activation during passenger evacuation.

4.2 Placarding Requirements:

NOTE: Application of placarding information shall not compromise any of the performance characteristics (e.g., strength, resistance to radiant heat, fungus, etc.) of the slide or slide/raft.

4.2.1 Manual Inflation Handle: The operating instructions for manual inflation of the inflatable evacuation devices shall be clearly marked by the following brief instructional placard:

PULL TO INFLATE

The placard shall be located immediately adjacent to the inflation handle and may be accompanied by arrows or other visual cues utilized to enhance the handle's visibility. Letter size and contrast coloring shall comply

4.2.1 (Continued):

with ARP577. In addition, the handle shall incorporate on its visible surface the following instruction or equivalent action necessary for activation:

PULL

4.2.2 Slide or Slide/Raft Disconnect Operation: The required placarding for release of the evacuation device from the aircraft will be designed for the conveyance of information to untrained individuals while boarded onto the device or from a position external to the aircraft following a water landing. The location of the required placard information shall be such that procedural information and/or symbols associated with the release function are isolated to the greatest extent possible from the manual inflation function. The design philosophy of the release placarding and operation should be to minimize the potential for human error in interpretation and execution of the release phase of the evacuation device.

4.2.3 Slide/Raft Equipment: Required placarding for location and operation of required slide/raft equipment shall be designed for conveyance of information to untrained individuals while boarded onto the device or for boarding from the water. Wording shall be brief but shall be chosen and located to provide understanding to untrained individuals as follows:

- a. Boarding Station Identification: Shall be located so that it is readable from the water with the raft in the rated or overload flotation condition. Words and arrows shall be used to direct individuals to the boarding station. Utilization of boarding equipment should be obvious; however, boarding aids shall be identified.
- b. Mechanical Inflation Pump: Identification shall call out its stowage location and method and points of utilization (upper and lower tubes).
- c. Heaving/Trailing Line: The location shall be identified. The utilization method need not be described.
- d. Static Line: The location need not be identified; however, simple detachment instructions shall be included at the point of attachment.
- e. Knife: The location shall be identified.
- f. Sea Anchor: The location shall be identified and deployment method shall be described briefly if special instructions would be required for an untrained individual.
- g. Canopy: The location shall be identified if not automatically positioned above the heads of the seated occupants. Instructions (guides) for positioning shall be simple and brief.