



AEROSPACE RECOMMENDED PRACTICE

ARP 1146 A

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COMBINATION EVACUATION SLIDE/RAFT

1. PURPOSE

1.1 The purpose of this Aerospace Recommended Practice (ARP) is to establish criteria for design and installation of combination evacuation slide/raft devices for use both as a ground and water escape device in the event of emergency.

NOTE: This document is not intended to specify design methods, mechanism, or equipment to be used in accomplishment of the objectives set forth herein.

2. DETAIL RECOMMENDATIONS

The following detail criteria are recommended:

2.1 General

2.1.1 The combination of the evacuation slide and the life raft shall be achieved without compromising standards of the device used as an evacuation slide or as a life raft.

2.1.2 The design of the slide/raft shall facilitate its removal from its primary launching station, portage to a secondary launching station, and deployment/inflation as a life raft.

2.2 Attachment To The Aircraft

2.2.1 The attachment of the slide/raft to the aircraft for use in the raft mode shall have a strength sufficient to allow loading to overload capacity in a minimum 4-ft. (1.22-meter) chop sea condition.

2.2.2 The slide/raft shall have a means to readily disconnect it from the aircraft by a person in the slide/raft so that it can be used in the raft mode. The release handle shall be located on the left-hand side of the girt when looking out the door of the aircraft. The release handle shall be a fabric loop with a 6-in. circumference. The pull force shall not exceed 35 lbs. (15.9 kg). A static line in accordance with ARP 1356 with an integral mechanical disconnect shall be provided in such a manner that the slide/raft shall remain secured to the aircraft when it is used in the raft mode but can be readily disconnected by a person in the slide/raft. The static line shall be a minimum length of 25 ft. (7.62 meters) and have a minimum assembly breaking strength of 1,000 lbs. (454 kg). Failure of the slide/raft attachment point shall not compromise the gas retention capability of the slide/raft. The static line shall not interfere with the operation of the slide/raft when used in the evacuation slide mode.

2.3 Use As An Evacuation Slide

2.3.1 The slide/raft, when used in the evacuation slide mode, shall meet the detail recommendations of ARP 495 for Passenger Evacuation Devices - Civil Air Transport.

2.3.2 The slide/raft shall not have any encumbrances which might be grabbed or inadvertently caught by an evacuee and thus hinder evacuation.

2.3.3 The design shall minimize the possibility of inadvertent actuation to the flotation mode, however, the slide/raft shall be capable of use as an evacuation slide in the event of that inadvertent actuation.

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