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400 COMMONWEALTH DRIVE, WARRENDALE, PA 15096

**AEROSPACE
RECOMMENDED
PRACTICE**

ARP 496B
Superseding ARP 496A

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STOWAGE OF CABIN EMERGENCY FLOTATION EQUIPMENT

1. **PURPOSE:** The purpose of this Aerospace Recommended Practice (ARP) is to establish the criteria for aircraft installations which shall ensure rapid and effective use of emergency flotation equipment in the event of ditching.
2. **DEFINITION:** This ARP concerns emergency flotation equipment and devices, required by the Federal Aviation Regulations, which passengers and crew members may be required to obtain and operate in a ditching situation. Equipment and devices include individual inflatable life preservers, life rafts, combination slide/rafts and accessory survival gear, and auxiliary flotation equipment (such as evacuation slides and seat cushions).

NOTE: It is not the purpose of this ARP to specify the design method or specific mechanism or equipment to be used in accomplishment of the objectives set forth herein.

3. **DETAIL RECOMMENDATIONS:**

3.1 **Individual Life Preserver:**

- 3.1.1 The installed location of each device shall be clearly indicated to the occupant when seated.
- 3.1.2 The installation shall permit ready removal of the device from its stowed position by the occupant while in a seated position and with seat belt fastened.
- 3.1.3 Additional individual life preservers shall be provided for cabin occupants who may not be occupying their normal seats, i.e. seated in lounges etc., where occupancy of such seats is approved for landing, take-off or planned ditching stations. Individual life preservers shall also be provided for children.
- 3.1.4 The individual life preserver stowage facility shall be designed to prevent the possibility of access to the device becoming obstructed by such items as underseat baggage or seat upholstery attachments. It shall be designed to preclude the possibility of interference or confusion with other aircraft equipment, i.e., oxygen masks.

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- 3.1.5 The time required to don the individual life preserver shall not be significantly extended by virtue of secondary packaging arrangements, i.e., protective containers, securing devices or safety seals.
- 3.1.6 Stowage facilities for these individual life preservers shall provide protection from damage. Stowage shall be accomplished in such a manner as to facilitate check for continued presence of unit, condition and necessary other data without disturbing the packaged device.
- 3.1.7 Life preserver stowage shall be designed to hold the life preserver securely in place under impact loads equal to those required for the passenger seats installed in the aircraft.

3.2 Life Rafts:

- 3.2.1 Life rafts shall be installed in the vicinity of the exit opening through which their launching is expected.
- 3.2.2 Raft stowage shall be designed to hold the raft securely in place under impact loads equal to those required for the passenger seats installed in the aircraft.
- 3.2.3 Stowage locations shall be conspicuously and clearly placarded. Placarding and lighting shall conform to appropriate ARP.
- 3.2.4 Stowage facilities shall allow for releasing and positioning the raft at its assigned launching location quickly and easily. The design and placarding shall where practical, contemplate performance of these operations by passengers. Stowage shall be accomplished in such a manner to facilitate check for continued presence of unit, condition and necessary other data without disturbing the packaged device.
- 3.2.5 Stowage provisions for rafts shall preclude inadvertent actuation of the inflation release mechanism or damage to the raft during stowage or removal.
- 3.2.6 No obstruction to launching of the raft or evacuation of occupants shall be caused by any portion of the stowage facilities such as an open hatch cover or container.
- 3.2.7 Means of attaching raft static lines shall be provided on aircraft structure directly adjacent to all launching openings. Each attachment point shall permit rapid unrestricted attachment of twice as many rafts as are expected to be deployed through the adjacent launching opening. The use and location of the attachment means shall be self evident. The attachment means shall have a minimum strength of 300 pounds.

3.3 Slide/Raft:

- 3.3.1 Slide/raft shall be installed on or in the immediate vicinity of the exit door.

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- 3.3.2 Slide/raft stowage location shall be conspicuously and clearly placarded. Placarding and lighting shall conform to appropriate ARP.
- 3.3.3 Stowage shall be designed to hold the slide/raft securely in place under impact loads equal to those required for passenger seats installed in the aircraft.
- 3.3.4 No obstruction to launching of slide/raft or evacuation of occupants shall be caused by any portion of the stowage facilities, such as an open hatch cover or containers.
- 3.3.5 Stowage facilities shall allow for quick and easy deployment of the slide/raft. Stowage shall allow for quick and easy removal of the packed slide/raft for transportation to other launching stations. The design placarding shall where practical, contemplate performance of these operations by passengers. Stowage shall be accomplished in such a manner to facilitate check for continued presence of unit and necessary other data without disturbing the packaged device.
- 3.3.6 Means shall be provided to preclude inadvertent actuation of the inflation release mechanism during removal and/or transportation to a secondary launching station.
- 3.4 Auxiliary Flotation Equipment:
- 3.4.1 Auxiliary flotation equipment may be such articles as seat bottom or seat back cushions and other devices as may be approved by the Federal Aviation Administration.
- 3.4.2 Auxiliary individual flotation equipment shall remain securely installed when subjected to same loads as noted in paragraph 3.2.2.
- 3.4.3 Installed individual auxiliary flotation equipment should be removable by uninstructed persons and be ready for use within 10 seconds.
- 3.4.4 Inflatable Evacuation Device (Slide):
- 3.4.4.1 The slide shall be installed on or in the immediate vicinity of the exit door.
- 3.4.4.2 Slide stowage location shall be conspicuously and clearly placarded. Placards and lighting shall conform to appropriate ARP.
- 3.4.4.3 Stowage shall be designed to hold the slide securely in place under loads equal to those required for passenger seats installed in the aircraft. No obstruction to launching of slide or evacuation of occupants shall be caused by any portion of the stowage facilities.