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AEROSPACE RECOMMENDED PRACTICE

ARP 499A

PASSAGEWAY DOOR OPERATION

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1. **PURPOSE:** The purpose of this Aerospace Recommended Practice is to provide recommendations which will lead to the standardization of passageway door operation in all transport aircraft, by providing in the design, features which will result in minimum exit passage blockage and jamming.
2. **DEFINITION:** Passageway doors are those doors connecting passenger occupiable compartments or providing access to approved emergency exits.
3. **DETAIL RECOMMENDATIONS:** The following detail criteria are recommended:
 - 3.1 The method of operation of the door release handle should be a single obvious motion in a single plane and should be natural to the occupant.
 - 3.2 Passageway door should be of such size and direction of operation as not to impede passenger movement during evacuation.
 - 3.3 On passageway doors which are normally closed during flight, means should be provided to secure the door in the open position. The door shall be capable of remaining in its open secured position under the crash inertia forces specified in the civil air regulations.
 - 3.4 Passageway doors should be designed to insure that they will not be torn loose to become flying missiles in the event of rapid decompression.
 - 3.5 The door and the areas around the door opening shall have no sharp edges or protrusions which could cause injury or present a hazard to safe movement under normal or emergency conditions.
 - 3.6 When a door is installed between the occupied areas of the passenger cabin and an emergency exit, a suitable placard* should be installed directing the occupants' attention to the exit.
 - 3.7 When in the open position, passageway doors should not block the egress of occupants from seats or from any areas of the aircraft.
 - 3.8 Round or spherical operating handles or knobs should "unlock" when gripped and turned in either direction.
 - 3.9 Consideration should be given to the operation and release of the passageway doors when aircraft is in other than an upright position.
 - 3.10 The design of the passageway doors and/or release mechanism should permit opening by application of force (without use of tools), in the event of jamming of the release mechanism or distortion of the door or supporting structure.

*Reference ARP 577, Emergency Placarding - Internal and External

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