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AEROSPACE INFORMATION REPORT

SAE AIR4072

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SAFETY CONSIDERATIONS OF CARRY-ON ITEMS DURING THE EMERGENCY EVACUATION OF TRANSPORT AIRCRAFT

FOREWORD

Aircraft accident investigations of transport aircraft have shown that items carried into the cabin by passengers have posed a hazard during emergency evacuations. Carry-on items have dislodged during a crash, striking passengers and blocking access to emergency exits. During evacuations, passengers attempt to carry items down evacuation slides. This process can slow the evacuation, possibly damage the slide, and create the problem of where to place the items taken from passengers during the evacuation. Passengers who have used slides while carrying items have been unable to stabilize their descent.

1. SCOPE:

This Aerospace Information Report (AIR) provides information about and suggests guidelines for handling carry-on items prior to and during the emergency evacuation of transport aircraft.

2. REFERENCES:

There are no referenced publications specified herein.

2.1 Definitions:

2.1.1 CARRY-ON ITEMS: All items not checked as baggage and carried by the passengers into the cabin such as the following:

- a. Passenger baggage
- b. Garment bags
- c. Briefcases
- d. Purses
- e. Coats and other wraps
- f. Personal computers
- g. Typewriters

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2.1.1 (Continued):

- h. Animal kennels
- i. Sample cases
- j. Portfolios
- k. Musical instruments
- l. Infant seats
- m. Shopping bags
- n. Duty-free articles
- o. Sporting equipment (ski boots, fishing rods, etc.)

2.1.2 STORAGE COMPARTMENTS: Aircraft storage compartments approved for carry-on articles can include:

- a. Overhead compartments
- b. Closets
- c. Elevating coat racks
- d. Storage bustles
- e. Garment bag modules
- f. Carry-on bag modules
- g. Overhead racks

2.1.3 UNDERSEAT STORAGE: The space beneath the passenger seat which is bounded by seat structure including restraint bars.

3. GOAL:

Recommend limitations of size and amount of carry-on items brought into the cabin; suggest improved stowage of carry-on items to minimize hazards to passengers inflight and during emergency evacuations; and recommend guidance to ensure no carry-on items are removed during an emergency evacuation.

4. OBJECTIVES:

- a. Provide the proper structural restraint and the containment of all items under the loads specified by certificating authority for emergency landing conditions and for inflight maneuvering loads.
- b. Maintain clear escape paths and aisles during an evacuation.
- c. Discourage attempts by passengers to remove carry-on items during evacuation.