

CREWMEMBER EMERGENCY TRAINING; USE OF MOCKUPS

(NTSB SAFETY RECOMMENDATION A-91-60)

- a. The principal purpose of mockups is to provide realism during training on emergency situations. Cabin mockups and cabin door training devices are part of FAA-approved training programs for flight attendants.
- b. The POI assigned to an air carrier certificate holder is responsible for the approval of these training devices. Approval of a training device(s) is concurrent with approval of the entire training program. The device is only one part of any training program.
- c. The following provides guidance for approval of training devices;
 - (1) The POI should review the procedures contained in any training module that incorporates the use of a training device(s). The training device must realistically simulate the exit which it represents, both in appearance and in operation.
 - (2) Whenever possible, before the on-site inspection of the device, the POI should operate the actual aircraft exit represented by the device. By opening the actual door in the normal mode, the POI will be able to determine the forces normally necessary to operate the training device. Additional information regarding normal forces may be obtained from the aircraft manufacturer. It should be noted that the normal forces needed to open any given type of door may have a wide range. In some cases, for example, the range was as much as 20 pounds. POI's should experience the forces using an actual door to determine what the opening of the door "feels like." In the case of tailcone devices, the POI should perform a walk-through of an aircraft tailcone in order to become familiar with its dimensions.
- d. During the on-site inspection of the training device, the POI should ensure that the device:
 - (1) Accurately represents the position and operation of the handles and hardware of the actual aircraft door, and that it simulates both the normal and emergency modes of operation.
 - (2) Incorporates the actions required to operate the exit in the same manner as the actual door in both normal and emergency modes of operation.
 - (3) Requires representative forces to open the door in the emergency mode. NOTE: Under adverse conditions operating forces may become even greater (e.g., fire or

hull damage). In training devices, therefore, operating forces should be biased toward the high side.

- (4) Is equipped with a manual inflation handle, if applicable. The training program should address the fact that the inflation handle may not always be in the same location on a similar aircraft.
- e. During the on-site inspection, and using the air carrier's procedures, the POI should have a qualified instructor demonstrate the operation of the device in the normal and emergency modes.
 - f. The POI should then operate the training device in the normal and emergency modes, using the provided instruction, to determine that the device and the training provide realistic simulation of the corresponding exit.
 - g. The POI should ensure that the air carrier has an established maintenance program for training devices. This program should ensure that each device maintains the appearance, function, and forces existing during original approval. The FAA-approved training program should list by name and title the person responsible for the maintenance of each training device.
 - h. Exit differences should be highlighted in the training program whenever a single training device is used to represent more than one exit. Examples include differences between Type I, Type A, and Type III exits, or differences in size and appearance among similarly operating exits. Other training aids may include, but are not limited to:
 - (1) Aircraft study guides.
 - (2) Videotape presentations.
 - (3) Slide presentations.
 - (4) Aircraft familiarization walk-arounds.
 - i. Whenever the motions needed to operate an emergency exit training device are different from those actually required on the aircraft exit, training requirements must be met by using another true-to-life training device or the aircraft itself. Examples include the differences between the forward and aft cabin door handles on the B-727-200 and between the normal and the special blowdown feature of the aft airstair pneumatic extension on the B-727-100.