

not having the centroid of either exit opening within 20 percent of the forward or aft end of the total overhead crew rest compartment length) the exit separation should not be less than 30 percent of the total overhead crew rest compartment length.

(b) The routes must be designed to minimize the possibility of blockage, which might result from fire, mechanical or structural failure, or persons standing below or against the escape route. One of the two evacuation routes should not be located where, during times in which occupancy is allowed, normal movement by passengers occurs (*i.e.*, main aisle, cross aisle or galley complex) that would impede egress from the overhead crew rest compartment. If an evacuation route utilizes an area where normal movement of passengers occurs, it must be demonstrated that passengers would not impede egress to the main deck. If there is low headroom at or near the evacuation route, provisions must be made to prevent or to protect occupants (of the overhead crew rest compartment) from head injury. The use of evacuation routes must not be dependent on any powered device. If the evacuation path is over an area where there are passenger seats, a maximum of five passengers may be displaced from their seats temporarily during the evacuation process of an incapacitated person(s). If the evacuation procedure involves the evacuee stepping on seats, the seats must not be damaged to the extent that they would not be acceptable for occupancy during an emergency landing.

(c) Emergency evacuation procedures, including the emergency evacuation of an incapacitated occupant from the overhead crew rest compartment, must be established. All of these procedures must be transmitted to the operator for incorporation into their training programs and appropriate operational manuals.

(d) There must be a limitation in the Airplane Flight Manual or other suitable means requiring that crewmembers be trained in the use of evacuation routes.

3. There must be a means for the evacuation of an incapacitated person (representative of a ninety-fifth percentile male) from the overhead crew rest compartment to the passenger cabin floor.

(a) The evacuation must be demonstrated for all evacuation routes. A crewmember (a total of one assistant within the overhead crew rest compartment) may provide assistance in the evacuation. Additional assistance may be provided by up to three persons in the main passenger compartment.

These additional assistants must be standing on the floor while providing assistance. For evacuation routes having stairways, the additional assistants may ascend up to one half the elevation change from the main deck to the overhead crew rest compartment, or to the first landing, whichever is lower.

4. The following signs and placards must be provided in the overhead crew rest compartment:

(a) At least one exit sign, located near each exit, meeting the requirements of § 25.812(b)(1)(i), except that a sign with reduced background area of no less than 5.3 square inches (excluding the letters) may be utilized, provided that it is installed such that the material surrounding the exit sign is light in color (*e.g.*, white, cream, light beige). If the material surrounding the exit sign is not light in color, a sign with a minimum of a one-inch wide background border around the letters would also be acceptable.

(b) An appropriate placard located near each exit defining the location and the operating instructions for each evacuation route.

(c) Placards must be readable from a distance of 30 inches under emergency lighting conditions.

(d) The exit handles and evacuation path operating instruction placards must be illuminated to at least 160 microlamberts under emergency lighting conditions.

5. There must be a means in the event of failure of the aircraft's main power system, or of the normal overhead crew rest compartment lighting system, for emergency illumination to be automatically provided for the overhead crew rest compartment.

(a) This emergency illumination must be independent of the main lighting system.

(b) The sources of general cabin illumination may be common to both the emergency and the main lighting systems if the power supply to the emergency lighting system is independent of the power supply to the main lighting system.

(c) The illumination level must be sufficient for the occupants of the overhead crew rest compartment to locate and transfer to the main passenger cabin floor by means of each evacuation route.

6. There must be means for two-way voice communications between crewmembers on the flight deck and occupants of the overhead crew rest compartment. There must also be two-way communications between the occupants of the overhead crew rest compartment and each flight attendant station required to have a public address

system microphone per § 25.1423(g) in the passenger cabin. In addition, the public address system will include provisions to provide only the relevant information to the flight crewmembers in the overhead crew rest compartment (*e.g.*, fire in flight, aircraft depressurization, preparation of the compartment occupants for landing, etc.).

7. There must be a means for manual activation of an aural emergency alarm system, audible during normal and emergency conditions, to enable crewmembers on the flight deck and at each pair of required floor level emergency exits to alert occupants of the overhead crew rest compartment of an emergency situation. Use of a public address or crew interphone system will be acceptable, provided an adequate means of differentiating between normal and emergency communications is incorporated. The system must be powered in flight, after the shutdown or failure of all engines and auxiliary power units (APU), for a period of at least ten minutes.

8. There must be a means, readily detectable by seated or standing occupants of the overhead crew rest compartment, which indicates when seat belts should be fastened. In the event there are no seats, at least one means must be provided to cover anticipated turbulence (*e.g.*, sufficient handholds). Seat belt type restraints must be provided for berths and must be compatible for the sleeping attitude during cruise conditions. There must be a placard on each berth requiring that seat belts must be fastened when occupied. If compliance with any of the other requirements of these special conditions is predicated on specific head location, there must be a placard identifying the head position.

9. In lieu of the requirements specified in § 25.1439(a) that pertain to isolated compartments and to provide a level of safety equivalent to that which is provided occupants of an isolated galley, the following equipment must be provided in the overhead crew rest compartment:

(a) At least one approved hand-held fire extinguisher appropriate for the kinds of fires likely to occur,

(b) Two protective breathing equipment (PBE) devices approved to Technical Standard Order (TSO)-C116 or equivalent, suitable for firefighting, or one PBE for each hand-held fire extinguisher, whichever is greater, and

(c) One flashlight.

**Note:** Additional PBEs and fire extinguishers in specific locations, (beyond the minimum numbers prescribed in Special Condition No. 9 may be required as a result