

of the egress analysis accomplished to satisfy Special Condition No. 2(a).

10. A smoke or fire detection system (or systems) must be provided that monitors each occupiable area within the overhead crew rest compartment, including those areas partitioned by curtains. Flight tests must be conducted to show compliance with this requirement. Each system (or systems) must provide:

(a) A visual indication to the flightdeck within one minute after the start of a fire;

(b) An aural warning in the overhead crew rest compartment; and

(c) A warning in the main passenger cabin. This warning must be readily detectable by a flight attendant, taking into consideration the positioning of flight attendants throughout the main passenger compartment during various phases of flight.

11. The overhead crew rest compartment must be designed such that fires within the compartment can be controlled without a crewmember having to enter the compartment, or the design of the access provisions must allow crewmembers equipped for firefighting to have unrestricted access to the compartment. The time for a crewmember on the main deck to react to the fire alarm, to don the firefighting equipment, and to gain access must not exceed the time for the compartment to become smoke-filled, making it difficult to locate the fire source. Procedures describing methods to search the overhead crew rests for fire sources(s) must be established. These procedures must be transmitted to the operator for incorporation into their training programs and appropriate operational manuals.

12. There must be a means provided to exclude hazardous quantities of smoke or extinguishing agent originating in the overhead crew rest compartment from entering any other compartment occupied by crewmembers or passengers. This means must include the time periods during the evacuation of the overhead crew rest compartment and, if applicable, when accessing the overhead crew rest compartment to manually fight a fire. Smoke entering any other compartment occupied by crewmembers or passengers when the access to the overhead crew rest compartment is opened, during an emergency evacuation, must dissipate within five minutes after the access to the overhead crew rest compartment is closed. Hazardous quantities of smoke may not enter any other compartment occupied by crewmembers or passengers during subsequent access to

manually fight a fire in the overhead crew rest compartment (the amount of smoke entrained by a firefighter exiting the overhead crew rest compartment through the access is not considered hazardous). During the one-minute smoke detection time, penetration of a small quantity of smoke from the overhead crew rest compartment into an occupied area is acceptable. Flight tests must be conducted to show compliance with this requirement.

If a built-in fire extinguishing system is used in lieu of manual firefighting, then the fire extinguishing system must be designed so that no hazardous quantities of extinguishing agent will enter other compartments occupied by passengers or crew. The system must have adequate capacity to suppress any fire occurring in the overhead crew rest compartment, considering the fire threat, volume of the compartment and the ventilation rate.

13. There must be a supplemental oxygen system equivalent to that provided for main deck passengers for each seat and berth in the overhead crew rest compartment. The system must provide an aural and visual warning to warn the occupants of the overhead crew rest compartment to don oxygen masks in the event of decompression. The warning must activate before the cabin pressure altitude exceeds 15,000 feet. The aural warning must sound continuously for a minimum of five minutes or until a reset push button in the overhead crew rest compartment is depressed. Procedures for crew rest occupants in the event of decompression must be established. These procedures must be transmitted to the operator for incorporation into their training programs and appropriate operational manuals.

14. The following requirements apply to overhead crew rest compartments that are divided into several sections by the installation of curtains or partitions:

(a) To compensate for sleeping occupants, there must be an aural alert that can be heard in each section of the overhead crew rest compartment that accompanies automatic presentation of supplemental oxygen masks. A visual indicator that occupants must don an oxygen mask is required in each section where seats or berths are not installed. A minimum of two supplemental oxygen masks are required for each seat or berth. There must also be a means by which the oxygen masks can be manually deployed from the flight deck.

(b) A placard is required adjacent to each curtain that visually divides or separates, for privacy purposes, the overhead crew rest compartment into small sections. The placard must require

that the curtain(s) remains open when the private section it creates is unoccupied. The vestibule section adjacent to the stairway is not considered a private area and, therefore, does not require a placard.

(c) For each section of the overhead crew rest compartment created by the installation of a curtain, the following requirements of these special conditions must be met with the curtain open or closed:

(1) No smoking placard (Special Condition No. 1),

(2) Emergency illumination (Special Condition No. 5),

(3) Emergency alarm system (Special Condition No. 7),

(4) Seat belt fasten signal or return to seat signal as applicable (Special Condition No. 8), and

(5) The smoke or fire detection system (Special Condition No. 10).

(d) Overhead crew rest compartments visually divided to the extent that evacuation could be affected must have exit signs that direct occupants to the primary stairway exit. The exit signs must be provided in each separate section of the overhead crew rest compartment, except for curtained bunks, and must meet the requirements of § 25.812(b)(1)(i).

(e) Sections within an overhead crew rest compartment that are created by the installation of a rigid partition with a door physically separating the sections, the following requirements of these special conditions must be met with the door open or closed:

(1) There must be a secondary evacuation route from each section to the main deck, or alternatively, it must be shown that any door between the sections has been designed to preclude anyone from being trapped inside the compartment. Removal of an incapacitated occupant within this area must be considered. A secondary evacuation route from a small room designed for only one occupant for short time duration, such as a changing area or lavatory, is not required. However, removal of an incapacitated occupant within a small room, such as a changing area or lavatory, must be considered.

(2) Any door between the sections must be shown to be openable when crowded against, even when crowding occurs at each side of the door.

(3) There may be no more than one door between any seat or berth and the primary stairway exit.

(4) There must be exit signs in each section meeting the requirements of § 25.812(b)(1)(i) that direct occupants to the primary stairway exit. An exit sign with reduced background area as