

them to get away from smoke and fire danger zones. This can be accomplished partially by the strobe and constant light, and partially by the use of a chemical light stripping on the slides. All slides should be securely, but not permanently, anchored to the exits, as they float and can be used in water emergencies as liferafts. If the design of the slides is such that it has to be inverted to be used as a raft, then the chemical stripping should be visible on both the underside and the top. As a matter of standardization, each emergency equipment item, including the slides, that is designed for passenger use in a water landing should be equipped with both a battery-sustained light and the chemical stripping. These items include the liferaft, baby bassinet, seat and seat cushion. Having two systems of light would provide means of backup in case one or the other failed. If the plane does not carry a radio directional finder, then these lights, too, should have a 36-hour life.

In addition to the above, the cabin environment must be such that both passengers and crewmembers can survive the rather violent kinematics leading to impact and immediate postcrash circumstances. The following suggestions are made:

All fabrics in the cabin area should be of the most fire-resistant material available. All lighting and electrical circuits used in equipment storage areas, passenger coatroom, and overhead bin should be so installed as to prevent them from coming in contact with the garment bags, clothing, and other fabric items.

There should be a lifejacket under each seat with a supply of infant jackets on board. These infant lifejackets should be given to the mothers prior to takeoff.

It is recommended that a built-in container be installed under each seat constructed in such a manner that the passenger may enclose his baggage under the seat in front of him. Baggage that will not fit into this space or other specific contained areas should not be in the cabin. Presently, hand baggage is so excessive that it might easily block evacuation.

It is suggested that there be no overhead rack baggage storage, as twisting of the fuselage can snap restraining bars and break locks, thus causing heavy cases to fall from the racks onto the passengers with resultant serious injuries.

It is recommended that a study be made to determine a realistic width of cabin aisles in order that there be a steady flow of passengers to each exist. A great deal of effort has gone into the production and installation of the 42- by 76-inch exit to promote rapid evacuation without an equal amount of concern being given to the provision of aisles that would permit sufficient traffic to fully and effectively utilize the large exit. A suggestion is made for a minimum aisle width of 24 inches; however, it is suggested that some realistic planning be done.

It is further suggested that partial seat rows not be installed adjacent to the large exits, thus reducing the value of such exits.

Engineers are busily engaged in trying to design the fuselage of tomorrow's aircraft in such a manner that even at maximum altitudes a pressure leak will not develop to such magnitude that the cabin pressure would rise above 12,000 feet before descent would be made to a livable level of oxygen in the atmosphere. Should this prove possible and hence result in such fuselage structure, then there is no need for