FLIGHT SAFETY FOUNDATION

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Improved Child Protection Endorsed

Flight Safety Foundation backs industry initiative recommending improvements in protection of infants and young children traveling on public carriers.

by
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President, Flight Safety Foundation

The Flight Safety Foundation endorses the initiative taken by the Air Transport Association concerning improved protection of infants travelling by commercial air. Although only about one percent of total transportation deaths occur in aviation and of that, less than one percent occurs in civil air transport, efforts continue to further decrease the loss of life in aviation.

Children constitute a small fraction of aviation deaths, but our concern for their well-being impels us to seek their protection. There are currently about 20 million children under the age of five in the United States and this group is a neglected population in terms of exposure to risk and injury.

Work on civil transport aircraft occupant protection has continued steadily since the late 1940s, when the National Advisory Committee for Aeronautics (predecessor of National Aeronautics and Space Administration) conducted an extensive series of full-scale aircraft crash tests near Akron, Ohio. Flight Safety Foundation continued this research during the 1960s on transport aircraft and helicopters at its Phoenix field center. The U.S. Air Force, Navy and Army conducted extensive research on human tolerance to crashes and the excellent work of Richard F.Chandler at Civil Aviation Medical Institute (CAMI) and Richard G.Snyder at the University of Michigan during the past three decades laid the groundwork for modern occupant protection concepts, including infant restraints, which have been extensively adopted by the automobile industry.

There is a strong and sound technical basis for occupant protection through restraint and energy absorption designs. It is time to turn our attention to infants, especially as air travel becomes commonplace for people of all economic strata throughout the world.

A major challenge is that of public education, needed to dispel the notion held by many that an unbelted infant can be adequately restrained in the arms of an adult. This belief is false, as has been demonstrated conclusively using live adults attempting to hold dummies simulating babies during even mild deceleration sled tests. Unbelted infants simply have no protection from crash forces.

Just as the duty of care applies to public carriers, so it applies to parent or adult guardians for protection of children. Because of the historical rarity of infant deaths in aircraft accidents, people tend to gamble when it comes to providing a revenue seat for children. The cost of a proper infant seat is trivial compared with the alternative risk exposure.

As an independent nonprofit international safety association with over 540 member organizations in 70 countries, FSF sometimes does not find itself in agreement with industries or governments on safety matters, but we certainly do endorse this initiative of the ATA to continue the improvement in aircraft occupant safety. ♦

Revised Pamphlet Encourages Use of Child Safety Seats

Revised pamphlet from U.S. FAA encourages, guides use of safety seats for young children traveling by air to increase survivability during aircraft emergencies.

U.S. Federal Aviation Administration

The U.S. Federal Aviation Administration (FAA) strongly encourages the use of child/infant safety seats even though such devices are not required by federal regulations. The agency recently published a second, revised edition of its free pamphlet *Child/Infant Safety Seats Recommended For Use in Aircraft* to guide air travelers in selection and use of the seats.

One important consideration in selection of child seats is acceptability for use in aircraft. The following seats are recommended by the FAA for use in aircraft:

Seats manufactured on or after February 26, 1985, must bear two labels: (1) "This child restraint system conforms to all applicable Federal motor vehicle safety standards;" and (2) "THIS RESTRAINT IS CERTIFIED FOR USE IN MOTOR VEHICLES AND AIRCRAFT" in red letters.

Seats manufactured between January 1, 1981, and February 25, 1985, must bear the label: "This child restraint system conforms to all applicable Federal motor vehicle safety standards."

The following child/infant seats are NOT RECOMMENDED for use in aircraft:

Vest and harness-type child restraints manufactured between January 1, 1981, and February 25, 1985, are not acceptable.

Unlabeled seats and seats manufactured before January 1, 1981, are not acceptable for use during takeoff and landing.

In its pamphlet, the FAA recommends that parents check with the air carrier to determine its policies on the use of child/infant safety seats. The agency suggests that users:

- Ask the air carrier whether it allows the use of acceptable safety seats (particularly during takeoffs and landings).

- Ask the air carrier whether it requires the purchase of a ticket to use a child/infant safety seat.

- Attempt to get a confirmation of this information in writing. Some consumers report being told one thing over the telephone and something else either at the gate or after boarding the aircraft.

The agency specifies maintenance precautions and guidance on use, cautioning that the device could be hazardous to the young occupants and to other passengers, or be rejected by an air carrier. Infant seat users are instructed to place the child/infant safety seat in a location that is safe for all aircraft occupants. Other guidance includes:

- In airliners, flight attendants may direct you to place the child/infant safety seat in a window passenger seat. In the event of an emergency evacuation, this would be the best location for the overall safety of all aircraft occupants.

- In some general aviation aircraft (air taxis and privately-owned) the best location for the child/infant safety seat is a rear passenger seat because the safety seat may interfere with the control wheel/yoke.

- If the child/infant safety seat is placed in a passenger seat that faces sideways, it should not be occupied during takeoff or landing.

Further information is available from: Community and Consumer Liaison Division, APA-200, FAA, Washington, DC 20591 U.S. Telephone (202) 267-3479.

NTSB on Child Seating

The U.S. National Transportation Safety Board wants the FAA to do more than "strongly encourage" the use of child/infant

seats in aircraft. Citing numerous accidents that involved small children and infants who were not secured in their own seats and the fact that the use of child safety seats is voluntary, the NTSB recommended on May 30 that the FAA:

- Revise federal aviation regulations to require that all occupants be restrained during takeoff, landing, and turbulent conditions, and that all infants and small children below the weight of 40 pounds and under the height of 40 inches be restrained in an approved child restraint system appropriate to their height and weight.

- Conduct research to determine the adequacy of aircraft seat belts to restrain children too large to use child safety seats and to develop some suitable means of providing adequate restraint for such children. ♦

U.S. FAA Adopts Final Rule Limiting Exit Row Seating

Predicated on the shortest possible evacuation time, order establishes passenger seating eligibility for exit row seats according to physical abilities.

U.S. Federal Aviation Administration

In a move to enhance the safety of all passengers, the U.S. Federal Aviation Administration (FAA) recently issued a final rule requiring air carriers to restrict seats in exit rows to only those persons who are able to activate emergency exits and perform other emergency functions needed to ensure the expeditious evacuation of an aircraft.

FAA Administrator James B. Busey said, "The issues raised by this rule are both difficult and controversial because they require, in the interest of the safety of all passengers, that some passengers be treated differently than others, depending on their physical abilities."

The agency found that "the fastest possible evacuation of the aircraft" is critical to survivability in an accident. Due to "the pivotal role played by those passengers seated in closest proximity to airplane exits," it was necessary to establish passenger eligibility to sit in an exit row.

The agency said passengers sitting near the exit doors must be able to:

- Locate the door and quickly follow the instructions for its use. A delay in determining how to operate the door can cost precious seconds; operating it improperly can injure passengers or result in their deaths.

- Physically open the door. Doors are often heavy and hard to manipulate, and not every passenger can open them quickly.

- Determine when to open the door. This involves being able to respond to shouted or hand-signalled instructions from flight attendants, as well a being able to tell when opening an exit would be too dangerous (e.g., because of fire on the adjacent wing).

- Get around any obstacles and proceed quickly through the open exit, so as not to cause a traffic jam at the door, and perhaps to assist other passengers in getting away from a burning aircraft.

- Devote full attention to the emergency. A passenger who is encumbered by having to care for small children, for example, may be unable to quickly open the door.

The regulation also requires the airlines to inform passengers sitting in exit rows about what may be required of them in an emergency.

The regulation applies to all U.S. air carriers except unscheduled air taxis with nine or fewer passenger seats. ♦

Earphones: A Cautionary Observation For Cabin Attendants

Passengers who listen to personal cassette tape players on aircraft are putting themselves at risk by not being able to hear important announcements during emergencies.

by
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Purser, Iberia International Airlines

The on-board use of airline-supplied earphones began as a means of entertaining passengers, particularly during long-distance flights.

I recall that a company introduced an early system in our airline that consisted of earphones in conjunction with a standard movie film projector, with screens located in three compartments of the passenger cabin on a Boeing 747.

At time went by, a less complicated and more effective system gained greater acceptance: video displays transmitted by cable could be programed in all the cabins simultaneously. The video system also can be used to demonstrate the use of life jackets, oxygen masks and the standard evacuation system in the event of an emergency. Since both the entertainment and the instructional programs are heard through the earphones, passengers can be informed under any circumstance.

However, a problem arises with the use of still another system, that of the individual earphones of the personal walkman-type tape player, used to listen to audio cassettes. These personal systems pose a dangerous threat and offer a serious risk in the event of an emergency, mainly at takeoff and landing because they may prevent the user from hearing announcements. If the passenger with a personal tape player is obstructing other passengers, they are also placed in danger.

To make matters worse, individual system earphones are usually micro-earphones inserted in the auditory canal which make it almost impossible to hear sounds from the outside, such as public address systems or other people.

For these reasons, I ask my passengers to not use personal system earphones during takeoff and landing, emphasizing that this measure is for their own safety. ♦

What's Your Input?

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