

# Advisory Circular

Subject: USE OF CHILD SEATS IN AIRCRAFT

Date: 10/15/92 Initiated by: AIR-120 AC No: 91-62A

Change:

1. <u>PURPOSE</u>. This advisory circular (AC) provides information to assist the public in the proper use of child seats aboard aircraft and provides precautions so all occupants are able to exit rapidly from aircraft during emergencies.

- 2. CANCELLATION. AC 91-62, Use of Child/Infant Seats in Aircraft, dated 2/26/85.
- 3. <u>RELATED FEDERAL AVIATION REGULATIONS (FAR) SECTIONS</u>. Sections 21.183, 21.305, 23.785, 25.785. 27.785, 29.785, 91.107, 91.203, 91.205, 121.311, 121.571, 121.586, 121.589, 125.211, 135.117, and 135.128 (CFR Title 14).

### 4. BACKGROUND.

- a. A Federal Aviation Administration (FAA) task force was convened in February 1979 to evaluate child restraint device use aboard aircraft and to explore the options for allowing child restraint devices in aircraft. Based on work previously done by the FAA Civil Aeromedical Institute, the FAA Flight Standards National Field Office, and the National Highway Traffic Safety Administration of the Department of Transportation, the task force recommended that the FAA adopt the Federal Motor Vehicle Safety Standard (FMVSS) No. 213, Child Restraint Systems, with additional provisions for the aircraft environment.
- b. The FMVSS No. 213 with combined provisions for motor vehicles and aircraft became effective on February 26, 1985; however, after February 1985, the FAA was notified often that certain air carriers did not allow the use of approved child restraint systems even when passengers purchased tickets for that purpose. Therefore, the FAA amended the FAR effective on October 15, 1992, to eliminate an air carrier's discretion to prohibit the use of an approved child restraint system when one is provided by the child's parent, guardian, or attendant and when a ticket is purchased or when a passenger seat is otherwise made available to accommodate the child restraint.

AC 91-62A 10/15/92

### 5. DISCUSSION.

a. Child Seats are Recommended. The FAR do not require the use of child seats for children aboard aircraft; however, if parents or guardians choose, they may use child seats in accordance with paragraph 4b during all phases of flight operations. To exercise this option, a parent or guardian may have to purchase a ticket for a child under two years of age. The parent or guardian should check with the air carrier to determine whether a ticket is necessary to ensure the use of a child seat for the child who may fly free of charge.

- b. Acceptable Child Seats. Seats considered acceptable by the FAA are those certified for use in motor vehicles and aircraft under the amended FMVSS No. 213 on or after February 26, 1985; certified for use in motor vehicles under the previous Standard 213 between January 1, 1981, and February 25, 1985; approved for use in motor vehicles/aircraft under the standards of the United Nations (U.N.); or approved under the standards of another government.
- (1) A child seat manufactured under FMVSS No. 213 between January 1, 1981, and February 25, 1985, should have the following label: "This child restraint system conforms to all applicable Federal motor vehicle safety standards." Some of these seats may also have labels indicating compliance with Technical Standard Order (TSO) C100. (EXCEPTION: Vest- and harness-type child restraints manufactured between these dates are not acceptable.)
- (2) A child seat manufactured under FMVSS No. 213 and approved for use in aircraft on or after February 26, 1985, will have two labels: (i) "This child restraint system conforms to all applicable Federal motor vehicle safety standards;" and (ii) "THIS RESTRAINT IS CERTIFIED FOR USE IN MOTOR VEHICLES AND AIRCRAFT," in red lettering.
- (3) A child seat manufactured under the standards of the U.N. will have a label with a circle surrounding the letter "E" followed by the distinguishing number of the country which has granted approval plus an indication of the category and mass group of the child seat.
- (4) Child seats manufactured under the standards of other governments are too numerous and varied for the labels to be described in this AC. Additionally, the FAA is not totally aware of the specifics in all cases.

10/15/92 AC 91-62A

c. <u>Unacceptable Child Restraint Devices</u>. A child restraint device that positions the child on the lap or chest of an adult seated in a passenger seat should not be used.

## 6. PRECAUTIONS FOR ALL OPERATIONS.

- a. <u>During aircraft movement on the surface</u>, takeoff, or landing, the child seat should be occupied only if placed in a forward-facing passenger seat. Only forward-facing passenger seats are normally used in testing to qualify child seats for use in motor vehicles and aircraft.
- b. The owner of an acceptable child seat should maintain, place, and secure the seat in accordance with the maintenance, care, and use instructions provided with each seat.
- c. <u>Instructions are provided with each child seat</u> to ensure its proper use. All straps, especially shoulder straps, should always be used, and available instructions should be followed carefully. If all instructions are not followed for proper use of the child seat, the device will at best provide only false security to the user, and at worst, be a hazard to a child and other occupants.
- d. <u>Shoulder Harnesses</u>. The child seat should be attached using only the lap belt per the manufacturer's instructions. Adult shoulder harnesses can be used to stabilize the child seat; however, adult shoulder harnesses should not be used to restrain the child.
- e. If a child seat is too bulky to be stowed as carry-on luggage under a passenger seat, in an overhead compartment, or in any other area designated by a flight attendant, the child seat in a passenger compartment should be secured to a passenger seat at all times during aircraft movement on the surface and during flight, even when it is unoccupied by a child. No other person may occupy that same passenger seat.
- f. If a passenger seat is not available for a child less than 2 years old, only the child may be held by an adult. The child should be taken out of the child seat and held in the adult's lap. A child in a child seat held by an adult is more hazardous to other occupants. If the child seat cannot be stowed in the passenger compartment, it should be checked and carried with luggage outside of the cabin.

AC 91-62A 10/15/92

g. <u>Emergency Evacuation</u>. During an evacuation, the child seat should remain attached to the passenger seat. Only the child should be removed from the aircraft.

# 7. PRECAUTIONS (GENERAL AVIATION OPERATIONS).

- a. <u>Location</u>. Child seats placed in small aircraft cabins may slow occupant exit in an emergency; however, the following precautions should improve emergency evacuation capabilities:
- (1) The child seat should be located in a passenger seat in the rear of the aircraft when available. Although the child seat can be located anywhere, a seat in the rear is the preferred location when another adult is also an occupant of an adjacent seat.
- (2) When practical for the interior arrangement, the child seat should not be located near an entry door or emergency exit.
- (3) The child seat should not interfere with the full travel of the control wheel/yoke. Prior to takeoff, controls should be checked for movement in all directions with the occupied child seat in place. A special emphasis item may be placed in the takeoff and landing checklists to ensure full travel of controls before takeoff and sufficient freedom of controls for landing. After a child seat is secured in a safe position, care should be exercised if either passenger or child seat is moved in flight.
  - b. Weight. The weight of the child seat should be considered in the weight and balance of the aircraft.

# 8. PRECAUTIONS (AIR CARRIER, AIR TAXI, AND COMMERCIAL OPERATIONS).

#### a. Location.

- (1) The child seat should be neither located in the row of an emergency exit nor located in a row forward or aft of an emergency exit. A window passenger seat is the preferred location; however, other locations may be acceptable provided seats next to the child are occupied by attendants responsible for the child.
- (2) The child seat may also be located in a middle row of seats in a two-aisle aircraft but should not be located in an aisle seat. Again, an aisle seat may be acceptable provided all other seats in that segment of a row are occupied by attendants responsible for the child.

10/15/92 AC 91-62A

(3) When practical, one child seat in a row segment is preferable. More than one child seat per row segment is allowed if the children are from the same family or traveling group.

- (4) The child seat should not block access ways and passageways to emergency exits.
- (5) The child seat should not be located in any pilot seat of an aircraft used in air transportation.
- b. Weight. The weight of the child seat is considered to be negligible in many operators' loading systems; however, operators' loading systems should account for the weight of the child seat when actual passenger and luggage weights are used to compute aircraft weight. Refer to Advisory Circular No. 120-27, as amended, Aircraft Weight and Balance Control, for additional guidance.
- c. <u>Safety Belt Signs/Placards</u>. The child should occupy the child seat when the "Fasten Seat Belt" signs are "on", when placards are posted, and when crewmembers give instructions to fasten safety belts.

Acting Director, Aircraft Certification

Service