

DEPARTMENT OF TRANSPORTATION**Federal Aviation Administration****14 CFR Parts 91, 121, 125, and 135**

[Docket No. 28229; Notice No. 95-7]

RIN 2120-AF52

Child Restraint Systems**AGENCY:** Federal Aviation Administration (FAA), DOT.**ACTION:** Notice of proposed rulemaking.

SUMMARY: This notice proposes to withdraw FAA approval for the use of booster seats and vest- and harness-type child restraint systems in aircraft during takeoff, landing, and movement on the surface. In addition, this notice emphasizes the existing prohibition in all aircraft against the use of lap held child restraint systems (including belly belts). The FAA believes that, during an aircraft crash, the banned devices may put children in a potentially worse situation than the allowable alternatives. This notice does not affect use of other types of approved child restraint devices. The FAA will continue to analyze methods to improve the alternatives to the proposed banned devices.

DATES: Comments must be received on or before July 10, 1995.

ADDRESSES: Comments on this notice should be mailed, in triplicate, to: Federal Aviation Administration, Office of the Chief Counsel, Attention: Rules Docket (AGC-200), Docket No. 28229, 800 Independence Avenue SW., Washington, DC 20591. Comments delivered must be marked Docket No. 28229. Comments may be examined in room 915G weekdays between 8:30 a.m. and 5 p.m., except on Federal holidays.

FOR FURTHER INFORMATION CONTACT: Donell Pollard, (AFS-203), Air Transportation Division, Flight Standards Service, Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591; Telephone (202) 267-3735.

SUPPLEMENTARY INFORMATION:**Background**

The FAA is concerned about the safety of children who use certain forms of child restraint systems aboard aircraft. In 1992, the FAA set forth in §§ 91.107(a), 121.311(b), 125.211(b), and 135.128(a) the child restraint systems acceptable for use in aircraft by listing labeling requirements and certain use requirements. Since that time the FAA has supplemented the rule with advisory material and with a public information leaflet titled "Child/Infant

Safety Seats Recommended for Use in Aircraft."

Under present regulations a child who has not reached his or her second birthday (infant) is not required to have a separate seat aboard an aircraft. This means that the person accompanying an infant may choose to hold the infant during flight.

If the accompanying adult wishes to put the infant in a child restraint system on a passenger seat, the airline may require the adult to purchase a separate ticket for the infant. Whether or not the airline requires the purchase of a ticket for the infant, a separate passenger seat is necessary if a child restraint is to be used (14 CFR §§ 121.311(c), 125.211(c), and 135.128(b)).

The provisions of §§ 91.107, 121.311, 125.211, and 135.128 identify those child restraints that are approved for use aboard aircraft. These child restraint provisions also apply whenever a child restraint is used for a child 2 years old or older who is required to have a separate seat on the aircraft. A child 2 years old or older must either be properly secured in an approved child restraint or properly secured with a safety belt in a passenger seat.

The FAA's 1992 determination as to which child restraint systems would be approved for use aboard aircraft was based on many years of work by both the FAA and the National Highway Traffic Safety Administration (NHTSA). In the 1970's, NHTSA proposed dynamic testing of child restraint systems for use in automobiles. In the mid 1980's, the FAA and NHTSA undertook an effort to develop a common approach to the approval of child restraints. Federal Motor Vehicle Safety Standards (FMVSS) No. 213 (49 CFR 571.213) was amended to provide criteria for the certification of child restraints that were appropriate for both aircraft and automobiles.

FMVSS No. 213, as revised, is the current U.S. standard, and has allowed hundreds of models of seats to be approved, including booster-type child restraint systems ("booster seats"). The current FAA child restraint rules do not specifically refer to FMVSS No. 213. However, FMVSS No. 213 is the basis for the labels required under the FAA rules.

The current FAA rules on child restraint systems permit the use of child restraint systems only if they bear a proper label(s), meet certain use requirements, and meet adult accompaniment requirements.

Approved labels fall into three categories as follows:

1. Seats manufactured to U.S. standards between January 1, 1981, and

February 25, 1985, must bear a label that states "This child restraint system conforms to all applicable Federal motor vehicle safety standards." However, vest- and harness-type child restraint systems manufactured before February 26, 1985, are not approved for use on aircraft even if they bear this label.

2. Seats manufactured to U.S. standards on or after February 26, 1985, must bear the following 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. Seats that are not manufactured to approved U.S. standards must bear either a label showing approval of a foreign government or a label showing that the seats were manufactured under the standards of the United Nations.

The use requirements for child restraint systems are as follows:

1. The restraint system must be properly secured to an approved forward-facing seat or berth;

2. The child must be properly secured in the restraint system and must not exceed the specified weight limit for the restraint system; and

3. The restraint system must bear that appropriate label(s).

The adult accompaniment provisions for child restraint systems require that the child be accompanied by a parent, guardian, or attendant designated by the child's parent or guardian to attend to the safety of the child during the flight.

While the current rule language disallows vest- and harness-type child restraint systems manufactured before February 26, 1985, some of these systems manufactured after that date meet U.S., foreign government, or United Nations requirements.

Need for Amendment

As discussed above, the present FAA rules on child restraint systems are based primarily on U.S. standards. However, the FAA now has determined that some child restraint systems that work well in automobiles may not be safe for use in aircraft. The FAA has reached this conclusion based in part on recent studies by FAA's Civil Aeromedical Institute (CAMI). A copy of CAMI's final report, as well as a follow-up report that clarifies certain issues in the CAMI report, is included in the docket. The CAMI studies were conducted to evaluate whether the FAA regulations regarding crashworthiness requirements for adult passenger seats and the standards applicable to child restraint devices were consistent, to respond to questions from the Air

Transport Association concerning which child restraint systems were approved for aircraft, and to respond to comments received from child restraint manufacturers, private testing organizations, the National Transportation Safety Board, foreign regulatory organizations, and consumer activists at the January 1993, session of the Society of Automotive Engineers (SAE) ad hoc committee on child restraints. Some of the most serious issues identified by CAMI concern child restraints commonly referred to as shield-type booster seats, vest- and harness-type child restraint systems, and belly belts.

FMVSS No. 213 defines a "booster seat" as "either a backless child restraint system or a belt-positioning seat". FMVSS No. 213 defines a "backless child restraint system" as "a child restraint, other than a belt-positioning seat, that consists of a seating platform that does not extend up to provide a cushion for the child's back or head and has a structural element designed to restrain forward motion of the child's torso in a forward impact" (hereinafter referred to as "shield-type"). FMVSS No. 213 defines a "belt-positioning seat" as "a child restraint system that positions a child on a vehicle seat to improve the fit of a vehicle Type 2 belt system on the child and that lacks any component, such as a belt system or a structural element, designed to restrain forward movement of the child's torso in a forward impact" (49 CFR 571.213(S4)). NHTSA and the FAA are working together to develop additional standards to allow an improved assessment of the performance of child restraint systems in the aircraft environment.

Booster seats are generally designed for children who are 3 to 8 years old and weigh 30 to 60 pounds. As such, the children who weigh 40 pounds and over can be adequately protected in an aircraft seat restrained by the safety belt, and the children who weigh between 30 pounds (the threshold weight for a booster seat) and 40 pounds can be restrained in a forward facing child restraint system. The "shield-type" booster seat is secured to the vehicle with the passenger safety belt and the shield provides crash protection for the upper body of the child. The "belt-positioning" booster seat is secured to the vehicle, along with the child, with the passenger seat and shoulder belt system of the vehicle; the shoulder portion of the best provides crash protection for the upper body of the child.

Vest- and harness-type restraint devices are usually designed for

children in the 25 to 50 pound range. The harness-type device usually consists of a torso harness with padded, adjustable straps over the shoulders and around the pelvis and, in some designs, it contains a crotch strap. The harness contains a means (e.g. a webbing attached to a metal back plate) for the passenger safety belt to attach the harness to the aircraft seat.

The belly belt included in the CAMI study has a short loop of webbing with standard buckle hardware installed on the ends. This belt is designed to be buckled around the child's abdomen and is secured to an adult's abdomen with the adult's safety belt by routing the safety belt through a small loop of webbing sewn on the belly belt. The belly belt, as well as other types of lap held child restraint devices, are not permitted to be used under the existing rules.

Under the existing rules, a child restraint system that bears one or more of the specified labels cannot be used unless the restraint system is properly secured to an approved forward-facing seat or berth (see §§ 91.107(a)(3)(iii)(C)(1), 121.311(b)(2)(iii)(A), 125.211(b)(2)(iii)(A), and 135.128(a)(2)(iii)(A)). Because lap held child restraint systems are not secured to a forward-facing seat or berth, but instead are secured to the adult, they cannot be used under existing rules. Nonetheless, the FAA has decided that it is important to emphasize this prohibition and, therefore, proposes to add clarifying language to the existing rules.

The CAMI study identified the following concerns with booster seats, vest- and harness-type child restraints, and belly belts:

Booster seats—In the test, the shield-type booster seat, in combination with other factors, contributed to an abdominal pressure measurement higher than in other means of protection.

Vest- and harness-type systems—When tested in an airplane seat, these systems allowed excessive forward body excursion, resulting in the anthropomorphic test dummy sliding off the front of the seat with a high likelihood of the child impacting the back of the row of seats in front of it. Rebound acceleration presents further risk for injury.

Belly belts—In the test, these systems allowed the anthropomorphic test dummy to make severe contact with the back of the seat in the row in front of the test dummy. The child also may be crushed by the forward bending motion

of the adult to whom the child is attached.

CAMI research involved dynamic impact tests with a variety of certified child restraints installed in transport airplane passenger seats at the 16g peak loads required in 14 CFR § 25.562(b)(2). Some of the tests of child restraint systems were configured to represent a typical multi-row seat installation and included testing the effects of the occupant impact against the backs of seats. The tests investigated transport airplane passenger seat compatibility with child restraints and measured three performance factors: adaptability, structural response, and occupant protection.

Shield-Type Booster Seats

The FAA has determined that some child restraint systems that work well in automobiles may not be as safe for use in aircraft during takeoff, landing, and movement on the surface as other available means of protection. Unlike in an automobile, where seat backs are fixed and rigid and present a barrier to rear-generated forces, airline seats are generally not rigid and thus may breakover under their own inertia or when struck by a passenger. This represents a potential source of pressure and force to the occupant of a backless child restraint device.

The CAMI research found that in laboratory impact tests using representative airplane seats found in a transport airplane, shield-type booster seats may offer less protection from aft row occupant impact forces on the seat back than other available means of protection. Aft row occupant impact forces transmitted through the passenger seat back in which the child restraint is installed are an important consideration, particularly in seats with breakover seat backs. The movement of the aft row adult passenger may expose the child to an impact from behind and to being crushed between the airplane seat back and the booster seat shield. In addition, when this situation was studied by CAMI, increased abdominal loading of the child test dummy was discovered when the researchers reviewed the test data on an anthropomorphic dummy representing a 3-year old child weighing 33.3 pounds.

The researchers then used a smaller "CAMIX" anthropomorphic dummy weighing 27.2 pounds, representing a 2-year old child, that was instrumented to measure abdominal loads. These measurements showed an increase in abdominal loads over those when the test dummy was protected by the aircraft seat's lap belt. The abdominal loading measured by this dummy in

shield-type booster seats was not caused by the dummy's impact against the shield alone, but by the force of the seat back and the aft row passenger as they pressed the dummy into the shield. Therefore, although CAMI used a test dummy weighing less than the range of children recommended by the manufacturer for its booster seat, the FAA believes that the dynamics would be the same for a child within the weight limits specified by the manufacturer.

The FAA believes that shield-type booster seats, which may contribute to higher abdominal loading, might put children in a potentially worse situation than the alternatives permitted in the FAA regulations. In the study, the FAA researchers at CAMI compared the abdominal load impacts on the CAMIX anthropomorphic test dummy when it was placed in a shield-type booster seat and when it was placed in a lap belt in a typical airplane passenger seat. When an adult-size test dummy aft of the CAMIX dummy and with a breakaway seat back, the abdominal load was 37.6 pounds per square inch (psi) when the dummy was restrained by the lap belt compared to 59.5 psi for the dummy when it was in a shield-type booster seat.

The CAMI researchers also found that the abdominal loads on the CAMIX test dummy with a locked seat back were higher in the shield-type booster seat (in the 19.8 to 20.8 psi range) than in a typical airplane lap belt with a locked seat back (9.5 psi).

The FAA recognizes that the booster seats are designed for children in the 30 to 60 pound weight range. Although the CAMIX dummy is 27.2 pounds, it was the only test dummy available that was equipped to measure abdominal loads. However, the FAA believes that abdominal loads for children who are in the 30 to 60 pound weight range and who are in shield-type booster seats would similarly exceed the abdominal loads that those children would experience in lap belts in representative aircraft seats in a worst case survivable aircraft crash.

The FAA is proposing to ban shield-type booster seats in aircraft during takeoff, landing, and movement on the surface because of the concern about the increase in abdominal pressure. The FAA believes that there is a relationship between abdominal loading and injury. The agency notes, however, that no accepted injury criteria have been developed that would permit the FAA to predict precisely the severity or type of abdominal injury. In view of the absence of criteria for assessing the relationship between differences in

measured levels of abdominal loading and the resulting risk of injury, the FAA invites comments, including statistical data, on the value of abdominal loading, by itself, as a predictor of injury.

The FAA recognizes that differences in abdominal loading are but one measure of the overall safety performance of child restraint devices. Among the others are the degree of extension of the spine and the head injury protection criteria (HIC) developed by NHTSA to measure head injury risk in motor vehicle crashes. Accordingly, the agency invites comments on the overall safety performance of shield-type booster seats compared to that of other available means of protection.

A separate seat or berth must be available in order to use a shield-type booster seat. If the FAA adopts this proposal to ban the use of shield-type booster seats, children over age 2 will have to use the passenger seat lap belt or some other type of approved child restraint system. The accompanying adult or the airline may provide the alternative approved child restraint system, but neither is required to do so. The FAA believes that children 2 years old or older will be safer in their own passenger seat restrained by a lap belt or in allowable child restraint systems than they would have been in the shield-type booster seats.

Under existing regulations, children under age 2 are not required to use a child restraint system or lap belt. Those children are permitted to be held on an adult's lap. By proposing to ban the use of shield-type booster seats, the FAA does not mean to encourage the practice of adults holding children under age 2 on their laps. Again, the FAA believes that a child who weighs enough to use a booster seat would be safer in a passenger seat lap belt or other approved type of child restraint system.

The FAA invites comments on the issue of whether the proposed ban would induce more parents to place more children on their laps during flight. The FAA also invites comments on the relative safety of placing children in shield-type booster seats versus putting children on laps. Although the FAA does not encourage the practice of holding a child under age 2 in an adult's lap, in 1992 the FAA decided not to mandate that children under age 2 use some type of restraint system (57 FR 42662). The FAA concluded that if children under age 2 were required to be in approved restraint systems and if the affected operators used such a requirement to charge for the transportation of children under age 2, more fatalities and injuries would occur.

The FAA determined that if adults were charged for the transportation of infants, some adults would decide to drive in automobiles to their destinations rather than fly. Noting that the accident rate on the roads is higher than the accident rate in commercial air transportation, the FAA concluded that more deaths and injuries would occur for children in automobile accidents than would be avoided in aviation crashes if the FAA mandated the use of child restraint systems for children under age 2 on aircraft. The FAA invites comments on its previous decision not to mandate child restraint systems. Recently, Congress instructed the FAA to restudy the net safety impact that would result if the agency were to mandate restraint devices for infants. That study will be submitted to Congress shortly and will be added to this rulemaking docket.

Vest- and Harness-Type Child Restraint Systems

Because of the location of the safety belt anchors for an airplane seat, harness-type child restraints tested at CAMI did not provide adequate restraint to prevent a serious impact with a seat back in front of the child occupant and a rebound impact with the occupant's own seat.

The FAA is aware that there may be an issue as to whether a parent who has been told that these devices are banned will choose not to buy a ticket for a separate seat for a child under 2, and, instead, hold the child in the lap. A parent who has purchased a ticket for the use of the vest- and harness-type device also has the option of using the passenger seat lap belt or using an approved child restraint device. The FAA believes that a parent who has purchased a ticket for a child, upon being told that the child could not use a vest- and harness-type device, would elect to use the passenger seat lap belt or an approved child restraint device. Others may believe that the parent may choose to hold the child on his or her lap. However, as noted above, the FAA believes that a child would be safer in a passenger seat lap belt or other approved type of child restraint system. The FAA also believes that a parent of a child under 2, who is already predisposed to buy a ticket for a separate airplane seat for use with a vest- and harness-type device and who has received education on the effectiveness of the allowable alternatives in advance of purchasing tickets, would purchase a ticket for a separate seat in order to use an approved and recommended child restraint device. The FAA specifically invites comments on this issue. Based

on the CAMI research and further analysis, the FAA believes that, in an aircraft crash, vest- and harness-type child restraint systems put children in a potentially worse situation than the alternatives permitted in the FAA regulations.

In an aircraft crash, these systems allow unacceptable levels of body excursion and/or submarining (the occupant's lower body slides underneath the restraint system). The FAA believes that if a child under 2 falls in the weight use limits (25–50 pounds) recommended by vest and harness manufacturers, the child would be safer in a passenger seat restrained by a lap belt than in a vest- and harness-type device if no other approved device were available.

However, the FAA believes that a child weighing between 25 and 40 pounds, a weight range consistent with harness use, would be better protected in a forward facing child restraint device than in a lap belt. The FAA notes that the CAMI study demonstrated that six of the eight forward facing child restraint systems it tested did not provide a desirable level of head injury protection (i.e., head injury criterion (HIC) less than 1,000) in the worst-case simulated survivable airplane crash. Nonetheless, based on an analysis of CAMI's testing of the harness, the lap belt, and forward facing child restraint devices, the FAA finds that forward facing child restraint devices will provide higher levels of protection than lap belts and harnesses for children between 25 and 40 pounds. In addition, CAMI testing revealed that lap belts provide a superior level of protection for children weighing more than 40 pounds to that provided by harnesses and booster seats. Consequently, the FAA recommends the use of forward facing child restraint devices for children weighing between 25 pounds (the threshold weight for a harness device) and 40 pounds; the FAA further recommends the use of lap belts for children weighing more than 40 pounds. The agency is continuing to analyze the relative protection afforded by forward facing child restraint devices and is aggressively examining methods by which the efficacy of such devices can meet desired testing levels.

Belt-Positioning Booster Seats

Belt-positioning booster seats require shoulder harnesses, and transport airplanes do not have passenger shoulder harnesses. In addition, in other aircraft that may have shoulder harnesses for passengers, the FAA believes that during an aircraft crash there is a likelihood that a belt-

positioning booster seat will shift from the passenger seat, causing a degradation in the performance of that child restraint system, thus resulting in injury. NHTSA recently issued an amendment (59 FR 37164; July 21, 1994) to its standard requiring that belt-positioning booster seats be labeled with a statement that they are not certified for use on aircraft. Based on further analysis, the FAA is proposing to ban all use of belt-positioning booster seats on aircraft.

It should be noted that, while booster seats and vest- and harness-type child restraints may be appropriate for use in automobiles, further analysis has indicated that their design may render them unsuitable for use in aircraft during takeoff, landing, and movement on the surface. The aircraft environment differs from the automobile environment in ways that are significant to this rulemaking and that add justification for the proposal of this notice. First, many booster seats require the use of a shoulder harness for proper restraint; however, shoulder harnesses are usually not available in transport airplane passenger seats. Second, the action of the shoulder harness inertial reels in automobiles is different than those in aircraft. Third, automobiles employ a rigid seat back system that maximizes the effectiveness of these child restraint systems, but aircraft usually do not have rigid seatbacks. Further, as a practical matter, a uniform application of this proposal to all aircraft is desirable, regardless of whether the aircraft has breakover seats.

Other Issues

The CAMI study identified other types of child restraint systems that did not provide the level of protection in a worst-case simulated survivable airplane crash that the FAA anticipated they would provide when the child restraint rule was originally promulgated. As previously noted, six of the eight forward facing child restraint systems in the CAMI study did not provide a level of head injury protection that is desirable in the worst case simulated survivable airplane crash. Because, unlike shield-type booster seats, forward facing child restraint devices have backs, the FAA has determined that forward facing child restraint devices are likely to provide a higher level of protection than shield-type booster seats at crash levels below the worst case survivable airplane crash.

The FAA notes that Roger N. Hardy of the Cranfield Impact Centre tested forward facing child restraint devices on behalf of the British Civil Aviation

Authority (BCAA). In his report, entitled *The Restraint of Infants and Young Children in Aircraft* (BCAA Paper 92929, December 12, 1992), Dr. Hardy concluded that while forward facing child restraint devices did not provide the optimal level of protection, they provided a higher level of protection relative to either the use of a belly belt or the holding of children on the laps of adults without the use of a belly belt.

The FAA believes that forward facing child restraint devices are superior to vest- and harness-type devices, booster seats, belly belts, and the holding of children on laps. Consequently, the FAA recommends the use of forward facing seats for children weighing between 20 and 40 pounds. (For children who weigh up to 20 pounds, and for children weighing over 40 pounds, the FAA recommends the use of aft facing child restraint devices and passenger lap belts, respectively.) While the FAA acknowledges that some forward facing child restraint devices may not presently provide a desired level of protection in a worst case survivable aircraft crash, it is examining means by which these seats will perform at optimal levels in such crashes. In addition, the agency is working with NHTSA to develop appropriate modifications to FMVSS No. 213 for future seat design approvals for airplane seats.

The FAA has issued directives to its inspectors that emphasize the existing prohibition on the use of devices, e.g. belly belts, that are not designed to be secured to forward-facing seats or berths. In issuing these statements, the FAA was motivated by its concern that such restraint systems could potentially result in a worse situation for children than the allowable alternatives would provide in the event of an aircraft crash.

The FAA is concerned as to whether the implementation of this rule may induce a significant number of parents to fail to provide child restraint devices for automotive travel to or from airports. Factors to be considered in addressing this issue are the share of the market that booster seats and vest- and harness-type devices comprise, the extent to which state laws require the use of child restraint systems in automobiles, and the availability of child restraint devices from car rental companies. The FAA seeks comments on the risks of children suffering increased injury due to their continued use of shield-type booster seats. The agency asks whether there are specific types of aircraft crashes or other aircraft events in which the measured difference in abdominal loading would have a greater potential for increasing the severity of injury to children.

Comments should include data on the frequency of such crashes or events, if available.

The agency also invites comments on the extent of any risks of children being injured in motor vehicles if parents are discouraged from bringing shield-type booster seats along on their combined air and land trips, and whether parents would in fact be so discouraged. If parents are so discouraged, the booster seat might not be available for motor vehicle use during the land portion of their trips, and parents might not obtain a restraint from another source. In addition, the agency requests additional comments and information on the number of shield-type booster seats currently used by children on aircraft, and how the proposed ban would affect the decisions of parents in selecting and purchasing child restraints.

Regulatory Evaluation Summary

Changes to Federal regulations are required to undergo several economic analyses. First, Executive Order 12866 directs each Federal agency to propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs. Second, the Regulatory Flexibility Act of 1980 requires agencies to analyze the economic effect of regulatory changes on small entities. Third, the Office of Management and Budget directs agencies to assess the effect of regulatory changes on international trade. With respect to this notice, the FAA has determined that it: (1) is "a significant regulatory action" as defined in the Executive Order; (2) is significant as defined in the Department of Transportation's Regulatory Policies and Procedures; (3) would not have a significant impact on a substantial number of small entities; and (4) would not constitute a barrier to international trade. The FAA does not believe that this proposal would impose any significant costs on the public. Therefore, a full regulatory analysis, which includes the identification and evaluation of cost-reducing alternatives to this notice, has not been prepared. Instead, the agency has prepared a more concise analysis of this notice that is presented in the following paragraphs.

Costs and Benefits

There would be some compliance costs associated with this notice. This proposed rule will reduce the types of child restraint systems that can be used during ground movement, takeoff, and landings by prohibiting the use of all booster seats and vest- and harness-type child restraint systems during these phases of a flight. The restrictions on

the use of these devices would need to be incorporated into flight attendant training and included in flight manuals, and this will impose additional costs on air carriers. For a period of time after the proposed rule becomes effective, there will also be some public education necessary and potential flight delays when flight attendants tell parents who brought prohibited child restraint devices on board the aircraft that the devices are banned for use during takeoff, landing, and movement on the ground. The FAA specifically requests comments on the cost of this notice, however.

The FAA has determined that booster seats and vest- and harness-type devices put children in a potentially worse situation than the alternatives during an aircraft crash. According to the CAMI study, these child restraint systems do not securely hold a child in place in an aircraft crash, and may themselves even cause harm to a child in the event of a crash. These types of accidents, while they rarely happen, usually occur during the takeoff or landing phases of a flight. Thus, prohibiting the use of these child restraint systems during takeoff and landing will enhance the child's safety. Since it is impractical to expect flight attendants to monitor, just prior to takeoff, whether children are out of banned devices, the FAA is prohibiting the use of these devices during movement on the surface also.

Regulatory Flexibility Determination

The Regulatory Flexibility Act of 1980 (RFA) was enacted by Congress to ensure that small entities are not unnecessarily or disproportionately burdened by Federal regulations. The RFA requires a Regulatory Flexibility Analysis if a proposed rule will have "a significant economic impact on a substantial number of small entities." FAA Order 2100.14A outlines FAA's procedures and criteria for implementing the RFA. Small entities are defined as independently owned and operated small businesses and small not-for-profit organizations. This proposed rule will impose unquantified costs on air carriers. These costs include changing manuals and training flight attendants about the restrictions on the use of certain child restraint devices. Initially, there may be some public education necessary and possible flight delays when flight attendants tell parents or guardians that they may not use certain child restraint devices during ground movement, takeoff, or landing. However, the FAA believes that this proposed rule will not have a significant economic impact on a substantial number of small entities.

International Trade Impact Assessment

This notice would not constitute a barrier to international trade, including the export of American goods and services to foreign countries and the import of foreign goods and services to the United States.

Federalism Implications

The regulations proposed herein would not have substantial direct effects on the states, on the relationship between the national government and that of any state, or on the distribution of power and responsibilities among the various levels of government. The respondents affected by the proposed amendments are private citizens, not state governments. Therefore, in accordance with Executive Order 12612, it is determined that this regulation would not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

Conclusion

For the reasons discussed in the preamble, and based on the findings in the Regulatory Flexibility Determination and the International Trade Impact Analysis, the FAA has determined that this proposed regulation is a significant regulatory action under Executive Order 12866. This rule is considered significant under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). In addition, it is certified that this proposed rule would not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects

14 CFR Part 91

Air carriers, Air transportation, Aviation safety, Safety.

14 CFR Part 121

Air carriers, Air transportation, Aviation safety, Common carriers, Safety, Transportation.

14 CFR Part 125

Air carriers, Air transportation, Aviation safety, Safety.

14 CFR Part 135

Air carriers, Air taxi, Air transportation, Aviation safety, Safety.

The Amendment

In consideration of the foregoing, the Federal Aviation Administration proposes to amend parts 91, 121, 125, and 135 of the Federal Aviation Regulations (14 CFR parts 91, 121, 125, and 135) as follows:

PART 91—GENERAL OPERATING AND FLIGHT RULES

1. The authority citation for part 91 continues to read as follows:

Authority: 49 U.S.C. 1301(7), 1303, 1344, 1348, 1352 through 1355, 1401, 1421 through 1431, 1471, 1472, 1502, 1510, 1522, and 2121 through 2125; Articles 12, 29, 31 and 32(a) of the Convention on International Civil Aviation (61 Stat. 1180); 42 U.S.C. 4321 et seq.; E.O. 11514, 35 FR 4247, 3 CFR, 1966-70 Comp., p. 902; 49 U.S.C. 106(g).

2. Section 91.107 is amended by removing the sentence in paragraph (a)(3)(iii)(B)(1) that begins with “Vest- * * *”, by removing the final “and” in paragraph (a)(3)(iii)(B)(3), by revising paragraph (a)(3)(i) and the introductory text of paragraph (a)(3)(iii)(B), and by adding a new paragraph (a)(3)(iii)(B)(4) to read as follows:

§ 91.107 Use of safety belts, shoulder harnesses, and child restraint systems.

(a) * * *
(3) * * *

(i) Be held by an adult who is occupying an approved seat or berth, provided that the person being held has not reached his or her second birthday and does not occupy or use any restraining device;

* * * * *

(iii) * * *

(B) Except as provided in paragraph (a)(3)(iii)(B)(4) of this section, the approved child restraint system bears one or more labels as follows:

* * * * *

(4) Notwithstanding any other provision of this section, booster-type child restraint systems (as defined in Federal Motor Vehicle Safety Standard No. 213 (49 CFR 571.213)), vest- and harness-type child restraint systems, and lap held child restraints are not approved for use in aircraft; and

* * * * *

PART 121—CERTIFICATION AND OPERATIONS: DOMESTIC, FLAG, AND SUPPLEMENTAL AIR CARRIERS, AND COMMERCIAL OPERATORS OF LARGE AIRCRAFT

3. The authority citation for part 121 continues to read as follows:

Authority: 49 U.S.C. 106(g), 1354(a), 1355, 1356, 1357, 1401, 1421–1430, 1472, 1485, and 1502.

4. Section 121.311 is amended by removing the sentence in paragraph (b)(2)(ii)(A) that begins with “Vest- * * *”, by removing the final “and” in paragraph (b)(2)(ii)(C), by revising paragraph (b)(1) and the introductory text of paragraph (b)(2)(ii), by adding a

new paragraph (b)(2)(ii)(D), and by revising paragraph (c) to read as follows:

§ 121.311 Seats, safety belts, and shoulder harnesses.

* * * * *

(b) * * *

(1) Be held by an adult who is occupying an approved seat or berth, provided the child has not reached his or her second birthday and the child does not occupy or use any restraining device; or

(2) * * *

(ii) Except as provided in paragraph (b)(2)(ii)(D) of this section, the approved child restraint system bears one or more labels as follows:

* * * * *

(D) Notwithstanding any other provisions of this section, booster-type child restraint systems (as defined in Federal Motor Vehicle Standard No. 213 (49 CFR 571.213)), vest- and harness-type child restraint systems, and lap held child restraints are not approved for use in aircraft; and

(c) Except as provided in paragraph (c)(3), the following prohibitions apply to certificate holders:

(1) No certificate holder may permit a child, in an aircraft, to occupy a booster-type child restraint system, a vest-type child restraint system, a harness-type child restraint system, or a lap held child restraint system during take off, landing, and movement on the surface.

(2) Except as required in paragraph (c)(1) of this section, no certificate holder may prohibit a child, if requested by the child's parent, guardian, or designated attendant, from occupying a child restraint system furnished by the child's parent, guardian, or designated attendant provided:

(i) The child holds a ticket for an approved seat or berth or such seat or berth is otherwise made available by the certificate holder for the child's use;

(ii) The requirements of paragraph (b)(2)(i) are met;

(iii) The requirements of (b)(2)(iii) are met; and

(iv) The child restraint system has one or more of the labels described in paragraph (b)(2)(ii)(A) through paragraph (b)(2)(ii)(C).

(3) This section does not prohibit the certificate holder from providing child restraint systems or, consistent with safe operating practices, determining the most appropriate passenger seat location for the child restraint system.

* * * * *

PART 125—CERTIFICATION AND OPERATIONS: AIRPLANES HAVING A SEATING CAPACITY OF 20 OR MORE PASSENGERS OR A MAXIMUM PAYLOAD CAPACITY OF 6,000 POUNDS OR MORE

5. The authority citation for part 125 continues to read as follows:

Authority: 49 U.S.C. 106(g), 1354, 1421 through 1430 and 1502.

6. Section 125.211 is amended by removing the sentence in paragraph (b)(2)(ii)(A) that begins with “Vest- * * *”, by removing the final “and” in paragraph (b)(2)(ii)(C), by revising paragraph (b)(1) and the introductory text of paragraph (b)(2)(ii), by adding a new paragraph (b)(2)(ii)(D), and by revising paragraph (c) to read as follows:

§ 125.211 Seat and safety belts.

* * * * *

(b) * * *

(1) Be held by an adult who is occupying an approved seat or berth, provided the child has not reached his or her second birthday and the child does not occupy or use any restraining device; or

(2) * * *

(ii) Except as provided in paragraph (b)(2)(ii)(D) of this section, the approved child restraint system bears one or more labels as follows:

* * * * *

(D) Notwithstanding any other provisions of this section, booster-type child restraint systems (as defined in Federal Motor Vehicle Standard No. 213 (49 CFR 571.213)), vest- and harness-type child restraint systems, and lap held child restraints are not approved for use in aircraft; and

(c) Except as provided in paragraph (c)(3), the following prohibitions apply to certificate holders:

(1) No certificate holder may permit a child, in an aircraft, to occupy a booster-type child restraint system, a vest-type child restraint system, a harness-type child restraint system, or a lap held child restraint system during take off, landing, and movement on the surface.

(2) Except as required in paragraph (c)(1) of this section, no certificate holder may prohibit a child, if requested by the child's parent, guardian, or designated attendant, from occupying a child restraint system furnished by the child's parent, guardian, or designated attendant provided:

(i) The child holds a ticket for an approved seat or berth or such seat or berth is otherwise made available by the certificate holder for the child's use;

(ii) The requirements of paragraph (b)(2)(i) are met;

(iii) The requirements of (b)(2)(iii) are met; and

(iv) The child restraint system has one or more of the labels described in paragraph (b)(2)(ii)(A) through paragraph (b)(2)(ii)(C).

(3) This section does not prohibit the certificate holder from providing child restraint systems or, consistent with safe operating practices, determining the most appropriate passenger seat location for the child restraint system.

* * * * *

PART 135—AIR TAXI OPERATORS AND COMMERCIAL OPERATORS

7. The authority citation for part 135 continues to read as follows:

Authority: 49 U.S.C. app. 1354(a), 1355(a), 1421 through 1431, and 1502; 49 U.S.C. 106(g).

8. Section 135.128 is amended by removing the sentence in paragraph (a)(2)(ii)(A) that begins with "Vest-* * *", by removing the final "and" in paragraph (a)(2)(ii)(C), by revising paragraph (a)(1) and the introductory text of paragraph (a)(2)(ii), by adding a new paragraph (a)(2)(ii)(D), and by revising paragraph (b) to read as follows:

§ 135.128 Use of safety belts and child restraint systems.

(a) * * *

(1) Be held by an adult who is occupying an approved seat or berth, provided the child has not reached his or her second birthday and the child does not occupy or use any restraining device; or

(2) * * *

(ii) Except as provided in subparagraph (b)(2)(ii)(D) of this section, the approved child restraint system bears one or more labels as follows:

* * * * *

(D) Notwithstanding any other provision of this section, booster-type child restraint systems (as defined in Federal Motor Vehicle Standard No. 213 (49 CFR 571.213)), vest- and harness-type child restraint systems, and lap held child restraints are not approved for use in aircraft; and

(b) Except as provided in paragraph (b)(3), the following prohibitions apply to certificate holders:

(1) No certificate holder may permit a child, in an aircraft, to occupy a booster-type child restraint system, a vest-type child restraint system, a harness-type child restraint system, or a lap held child restraint system during take off, landing, and movement on the surface.

(2) Except as required in paragraph (b)(1) of this section, no certificate holder may prohibit a child, if requested by the child's parent, guardian, or

designated attendant, from occupying a child restraint system furnished by the child's parent, guardian, or designated attendant provided:

(i) The child holds a ticket for an approved seat or berth or such seat or berth is otherwise made available by the certificate holder for the child's use;

(ii) The requirements of paragraph (a)(2)(i) are met;

(iii) The requirements of (a)(2)(iii) are met; and

(iv) The child restraint system has one or more of the labels described in paragraph (a)(2)(ii)(A) through paragraph (a)(2)(ii)(C).

(3) This section does not prohibit the certificate holder from providing child restraint systems or, consistent with safe operating practices, determining the most appropriate passenger seat location for the child restraint system.

* * * * *

Issued in Washington, DC, on May 19, 1995.

William J. White,

Acting Director, Flight Standards Service.

[FR Doc. 95-12800 Filed 6-7-95; 8:45 am]

BILLING CODE 4910-13-M

49 CFR Part 571

[Docket No. 74-09; Notice 41]

RIN 2127-AF46

Federal Motor Vehicle Safety Standards; Child Restraint Systems

AGENCY: National Highway Traffic Safety Administration (NHTSA), Department of Transportation.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This proposed rule, and a companion proposed rule issued by the Federal Aviation Administration (FAA), address the use of child harnesses and backless child restraints in aircraft. This document proposes to amend a provision in Federal Motor Vehicle Safety Standard No. 213, "Child Restraint Systems," that permits those restraints to be certified for use in both motor vehicles and aircraft. This rule complements an FAA proposal, published elsewhere in today's **Federal Register**, that would prohibit the use of booster seats, and vest- and harness-type child restraint systems on aircraft even if the restraints are certified for aircraft use.

Under the current FAA regulations, aircraft-certified child restraints may be used on aircraft. However, because testing has raised concerns about the safety of using harnesses and backless child restraint systems on the types of seats found in aircraft, FAA is publishing, in today's **Federal Register**, an NPRM that would prohibit the use of booster seats, and vest- and harness-type child restraint systems on aircraft even if they are certified for aircraft use.

NHTSA is, in turn, concerned that if FAA were to ban harnesses and backless

booster seats from being used on aircraft, continuing to permit the certification of those restraints for aircraft use could be confusing to the public. Accordingly, this document proposes to require manufacturers to label these restraints as not being for aircraft use.

DATES: Comments on this proposed rule must be received by the agency no later than July 10, 1995.

ADDRESSES: Comments should refer to the docket number and notice number and be submitted in writing to: Docket Section, National Highway Traffic Safety Administration, Room 5109, 400 Seventh Street SW., Washington, DC 20590. Telephone: (202) 366-5267. Docket hours are 9:30 a.m. to 4:00 p.m. Monday through Friday.

FOR FURTHER INFORMATION CONTACT: Dr. George Mouchahoir, Office of Vehicle Safety Standards (telephone 202-366-4919), or Ms. Deirdre Fujita, Office of the Chief Counsel (202-366-2992), National Highway Traffic Safety Administration, 400 Seventh Street SW., Washington, DC 20590. For information on FAA's proposal, contact Ms. Donell Pollard (AFS-203), Air Transportation Division, Flight Standards Service (telephone 202-267-3735), Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591.

SUPPLEMENTARY INFORMATION: This document proposes to amend the provision in Federal Motor Vehicle Safety Standard No. 213, "Child Restraint Systems," that permits child restraint systems to be certified for use in both motor vehicles and aircraft. This rule complements an FAA proposal, published elsewhere in today's **Federal Register**, that would prohibit the use of booster seats, and vest- and harness-type child restraint systems on aircraft even if the restraints are certified for aircraft use.

The types of child restraint systems that are the subject of this NPRM are harnesses and backless child restraints. A harness typically consists of a vest or a series of straps that form a vest-like garment, that attaches at the back of the harness to a vehicle seat's lap belt. Harnesses are generally intended for children who weigh from 25 to 50 pounds, and some require the use of a tether strap to supplement the lap belt. A backless child restraint system is a type of child booster seat that has a structural element (typically a shield) designed to restrain forward motion of the child's torso in a frontal crash. Backless child restraint systems are generally intended for children weighing from 30 to 60 pounds.