$Q_j = (T_j)(P_j)$

Where:

T_j = Average time spent in failure condition j (in hours)

P_j = Probability of occurrence of failure mode j (per hour)

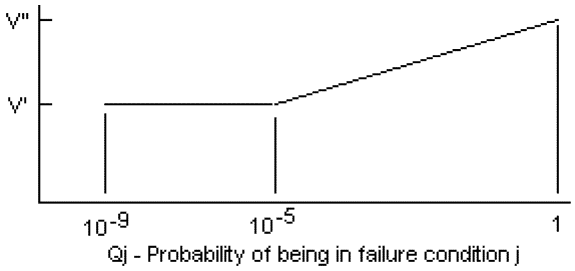
Note: If P_j is greater than 10^{-3} per flight hour then a 1.5 factor of safety must be applied to all limit load conditions specified in Subpart C.

iii. For residual strength substantiation, the airplane must be able to withstand two thirds of the ultimate loads defined in paragraph (6)(b)(ii) of the special condition. For pressurized cabins, these loads must be combined with the normal operating differential pressure.

iv. If the loads induced by the failure condition have a significant effect on fatigue or damage tolerance then their effects must be taken into account.

v. Freedom from aeroelastic instability must be shown up to a speed determined from Figure 3. Flutter clearance speeds V′ and V″ may be based on the speed limitation specified for the remainder of the flight using the margins defined by § 25.629(b).

Figure 3
Clearance speed



V′ = Clearance speed as defined by § 25.629(b)(2).

V″ = Clearance speed as defined by § 25.629(b)(1).

Qj = (Tj)(Pj) where:

Tj = Average time spent in failure condition j (in hours)

Pj = Probability of occurrence of failure mode j (per hour)

Note: If Pj is greater than 10^{-3} per flight hour, then the flutter clearance speed must not be less than V″.

vi. Freedom from aeroelastic instability must also be shown up to V′ in Figure 3 above, for any probable system failure condition combined with any damage required or selected for investigation by § 25.571(b).

c. Consideration of certain failure conditions may be required by other sections of 14 CFR part 25 regardless of calculated system reliability. Where analysis shows the probability of these failure conditions to be less than 10^{-9} per flight hour, criteria other than those specified in this paragraph may be used for structural substantiation to show continued safe flight and landing.

7. Failure indications. For system failure detection and indication, the following apply:

a. The system must be checked for failure conditions, not extremely improbable, that degrade the structural capability below the level required by part 25 or significantly reduce the reliability of the remaining system. As far as reasonably practicable, the flight crew must be made aware of these failures before flight. Certain elements of the control system, such as mechanical and hydraulic components, may use special periodic inspections, and electronic components may use daily checks, in lieu of detection and indication systems to achieve the objective of this requirement. These certification maintenance requirements must be limited to components that are not readily detectable by normal detection and indication systems and where service history shows that inspections will provide an adequate level of safety.

b. The existence of any failure condition, not extremely improbable, during flight that could significantly affect the structural capability of the airplane and for which the associated reduction in airworthiness can be minimized by suitable flight limitations, must be signaled to the flight crew. For example, failure conditions that result in a factor of safety between the airplane strength and the loads of 14 CFR part 25, subpart C, below 1.25, or flutter margins below V″, must be signaled to the crew during flight.

8. Dispatch with known failure conditions. If the airplane is to be dispatched in a known system failure condition that affects structural performance, or affects the reliability of the remaining system to maintain structural performance, then the provisions of this special condition must be met, including the provisions of paragraph (5) for the dispatched condition, and paragraph (6) for subsequent failures. Expected operational limitations may be taken into account in establishing Pj as the probability of failure occurrence for determining the safety margin in Figure 1. Flight limitations and expected operational limitations may be taken into account in establishing Qj as the combined probability of being in the dispatched failure condition and the subsequent failure condition for the safety margins in Figures 2 and 3. These limitations must be such that the probability of being in this combined failure state and then subsequently encountering limit load conditions is extremely improbable. No reduction in these safety margins is allowed if the subsequent system failure rate is greater than 10^{-3} per flight hour.

Issued in Des Moines, Washington.

Victor Wicklund,

Manager, Transport Standards Branch, Policy and Innovation Division, Aircraft Certification Service.

[FR Doc. 2018–07277 Filed 4–9–18; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 25

[Docket No. FAA–2018–0247; Special Conditions No. 25–721–SC]

Special Conditions: Textron Aviation Inc. Model 700 Series Airplanes; Side-Facing Seats—Installation of Airbag Systems

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final special conditions; request for comments.

SUMMARY: These special conditions are issued for the Textron Aviation Inc. (Textron), Model 700 series airplanes that feature an inflatable airbag system on multiple-place and single-place side-facing seats (*i.e.,* seats positioned in the airplane with the occupant facing 90 degrees to the direction of airplane travel). The applicable airworthiness regulations do not contain adequate or appropriate safety standards for this design feature. These special conditions contain the additional safety standards that the Administrator considers necessary to establish a level of safety equivalent to that established by the existing airworthiness standards.

DATES: This action is effective on Textron Aviation Inc. on April 10, 2018. Send comments on or before May 25, 2018.

ADDRESSES: Send comments identified by Docket No. FAA–2018–0247 using any of the following methods:

- *Federal eRegulations Portal:* Go to *http://www.regulations.gov/*and follow the online instructions for sending your comments electronically.
- *Mail:* Send comments to Docket Operations, M–30, U.S. Department of Transportation (DOT), 1200 New Jersey Avenue SE, Room W12–140, West Building Ground Floor, Washington, DC 20590–0001.
- *Hand Delivery or Courier:* Take comments to Docket Operations in Room W12–140 of the West Building Ground Floor at 1200 New Jersey Avenue SE, Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.
- *Fax:* Fax comments to Docket Operations at 202–493–2251.

Privacy: The FAA will post all comments it receives, without change, to *http://www.regulations.gov/,* including any personal information the commenter provides. Using the search function of the docket website, anyone can find and read the electronic form of all comments received into any FAA docket, including the name of the individual sending the comment (or signing the comment for an association, business, labor union, etc.). DOT's complete Privacy Act Statement can be found in the **Federal Register** published on April 11, 2000 (65 FR 19477–19478).

Docket: Background documents or comments received may be read at *http://www.regulations.gov/* at any time. Follow the online instructions for accessing the docket or go to Docket Operations in Room W12–140 of the West Building Ground Floor at 1200 New Jersey Avenue SE, Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Alan Sinclair, FAA, Airframe and Cabin Safety Section, AIR–675, Transport Standards Branch, Aircraft Certification Service, 2200 South 216th St., Des Moines, Washington 98198–6547, telephone 206–231–3215, email *Alan.Sinclair@faa.gov*.

SUPPLEMENTARY INFORMATION: The FAA has determined that notice of, and opportunity for prior public comment on, these special conditions is unnecessary because the substance of these special conditions has been published in the **Federal Register** for public comment in several prior instances with no substantive comments received. The FAA therefore has determined that prior public notice and comment are unnecessary, and finds that, for the same reason, good cause exists for making these special conditions effective upon publication in the **Federal Register**.

Comments Invited

We invite interested people to take part in this rulemaking by sending written comments, data, or views. The most helpful comments reference a specific portion of the special conditions, explain the reason for any recommended change, and include supporting data.

We will consider all comments we receive by the closing date for comments. We may change these special conditions based on the comments we receive.

Background

On November 20, 2014, Textron applied for a type certificate for the Textron Model 700 series airplanes. The Textron Model 700 series airplanes are low-wing, executive jet airplanes with seating provisions for 2 crewmembers and up to 12 passengers. These airplanes will have a maximum takeoff weight of 38,514 lbs.

Textron's proposed passenger seating arrangement(s) include a baseline 9-place and an optional 8-place and 10-place configuration. The baseline configuration includes a forward right hand belted single-place side-facing seat. An optional 10-place seat configuration includes a left hand, aft-belted, three-place side-facing couch. The multiple-place and single-place side-facing seats can be occupied for taxi, takeoff, and landing, and incorporate an inflatable airbag occupant protection system integrated into the side-facing seats. The FAA determined that inflatable airbag systems are a novel or unusual design feature and the existing airworthiness regulations do not provide adequate or appropriate safety standards.

Type Certification Basis

Under the provisions of title 14, Code of Federal Regulations (14 CFR) 21.17, Textron must show that the Textron Model 700 series airplanes meet the applicable provisions of part 25, as amended by Amendments 25–1 through 25–141.

If the Administrator finds that the applicable airworthiness regulations (*i.e.,* 14 CFR part 25) do not contain adequate or appropriate safety standards for the Textron Model 700 series airplanes because of a novel or unusual design feature, special conditions are prescribed under the provisions of § 21.16.

Special conditions are initially applicable to the model for which they are issued. Should the type certificate for that model be amended later to include any other model that incorporates the same novel or unusual design feature, these special conditions would also apply to the other model under § 21.101.

In addition to the applicable airworthiness regulations and special conditions, the Textron Model 700 series airplanes must comply with the fuel-vent and exhaust-emission requirements of 14 CFR part 34 and the noise-certification requirements of 14 CFR part 36.

The FAA issues special conditions, as defined in 14 CFR 11.19, in accordance with § 11.38, and they become part of the type certification basis under § 21.17(a)(2).

Novel or Unusual Design Features

The Textron Model 700 series airplanes will incorporate the following novel or unusual design feature:

An inflatable airbag system on multiple-place and single-place side-facing seats installed in Textron Model 700 series airplanes, in order to reduce the potential for both head and leg injury in the event of an accident.

Discussion

Side-facing seats are considered a novel design for transport category airplanes that include §§ 25.562 and 25.785 at Amendment 25–64 in their certification basis, and were not considered when those airworthiness standards were issued. The FAA has determined that the existing regulations do not provide adequate or appropriate safety standards for occupants of side-facing seats. To provide a level of safety

that is equivalent to that afforded to occupants of forward- and aft-facing seats, additional airworthiness standards in the form of special conditions are necessary.

On June 16, 1988, 14 CFR part 25 was amended by Amendment 25–64 to revise the emergency-landing conditions that must be considered in the design of transport category airplanes. Amendment 25–64 revised the static-load conditions in § 25.561, and added a new § 25.562 that required dynamic testing for all seats approved for occupancy during takeoff and landing. The intent of Amendment 25–64 was to provide an improved level of safety for occupants on transport category airplanes. However, because most seating on transport category airplanes is forward-facing, the pass/fail criteria developed in Amendment 25–64 focused primarily on these seats. For some time, the FAA granted exemptions for the multiple-place side-facing-seat installations because the existing test methods and acceptance criteria did not produce a level of safety equivalent to the level of safety provided for forward- and aft-facing seats. These exemptions were subject to many conditions that reflected the injury-evaluation criteria and mitigation strategies available at the time of the exemption issuance.

The FAA also issued special conditions to address single-place side-facing seats based on the data available at the time the FAA issued those special conditions. Continuing concerns regarding the safety of side-facing seats prompted the FAA to conduct research to develop an acceptable method of compliance with §§ 25.562 and 25.785(b) for side-facing seat installations. That research has identified injury considerations and evaluation criteria in addition to those previously used to approve side-facing seats (see published report DOT/FAA/AR–09/41, July 2011).

One particular concern that was identified during the FAA's research program, but not addressed in the previous special conditions, was the significant leg injuries that can occur to occupants of both single- and multiple-place side-facing seats. Because this type of injury does not occur on forward- and aft-facing seats, the FAA determined that, to achieve the level of safety envisioned in Amendment 25–64, additional requirements would be needed as compared to previously issued special conditions. Nonetheless, the research has now allowed the development of a single set of special conditions that is applicable to all fully side-facing seats.

On November 5, 2012, the FAA released Policy Statement PS–ANM–25–03–R1, ''Technical Criteria for Approving Side-Facing Seats,'' to update existing FAA certification policy on §§ 25.562 and 25.785(a) at Amendment 25–64 for single- and multiple-place side-facing seats. This policy addresses both the technical criteria for approving side-facing seats and the implementation of those criteria. The FAA methodology detailed in Policy Statement PS–ANM–25–03–R1 was used to establish a new set of proposed special conditions that incorporated conditions for exemptions developed prior to the policy and included in these new special conditions, others that reflect current research findings specifically for neck and leg protection. We have frequently issued these new special conditions for airbag systems in the shoulder belts. While the Textron design integrate the airbag systems into the side-facing seats that deploy from a different location then the shoulder belts, the airbag will inflate at the same locations as those in the shoulder belts. Therefore, the FAA is using the same special conditions as for airbag systems in shoulder belts for this Textron design as the airbag system functions the same.

In Policy Statement PS–ANM–25–03–R1, conditions 1 and 2 are applicable to all side-facing seat installations, whereas conditions 3 through 16 represent additional requirements applicable to side-facing seats equipped with an airbag system in the shoulder belt. These special conditions contain the additional safety standards that the Administrator considers necessary to establish a level of safety equivalent to that established by the existing airworthiness standards.

Applicability

As discussed above, these special conditions are applicable to the Textron Model 700 series airplanes Should Textron apply at a later date for a change to the type certificate to include another model incorporating the same novel or unusual design feature, these special conditions would apply to that model as well.

Conclusion

This action affects only certain novel or unusual design features on one model of airplane. It is not a rule of general applicability.

List of Subjects in 14 CFR Part 25

Aircraft, Aviation safety, Reporting and recordkeeping requirements.

Authority Citation

The authority citation for these special conditions is as follows:

Authority: 49 U.S.C. 106(f), 106(g), 40113, 44701, 44702, 44704.

The Special Conditions

Accordingly, pursuant to the authority delegated to me by the Administrator, the following special conditions are issued as part of the type certification basis.

In addition to the requirements of §§ 25.562 and 25.785, the following special condition numbers 1 and 2 are part of the type certification basis of the Textron Model 700 series airplanes with side-facing seat installations. For seat places equipped with airbag systems, additional special condition numbers 3 through 16 are part of the type certification basis.

1. Additional requirements applicable to tests or rational analysis conducted to show compliance with §§ 25.562 and 25.785 for side-facing seats:

a. The longitudinal test(s) conducted in accordance with § 25.562(b)(2) to show compliance with the seat-strength requirements of § 25.562(c)(7) and (8), and these special conditions must have an ES–2re anthropomorphic test dummy (ATD) (49 CFR part 572, subpart U) or equivalent, or a Hybrid-II ATD (49 CFR part 572, subpart B, as specified in § 25.562) or equivalent, occupying each seat position and including all items contactable by the occupant (*e.g.,* armrest, interior wall, or furnishing) if those items are necessary to restrain the occupant. If included, the floor representation and contactable items must be located such that their relative position, with respect to the center of the nearest seat place, is the same at the start of the test as before floor misalignment is applied. For example, if floor misalignment rotates the centerline of the seat place nearest the contactable item 8 degrees clockwise about the airplane x-axis, then the item and floor representations must be rotated by 8 degrees clockwise also to maintain the same relative position to the seat place, as shown in Figure 1. Each ATD's relative position to the seat after application of floor misalignment must be the same as before misalignment is applied. To ensure proper loading of the seat by the occupants, the ATD pelvis must remain supported by the seat pan, and the restraint system must remain on the pelvis and shoulder of the ATD until rebound begins. No injury-criteria evaluation is necessary for tests conducted only to assess seat-strength requirements.

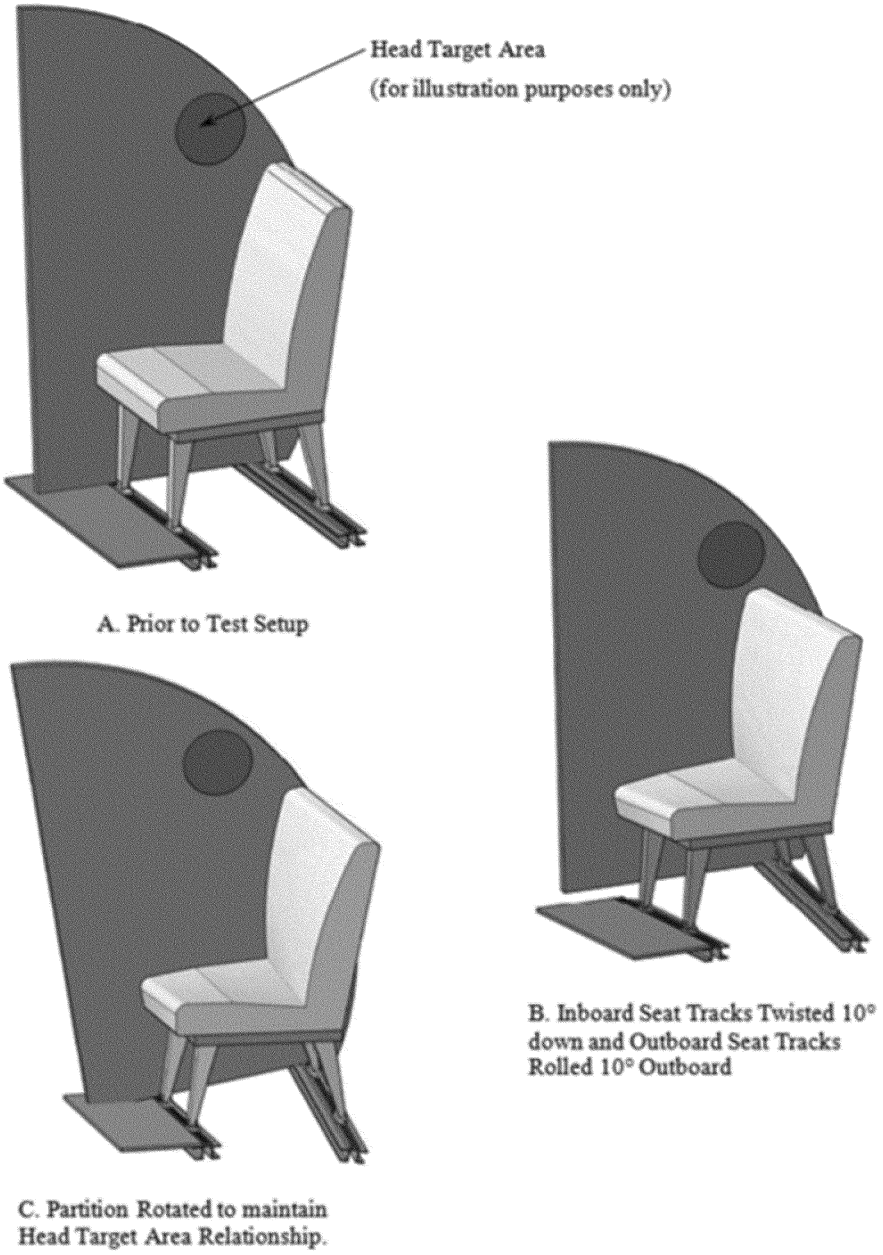


Figure 1: Head Target Areas Relative to Seat Position

b. The longitudinal test(s) conducted in accordance with § 25.562(b)(2), to show compliance with the injury assessments required by § 25.562(c) and these special conditions, may be conducted separately from the test(s) to show structural integrity. In this case, structural-assessment tests must be conducted as specified in paragraph 1a, above, and the injury-assessment test must be conducted without yaw or floor misalignment. Injury assessments may be accomplished by testing with ES–2re ATD (49 CFR part 572, subpart U) or equivalent at all places. Alternatively, these assessments may be accomplished by multiple tests that use an ES–2re at the seat place being evaluated, and a Hybrid-II ATD (49 CFR part 572, subpart B, as specified in § 25.562) or equivalent used in all seat places forward of the one being assessed, to evaluate occupant interaction. In this case, seat places aft of the one being assessed may be unoccupied. If a seat installation includes adjacent items that are contactable by the occupant, the injury potential of that contact must be assessed. To make this assessment, tests may be conducted that include the actual item, located and attached in a representative fashion. Alternatively, the injury potential may be assessed by a combination of tests with items having the same geometry as the actual item, but having stiffness characteristics that would create the worst case for injury (injuries due to both contact with the item and lack of support from the item).

c. If a seat is installed aft of structure (*e.g.,* an interior wall or furnishing) that does not have a homogeneous surface contactable by the occupant, additional analysis and/or test(s) may be required to demonstrate that the injury criteria are met for the area which an occupant could contact. For example, different yaw angles could result in different injury considerations and may require additional analysis or separate test(s) to evaluate.

d. To accommodate a range of occupant heights (5th percentile female to 95th percentile male), the surface of items contactable by the occupant must be homogenous 7.3 inches (185 mm) above and 7.9 inches (200 mm) below the point (center of area) that is contacted by the 50th percentile male size ATD's head during the longitudinal test(s) conducted in accordance with paragraphs 1a, 1b, and 1c, of these special conditions. Otherwise, additional head-injury criteria (HIC) assessment tests may be necessary. Any surface (inflatable or otherwise) that provides support for the occupant of any seat place must provide that support in a consistent manner regardless of occupant stature. For example, if an inflatable shoulder belt is used to mitigate injury risk, then it must be demonstrated by inspection to bear against the range of occupants in a similar manner before and after inflation. Likewise, the means of limiting lower-leg flail must be demonstrated by inspection to provide protection for the range of occupants in a similar manner.

e. For longitudinal test(s) conducted in accordance with § 25.562(b)(2) and these special conditions, the ATDs must be positioned, clothed, and have lateral instrumentation configured as follows:

i. *ATD positioning:*

(1) Lower the ATD vertically into the seat while simultaneously (see Figure 2 for illustration):

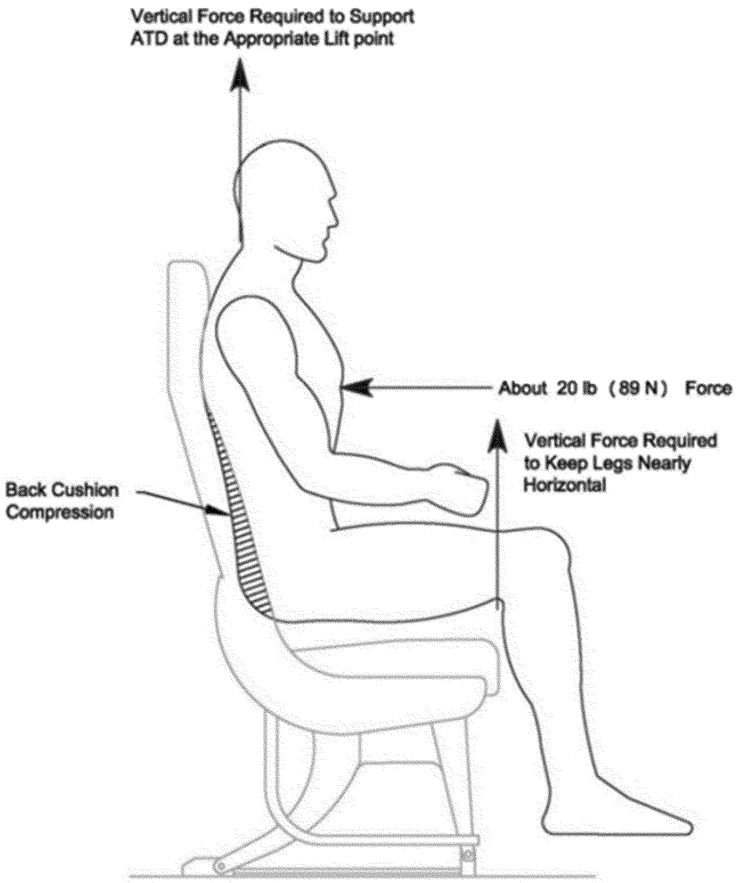


Figure 2: ATD Positioning

(a) Aligning the midsagittal plane (a vertical plane through the midline of the body; dividing the body into right and left halves) with approximately the middle of the seat place.

(b) Applying a horizontal x-axis direction (in the ATD coordinate system) force of about 20 lbs. (89 N) to the torso at approximately the intersection of the midsagittal plane and the bottom rib of the ES–2re or lower sternum of the Hybrid-II at the midsagittal plane, to compress the seat back cushion.

(c) Keeping the upper legs nearly horizontal by supporting them just behind the knees.

(2) Once all lifting devices have been removed from the ATD:

Rock it slightly to settle it in the seat.

(a) Separate the knees by about 4 inches (100 mm).

(b) Set the ES–2re's head at approximately the midpoint of the available range of z-axis rotation (to align the head and torso midsagittal planes).

(c) Position the ES–2re's arms at the joint's mechanical detent that puts them at approximately a 40 degree angle with respect to the torso. Position the Hybrid-II ATD hands on top of its upper legs.

(d) Position the feet such that the centerlines of the lower legs are approximately parallel to a lateral vertical plane (in the aircraft coordinate system).

ii. *ATD clothing:* Clothe each ATD in form-fitting, mid-calf-length (minimum) pants and shoes (size 11E) weighing about 2.5 lbs. (1.1 Kg) total. The color of the clothing should be in contrast to the color of the restraint system. The ES–2re jacket is sufficient for torso clothing, although a form-fitting shirt may be used in addition if desired.

iii. *ES–2re ATD lateral instrumentation:* The rib-module linear slides are directional, *i.e.,* deflection occurs in either a positive or negative ATD y-axis direction. The modules must be installed such that the moving end of the rib module is toward the front of the aircraft. The three abdominal-force sensors must be installed such that they are on the side of the ATD toward the front of the aircraft.

f. The combined horizontal/vertical test, required by § 25.562(b)(1) and these special conditions, must be conducted with a Hybrid II ATD (49 CFR part 572, subpart B, as specified in § 25.562), or equivalent, occupying each seat position.

g. Restraint systems:

i. If inflatable restraint systems are used, they must be active during all dynamic tests conducted to show compliance with § 25.562.

ii. The design and installation of seat-belt buckles must prevent unbuckling due to applied inertial forces or impact of the hands/arms of the occupant during an emergency landing.

2. Additional performance measures applicable to tests and rational analysis conducted to show compliance with §§ 25.562 and 25.785 for side-facing seats:

a. *Body-to-body contact:* Contact between the head, pelvis, torso, or shoulder area of one ATD with the adjacent-seated ATD's head, pelvis, torso, or shoulder area is not allowed. Contact during rebound is allowed.

b. *Thoracic:* The deflection of any of the ES–2re ATD upper, middle, and lower ribs must not exceed 1.73 inches (44 mm). Data must be processed as defined in Federal Motor Vehicle Safety Standards (FMVSS) 571.214.

c. *Abdominal:* The sum of the measured ES–2re ATD front, middle, and rear abdominal forces must not exceed 562 lbs. (2,500 N). Data must be processed as defined in FMVSS 571.214.

d. *Pelvic:* The pubic symphysis force measured by the ES–2re ATD must not exceed 1,350 lbs. (6,000 N). Data must be processed as defined in FMVSS 571.214.

e. *Leg:* Axial rotation of the upper-leg (femur) must be limited to 35 degrees in either direction from the nominal seated position.

f. *Neck:*

As measured by the ES–2re ATD and filtered at CFC 600 as defined in SAE J211:

i. The upper-neck tension force at the occipital condyle (O.C.) location must be less than 405 lbs. (1,800 N).

ii. The upper-neck compression force at the O.C. location must be less than 405 lbs. (1,800 N).

iii. The upper-neck bending torque about the ATD x-axis at the O.C. location must be less than 1,018 in lbs. (115 Nm).

iv. The upper-neck resultant shear force at the O.C. location must be less than 186 lbs. (825 N).

g. *Occupant (ES–2re ATD) retention:* The pelvic restraint must remain on the ES–2re ATD's pelvis during the impact and rebound phases of the test. The upper-torso restraint straps (if present) must remain on the ATD's shoulder during the impact.

h. *Occupant (ES–2re ATD) support:*

i. *Pelvis excursion:* The load-bearing portion of the bottom of the ATD pelvis must not translate beyond the edges of its seat's bottom seat-cushion supporting structure.

ii. *Upper-torso support:* The lateral flexion of the ATD torso must not exceed 40 degrees from the normal upright position during the impact.

3. For seats with an airbag system, show that the airbag system will deploy and provide protection under crash conditions where it is necessary to prevent serious injury. The means of protection must take into consideration a range of stature from a 2-year-old child to 95th percentile male. The airbag system must provide a consistent approach to energy absorption throughout that range of occupants. When the seat systems include airbag systems, the systems must be included in each of the certification tests as they would be installed in the airplane. In addition, the following situations must be considered:

a. The seat occupant is holding an infant.

b. The seat occupant is a pregnant woman.

4. The airbag systems must provide adequate protection for each occupant regardless of the number of occupants of the seat assembly, considering that unoccupied seats may have an active airbag system.

5. The design must prevent the airbag systems from being incorrectly installed, such that the airbag systems would not properly deploy. Alternatively, it must be shown that such deployment is not hazardous to the occupant and will provide the required injury protection.

6. It must be shown that the airbag system is not susceptible to inadvertent deployment as a result of wear and tear, or inertial loads resulting from in-flight or ground maneuvers (including gusts and hard landings), and other operating and environment conditions (vibrations, moisture, etc.) likely to occur in service.

7. Deployment of the airbag system must not introduce injury mechanisms to the seated occupant or result in injuries that could impede rapid egress. This assessment should include an occupant whose belt is loosely fastened.

8. It must be shown that inadvertent deployment of the airbag system during the most critical part of the flight, will either meet the requirement of § 25.1309(b) or not cause a hazard to the airplane or its occupants.

9. It must be shown that the airbag system will not impede rapid egress of occupants 10 seconds after airbag deployment.

10. The airbag systems must be protected from lightning and high-intensity radiated fields (HIRF). The threats to the airplane specified in existing regulations regarding lightning, § 25.1316, and HIRF, § 25.1317, are incorporated by reference for the purpose of measuring lightning and HIRF protection.

11. The airbag system must function properly after loss of normal aircraft electrical power, and after a transverse separation of the fuselage at the most critical location. A separation at the location of the airbag systems does not have to be considered.

12. It must be shown that the airbag system will not release hazardous quantities of gas or particulate matter into the cabin.

13. The airbag system installations must be protected from the effects of fire such that no hazard to occupants will result.

14. A means must be available for a crew member to verify the integrity of the airbag activation system prior to each flight or it must be demonstrated to reliably operate between inspection intervals. The FAA considers that the loss of the airbag system deployment function alone (*i.e.,* independent of the conditional event that requires the airbag system deployment) is a major-failure condition.

15. The inflatable material may not have an average burn rate of greater than 2.5 inches/minute when tested using the horizontal flammability test defined in part 25, appendix F, part I, paragraph (b)(5).

16. The airbag system, once deployed, must not adversely affect the emergency lighting system (*e.g.,* block floor proximity lights to the extent that the lights no longer meet their intended function).

Issued in Des Moines, Washington.

Victor Wicklund,

Manager, Transport Standards Branch, Policy and Innovation Division, Aircraft Certification Service.

[FR Doc. 2018–07278 Filed 4–9–18; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2017–1120; Product Identifier 2017–CE–030–AD; Amendment 39–19244; AD 2018–07–13]

RIN 2120–AA64

Airworthiness Directives; Textron Aviation Inc. Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Textron Aviation Inc. Models 510, 680, and 680A airplanes equipped with certain part number brake assemblies. This AD was prompted by a report that brake pad wear indicator pins were set incorrectly, which could lead to brake pad wear beyond the acceptable limits without indication. This AD requires inspection of the brake pad wear indicator pins and replacement of the brake assembly if any pin is set incorrectly. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective May 15, 2018.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of May 15, 2018.

ADDRESSES: For service information identified in this final rule, contact Textron Aviation Inc., One Cessna Boulevard, P.O. Box 7704, Wichita, Kansas 67277; phone: 316–517–6215; email: *citationpubs@txtav.com;* internet: *https://support.cessna.com/custsupt/csupport/newlogin.jsp;* or UTC Aerospace Systems, Goodrich Corporation, 101 Waco Street, P.O. Box 340, Troy, Ohio 45373; phone: 937–339–3811; email: *awb.techpubs@utas.utc.com;* internet: *https://www.customers.utcaerospacesystems.com/.* You may view this service information at the FAA, Policy and Innovation Division, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329–4148. It is also available on the internet at *http://www.regulations.gov* by searching for and locating Docket No. FAA–2017–1120.

Examining the AD Docket

You may examine the AD docket on the internet at *http://www.regulations.gov* by searching for and locating Docket No. FAA–2017–1120; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the regulatory evaluation, any comments received, and other information. The address for Docket Operations (phone: 800–647–5527) is U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION: CONTACT ONE OF THE FOLLOWING:

- *For the Model 510:* David Enns, Aerospace Engineer, Wichita ACO Branch, FAA, 1801 Airport Road, Room 100, Wichita, Kansas 67209; phone: 316–946–4147; fax: 913–946–4107; email: *david.enns@faa.gov;* or
- *For the Models 680 and 680A:* Adam Hein, Aerospace Engineer, Wichita ACO Branch, FAA, 1801 Airport Road, Room 100, Wichita, Kansas 67209; phone: 316–946–4116; fax: 316–946–4107; email: *adam.hein@faa.gov.*

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Textron Aviation Inc. (Textron) Models 510, 680, and 680A airplanes equipped with brake assemblies, part numbers (P/Ns) 2–1706–1 and 2–1675–1, with certain serial numbers. The NPRM published in the **Federal Register** on December 11, 2017 (82 FR 58140). The NPRM was prompted by a report that brake pad wear indicator pins were set incorrectly, which could lead to brake pad wear beyond the acceptable limits without indication. Brakes overhauled by UTC may have wear indicator pins set longer than specified. UTC discovered this condition during their inspection of incoming brakes. This condition, if not corrected, could result in brake pad wear beyond the acceptable limits without indication and consequent loss of braking ability, which could lead to a runway excursion. We are issuing this AD to address the unsafe condition on these products.

Comments

We gave the public the opportunity to participate in developing this final rule. The following presents the comments received on the NPRM and the FAA's response to each comment.

Request Clarification for FAA-Approved Replacement Instructions

Mark Mitcheson of NetJets Aviation requested specifics on ''FAA-approved replacement instructions approved specifically for this AD.'' We infer he wants clarification of the intent of this statement.

We agree that the language quoted by the commenter and used in the NPRM was confusing. We intended to direct those responsible for complying with the requirements of the AD to the type certificate holder, in this case Textron Aviation Inc., to obtain the replacement instructions (*i.e.,* maintenance manuals) specific to the applicable airplane models affected by this AD.

We modified in this AD the language quoted by the commenter to more accurately reflect our intent.

Request Parts Installation Prohibition

Mark Mitcheson requested whether the AD should prohibit the installation of the affected parts.

We partially agree. We agree operators should avoid installing the affected part because parts that do not meet type design could introduce the unsafe condition onto the airplane. However, we disagree with adding a specific requirement to the AD prohibiting the installation of the affected part. This AD requires inspection of the installed affected parts, and, if an affected part is installed, the airplane will immediately be subject to the requirements of this AD.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this final rule with the change described previously and minor editorial changes. We have determined that these changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this final rule.