

TABLE 1 TO PARAGRAPH (h)

Softwood lumber (by HTSUS number)	Assessment \$/cubic meter	Assessment \$/square meter
4407.11.00 .....	0.1737	0.004412
4407.12.00 .....	0.1737	0.004412
4407.13.00 .....	0.1737	0.004412
4407.14.00 .....	0.1737	0.004412
4407.19.00 .....	0.1737	0.004412
4409.10.05 .....	0.1737	0.004412
4409.10.10 .....	0.1737	0.004412
4409.10.20 .....	0.1737	0.004412
4409.10.90 .....	0.1737	0.004412
4418.99.10 .....	0.1737	0.004412

\* \* \* \* \*

**Erin Morris,**

Associate Administrator, Agricultural Marketing Service.

[FR Doc. 2024–15238 Filed 7–17–24; 8:45 am]

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**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 25**

[Docket No. FAA–2023–2412; Special Conditions No. 25–868–SC]

**Special Conditions: Airbus Model A321neo Extra-Long Range (XLR) Airplane; Cabin Evacuation—Protection From Fuel Tank Explosion Due to External Fuel-Fed Ground Fire**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final special conditions.

**SUMMARY:** These special conditions are issued for the Airbus Model A321neo XLR airplane. This airplane will have a novel or unusual design feature when compared to the technology envisaged by the airworthiness standards for transport category airplanes. This design feature is an integral rear center tank (RCT). The applicable airworthiness regulations do not contain adequate or appropriate safety standards for fire-safety performance of fuel-tank skin or structure in a post-crash external fuel-fed ground fire. 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:** Effective July 18, 2024.

**FOR FURTHER INFORMATION CONTACT:**

Douglas Bryant, Engine and Propulsion Section, AIR–625, Technical Policy Branch, Policy and Standards Division, Aircraft Certification Service, Federal Aviation Administration, 2200 South

216th Street, Des Moines, Washington 98198; telephone and fax 206–231–3166; email *douglas.n.bryant@faa.gov*.

**SUPPLEMENTARY INFORMATION:**

**Background**

On September 16, 2019, Airbus applied for an amendment to Type Certificate No. A28NM to include the new Model A321neo XLR series airplane. The Airbus Model A321neo XLR series airplane, which is a derivative of the Model A321neo Airbus Cabin Flex (ACF) currently approved under Type Certificate No. A28NM, is a twin-engine transport category aircraft that seats up to 244 passengers and has a maximum takeoff weight of 222,667 lbs.

**Type Certification Basis**

Under the provisions of title 14, Code of Federal Regulations (14 CFR) 21.101, Airbus must show that the Model A321neo XLR series airplane meets the applicable provisions of the regulations listed in Type Certificate No. A28NM, or the applicable regulations in effect on the date of application for the change, except for earlier amendments as agreed upon by the FAA.

If the Administrator finds that the applicable airworthiness regulations (e.g., 14 CFR part 25) do not contain adequate or appropriate safety standards for the Airbus Model A321neo XLR series airplane 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, or should any other model already included on the same type certificate be modified to incorporate 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 Airbus Model A321neo XLR series airplane must comply with the fuel venting 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 § 21.101.

**Novel or Unusual Design Features**

The Airbus Model A321neo XLR series airplane will incorporate the following novel or unusual design feature:

An integral RCT.

**Discussion**

The Airbus Model A321neo XLR series airplane incorporates an integral RCT. This tank is a “center” fuel tank, that would, if approved, be located in the airplane fuselage rather than in its wings. The tank is a “rear” tank, that would be located aft of the center wing fuel tank and behind the wheel bay; it would be in an area of the lower section of the fuselage, partially replacing the aft cargo compartment of the airplane from which this model is derived. The top of the tank would be directly below the floor of the passenger cabin. The fuel tank would be “integral” to the airplane, in that its walls would be part of the airplane structure. The exterior skin of the airplane fuselage would constitute part of the walls of the fuel tank, and these areas are usually separate boundaries (not integral) on other fuselage fuel tanks. An integral fuel tank may be referred to as a conformal fuselage structural fuel tank since boundaries of the fuel tank “conform” with the airplane exterior. The integral RCT is installed in a location that may be exposed to the direct effects of post-crash ground, or pool, fuel-fed fires. An external fuel-fed ground fire or external fuel-fed pool fire is also referred to as ‘external ground fire’.

The airworthiness standards applicable to the Model A321neo XLR do not contain specific standards for post-crash fire-safety performance of fuel-tank skin or structure. In addition, the integral RCT on the A321neo XLR was not envisaged by the FAA when promulgating requirements related to occupant protection when fuel tanks are exposed to external fuel-fed fires. The FAA considered fuel tank designs in widespread use on transport airplanes, including main fuel tanks and auxiliary fuel tanks when promulgating requirements related to occupant protection. Auxiliary fuel tanks are normally located in the center wing and within cargo holds, and in such cases are sometimes referred to as an auxiliary center tank (ACT).

Airplane manufacturers commonly incorporate a center wing fuel tank as an auxiliary fuel tank to make fuel available for increasing the flight range of the airplane. Continued expansion of range performance requirements has resulted in airplane designs using other

areas of the airplane to carry fuel, such as incorporating fuel tanks in the empennage and fuselage. The Airbus model A321neo XLR airplane includes a center wing fuel tank, an integral RCT and the option for additional ACTs within the fuselage. Unlike an integral RCT, a center wing fuel tank and optional ACTs are not expected by the FAA or manufacturers to be exposed to the direct effects of post-crash ground fire because the fuel tank walls are not exterior airplane skin on the center fuel tank or ACT designs.

Due to its unusual configuration, the A321neo XLR's integral RCT will also not incorporate the insulation that usually lines the fuselage skin of a modern transport category airplane. Therefore, the FAA has issued, after notice and comment, a set of special conditions that address that novel or unusual aspect of the A321neo XLR's integral RCT with regard to certain of the FAA's regulatory requirements for thermal/acoustic insulation installations, specifically 14 CFR 25.856(b). Those special conditions, No. 25-825-SC, require that the lower half of the fuselage spanning the longitudinal location of the RCT resist penetration from an external fuel-fed fire, to ensure that the design provides the same level of passenger protection from such fires as do the FAA's existing regulations for such insulation. The special conditions herein address a different flammability aspect of the A321neo XLR's integral RCT.

Pertinent to the fuel tank structure, post-crash-fire occupant survivability is dependent on the time available for occupant evacuation prior to fuel-tank breach or structural failure. Structural failure can be a result of degradation in load-carrying capability caused by a fuel-fed ground fire. Structural failure can also be a result of over-pressurization caused by ignition of fuel vapors inside the fuel tank.

Past experience indicates that occupant survivability following a post-crash fire is greatly influenced by the size and intensity of any fire that occurs. The ability of main fuel tanks, when they have aluminum wing surfaces wetted by fuel on their interior surface, to withstand post-crash-fire conditions, has been demonstrated by tests conducted at the FAA William J. Hughes Technical Center. Results of these tests have verified adequate dissipation of heat across wetted aluminum fuel-tank surfaces so that localized hot spots do not occur, thus minimizing the threat of explosion. This inherent capability of aluminum to dissipate heat also allows the aircraft's lower surface, which is also the fuel

tank boundary, to retain its load-carrying characteristics during a fuel-fed ground fire, and significantly delays structural collapse or burn-through for a time interval that usually exceeds evacuation times. In addition, as an aluminum fuel tank with significant quantities of fuel inside is heated, fuel vapor accumulates in the ullage space, exceeding the upper flammability limit relatively quickly and thus reducing the threat of a fuel-tank explosion prior to fuel-tank burn-through.

The center wing tank and optional ACTs are surrounded by fuselage structure and would not be directly exposed to a post-crash ground fire. This inherent separation is also expected to significantly delay structural collapse or burn-through and reduce the threat of explosion for a time interval that usually exceeds evacuation times. Service history of conventional aluminum airplanes has shown that fuel-tank explosions caused by ground fires have been rare on airplanes configured with flame arrestors in the fuel-tank vent lines. The Model A321neo XLR integral RCT may or may not have equivalent capability of past designs approved with existing regulations, due to the RCT design and location being integral with the fuselage.

There are several part 25 requirements that address fire-safety performance of the fuel tanks and fuselage in the Model A321neo XLR certification basis. However, these requirements do not directly or adequately address standards for post-crash fire-safety performance of fuel-tank skin or structure. These standards address failure conditions or minimize the hazard to the occupants in the event ignition of flammable fluids or vapors occurs. For example, § 25.863 requires applicants to minimize the probability of ignition and resultant hazards if ignition occurs for flammable fluid systems on the airplane. Another example is § 25.981(a) which requires applicants to demonstrate no ignition source may be present at each point in the fuel tank or fuel tank system where catastrophic failure could occur due to ignition of fuel or vapors. Specifically, § 25.981(a)(1) requires "determining the highest temperature allowing a safe margin below the lowest expected autoignition temperature of the fuel in the fuel tanks." Then § 25.981(a)(2) requires "demonstrating that no temperature at each place inside each fuel tank where fuel ignition is possible will exceed the temperature determined under paragraph (a)(1) of this section. This must be verified under all probable operating, failure, and malfunction conditions of each component whose operation, failure, or malfunction could

increase the temperature inside the tank." In addition, § 25.981(a)(3) requires "except for ignition sources due to lightning addressed by § 25.954, demonstrating that an ignition source could not result from each single failure, from each single failure in combination with each latent failure condition not shown to be extremely remote, and from all combinations of failures not shown to be extremely improbable, taking into account the effects of manufacturing variability, aging, wear, corrosion, and likely damage." These airworthiness requirements address ignition sources and are part of the FAA's regulatory framework for preventing fires and explosions; however, taken together, they do not adequately address the potential for a post-crash external ground fire to affect the safety of airplane occupants.

The FAA therefore determined that the airworthiness standards applicable to the Model A321neo XLR airplane do not contain adequate standards for post-crash fire-safety performance of fuel-tank skin or structure. The FAA therefore proposed that special conditions are needed for the Model A321neo XLR airplane, because the integral RCT design, including location in the lower fuselage, is considered an unusual or novel design feature that could expose the RCT to an external ground fire. Factors influencing occupant survival time when a fuel tank is exposed to a ground-fed fire are the structural integrity of the tank; burn-through resistance; flammability of the tank; and the presence of auto-ignition threats during exposure to a fire. As previously discussed, the FAA issued Special Conditions No. 25-825-SC to address the novel or unusual aspect of the A321neo XLR's integral RCT with regard to requirements for thermal/acoustic insulation installations. The FAA considers the occupant survival time related to the burn-through resistance of the integral RCT to be adequately accounted for in those special conditions.

These special conditions address standards for post-crash fire-safety performance of fuel-tank skin or structure by proposing a requirement to prevent the ignition of fuel vapor during an external fuel-fed ground fire. These special conditions include accounting for the potential for hot surface ignition created by the external fuel-fed fire. As described in FAA Advisory Circular 25.981-1D, "Fuel Tank Ignition Source Prevention Guidelines," hot surfaces that can exceed the autoignition temperature of the flammable vapor under consideration are considered to be ignition sources. The FAA intends

this requirement to adequately protect the airplane occupants from the consequences of an integral RCT exposed to an external fuel-fed ground, or pool fire.

The intention of the requirement for the design to prevent ignition is for the applicant to show that ignition sources do not occur, such as from a hot surface, due to the external heat applied to the integral RCT from an external fuel-fed ground fire. Where previously discussed, § 25.981(a) requires applicants to demonstrate that no ignition source may be present but does not specifically address ignition due to an external fuel-fed ground fire.

To provide the same level of safety as provided by the relevant regulations in this model's certification basis, Airbus must demonstrate that the Model A321neo XLR series airplane has sufficient post-crash fire-safety performance of fuel-tank skin or structure to enable occupants to safely evacuate in the event that the integral RCT is exposed to an external fuel-fed ground fire.

The FAA assessed post-crash-survival time during the adoption of § 25.856 and revisions to appendix F to part 25 at Amendment 25-111 for fuselage burn-through protection. Studies conducted by and on behalf of the FAA indicated that following a survivable accident, prevention of fuselage burn-through for approximately 5 minutes can significantly enhance survivability.

The FAA would consider Airbus showing the design prevents ignition of fuel tank vapors in the integral RCT during at least 5 minutes of exposure to an external fuel-fed ground fire as a sufficient time duration for the purposes of these special conditions. The time duration of 5 minutes is consistent with the studies mentioned above showing prevention of fuselage burn-through for approximately 5 minutes enhances occupant survivability. The requirements of the special conditions and the time duration are consistent with the European Union Aviation Safety Agency Special Conditions No. SC-D25.863-01, Cabin Evacuation—Protection from Fuel Tank Explosion due to External Fuel Fed Ground Fire applicable to integral RCTs.

Airbus may consider a flammability reduction system or ignition mitigation means that complies with § 25.981 when showing compliance with these special conditions, provided the system's performance is demonstrated to meet the special conditions. As discussed previously, showing compliance with only § 25.981(b) is insufficient to show post-crash fire-safety performance of fuel-tank skin or

structure. Airbus must also meet these special conditions.

The 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.

#### Discussion of Comments

The FAA issued Notice of Proposed Special Conditions No. 25-23-06-SC for the Airbus Model A321neo XLR airplane, which was published in the **Federal Register** on May 7, 2024 (89 FR 38004). The FAA received several comments from an individual regarding the proposed special conditions.

The commenter requested the FAA consider how passengers will be made aware of what the commenter described as the “unique” configuration of a fuel tank directly under passenger seats in what is traditionally a location for baggage and cargo. The commenter suggested that the FAA make passengers aware of their proximity to the airplane fuel.

In the Notice of Proposed Special Conditions No. 25-23-06-SC, which was published in the **Federal Register**, the FAA informed the public of the proposed configuration. As stated in that Notice, while the subject integral RCT is a novel or unusual design feature, the configuration is not unique. Many transport airplanes incorporate fuel tank configurations that result in fuel in close proximity to some passengers. These special conditions address standards for post-crash fire-safety performance of fuel-tank skin or structure. No changes were made to these special conditions as a result of this comment.

The commenter requested the FAA clarify how it addressed the crashworthiness requirements of a fuel tank integral to the fuselage applied by the FAA to the Model A321neo XLR series airplane. The commenter recognized the request is beyond the proposed special conditions.

The FAA disagrees that additional clarification of crashworthiness requirements for the RCT is necessary for these special conditions. The FAA discussed the type certification basis of the Model A321neo XLR series airplane in the Notice of Proposed Special Conditions No. 25-23-06-SC. The crashworthiness requirements applicable to the Model A321neo XLR series airplane are addressed by the type certification basis, and as acknowledged by the commenter, are outside the scope of these special conditions. Therefore, no changes were made to these special conditions as a result of this comment.

The commenter requested the FAA explain what considerations the FAA is making relative to an otherwise survivable accident when the RCT is ruptured and there is an external fuel-fed ground fire already present.

The FAA infers that the commenter requests the FAA further clarify the requirements the FAA applied to the Model A321neo XLR series airplane related to a ruptured RCT in addition to an external fuel-fed ground fire. The FAA considers the commenter's request to be beyond the scope of these special conditions, which addresses standards specifically for the post-crash fire safety performance of fuel-tank skin or structure by establishing a requirement to prevent the ignition of fuel vapor during an external fuel-fed ground fire.

The FAA stated in Notice of Proposed Special Conditions No. 25-23-06-SC, and restated in the discussion above, that several part 25 requirements applicable to the Model A321neo XLR series airplane address fire-safety performance of the fuel tanks and fuselage in the Model A321neo XLR certification basis. These standards address failure conditions or minimize the hazard to the occupants in the event ignition of flammable fluids or vapors occurs. The potential for a ruptured RCT is thus already addressed in the Model A321neo XLR certification basis. Therefore, no changes were made to these special conditions as a result of this comment.

The commenter stated that “the applicant should show not that the design prevents but that it eliminates the possibility that ignition will occur.” The FAA interprets this statement as a request that the FAA require the applicant to fully eliminate any possibility of fuel ignition in the RCT, rather than to minimize the probability of ignition to an acceptable level through ignition-preventative design measures. The FAA does not agree that it is practical to eliminate the possibility that ignition will occur from a design in the case of a fuel tank exposed to a post-crash fuel-fed ground fire. Service experience has shown that existing designs would not meet this standard since aircraft fuel tanks exposed to an external fuel-fed ground fire would eventually experience conditions that would support fuel tank ignition (for example, refer to the fuel tank explosions discussed in the China Airlines Boeing 737 accident report<sup>1</sup>). These special conditions are necessary

<sup>1</sup> Japan Transport Safety Board, Aircraft Accident Investigation Report, AA2009-7, China Airlines B18616, August 28, 2009. [www.mlit.go.jp/jtsb/eng-air\\_report/B18616.pdf](http://www.mlit.go.jp/jtsb/eng-air_report/B18616.pdf).

to establish a level of safety equivalent to that established by the existing airworthiness standards. The commenter's proposal would set a requirement beyond existing airworthiness standards and place an unnecessary burden on applicants. Therefore, no changes were made to these special conditions as a result of this comment.

The commenter requested the applicant show compliance by testing the capability of the design. The FAA acknowledges that some testing may be necessary to show compliance with these special conditions but does not agree that only testing must be used. To obtain a type certificate the applicant must follow the requirements of § 21.33(b)(1). No specific aspect of the proposed integral RCT, nor requirement of these special conditions, necessitates or requires that the applicant must demonstrate by test to show compliance. These special conditions do not include specific means of compliance since more than one means of compliance may be acceptable. No changes were made to these special conditions as a result of this comment.

The commenter requested the FAA define the flame size and intensity the applicant must use for representing an external fuel-fed ground fire when showing compliance with these special conditions. Such definition is unnecessary. A post-crash external fuel-fed ground fire depends on many factors, including the specific airplane design and fuel types approved for use. Well-established industry standard fire test methods currently exist for powerplant installation fire protection, as well as cabin safety fire protection, that include standardized fire test conditions that are intended to represent a large pool fire. Applicants may consider these standards and any other available fire testing method, if shown to be applicable to these special conditions, when developing test methods for these special conditions. The FAA does not consider it is necessary to identify any specific test conditions as requirements for these special conditions. Therefore, no changes were made to these special conditions as a result of this comment.

The commenter requested the FAA clarify what it means by sufficient time to evacuate to include occupants to move safely away from the aircraft due to the potential impact from a fuel tank explosion to the surrounding area. The commenter stated the 90-second evacuation test time would be insufficient and the 5-minute time referenced in the Notice of Proposed Special Conditions No. 25–23–06–SC

may be acceptable if justified by the applicant. The commenter also stated the applicant should include an assessment of other aircraft accidents and time to move survivors clear of the aircraft in the justification.

The FAA does not agree to specify a requirement in these special conditions for additional time for airplane occupants to move away from the airplane once safely evacuated. These special conditions are necessary to establish a level of safety equivalent to that established by the existing airworthiness standards. The considerations of moving occupants away from the airplane as proposed by the commenter apply generally to all airplane designs and are not specifically associated with or affected by the novel or unusual design feature of the RCT. Since these special conditions are intended to establish the same level of safety as the relevant regulations in this model's certification basis, by providing sufficient time for a safe evacuation of all occupants after the initiation of an external fuel-fed ground fire, it is unnecessary to include an additional assessment to account for moving occupants away from the airplane. Therefore, no changes were made to these special conditions as a result of this comment.

The commenter requested that the FAA clarify how it considered maintainability of the design features needed to ensure the original design intent for each airplane as it ages. The FAA infers the commenter requests the FAA to include requirements for the airplane manufacturer to require airplane operators to maintain the critical features of the type design associated with these special conditions for the life of the airplane.

The FAA agrees that critical features that need to be identified by the applicant and maintained in service should be appropriately managed; however, the FAA does not agree these special conditions should include a dedicated requirement to address this need. The FAA considers that the Model A321neo XLR certification basis already includes airworthiness standards that account for ensuring critical design features are maintained in service. Specifically, §§ 25.901(c) and 25.1309(b) include requirements for system safety analysis of propulsion and airplane systems. FAA Advisory Circular 25–19A, Certification Maintenance Requirements, provides guidance on the selection, documentation, and control of Certification Maintenance Requirements (CMR). A CMR is a required scheduled maintenance task established during the design certification of the airplane

systems as an operating limitation of the type certificate. The FAA considers it unnecessary to include additional requirements in these special conditions to maintain the type design of critical features since the Model A321neo XLR certification basis includes airworthiness requirements that address this issue. Therefore, no changes were made to these special conditions as a result of this comment.

In conclusion, no changes were made to the special conditions as a result of these comments, and the special conditions are adopted as proposed.

### Applicability

As discussed above, these special conditions are applicable to the Airbus Model A321neo XLR series airplane 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, or should any other model already included on the same type certificate be modified to incorporate the same novel or unusual design feature, these special conditions would apply to the other model as well.

Under standard practice, the effective date of final special conditions would be 30 days after the date of publication in the **Federal Register**. However, as the certification date for the Airbus Model A321neo XLR series airplane is imminent, the FAA finds that good cause exists to make these special conditions effective upon publication.

### Conclusion

This action affects only a certain novel or unusual design feature on one model series 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 for Airbus Model A321neo XLR series airplanes. Cabin Evacuation—Protection From Fuel Tank Explosion Due to External Fuel-Fed Ground Fire.

The applicant must show the design prevents ignition of fuel tank vapors (due to hot surface) from occurring in

the integral rear center tank during the time required for evacuation. The applicant's showing must also demonstrate that the design provides sufficient time for a safe evacuation of all occupants after the initiation of an external fuel-fed ground fire.

Issued in Kansas City, Missouri, on July 12, 2024.

**Patrick R. Mullen,**

*Manager, Technical Policy Branch, Policy and Standards Division, Aircraft Certification Service.*

[FR Doc. 2024-15853 Filed 7-17-24; 8:45 am]

**BILLING CODE 4910-13-P**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2023-2395; Project Identifier AD-2023-00767-T; Amendment 39-22773; AD 2023-12-09]

RIN 2120-AA64

#### Airworthiness Directives; The Boeing Company Airplanes

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** The FAA is superseding Airworthiness Directive (AD) 2022-08-12, which applies to all The Boeing Company Model 757 airplanes. AD 2022-08-12 required repetitive inspections for skin cracking and shim migration at the upper link drag fittings, diagonal brace cracking, and fastener looseness; and applicable on-condition actions. This AD was prompted by reports of bolt rotation in the engine drag fitting joint and fastener heads and cracks found in the skin of the fastener holes, a determination that certain drag fittings may be made of alternate materials, which could result in reduced structural integrity of the engine strut, and a determination that additional inspections and revised compliance times are needed. This AD retains the requirements of AD 2022-08-12 with revised compliance times for certain actions and requires adding inspections for existing repairs and applicable on condition actions. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective August 22, 2024.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of August 22, 2024.

**ADDRESSES:**

**AD Docket:** You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-2395; 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, any comments received, and other information. The address for Docket Operations 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.

**Material Incorporated by Reference:**

- For Boeing service information incorporated by reference in this AD, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; website [myboeingfleet.com](https://myboeingfleet.com).

- You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-2395.

**FOR FURTHER INFORMATION CONTACT:**

Wayne Ha, Aviation Safety Engineer, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone 562-627-5238; email [wayne.ha@faa.gov](mailto:wayne.ha@faa.gov).

**SUPPLEMENTARY INFORMATION:**

**Background**

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2022-08-12, Amendment 39-22015 (87 FR 26964, May 6, 2022) (AD 2022-08-12). AD 2022-08-12 applied to all The Boeing Company Model 757 airplanes. The NPRM published in the **Federal Register** on December 21, 2023 (88 FR 88271). The NPRM was prompted by reports of bolt rotation in the engine drag fitting joint and fastener heads and cracks found in the skin of the fastener holes, and the need to reduce the compliance time for certain groups. In the NPRM, the FAA proposed to require repetitive inspections for skin cracking and shim migration at the upper link drag fittings, diagonal brace cracking, and fastener looseness; and applicable on-condition actions. The FAA issued AD 2022-08-12 to address cracking in the wing upper skin and forward drag fittings, which could lead to a compromised upper link and reduced structural integrity of the engine strut, and possible separation of a strut and engine from the airplane during flight.

**Actions Since AD 2022-08-12 Was Issued**

Since the FAA issued AD 2022-08-12, it was determined that drag fittings made of alternate materials have possibly been installed on some configurations, which could result in reduced structural integrity of the engine strut. The FAA has determined that additional inspections and revised compliance times are needed to maintain structural integrity. Although this AD does not explicitly restate the requirements of AD 2022-08-12, this AD would retain all requirements of AD 2022-08-12. Those requirements are referenced in the service information identified previously, which, in turn, is referenced in paragraph (g) of this AD.

**Discussion of Final Airworthiness Directive**

**Comments**

The FAA received comments from The Boeing Company, who supported the NPRM without change.

The FAA received additional comments from five commenters, including Aviation Partners Boeing, Delta Air Lines, UPS Airlines, United Airlines, and FedEx Express. The following presents the comments received on the NPRM and the FAA's response to each comment.

**Effect of Winglets on Accomplishment of the Proposed Actions**

Aviation Partners Boeing has reviewed the NPRM and has determined that the incorporation of STC ST01518SE for installation of blended or scimitar blended winglets does not affect compliance with the mandated actions in the proposed rule. Boeing does not have delegation to approve repairs in areas affected by the scimitar blended winglet configuration of STC ST01518SE. Therefore, Boeing will not be able to use Organization Designation Authorization (ODA) approval in paragraph (j)(3) of this AD to make an alternative method of compliance (AMOC) finding on behalf of the FAA for alternative inspections and corrective actions in areas affected by the scimitar blended winglet configuration of STC ST01518SE. The operators of scimitar blended winglet airplanes subject to this AD should be aware that approval of any alternative inspections and corrective actions as an AMOC to the final rule will only be obtainable from the FAA through the means described in paragraph (j)(1) of this AD.

The FAA agrees. The FAA has not changed this AD in this regard.