Product class	AEU (kWh/yr)
(A) C–3A. Cooler with all-refrigerator—automatic defrost	4.57AV + 130.4
(B) C–3A–BI. Built-in cooler with all-refrigerator—automatic defrost	5.19AV + 147.8
(C) C–9. Cooler with upright freezer with automatic defrost without an automatic icemaker	5.58AV + 147.7
(D) C–9–BI. Built-in cooler with upright freezer with automatic defrost without an automatic icemaker	6.38AV + 168.8
(E) C–9I. Cooler with upright freezer with automatic defrost with an automatic icemaker	5.58AV + 231.7
(F) C–9I–BI. Built-in cooler with upright freezer with automatic defrost with an automatic icemaker	6.38AV + 252.8
(G) C–13A. Compact cooler with all-refrigerator—automatic defrost	5.93AV + 193.7
(H) C–13A–BI. Built-in compact cooler with all-refrigerator—automatic defrost	6.52AV + 213.1

AV = Total adjusted volume, expressed in ft^3, as determined in appendix A to subpart B of this part.

(ii) Combination cooler refrigeration products manufactured on or after January 31, 2029, shall have an Annual Energy Use (AEU) no more than:

Product class	AEU (kWh/yr)
(A) C–3A. Cooler with all-refrigerator—automatic defrost	4.11AV + 117.4
(B) C–3A–BI. Built-in cooler with all-refrigerator—automatic defrost	4.67AV + 133.0
(C) C–5–BI. Built-in cooler with refrigerator-freezer with automatic defrost with bottom-mounted freezer	5.47AV + 196.2 + 28I
(D) C–9. Cooler with upright freezer with automatic defrost without an automatic icemaker	5.58AV + 147.7 + 28I
(E) C–9–BI. Built-in cooler with upright freezer with automatic defrost without an automatic icemaker	6.38AV + 168.8 + 28I
(F) C–13A. Compact cooler with all-refrigerator—automatic defrost	4.74AV + 155.0
(G) C–13A–BI. Built-in compact cooler with all-refrigerator—automatic defrost	5.22AV + 170.5

AV = Total adjusted volume, expressed in ft^3, as determined in appendix A to subpart B of this part.
I = 1 for a product with an automatic icemaker and = 0 for a product without an automatic icemaker.

* * * * *

[FR Doc. 2024–08002 Filed 5–6–24; 8:45 am]

BILLING CODE 6450–01–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 25

[Docket No. FAA–2023–2412; Notice No. 25–23–06–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: Notice of proposed special conditions.

SUMMARY: This action proposes special conditions for the Airbus Model A321neoXLR 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 proposed 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: Send comments on or before June 21, 2024.

ADDRESSES: Send comments identified by Docket No. FAA–2023–2412 using any of the following methods:

Federal eRegulations Portal: Go to *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.

Docket: Background documents or comments received may be read at *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: 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:

Comments Invited

The FAA invites 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 proposed special conditions, explain the reason for any recommended change, and include supporting data.

The FAA will consider all comments received by the closing date for comments, and will consider comments filed late if it is possible to do so without incurring delay. The FAA may change these special conditions based on the comments received.

Privacy

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in title 14, Code of Federal Regulations (14 CFR) 11.35, the FAA will post all comments received without change to *www.regulations.gov,* including any personal information you provide. The FAA will also post a report

summarizing each substantive verbal contact received about these special conditions.

Confidential Business Information

Confidential Business Information (CBI) is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to these special conditions contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to these special conditions, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as ''PROPIN.'' The FAA will treat such marked submissions as confidential under the FOIA, and the indicated comments will not be placed in the public docket of these special conditions. Send submissions containing CBI to the individual listed in the For Further Information Contact section. Comments the FAA receives, which are not specifically designated as CBI, will be placed in the public docket for these special conditions.

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 proposed 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 proposed 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, in order 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.[1] The special conditions

[1] Special Conditions: Airbus Model A321neoXLR Airplane; Passenger Protection from External Fire. 87 FR 74503 (Dec. 6, 2022).

proposed 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.[2] 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 proposes 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 were issued 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 proposed 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 proposed 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 proposed 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 proposed 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.

[2] Hill, R., and Johnson, G.R., ''Investigation of Aircraft Fuel Tank Explosions and Nitrogen Inerting Requirements During Ground Fires,'' FAA Report DOT/FAA/RD–75–119, October 1975. Available via the FAA Technical Center website for Fire Safety at *http://www.fire.tc.faa.gov/*.

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.[3]

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 aforementioned studies showing prevention of fuselage burn-through for approximately 5 minutes enhances occupant survivability. The requirements of the proposed 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.[4]

Airbus may consider a flammability reduction system or ignition mitigation means that complies with § 25.981 when showing compliance with the proposed special conditions, provided the system's performance is demonstrated to meet the proposed 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 the proposed special conditions.

The proposed 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 proposed 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.

Conclusion

This action affects only certain novel or unusual design feature on A321neo XLR series airplanes. 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, and 44704.

The Proposed Special Conditions

■ Accordingly, the Federal Aviation Administration (FAA) proposes the following special conditions 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 April 29, 2024.

Patrick R. Mullen,

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

[FR Doc. 2024–09660 Filed 5–6–24; 8:45 am]

BILLING CODE 4910–13–P

[3] Cherry, R. and Warren, K. ''Fuselage Burnthrough Protection for Increased Postcrash Occupant Survivability: Safety Benefit Analysis Based on Past Accidents, ''FAA Report DOT/FAA/AR–99/57, September 1999 and R G W Cherry & Associates Limited, ''A Benefit Analysis for Cabin Water Spray Systems and Enhanced Fuselage Burnthrough Protection,'' FAA Report DOT/FAA/AR–02/49, April 7, 2003.

[4] SC–D25.863–01, Issue 2, dated 24 October 2023 *https://www.easa.europa.eu/en/document-library/product-certification-consultations/final-special-condition-ref-sc-d25863-01-cabin.*

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 76

[MB Docket No. 24–115; FCC 24–44; FR ID 216063]

Fostering Independent and Diverse Sources of Video Programming

AGENCY: Federal Communications Commission.

ACTION: Proposed rule.

SUMMARY: In this document, the Federal Communications Commission (Commission) seeks comment on the current state of the marketplace for diverse and independent programming and on the obstacles faced by independent programmers seeking carriage on multichannel video programming distributors (MVPDs) and online platforms. In order to alleviate such obstacles, the Commission proposes to prohibit two types of contractual provisions in program carriage agreements between independent programmers and MVPDs: most favored nation (MFN) provisions, and unreasonable alternative distribution method (ADM) provisions. The Commission also seeks comment on current program bundling practices.

DATES: Comments are due on or before June 6, 2024; reply comments are due on or before July 8, 2024.

ADDRESSES: Pursuant to §§ 1.415 and 1.419 of the Commission's rules, 47 CFR 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS). *See Electronic Filing of Documents in Rulemaking Proceedings,* 63 FR 24121 (1998). You may submit comments, identified by MB Docket No. 24–115, by any of the following methods:

- *Electronic Filers:* Comments may be filed electronically using the internet by accessing the ECFS: *https://apps.fcc.gov/ecfs/.*
- *Paper Filers:* Parties who choose to file by paper must file an original and one copy of each filing.
- Filings can be sent by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.
- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 45 L Street NE, Washington, DC 20554.
- Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID–19.