

[4910-13]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Parts 25 and 121

[Docket No.: FAA-2022-0772; Notice No. 22-05]

RIN 2120-AL59

Installation and Operation of Flightdeck Installed Physical Secondary Barriers on Transport Category Airplanes in Part 121 Service

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This proposed rule would implement a mandate in the FAA Reauthorization Act of 2018 by requiring that certain airplanes used to conduct domestic, flag, or supplemental passenger-carrying operations have an installed physical secondary barrier that protects the flightdeck from unauthorized intrusion when the flightdeck door is opened.

DATES: Send comments on or before [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: Send comments identified by docket number FAA-2022-0772 using any of the following methods:

- Federal eRulemaking 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, 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 20590-0001, 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: In accordance with 5 USC 553(c), DOT solicits comments from the public to better inform its rulemaking process. DOT posts these comments, without edit, including any personal information the commenter provides, to www.regulations.gov, as described in the system of records notice (DOT/ALL-14 FDMS), which can be reviewed at www.dot.gov/privacy.

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 the Docket Operations in Room W12-140 of the West Building Ground Floor at 1200 New Jersey Avenue, SE., Washington, DC 20590-0001, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Dan Jacquet, AIR-626, Human-Machine Interface Section, Technical Policy Branch, Policy and Innovation Division, Aircraft Certification Service, Federal Aviation Administration, 2200 South 216th Street, Des Moines, WA 98198; telephone (206) 231-3208; e-mail Daniel.Jacquet@faa.gov.

SUPPLEMENTARY INFORMATION:

Authority for this Rulemaking

The FAA's authority to issue rules on aviation safety is found in Title 49 of the United States Code. Subtitle I, Section 106 describes the authority of the FAA

Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the agency's authority.

This rulemaking is issued under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General Requirements." Under that section, the FAA is charged with prescribing regulations and minimum standards for the design and performance of aircraft that the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority.

In addition, section 336, "Secondary Cockpit Barriers," of the FAA Reauthorization Act of 2018, Public Law 115-254 (Oct. 5, 2018),¹ directs the Administrator of the FAA to issue an order requiring installation of a secondary flightdeck barrier on "each new aircraft that is manufactured for delivery to a passenger air carrier in the United States operating under the provisions of part 121 of title 14, Code of Federal Regulations."

I. Overview of Proposed Rule

This proposed rule would implement² Section 336 of the FAA Reauthorization Act of 2018 by proposing to require the installation and use of an installed physical secondary barrier (IPSB) that would be deployed (closed and locked) whenever the flightdeck door is opened while the airplane is in flight. The purpose of this IPSB would be to impede unauthorized access to the flightdeck. The IPSB would be required to resist intrusion and meet certain physical standards, but still permit line-of-sight visibility between the flightdeck door and the cabin.

¹ Referred to as "the FAA Reauthorization Act of 2018" in this rule.

² The FAA determined that an informal rulemaking proceeding under section 553 of the Administrative Procedure Act is appropriate to prospectively apply these requirements on certain newly-manufactured airplanes.

This proposal would affect operators conducting passenger-carrying operations under 14 CFR part 121 with transport category airplanes operating in the United States by requiring the operators to use the IPSB, when installed, as part of their procedures for opening the flightdeck door. This proposed rule would apply to transport category airplanes manufactured two years after the effective date of a final rule.

II. Background

A. Congressional Mandate

On October 5, 2018, Congress enacted the FAA Reauthorization Act of 2018.

Section 336 of the Act states:

(a) SHORT TITLE.—This section may be cited as the “Saracini Aviation Safety Act of 2018.”

(b) REQUIREMENT.—Not later than 1 year after the date of the enactment of this Act, the Administrator of the Federal Aviation Administration shall issue an order requiring installation of a secondary flightdeck barrier on each new aircraft that is manufactured for delivery to a passenger air carrier in the United States operating under the provisions of part 121.

B. History

Following the events of September 11, 2001, the FAA adopted standards for flightdeck security in January 2002 by adding 14 CFR § 25.795 and amending § 121.313.³ Those amendments were intended to make the flightdeck resistant to forcible intrusion and small firearms, and prevent unauthorized entry into the flightdeck. These requirements were

³ *Security Considerations in the Design of the Flightdeck on Transport Category Airplanes*, 67 FR 2117 (January 15, 2002).

based on International Civil Aviation Organization (ICAO) standards,⁴ and recommendations of the Aviation Rulemaking Advisory Committee⁵ (ARAC), which were developed by the Design for Security Harmonization Working Group. ARAC includes representatives of aircraft owners and operators, airmen and flight crewmembers, airports, aircraft maintenance providers, aircraft manufacturers, public citizen and passenger groups, training providers, and labor organizations.

Even a strong and secure flightdeck door, however, must occasionally be opened, in order to provide for necessary events such as lavatory breaks and meal service. Between the time of opening and closing the flightdeck door (door transition), the open flightdeck has some degree of vulnerability to attack. Such an attack could happen quickly, and arguably leave insufficient time for the cabin crew to react.

Therefore, in 2007, the FAA promulgated requirements⁶ to address the security of the flightdeck when the flightdeck door was opened, however briefly. Specifically, the FAA adopted §§ 121.584 and 121.587 to require that the flightdeck door be locked when the airplane is in operation, unless it is necessary to open it to permit access by authorized persons, and require compliance with FAA-approved procedures for opening the door.

As a result of these new requirements, air carriers and type design holders developed various methods and designs, including use of crewmembers and equipment and, in limited

⁴ Adopted by Amendment 97 to Annex 8 to the Convention on International Civil Aviation on March 12, 1997.

⁵ See Advisory and Rulemaking Committees – ICAO Amendment 97 to Annex 8 and Resistance to Intrusion Complete File (Design for Security HWG, TAE), www.faa.gov/regulations_policies/rulemaking/committees/documents/index.cfm/document/information/documentID/342.

⁶ *Flightdeck Door Monitoring and Crew Discreet Alerting Systems*, 72 FR 45629 (August 15, 2007).

cases, IPSBs,⁷ to help secure the flightdeck during the period when the flightdeck door was open during flight. To provide guidance and recommendations for these different methods and designs, RTCA, Inc.⁸ formed a committee to develop recommended procedures and standards for airplane secondary barriers. In 2011, RTCA produced DO-329, “Aircraft Secondary Barriers and Alternative Flight Deck Security Procedures.” DO-329 describes various means of addressing the times when the flightdeck door must be opened. In this context, these means can be combinations of people, procedures and/or equipment. The document does not recommend one of these means over another, but provides advice on the use of each one to meet the objective of a secure flightdeck. Subsequently and based on the RTCA’s report, the FAA issued Advisory Circular (AC) 120-110, “Aircraft Secondary Barriers and Alternate Flight Deck Security Procedures,” in 2015. That AC references various means of compliance with § 121.584(a)(1), which prohibits the flightdeck door from being unlocked during flight unless the operator has an approved procedure and visual device to verify that the area outside the flightdeck door is secure.

C. ARAC Report

On June 20, 2019, to facilitate the implementation of the mandate in Section 336 to require secondary barriers on certain aircraft, the FAA tasked ARAC⁹ to recommend standards for IPSB. The ARAC formed the Flightdeck Secondary Barrier Working Group, under the Transport Airplane and Engine Subcommittee, to carry out the tasks. The Working

⁷ Relatively few such IPSBs were installed, relative to the total number of airplanes in scheduled service, and most have since been removed. The FAA is not aware of the reasons for removal. In addition, the FAA has no data regarding whether those varying installations would have met the requirements of this proposal.

⁸ RTCA was formerly the Radio Technical Commission for Aeronautics and an Advisory Committee to the FAA.

⁹ See Flightdeck Secondary Barrier Tasking Notice (June 20, 2019), www.faa.gov/regulations_policies/rulemaking/committees/documents/index.cfm/document/information?documentID=3943.

Group included representatives from manufacturers, air carriers, and pilot and flight attendant unions. On February 27, 2020, the Working Group submitted its “Recommendation Report to Aviation Rulemaking Advisory Committee for Implementation of Section 336 of P.L. 115-254” (the Report)¹⁰ to ARAC. ARAC accepted the Report in March of 2020 and forwarded it to the FAA.¹¹

The Report contained 21 recommendations, most of which were by consensus. This NPRM incorporates those consensus recommendations.¹² The Report included suggestions on the scope and potential cost of the requirement for IPSB, as well as the performance standards that the FAA should include in a proposed rule. The FAA carefully considered all recommendations and plans to address certain recommendations appropriately through guidance. The following summarized recommendations are pertinent to this regulatory proposal.

The Report recommended that:

- The FAA promulgate a part 25 design standard for IPSB to resist a 600-pound push load (toward the flightdeck), and a 250-pound pull load (away from the flightdeck), applied at certain critical locations.

¹⁰ See Flightdeck Secondary Barriers Working Group Report, available in the docket for this rulemaking and at www.faa.gov/regulations_policies/rulemaking/committees/documents/index.cfm/document/information?documentID=4342.

¹¹ See Aviation Rulemaking Advisory Committee (ARAC) Meeting (June 18, 2020), www.faa.gov/regulations_policies/rulemaking/committees/documents/media/ARAC%20June%202020%20Meeting%20Packet.pdf.

¹² The Report also included three recommendations on which the Working Group could not agree, but it provided alternatives. Recommendation 19 suggested either a full risk assessment by the FAA and air carriers of the secondary barriers currently in use, or the continuous evaluation in the future by air carriers of such secondary barrier systems under their Safety Management Systems. Recommendation 20 suggested either requiring two flight attendants onboard every aircraft, or a more particularized assessment of the effectiveness of the relevant operational procedures, when only one flight attendant is on board. Finally, Recommendation 21 suggested implementation times of either 18 or 36 months.

- The FAA require these load requirements only to be static, rather than the more conservative dynamic, because the purpose of the IPSB is to delay access to the flightdeck door for only the time necessary for the door to be shut and locked.
- The IPSB be able to resist an intrusion attempt for five seconds, so as to provide a two-second margin above the expected three-second time needed to close and lock the flightdeck door.
- The FAA require the IPSB to be designed such that it would not be possible for a 50th percentile male to reach through the IPSB and grab an open flightdeck door.
- The IPSB be sufficiently transparent, whether through open space or transparent material, to provide situational awareness between the vestibule area (outside the flightdeck) and the passenger cabin, and that the FAA's design requirements for the IPSB account for human needs, that is, providing room for crew changes, meal service, etc.
- That the FAA take any actions needed for the IPSB to be certified to existing part 25 standards.¹³ Such actions could, according to the Report, include excepting a proposed IPSB from conflicting part 25 regulations, such as those relating to emergency evacuation and aisle width. Such an exception would not, according to the Report, have a meaningful adverse impact on safety, due to the limited time during flight that the IPSB would be deployed.
- That the FAA require part 121 certificate holders to incorporate the IPSB's use into their procedures for opening the flightdeck door of newly-manufactured

¹³ Part 25 contains the airworthiness standards (i.e., design requirements) for transport category airplanes.

airplanes, and impose compliance times of 18 or 36 months¹⁴ for when the use of the IPSB would be required as part of the certificate holder's operation of newly-manufactured airplanes.

Lastly, the Report recommended the FAA not impose a similar requirement for all-cargo operations or operations conducted under 14 CFR part 129.¹⁵ The Report suggested the FAA consider whether the operational rule should account for smaller airplanes, because such airplanes may only have one cabin crewmember and flights of lesser duration, and the flightdeck door may be less likely to be opened.

III. Discussion of the Proposal

A. Proposed Part 25 Requirement for IPSB

The FAA proposes to require installation of an IPSB on certain airplanes used by air carriers to conduct passenger-carrying flights and for which the applicable operating rules (14 CFR § 121.313(f)) require a reinforced flightdeck door.¹⁶ Such IPSBs would be required to meet certain new design requirements, which would be set forth in a new paragraph (4) to § 25.795(a).

Part 25 prescribes airworthiness standards for the issuance of type certificates, and changes to those certificates, for transport category airplanes.¹⁷ Each person who applies for such a certificate or change for such airplanes must show compliance with the applicable

¹⁴ These varying times were based on different estimates of the amount of time that would be necessary to develop and certify the IPSB. Report, pp. 23-25.

¹⁵ Part 129 governs foreign operators who operate either within the United States, or who operate solely outside the United States but with airplanes registered in the United States.

¹⁶ Part 121 of title 14 establishes minimum operating standards for part 119 certificate holders who wish to conduct domestic, flag, or supplemental operations.

¹⁷ Transport category airplanes are airplanes for which a type certificate is applied for under part 21 in the transport category and that meet the transport category airworthiness requirements. Multi-engine airplanes with more than 19 seats or a maximum takeoff weight greater than 19,000 lbs must be certificated in the transport category.

requirements in part 25. As such, the proposed part 25 revisions establish the IPSB performance standards, but do not specify which aircraft need IPSB installed, or that the IPSB must be used when showing compliance with § 121.584. This is accomplished by proposed changes to part 121¹⁸.

The IPSB would need to resist intrusion and meet certain strength and other standards, as described below.

1. Intrusion Resistance

The proposed requirement for resisting intrusion into the flightdeck must meet three criteria. First, the IPSB must be "physical," i.e., an object rather than only procedures. Second, the IPSB must be a "barrier," in that it must occupy sufficient space that it cannot be avoided (i.e., by going over, under, or around it) to get access to the flightdeck door. Third, to resist intrusion, the IPSB must impede physical force in the event a person tries to overcome the IPSB, including by attempting to open or push through it.

2. Proposed Load Requirements

The IPSB would be required to resist certain intrusion loads applied in both the direction of the flightdeck and the direction of the passenger cabin,¹⁹ at the most critical locations on the IPSB. Given the variety of IPSB designs and failure modes that are possible, this rule would require application of the loads at the most critical locations for the particular design. For each load requirement, an applicant would have to identify and justify

¹⁸ The FAA authorizes scheduled air service by issuing a part 119 certificate for operations under part 121. Air carriers authorized to operate under part 121 are generally large, U.S.-based airlines, regional air carriers, and certain cargo operators.

¹⁹ For purposes of this preamble, the terms passenger "cabin" and passenger "compartment" refer to the same area of the airplane and therefore are used synonymously.

the most critical locations to apply these loads for its particular design. The applied loads would be considered ultimate loads.²⁰

The FAA proposes the use of static, rather than dynamic, loads²¹ for this requirement. Specifically, the FAA proposes a 600-pound static load in the direction of the flightdeck. This proposal is consistent with Recommendation 1 of the Report, which was derived from Working Group discussions regarding the potential means available on board (i.e., persons) to exert such loads, coupled with the proprietary results of intrusion testing conducted by airframe manufacturers. Regarding the need to resist intrusion loads applied in the direction of the passenger cabin i.e., by a person pulling on the barrier, the IPSB and the flightdeck door are effectively the same. Therefore, an acceptable load of 250 pounds in the direction of the passenger cabin would correspond to the constant 250-pound tensile load requirement in § 25.795(a)(2) for the flightdeck door. This would allow some commonality with testing of the flightdeck door.

The FAA proposes static rather than dynamic loads for these performance standards because the purpose of the IPSB is to provide resistance to intrusion during the comparatively short time necessary for the flightdeck door to be reopened by the flightcrew member and then closed and locked. This is in contrast to a barrier such as a flightdeck door, which must provide near-continuous security throughout the flight. For such barriers, the required dynamic loads of § 25.795(a)(1) are designed to simulate how the door may have to respond in service. For the IPSB, a simpler assessment—of static strength (as assessed by its

²⁰ Design loads are typically expressed in terms of limit loads, which are then multiplied by a factor of safety, usually 1.5, to determine ultimate loads. See 14 CFR §§ 25.301, 25.303, and 25.305. In this proposal, the design loads would be expressed as ultimate loads, and no additional safety factor would be applied.

²¹ In this context, "static" means a load that is constant and the rate of load application is not important; "dynamic" means a load for which both the magnitude and the rate of load application with respect to time are important.

ability to withstand applied loads)—in combination with the other proposed requirements, provides an acceptable way to determine that the IPSB resists access. Because dynamic load testing is generally more conservative than static load testing, an applicant could choose to use dynamic testing in order to demonstrate compliance with the static load performance requirements.

The FAA's proposed guidance on methods of testing these static load requirements is in proposed AC 25.795-X, which is discussed in the “Proposed Guidance” section of this document.

3. Proposed Delay Requirement

This proposed rule would require the IPSB be designed to slow the time by which a person could reach the flightdeck for at least the time required to open and reclose the flightdeck door, but no less than 5 seconds. This is the time cited in Recommendation 18 of the Report. This duration is reasonable and consistent with the purpose of the IPSB. The proposed requirement that the IPSB need only resist intrusion to the flightdeck when the flightdeck door is opened would permit the IPSB to be deployed as needed and stowed when not needed.

4. Proposed Visibility Requirement

The FAA proposes that the IPSB provide enough line-of-sight visibility to allow crewmember situational awareness of the area between the passenger cabin and the entry to the flightdeck. Due to the physical nature of the IPSB, maintaining situational awareness of the area between the passenger cabin and the vestibule area when the IPSB is deployed is important if crewmembers on either side of the IPSB need to act. The proposed design would be evaluated during certification to assess whether it meets the above performance

standard. For example, such visibility could be accomplished via the type of material used to construct the IPSB or via open space (e.g., holes, slots, or other openings) in the IPSB. This visibility requirement would be codified in new § 121.313(l).

5. Proposed Reach-Through Requirement

Such openings, however, could defeat the purpose of the IPSB if they allowed a person to reach through the barrier and grab the open flightdeck door. Therefore the FAA proposes to require, in new § 25.795(a)(4), that the IPSB prevent a person from doing so. The FAA would provide compliance guidance in Advisory Circular 25.795-X. This guidance would allow an applicant to show compliance using methods that include anthropometric reference values of a 50th percentile male, coupled with a maximum recommended spacing for any openings in the barrier.²²

6. Proposed Exception from Incompatible Regulations

The FAA requests comment on its proposed method of certifying IPSB installations. The FAA proposes that, during its certification of the IPSB installation, the requirements of §§ 25.365, 25.803, 25.813, 25.815, 25.1411, and 25.1447 would not apply to IPSBs in the deployed configuration. An IPSB, when deployed to block access to the flightdeck, cannot reasonably be expected to meet certain design requirements for transport category airplanes, such as those relating to rapid decompression, emergency evacuation, aisle width, and accessibility to the emergency equipment. Moreover, because this rule would not require that the IPSB be deployed during taxi, takeoff, and landing, and because the IPSB should be immediately stowed after use, the amount of time that the IPSB is deployed should be very

²² As noted above, ARAC recommended the FAA prevent reach-through by a 50th percentile male, but the FAA proposes that a regulation which prevents a “person” from reaching through would be understandable and consistent with FAA regulatory practice, and can be explained in the relevant guidance material.

brief in comparison to the duration of the flight. This configuration-based compliance method would be similar to the FAA's longstanding method of certification of lavatory doors, in which the FAA considers the position of the door when making compliance findings. Depending on the proposed design, it may be necessary for an applicant to petition for exemption from certain regulations during the certification process.

7. Proposed Human Factors Considerations

The FAA proposes that the design of the IPSB, whether deployed or stowed, must allow for necessary crewmember activities. This would include providing adequate space for activities that include crew change-outs, restroom breaks, meal service, etc.

B. Proposed Part 121 Requirement to Use Installed Physical Secondary Barriers (IPSB)

The FAA proposes a new paragraph (l) in § 121.313 that would require all airplanes that § 121.313(f) requires to have a lockable door, and all transport category airplanes that have a door installed between the flightdeck and any other occupied compartment, to incorporate an IPSB that meets the requirements of proposed § 25.795(a)(4). This proposed requirement would apply to newly-manufactured airplanes two years after the effective date of this rule. This approach is consistent with the FAA's existing method of implementing the requirements for reinforced flightdeck doors and is discussed in more detail below. If the operating rules require a flightdeck door on the airplane, § 25.795, which currently specifies the requirements for the flightdeck door, would add the requirements for the IPSB.

An FAA requirement to simply install an IPSB would not necessarily ensure that the IPSB is deployed. Therefore, the FAA also proposes that operators incorporate the use of the IPSB into their flightdeck door opening procedures required by § 121.584. These procedures contain requirements to verify, prior to unlocking or opening a flightdeck door, that the area

outside the flightdeck door is secure and, if someone outside the flightdeck seeks to have the flightdeck door opened, then that person is not under duress. New § 121.584(a)(3) would require an operator to deploy (close and lock) the IPSB, if one was required to be installed on that airplane in accordance with new § 121.313(l), before opening the flightdeck door during flight.

An operational procedure included in the operator's methods of compliance with § 121.584 would apply to uses of the IPSB. Some or all of the operator's existing procedures could be retained (e.g., the procedure for a flight attendant to enter the flightdeck when one of the flightcrew leaves, to meet the requirements of § 121.587(b)), while others may need to be removed or replaced (e.g., the use of a serving cart as an improvised non-installed barrier). Depending on the operator's procedures for opening the flightdeck door, an IPSB has the potential benefit of requiring only one flight attendant to carry out those procedures. One flight attendant could both deploy the secondary barrier, and enter the flightdeck when a pilot leaves the flightdeck. In contrast, typical current procedures for opening the flightdeck door necessitate more than one flight attendant.

The requirements of § 121.584 are only applicable when the flightdeck door is to be unlocked or opened. To comply with § 121.584 and protect the area just outside the flightdeck door, deployment of the IPSB would occur prior to unlocking or opening the flightdeck door. The FAA expects that the IPSB would remain deployed until after the flightdeck door is closed and locked. Accordingly, the IPSB would be in the stowed position during taxi, takeoff, landing, and the majority of flight.

Any training for operation of the IPSB should be tailored to meet operational requirements of various designs. Non-prescriptive examples of procedures are found in appendix B of the Report.

1. Proposed Two-Year Compliance Time

The FAA proposes a compliance time of two years, after which any transport category airplane manufactured and used in passenger-carrying operations under part 121 would be required to have an IPSB meeting the requirements of proposed § 25.795(a)(4). The FAA proposes this 2-year compliance time, rather than the 18 or 36 months recommended in the Report, for several reasons. There are very few in-production IPSBs currently in existence, so most designs would be new. The means of showing compliance with proposed § 25.795(a)(4) have not yet been developed nor used previously for any of the IPSB that do exist. Consequently, part of the compliance time would be needed for both the applicant and the FAA's validation and refinement of the methods of compliance for both current and new designs. The requirements are complex and there are a large number of different airplane models likely to be affected. Many airplanes that would be required to have an IPSB will require design modification to permit IPSB installation.

2. Date of Manufacture

For the purposes of this proposal, the FAA considers the date of manufacture to be the date on which inspection records show that an airplane is in a condition for safe flight. This is not necessarily the date on which the airplane is in conformity with the approved type design, or the date on which a certificate of airworthiness is issued, because some items not relevant to safe flight, such as passenger seats, might not be installed at that time. It

could be earlier, but would be no later, than the date on which the first flight of the airplane occurs.²³

3. Not Applicable to Part 129 Operations

The FAA proposes to apply the requirements of proposed § 121.313(l) to passenger-carrying, transport category airplanes operating under part 121, and not to those airplanes operating under 14 CFR part 129.

Part 129 governs foreign operators who operate either within the United States, or who operate solely outside the United States, but with airplanes registered in the United States.²⁴ When the FAA adopted the reinforced flightdeck door requirements in part 121, the agency was concerned that aircraft operations subject to part 129 would be more attractive targets for terrorist actions if security was not similarly improved. Therefore, in June of 2002 the FAA adopted 14 CFR § 129.28²⁵ to require foreign air carriers to have the same level of flightdeck security as domestic air carriers. In this case, the requirement for an IPSB would be applicable to newly-manufactured airplanes only. The portion of the total fleet made up by airplanes that are both newly manufactured, and subject to part 129, is very small, so the difference in risk between the domestic fleet and the international fleet would not be significant under this proposal.

²³ The FAA has used the term “date of manufacture” in previous rulemakings. See the final rules entitled *Improved Flammability Standards for Materials Used in the Interiors of Transport Category Airplane Cabins* (60 FR 6616, 6617, February 2, 1995), and *Improved Flammability Standards for Thermal/Acoustic Insulation Materials Used in Transport Category Airplanes* (68 FR 45046, 45055, July 31, 2003).

²⁴ Currently there are approximately 3400 airplanes eligible for operation in accordance with part 129 that are of the types that have a secure flightdeck door. This is approximately 35% of the part 121/129 fleet. Imposition of the requirement could have the effect of reducing the number of airplanes that operators choose make available for operation in part 129. Given that, in ten years, less than half of the part 121 fleet would have been equipped by IPSBs, the relevance to this rule of the number of part 129 airplanes would remain marginal.

²⁵ *Security Considerations for the Flightdeck on Foreign Operated Transport Category Airplanes* (67 FR 42449, June 21, 2002).

Moreover, after September 11, 2001, the need to require reinforced flightdeck doors was recognized internationally, and civil aviation authorities throughout the world worked together, and with ICAO, to establish uniform standards.²⁶ The FAA's requirements were mirrored by the civil aviation authorities of most other countries. In contrast, at this time neither ICAO nor other countries are imposing an IPSB requirement. An FAA requirement levied on foreign air carriers for an IPSB would therefore be un-harmonized, and as noted above, would not significantly change the composition of the international fleet since it would only apply to newly-produced airplanes. The FAA anticipates that, if there are no changes in fleet composition, by the time full adoption of IPSBs among the part 121 fleet occurs, approximately 35% of the part 121/129 fleet will lack an IPSB. Should the fleet change, or an IPSB requirement become an international standard, the FAA may reconsider its current position.

4. Size and Range

The FAA invites comments on applying proposed § 121.313(l) to all transport category airplanes, as well as to all airplanes with a flightdeck door. During a short flight, the flightdeck door may not need to be opened. ARAC therefore recognized that, for short flights, the IPSB may not provide the intended benefit. However, there is no obvious design parameter, such as passenger capacity or airplane gross weight, which correlates with short flights. Also, the maximum range of all of the airplane models that would be covered by this proposed rule exceeds the maximum flight time at which opening the flightdeck is unlikely. Therefore, this proposal does not consider an airplane's size or range, or duration of flight, but invites comment on whether any such limitations are appropriate.

²⁶ 15 March 2002, Amendment 27 to Annex 6, Part I the *International Standards and Recommended Practices*, International Civil Aviation Organization.

C. Proposed Guidance

The FAA developed proposed AC 25.795-X, “Installation of Physical Secondary Barriers for Transport Category Airplanes.” This proposed AC would provide guidance on acceptable means, but not the only means, of showing compliance with proposed § 25.795(a)(4).

In addition, the FAA has proposed revisions to AC 120-110, “Aircraft Secondary Barriers and Alternate Flight Deck Security Procedures,” dated April 14, 2015, to add discussion regarding the installation of IPSB and address other operational issues.

The FAA will post these two proposed ACs to the docket for comment. The FAA will also post them to its “Aviation Safety Draft Documents Open for Comment” Web page at www.faa.gov/aircraft/draft_docs/.

IV. Regulatory Notices and Analyses

Changes to Federal regulations must undergo several economic analyses. First, Executive Order 12866 and Executive Order 13563 direct that each Federal agency shall propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs. Second, the Regulatory Flexibility Act of 1980 (Public Law 96-354) requires agencies to analyze the economic impact of regulatory changes on small entities. Third, the Trade Agreements Act (Public Law 96-39) prohibits agencies from setting standards that create unnecessary obstacles to the foreign commerce of the United States. In developing U.S. standards, the Trade Act requires agencies to consider international standards and, where appropriate, that they be the basis of U.S. standards. Fourth, the Unfunded Mandates Reform Act of 1995 (Public Law 104-4) requires agencies to prepare a written assessment of the costs, benefits, and other effects of proposed or final

rules that include a Federal mandate likely to result in the expenditure by State, local, or tribal governments, in the aggregate, or by the private sector, of \$100 million or more annually (adjusted for inflation with base year of 1995). This portion of the preamble summarizes the FAA's analysis of the impacts of the proposed rule. The FAA provides a detailed Regulatory Impact Analysis in the docket of this rulemaking.

In conducting these analyses, the FAA determined that this proposed rule (1) has benefits that justify its costs; (2) is not an economically "significant regulatory action" as defined in section 3(f) of Executive Order 12866; (3) would not have a significant economic impact on a substantial number of small entities; (4) would not create unnecessary obstacles to the foreign commerce of the United States; and (5) would not impose an unfunded mandate on state, local, or tribal governments, or on the private sector by exceeding the threshold identified above. These analyses are summarized below.

A. Regulatory Impact Analysis

1. Benefits

During many flights, the flightdeck door must be opened for lavatory breaks, meal service, rest periods, crew changes, etc. Between the time of opening and closing the flightdeck door (door transition), the open flightdeck has some degree of vulnerability to attack. This is especially the case for transcontinental and international flights. During these openings, an attack on the flightdeck could happen quickly; this could leave insufficient time for passengers and cabin crew to react. However, there have been no breaches of a flightdeck since the September 11, 2001 terrorist attacks.

The purpose and functional benefit of IPSBs, which Congress directed the FAA to require by mandate, is to enhance the flightdeck security procedures of 14 CFR § 121.584

by slowing the time by which an unauthorized person could reach the flightdeck by at least the time required to open and reclose the flightdeck door.²⁷

A Briefing Note²⁸ (Stewart and Mueller, 2019) provided to the ARAC Flightdeck Secondary Barrier Working Group by one of the members, applied an engineering technique—reliability analysis—to the Transportation Security Administration’s (TSA) “Layers of Security”²⁹ to estimate the benefits of secondary barriers in reducing the vulnerability of the U.S. commercial fleet to a 9/11-like terrorist attack. This approach requires estimates of “disruption rates” for the various TSA layers of security and also requires an estimate of the probability of a 9/11-like terrorist attack. Estimates of security layer disruption rates are very difficult to make and, accordingly, are highly uncertain. For example, Stewart and Mueller estimate a disruption rate of 15% for the TSA Airport Checkpoint Screening security layer, whereas Martonosi and Barrett³⁰ estimate the disruption rate to be 50%. Estimating the probability of a 9/11-like terrorist attack is also difficult since there has been only one such event. Consequently, estimating quantified benefits of the proposed IPSB requirements is problematic. Accordingly, the FAA does not endorse the analysis or conclusions of this Briefing Note.

However, based on estimates of costs of the 9/11 attacks, we have conducted a break-even analysis. An authoritative study³¹ of the costs to New York City of the 9/11

²⁷ Report, pp. 33-34.

²⁸ Mark G. Stewart & John Mueller, “Security Risk and Cost-Benefit Assessment of Secondary Flight Deck Barriers,” Centre for Infrastructure Performance and Reliability, The University of Newcastle, Australia (2019), nova.newcastle.edu.au/vital/access/manager/Repository/uon:35881.

²⁹ “Inside Look: TSA Layers of Security,” www.tsa.gov/blog/2017/08/01/inside-look-tsa-layers-security.

³⁰ Susan E. Martonosi & Arnold Barnett. 2006. “How Effective is Security Screening of Airline passengers?,” *Interfaces* 36(6): 545, 550.

³¹ Jason Bram, James Orr, and Carol Rapaport. 2002. “Measuring the Effects of the September 11 Attack on New York City,” Federal Reserve Bank of New York *Economic Policy Review* 8:2 (November).

attacks provides an estimate of \$26.6 billion in physical capital and short-term earnings losses,³² which amounts to \$38.86 billion in 2021 dollars.³³ What remains is to estimate the cost of the 2,763 lives lost in the 9/11 attacks. Using DOT's \$11.8 million dollar estimate of the Value of Statistical Life (VSL),³⁴ that loss is \$32.60 billion, which added to the physical capital and earnings losses, makes the total New York City costs to be \$71.46 billion. We estimate the cost of a single-airplane 9/11-type attack (and the value of an averted attack) to be half that at \$35.73 billion. The break-even analysis estimates what the annual probability of a single-airplane 9/11-type attack must be in order for the proposed rule to break even, i.e., for the benefits of the proposed rule to be equal to its costs. Dividing the \$236.5 million cost³⁵ of the proposed rule by the \$35.7 billion averted attack value yields the break-even annual probability of an attack to be 0.66%. Multiplying this calculated break-even probability of attack times the \$35.7 billion averted attack value necessarily returns the \$236.5 million break-even expected value of averting an attack. Such a break-even analysis implicitly assumes that the proposed rule is completely effective. Thus, here the proposed rule breaks even under the assumptions that the probability of an attempted attack is as high as 0.66 percent per year and that the proposed rule would be 100% effective in thwarting any such attack.

The FAA requests comments on the incremental benefits of this proposed rule, including additional information and data to quantify benefits.

2. Costs

³² \$21.6 bn in physical capital losses plus the \$5 bn average of \$3.6-\$6.4 bn in short-term earnings losses.

³³ \$26.6 bn inflated by ratio of 2021 and 2002 GDP Price Deflators. Source: U.S. Bureau of Economic Analysis, "Table 1.1.4 Price Indexes for GDP." Click "Modify" icon and refresh table with first and last years of period.

³⁴ U.S. Department of Transportation, Office of Transportation Policy. "Departmental Guidance on the Value of a Statistical Life," www.dot.gov/policy/transportation-policy/economy. Effective Date: March 24, 2022.

³⁵ Assumes 7 percent discount rate.

The FAA uses the cost estimate of \$35,000 provided by the Report for the purchase and installation of an IPSB. Costs are estimated in two stages since this proposed rule would require IPSBs be installed on each new airplane that is manufactured for delivery to a passenger air carrier operating under part 121. First-stage costs are calculated for the 25-year period, 2023-2047, during which the fleet operating under part 121 gradually becomes fully equipped with IPSBs. Second-stage costs are calculated to include in the analysis a full 25-year airplane life cycle (2048-2072) for which the entire part 121 fleet is equipped with IPSBs.

(a) Stage One Costs

In the preliminary analysis of the proposed rule, the FAA estimates the rule would begin to apply to new airplanes operating under part 121 by the end of 2023. The FAA uses its Aerospace Forecast 2020-2040 to estimate the annual increase in the passenger fleet operating under part 121.³⁶ The sum of the forecast increase in the fleet and the number of retirements determines the annual increase in new airplanes operating under part 121 and therefore the annual number of IPSBs that would be installed in airplanes destined for part 121 operations. Annual retirements are estimated assuming a retirement rate (3.57%) that is consistent with the 2020-2040 forecast of the number of airplanes in part 121 operations. A similar analysis is done to determine the IPSB training costs of pilots and flight attendants, except that training costs apply to current as well as future pilots and flight attendants.

³⁶ FAA Forecast FY 2020-2040, Table 21: “US Mainline Air Carriers—Passenger Jet Aircraft,” & Table 25: “Regional Air Carriers—Passenger Aircraft.” Since some regional air carriers operate under part 135 as well as part 121, the estimate of airplanes operating under part 121 is improved by excluding airplanes with less than 20 passenger seats. Estimates for the period 2040-2047 are made assuming the growth rate (1.74%) implied by the FAA part 121 airplane numbers for 2030 and 2040.

(b) Stage Two Costs

As previously noted, second-stage costs are calculated in order to include a full 25-year airplane life cycle (2048-2072) for which the entire part 121 fleet is equipped with IPSBs. For this second stage, the FAA is well beyond the terminal date of the FAA forecast and, accordingly, assumes a constant growth rate for the part 121 fleet. The constant growth rates for pilots and flight attendants are as before.

(c) Other Potential Costs

Stewart and Mueller also discuss potential added risks associated with IPSBs, including, for example, that crew vigilance and responsiveness might be reduced in the presence of an IPSB. The FAA notes that it does not find significant downsides to the installation of the ISPBs if all other relevant regulations are complied with.

(c) Total Costs of the Rule

Table 1 summarizes the total costs of the proposed rule by combining stage one and stage two costs. At a seven percent discount rate, the present value total costs of the proposed rule are \$236.5 million with annualized costs at \$20.3 million. At a three percent discount rate, the present value total costs of the proposed rule are \$505.0 million with annualized costs at \$ 29.0 million.

**TABLE 1. TOTAL COSTS OF SECONDARY BARRIERS PROPOSED RULE
(\$ millions)**

	Present Value Costs (7%)	Annualized Costs (7%)	Present Value Costs (3%)	Annualized Costs (3%)
2023-2047	\$ 186.0	\$ 16.0	\$ 296.5	\$ 17.0
2048-2072	\$ 50.4	\$ 4.3	\$ 208.6	\$ 12.0
2023-2072	\$ 236.5	\$ 20.3	\$ 505.0	\$ 29.0

1. Present values discounted to 2021 at 7% and 3% discount rates.

2. Columns may not sum to totals due to rounding.

3. Discussion of Alternatives

(a) Alternative 1—Extending the Proposed Rule to Include Foreign Carriers

Operating Under Part 129³⁷

At this time neither other countries nor ICAO have identified secondary barriers as a security priority. Therefore, extending the IPSB requirement to foreign air carriers would be un-harmonized. After the events of September 11, 2001, the FAA did apply the hardened flightdeck door requirement to foreign air carriers, but the need for hardened flightdeck doors was recognized internationally and the FAA's standards were reflected in the requirements of most other countries. The FAA estimates that by the time IPSBs are fully adopted among part 121 aircraft, 35% of operating commercial passenger aircraft (parts 121 and 129) will not have an IPSB.

(b) Alternative 2—Exempting the Proposed Rule for Short Duration Flights

ARAC recognized that, for short flights, the flightdeck door may not need to be opened, in which case the IPSB would not provide the intended benefit. However, ARAC was unable to identify any airplane design parameter, such as passenger capacity or airplane gross weight that correlates with short flights. Also, the range of all the airplane models that would be affected by this proposed rule exceeds the maximum flight length at which opening the flightdeck door is unlikely. Therefore, this proposal does not address an airplane's size or range, or duration of flight, but invites comment on whether any such limitations are appropriate.

³⁷ Part 129 governs foreign operators who operate either within the United States, or who operate solely outside the United States, but with airplanes registered in the United States.

B. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) of 1980, Public Law 96–354, 94 Stat. 1164 (5 U.S.C. 601–612), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (Pub. L. 104–121, 110 Stat. 857, Mar. 29, 1996) and the Small Business Jobs Act of 2010 (Pub. L. 111–240, 124 Stat. 2504, Sept. 27, 2010), requires Federal agencies to consider the effects of the regulatory action on small business and other small entities and to minimize any significant economic impact. The term “small entities” comprises small businesses and not-for-profit organizations that are independently owned and operated and are not dominant in their fields, and governmental jurisdictions with populations of less than 50,000.

The FAA is publishing this Initial Regulatory Flexibility Analysis (IRFA) to aid the public in commenting on the potential impacts to small entities from this proposal. The FAA invites interested parties to submit data and information regarding the potential economic impact that would result from the proposal. The FAA will consider comments when making a determination or when completing a Final Regulatory Flexibility Assessment.

Under sections 603(b) and (c) of the RFA, an IRFA must contain the following:

- (1) A description of the reasons why the action by the agency is being considered;
- (2) A succinct statement of the objectives of, and legal basis for, the proposed rule;
- (3) A description of and, where feasible, an estimate of the number of small entities to which the proposed rule will apply;
- (4) A description of the projected reporting, recordkeeping, and other compliance requirements of the proposed rule, including an estimate of the classes of small entities

which will be subject to the requirement and the type of professional skills necessary for preparation of the report or record;

(5) An identification, to the extent practicable, of all relevant Federal rules that may duplicate, overlap, or conflict with the proposed rule; and

(6) A description of any significant alternatives to the proposed rule which accomplish the stated objectives of applicable statutes and which minimize any significant economic impact of the proposed rule on small entities.

1. Reasons the Action is Being Considered

Publication of the rule will satisfy the requirements of section 336 of the FAA Reauthorization Act of 2018. This law requires that the FAA issue an order for the installation of Secondary Cockpit Barriers on each new airplane that is manufactured for delivery to a passenger air carrier in the United States operating under title 14 Code of Federal Regulations (CFR) part 121.

2. Objectives and Legal Basis of the Proposed Rule

The objective of the proposed rule is to require all airplanes in part 121 passenger operations to have an Installed Physical Secondary Barrier (IPSB). The IPSB would be deployed between the flightdeck and passenger compartments before the flightdeck door was opened so as to protect the flightdeck during the time that the door was opened and closed. This rulemaking is issued under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General Requirements." Under that section, the FAA is charged with prescribing regulations and minimum standards for the design and performance of airplanes that the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority.

3. All Federal Rules That May Duplicate, Overlap, or Conflict

There are no relevant Federal rules that may duplicate, overlap, or conflict with the proposed rule.

4. Description and Estimate of the Number of Small Entities

The FAA used the definition of small entities in the RFA for this analysis. The RFA defines small entities as small businesses, small governmental jurisdictions, or small organizations. In 5 U.S.C. section 601(3), the RFA defines "small business" to have the same meaning as "small business concern" under section 3 of the Small Business Act. The Small Business Act authorizes the Small Business Administration (SBA) to define "small business" by issuing regulations.

SBA has established size standards for various types of economic activities, or industries, under the North American Industry Classification System (NAICS).³⁸ These size standards generally define small businesses based on the number of employees or annual receipts.

NAICS has classified certificate holders operating under part 121 in either NAICS 481111, Scheduled Passenger Air Transportation or NAICS 481211, Nonscheduled Chartered Passenger Air Transportation, or both. Since the size standard for either industry is the same at 1500 employees, it is of no concern in which of the two industries they are classified.

In the regulatory impact analysis for this rulemaking, a total of 43 operators operating under part 121 were identified in the FAA's National Vital Information Subsystem

³⁸ Small Business Administration, Table of Size Standards (2019). www.sba.gov/document/support-table-size-standards.

(NVIS) data base. Table 2 lists 23 of these operators identified in this study as having less than 1500 employees and therefore potentially subject to consideration under the Regulatory Flexibility Act. Twelve of these operators were identified as small based on airline employment data (Table 2, col. 3) from the DOT Bureau of Transportation Statistics.³⁹ The remaining eleven operators were identified as having less than 1500 total employees on the basis of their numbers of operations and maintenance employees (also from the NVIS database). One of the small operators, Piedmont Airlines, was excluded from the regulatory flexibility analysis as it is a wholly-owned subsidiary of American Airlines. Since the remaining 22 small operators are more than 50% of the part 21 operator population, the FAA estimates that a substantial number of small firms are affected by this rulemaking.

³⁹ Transtats.bts.gov.

TABLE 2. DATA FOR REGULATORY FLEXIBILITY ANALYSIS OF SECONDARY BARRIERS RULE

PART 121 OPERATOR NAME	All Ops Emp (NVIS data)	No. Emp (BTS data)	Flt Attendants	Pilots	No. Aircraft	2015 \$ mn	2016 \$ mn	2017 \$ mn	2018 \$ mn	2019 \$ mn	Avg Rev 2015-2019	IPSB Cost (\$ 000)	IPSB Cost/ Avg Rev	Notes
AERODYNAMICS INC	37		10	15	2							70		Operation certificate terminated Oct. 2020.
AIR WISCONSIN AIRLINES LLC	1120		289	571	67	536	443	248			409	2,345	0.57%	
CARIBBEAN SUN AIRLINES INC	104	158	51	20	7			34	37	38	27	245	0.90%	Doing business as World Atlantic Airlines.
CHAMPLAIN ENTERPRISES INC	713		170	330	37		115	135			122	1,295	1.06%	Operates mainly through subsidiary CommutAir, which operates as United Express.
COMPASS AIRLINES LLC	1299	1,438	469	531	48	177	235	236	241	228	223	1,680	0.75%	Shut down due to Covid.
CORVUS AIRLINES INC	156		29	61	10							350		Bankrupt July 2020.
EASTERN AIRLINES LLC	146	196	88	30	8		56	28			42	280	0.67%	
ELITE AIRWAYS LLC	139	130	40	43	13				134	117	126	455	0.36%	
EMPIRE AIRLINES INC	332		14	134	60							2,100		
GOJET AIRLINES LLC	918	977	292	487	43	204	227	238	257	265	238	1,505	0.63%	Trans States Holding WOS.
GULF AND CARIBBEAN CARGO INC	79	122	0	41	19							665		
HILLWOOD AIRWAYS, LLC	49	35	14	9	2							70		
KAISERAIR INC	94	68	15	38	7							245		
KEY LIME AIR CORPORATION	123		9	38	35							1,225		
MIAMI AIR INTERNATIONAL INC	249	351	131	67	6	108	105	119	118	112	112	210	0.19%	Liquidated May 2020.
OMNI AIR INTERNATIONAL LLC	758	1045	302	246	14	360	336	358	493	541	418	490	0.12%	
PENINSULA AVIATION SERVICES INC	80		18	17	6							210		Saudi Arabian A/C refueling.
PIEDMONT AIRLINES INC	1096		231	530	60							2,100		WOS of American Airlines.
SEABORNE VIRGIN ISLAND INC	96		17	29	7							245		Subsidiary of Silver Airways.
SIERRA PACIFIC AIRLINES INC	43	35	12	11	2							70		
SILVER AIRWAYS LLC	355		56	142	26	119				42	80	910	1.13%	
TEM ENTERPRISES	21	25	5	5	1	55	97	81		2	59	35	0.06%	Doing business as Xtra Airways.
TRANS STATES AIRLINES LLC	1116		244	464	48							1,680		Planned shutdown accelerated due to Covid.

5. Projected Reporting, Recordkeeping, and Other Compliance Requirements

Since the secondary barriers proposed rule would apply to only new airplanes entering the fleet, the analysis assumes that each operator's current fleet is replaced immediately even though the fleet airplanes generally will be replaced only when they are retired. Though airplanes could be retired any time over the next 25 years depending on the age of the airplane, the analysis assumes immediate replacement to ensure that the economic impact is not underestimated. The regulatory impact analysis assumes that the average retirement age of transport category airplanes is 25 years.

The economic impact is assessed using 11 of the 22 small operators for which revenue data is available from Cirium's (formerly FlightGlobal) FlightFleets Analyzer. The analysis uses average revenue for the five-year period 2015-2019. Revenue figures for the 11 operators are available for an average of 3.45 years. For an operator, the economic impact is measured as the estimated \$35,000 cost of an FAA-certified IPSB times number of airplanes, as a percentage of the average revenue. The number of airplanes is from the SPAS database as of January 9, 2020. The regulatory impact analysis also considers training costs for flight attendants and pilots, but these costs are not included here as they have a trivial effect on the results.

As Table 2 shows, the economic impact ranges from .06% and 1.13% of sales, which averages to 0.60%. On a 2% criterion that the economic impact is significant only if the IPSB cost is at least 2% of a small firm's annual revenues, there is no significant economic impact for any small firm. On a 1% criterion, the economic impact is barely significant for just 2 of the 11 firms which data is available. Bearing in mind that these estimates are very conservative, the FAA concludes that there is not a significant impact

on a substantial number of small firms. The FAA requests comments on these estimates and whether or not they represent a significant economic impact on the small firms affected by this proposed rule.

6. Significant Alternatives Considered that Minimize Economic Impacts on Small Entities

The FAA evaluated alternatives to this rulemaking that could minimize impacts on small entities. The FAA identified only alternative 2 of its regulatory impact analysis as potentially minimizing such impacts. Specifically, the FAA considered exempting short duration flights from the proposed rule as a means of reducing economic impacts on small entities. ARAC recognized that, for short flights, the flightdeck door may not need to be opened, in which case the IPSB would not provide the intended benefit. However, ARAC was unable to identify any airplane design parameter, such as passenger capacity or airplane gross weight that sufficiently correlates with short flights. Also, the range of all the airplane models that would be affected by the proposed rule exceeds the maximum flight length at which opening the flightdeck door is unlikely. The FAA requests comments on this and other alternatives that would minimize economic impacts of the proposed rule on small entities.

C. International Trade Impact Assessment

The Trade Agreements Act of 1979 (Public Law 96-39), as amended by the Uruguay Round Agreements Act (Public Law 103-465), prohibits Federal agencies from establishing standards or engaging in related activities that create unnecessary obstacles to the foreign commerce of the United States. Pursuant to these Acts, the establishment of standards is not considered an unnecessary obstacle to the foreign commerce of the

United States, so long as the standard has a legitimate domestic objective, such as the protection of safety, and does not operate in a manner that excludes imports that meet this objective. The statute also requires consideration of international standards and, where appropriate, that they be the basis for U.S. standards.

The FAA has assessed the potential effect of this proposed rule and has determined that it would have a legitimate domestic objective, in that it would increase the safety of the United States from terrorist attacks on U.S.-operated airplanes. This proposed rule would not operate in a manner as to directly affect foreign trade and, therefore, would have little or no effect on foreign trade.

D. Unfunded Mandates Assessment

Title II of the Unfunded Mandates Reform Act of 1995 (Public Law 104-4) requires each Federal agency to prepare a written statement assessing the effects of any Federal mandate in a proposed or final agency rule that may result in an expenditure of \$100 million or more (in 1995 dollars) in any one year by State, local, and tribal governments, in the aggregate, or by the private sector; such a mandate is deemed to be a “significant regulatory action.” The FAA currently uses an inflation-adjusted value of \$155.0 million in lieu of \$100 million.

This rule does not contain such a mandate. Therefore, the requirements of Title II of the Act do not apply.

E. Paperwork Reduction Act

The Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)) requires that the FAA consider the impact of paperwork and other information collection burdens imposed on

the public. The FAA has determined that there would be no new requirement for information collection associated with this proposed rule.

F. International Compatibility and Cooperation

In keeping with U.S. obligations under the Convention on International Civil Aviation, it is FAA policy to conform to ICAO Standards and Recommended Practices to the maximum extent practicable. The FAA has determined that there are no ICAO Standards and Recommended Practices that correspond to these proposed regulations.

G. Environmental Analysis

In accordance with the provisions of regulations issued by the Council on Environmental Quality (40 CFR parts 1500-1508), FAA Order 1050.1F identifies FAA actions that are categorically excluded from preparation of an Environmental Assessment or Environmental Impact Statement under the National Environmental Policy Act in the absence of extraordinary circumstances. The FAA has determined this NPRM action qualifies for the categorical exclusion identified in paragraph 5-6.6(d) because no significant impacts to the environment are expected from publication of this NPRM and it involves no extraordinary circumstances.

V. Executive Order Determinations

A. Executive Order 13132, Federalism

The FAA has analyzed this proposed rule under the principles and criteria of Executive Order 13132, Federalism (64 FR 43255, August 10, 1999). The agency has determined that this action would not have a substantial direct effect on the States, or the relationship between the Federal Government and the States, or on the distribution of

power and responsibilities among the various levels of government, and, therefore, would not have Federalism implications.

B. Executive Order 13211, Regulations that Significantly Affect Energy Supply, Distribution, or Use

The FAA analyzed this proposed rule under Executive Order 13211, Actions Concerning Regulations that Significantly Affect Energy Supply, Distribution, or Use (66 FR 28355, May 18, 2001). The agency has determined that it would not be a “significant energy action” under the executive order and would not be likely to have a significant adverse effect on the supply, distribution, or use of energy.

C. Executive Order 13609, International Cooperation

Executive Order 13609, Promoting International Regulatory Cooperation (77 FR 26413, May 4, 2012), promotes international regulatory cooperation to meet shared challenges involving health, safety, labor, security, environmental, and other issues and to reduce, eliminate, or prevent unnecessary differences in regulatory requirements. The FAA has analyzed this proposed rule under the policies and agency responsibilities of Executive Order 13609, and has determined that this proposed rule would have no effect on international regulatory cooperation.

VI. Additional Information

A. Comments Invited

The FAA invites interested persons to participate in this rulemaking by submitting written comments, data, or views. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters

should send only one copy of written comments, or if comments are filed electronically, commenters should submit only one time.

Except for the confidential business information described in the next paragraph, the FAA will file in the docket all comments it receives, as well as a report summarizing each substantive public contact with FAA personnel concerning this proposed rulemaking. Before acting on this proposal, the FAA will consider all comments it receives on or before the closing date for comments. The FAA will consider comments filed after the comment period has closed if it is possible to do so without incurring expense or delay. The agency may change this proposal in light of the comments it receives.

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 this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, 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 they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to Dan Jacquet, AIR-626, Human-Machine Interface Section, Technical Innovation Policy Branch, Policy and Innovation Division, Aircraft Certification Service, Federal Aviation Administration, 2200 South 216th Street, Des Moines, WA 98198.

Any commentary that the FAA receives that is not specifically designated as CBI will be placed in the public docket for this rulemaking.

B. Availability of Rulemaking Documents

An electronic copy of rulemaking documents may be obtained from the Internet by—

1. Searching the Federal eRulemaking Portal (www.regulations.gov);
2. Visiting the FAA's Regulations and Policies web page at www.faa.gov/regulations_policies or
3. Accessing the Government Printing Office's web page at www.GovInfo.gov.

Copies may also be obtained by sending a request to the Federal Aviation Administration, Office of Rulemaking, ARM-1, 800 Independence Avenue SW., Washington, DC 20591, or by calling (202) 267-9680. Commenters must identify the docket or notice number of this rulemaking.

All documents the FAA considered in developing this proposed rule, including economic analyses and technical reports, may be accessed from the Internet through the Federal eRulemaking Portal referenced in item (1) above.

C. Small Business Regulatory Enforcement Fairness Act

The Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA) requires the FAA to comply with small entity requests for information or advice about compliance with statutes and regulations within its jurisdiction. A small entity with questions regarding this document may contact the person identified in the FOR FURTHER INFORMATION CONTACT heading at the beginning of the preamble. To

find out more about SBREFA on the internet, visit www.faa.gov/regulations_policies/rulemaking/sbre_act/

List of Subjects

14 CFR Part 25

Aircraft, Aviation safety, Reporting and recordkeeping requirements.

14 CFR Part 121

Air carriers, Aircraft, Airmen, Alcohol abuse, Aviation safety, Charter flights, Drug abuse, Drug testing, Reporting and recordkeeping requirements, Safety, Transportation.

The Proposed Amendment

In consideration of the foregoing, the Federal Aviation Administration proposes to amend chapter I of title 14, Code of Federal Regulations as follows:

PART 25—AIRWORTHINESS STANDARDS: TRANSPORT CATEGORY

AIRPLANES

1. The authority citation for part 25 is revised to read as follows:

Authority: 49 U.S.C. 106(f), 106(g), 40113, 44701, 44702 and 44704; Pub. L. 115-254, 132 Stat 3281 (49 U.S.C. 44903 note).

2. In § 25.795, add paragraph (a)(4) to read as follows:

§ 25.795 Security considerations.

(a) * * *

(4) An installed physical secondary barrier (IPSB) must be installed to resist intrusion into the flightdeck whenever the flightdeck door is opened. In addition, when deployed, the IPSB must:

- (i) Resist a 250 pound (1113 Newtons) static load in the direction of the passenger cabin applied at the most critical locations on the IPSB;
- (ii) Resist a 600 pound (2669 Newtons) static load in the direction of the flightdeck applied at the most critical locations on the IPSB;
- (iii) Delay a person attempting to access the flightdeck by at least the time required for a crewmember to open and reclose the flightdeck door, but no less than 5 seconds;
- (iv) Prevent a person from reaching through and touching the flight deck door; and
- (v) Allow for necessary crewmember activities.

* * * * *

PART 121—OPERATING REQUIREMENTS: DOMESTIC, FLAG, AND SUPPLEMENTAL OPERATIONS

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

Authority: 49 U.S.C. 106(f), 106(g), 40103, 40113, 40119, 41706, 42301 preceding note added by Pub. L. 112-95, sec. 412, 126 Stat. 89, 44101, 44701-44702, 44705, 44709-44711, 44713, 44716-44717, 44722, 44729, 44732; 46105; Pub. L. 111-216, 124 Stat. 2348 (49 U.S.C. 44701 note); Pub. L. 112-95, 126 Stat 62 (49 U.S.C. 44732 note); Pub. L. 115-254, 132 Stat 3281 (49 U.S.C. 44903 note).

4. In § 121.313, add paragraph (l) to read as follows:

§ 121.313 Miscellaneous equipment.

* * * * *

- (l) For airplanes required by paragraph (f) of this section to have a door between the passenger and pilot or crew rest compartments, and for transport category airplanes that have a door installed between the pilot compartment and any other occupied

compartment, that were manufactured after [INSERT DATE TWO YEARS AFTER THE EFFECTIVE DATE OF THE FINAL RULE], an installed physical secondary barrier (IPSB) that provides line-of-sight visibility between the flightdeck door and the cabin, and meets the requirements of § 25.795(a)(4) in effect on [INSERT THE EFFECTIVE DATE OF THE FINAL RULE].

5. In § 121.584, add paragraph (a)(3) to read as follows:

§ 121.584 Requirement to view the area outside the flightdeck door.

* * * * *

(a) * * *

(3) If the airplane is in flight, any installed physical secondary barrier required by 121.313(l) has been deployed, and;

* * * * *

Issued under authority provided by Pub. L. 115-254 and 49 U.S.C. §§ 106(f), 44701(a), and 44703 in Washington, DC, on July 27, 2022.

David W. Hempe
Deputy Executive Director, Aircraft Certification Service