



# Federal Register

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**Part V**

## **Department of Transportation**

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**Federal Aviation Administration**

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**14 CFR Part 121**

**Flightcrew Compartment Access and Door  
Designs; Final Rule**

**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****14 CFR Part 121**

[Docket No. FAA-2001-10770; SFAR 92-2]

RIN 2120-AH54

**Flightcrew Compartment Access and Door Designs****AGENCY:** Federal Aviation Administration (FAA), DOT.**ACTION:** Final rule.

**SUMMARY:** This action supersedes SFAR 92-1, which was published October 17, 2001, allowing air carriers to quickly modify the flightcrew compartment door to delay or deter unauthorized entry to the flightcrew compartment. This action temporarily authorizes variances from existing design standards for the doors and allows for approval for return to service of modified airplanes without prior approved data if the modification constitutes a major alteration. This action prohibits the possession of flightdeck compartment door keys by other than the flightcrew during flight, unless the flightdeck door has an internal flightdeck locking device installed, operative, and in use. This action also clarifies the 90 day and 180 day time frames in earlier versions of this SFAR with specific dates. This action is being taken in the wake of the September 11, 2001, terrorist attacks against four U.S. commercial airplanes.

**DATES:** This action is effective November 21, 2001 and shall remain in effect until April 9, 2003.

**FOR FURTHER INFORMATION CONTACT:** Kimberly Smith, Technical Programs Branch, Aircraft Certification Service, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone: (202) 267-7242; e-mail address: *9-awa-avr-design@faa.gov*.

**SUPPLEMENTARY INFORMATION:****Availability of This Action**

You can get an electronic copy of this document from the Internet by taking the following steps:

Go to the search function of the Department of Transportation's electronic Docket Management System (DMS) web page (<http://dms.dot.gov/search>).

On the search page, type in the last four digits to the docket number shown at the beginning of this document. Click on "search."

On the next page, which contains the docket summary information, click on the item you want to see.

You can also get an electronic copy through the Internet through the FAA's web page at <http://www.faa.gov/avr/arm/nprm/nprm.htm> or the Government Printing Office's web page at <http://www.access.gpo.gov/su/docs/aces/aces140.html>.

You can also get a copy by submitting a request to the Federal Aviation Administration, Office of rulemaking, ARM-1, 800 Independence Ave., SW., Washington, DC 20591, or by calling (202) 267-9680. Make sure to identify the docket number or notice number of this rulemaking.

**Small Entity Inquiries**

The Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996 requires the FAA to comply with small entity requests for information advice about compliance with statutes and regulations within the FAA's jurisdiction. Therefore, any small entity that has a question regarding this document may contact its local FAA official. Internet users can find additional information on SBREFA on the FAA's web page at <http://www.faa.gov/avr/arm/sbrefa.htm> and send electronic inquiries to the following Internet address: *9-AWA-SBREFA@faa.gov*.

**Background**

The September 11, 2001, hijacking events have demonstrated that some persons are willing to hijack airplanes and use them as weapons against the citizens of the United States. This is a safety and security threat that was not anticipated and, therefore, not considered in the design of transport airplanes. The recent hijackings make it clear that there is a critical need to improve the security of the flightcrew compartment. These improvements should deter terrorist activities and, if they are attempted, delay or deny access to the cockpit.

**Flightcrew Compartment Door Designs**

Flightcrew compartment doors on transport category airplanes have been designed principally to ensure privacy, so pilots could focus their entire attention to their normal and emergency flight duties. The doors have not been designed to provide an impenetrable barrier between the cabin and the flightcrew compartment. Doors have not been required to meet any significant security threat, such as small arms fire or shrapnel, or the exercise of brute force to enter the flightcrew compartment.

Beside affording an uninterrupted work environment for the flightcrew, flightcrew compartment doors often

must meet other important safety standards. Should there be a sudden decompression of the airplane, separate compartments within the airplane, like the cabin and the crew compartment, must be designed so that the pressure differential that is created does not compromise the basic airplane structure. Certification standards require that airplane designs provide a method to compensate for decompression in a manner that avoids significant damage to the airplane. In many cases, flightcrew compartment doors provide the pressure compensation, by being vented or swinging open to equalize the pressure between the cabin and the flightcrew compartment.

In addition, design standards require that the flightcrew have a path to exit the flightcrew compartment in an emergency, if the cockpit window exists are not usable. Flightcrew compartment doors have been designed to provide this escape path. But this escape feature may also enable easier unauthorized entry into the flightcrew compartment from the cabin.

Operating regulations, in particular § 121.379(b) in the case of a major alteration, require the work to be done in accordance with technical data approved by the Administrator. Operating regulations for airlines also require that each crewmember have a key readily available to open doors between passengers and an emergency exit. Some airlines issue flightcrew compartment door keys to all their crewmembers. This allows flight attendants to enter the flightcrew compartment and assist the flightcrew in an emergency, such as incapacitation of a flight crewmember. But it also offers an opportunity for an individual to overpower or coerce a flight attendant, take away the key, and enter the flightcrew compartment.

**Rapid Response Team**

To evaluate what could be done to improve flightcrew compartment security, the Secretary of transportation formed a Rapid Response Team for Aircraft Security. The Team included representatives of airplane designers, airline operators, airlines pilots, and flight attendants. There was a clear consensus from this group, and agreement by the FAA, that immediate actions must be taken to strengthen the flightcrew compartment door. The short-term options, though, in one way or another could conflict with regulatory design requirements such as those discussed above.

The Rapid Response Team addressed the design issues and found the relative safety risks to be small in view of he

emergent security risk of unauthorized flightcrew compartment entry. The FAA agrees with this conclusion. The Rapid Response Team report also concluded, and the FAA agrees, that all existing design requirements should continue to be applied in the long term. Therefore, this SFAR allows a temporary period during which non-compliance with design requirements will be allowed when improvements to flightcrew compartment security are made. This relief is limited to 18 months, at which time the modified airplane must be brought back into full compliance with all design requirements. Airlines will submit reports within 180 days of the publication of the SFAR on how they will achieve this compliance.

This SFAR will provide airlines with maximum flexibility to incorporate door modifications rapidly. In addition to waiving specific airworthiness regulations, the FAA is waiving procedural requirements applicable to major alterations § 121.379(b). In addition to the information obtained from the Rapid Response Team, the FAA has received technical information from airline operators and manufactures regarding what modifications are possible and how quickly they can be incorporated. The technical data reviewed by the FAA reflect good design practices, and the FAA is confident that installations can be made without unduly compromising safety.

Given the urgency of the need to take action to reinforce the flightcrew compartment doors, the FAA finds that it is in the public interest to forego the requirement that major alterations to accomplish this task have data previously approved by the Administrator. This portion of the SFAR is limited to 6 months. Major alterations performed after that date must be in accordance with approved data, and whatever the airline installs in the short term must ultimately be brought into full regulatory compliance for emergency egress and venting.

The SFAR requires reports to the FAA so the modifications can be monitored and corrective action taken if necessary. Because of the risk posed by having other than flightcrew members onboard the aircraft as allowed in § 121.583, FedEx on October 10, 2001, petitioned the FAA to take actions necessary to allow it to install additional door security measures in accordance with the provisions of SFAR 92 (66 FR 51546, October 9, 2001). The FAA has determined that the modifications requested by FedEx would apply to similarly situated cargo airplane operators and that the threat is similar to that of passenger airplanes.

#### *The SFAR Provisions*

The revised SFAR allows all air carriers under part 121 to install flightcrew compartment door improvements and to prohibit possession of flightcrew compartment keys by persons other than flight crewmembers during flight. It is very broad, to allow maximum short-term flexibility in crafting enhanced door security measures. It allows the doors to be modified and airplanes to be operate with modified doors.

The FAA has established an 18-month duration for the portions of the SFAR concerning airworthiness requirements. We expect this will give the industry sufficient time to design and install more permanent changes to door security and establish procedures for flightcrew compartment door access that met regulator requirements for egress and venting.

The SFAR requires operators to submit a report to the FAA by January 15, 2002 that details the specific modifications they have made to the flightcrew compartment door. This will allow the FAA to monitor what has been installed and take action if the installation creates an unacceptable safety risk. Further, to monitor progress toward the goal of full compliance, the SFAR requires a report by April 22, 2002 that describes how the operator will meet regularly compliance for egress and venting.

We also expect that airframe manufacturers and modifiers will produce service information to assist operators in developing modifications to improve intrusion resistance to the flightcrew compartment. While service documents would not require separate approval under this SFAR, such modifications may also be installed in production airplanes. The modification authority granted by this SFAR also applies to manufacturers and other persons applying for airworthiness certificates to enable delivery of airplanes to the operators.

In addition, we understand that some operators may rely on suppliers to produce parts to support these modifications to the flightcrew doors. Under normal circumstances, such parts producers would be subject to the requirement to obtain parts manufacturer approvals in accordance with 14 CFR 21.303. However, to facilitate reinforcement of these doors, the SFAR includes a provision overriding the requirement for parts production approval in support of these activities.

Should any of the changes to the door constitute a major alteration, this SFAR

temporarily relieves the operator of having to obtain prior approval of the data. This part of the SFAR terminates on April 22, 2002. As soon as the design data is submitted (no later than January 15, 2002), the FAA will work with the operators to identify a mutually acceptable process and time to get the data approved. In the meantime, the airworthiness certificates on airplanes that have been modified will remain valid. In making returns to service of airplanes modified under this SFAR, documents can reflect compliance with regularly requirements by citing the SFAR.

In addition to the above changes to harden the flightcrew compartment doors against intruders, the FAA also believes it is prudent to eliminate the ability of intruders to gain access by obtaining a flight attendant's key. For that reason, this SFAR temporarily changes the requirement in § 121.313(g) by stating that only flight crewmembers, and not cabin crewmembers, will have flight crew compartments key during flight. This should lessen the opportunity for gaining unauthorized access and reduced the likelihood of attacks on cabin crewmembers to obtain keys on airplanes where the flightdeck door does not have an internal locking device.

Since initial issuance of this SFAR, internal locking devices that render the key useless for flightdeck access have been installed on many air carrier airplanes. Since the keys have multiple uses in the airplane beyond the flightdeck door, prohibiting possession of the flightdeck door keys by non-flight crewmembers on these airplanes is only an inconvenience to the crew and not a deterrent to terrorist activity. Allowing non-flight crewmembers access to the keys is acceptable when the internal locking device is in use on the airplane. "In use" contemplates that the device is locked from the inside by the flightdeck crew. If a flightdeck crewmember must exist the flightdeck for some reason, either the remaining flightdeck crewmember, or a cabin crewmember that enters the flightdeck, will immediately lock the internal device behind the exiting flightdeck crewmember. This provision may also reduce the opportunity for coercion, since the flight attendant can safely hand over the key.

As a result, this change to the SFAR adds a phrase to the end of § 121.313(a)(ii) to allow possession of the key under certain circumstances. The limitations on keys do not apply to cargo operators because flight attendants are only required on passenger airplanes. Note that this change to

121.313(g) will expire with this SFAR. Further rulemaking will be necessary to address this subject after expiration.

This change also replaces the 90 day and 180 day reporting and termination time frames with specific dates, January 15, 2002, and April 22, 2002 respectively. Since this SFAR has been republished more than once, insertion of specific dates will eliminate confusion in calculating these dates.

#### Justification for Immediate Adoption

Because the circumstances described herein warrant immediate action by the FAA, the Administrator finds that notice and public comment under 5 U.S.C. 553(b) are impracticable and contrary to the public interest. Further, the Administrator finds that good cause exists under 5 U.S.C. 553(d) for making this rule effective immediately upon publication. This action is necessary to prevent a possible imminent hazard to airplanes and to protect persons and property within the United States.

#### International Compatibility

In keeping with U.S. obligations under the Convention on International Civil Aviation, it is FAA policy to comply with International Civil Aviation Organization (ICAO) Standards and Recommended Practices to the maximum extent practicable. The FAA determined that there are no ICAO Standards and Recommended Practices that correspond to this SFAR.

#### Paperwork Reduction Act

This emergency final SFAR contains information collection activities subject to the Paperwork Reduction Act of 1995 (44 USC § 3507(d)). In accordance with section 3507(j)(1)(B) of that statute, the FAA is requesting the Office of Management and Budget to grant an immediate emergency clearance on the paperwork package that it is submitting. As protection provided by the Paperwork Reduction Act, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Therefore, notification will be made to the public when a clearance is received. Following is a summary of the information collection activity.

*Title:* Flightcrew Compartment Access and Door Designs.

*Summary/Need:* The SFAR requires operators to submit a report to the FAA by January 15, 2002 that details the specific modifications. This will allow the FAA to monitor what has been installed and taken action if the installation creates an unwarranted safety risk. Further, to monitor progress

toward the goal of full compliance, the SFAR requires a report by April 22, 2002 that describes how the operator will come into full regulatory compliance.

*Respondents:* The respondents are an estimated 135 airplane operators covered under 14 CFR part 121.

*Burden:* The burden associated with this SFAR has not been determined prior to this publication, but will be submitted to OMB with the request for clearance.

#### Regulatory Analyses

This rulemaking action is taken under an emergency situation within the meaning of Section 6(a)(3)(D) of Executive Order 12866, Regulatory Planning and Review. It also is considered an emergency regulation under Paragraph 11g of the Department of Transportation (DOT) Regulatory Policies and Procedures. In addition, it is a significant rule within the meaning of the Executive Order and DOT's policies and procedures. No regulatory analysis or evaluation accompanies the rule. At this time, the FAA is not able to assess whether this rule will have a significant impact on a substantial number of small entities as defined in the Regulatory Flexibility Act of 1980, as amended. However, we will be conducting a regulatory analysis of the cost and benefits of this rulemaking, including any impact on small entities, at a later date.

#### Executive Order 13132, Federalism

The FAA has analyzed this SFAR under the principles and criteria of Executive Order 13132, Federalism. We have determined that this action will not have a substantial direct effect on the States, or the relationship between the national Government and the State, or on the distribution of power and responsibilities among the various levels of government. Therefore, we have determined that this final rule does not have federalism implications.

#### Unfunded Mandates Reform Act

The Unfunded Mandates Reform Act of 1995 (the Act), enacted as Pub. L. 104-4 on March 22, 1995, is intended, among other things, to curb the practice of imposing unfunded Federal mandates on State, local, and tribal governments. Title II of the Act 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 a \$100 million or more expenditure (adjusted annually for inflation) 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." This SFAR does not contain such a mandate. Therefore, the requirements of Title II of the Unfunded Mandates Reform Act of 1995 do not apply.

#### Environmental Analysis

FAA Order 1050.1D defines FAA actions that may be categorically excluded from preparation of a National Environmental Policy Act (NEPA) environmental impact statement. In accordance with FAA Order 1050.1D, appendix 4, paragraph 4(j) this rulemaking action qualifies for a categorical exclusion.

#### Energy Impact

The energy impact of this SFAR has been assessed in accordance with the Energy Policy and Conservation Act (EPCA) Pub. L. 94-163, as amended (42 U.S.C. 6362) and FAA Order 1053.1. It has been determined that this SFAR is not a major regulatory action under the provisions of the EPCA.

#### List of Subjects in 14 CFR Part 121

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

#### The Amendment

For the reasons set forth above, the Federal Aviation Administration amends 14 CFR part 121 as follows:

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

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

**Authority:** 49 U.S.C. 106(g), 1153, 40113, 40119, 41706, 44101, 44701-44702, 44705, 44709-44711, 44713, 44716-44717, 44722, 44901, 44903-44904, 44912, 46105.

#### SFAR 92-1 [Removed]

2. Remove Special Federal Aviation Regulation No. 92-1 [SFAR].

#### SFAR 92-2 [Added]

3. Add Special Federal Aviation Regulation (SFAR) 92-2 to read as follows:

#### Special Federal Aviation Regulations No. 92-2—Flightcrew Compartment Access and Door Designs

1. *Applicability.* This Special Federal Aviation Regulation (SFAR) applies to all operators that hold an air carrier certificate or operating certificate issued under part 119 and that conduct operations under part 121, except paragraph 4 of this SFAR does not apply to cargo operations. It applies to the operators specified in this SFAR that modify airplanes to improve the flightcrew

compartment door installations to restrict the unwanted entry of persons into the flightcrew compartment. This SFAR also applies to production certificate holders and applicants for airworthiness certificates for airplanes to be operated by operators specified in this SFAR, and producers of parts to be used in such modifications.

2. *Regulatory Relief.* Contrary provisions of part 21, and §§ 121.153(a)(2) and 121.379(b), notwithstanding:

(a) An operator may operate airplanes modified to improve the flightcrew compartment door installations to restrict the unauthorized entry of persons into the flightcrew compartment without regard to the applicable airworthiness requirements and may modify those airplanes for that purpose, using technical data not previously approved by the Administrator, subject to the following conditions:

(i) Not later than January 15, 2002, submit to the Director, Aircraft Certification Service, a detailed description of the changes to the airplane that have been accomplished to enhance the intrusion resistance of the flightcrew compartment including identification of what major alterations have been done without previously approved data.

(ii) Not later than April 22, 2002, submit to the Director, Aircraft Certification Service,

a schedule for accomplishment of the changes necessary to restore compliance with all applicable airworthiness requirements, as well as a listing of the regulations not currently complied with. The schedule may not extend beyond the termination date of this SFAR.

(iii) If, upon reviewing the data submitted in paragraph 2(a)(i) of this SFAR, the Administrator determines that a door modification presents an unacceptable safety risk, the FAA may issue an order requiring changes to such modifications.

(b) An applicant for an airworthiness certificate may obtain such a certificate for modified airplanes to be operated by operators described in this SFAR.

(c) A holder of a production certificate may submit for airworthiness certification or approval, modified airplanes to be operated by operators described in this SFAR.

(d) A person may produce parts for installation on airplanes in connection with modifications described in this SFAR, without FAA parts manufacturer approval (PMA).

3. *Return to Service Documentation.* Where operators have modified airplanes as authorized in this SFAR, the affected airplane must be returned to service with a

note that it was done under the provisions of this SFAR.

4. *Provision for Flightdeck Door Compartment Key.* Contrary to provisions of § 121.313(g), the following provision applies: A key for each door that separates a passenger compartment from an emergency exit identified to passengers in the briefing required by § 121.571(a)(1)(ii). The key required for access to the emergency exit must be readily available for each crewmember. No key to the flight crewmembers, unless an internal flightdeck locking device such as a deadbolt or bar is installed, operative, and in use.

5. *Termination.* With respect to the ability to approve airplanes for return to service without data previously approved by the Administrator in the case of major alterations, this SFAR terminates on April 22, 2002. All other provisions of this SFAR terminate on April 9, 2003.

Issued in Washington, DC, on November 19, 2001.

**Jane F. Garvey,**  
*Administrator.*

[FR Doc. 01-29280 Filed 11-19-01; 3:43 pm]

**BILLING CODE 4910-13-M**