- 1992 (the effective date of AD 92–01–02, Amendment 39–8125), and thereafter at intervals not to exceed 250 hours TIS.
- (ii) For any installed B.F. Goodrich landing gear brake assembly, part number 2–1203 or 2–1203–1: Within 100 hours TIS after the effective date of this AD, and thereafter at intervals not to exceed 250 hours TIS.
- (3) Overhaul or replacement, as necessary: Prior to further flight after the inspection where the wear or the maximum clearance limit is exceeded.
- (f) What procedures must I use to accomplish the actions required in this AD?
- (1) Modification: The instructions included in either Fairchild Service Bulletin (SB) 227– 32–017 or Fairchild SB 226–32–049, both Issued: November 14, 1984, as applicable.
- (2) Inspections: The instructions included in B.F. Goodrich No. 1498, Issued: October 26, 1989. The wear and maximum clearance limits specified in this AD take precedence over those specified in the service information.
- (3) Overhaul or replacement: The instructions included in the applicable maintenance manual.
- (g) Can I comply with this AD in any other way? Yes.
- (1) You may use an alternative method of compliance or adjust the compliance time if:
- (i) Your alternative method of compliance provides an equivalent level of safety; and
- (ii) The Manager, Fort Worth Airplane Certification Office, approves your alternative. Submit your request through an FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager.
- (2) This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (g)(1) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if you have not eliminated the unsafe condition, specific actions you propose to address it.
- (3) Alternative methods of compliance approved in accordance with AD 92–01–02, which is superseded by this AD, are approved as alternative methods of compliance with this AD.
- (h) Where can I get information about any already-approved alternative methods of compliance? Contact the Fort Worth Airplane Certification Office, 2601 Meacham Boulevard, Fort Worth, Texas 76193–0150; telephone: (817) 222–5133; facsimile: (817) 222–5960.
- (i) What if I need to fly the airplane to another location to comply with this AD? The

- FAA can issue a special flight permit under sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate your airplane to a location where you can accomplish the requirements of this AD.
- (j) How do I get copies of the documents referenced in this AD? You may obtain copies of the documents referenced in this AD from Fairchild Aircraft, Inc., P.O. Box 790490, San Antonio, Texas 78279–0490; and B.F. Goodrich Aircraft Wheels and Brakes, P.O. Box 340, Troy, Ohio 45373. You may examine these documents at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Room 506, Kansas City, Missouri 64106.
- (k) Does this AD action affect any existing AD actions? Yes. This amendment supersedes AD 92–01–02, Amendment 39–8125.

Issued in Kansas City, Missouri, on February 8, 2000.

Michael K. Dahl,

Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. 00–3621 Filed 2–15–00; 8:45 am] BILLING CODE 4910–13–U

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2000-NM-01-AD]

RIN 2120-AA64

Airworthiness Directives; McDonnell Douglas Model DC-8 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This document proposes the adoption of a new airworthiness directive (AD) that is applicable to certain McDonnell Douglas Model DC-8 series airplanes that have been converted from a passenger to a cargocarrying ("freighter") configuration. This proposal would require a revision to the Airplane Flight Manual Supplement to ensure that the main deck cargo door is closed, latched, and locked; an inspection of the door wire bundle; and repair or replacement of discrepant parts. This proposal also would require, among other actions, modification of the hydraulic and indication systems of the main deck cargo door, and installation of a means

to prevent pressurization to an unsafe level if the main deck cargo door is not closed, latched, and locked. This proposal is prompted by the FAA's determination that certain main deck cargo door systems do not provide an adequate level of safety, and that the means to prevent pressurization to an unsafe level if the main deck cargo door is not closed, latched, and locked is inadequate. The actions specified by the proposed AD are intended to prevent opening of the cargo door while the airplane is in flight, and consequent rapid decompression of the airplane including possible loss of flight control or severe structural damage.

DATES: Comments must be received by April 3, 2000.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2000–NM-01–AD, 1601 Lind Avenue, SW., Renton, Washington 98055–4056. Comments may be inspected at this location between 9:00 a.m. and 3:00 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT:

Michael E. O'Neil, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5320; fax (562) 627-5210.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified above. All communications received on or before the closing date for comments, specified above, will be considered before taking action on the proposed rule. The proposals contained in this notice may be changed in light of the comments received.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report summarizing each FAA-public contact concerned with the substance of this proposal will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 2000–NM–01–AD." The postcard will be date stamped and returned to the commenter.

Availability of NPRMs

Any person may obtain a copy of this NPRM by submitting a request to the FAA, Transport Airplane Directorate, ANM–114, Attention: Rules Docket No. 2000–NM–01–AD, 1601 Lind Avenue, SW., Renton, Washington 98055–4056.

Discussion

Supplemental Type Certificate (STC) SA1832SO [originally issued to Monarch, Inc. and currently held by National Aircraft Service, Inc. (NASI)] specifies a design for installation of a main deck cargo door, associated door cutout in the fuselage, door hydraulic and indication systems, and Class "E" cargo interior with a cargo barrier on McDonnell Douglas Model DC-8 series airplanes. The FAA has conducted a design review of Model DC-8 series airplanes modified in accordance with STC SA1832SO and has conducted discussions regarding the design with the STC holder. From the design review and these discussions, the FAA has identified several potential unsafe conditions. [Results of this design review are contained in "DC-8 Cargo Modification Review Team Review of Monarch (ATAZ) Supplemental Type Certificate SA1832SO-Installation of a Cargo Door and Interior, Final Report, Revision A, dated January 7, 2000," hereinafter referred to as "the Design Review Report," which is included in the Rules Docket for this NPRM.]

This NPRM proposes corrective actions for those potential unsafe conditions that relate to the hydraulic and indication systems of the main deck cargo door and a means to prevent pressurization to an unsafe level if the main deck cargo door is not fully closed, latched, and locked. These conditions, if not corrected, could result in opening of the main deck cargo door while the airplane is in flight, and consequent rapid decompression of the airplane including possible loss of flight control or severe structural damage.

Other Related Rulemaking

The FAA is considering further rulemaking to address the remaining potential unsafe conditions relating to the unreinforced main deck floor, main deck cargo door hinge, and fuselage structure in the area modified by installation of a main deck cargo door, 9g crash barrier, and fire/smoke detection system.

Main Deck Cargo Door Systems

In early 1989, two transport airplane accidents were attributed to cargo doors coming open during flight. The first accident involved a Boeing Model 747 series airplane in which the cargo door separated from the airplane, and damaged the fuselage structure, engines, and passenger cabin. The second accident involved a McDonnell Douglas DC-9 series airplane in which the cargo door opened but did not separate from its hinge. The open door disturbed the airflow over the empennage, which resulted in loss of flight control and consequent loss of the airplane. Although cargo doors have opened occasionally without mishap shortly after the airplane was in flight, these two accidents served to highlight the extreme potential dangers associated with the opening of a cargo door while the airplane is in flight.

As a result of these cargo door opening accidents, the Air Transport Association (ATA) of America formed a task force, including representatives of the FAA, to review the design, manufacture, maintenance, and operation of airplanes fitted with outward opening cargo doors, and to make recommendations to prevent inadvertent cargo door openings while the airplane is in flight. A design working group was tasked with reviewing 14 CFR part 25.783 [and its accompanying Advisory Circular (AC) 25.783-1, dated December 10, 1986] with the intent of clarifying its contents and recommending revisions to enhance future cargo door designs. This design group also was tasked with providing specific recommendations regarding design criteria to be applied to existing outward opening cargo doors to ensure that inadvertent openings would not occur in the current transport category fleet of airplanes.

The ATA task force made its recommendations in the "ATA Cargo Door Task Force Final Report," dated May 15, 1991 (hereinafter referred to as "the ATA Final Report"). On March 20, 1992, the FAA issued a memorandum to the managers of the Transport Airplane Directorate (TAD) and Los Angeles, Seattle, and Atlanta Aircraft

Certification Offices (hereinafter referred to as "the FAA Memorandum"), acknowledging ATA's recommendations and providing additional guidance for purposes of assessing the continuing airworthiness of existing designs of outward opening doors. The FAA Memorandum was not intended to upgrade the certification basis of the various airplanes, but rather to identify criteria to evaluate potential unsafe conditions identified on in-service airplanes. Appendix 1 of this proposed AD contains the specific paragraphs from the FAA Memorandum that set forth the criteria to which the outward opening doors should be shown to comply.

Utilizing the applicable requirements of Civil Air Regulations (CAR) part 4b and the design criteria provided by the FAA Memorandum, the FAA has reviewed the original type design of major transport airplanes, including McDonnell Douglas Model DC–8 airplanes equipped with outward opening doors, for any design deficiency or service difficulty. Based on that review, the FAA identified unsafe conditions and issued, among others, the following AD's and NPRM:

- For certain McDonnell Douglas Model DC–9 series airplanes: AD 89– 11–02, amendment 39–6216 (54 FR 21416, May 18, 1989);
- For all Boeing Model 747 series airplanes: AD 90–09–06, amendment 39–6581 (55 FR 15217, April 23, 1990);
- For certain McDonnell Douglas Model DC–8 series airplanes: AD 89–17–01 R1, amendment 39–6521 (55 FR 8446, March 8, 1990);
- For certain Boeing Model 747–100 and -200 series airplanes: AD 96–01–51, amendment 39–9492 (61 FR 1703, January 23, 1996);
- For certain Boeing Model 727–100 and -200 series airplanes: AD 96–16–08, amendment 39–9708 (61 FR 41733, August 12, 1996); and
- For certain McDonnell Douglas Model DC–8 series airplanes: NPRM Rules Docket No. 99–NM–338–AD (64 FR 245, December 22, 1999).

In late 1997, the FAA informed the STC holders and operators of Model DC–8 series airplanes that it was embarking on a review of Model DC–8 series airplanes that have been converted from a passenger to a cargocarrying ("freighter") configuration by STC. The FAA proposed at a subsequent industry sponsored meeting in early 1998, that DC–8 operators and STC holders work together to identify and address potential safety concerns. This suggestion to the affected industry resulted in the creation of the DC–8

Cargo Conversion Joint Task Force (JTF) (hereinafter referred to as "the JTF").

The current composition of the JTF includes holders of each of the six STC's that addresses the installation of a main deck cargo door in Model DC-8 series airplanes and operators and lessors of those modified airplanes. At the JTF's request, the FAA participates in its meetings to offer counsel and guidance with respect to the FAA's regulatory processes. The JTF is a clearinghouse for the gathering and sharing of information among the parties affected by the FAA review of STC cargo conversions of Model DC-8 series airplanes. The JTF also is a liaison between the FAA, operators, and STC holders.

The JTF has been working with the FAA to provide data relating to the number of STC modified Model DC-8 series airplanes and operators of those airplanes, and identified which airplanes are modified by each STC. It also was instrumental in polling the operators and providing maintenance schedules and locations to the FAA, which helped the FAA arrange visits to operators of airplanes modified by each of the STC's. These visits allowed the FAA to review both the available data supporting each STC and modified airplanes and to identify potential safety concerns with each of the STC modifications. Additionally, the JTF has coordinated funding of the industry review of the data supporting the STC's and ongoing efforts to resolve safety issues identified by the FAA.

Using the applicable requirements of CAR part 4b and the criteria specified in the FAA Memorandum as evaluation guides, the FAA, in collaboration with the JTF, conducted an engineering design review and inspection of an airplane modified in accordance with STC SA1832SO. The FAA identified a number of design features of the main deck cargo door systems of this STC that are unsafe and do not meet the applicable requirements of CAR part 4b or the criteria specified in the FAA Memorandum. These systems include the door indication and hydraulic systems, and the means to prevent pressurization of the airplane to an unsafe level if the door is not fully closed, latched, and locked. The FAA design review team also determined that the design data of this STC did not include an adequate safety analysis of the main deck cargo door systems.

For airplanes modified in accordance with STC SA1832SO, the FAA considers the following five specific design deficiencies of the main deck cargo door systems to be unsafe:

1. Indication System.

The main deck cargo door indication system for STC SA1832SO utilizes door warning lights at the door operator's control panel and the flight engineer's panel. There are also indication lights on the door operator's control panel. These lights indicate the status of the cargo door center latch and lock positions, but do not indicate either the door open or closed status. All three conditions (i.e., door closed, latched, and locked) must be monitored directly so that the door indication system cannot display either "latched" before the door is closed or "locked" before the door is latched. If a sequencing error caused the door to latch and lock without being fully closed, the subject indication system, as currently designed, would not alert the door operator or the flight engineer of this condition. As a result, the airplane could be dispatched with the main deck cargo door unsecured, which could lead to the cargo door opening while the airplane is in flight.

The light on the flight engineer's panel is labeled "Cargo Door" and is displayed in red since it indicates an event that requires immediate pilot action. However, if the flight engineer is temporarily away from his station, a door unsafe warning indication could be missed by the pilots. In addition, the flight engineer could miss such an indication by not scanning the panel. As a result, the pilots and flight engineer could be unaware of or misinterpret an unsafe condition and could fail to respond in the correct manner. The warning lights have a "Press-to-Test" feature which is adequate to check the light bulb functionality, but is not adequate to check the cargo door closed, latched, and locked functions. Therefore, an indicator light that monitors all three conditions (i.e., door closed, latched, and locked) must be located in front of and in plain view of both pilots since one of the pilot's stations is always occupied during flight operations.

During an FAA review of STC modified airplanes, instances of distress of the wire bundle between the fuselage and main deck cargo door and the associated attach hardware were noted. Therefore, a one-time general visual inspection of this area to detect crimped, frayed, or chafed wires is necessary to ensure the electrical continuity of the existing door indication system during the interim period.

2. Means to Visually Inspect the Locking Mechanism.

The locking system of STC SA1832SO consists of a lock pin installed at each of the seven latches of the main deck cargo door. The single view port of the main deck cargo door installed in accordance with STC SA1832SO is intended to allow the flight crew to conduct a visual inspection of a single lock pin at the center latch of the main deck cargo door. Monitoring of a single lock pin does not ensure that all the lock pins are in the locked position. As such, this view port is inadequate to ensure that the door is fully closed, latched, and locked. Therefore, a means to visually inspect the door locking mechanism must be installed to ensure that the door is fully closed, latched, and locked.

As discussed in the ATA Final Report and the FAA Memorandum, there should be a means of directly inspecting each lock or, at a minimum, the locks at each end of the lock shaft of certain designs, such that a failure condition in the lock shaft would be detectable.

3. Means to Prevent Pressurization to an Unsafe Level

McDonnell Douglas Model DC-8 series airplanes modified in accordance with STC SA1832SO are configured to utilize the existing fuselage pressurization outflow valve for the purpose of preventing pressurization of the airplane to an unsafe level in the event that the main deck cargo door is not fully closed, latched, and locked. The FAA has determined, however, that the existing means to prevent pressurization is inadequate because the outflow valve can be manually closed to allow pressurization of the airplane regardless of the condition of the main deck cargo door. Therefore, a means must be installed to prevent pressurization of the airplane to an unsafe level in the event that the main deck cargo door is not fully closed, latched, and locked.

4. Powered Lock Systems

In addition to the master control switch for the main deck cargo door, STC SA1832SO utilizes a nose gear squat switch to remove door control power (i.e., electrical and hydraulic) while the airplane is in flight. The FAA finds that a single point failure in the "up relay circuit" of the main deck cargo door could result in inadvertent door opening irrespective of the squat switch position. Therefore, a means must be provided to remove power from the door while the airplane is in flight. The FAA has determined that the three

phase (10A) circuit breaker for the cargo door hydraulic pump must be pulled prior to flight as an interim action to prevent inadvertent main cargo door opening while the airplane is in flight.

A systems safety analysis would normally evaluate and resolve the potential for these types of unsafe conditions. However, the design data for STC SA1832SO do not include a systems safety analysis to specifically identify these failure modes and do not show that an inadvertent main cargo door opening is extremely improbable. The need for a system safety analysis is identified in the ATA Final Report and the FAA Memorandum.

5. Lock Strength

Analysis of the existing latching and locking mechanism of the main deck cargo door indicates that in the event of a system jam, continued operation of the hydraulic cylinders could result in structural deformation of elements of the latching and locking mechanisms. Structural deformation of the locking mechanisms could result in the door latches not being locked and erroneous indication to the flightcrew that the latches are locked properly. Therefore, the latching and locking systems for the main deck cargo door must be modified to prevent structural deformation, which could result in incorrect indication to the pilots that the door is not fully closed, latched, and locked.

Explanation of Requirements of Proposed Rule

Since unsafe conditions have been identified that are likely to exist or develop on other products of this same type design, the proposed AD would require, within 60 days after the effective date of this AD, a general visual inspection of the wire bundle of the main deck cargo door between the exit point of the cargo liner and the attachment point on the main deck cargo door to detect crimped, frayed, or chafed wires; a general visual inspection for damaged, loose, or missing hardware mounting components; and repair, if necessary. These actions would be required to be accomplished in accordance with FAA-approved maintenance procedures.

The proposed AD also would require, within 60 days after the effective date of this AD, a revision of the Limitations Section of the appropriate FAA-approved Airplane Flight Manual Supplement (AFMS) for STC SA1832SO by inserting therein procedures to ensure that the main deck cargo door is closed, latched, and locked prior to dispatch of the airplane; and installation of any associated placards. These

procedures shall include pulling the three phase (10A) circuit breaker for the cargo door hydraulic pump. These actions would be required to be accomplished in accordance with a method approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate.

The proposed AD also would require, within 18 months after the effective date of this AD, the following actions:

- Modification of the indication system of the main deck cargo door to indicate to the pilots whether the main deck cargo door is fully closed, latched, and locked;
- Modification of the mechanical and hydraulic systems of the main deck cargo door to eliminate detrimental deformation of the elements of the door latching and locking mechanisms;
- Installation of a means to visually inspect the locking mechanism of the main deck cargo door;
- Installation of a means to remove power to the door while the airplane is in flight; and
- Installation of a means to prevent pressurization to an unsafe level if the main deck cargo door is not fully closed, latched, and locked.

The modifications and installations would be required to be accomplished in accordance with a method approved by the Manager, Los Angeles ACO. Accomplishment of the modifications and installations would constitute terminating action for the inspections, AFMS revision, and placards described previously.

Cost Impact

There are approximately 6 Model DC–8 series airplanes of the affected design in the worldwide fleet. The FAA estimates that 6 airplanes of U.S. registry would be affected by this proposed AD.

It would take approximately 1 work hour per airplane to accomplish the general visual inspections, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact of the general visual inspections proposed by this AD on U.S. operators is estimated to be \$360, or \$60 per airplane, per inspection cycle.

It would take approximately 1 work hour per airplane to accomplish the AFMS revision and installation of associated placards, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact of the AFM revision and installation of associated placards proposed by this AD on U.S. operators is estimated to be \$360, or \$60 per airplane.

The FAA estimates that it would take approximately 210 work hours per airplane to accomplish the modification required by paragraph (c) of the proposed AD, at an average labor rate of \$60 per work hour. The FAA also estimates that required parts would cost approximately \$45,000 per airplane. Based on these figures, the cost impact of this modification proposed by this AD on U.S. operators is estimated to be \$345,600, or \$57,600 per airplane.

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the proposed requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted.

Regulatory Impact

The regulations proposed herein would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this proposal would not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this proposed regulation (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) if promulgated, will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A copy of the draft regulatory evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

The Proposed Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration proposes to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

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

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

McDonnell Douglas: Docket 2000–NM–01– AD.

Applicability: Model DC–8 series airplanes that have been converted from a passenger to a cargo-carrying ("freighter") configuration in accordance with Supplemental Type Certificate (STC) SA1832SO; certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent opening of the cargo door while the airplane is in flight, and consequent rapid decompression of the airplane including possible loss of flight control or severe structural damage, accomplish the following:

Actions Addressing the Main Deck Cargo Door

(a) Within 60 days after the effective date of this AD, perform a general visual inspection of the wire bundle of the main deck cargo door between the exit point of the cargo liner and the attachment point on the main deck cargo door to detect crimped, frayed, or chafed wires; and perform a general visual inspection for damaged, loose, or missing hardware mounting components. If any crimped, frayed, or chafed wire, or damaged, loose, or missing hardware mounting component is detected, prior to further flight, repair in accordance with FAA-approved maintenance procedures.

Note 2: For the purposes of this AD, a general visual inspection is defined as "A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or droplight, and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked."

(b) Within 60 days after the effective date of this AD, revise the Limitations Section of the appropriate FAA-approved Airplane Flight Manual Supplement (AFMS) for STC SA1832SO by inserting therein procedures to ensure that the main deck cargo door is fully closed, latched, and locked prior to dispatch

of the airplane, and install any associated placards. These procedures shall include pulling the three phase circuit breaker for the cargo door hydraulic pump. The AFMS revision procedures and installation of any associated placards shall be accomplished in accordance with a method approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate.

Actions Addressing the Main Deck Cargo Door Systems

- (c) Within 18 months after the effective date of this AD, accomplish the actions specified in paragraphs (c)(1), (c)(2), (c)(3), (c)(4), and (c)(5) of this AD in accordance with a method approved by the Manager, Los Angeles ACO.
- (1) Modify the indication system of the main deck cargo door to indicate to the pilots whether the main deck cargo door is fully closed, latched, and locked;
- (2) Modify the mechanical and hydraulic systems of the main deck cargo door to eliminate detrimental deformation of elements of the door latching and locking mechanism;
- (3) Install a means to visually inspect the locking mechanism of the main deck cargo door:
- (4) Install a means to remove power to the door while the airplane is in flight; and
- (5) Install a means to prevent pressurization to an unsafe level if the main deck cargo door is not fully closed, latched, and locked.
- (d) Compliance with paragraphs (c)(1), (c)(2), (c)(3), (c)(4), and (c)(5) of this AD constitutes terminating action for the requirements of paragraphs (a) and (b) of this AD, and the required AFMS revision and placards may be removed.

Alternative Methods of Compliance

(e) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

Note 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permit

(f) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Appendix 1—Excerpt from an FAA Memorandum to Director-Airworthiness and Technical Standards of ATA, dated March 20, 1992

"(1) Indication System:

(a) The indication system must monitor the closed, latched, and locked positions, directly.

- (b) The indicator should be *amber* unless it concerns an outward opening door whose opening during takeoff could present an immediate hazard to the airplane. In that case the indicator must be *red* and located in plain view in front of the pilots. An aural warning is also advisable. A display on the master caution/warning system is also acceptable as an indicator. For the purpose of complying with this paragraph, an immediate hazard is defined as significant reduction in controllability, structural damage, or impact with other structures, engines, or controls.
- (c) Loss of indication or a false indication of a closed, latched, and locked condition must be improbable.
- (d) A warning indication must be provided at the door operators station that monitors the door latched and locked conditions directly, unless the operator has a visual indication that the door is fully closed and locked. For example, a vent door that monitors the door locks and can be seen from the operators station would meet this requirement.
- (2) Means to Visually Inspect the Locking Mechanism:

There must be a visual means of directly inspecting the locks. Where all locks are tied to a common lock shaft, a means of inspecting the locks at each end may be sufficient to meet this requirement provided no failure condition in the lock shaft would go undetected when viewing the end locks. Viewing latches may be used as an alternate to viewing locks on some installations where there are other compensating features.

(3) Means to Prevent Pressurization:

All doors must have provisions to prevent initiation of pressurization of the airplane to an unsafe level, if the door is not fully closed, latched and locked.

(4) Lock Strength:

Locks must be designed to withstand the maximum output power of the actuators and maximum expected manual operating forces treated as a limit load. Under these conditions, the door must remain closed, latched and locked.

(5) Power Availability:

All power to the door must be removed in flight and it must not be possible for the flight crew to restore power to the door while in flight.

(6) Powered Lock Systems:

For doors that have powered lock systems, it must be shown by safety analysis that inadvertent opening of the door after it is fully closed, latched and locked, is extremely improbable."

Issued in Renton, Washington, on February 10, 2000.

Donald L. Riggin,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service. [FR Doc. 00–3690 Filed 2–15–00; 8:45 am]

BILLING CODE 4910-13-U