

**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****14 CFR Parts 119, 121, 129, 135, and 183**

[Docket No. FAA-1999-5401; Amendment Nos. 119-6, 121-284, 129-34, 135-81, and 183-11]

RIN 2120-AE42

**Aging Airplane Safety**

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

**ACTION:** Final rule; disposition of comments.

**SUMMARY:** This action adopts the interim final rule published on December 6, 2002, as a final rule with changes. The IFR imposed statutory requirements from the Aging Aircraft Safety Act of 1991 for certain airplanes to undergo inspections and records reviews after their 14th year in service and at specified intervals after that. Also, the rule imposed a requirement to include supplemental inspections by specified deadlines in the maintenance programs for these airplanes. With this action, the FAA responds to comments to the IFR, further clarifies parts of the rule language, and substantially revises the supplemental inspection requirements.

**DATES:** The interim final rule became effective December 8, 2003. This final rule becomes effective March 4, 2005.

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**SUPPLEMENTARY INFORMATION:****Availability of Rulemaking Documents**

You can get an electronic copy using the Internet by:

- (1) Searching the Department of Transportation's electronic Docket Management System (DMS) Web page (<http://dms.dot.gov/search>);
- (2) Visiting the Office of Rulemaking's Web page at <http://www.faa.gov/avr/arm/index.cfm>; or
- (3) Accessing the Government Printing Office's Web page at <http://www.gpoaccess.gov/fr/index.html>.

You can also get a copy 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. Make sure to identify the amendment number or docket number of this rulemaking.

Anyone can search the electronic form of comments to any of our dockets using the name of the individual who sent the comment. You can also search by the person who signed the comment if, for example, an association, business, or labor union, sent the comment. You may review DOT's complete Privacy Act statement in the **Federal Register** published on April 11, 2000 (Volume 65, Number 70; Pages 19477-78), or you may visit <http://dms.dot.gov>.

**Small Business Regulatory Enforcement Fairness Act**

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**Authority for This Rulemaking**

The FAA's authority to issue rules regarding 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 promulgated under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, General requirements and Section 44717, Aging aircraft. Under section 44701 the Administrator is charged with prescribing "regulations and minimum standards in the interest of safety for inspecting, servicing, and overhauling aircraft, aircraft engines, propellers, and appliances." Under section 44717 the Administrator is charged with prescribing "regulations that ensure the continuing airworthiness of aging aircraft." In accordance with those regulations the Administrator must "make inspections, and review the maintenance and other records, of each aircraft an air carrier uses to provide air transportation that the Administrator decides may be necessary to enable the Administrator to decide whether the aircraft is in a safe condition and maintained properly for operation in air transportation." These inspections and reviews "shall be carried out as part of each heavy maintenance check of the aircraft conducted after the 14th year in which the aircraft has been in service."

This regulation is within the scope of section 44701 since it establishes

requirements and minimum standards for the inspection of aging aircraft and establishes requirements for the inclusion of supplemental inspections in aircraft maintenance programs. Additionally, the regulation specifically responds to the statutory mandate prescribed in section 44717 by establishing a requirement for certain airplanes to undergo inspections and records reviews after their 14th year in service and at specified intervals thereafter.

**Background**

This final rule adopts the interim final rule (IFR) published at 67 FR 72726 on December 6, 2002, as a final rule with changes. The provisions of the IFR became effective on December 8, 2003. The rule resulted from requirements placed on the FAA by the Aging Aircraft Safety Act (AASA) of 1991. Section 402 of the AASA requires the Administrator to "initiate a rulemaking proceeding for the purpose of issuing a rule to assure the continuing airworthiness of aging aircraft."

Specifically, the AASA requires "the Administrator to make such inspections and conduct such reviews of maintenance and other records of each aircraft used by an air carrier to provide air transportation as may be necessary to determine that such is in a safe condition and is properly maintained for operation in air transportation." Further, the AASA states an air carrier must show, as part of the inspection, "that maintenance of the aircraft's structure, skin, and other age-sensitive parts and components have been adequate and timely enough to ensure the highest degree of safety." Title 14, Code of Federal Regulations (14 CFR) §§ 121.368, 129.33, 135.422, and 135.423 of the IFR cover the AASA's requirements for airplane inspections and records reviews.

Additionally, the FAA found it necessary to initiate a consistent approach to preserve the continued airworthiness of the airplane structure that is susceptible to fatigue cracking that could contribute to a catastrophic failure. Sections 121.370a, 129.16, and 135.168 of the IFR include supplemental inspection requirements that address the continued airworthiness of this type of airplane structure. These sections require operators to use damage-tolerance-based inspections and procedures to maintain the continued airworthiness of the affected airplane structure. However, certain operators of airplanes initially certificated with nine or fewer passenger seats and used in scheduled operations could use service-history-

based inspections to meet these requirements. The damage-tolerance (DT) based inspections and procedures required in these sections are based on the same methodology identified in 14 CFR 25.571 (Damage-tolerance and fatigue evaluation of structure). This methodology has been used successfully to develop supplemental structural inspection programs (SSIP) and repair assessment guidelines (RAGs) for pressurized fuselages. Therefore, the FAA has determined that this methodology is an acceptable approach to maintaining the continued airworthiness of the affected airplane structure.

#### *IFR Revised by Technical Amendment*

The FAA published a technical amendment (68 FR 69307) on December 12, 2003, to the Aging Airplane Safety IFR. This amendment made minor technical changes to the IFR.

#### *Aging Airplane Program Activities*

The FAA's Aging Airplane Program came about to address airplanes operated beyond their original design service goals, the 1988 Aloha B-737 accident, and the Aging Aircraft Safety Act of 1991. When the program first started, the goal was to preserve the structural integrity of the aging airplane fleet by requiring structural modifications and inspections to address certain design deficiencies that could lead to airplane structural damage. Following the 1996 TWA 800 B-747 accident, the FAA expanded the Aging Airplane Program to include non-structural systems. The goal was to address requirements for design, inspection, repair, and maintenance of fuel tanks and electrical wiring on aging airplanes. Efforts related to Aging Airplane Program initiatives have resulted in the issuance of airworthiness directives (ADs) and rulemaking actions. Such actions include this Aging Airplane Safety rule, which addresses airplane structure.

#### *The FAA's Review of the Aging Airplane Program*

Because of issues raised by industry about the effectiveness and efficiency of the Aging Airplane Program, the FAA recently performed a comprehensive review of it. The goals of this review were to—

- Identify how to most effectively align rulemaking initiatives to ensure there are no overlapping or redundant requirements;
- Ensure that design approval holder data supporting operator compliance are available and timely; and,

- Ensure the resulting maintenance requirements allow operators to be more efficient in revising their maintenance programs when addressing multiple, similar initiatives.

The Aging Airplane Safety IFR was among the rules and proposals included in the FAA's aging program review. The FAA determined that better aligning certain compliance dates in existing rules and pending proposals and making certain substantive changes to them would increase their cost-effectiveness without compromising safety. As a result, the FAA has made changes to the Aging Airplane Safety IFR and has clarified parts of the rule language in the IFR. Also, the FAA has made changes to other aging program rules.

Additionally, the FAA tasked the Aviation Rulemaking Advisory Committee (ARAC) to develop damage tolerance (DT) guidelines to support compliance with §§ 121.370a and 129.16 of the Aging Airplane Safety rule in response to comments to the IFR (69 FR 26641, May 13, 2004). Further, based on comments to the IFR, the FAA is considering proposing a new rule to require type certificate and supplemental type certificate holders to develop DT programs that will support compliance with the Aging Airplane Safety final rule.

On July 30, 2004, the FAA published a final rule with request for comments entitled, Fuel Tank Safety Compliance Extension and Aging Airplane Program Update, (69 FR 45936). You may refer to that document for more details about the FAA's review of the Aging Airplane Program initiatives and the results of the review.

#### *Changes to the IFR*

Based on the FAA's recent review of the Aging Airplane Program and the comments to the Aging Airplane Safety IFR, we believe certain revisions and clarifications to the IFR are proper. These changes are intended to retain the rule's safety objective while reducing the burden on the industry. The major changes, which pertain to the supplemental inspections requirements in §§ 121.370a, 129.16, and 135.168 are listed below and are described in detail later in this preamble.

- Removal of certain DT-based supplemental inspection requirements for airplanes operated under parts 121 and 129.
- Extension of the compliance date and narrowing of the airplane applicability for the DT-based supplemental inspection requirements that remain in the final rule for

airplanes operated under parts 121 and 129.

- Removal of the supplemental inspection requirements for part 135 airplanes.
- Clarification of the type of airplane structure the supplemental inspection requirements cover.

#### **Discussion of Comments**

The FAA sought and received comments to the interim final rule (IFR).

#### **General Comments**

*Comment:* Several commenters express concern the FAA did not seek recommendations from the ARAC to develop the IFR. The commenters ask the FAA to explain why the agency did not seek ARAC's advice. One commenter wants the FAA to refer the IFR to the ARAC for final review and completion so the rule could more easily be harmonized with foreign Civil Aviation Authorities' (CAAs) requirements.

*FAA Response:* This final rule is based on a congressional mandate imposed by the Aging Aircraft Safety Act (AASA) of 1991. Therefore, rather than seeking recommendations, the FAA used the terms of the AASA to develop the Aging Airplane Safety rule. However, based on requests from the Air Transport Association (ATA) and others from the industry, the FAA recently tasked ARAC (69 FR 26641, May 13, 2004) to develop guidelines that would support industry's compliance with §§ 121.370a and 129.16 of this final rule. Since Congress mandated the terms of the Aging Airplane Safety rule, the FAA believes it would not have been proper to refer the rule to ARAC, solely to harmonize it with foreign CAAs' actions.

#### **Airplane Inspections and Records Reviews**

*Comment:* A commenter suggests the FAA modify the recordkeeping requirements of the IFR.

*FAA Response:* The commenter did not provide specific recommendations about how to modify the recordkeeping requirements of the rule. However, as part of the FAA's review of the Aging Airplane Program, the FAA withdrew the Corrosion Prevention and Control Program (CPCP) proposed rule (69 FR 50350, August 16, 2004). Therefore, the FAA has amended the Aging Airplane Safety IFR to remove from §§ 121.368, 129.33, and 135.422, the requirement for operators to provide the current status of CPCPs as a separate item. Instead, they will provide this information as part of the requirement for the current inspection status of the airplane.

However, for those CPCPs mandated by airworthiness directive (AD), they will provide it as part of the requirement for the current status of ADs.

In addition, the FAA has removed the requirement from §§ 121.368, 129.33, and 135.422 of this final rule for operators to provide the current status of the inspections and procedures required under the supplemental inspection portion of the IFR. The FAA removed this requirement because under the terms of the final rule, operators must provide this information as part of the current inspection status of the airplane.

*Comment:* One commenter requests the FAA include a definition for “age-sensitive parts” in 14 CFR part 1.

*FAA Response:* For purposes of this rule, the FAA considers this term to mean those structural parts and components that are susceptible to fatigue cracking that could contribute to a catastrophic failure. Although the FAA has not defined age-sensitive parts in 14 CFR part 1, we will include this definition in the related advisory material.

*Comment:* One commenter requests the FAA amend the regulation to allow the use of Organizational Designated Airworthiness Representatives (ODAR) to perform the inspections and records review required by § 121.368. Several commenters address the use of Designated Airworthiness Representatives (DARs) to perform the required inspections and records reviews. The commenters are concerned with access to enough inspectors to perform the necessary inspections. One commenter states that to carry out the required inspections and records review, every air carrier will need at least two or three DARs. The commenter says this would require a greater commitment by the FAA to qualify many more DARs than they have in the past. Another commenter states they would need access to a DAR or Principal Maintenance Inspector (PMI) in the FAA’s London, United Kingdom, office to inspect their aircraft and review their records. The commenter requests the FAA clarify whether data obtained from this review would be acceptable to the FAA when transferring an aircraft to the U.S. registry.

*FAA Response:* The FAA does not believe it is necessary to include specific language in the rule allowing the use of ODARs to perform inspections and records review. Each operator may decide, based on individual need, whether they will use designees or have the FAA perform the airplane inspections and records review this rule requires. The final rule does

not mandate the use of DARs or ODARs. The Administrator already has the authority under § 183.33 (Designated Airworthiness Representative) to designate certain persons or organizations to perform these functions.

To aid the inspections by existing DARs, the FAA has updated the guidance material in FAA Order 8100.8B, Designee Management Handbook, and is providing workshops for its designees. The intent is to maximize the number of DARs available to conduct the inspections and records reviews. The FAA remains committed to the timely issuance of designee authorizations to properly qualified persons.

The comment about whether “data” obtained during airplane inspections and records review would be acceptable when transferring an aircraft to the U.S. registry is unclear. For part 129 operators, this final rule only applies to U.S.-registered airplanes. If the commenter transfers a non-U.S.-registered airplane to the U.S. registry, the airplane would have to meet all FAA operational and certification requirements on transfer, including the requirements of this final rule.

*Comment:* One commenter, who expresses concern for air safety, agrees the rule is needed and asks who would conduct the airplane inspections.

*FAA Response:* The FAA’s airworthiness inspectors and designees will conduct the airplane inspections and records reviews required by this rule.

*Comment:* Two commenters discuss examining wire during airplane inspections and records reviews. One commenter says wiring is often overlooked in the inspection process. A second commenter says it is necessary to determine a timetable for wire and cable bundles to be inspected and replaced.

*FAA Response:* Congress passed the Aging Aircraft Safety Act of 1991 to address aging aircraft structural concerns resulting from the April 1988 accident involving a B-737. The Aging Airplane Safety rule, which resulted from the Act, addresses only structural concerns. The FAA is evaluating future rulemaking actions that may address other airplane systems such as wiring.

*Comment:* Some commenters say the rule is unnecessary. Several commenters believe the rule does not provide added safety benefits. One commenter says the FAA can achieve the same results without rulemaking by simply adding increased inspections to C and D checks. One commenter says the IFR

duplicates existing regulations, is unevenly applied, and is inconvenient.

*FAA Response:* The Aging Aircraft Safety Act (AASA) of 1991, as codified in Section 44717 of Title 49 U.S.C., directs the Administrator to “make inspections and review the maintenance and other records of each aircraft an air carrier uses to provide air transportation.” The FAA issued this rule to comply with this statutory mandate. The rule helps ensure the continued structural airworthiness of airplanes that operate beyond their original design service goals. The inspection and records review requirements in this rule are not intended to increase the number of inspections the operator performs. The FAA will perform the airplane inspections and records reviews required by this rule during scheduled maintenance.

*Comment:* Some commenters express concern the term “highest degree of safety” is vague and is open to interpretation. One commenter says while this term appears in the Federal Aviation Act of 1958, it has never appeared in a rule until now. The commenter believes the FAA should interpret the Act rather than simply repeat the phrase in the rule.

*FAA Response:* The FAA’s use of the term, “highest degree of safety,” in the Aging Airplane Safety rule is based on the statutory language contained in the AASA of 1991, subsequently codified as section 44717 of title 49 U.S.C. For purposes of this rule, the FAA considers that operators will have met the “highest degree of safety” by complying with their FAA-approved maintenance program.

The maintenance programs for those airplanes affected by the inspections and records review requirement of this rule may include certain elements of the FAA’s Aging Airplane Program listed below:

- Supplemental Structural Inspection Programs.
- Corrosion Prevention and Control Programs.
- Structural Modification Programs.
- Repair Assessment Programs.
- Inspections and procedures identified in the Airworthiness Limitation section of the Instructions for Continued Airworthiness.

• Damage-tolerance-based inspections and procedures required by §§ 121.370a and 129.16 of this rule.

The first five elements have been incorporated into most large transport category airplane maintenance programs. There are some airplanes subject to the inspections and records reviews requirement that do not include

some of these elements. Maintenance programs that include any of these elements will be subject to the airplane inspections and records review provisions of this rule.

According to the IFR, operators of certain model airplanes are not required to incorporate damage-tolerance-based inspections and procedures in their maintenance programs until December 5, 2007. This final rule extends this compliance date to December 20, 2010. As a result, damage-tolerance-based inspections and procedures, as required by §§ 121.370a and 129.16, are not required to be incorporated into maintenance programs before this date.

As explained later in this preamble under "Changes to the Interim Final Rule" heading, the FAA has removed the DT requirements for certain airplanes operated under parts 121, 129, and 135. However, the airplane inspections and records review requirement still applies to these airplanes.

*Comment:* One commenter states the requirements for the extent of inspections and records reviews are not clearly defined, which may lead to inconsistent interpretation and application.

*FAA Response:* The FAA intends to perform structural spot inspections of each airplane and review those records needed to determine compliance with §§ 121.368(d), 129.33(c), 135.422(d) of this final rule. The FAA has provided the following guidance to aid compliance with the airplane inspections and records reviews requirements in the rule:

- Notice 8300.113, Conducting Records Reviews and Aircraft Inspections Mandated by the Aging Aircraft Rules, dated November 25, 2003, which has been incorporated into FAA Order 8300.10, Airworthiness Inspector's Handbook. This guidance includes information on scheduling inspections and records review to minimize the impact on operators' maintenance schedules.

- Advisory Circular (AC 120-84) Aging Airplane Inspections and Records Reviews, provides guidance for operators to comply with the requirements of this rule.

The FAA believes providing guidance for our inspectors and for the industry will help reduce inconsistencies in interpreting and complying with the rule.

*Comment:* A commenter recommends the records review of ADs and modifications on structures that are not easily "de-modified," such as Boeing 747 section 41, be waived after the first inspection. For repetitive inspections,

the commenter suggests the review be required only on the records collected since the last inspection.

*FAA Response:* Under the airplane inspections and records review requirements, the FAA does not intend to inspect an airplane such that an operator would have to "de-modify" the structure to gain access to certain areas. These areas include ones modified by AD, supplemental type certificate (STC), FAA approved service bulletin, or FAA approved repair. However, if in complying with §§ 121.370a and 129.16 deficiencies are identified in a repair, alteration, or modification, or in the inspection procedures, removal of a previously modified structure may be required.

*Comment:* A commenter says the FAA's Flight Standards office has for many years conducted thorough records reviews and on-site spot inspections of airplanes during heavy maintenance visits. The commenter wants the FAA to allow credit for these prior records reviews and inspections either in the regulation or in the guidance material. The commenter says a certificate holder's PMI could be responsible for determining the extent of credit to give on a particular airplane.

*FAA Response:* Operators must provide the FAA with the current inspection status of the airplane as required by §§ 121.368(d), 129.33(c), and 135.422(d). To meet the requirement of these sections, the FAA intends to conduct the specified inspections and records review during scheduled maintenance visits. The FAA also intends to perform structural spot inspections of each airplane and review those records necessary to determine compliance with this rule. The FAA will consider the scope and timeframe of prior inspections to determine the extent to which those prior inspections can help the operator meet the inspections and records reviews mandated by this rule.

*Comment:* One commenter believes the requirement for a fixed repeat inspection interval not to exceed 7 years required by § 121.368(b) should be removed. Further, any subsequent inspection requirements should be met based on an agreement between the operator and the PMI. This would allow the operator and the PMI to agree on the schedule for follow-up inspections. The commenter says this is particularly true for those fleet types where the FAA-approved maintenance programs are segmented. Such programs do not provide for 14-day downtimes or only provide for 14-day downtimes at intervals beyond 7 years. Thus, the commenter recommends the following

wording at the end of subparagraphs (1), (2), and (3) of § 121.368(b): "\* \* \* and thereafter at intervals approved by the FAA principal maintenance inspector (PMI) having cognizance for the operator."

*FAA Response:* The FAA selected a 7-year interval for repeat inspections to provide time for operators to schedule the inspections and records review. Such scheduling would take place during a "C" check or segment thereof, "D" check or segment thereof, or other scheduled maintenance visits where structural inspections are done. The FAA believes a 7-year repeat interval provides scheduling flexibility for the operator to meet the requirements of the rule. Also, §§ 121.368(c), 129.33(b), and 135.422(c) of the rule authorize the Administrator to approve up to a 90-day extension beyond the 7-year interval required by §§ 121.368(b), 129.33(a), and 135.422(b). The FAA's PMI may approve this extension for the Administrator. The FAA agrees the operator and PMI should work together to agree on the specific time within the 7-year repeat intervals to conduct the required inspections and records review.

*Comment:* Several commenters express concern about the inspection intervals. One commenter states the repeat interval for inspections will result in maintenance program scheduling constraints. The commenter says meeting the 7-year requirement in the rule would result in 118 added heavy maintenance visits (HMV) because their HMVs on B-737 and B-767s are scheduled at 8-year intervals. In general, the commenter believes the timeframes for inspections and records reviews in the rule are out of sync with their particular maintenance program requirements. Another commenter states that certificate holders and FAA inspectors should work together to schedule the required inspections to coincide with existing inspection schedules. The commenter adds the FAA should quickly publish guidance that removes any doubt about the effect of the rule on heavy maintenance check (HMC) schedules.

*FAA Response:* The AASA states the records reviews and inspections will be carried out as part of the operator's HMC. To comply with the statute, the FAA considers an HMV or HMC to consist of a "C" check or segment thereof, a "D" check or segment thereof, or other scheduled maintenance where structural inspections are accomplished. The FAA agrees the required inspections and records review should coincide as much as possible with operators' existing maintenance

schedules. The FAA does not believe the rule will result in added HMVs or HMCs since the FAA intends to coordinate the airplane inspections and records reviews to coincide with scheduled HMVs and HMCs. To provide guidance for the conduct of the inspections and records reviews, the FAA published Notice 8300.113 and AC 120-84, discussed earlier in this preamble.

*Comments:* A commenter suggests the FAA reduce the inspection intervals from 14 years to 8 years and conduct periodic spot checks of 20 percent of the airplanes during the inspection intervals.

*FAA Response:* The statute requires inspections and records reviews of each airplane to "be carried out as part of each HMC of the aircraft conducted after the 14th year in which the aircraft has been in service." To meet this requirement, the FAA must inspect each airplane. However, the FAA intends to conduct a spot inspection of each airplane. The FAA established the first and repeat intervals at which inspections and records reviews will be done. The FAA set the first inspections based on the age of the airplane with the oldest airplanes being scheduled first. The repeat intervals for all airplanes, regardless of age, is set at 7 years, following completion of the first inspection.

*Comment:* One commenter believes § 121.368(d) should request a listing of operational limits as part of the airplane records. This commenter also says aging aircraft rules require full compliance with their terms on transfer of an aircraft. Therefore, a statement about full compliance on transfer should be included in the rule.

*FAA Response:* The FAA does not require a listing of "operational limits" as part of the airplane records required in § 121.368. However, the FAA does require that operators make available records that contain the current status of life-limited parts of the airframe.

The FAA has not included a requirement that an operator provide a statement that an airplane complies with the provisions of this rule at the time of transfer. Operators show compliance with the airplane and records availability requirements of the rule by making affected airplanes that meet the stated time in service and their associated records available to the Administrator within the prescribed interval. If the commenter transfers an airplane from a foreign country to the U.S. registry, the airplane will have to meet all FAA operational and certification requirements on transfer,

including the requirements of this final rule.

*Comments:* Several commenters state § 121.368 duplicates current regulations, especially the provisions of § 121.380, which also relate to recordkeeping requirements. In support of their comments, they say most operators of large transport category airplanes have developed elaborate maintenance recordkeeping systems under § 121.380. They say these systems duplicate the requirements under § 121.368. They recommend the FAA revise the language in § 121.368(d) that states "\* \* \* together with records containing the following information" to read "\* \* \* together with the following records or those specified in § 121.380."

One commenter contends the FAA should modify the rule or add in the advisory circulars a statement saying compliance with § 121.380 is an alternate way to comply with § 121.368. This same commenter states § 121.380 is more comprehensive than § 121.368, especially about airworthiness directives. Existing § 121.380(a)(2)(vi) requires records to include "\* \* \* the current status of applicable airworthiness directives, including the date and methods of compliance, and, if the airworthiness directive involves recurring action, the time and date when the next action is required." However, for Airworthiness Directives, § 121.368(d)(8)(i) requires "current status of the following, including the method of compliance."

*FAA Response:* The FAA agrees that some of the recordkeeping requirements of § 121.368(d) are also found in § 121.380. However, § 121.368(d) contains added recordkeeping requirements not found in § 121.380. These added requirements allow the FAA to determine compliance with the Aging Airplane Safety rule. For example, § 121.368(d) requires records containing information on total years in service of the airplane and total flight cycles of the airframe. Because § 121.368(d) contains requirements not contained in § 121.380, compliance with § 121.380 by itself cannot constitute compliance with § 121.368(d). Operators can show compliance to both §§ 121.368(d) and 121.380 within a single recordkeeping system that is acceptable to the FAA. This removes the need to repeat recordkeeping for those requirements found in § 121.368(d) and § 121.380. The FAA included guidance in advisory circular AC 120-84, Aging Airplane Inspections and Records Reviews, to address the records requirements. The FAA also has included guidance in Notice 8300.113, Conducting Records Reviews and

Aircraft Inspections Mandated by the Aging Aircraft Rules, which has recently been incorporated into FAA Order 8300.10 to address these requirements.

The FAA agrees that compliance with § 121.380(a)(2)(vi) should satisfy the recordkeeping requirements contained in § 121.368(d)(8). Therefore, we have revised § 121.368(d)(8) to match the requirements in § 121.380(a)(2)(vi).

*Comments:* A commenter says the provisions of § 119.59 already provide adequate authority to carry out aircraft inspections and records reviews required by § 121.368.

*FAA Response:* The FAA agrees. Section 119.59(a) states "at any time or place, the Administrator may conduct an inspection or test to determine whether a certificate holder under this part is complying with Title 49 of the United States Code, applicable regulations, the certificate, or certificate holder's operations specifications." The Aging Aircraft Safety Act, however, requires the Administrator to conduct specific inspections that before the Act were part of the FAA's discretionary oversight.

*Comments:* One commenter notes some major repairs have no repetitive inspections associated with them and recommends the FAA amend § 121.368(d)(10) to read: "A report of major repairs which require supplemental inspections, and the inspection status of those repairs."

*FAA Response:* The FAA disagrees. Knowing the inspection status of all major repairs, including those repairs that have no damage-tolerance-based repetitive inspection requirement, is an important part of maintaining the continued airworthiness of aging airplanes. The inspection and records review required by § 121.368(d)(10) will help ensure major repairs and changes to major repairs are properly recorded and their inspection status verified. There are past instances where modification of major repairs degraded the airplane's structural integrity to the point of making it no longer airworthy. In some cases, it was determined the current inspections were not adequate to address the modifications. In other cases, where no inspections were required for the original modification, it was determined that repetitive inspections were necessary to ensure the airworthiness of the modified repair. Therefore, the value of the inspection and records review required by § 121.368(d)(10) is to verify the condition of all major repairs and identify areas where more inspections may be required.

### Advisory Material and Training for Aging Airplane Inspections and Records Reviews

*Comment:* Several commenters express concern about whether enough training, guidance material, and trained inspectors would be available to support compliance with the rule. One commenter suggests if guidance materials and trained inspectors are not ready by December 8, 2003, the compliance date specified in § 121.368, the FAA should index the 48-month inspection and records review completion window based on the availability of trained inspectors. One commenter requests the FAA open DAR and PMI training programs to non-U.S. operators. Another commenter asks the FAA to extend this compliance date to the date the FAA completes training for FAA inspectors and DARs, unless the guidance material is issued with the final rule. One commenter says it is especially important to provide training and guidance material to operators during the initial period of compliance with this rule.

*FAA Response:* The FAA agrees that timeliness of training is important to meeting the deadlines in the rule. Therefore, the FAA completed workshops for its flight standards airworthiness inspectors and is providing workshops for its designees (DARs and ODARs). The intent of these workshops is to ensure that FAA airworthiness inspectors, DARs, and ODARs use uniform procedures when conducting their inspections and records reviews. A foreign air carrier may hire an FAA designee to perform the airplane inspections and records review required by the Aging Airplane Safety rule. The FAA does not intend to develop a training course specifically for air carriers. However, the FAA has developed an AC 120-84, Aging Airplane Inspections and Records Reviews, to help operators affected by the Aging Airplane Safety rule.

Additionally, the FAA published guidance in Notice 8300.113, Conducting Records Reviews and Aircraft Inspections Mandated by the Aging Aircraft Rules. The FAA's training preparations and published guidance allowed the FAA to begin inspections and records reviews shortly after the effective date of the IFR.

The FAA is adopting an approach that enables the existing FAA inspector workforce to comply with their obligations under this rule. The approach involves the use of spot inspections and records reviews and coordinating with operators to perform

these inspections and reviews during scheduled maintenance.

*Comment:* A commenter requests clarification on the applicability of Handbook 8300.10, volume 3, chapter 2, to on-site inspections.

*FAA Response:* The FAA has reviewed volume 3, chapter 2 of FAA Order 8300.10, Airworthiness Inspector's Handbook, which discusses the conduct of structural spot inspections of an operator's aircraft, to determine the applicability of that chapter to the airplane inspections and records review requirements. The FAA found that this Order did not provide enough guidance to conduct inspections and record reviews required under the rule. Therefore, the FAA issued Notice 8300.113 on November 25, 2003, to provide added guidance to inspectors to conduct these inspections and records reviews.

*Comment:* Several commenters discuss draft AC 120-84, which was released concurrently with the IFR. In general, the commenters express concern that the AC provides no added guidance to operators. The commenters feel that operators are inadequately prepared for the inspections and reviews required under the IFR.

*FAA Response:* Based on comments received, the FAA has revised AC 120-84, Aging Airplane Inspections and Records Reviews, to be consistent with the final rule. The FAA has provided more guidance in the AC on conducting airplane inspections and records reviews. In addition, the FAA has changed Order 8300.10, Airworthiness Inspector's Handbook, to provide standardized guidance to FAA inspectors when conducting airplane inspections and records reviews.

*Comment:* A commenter requests the FAA clarify whether AC 120-84 is intended to address structural issues only.

*FAA Response:* AC 120-84 applies to airplane structures only.

*Comment:* A commenter notes that AC 120-84 contains an inaccurate reference to § 121.212, which does not exist.

*FAA Response:* The FAA agrees with the commenter and has made the correction in the final version of AC 120-84.

### Supplemental Inspections

To aid understanding of the discussion about repairs, alterations, and modifications (RAMs), which appears below, the FAA offers the following explanation: The industry has used the terms "alteration" or "modification" synonymously to define a design change to an airplane.

Therefore, the FAA uses both terms to avoid potential misinterpretation of the intent of these terms.

*Comment:* A commenter suggests the FAA withdraw the supplemental inspection requirement and task the ARAC to provide advice in this area. Another commenter suggests the FAA extend the compliance date to 2010 since the FAA issued the notice of proposed rulemaking in 1999.

*FAA Response:* The FAA determined that it is no longer necessary to impose the DT requirements of this rule on the number of airplanes mandated in the IFR. Therefore, this final rule only imposes DT requirements on airplanes that are—

- Transport category;
- Turbine powered;
- Have a type certificate issued after January 1, 1958; and
- Have, because of original type certification or later increase in capacity, a maximum type-certificated passenger seating capacity of 30 or more or a maximum payload capacity of 7500 pounds or more.

The FAA determined that damage-tolerance-based inspections and procedures are an effective way to meet the AASA's requirement for preserving the continued airworthiness of an airplane's structure. AC-25.571-1C, Damage Tolerance and Fatigue Evaluation of Structure, which the ARAC helped develop, is an acceptable means of compliance with the DT-based supplemental inspection requirements for the baseline structure (type design) of an airplane. The FAA tasked the ARAC on May 13, 2004, to develop guidelines to support the industry's compliance with the rule's requirements to address repairs, alterations, and modifications. Further, the FAA has extended the compliance date for operators to have damage-tolerance-based inspections and procedures in their airplane maintenance programs from December 5, 2007, to December 20, 2010. This extension should allow enough time for the ARAC to perform the tasking and for operators to comply with the supplemental inspection requirements of the final rule.

*Comment:* A commenter asks whether the FAA would extend the December 20, 2010, compliance date for those parts of the IFR that already contain this compliance date.

*FAA Response:* The FAA has removed from the rule the supplemental inspection requirements related to design-life goal airplanes, airworthiness directive-mandated service-history-based inspections, and multiengine airplanes with nine or fewer passenger seats. These requirements had a

compliance date of December 20, 2010. However, as noted earlier, the FAA has removed all part 135 supplemental inspection requirements from this rule. Also, the FAA has extended the compliance date for the remaining supplemental inspection requirements under parts 121 and 129 from December 5, 2007, to December 20, 2010.

*Comment:* One commenter states for aircraft transferring from country to country, it is not clear how the life limits (design-life goal) would be interpreted.

*FAA Response:* As noted earlier, the FAA has removed the design life goal requirement from the rule.

*Comment:* One commenter states the FAA has not proven that a DT inspection program is any more effective than the current programs operators use for their small airplane fleets. The commenter suggests the FAA use another method for 10- to 19-seat, nontransport-category airplanes.

*FAA Response:* Based on industry comments and the FAA's reassessment of the IFR and the Aging Airplane Program, the FAA narrowed the scope of airplane applicability in §§ 121.370a and 129.16 to impose DT requirements on transport category, turbine powered airplanes with a type certificate issued after January 1, 1958, that as a result of original type certification or later increase in capacity, have—

- A maximum type-certificated passenger seating capacity of 30 or more; or
- A maximum payload capacity of 7,500 pounds or more.

As a result, the final rule does not apply to the airplanes the commenter references.

*Comment:* A commenter notes that currently DT and safe-life inspections are acceptable to show compliance with maintenance requirements. However, it appears that under the IFR, the FAA will only accept DT-based maintenance programs after December 2007. The commenter suggests the IFR clearly state that parts certified as safe-life are exempt from the requirements of § 121.370a. Another commenter notes that several aircraft, such as the EMB-110, were designed using safe-life criteria, which were required at the time of certification. The commenter states that aircraft not designed using DT techniques will not have accessibility to all areas that must be inspected under a Damage Tolerance Inspection Program (DTIP). The commenter suggests that forcing DT inspections could result in unintended damage to the structural integrity of the aircraft.

*FAA Response:* The intent of the Aging Airplane Safety rule is to apply

the DT and fatigue evaluation of structure consistent with the evaluation prescribed in § 25.571. Section 25.571(c) includes provisions for the evaluation of safe-life structures when the applicant determines the DT requirements of § 25.571(b) are impractical for a particular structure. For purposes of this rule, damage-tolerance-based inspections and procedures will not be required for an airplane component certified as a safe-life design (e.g., landing gear) and where the application of the DT requirements of § 25.571(b) are determined to be impractical.

*Comment:* Several commenters ask the FAA to clarify the extent to which a DT assessment for repairs, alterations, and modifications (RAMs) beyond the fuselage pressure boundary will be required. One of the commenters says the industry held 29 meetings over 7 years to develop a process and procedure to assess existing repairs. They found that a rational, technical basis is needed only to assess the DT of fuselage pressure boundary repairs. Also, the commenter states while the IFR indicates damage-tolerance-based maintenance programs must be in place by December 2007, the IFR does not say what this means. The commenter recommends two options regarding § 121.370a. In option 1, the commenter states the FAA should withdraw § 121.370a and the associated draft AC 91-56B (regarding airplanes >75,000 lbs maximum takeoff weight (MTOW)). Additionally, the commenter requests that the FAA task the Aviation Rulemaking Advisory Committee (ARAC) with formulating the technical considerations and the rule and advisory language for developing a damage tolerance-based maintenance program for the primary structure of the airplane. In option 2, the commenter notes the FAA should remove the DT assessment of primary structural elements (PSEs) for RAMs discussion from the preamble to the IFR and the associated draft AC 91-56B, when re-published, and task ARAC to develop appropriate direction for the FAA.

One commenter also notes that significant gaps appear in the DT guidance materials original equipment manufacturers (OEM) provide for DT-based inspections and procedures.

Another commenter states the rule, with respect to RAMs made to non-ATA 53 (fuselage structure) PSEs, should not apply to aircraft certificated before amendment 25-45. The commenter further states that they are unaware of any fleet evidence of DT problems associated with a repair to non-ATA 53 PSEs. The commenter supports the ARAC's Airworthiness Assurance

Working Group's (AAWG) earlier recommendation on repair assessment that the scope of addressing repairs for DT on pre-amendment 25-45 aircraft should be confined to those repairs made only to the fuselage pressure boundary.

*FAA Response:* In 1992, the FAA and the AAWG surveyed large transport category airplane models to assess the status of repairs. In 1994, the AAWG requested manufacturers conduct a second survey on airplane repairs to validate the 1992 results. The surveys showed that the fuselage pressure boundary was the area most susceptible to structural damage and subsequent repairs. Therefore, in response to the AAWG's recommendations, the FAA issued the "Repair Assessment for Pressurized Fuselages" final rule (65 FR 24108, April 25, 2000).

In the preamble language to that rule, the FAA recognized, based on the AAWG's recommendations, that additional rulemaking may be needed to address repairs on the remaining primary structures. In addition, the preamble under the heading "Determining which Airplanes Should be Affected," states:

Those transport category airplanes that have been certificated to regulatory standards that include the requirements for damage-tolerance structure under § 25.571 are not included in this rulemaking action. These later requirements make it incumbent on the operating certificate holder to return the structure to the original certification basis by installing only those repairs that meet the airplane's damage-tolerance certification basis. The AAWG, in its final report on this subject, did recommend continued monitoring of repairs on newer airplanes, with the possibility of additional rulemaking if conditions warrant \* \* \* It was from this activity that the AAWG and the manufacturers recognized not only the need for a RAG document for each affected model, but a SRM updated to include the results of a damage-tolerance assessment.

As transport category airplanes continue to accumulate flight hours, they are increasingly susceptible to fatigue cracking and repairs. The FAA has determined that there is no technical basis for excluding any repaired airplane structure that is susceptible to fatigue cracking that could contribute to a catastrophic failure. Therefore, the FAA believes that repairs made to such structure that is outside the pressure boundary must be addressed as part of this final rule.

In an effort to support industry's compliance with the Aging Airplane Safety final rule, the FAA tasked ARAC (69 FR 26641, May 13, 2004) to make recommendations regarding the assessment of repairs beyond the

fuselage pressure boundary. We tasked ARAC to complete their work by December 18, 2009. In addition, the FAA recognizes that additional time is needed to implement the ARAC recommendations, which are related to guidelines for establishing DT-based inspections and procedures for RAMs, and for operators to incorporate DT-based inspections and procedures for RAMs into their maintenance programs. Therefore, the FAA has extended the DT-based supplemental inspection requirement compliance time in this final rule to December 20, 2010.

*Comment:* A commenter requests clarification on whether the FAA would accept a SSID program developed by the OEM as an alternate means of compliance with the supplemental inspection requirements.

*FAA Response:* The FAA will accept a SSID program for the baseline structure of an airplane developed by the OEM and approved by the FAA. If a SSID does not consider repairs, alterations, and modifications (RAMs), as required by this rule, the FAA would not accept it as a means to comply with this portion of the rule.

*Comment:* One commenter notes that the IFR will apply to pre- and post-amendment 25–45 airplanes; however, the accompanying guidance materials do not provide guidance for post-amendment 25–45 airplanes. Another commenter says the FAA should apply the December 2007 compliance date only to DTIPs for those areas where guidance materials have been developed.

*FAA Response:* The FAA believes adequate guidance exists for developing DT-based supplemental structural inspections for post-amendment 25–45 airplanes. The FAA recognizes that the guidance material for developing DT-based supplemental inspection programs that address repairs, alterations, and modifications may be inadequate to support compliance with this rule. Therefore, the FAA has tasked the ARAC to draft an advisory circular that contains guidance to support operators' compliance with §§ 121.370a and 129.16 for all affected airplanes. This guidance will support compliance with the final rule for the DT-assessment of repairs, alterations, and modifications made to aircraft structure that is susceptible to fatigue cracking that could contribute to a catastrophic failure.

The FAA also has decided to extend the compliance date for the DT-based supplemental inspection requirement from December 5, 2007 to December 20, 2010. This will allow the ARAC enough time to develop the guidance material

and will give the operators enough time to incorporate the DT requirements into their maintenance programs.

*Comment:* One commenter states that because "DTIP" is not concisely defined, the FAA should include a definition of this term in 14 CFR part 1. A second commenter expresses concern over the FAA's failure to clearly define "DTIP."

*FAA Response:* The term "damage-tolerance-based inspections and procedures" or DTIP as used in this rule refers to the actions needed to achieve damage tolerance as defined in AC 25.571–1C, Damage Tolerance and Fatigue Evaluation of Structure.

*Comment:* Several commenters express concern that operators will not be able to comply with the supplemental inspection requirements in the rule without data from the OEM. One commenter notes the IFR does not require OEMs to provide these data. This commenter suggests the FAA Transport Airplane Directorate standardize SSID ADs to aid industry compliance with DT-based inspections. Another commenter states they would not be able to comply with the rule because the manufacturer has not issued FAA-approved SSIDs for their airplane fleets.

*FAA Response:* The FAA is considering proposing a new rule to require type certificate and supplemental type certificate holders to develop damage tolerance inspection programs that will support compliance with the Aging Airplane Safety final rule. The FAA recognizes the need to standardize SSID ADs to aid industry's compliance with DT-based inspections and procedures.

*Comment:* One commenter notes that although the FAA has acknowledged difficulty in implementing ADs for structural repair manuals, the FAA does not present a solution to this problem in the IFR.

*FAA Response:* It is not the FAA's intent to mandate structural repair manuals by issuing ADs. While the commenter's specific concern is unclear, the FAA notes that we issue ADs to address known unsafe conditions on aircraft. OEM produced structural repair manuals are a part of the Instructions for Continued Airworthiness, and are used in carrying out operators' maintenance programs.

*Comment:* A number of commenters express concern about the design-life goals contained in Appendix N to part 121, Appendix B to part 129, and Appendix G to part 135 of the IFR. The commenters say the FAA may have used inconsistent approaches for determining

design-life goals and evaluating specific aircraft types.

*FAA Response:* The FAA acknowledges the concerns the commenters express. The FAA has removed the design-life goal requirements, which include part 121 Appendix N, part 129 Appendix B, and part 135 Appendix G, from the regulation. The design-life goals were intended as a transition measure for those models listed in the appendices. The IFR required inspection programs to be in place by December 5, 2007 for airplanes above their design-life goals. For those airplanes that had not reached their design-life goal, inspection programs were not required until December 20, 2010. Since the compliance date for the damage tolerance requirements has been extended to December 20, 2010, this transition period is no longer needed. Additionally, only three of the models listed in the appendices meet the new airplane applicability requirement of this final rule, and these three models are no longer operated under part 121.

*Comment:* One commenter states that under existing ADs and repair assessment guidelines for pressurized fuselages, the required repair assessments are linked to the number of flight cycles as a percentage of the design-life goal. The commenter recommends that for airplanes that have more than 14 years in service but relatively few flight cycles, the FAA should not require DT assessment of all repairs during the initial aging aircraft inspections.

*FAA Response:* The FAA recognizes that current repair assessment guidelines for pressurized fuselages required by § 121.370 are linked to the number of flight cycles as a percentage of the design-life goal. The FAA has tasked ARAC to develop guidelines that would support the industry's compliance with § 121.370a for repairs, alterations, and modifications made to the baseline primary structure. The FAA expects the new repair assessment guidelines will be consistent with those developed for § 121.370. Also, the FAA has extended the compliance date for damage-tolerance-based inspections and procedures to December 20, 2010. This will give the ARAC enough time to complete its work.

*Comment:* One commenter recommends the term "primary structure" be replaced with the term "Principle Structural Elements."

*FAA Response:* The FAA disagrees the term "primary structure" should be replaced with the term "Principle Structural Elements." This is mainly because of the different industry



interpretations for the term "Principle Structural Elements." However, the FAA believes it would be helpful to clarify the intent of this rule regarding the type of primary structure that requires damage-tolerance-based inspections and procedures. Therefore, the FAA provided this clarification in §§ 121.370a and 129.16 of this rule. The revised language applies to "airplane structure susceptible to fatigue cracking that could contribute to a catastrophic failure."

#### Advisory Material for Supplemental Inspections

*Comment:* Many commenters address the need for the FAA to provide more guidance material to assist operators in complying with the required DT-based inspections and procedures.

*FAA Response:* Guidance material is available in AC 25.571C for developing DT-based inspections for an airplane's baseline primary structure. As noted earlier, the FAA has tasked the ARAC to develop guidance material the operators can use to support their compliance with §§ 121.370a and 129.16 of this rule with respect to addressing repairs, alterations, and modifications.

*Comment:* One commenter says draft AC 91-56, Continued Structural Integrity Program for Airplanes, states that widespread fatigue damage (WFD) will be the subject of a separate rulemaking. However, little detail is given about how service bulletin reviews and aging aircraft programs should be carried out. The commenter recommends the FAA include in AC 91-56 the text the European Aging Aircraft Working Group (EAAWG) presented to cover these points. Another commenter questions whether the statement "cracks must be difficult to detect during regular maintenance" shows that WFD should be evaluated. If so, the commenter suggests the FAA clarify in the AC the effects of such an evaluation in extending design-life goals.

*FAA Response:* This rule does not include requirements for evaluating WFD. However, the FAA is considering future rulemaking that would address this topic. As a part of their tasking, the ARAC will review and make recommendations to the FAA on AC 91-56. Since the EAAWG is represented on the ARAC working group that is conducting the review, the FAA expects the views of the EAAWG would be considered.

*Comment:* A commenter suggests the FAA include a sample DT-assessment report in AC 91-56.

*FAA Response:* The commenter does not indicate how a DT-assessment

report would be used and does not provide enough information about the scope of such a report. Without this information, the FAA is unable to consider including a sample report in AC-91-56.

*Comment:* One commenter questions whether the FAA will assign extended design-life goals to aircraft with SSIDs.

*FAA Response:* The FAA has removed the design-life goal requirements from the final rule. Therefore, aircraft with SSIDs will not be subject to design-life goal requirements.

*Comment:* A commenter recommends the FAA include in the AC not only those RAMs produced by type certificate (TC) holders, but also RAMs produced by non-TC holders through alternate means.

*FAA Response:* The FAA has tasked the ARAC to assess the effectiveness of AC-91-56B to provide guidance to supplemental type certificate (STC) holders for developing damage-tolerance-based inspections and procedures for repairs, alterations, and modifications made to airplane structure that is susceptible to fatigue cracking that could contribute to a catastrophic failure. The ARAC will provide recommendations regarding the development of guidance for addressing RAMs.

*Comment:* A commenter notes that AC 91-60, The Continued Airworthiness of Older Airplanes, is being used to guide operators in scheduled operations. The commenter recommends the FAA edit the list of components in AC 91-60 to consider them for inclusion in inspection programs and express them in more general terms.

*FAA Response:* AC 91-60 addresses service-history-based inspections, which are typically applied to airplanes operated under part 135. As mentioned in the FAA's response to prior comments, the FAA has changed the airplane applicability in this final rule. Because of this change, the requirement in § 135.168 related to service-history-based inspections and procedures has been removed from the rule. However, the FAA intends to issue a revised version of the related AC, AC 91-60, Continued Airworthiness of Older Airplanes, as guidance for part 135 operators, who may still want to develop service-history-based inspections.

*Comment:* A commenter notes the preamble to the IFR states that certain DT-based supplemental structural inspection programs (SSIPs) do not fully meet the requirements of the IFR, which apply to the complete primary structure. The commenter suggests the final rule

or its accompanying ACs state that inspections and procedures in the Airworthiness Limitation section of the Instructions for Continued Airworthiness and the supplemental structural inspection document (SSID) satisfy the IFR for baseline structure.

*FAA Response:* With respect to an airplane's baseline structure, FAA-approved DT-based supplemental structural inspection programs that address airplane baseline structure susceptible to fatigue cracking that could contribute to a catastrophic failure are considered an acceptable means of compliance with this rule. With respect to repaired, altered, or modified baseline structure, the FAA has tasked ARAC to develop guidelines that would support the industry's compliance with §§ 121.370a and 129.16 of the rule.

*Comment:* A commenter requests the FAA address how operators should communicate to the FAA that a Designated Engineering Representative (DER) approved repair is DT-based, when DT requirements were not part of the original certification requirements.

*FAA Response:* Operators inform the FAA that a DER approved repair is DT based by establishing DT-based inspections according to the requirements of § 25.571 at amendment 25-45 or later.

#### Economic or Cost Comments

*Comment:* One commenter states that operators of aircraft with 19 or fewer seats will pay the greatest cost, on a seat-by-seat basis, for complying with the IFR. The commenter notes that unlike the aircraft involved in the Aloha Airlines, Inc. accident, aircraft with 19 or fewer seats are unpressurized. The commenter requests the FAA provide an alternative to the DT maintenance program for non-transport category airplanes with 19 or fewer seats operated under part 121.

Another commenter states the IFR will impose an enormous burden on turboprop aircraft operators, many of which will not be able to afford to support a DTIP. There are, for example, a relatively small number of EMB-110s being used in scheduled passenger operations, meaning that the very large development costs for a DTIP would be distributed over a few operators. The commenter suggests this will result in the premature retirement by 2007 of a significant number of aircraft still within their safe-life design-service goal.

*FAA Response:* In consideration of comments to the IFR and the FAA's review of the Aging Airplane Program, the FAA has narrowed the scope of the airplane applicability in §§ 121.370a

and 129.16. The new applicability for DT inspections and procedures covers airplanes that meet all the following requirements:

- Transport category.
- Turbine powered.
- Type certificate issued after January 1, 1958.
- As a result of original type certification or later increase in capacity, have a maximum type-certificated passenger seating capacity of 30 or more, or a maximum payload capacity of 7500 pounds or more.

*Comment:* Several commenters state the IFR will cause them an undue burden. One commenter states the financial impact of the IFR will far exceed the FAA's estimates because these estimates have grown since 1999, the year the NPRM was-issued. Another commenter says it conducted a survey of its members to estimate the compliance costs of the IFR. Based on its cost estimates for inspections, airplane and records availability, and establishing DT programs, this commenter estimates the cost of the IFR on the industry over the next 20 years will be between \$1.3 billion and \$2.7 billion. Another commenter notes the IFR will cost them an additional \$363 million per year in rescheduling and \$285,790,000 in lost revenue.

*FAA Response:* Following industry comments about the IFR cost estimates, the FAA reassessed the Aging Airplane Safety Program, and the FAA modified the IFR's existing requirements. These changes to the existing requirements of the IFR have the economic impact of reducing costs. The FAA estimates the changes to this rule will provide substantial cost savings to operators of 10-to 29-seat airplanes. The estimated cost savings depend on the number of affected airplanes remaining in scheduled passenger carrying operations as of December 20, 2010. Cost savings will decrease as the number of affected airplanes decrease. The final rule provides cost relief and imposes no added costs.

*Comment:* A commenter states that it will be costly for operators to perform the required inspections and records reviews. The commenter recommends that an operator's DARs perform the inspections and records review required by the IFR because DARs are more familiar with the aircraft. The commenter suggests the FAA's role should be to evaluate the DARs rather than conduct the inspections and records reviews.

*FAA Response:* This rule does not restrict operators from using DARs or ODARs to perform the required airplane inspections and records reviews.

*Comment:* A commenter states that requiring HMCs every 7 years has a potential cost to its members of more than \$500 million. The commenter suggests the FAA align the IFR with existing air carrier maintenance schedules to mitigate these costs.

*FAA Response:* The FAA intends to perform the required airplane inspections and records reviews within the operator's normal maintenance cycle. Therefore, the FAA will perform these inspections and records reviews at a "C" check or segment thereof, a "D" check or segment thereof, or other scheduled maintenance visits where structural inspections are accomplished.

*Comment:* Several commenters address how the FAA might reduce the implementation costs of the IFR. One commenter states that the best way to reduce implementation costs is to train field inspectors comprehensively and emphasize the importance of integrating the IFR's requirements into current air carrier maintenance and inspection programs.

*FAA Response:* The FAA agrees that having an adequately trained inspector and designee workforce is important to providing a standardized approach to conducting the required airplane inspections and records reviews. Therefore, the FAA completed workshops for its flight standards airworthiness inspectors and is providing workshops for its designees (DARs and ODARs). The intent of these workshops is to ensure that FAA airworthiness inspectors, DARs, and ODARs use uniform procedures when conducting their inspections and records reviews. The FAA also has changed related guidance material to ensure uniformity in the inspection and records review process.

*Comment:* One commenter, who conducts operations under part 135, states the FAA should use Government funds to subsidize, at least in part, the cost of the inspections to minimize the impact on ticket prices.

*FAA Response:* As discussed earlier, the FAA made many changes to the IFR, which are cost relieving, particularly to persons conducting operations under part 135. For example, the FAA has removed the supplemental inspection requirement in the IFR for part 135 operators.

*Comment:* A commenter suggests that lessors will require non-U.S. operators to meet the part 121 requirements and non-U.S. operators will attempt to mitigate the costs, leading to a greater proportion of aircraft being owned by operators rather than being leased. The commenter contends that this may cause operators to elect to operate

aircraft manufactured outside the United States, which are less likely to have the IFR requirements imposed within the lease agreements.

*FAA Response:* The FAA notes that the provisions of this rule apply to any affected airplane, regardless of its State of design or State of manufacture. The FAA notes that any affected U.S.-registered airplane will be subject to the requirements of this rule whether it is purchased from a seller in a U.S. location or from a seller in a foreign location. The FAA does not believe the requirements of this rule will influence an operator to elect to lease a foreign manufactured airplane in lieu of a U.S.-manufactured airplane.

*Comment:* A commenter, who conducts operations in Alaska, says that current regulations already provide for adequate safety for aircraft operated under part 121 and additional regulations will have no measurable increase on safety.

*FAA Response:* The FAA notes the proposal would not apply to airplanes engaged in operations solely within the State of Alaska. This rule responds to a congressional mandate set forth in the Aging Aircraft Safety Act of 1991. If the airplane is operated outside the State of Alaska, it would be subject to the provisions of this rule.

#### International Trade

*Comment:* One commenter states the FAA did not consider the impact of the IFR outside the U.S. market.

*FAA Response:* The FAA notes that this rule only applies to U.S.-registered airplanes. The rule does not apply to non-U.S.-registered airplanes used by foreign air carriers to conduct operations under part 129.

#### Changes to the Interim Final Rule

After the FAA's recent review of the Aging Airplane Program and comments to the Aging Airplane Safety interim final rule (IFR), the FAA found it necessary to make changes to the IFR. The IFR became effective on December 8, 2003. A discussion of the changes to the rule follows.

#### Sections 121.368 and 129.33 Aging Airplane Inspections and Records Reviews

These sections describe the requirements for operators to make certain airplanes available to the Administrator for inspection and records review. They also explain the type and content of records operators must make available for review. Current §§ 121.368(d) and 129.33(c) explain the content of the records operators must make available for review. The FAA

made the following changes to these sections:

- In §§ 121.368(d)(2) and 129.33(c)(2), “total flight hours of the airframe” has been changed to “total time in service of the airframe.” The FAA’s use of the term “total flight hours” was not intended to differ from the meaning of the term “total time in service” as defined in 14 CFR 1.1. The FAA made this change to avoid any inconsistencies in the interpretation of this rule and to remain consistent with existing recordkeeping requirements.

- Sections 121.368(d)(8) and 129.33(c)(8) of the IFR require the current status of inspections and procedures required by §§ 121.370a and 129.16, airworthiness directives, and corrosion prevention and control programs. As pointed out earlier in this preamble, as part of the FAA’s review of the Aging Airplane Program, the FAA withdrew the Corrosion Prevention and Control Program (CPCP) proposed rule (69 FR 50350, August 16, 2004). Therefore, the Aging Airplane Safety IFR is being amended to remove from §§ 121.368 and 129.33, the requirement for operators to provide the current status of CPCPs as a separate item. Instead, operators will provide this information as part of the requirement for the current inspection status of the airplane, or for those CPCPs mandated by AD, they will provide it as part of the requirement for the current status of ADs. In addition, the FAA has removed the requirement from §§ 121.368 and 129.33 for operators to provide the current status of the inspections and procedures that are required under the supplemental inspection portions of the IFR. The FAA removed this requirement because under the terms of this final rule, operators must provide this information as part of the current inspection status of the airplane. Further, a commenter to the rule pointed out that § 121.380(a)(2)(vi) should satisfy the recordkeeping requirements in § 121.368(d)(8) related to ADs. The FAA agrees and has revised §§ 121.368(d)(8) and 129.33(c)(8) to match § 121.380(a)(2)(vi).

*Sections 135.422 and 135.423 Aging Airplane Inspections and Records Reviews for Multiengine Airplanes*

On December 20, 1995, the FAA published the Commuter Operations and General Certification and Operation Requirements rule (60 FR 65832). Because of this rule, airplanes certificated with 10 or more passenger seats may not conduct scheduled passenger carrying operations under part 135. Therefore, airplanes engaged in these operations are now subject to

the aging airplane inspections and records review requirements contained in § 121.368 of this final rule. As a result, the requirements in § 135.422 of the IFR, which addresses these airplanes, are no longer needed.

The FAA notes that § 121.368 requires operators to provide records containing total flight cycles of the airframe. The FAA recognizes that some part 135 operators may not have kept a record of the total flight cycles of the airframe. Therefore, current flight cycle information may not be available. In such an instance, the operator should determine flight cycles using a flight hour to flight cycle ratio included in their manual that is acceptable to the assigned PML.

In this final rule, the FAA has redesignated § 135.424 as § 135.423 and has made the following changes to § 135.422:

- The reference to “total flight hours of the airframe” is changed in to “total time in service.” This change is similar to the change in §§ 121.368(d)(2) and 129.33(c)(2) described earlier.
- The requirements to provide the current status of Corrosion Prevention and Control Programs (CPCP) and the current status of supplemental inspections and procedures required by § 135.168 are removed. These changes are similar to those made in §§ 121.368 and 129.33.
- The requirement to provide the time and date of the next recurring action for an airworthiness directive was added to paragraph (d)(7). These changes are similar to those made in §§ 121.368 and 129.33. In addition, the requirements in § 135.168 have been removed from the rule.

*Sections 121.370a, 129.16, and 135.168 Supplemental Inspections*

*Airplane applicability:* This final rule narrows the airplane applicability for supplemental inspections and procedures (DT-based and service-history-based). The final rule removes requirements for service-history-based inspections and procedures and imposes damage tolerance requirements on transport category, turbine powered airplanes with a type certificate issued after January 1, 1958, that as a result of original type certification or later increase in capacity, have—

- A maximum type-certificated passenger seating capacity of 30 or more; or
- A maximum payload capacity of 7,500 pounds or more.

The FAA determined that this rule should apply to airplanes with a type certificate issued after January 1, 1958, because this date is generally accepted

as the beginning of the jet age for commercial aviation in the United States. It corresponds with the type certificate applicability date used in other rules, such as the Fuel Tank Design Review (SFAR 88) rule.

The reference to the original type certificate or later increase in capacity is intended to address two situations:

1. In the past, some designers and operators have attempted to avoid the application of requirements that apply only to airplanes over specified capacities by obtaining a design change approval for a slightly lower capacity. By including the reference to “capacity resulting from the original certification,” the FAA intends to remove this possible means of avoiding compliance.

2. It is also possible for an airplane design to be originally certified with a capacity slightly lower than the minimum specified in this section. But, through later design changes, the capacity could be increased above this minimum. The reference to “later increases in capacity” is intended to ensure that, if this occurs, the design would have to meet the requirements of this section.

The FAA received comments to the IFR that expressed concern about the economic burden the supplemental inspection requirement would place on persons operating small commuter airplanes in air-carrier service. These operators typically operate small fleets of airplanes with a passenger seating capacity of 30 or less. As of 2003, the U.S. fleet total of these airplanes consisted of 19 models and about 350 airplanes. This small number of airplanes per model makes it costly for operators to develop inspection programs. The FAA found that as of 2002, only about 50 percent of the small commuter fleet in use in 1997 was still operating in the U.S. By 2010, the FAA expects this percentage to decrease to only 11 percent (about 80 aircraft) or less of the commuter fleet in use in 1997. The FAA has determined the supplemental inspections for these airplanes are no longer needed and intends to address the discovery of any age-related problems for these airplanes through continued operational safety programs and ADs.

If operators of these small airplanes choose to voluntarily develop supplemental inspection programs, they can refer to AC 91-60, The Continued Airworthiness of Older Airplanes, which the FAA is currently revising, for guidance.

*Compliance date:* The current regulation contains a compliance date of December 5, 2007, for operators to

include damage-tolerance-based inspections and procedures in their maintenance programs. In §§ 121.370a(c) and 129.16(b) of this final rule, the FAA has extended this compliance date to December 20, 2010.

On May 13, 2004, the FAA tasked ARAC to develop guidelines to support the industry's compliance with the rule's requirement to address repairs, alterations, and modifications. Extending the compliance date to December 20, 2010, will give ARAC time to develop these guidelines. It also will allow operators enough time to comply with the requirement to incorporate damage-tolerance-based inspections and procedures into their maintenance programs.

*New model added through type certificate amendment (parts 121 and 129):* The FAA has determined that this requirement is no longer needed. The intent of this requirement under §§ 121.370a(b) and 129.16(c) of the IFR was to cover certain large transport category airplanes (e.g., B-737s, MD-80s, and A300s) whose certification basis does not include a requirement for damage-tolerance-based inspections and procedures. Since the FAA expects that some of these airplanes may reach or exceed their design-life goals before the extended compliance date for supplemental inspections, the FAA finds it necessary to mandate supplemental inspections and procedures (i.e., supplemental structural inspection documents (SSIDs)) for these airplanes by issuing ADs. Operators of airplanes that will not reach their design-life goal by December 20, 2010, must comply with the supplemental inspection requirements (§§ 121.370a(c) and 129.16(b)) of this final rule by the December 20, 2010, date.

*Design-life goal airplanes (parts 121 and 129):* Under §§ 121.370a(c) and 129.16(d) of the IFR, the design-life-goal requirement restricts an operator from operating an airplane with a design-life goal listed in part 121 Appendix N and part 129 Appendix B, after December 5, 2007. This requirement is no longer needed because most of these airplanes have a passenger seating capacity of less than 30 passenger seats. Also, the FAA has extended the compliance date for supplemental inspections to December 20, 2010. The FAA expects that most of these airplanes will not be in scheduled passenger service by December 20, 2010. The FAA will address any age-related problems for these remaining airplanes through continued operational safety programs and ADs.

*Airworthiness directive-mandated service-history-based inspections (parts 121 and 129):* This requirement under

§§ 121.370a(d) and 129.16(e) of the IFR prohibits an operator from operating an airplane beyond December 20, 2010, for which an airworthiness directive requires the maintenance program to include service-history-based inspections and procedures. The IFR further requires that after this date, the operator's maintenance program must include DT-based inspections and procedures for these airplanes. The airplanes subject to this requirement are mostly reciprocating engine powered airplanes that have long been out of scheduled passenger service. There are about 50 of these airplanes, consisting of four models, currently serving as freighters. Some of these airplanes are operating in the State of Alaska and are excepted from the requirements in this rule. The FAA has determined that imposing damage-tolerance-based inspections and procedures on the airplanes not operating in Alaska would impose an undue economic burden with little increase in safety benefits. The withdrawal of this requirement does not relieve the operators of these airplanes from any of the requirements in applicable ADs.

*Supplemental inspections (part 135):* Since the FAA has narrowed the applicability for supplemental inspections to certain transport category airplanes, § 135.168 and Appendix G to part 135 have been removed from this final rule.

*Airplane structure applicability:* Some comments to the IFR indicated the rule is still unclear about the type of airplane structure to which the DT-based inspections and procedures should be applied. Therefore, the FAA further clarified §§ 121.370a(c)(1) and 129.16(b)(1) of this final rule to state operators must include in their maintenance programs "FAA-approved damage-tolerance-based inspections and procedures for airplane structure susceptible to fatigue cracking that could contribute to a catastrophic failure. These inspections and procedures must take into account the adverse effects repairs, alterations, and modifications may have on fatigue cracking and the inspection of this airplane structure."

*Approvals (§§ 121.370a(e) and 129.16(f)):* The FAA has removed these approval paragraphs and has placed the approval requirements in §§ 121.370a(c)(2) and 129.16(b)(2) of the final rule. The FAA has modified the related rule language to further clarify and identify the approval levels the rule requires. The final rule states the damage-tolerance-based inspections and procedures and any revisions to them must be approved by the Aircraft

Certification Office or the office of the Transport Airplane Directorate with oversight responsibility for the relevant type certificate or supplemental type certificate, as determined by the Administrator. The FAA intends to develop guidance material to provide a consistent approach to the approval process.

The rule also states operators must include the damage-tolerance-based inspections and procedures in their FAA-approved maintenance program.

#### *Section 135.411 Applicability*

The part 135 airplane inspections and records review requirements in the final rule, which applies to multiengine airplanes certificated for nine or fewer passenger seats, are now under § 135.422. In addition, the FAA has removed the requirements under § 135.423 and has redesignated § 135.423 as § 135.424. As a result, the FAA had to amend § 135.411(a)(1), which lists the part 135 aircraft maintenance requirements sections for aircraft with nine or fewer passenger seats. Additionally, we had to amend § 135.411(a)(2), which lists the part 135 aircraft maintenance requirements sections for aircraft with 10 or more passenger seats. In § 135.411(a)(1), we removed the reference to § 135.423 and added a reference to § 135.422. In § 135.411(a)(2), we removed the reference to § 135.422.

#### **Cost Benefit Analysis**

Proposed changes to Federal regulations must undergo several economic analyses. First, Executive Order 12866 directs 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 requires agencies to analyze the economic impact of regulatory changes on small entities. Third, the Trade Agreements Act (19 U.S.C. 2531–2533) prohibits agencies from setting standards that create unnecessary obstacles to the foreign commerce of the United States. In developing U.S. standards, this Act requires agencies to consider international standards and, where appropriate, that they be the basis for U.S. standards. Fourth, the Unfunded Mandates Reform Act of 1995 (Pub. L. 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.)

In conducting these analyses, FAA has determined this rule: (1) Has benefits that justify its costs, is a "significant regulatory action" as defined in section 3(f) of Executive Order 12866, and is "significant" as defined in DOT's Regulatory Policies and Procedures; (2) will not have a significant economic impact on a substantial number of small entities; (3) will not create obstacles to international trade; and does not impose an unfunded mandate on state, local, or tribal governments, or on the private sector.

This regulatory evaluation assesses the economic impacts of the changes to the IFR. Following the FAA's review of industry comments and the FAA's reassessment of the Aging Airplane Safety Program, the FAA modified the requirements of the IFR. These changes to existing requirements have the economic impact of reducing costs. As the economic impact of the changes to the IFR is cost relieving, the rule does not warrant a full regulatory evaluation. The FAA provides the basis for this minimal impact determination below.

Under the terms of the final rule, the FAA will conduct spot inspections and records reviews of affected airplanes operating under parts 121, 129, and 135. These inspections and records reviews are based on the requirements in the Aging Airplane Safety Act (AASA), which requires the Administrator to conduct inspections and records reviews of aging aircraft. The FAA intends to conduct these activities during scheduled maintenance to minimize the cost to industry.

This final rule reduces compliance costs by narrowing the scope of airplane applicability for the supplemental inspections portion (§§ 121.370a, 129.16, 135.168) of the IFR. This final rule requires damage-tolerance-based inspections and procedures (supplemental inspections) for transport category, turbine-powered airplanes with a type certificate issued after January 1, 1958, and that, as a result of original type certification or later increase in capacity, have a maximum type-certificated passenger seating capacity of 30 or more, or a maximum payload capacity of 7,500 pounds or more.

As a result of narrowing the airplane applicability, the part 135 requirement and certain parts 121 and 129 requirements for supplemental inspections have been removed in the final rule. It would be costly for operators to develop inspection programs for the remaining small number of affected airplanes. The FAA

found that as of 2002, about 50 percent of the small commuter fleet in use in 1997 was still operating in the U.S. By 2010, the FAA expects this percentage to decrease to only 11 percent (about 80 airplanes) or less. Therefore, the FAA has determined that the supplemental inspections for these airplanes are no longer needed. The FAA intends to address the discovery of any age-related problems for these airplanes through continued operational safety programs and ADs.

The FAA is removing the design-life goal requirements, which include part 121 Appendix N, part 129 Appendix B, and part 135 Appendix G, from the regulation. The IFR required supplemental inspection programs to be in place by December 5, 2007, for airplanes that exceeded their design-life goals. For those airplanes that had not reached their design-life goal, these inspection programs were not required until December 20, 2010. Since the compliance date for the damage tolerance requirements has been extended to December 20, 2010, this transition period is no longer needed.

The FAA has extended the compliance date from December 5, 2007 to December 20, 2010, for parts 121 and 129 operators to meet the DT-based supplemental inspection requirement. This extension will provide operators additional time to develop to incorporate DT-based inspection and procedures into their maintenance program. The FAA believes this extension is necessary to provide industry enough time to develop the DT-based inspections and for operators to incorporate these inspections and procedures into their maintenance programs. The extension will also allow ample time to train inspectors.

The FAA estimates this final rule will provide substantial cost savings to operators of multi-engine airplanes with less than 30 seats. Additionally, this final rule will provide cost savings by extending the supplemental inspections compliance date from 2007 to 2010 for all affected operators. The final rule provides cost relief and imposes no added costs. The benefits to this rule are the cost relief provided by extending the damage tolerance compliance time and narrowing the airplane applicability for DT-based inspections and procedures. Therefore, the FAA has determined the benefits of this regulatory action justify the costs.

#### Regulatory Flexibility Analysis

The Regulatory Flexibility Act of 1980 (RFA) establishes "as a principle of regulatory issuance that agencies shall endeavor, consistent with the objective

of the rule and of applicable statutes, to fit regulatory and informational requirements to the scale of the business, organizations, and governmental jurisdictions subject to regulation." Under that principle, the Act requires agencies to solicit and consider flexible regulatory proposals, and to consider the rationale for their actions. The Act covers a wide range of small entities, including small businesses, not-for-profit organizations and small governmental jurisdictions.

Agencies must perform a review to determine whether a proposed or final rule will have a significant economic impact on a substantial number of small entities. If the determination is that it will have such an impact, the agency must prepare a regulatory flexibility analysis as described in the Act. However, if an agency determines that a proposed, or final, rule is not expected to have a significant economic impact on a substantial number of small entities, section 605(b) of the Act provides that the head of the agency may so certify and a regulatory flexibility analysis is not required. The certification must include a statement providing the factual basis for this determination, and the reasoning should be clear.

The changes to the IFR are cost relieving, thus are not expected to have a significant economic impact on a substantial number of small entities. The FAA presents the factual basis below.

For the IFR, the FAA conducted a complete regulatory flexibility analysis to assess the impact on small entities. This rule will affect operators of certain airplanes operated under parts 121, 129, and 135. For operators, a small entity is defined as one with 1,500 or fewer employees. As there are operators that meet these criteria for a small business, calculations were done to assess whether the rule will have a significant impact on a substantial number of these operators.

#### *Issues To Be Addressed in a Final Regulatory Flexibility Analysis (FRFA)*

The central focus of the FRFA, like the Initial Regulatory Flexibility Analysis, is the requirement that agencies evaluate the impact of a rule on small entities and analyze regulatory alternatives that minimize the impact when there will be a significant economic impact on a substantial number of small entities.

The requirements, outlined in section 604(a)(1-5) of the RFA, appear in items 1 through 5 below. The FAA's response follows each requirement.

(1) A succinct statement of the need for, and objectives of, the rule.

This rule represents a critical step toward compliance with the Aging Aircraft Safety Act of 1991. Section 44717 of Title 49 U.S.C. instructs the Administrator to “prescribe regulations that ensure the continuing airworthiness of aging aircraft.” The law also requires “the Administrator to make inspections, and review the maintenance and other records, of each aircraft an air carrier uses to provide air transportation.” The objectives of the rule are to ensure the continuing airworthiness of aging airplanes operating in air transportation.

(2) A summary of the significant issues raised by the public comments in response to the Initial Regulatory Flexibility Analysis (IRFA), a summary of the assessment of the agency of such issues, and a statement of any changes made in the proposed rule as a result of such comments.

There were few public comments explicitly on the Initial Regulatory Flexibility Analysis. There were several comments from part 135 operators that discuss the financial burden the IFR would place on them. Many part 135 operators have fewer than 1,500 employees and are considered small entities.

In response to public comments, the FAA revised the supplemental inspection requirement by narrowing the applicability to transport category, turbine powered airplanes with a type certificate issued January 1, 1958, that because of original type certification or later increase in capacity, have a maximum type-certificated passenger seating capacity of 30 or more or a maximum payload capacity of 7500 pounds or more. This change excepted part 135 operators from having to implement a supplemental inspection program.

(3) A description of, and an estimate of the number of, small entities to which the rule will apply or an explanation of why no such estimate is available.

On December 8, 2003, the Aging Airplane Safety IFR was codified. After the FAA’s review of the Aging Airplane Program and comments to the IFR, the FAA made the changes to the IFR that are reflected in this final rule. The FAA has determined that these changes impose no additional costs and provide cost relief to small entities. No description or estimated number of small entities is given as the final rule provides only cost relief to these operators.

(4) A description of the projected reporting, recordkeeping, and other compliance requirements of the 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.

The changes to the IFR will result in no additional paperwork burden.

(5) A description of the steps the agency has taken to minimize the significant economic impact on small entities consistent with the stated objectives of applicable statutes, including a statement of the factual, policy, and legal reasons for selecting the alternative adopted in the final rule and why each one of the other significant alternatives to the rule considered by the agency which affect the impact on small entities was rejected.

The changes the FAA made to the IFR resulted in part 135 operators not having to implement supplemental inspection programs. This decreased the cost burden for these operators, many of whom are small entities.

#### **Description of Alternatives**

The FAA considered several alternative approaches to this rulemaking action. One was to retain the provisions of the rule as set forth in the IFR. The FAA rejected this alternative after a review of the Aging Airplane Program initiatives and comments to the IFR. We determined that better aligning certain compliance dates in existing aging airplane rules and pending proposals and making certain substantive changes to them would increase their cost-effectiveness without compromising safety. The FAA included the Aging Airplane Safety rule in the review. The results were the removal of the supplemental inspection requirement for certain airplanes and the extension of the supplemental inspection compliance date for those airplanes still subject to the rule.

Another alternative came from commenters to the IFR. They recommended the FAA withdraw the rule. The FAA rejected this alternative because the rule is based on a congressional mandate, which requires the FAA to implement regulations to ensure the continuing airworthiness of aging aircraft.

#### **Compliance Assistance**

The FAA has tasked the Aviation Rulemaking Advisory Committee (ARAC) to review and make recommendations on the contents of AC 91–56B, Continuing Structural Integrity Programs for Airplanes. This AC will provide guidance to develop damage-tolerance-based SSIPs. The FAA intends to publish this AC before the December 20, 2010 compliance date specified in

this rule. The FAA also intends to publish AC 120–84, Aging Airplane Inspections and Records Review, concurrently with this rule to help operators in complying with the airplane inspections and records reviews required by this rule.

#### **Paperwork Reduction Act**

Information collection requirements in the final rule have been previously approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)) and have been assigned OMB Control Numbers: 2120–0020, 2120–0008, and 2120–0039. Part 129 record requirements can be found in International Civil Aviation Organization Annexes.

#### **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 these regulations.

#### **Trade Impact Assessment**

The Trade Agreement Act of 1979 prohibits Federal agencies from establishing any standards or engaging in related activities that create unnecessary obstacles to the foreign commerce of the United States. Legitimate domestic objectives, such as safety, are not considered unnecessary obstacles. 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 final rule and determined that it will impose the same costs on domestic and international entities and thus have a neutral trade impact.

#### **Unfunded Mandates Assessment**

The Unfunded Mandates Reform Act of 1995 (the Act) 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 an expenditure of \$100 million or more (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.” The

FAA currently uses an inflation-adjusted value of \$120.7 million in lieu of \$100 million.

This final rule does not contain such a mandate. The requirements of Title II do not apply.

#### Executive Order 13132, Federalism

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

#### Environmental Analysis

FAA Order 1050.1E 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 rulemaking action qualifies for the categorical exclusion identified in paragraph 312f and involves no extraordinary circumstances.

#### Energy Impact

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

#### List of Subjects

##### 14 CFR Part 119

Air carriers, Air transportation, Aircraft, Aviation safety, Commuter operations, Reporting and recordkeeping requirements.

##### 14 CFR Part 121

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

##### 14 CFR Part 129

Air carriers, Aircraft, Aviation safety, Reporting and recordkeeping requirements.

##### 14 CFR Part 135

Aircraft, Aviation safety, Reporting and recordkeeping requirements.

##### 14 CFR Part 183

Aircraft, Authority delegations (Government agencies), Reporting and recordkeeping requirements.

#### The Amendment

■ In consideration of the foregoing, the Federal Aviation Administration adopts the interim final rule (IFR) published at 67 FR 72726 on December 6, 2002, and revised by technical amendment (68 FR 69307, December 12, 2003), as a final rule with the following changes:

#### 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), 40113, 40119, 41706, 44101, 44701–44702, 44705, 44709–44711, 44713, 44716–44717, 44722, 44901, 44903–44904, 44912, 45101–45105, 46105, 46301.

■ 2. Amend § 121.368 by revising paragraphs (d)(2) and (d)(8) introductory text to read as follows:

##### § 121.368 Aging airplane inspections and records reviews.

\* \* \* \* \*

(d) \* \* \*

(2) Total time in service of the airframe;

\* \* \* \* \*

(8) Current status of applicable airworthiness directives, including the date and methods of compliance, and if the airworthiness directive involves recurring action, the time and date when the next action is required:

\* \* \* \* \*

■ 3. Revise § 121.370a to read as follows:

##### § 121.370a Supplemental inspections.

(a) *Applicability.* Except as specified in paragraph (b) of this section, this section applies to transport category, turbine powered airplanes with a type certificate issued after January 1, 1958, that as a result of original type certification or later increase in capacity have—

(1) A maximum type certificated passenger seating capacity of 30 or more; or

(2) A maximum payload capacity of 7,500 pounds or more.

(b) *Exception.* This section does not apply to an airplane operated by a certificate holder under this part between any point within the State of Alaska and any other point within the State of Alaska.

(c) *General requirements.* After December 20, 2010, a certificate holder may not operate an airplane under this

part unless the following requirements have been met:

(1) The maintenance program for the airplane includes FAA-approved damage-tolerance-based inspections and procedures for airplane structure susceptible to fatigue cracking that could contribute to a catastrophic failure. These inspections and procedures must take into account the adverse affects repairs, alterations, and modifications may have on fatigue cracking and the inspection of this airplane structure.

(2) The damage-tolerance-based inspections and procedures identified in this section and any revisions to these inspections and procedures must be approved by the Aircraft Certification Office or office of the Transport Airplane Directorate with oversight responsibility for the relevant type certificate or supplemental type certificate, as determined by the Administrator. The certificate holder must include the damage-tolerance-based inspections and procedures in the certificate holder's FAA-approved maintenance program.

#### Appendix N To Part 121 [Removed]

■ 4. Amend part 121 by removing Appendix N.

#### PART 129—OPERATIONS: FOREIGN AIR CARRIERS AND FOREIGN OPERATORS OF U.S.-REGISTERED AIRCRAFT ENGAGED IN COMMON CARRIAGE

■ 5. The authority citation for part 129 continues to read as follows:

**Authority:** 49 U.S.C. 1372, 40113, 40119, 44101, 44701–44702, 44705, 44709–44711, 44713, 44716–44717, 44722, 44901–44904, 44906, 44912, 46105, Pub. L. 107–71 sec 104.

■ 6. Revise § 129.16 to read as follows:

##### § 129.16 Supplemental inspections for U.S.-registered aircraft.

(a) *Applicability.* This section applies to U.S.-registered, transport category, turbine powered airplanes with a type certificate issued after January 1, 1958 that as a result of original type certification or later increase in capacity have—

(1) A maximum type certificated passenger seating capacity of 30 or more; or

(2) A maximum payload capacity of 7,500 pounds or more.

(b) *General requirements.* After December 20, 2010, a foreign air carrier or foreign person may not operate an airplane under this part unless the following requirements have been met:

(1) The maintenance program for the airplane includes FAA-approved

damage-tolerance-based inspections and procedures for airplane structure susceptible to fatigue cracking that could contribute to a catastrophic failure. These inspections and procedures must take into account the adverse affects repairs, alterations, and modifications may have on the fatigue cracking and the inspection of this airplane structure.

(2) The damage-tolerance-based inspections and procedures identified in this section and any revisions to these inspections and procedures must be approved by the Aircraft Certification Office or office of the Transport Airplane Directorate with oversight responsibility for the relevant type certificate or supplemental type certificate, as determined by the Administrator. The operator must include the damage-tolerance-based inspections and procedures in the operator's FAA-approved maintenance program.

■ 7. Amend § 129.33 by revising paragraphs (c)(2) and (c)(8) introductory text to read as follows.

**§ 129.33 Aging airplane inspections and records reviews for U.S.-registered multiengine aircraft.**

\* \* \* \* \*

(c) \* \* \*

(2) Total time in service of the airframe;

\* \* \* \* \*

(8) Current status of applicable airworthiness directives, including the date and methods of compliance, and if the airworthiness directive involves recurring action, the time and date when the next action is required:

\* \* \* \* \*

**Appendix B To Part 129 [Removed]**

■ 8. Amend part 129 by removing Appendix B.

**PART 135—OPERATING REQUIREMENTS: COMMUTER AND ON-DEMAND OPERATIONS AND RULES GOVERNING PERSONS ON BOARD SUCH AIRCRAFT**

■ 9. The authority citation for part 135 continues to read as follows:

**Authority:** 49 U.S.C. 106(g), 41706, 44113, 44701–44702, 44705, 44709, 44711–44713, 44715–44717, 44722.

**§ 135.168 [Removed and reserved]**

■ 10. Remove and reserve §135.168.

■ 11. Amend § 135.411 by revising paragraphs (a)(1) and (a)(2) to read as follows:

**§ 135.411 Applicability.**

(a) \* \* \*

(1) Aircraft that are type certificated for a passenger seating configuration, excluding any pilot seat, of nine seats or less, shall be maintained under parts 91 and 43 of this chapter and §§ 135.415, 135.416, 135.417, 135.421 and 135.422. An approved aircraft inspection program may be used under § 135.419.

(2) Aircraft that are type certificated for a passenger seating configuration, excluding any pilot seat, of ten seats or more, shall be maintained under a maintenance program in §§ 135.415, 135.416, 135.417, and 135.423 through 135.443.

\* \* \* \* \*

■ 12. Amend part 135, by revising § 135.422 to read as follows:

**§ 135.422 Aging airplane inspections and records reviews for multiengine airplanes certificated with nine or fewer passenger seats.**

(a) *Applicability.* This section applies to multiengine airplanes certificated with nine or fewer passenger seats, operated by a certificate holder in a scheduled operation under this part, except for those airplanes operated by a certificate holder in a scheduled operation between any point within the State of Alaska and any other point within the State of Alaska.

(b) *Operation after inspections and records review.* After the dates specified in this paragraph, a certificate holder may not operate a multiengine airplane in a scheduled operation under this part unless the Administrator has notified the certificate holder that the Administrator has completed the aging airplane inspection and records review required by this section. During the inspection and records review, the certificate holder must demonstrate to the Administrator that the maintenance of age-sensitive parts and components of the airplane has been adequate and timely enough to ensure the highest degree of safety.

(1) *Airplanes exceeding 24 years in service on December 8, 2003; initial and repetitive inspections and records reviews.* For an airplane that has exceeded 24 years in service on December 8, 2003, no later than December 5, 2007, and thereafter at intervals not to exceed 7 years.

(2) *Airplanes exceeding 14 years in service but not 24 years in service on December 8, 2003; initial and repetitive inspections and records reviews.* For an airplane that has exceeded 14 years in service, but not 24 years in service, on December 8, 2003, no later than December 4, 2008, and thereafter at intervals not to exceed 7 years.

(3) *Airplanes not exceeding 14 years in service on December 8, 2003; initial*

*and repetitive inspections and records reviews.* For an airplane that has not exceeded 14 years in service on December 8, 2003, no later than 5 years after the start of the airplane's 15th year in service and thereafter at intervals not to exceed 7 years.

(c) *Unforeseen schedule conflict.* In the event of an unforeseen scheduling conflict for a specific airplane, the Administrator may approve an extension of up to 90 days beyond an interval specified in paragraph (b) of this section.

(d) *Airplane and records availability.* The certificate holder must make available to the Administrator each airplane for which an inspection and records review is required under this section, in a condition for inspection specified by the Administrator, together with the records containing the following information:

(1) Total years in service of the airplane;

(2) Total time in service of the airframe;

(3) Date of the last inspection and records review required by this section;

(4) Current status of life-limited parts of the airframe;

(5) Time since the last overhaul of all structural components required to be overhauled on a specific time basis;

(6) Current inspection status of the airplane, including the time since the last inspection required by the inspection program under which the airplane is maintained;

(7) Current status of applicable airworthiness directives, including the date and methods of compliance, and, if the airworthiness directive involves recurring action, the time and date when the next action is required;

(8) A list of major structural alterations; and

(9) A report of major structural repairs and the current inspection status for these repairs.

(e) *Notification to the Administrator.* Each certificate holder must notify the Administrator at least 60 days before the date on which the airplane and airplane records will be made available for the inspection and records review.

**§ 135.423 [Removed]**

■ 13. Amend part 135 by removing § 135.423.

**§ 135.424 [Redesignated]**

■ 14. Redesignate § 135.424 as § 135.423.

**Appendix G To Part 135 [Removed]**

■ 15. Amend part 135 by removing Appendix G.



Issued in Washington, DC, on January 25,  
2005.

**Marion C. Blakey,**  
*Administrator.*

[FR Doc. 05-1756 Filed 2-1-05; 8:45 am]

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