A regularly scheduled daily tour of duty when any part of that daily tour of duty is on a Sunday. For any such tour of duty, not more than 8 hours of work are Sunday work, unless the employee is on a compressed work schedule, in which case the entire regularly scheduled daily tour of duty constitutes Sunday work.

3. In §550.171, revise paragraph (a) to read as follows:

**§550.171 Authorization of pay for Sunday work.**

(a) An employee is entitled to pay at his or her rate of basic pay plus premium pay at a rate equal to 25 percent of his or her rate of basic pay for each Sunday hour of work (as defined in §550.103).

* * * * *

This is a proposed rulemaking and, as such, is not the final word on any particular issue. All comments received will be considered by the FAA Administrator in determining what, if any, final action to take. This proposal will become final unless a final rule is issued. If final rule is issued, it will be published in the Federal Register for public comment. The final rule will be issued after consideration of all comments received. This rulemaking is promulgated under the authority described in subtitle II, part A, subpart III, chapter 447, Title 49 of the United States Code. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes the scope of the FAA Administrator’s authority.

This rulemaking is promulgated under the authority described in subtitle VII, part A, subpart III, chapter 447, section 44701. Under that section, Congress charges the FAA with carrying out the policies and objectives set forth in subtitle I, section 106, and Title 49,Subtitle VII, Aviation Programs.

This regulation is within the scope of that authority because it will prescribe new safety procedures for turbine-powered airplanes.

**Discussion of the Proposal**

I. Statement of the Problem

For part 23, function and reliability (F & R) flight testing is required by Title 14, Code of Federal Regulations (14 CFR) 21.35(b)(2) for all airplanes weighing more than 6,000 pounds maximum certified weight. Function and reliability flight testing is not required for gliders, nor for part 23 airplanes weighing 6,000 pounds or less. Because of advancements in airplane structures, propulsion methods, and systems technologies, the 6,000 pound break point may no longer be justified. Turbine-powered airplanes that weigh 6,000 pounds or less are not required to undergo F & R flight testing regardless of the airplane’s systems complexity or level of automation. After reviewing several recent TC projects for small turbojet-powered airplanes (turbojets)—involving airplanes expected to weigh 6,000 pounds or less—the FAA has determined that most, if not all, of these airplane designs would benefit from the F & R flight testing requirement. This determination is based on new lightweight, turbine-powered airplanes having design features and performance consistent with larger airplanes that are required to undergo F & R flight testing.

II. Background

A. What Is Function and Reliability Flight Testing?

Function and reliability flight testing simulates typical aircraft, in-service flight operations for a new aircraft design. This flight testing is done prior to the aircraft’s final design approval leading to the issuance of a TC. The F & R flight testing requirement in §21.35(b)(2) gives the FAA and the public a reasonable assurance that an aircraft, its components, and its equipment are reliable and function properly.

Function and reliability flight testing covers a wide variety of operations that an aircraft will likely undertake in service. Typically, F & R flight testing plans specify the type and number of each task to be completed (i.e., takeoffs, landings, Instrument Landing Systems approaches, high altitude, hot/cold/humid air operations, stalls, in-flight engine restarts, engine starts using different power sources, flight in rain, and night flights).

In addition, F & R flight testing involves simulated in-service operations
using a mature aircraft configuration. Mature in this sense means the aircraft configuration that represents the type design that has been shown to meet the airworthiness standards of the aircraft’s certification basis in accordance with applicable requirements of §§ 21.33 and 21.35(a). The regulatory sequencing prescribed by §§ 21.35(a) and (b) results in the aircraft configuration selected for F & R flight testing having successfully completed much, if not most, of the individual certification requirements for the issuance of a TC.

B. Historical Overview of Function and Reliability Flight Testing

The requirement for F & R flight testing originated with the Civil Aeronautics Board (CAB) imposing a “service test” requirement for aircraft in 1947. The purpose of these service tests was to “ascertain whether there is reasonable assurance that the airplane, its components, and equipment are reliable and function properly” (see 12 FR 2086, March 29, 1947). A related rulemaking included a reference to a study of accidents and maintenance issues of then relatively new model aircraft (see 12 FR 1028, February 13, 1947). That study showed extensive difficulties can occur in the initial stages of operating new aircraft.

The operation of new aircraft had a greater chance for accidents caused by mechanical malfunctioning of troublesome components or equipment. The CAB determined that accidents likely would be prevented if an aircraft were required to undergo tests specifically designed to ascertain the reliability and proper functioning of the aircraft and its systems and equipment before type certification.

In 1950, the CAB amended the airworthiness standards to exclude “* * * smaller airplanes, specifically those of 6,000 pounds maximum weight or less “* * “ from the service test requirement (see 15 FR 8899, December 15, 1950). The introductory material published in the revision of the service test requirement explained that most of the significant changes in the amendment stemmed from “the desire for simplification of the rules in this part with respect to the smaller airplanes, specifically those of 6,000 pounds maximum weight or less, which would be expected to be used mainly as personal airplanes.” 5 The introductory material also stated the service test requirement was removed for airplanes of 6,000 pounds or less maximum weight because “experience seems to indicate that this rule imposes a burden upon the manufacturers not commensurate with the safety gained.” 6

With the recodification of airworthiness standards in 1964 and 1965, the requirement for F & R flight testing was placed in § 21.35(b)(2). The exclusion of smaller airplanes weighing 6,000 pounds or less maximum certificated weight was described in terms of aircraft type certificated in accordance with part 23.

III. The Need for This Proposal

A. Evolution of Aviation Technology

The decision to exclude certain airplanes of 6,000 pounds or less maximum weight from F & R flight testing was based on the state of technology existing in 1950. At that time, airplanes of 6,000 pounds or less maximum weight were expected to be used mainly as personal airplanes. Such civil aircraft developed between the years of 1945 and 1955 were typically single, reciprocating-engine powered airplanes weighing less than 3,000 pounds with engine output of less than 300 horsepower. Technological advancements now allow airplanes that weigh 6,000 pounds or less to be more complex and integrated than some transport category airplanes of the 1960s and earlier.

B. Purpose of Function and Reliability Flight Testing

The safety goal of F & R flight testing is to identify and reduce aircraft system malfunctions or failures that would be more than inconvenient nuisances routinely accommodated in normal operations. By minimizing flight crew distractions from system malfunctions, new aircraft entering service are protected from the flight crew workload consequences of aircraft system deficiencies. Function and reliability flight testing will target deficiencies that may not have been apparent during aircraft engineering ground and flight test programs.

C. Very Light Jet Certification Experience

Recent FAA TC program experience with the new very light jets (VLJ) has led to reconsideration of the existing exclusion of airplanes weighing 6,000 pounds or less in § 21.35(b)(2). This reconsideration was driven in part by difficulties encountered with the voluntary application of the requirement during the FAA type certification of the Eclipse Aviation Corporation’s (Eclipse) EA–500 VLJ and the subsequent problems experienced during that airplane’s entry into service.

The FAA assembled a team of technical staff to conduct a Special Certification Review (SCR) of the EA–500 certification program. A copy of the Eclipse SCR has been placed in the Rules Docket for this rulemaking. 7 That team’s report reviewed the FAA’s TC program and focused on four service problems encountered during the EA–500’s entry into service. That team also reviewed Service Difficulty Report (SDR) experience concerning airplane system deficiencies and malfunctions encountered subsequent to the EA–500’s entry into service. The team developed eight findings and six recommendations. One of the SCR findings (Finding No. 8) stated: “The newly designed VLJs have modern and integrated complex avionics. The traditional approach of defining certification requirements for part 23 airplanes based solely on maximum certificated weight is no longer valid.” 8 The FAA has issued a separate rulemaking proposal to address Finding No. 8 (see “Certification of Turbojets,” 74 FR 41522, August 17, 2009). A corresponding recommendation (Recommendation No. 6) in the Eclipse SCR stated: “The FAA should reevaluate the criteria for applicability of F & R testing.” 9 The Eclipse SCR further found that the EA–500 complied with the requirements of its certification basis and noted that the airplane was not required by existing regulations to include the F & R flight testing requirements of § 21.35(b)(2). This rulemaking proposal addresses Recommendation No. 6, which called for a revision of the applicability of the existing F & R flight testing requirements.

After reviewing the Eclipse SCR and the EA–500 certification program, the FAA reviewed the likelihood that F & R flight testing requirements might have preventatively identified problems encountered by the EA–500 when it entered into service. Function and reliability flight testing might have discovered five of the problems identified in the SCR (pitch and rudder trim problems; pitot system moisture trap; engine surges caused by hard carbon build-up on the static vanes; brake problems; and tire problems) while two of the cited problems (autopilot turbulence sensitivity; and problems with the software logic

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1 Id.
2 Id.
3 Id.
4 Id.
5 Id.
6 Id.
7 A Subcommittee of the United States Congress held hearings on problems related to the introduction of the Eclipse VLJ (Refer to House of Representatives Subcommittee on Aviation, Hearing No. 110–169, September 17, 2008).
8 Special Certification Review (SCR) of the Eclipse 500 certification program.
9 Id.
 dealing with the throttle position) would less likely have been detected, based on the chances of duplicating causal conditions and other risk factors. These conclusions were based on the likelihood that the root causes for the reported problems would be identified by the additional effective flight testing that would be accomplished by a mandatory F & R flight testing program (150 or 300 additional hours of simulated in-service operations accomplished in various environments and locations). Section 21.35(f) has the criteria for selection of 150 or 300 hours, a provision that is not changed in this proposal. This proposal would expand the applicability of F & R flight testing requirements to all turbine-powered airplanes that weigh 6,000 pounds or less, while retaining the exception for gliders and reciprocating-engine powered airplanes type certificated under 14 CFR part 23.

IV. Regulatory Notices and Analyses

Paperwork Reduction Act

The Paperwork Reduction Act (PRA) of 1995 (44 U.S.C. 3507(d)) requires that the FAA consider the impact of paperwork and other information collection burdens imposed on the public. We have determined that there is no information collection burden associated with this proposed rule.

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 has reviewed the corresponding ICAO Standards and Recommended Practices and has identified no differences with these proposed regulations.

Initial Regulatory Evaluation, Regulatory Flexibility Determination, International Trade Impact Assessment, and Unfunded Mandates Assessment

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 (Pub. L. 96–354) requires agencies to analyze the economic impact of regulatory changes on small entities. Third, the Trade Agreements Act (Pub. L. 96–39) prohibits agencies from setting standards that create unnecessary obstacles to the foreign commerce of the United States. In developing U.S. standards, this Trade Act requires agencies to consider international standards and, where appropriate, that they be the basis of U.S. standards. Fourth, the Unfunded Mandates Reform Act of 1995 (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 with base year of 1995). This portion of the preamble summarizes the FAA’s analysis of the economic impacts of this proposed rule. We suggest readers seeking greater detail read the full initial regulatory evaluation, a copy of which we have placed in the docket for this rulemaking.

In conducting these analyses, FAA has determined that this proposed rule: (1) Has benefits that justify its costs, (2) is not an economically “significant regulatory action” as defined in section 3(f) of Executive Order 12866, (3) is not “significant” as defined in the DOT’s Regulatory Policies and Procedures; (4) would not have a significant economic impact on a substantial number of small entities; (5) would not create unnecessary obstacles to the foreign commerce of the United States; and (6) would not impose an unfunded mandate on state, local, or tribal governments, or on the private sector by exceeding the threshold identified above. These analyses are summarized below.

Total Costs and Benefits of This Proposed Rule

We expect that the typical certification project for an airplane subject to the proposed rule would be for a new airplane design with a turbine engine previously used in a type-certificated aircraft requiring 165 hours of F & R flight testing at a total cost of $317,000. In the case of a new airplane design and an engine not previously used on a certificated airplane, we estimate that double the hours (330 hours) would be required, so the total cost would double to $634,000.

We expect that adoption of this proposed rule would enhance safety and reduce costs by substantially reducing the number of safety incidents and post-certification Airworthiness Directives (AD). A partial estimate of the expected costs that would be avoided for a single new airplane design amounts to $1.8 million, with a present value of $1.6 million. These avoided costs are approximately six times the costs of our 165-hour estimate ($317,000) and approximately three times the higher 300-hour estimate ($634,000). Consequently, the benefits of this proposed rule greatly exceed its modest costs. For additional detail, see the separate sections on costs and benefits below.

The FAA solicits comments on our determination of costs and benefits and our expectation that this proposed rule would enhance safety and reduce costs.

Who Is Potentially Affected by This Rule?

Manufacturers of part 23 turbine-powered airplanes weighing 6,000 pounds or less are potentially affected.

Assumptions and Sources of Information

• We use a two-year period of analysis, as we find this period sufficient to show the cost-beneficial nature of this proposed rule. We use the period from the beginning of 2007 to the end of 2008, as the data used in the analysis are from this period. The short period of analysis reflects the inherent nature of F & R flight testing, designed as it is to uncover design flaws that otherwise would reveal themselves in the very early life of an airplane.


• Data on costs of compliance with this proposal were obtained from a part 23 airplane manufacturer and FAA estimates.

Costs of This Proposed Rule

Aircraft subject to F & R flight testing under 14 CFR 21.35(b)(2), § 21.35(f) require at least 300 hours of F & R flight testing for aircraft “incorporating turbine engines of a type not previously used in a type certificated aircraft” and at least 150 hours for all other aircraft. Unless a new engine is used, it is rare that the applicant is required to run a full 300-hour program. Generally, an applicant with a new aircraft design, but with an engine previously used in a type-certificated aircraft, would be required to conduct at least 150 hours of F & R flight testing. As most VLJ projects appear to be based on derivatives of the Williams FJ–33 engine or other previously-certificated engines, we expect this requirement to hold for
the typical project subject to this proposed rule. Failures during F & R flight testing, however, occasionally lead to extension of the required hours. We estimate that the average extension is 10%, or 15 hours, so our “typical” estimate assumes 165 hours of F & R flight testing. We double that estimate to also provide an estimate for a new airplane design with a new engine design.

Our final figures are $317,066 for a 165-hour program and $634,132 for a 330-hour program.

Benefits of This Proposed Rule

We expect that adoption of this proposed rule would enhance safety and reduce costs by substantially reducing the number of service difficulties experienced post-certification. This expectation is supported by evidence from the service experience of the EA–500. The Eclipse SDR 7 team looked at 85 Eclipse SDRs submitted between July 29, 2007 and May 13, 2008. The Eclipse SDR team “concluded the majority of the SDRs resulted from reliability issues separate from compliance with the minimum FAA standards” (see SCR, Executive Summary). There also were 6 Eclipse-related ADs issued in the one-year period between November 2007 and November 2008. In any case, the pitot/angle of attack (AOA) issue (SCR, p. 25: AD 2008–02–04) is the one most likely to have been uncovered by a mandatory F & R flight testing program. Extending the AD estimate to the entire U.S.-registered Eclipse EA–500 fleet (264 airplanes), we estimate the total cost of the pitot/AOA problem to be $2.5 million. As discussed above, however, we assess the probability of F & R flight testing uncovering the pitot/AOA problem to be approximately 0.7 to 0.75. Using the lower figure, we accordingly calculate the expected benefit as the total cost avoided of $2.5 million times 0.7, or $1.8 million. Since the FAA issued a type certificate on September 30, 2006, approximately 1.5 years prior to the compliance date for this AD, we discount the expected benefit 1.5 years to find present value benefit of $1.6 million.

Thus, the $1.6 million benefit from avoiding just this one problem greatly exceeds our $317,066 estimated typical cost of F & R flight testing.

Initial Regulatory Flexibility Determination

The Regulatory Flexibility Act of 1980 (Pub. L. 96–354) (RFA) establishes “as a principle of regulatory issuance that agencies shall endeavor, consistent with the objectives of the rule and of applicable statutes, to fit regulatory and informational requirements to the scale of the businesses, organizations, and governmental jurisdictions subject to regulation. To achieve this principle, agencies are required to solicit and consider flexible regulatory proposals and to explain the rationale for their actions to assure that such proposals are given serious consideration.” The RFA 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 rule will have a significant economic impact on a substantial number of small entities. If the agency determines that it will, the agency must prepare a regulatory flexibility analysis as described in the RFA.

However, if an agency determines that a rule is not expected to have a significant economic impact on a substantial number of small entities, section 605(b) of the RFA 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 FAA believes that this proposed rule would not have a significant impact on a substantial number of entities for the following reason: The cost of requiring F & R flight testing is small and a very small percentage of development, certification, and production costs. Consequently, requiring F & R flight testing for turbine-powered airplanes weighing 6,000 pounds or less would have a minimal cost impact on manufacturers of airplanes in this category. Therefore the FAA certifies that this proposed rule would not have a significant economic impact on a substantial number of small entities. The FAA solicits comments regarding this determination.

International Trade Impact Assessment

The Trade Agreements Act of 1979 (Pub. L. 96–39), as amended by the Uruguay Round Agreements Act (Pub. L. 103–465), prohibits Federal agencies from establishing standards or engaging in related activities that create unnecessary obstacles to the foreign commerce of the United States. Pursuant to these Acts, the establishment of standards is not considered an unnecessary obstacle to the foreign commerce of the United States, so long as the standard has a legitimate domestic objective, such the protection of safety, and does not operate in a manner that excludes imports that meet this objective. The statute also requires consideration of international standards and, where appropriate, that they be the basis for U.S. standards. The FAA has assessed the potential effect of this proposed rule and determined the purpose is to promote safety and is thus not considered an unnecessary obstacle to foreign commerce of the United States.

Unfunded Mandates Assessment

Title II of the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4) requires each Federal agency to prepare a written statement assessing the effects of any Federal mandate in a proposed or final agency rule that may result in an expenditure of $100 million or more (adjusted annually for inflation with the base year 1995) 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 $136.1 million.

This proposed rule does not contain such a mandate. The requirements of Title II do not apply to this proposal.

Executive Order 13132, Federalism

The FAA analyzed this proposed rule under the principles and criteria of Executive Order 13132, Federalism. We determined that this action would 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, and, therefore, would not have federalism implications.

Regulations Affecting Intrastate Aviation in Alaska

Section 1205 of the FAA Reauthorization Act of 1996 (110 Stat. 3213) requires the Administrator, when modifying regulations in Title 14 of the CFR in a manner affecting intrastate aviation in Alaska, to consider the extent to which Alaska is not served by transportation modes other than aviation, and to establish appropriate regulatory distinctions. The proposed rule would apply to the certification of airplanes that may be used for air transportation in Alaska. In light of air transportation needs, and terrain and aviation environment conditions unique
to that state, we anticipate that safety benefits of the proposal would be correspondingly higher than expected for aviation operations in the continental National Airspace System (NAS).

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 proposed rulemaking action qualifies for the categorical exclusion identified in paragraph 312(f) and involves no extraordinary circumstances.

Regulations That Significantly Affect Energy Supply, Distribution, or Use

The FAA has analyzed this proposal under Executive Order 13211, Actions Concerning Regulations that Significantly Affect Energy Supply, Distribution, or Use (May 18, 2001). We have determined that it is not a “significant regulatory action” under the executive order because it is not a “significant regulatory action” under Executive Order 12866, and it is not likely to have a significant adverse effect on the supply, distribution, or use of energy.

Additional Information

Comments Invited:
The FAA invites interested persons to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, or federalism impacts that might result from adopting the proposals in this document. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, please send only one copy of written comments, or if you are filing comments electronically, please submit your comments only one time.

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

Proprietary or Confidential Business Information:
Do not file in the docket information that you consider to be proprietary or confidential business information. Send or deliver this information directly to the person identified in the FOR FURTHER INFORMATION CONTACT section of this document. You must mark the information that you consider proprietary or confidential. If you send this information electronically, please send only one copy of written information that is proprietary or confidential.

Under 14 CFR 11.35(b), when we are aware of proprietary information filed with a comment, we do not place it in the docket. We hold it in a separate file to which the public does not have access, and we place a note in the docket that we have received it. If we receive a request to examine or copy this information, we treat it as any other request under the Freedom of Information Act (5 U.S.C. 552). We process such a request under the DOT procedures found in 49 CFR part 7.

Availability of Rulemaking Documents:
You can get an electronic copy of rulemaking documents using the Internet by—

1. Searching the Federal eRulemaking Portal (http://www.regulations.gov);

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 docket number or notice number of this rulemaking.

You may access all documents the FAA considered in developing this proposed rule, including economic analyses and technical reports, from the Internet through the Federal eRulemaking Portal referenced in paragraph (1).

List of Subjects in 14 CFR Part 21
Aircraft, Aviation safety, Exports, Imports, Reporting and recordkeeping requirements.

The Proposed Amendment
In consideration of the foregoing, the Federal Aviation Administration proposes to amend Chapter I of Title 14, Code of Federal Regulations, as follows:

PART 21—CERTIFICATION PROCEDURES FOR PRODUCTS, ARTICLES, AND PARTS

1. The authority citation for part 21 continues to read as follows:


2. Amend § 21.35 by revising paragraph (b)(2) to read as follows:

§ 21.35 Flight tests.
* * * * *
(b) * * *
(2) For aircraft to be certificated under this subchapter, except gliders and except reciprocating engine powered airplanes of 6,000 lbs. or less maximum certificated weight that are to be certificated under part 23 of this chapter, to determine whether there is reasonable assurance that the aircraft, its components, and its equipment are reliable and function properly.
* * * * *

Issued in Washington, DC, on April 2, 2010.

Kalene C. Yanamura,
Acting Director, Aircraft Certification Service.
[FR Doc. 2010–8130 Filed 4–8–10; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF DEFENSE
Office of the Secretary
32 CFR Part 108

[Docket ID: DOD–2009–OS–0036; RIN 0790–AI52]

Health Care Eligibility Under the Secretarial Designee Program and Related Special Authorities

AGENCY: Department of Defense (DoD).

ACTION: Proposed rule.

SUMMARY: This proposed action would establish policies and assign responsibilities for health care eligibility under the Secretarial Designee Program. It would also implement the requirement where the United States would receive reimbursement for inpatient health care provided in the United States to foreign military or diplomatic personnel or their dependents, except in certain cases covered by Reciprocal Health Care Agreements (RHCA)s between the Department of Defense and a foreign country.