

Below we provide FAA's projected average estimates for the next three years:<sup>1</sup>

*Current Actions:* New collection of information.

*Type of Review:* New Collection.

*Affected Public:* Individuals and Households, Businesses and Organizations, State, Local or Tribal Government.

*Average Expected Annual Number of activities:* 2.

*Respondents:* 2,813.

*Annual responses:* 2,813.

*Frequency of Response:* Once per request.

*Average minutes per response:* 15.

*Burden hours:* 704.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid Office of Management and Budget control number.

*Public Comments Invited:* You are asked to comment on any aspect of this information collection, including (a) Whether the proposed collection of information is necessary for FAA's performance; (b) the accuracy of the estimated burden; (c) ways for FAA to enhance the quality, utility and clarity of the information collection; and (d) ways that the burden could be minimized without reducing the quality of the collected information. The agency will summarize and/or include your comments in the request for OMB's clearance of this information collection.

Issued in Washington, DC, on March 21, 2011.

**Carla Scott,**

*FAA Information Collection Clearance Officer, IT Enterprises Business Services Division, AES-200.*

[FR Doc. 2011-7179 Filed 3-25-11; 8:45 am]

**BILLING CODE 4910-13-P**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### Aviation Rulemaking Advisory Committee; Transport Airplane and Engine Issues—New Task

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

<sup>1</sup> The 60-day notice included the following estimate of the aggregate burden hours for this generic clearance Federal-wide:

*Average Expected Annual Number of activities:* 25,000.

*Average number of Respondents per Activity:* 200.

*Annual responses:* 5,000,000.

*Frequency of Response:* Once per request.

*Average minutes per response:* 30.

*Burden hours:* 2,500,000.

**ACTION:** Notice of new task assignment for the Aviation Rulemaking Advisory Committee (ARAC).

**SUMMARY:** The FAA assigned ARAC a new task to consider whether changes to part 25 are necessary to address rudder pedal sensitivity and rudder reversals. This notice is to inform the public of this ARAC activity.

**FOR FURTHER INFORMATION CONTACT:** Robert C. Jones, Propulsion/Mechanical Systems Branch, ANM-112, Transport Airplane Directorate, Federal Aviation Administration, 1601 Lind Avenue, SW., Renton, Washington 98057, telephone (425) 227-1234, facsimile (425) 227-1149; e-mail [robert.c.jones@faa.gov](mailto:robert.c.jones@faa.gov).

#### SUPPLEMENTARY INFORMATION:

##### Background

The FAA established the Aviation Rulemaking Advisory Committee (ARAC) to provide advice and recommendations to the FAA Administrator on the FAA's rulemaking activities with respect to aviation-related issues. This includes obtaining advice and recommendations on the FAA's commitments to harmonize Title 14, Code of Federal Regulations (14 CFR), with its partners in Europe, Canada, and Brazil; in this instance, on rudder pedal sensitivity and rudder reversals. The committee will address the task under the ARAC's Transport Airplane and Engine Issues, and will reestablish the Flight Controls Harmonization Working Group, to assist in analysis of this task.

Recent research shows that regardless of training, pilots make inadvertent and erroneous rudder inputs, some of which have resulted in pedal reversals. Accident and incident data show airplanes that have experienced pedal reversals that surpassed the airplane's structural limit load and sometimes ultimate load. One case resulted in loss of the vertical fin, the airplane and 265 lives.

On November 12, 2001, an Airbus A300-600 crashed at Belle Harbor on climb-out resulting in 265 deaths and an airplane hull loss. The National Transportation Safety Board (NTSB) found "that the probable cause of this accident was the in-flight separation of the vertical stabilizer as a result of the loads beyond ultimate design that were created by the first officer's unnecessary and excessive rudder pedal inputs. Contributing to these rudder pedal inputs were characteristics of the Airbus A300-600 rudder system design and elements of the American Airlines Advanced Aircraft Maneuvering Program."

In two additional events, commonly known as the Miami Flight 903 event and the Interflug event, pilot commanded pedal reversals caused A300-600/A310 fins to experience loads greater than their ultimate load level. Both airplanes survived because they possessed greater strength than required by the current standards.

In January 2008, an Airbus 319 encountered a wake vortex. The pilot responded with several pedal reversals. Analysis shows that this caused a fin load exceeding limit load by approximately 29 percent. The pilot eventually stabilized the airplane and safely landed. The Transportation Safety Board (TSB) Canada investigated this event, with the NTSB providing accredited representatives.

On May 27, 2005, a de Havilland DHC-8-100 (Dash 8) airplane (registration C-GZKH, serial number 117) was on a passenger revenue flight from St. John's to Deer Lake, Newfoundland, with 36 passengers and 3 crew on board. During the climb-out from St. John's, the indicated airspeed gradually decreased to the point that the airplane entered an aerodynamic stall. The airplane descended rapidly, out of control, losing 4200 feet before recovery was effected approximately 40 seconds later. The incident occurred during daylight hours in instrument meteorological conditions. There were no injuries and the airplane was not damaged. During this event, the pilot commanded a pedal reversal.

The FAA sponsored studies<sup>1</sup> to understand parameters that affect the way pilots use the rudder. These studies included a survey of transport pilots from all over the world and real time piloted flight simulation. One of the studies found that many experienced pilots misused the rudder after wake vortex encounters. A follow-on study showed that the key parameter leading to excessive pedal use is short pedal travel. The analysis of a survey of large airplane pilots found:

1. Pilots use the rudder more than previously thought and often in ways

<sup>1</sup> 1. DOT/FAA/AM-10/14, The Rudder Survey Technical Report. For a copy, call Sarah Peterson at (405) 954-6840.

2. DOT/FAA/AR-09-5, Pilot Simulations Study to Develop Transport Aircraft Rudder Control System Requirements Phase 1 Simulator Motion System Requirements and Initial Results, Authors Hoh, Desrochers, Niscol, 18 April 2007.

**Note:** HAI is about to release another report that has additional and more important results (essentially that pilot tendency to over-control correlates very strongly with pedal travel).

3. DOT/FAA/AR-10/17, Piloted Simulation Study to Develop Transport Aircraft Rudder Control System Requirements Phase 2 Develop Criteria for Rudder Overcontrol, Authors Hoh, Desrochers, Niscol.

not recommended by the design approval holders (DAHs).

2. Pilots make erroneous pedal inputs, and some erroneous pedal inputs include rudder reversals.

3. After years of training, many pilots are not aware that they should not make pedal reversals, even below design maneuvering speed ( $V_A$ ). Note: Over the past 4 years, training and Airplane Flight Manual (AFM) changes have directed the pilot not to make cyclic control inputs, but events occurred despite this effort.

4. Pilots in airplane upset situations (e.g., wake vortex encounters) may revert to prior training and make excessive pedal inputs that they may then counter with pedal reversals.

The current standards in part 25 address large pedal inputs at airspeeds up to the design dive airspeed ( $V_D$ ). This ensures safe structural airplane characteristics throughout the flight envelope from single full rudder inputs. However, the standard does not address the loads imposed by rudder reversals. Additionally, sections of part 25 require that controls operate with ease and smoothness appropriate to their function. However, these standards do not address specific control system parameters such as inceptor travel breakout force or force gradient.

The FAA is partially addressing this condition for new designs by requiring under § 25.601 that applicants for new type certificates show that the design is capable of continued safe flight and landing after experiencing rudder pedal reversals. The applicants have been able to show compliance with this requirement by appropriate rudder controls. These control schemes have been incorporated through software and therefore add no weight or maintenance cost to the airplanes. However, such controls might only be capable of a limited number of pedal reversals before exceeding airframe ultimate loads, and part 25 may need to address this situation.

### The Task

Excessive use of rudder, beyond its design capabilities, has been identified as a contributing factor in several incidents and accidents. The FAA is tasking ARAC to consider:

1. the need to revise 14 CFR part 25, subpart C, to ensure airplane structural capability in the presence of rudder reversals and associated buildup of sideslip angles through a defined flight envelope (see question 1), or

2. if other sections of the airworthiness standard may more appropriately address this concern, such as certain pedal characteristics that

discourage pilots from making pedal reversals (reduce pedal sensitivity).

If ARAC determines new requirements are necessary, it must recommend performance-based standards that allows manufacturers the flexibility to design airplanes to meet their needs while ensuring airplane safety. ARAC would also need to recommend methods of compliance (criteria), such as background simulation or piloted simulation, to support the rule change.

In addition, ARAC must consider the need to revise 14 CFR parts 26, 121, 125, 129, and 135, or to write airworthiness directives to address the safety concerns posed by rudder reversals in the existing transport airplane fleet. Finally, ARAC must recommend criteria that can be used to determine the need for retrofit.

ARAC is expected to provide a report that addresses the following questions regarding new airplane designs, with rationale for their responses. Any disagreement should be documented, including the rationale from each party and the reasons for the disagreement.

### Questions

#### *For New Transport Airplanes:*

1. Define what is meant by pilot misuse/use of rudder and rudder pedal sensitivity, and determine the appropriate flight envelope that should be considered.

2. Consider what types of part 25 standards can be developed to prevent unintended or inappropriate rudder usage, or to ensure that unintended usage provides a level of safety commensurate with part 25. The working group should consider the following areas of the existing airworthiness standard:

- a. Loads.
- b. Maneuverability.
- c. System design.
- d. Control sensitivity.
- e. Warning.

3. What is the best regulatory approach to address rudder usage? For example, is it better to assume certain inputs and provide mitigation to ensure safe flight (envelope protection), or to provide certain standards to ensure that the pilot will not make (inadvertent or inappropriate) inputs?

4. What changes, if any, to part 25—including details for compliance demonstration and guidance—are recommended for new type certification applications to prevent unintended improper rudder usage? Some considerations include use of analysis, desktop or piloted simulation, or actual flight testing.

5. Are there any regulations or guidance material that might conflict with the proposal?

6. Does current technology exist to support implementation of new requirements?

7. What are the effects and implications of any proposed change regarding commonly used system designs? For example, would a new standard cause adverse interaction with currently used fly-by-wire flight control systems, stability augmentation or auto-flight systems, or with current operations?

8. Does the proposed solution present any issues relating to specific flight phases or environmental conditions? If so, what are they, and how should they be addressed?

9. What recommended guidance material is needed?

10. After reviewing airworthiness standard, safety, cost, benefit, and other relevant factors, including recent certification and fleet experience, are there any additional considerations that should be taken into account?

11. Is coordination necessary with other harmonization working groups (e.g., Human Factors, Flight Test)?

#### *For Existing Transport Airplanes:*

The report must address the following questions while considering existing transport airplane designs, with rationale for the responses. Any disagreements should be documented, including the rationale from each party and the reasons for the disagreement.

1. What factors should be considered to determine if retrofit should be required?

2. For airplanes that require retrofit per the criteria, what differences should be considered from the requirements developed for new transport airplanes?

3. What are the effects and implications of any proposed retrofit standards and guidance for current system designs? For example, would the retrofit cause adverse interaction with currently used fly-by-wire flight control systems, stability augmentation or auto-flight systems, or with current operations?

4. After reviewing airworthiness standards, safety, cost, benefit, and other relevant factors, including recent certification and fleet experience, are there any additional considerations that should be taken into account?

5. If improvements are needed to ensure safe rudder usage, what is the recommended method to mandate retrofit? (Ad hoc airworthiness directives, part 26 rules, etc.) In responding, ARAC should address the factors set forth in "FAA Policy Statement: Safety-A Shared

Responsibility-New Direction for Addressing Airworthiness Issues for Transport Airplanes" (70 FR 40166, July 12, 2005), and the industry's ability to provide the necessary retrofit equipment that might be required.

ARAC should provide information that could lead to requirements in rudder load conditions, and/or system design that can be satisfied with practical design approaches.

The FAA will provide a copy of each DOT report mentioned in this tasking notice.

*Schedule:* The tasks described above are to be accomplished within 18 months of publication of this tasking notice in the **Federal Register**.

#### **ARAC Acceptance of Task**

ARAC accepted the task and will assign it to the reestablished Flight Controls Harmonization Working Group, under Transport Airplane and Engine Issues. This working group will use task groups to assist in their activities. Nominees should have experience in the areas of flight test, flight controls, loads, or human factors. The working group serves as support to ARAC and assists in the analysis of assigned tasks. ARAC must review and approve the working group's recommendations. If ARAC accepts the working group's recommendations, it will forward them to the FAA.

#### **Working Group Activity**

The Flight Controls Harmonization Working Group must comply with the procedures adopted by ARAC. As part of the procedures, the working group must:

1. Recommend a work plan for completion of the task, including the rationale supporting such a plan, for consideration at the next ARAC meeting on Transport Airplane and Engine Issues held following publication of this notice.
2. Give a detailed conceptual presentation of the proposed recommendations before proceeding with the work stated in item 3 below.
3. Draft the appropriate documents and required analyses and/or any other related materials or documents.
4. Provide a status report at each ARAC meeting held to consider Transport Airplane and Engine Issues.

#### **Participation in the Working Group**

The Flight Controls Harmonization Working Group will be composed of technical experts having an interest in the assigned task. A working group member need not be a representative or a member of the full committee.

If you have expertise in the subject matter and wish to become a member of the working group, write to the person listed under the caption **FOR FURTHER INFORMATION CONTACT** expressing that desire. Describe your interest in the task and state the expertise you would bring to the working group. We must receive all requests by April 25, 2011. The assistant chair and the assistant executive director will review the requests and advise you whether or not your request is approved.

If you are chosen for membership on the working group, you must represent your aviation community segment and actively participate in the working group by attending all meetings, and providing written comments when requested to do so. You must devote the resources necessary to support the working group in meeting any assigned deadlines. You must keep your management chain and those you may represent advised of working group activities and decisions to ensure that the proposed technical solutions don't conflict with your sponsoring organization's position when the subject being considered is presented to ARAC for approval. Once the working group has begun deliberations, members will not be added or substituted without the approval of the assistant chair, the assistant executive director and the working group chair.

The Secretary of Transportation determined that the formation and use of ARAC is necessary and in the public interest in connection with the performance of duties imposed on the FAA by law.

ARAC meetings are open to the public. Meetings of the Flight Controls Harmonization Working Group will not be open to the public, except to the extent individuals with an interest and expertise are selected to participate. The FAA will make no public announcement of working group meetings.

Issued in Washington, DC, on March 23, 2011.

**Pamela Hamilton-Powell,**

*Executive Director, Aviation Rulemaking Advisory Committee.*

[FR Doc. 2011-7180 Filed 3-25-11; 8:45 am]

**BILLING CODE 4910-13-P**

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Highway Administration**

#### **Environmental Impact Statement: Cook County, IL**

**AGENCY:** Federal Highway Administration (FHWA), DOT.

**ACTION:** Notice of Intent.

**SUMMARY:** The FHWA is issuing this Notice of Intent to advise the public that an Environmental Impact Statement (EIS) will be prepared for the Grand Crossing Rail Project, which involves new railroad track work, structural work, grading, and signal improvements to provide a new direct route for Amtrak trains from New Orleans, Louisiana or Carbondale, Illinois into Chicago Union Station, and to provide sufficient mainline capacity to accommodate existing and additional Amtrak trains along with freight traffic in the City of Chicago, Cook County, Illinois.

**FOR FURTHER INFORMATION CONTACT:** Norman R. Stoner, P.E., Division Administrator, Federal Highway Administration, 3250 Executive Park Drive, Springfield, Illinois 62703, Phone: (217) 492-4600. Steve McClarty, Acting Bureau Chief, Bureau of Railroads, Illinois Department of Transportation, 100 W. Randolph Street, Suite 6-600, Chicago, Illinois 60601-3229, Phone: (312) 793-3940.

**SUPPLEMENTARY INFORMATION:** The FHWA, in cooperation with the Illinois Department of Transportation, Bureau of Railroads, will prepare an EIS on a proposal to construct a direct rail connection between the Canadian National (CN) and Norfolk Southern (NS) Chicago Line to provide a new, more direct route to Chicago's Union Station for Amtrak trains coming from New Orleans, Louisiana, and Carbondale, Illinois. The proposed project is an element of the overall Chicago Region Environmental and Transportation Efficiency Program (CREATE), a joint effort of the Illinois Department of Transportation, the Chicago Department of Transportation, and the Association of American Railroads to restructure, modernize, and expand freight and passenger rail facilities and highway grade separations in the Chicago metropolitan area. Alternative track configurations will be considered and refined. The no-action alternative will also be evaluated. A preferred alternative and associated potential impacts will be presented at a public hearing. Preliminary measures to minimize harm, construction cost estimates, and estimated right-of-way and relocation requirements will also be developed.

The proposed action will reduce travel time on the Amtrak's Illini-Saluki and City of New Orleans trains by eliminating a time-consuming back-up move into Union Station that these trains currently perform due to the existing track configuration. In addition, the proposed action will provide