

September 12, 2017

Ms. Lirio Liu
Director, Office of Rulemaking, ARM-1
Federal Aviation Administration
800 Independence Avenue, SW.
Washington, D.C. 20591

Subject: Tasking – ARAC Input to Support Regulatory Reform of Aviation Regulations – ARAC Addendum Report

Reference: Federal Register Tasking Notice (Vol. 82, 2017-08564, April 28, 2017)

Dear Ms. Liu,

On behalf of Aviation Rulemaking Advisory Committee (ARAC) members, I am pleased to formally submit the addendum report as directed in the referenced tasking. The Aviation Rulemaking Advisory Committee (ARAC) accepted the “ARAC Input to Support Regulatory Reform of Aviation Regulation” tasking on April 20, 2017. The tasking stems from the February 24, 2017, Executive Order titled “Enforcing the Regulatory Reform Agenda” in which the Administration required each government agency to establish a Regulatory Reform Task Force (RRTF) to evaluate existing regulations and make recommendations for their repeal, replacement or modification. The FAA elected to use ARAC to support the RRTF initiative. The tasking’s preamble states,

“Improvement of regulations is a continuous focus for the Department. Accordingly, the department regularly makes a conscientious effort to review its rules in accordance with the Department’s 1979 Regulatory Policies and Procedures (44 FR 11034, 2/26/1979), Executive Order 12866, Executive Order 13563, and section 610 of the Regulatory Flexibility Act. Through two new Executive Orders, President Trump directed agencies to further scrutinize its regulations. On January 30, 2017, President Trump signed an Executive Order titled “Reducing Regulation and Controlling Regulatory Costs (EO).” Under Section 2a of that Executive Order, unless prohibited by law, whenever an executive department or agency publicly proposes for notice and comment or otherwise promulgates a new regulation, it shall identify at least two existing regulations to be repealed. In addition, on February 24, 2017, President Trump signed Executive Order 13777 titled “Enforcing the Regulatory Reform Agenda.” Under this Executive Order, each agency is required to establish a Regulatory Reform Task Force (RRTF) to evaluate existing regulations, and make recommendations for their repeal, replacement, or modification. As part of this process, the Department is directed to seek input/assistance from entities significantly affected by its regulations. Accordingly, the Department, through the FAA, tasked ARAC to consider (1) recommendations on existing regulations that are good candidates for repeal, replacement, or modification and (2) recommendations on regulatory action identified in FAA’s regulatory agenda.”

Specifically, ARAC was tasked with the following:

1. Evaluate the FAA's regulations in Title 14 of the Code of Federal Regulations to determine any and all regulations that should be repealed, replaced or modified. This evaluation will attempt to identify regulations that:
 - a. Eliminate jobs, or inhibit job creation;
 - b. Are outdated, unnecessary, or ineffective;
 - c. Impose costs that exceed benefits; or
 - d. Create a serious inconsistency or otherwise interfere with regulatory reform initiatives and policies.
2. Provide a detailed explanation for recommending the repeal, replacement or modification of each regulation. This explanation will include any examples of why the regulation falls into one or more of the categories listed in paragraph 1.
3. Provide quantitative data on the costs and benefits of either repealing, replacing or modifying each regulation in the recommendation report.
4. Review the FAA's current regulatory actions identified in the regulatory agenda, and provide feedback on the current program as appropriate.
5. Develop both an initial report and an addendum report containing recommendations on the findings and results of the tasks explained above. This data will be provided in two recommendation reports. In the first recommendation report, ARAC will provide a list of regulations that are considered to address the criteria of paragraph 1 of this tasking. A second addendum recommendation report will provide details to supplement the first submission by ARAC to the FAA, and will provide the additional and detailed data as described in paragraph 2, 3 and 4 of this tasking.

The initial recommendation report was formally approved by ARAC and submitted to the FAA at the June 8, 2017 meeting. Dissenting opinions regarding the initial recommendation report were submitted to the FAA by the ARAC Chair on June 21, 2017.

Since the completion of phase 1, ARAC members worked to complete the enclosed addendum report as required by the tasking. All ARAC members were encouraged to submit proposals for regulatory change(s) that met the criteria identified in paragraph 1 above and provide additional details and rationale for each submission per paragraphs 2 and 3 above. Given the diversity of ARAC membership, and in some cases the complexity of regulations, ARAC members felt a venue in which interested members could gain a better understanding of each proposal was warranted. As such, five teleconferences with webcast capabilities were held to give interested ARAC members an opportunity to discuss the proposals and respond to any questions from the rest of the group. ARAC members were given the opportunity to further explain how the proposals met the above criteria. Members that did not feel the proposal met the above criteria or felt other implications of the change were not adequate were encouraged to express their viewpoints. During those discussions, members were also given the opportunity to call for the proposal to be withdrawn or file a dissent. Any member that could not participate on the call was encouraged to file comments, questions, support of any proposal(s) or dissenting opinion(s) via email. As with all ARAC activities, dissenting opinions were accepted and are included with the report when full consensus was not achieved on any specific proposal.

Ultimately, the process outlined above enabled ARAC members to create a list of proposed regulatory changes supported by the committee (dissenting opinions notwithstanding) in lieu of forwarding to FAA individual proposals from each member that lacked full ARAC support.

The regulatory changes proposed within this report detail the following information:

- Regulation by number and title
- Existing regulation text
- Why is change to or repeal of the regulation proposed (referencing categories in paragraph 1 above)
- Proposed action needed (repeal, replace or modify)
- Proposed change, including specific proposed regulation text if appropriate
- Rationale for the proposal
- Associated cost/benefit information, where available

Some proposals recommend that further evaluation be conducted before formal action is taken by the FAA and some proposals include dissenting opinion(s) either within the specific proposal or have been included at the end of the report.

The detail in the proposals vary given the time permitted to complete the second part of the tasking. ARAC accepts that some proposals contain greater detail and supporting data, but ARAC believes each proposal is a valid opportunity for the FAA to pursue and does meet the intent of the tasking and associated Executive Orders. ARAC supports any FAA decision to use existing sub-committees and working groups, and establishing others if needed, to further explore any of the proposals contained within the report.

Documented dissenting opinions also vary in detail and substantiation.

Due to time constraints, ARAC was unable to complete a review of the regulatory agenda, as directed in item 4 of the tasking.

ARAC members worked diligently since accepting this tasking, remaining engaged and committed to provide FAA with information to substantively inform near and long-term regulatory activities. ARAC challenges the FAA to closely review the proposals within this report and asks FAA to respond at the December 2017 meeting.

Sincerely,

Tim Brady, Ph.D.

ARAC Chair

Yvette Rose

ARAC Vice Chair

**ARAC Input to Support Regulatory Reform of Aviation
Regulations – ARAC Addendum Report**

September 12, 2017

Reference: Federal Register Tasking Notice
(Vol. 82, 2017-08564, April 28, 2017)

Airspace, Airports and Weather

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

§71.41. Class B airspace

Existing Regulation Text

N/A

Why is this rule on the list?

c) Impose costs that exceed benefits; or

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

The FAA should remove the Class B airspace areas listed in subpart B of FAA Order 7400.11A (incorporated by reference) that no longer meet the FAA established criteria for Class B airspace detailed in JO 7400.2 and should concurrently establish the correct airspace for these airports.

Rationale – Context of Regulation and proposed change

Background: The minimum criteria for designation of Class B airspace is found within JO 7400.2, Procedures for Handling Airspace Matters. The criteria requires that (1) the primary airport serves at least 5 million passengers enplaned annually; (2) the primary airport has a total airport operations count of 300,000 (of which at least 240,000 are air carriers and air taxi); and (3) the Class B designation will contribute to the efficiency and safety of operations, and is necessary to correct a current situation or problem that cannot be solved without a Class B designation. Of the 37 Class B airports in the U.S., many no longer meet these requirements and should no longer be contained within Class B airspace. The RTCA Tactical Operations Committee (TOC) reported in the “Class B Airspace: Designation, Design and Evaluation” final report, that many large airports “have seen their status as a primary hub removed and scheduled traffic drop precipitously.”

Proposal: The FAA should remove the Class B airspace areas listed in subpart B of FAA Order 7400.11A (incorporated by reference) that no longer meet the FAA established criteria for Class B airspace detailed in JO 7400.2 and should concurrently establish the correct airspace for these airports.

Safety Impact: As the FAA would review those areas not meeting Class B criteria for Class C airspace designation, adequate airspace protection would be provided as is warranted for the number of operations taking place. The airspace design process takes into account numerous factors which we believe results in an equivalent level of safety, while not imposing unnecessary requirements.

Rationale – Associated Cost Information

The FAA imposes several requirements on pilots in order to operate in Class B airspace that result in a cost to the operator:

- a) Mandatory ADS-B equipage for aircraft operating within the Mode C veil, which for an average single-engine piston aircraft can cost more than \$3,500 and an additional \$2,000 for installation (14 CFR 91.225)
- b) A Mode C transponder is required for an aircraft to be based within the Mode C veil or to transit the airspace; a transponder has an average cost of \$2,000 and requires inspection every 24 months (14 CFR 91.131 and 91.413)
- c) SVFR may be allowed at the primary airport which is an operational limitation that can result in aircraft delays (14 CFR 91 App D)
- d) An ATC clearance is required for airspace entry, including for an airspace transition, which discourages many pilots from flying into the airspace and instead they fly around incurring higher operating costs (14 CFR 91.131)
- e) Greater visibility and clearance from cloud requirements in Class B compared to G airspace impose an unnecessary restriction in those areas where Class G may be acceptable (14 CFR 91.155)
- f) For IFR operations, an operable VOR or TACAN receiver or an operable and suitable RNAV system is required for operating in Class B airspace; this is a requirement not applicable to Class C airspace and it imposes an expensive equipage requirement (14 CFR 91.131)
- g) Student pilots have limitations on operating in Class B airspace which results in a large area around the Class B airport negatively impacting flight training operations (14 CFR 91.131)
- h) Speed restrictions under Class B airspace of 200 knots can adversely impact the efficiency of underlying airports (14 CFR 91.117)
- i) Aerobatic flight or glider towing operations are not allowed within the lateral boundaries of Class B airspace; Class C would considerably reduce the lateral boundaries allowing safe and unique operations to take place in more areas (14 CFR 91.303 and 91.309)

It is conservatively estimated that 20,000⁹ general aviation aircraft are based within the Mode C veils and are impacted by the ADS-B mandate. Conservatively estimating that five Class B's are not in compliance, approximately 2,702 aircraft are unnecessarily being required to equip with ADS-B. Using the estimate of \$3,500 for equipment and \$2,000 for installation, the total financial burden is \$14,864,864 to meet the 2020 mandate. Additional equipage and maintenance burdens, as well as operational impacts like inability to conduct certain operations, are estimated to have a financial impact of \$5,000,000 per year. Over a 10-year period, the impact is \$64,864,864 without adjustment for inflation.

⁹ <https://generalaviationnews.com/2017/04/05/ads-b-airspace-is-your-ga-airport-inside-or-near-it/>.

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

150/5220-16E, Automated Weather Observing Systems (AWOS) for Non-Federal Applications

Existing Regulation Text

N/A

Why is this rule on the list?

c) Impose costs that exceed benefits; or

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

See below.

Rationale – Context of Regulation and proposed change

Background: The FAA requirement, outlined in AC 150/5220-16E, stipulates that for any weather station to be connected to WMSCR, the system which transmits METAR to users, that any “non-Federal navigation facilities meet and are maintained at the same standard as FAA facilities.” This means that weather observations officially provided to users must be AWOS-III systems or better. These systems must also be initially FAA certified, undergo annual FAA recertification, and receive a minimum of three maintenance visits a year. These additional requirements that take place after the initial expense of installing an AWOS station can be prohibitively expensive for operators, particularly in isolated environments where they are most needed.

Proposal: A supplementary weather certification standard would allow the hundreds of non-federal and federal weather systems across the country that are comparable to AWOS-III to be visible to pilots for advisory information. While the FAA has agreed that the National Weather Service’s MAWS systems meet the basic requirements of an AWOS-III, they are unwilling to waive the requirements for three maintenance visits a year, a significant expense in areas like Alaska. An alternate weather certification standard would allow many more reporting locations, like the MAWS, to be visible to pilots for VFR advisory purposes.

The FAA should remove the technical requirement that non-federal weather stations must be AWOS-III or better to be included in WMSCR, and to allow the establishment of a new VFR weather station standard that would allow fewer maintenance visits and reduced operational cost for owners. The VFR weather stations could have a unique identifier, similar to LWIS, to ensure pilots understand that system may be used for limited purposes. The incorporation of these hundreds of weather systems will provide much better information to pilots as they conduct their VFR flight planning. By reducing the cost of both the initial investment and ongoing maintenance, we expect that additional stations will be established, leading to improved aviation safety.

The current policy is too restrictive and serves as a barrier to VFR operators having greater access to weather. The fact that hundreds of weather observation systems are already available that meet aviation standards, but not technically able to be included in WMSCR, means pilots are being deprived of critical information. There are precedents for a VFR-only system. For example, the FAA

maintains several NDBs that are designated as for VFR only navigation. We believe the existing FAA standards could be relaxed to reflect the nature of VFR operations.

To provide greater weather information to its customers, Nav Canada has implemented the Limited Weather Information System (LWIS). These automated stations generate wind, temperature, dew point, and altimeter setting using LWIS as the identifier, instead of METAR or SPECI. The weather report is issued in the same order and with the same content, coding and formatting as for a METAR, except several elements may be omitted. The LWIS is similar to the AWOS-AV, AWOS-I, and AWOS-II systems; however, these systems in the United States are not disseminated via WMSCR. Nav Canada files a difference to ICAO's Annex 3 to allow them to meet the needs of their customers and comply with their international obligations.

Safety Impact: A study of National Transportation Safety Board data showed that VFR-into-IMC was the leading cause of general aviation fatalities between 1983 and 2002. Accidents involving VFR-into-IMC have been consistently estimated to have a mortality rate of around 75%. Although increased weather reporting could prevent accidents and save lives, the cost to acquire and maintain fully certified Automated Weather Observing System (AWOS) stations makes it unlikely that this will occur under the current federal and state budget climate.

There were 247 emergency medical helicopter accidents between 1983 and 2013 with 25% of those accidents directly related to weather. The fatality rate in these cases was 58% versus the non-weather related accidents where it was just 33%. Weather has a significant impact on the decision of these operators to launch and to turn around, unable to pick-up or drop-off that patient. The Helicopter Emergency Medical Services (HEMS) Weather Tool was implemented to help provide a more complete weather picture to these pilots so they could make more informed decisions.

The HEMS Weather Tool is limited to VFR operations and only for the operator to make "no-go" decisions. There would be a tremendous benefit to have additional weather information included in this tool, particularly the non-federal weather systems not included in WMSCR, due to the aviation reporting information they provide. Incorporating more weather systems that could be limited to assisting pilots "no-go" decisions could prevent VFR-into-IMC and save lives.

Rationale – Associated Cost Information

There are estimated to be about 100 AWOS systems that are categorized as less than AWOS-III. The reduction in the initial purchase price between these systems and the more expensive AWOS-III is conservatively estimated at \$50,000. The cost savings for reducing the number of maintenance visits for these locations is approximately \$5,000 per system per year. In the first year, the cost savings are \$5,500,000. These weather systems provide important information and the cost savings could allow more systems to be established and in more remote locations.

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

Part 77.23 (a) – Heliport Imaginary Surfaces

Existing Regulation Text

a. Primary surface. The area of the primary surface coincides in size and shape with the designated take-off and landing area. This surface is a horizontal plane at the elevation of the established heliport elevation.

Why is this rule on the list?

b) Are outdated, unnecessary or ineffective;

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

(a) Primary surface. The area of the primary surface coincides in size and shape with the designated final approach and takeoff area (FATO). This surface is a horizontal plane at the elevation of the established heliport elevation.

Rationale – Context of Regulation and proposed change

This citation uses outdated terminology from the Heliport Design advisory circular (AC 150-5390) chronology.

Rationale – Associated Cost Information

No cost information. Proposal amends incorrect terminology

ARAC – Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

ARAC reviewed, but does not endorse, the following proposed regulatory changes related to funding of activities associated with airport development/construction. The blue text represents proposed added regulatory text and proposed deletions are in red strikethrough. See ARAC recommendation on the following page.

14 CFR 234.12 - Waivers

Any carrier may request a waiver from the reporting requirements of this part. Such a request, at the discretion of the Director, Bureau of Transportation Statistics may be granted for good cause shown. The requesting party shall state the basis for such a waiver. **Any proposed waiver shall to subject to notice and public comment pursuant to the Administrative Procedure Act, and if approved shall not exceed more than 120 days in duration.**

14 CFR 151.37 - Sponsor eligibility

To be eligible to apply for an individual or joint project for development with respect to a particular airport a sponsor must –

- (a) Be a public agency, which includes for the purposes of this part only, a State, the District of Columbia, Puerto Rico, the Virgin Islands, Guam or an agency of any of them; a municipality or other political subdivision; a tax-supported organization; or the United States or an agency thereof; **or a non-government entity not controlled by a foreign person or government.**
- (b) Be legally, financially, and otherwise able to -
 - (1) Make the certifications, representations, and warranties in the application form prescribed in § 151.67(a);
 - (2) Make, keep, and perform the assurances, agreements, and covenants in that form; and
 - (3) Meet the other applicable requirements of the Federal Airport Act and subparts B and C;
- (c) Have, or be able to obtain, enough funds to meet the requirements of § 151.23; and
- (d) Have, or be able to obtain, property interests that meet the requirements of § 151.25(a).

~~For the purpose of paragraph (a) of this section, the United States, or an agency thereof, is not eligible for a project under subparts B and C, unless the project –~~

~~(1) Is located in Puerto Rico, the Virgin Islands, or Guam;~~

~~(2) Is in or is in close proximity to a national park, a national recreation area, or a national monument; or~~

~~(3) Is in a national forest or a special reservation for United States purposes.~~

14 CFR 151.125 - Allowable advance planning costs

(a) The United States' share of the allowable costs of an advance planning proposal is stated in the advance planning grant agreement, but is not more than ~~50~~ 80 percent of the total cost of the necessary and reasonable planning and engineering services.

ARAC Recommendation

The proposed regulatory changes above highlight the potential opportunity to reduce impediment of airport development and construction by the private sector. After significant discussion, and in recognition that many ARAC members lack a sufficient understanding of the listed regulations, ARAC recommends FAA establish an appropriate ARAC working group to review regulations related to the funding of new airport development and/or expansion of existing airports to ascertain what changes in regulation could remove impediments consistent with Executive Orders 12866 and 13777.

Part 21 & 25

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

14 CFR section [25.853\(g\)](#) – Compartment Interiors

Existing Regulation Text

- (g) Regardless of whether smoking is allowed in any other part of the airplane, lavatories must have self-contained, removable ashtrays located conspicuously on or near the entry side of each lavatory door, except that one ashtray may serve more than one lavatory door if the ashtray can be seen readily from the cabin side of each lavatory served.

SOURCE: Docket No. 5066, 29 FR 18291, Dec. 24, 1964, unless otherwise noted

[Amdt. 25-83, 60 FR 6623, Feb. 2, 1995, as amended by Amdt. 25-116, 69 FR 62788, Oct. 27, 2004]

Why is this rule on the list?

a) Eliminate jobs, or inhibit job creation;

b) Are outdated, unnecessary or ineffective;

c) Impose costs that exceed benefits; or

d) Create a serious inconsistency or otherwise interfere with regulatory reform initiatives and policies

Proposed Action (Repeal/Replace/Modify)

Repeal of the paragraph

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

Alternatively, strike the words “[r]egardless of whether” and replace with the word “if”.

14 CFR section [25.853\(g\)](#) – Compartment Interiors

- (g) ~~Regardless of whether~~ If smoking is allowed in any other part of the airplane, lavatories must have self-contained, removable ashtrays located conspicuously on or near the entry side of each lavatory door, except that one ashtray may serve more than one lavatory door if the ashtray can be seen readily from the cabin side of each lavatory served.

14 CFR section [25.853\(g\)](#) – Compartment Interiors

- (g) If smoking is allowed in any other part of the airplane, lavatories must have self-contained, removable ashtrays located conspicuously on or near the entry side of each lavatory door, except that one ashtray may serve more than one lavatory door if the ashtray can be seen readily from the cabin side of each lavatory served.

Rationale – Context of Regulation and proposed change

The regulation is—

- (1) Outdated:
 - (a) Section [25.854](#) was promulgated after section [25.853\(g\)](#); the equipage of smoke detectors and the built-in fire extinguisher eliminates the safety hazard of the passenger illegally smoking in the lavatories.
 - (b) Section [91.519](#) prohibits smoking in lavatories.
 - (c) Title 14 CFR part [252](#) was promulgated after section after section [25.853\(g\)](#); the purpose of the new part was to ban smoking on air carrier flights.
- (2) Costs exceed benefits
 - (a) No safety benefit.
 - (b) Incremental design costs are saved.
 - (c) Incremental production costs are saved.
 - (d) Installation and maintenance costs saved:
 - (e) Reduces weight.

Rationale – Associated Cost Information

- (1) Safety benefit has been eliminated by other rules that prohibit smoking in—
 - (a) Air carrier aircraft (see 14 CFR part [252](#))—this was the biggest risk when the original regulation was promulgated.
 - (b) Lavatories in all aircraft under part 91 (see, section [91.519](#))—whereas passengers may illegally smoke in those areas, the additional requirements under part 25 of smoke detectors and fire extinguishers further minimizes any safety of continued flight and landing issues.
- (2) Cost elements to consider over the life of a regulation—
 - (a) Impact:
 - (i) New production Part 25 aircraft
 - (A) Passenger
 - (B) Cargo
 - (ii) Existing part 25 aircraft
 - (A) Passenger
 - (B) Cargo
 - (iii) Average number of lavatories
 - (A) Wide body
 - (B) Narrow body
 - (b) None-recurring costs associated with making minor design changes to:
 - (i) Eliminate the lavatory ashtray, or
 - (ii) Provide a customer option to include a lavatory ashtray.
 - (c) Production savings will be realized because:
 - (i) The labor costs associated with creating the hole for ashtray fitment will be eliminated.
 - (ii) The time and material costs associated with obtaining the ashtrays.
 - (iii) The time costs associated with installing the ashtrays.
 - (d) Although the ashtray manufacturers will not realize income associated with the current regulation, the cost savings over the life of the aircraft will balance the loss of revenue to the non-aviation centric industry.

- (e) Reduction in weight for aircraft that do not include lavatory ashtrays will be negligible; however, for aircraft with multiple lavatories the change will be measureable.
 - (f) Installation and maintenance costs saved include:
 - (i) While ashtrays can be MEL'd, that action necessitates time associated with:
 - (A) Reporting (squawking the issue)
 - (B) Making the deferral (completing the paperwork)
 - (ii) Maintenance time to diagnose and correct the discrepancies
 - (A) Replacement of the ashtray (obtaining the material, diagnosing and correcting the discrepancy)
 - (B) Damage to the door or other structure or surrounding area:
 - (1) Removal of the door
 - (2) Shipment to maintenance shop or vendor and cost of repair; Repair costs
 - (3) Replacing the door
 - (iii) Procurement costs for stolen, missing and/or damaged ashtrays:
 - (A) Administrative time associated with creating and tracking vendors and inventory levels
 - (B) Replacement costs
 - (C) Shipment to out or line stations
- (3) A rough estimate of the cost of compliance with the current rule is easily over \$2 million a year.

§ [25.854](#) Lavatory fire protection.

For airplanes with a passenger capacity of 20 or more:

- (a) Each lavatory must be equipped with a smoke detector system or equivalent that provides a warning light in the cockpit, or provides a warning light or audible warning in the passenger cabin that would be readily detected by a flight attendant; and
- (b) Each lavatory must be equipped with a built-in fire extinguisher for each disposal receptacle for towels, paper, or waste, located within the lavatory. The extinguisher must be designed to discharge automatically into each disposal receptacle upon occurrence of a fire in that receptacle.

[Amdt. 25-74, 56 FR 15456, Apr. 16, 1991]

Section [91.519](#)

- (a) Before each takeoff the pilot in command of an airplane carrying passengers shall ensure that all passengers have been orally briefed on—
 - (1) Smoking. Each passenger shall be briefed on when, where, and under what conditions smoking is prohibited. This briefing shall include a statement, as appropriate, that the Federal Aviation Regulations require passenger compliance with lighted passenger information signs and no smoking placards, prohibit smoking in lavatories, and require compliance with crewmember instructions with regard to these items;

SOURCE: Docket No. 18334, 54 FR 34314, Aug. 18, 1989, unless otherwise noted.

[Doc. No. 18334, 54 FR 34314, Aug. 18, 1989, as amended by Amdt. 91-231, 57 FR 42672, Sept. 15, 1992; Amdt. 91-280, 68 FR 54561, Sept. 17, 2003]

14 CFR part [252](#)

§ [252.1](#) Purpose.

This part implements a ban on smoking as defined in § 252.3, including the use of electronic cigarettes and certain other devices, on flights by air carriers and foreign air carriers.

SOURCE: Docket No. DOT-OST-2000-7473, 65 FR 36775, June 9, 2000, unless otherwise noted.

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

14 CFR 21.33 Inspection and tests.

14 CFR 21.53 Statement of conformity.

FAA Order 8110.4C Type Certification Process

Existing Regulation Text

§21.33 Inspection and tests.

(a) Each applicant must allow the FAA to make any inspection and any flight and ground test necessary to determine compliance with the applicable requirements of this subchapter. However, unless otherwise authorized by the FAA—

(1) No aircraft, aircraft engine, propeller, or part thereof may be presented to the FAA for test unless compliance with paragraphs (b)(2) through (b)(4) of this section has been shown for that aircraft, aircraft engine, propeller, or part thereof; and

(2) No change may be made to an aircraft, aircraft engine, propeller, or part thereof between the time that compliance with paragraphs (b)(2) through (b)(4) of this section is shown for that aircraft, aircraft engine, propeller, or part thereof and the time that it is presented to the FAA for test.

(b) Each applicant must make all inspections and tests necessary to determine—

(1) Compliance with the applicable airworthiness, aircraft noise, fuel venting, and exhaust emission requirements;

(2) That materials and products conform to the specifications in the type design;

(3) That parts of the products conform to the drawings in the type design; and

(4) That the manufacturing processes, construction and assembly conform to those specified in the type design.

[Doc. No. 5085, 29 FR 14564, Oct. 24, 1964, as amended by Amdt. 21-17, 32 FR 14926, Oct. 28, 1967; Amdt. 21-27, 34 FR 18363, Nov. 18, 1969; Amdt. 21-44, 41 FR 55463, Dec. 20, 1976; Amdt. 21-68, 55 FR 32860, Aug. 10, 1990; Amdt. 21-68, 55 FR 32860, Aug. 10, 1990; Amdt. 21-92, 74 FR 53386, Oct. 16, 2009]

§21.53 Statement of conformity.

(a) Each applicant must provide, in a form and manner acceptable to the FAA, a statement that each aircraft engine or propeller presented for type certification conforms to its type design.

(b) Each applicant must submit a statement of conformity to the FAA for each aircraft or part thereof presented to the FAA for tests. This statement of conformity must include a statement that the applicant has complied with §21.33(a) (unless otherwise authorized under that paragraph).

[Amdt. 21-17, 32 FR 14926, Oct. 28, 1967, as amended by Amdt. 21-92, 74 FR 53386, Oct. 16, 2009]

FAA Order 8110.4C Type Certification Process

2-5. COMPLIANCE PLANNING

...

c. Conformity for Engineering Purposes. The FAA uses conformity inspections for both quality assurance and engineering purposes. FAA conformity is a validation of the applicant's conformity. As part of the type certification process, the ACO must identify the minimum level of conformity inspections needed for certification. During the inspection, FAA

manufacturing inspectors base the depth of their assessment on factors such as quality of the applicant's conformity paperwork, comparison of inspection results, and magnitude and complexity of the inspection.

(1) The applicant is responsible for identifying the test articles that will be used to generate compliance data, and for conducting 100 percent applicant conformity of those test articles as required by 14 CFR § 21.33(b). The ACO is responsible for identifying features, attributes, and components critical to the test results and for requesting FAA conformity on these test articles with special instructions as necessary. The MIDO is responsible for determining what conformity inspections will be necessary for processing production approvals. Because both offices need FAA conformity inspections for different purposes, the ACO and MIDO should finalize a comprehensive conformity plan (also known as conformity verification plan) together. Base this conformity plan on the test article and schedule data in the applicant's certification plan.

(2) To expedite agreement of a completed PSCP, applicants should develop their test article and schedule data into a conformity plan that the ACO and MIDO can accept with minimal further development (see paragraph 5-5 of this order). Applicants should consider the conformity requirements elsewhere in this and other orders and present a plan that supports their showing of compliance for a TC and the FAA's finding of compliance for the TC and PC. While applicant involvement in the conformity plan is strongly encouraged (only the supporting data listed in paragraph 2-3d of this order are required), the FAA must retain the discretion to make the inspections necessary to determine compliance with the applicable 14 CFR requirements. Therefore, the FAA is responsible for the final content of the plan.

...

Why is this rule on the list?

b) Are outdated, unnecessary or ineffective;

- *Applicant manufacturers are completely responsible for conformity specifically prescribed by regulation and have modern quality systems and industry best practices for robust configuration management systems and IT tools for controlling test article configuration to ensure conformity in compliance with safety and regulatory requirements. A configuration management system ensures conformity is built into the process for all articles/parts whereas the current FAA conformity process is only capable of managing configuration at a single individual component level.*

c) Impose costs that exceed benefits; or

- *Redundant FAA conformity process is extremely administratively burdensome for both industry and FAA and also requires FAA personnel or its designees to travel all over the U.S. and the world to conduct redundant inspections which is already the responsibility of the applicant.*

d) Create a serious inconsistency or otherwise interfere with regulatory reform initiatives and policies

- *Redundant FAA verification of conformity at the individual part level is not a systematic approach to system safety oversight and is contrary to current FAA compliance philosophy and risk based decision making as well as certification reforms supported by FAA, industry and Congress.*
- *Redundant verification of conformity is unique to the FAA and United States. EASA from Europe and TCCA from Canada do not require a second verification check of configuration and allows for a manufacturer configuration management system that has been approved/accepted by the Authority.*

Proposed Action (Repeal/Replace/Modify)

Replace the current requirement for redundant FAA conformity verification to allow the use of a systematic approach to test article configuration management system that satisfies FAA conformity and safety requirements in accordance with 14 CFR 21.33 and 21.53.

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

14 CFR 21.33 and 21.53 does not require a redundant FAA conformity but custom and practice for this interpretation and method of compliance has been established by FAA Order 8110.4C, Type Certification Process. At a minimum, FAA Order 8110.4C, Type Certification Process (and other related policy and guidance material) must be revised to allow the use of a configuration management system as an alternative to the currently required redundant FAA conformity process. Specific recommendations for changes to these documents are provided in the referenced report.

Rationale – Context of Regulation and proposed change

The FAA 14 CFR Part 23 Reorganization Aviation Rulemaking Committee (23ARC), comprised of broad representation from both industry and FAA, report dated June 5, 2013 included a recommendation to replace current redundant FAA conformity process to allow the use of a configuration management system. The current FAA conformity process is essentially a double check of the applicant process (who is required by regulation to do 100% company conformity) and is extremely administratively burdensome for both industry and FAA. It requires FAA personnel or its specially authorized designees to travel all over the U.S. and the world to conduct redundant inspections which is already conducted as a responsibility of the applicant.

In addition, the redundant FAA conformity process is very labor intensive and disjointed by the fact that individual Requests For Conformity (RFC) are frequently required for different tests on the same test article. Coordinating these RFCs requires significant manual effort, spreadsheets, or even software for complex aircraft programs. This can be accomplished more quickly and efficiently using an integrated data management system that links the test plan requirements directly to the test article configuration and test schedule.

The Type Design and Production Certification Working Group of the 23ARC compared the current conformity process against a proposed configuration management system (currently used in FAA approved quality systems and industry best practice in the US and is a standard method of conformity verification accepted by EASA and TCCA) that would allow the applicant and the FAA to ensure that the article being tested satisfied the requirements in the applicable test plan(s). The analysis is available from the 23ARC report Section 5, Type Certification / Production Certification Working Group – Recommendations and Appendix F.3 Conformity White Paper.

In addition, redundant verification of conformity is unique to the FAA and United States. EASA from Europe and TCCA from Canada do not require a second verification check of configuration and allows for a manufacturer configuration management system that has been approved/accepted by the Authority.

The 23ARC recommends that the appropriate policies, Orders, or other guidance be created or revised to allow implementation of the configuration management process in lieu of the current conformity requirements described in FAA Orders. No changes to part 21 would be required to allow for the use of the configuration management process.

Ref: https://www.faa.gov/about/office_org/headquarters_offices/avs/offices/air/directorates_field/small_airplanes/media/P23_Reorg_ARCFINAL.pdf

Rationale – Associated Cost Information

There was unanimous agreement by the 23ARC working group that the FAA conformity process was the number one cost driver in certification. A detailed cost/benefit analysis for replacing a redundant FAA conformity with a configuration management process is provided in the 23ARC report, Appendix F.3 Conformity White Paper. In summary, Direct type certification conformity expense savings on the order of 2 to 8 full time equivalency (FTE) heads for each individual part 23 airplane TC applicant depending on the complexity of the project in addition to operating expense travel savings of \$40,000 per year during routine times to \$200,000 per month during peak type certification program efforts. In addition, there are significant cost savings by avoiding/reducing program delay due to required redundant FAA conformity which can run over \$100,000 per day for a small part 23 airplane.

Ref: https://www.faa.gov/about/office_org/headquarters_offices/avs/offices/air/directorates/field/small_airplanes/media/P23_Reorg_ARCFINAL.pdf

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

Part 25 - Section 365(b) - Pressurized compartment loads

Existing Regulation Text

(b) The external pressure distribution in flight, and stress concentrations and fatigue effects must be accounted for.

Why is this rule on the list?

b) Are outdated, unnecessary or ineffective;

Proposed Action (Repeal/Replace/Modify)

Repeal

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

Rationale – Context of Regulation and proposed change

Fatigue aspects of both pressure cases and flight cases are well accounted for by 25.571 and therefore this requirement 25.365b is not necessary.

Rationale – Associated Cost Information

Time spent for justification with no safety benefit

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

Part 25 - Section 651 - Proof of strength

Existing Regulation Text

(a) Limit load tests of control surfaces are required. These tests must include the horn or fitting to which the control system is attached.

(b) Compliance with the special factors requirements of Secs. 25.619 through 25.625 and 25.657 for control surface hinges must be shown by analysis or individual load tests.

Why is this rule on the list?

b) Are outdated, unnecessary or ineffective;

Proposed Action (Repeal/Replace/Modify)

Repeal

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

Rationale – Context of Regulation and proposed change

Practice of doing testing is outdated, state of the art is analysis validated by test data. This requirement is adequately covered by other existing requirements like 25.305/307 and 25.683.

Rationale – Associated Cost Information

Cost of the test + Time spent for justification with no safety benefit

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

Part 25 - Section 657 (b) - Hinges

Existing Regulation Text

(b) Hinges must have enough strength and rigidity for loads parallel to the hinge line.

Why is this rule on the list?

b) Are outdated, unnecessary or ineffective;

Proposed Action (Repeal/Replace/Modify)

Repeal

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

Rationale – Context of Regulation and proposed change

The strength for loads parallel to the hinge line is already covered in 25.393 and should be concentrated in this requirement only.

Rationale – Associated Cost Information

Time spent for justification with no safety benefit

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

Part 25 - Section 809(a) - Emergency exit arrangement

Existing Regulation Text

(a) Each emergency exit, including each flightcrew emergency exit, must be a moveable door or hatch in the external walls of the fuselage, allowing an unobstructed opening to the outside. In addition, each emergency exit must have means to permit viewing of the conditions outside the exit when the exit is closed. The viewing means may be on or adjacent to the exit provided no obstructions exist between the exit and the viewing means. Means must also be provided to permit viewing of the likely areas of evacuee ground contact. The likely areas of evacuee ground contact must be viewable during all lighting conditions with the landing gear extended as well as in all conditions of landing gear collapse.

Why is this rule on the list?

b) Are outdated, unnecessary or ineffective;

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

Common standard harmonized with EASA CS25.809 that distinguishes between passenger and flightcrew exits.

Rationale – Context of Regulation and proposed change

Exemptions issued for overwing outside view, and for flightcrew exits outside view.

The FAR applies the requirement (viewing ground contact area and illumination) to flight deck exits which is very challenging to meet. The CS corrected flight deck exits to allow flash lights for illumination and clarified what must be viewed (not ground contact area but general vicinity). For the over wing exits, the FAR requires viewing and lighting (very challenging). The CS corrected the over wing exits to remove the lighting requirement and clarified to view requirement since ground contact cannot be viewed with door closed from the door window area.

Rationale – Associated Cost Information

Time spent for justification with no safety benefit

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

Part 25 - Sections 25.811 & 812 - Emergency exit marking Emergency lighting

Existing Regulation Text

(a)(2)(b)(1)(i) Each passenger emergency exit locator sign required by §25.811(d)(1) and each passenger emergency exit marking sign required by §25.811(d)(2) must have red letters at least 1 1/2 inches high on an illuminated white background

Why is this rule on the list?

b) Are outdated, unnecessary or ineffective;

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

Propose to harmonize with EASA CS25.

Example: 812 (b)(1)(i) Each passenger emergency exit locator sign required by CS 25.811 (d)(1) and each passenger emergency exit marking sign required by CS 25.811(d)(2) must have red letters on an illuminated white background or a universal symbol, of adequate size...

Rationale – Context of Regulation and proposed change

Avoid multiple ELOS

Rationale – Associated Cost Information

OEMs: Time necessary to create administrative work or the ELOS dossier

FAA: Administrative burden to review and process the dossier with no safety benefit

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

Part 25 - Section 25.841 - Pressurized cabins

Existing Regulation Text

(a) Pressurized cabins and compartments to be occupied must be equipped to provide a cabin pressure altitude of not more than 8,000 feet at the maximum operating altitude of the airplane under normal operating conditions.

(1) If certification for operation above 25,000 feet is requested, the airplane must be designed so that occupants will not be exposed to cabin pressure altitudes in excess of 15,000 feet after any probable failure condition in the pressurization system.

(2) The airplane must be designed so that occupants will not be exposed to a cabin pressure altitude that exceeds the following after decompression from any failure condition not shown to be extremely improbable:

(i) Twenty-five thousand (25,000) feet for more than 2 minutes; or

(ii) Forty thousand (40,000) feet for any duration.

(3) Fuselage structure, engine and system failures are to be considered in evaluating the cabin decompression.

Why is this rule on the list?

b) Are outdated, unnecessary or ineffective;

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

Add waiver for aircraft with engines mounted under the wings

Rationale – Context of Regulation and proposed change

Impossibility to certify an aircraft with engines mounted under the wing for operations beyond 40000ft, (size of the debris) that leads to systematic exemption request

Rationale – Associated Cost Information

OEMs: Time necessary to create administrative work or the exemption dossier

FAA: Administrative burden to review and process the dossier with no safety benefit

ARAC recommends the Transport Airplane and Engine sub-committee evaluate this proposal before further action is taken by FAA.

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

Part 25 - Section 843(a) - Tests for pressurized cabins

Existing Regulation Text

(a) Strength test. The complete pressurized cabin, including doors, windows and valves, must be tested as a pressure vessel for the pressure differential specified in Sec. 25.365(d).

Why is this rule on the list?

b) Are outdated, unnecessary or ineffective;

Proposed Action (Repeal/Replace/Modify)

Repeal

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

Rationale – Context of Regulation and proposed change

By complying with all part 25.305/307 requirements for structural strength, the intent of 25.843 is inherently covered and making a compliance statement to 25.843 does not add any safety benefit.

Rationale – Associated Cost Information

Time spent for justification with no safety benefit

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

Part 25 - Section 901(c) - Subpart E - Powerplant - General - Installation

Existing Regulation Text

For each powerplant and auxiliary power unit installation, it must be established that no single failure or malfunction or probable combination of failures will jeopardize the safe operation of the airplane except that the failure of structural elements need not be considered if the probability of such failure is extremely remote.

Why is this rule on the list?

b) Are outdated, unnecessary or ineffective;

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

Harmonize with EASA CS 25.901(c) rule i.e. refer to 25.1309 except for UERF and combustor burnthrough

Rationale – Context of Regulation and proposed change

The current FAA rule creates a serious inconsistency with the way the powerplant installation is treated compared to other aircraft systems. The FAA rule is considered to be unduly stringent compared to the 25.1309 systems safety requirements. The equivalent EASA rule refers to 25.1309.

Rationale – Associated Cost Information

Time spent for justification with no safety benefit

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

Part 25 - Section 981(a)(3) and associated AC25.981-1C -Powerplant - Fuel System - fuel tank ignition prevention

Existing Regulation Text

No ignition source may be present at each point in the fuel tank or fuel tank system where catastrophic failure could occur due to ignition of fuel or vapors. This must be shown by:
Demonstrating that an

ignition source could not result from each single failure, from each single failure in combination with

each latent failure condition not shown to be extremely remote, and from all combinations of failures

not shown to be extremely improbable. The effects of manufacturing variability, aging, wear, corrosion, and likely damage must be considered.

Why is this rule on the list?

c) Impose costs that exceed benefits; or

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

Require an analysis that does not go beyond 25.1309

Rationale – Context of Regulation and proposed change

The current FAA rule and associate AC impose requirements on the fuel system that go well beyond equivalent 25.1309 requirements imposed on the other aircraft systems. Compliance to this requirement has driven costly designs constraints (with associated costs) with no obvious safety benefits. It is considered that imposing to the fuel system safety requirements that go beyond 25.1309 is not justified.

Rationale – Associated Cost Information

Time spent for justification with no safety benefit

ARAC recommends the Transport Airplane and Engine sub-committee evaluate this proposal before further action is taken by FAA.

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

Part 25 - Section 1403 - Wing icing detection lights

Existing Regulation Text

Unless operations at night in known or forecast icing conditions are prohibited by an operating limitation, a means must be provided for illuminating or otherwise determining the formation of ice on the parts of the wings that are critical from the standpoint of ice accumulation. Any illumination that is used must be of a type that will not cause glare or reflection that would handicap crewmembers in the performance of their duties.

Why is this rule on the list?

b) Are outdated, unnecessary or ineffective;

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

Ice detection systems:

Unless operations at night in known or forecast icing conditions are prohibited by an operating limitation, a means must be provided for (illuminating or by other means) determining the formation of ice on the parts of the wings that are critical from the standpoint of ice accumulation. Any illumination that is used must be of a type that will not cause glare or reflection that would handicap crewmembers in the performance of their duties.

Rationale – Context of Regulation and proposed change

The requirement originates from very early design of ice detection systems which is now outdated.

Rationale – Associated Cost Information

Time spent for justification with no safety benefit

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

Part 25 – Section 563 - Structural ditching provisions

Existing Regulation Text

Structural strength considerations of ditching provisions must be in accordance with Sec. 25.801(e).

Why is this rule on the list?

b) Are outdated, unnecessary or ineffective;

Proposed Action (Repeal/Replace/Modify)

Repeal

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

Rationale – Context of Regulation and proposed change

Rule is just a pointer to another rule, 25.801(e) that captures the structural ditching requirements.

Rationale – Associated Cost Information

Time spent for justification with no safety benefit

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

Part 25 – Section 631 - [Bird strike damage]

Existing Regulation Text

The empennage structure must be designed to assure capability of continued safe flight and landing of the airplane after impact with an 8-pound bird when the velocity of the airplane (relative to the bird along the airplane's flight path) is equal to VC at sea level, selected under Sec. 25.335(a). Compliance with this section by provision of redundant structure and protected location of control system elements

or protective devices such as splitter plates or energy absorbing material is acceptable. Where compliance is shown by analysis, tests, or both, use of data on airplanes having similar structural design is acceptable.

Why is this rule on the list?

c) Impose costs that exceed benefits; or

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

Harmonise with EASA CS 25.631 rule

Rationale – Context of Regulation and proposed change

The rule requires considering the Bird impact on empennage only, while other a/c structures may also be prone to bird impact.

Rule is inconsistent with 14 CFR 25.571e1, where 4lb bird impact is required.

Rationale – Associated Cost Information

Time spent for justification with no safety benefit

ARAC recommends the Transport Airplane and Engine sub-committee evaluate this proposal before further action is taken by FAA.

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

FAA Orders and Policy which address use of current policy vs acceptable means of compliance including but not limited to the following.

- FAA Order 8110.4C, Change 1-6 incorporated "Type Certification",
- FAA Order 8110.37E "Designated Engineering Representative (DER) Handbook",
- FAA Order 8110.112A "Standardized Procedures for Usage of Issue Papers and Development of Equivalent Levels of Safety Memorandums",
- FAA Order 8100.15B, Change 2 incorporated "Organization Designation Authorization Procedures"

Existing Regulation Text

- Order 8110.4C - Type Certification

Section 2-4, "Requirements Definition," paragraph b.(4) "b. The establishment of a TC Project, (4) Assignments and Duties of the Project Officer" states:

"The project officer is responsible for ensuring that the project team is using current policy and guidance. The project officer also provides project- specific rules (for example, special conditions and exemptions) and policy (for example, acceptable means of compliance, ELOS, and certification basis) to the project team."

Section 2-4, paragraph j. "Certification Basis" states:

"...Upon agreement of the certification basis, new policy will not be imposed unless the policy is needed to address an unsafe design condition the FAA has corrected by mandating a change on other projects with the same design feature."

Section 2-6, "Implementation," paragraph f.(2)(a) "f. Engineering Compliance by Inspection, (2) Sample Inspections, (a) Interior Inspections" states:

"...As with all findings, in accomplishing an interior compliance inspection, the certification team makes many determinations and, therefore, should be very familiar with current regulations and policy."

Section 2-7, "Post-Certification Activities," paragraph e.(1) "e. Post-Certification Evaluations, (1) Special Certification Review (SCR)":

Sub-paragraph (f) states: *"Thoroughly explore every significant aspect and ramification of the potential safety problem in question. Consider the adequacy of the applicable regulations and policy material."*

Sub-paragraph (g) states: *"The SCR chairperson prepares a report of the team's findings and recommendations. The accountable directorate may use the report to develop regulatory changes or guidance material."*

Sub-paragraph (h) states: *"The certifying ACO is responsible for appropriate action on the SCR team's findings and recommendations."*

- Order 8110.37E - Designated Engineering Representative (DER) Handbook

Chapter 4, *"Certification Activities of a DER"* paragraph 4-1 *"Type Certification Projects"* states:

"... A DER must follow FAA policy in determining compliance with pertinent regulations. ..."

- Order 8110.112A - Standardized Procedures for Usage of Issue Papers and Development of Equivalent Levels of Safety Memorandums

Chapter 2, *"Issue Papers"* paragraph 2-3 *"Items Considered Significant Issues and Addressed by IPs."*

Sub-paragraph n. *"Changes in Interpretation"* states: *"Include new interpretation or policy of existing regulations using precedent-setting new technology in an IP at the early stages of the certification project."*

Sub-paragraph p. *"Administrative IPs"* states: *"Administrative IPs may be used to define policy, interpret policy, or document the resolution of issues when adherence to policy becomes controversial or might otherwise require Type Certification Board (TCB) action to resolve (refer to paragraph 3-1n below for the duties of a TCB). An example of this is a nonstandard method or means of compliance proposed by an applicant."*

Chapter 3, *"Roles, Responsibilities, and the Issue Paper Process"*

Paragraph 3-1 *"Roles and Responsibilities,"* sub-paragraph a. *"Accountable Directorate"* states: *"... In general, the primary purpose of the directorate review is to—*

(1) Ensure and lead standardization of the IP by comparing it with similar IPs from other projects.

(2) Provide current policy related to the significant issue.

Note: With some validation projects, the accountable directorate may fulfill the role of the PACO in addition to the duties listed here."

- Order 8100.15B, Change 2 incorporated - Organization Designation Authorization Procedures

Chapter 3, *"Qualifications, Responsibilities, and Authority"*

Paragraph 3-4 *"ODA Holder Qualifications,"* sub-paragraph b. *"Organizational Model."* states: *"... (1) The ODA administrator must ensure that the organization performs all authorized functions in accordance with the regulations and applicable FAA policy. ..."*

Paragraph 3-6 *"Responsibilities,"* states: *"ODA holders and units must follow the FAA regulations, directives, policies, guidance, and procedures as applicable to the authorized functions. The responsibility for finding compliance with the regulations and applicable policy remains with the ODA holder. The ODA holder is responsible for the activity of the ODA unit and ODA administrator."*

Sub-paragraph b. *"ODA Administrator"* states: *"... The ODA administrator must ensure that the organization follows the procedures in its procedures manual and that the processes comply with all applicable FAA regulations and policy. ..."*

Paragraph 3-14 "Self-Audit," states: "The ODA holder must perform self-audits that evaluate the ODA unit members, the ODA processes, and compliance with all applicable FAA regulations and policy. A self-audit must be performed at least once every 12 months, and as requested by the OMT. The self-audit does not replace the FAA inspection required by this order. The procedures manual must contain the ODA holder's audit procedures."

Chapter 8, "Type Certification Functions,"

Paragraph 8-6 "Type Certification Programs," states: "An ODA holder must follow the same process the FAA uses for standard certification programs (see FAA Order 8110.4)."

Sub-paragraph d.(2)(b)2. "d. FAA Project Participation, (2) Discretionary Participation, (b) Insufficient Demonstration of Ability, 2. Policy and Procedure Changes" states: "When FAA policy or procedures changes since the ODA holder's last type certification program impact the ODA holder's ability to determine compliance."

Sub-paragraph e.(3) "e. TC Board Meetings," states: "(3) Offer special attention, information, and guidance to address new design concepts, service difficulties, FAA policy, and current state-of-the-art considerations."

Chapter 11, "Supplemental Type Certification Functions,"

Paragraph 11-7 "Supplemental Type Certification Programs," states: "An STC ODA holder must use the same process the FAA uses for standard certification programs (see FAA Order 8110.4 and AC 21-40, Guide for Obtaining a Supplemental Type Certificate)."

Sub-paragraph a.(6) "a. STC Program Considerations, (6) Adherence to Policy Requirements" states: "As a representative of the FAA, an ODA holder is expected to comply with any certification guidance and policy applicable to the project. Each ODA holder must stay informed of the latest policies applicable to the projects it performs and propose certification plans that conform to these policies. Certification policies can be reviewed on the internet at <http://www.airweb.faa.gov/rql>."

Sub-paragraph d.(2)(b)2. "d. FAA Project Participation, (2) Discretionary Participation, (b) Insufficient Demonstration of Ability" states: "2. When FAA policy or procedures changes since the ODA holder's last type certification program impact the ODA holder's ability to determine compliance."

Sub-paragraph f.(3) "f. STC Board Meetings" states: "... the FAA will: ... (3) Offer special attention, information, and guidance to address new design concepts, service difficulties, FAA policy, and the current state-of-the-art considerations."

Why is this rule on the list?

c) **Impose costs that exceed benefits;** or

d) **Create a serious inconsistency or otherwise interfere with regulatory reform initiatives and policies**

Proposed Action (Modify)

Modify FAA Orders and Policies that direct FAA personnel to apply current policy and guidance to ensure that it also recognizes and allows for the use of an accepted means of compliance (MoC). The modification of FAA Orders and Policies should also include a process for the FAA to work with applicants (and/or ODA's) on managing a listing of acceptable MoC. This is particularly important for those specific MoC accepted by FAA which may be different from current general policy and guidance but equally applicable and acceptable. In addition, this process needs to include FAA notification to applicants and ODAs when a previously accepted MoC is no longer acceptable along with specific rationale. The requirements for such notification are spelled out in FAA Order IR 8100.16 as it pertains to issuance of an FAA Policy Memo invalidating a prior accepted MoC.

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

- Order 8110.4C - Type Certification

Add text in appropriate sections of this order to ensure the appropriate FAA branch notifies an Applicant/ODA Holder/Unit when prior accepted MoC are no longer acceptable for subsequent use and specific rationale as to why it is no longer acceptable.

Modify Section 2-4, "Requirements Definition," paragraph b.(4) "b. The establishment of a TC Project, (4) Assignments and Duties of the Project Officer" to state:

"The project officer is responsible for ensuring that the project team is using current or applicable policy and guidance or agreed means of compliance. The project officer also provides project- specific rules (for example, special conditions and exemptions) and policy (for example, acceptable means of compliance, ELOS, and certification basis) to the project team."

Modify Section 2-6, "Implementation," paragraph f.(2)(a) "f. Engineering Compliance by Inspection, (2) Sample Inspections, (a) Interior Inspections" to state:

"...As with all findings, in accomplishing an interior compliance inspection, the certification team makes many determinations and, therefore, should be very familiar with ~~current regulations and policy~~ the product's certification basis and the agreed means of compliance for the change(s)."

Modify Section 2-7, "Post-Certification Activities," paragraph e.(1) "e. Post-Certification Evaluations, (1) Special Certification Review (SCR)":

Sub-paragraph (h) to state: *"The certifying ACO is responsible for appropriate action on the SCR team's findings and recommendations. If there are findings identifying deficiencies in the FAA accepted and agreed means of compliance, the ACO is responsible to work with the Policy Office and the Applicant to reconcile the deficiencies."*

- Order 8110.37E - Designated Engineering Representative (DER) Handbook

Modify Chapter 4, "Certification Activities of a DER" paragraph 4-1 "Type Certification Projects" to state:

"... A DER must follow applicable FAA policy or agreed means of compliance in determining compliance with pertinent regulations. ..."

- Order 8110.112A - Standardized Procedures for Usage of Issue Papers and Development of Equivalent Levels of Safety Memorandums

Add text in appropriate sections of this order to ensure that when an issue paper invalidates a prior accepted MoC, the appropriate FAA branch notifies the Applicant/ODA Holder/Unit that prior accepted MoC are no longer acceptable for subsequent use and specific rationale as to why it is no longer acceptable.

- Order 8100.15B, Change 2 incorporated - Organization Designation Authorization Procedures
Add text in the appropriate sections of this order which allows/enables an applicant to establish a process for the ODA and FAA to manage a listing of specific acceptable MoC, particularly those which may be different from current general policy and guidance but are equally applicable and acceptable. This process needs to include FAA notification to the ODA Holder and Unit when a previously accepted MoC is no longer acceptable and specific rationale as to why. Such notification is spelled out in FAA Order IR 8100.16 as it pertains to issuance of an FAA Policy Memo invalidating a prior accepted MoC.
- Orders and Policies pertinent to application of policy and guidance materials not listed above:
It is proposed that other Orders or Policies which state or are interpreted as stating a mandate that only current policy and guidance must be used be modified to specifically recognize and allow for consideration of applicable policy and guidance for the project certification basis and existing acceptable/agreed means of compliance that continue to support compliance to the applicable regulations be modified in a similar manner to the recommendations for those listed above.

Rationale – Context of Regulation and proposed change

Currently Order 8110.4C Change 6, Order 8110.112A, Order 8100.16B Change 2 and Order 8110.37E all seem to direct FAA personnel and FAA delegated individuals and organizations to apply only the current policy and guidance for airworthiness requirements to all certification projects. This approach does not recognize that a majority of projects are amendments which used previous policy and guidance and previous accepted means of compliance (MoC) which can continue to be applicable and acceptable, and therefore defaults to requiring any deviation from the current policy or guidance material to be documented in an issue paper resulting in significant administrative and resource burden and time delay for both the applicant and FAA. Modifying the policy to allow for the recognition and use of applicable and acceptable policy, guidance and accepted MoC would facilitate efficient certification project planning at the project office for these routine activities and not require administrative processing of issue papers through the national policy offices.

FAA Order IR 8100.16, “Aircraft Certification Service Policy Statement, Memorandum & Deviation Memorandum Systems” provides guidance for the subject policy documents based on criteria which conform to the U.S. Office of Management and Budget (OMB), Final Bulletin for Agency Good Guidance Practices (GGP), 72 FR 342 (January 25, 2007). In Chapter 2, which addresses policy statements, paragraph 2-2, sub-paragraph d outlines that policy statements must not invalidate a method of compliance the FAA previously agreed to, “*unless –*

1. *It was accepted in error,*
2. *It is no longer in conformance with a change in the regulations, or*
3. *It no longer supports a finding of compliance; in which case, a justification should be included in the policy statement.”*

The guidance outlined in Order IR 8100.16 is not recognized in the Orders for type certification process cited above with respect to previously accepted MoC used by applicants for which a subsequent new policy or guidance document or revision thereto has been issued and for which there has been no information provided to the applicant or field offices that the prior means of compliance is no longer acceptable based on one of the three reasons shown above. In practice, this has resulted in a large number of issue papers to re-document the continued acceptability of a previously accepted means of compliance or late of identification of requirements affecting design or substantiation and the associated protracted discussions consuming FAA and applicant resources.

The FAA AIR Transformation has as a tenet the establishment and use of applicant compliance libraries and standardization of means of compliance to airworthiness regulations. This requires stabilization of the means of compliance and an acceptable MoC configuration management process with closed loop feedback in order to ensure that applicants are clearly aware when MoC are no longer adequate before the start of a given project.

To free up resources which enable the implementation of the AIR Transformation vision and reduce the burden on applicants and the FAA, it is recommended that the text in FAA Orders citing the need to use the latest or the current policy and guidance be revised to also allow for recognition of applicable policy/guidance and accepted MoC and to enable a process between FAA and applicants for managing the accepted MoC.

Rationale – Associated Cost Information

The cost savings for industry and FAA by adopting this proposal is significant in terms of both resources and reduction of certification project time and delays. However, quantifying potential cost savings is challenging as we are not aware of an established regulatory evaluation of the Orders (cost/benefit) and any metric/measure across industry and FAA for time and resources invested clarifying the evolving requirements for certification and time spent in simply administering the process and paperwork for things like issue papers.

The efforts consumed by this activity place stress on limited resources within FAA and industry for no measurable increase in safety. The regulations that form the foundation of our safe air transportation system are not being changed in this proposal, nor ultimately are those regulations being changed by the inefficient process of continually applying new compliance requirements.

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

25.933(a) – Reversing System

Existing Regulation Text

For turbojet reversing systems -

- (a) Each system intended for ground operation only must be designed so that during any reversal in flight the engine will produce no more than flight idle thrust. In addition, it must be shown by analysis or test, or both, that -
 - (i) Each operable reverser can be restored to the forward thrust position; and
 - (ii) The airplane is capable of continued safe flight and landing under any possible position of the thrust reverser.

Why is this rule on the list?

- b) Are outdated, unnecessary or ineffective;*
- d) Create a serious inconsistency or otherwise interfere with regulatory reform initiatives and policies*

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

For turbojet reversing systems -

- (a) Each system intended for ground operation only must be designed so that during any reversal in flight the engine will produce no more than flight idle thrust. In addition, it must be shown by analysis or test, or both, that -
 - ~~(i) Each operable reverser can be restored to the forward thrust position; and~~
 - (i) The airplane is capable of continued safe flight and landing under any possible position of the thrust reverser; or
 - (ii) It can be demonstrated that in-flight thrust reversal is extremely improbable and does not result from a single failure or malfunction.

Rationale – Context of Regulation and proposed change

Harmonization with the EASA regulation would eliminate an issue paper used by FAA invoke compliance with 25.933(a)(1)(i), simplifying and removing costs from the certification process for FAA and industry.

Rationale – Associated Cost Information

Approximately \$250,000 per year savings per manufacturer by using direct compliance versus following the Issue Paper process (does not include estimate for FAA savings)

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

25.1155 – Reverse Thrust and Propeller Pitch Settings below the Flight Regime

Existing Regulation Text

Each control for reverse thrust and for propeller pitch settings below the flight regime must have means to prevent its inadvertent operation. The means must have a positive lock or stop at the flight idle position and must require a separate and distinct operation by the crew to displace the control from the flight regime (forward thrust regime for turbojet powered airplanes).

Why is this rule on the list?

b) Are outdated, unnecessary or ineffective;

d) Create a serious inconsistency or otherwise interfere with regulatory reform initiatives and policies

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

Each control for selecting propeller pitch settings below the flight regime (reverse thrust for turbojet powered aeroplanes) must have the following:

- (a) A positive lock or stop which requires a separate and distinct operation by the flight crew to displace the control from the flight regime (forward thrust regime for turbojet powered aeroplanes), and it must only be possible to make this separate and distinct operation once the control has reached the flight idle position.
- (b) A means to prevent both inadvertent and intentional selection or activation of propeller pitch settings below the flight regime (reverse thrust for turbojet powered aeroplanes) when out of the approved inflight operating envelope for that function, and override of that means is prohibited.
- (c) A reliability, such that the loss of the means required by subparagraph (b) above is remote.
- (d) A caution provided to the flight crew when the means required by subparagraph (b) above is lost.
- (e) A caution provided to the flight crew when a cockpit control is displaced from the flight regime (forward thrust regime for turbojet powered aeroplanes) into a position to select propeller pitch settings below the flight regime (reverse thrust for turbojet powered aeroplanes) outside the approved inflight operating envelope. This caution need not be provided if the means required by subparagraph (b) is a mechanical baulk that prevents movement of the control.

Rationale – Context of Regulation and proposed change

If the FAA rule was harmonization with the EASA regulation (basis of this proposal), FAA and industry would benefit by avoiding unnecessary administrative processes to accommodate the difference. The FAA's Transport Airplane Issues List specifies that industry should be prepared to comply with the EASA regulation, as FAA will likely force compliance via an Issue Paper.

Rationale – Associated Cost Information

Approximately \$250,000 per year savings per manufacturer by using direct compliance versus following the Issue Paper process (does not include estimate for FAA savings)

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

25.1549(b) – Powerplant and Auxiliary Power Unit Instruments

Existing Regulation Text

For each required powerplant and auxiliary power unit instrument, as appropriate to the type of instrument—

(b) Each normal operating range must be marked with a green arc or green line, not extending beyond the maximum and minimum safe limits

Why is this rule on the list?

b) Are outdated, unnecessary or ineffective;

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

For each required powerplant and auxiliary power unit instrument, as appropriate to the type of instrument—

(b) Each normal operating range must be readily indicated to the flight crew by use of markings, colors, color changes, or other means.

Rationale – Context of Regulation and proposed change

The regulation was promulgated when mechanical instruments were the industry norm, thus requiring a green arc or line was a practical way to mark instrument faces to indicate safe limits. However, with the evolution of electronic instrumentation, along with display of instruments that do not replicate round 'steam' gages, the regulation is out dated. FAA routinely elects to use an Equivalent Level of Safety to document compliance with the rule's intent, versus the prescriptive way to meet the intent. Using an ELOS on a routine basis unnecessarily consumes FAA and industry resources.

Rationale – Associated Cost Information

Approximately \$250,000 per year savings per manufacturer would be saved if the rule was changed, enabling using direct compliance versus the ELOS process (does not include estimate for FAA savings)

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

25.1555(d) – Control Markings

Existing Regulation Text

(d) For accessory, auxiliary, and emergency controls—

(1) Each emergency control (including each fuel jettisoning and fluid shutoff control) must be colored red

Why is this rule on the list?

b) Are outdated, unnecessary or ineffective;

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

(d) For accessory, auxiliary, and emergency controls—

(1) Each emergency control (including each fuel jettisoning and fluid shutoff) must be red under all conditions where the control is intended to be used.

Rationale – Context of Regulation and proposed change

Similar to the 25.1549(b) above, technology and aircraft systems have evolved and regulations promulgated decades earlier which have prescriptive compliance requirements (versus performance or intent based compliance) need to be updated. Absent an updated regulation, FAA continues to use the Equivalent Level of Safety process, ineffectively using FAA and industry resources.

Rationale – Associated Cost Information

Approximately \$250,000 per year savings per manufacturer would be saved if the rule was changed, enabling using direct compliance versus the ELOS process (does not include estimate for FAA savings)

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

25.1701 – Definition (EWIS)

Existing Regulation Text

N/A – proposing to add text

Why is this rule on the list?

- b) Are outdated, unnecessary or ineffective;
- d) Create a serious inconsistency or otherwise interfere with regulatory reform initiatives and policies

Proposed Action (Repeal/Replace/Modify)

Modify; add new sub-paragraph (c)

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

(c) EWIS components which are already approved as part of a type certificated engine are excluded from paragraph (a) of this section.

Rationale – Context of Regulation and proposed change

Eliminate redundant and unnecessary compliance showing for transport airplane EWIS compliance (Part 25) already addressed under engine (Part 33) compliance. This would eliminate the need for FAA to regularly use the Equivalent Level of Safety compliance process for 25.1713(c).

Rationale – Associated Cost Information

Approximately \$500,000 per year per manufacturer would be saved if FAA removed the redundancy of compliance activity required by engine (Part 33) and transport airplane (Part 25) requirements (does not include estimate for FAA savings)

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

25.1193(e)(3) – Cowling and Nacelle Skin

Existing Regulation Text

(e) Each airplane must-

(3) Have fireproof skin in areas subject to flame if a fire starts in the engine power or accessory sections

Why is this rule on the list?

b) Are outdated, unnecessary or ineffective;

d) Create a serious inconsistency or otherwise interfere with regulatory reform initiatives and policies

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

(e) Each airplane must-

(3) Have cowlings and nacelles skins, in areas subject to flame if a fire starts in an engine fire zone, complying with the following:

(i) For in-flight operations, cowlings and nacelles skins must be fireproof in the complete concerned areas, and

(ii) For ground operations, cowlings and nacelles skins must be:

(a) Fireproof and in the portions of the concerned areas where a skin burn through would affect critical areas of the aeroplane, and

(b) Fire resistant or compliant with subparagraph (e)(1) of this paragraph in the remaining portions of the concerned areas.

Rationale – Context of Regulation and proposed change

The proposal would harmonize FAA regulations with EASA (CS 25.1193(e)(3)), thereby eliminating the regular use of the Equivalent Level of Safety compliance process to accept compliance to EASA rules.

Rationale – Associated Cost Information

Approximately \$250,000 per year savings per manufacturer would be saved if the rule was changed, enabling using direct compliance versus the ELOS process (does not include estimate for FAA savings)

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

25.251 – Vibration and buffeting

Existing Regulation Text

[(a) The airplane must be demonstrated in flight to be free from any vibration and buffeting that would prevent continued safe flight in any likely operating condition.

(b) Each part of the airplane must be demonstrated in flight to be free from excessive vibration under any appropriate speed and power conditions up to VDF / MDF. The maximum speeds shown must be used in establishing the operating limitations of the airplane in accordance with Sec. 25.1505.]

Why is this rule on the list?

a) *Eliminate jobs, or inhibit job creation;*

c) *Impose costs that exceed benefits*

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

[(a) The airplane must be demonstrated in flight to be free from any vibration and buffeting that would prevent continued safe flight in any likely operating condition.

(b) Each part of the airplane must be demonstrated in flight to be free from excessive vibration under any appropriate speed and power conditions up to VDF / MDF. The maximum speeds shown must be used in establishing the operating limitations of the airplane in accordance with Sec. 25.1505.]

Rationale – Context of Regulation and proposed change

Rule is over prescriptive and leaves no options for compliance demonstration other than flight.

Rationale – Associated Cost Information

Large cost savings potential for certification programs by opening the possibility to show compliance by analysis. Product improvements that might otherwise be prohibitive to certify may become feasible and create new jobs. Wide cost range from "simple" analysis only changes requiring an ELOS (400 hours / \$125,000 per project) under current process to larger projects requiring trailing cone to safely test to dive speed requirement (\$1.5M)

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

FAA 14 CFR 25.571(b) – Damage-tolerance and fatigue evaluation of structure

Existing Regulation Text

(b) [Damage-tolerance evaluation. The evaluation must include a determination of the probable locations and modes of damage due to fatigue, corrosion, or accidental damage. Repeated load and static analyses supported by test evidence and (if available) service experience must also be incorporated in the evaluation. Special consideration for widespread fatigue damage must be included where the design is such that this type of damage could occur. An LOV must be established that corresponds to the period of time, stated as a number of total accumulated flight cycles or flight hours or both, during which it is demonstrated that widespread fatigue damage will not occur in the airplane structure. This demonstration must be by full-scale fatigue test evidence. ...

Why is this rule on the list?

c) Impose costs that exceed benefits

d) Create a serious inconsistency or otherwise interfere with regulatory reform initiatives and policies

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

Revise the demonstration requirement to align with 14CFR 26.21. Add analysis supported by test or fleet data as other acceptable methods of accomplishing the required demonstration.

Rationale – Context of Regulation and proposed change

This rule does not provide flexibility to accommodate other valid data and is not consistent with 14 CFR 26.21. 14 CFR 26.21 in the establishment of LOV accommodates analysis and other data - "This demonstration must include an evaluation of airplane structural configurations and be supported by test evidence and analysis at a minimum and, if available, service experience, or service experience and teardown inspection results, of high-time airplanes of similar structural design, accounting for differences in operating conditions and procedures."

Rationale – Associated Cost Information

The cost of the full scale test, including test article. This cost benefit could be hundreds of millions of dollars for large tests.

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

FAA 14 CFR 25.723(a) – Shock absorption tests

Existing Regulation Text

(a) The analytical representation of the landing gear dynamic characteristics that is used in determining the landing loads must be validated by energy absorption tests. A range of tests must be conducted to ensure that the analytical representation is valid for the design conditions specified in Sec. 25.473.

(1) The configurations subjected to energy absorption tests at limit design conditions must include at least the design landing weight or the design takeoff weight, whichever produces the greater value of landing impact energy.

(2) The test attitude of the landing gear unit and the application of appropriate drag loads during the test must simulate the airplane landing conditions in a manner consistent with the development of rational or conservative limit loads

Why is this rule on the list?

c) Impose costs that exceed benefits

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

(a) The analytical representation of the landing gear dynamic characteristics that is used in determining the landing loads must be validated by energy absorption tests or analysis supported by test data. When accomplishing tests, a A range of tests must be conducted to ensure that the analytical representation is valid for the design conditions specified in Sec. 25.473.

(1) The configurations subjected to energy absorption tests at limit design conditions must include at least the design landing weight or the design takeoff weight, whichever produces the greater value of landing impact energy.

(2) The test attitude of the landing gear unit and the application of appropriate drag loads during the test must simulate the airplane landing conditions in a manner consistent with the development of rational or conservative limit loads

Rationale – Context of Regulation and proposed change

The proposed change would provide a regulatory path where analysis supported by test may become FAA accepted method of compliance.

It is noted 14 CFR 25.723(c) accommodates analysis for very limited minor changes.

Rationale – Associated Cost Information

Approximately \$9.0M per major certification project per manufacturer could be realized. This does not include likely cost saving for FAA.

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

P

Regulation & Title

FAA 14 CFR 25.459 – Special devices (such as slots, slats, and spoilers).

Existing Regulation Text

The loading for special devices using aerodynamic surfaces (such as slots [, slats,] and spoilers) must be determined from test data.

Why is this rule on the list?

c) Impose costs that exceed benefits

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

The loading for special devices using aerodynamic surfaces (such as slots [, slats,] and spoilers) must be determined from test data or analysis supported by test data.

Rationale – Context of Regulation and proposed change

The rule does not afford the acceptance of valid test supported engineering data. The proposed change would provide a regulatory path whereby analysis supported by test may become FAA accepted data.

Rationale – Associated Cost Information

Approximately \$1.0M per major certification project per manufacturer could be realized. This does not include likely cost saving for FAA.

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

FAA Special Conditions Related to Proposed 14 CFR 25.302 – Interaction of systems and structures

Existing Regulation Text

Each Special Condition related to interaction of systems and structures as applied to each airplane program.

Why is this rule on the list?

c) Impose costs that exceed benefits

d) Create a serious inconsistency or otherwise interfere with regulatory reform initiatives and policies

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

Incorporate EASA CS 25.302 rule, in lieu of continuing publication of FAA Special Conditions.

Rationale – Context of Regulation and proposed change

Eliminate the recurring cost to industry and FAA of developing, reviewing and publishing Special Conditions for each airplane program by adopting existing EASA CS 25.302. This change will provide consistent standardized requirements, eliminate non-value added Special Condition activity and will be harmonized with the existing EASA rule.

Rationale – Associated Cost Information

Approximately \$220K per major certification project per manufacturer could be realized. This does not include likely cost saving for FAA.

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

FAA 14 CFR 25.349(a) – Rolling conditions

Existing Regulation Text

(a) Maneuvering. The following conditions, speeds, and aileron deflections (except as the deflections may be limited by pilot effort) must be considered in combination with an airplane load factor of zero and of two-thirds of the positive maneuvering factor used in design. In determining the required aileron deflections, the torsional flexibility of the wing must be considered in accordance with Sec. 25.301(b):

(1) Conditions corresponding to steady rolling velocities must be investigated. In addition, conditions corresponding to maximum angular acceleration must be investigated for airplanes with engines or other weight concentrations outboard of the fuselage. For the angular acceleration conditions, zero rolling velocity may be assumed in the absence of a rational time history investigation of the maneuver.

(2) At VA, a sudden deflection of the aileron to the stop is assumed.

(3) At VC, the aileron deflection must be that required to produce a rate of roll not less than that obtained in paragraph (a)(2) of this section.

(4) At VD, the aileron deflection must be that required to produce a rate of roll not less than one-third of that in paragraph (a)(2) of this paragraph.

Why is this rule on the list?

d) Create a serious inconsistency or otherwise interfere with regulatory reform initiatives and policies

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

(a) Maneuvering. The following conditions, speeds, and cockpit roll control motions ~~aileron deflections~~ (except as the motions ~~deflections~~ may be limited by pilot effort) must be considered in combination with an airplane load factor of zero, and separately, ~~and of~~ two-thirds of the positive maneuvering factor used in design. In determining the required control surface ~~aileron~~ deflections, the torsional flexibility of the wing must be considered in accordance with Sec. 25.301(b):

(1) Conditions corresponding to steady rolling velocities must be investigated. In addition, conditions corresponding to maximum angular acceleration must be investigated ~~for airplanes with engines or other weight concentrations outboard of the fuselage~~. For the angular acceleration conditions, zero rolling velocity may be assumed in the absence of a rational time history investigation of the maneuver.

(2) At VA, a sudden movement of the cockpit roll control up ~~deflection of the aileron~~ to the limit stop is assumed. The position of the cockpit roll control must be maintained until a steady roll rate is achieved and then must be returned suddenly to the neutral position.

(3) At VC, the cockpit roll control ~~aileron deflection~~ must be moved suddenly and maintained so as to achieve a ~~that required to produce a rate of~~ roll rate not less than that obtained in paragraph (a)(2) of ~~this section.~~

(4) At VD, the cockpit roll control ~~aileron deflection~~ must be moved suddenly and maintained so as to achieve a ~~that required to produce a rate of~~ roll rate not less than one-third of that obtained in paragraph (a)(2) ~~of this paragraph.~~

Rationale – Context of Regulation and proposed change

The proposed rule modification to incorporate Special Condition content into the rule will eliminate the need for recurring development of new Special Conditions on a by-model basis. This change will provide consistent standardized requirements and eliminate non-value added Special Condition activity.

Rationale – Associated Cost Information

Approximately \$220K per major certification project per manufacturer could be realized. This does not include likely cost saving for FAA.

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

14 CFR Part 25 Airworthiness Standards: Transport Category Airplanes, Special Federal Aviation Regulation No. 109 (SFAR 109) Certification of Business Aircraft Interiors

Existing Regulation Text

14 CFR Part 25 SFAR No. 109 (commonly called 'private-use SFAR')

<https://www.ecfr.gov/cgi-bin/text-idx?SID=df786be0253b5df6536aa6ec817d2616&mc=true&node=pt14.1.25&rgn=div5#ap14.1.25.2>

14 CFR Part 25 Sections: 25.562, 25.785(h)(2), 25.785(j), 25.803, 25.807(f)(4), 25.812(b)(1), 25.812(e)(1), 25.813(e), 25.815, 25.851, 25.853, 25.858, Appendix F, Appendix J

https://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title14/14cfr25_main_02.tpl

NOTE: Reference table below for heading/subject for each of these sections

Why is this rule on the list?

b) Are outdated, unnecessary or ineffective;

- *SFAR 109 was intended to establish airworthiness standards appropriate for the operational safety of business aircraft interior configurations which are different than traditional airline rows of passenger seating. However, the SFAR's private use limitation for business aircraft interior configurations are ineffective, outdated, and inconsistent with current certified configurations, management and use of business jet aircraft. As a result, the SFAR 109 provisions are not being utilized by industry which means the intended efficiency and safety benefits envisioned when originally promulgated are not being realized by neither industry, operators or FAA.*
- *FAA and industry continue to experience significant resource and cost burden and limitations on aircraft configurations due to application of part 25 standards which primarily focus on typical airliner rows of seats and are inappropriate for business aircraft interior configurations which therefore require exemptions, special conditions and/or result in competitive disadvantage to business aircraft configurations type certificated in other countries.*

c) Impose costs that exceed benefits; or

- *The 2007 FAA NPRM regarding SFAR 109 indicated the use of SFAR 109 which established airworthiness standards appropriate for typical business aircraft interior configurations could amount to about \$725,000 of savings per airplane. In addition, the NPRM stated that it was expected that industry completion centers and the FAA would achieve significant time and cost savings if the SFAR 109 standards were selected by the applicant. Unfortunately, these envisioned and intended cost benefits are not being realized by neither industry nor FAA due to the fact that FAA elected to add a private use limitation as a requirement for using SFAR 109.*

- *Absent any action, it is likely that there will be a continuous increase in cost and use of resources to administer additional special conditions, exemption requests, and issue papers that would also continue to divert FAA resources from more critical issues.*

d) Create a serious inconsistency or otherwise interfere with regulatory reform initiatives and policies

- *EASA recently published CS 25-19 amendment 19 which established appropriate airworthiness standards for business aircraft interior configurations for commercial and private operations. Global business aircraft manufacturer community (including all US airplane manufacturers) and FAA participated in the EASA rulemaking drafting group which developed the recommended rule change which was largely based on FAA SFAR 109 and promulgated and adopted by EASA as CS 25-19 for all business aircraft operations (i.e. not limited to private-use only).*
- *If FAA does not adopt similar business aircraft airworthiness standards, lack of harmonization with EASA will put US manufacturers and US business aircraft charter operators at a significant competitive dis-advantage in the global marketplace.*

Proposed Action (Repeal/Replace/Modify)

Modify SFAR 109 and corresponding part 25 airworthiness standards to harmonize with EASA CS 25 Amendment 19 provisions which establishes appropriate standards for business aircraft interior configurations in commercial and private operations based on recommendations of a joint EASA/FAA/industry drafting group.

Ref: EASA Executive Director Decision 2017/015/R

<https://www.easa.europa.eu/system/files/dfu/ED%20Decision%202017-015-R.pdf>

Certification specifications for large aeroplanes have been drafted taking into account large transport aeroplanes, featuring cabin interiors equipped for the commercial carriage of relatively high numbers of passengers. These specifications are not always adequate for cabin interiors installed in so-called business aeroplanes, i.e. those having lower-density interiors that offer a greater level of comfort and amenities, and sometimes being non-commercially operated. Numerous certification review items (CRIs) are issued for each certification project involving these aeroplanes. They address repetitive issues like access to emergency exits, width of aisles, heat release, and smoke density properties of materials, interior doors, etc.

EASA decided to create rulemaking task RMT.0264 with the objective to introduce in CS-25 a set of common requirements and intended interpretations (in the form of AMCs) that will establish a level playing field for all applicants with regard to the specificities of business aeroplanes, while continuing to provide an acceptable level of safety.

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

Modification of SFAR 109 and corresponding part 25 paragraphs (summarized in table below) with specific regulatory text which harmonizes with EASA CS-25 amendment 19 provisions which include

amendment of several paragraphs in Subparts D and F and creation of a new Appendix S for ‘Low-occupancy aeroplanes’ and ‘non-commercially operated aeroplanes’ (commonly called ‘private-use aeroplanes’), along with new or amended AMC/guidance. In addition, new and amended CS-25 requirements are provided, which were found to be fully applicable to any kind of transport category aeroplanes certified under CS-25 regardless of the type of interior arrangement or operation (RMT.0264).

Ref: EASA Explanatory Note to Decision 2017/015/R: CS-25 amendment 19

<https://www.easa.europa.eu/system/files/dfu/Explanatory%20Note%20to%20ED%20Decision%202017-015-R.pdf>

Summary		
SFAR 109 & Part 25.xx	Sections of part 25 standards not appropriate for business aircraft interior configurations	Modification of SFAR 109 and corresponding part 25 regulations to harmonize with EASA CS 25 Amendment 19 provisions which establishes appropriate airworthiness standards for business aircraft interior configurations in commercial and private operations based on recommendations of an EASA/FAA/industry drafting group.
Proposed Regulatory Sections / Paragraphs		
SFAR 109(2)(b) & 91.533(b) & 25.853 & 25.803	General (Flight attendant requirement for interior doors)	Recommend removing requirement for flight attendant and to harmonize with EASA CS25-Amendment 19 by including revised language in existing Part 25.
SFAR 109(2)(d) Parts 125 and 91, subpart F	General (AFM requirement to indicate Private use limitation)	Recommend that requirement for private use operating limitation in SFAR 109 be applied to specific features/provisions as appropriate consistent with FAA/EASA/industry drafting group recommendations and harmonization with EASA CS25-Amendment 19 which established a new Subpart S for ‘Low-occupancy aeroplanes’ and ‘non-commercially operated aeroplanes’ (commonly called ‘private-use aeroplanes’) which was based on FAA SFAR 109.
SFAR 109(2)(e) & Parts 125 and 91, subpart F	General (Placard Requirement)	Recommend Harmonization with EASA CS25-Amendment 19 by including revised language in existing Part 25.
SFAR 109(2)(f) & 25.803 & Appendix J	General (Evacuation analysis requirement specific to 45 to 60 passengers)	Recommend Harmonization with EASA CS25-Amendment 19 by including revised language in existing Part 25.
SFAR 109(2)(g)	General (Private use limitation)	Recommend that requirement for private use operating limitation in SFAR 109 be applied to specific features/provisions as appropriate consistent with FAA/EASA/industry drafting group recommendations and harmonization with EASA CS25-Amendment 19 which established a new Subpart S for ‘Low-occupancy aeroplanes’ and ‘non-commercially operated aeroplanes’ (commonly called ‘private-use aeroplanes’) which was based on FAA SFAR 109.
SFAR 109(4)(a) & 25.785(j)	Firm Handhold	Recommend Harmonization with EASA CS25-Amendment 19 by including revised language in existing Part 25.
SFAR 109(4)(b) & 25.562	Injury Criteria for multiple occupancy side facing seats	Special Conditions and existing P 25 should address side facing seats as they are not/ will not always be unique to business aircraft. Can be combined with an existing rule in P25
SFAR 109(4)(c) & 25.562(b)(1)	Verticle test	Special Conditions, policy, guidance, industry standards should support identify specific ATDs

SFAR 109(5) & 25.785(h)(2)	Flt. Atndnt. Direct View	Recommend Harmonization with EASA CS25-Amendment 19 by including revised language in existing Part 25.
SFAR 109(6) & 25.785(h)(2)	Passenger Information Signs	Recommend Harmonization with EASA CS25-Amendment 19 by including revised language in existing Part 25.
SFAR 109(7) & 25.807(f)(4)	Distance Between Exits	Recommend Harmonization with EASA CS25-Amendment 19 by including revised language in existing Part 25.
SFAR 109(8) & 25.812(b)(1)	Emergency Exit Signs	Recommend Harmonization with EASA CS25-Amendment 19 by including revised language in existing Part 25.
SFAR 109(9)(a) & 25.812(b)(1)	Emergency Lighting (Exit Signs)	Recommend Harmonization with EASA CS25-Amendment 19 by including revised language in existing Part 25.
SFAR 109(9)(b) & 25.812(e)(1)	Emergency Lighting (Floor Proximity Escape Path Markings)	Recommend Harmonization with EASA CS25-Amendment 19 by including revised language in existing Part 25.
SFAR 109 (9)(c) & 25.812(l)	Emergency Lighting (Transverse Separation of the Fuselage)	Recommend Harmonization with EASA CS25-Amendment 19 by including revised language in existing Part 25.
SFAR 109(10) & 25.813(e)	Interior Doors	Recommend Harmonization with EASA CS25-Amendment 19 by including revised language in existing Part 25.
SFAR 109(11) & 25.815	Width of Aisle	Recommend Harmonization with EASA CS25-Amendment 19 by including revised language in existing Part 25.
SFAR 109(12) & 25.853	Materials for Compartment Interiors	Recommend Harmonization with EASA CS25-Amendment 19 by including revised language in existing Part 25.
SFAR 109(13) & 25.858(a-d)	Fire Detection	Recommend Harmonization with EASA CS25-Amendment 19 by including revised language in existing Part 25.
SFAR 109(14) & 25.853 & Appendix F (Various sub parts)	Cooktops	Recommend Harmonization with EASA CS25-Amendment 19 by including revised language in existing Part 25.
SFAR 109(15) & 25.851	Hand-held Fire Extinguishers	Recommend Harmonization with EASA CS25-Amendment 19 by including revised language in existing Part 25.

Rationale – Context of Regulation and proposed change

The recent publication of EASA’s CS-25 Amendment 19 establishes appropriate certification specifications / airworthiness standards for executive or business aircraft cabin interior configurations to be operated in commercial and/or private use. The publication CS-25 amendment 19 provides appropriate and proportional certification standards consistent with the FAA’s safety continuum and compliance philosophy for aircraft with executive or business interiors as compared with the current FAA part 25 and SFAR 109 regulations. In particular, the EASA amendment 19 to CS-25 does not require a private use limitation which is consistent with how business aircraft are operated throughout their lifecycle and therefore establishes airworthiness standards which are practical and applicable to current aircraft and operations.

FAA promulgated SFAR 109 in 2009 and participated in the EASA rulemaking drafting group which resulted in EASA CS-25 Amendment 19 promulgated in 2016-17 to better reflect current business aircraft operations and establishment of appropriate standards for business aircraft cabin interior configurations. During the EASA rulemaking drafting group activities, FAA indicated its intention to promulgate a US rulemaking to remove the private use limitation of SFAR 109 and propose to harmonize airworthiness standards as appropriate.

Therefore, the recommendation is to modify SFAR 109 and corresponding part 25 airworthiness standards to harmonize with EASA CS 25 Amendment 19 provisions which establishes appropriate

airworthiness standards for business aircraft interior configurations in commercial and private operations based on recommendations of a joint EASA/FAA/industry drafting group.

Rationale – Associated Cost Information

The FAA issued the SFAR 109 NPRM (reference link below) stating the benefits of this rulemaking, for applicants who select the proposal, are a reduction in the time and costs of the cabin certification process for transport category, private use airplanes. These time and cost savings to airplane purchasers could amount to about \$725,000 per airplane certificated under this proposal. In addition, it is expected that the completion centers and the FAA would obtain cost and time savings if the proposal were selected by the applicant.

The FAA promulgated SFAR 109 in 2009 to establish appropriate airworthiness standards for business aircraft cabin configurations. Unfortunately, the SFAR does not reflect how business jet aircraft are operated throughout its lifecycle regularly operating under both part 91 private and part 135 on demand charter commercial operating rules depending on the particular scenario and operator at a given time. Ultimately the private use limitation for the applicability of the SFAR proved to be too restrictive to render the standard not commercially viable and therefore not used by industry. As a result, applicants continued to request from FAA repetitive exemptions and special conditions at significant resource and financial cost for both FAA and industry. As a result, the intended efficiency, cost savings, and safety benefits envisioned when SFAR 109 was originally promulgated have not been realized. Therefore, the resource and cost efficiency benefits outlined in the FAA's original rulemaking providing justification and basis for the establishment of SFAR 109 would carry forward and be realized as significant cost savings if this proposal is adopted.

SFAR 109 NPRM REF <https://www.gpo.gov/fdsys/pkg/FR-2007-07-13/pdf/E7-13582.pdf>

In addition, EASA's NPRM regarding CS-25 amendment 19 (Appendix S) indicated that if more proportional certification specifications were not developed, industry and the authority could expect to see continued increases in cost and resources.

“If CS-25 is not amended as proposed, there will be a continuous increase in cost and time of the certification process for large aeroplanes fitted with executive interiors. The Agency and the applicants would have to administer additional CRIs that would continue to divert all stakeholder's resources from more critical issues.”

EASA CS-25 Amendment 19 (Executive interiors proposal) REF: <https://www.easa.europa.eu/document-library/rulemaking-subjects/executive-interiors-accommodation>

Parts 61, 65, 141
and 142

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

14 CFR § 61.159 Recent Flight Experience, Pilot in Command and Aeronautical Experience

14 CFR §121.436 Pilot qualification: Certificates and experience requirements

Existing Regulation Text

§61.159 (a) Except as provided in paragraphs (b), (c), and (d) of this section, a person who is applying for an airline transport pilot certificate with an airplane category and class rating must have at least 1,500 hours of total time as a pilot that includes at least:

(1) 500 hours of cross-country flight time.

(2) 100 hours of night flight time.

(3) 50 hours of flight time in the class of airplane for the rating sought. A maximum of 25 hours of training in a full flight simulator representing the class of airplane for the rating sought may be credited toward the flight time requirement of this paragraph if the training was accomplished as part of an approved training course in parts 121, 135, 141, or 142 of this chapter. A flight training device or aviation training device may not be used to satisfy this requirement.

(4) 75 hours of instrument flight time, in actual or simulated instrument conditions, subject to the following:

(i) Except as provided in paragraph (a)(4)(ii) of this section, an applicant may not receive credit for more than a total of 25 hours of simulated instrument time in a flight simulator or flight training device.

(ii) A maximum of 50 hours of training in a flight simulator or flight training device may be credited toward the instrument flight time requirements of paragraph (a)(4) of this section if the training was accomplished in a course conducted by a training center certificated under part 142 of this chapter.

(iii) Training in a flight simulator or flight training device must be accomplished in a flight simulator or flight training device, representing an airplane.

(5) 250 hours of flight time in an airplane as a pilot in command, or as second in command performing the duties of pilot in command while under the supervision of a pilot in command, or any combination thereof, which includes at least -

(i) 100 hours of cross-country flight time; and

(ii) 25 hours of night flight time.

(6) Not more than 100 hours of the total aeronautical experience requirements of paragraph (a) of this section or § 61.160 may be obtained in a full flight simulator or flight training device provided the device

represents an airplane and the aeronautical experience was accomplished as part of an approved training course in parts 121, 135, 141, or 142 of this chapter.

§121.436 (a) No certificate holder may use nor may any pilot act as pilot in command of an aircraft (or as second in command of an aircraft in a flag or supplemental operation that requires three or more pilots) unless the pilot:(1) Holds an airline transport pilot certificate not subject to the limitations in § 61.167 of this chapter;

(b) No certificate holder may use nor may any pilot act as second in command unless the pilot holds an airline transport pilot certificate and an appropriate aircraft type rating for the aircraft being flown. A second-in-command type rating obtained under § 61.55 does not satisfy the requirements of this section.

Why is this rule on the list?

Imposes costs that exceed benefits

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

Allow for the FAA to approve additional pathways towards the 1500-hour requirement, limited to those programs that the FAA finds enhance safety. Such programs can include airline-based education and training programs, but any program must meet FAA standards and approved by the FAA to ensure they enhance safety.

Rationale – Context of Regulation and proposed change

As part of Public Law 111-216, Congress mandated that First Officers must have an Airline Transport Certificate (ATP) and that an ATP requires 1,500 hours of flight experience (not training). This requirement has reduced the pool of hireable pilots and has caused airlines to cancel flights and reduce or eliminate service to certain communities. We urge the FAA to create additional enhancements to safety by allowing for programs that are proven to enhance safety to be counted towards the 1,500-hour requirement.

Rationale – Associated Cost Information

We are working on assessing the cost data or cost savings for the cargo industry if the rule is modified to allow for additional pathways and if there is no change. What is clear is that the First Officer Qualification presents a barrier for those who might otherwise intend to become a pilot. It is no more expensive to become a pilot. In 2015, the University of Nebraska Omaha's "Pilot Careers Aspiration Study Update", found that more than 1/3 of aspiring aviators in flight training environments had been discouraged or decided against becoming a commercial airline pilot since the rule.

Cargo airlines run complex global networks and are evolving rapidly to meet the growing demand for air freight service. We also rely on regional feeder operations to reach small communities and operations are currently being cut due to unavailable pilots. Without additional pathways, we expect further cuts to services and the inability to serve small communities. Moreover, additional pathways would only be approved if they were proven to enhance safety, thus FAA should be able to consider safety benefits if the rule is modified.

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

FAR 65.53 (b)(1) Eligibility Requirements: General

Existing Regulation Text

(b) To be eligible for an aircraft dispatcher certification, a person must –

(1) Be at least 23 years of age

Why is this rule on the list?

a) Eliminate jobs, or inhibit job creation;

b) Are outdated, unnecessary or ineffective;

c) Impose costs that exceed benefits; or

d) Create a serious inconsistency or otherwise interfere with regulatory reform initiatives and policies

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

Reduce the required age to 21:

65.53(a) A person may be eligible for an aircraft dispatcher's certificate at age 21 if that person

(1) Holds a Bachelor's degree with an aviation major from an institution of higher education, as defined in §61.1, that has been issued a letter of authorization by the Administrator.

(2) Completes 60 semester credit hours of aviation or aviation-related coursework that has been recognized by the Administrator as coursework designed to improve and enhance the knowledge and skills of a person seeking a career as an aviation professional; including aircraft dispatcher specific courses.

(i) The required aircraft dispatcher training was completed as part of an approved part 65 curriculum at the institution of higher education; and

(ii) The required aircraft dispatcher training meets the requirements of part 65, the training is conducted by the institution of higher education or a part 65 school under a training agreement with the institution of higher education.

(3) Presents a graduation certificate as required by part 65 and transcripts or other documentation acceptable to the Administrator from the institution of higher education certifying that the graduate has satisfied the requirements in paragraphs (a)(1 and 2) of this section.

Rationale – Context of Regulation and proposed change

- 1) The ATP age 23 is said to be tied to the ATP age requirement. There is now a restricted ATP available to persons with certain education at age 21. The same logic can be applied to the dispatch certificate. As there is a Captain available to a Restricted ATP, there are dispatch supervisors and Chief Dispatchers available to a 21 year old dispatcher. If they have an aviation related degree from a 4-yr university with a Part 65 program, or the license obtained through one, then there should be an age 21 dispatch license available.
- 2) The current age 23 requirement is not in line with ICAO which uses age 21.
- 3) The current age 23 requirement is not in line with other positions of great responsibility within the FAA. It is 18 for ATC, 18 for commercial pilot, 18 for A&P.
- 4) There is no evidence to suggest that there would be a loss of safety. There are Assistant Dispatchers, Crew Schedulers, Load Planners and all manner of folks working in operations centers who are not yet 23.
- 5) Claiming someone is not mature enough at age 21 is unsupported by facts; particularly if they have graduated from college. We trust 21 year old people to be officers in this nations' military and command troops in battle. They can hold many political offices, they can take part in almost any function in American society that is age related.
- 6) If the age is lowered to 21 it would increase the pool of persons who meet diversity profiles for greater levels of inclusion.

Rationale – Associated Cost Information

The cost savings to the employer would be found in not having to train someone twice. Now, some employers bring on people as crew schedulers and other such dispatch support roles. Then they have to train them again to be dispatchers at the carrier. Additional costs are incurred by carriers due to the failure rate of folks in their dispatch programs and new hire programs. Beyond training costs, acquisition costs will continue to go up. Graduates already in the field in some other capacity will not change readily without financial incentive. The dynamic nature of all of this would be difficult to build a matrix for to evaluate.

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

61.195(h)(2)(iii)– Flight instructor limitations and qualifications

Existing Regulation Text

(iii) Have held a flight instructor certificate for at least 24 months;

Why is this rule on the list?

This rule inhibit job creation and is outdated, unnecessary and ineffective;

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

(iii) Have held a flight instructor certificate for at least 24 months or has completed an FAA approved standardization course at a part 141 training school that provides instruction on the intricacies of training a flight instructor applicant.

Rationale – Context of Regulation and proposed change

The turnover of CFIs across the nation is tremendous and there are very few full-time/permanent CFIs. The flight instructor profession is a transient position for the vast majority of pilots on their way to fly jets professionally. As a result, instructors are moving fast to Regional Airlines; our turnover (and the turnover across the training industry) is approaching 90% annually. This turnover is severely limiting the number of flight instructors available that meet the requirement of 61.195. This regulation sets the requirements for an instructor pilot to train individuals in the CFI course. As of right now, we have about 40 students waiting to start their CFI training who cannot start due to a lack of human resources that meet the requirements for 61.195 (and the backlog is growing).

Rationale – Associated Cost Information

A shortage of CFIs increases the training time of new flight students thus increasing the time it takes for new pilots to complete their flight training and ATP requirements. This delay further exacerbates the pilot shortage problem.

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

141 Appendix B (4)(c)(2-4) - Private Pilot Certification Course

Existing Regulation Text

(2) Training in a full flight simulator that meets the requirements of § 141.41(a) may be credited for a maximum of 30 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(3) Training in a flight training device that meets the requirements of § 141.41(a) may be credited for a maximum of 20 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(4) Training in the flight training devices described in paragraphs (c)(2) and (3) of this section, if used in combination, may be credited for a maximum of 30 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less. However, credit for training in a flight training device that meets the requirements of § 141.41(a) cannot exceed the limitation provided for in paragraph (c)(3) of this section.

Why is this rule on the list?

This rule is outdated, unnecessary, and ineffective and Imposes costs that exceed benefits.

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

(2) Training in a full flight simulator that meets the requirements of § 141.41(a) may be credited for a maximum of **50** percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(3) Training in a flight training device that meets the requirements of § 141.41(a) may be credited for a maximum of **40** percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.

(4) Training in the flight training devices described in paragraphs (c)(2) and (3) of this section, if used in combination, may be credited for a maximum of **50** percent of the total flight training hour requirements of the approved course, or of this section, whichever is less. However, credit for training in a flight training device that meets the requirements of § 141.41(a) cannot exceed the limitation provided for in paragraph (c)(3) of this section.

Rationale – Context of Regulation and proposed change

This is in the public's interest because it increases safety, accelerates learning, and reduces training cost. The percentiles in this section need to be increased. Initial training in advanced simulation is more effective than training in an aircraft since it reduces barriers to learning. Students are able to build primary knowledge and experience in a safe environment. Students can practice the required procedures and skills in simulation and then transfer those skills to the aircraft. Please see the following study: <http://commons.erau.edu/publication/149/>

Rationale – Associated Cost Information

Increased use of simulation in student training will lead to reduced flight training time. This reduction will reduce the risk of flight training due to the decreased exposure in the training environment. At the same time, students can be exposed to realistic emergency scenarios using simulation; this reduction in time and increase in exposure to emergencies may result in an increase in safety. An increase in safety is in the public's interest since it may result in unnecessary loss of life.

In addition, this reduction in training time is in the public's interest since it would reduce environmental pollution, create fuel savings, improve training, and shorten the pilot training pipeline. If each of the 17,082 pilots who earned a private certificate in 2016 exchanged 5 hours of flight training time with simulation, the cost savings would have over \$1.5M (assuming an average hourly rate of \$150 for the aircraft and \$60 for the flight training device).

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

141.55(e)(2)(ii) - Training course: Contents.

Existing Regulation Text

(ii) At least 80 percent of those students passed the practical or knowledge test, as appropriate, on the first attempt, and that test was given by -

- (A) An FAA inspector; or
- (B) An examiner who is not an employee of the school.

Why is this rule on the list?

This rule is outdated, unnecessary and ineffective

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

(ii) At least 80 percent of those students passed the practical or knowledge test, as appropriate, on the first attempt, and that test was given by -

- (A) An FAA inspector; or
- (B) An examiner who is not an employee of the school.

(iii) or the training school must have an FAA approved quality control program.

Rationale – Context of Regulation and proposed change

The requirement of an 80% pass rate to maintain FAA Part 141 status does not result in an improvement of flight training. Measuring quality using one metric on a bi-annual basis does not provide a sound measurement for flight training organizational quality. Requiring an arbitrary pass rate may provide motivation for schools to train students to pass the knowledge and practical test rather than focus on overall student competency, process improvement, personnel improvement, customer service, etc. In addition, the FAA does not have the required number of inspectors to complete examinations for schools. As a result, schools are solely dependent on FAA designated examiners. Many times these examiners lack standardization and availability. Designated examiners also charge extremely high fees for students (\$500+) which greatly increases the cost of training.

It should be acceptable to the FAA to measure the performance of a part 141 training school based on a comprehensive quality control plan. A quality control plan would provide a method for the FAA to

review, measure, and improve the total quality of all factors associated with part 141 flight training. Requiring a total quality approach within flight training organizations would provide a vehicle for continual improvement of the quality of the training organizations' processes, curriculum, personnel, customer service, metrics, as well as the training environment. Using a total quality approach to monitoring flight training organizations is not foreign to the FAA, this is the same method that the FAA uses to measure the performance of Part 142 training centers.

Rationale – Associated Cost Information

The cost associated with this change are difficult to quantify. However, a focus on continuous improvement of people, processes, curriculum, and environments within training schools may result in an increase in safety. An increase in safety is in the public's interest since it may result in unnecessary loss of life.

In addition, improvement in student training may lead to reduced flight training time. This reduction in training time is in the public's interest since it would reduce environmental pollution, create fuel savings, reduce risk by reducing airplane flying time, and shorten the pilot training pipeline. If each of the 38,293 pilots that earn a private certificate, commercial certificate, or an instrument rating in 2016 saved 1 hour of flight training the cost savings would have been over \$5.7M (assuming an average hourly rate of \$150).

Finally, assuming that half of the 10,191 new commercial pilots in 2016 completed their commercial certificate at an FAA Part 141 school using a designated examiner, the cost of training would have been reduced by over \$2.5M for the pilot group.

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

Part 142.54(d)(1)– Airline transport pilot certification training program

Existing Regulation Text

Holds an aircraft type rating for the aircraft represented by the flight simulation training device utilized in the training program and have received training and evaluation within the preceding 12 months from the certificate holder on the maneuvers that will be demonstrated in the flight simulation training device; and

Why is this rule on the list?

This rule is unnecessary and Imposes costs that exceed benefits.

Proposed Action (Repeal/Replace/Modify)

Modify.

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

Holds an aircraft type rating and have received training and evaluation within the preceding 12 months from the certificate holder on the maneuvers that will be demonstrated in the flight simulation training device; and

Rationale – Context of Regulation and proposed change

While it is important that the instructor has knowledge of the aircraft, a type rating should not be required to teach a course that is not specific to any aircraft and simply designed to provide exposure to large aircraft performance. For this course it should be acceptable to use an instructor that has a type rating and flight experience in any large aircraft as long as they complete an FAA approved 142 TCI course for the ATP-CTP training program. For example, we are forced to put former airline pilots with 10 + years of 121 experience through a type rating course to teach an exposure course that is not aircraft specific; the completion of an approved TCI course within the preceding 12 months should be sufficient.

Rationale – Associated Cost Information

The cost of a Type Rating is approximately \$20,000 per pilot. There are currently 46 approved ATP-CTP training programs in the United States. Assuming each center has at least 4 ATP-CTP instructors the cost to train the current cadre was \$3,680,000. Assuming that each program has one instructor attrit each year, the annual cost would be \$920,000. This does not include the cost of travel and daily expenses.

Parts 91, 121, 133 and
135

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

14 CFR section [121.374\(h\)\(1\)\(ii\)-\(vi\)](#): Continuous airworthiness maintenance program (CAMP) for two-engine ETOPS

Existing Regulation Text

[121.374\(h\)\(1\)\(ii\)-\(vi\)](#): Continuous airworthiness maintenance program (CAMP) for two-engine ETOPS

In order to conduct an ETOPS flight using a two-engine airplane, each certificate holder must develop and comply with the ETOPS continuous airworthiness maintenance program, as authorized in the certificate holder's operations specifications, for each airplane-engine combination used in ETOPS. The certificate holder must develop this ETOPS CAMP by supplementing the manufacturer's maintenance program or the CAMP currently approved for the certificate holder. This ETOPS CAMP must include the following elements:

- (h) Reliability program. The certificate holder must have an ETOPS reliability program. This program must be the certificate holder's existing reliability program or its Continuing Analysis and Surveillance System (CASS) supplemented for ETOPS. This program must be event-oriented and include procedures to report the events listed below, as follows:
 - (1) The certificate holder must report the following events within 96 hours of the occurrence to its certificate holding district office (CHDO):
 - (i) IFSDs, except planned IFSDs performed for flight training.
 - (ii) Diversions and turnbacks for failures, malfunctions, or defects associated with any airplane or engine system.
 - (iii) Uncommanded power or thrust changes or surges.
 - (iv) Inability to control the engine or obtain desired power or thrust.
 - (v) Inadvertent fuel loss or unavailability, or uncorrectable fuel imbalance in flight.
 - (vi) Failures, malfunctions or defects associated with ETOPS Significant Systems.
 - (vii) Any event that would jeopardize the safe flight and landing of the airplane on an ETOPS flight.

Why is this rule on the list?

a) Eliminate jobs, or inhibit job creation;

b) Are outdated, unnecessary or ineffective;

c) Impose costs that exceed benefits; or

d) Create a serious inconsistency or otherwise interfere with regulatory reform initiatives and policies

Proposed Action (Repeal/Replace/Modify)

Modify to remove the redundancies with [121.703](#) *Service difficulty reports* and [121.705](#) *Mechanical interruption summary report*.

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

[121.374\(h\)\(1\)\(ii\)-\(vi\)](#): Continuous airworthiness maintenance program (CAMP) for two-engine ETOPS

In order to conduct an ETOPS flight using a two-engine airplane, each certificate holder must develop and comply with the ETOPS continuous airworthiness maintenance program, as authorized in the certificate holder's operations specifications, for each airplane-engine combination used in ETOPS. The certificate holder must develop this ETOPS CAMP by supplementing the manufacturer's maintenance program or the CAMP currently approved for the certificate holder. This ETOPS CAMP must include the following elements:

(h) Reliability program. The certificate holder must have an ETOPS reliability program. This program must be the certificate holder's existing reliability program or its Continuing Analysis and Surveillance System (CASS) supplemented for ETOPS. This program must be event-oriented and include procedures to report the events **from sections 121.703 and 121.705 that are related to ETOPS operations**, listed below, as follows:

- ~~(1) The certificate holder must report the following events within 96 hours of the occurrence to its certificate holding district office (CHDO):~~
- ~~(i) IFSDs, except planned IFSDs performed for flight training.~~
 - ~~(ii) Diversions and turnbacks for failures, malfunctions, or defects associated with any airplane or engine system.~~
 - ~~(iii) Uncommanded power or thrust changes or surges.~~
 - ~~(iv) Inability to control the engine or obtain desired power or thrust.~~
 - ~~(v) Inadvertent fuel loss or unavailability, or uncorrectable fuel imbalance in flight.~~
 - ~~(vi) Failures, malfunctions or defects associated with ETOPS Significant Systems.~~
 - ~~(vii) Any event that would jeopardize the safe flight and landing of the airplane on an ETOPS flight.~~

121.374(h)(1)(ii)-(vi): Continuous airworthiness maintenance program (CAMP) for two-engine ETOPS

In order to conduct an ETOPS flight using a two-engine airplane, each certificate holder must develop and comply with the ETOPS continuous airworthiness maintenance program, as authorized in the certificate holder's operations specifications, for each airplane-engine combination used in ETOPS. The certificate holder must develop this ETOPS CAMP by supplementing the manufacturer's maintenance program or the CAMP currently approved for the certificate holder. This ETOPS CAMP must include the following elements:

(h) Reliability program. The certificate holder must have an ETOPS reliability program. This program must be the certificate holder's existing reliability program or its Continuing Analysis and Surveillance System (CASS) supplemented for ETOPS. This program must be event-oriented and include procedures to report the events from sections 121.703 and 121.705 that are related to ETOPS operations.

Rationale – Context of Regulation and proposed change

Eliminates redundant reporting elements.

Rationale – Associated Cost Information

Costs associated with keeping redundant reporting systems include:

- ✓ Creation of the systems
- ✓ Maintenance of the systems
- ✓ Elimination of redundant elements from each system

§ 121.374 *Continuous airworthiness maintenance program (CAMP) for two-engine ETOPS.*

In order to conduct an ETOPS flight using a two-engine airplane, each certificate holder must develop and comply with the ETOPS continuous airworthiness maintenance program, as authorized in the certificate holder's operations specifications, for each airplane-engine combination used in ETOPS. The certificate holder must develop this ETOPS CAMP by supplementing the manufacturer's maintenance program or the CAMP currently approved for the certificate holder. This ETOPS CAMP must include the following elements:

- (a) ETOPS maintenance document. The certificate holder must have an ETOPS maintenance document for use by each person involved in ETOPS.
 - (1) The document must—
 - (i) List each ETOPS significant system,
 - (ii) Refer to or include all of the ETOPS maintenance elements in this section,
 - (iii) Refer to or include all supportive programs and procedures,
 - (iv) Refer to or include all duties and responsibilities, and
 - (v) Clearly state where referenced material is located in the certificate holder's document system.
- (b) ETOPS pre-departure service check. Except as provided in Appendix P of this part, the certificate holder must develop a pre-departure check tailored to their specific operation.
 - (1) The certificate holder must complete a pre-departure service check immediately before each ETOPS flight.
 - (2) At a minimum, this check must—
 - (i) Verify the condition of all ETOPS Significant Systems;
 - (ii) Verify the overall status of the airplane by reviewing applicable maintenance records; and
 - (iii) Include an interior and exterior inspection to include a determination of engine and APU oil levels and consumption rates.
 - (3) An appropriately trained maintenance person, who is ETOPS qualified, must accomplish and certify by signature ETOPS specific tasks. Before an ETOPS flight may commence, an ETOPS pre-departure service check (PDSC) Signatory Person, who has been authorized by the certificate holder, must certify by signature, that the ETOPS PDSC has been completed.
 - (4) For the purposes of this paragraph (b) only, the following definitions apply:
 - (i) ETOPS qualified person: A person is ETOPS qualified when that person satisfactorily completes the operator's ETOPS training program and is authorized by the certificate holder.
 - (ii) ETOPS PDSC Signatory Person: A person is an ETOPS PDSC Signatory Person when that person is ETOPS qualified and that person:
 - (A) When certifying the completion of the ETOPS PDSC in the United States:
 - (1) Works for an operator authorized to engage in part 121 operation or works for a part 145 repair station; and
 - (2) Holds a U.S. Mechanic's Certificate with airframe and powerplant ratings.
 - (B) When certifying the completion of the ETOPS PDSC outside of the U.S. holds a certificate in accordance with §43.17(c)(1) of this chapter; or

- (C) When certifying the completion of the ETOPS PDSC outside the U.S. holds the certificates needed or has the requisite experience or training to return aircraft to service on behalf of an ETOPS maintenance entity.
 - (iii) ETOPS maintenance entity: An entity authorized to perform ETOPS maintenance and complete ETOPS PDSC and that entity is:
 - (A) Certificated to engage in part 121 operations;
 - (B) Repair station certificated under part 145 of this chapter; or
 - (C) Entity authorized pursuant to §43.17(c)(2) of this chapter.
- (c) Limitations on dual maintenance.
 - (1) Except as specified in paragraph (c)(2), the certificate holder may not perform scheduled or unscheduled dual maintenance during the same maintenance visit on the same or a substantially similar ETOPS Significant System listed in the ETOPS maintenance document, if the improper maintenance could result in the failure of an ETOPS Significant System.
 - (2) In the event dual maintenance as defined in paragraph (c)(1) of this section cannot be avoided, the certificate holder may perform maintenance provided:
 - (i) The maintenance action on each affected ETOPS Significant System is performed by a different technician, or
 - (ii) The maintenance action on each affected ETOPS Significant System is performed by the same technician under the direct supervision of a second qualified individual; and
 - (iii) For either paragraph (c)(2)(i) or (ii) of this section, a qualified individual conducts a ground verification test and any in-flight verification test required under the program developed pursuant to paragraph (d) of this section.
- (d) Verification program. The certificate holder must develop and maintain a program for the resolution of discrepancies that will ensure the effectiveness of maintenance actions taken on ETOPS Significant Systems. The verification program must identify potential problems and verify satisfactory corrective action. The verification program must include ground verification and in-flight verification policy and procedures. The certificate holder must establish procedures to indicate clearly who is going to initiate the verification action and what action is necessary. The verification action may be performed on an ETOPS revenue flight provided the verification action is documented as satisfactorily completed upon reaching the ETOPS Entry Point.
- (e) Task identification. The certificate holder must identify all ETOPS-specific tasks. An appropriately trained mechanic who is ETOPS qualified must accomplish and certify by signature that the ETOPS-specific task has been completed.
- (f) Centralized maintenance control procedures. The certificate holder must develop and maintain procedures for centralized maintenance control for ETOPS.
- (g) Parts control program. The certificate holder must develop an ETOPS parts control program to ensure the proper identification of parts used to maintain the configuration of airplanes used in ETOPS.
- (h) Reliability program. The certificate holder must have an ETOPS reliability program. This program must be the certificate holder's existing reliability program or its Continuing Analysis and Surveillance System (CASS) supplemented for ETOPS. This program must be event-oriented and include procedures to report the events listed below, as follows:
 - (1) The certificate holder must report the following events within 96 hours of the occurrence to its certificate holding district office (CHDO):

- (i) IFSDs, except planned IFSDs performed for flight training.
 - (ii) Diversions and turnbacks for failures, malfunctions, or defects associated with any airplane or engine system.
 - (iii) Uncommanded power or thrust changes or surges.
 - (iv) Inability to control the engine or obtain desired power or thrust.
 - (v) Inadvertent fuel loss or unavailability, or uncorrectable fuel imbalance in flight.
 - (vi) Failures, malfunctions or defects associated with ETOPS Significant Systems.
 - (vii) Any event that would jeopardize the safe flight and landing of the airplane on an ETOPS flight.
 - (2) The certificate holder must investigate the cause of each event listed in paragraph (h)(1) of this section and submit findings and a description of corrective action to its CHDO. The report must include the information specified in §121.703(e). The corrective action must be acceptable to its CHDO.
- (i) Propulsion system monitoring.
- (1) If the IFSD rate (computed on a 12-month rolling average) for an engine installed as part of an airplane-engine combination exceeds the following values, the certificate holder must do a comprehensive review of its operations to identify any common cause effects and systemic errors. The IFSD rate must be computed using all engines of that type in the certificate holder's entire fleet of airplanes approved for ETOPS.
 - (i) A rate of 0.05 per 1,000 engine hours for ETOPS up to and including 120 minutes.
 - (ii) A rate of 0.03 per 1,000 engine hours for ETOPS beyond 120-minutes up to and including 207 minutes in the North Pacific Area of Operation and up to and including 180 minutes elsewhere.
 - (iii) A rate of 0.02 per 1,000 engine hours for ETOPS beyond 207 minutes in the North Pacific Area of Operation and beyond 180 minutes elsewhere.
 - (2) Within 30 days of exceeding the rates above, the certificate holder must submit a report of investigation and any necessary corrective action taken to its CHDO.
- (j) Engine condition monitoring.
- (1) The certificate holder must have an engine condition monitoring program to detect deterioration at an early stage and to allow for corrective action before safe operation is affected.
 - (2) This program must describe the parameters to be monitored, the method of data collection, the method of analyzing data, and the process for taking corrective action.
 - (3) The program must ensure that engine-limit margins are maintained so that a prolonged engine-inoperative diversion may be conducted at approved power levels and in all expected environmental conditions without exceeding approved engine limits. This includes approved limits for items such as rotor speeds and exhaust gas temperatures.
- (k) Oil-consumption monitoring. The certificate holder must have an engine oil consumption monitoring program to ensure that there is enough oil to complete each ETOPS flight. APU oil consumption must be included if an APU is required for ETOPS. The operator's oil consumption limit may not exceed the manufacturer's recommendation. Monitoring must be continuous and include oil added at each ETOPS departure point. The program must compare the amount of oil added at each ETOPS departure point with the running average consumption to identify sudden increases.

- (l) APU in-flight start program. If the airplane type certificate requires an APU but does not require the APU to run during the ETOPS portion of the flight, the certificate holder must develop and maintain a program acceptable to the FAA for cold soak in-flight start-and-run reliability.
- (m) Maintenance training. For each airplane-engine combination, the certificate holder must develop a maintenance training program that provides training adequate to support ETOPS. It must include ETOPS specific training for all persons involved in ETOPS maintenance that focuses on the special nature of ETOPS. This training must be in addition to the operator's maintenance training program used to qualify individuals to perform work on specific airplanes and engines.
- (n) Configuration, maintenance, and procedures (CMP) document. If an airplane-engine combination has a CMP document, the certificate holder must use a system that ensures compliance with the applicable FAA-approved document.
- (o) Procedural changes. Each substantial change to the maintenance or training procedures that were used to qualify the certificate holder for ETOPS, must be submitted to the CHDO for review. The certificate holder cannot implement a change until its CHDO notifies the certificate holder that the review is complete.

[Doc. No. FAA-2002-6717, 72 FR 1880, Jan. 16, 2007, as amended by Amdt. 121-329, 72 FR 7348, Feb. 15, 2007; Amdt. 121-329, 72 FR 26541, May 10, 2007; Amdt. 121-339, 73 FR 33881, June 16, 2008]

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

14 CFR section [121.139](#)

Existing Regulation Text

§ [121.139](#) Requirements for manual aboard aircraft: Supplemental operations.

- (a) Except is provided in paragraph (b) of this section, each certificate holder conducting supplemental operations shall carry appropriate parts of the manual on each airplane when away from the principal base of operations. The appropriate parts must be available for use by ground or flight personnel. If the certificate holder carries aboard an airplane all or any portion of the maintenance part of its manual in other than printed form, it must carry a compatible reading device that produces a legible image of the maintenance information and instructions or a system that is able to retrieve the maintenance information and instructions in the English language.
- (b) If a certificate holder conducting supplemental operations is able to perform all scheduled maintenance at specified stations where it keeps maintenance parts of the manual, it does not have to carry those parts of the manual aboard the aircraft en route to those stations.

Why is this rule on the list?

- a) *Eliminate jobs, or inhibit job creation;*
- b) *Are outdated, unnecessary or ineffective;***
- c) *Impose costs that exceed benefits; or*
- d) *Create a serious inconsistency or otherwise interfere with regulatory reform initiatives and policies***

Proposed Action (Repeal/Replace/Modify)

Modify to allow for use of any media and/or means to make the appropriate parts of the manual available.

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

§ [121.139](#) Requirements for manual aboard aircraft: Supplemental operations.

- (a) ~~Except is provided in paragraph (b) of this section,~~ each certificate holder conducting supplemental operations shall ~~carry~~ ensure appropriate parts of the manual ~~on each airplane when away from the principal base of operations. The appropriate parts must be~~ **are** available for use by ground or flight personnel. ~~If the certificate holder carries aboard an airplane all or any portion of the maintenance part of its manual in other than printed form, it must carry a compatible reading device that produces a legible image of the maintenance information and instructions or a system that is able to retrieve the maintenance information and instructions in the English language.~~
- (b) ~~If a certificate holder conducting supplemental operations is able to perform all scheduled maintenance at specified stations where it keeps maintenance parts of the manual, it does not have to carry those parts of the manual aboard the aircraft en route to those stations.~~

§ [121.139](#) Requirements for manual aboard aircraft: Supplemental operations.

Each certificate holder conducting supplemental operations shall ensure appropriate parts of the manual are available for use by ground or flight personnel.

Rationale – Context of Regulation and proposed change

The regulation was written before technological advances were stabilized and therefore does not contemplate the ability to reach any area in the world electronically. The interface with flight crews and maintenance personnel from a carrier's main location has become seamless and the need for "paper" has been eliminated.

The regulation is unevenly enforced. Some FAA inspectors steadfastly require printed manuals, while others recognize that computers and smartphones with internet connections are ubiquitous and therefore constitute compliance. A third position maintains that the means of reading the electronic data has to be carried on the aircraft; that access to the manual may be interrupted due to bad connectivity.

Rationale – Associated Cost Information

There are no safety justifications for continuing to demand that the information be "on the aircraft". Indeed, since most systems are electronic, the need to "transfer" relevant information to another medium that can be "carried" on the aircraft creates opportunity for error, which would be contrary to safety. The ability to access relevant information electronically saves time, money and drastically reduces the chance for human error.

In the unlikely event that connectivity is problematic, and the on-ground electronic means is interrupted, maintenance activities may be temporarily suspended. While this may impact operation, which is a logistical challenge, it certainly is not a safety issue.

Costs savings include:

Reduction in weight—

- ✓ Paper manuals
- ✓ Equipment associated with non-paper manuals.

Reduction in transferring information from existing media to a type that can be "carried on the aircraft."

- ✓ Printing, collating, packaging, and transfer to aircraft
- ✓ Time
- ✓ Auditing to ensure information is updated and accurate

One A4A member, upon whom this creates a requirement for paper manuals, reports annual costs of approximately \$500,000.

§ [121.139](#) Requirements for manual aboard aircraft: Supplemental operations.

- (c) Except as provided in paragraph (b) of this section, each certificate holder conducting supplemental operations shall carry appropriate parts of the manual on each airplane when away from the principal base of operations. The appropriate parts must be available for use by ground or flight personnel. If the certificate holder carries aboard an airplane all or any portion of the maintenance part of its manual in other than printed form, it must carry a compatible reading device that produces a legible image of the maintenance information and instructions or a system that is able to retrieve the maintenance information and instructions in the English language.
- (d) If a certificate holder conducting supplemental operations is able to perform all scheduled maintenance at specified stations where it keeps maintenance parts of the manual, it does not have to carry those parts of the manual aboard the aircraft en route to those stations.

[Doc. No. 6258, 29 FR 19196, Dec. 31, 1964, as amended by Amdt. 12-71, 35 FR 17176, Nov. 7, 1970; Amdt. 121-253, 61 FR 2611, Jan. 26, 1996; Amdt. 121-262, 62 FR 13256, Mar. 19, 1997; 62 FR 15570, Apr. 1, 1997]

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

§91.157(a). Special VFR weather minimums

Existing Regulation Text

(a) Except as provided in appendix D, section 3, of this part, special VFR operations may be conducted under the weather minimums and requirements of this section, instead of those contained in §91.155, below 10,000 feet MSL within the airspace contained by the upward extension of the lateral boundaries of the controlled airspace designated to the surface for an airport.

Why is this rule on the list?

b) Are outdated, unnecessary or ineffective;

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

(a) Except as provided in appendix D, section 3, of this part, special VFR operations may be conducted under the weather minimums and requirements of this section, instead of those contained in §91.155, below 10,000 feet MSL within the airspace contained by the upward extension of the lateral boundaries of the controlled airspace designated to the surface for an airport or as an extension to a Class B, C, or D surface area.

Rationale – Context of Regulation and proposed change

Background: The FAA wrote §91.157(a) in a way that limits Special VFR (SVFR) operations to certain airports located in a Class E surface area. The FAA’s strict interpretation of this rule results in many general aviation airports not being accessible in weather conditions that they otherwise would have been had §91.157(a) allowed SVFR to any airport underlying a Class E surface area, i.e., Class E3, E3A, and E4 airspace. There is no impact to safety as the weather requirements are comparable to Class G airspace clearance from cloud and visibility minimums, and the requirement of an air traffic control clearance ensures safe separation with IFR aircraft. The current rule results in unnecessary delays of aircraft, including operations of first responders like helicopter air ambulances and law enforcement.

Proposal: AOPA recommends the FAA modify §91.157(a) to allow SVFR to any airport underlying any type of Class E surface area. This resolution can be achieved by allowing SVFR to airports underlying Class E surface area airspace enacted as extensions to Class B, C, or D surface areas.

Safety Impact: A similar modification to §91.157 was carried out by the FAA in 2000¹, per an ARAC recommendation. That direct final rule allowed pilots to use flight visibility instead of being required to use an official report of ground visibility when conducting SVFR. The rule noted it would “result in potential cost-savings, while maintaining an equivalent level of safety, the FAA has determined that his direct final rule will be cost-beneficial.” We believe the proposed modification will promote cost savings for users while maintaining this same equivalent level of safety.

Rationale – Associated Cost Information

¹ See Docket No. FAA-2000-7110; RIN 2120-AG94.

This modification will not increase the cost to the agency or on airspace users. In fact, this modification would reduce the unnecessary number of flight delays for departing and arriving aircraft.

At least 112 airports are located in Class E3, E3A, or E4 airspace extensions of Class B, C, or D surface areas. These airports account for at least 2,240 based aircraft and tens of thousands of operations each year. When the extension airspace is governing and weather conditions do not allow for flight in accordance with §91.155, pilots are not able to arrive or depart these airports except under instrument flight rules.

As the FAA does not track the number of SVFR operations conducted, we conservatively estimate the number of flights delayed because of the rule's current wording to be approximately 500 per year. Of these 500, at least 100 are assumed to result in a diversion versus airborne holding.

The FAA estimates a piston multi-engine airplane with 4-9 seats operating under Part 91 costs \$991² per hour (including crew). Additionally, the FAA estimates the cost of delay due to weather for passengers to be \$63³ per hour. Assuming 400 hours of annual delay for airborne holding and another 300 hours for the time necessary for a diversion and reposition, the cost on average per year for a 7-seat Part 91 aircraft would be \$1,002,400. Over ten years, modifying §91.157 would result in cost saving for users of approximately \$10,024,000 without adjusting for inflation.

² https://www.faa.gov/regulations_policies/policy_guidance/benefit_cost/media/econ-value-section-4-op-costs.pdf.

³ <https://www.faa.gov/nextgen/programs/weather/faq/>.

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

§91.319(c). Aircraft having experimental certificates: Operating limitations

Existing Regulation Text

(c) Unless otherwise authorized by the Administrator in special operating limitations, no person may operate an aircraft that has an experimental certificate over a densely populated area or in a congested airway. The Administrator may issue special operating limitations for particular aircraft to permit takeoffs and landings to be conducted over a densely populated area or in a congested airway, in accordance with terms and conditions specified in the authorization in the interest of safety in air commerce.

Why is this rule on the list?

b) Are outdated, unnecessary or ineffective;

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

(c) Unless otherwise authorized by the Administrator in special operating limitations or as directed by Air Traffic Control, no person may operate an aircraft that has an experimental certificate over a densely populated area or in a congested airway. The Administrator may issue special operating limitations for particular aircraft to permit takeoffs and landings to be conducted over a densely populated area or in a congested airway, in accordance with terms and conditions specified in the authorization in the interest of safety in air commerce.

Rationale – Context of Regulation and proposed change

Background: The FAA has chosen to keep the definition of “densely populated areas” vague and interpreted on a case-by-case basis.⁴ Pilots operating an aircraft with Experimental operating limitations must abide by §91.319(c) which requires the pilot to not operate over a densely populated area; however, this pilot is also responsible to adhere to §91.123, “compliance with ATC clearances and instructions.” As many Experimental turbojet aircraft will interact with air traffic control and, as required, identify themselves as Experimental, the responsibility for determining densely populated areas should be placed on air traffic control for any clearance they give. The rule is currently onerous and requires Experimental turbojet aircraft to decline clearances and incur significant delays.

Proposal: AOPA recommends the FAA modify §91.319(c) to allow pilots to deviate⁵ from this requirement when a clearance issued under §91.123 has been given.

4

[https://www.faa.gov/about/office_org/headquarters_offices/agc/pol_adjudication/agc200/interpretations/data/interprets/2010/simmons%20-%20\(2010\)%20legal%20interpretation.pdf](https://www.faa.gov/about/office_org/headquarters_offices/agc/pol_adjudication/agc200/interpretations/data/interprets/2010/simmons%20-%20(2010)%20legal%20interpretation.pdf).

[https://www.faa.gov/about/office_org/headquarters_offices/agc/pol_adjudication/agc200/interpretations/data/interprets/2012/cintron-afs-800-2%20-%20\(2012\)%20legal%20interpretation.pdf](https://www.faa.gov/about/office_org/headquarters_offices/agc/pol_adjudication/agc200/interpretations/data/interprets/2012/cintron-afs-800-2%20-%20(2012)%20legal%20interpretation.pdf).

⁵ <http://www.warbirds-eaa.org/forms/7Deviation%20Memo%20PDF.pdf>.

Safety Impact: The FAA has routinely evaluated regulations applicable to Experimental aircraft to ensure they are not burdensome and are contributing to safety; however, they have failed to provide relief to an expensive provision of Part 91. More recently the FAA acknowledged the positive safety record of these aircraft when in 2008⁶ they allowed exhibition aircraft to fly further from their base airport. Building off of the relief provided over the years, we believe it would be appropriate and not adverse to safety to allow air traffic control to issue instructions that deviate from §91.319(c).

Rationale – Associated Cost Information

This modification will not increase the cost to the agency or on airspace users. This modification will reduce the unnecessary number of flight delays for departing and arriving Experimental aircraft and result in reduced workload for the pilot.

There are at least 1,966⁷ Experimental aircraft subject to this requirement with most regularly interacting with air traffic control. According to the General Aviation Manufacturers Association, these exhibition aircraft flew 76,331 hours in 2015. The FAA does not report what the average operating cost per hour is for Experimental aircraft, but they do report the average cost for a turbojet operating under Part 91 to be \$2,193⁸ per hour, which is identifiable of most exhibition aircraft.

We estimate each exhibition aircraft is impacted annually by at least 30 minutes of delay due to the need to negotiate with air traffic control an agreeable lateral track that allows them to comply with §91.319(c). This course takes the pilot further from the optimum pathway to their destination resulting in an increased expense of operating time. Assuming 983 hours of delay, these Part 91 Experimental aircraft operators incur an unnecessary expense of \$2,155,719 annually or \$21,557,190 over ten years without adjustment for inflation.

⁶ <http://pilatusp-3.com/operating-limitations/>.

⁷ https://gama.aero/wp-content/uploads/2016-GAMA-Databook_forWeb.pdf.

⁸ https://www.faa.gov/regulations_policies/policy_guidance/benefit_cost/media/econ-value-section-4-op-costs.pdf.

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

121.629(b) – Operation in icing conditions

Existing Regulation Text

(b) No person may take off an aircraft when frost, ice, or snow is adhering to the wings, control surfaces, propellers, engine inlets, or other critical surfaces of the aircraft or when the takeoff would not be in compliance with paragraph (c) of this section. Takeoffs with frost under the wing in the area of the fuel tanks may be authorized by the Administrator.

Why is this rule on the list?

c) Impose costs that exceed benefits

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

(b) No person may take off an aircraft when frost, ice, or snow is adhering to the wings, control surfaces, propellers, engine inlets, or other critical surfaces of the aircraft which might adversely affect the performance and/or controllability of the aircraft except as permitted in the Airplane Flight Manual or when the takeoff would not be in compliance with paragraph (c) of this section. Takeoffs with frost under the wing in the area of the fuel tanks may be authorized by the Administrator.

Rationale – Context of Regulation and proposed change

Part 121 operations should not be restricted when the impact has been addressed and accounted for in the Part 25 certification basis and AFM performance. Harmonizes with intent of EASA EUOPS OPS 1.345(b).

Rationale – Associated Cost Information

Allows manufacturers design flexibility by including ice impacts in the basic AFM performance. Negates the need for operators to apply for an exemption to the rule, which requires renewal on a recurring basis. Much of the cost burden falls on the operators with this rule, though manufacturers incurs costs to support airlines with the exemption process (\$250,000 per project).

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

14 CFR 121.103 En route navigational facilities

Existing Regulation Text

(a) Except as provided in paragraph (b) of this section, each certificate holder conducting domestic or flag operations must show, for each proposed route (including to any regular, provisional, refueling or alternate airports), that suitable navigation aids are available to navigate the airplane along the route within the degree of accuracy required for ATC. Navigation aids required for approval of routes outside of controlled airspace are listed in the certificate holder's operations specifications except for those aids required for routes to alternate airports.

(b) Navigation aids are not required for any of the following operations--

- (1) Day VFR operations that the certificate holder shows can be conducted safely by pilotage because of the characteristics of the terrain;
- (2) Night VFR operations on routes that the certificate holder shows have reliably lighted landmarks adequate for safe operation; and
- (3) Other operations approved by the certificate holding district office.

Why is this rule on the list?

outdated, unnecessary or ineffective

Proposed Action (Repeal/Replace/Modify)

Repeal or modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

Either repeal or if modified, allow for an exception if using RNAV

Rationale – Context of Regulation and proposed change

With aircraft and air traffic modernization, area navigation (RNAV) routes are taking the place of routes defined by suitable navigation aids. RNAV approaches are based on GPS and allows an aircraft to choose any course within a network of navigation beacons.

Rationale – Associated Cost Information

Cost savings if carriers are not required to show suitable navigation aids for each route flown.

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

14 CFR 121.135 Manual Contents

Existing Regulation Text

(a) Each manual required by Sec. 121.133 must--(3) Have the date of last revision on each page concerned;

Why is this rule on the list?

outdated, unnecessary or ineffective

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

Remove the requirement to have a date of last revision on each page

Rationale – Context of Regulation and proposed change

There are no page numbers in electronic documents in XML or HTML formats.

Rationale – Associated Cost Information

Cost savings would be realized if this requirement were removed as most carriers are submitting via XML or HTML formats

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

14 CFR 121.619 Alternate airport for destination IFR: Domestic Operations

Existing Regulation Text

(a) No person may dispatch an airplane under IFR or over-the-top unless he lists at least one alternate airport for each destination airport in the dispatch release. When the weather conditions forecast for the destination and first alternate airport are marginal at least one additional alternate must be designated. However, no alternate airport is required if for at least 1 hour before and 1 hour after the estimated time of arrival at the destination airport the appropriate weather reports or forecasts, or any combination of them, indicate-- (1) The ceiling will be at least 2,000 feet above the airport elevation; and (2) Visibility will be at least 3 miles.

Why is this rule on the list?

outdated, unnecessary or ineffective

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

For airports with CAT II/III capability, replace the 1-2-3 rule with ± 1 hour, CAT 1 landing minimums only.
b. For airports without CAT II/III capability, replace the 1-2-3 rule with ± 1 hour 2000ft / 2mi

Rationale – Context of Regulation and proposed change

Given aircraft and air traffic modernization, modification of the rule is appropriate

Rationale – Associated Cost Information

Consistency with air traffic modernization and cost savings for any carrier that would have to ask for an exemption from the existing text of the rule.

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

14 CFR 121.621 Alternate airport for destination: Flag Operations

Existing Regulation Text

(a) No person may dispatch an airplane under IFR or over-the-top unless he lists at least one alternate airport for each destination airport in the dispatch release, unless--(1) The flight is scheduled for not more than 6 hours and, for at least 1 hour before and 1 hour after the estimated time of arrival at the destination airport, the appropriate weather reports or forecasts, or any combination of them, indicate the ceiling will be:(i) At least 1,500 feet above the lowest circling MDA, if a circling approach is required and authorized for that airport; or(ii) At least 1,500 feet above the lowest published instrument approach minimum or 2,000 feet above the airport elevation, whichever is greater; and(iii) The visibility at that airport will be at least 3 miles, or 2 miles more than the lowest applicable visibility minimums, whichever is greater, for the instrument approach procedures to be used at the destination airport; or

Why is this rule on the list?

outdated, unnecessary or ineffective

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

Change 121.621 (a)(1) alternate requirements to match domestic 121.619 for domestic operations

Modify 121.621(a)(1) from 6 hours to 8 hours

Rationale – Context of Regulation and proposed change

This rule is outdated for Flag Operations. This requirement should mirror domestic operations.

Rationale – Associated Cost Information

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

14 CFR §121.697 Disposition of load manifest, flight release, and flight plans: Supplemental operations

Existing Regulation Text

(c) Except as provided in paragraph (d) of this section, if a flight originates at a place other than the certificate holder's principal base of operations, the pilot in command (or another person not aboard the airplane who is authorized by the certificate holder) shall, before or immediately after departure of the flight, mail signed copies of the documents listed in paragraph (a) of this section, to the principal base of operations.

Why is this rule on the list?

outdated, unnecessary or ineffective

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

Modify the requirement to “mail” signed copies of the documents to the principal base of operations with “mail or send by an electronic means” signed copies of the document to the principal base of operations

Rationale – Context of Regulation and proposed change

With modern advances and increased use of electronic communication, electronic means should be included as an option for this requirement.

Rationale – Associated Cost Information

Cost savings would be realized if the e-mail option were used over the regular “mail” option.

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

Part 135.619 (g) (2) (i)(ii)(iii) (iv) – Operations control specialist duty time limitations

Existing Regulation Text

(2) Except in cases where circumstances or emergency conditions beyond the control of the certificate holder require otherwise -

- (i) No certificate holder may schedule an operations control specialist for more than 10 consecutive hours of duty;
- (ii) If an operations control specialist is scheduled for more than 10 hours of duty in 24 consecutive hours, the certificate holder must provide that person a rest period of at least 8 hours at or before the end of 10 hours of duty;
- (iii) If an operations control specialist is on duty for more than 10 consecutive hours, the certificate holder must provide that person a rest period of at least 8 hours before that person's next duty period;
- (iv) Each operations control specialist must be relieved of all duty with the certificate holder for at least 24 consecutive hours during any 7 consecutive days.

Why is this rule on the list?

c) Impose costs that exceed benefits; or

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

Change to read:

- (2) Except in cases where circumstances or emergency conditions beyond the control of the certificate holder require otherwise -
- (i) No certificate holder may schedule an operations control specialist for more than 12 consecutive hours of duty;
 - (ii) If an operations control specialist is scheduled for more than 12 hours of duty in 24 consecutive hours, the certificate holder must provide that person a rest period of at least 8 hours at or before the end of 10 hours of duty;
 - (iii) If an operations control specialist is on duty for more than 12 consecutive hours, the certificate holder must provide that person a rest period of at least 8 hours before that person's next duty period;
 - (iv) Each operations control specialist must be relieved of all duty with the certificate holder for at least 24 consecutive hours during any 8 consecutive days.

Rationale – Context of Regulation and proposed change

Historically HAA staffing requirements have been based on Crew Day/Rest Requirements for pilots in 135.271 as it is only regulatory duty time limitation applied to the Air Medical operation. Physicians, Nurses, Paramedics, other Medical Personnel and Aviation Maintenance Technicians have no such duty time limitations. Helicopter Air Ambulance is by necessity an industry based on 12-hour duty shifts (driven by the 135.271 prospective 10 hours of rest in each 24-hour

duty period). 135.619 arbitrarily limits Operational Control Specialists to 10 hours of duty time. The 10-hour restriction is lifted word for word from 14 CFR 121.465 (b) (1) "No certificate holder conducting domestic or flag operations may schedule a dispatcher for more than 10 consecutive hours of duty;" further, the restriction of HAA Operational Control Specialists to six consecutive workdays in an industry where 7 days on and 7 days off is common practice is also lifted word for word from 14 CFR 121.465 (b) (3). This regulation applying to domestic or flag operations was applied to Part 135 Operators, without adequate analysis, and left in place due to apparent time constraints. This application of duty limits does not reflect the world of work in Part 135 operations. As a result, 135 operators are still suffering from an unfair management and financial burden.

Rationale – Associated Cost Information

The restriction of the Operational Control Specialist duty shift to 10 hours instead of 12 hours mandates the addition of another FTE to each position to provide 24-hour coverage of that position and limits the ability to effectively manage shift coverage. Each position requires 2.4 FTE for 24-hour coverage and moving among different positions produces an expanding geometric scheduling/coverage issue. There is an increased cost to scheduling 10 hour OCS shifts borne by the operator and before the imposition of the rule, there were no documented fatigue issues from 12 hour OCS shifts. The six-day shift makes the position supremely less attractive than 7 on and 7 off and increases recruiting and staffing costs. The 10-hour shift issue also creates inconsistent coverage changes while Air Medical flights are in progress and generates the potential for unexpected gaps in the over watch function critical to OCS efficiency, and its inherent safety responsibility.

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

Part 135.619 (d)(1) – Training Requirements - Initial Training

Existing Regulation Text

Initial training. Before performing the duties of an operations control specialist, each person must satisfactorily complete the certificate holder's FAA-approved operations control specialist initial training program and pass an FAA-approved knowledge and practical test given by the certificate holder. Initial training must include a minimum of 80 hours of training on the topics listed in paragraph (f) of this section. A certificate holder may reduce the number of hours of initial training to a minimum of 40 hours for persons who have obtained, at the time of beginning initial training, a total of at least 2 years of experience during the last 5 years in any one or in any combination of the following areas—

Why is this rule on the list?

c) Impose costs that exceed benefits

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

Rationale – Context of Regulation and proposed change

Even though there is a training reduction allowed if the conditions of 135.619(d)(1)(i)(ii)(iii) there is still a programmed minimum of 40 hours of instruction required. The certificate holder should have the discretion to determine level of competency and minimum training needed when utilizing planned training hours and training to proficiency. Base on the average combined hourly cost of training (trainee and instructor) The full 80 hour curriculum would cost \$7000 per OCS

Rationale – Associated Cost Information

The full 80-hour curriculum is approximately \$7000 per Operations Control Specialist, including student and instructor costs. Training to proficiency vice training to a prescribed number of hours could save operators an estimated \$88.00 per training hour avoided. This cost savings does not consider lost productivity of both student and instructor personnel while engaged in training.

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

Part 135.619 (d)(2) – Training Requirements – Recurrent Training

Existing Regulation Text

(2) Recurrent training. Every 12 months after satisfactory completion of the initial training, each operations control specialist must complete a minimum of 40 hours of recurrent training on the topics listed in paragraph (f) of this section and pass an FAA-approved knowledge and practical test given by the certificate holder on those topics.

Why is this rule on the list?

b) Are outdated, unnecessary or ineffective;

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

Change to read: (2) Recurrent training. After satisfactory completion of the initial training, each operations control specialist must complete a minimum of 40 hours of recurrent training on the topics listed in paragraph (f) of this section and pass an FAA-approved knowledge and practical test given by the certificate holder on those topics. Recurrent training shall be completed annually, and on a cycle that does not exceed 12 months from the date of initial training or the date of last recurrent training.

Rationale – Context of Regulation and proposed change

135.619 (d)(2) as written allows no grace period for recurrent training, requiring it all to occur in the 12th month after initial training. This forces the operator to hold all OCS training in the same period and further aggravates scheduling issues and produces unnecessary compensation issues (travel/overtime).

Rationale – Associated Cost Information

Personnel Support Costs – Varies per operation. Imposes additional compensation and support costs (travel, etc) to meet the 12-month requirement. Creates inefficiencies in terms of operational scheduling.

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

Part 133.19 – Rotorcraft

Existing Regulation Text

(a) The applicant must have the exclusive use of at least one rotorcraft that—

(1) Was type certificated under, and meets the requirements of, part 27 or 29 of this chapter (but not necessarily with external-load-carrying attaching means installed) or of §21.25 of this chapter for the special purpose of rotorcraft external-load operations;

Why is this rule on the list?

b) Are outdated, unnecessary or ineffective;

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

(a) The applicant must have the exclusive use of at least one rotorcraft that—

(1) Was type certificated under, and meets the requirements of, part 27 or 29 of this chapter (but not necessarily with external-load-carrying attaching means installed), any previously accepted certification method, or of §21.25 of this chapter for the special purpose of rotorcraft external-load operations;

Rationale – Context of Regulation and proposed change

Current language requires operator to have exclusive use of at least one rotorcraft that was certified under part 27 or 29. This should be modified to include aircraft certificated under previous standards. To this point, this regulation has not been interpreted specifically as written, but it leaves open the possibility of a misinterpretation of the intent in the future.

Rationale – Associated Cost Information

No associated cost information. This change eliminates unintended consequences due to misinterpretation.

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Proposal Submitted by: Helicopter Association International (HAI)/Air Medical Operators Association (AMOA)

For Questions, Contact: Chris Martino

Regulation & Title

Part 135.207 – VFR: Helicopter Surface Reference Requirements

Existing Regulation Text

No person may operate a helicopter under VFR unless that person has visual surface reference or, at night, visual surface light reference, sufficient to safely control the helicopter.

Why is this rule on the list?

b) Are outdated, unnecessary or ineffective

Proposed Action (Repeal/Replace/Modify)

Modify rule or issue appropriate interpretative artifact.

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

Change rule to: No person may operate a helicopter under VFR unless that person has visual reference or, at night, visual surface light reference, sufficient to safely control the helicopter, to include the use of Night Vision Imaging Systems (NVIS)/Night Vision Goggles (NVG).

Alternatively, ARAC supports FAA issuance of the appropriate interpretive artifact that would explicitly allow use of NVG during night VFR.

Rationale – Context of Regulation and proposed change

Night Vision Goggles (NVG) are intended for use in visual meteorological conditions (VMC), as an adjunct to visual flight at night. NVGs are a viable tool during the enroute and terminal operations during certain helicopter flight scenarios. When properly used, NVG use can increase safety, enhance situational awareness, and reduce pilot workload and stress that are typically associated with night operations. Provided that NVG operations are properly prepared, equipped and trained for, there is considerable potential for enhancing the overall safety of night helicopter operations. The proper use of NVGs has the potential to enhance the safety of visual flight at night by assisting the crew's ability to see the horizon and terrain, observe much of the in-flight meteorological conditions, and to identify objects that may cause a hazard to flight.

Rationale – Associated Cost Information

This proposal addressing a regulation that is outdated and potentially hinders the level of safety which could be realized with today's technology. This proposal is not explicitly a "cost savings", yet many believe the safety benefit gained easily outweighs the small investment required by FAA to promote safer helicopter operations.

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

Part 135.293(d) – Crewmember Testing Requirements

Existing Regulation Text

“The instrument proficiency check required by §135.297 may be substituted for the competency check required by this section for the type of aircraft used in the check.”

Why is this rule on the list?

d) Create a serious inconsistency or otherwise interfere with regulatory reform initiatives and policies

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

“The instrument proficiency check required by §135.297 may be substituted for the competency check required by this section for the type of aircraft used in the check. Competency maneuvers in paragraph (b) of this section are to be included in a 135.297 IPC when it is being substituted for a 135.293 competency check.”

Rationale – Context of Regulation and proposed change

Part §135.293 (d) allows the substitution of the §135.297 IPC for the competency check required by §135.293. For airplane pilots, operating day to day into and out of conventional airports, the IPC consists of enough maneuvers to make a determination of airman competency. On the other hand, helicopter pilots operate in a very different flight environment which includes performing challenging visual maneuvers that can vary significantly from those routinely conducted by airplanes. Therefore, FAA guidance should be amended to indicate the VFR Competency maneuvers listed in §135.293(b) are to be included in a 135.297 IPC when it is being substituted for the competency check delineated in §135.293.

Rationale – Associated Cost Information

Cost saving not a factor of this proposal. This proposal is a safety-of-flight enhancement.

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

FAA Order 8900.1 - Flight Standards Information Management System (FSIMS) Volume 4, Ch7, Para 4-1128.b.4.g - Training Program

Existing Regulation Text

If only one NVG crewmember is required for takeoff from unimproved sites, the operator must develop and use appropriate operational procedures and training for dual NVG high and low reconnaissance, which must include the evaluation of egress route(s). The single pilot using NVGs, provided no substantial change in conditions (wind, obstructions, and weather conditions) has occurred between the time of the reconnaissance and the departure, may use egress routes selected during high and low reconnaissance.

Why is this rule on the list?

d) Create a serious inconsistency or otherwise interfere with regulatory reform initiatives and policies

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

Allow operations to and from the ground under NVGS with no crew member restrictions

Rationale – Context of Regulation and proposed change

Current FAA Order 8900.1 guidance and, in turn, all of the aircraft STCs state that if you do not have a second person (trained medical person) utilizing NVGs for unimproved landing areas, the pilot cannot land aided. They can go from improved area to improved area with the pilot only wearing NVGs, but not to unimproved. In effect, this means if for any reason your crew's NVGs are out of service, the pilot is required to flip up his goggles and land unaided. This has the effect of decreasing/degrading visual acuity from near 20/20 to 20/200 (best case). Basically, where goggles provide the highest level of safety, their use is prohibited unless a second person is also wearing them.

Rationale – Associated Cost Information

Cost saving not a factor of this proposal. This proposal is a safety-of-flight enhancement.

ARAC - Support Regulatory Reform of Aviation Regulations Tasking – Phase 2

Regulation & Title

FAA Order 8900.1 - Flight Standards Information Management System (FSIMS) - Volume 3, Chapter 19, Section 7, Table 3-71 – Part 135 Checking Modules—Helicopters

Existing Regulation Text

Entire Table

Why is this rule on the list?

c) Impose costs that exceed benefits; or

Proposed Action (Repeal/Replace/Modify)

Modify

Proposed Change (Include specific regulatory text edits if appropriate – Replace or Modify proposals)

Only the items listed in the helicopter instrument rating Practical Test Standards (PTS) or Airline Transport Pilot Testing Standards (tasks are the same, the standards are different) should be shown under the INST PROF in Table 3-71

Rationale – Context of Regulation and proposed change

Part 135 Checking Module Helicopters table found in 8900 Volume 3 Chapter 19 Section 7 Table 3-71, In that table under the INST. PROF Column operators are required to check the maneuvers such as tail rotor failures, dynamic rollover, and confined areas. It makes sense to include those maneuvers in the IFR COMP column when an operator intends on using the competency check to satisfy the requirements of the 135.293 check as allowed under Section 135.293 (c). However, the Instrument Proficiency Check (IPC) is in a separate column in the table for a reason. It allows a pilot in command that is qualified according to 135.293 to complete an IPC and begin IFR revenue operations. There are several places in preambles that address Instrument Proficiency Checks. For example, 42518 Federal Register/ Vol. 74, No. 161/ Friday, August 21, 2009 speaks directly to IPC requirements as addressed in 61.57 and correlates them directly to the IPC required by 135.297 (by saying the .297 check meets the requirements of an IPC under 61.57). It goes on to state, "The instrument proficiency check consists of operation areas and tasks listed for an instrument proficiency check in the practical test standards (PTS)." The Instrument Rating PTS reiterates: Required Tasks for instrument proficiency check (PC) are also contained in these practical test standards.

Rationale – Associated Cost Information

No costing information available.

DISSENTING OPINIONS

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September 7, 2017

To: Ms. Lirio Liu, Lirio.Liu@faa.gov
Director, Office of Rulemaking, ARM-1
Federal Aviation Administration
800 Independence Ave, SW
Washington DC 20591, and

Todd D. Sigler, FAA ARAC, Aviation Rulemaking Advisory Committee
Todd.D.Sigler@boeing.com

Re: Tasking – 82 FR 19783 – Aviation Rulemaking Advisory Committee (ARAC) Input to Support
Regulatory Reform of Aviation Regulations – New Task.
Federal Register Tasking Notice (Vol. 82, 2017-08564, April 28, 2017)

This DISSENT is filed by the NATIONAL AIR DISASTER FOUNDATION (NADF) as a Public Record opposed to any changes, deletions, modifications to the legislation or FAA Rulemaking 14 CFR 61.159 and 14 CFR 121.436, regarding Pilot Qualifications, Training and Experience.

The request is for more Working Groups and additional Part 121 Rulemaking. More working groups are not included in the task directions to ARAC and the RRTF. The request as written is based on a false assumption that nothing was done in seven years since the legislation was signed August 1, 2010, and ignores Rulemaking, years of working groups, and FAA research.

The recommendation does not recognize that 61.159 and 121.436 are a result of Congressional Legislation: The Airline Safety and FAA Extension Act of 2010, PL 111-216 and Rulemakings. The legislation and work by so many have provided unprecedented, priceless aviation safety for seven years.

The overly general recommendations do not comply with the specific language in the legislation.

The FAA does not need another working group to give them the authority they already have.

The ARAC Chair said early in this process that Rulemaking as a result of Legislation would not be considered. It appeared that the ARAC group supported that principle. If recommendations are inaccurate, incomplete, disregard extensive FAA research, or now attempt to overturn Acts of Congress, they undermine the credibility of the ARAC final recommendations for this task. *NADF* supports the FAA as a regulatory agency to promote aviation safety, and our organization does not want to diminish their oversight. This legislation and its FAA Rulemaking represent millions invested by FAA expertise and time from 2010 through the present.

NADF disagrees with a newly stated interpretation that ARAC should only consider legislation that prevented changes. We request those specifics. 61.159 and 121.436 are very specific to language in the legislation, and only apply to PL 111-216, and no other legislation. The task notice gave no authority to change, modify or invalidate Legislation.

61.160 Aeronautical Experience – Airplane Category Restricted Privileges -- clearly defined academic credit in lieu of the 1500 required flight hours. The request excluded this important fact that the FAA had issued a Final Rulemaking for academic credit for flight hours. Approved by the FAA July 15, 2013. Doc. No. FAA -2010-0100, 78 FR 42375.

The recommendation: *“Allow for the FAA to approve additional pathways toward the 1500-hour requirement, limited to those programs that the FAA finds enhance safety. Such programs can include airline-based education and training programs, but any program must meet FAA standards and approved by the FAA to ensure they enhance safety.”*

The recommendation is overly general, lacks specifics, and reads as a broad-based flight hour credit for airline based education and training programs, and is a direct contradiction from the specific process and language in the legislation:

HR5900 – PL 111-216:

- (1) NUMBERS OF FLIGHT HOURS – The total **flight hours required** by the Administrator under subsection (b)(1) **shall be** at least 1,500 hours.
- (2) FLIGHT HOURS IN DIFFICULT OPERATIONAL CONDITIONS – The total flight hours required by the Administrator under subsection (b) (1) shall include sufficient flight hours, as determined by the Administrator, in difficult operational conditions that may be encountered by an air carrier to enable a pilot to operate safely in such conditions.
 - (d) CREDIT TOWARD FLIGHT HOURS – The Administrator **may allow** specific academic training courses, beyond those required under subsection (b)(2) to be credited toward the total flight hours required under subsection (c). The Administrator may allow such credit based on a determination by the Administrator that allowing a pilot to take **specific academic training courses will enhance safety more than requiring the pilot to fully comply with the flight hours requirement.**
 - (e) RECOMMENDATIONS OF EXPERT PANEL – In conducting the rulemaking proceeding under this section, the Administrator shall review and consider the assessment and recommendations of the expert panel to review Part 121 and 135 training hours established by section 209 (b) of this Act.

Working Groups

61.160 was a result of the first working group, ARC FOQ, First Officer Qualifications, in 2010, and met this request for academics in lieu of flight hours.

At industry request a **second working group** was established with the ACT ARC, as a working group to **study alternatives to the restricted ATP**. The second working group, EQP Enhanced Pilot Qualifications, met for 2-1/2 years, from **January 2014, until July 2016.**

We encourage the air cargo and others to request that the FAA release the Final Report from the Air Carrier Training Aviation Rulemaking Committee, the second working group, (ACT ARC) as a Public Record so that all Part 121, air cargo carriers and others can share the training recommendations of the EQP Enhanced Qualification Program.

Why request another working group without review of the ACT ARC EQP? This is a financial burden to the FAA and should be removed from the submission. (1600805 ACT ARC Rec. 16-8 (APPROVED)).

The recommendation: *“Imposes costs that exceed benefits.”*

Under the rationale they state the air cargo industry is working on assessing cost data savings for the cargo industry. Their own statement does not support “Imposes costs that exceed benefits.” Cost benefit could have been submitted during the past seven years.

The recommendation: *“CAA urges the FAA to create additional enhancements to safety by allowing for programs that are proven to enhance safety to be counted towards the 1500 hour requirement.”*

Prior to PL 111-216 there were seven commuter air crashes. Since PL 111-216 there have been none. The cost of a commercial plane crash can be \$1 billion, so PL 111-216 and the extensive FAA research, study, Rulemaking and working groups, have proven to be successful to promote aviation safety, and cost effective. CAA and other air carriers are encouraged to increase and continue to improve the training that they recommend. The FAA requested scientific empirical evidence and proof that academics had a greater value to safety than training and flight hours. *Note ALPA statistics below.*

The Rationale: *“PL 111-216, Congress mandated that First Officers must have an Airline Transport Certificate (ATP) and that an ATP requires 1,500 hours of flight experience (not training). This requirement has reduced the pool of hireable pilots and caused airlines to cancel flights and reduce or eliminate service to certain community. CAA urges the FAA to create additional enhancements to safety by allowing for programs that are proven to enhance safety to be counted towards the 1,500 hour requirement.”*

The air cargo recommendation ignores **61.160** which provides generous academic credit, in lieu of flight hours. Flying an airplane is Training Experience. Their recommendation reads from passing PL 111-216 and ignores all that has been accomplished through 2017.

In email conversation I raised the issue of low pay, and the responder replied about high pay for UPS and FedEx pilots. That is exactly the point. UPS and FedEx have good pay and benefits and thousands of highly qualified pilot applicants. Smaller regional airlines and smaller air cargo airlines have trouble hiring because of low pay. In fact, since the Colgan 3407 crash that led to the PL111-216 legislation, sadly regional pilot pay has gone down. There is only a pilot shortage of pilots able to work for \$25,000 a year (more or less).

Note source documents listed below.

Rationale – Associated Cost Information: *“In 2015, the University of Nebraska Omaha’s “Pilot Careers Aspiration Study Update”, found that more than 1/3 of aspiring aviators in flight training environments had been discouraged or decided against become a commercial pilot since the rule.”*

I think everyone agrees there are fewer pilot applicants, but that is because of low pay and benefits compared to \$100,000 to \$200,000 in student loans, not the “fault” of the legislation. The following two excellent professional studies support the legislation and the Final Rulemaking.

GAO-14-232 *“Aviation Workforce, Current and Future Availability of Airline Pilots”*
February 2014
U.S. Government Accountability Office

The Rand Study, www.RAND.org
“Air Transport Pilot Supply and Demand”
“Current State and Effects of Recent Legislation”
Michael McGee
April 15, 2015

Provides a comprehensive Airline Transport Pilot (ATP) supply and demand model and assesses the future ATP supply and demand pipeline, to include the impact on the U.S. military pilot population. Note pages 152 – 155 for additional references.”

Rationale – Associated Cost Information: *“...Thus, FAA should be able to consider safety benefits if the rule is modified.”*

The FAA “considered” and invested heavily for seven years and has issued 61.160 for academic credits for flight hours, and to recognize military pilot experience. FAA invested additional three years to “consider” the EQP program.

Note the recent ALPA Air Line Pilots Association statements:

“America is currently enjoying the safest period of airline travel in history. That success is due in part to the Airline Safety and Federal Aviation Administration (FAA) Extension Act of 2010, which strengthened pilot training as well as several other key safety regulations. It is critical to maintain the highest level of safety in our airspace and ensure that professional pilots remain highly qualified and well-trained. Maintaining strong, safety-focused pilot training and qualification standards will protect the traveling public and save lives.”

“Since passage of the Airline Safety and FAA Extension Act of 2010, there have been no passenger fatalities due to an accident of a U.S. Part 121 passenger airline. Conversely, in the two decades prior to enactment of this aviation safety measure, there were more than 1,100 airline passenger fatalities (Part 121), according to the National Transportation Safety Board.”

“The data is clear: our system is safer today because of these rules. Since the enactment of these safety regulations, issued and enforced by the FAA, passenger travel in the U.S. national airspace has become the safest transportation system in the world. It is important that we defend any action that could erode these standards . . . “

**The FAA request: “Evaluate FAA regulations that inhibit job creation.”
“Job Creation” vs. “Job-Killing”**

The current Rulemaking encourages job creation; PL 111-216 and Rulemaking do not “inhibit job creation.” The rationale that the Rulemaking “Destroys job creation to the U.S. economy” is outrageous and wrong. Thank you to the carriers who have worked hard to improve their pilot pay and benefits to attract and hire the best pilot applicants. PL 111-216 could be the most terrific job creator. Thousands of young men and women would pursue good paying aviation careers and improve the prestige associated with the profession of being an Airline Pilot.

The airline industry hires Part 121 co-pilots for \$25,000+ a year (more and less), plus signing bonus, and that is hurting jobs. How can a new hire pilot live in a metropolitan airline hub location, with \$25,000 not even a “living wage.” Pilots cannot afford the technical education and student loans to work for \$25,000.

The higher flight hour requirement should correctly encourage the commuter airline and Part 121 industry to pay more to hire more experienced pilots. United, Delta, FedEx, UPS, American, Southwest and other airlines with a higher pay schedule reflect the higher level of experience, and they have thousands of highly qualified pilot applicants.

NADF is sympathetic to the fact that airlines rely on contracts with the Big Three Legacy Airlines, and it should be easier to negotiate contracts to improve pay and benefit contracts. One idea is to request that GAO to do a study on pay, stock and other benefits for the legacy airline executives and their Board Directors. *NADF* believes the money is there to improve pay and benefits.

The following is a *NADF* review of the PL111-216 legislation and FAA Rulemaking to prove that academics in lieu of pilot flight hours has been thoroughly researched and accomplished.

Congress spoke, the FAA spoke, the industry spoke, and the aviation safety statistics prove that we cannot afford to change this important legislation and FAA Rulemaking.

- February 12, 2009 - Colgan flight 3407 crashed at Clarence Center NY, with 50 total fatalities.
- May 2009 - NTSB identified a number of safety issues and the NTSB made extensive recommendations.
- May 11-15, 2009 – Thank you to the CO3407 family members who attended the NTSB Public Hearing and lobbied for aviation safety legislation. **The FAA identified 31 accidents in Part 121 air carrier operation and 30 accidents in Part 135 air carrier operations from 2001 – 2010.**
- October 14, 2009 - U.S. House passed H.R. 3371 by a **vote of 409 -11** for the initial version of the standalone aviation safety legislation.
- March 2010 - The U.S. Senate took much of H.R. 3371 **passed by 93 – 0** and rolled it into its FAA Reauthorization Bill.
- July 29, 2010 - U.S. House attached H.R. 3371 to H.R. 5900, their FAA extension, and passed by voice vote.
- **July 30, 2010 - U.S. Senate passed H.R. 5900 unanimously.**
- Congress spoke and passed this historic aviation safety legislation with higher standards for Pilot Qualifications, Certificates and Experience Requirements.
- **August 1, 2010 - Public Law 111-216** was signed into law by President Barack Obama, to be effective three years later, August 1, 2013.
- **July 2010 – September 2010, The FAA Chartered the First Officer Qualification Aviation Rulemaking Working Group (FOQ ARC). *NADF* was a member organization of that working group. *NADF* filed a Dissent opposed to the 500 flight hour experience as not sufficient experience, especially compared to the ATP 1500 flight rule.**
- **From September, 2010 for three years the FAA conducted internal review of the Part 121, FO, co-pilot flight hour experience requirements, safety requirements; and the FAA concluded 750 flight hours for military pilots, 1,000 flight hours for those with 4-year Bachelor's degree as academic credit, and 1,250 flight hours for those with aeronautical Associates' degree (two year program), including 30 or more semester hours of aviation related-coursework.**
- May 3, 2011 – Attempts to reduce the flight hour requirement were defeated by Congress.
- **July 15, 2013, FAA Issued 61.160 Final Rule to allow academic credit in lieu of required flight hours.**
- April 13, 2016 – Another attempt to reduce the flight hour requirement was defeated by Congress.
- **January 21, 2014 - FAA formed another working group, chartered through December 31, 2017, and one of the tasks was specific to Part 121 co-pilot flight hour requirements, and Alternate Paths to the Restricted ATP.**
- July 2016, after 2-1/2 years of meetings that working group filed their EQP (Enhanced Qualification Program) Final Report with the FAA.
- Fall, 2016 the FAA advised there would be no changes to the flight hour requirements. ***NADF* requests that the Final Report from that working group be Public Record.**
- January 2017 it was again confirmed to the ACT ARC that the FAA was not moving forward with the EQP proposals.

As we look at the four policy statements “to evaluate the FAA’s regulations in Title 14 of the Code of Federal Regulations to determine any and all regulations that should be repealed, replace or modified, or inhibit job creation,” we clearly see that 14 CFR 61.159 and 121.436 do not belong on this task list.

FAA 14 CFR 61.159, and 14 CFR 121.436 are clearly a result of Congressional Legislation. FAA 14 CFR 61.160, which air cargo did not include in their recommendation is also a result of Congressional Legislation.

Statistics show improved and impressive Safety and Cost Effectiveness since the legislation was passed in 2010, and the FAA issued Final Rulemaking.

Nothing is “outdated” with the best paid, trained and experienced airline pilots.

Respectfully Submitted,
Gail A. Dunham

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August 30, 2017

To: Ms. Lirio Liu, Lirio.Liu@faa.gov
Director, Office of Rulemaking, ARM-1
Federal Aviation Administration
800 Independence Ave, SW
Washington DC 20591, and

Todd D. Sigler, FAA ARAC, Aviation Rulemaking Advisory Committee
Todd.D.Sigler@boeing.com

Re: Tasking – 82 FR 19783 – Aviation Rulemaking Advisory Committee (ARAC) Input to Support
Regulatory Reform of Aviation Regulations – New Task.
Federal Register Tasking Notice (Vol. 82, 2017-08564, April 28, 2017)

**This DISSENT is filed by the NATIONAL AIR DISASTER FOUNDATION (NADF) as a Public Record
opposed to the following recommendations from ERAU.**

FAR 65.53 (b)(1) Eligibility Requirements: General for Aircraft Dispatcher

The NATIONAL AIR DISASTER FOUNDATION (NADF) supports the Dissent filed by ADF and ALPA,
ARAC organizations.

NADF is strongly opposed to reducing the required age from 23 to 21.

61.195(h)(2)(iii)-Flight Instructor limitations and qualifications

NADF is strongly opposed to eliminating the existing regulation that requires at least 24 months.

ERAU statement: *“This rule inhibit job creation and is outdated, unnecessary
and ineffective.”*

This is not true. Instructors need to be experienced, and not students teaching/supervising students.
Student pilots need to work with experienced instructors.

141 Appendix B (4)(c)(2-4) Private Pilot Certification Course

The NATIONAL AIR DISASTER FOUNDATION (NADF) supports the current flight simulator 20% or 30%
credit for of the total flight training hour requirements. NADF is opposed to the proposed change to
increase flight simulator to 40% or 50%.

Recommendation: *“This rule is outdated, unnecessary, and ineffective and imposes costs
that exceed benefits.”*

NADF sees no scientific empirical proof that simulator time in lieu of flight hours is better for aviation
safety. NADF sees no proof that actually flying a plane is “outdated learning,” especially for new
pilots. The Private Pilot Certificate is in the early stage of learning to be an airplane pilot and the FAA
standard now for actual flight hours, at the very least, is necessary. NADF encourages the flight
training schools to increase simulator time, with the most advanced simulators possible, however,
not in lieu of flight hours.

The recommendation is not a modification: it is another proposal for radical reduction in actual flight hours. To shorten the pilot training time in flight to save money, and expect the OJT (on the job flight training) to be in a commercial plane flying in/out of LGA/PHL/ DCA and more is not safe.

141.55 (e)(2)(iii) – Training course: Contents

NADF supports the current rule requiring testing to be supervised by an FAA inspector or an examiner who is not an employee of the school. The practical or knowledge test, is an important test and should be administered by someone without a financial incentive to promote the applicants. An FAA designated examiner is appropriate as an independent regulated supervisor of this important test and improves the expectation that the test is standardized. Self-inspection is not the same as FAA and independent oversight.

Part 142.54(d)(1) – Airline transport pilot certification program.

During the first working group in compliance with PL 111-216, the FOQ ARC, the discussion about a required aircraft type rating as part of the ATP was thoroughly researched and discussed. ERAU was a member organization of that discussion and supported the requirement for an aircraft type rating as part of the ATP-CTP course.

NADF supports the FAA ruling as written. Yes there is cost factor, however, the FOQ collectively decided that the type rating was very important, and supports aviation safety.

The request to modify so that the instructor is not required to have a type rating is not a modification, it is a substantial change. The word “modify” implies moderate change, somewhat different in form. The ERAU recommendation that the instructor would have knowledge of the aircraft and exposure to large aircraft performance seems vague. Instructors and students need the specificity of an aircraft type rating for a specific aircraft. We do not see an assurance that cost savings would be passed to the students.

Respectfully Submitted,
Gail A. Dunham

Gail A. Dunham
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NADF, Member Organization of FAA ARAC since 1998
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Dissenting Opinion to Proposed Change to 14 CFR 61.159 and 121.436.

ALPA is strongly opposed to the proposal to change 61.159 and 121.436.

Public Law 111-216 and the FAA rule changes to first officer minimum qualifications that took effect in 2010 and 2013, respectively, have improved the overall safety of our airspace system.

Prior to 9/11, many airlines maintained minimum hiring requirements that were much greater than the current 1,500 hours required for an air transport pilot (ATP) certificate, and far higher than the requirements that exist for the restricted ATP (R-ATP). The R-ATP certificate qualifies pilots for first officer airline pilot employment at reduced levels of flight-hour experience because of military or accredited university training.

- 750 hours, if qualified as a military aviator
- 1,000 hours, with a four-year aviation degree
- 1,250 hours, with a two-year aviation degree

This credit is due to a combination of varying types of aeronautical experience, written and practical exams, formal academic instruction, and other competitive factors needed to gain employment as a Part 121 airline pilot.

After 9/11, airlines began to lower their standards in order to attract more pilots, which led to an increase in accidents and a reduction in overall safety. While some may point to a single accident in 2009 that led to a change in first officer qualifications, the FAA has identified 31 accidents over a 10-year period that were addressed by the rules published in 2013. Four notable accidents include:

- Pinnacle (Northwest Airlink) Flight 3701, Oct. 14, 2004, Jefferson City, Mo.
- Corporate Airlines (dba American Connection) Flight 5966, Oct. 19, 2004, Kirksville, Mo.
- Comair (Delta Connection) Flight 5191, Aug. 27, 2006, Lexington, Ky.
- Colgan Air (Continental Connection) Flight 3407, Feb. 12, 2009, Buffalo, N.Y.

Since passage of the Airline Safety and FAA Extension Act of 2010, there have been no fatalities due to an accident of a U.S. Part 121 passenger airline. In fact, in the two decades prior to enactment of this aviation safety measure, there were more than 1,100 airline passenger fatalities (Part 121), according to the National Transportation Safety Board.

Pilot supply remains strong in the United States, as seen by the current number of ATP/R-ATP issuances. More than 26,000 have been issued since July 2013, including more than 4,000 R-ATP certificates. This is an average of more than 7,400 ATP/R-ATP certificates issued per year. It

exceeds the most optimistic pilot needs forecast. For comparison, the 20-year average number of ATP certificates exceeds 6,000 per year.

In addition, from a safety perspective, a paper presented at the 2017 National Training Aircraft Symposium (NTAS) by the RAND Corporation showed, at least in USAF training, that hours had a positive impact on the success of pilots in training in both basic and advanced phases.

The safety record since the FOQ should also be considered and historical hiring minimums established by the airlines themselves when FAA minimums were at approximately 250 hours should be a good indicator that airlines also preferred more experience when economics were not a factor.

The current RAND study further reinforces that no current shortage exists, so supply as a justification is a weak argument. That is in addition to the previous GAO study and ALPA's public statements and data. Furthermore, there have been some saying that a reduction in hours could in fact have a detrimental effect on the long term viability of pilot supply due to the depletion of instructor ranks possible with lower hour requirements.

With respect to this proposal, the FAA has the authority from congress to approve alternate pathways and they have tasked the Air Carrier Training (ACT) Aviation Rulemaking Committee (ARC) to evaluate alternate methods.

Additionally, the current pathways to a R-ATP are safe and sufficient.

ALPA therefore opposes this proposal.



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Dissenting Opinion to Proposed Change to 14 CFR 141 Appendix B (4)(c)(2-4)

ALPA is opposed to the proposal to modify 141 Appendix B (4)(c)(2-4).

The current requirements (14 CFR 141 Appendix B (4)(c)) as part of the private pilot training course require:

- (2) Training in a full flight simulator that meets the requirements of § 141.41(a) may be credited for a maximum of 30 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.
- (3) Training in a flight training device that meets the requirements of § 141.41(a) may be credited for a maximum of 20 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less.
- (4) Training in the flight training devices described in paragraphs (c)(2) and (3) of this section, if used in combination, may be credited for a maximum of 30 percent of the total flight training hour requirements of the approved course, or of this section, whichever is less. However, credit for training in a flight training device that meets the requirements of § 141.41(a) cannot exceed the limitation provided for in paragraph (c)(3) of this section.

The ARAC report proposes to increase the amount of simulator time that can be applied to the private (or commercial) certificate. While simulators are very useful training tools they are best used when the pilot is already proficient flying an actual aircraft in the airspace system communicating with actual ATC. No additional simulator credit toward the total time to qualify for a private or commercial certificate should be entertained.

ALPA therefore opposes this proposal.



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Dissenting Opinion to Proposed Change to 14 CFR 142.54(d)(1)

ALPA is opposed to the proposal to modify 142.54(d)(1).

The current requirements as part of the required Airline Transport Pilot Certification Training Program (ATP-CTP) require that the instructor holds an aircraft type rating for the aircraft represented by the flight simulation training device utilized in the training program and has received training and evaluation within the preceding 12 months from the certificate holder on the maneuvers that will be demonstrated in the flight simulation training device.

Public Law 111-216 and the FAA rule changes to first officer minimum qualifications that took effect in 2010 and 2013, respectively, have improved the overall safety of our airspace system. These changes included the addition of this new Airline Transport Pilot Certification Training Program (ATP-CTP) course.

The ATP-CTP course, which is what the instructor requirements in 154.42 are for, is the only training required following obtaining a commercial certificate to get obtain an ATP. The current type rating requirement maintains a high level of experience and qualification for the instructors training those who are qualifying for the highest pilot certificate and is an appropriate prerequisite. Removing the requirement for a type rating in the aircraft the simulator being used for the CTP training would likely render the training received during a CTP course less effective.

ALPA therefore opposes this proposal.



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Dissenting Opinion to Proposed Change to 14 CFR 71.41. Class B airspace

ALPA disagrees with the proposal to downgrade Class B airspace based on the criteria in JO 7400.2. The quantitative criteria quoted from 7400.2 are used during the evaluation process for *establishing* Class B airspace. Currently, the FAA does not have standardized criteria nor do they have a process for revoking Class B airspace. The criteria are also in need of review given the forecast by the FAA for many new aircraft entrants into the NAS, specifically unmanned aircraft systems.

The proposal references the “Class B Airspace: Designation, Design, and Evaluation” final report recommendations from the RTCA Tactical Operations Committee (TOC) as a basis for eliminating Class B airspace, solely based on the traffic data volume discussion contained in JO 7400.2. It was determined during the RTCA TOC Class B workgroup that, although some quantitative numbers are reduced at Class B primary airports due to airline withdrawal of service, larger aircraft that can carry significantly more passengers per aircraft still serve these airports and the criteria for establishing Class B airspace at candidate airports are not valid for evaluating Class B downgrades. The report provided several recommendations supporting the removal of the quantitative numbers and developing better metrics for evaluating Class B airspace including:

- The FAA should remove the enplanement and air carrier/air taxi quantitative criteria.
- Total airport operations counts should also include traffic from secondary airport and overflights.
- An airspace complexity index should be developed to address airspace considerations beyond that of total airport operations.

It was further noted at the TOC that Class B airspace could in fact contribute to the safety and efficiency of operations at airports with Class C airspace, but with complex operations, despite the fact that they did not meet current Class B requirements contained in JO 7400.2. Thus, the TOC seemed to be suggesting that more airports should be evaluated for Class B airspace.

- Criteria should be developed for airports with strong seasonal or time of day demand surges.

Eliminating Class B airspace at airports with complex large turbine powered aircraft operations would expose the GA community to increased wake turbulence encounters and collision hazards with commercial aircraft operations at these primary airports. Ultimately, the RTCA TOC Class B workgroup concluded that once Class B is downgraded, the cost and time to re-establish Class B outweighed the benefit of an airspace downgrade.

Airports that do not meet the criteria of (1) the primary airport serves at least 5 million passengers enplaned annually and (2) the primary airport has a total airport operations count of 300,000, still require Class B airspace to ensure efficiency and safety of operations. There has been a growth of business aviation, cargo operations, and low cost operators which have increased the use of secondary and satellite airports by high performance aircraft. Consequently, the mix of high performance IFR and lower performance VFR aircraft have evolved such that higher performance aircraft are operating to and

from secondary or satellite airports in greater volumes, thus increasing the risk associated with the mix of IFR and VFR operations.

Class B airspace was initially established to segregate IFR / VFR operations and mitigate the risk of collision between large turbine aircraft and GA aircraft operations. If Class B revocation is being considered, the result is less protected airspace. Using current design guidance, going from Class B to Class C airspace would reduce the lateral boundary from 30 to 10 nautical miles and reduce the ceiling from 10,000 to 4,000 feet eliminating the requirement that VFR aircraft communicate with ATC in this vacated volume of airspace. The Task Group concluded that the salient issue is not whether an airport meets Class B criteria, but rather whether the airspace solutions developed to address operational issues are appropriate and effective.

Currently, no appropriate and effective mitigation solutions have been developed that can provide the same safety levels since the establishment of Class B airspace as a safety tool in the late 1980's. Downgrading Class B airspace to a lower airspace classification will re-introduce the risk that Class B has effectively mitigated.

The TOC workgroup provided several recommendations that allowed GA aircraft access to Class B airspace while maintaining safety and efficiency:

- Encourage designers to make maximum use of existing tools to accommodate VFR flights through and around Class B airspace.
- Recommend introduction of an altitude buffer between protected IFR airplanes and VFR aircraft.
- Ensure all Class B terminal Area Charts include information on IFR arrival/departure routes to/from the primary airport and explore possibility of extending to include secondary airports.

Safety Impact:

The proposal argues that adequate airspace protection for airports that do not fully meet Class B criteria contained in JO 7400.2 will be provided with Class C airspace due to the FAA design process. This is an inaccurate assumption. The intent of Class B airspace is to contain large turbine aircraft operations and segregate non-participating aircraft. The TOC WG report indicated that eliminating Class B based solely on operational criteria would:

- Increase the risk of NMAC encounters between civil and GA aircraft. Along with a mid-air collision, populated areas surrounding airports would be exposed to loss of life.
- Increase the number of operations not under positive ATC control due to a smaller airspace volume contained in Class C airspace.
- Decrease surveillance and tracking of aircraft due to elimination of transponder (and ADS-B after 2020) operational requirements within 30 nm of the primary airport(s).
- Result in less time for large turbine aircraft to see and avoid GA aircraft due to cloud and visibility requirements.
- Increase in student/solo pilots, and recently licensed GA pilots operating in close proximity to commercial aircraft and flight paths.
- Increase air traffic controller workload.

Class B airspace re-designs are underway throughout the NAS. As these designs are conducted, issues that impact access to airports and airspace are identified and addressed. After each of the airspace design efforts, GA aircraft should be less impacted by Class B airspace. Class B configurations are designed to afford all aircraft access to the airspace through VFR flyways, VFR corridors, and LOAs for satellite airports while providing maximum safety in the airspace.



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Dissenting Opinion to Proposed Change to 14 CFR 25.251.

ALPA is opposed to the proposal to modify 25.251 – Vibration and buffeting.

The current requirements of 25.251 state:

- (a) The airplane must be demonstrated in flight to be free from any vibration and buffeting that would prevent continued safe flight in any likely operating condition.
- (b) Each part of the airplane must be demonstrated in flight to be free from excessive vibration under any appropriate speed and power conditions up to V_{DF}/M_{DF} . The maximum speeds shown must be used in establishing the operating limitations of the airplane in accordance with §25.1505.

The proposal is to modify both sections (a) and (b) to remove the verbiage “demonstrated in flight”, effectively allowing manufacturers to use analysis to show the airplane free of vibration and buffeting. By definition, V_{DF}/M_{DF} are dive speeds demonstrated in flight and are the maximum speed achieved during flight test. Flight tests are conducted up to these speeds to demonstrate many certification requirements besides vibration and buffeting, such as high-speed or out-of-trim characteristics. The proposed modification to the certification requirements does not relieve the duty of the manufacturer from flight testing up to V_{DF}/M_{DF} .

The ARAC has already tasked the Flight Test Harmonization Working Group (FTHWG), part of the Transport Airplane and Engine (TAE) group, with evaluating the use of V_{DF}/M_{DF} in certification flight testing. This evaluation is part of the group’s Phase III work packet which is expected to be submitted to ARAC for consideration in 2019.

For these reasons, ALPA is opposed to the proposed changes to 14 CFR 25.251.



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Dissenting Opinion to Proposed Change to 14 CFR 61.195(h)(2)(iii)

ALPA is strongly opposed to the proposal to modify 61.195(h)(2)(iii). The proposal's rationale is based upon an economic basis, but makes no mention of what safety impacts were considered. ALPA has actively defended the current First Officer Qualifications against proposed changes to those regulations on the same basis. It is ALPA's view that altering the subject regulation as proposed would lessen the current levels of safety.

The current regulations (14 CFR 61.195(h)(2)(iii)) require that a flight instructor certificate be held for at least 24 months prior to providing the preparatory training and instruction for flight instructor candidates. This is a time-proven regulation that helps ensure flight instructor candidates are taught how to instruct others only by pilots who have a level of experience and competence serving as flight instructors themselves.

The proposal is to modify 61.195(h)(2) to remove the requirement that a flight instructor certificate be held for at least 24 months to instruct flight instructor candidates.

Removing the 24-month requirement could result in CFIs providing instructor training to CFI candidates after being instructors for as little as two or three months. It is essential that flight instructors who will provide instruction to new flight instructor candidates have that time to learn, absorb, process, digest, discuss, debate, and otherwise become prepared to teach this skill set. The 24-month timeframe leads to experience, knowledge, professionalism, expertise and skill that make an individual a better instructor, which the proposed regulatory change would undermine. Any real or perceived shortage of instructors is an inappropriate justification for reducing instructor qualifications, and leads to a reduction in the quality of training and ultimately safety.

ALPA therefore strongly opposes this proposal.

I'd like to go on the record that my organization, the IAMAW, supports the dissent of ALPA and NADF to 61.159 and 121.436. I won't go and repeat all their issues, but the message is the same – the shortage is NOT of qualified pilots, the shortage is of qualified pilots who are willing to work for sub-poverty wages! In my organization, we represent many of the airline workers, from the mechanics, baggage handlers, customer service agents and reservation agents. We also represent auxiliary group workers such as aircraft fuelers. Almost all of the companies we represent had to increase their wages to the aircraft fuelers because they were leaving to get more money working at McDonalds! Now, the person fueling the aircraft, with pilots earning \$25k, are starting at just over \$34k! So, we don't have a problem attracting fuelers – IF we pay them what they are worth. If the regionals and cargo carriers say they have a shortage of qualified pilots, maybe they should look at paying them what they are worth.

In addition, I don't believe it is our duty, as members of this ARAC team, to overturn regulations that were driven by legislation.

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Dissenting opinion to proposed change to 14 CFR 234.12 – Waivers (Airline Service Quality)

A4A disagrees with the proposed text change to 14 CFR 234.12. The existing provision does not inhibit job creation and is not outdated. On the other hand, the proposed change does not reduce the regulatory burden and associated costs. If anything, it adds unnecessary regulatory process and associated cost. We view the proposed changes as adding an additional level of bureaucracy where none is needed. The existing regulation provides the Administrator with needed and appropriate flexibility applying the well-established and accepted “good cause” standard. Additionally, the proposal alleges the existing CFR allows favoritism among airlines with no basis or substance to that allegation and, in any event, the proposal does nothing to address this alleged issue.

The Airline Dispatchers Federation (ADF) supports the ALPA position to oppose the change to 14 CFR 61.159 and 14 CFR 121.436 as noted below.

"ALPA is opposed to the proposal to change 61.159 and 121.436.

The proposal does not explain the imposed costs that exceed the benefits, especially since there have been no fatal accidents of United States passenger part 121 airline operations since the law was passed.

In addition, the proposal does not provide any details on how the regulation would be modified, it only states that the FAA should be able to approve alternate pathways.

Currently the FAA has the authority from congress to approve alternate pathways and they have tasked the Air Carrier Training (ACT) Aviation Rulemaking Committee (ARC) to evaluate alternate methods. While the work products of that ARC cannot be shared or discussed, they did have that tasking. ARAC should allow the subject matter experts to make these recommendations.

Additionally, the current pathways to a R-ATP are safe and sufficient. Between July 2013 and the end of 2016, over 25,000 ATP/R-ATPs were issued by the FAA (new certificates) and that outpaces the most aggressive pilot supply forecasts say that there will be a need for up to 5,200 pilots per year.

ALPA therefore opposes this proposal."

Regards,
Michelle Betcher
Airline Dispatchers Federation

Airline Dispatchers Foundation Dissenting Opinion

ADF disagrees with the proposal, as written, to amend 65.53(b)(1) to lower the age for aircraft dispatchers. The current language would allow for a 21 year old aviation school graduate to be eligible for Aircraft Dispatcher certificate (jointly responsible for the safety of flight with a ATP certificated airman), not the creation of a potential new Aircraft Dispatcher – R certificate (one that does not allow for direct operational control, see 14 CFR 121.533). We will only be supportive to any proposals that keeps the Aircraft Dispatcher’s certificate in full alignment with the ATP certificate requirements, not the ATP-R requirements (the ATP-R certificate does not allow for the certificate holder to serve as a captain and exercise operational control over the flight until he/she is 23 years old). Below are a few counters to the proposals rationale:

Rationale – Context of Regulation and proposed change

- 1) **The ATP age 23 is said to be tied to the ATP age requirement. There is now a restricted ATP available to persons with certain education at age 21. The same logic can be applied to the dispatch certificate.**

The ATP-R certificate does not allow for the certificate holder to serve as a captain and exercise operational control over the flight until he/she is 23 years old.

As there is a Captain available to a Restricted ATP, there are dispatch supervisors and Chief Dispatchers available to a 21 year old dispatcher.

Not true. Currently most dispatch offices do not staff supervisors 24/7. Aircraft Dispatcher certificate holders are legally responsible for the operation of the flight, not the supervisor. Dispatch Supervisors typically perform a business management and administrative role. Additionally, there will be very significant cost impacts if dispatch offices will have to staff additional supervisors for each shift to oversee these new 21 year old dispatchers.

If they have an aviation related degree from a 4-yr university with a Part 65 program, or the license obtained through one, then there should be an age 21 dispatch license available.

If so, this needs to align directly with the ATP and ATP-R responsibilities and limitations. An ATP with a four year degree still has an age 23 requirement.

- 2) **The current age 23 requirement is not in line with ICAO which uses age 21.**

Both the ATP and Aircraft Dispatcher certificate in the US have an age requirement that goes above and beyond ICAO’s 21 year old requirement for both. ADF is against any proposed changes that do not align age requirements with the ATP and Aircraft Dispatcher certificates.

- 3) **The current age 23 requirement is not in line with other positions of great responsibility within the FAA. It is 18 for ATC, 18 for commercial pilot, 18 for A&P.**

Irrelevant argument, none of these perform duties of an ATP or Aircraft Dispatcher

- 4) **There is no evidence to suggest that there would be a loss of safety. There are Assistant Dispatchers, Crew Schedulers, Load Planners and all manner of folks working in operations centers who are not yet 23.**

The 23 age requirement was reviewed and held in place after the 1500hr rule was put in place after the Colgan crash. In respect to other positions not having a 23 year old requirement, none of these positions have direct oversight and responsibility for the safety of the flight.

- 5) **Claiming someone is not mature enough at age 21 is unsupported by facts; particularly if they have graduated from college. We trust 21 year old people to be officers in this nations' military and command troops in battle. They can hold many political offices, they can take part in almost any function in American society that is age related.**

Again, the 23 age requirement was reviewed and held in place after the 1500hr rule was put in place after the Colgan crash.

While we appreciate this spirit of this proposal and its intent, this proposal will likely add regulation rather than eliminate it (as needed for the 2 for 1 executive order) and it will likely add additional costs beyond its benefits (additional supervisors to oversee these new certificate holders). Furthermore, both ARAC groups (ADF and ALPA) who's members are directly impacted by this change are not in favor of this proposal. For these reasons, we would like for you to consider withdrawing this proposal.

Thank you,

Damon Cox &

Michelle Betcher

Airline Dispatcher Federation

Sigler, Todd D

From: Chris Witkowski <cwitkowski@afanet.org>
Sent: Friday, September 08, 2017 2:23 PM
To: Sigler, Todd D
Cc: Dinkar Mokadam

[REDACTED]

Hi Todd,

I will send you a general dissent later today, but am writing now to let you know that AFA supports the attached letters and opposition sent to you by ALPA on August 30, 2017.

So in addition to our forthcoming general dissent, AFA hereby submits our dissent to the following proposals for the reasons stated in these dissenting opinions filed by ALPA:

Dissenting Opinion to Proposed Change to 14 CFR 61.159 and 121.436.

Dissenting Opinion to Proposed Change to 14 CFR 142.54(d)(1)

Dissenting Opinion to Proposed Change to 14 CFR 141 Appendix B (4)(c)(2-4)

Dissenting Opinion to Proposed Change to 14 CFR 61.195(h)(2)(iii)

Dissenting Opinion to Proposed Change to 14 CFR 25.251.

Dissenting Opinion to Proposed Change to 14 CFR 71.41. Class B airspace

Thank you,

Chris.

Christopher J. Witkowski

Director

Air Safety, Health and Security Department

Dissents Received from Flyer's Rights on September 8, 2017

14 CFR 121.374

The proposal claims that certain reporting requirements are duplicative. Even assuming they are (which they appear not to be, but technical expertise is needed), repealing the regulation would mean this information only goes to the Oklahoma City FAA HQ, and not the district certificate holding offices

CFR 25.853

This proposes removing the ash tray requirement due to cost and weight. These cost savings are unlikely to outweigh the safety risk, despite (1) a smoking ban (2) fire extinguishers and (3) smoke detectors and the cost saving is trivial.

14 CFR 121.139

This would get rid of the requirement to carry a paper copy of the manual on board aircraft, saving weight. The proposer wants to exclusively use electronic devices, and qualifies this as an operational issue, and not a safety issue, but if the electronics malfunction it is a safety issue.

14 CFR 25.841

re: loosening pressurized cabin standards, or a back up system. We're not sure exactly how this works, it is something worth looking at, but we think it needs more study.

14 CFR 25.251

This gets rid of live testing in favor of "analysis" re vibration and buffeting. ALPA dissented on page 104, and we agree.

14 CFR 121.436
61.159

Pilot training hour reduction. The Colgan air crash illustrated with other incidents that the 500 hour minimum was way too low and needed to be increased to 1500 hours which was done by legislation. We also proposed instituting a minimum wage for commercial pilots but this was not done and was strangely opposed by the unions. While we think there could be some flexibility in pilot training minimum to include flight simulators and some academic work, this proposal gives too much discretion and power to flight schools and takes away too much power from the FAA and since it clearly violates a statutory mandate would be likely challenged in court successfully.

14 CFR 142.54(d)

This would reduce the qualifications of certain flight instructors. ALPA is opposed. Would replace 40 hour minimum with "discretion". We agree with the ALPA dissent.

We also oppose the repeal of the FAA ETOPS standards making this essentially a matter of self regulation by plane and engine makers. While we appreciate the increased reliability of airliner jet engines. The much greater use of 2 engine aircraft over water and uninhabited parts of the Earth and over conflict zones for up to 18,000 miles often with no emergency landing areas should dictate higher not lower standards.

If two engines go out an air crash is nearly certain, and if one engine goes out the range is considerably reduced.

Paul Hudson, Pres.

[Flyersrights.org](http://flyersrights.org)

Member, FAA Aviation Rulemaking Advisory Committee ((1993-present)

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September 8, 2017

Ms. Lirio Liu
Director, Office of Rulemaking, ARM-1
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591

Mr. Todd Sigler
Boeing Commercial Airplanes

Subject: AFA Dissent on FAA Regulatory Reform ARAC Task

Dear Ms. Liu and Mr. Sigler,

At the April 20, 2017 ARAC meeting (82 Fed. Reg. 8,564, April 28, 2017), the Federal Aviation Administration (FAA) requested that the Aviation Rulemaking Advisory Committee (ARAC) accept a tasking to support regulatory reform. At that meeting, the Association of Flight Attendants-CWA, AFL-CIO (AFA), as a member of ARAC, voted against ARAC acceptance of the task; despite AFA's opposition, the task was accepted by ARAC.

There were specific terms for Phase 1 of the tasking that were not followed by the ARAC. Notwithstanding our overall opposition to the tasking, AFA filed a dissent to the submission of the first recommendation report to the FAA (see Attachment), arguing that the committee failed to follow the terms of the tasking.

AFA is filing this dissent against submission of the second recommendation report to the FAA primarily due to our opposition to task itself, which is based in part upon Executive Order 13771 (EO 13771), Reducing Regulation and Controlling Regulatory Costs, and Executive Order 13777, which enforces EO 13771.¹ Both EOs were signed by President Donald Trump shortly after taking office. The reason for AFA opposition to this EO, and the tasks emanating from it, is that the legislative power of the United States is vested in Congress. The deregulatory requirements and their terms in Executive Order 13771 have not been authorized by Congress. We have not found any statute that authorizes the FAA to condition promulgation of a new rule upon repeal of existing rules to offset the costs of the new one. The FAA may be reluctant to

¹ Through two new Executive Orders, President Trump directed agencies to further scrutinize its regulations. On January 30, 2017, President Trump signed an Executive Order titled "Reducing Regulation and Controlling Regulatory Costs (EO)." Under Section 2a of that Executive Order, unless prohibited by law, whenever an executive department or agency publicly proposes for notice and comment or otherwise promulgates a new regulation, it shall identify at least two existing regulations to be repealed.

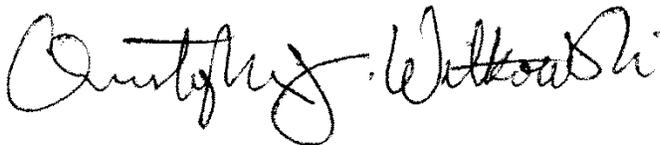
In addition, on February 24, 2017, President Trump signed Executive Order 13777 titled "Enforcing the Regulatory Reform Agenda." Under this Executive Order, each agency is required to establish a Regulatory Reform Task Force (RRTF) to evaluate existing regulations, and make recommendations for their repeal, replacement, or modification. As part of this process, the Department is directed to seek input/assistance from entities significantly affected by its regulations. ARAC Input to Support Regulatory Reform of Aviation Regulations - New Task, 82 Fed. Reg. 8,564, April 28, 2017



suspend activity on an executive order, even one that is outside of the law, but there is no good reason beyond administrative convenience that the ARAC should be pressed to approve elimination of a list of regulatory provisions, given the terms of EO 13771. As I stated in the April 20, 2017 ARAC meeting on whether to approve this task, the FAA could simply have invited any person or member of ARAC to individually submit one or more regulations which that party thinks should be repealed, replaced or modified.

Regardless of the number of majority votes, ARAC generally operates on a consensus-based approach. Even if a simple majority of ARAC members vote in favor of sending the second Report to the FAA, it should not be sent unless there is wider consensus. Due to the significance of this vote on aviation safety deregulation, note should be made in the recordation and all descriptions of this vote as to each voting member's organizational affiliation, such as whether they represent operators, manufacturers, contractors, airports, crew and other airline workers, or passengers. The purpose would be to indicate whether or not most, if not all of those directly representing workers or passengers on ARAC support submitting Recommendation Report 2 to the FAA on September 14, 2017. Without this information included, an ARAC approval of Recommendation Report 2 may be misleading.

Sincerely,

A handwritten signature in black ink, appearing to read "Christopher J. Witkowski". The signature is fluid and cursive, with the first name being the most prominent.

Christopher J. Witkowski
Director
Air Safety, Health and Security Department

ATTACHMENT

AFA Dissent to Initial Recommendation Report Submitted in
Response to the Tasking-
ARAC Input to Support Regulatory Reform of Aviation
Regulations

June 19, 2017



June 19, 2017

Ms. Lirio Liu
Director, Office of Rulemaking, ARM-1
Federal Aviation Administration
800 Independence Avenue, SW.
Washington, D.C. 20591

Subject: Dissent to the Initial Recommendation Report Submitted in response to the
Tasking – ARAC Input to Support Regulatory Reform of Aviation Regulations

Dear Ms. Liu,

In a letter dated June 1, 2017, Federal Aviation Administration (FAA) Aviation Rulemaking Advisory Committee chair Todd Sigler submitted an “initial recommendation report” in response to a Tasking Notice (Federal Register Vol. 82, 2017-08564, April 28, 2017) titled *Aviation Rulemaking Advisory Committee (ARAC)-ARAC Input to Support Regulatory Reform of Aviation Regulations - New Task* (hereinafter referred to as “the Tasking”). According to this letter, the initial recommendation report includes an extensive list of “over 300 individual suggestions to repeal, replace or modify regulatory language ... [and] Policy, Advisory Circulars and Orders that could be similarly changed or repealed...” The chair went on to state that “the attached list represents all inputs received from ARAC members. Not all ARAC members provided input and reaching consensus on each input was not attempted.”

During an ARAC meeting on June 8, 2017, it was determined through a 15 to 4 vote of members present that the initial recommendation report would be submitted to the FAA. The FAA Office of Rulemaking Committee Manual (ARM-001-015, Rev. 40) states that “[i]f a member(s) does not concur with a recommendation(s) or the entire recommendation report, then this dissenting position is documented in the recommendation report.” This letter conveys the dissenting position held by the Association of Flight Attendants-CWA to the initial recommendation report submitted by ARAC to the FAA on June 8, 2017, which should be included as part of the final “initial recommendation report” on the Tasking.

In its summary statement, the Tasking Notice states that “[t]he FAA assigned the Aviation Rulemaking Advisory Committee (ARAC) a new task to consider (1) recommendations on existing regulations that are good candidates for repeal, replacement, or modification and (2) recommendations on regulatory action identified in FAA’s regulatory agenda.” Specific to phase 1 of the Tasking, the notice tasked ARAC to:



1. Evaluate the FAA's regulations in Title 14 of the Code of Federal Regulations to determine any and all regulations that should be repealed, replaced or modified. This evaluation will attempt to identify regulations that:

- a. Eliminate jobs, or inhibit job creation;
- b. Are outdated, unnecessary, or ineffective;
- c. Impose costs that exceed benefits; or
- d. Create a serious inconsistency or otherwise interfere with regulatory reform initiatives and policies.

For purposes of this evaluation, a regulation means any regulatory provision and could include a regulatory section (e.g., § 121.xxx), paragraph (e.g., § 121.xxx(y)), or subparagraph (e.g., § 121.xxx(y)(z)).

The schedule defined in the Tasking required submission of an initial recommendation report, as follows:

- The initial recommendation report must be submitted to the FAA no later than June 1, 2017, to allow for consideration of ARAC approval at the June 15, 2017 [later changed to June 8, 2017, to accommodate ARAC member schedules] meeting.

The tables submitted to the FAA on June 8, 2017 by ARAC do not meet the clear, unambiguous intent of the published Tasking Notice. The Tasking requested that ARAC provide a list of “all regulations that *should* be repealed, replaced or modified.” [Emphasis added] The Tasking also defined the term “regulatory provision.” Clearly, the tables sent to FAA do not list only regulatory provisions that ARAC agrees *should be* repealed, replaced or modified; rather, they are a grab bag of unfiltered wish list items submitted by individual ARAC member organizations. In fact, many of the items in the tables are not even “regulatory provisions”—for example, the initial report includes a table of “Policies, Orders, Notices, Advisory Circulars, and Cert Memos.” The committee did not review the list and trim it to only those items that could achieve some minimal level of agreement within the committee. Thus, the process followed did not meet the clear, unambiguous wording of the Tasking statement.

Notwithstanding AFA's vote to not accept the Tasking at the April 20, 2017 ARAC meeting, because the committee did not follow the Tasking, the FAA should reject the “initial recommendation report” submitted on June 8, 2017, and return it to ARAC for further review and refinement. Furthermore, the FAA and ARAC should agree on a realistic date for submitting the limited list of regulatory provisions that are actually requested in the published Tasking notice.

Sincerely,



Christopher J. Witkowski
Director
Air Safety, Health and Security Department