



## **SAFETY OVERSIGHT AND CERTIFICATION ADVISORY COMMITTEE (SOCAC) MEETING AGENDA**

December 8, 2021 \*\*\* 1:00 PM – 4:00 PM

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- Welcome and Introductions
- Federal Advisory Committee Act (FACA) Statement
- Acceptance of September 2021 Meeting Minutes
- Subcommittee Update
  - Workforce Development and Training Tasking Final Report
- SOCAC Safety Management System Panel
- FAA Updates
  - FAA Update on Certification & Oversight Reform
  - Change Product Rule International Harmonization Effort
- Other Business and Closing Remarks

SOCAC agendas, meeting minutes, and reports are available on the FAA's committee website at [https://www.faa.gov/regulations\\_policies/rulemaking/committees/documents/index.cfm/committee/browse/committeeID/717](https://www.faa.gov/regulations_policies/rulemaking/committees/documents/index.cfm/committee/browse/committeeID/717).

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**Safety and Oversight Certification Advisory Committee Meeting  
Record of Meeting (DRAFT)**

**MEETING DATE:** September 22, 2021

**MEETING TIME:** 1:00 p.m. - 3:00 p.m.

**LOCATION:** Virtual Meeting via Zoom

**PUBLIC**

**ANNOUNCEMENT:** Federal Aviation Administration (FAA) provided notice to the public of the Safety and Oversight Certification Advisory Committee (SOCAC) meeting in a Federal Register notice published on September 1, 2021 (86 FR 49088).

Attendees	Occupation Or Affiliation
<b>SOCAC Members</b>	
Bill Ayer	National Business Aviation Association (NBAA) SOCAC Chair
Bob Busto	FAA Aircraft Certification Service (AIR)
Jason Dickstein	Modification and Replacement Parts Association
Bob Fox	Air Line Pilots Association, International (ALPA)
Chris Jackman	Wing Aviation LLC
Paul LaPietra	Honeywell Aerospace
Sarah MacLeod	Aeronautical Repair Station Association (ARSA)
Michael Perrone	Professional Aviation Safety Specialists (PASS)
Michael Quiello	XTRA Airways
Chris Rocheleau	FAA Designated Federal Officer (DFO)
Gregory Shoemaker	National Air Traffic Controllers Association (NATCA)
Alan Stolzer	Emory-Riddle Aeronautical University
Phillip Straub	Garmin International, Inc.
Jim Viola	Helicopter Association International

<b>Non-SOCAC Members</b>	
<b>Name</b>	<b>Occupation Or Affiliation</b>
Julie Arndt	Boeing
Ludovic Aron	European Union Aviation Safety Agency
Brandon Anderson	United States Society of Professional Engineering Employees in Aerospace (SPEEA, IFPTE)
Chad Balentine	ALPA
Stacey Bechdolt	ALPA
Doug Beneteau	GE Aviation
Ellen Birmingham	United Airlines
Andy Cebula	Airlines for America (A4A)
Keith DeBerry	NATA
Jana Denning	PASS AFL-CIO
Walter Desrosier	General Aviation Manufacturers Association (GAMA)
Tony Fazio	GIFAS - French Aeronautics Association
Robert Ireland	Airlines for America
Faraz Khan	InterGlobe Aviation
Elke Kolodinski	U.S. Government Accountability Office (GAO)
Michael Maidenber	Wall Street Journal
Yvette Rose	Cargo Airline Association
Abbey Salvon	Boeing
<b>FAA PARTICIPANTS</b>	
Angela Anderson	Office of Rulemaking (ARM)
Thuy Cooper	ARM
Sheri Baxter	AFS
Richard Doan	AGC
Crystal Essiaw	AOC
Mara Jenkins	AVS
Mel Johnson	AIR
Brian LaCross	ATO
Earl Lawrence	AIR
Lakisha Pearson	ARM

Luis Ramirez	AIR
Shalini Razdan	AIR
Puja Sardana	ARM Contractor
Tim Shaver	AFS
Jamie Showman	AIR
Elizabeth Williams	AFS

## **Welcome and Introduction**

Mr. Chris Rocheleau, Designated Federal Officer (DFO), called the meeting to order at 1:03 pm EDT. In light of Mr. Ali Bahrami's retirement, Mr. Rocheleau shared that he was the Acting Associate Administrator for Aviation Safety and the DFO. He greeted SOCAC members and reminded participants that the meeting will be recorded, and provided instructions on how the meeting will be conducted on Zoom.

Mr. Rocheleau noted that the Federal Advisory Committee Act (FACA) rules will apply, and speakers will be recognized by the Chair, Mr. Bill Ayer. Mr. Rocheleau read the required FACA, Title 5, United States Code (5 U.S.C.); Appendix 2 (2007) statement. He confirmed that the meeting is public and that members of the public may address SOCAC with the permission of the Chairperson.

Mr. Ayer, the SOCAC Chair, thanked Mr. Rocheleau. He recognized members that SOCAC has lost due to retirement – Mr. Collin Miller (Gulf Stream) and Ms. Beth Pasztor (Boeing). Mr. Ayer also recognized Mr. Mike Perrone (PASS), who will retire September 30.

## **Ratification of Minutes**

Mr. Ayer asked for a motion to accept the March 29, 2021, SOCAC meeting minutes. Mr. Bob Fox motioned to accept the minutes, and Mr. James Viola seconded the motion. SOCAC voted to ratify the minutes with no opposition.

The September 22, 2021, meeting packet with presentations is available on the FAA Committee website at:  
[https://www.faa.gov/regulations\\_policies/rulemaking/committees/documents/media/SOCAC\\_Meeting\\_Packet\\_Sept2021\\_Final.pdf](https://www.faa.gov/regulations_policies/rulemaking/committees/documents/media/SOCAC_Meeting_Packet_Sept2021_Final.pdf).

## **Subcommittee Update**

### Status Report

Mr. Bob Fox, Subcommittee Chair, provided the status update for the Workforce Development and Training task. Mr. Fox reviewed the membership, noting that he was proud of the group's dedication and work. He described the progress and workflow, noting that the group intended to

distribute the draft report to SOCAC members for review and comment after the September meeting. Mr. Fox stated that the Subcommittee intends to meet the deadline to present the draft final report for SOCAC's consideration at the December meeting.

Ms. Sarah MacLeod described the thought process involved in developing the recommendations and confirmed that the group engaged with subject matter experts and other sources for information. Ms. MacLeod asked members to reference the specific tasking when reviewing the report.

Mr. Mike Quiello asked if the group considered FAA's STEM Education program in what the group is trying to accomplish. Mr. Fox said that the group consulted with FAA experts, who were developing those programs in the same timeframe that the group was doing their work.

## **FAA Updates**

### FAA Update on Certification & Oversight Reform Report

Mr. Rocheleau opened the discussion regarding the FAA efforts on certification and safety oversight reform. He cited prior briefings to SOCAC on the agency's responses to the Special Committee Report, and noted that since the March meeting the FAA evolved the approach to include implementation of the provisions from the recent certification reform legislation and the recommendations received from investigations and independent reviews.

Mr. Rocheleau asked Mr. Kevin Dickert to walk through the update on the certification and safety oversight reform. He also announced that Mr. Dickert was selected as the Director of the Organization Designation Authorization (ODA) Office.

Mr. Dickert noted that the FAA is using a holistic approach as the agency continues to improve and refine certification and safety oversight processes. He described the following general themes of the approach:

- Treat aircraft as complex systems, with full consideration of how all the elements in the operating system interact.
- Integrate human factors considerations more effectively throughout all aspects of the design and certification process.
- Improve the agency's oversight process by ensuring coordinated and flexible flow of data and information.
- Focus on the workforce of the future and develop expertise to evaluate technological advances.

Mr. Dickert reviewed the impacts of the Aircraft Certification, Safety, and Accountability Act (ACSAA). He stated that the FAA has organized certification and safety oversight reform efforts into the following workstreams:

- Safety Management Systems

- System Safety and Human Factors
- Global Collaboration
- Data
- Integration of Certification and Oversight Functions
- Culture of Safety and Excellence
- Delegation
- Certification and Continued Operational Safety Processes
- Innovation
- Other Requirements

Mr. Dickert described the objective, benefits, and overview of actions for each workstream. He emphasized the approach, which takes into account how these efforts overlap.

Mr. Ayer asked how the information was being prioritized. Mr. Dickert replied that work is being managed and prioritized at the AVS level. Congressional deadlines factor into prioritization.

Mr. Greg Shoemaker asked who is on the Changed Product Rule International Authority Working Group under Global Collaboration. Mr. Dickert stated that there are six authorities on the working group: FAA, TCCA, EASA, ANAC, TCAB, and CDAC. He explained that the work is being done in three phases. Mr. Shoemaker also asked about the anonymity of the Voluntary Safety Reporting Program (VSRP), which falls under Culture of Safety and Excellence. Mr. Dickert stated that reports may be submitted anonymously or confidentially (with attribution). He noted that confidential (with attribution) reporting is encouraged to allow for follow-up. Note: Only confidential reporting is available to NATCA bargaining unit employees.

Mr. Michael Quiello asked about the relationship between Aviation Safety Information Analysis and Sharing (ASIAS) system data and Safety Management System (SMS). He suggested mapping SMS with ASIAS data may result in a better product. He recognized that obtaining operational data may be difficult and noted there is an effort underway to build a usage case for better information sharing through ICAO. Mr. Dickert concurred that SMS is intertwined in most topics and teams are communicating with each other on relevant SMS information.

Mr. Ayer asked about data regarding voluntary reporting. Mr. Dickert offered to provide more specific data. However, it does not appear the sample size is sufficient for significant analysis.

Mr. Mike Perrone asked if the ODA expansion is being slowed down or paused until all the data is collected. Mr. Dickert stated that while the pace of ODAs have slowed down, there are no plans to pause ODA-related topics. Discussions continued around the ODA panel under section 103 of ACSAA. Members asked if the panel has been coordinated with the unions. Note: PASS and NATCA (the FAA unions with representation on the ACSAA Section 103 ODA Expert Panel) coordinated on the ACSAA Section 103 ODA Expert Panel Charter earlier this year.

Mr. Michael Perrone asked about logistics related to retiring, and Ms. Thuy Cooper let him know that FAA would follow up with him after the meeting.

### FAA 2018 Reauthorization Section 213 ODA Expert Panel

Mr. Bob Busto, Section 213 Expert Panel FAA Co-chair, provided an update on the ODA Expert Panel. Mr. Busto provided background information including requirements of the FAA Reauthorization Act of 2018, membership, and the deliverable.

Mr. Busto noted that, as part of the tasking, the Panel issued a 102-question survey on February 16, 2021. The survey included the following sections - demographics, program applicant questions, and ODA holder questions. Mr. Busto stated the Panel received the survey results in June and that they are assessing the survey results against the existing draft recommendations. He said the next steps include:

- reviewing and incorporating the survey results into the recommendations report;
- finalizing reviews and documenting best practices recommendations from the new requirements outlined in section 125 of ACSAA; and
- releasing the recommendations report.

Mr. Busto noted that he hopes the Panel will complete the report in November. Mr. Ayer asked if SOCAC would receive the report. Mr. Busto confirmed that the Panel would send the report to SOCAC and Congress, as directed in the FAA Reauthorization Act of 2018. Ms. MacLeod urged the FAA to work closer with the industry to gather data.

### Engagement

Mr. Rocheleau shared how the FAA envisions engaging with SOCAC in the future. He proposed adopting a two-prong approach on how the agency engages with SOCAC. He noted the FAA will continue to use the current approach where he assigns a task to SOCAC, which SOCAC reassigns to the subcommittee to address. The FAA would use this approach for tasks that may require more time and in-depth analysis for the committee to address. Mr. Rocheleau also described the new approach where the committee would provide more immediate feedback to the FAA.

He stated the FAA would like to use SOCAC to gain insight and advice on how the agency plans to address recommendations from the various investigations and reviews on aircraft certification received over the past year and legislative mandates. He noted that under this approach, the committee would engage with the FAA and provide real-time feedback on certain issues.

### Membership

Mr. Rocheleau shared the FAA intends to issue a notice to solicit nominations for membership. He stated that his team would contact members to gauge their interest in continuing membership on SOCAC.

Other Business and Closing Remarks

Mr. Ayer stated that the next meeting is on December 8, 2021. He adjourned the meeting at 2:55pm EDT.



# Certification & Safety Oversight Reform Status Update



Federal Aviation  
Administration

009



Date: December 8, 2021

# Introduction

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The Federal Aviation Administration (FAA) understands and embraces the need to promote and sustain the primacy of safety, as well as continuous and proactive management of risk throughout its workforce, across industry, and with other aviation authorities.

To meet this need, the FAA is driving greater transparency, collaboration, and accountability across the regulating and regulated communities, with a primary focus on:

- Strengthening corporate safety cultures to improve safety risk management and performance through mandated and voluntary action;
- Improving data availability, accessibility, and analysis through both process and infrastructure enhancements; and
- Advancing system-level safety management through better integration of the design, production, and operational approval processes.

Further, the FAA is committed to thorough and complete implementation of the aircraft certification reform legislation and addressing recommendations from recent investigations and independent reviews.



# Approach Overview

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The FAA continues to improve and refine our certification and safety oversight processes using a *comprehensive approach* to implementing the provisions from the recent certification reform legislation and the various recommendations received from investigations (OIG, NTSB, KNKT, etc.) and independent reviews (JATR, Special Committee, etc.). We identified the following general themes:

- ***Treat aircraft as complex systems***, with full consideration of how all the elements in the operating system interact.
- ***Integrate human factors considerations more effectively*** throughout all aspects of the design and certification process.
- ***Improve the agency's oversight process*** by ensuring coordinated and flexible flow of data and information.
- ***Focus on the workforce of the future*** and develop expertise to evaluate technological advances.



# Requirements, Recommendations, and Provisions

012

## REQUIREMENTS

- **Aircraft Certification, Safety, and Accountability Act** (December 27, 2020)
  - 100+ provisions

## INVESTIGATIONS AND INDEPENDENT REVIEWS

- **Joint Authorities Technical Review Submittal** (October 11, 2019)
  - 12 recommendations
  - All 737 MAX Return to Service items have been completed
- **Official Report of the Special Committee (Spec Comm) to review the Federal Aviation Administration's Aircraft Certification Process** (January 16, 2020)
  - 10 Focus Areas
- **National Transportation Safety Board (NTSB) Report** (September 19, 2019)
  - 7 recommendations
- **JT610 Final Komite Nasional Keselamatan Transportasi (KNKT) Aircraft Accident Investigation Report** (October 29, 2018)
  - 8 recommendations to the FAA
- **Office of Inspector General *Weaknesses in FAA's Certification and Delegation Processes Hindered Its Oversight of the 737 MAX 8*** (February 23, 2021)
  - 14 recommendations
- **Technical Advisory Board (TAB) Final Report** (November 18, 2020)
  - 5 action items for the FAA
  - All 737 MAX Return to Service items have been completed



# Certification and Safety Oversight Reform

013

**The FAA has organized certification and safety oversight reform provisions and recommendations into the following workstreams:**

- Safety Management Systems
- System Safety and Human Factors
- Global Collaboration
- Data
- Integration of Certification and Oversight Functions
- Culture of Safety and Excellence
- Delegation
- Certification and Continued Operational Safety Processes
- Innovation
- Other Requirements



# Milestones since July ACSAA Quarterly Update

014

- **ACSAA Sec. 106:** Memo issued to reinforce restriction on delegation without validation of assumptions for critical system design features (effective upon enactment of ACSAA).
- **ACSAA Sec. 115:** Safety Assessment Improvement Plan completed by System Safety Implementation Team.
- **ACSAA Sec. 117:** International Authority Working Group on Changed Product Rule held initial meeting on July 29, 2021 and is now meeting regularly.
- **ACSAA Sec. 122:** First meeting of Executive Council to oversee FAA Compliance Program held on August 31, 2021 and is now meeting regularly.
- **ACSAA Sec. 124:** Center of Excellence for Technical Training and Human Performance (COE TTHP) grants awarded on September 24, 2021.
- **ACSAA Sec. 127:** COE TTHP grants awarded on September 24, 2021.



# Briefing & Reporting Requirements

015

This quarterly update is intended to address the specific briefing and reporting requirements for the following ACSAA sections:

- ACSAA Sec. 104(d) – Certification oversight staff
  - (d) BRIEFING.—Not later than 30 days after the completion of the review required by subsection (b), the Administrator shall brief the congressional committees of jurisdiction on the results of the review.
- ACSAA Sec. 107(f)2 – Oversight of organization designation authorization unit members
  - CONGRESSIONAL BRIEFING.—Not later than 90 days after the date of enactment of this section, and every 90 days thereafter through September 30, 2023, the Administrator shall provide a briefing to the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate on the implementation and effects of this section, including—“(A) the Administration’s performance in completing reviews of individuals and approving or denying such individuals within the timeline required under subsection (b)(3); “(B) for any individual rejected by the Administrator under subsection (b) during the preceding 90-day period, the reasoning or basis for such rejection; and “(C) any resource, staffing, or other challenges within the Administration associated with implementation of this section.
- ACSAA Sec. 108(f) – Integrated project teams
  - (f) REPORT.—Not later than 1 year after the date of enactment of this section, and annually thereafter through fiscal year 2023, the Administrator shall submit to the congressional committees of jurisdiction a report on the establishment of each integrated project team in accordance with this section during such fiscal year, including the role and composition of each such project team.
- ACSAA Sec. 117(b) – Changed product rule
  - (b)(1) AMENDED TYPE CERTIFICATE REPORT AND RULEMAKING.— (1) BRIEFINGS.—Not later than 12 months after the date of enactment of this title, and annually thereafter through fiscal year 2023, the Administrator shall brief the congressional committees of jurisdiction on the work and status of the development of such recommendations by the Certification Management Team.
- ACSAA Sec. 119(e)(4) – Domestic and international pilot training
  - (e)(4) CONGRESSIONAL BRIEFING.—The Secretary, the Administrator, and other appropriate officials of the Government shall provide to the congressional committees of jurisdiction regular briefings on the status of efforts undertaken pursuant to this subsection.



# ACSAA Sections Closed or No Action Required

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The following ACSAA sections are considered closed or have no required actions by the FAA:

- **ACSAA Sec. 101:** Short title; table of contents – no action required
- **ACSAA Sec. 114:** Compensation limitation – closed
- **ACSAA Sec. 123:** Settlement agreement – closed
- **ACSAA Sec. 129:** Ensuring appropriate responsibility of aircraft certification and flight standards performance objectives and metrics – no action required
- **ACSAA Sec. 137:** Definitions – no action required





# Safety Management Systems: Overview

**Objective:** To enhance and promote the use of safety management systems (SMS) to ensure a holistic and proactive assessment of hazards and support improvement in safety performance.

**Behavioral and Process Benefits:**

- Increased transparency from industry will drive behavioral changes, which allow the agency to be more proactive in our decision making.
- Key decisions made by industry will be prioritized by the safety impact.
- Strengthen risk management interfaces and feedback loops within industry and the FAA for design, manufacturing, operation, and maintenance.

**Overview of Actions:**

- SMS rulemaking for design and manufacturing organizations, repair stations, Part 135 operators, and air tour operators conducting operations under 14 CFR 91.147.
- Promoting the use of voluntary SMS programs:
  - Voluntary SMS programs in place for Design & Manufacturing organizations and for Operations & Maintenance Organizations.
  - Voluntary SMS participants submit elements of SMS to FAA for acceptance.
  - Voluntary SMS participants commit to regular oversight of their SMS by the FAA.
- Corporate implementation of the FAA & Industry Guide to Product Certification (CPG).
  - The CPG promotes a systems approach to certification with appropriate involvement and oversight by the FAA.

Cert Reform Bill	JATR	Spec Comm	Other
Section 102	Recommendation 6	Focus Area 1	OIG Recommendations 4, 14



# System Safety and Human Factors: Overview

**Objective:** Implement changes to ensure system safety analyses and human factors assumptions are incorporated into the FAA’s Aviation Safety (AVS) policy and oversight.

**Behavioral and Process Benefits:**

- Human factors activities will improve the way aircraft designs account for the broad range of pilots and pilot capabilities around the world.)
- System safety assessment activities will generate earlier, more frequent, and timely assessments of potential hazards and risks associated with aircraft and operations during the design and certification process.
- Comprehensive understanding of the interconnectivity of the airplane lifecycle.

**Overview of Actions:**

- Rulemaking for System Safety Assessments, system safety advisory circular, and new policy for flight path management.
- Completed a Safety Assessment Improvement Plan which makes recommendation on how to improve integration between Human Factors and System Safety; Development Assurance Processes; and system safety aspects of the certification process.
- Issued three grants to the University of Akron, Embry-Riddle Aeronautical University/Kent State, and Wichita State University through the Center of Excellence for Technical Training and Human Performance to develop a Human Factors Education Program for FAA Employees and conduct a study on Human Error Taxonomy.
- Issued a memo to AIR employees reinforcing the prohibition on delegation for critical system design features without validation of the underlying human factors assumptions.

Cert Reform Bill	JATR	Spec Comm	Other
Sections 105, 106, 115, 116, 119, 124, 126, 127	Recommendations 2, 3, 4, 6	Focus Areas 2	OIG Recommendations 3, 5 NTSB A-19-10 through A-19-16 KNKT 2018-35.20; -21; -23; -24 <i>TAB Report Action Item 5</i>



# Global Collaboration: Overview

**Objective:** Expand global engagement with other Civil Aviation Authorities to foster improvements in international safety standards and practices for how the operational requirements for an aircraft are evaluated by the State of Design as part of the certification effort.

**Behavioral and Process Benefits:**

- Increased sharing of information about the type design from the State of Design and improved information flow from States of Registry to the FAA to assist in continued operational safety.
- Harmonization of standards, guidance, and practices.
- Improved information flow from States of Registry to the FAA to assist in continued operational safety management.

**Overview of Actions:**

- Adjust the requirements for establishing pilot training requirements for new or amended type certificates to require additional information from the manufacturer.
  - Work with International Civil Aviation Organization (ICAO) and other international stakeholders to improve the FAA’s ability to influence the maintenance and pilot training requirements for U.S. products operating under the oversight of another civil aviation authority.
  - Continue to support the ICAO Personnel Training & Licensing Panel (PTLP), including leadership of the Automation Working Group which is studying the extent of automation dependency worldwide.
- Chartered the Changed Product Rule International Authority Working Group.
  - First meeting held in July 2021 and working group is now meeting regularly.
  - Working Group is on track to develop plan to address Max-related recommendations in Summer 2022.

Cert Reform Bill	JATR	Spec Comm	Other
Sections 117, 119, 128	Recommendation 1	Focus Areas 3, 8	TAB Report Action Items 7, 8 KNKT Recommendations 2018-35.25, .27



# Data: Overview

**Objective:** Enhance the capability to collect, consolidate, analyze, and share safety data within the FAA and between industry stakeholders and international partners.

**Behavior and Process Benefits:**

- Significant improvements in data quality and availability to support FAA’s risk-based decision making.
- Technology infrastructure and data integration to support risk-based decision making.
- Data accessibility to make daily safety decisions.

**Overview of Actions:**

- Contract in place with Transportation Research Board to develop framework for annual analysis and report on emerging safety trends in aviation.
  - Kickoff meeting held in August 2021.
- Charter signed and first meetings held for joint FAA/NASA System Wide Safety (SWS) Research Transition Teams (RTTs) focused on real-time monitoring, assessment, and mitigation of hazards for both current and emerging aviation.
- Enhancements to the Aviation Safety Information Analysis and Sharing (ASIAS) system to integrate new data sources and methods for safety analysis.
- Validation of the initial Safety Data Governance ConOps for a Single FAA Data Repository.

Cert Reform Bill	JATR	Spec Comm	Other
Sections 132	Recommendations 12	Focus Area 3	None



# Integration of Certification and Oversight: Overview

**Objective:** Improve coordination between AVS offices throughout the aviation lifecycle.

**Behavioral and Process Benefits:**

- Ensure maximum integration between certification and operations.
- Leveraging system safety principles to develop internationally harmonized certification basis for products under the Changed Product Rule.
- Comprehensive assessment of risk through the aviation lifecycle and system approach to safety oversight.

**Overview of Actions:**

- FAA is updating documentation for Technical Advisory Boards (TAB) to apply them to all projects covered by Section 108.
  - Applied TAB approach to existing transport category TC project.
- In June 2020, the FAA commissioned the Integrated Program Management (IPM) team comprised of subject matter experts from the Flight Standards Service (FS) and Aircraft Certification Service (AIR) to assess current practices and policies and make recommendations for improving FAA oversight through the integration between design and operations.
  - Best practices identified from this process are being applied to ongoing certification projects.
  - Targeted outreach to select ongoing type certificate projects to ensure strong integration between AIR and FS.
- The Compliance Program was launched in 2015 and provides a framework for how the Agency responds to safety deviations, including regulatory noncompliance.
  - Executive Council formed and held first meeting in August 2021.

Cert Reform Bill	JATR	Spec Comm	Other
Sections 108, 118, 122, 123	Recommendations 4, 9, 12	Focus Area 5	OIG Recommendations 6, 7, 13 KNKT Recommendation 2018-35.22



# Culture of Safety and Excellence: Overview

**Objective:** Enhance the FAA’s safety culture by promoting voluntary safety reporting, increasing workforce competencies, and attracting the right talent.

**Behavioral and Process Benefits:**

- Just culture – employees and designees free to identify, raise or address potential safety concerns without fear of reprisal.
- Workforce that is adaptive and responsive to changing industry technologies and practices.

**Overview of Actions:**

- Implemented the AVS Voluntary Safety Reporting Program (VSRP) in April 2021.
  - Data shows that system is being used regularly by employees to raise safety concerns.
- Implemented a number of efforts to bolster human factors expertise and resources in FY21, including:
  - Almost doubled the number of human factors staff within the Aviation Safety (AVS) organization.
  - Linked the development of human factors education and training through a Center of Excellence grant.
- Completed a review of the Senior Technical Experts Program which identified necessary strategic capabilities and near term hiring priorities.
- The FAA has contracted with Booz Allen Hamilton to conduct a review of engineers.

Cert Reform Bill	JATR	Spec Comm	Other
Sections 104, 111, 112, 113, 114, 131, 133	Recommendations 5,7	Focus Area 6	OIG Recommendation 10



# Delegation: Overview

**Objective:** Promote consistency and transparency in the applicability of policy, oversight of Organization Designation Authorization (ODA) holders, and communication between the FAA and ODA unit members.

**Behavior and Process Benefits:**

- Foster an environment of safety at companies and transparency between applicant and ODA.
- Stronger relationship and trust between the agency and ODA unit members to share information and discuss safety concerns without fear of retribution/barriers.
- Standardization of unit member approval and FAA oversight of the ODA Holder.

**Overview of Actions:**

- Operationalized the AVS ODA Office on April 11, 2021 (realigned to the Associate Administrator for Aviation Safety).
  - Permanent manager and initial employees assigned in September 2021. Vacancy announcements for 10 additional positions closed in September.
- Working to convene an expert review panel to make findings and recommendations with respect to ODA holders for the design and production of transport airplanes.
- Drafting new policy to address:
  - Requirements for FAA approval of ODA unit members.
  - Minimizing or eliminating ODA holder interference with unit members and unrestricted communication between FAA and unit members.
  - Assignment of FAA advisors for unit members of transport category airplanes and engines ODAs.
  - Other ODA policy improvements, including risk-based oversight requirements.

Cert Reform Bill	JATR	Spec Comm	Other
Sections 103, 107, 109, 125	Recommendations 5,8	Focus Area 7	OIG Recommendations 8, 9, 11, 12 KNKT Recommendation 2018-35.21



# Certification and COS Processes: Overview

**Objective:** Increase robustness of the type certification process and related reduction of operational risk.

**Behavioral and Process Benefits:**

- Continuous improvement of our certification process, including the evaluation of the aircraft lifecycle perspective.
- Robust issue resolution and appeals guidance for certification decisions.

**Overview of Actions:**

- Developing an order for resolving issues.
  - This order will establish overarching principles and requirements for resolving issues and subsequent appeals related to type certification decisions.
- Revising guidance material ensuring that proposed changes to an aircraft are evaluated from a whole aircraft system level perspective, including human interface aspects.
- Developing defined criteria for what constitutes a significant change.
- Consider mandating validation of assumptions and focusing on new and updated training materials.
- Commissioned external reviews to evaluate our Transport Airplane Risk Assessment Model (TARAM) and type certification processes.
- Commissioned independent study on Type Certification Reform.

Cert Reform Bill	JATR	Spec Comm	Other
Sections 110, 116, 120, 130, 136	Recommendations 2, 5, 8, 12	Focus Area 8	OIG Recommendation 1 TAB Report Action Items 2,4 KNKT Recommendation 2018-35.26





# Innovation: Overview

**Objective:** Accelerate and expand deployment of new technologies and practices by reducing barriers to innovation and actively promoting innovation that enhances safety and performance of the National Airspace System (NAS).

**Behavioral and Process Benefits:**

- Early applicant engagement and information sharing to define certification path for emerging technologies and concepts.
- Increased efficiencies through the FAA intake process.
- Enhanced coordination across the FAA on emerging products and concepts.

**Overview of Actions:**

- Established and staffed the Center for Emerging Concepts and Innovation supporting certification of new aircraft and technologies by providing structured pre-application engagement with companies to identify a clear path to compliance.
- Awarded \$5.8M in grants to 6 projects with the Joint Advanced Materials and Structures Center of Excellence.

Cert Reform Bill	JATR	Spec Comm	Other
Section 134	None	Focus Area 9	OIG Recommendation 2



# Other Requirements: Overview

**Objective:** Evaluate ways to expedite implementation of changes while longer-term policy or rulemaking efforts are underway as well as to address requirements and recommendations that don't fit into other focus areas.

**Overview of Actions:**

- Rulemaking to issue requirements for aviation maintenance technician school certificates and associated ratings and the general operating rules for the holders of those certificates.
  - All previously identified issues addressed – moving ahead with interim final rule.

Cert Reform Bill	JATR	Spec Comm	Other
Sections 121, 135	None	Focus Area 10	None



# Moving Forward

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- 15 of 19 provisions with 270-day or less timelines are complete.
- Remaining activities include:
  - Organization Designation Authorization (ODA) Expert Review Panel: Charter and Solicitation drafted, coordination with Federal unions complete, final stages of internal coordination.
  - Review of certification oversight staff: cross organizational team working to appropriately review inspectors, human factor specialists, flight test pilots, managers, and executives.
  - Order for Issues Resolution: Order is drafted and is being coordinated internally.
  - Promoting Aviation Regulations for Technical Training (Part 147 Rulemaking): All previously identified issues addressed. Moving ahead with interim final rule.
- The FAA will continue to provide quarterly updates to Congress on the implementation status of all provisions in the ACSAA.



## **SOCAC - Changed Product Rule (CPR)**

### Description of CPR:

There are two main regulations associated with the CPR process, Title 14 Code of Federal Regulations (CFR) Sections 21.19 and 21.101.

Section 21.19 describes the circumstances in which an applicant for a Type Certificate (TC) of a changed product must apply for a new TC. Section 21.19 requires an applicant to apply for a new type certificate for a changed product if the FAA finds that the change in design, power, thrust, or weight is so extensive that a substantially complete investigation of compliance with the applicable regulations is required.

Section 21.101 requires a change to a TC and the area affected by the change to comply with the latest requirements on the date of application, unless the change meets the criteria for the exceptions identified in § 21.101(b) and (c). The intent of § 21.101 is to enhance safety by incorporating the latest requirements into the type certification basis for the changed product, to the greatest extent practicable.

### Summary of the Legislation:

Section 117, Changed Product Rule (CPR), of “The Aircraft Certification, Safety, and Accountability Act” [H. R. 133—1128], hereafter referred to as “the Act” requires action to revise and improve the process of issuing amended type certificates. In addition to other requirements, the Act included a requirement for the FAA to exercise leadership in the creation of international policies and standards relating to the issuance of amended type certificates within the Certification Management Team.

### Overview of the International Authorities Working Group’s activities:

In support of Section 117 of the Act, the FAA initiated an authorities working group (i.e., CPR International Authorities Working Group (IAWG)) to strive for a unified approach to address gaps and make improvements in the amended type certification process.

The IAWG will conduct its work in three stages – 1) Review and Consultation Stage, 2) Development Stage, and 3) Aligned International Implementation and Outreach Stage. Each stage will be one year in duration.

In July 2021, the team began reviewing the legislation and relevant reports, identifying lesson learned in the application of policies/guidance for CPR. In mid-2022, the IAWG will collectively develop an improvement plan of their recommendations and present them to member-authorities leadership for review and approval. The team expected to complete its work in mid-2024 pending identification of any longer-term actions (e.g., significant policy or rulemaking requirements), which may extend the completion date.

### Expectations on the type of feedback we would like SOCAC to provide:

The CPR IAWG will continue its activities on aggressive pace. Nevertheless, given the need for timeliness, the FAA wishes to engage the SOCAC members and obtain immediate feedback on the CPR IAWG’s activities and progress to inform FAA’s approach throughout the process. As a result, we plan to engage regularly with the SOCAC throughout the course of the IAWG’s activities, and we intend to provide progress briefings and feedback discussions at each of the SOCAC meetings throughout the process. The FAA will benefit from gain firsthand information and insight from SOCAC members regarding what is successful vs. areas for improvement within the CPR process.

# Changed Product Rule International Authorities Working Group



Federal Aviation  
Administration

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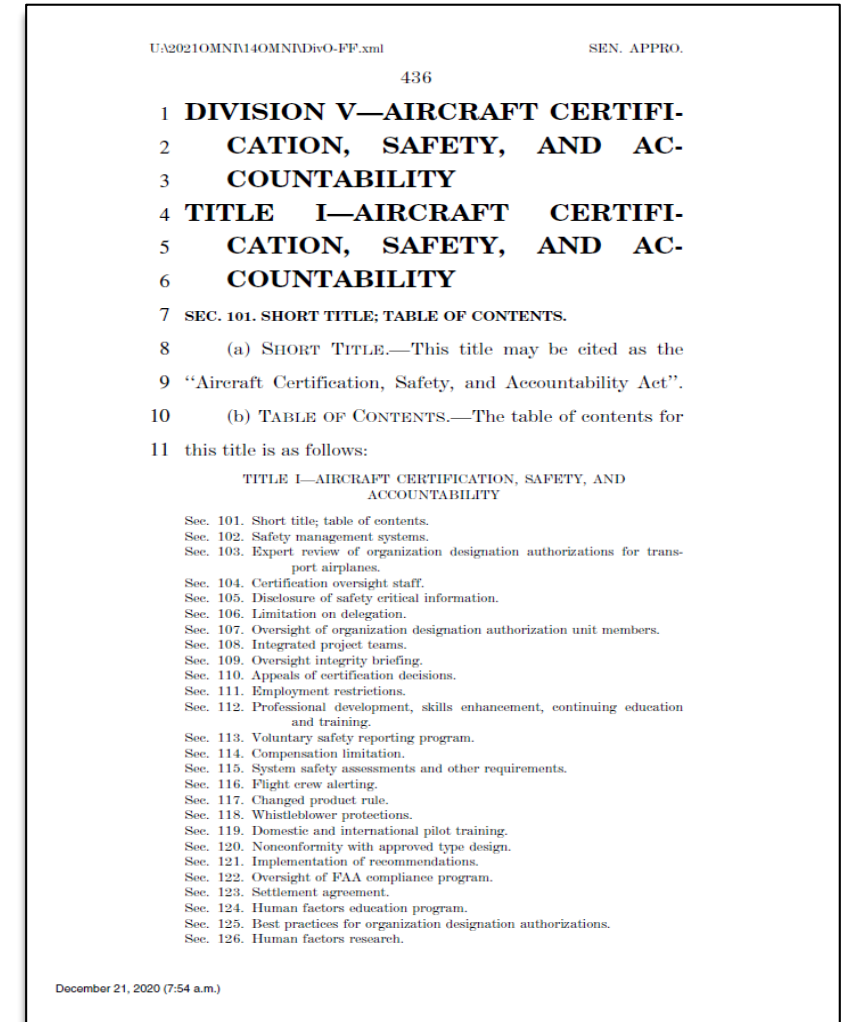


Date: December 8, 2021

# Background

## Aircraft Certification, Safety, and Accountability Act (ACSAA)

- Signed into law December 27, 2020
- Contains 37 sections, many pertaining to the Aircraft Certification Service
- Working across the FAA to address the recommendations in the Act in coordination with existing activities
- Includes Section 117, Changed Product Rule



# Background (cont.)

- **ACSAA required international authority involvement**
- **IAWG Charter (signed in March 2021)**
  - Comprised of States of Design and those engaged in significant validation projects
  - 5 authorities invited to participate
    - Brazil, ANAC
    - China, CAAC
    - European Union, EASA
    - Japan, JCAB
    - Canada, TCCA



# CPR IAWG Purpose

- **Harmonized approach to address gaps in the process of issuing amended type certificates for derivative aircraft**
  - Provide recommendations based on:
    - ACSAA
    - Joint Authorities Technical Review
    - Special Committee of the DOT
    - National Transportation Safety Board
    - Office of Inspector General
  - Other influences (Section 136 – Independent Study on Type Certification Reform)
    - MITRE





# CPR IAWG Scope

- **Charter Objectives**

- Review legislation and relevant reports
- Review “lessons-learned” from authorities in the application of CPR and identify gaps (technical, procedural, and standardization)
- Evaluate joint policy/training and develop a path for addressing gaps

- **Considerations**

- Full range of necessary changes to include; harmonized rulemaking proposals, policy changes, and training
- System safety concepts and how they may play a role in change product outcomes

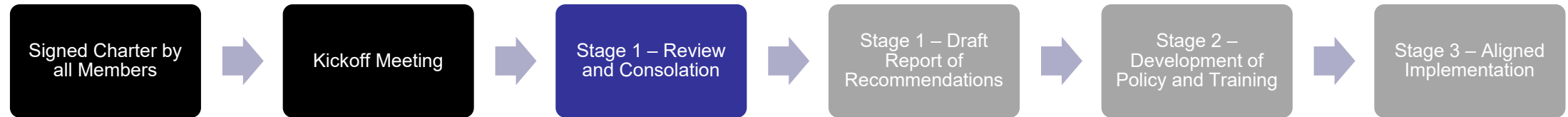


# Discussion Topics Include:

- Requirements with safety impact at aircraft level
- Use of system safety methodologies
- Use of assumptions / exemptions
- Process complexity
- Time limits
- Role of retroactive requirements / part 26 / operational rules
- Use of data analytics and predictive analysis
- Guidance materials – examples
- Early engagement
- Consistency / standardization
- Emerging technologies
- Training opportunities



# CPR IAWG Status



## Three Stages

- **Stage 1 - Review and Consultation**
  - a) Lessons Learned
  - ▶ b) Rulemaking Review (Sections 21.19 and 21.101)
  - c) Guidance and Documentation
  - d) TC Documentation Improvements
  - e) Training and Continued Collaboration
  - f) Recommendation Report
- **Stage 2 - Development of Policy and Training**
- **Stage 3 - Aligned Implementation**



# Major Milestones & Deliverables

- **Recommendation Development**

- Formal kick-off
- Review and Consultation

July 2021

Sept 2021 – Mid 2022

- **Draft Report of Recommendations**

- Report containing collaboration  
on proposals

Mid 2022

- **Development of Policy and Training**

- Policy/guidance/training

Mid 2022 – 2023

- **Aligned Implementation**

Mid 2023 – 2024



# Moving Forward

- **CPR IAWG will continue its activities on aggressive pace**
- **FAA intends to continue SOCAC engagement**
  - Progress briefings and feedback discussions expected at SOCAC meetings throughout the process

