H.R. ____ "Aircraft Certification Reform and Accountability Act"

Section-by-Section

Sec. 1. Short Title; Table of Contents.

This section provides the short title for this bill as the "Aircraft Certification Reform and Accountability Act."

Sec. 2. Safety Management Systems.

Requires the Federal Aviation Administration (FAA) to issue regulations for holders of both a type certificate and a production certificate, such as aircraft and other aerospace industry manufacturers, to adopt safety management systems (SMS) consistent with international standards and practices. An SMS adopted under this section must contain a confidential employee reporting system that includes non-punitive provisions through which employees can report hazards and safety concerns, as well as a code of ethics emphasizing safety as the highest priority for a manufacturer's officers and employees. Directs that the required confidential employee reporting system be implemented in a manner consistent with other voluntary reporting programs administered by the FAA Administrator.

Sec. 3. Expert Review of Organization Designation Authorizations for Transport Airplanes.

Convenes an independent expert review panel—comprised of representatives of the FAA, National Aeronautics and Space Administration, U.S. airlines, manufacturers of aircraft and aircraft components, labor unions representing airline pilots, production employees, and FAA engineers and safety inspectors, other organization designation authorization (ODA) holders, and other independent subject-matter experts—to review The Boeing Company's ODA, safety culture, and capability to perform FAA-delegated functions. Directs the panel to make recommendations on any deficiencies found during the review.

Authorizes the FAA Administrator to limit, suspend, or terminate Boeing's ODA if the Administrator deems it necessary based on the review panel's findings. Requires the FAA Administrator to report to Congress on the status of procedures under which the agency will conduct focused oversight of Boeing's processes for performing FAA-delegated functions.

Sec. 4. Certification Oversight Staff.

Authorizes \$27,000,000 for each of fiscal years 2021 through 2023 in new appropriations for the FAA to recruit and retain engineers, safety inspectors, human factors specialists, software and cybersecurity experts, and other qualified technical experts who perform duties related to the certification of aircraft, engines, and other components. Clarifies that nothing in this section

vests in any exclusive bargaining representative any management right of the FAA Administrator, and any action taken under this section is subject to the availability of appropriations.

Sec. 5. Disclosure of Safety-Critical Information.

Requires manufacturers to disclose to the FAA certain safety-critical information related to an aircraft, including information regarding systems that manipulate flight controls without direct pilot input or commands, correct adverse handling qualities, or compensate for unstable aerodynamic properties, as well as other systems whose failure or erroneous activation would present a risk rated hazardous or catastrophic. Requires that any aircraft flight manual and flight crew operating manual contain a description of such a system and flight crew procedures for responding to a failure or aberrant operation of such system. Imposes up to a \$1 million civil penalty for a violation of the disclosure requirements. Directs the FAA to revoke an airline transport pilot certificate held by an individual who fails to disclose such safety-critical information on behalf of a manufacturer. Repeals unused FAA design and production organization certification authorities.

Sec. 6. Periodic Reviews of Organization Designation Authorizations.

Directs the FAA to conduct a comprehensive review of each manufacturing ODA holder's capability to meet FAA regulations based on the holder's organizational structures, requirements applicable to its officers and employees, and safety culture. The review, to be conducted every seven years, must include an assessment of the effectiveness of, and organization-wide adherence to, the ODA holder's SMS and voluntary safety reporting system.

Sec. 7. Limitations on Delegation.

Codifies an existing FAA policy that prohibits, with some exceptions, FAA delegation to an aircraft manufacturer the ability to certify on behalf of the agency the design of a "novel or unusual design feature" that results in a major change to an aircraft type design. The FAA may delegate such a matter when the FAA Administrator determines it is a routine task, or when, during the course of the certification process, the Administrator determines it no longer relates to a novel or unusual design feature. This section also prohibits FAA delegation of a certification function to a manufacturer solely because the agency lacks the qualified personnel or expertise to handle the function internally.

Sec. 8. Oversight of ODA Unit Members.

Beginning one year after the date of enactment of this Act, requires the FAA Administrator to approve each new individual selected by an ODA holder engaged in the design of an aircraft, aircraft engine, propeller, or appliance before they become an authorized representative (or ODA unit member), who are employees of a manufacturer granted special permission to act on the FAA's behalf in validating compliance of aircraft systems and designs with FAA requirements. Requires new ODA unit members to meet qualifications issued by the

Administrator, such as the knowledge, technical proficiency, and moral character of such individual. Authorizes the FAA Administrator to rescind an approval of an approved individual to serve as an ODA unit member at any time, for any reason. Notwithstanding the applicability of this section to new ODA unit members, directs the FAA to complete a review of each current Boeing ODA unit member to ensure each individual meets the agency's minimum qualifications issued under this section. Authorizes \$3,000,000 for each of fiscal years 2021 through 2023 in new appropriations for the FAA to ensure adequate staffing and resources necessary to undertake the work required under this section.

Imposes a civil penalty for any individual employed by an ODA holder who interferes with (e.g., harasses, berates, or threatens) an ODA unit member's performance of authorized functions on behalf of the FAA and requires all ODA unit members to promptly report any cases of interference experienced or witnessed at a company.

Creates a process for lateral communications so that FAA employees with certification responsibilities may directly contact non-managerial employees of an aircraft manufacturer for consultation regarding the certification of aircraft design, production, and other matters. Prohibits a manufacturer from prohibiting or imposing any condition or restriction on its employees from making such contact with FAA employees.

Repeals previously enacted statutory direction related to the ODA program.

Sec. 9. Integrated Project Teams.

Requires the FAA to convene an interdisciplinary integrated project team with specialists from the agency's Aircraft Certification Service and the Flight Standards Service at the outset of a certification program for a new airplane to ensure that engineers and pilots are operating from the same set of assumptions regarding airplane systems, system safety assessments, human factors, pilot response to non-normal conditions, and airplane-level safety effects of system failures.

Sec. 10. Oversight Integrity Briefing.

Requires the FAA to brief Congress on specific measures the agency has taken to reinforce that each FAA employee responsible for overseeing an aircraft manufacturer's ODA performs their work in accordance with safety management principles and in the public interest of aviation safety.

Sec. 11. Appeals of Certification Decisions.

Directs the FAA Administrator to issue an order establishing an appeal process to review an FAA employee's decision regarding a manufacturer's compliance with applicable design regulation. Prohibits FAA leadership and manufacturing executives from communicating about the dispute outside of the established review process unless those communications are publicly disclosed.

Sec. 12. Employment Restrictions.

Implements a one-year cooling off period for incoming FAA employees from overseeing their former aerospace manufacturer employer. Also implements a two-year cooling off period for former FAA certification employees representing their new employer before the FAA if they were responsible for overseeing that employer while at FAA, consistent with existing aviation safety inspector restrictions.

Sec. 13. Professional Development and Skills Enhancement.

Directs the FAA to develop a program for regular recurrent training of FAA engineers, inspectors, and other subject matter experts in accordance with the training strategy developed pursuant to section 231 of the FAA Reauthorization Act of 2018 (P.L. 112-95). Also requires the FAA, to the maximum extent practicable, to implement measures that provide such employees with diverse professional opportunities to expand their knowledge and skills and minimize the likelihood of inappropriate bias toward a regulated company.

Sec. 14. Voluntary Safety Reporting Program.

Directs the FAA, in collaboration with labor groups representing certain FAA employees, to implement a confidential voluntary safety reporting program for FAA engineers, safety inspectors, systems safety specialists, and other subject matter experts to identify and report potential safety issues or concerns. Directs that the confidential voluntary safety reporting system be implemented in a manner consistent with other voluntary safety reporting systems administered by the FAA Administrator.

Sec. 15. Compensation Limitation.

Prohibits an FAA employee from receiving a compensation adjustment solely on the basis of meeting or exceeding a deadline related to the completion of a certification function.

Sec. 16. System Safety Assessments and Other Requirements.

Directs the FAA to require an applicant for an amended type certificate for a transport airplane (as defined in this Act) to perform a system safety assessment with respect to each proposed design change that the Administrator determines is significant, considering the airplane-level effects of individual failures and realistic pilot response times. Requires the FAA to review each system safety assessment for sufficiency and adequate consideration of the airplane-level effects of individual failures and realistic pilot response times.

Sec. 17. Flight Crew Alerting.

Prohibits the FAA from issuing a type certificate for a new airliner design unless the airplane is equipped with a centralized crew alerting system that helps a pilot differentiate, prioritize, and respond to warnings, cautions, and advisories activated on the airplane.

Sec. 18. Amended Type Certificates.

Directs the FAA to exercise leadership in the creation of international policies and standards relating to the issuance of amended type certificates for new airplane designs. Requires the FAA to revise and improve the process for issuing amended type certificates based on the agency's international harmonization efforts and other requirements, including establishing the extent to which certain changes to an airplane's design are so significant that a new type certification process is warranted.

Sec. 19. Whistleblower Protections.

Extends the whistleblower protections currently provided to air carrier employees to employees of manufacturing ODAs. This includes the prohibition on discharging or taking an adverse employment action against an employee due to the employee providing to the employer or Federal Government information relating to non-compliance with FAA regulations or orders.

Sec. 20. Pilot Training.

Requires the FAA to independently review a proposal by a transport airplane manufacturer in setting pilot training requirements for an airliner. Prohibits such manufacturer from making assurances regarding certain pilot training requirements to customers before the FAA establishes them without a clear disclaimer regarding the actual status of training requirements and prohibits such manufacturer from providing financial incentives such as rebates to a potential customer regarding the scope or magnitude of pilot training for an airplane.

Beginning the day after the date on which the FAA issues regulations in response to the expert safety review required by this section, prohibits the FAA from issuing a new or amended type certificate to a transport airplane manufacturer for a transport airplane unless the manufacturer has demonstrated to the FAA it has accounted for realistic assumptions regarding pilot reaction time to non-normal conditions in designing the systems and instrumentation of such airplane.

Directs the FAA to initiate an expert safety review of assumptions relied upon by the FAA and airplane manufacturers, including a review of assumptions regarding the time presumed for pilot response to non-normal conditions, in designing airplane systems and instrumentation and consideration of the global nature of the marketplace and varying pilot training programs worldwide. Directs the FAA to initiate a call to action safety review of FAA pilot certification

standards. Directs the FAA to exercise leadership in setting global standards to improve airline pilot training and qualifications.

Sec. 21. Nonconformity with Approved Type Design.

Prohibits a manufacturer from delivering an aircraft that does not conform with its approved type design—the configuration that the FAA certified as safe—except when multiple disclosure and other safeguards are met to ensure the nonconformity does not jeopardize safety. For example, the manufacturer must promptly notify the FAA and operators of the aircraft about the nonconformity, the FAA must determine the nonconformity does not reduce the margin of safety by any measure without any change in flight crew operating procedures, and the manufacturer agrees to correct it within a timeframe set by the FAA while waiving financial penalties for customers who wish to delay delivery of an aircraft until it is repaired. Imposes an up to \$1 million civil penalty for each nonconforming aircraft.

Sec. 22. Implementation of Recommendations.

Requires the FAA to report to Congress on the status of the agency's implementation of recommendations made by the National Transportation Safety Board, Joint Authorities Technical Review, Department of Transportation Inspector General, and other entities in response to the Lion Air flight 610 and Ethiopian Airlines flight 302 accidents involving the Boeing 737 MAX aircraft. For any recommendation with which the FAA Administrator does not concur, the Administrator must provide to Congress a detailed explanation for such non-concurrence.

Sec. 23. Oversight of FAA Compliance Program.

Directs the FAA to establish an Executive Council to oversee the use and effectiveness of the FAA's Compliance Program across the agency's program offices and make recommendations to the FAA Administrator on controls that should be issued to improve the Program's effectiveness and to ensure the highest levels of aviation safety.

Sec. 24. Settlement Agreement.

Expresses a sense of Congress that the FAA administrator should fully exercise all rights and pursue all remedies available to the administrator under the 2015 FAA-Boeing settlement agreement, including a demand for full payment of applicable deferred civil penalties if Boeing has not fully performed all of its obligations incurred under the agreement.

Sec. 25. Human Factors.

Directs the FAA to conduct an evaluation of tools and methods that support the better integration of human factors and system safety assessments of aircraft flight deck and flight control systems into the FAA's certification process. Directs the FAA to develop a human factors education program for FAA employees that teaches about the effects of modern flight deck

systems on human performance and new approaches for better integration of human factors into aircraft design and certification.

Sec. 26. Technical Corrections.

Makes various technical corrections to ensure the bill coexists with the FAA's existing civil penalty authorities.

Sec. 27. Definitions.

Defines certain terms used throughout the Act.