AMENDMENT NO._______   Calendar No._______

Purpose: In the nature of a substitute.


S. 3969

To amend title 49, United States Code, to reform the Federal Aviation Administration’s aircraft certification process, and for other purposes.

Referred to the Committee on _________________ and ordered to be printed

Ordered to lie on the table and to be printed

AMENDMENT IN THE NATURE OF A SUBSTITUTE intended to be proposed by Mr. WICKER (for himself and Ms. CANTWELL)

Viz:

1 Strike all after the enacting clause and insert the following:

3 SECTION 1. SHORT TITLE.

4 This Act may be cited as the “Aircraft Safety and Certification Reform Act of 2020”.

6 SEC. 2. TABLE OF CONTENTS.

7 The table of contents of this Act is as follows:

Sec. 1. Short title.
Sec. 2. Table of contents.
Sec. 3. Definitions.
Sec. 4. Safety management system for manufacturers.
Sec. 5. Organization designation authorization.
Sec. 6. Best practices for organization designation authorizations.
Sec. 7. Review of human factors assumptions.
Sec. 8. Human factors research.
Sec. 9. FAA center of excellence for automated systems and human factors in aircraft.
Sec. 10. Pilot operational evaluations.
Sec. 11. FAA continuing education and training.
Sec. 12. Authorization of appropriations for scientific and technical advisors.
Sec. 13. Prohibition on certain performance-based incentives.
Sec. 14. Safety reporting program.
Sec. 15. Protection of whistleblowers.
Sec. 16. Repeal of design and production organization certificate authority.
Sec. 17. Ensuring appropriate responsibility of aircraft certification and flight standards performance objectives and metrics.
Sec. 18. Review of FAA certification expertise.
Sec. 19. Transport airplane risk assessment methodology.
Sec. 20. Foreign civil aviation authority assistance.
Sec. 21. National Air Grant Fellowship Program.
Sec. 22. Changed product rule.
Sec. 23. Technical certification board.
Sec. 24. Emerging safety trends in aviation.
Sec. 25. Federal Aviation Administration accountability enhancement.
Sec. 27. Required submission of outline of system changes at the beginning of the certification process.
Sec. 28. Authorization of appropriations for the Advanced Materials Center of Excellence.
Sec. 29. Promoting Aviation Regulations for Technical Training.
Sec. 30. Limitation on delegation.
Sec. 31. Independent study on type certification reform.

1 SEC. 3. DEFINITIONS.

2 In this Act:

3 (1) ADMINISTRATOR.—The term "Administrator" means the Administrator of the FAA.

4 (2) APPROPRIATE COMMITTEES OF CONGRESS.—The term “appropriate committees of Congress” means the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives.

5 (3) FAA.—The term “FAA” means the Federal Aviation Administration.
(4) ICAO.—The term “ICAO” means the International Civil Aviation Organization.

SEC. 4. SAFETY MANAGEMENT SYSTEM FOR MANUFACTURERS.

(a) RULEMAKING PROCEEDING.—

(1) IN GENERAL.—The Administrator shall conduct a rulemaking proceeding to require that manufacturers that hold both a type certificate and a production certificate issued pursuant to section 44704 of title 49, United States Code, where the United States is the State of Design and State of Manufacture, have in place a safety management system that is consistent with the standards established by ICAO for such systems.

(2) AVIATION RULEMAKING COMMITTEE.—

(A) IN GENERAL.—Not later than 90 days after the date of enactment of this Act, the Administrator shall establish an aviation rulemaking committee to make recommendations on the rulemaking to be carried out under paragraph (1).

(B) DUTIES.—In making such recommendations, the aviation rulemaking committee shall consider how to—
(i) ensure safety management systems are consistent with, and complementary to, existing safety management systems; and

(ii) include provisions in such recommendations that would permit operational feedback from operators and pilots qualified on the manufacturers' equipment to ensure that the operational assumptions made during design and certification remain valid.

(b) **Final Rule Deadline.**—Not later than 24 months after establishing the aviation rulemaking committee under subsection (a)(2), the Administrator shall issue a final rule pursuant to the rulemaking proceeding required under subsection (a).

(c) **Surveillance and Audit Requirement.**—The final rule issued pursuant to subsection (b) shall include a requirement for the Administrator to implement a systems approach to risk-based surveillance by defining and planning inspections, audits, and monitoring activities on a continuous basis, to ensure that design and production approval holders of aviation products meet and continue to meet safety management system requirements under the rule.
(d) ENGAGEMENT WITH ICAO.—The Administrator shall engage with ICAO and foreign civil aviation authorities to help ensure the adoption of safety management systems for manufacturers on a global basis, consistent with ICAO standards.

SEC. 5. ORGANIZATION DESIGNATION AUTHORIZATION.

(a) APPROVAL OF ODA UNIT MEMBERS.—Section 44736 of title 49, United States Code, is amended by adding at the end the following:

"(d) APPROVAL OF ODA UNIT MEMBERS.—

“(1) IN GENERAL.—Beginning on the date that is 1 year after the date of enactment of this subsection, each individual who is a new member of an ODA unit of an ODA holder and performs an authorized function pursuant to a delegation by the Administrator under section 44702(d) shall be an employee, a contractor, a consultant, or the employee of a supplier of the ODA holder who is approved to be a member of the unit by the Administrator. The ODA holder may make provisional appointments of ODA unit members pending final approval by the Administrator. The Administrator shall approve or reject appointments within 90 days. If the Administrator rejects an appointment, the Administrator shall provide the ODA holder with a
written document stating the reasons for the rejection.

"(2) Qualifications.—In approving appointments to an ODA unit, the Administrator shall take into account the technical proficiency, relevant work experience, educational background, license requirements (as appropriate), and expertise of individuals. The Administrator shall issue minimum qualifications, including appropriate and relevant work experience, education, and license requirements, for ODA unit members and designees which are comparable to the same level required for FAA engineers within the same authorized areas, as appropriate, that are subject to approval by the Administrator pursuant to paragraph (1).

"(3) Rescission of Approval.—The Administrator may rescind an approval of an appointment to an ODA unit at any time for any reason the Administrator considers appropriate. The Administrator shall develop procedures to provide for proper notice and opportunity to appeal rescission decisions made by the Administrator. Such decisions by the Administrator are not subject to judicial review.
“(4) RECORDS AND REPORTS.—An ODA holder shall maintain, in a manner and for a period to be determined by the Administrator—

“(A) any data, applications, records, or manuals required by the ODA holder’s approved procedures manual;

“(B) the name, responsibilities, qualifications, and example signature of each member of the ODA unit who performs an authorized function pursuant to a delegation by the Administrator under section 44702(d);

“(C) training records for ODA unit members and ODA administrators; and

“(D) any other data, applications, records, or manuals determined appropriate by the Administrator.

“(5) AUDITS.—

“(A) IN GENERAL.—The Administrator shall perform a periodic audit of each ODA unit and its procedures.

“(B) DURATION.—An audit required under subparagraph (A) shall be performed with respect to an ODA holder once every 3 years (or more frequently as determined appropriate by the Administrator).
“(C) RECORDS.—The ODA holder shall maintain, for a period to be determined by the Administrator, a record of—

“(i) each audit conducted under this paragraph; and

“(ii) any corrective actions resulting from each such audit.

“(e) FEDERAL AVIATION SAFETY ADVISORS.—

“(1) IN GENERAL.—In the case of an ODA holder described in paragraph (2), the Administrator shall assign FAA aviation safety personnel with appropriate expertise to be advisors to the ODA unit members that are authorized to make findings of compliance on behalf of the Administrator. The advisors shall—

“(A) communicate with assigned unit members on an ongoing basis to ensure that the assigned unit members are knowledgeable of relevant FAA policies and acceptable methods of compliance; and

“(B) monitor the performance of the assigned unit members to ensure consistency with such policies.

“(2) ODA HOLDERS DESCRIBED.—An ODA holder described in this paragraph is—
“(A) a manufacturer that holds both a type and a production certificate for—

“(i) transport category airplanes with a maximum takeoff gross weight greater than 150,000 pounds; or

“(ii) airplanes produced and delivered to operators operating under part 121 of title 14, Code of Federal Regulations, for air carrier service under such part 121;

and

“(B) a manufacturer of engines for an airplane described in subparagraph (A).

“(f) COMMUNICATION WITH THE FAA.—Neither the Administrator nor an ODA holder may prohibit—

“(1) an ODA unit member from communicating with, or seeking the advice of, the Administrator or FAA staff; or

“(2) the Administrator or FAA staff from communicating with an ODA unit member.”.

(b) REPORT.—Not later than September 30, 2022, the Administrator shall submit to the appropriate committees of Congress a report on the implementation of subsections (d) through (f) of section 44736 of title 49, United States Code, as added by subsection (a).
SEC. 6. BEST PRACTICES FOR ORGANIZATION DESIGNATION AUTHORIZATIONS.

(a) In General.—Section 213 of the FAA Reauthorization Act of 2018 (Public Law 115–254, 132 Stat. 3249) is amended—

(1) by striking subsection (g);

(2) by redesignating subsections (e) through (f) as subsections (d) through (g), respectively;

(3) by inserting after subsection (b), the following:

"(c) Best Practices Review.—In addition to conducting the survey required under subsection (b), the Panel shall conduct a review of all ODA holders to identify and develop best practices. At a minimum, the best practices shall address preventing and deterring instances of undue pressure on or by an ODA unit member, within an ODA, or by an ODA holder, or instances of perceived regulatory coziness or other failures to maintain independence between the FAA and an ODA holder or an ODA unit member. In carrying out such review, the Panel shall—"

(1) examine other government regulated industries to gather lessons learned, procedures, or processes that address undue pressure of employees, perceived regulatory coziness, or other failures to maintain independence;"
“(2) identify ways to improve communications between an ODA Administrator, ODA unit members, and FAA engineers and inspectors, consistent with section 44736(g) of title 49, United States Code, in order to enable direct communication of technical concerns that arise during a certification project without fear of reprisal to the ODA Administrator or ODA unit member; and

“(3) examine FAA designee programs, including the assignment of FAA advisors to designees, to determine which components of the program may improve the FAA’s oversight of ODA units, ODA unit members, and the ODA program.”;

(4) in subsection (d) (as redesignated by paragraph (2))—

(A) by striking paragraph (3) and redesignating paragraphs (4) through (6) as paragraphs (3) through (5), respectively;

(B) in paragraph (4) (as redesignated by subparagraph (A)), by striking “and” at the end;

(C) in paragraph (5) (as so redesignated), by striking the period at the end and inserting “; and”; and

(D) by adding at the end the following:
“(6) the results of the review conducted under subsection (c).”; and

(5) by inserting after subsection (g) (as redesignated by paragraph (2)), the following:

“(h) BEST PRACTICES ADOPTION.—

“(1) IN GENERAL.—Not later than 180 days after the date on which the Administrator receives the report required under subsection (e), the Administrator shall establish best practices for all ODA holders and require such practices to be incorporated, as appropriate, into each ODA holder’s approved procedures manual.

“(2) NOTICE AND COMMENT PERIOD.—The Administrator shall publish the established best practices for public notice and comment for not fewer than 60 days prior to requiring the practices, as appropriate, be incorporated into each ODA holder’s approved procedures manual.

“(i) SUNSET.—The Panel shall terminate on the earlier of—

“(1) the date of submission of the report under subsection (e); or

“(2) the date that is 2 years after the date on which the Panel is first convened under subsection (a).”.
(b) **PROCEDURES MANUAL.**—Section 44736(b)(3) of title 49, United States Code, is amended—

(1) in subparagraph (E), by striking “and” after the semicolon at the end;

(2) in subparagraph (F), by striking the period at the end and inserting “; and”; and

(3) by adding at the end the following:

“(G) ensure the ODA holders procedures manual contains procedures and policies based on best practices established by the Administrator of the FAA to mitigate undue pressure and regulatory coziness or other failures to maintain independence.”.

**SEC. 7. REVIEW OF HUMAN FACTORS ASSUMPTIONS.**

(a) **HUMAN FACTORS IN CERTIFICATION.**—Not later than 60 days after the date of enactment of this Act, the Administrator shall initiate a review and may, after such review and as necessary, revise existing regulations, including, but not limited to, sections 25.1302, 25.1309, 25.1322, 25.1323, 25.1324, and 25.1329 of title 14, Code of Federal Regulations, and supporting policies, guidelines, and advisory circulars, to integrate and emphasize human factors and human system integration, particularly those related to pilot and aircraft interfaces.
(b) REVIEW.—In carrying out subsection (a), the Administrator shall—

(1) review existing assumptions on pilot recognition and response, including response to safety-significant failure conditions and failure scenarios that trigger multiple, and possibly conflicting, warnings and alerts, as part of the certification process;

(2) validate such assumptions with applicable operational data, human factors research and the input of human factors experts and FAA operational data, and as necessary, modify the existing assumptions;

(3) ensure that when carrying out the certification of a new aircraft type, an amended type, or, as appropriate, supplemental type, the cumulative impact that new technologies, and the interaction between new technologies and unchanged systems for an amended type certificate, may have on pilot interactions with aircraft systems are properly assessed through system safety assessments or otherwise;

(4) ensure that any action carried out under this section accounts for the necessary adjustments to system safety assessments, pilot procedures and training needs, and design requirements; and
(5) notify other international regulators that certify transport-category airplane type designs of the review and encourage them to evaluate any regulatory changes to their processes and address any changes, if applicable.

(c) REPORT.—Not later than 180 days after completing the review required under subsection (a), the Administrator shall submit a report to the appropriate committees of Congress detailing the results of the review and what revisions or other changes were made as a result of such review.

SEC. 8. HUMAN FACTORS RESEARCH.

(a) HUMAN FACTORS.—Not later than 180 days after the date of enactment of this Act, the Administrator, in consultation with aircraft manufacturers, operators, and pilots, and in coordination with the Administrator of the National Aeronautics and Space Administration, shall develop research requirements to address the integration of human factors in the design and certification of aircraft that are intended for use in air transportation.

(b) REQUIREMENTS.—In developing such research requirements, the Administrator shall—

(1) establish goals for research in areas of study relevant to advancing technology, improving design engineering and certification practices, and
facilitating better understanding of human factors concepts in the context of the growing development and reliance on automated or complex flight deck systems in aircraft operations, including, but not limited to, the development of tools to validate pilot recognition and response assumptions and diagnostic tools to improve the clarity of failure indications presented to pilots;

(2) take into consideration and leverage any existing or planned research that is conducted by, or conducted in partnership with, the FAA; and

(3) focus on—

(A) preventing a recurrence of the types of recent accidents that have involved transport category airplanes designed and manufactured in the United States; and

(B) increasingly complex aircraft systems and designs.

(c) IMPLEMENTATION.—In implementing the research requirements developed under this section, the Administrator shall work with appropriate organizations and authorities with expertise including, to the maximum extent practicable, the Center of Excellence for Technical Training and Human Performance and the Center of Excellence focused on automated systems and human factors
in aircraft that are intended for use in air transportation established under section 9.

(d) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Administrator such sums as may be necessary to carry out this section.

SEC. 9. FAA CENTER OF EXCELLENCE FOR AUTOMATED SYSTEMS AND HUMAN FACTORS IN AIRCRAFT.

(a) CENTER.—

(1) IN GENERAL.—The Administrator shall develop a Center of Excellence focused on automated systems and human factors in aircraft that are intended for use in air transportation.

(2) DUTIES.—The Center of Excellence shall, as appropriate—

(A) promote and facilitate collaboration among academia, the FAA, and the aircraft and airline industries, including aircraft, engine, and equipment manufacturers, air carriers, and representatives of the pilot community;

(B) establish goals for research in areas of study relevant to advancing technology, improving engineering practices, and facilitating better understanding of human factors concepts in the
context of the growing development and reliance
on automated or complex systems in commercial aircraft, including continuing education and training;

(C) examine issues related to human system integration and flight crew and aircraft interfaces; and

(D) assist the FAA by reviewing safety reports to identify human factors issues for research.

(3) AVOIDING DUPLICATION OF WORK.—In developing the Center of Excellence, the Administrator shall ensure the work of the Center of Excellence does not duplicate or overlap with the work of any other established center of excellence.

(4) MEMBER PRIORITIZATION.—

(A) IN GENERAL.—The Administrator, when developing the Center of Excellence, shall prioritize the inclusion of subject-matter experts whose professional experience enables them to be objective and impartial in their contributions to the greatest extent possible.

(B) REPRESENTATION.—The Administrator shall require that the membership of the Center of Excellence reflect a balanced view-
point across broad disciplines in the aviation in-
dustry.

(C) INDEPENDENCE CLAUSE.—Any mem-
ber of the Center of Excellence who is a Boeing
Company or FAA employee who participated in
the certification of the Maneuvering Character-
istics Augmentation System for the 737 MAX
8 airplane must disclose such involvement to
the FAA prior to performing any work on be-
half of the FAA.

(D) TRANSPARENCY.—In developing and
administering the Center of Excellence, the Ad-
ministrator shall develop procedures to facilitate
transparency and appropriate maintenance of
records to the maximum extent practicable.

(b) AUTHORIZATION OF APPROPRIATIONS.—There
are authorized to be appropriated to the Administrator
such sums as may be necessary to carry out this section.

SEC. 10. PILOT OPERATIONAL EVALUATIONS.

(a) PILOT OPERATIONAL EVALUATIONS.—Not later
than 1 year after the date of enactment of this Act, the
Administrator shall revise existing policies for manufac-
turers of transport category airplanes that are expected
to be operated for scheduled passenger air transporta-
tion to ensure that pilot operational evaluations for new air-
planes that are in the process of being certified use pilots
from air carriers that are expected to operate such air-
planes.

(b) REQUIREMENT.—The air carrier pilots used for
such evaluations shall include a representative sample of
such carriers' pilots with respect to levels of experience.
Such sampling of pilots shall come from foreign and do-
meric air carriers, if necessary, to produce such rep-
resentative sampling.

SEC. 11. FAA CONTINUING EDUCATION AND TRAINING.

(a) IN GENERAL.—Chapter 445 of title 49, United
States Code, is amended by adding at the end the fol-
lowing:

§ 44519. Certification personnel continuing edu-
cation and training

“(a) OFFICE.—Not later than 120 days after the
date of enactment of this section, the Administrator of the
FAA shall establish an Office of Continuing Education.

“(b) PROGRAM.—The Office of Continuing Education
shall administer a continuing education and training pro-
gram.

“(e) PURPOSE OF PROGRAM.—The purpose of the
continuing education and training program shall be to pro-
vide continuing education and training to FAA personnel
who hold positions involving aircraft certification and
flight standards, including human factors specialists, engineers, flight test pilots, inspectors, and, as determined appropriate by the Administrator, industry personnel who may be responsible for compliance activities including designees.

“(d) FUNCTIONS.—In administering the continuing education and training program, the Office of Continuing Education shall—

“(1) in consultation with outside experts, develop—

“(A) an education and training curriculum on current and new aircraft technologies, human factors, project management, and the roles and responsibilities associated with oversight of designees; and

“(B) recommended practices for compliance with FAA regulations; and

“(2) hire and manage a staff of qualified individuals to educate and train FAA personnel described in subsection (c) using the education and training curriculum and best practices developed under paragraph (1).

“(e) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Administrator, $10,000,000 for each of fiscal years 2021 through 2025
to carry out this section. Amounts appropriated under the preceding sentence for any fiscal year shall remain available until expended.

"(f) DEFINITION OF FAA.—In this section, the term ‘FAA’ means the Federal Aviation Administration.”.

(b) TABLE OF CONTENTS.—The analysis for chapter 445 of title 49, United States Code, is amended by inserting after the item relating to section 44518 the following:

“44519. Certification personnel continuing education and training.”.

SEC. 12. AUTHORIZATION OF APPROPRIATIONS FOR SCIENTIFIC AND TECHNICAL ADVISORS.

There are authorized to be appropriated to the Administrator, $10,000,000 for each of fiscal years 2021 through 2030 for salaries of specialized technical personnel with expertise in new and emerging technologies for such personnel to advise the Administrator on the development of technical standards for new technologies and operations to be implemented in the FAA’s regulatory and certification programs. Amounts appropriated under the preceding sentence for any fiscal year shall remain available until expended.

SEC. 13. PROHIBITION ON CERTAIN PERFORMANCE-BASED INCENTIVES.

Section 106(l) of title 49, United States Code, is amended by adding at the end the following:
“(7) Prohibition on Certain Performance-Based Incentives.—No employee of the Administration shall be given an award, financial incentive, other compensation, or recognition as a result of actions to meet performance goals related to meeting schedules or quotas for certificates issued under section 44704.”.

SEC. 14. SAFETY REPORTING PROGRAM.

(a) In General.—Not later than 1 year after the date of enactment of this Act, in order to improve safety in the individual certification application review process and potential trends relating to safety concerns, the Administrator shall maintain a voluntary safety reporting program for FAA employees to confidentially and voluntarily report instances where they have identified safety concerns during certification or oversight processes.

(b) Safety Reporting Program Requirements.—In maintaining the safety reporting program under subsection (a), the Administrator shall ensure the following:

(1) The FAA maintains a reporting culture that encourages human factors specialists, engineers, flight test pilots, inspectors, and other appropriate FAA employees to voluntarily report concerns that
an aspect of an aircraft design may be noncompliant, nonconforming, or unsafe.

(2) The safety reporting program is non-punitive, confidential, and protects employees from adverse employment actions related to their participation in the program.

(3) The safety reporting program identifies exclusionary criteria for the program.

(4) Collaborative development of the program with bargaining representatives of employees under section 7111 of title 5, United States Code, who are employed in the Aircraft Certification Service or Flight Standards Service of the Administration (or, if unable to reach an agreement collaboratively, the Administrator shall negotiate with the representatives in accordance with section 40122(a) of title 49, United States Code, regarding the development of the program).

(5) Full and collaborative participation in the program by the bargaining representatives of employees described in subparagraph (4).

(6) The Administrator thoroughly reviews safety reports to determine whether there is a hazard, defect, noncompliance, nonconformance, or process error.
(7) The Administrator thoroughly reviews safety reports to determine whether potential weaknesses in the aircraft certification processes led to safety concerns being raised regarding aircraft, engine, propeller, and appliance designs, including systems, components, parts, and materials.

(8) If the Administrator determines that a hazard, defect, noncompliance, nonconformance, or process error exists, the root cause is identified and appropriate corrective action is taken to rectify the defect, noncompliance, nonconformance, or process error.

(c) OUTCOMES.—Results of safety report reviews under this section may be used to—

(1) improve—

(A) safety systems, hazard control, and risk reduction;

(B) certification systems;

(C) FAA oversight; and

(D) compliance and conformance; and

(2) implement lessons learned.

(d) REPORT FILING.—The Administrator shall establish requirements for when in the certification process reports may be filed, which may include certification milestones, timelines, or other decision-making points, with the
goals of ensuring that identified issues can be timely ad-
dressed and fostering open dialogue between applicants
and FAA employees throughout the certification process.

(e) **Integration With Other Safety Reporting Programs.**—The Administrator shall harmonize the safety reporting program maintained under subsection (a) with other internal safety reporting programs the FAA maintains.

(f) **Report to Congress.**—Not later than 2 years after the date of enactment of this Act, and annually thereafter, the Administrator shall submit to the appropriate committees of Congress a report on the effectiveness of the safety reporting program maintained under subsection (a).

**Sec. 15. Protection of Whistleblowers.**

Section 42121(a) of title 49, United States Code, is amended—

(1) by redesignating paragraphs (1) through (4) as subparagraphs (A) through (D), respectively, and moving the margins of such subparagraphs 2 ems to the right;

(2) in the subsection heading, by striking “Air-
line”;

(3) by striking “No air carrier” and inserting the following:
“(1) AIR CARRIERS.—No air carrier”; and
(4) by adding at the end the following:
“(2) AIRCRAFT MANUFACTURERS.—No aircraft, engine, or propeller manufacturer that holds a certificate issued pursuant to section 44704 of title 49, United States Code, or contractor of, subcontractor of, or supplier to, such a manufacturer may discharge an employee or otherwise discriminate against an employee with respect to compensation, terms, conditions, or privileges of employment because the employee (or any person acting pursuant to a request of the employee)—
“(A) provided, caused to be provided, or is about to provide (with any knowledge of the employer) or cause to be provided to the employer or Federal Government information relating to any violation or alleged violation of any order, regulation, or standard of the Federal Aviation Administration or any other provision of Federal law relating to aircraft, engine, or propeller manufacturer safety (including parts or components provided by contractors, subcontractors, or suppliers) under this subtitle or any other law of the United States;
“(B) has filed, caused to be filed, or is about to file (with any knowledge of the employer) or cause to be filed a proceeding relating to any violation or alleged violation of any order, regulation, or standard of the Federal Aviation Administration or any other provision of Federal law, relating to aircraft, engine, or propeller manufacturer safety (including parts or components provided by contractors, subcontractors, or suppliers) under this subtitle or any other law of the United States;

“(C) testified or is about to testify in such a proceeding; or

“(D) assisted or participated or is about to assist or participate in such a proceeding.”.

SEC. 16. REPEAL OF DESIGN AND PRODUCTION ORGANIZATION CERTIFICATE AUTHORITY.

(a) In General.—Section 44704 of title 49, United States Code, is amended—

(1) in the section heading, by striking “airworthiness certificates, and design and production organization certificates” and inserting “and airworthiness certificates”; and

(2) by striking subsection (e).
29

(b) **CONFORMING AMENDMENT.**—Section 44702(a) of title 49, United States Code, is amended, in the matter preceding paragraph (1), by striking "design organization certificates,"

**SEC. 17. ENSURING APPROPRIATE RESPONSIBILITY OF AIRCRAFT CERTIFICATION AND FLIGHT STANDARDS PERFORMANCE OBJECTIVES AND METRICS.**

(a) **REPEALS.**—Sections 211 and 221 of the FAA Reauthorization Act of 2018 (49 U.S.C. 44701 note) are repealed.

(b) **CONFORMING REPEALS.**—Paragraphs (8) and (9) of section 202(e) of the FAA Reauthorization Act of 2018 (49 U.S.C. 44701 note) are repealed.

**SEC. 18. REVIEW OF FAA CERTIFICATION EXPERTISE.**

(a) **IN GENERAL.**—Not later than 60 days after the date of enactment of this Act, and without duplicating any recently completed or ongoing reviews, the Administrator shall initiate a review of—

(1) the inspectors, human factors specialists, flight test pilots, engineers, managers, and executives in the FAA who are responsible for the certification of the design, manufacture, and operation of aircraft intended for air transportation for purposes of determining whether the FAA has the expertise
and capability to adequately understand the safety
implications of, and oversee the adoption of, new or
innovative technologies, materials, and procedures
that designers and manufacturers of such aircraft
may adopt or introduce;

(2) the Chief Scientific and Technical Advisors
program to determine whether the program should
be enhanced or expanded to bolster and support the
programs of the FAA’s Office of Aviation Safety,
with particular focus placed on the Aircraft Certifi-
cation Service and the Flight Standards Service (or
any successor organizations), particularly with re-
spect to understanding the safety implications of
new or innovative technologies, materials, aircraft
operations, and procedures, that designers and man-
ufacturers of such aircraft may adopt or introduce;
and

(3) the FAA’s compensation policies for aircraft
certification engineers, human factors specialists,
flight test pilots, and aviation safety inspectors rel-
ative to those of industry to determine whether com-
pensation is adequate to attract personnel with ade-
quate experience.

(b) Deadline for Completion.—Not later than
270 days after the date of enactment of this Act, the Ad-
ministrator shall complete the review required by sub-
section (a).

(c) BRIEFING.—Not later than 30 days after the com-
pletion of the review required by subsection (a), the Ad-
ministrator shall brief the appropriate committees of
Congress on the results of the review and any other related
review. The briefing shall include the following:

(1) An analysis of the FAA’s ability to hire
safety inspectors, human factors specialists, flight
test pilots, engineers, managers, executives, sci-
entists, and technical advisors, who have the requ-
site expertise to oversee new developments in aero-
space design and manufacturing.

(2) A plan for the FAA to improve the overall
expertise of the FAA’s personnel who are responsible
for the oversight of the design and manufacture of
aircraft.

(3) Recommendations for such legislation, if
any, as the Administrator determines necessary to
carry out the plan required under paragraph (2).

(d) CONSULTATION REQUIREMENT.—In completing
the review under subsection (a), the Administrator shall
consult and collaborate with appropriate stakeholders, in-
cluding labor organizations (including those representing
aviation workers, FAA aviation safety engineers, human
factors specialists, flight test pilots, and FAA aviation
safety inspectors), air carriers and aircraft and aviation
manufacturers.

SEC. 19. TRANSPORT AIRPLANE RISK ASSESSMENT METH-
ODOLOGY.

(a) DEADLINES.—

(1) AGREEMENT.—Not later than 15 days after
the date of enactment of this Act, the Administrator
shall enter into an agreement with the Transpor-
tation Research Board to develop a report regarding
the methodology and effectiveness of the Transport
Airplane Risk Assessment Methodology (TARAM)
process used by the FAA.

(2) REPORT.—Not later than 180 days after
the date of enactment of this Act, the Transpor-
tation Research Board shall deliver such report to
the appropriate committees of Congress.

(b) ELEMENTS.—The report under subsection (a)
shall include the following elements:

(1) An assessment of the Transport Airplane
Risk Assessment Methodology (TARAM) method-
ology.

(2) An assessment of the effectiveness of the
Transport Airplane Risk Assessment Methodology
(TARAM) for the purposes of improving aviation safety.

(3) Recommendations to improve the methodology and effectiveness of the Transport Airplane Risk Assessment Methodology (TARAM) as an element of aviation safety.

(c) REQUIRED BRIEFINGS.—

(1) IN GENERAL.—Not later than 7 days after the completion of any Transport Airplane Risk Assessment Methodology (TARAM) conducted pursuant to an aviation incident in which loss of life occurred, the Administrator shall provide a briefing to the appropriate committees of Congress on the findings and recommendations of the Transport Airplane Risk Assessment Methodology (TARAM).

(2) REQUIRED SUBMISSION.—Any briefing required under paragraph (1) shall include the provision of copies of the Transport Airplane Risk Assessment Methodology (TARAM) to the appropriate committees of Congress.

(3) NO DELEGATION.—The requirement for the Administrator to provide a briefing under paragraph (1) shall not be delegated to any other official of the FAA.
SEC. 20. FOREIGN CIVIL AVIATION AUTHORITY ASSISTANCE.

(a) INTERNATIONAL AVIATION SAFETY.—

(1) IN GENERAL.—Section 40104(b) of title 49, United States Code, is amended—

(A) by striking "The Administrator shall"
and inserting the following:

"(1) IN GENERAL.—The Administrator shall";

and

(B) by adding at the end the following:

"(2) BILATERAL AND MULTILATERAL ENGAGEMENT; TECHNICAL ASSISTANCE.—The Administrator shall—

"(A) with the concurrence of the Secretary
of State, engage bilaterally and multilaterally, including with the International Civil Aviation
Organization (ICAO), on an ongoing basis to bolster international collaboration, data sharing, and harmonization of international aviation safety requirements including through—

"(i) sharing of continued operational safety information;

"(ii) prioritization of pilot training deficiencies, including manual flying skills and flight crew training, to discourage over
reliance on automation, further bolstering the components of airmanship;

“(iii) encouraging the consideration of the safety advantages of appropriate Federal regulations, which may include relevant Federal regulations pertaining to flight crew training and qualifications; and

“(iv) prioritizing any other flight crew training areas that the Administrator believes will enhance all international aviation safety; and

“(B) seek to expand technical assistance provided by the Federal Aviation Administration in support of enhancing international aviation safety, including by—

“(i) promoting and enhancing effective oversight systems, including operational safety enhancements identified through data collection and analysis;

“(ii) promoting and encouraging compliance with international safety standards by counterpart civil aviation authorities;

“(iii) minimizing cybersecurity threats and vulnerabilities across the aviation ecosystem;
“(iv) supporting the sharing of safety information, best practices, risk assessments, and mitigations through established international aviation safety groups; and
“(v) providing technical assistance on any other aspect of aviation safety that the Administrator determines is likely to enhance international aviation safety.”.

(2) AUTHORIZATION OF APPROPRIATIONS.—
There are authorized to be appropriated such sums as may be necessary to carry out the amendments made by this subsection.

(b) ASSISTANCE TO FOREIGN AVIATION AUTHORITIES.—

(1) IN GENERAL.—Section 40113(e)(1) of title 49, United States Code, is amended by inserting “The Administrator also may provide technical assistance related to all aviation safety-related training and operational services in connection with bilateral and multilateral agreements, including further bolstering the components of airmanship.” after the first sentence.

(2) AUTHORIZATION OF APPROPRIATIONS.—
Section 40113(e) of title 49, United States Code, is amended by adding at the end the following:
“(5) AUTHORIZATION OF APPROPRIATIONS.—

There are authorized to be appropriated to the Administrator, $10,000,000 for each of fiscal years 2021 through 2026 to carry out this subsection. Amounts appropriated under the preceding sentence for any fiscal year shall remain available until expended.”.

(c) SUPPORT FOR IMPLEMENTATION OF IMPROVEMENTS TO INTERNATIONAL PILOT TRAINING TO ADDRESS FLIGHT DECK AUTOMATION AND HUMAN FACTORS.—

(1) AUTHORIZATION OF APPROPRIATIONS.—

There are authorized to be appropriated to the International Organizations and Programs (IO&P) account of the Department of State, $2,000,000 for each of fiscal years 2021 through 2026, to remain available until expended. Amounts appropriated under the authority of the preceding sentence should be used for expenditures attributable to supporting implementation of recommendations included in the working paper titled, “Pilot Training Improvements to Address Automation Dependency” offered by the United States at the 40th Assembly of ICAO and related to human-machine interface.

(2) SENSE OF CONGRESS REGARDING INTERNATIONAL PILOT TRAINING STANDARDS.—
(A) **FINDINGS.**—Congress makes the following findings:

(i) Increased reliance on automation in commercial aviation risks a degradation of pilot skills in flight path management using manual flight control.

(ii) Manual flight skills are essential for pilot confidence and competence.

(iii) During the 40th Assembly of ICAO, the United States, Canada, Peru, and Trinidad and Tobago presented a working paper titled, “Pilot Training Improvements to Address Automation Dependency”.

(iv) The working paper outlines recommendations for the Assembly to mitigate the consequences of automation dependency, including identifying competency requirements for flight path management using manual flight control and assessing the need for new or amended international standards or guidance.

(B) **SENSE OF CONGRESS.**—It is the sense of Congress that, as soon as practicable—
(i) the recommendations included in the working paper titled “Pilot Training Improvements to Address Automation Dependency” offered by the United States at the 40th Assembly of ICAO should be carried out by the Assembly; and

(ii) the United States should work with ICAO and other international aviation safety groups, further bolstering the components of airmanship.

SEC. 21. NATIONAL AIR GRANT FELLOWSHIP PROGRAM.

(a) PROGRAM.—

(1) PROGRAM MAINTENANCE.—The Administrator shall maintain within the FAA a program to be known as the “National Air Grant Fellowship Program”.

(2) PROGRAM ELEMENTS.—The National Air Grant Fellowship Program shall provide support for the fellowship program under subsection (b).

(3) RESPONSIBILITIES OF ADMINISTRATOR.—

(A) GUIDELINES.—The Administrator shall establish guidelines related to the activities and responsibilities of air grant fellowships under subsection (b).
(B) QUALIFICATIONS.—The Administrator shall by regulation prescribe the qualifications required for designation of air grant fellowships under subsection (b).

(C) AUTHORITY.—In order to carry out the provisions of this section, the Administrator may—

(i) appoint, assign the duties, transfer, and fix the compensation of such personnel as may be necessary, in accordance with civil service laws;

(ii) make appointments with respect to temporary and intermittent services to the extent authorized by section 3109 of title 5, United States Code;

(iii) enter into contracts, cooperative agreements, and other transactions without regard to section 6101 of title 41, United States Code;

(iv) notwithstanding section 1342 of title 31, United States Code, accept donations and voluntary and uncompensated services;

(v) accept funds from other Federal departments and agencies, including agen-
cies within the FAA, to pay for and add to
activities authorized by this section; and
(vi) promulgate such rules and regulations as may be necessary and appropriate.

(4) DIRECTOR OF NATIONAL AIR GRANT FEL-
LOWSHIP PROGRAM.—

(A) IN GENERAL.—The Administrator
shall appoint, as the Director of the National
Air Grant Fellowship Program, a qualified indi-
vidual who has appropriate administrative expe-
rience and knowledge or expertise in fields re-
lated to aerospace. The Director shall be ap-
pointed and compensated, without regard to the
provisions of title 5 governing appointments in
the competitive service, at a rate payable under
section 5376 of title 5, United States Code.

(B) DUTIES.—Subject to the supervision
of the Administrator, the Director shall admin-
ister the National Air Grant Fellowship Pro-
gram. In addition to any other duty prescribed
by law or assigned by the Administrator, the
Director shall—

(i) cooperate with institutions of higher
education that offer degrees in fields re-
lated to aerospace;
(ii) encourage the participation of graduate and post-graduate students in the National Air Grant Fellowship Program; and

(iii) cooperate and coordinate with other Federal activities in fields related to aerospace.

(b) Fellowships.—

(1) In general.—The Administrator shall support a program of fellowships for qualified individuals at the graduate and post-graduate level. The fellowships shall be in fields related to aerospace and awarded pursuant to guidelines established by the Administrator. The Administrator shall strive to ensure equal access for minority and economically disadvantaged students to the program carried out under this paragraph.

(2) Aerospace policy fellowship.—

(A) In general.—The Administrator shall award aerospace policy fellowships to support the placement of individuals at the graduate level of education in fields related to aerospace in positions with—

(i) the executive branch of the United States Government; and
(ii) the legislative branch of the United States Government.

(B) PLACEMENT PRIORITIES FOR LEGISLATIVE FELLOWSHIPS.—

(i) IN GENERAL.—In considering the placement of individuals receiving a fellowship for a legislative branch position under subparagraph (A)(ii), the Administrator shall give priority to placement of such individuals in the following:

(I) Positions in offices of, or with Members on, committees of Congress that have jurisdiction over the FAA.

(II) Positions in offices of Members of Congress that have a demonstrated interest in aerospace policy.

(ii) EQUITABLE DISTRIBUTION.—In placing fellows in positions described under clause (i), the Administrator shall ensure that placements are equally distributed among the political parties.

(C) DURATION.—A fellowship awarded under this paragraph shall be for a period of not more than 1 year.
(3) Restriction on Use of Funds.—

Amounts available for fellowships under this subsection, including amounts accepted under subsection (a)(3)(C)(v) or appropriated under subsection (d) to carry out this subsection, shall be used only for award of such fellowships and administrative costs of implementing this subsection.

(e) Interagency Cooperation.—Each department, agency, or other instrumentality of the Federal Government that is engaged in or concerned with, or that has authority over, matters relating to aerospace—

(1) may, upon a written request from the Administrator, make available, on a reimbursable basis or otherwise, any personnel (with their consent and without prejudice to their position and rating), service, or facility that the Administrator deems necessary to carry out any provision of this section;

(2) shall, upon a written request from the Administrator, furnish any available data or other information that the Administrator deems necessary to carry out any provision of this section; and

(3) shall cooperate with the FAA and duly authorized officials thereof.

(d) Authorization of Appropriations.—There are authorized to be appropriated to the Administrator
$15,000,000 for each of fiscal years 2021 through 2025 to carry out this section. Amounts appropriated under the preceding sentence shall remain available until expended.

(e) DEFINITIONS.—In this section:

(1) DIRECTOR.—The term "Director" means the Director of the National Air Grant Fellowship Program, appointed pursuant to subsection (a)(4).

(2) FIELDS RELATED TO AEROSPACE.—The term "fields related to aerospace" means any discipline or field that is concerned with, or likely to improve, the development, assessment, operation, safety, or repair of aircraft and other airborne objects and systems, including the following:

(A) Aerospace engineering.

(B) Aerospace physiology.

(C) Aeronautical engineering.

(D) Airworthiness engineering.

(E) Electrical engineering.

(F) Human factors.

(G) Software engineering.

(H) Systems engineering.

SEC. 22. CHANGED PRODUCT RULE.

(a) RULEMAKING PROCEEDING.—

(1) IN GENERAL.—The Administrator shall conduct a rulemaking proceeding to revise the certifi-
cation basis for changed aeronautical products estab-
lished under part 21 of title 14 of the Code of Fed-
eral Regulations, in order to ensure an adequate as-
se ssment of how proposed design changes integrate
with existing systems and the associated impact of
such interaction at the aircraft level.

(2) CERTIFICATION MANAGEMENT TEAM.—

(A) RE-CHARTER.—Not later than 30 days
after the date of enactment of this Act, the Ad-
ministrator shall, in cooperation with foreign
civil aviation authorities, re-charter the Certifi-
cation Management Team to make recom-

dendations on the rulemaking to be carried
out under paragraph (1).

(B) REQUIREMENTS.—In developing rec-
ommendations under subparagraph (A), the Ad-
ministrator, through the Certificate Manage-
ment Team, shall consider, at a minimum—

(i) requiring a comprehensive inte-
grated system-level analysis, recognizing
that with complex interactive systems,
every change could interact with other
parts of the system;

(ii) requiring an assessment of pro-
posed design changes on existing systems
at the aircraft level that includes using development assurance principles, system safety principles, and validation and verification techniques;

(iii) whether the level of assessment should be proportional to the impact of the change at the aircraft level; and

(iv) what to include in the training and qualification of flight and maintenance personnel, as well as detailed and appropriate procedures for the safe operation of the aircraft.

(C) Certification Management Team Defined.—In this section, the term “Certification Management Team” means the team framework under which the FAA, the European Aviation Safety Agency, the Transport Canada Civil Aviation, and the National Civil Aviation Agency of Brazil, manage the technical, policy, certification, manufacturing, export, and continued airworthiness issues common among the 4 authorities.

(D) Briefings.—Not later than 12 months after the date on which the Certification Management Team is re-chartered in ac-
cordance with subparagraph (A), and annually thereafter until the date on which all recommendations required under subparagraph (B) are developed, the Administrator shall brief the appropriate committees of Congress on the work and status of the development of such recommendations by the Certification Management Team.

(3) OBJECTIVES.—The Administrator, when conducting the rulemaking under paragraph (1), shall address the following objectives:

(A) Ensure that changes are evaluated from an integrated, whole aircraft-human system engineering perspective and assume the whole aircraft is affected by the proposed design change until the FAA finds otherwise.

(B) Develop criteria for determining when attributes of an existing design make it incapable of supporting the safety advancements codified in title 14 of the Code of Federal Regulations, as in effect on the date of application for the change, and therefore warrant consideration of a design change or certification under a new type certificate.
(C) Develop criteria for determining what constitutes a substantial change and a significant change to address changes in software, changes in the roles and responsibilities of the flight crew, changes to maintenance practices, and other safety critical design features which may include changes in thrust, engine location, wing size, body length, and aircraft control surfaces size, function, and travel authority that result in changes to aircraft performance and handling qualities.


(E) Implement mandatory aircraft-level reviews throughout the certification process to validate the certification basis and assumptions to include risk and failure analyses at the integrated aircraft system-level, including the flight crew when appropriate.

(F) Define objective criteria for FAA's familiarization with design details.

(G) Require maintenance of relevant records of interactions between certification authorities and applicants that lead to agreements
affecting documentation and certification
deliverables.

(H) Ensure appropriate documentation of
the designation of applicable regulations to in-
clude FAA’s assessment of any exceptions such
as whether a change is significant, and any re-
quest for exemptions from airworthiness re-
quirements codified in title 14 of the Code of
Federal Regulations, as in effect on the date of
application for the change.

(b) **Final Rule Deadline.**—Not later than 24
months after the date on which all recommendations re-
quired under subsection (a)(2)(B) are developed by the
Certification Management Team, the Administrator shall
issue a final rule pursuant to the rulemaking proceeding
required under subsection (a).

(c) **Guidance Material.**—The Administrator shall
consider the following for developing orders and regulatory
guidance, including advisory circulars, where appropriate:

(1) Early FAA involvement and feedback paths
in the aircraft certification process to ensure the
FAA is aware of changes to design assumptions and
product design impacting a changed product assess-
ment.
(2) Feedback paths in the aircraft certification process to ensure that compliance, system safety, and flight deck and human factors aspects are considered for the product design throughout its development and certification.

(3) Presentation to the FAA of new technology, novel design, or safety critical features or systems, initially and throughout the certification process, when development and certification prompt design or compliance method revision.

(4) Roles and responsibilities of the applicant and the FAA in assessing cross-functional interface assumptions in determining what constitutes a significant change or a substantial change.


(6) The intent and expected use of additional design requirements and conditions, including the application of these additional design requirements and conditions in future application modifications and supplemental type certificates.

(7) Type certificate data sheet improvements to accurately state which regulations and amendment
level the aircraft complies to and when compliance is
limited to a subset of the aircraft.

(8) Policies to guide applicants on proper visi-
bility, clarity, and consistency of key design and
compliance information that is submitted for certifi-
cation, particularly with new design features.

(9) Early coordination processes with the FAA
for the functional hazard assessments validation and
preliminary system safety assessments review to en-
sure the proposed system architecture can reason-
ably meet the functional hazard safety requirements.

(10) The development, validation, and imple-
mentation of analytical tools appropriate for the
analysis of complex system for the FAA and appli-
cants.

(11) Adequate and complete functional descrip-
tions, organized in a clear and understandable for-
mat, particularly regarding integrated systems and
how the functions interact.

(12) Early coordination processes to highlight
and properly describe any functional change at the
earliest stage possible in the certification process re-
gardless of the preliminary functional hazard classi-
ification.
(d) **TRAINING MATERIALS.**—The Administrator shall—

1. develop training materials for establishing the certification basis for changed aeronautical products pursuant to section 21.10 of title 14, Code of Federal Regulations, applications for a new type certificate pursuant to section 21.19 of such title, and the regulatory guidance developed under subsection (c); and

2. procedures for disseminating such materials to implementing personnel of the FAA, designees and applicants.

(e) **INTERNATIONAL ENGAGEMENT.**—The Administrator shall engage with ICAO and foreign civil aviation authorities to help ensure the adoption of an amended changed product rule on a global basis, consistent with ICAO standards.

**SEC. 23. TECHNICAL CERTIFICATION BOARD.**

Section 44702 of title 49, United States Code, is amended by adding at the end the following:

"(e) **TECHNICAL CERTIFICATION BOARD.**—"

1. **IN GENERAL.**—For any new, amended, and supplemental type certification projects for transport category airplanes that involve new technology or novel design, the Administrator shall, if it
is determined to be in the interest of safety, establish a Technical Certification Board.

"(2) MEMBERS.—The Board shall be comprised of independent qualified subject matter experts appointed by the Administrator. Such appointments may include FAA engineers, aviation safety inspectors, senior technical specialists, and Chief Scientist and Technical Advisors, and outside qualified subject matter experts, including from the U.S. Air Force, Volpe National Transportation Systems Center, and the National Aeronautics and Space Administration.

"(3) AVAILABILITY.—In order to carry out its duties with respect to the areas specified in paragraph (4), the Board shall be available to the Administrator, upon request, any time during the certification process.

"(4) DUTIES.—The Board shall advise the Administrator and make written recommendations to the FAA, to be retained in the certification project file, including recommendations for any plans, analyses, assessments, and reports required to support and document the certification project, in the following areas associated with the new technology or novel design:
"(A) Initial review of design proposals proposed by the applicant and the establishment of the certification basis.

"(B) Identification of new technology, novel design, or safety critical design features or systems that are potentially catastrophic, either alone or in combination with another failure.

"(C) Determination of compliance findings, system safety assessments, and safety critical functions the FAA should retain in terms of new technology, novel design, or safety critical design features or systems.

"(D) Evaluation of the FAA's expertise or experience necessary to support the project.

"(E) Review and evaluation of an applicant's request for exceptions or exemptions from compliance with airworthiness standards codified in title 14 of the Code of Federal Regulations, as in effect on the date of application for the change.

"(F) Conduct of design reviews, procedure evaluations, and training evaluations.
"(G) Review of the applicant's final design documentation and other data to evaluate compliance with all FAA regulations.

"(5) DOCUMENTATION OF FAA RESPONSE.—The Administrator shall document in writing the FAA's response to each recommendation of each Board and shall retain such response in the certification project file.

"(6) REPORT.—Not later than 1 year after the date of enactment of this subsection, and annually thereafter, the Administrator shall submit to the appropriate committees of Congress a report on the establishment of each Board in accordance with this subsection, including the role, performance, and composition of each Board and any instances in which the Administrator declined to establish a Board for a certification project.

"(7) DEFINITION.—In this subsection, the term 'Board' means a Technical Certification Board established under paragraph (1).”

SEC. 24. EMERGING SAFETY TRENDS IN AVIATION.

(a) GENERAL.—Not later than 180 days after the date of enactment of this Act, the Administrator shall enter into an agreement with the Transportation Research Board for the purposes of developing an annual report
identifying, categorizing, and analyzing emerging safety
trends in air transportation.

(b) FACTORS.—The emerging safety trends report
should be based on the following data:

(1) The National Transportation Safety
Board’s investigation of accidents under section
1132 of title 49, United States Code.

(2) The Administrator’s investigations of acci-
dents and incidents under section 40113 of title 49,
United States Code.

(3) Information provided by air operators pur-
suant to safety management systems.

(4) International investigations of accidents and
incidents, including reports, data, and information
from foreign authorities and ICAO.

(5) Other sources deemed appropriate for estab-
lishing emerging safety trends in the aviation sector,
including the FAA’s annual safety culture assess-
ment required under subsection (e).

(c) SAFETY CULTURE ASSESSMENT.—The Adminis-
trator shall conduct an annual safety culture assessment,
which shall include surveying all employees in the FAA’s
Aviation Safety organization (AVS) to determine the em-
ployees’ collective opinion regarding, and to assess the
health of, AVS' safety culture and implementation of any voluntary safety reporting program.

(d) EXISTING REPORTING SYSTEMS.—The Executive Director, in consultation with the Secretary and Administrator, may take into account and, as necessary, harmonize data and sources from existing reporting systems within the Department of Transportation and FAA.

(e) ANNUAL REPORT TO CONGRESS.—One year after the Administrator enters into the agreement with the Transportation Research Board as set forth in subsection (a), and annually thereafter, the Executive Director, in consultation with the Secretary and Administrator, shall submit to the appropriate committees of Congress a report identifying the emerging safety trends in air transportation.

(f) DEFINITIONS.—In this section:

(1) EXECUTIVE DIRECTOR.—The term “Executive Director” means the Executive Director of the Transportation Research Board.

(2) SECRETARY.—The term “Secretary” means the Secretary of Transportation.
sec. 25. Federal Aviation Administration Account-Ability Enhancement.

(a) Enhancement of the Aviation Safety Whistleblower Investigation Office in the Federal Aviation Administration.—

(1) Renaming of the Office.—Section 106(t)(1) of title 49, United States Code, is amended by striking “an Aviation Safety Whistleblower Investigation Office” and inserting “the Office of Accountability and Whistleblower Protection”.

(2) Duties.—

(A) In General.—Section 106(t)(3) of title 49, United States Code, is amended—

(i) in subparagraph (A)—

(I) in clause (i)—

(aa) by inserting “and investigate in accordance with subsection (w)” after “receive”; and

(bb) by striking “(if the certificate holder does not have a similar in-house whistleblower or safety and regulatory noncompliance reporting process)”;

(II) in clause (ii), by striking “and” at the end;
(III) in clause (iii), by striking the period at the end and inserting "; and"
(IV) adding at the end the following:

"(iv) investigate in accordance with subsection (w) any misconduct alleged or discovered as a result of an investigation conducted pursuant to clause (i);
(v) receive and investigate in accordance with subsection (w) complaints and information concerning whistleblower retaliation by employees of the Agency;
(vi) assess the results of any investigation under clause (i), (iv), or (v), and if there is a finding of whistleblower retaliation or related misconduct, provide a recommendation for a range of disciplinary actions to the Agency proposing official;
(vii) if the Agency proposing official deviates from the recommended range of disciplinary action described in clause (vi), or if the Agency deciding official deviates from the range of disciplinary actions proposed by the Agency proposing official, no-
tify Congress in writing not later than 10
days after such deviation; and
“(viii) comply with all legal require-
ments concerning disciplinary actions re-
lated to whistleblower retaliation.”;
(ii) in subparagraph (B), by striking
“subparagraph (A)(i)” and inserting
“clause (i), (iv), or (v) of subparagraph
(A)”;
(iii) in subparagraph (C), by striking
“subparagraph (A)(i)” and inserting
“clause (i), (iv), or (v) of subparagraph
(A)”; and
(iv) in subparagraph (D)—
(I) by striking “assessment” and
inserting “investigation”;
(II) by striking “subparagraph
(A)(i)” and inserting “clause (i), (iv),
or (v) of subparagraph (A)”; and
(III) by inserting “, misconduct,
or whistleblower retaliation” after
“aviation safety”.
(B) LIMITATION.—Section 106(t)(2) of
title 49, United States Code, is amended by
adding at the end the following:
“(E) LIMITATION OF DUTIES.— The Administrator may only assign to the Director responsibilities relating to the duties of the Office described in paragraph (3).”

(C) CONFORMING AMENDMENTS.—Section 106(t) of title 49, United States Code, is amended—

(i) in paragraph (5), by inserting “misconduct, or whistleblower retaliation” after “aviation safety”;

(ii) in paragraph (7)—

(I) in the matter preceding subparagraph (A), by striking “October 1” and inserting “November 15”;

(II) in subparagraph (A), by striking “paragraph (3)(A)(i) in the preceding 12-month period” and inserting “clause (i), (iv), or (v) of paragraph 3(A) in the preceding fiscal year”; and

(III) by adding at the end the following flush sentence:

“Each report to Congress required under this paragraph shall be provided directly to Congress without prior review or comment by the Administrator, the
Secretary, or the Director of the Office of Management and Budget.”; and

(iii) by adding at the end the following:

“(8) STAFF AND RESOURCES.—The Administrator shall ensure that the Director has such staff, resources, and access to information as may be necessary to carry out the functions of the Office.”.

(b) OFFICE OF THE WHISTLEBLOWER OMBUDSMAN IN THE FEDERAL AVIATION ADMINISTRATION.—Section 106 of title 49, United States Code, is amended by adding at the end the following:

“(u) OFFICE OF THE WHISTLEBLOWER OMBUDSMAN.—

“(1) ESTABLISHMENT.—The Administrator shall establish in the Federal Aviation Administration (in this subsection referred to as the ‘Agency’) an Office of the Whistleblower Ombudsman (in this subsection referred to as the ‘Office’).

“(2) OMBUDSMAN.—

“(A) IN GENERAL.—The Office shall be headed by an Ombudsman, who shall be selected by the Administrator.

“(B) QUALIFICATIONS.—The individual selected as Ombudsman shall have knowledge of
Federal labor law and demonstrated government experience in human resource management, conflict resolution, and delivering training for a geographically dispersed organization.

"(C) RESTRICTION.—An individual may not be selected as the Ombudsman if such individual was an officer or employee of the Agency during the 2-year period that precedes the date of such selection.

"(3) DUTIES.—

"(A) IN GENERAL.—The Ombudsman shall carry out the following duties:

"(i) Educate Agency employees about prohibitions on retaliation and any specific rights or remedies with respect to any retaliatory practice.

"(ii) Serve as an independent confidential resource for Agency employees to discuss any specific retaliation allegation and available rights or remedies based on the circumstances.

"(iii) Coordinate with Human Resource Management, the Office of Accountability and Whistleblower Protection, the Office of Professional Responsibility, and
the Office of the Chief Counsel, as necessary.

"(iv) Coordinate with the Office of the Inspector General of the Department of Transportation's Whistleblower Protection Coordinator and the Office of the Special Counsel, as necessary.

"(v) Conduct outreach and training within the Agency to mitigate retaliation and promote timely and appropriate processing of any protected disclosure or allegation of retaliation.

"(B) LIMITATION.—The Administrator may only assign to the Ombudsman responsibilities relating to the duties of the Office described in subparagraph (A).

"(4) STAFF AND RESOURCES.—The Administrator shall ensure that the Ombudsman has such staff, resources, and access to information as may be necessary to carry out the functions of the Office.

"(5) REPORT TO CONGRESS.—

"(A) IN GENERAL.—Not later than November 15 of each year, the Ombudsman shall submit to the Committee on Commerce, Science, and Transportation of the Senate and
the Committee on Transportation and Infrastructure of the House of Representatives a report regarding the duties carried out during the preceding fiscal year. Each report shall include the following:

"(i) The number of employee consultations during such fiscal year and a summary of such consultations.

"(ii) The number of reported incidents of retaliation during such fiscal year and, if applicable, a description of the disposition of such incidents during such fiscal year.

"(iii) Recommendations for such legislation and administrative action as the Ombudsman determines appropriate.

"(B) DIRECT REPORTING.—Each report required under this paragraph shall be provided directly to the committees of Congress described in subparagraph (A) without prior review or comment by the Administrator, the Secretary of Transportation, or the Director of the Office of Management and Budget."

(c) OFFICE OF PROFESSIONAL RESPONSIBILITY IN THE FEDERAL AVIATION ADMINISTRATION.—Section 106
of title 49, United States Code, as amended by subsection (b), is amended by adding at the end the following:

"(v) Office of Professional Responsibility.—

"(1) Establishment.—The Administrator shall establish in the Federal Aviation Administration (in this subsection referred to as the ‘Agency’) an Office of Professional Responsibility (in this subsection referred to as the ‘Office’).

"(2) Duties.—The Office shall carry out the following duties:

"(A) Receive any complaints and information concerning misconduct by managers within the Agency.

"(B) Assess any complaint and information concerning misconduct by managers received under this paragraph and determine whether sufficient information exists to initiate an investigation in accordance with subsection (w).

"(C) Except as provided in subparagraph (D), refer each misconduct case, based on the nature of the allegations, to—

"(i) the Office of the Inspector General of the Department of Transportation
for investigation and appropriate referral, as necessary; or

"(ii) the appropriate venue within the Agency for investigation in accordance with subsection (w) and adjudication in accordance with subsection (x), unless the Office decides to retain such case.

"(D) Retain and independently investigate in accordance with subsection (w) any allegation, other than an allegation investigated by the Office of Accountability and Whistleblower Protection or referred outside of the Agency, that carries a possible penalty of suspension of pay for more than 14 days.

"(E) Record and track the disposition of each misconduct case received under this paragraph.

"(3) STAFF AND RESOURCES.—The Administrator shall ensure that the Office has such staff, resources, and access to information as may be necessary to carry out the functions of the Office.

"(4) DEFINITION.—For purposes of this subsection, the term ‘manager’ means an employee of the Agency who is a supervisor or management offi-
cial, as defined in section 7103(a) of title 5, United
States Code.”.

(d) MISCONDUCT INVESTIGATIONS AND ADJUDICA-
TIONS IN THE FEDERAL AVIATION ADMINISTRATION.—
Section 106 of title 49, United States Code, as amended
by subsection (c), is amended by adding at the end the
following:

“(w) MISCONDUCT INVESTIGATIONS.—

“(1) ESTABLISHMENT OF POLICY.—

“(A) IN GENERAL.—The Administrator
shall establish an investigative policy that gov-
erns any investigation of misconduct by a man-
ger conducted by the Federal Aviation Admin-
istration (in this subsection referred to as the
‘Agency’).

“(B) PRESERVATION OF COLLECTIVE BARGAINING AGREEMENTS.—The investigative pol-
icy established under subparagraph (A) shall
not apply to, or in the future, be extended by
the Administrator to apply to, any employee
covered by or eligible to be covered by a collect-
tive bargaining agreement entered into by the
Agency.

“(2) REQUIREMENTS.—The investigative policy
established under paragraph (1) shall require the
utilization of investigative best practices to ensure
independent and objective investigation and accurate
recording and reporting of such investigation, in-
cluding—

“(A) managing case files to ensure the in-
tegrity of the information contained in such
case files;

“(B) conducting interviews in a manner
that ensures truthful answers and accurate
records of such interviews;

“(C) coordinating with the Office of the
Inspector General of the Department of Trans-
portation, the Office of the Special Counsel,
and the Attorney General, as necessary; and

“(D) completing investigations in a timely
manner.

“(3) DEFINITION.—For purposes of this sub-
section, the term ‘manager’ has the meaning given
such term in subsection (v)(4).

“(x) DISCIPLINE MANAGEMENT.—

“(1) ESTABLISHMENT OF POLICY.—

“(A) IN GENERAL.—The Administrator
shall establish a discipline management policy
that governs any adjudication of an investiga-
tion of misconduct by a manager conducted by
the Federal Aviation Administration (in this subsection referred to as the 'Agency').

“(B) PRESERVATION OF COLLECTIVE BARGAINING AGREEMENTS.—The discipline management policy established under subparagraph (A) shall not apply to, or in the future, be extended by the Administrator to apply to, any employee covered by or eligible to be covered by a collective bargaining agreement entered into by the Agency.

“(2) REQUIREMENTS.—The discipline management policy established under paragraph (1) shall require—

“(A) except as provided in subsection (t)(3)(A) or in a case where the allegation involved carries a possible penalty of suspension of pay for 14 days or less, the Administrator to appoint an individual to serve as the Agency proposing official in any adjudication conducted by the Agency;

“(B) except in a case where the allegation involved carries a possible penalty of suspension of pay for 14 days or less, the Administrator to appoint an individual to serve as the Agency de-
ciding official in any adjudication conducted by
the Agency;

"(C) the Agency to conduct any adjudica-
tion in accordance with best practices; and

"(D) the Agency to complete—

"(i) the discipline proposal process,
including an opportunity for employee re-
response, not later than 60 days after the re-
ceipt of a completed misconduct investiga-
tion; and

"(ii) the decision process, including
any employee appeal, not later than 60
days after the conclusion of the discipline
proposal process.

"(3) DEFINITION.—For purposes of this sub-
section, the term ‘manager’ has the meaning given
such term in subsection (v)(4).”.

SEC. 26. SYSTEMS SAFETY ASSESSMENT DOCUMENT
TRACEABILITY PROCEDURES AND CLARITY
OF PROCEDURES FOR REVISIONS.

(a) IN GENERAL.—Not later than 90 days after the
date of enactment of this Act, the Administrator shall
begin developing guidance for document traceability and
clarity of explanations for changes to aircraft type designs
and system safety assessment certification documents.
1 The Administrator shall finalize such guidance not later
2 than 1 year after the date of enactment of this Act.
3 (b) REQUIREMENT.—In developing the guidance re-
4 quired under subsection (a), the Administrator shall con-
5 sider existing guidance, and the implications for con-
6 ducting a systems safety assessment, and emphasize the
7 importance of adequate documentation of how and when
8 changes to aircraft type designs are made, with particular
9 attention to changes resulting in a functional hazard as-
10 sessment classification of major and above, as that term
11 is defined by the FAA Advisory Circular 25.1309.1A (or
12 any successor or replacement circular).
13 SEC. 27. REQUIRED SUBMISSION OF OUTLINE OF SYSTEM
14 CHANGES AT THE BEGINNING OF THE CERT-
15 TIFICATION PROCESS.
16 (a) IN GENERAL.—Not later than 180 days after the
17 date of enactment of this Act, the Administrator shall ini-
18 tiate a process to update type certification procedures to
19 require a manufacturer to submit a document at the be-
20 beginning of the process for certification of an aircraft type,
21 including an amended or supplemental type, that outlines,
22 to the maximum extent practicable, all intended changes
23 to new and existing systems. The Administrator shall fi-
24 nalize the updating of type certification procedures not
25 later than 18 months after initiating such process.
(b) **APPLICATION.**—Compliance with the type certification procedures updated under subsection (a) shall not limit a manufacturer to the anticipated revisions submitted in a document or prohibit a manufacturer from making necessary changes as the design process proceeds. Non-inclusion of an unanticipated change shall not constitute noncompliance with such procedures, nor shall the Administrator have the ability to approve or deny the revision based solely on such non-inclusion.

**SEC. 28. AUTHORIZATION OF APPROPRIATIONS FOR THE ADVANCED MATERIALS CENTER OF EXCELLENCE.**

Section 44518 of title 49, United States Code, is amended by adding at the end the following:

"(c) **AUTHORIZATION OF APPROPRIATIONS.**—There are authorized to be appropriated to the Administrator $10,000,000 for each of fiscal years 2021 through 2025 to carry out this section. Amounts appropriated under the preceding sentence for each fiscal year shall remain available until expended."

**SEC. 29. PROMOTING AVIATION REGULATIONS FOR TECHNICAL TRAINING.**

(a) **NEW REGULATIONS REQUIRED.**—

(1) **INTERIM FINAL REGULATIONS.**—Not later than 90 days after the date of enactment of this sec-
tion, the Administrator shall issue interim final regulations to establish requirements for issuing aviation maintenance technician school certificates and associated ratings and the general operating rules for the holders of those certificates and ratings in accordance with the requirements of this section.

(2) REPEAL OF CURRENT REGULATIONS.—

Upon the effective date of the interim final regulations required under paragraph (1), part 147 of title 14, Code of Federal Regulations (as in effect on the date of enactment of this Act) and any regulations issued under section 624 of the FAA Reauthorization Act of 2018 (Public Law 115–254) shall have no force or effect on or after the effective date of such interim final regulations.

(b) AVIATION MAINTENANCE TECHNICIAN SCHOOL CERTIFICATION REQUIRED.—No person may operate an aviation maintenance technician school without, or in violation of, an aviation maintenance technician school certificate and the operations specifications issued under the interim final regulations required under subsection (a)(1).

(c) CERTIFICATE AND OPERATIONS SPECIFICATIONS REQUIREMENTS.—
(1) APPLICATION REQUIREMENTS.—An application for a certificate to operate an aviation maintenance technician school shall include the following:

(A) A description of the facilities, including the physical address of the certificate holder's primary location for operation of the school, any additional fixed locations where training will be provided, and the equipment and materials to be used at each location.

(B) A description of the manner in which the school's curriculum will ensure students are capable of attaining a mechanic certificate and associated ratings under subpart D of part 65 of title 14, Code of Federal Regulations (or any successor regulation).

(C) A description of the manner in which the school will ensure it provides the necessary qualified instructors to meet the requirements of subsection (d)(4).

(2) CHANGE APPLICATIONS.—An application for an additional rating or amended certificate shall include only the information necessary to substantiate the reason for the requested additional rating or change.
(3) Duration of Certificate.—An aviation maintenance technician school certificate issued under the interim final regulations required under subsection (a)(1) shall be effective from the date of issue until the certificate is surrendered, suspended, or revoked.

(4) Certificate Ratings.—An aviation maintenance technician school certificate issued under the interim final regulations required under subsection (a)(1) shall specify which of the 1 or more following ratings apply to the aviation maintenance technician school:

(A) Airframe.

(B) Powerplant.

(C) Airframe and Powerplant.

(5) Operations Specifications.—An aviation maintenance technician school shall operate in accordance with operations specifications that include the following:

(A) The certificate holder's name.

(B) The certificate holder's air agency certificate number.

(C) The name and contact information of the certificate holder's primary point of contact.
(D) The physical address of the certificate holder's primary location, as provided under paragraph (1)(A).

(E) The physical address of any additional location of the certificate holder, as provided under subsection (d)(2).

(F) The ratings held, as provided under paragraph (4).

(G) Any regulatory exemption granted to the school by the Administrator.

(d) OPERATIONS REQUIREMENTS.—

(1) FACILITIES, EQUIPMENT, AND MATERIAL REQUIREMENTS.—Each aviation maintenance technician school shall provide and maintain the facilities, equipment, and materials that are appropriate to the 1 or more ratings held by the school and the number of students taught.

(2) TRAINING PROVIDED AT ANOTHER LOCATION.—An aviation maintenance technician school may provide training at any additional location that meets the requirements of the interim final regulations required under subsection (a)(1) and is listed in the certificate holder's operations specifications.

(3) TRAINING REQUIREMENTS.—Each aviation maintenance technician school shall—
(A) establish and maintain curriculum designed to continually align with mechanic airman certification standards as appropriate for the ratings held;

(B) provide training of a quality that meets the requirements of subsection (f)(1); and

(C) ensure students are eligible for a mechanic certificate and associated ratings under subpart D of part 65 of title 14, Code of Federal Regulations (or any successor regulation).

(4) INSTRUCTOR REQUIREMENTS.—Each aviation maintenance technician school shall—

(A) provide qualified instructors to teach in a manner that ensures positive educational outcomes are achieved;

(B) ensure instructors hold a mechanic certificate with 1 or more appropriate ratings (or, with respect to instructors who are not certified mechanics, ensure instructors are otherwise specifically qualified to teach their assigned content); and

(C) ensure the student-to-instructor ratio does not exceed 25:1 for any shop class.
(5) Certificate of completion.—Each aviation maintenance technician school shall provide authenticated documentation to each graduating student, indicating the student's date of graduation and curriculum completed, as described in paragraph (3)(A).

(e) Quality control system.—

(1) Accreditation.—Each aviation maintenance technician school shall—

(A) be accredited as meeting the definition of an institution of higher education provided for in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001); or

(B) establish and maintain a quality control system that meets the requirements specified in paragraph (2) and is approved by the Administrator.

(2) FAA-approved system requirements.—In the case of an aviation maintenance technician school that is not accredited as set forth in paragraph (1), the Administrator shall approve a quality control system that provides procedures for record-keeping, assessment, issuing credit, issuing of final course grades, ensuring sufficient number of instruc-
tors, granting of graduation documentation, and corrective action for addressing deficiencies.

(f) ADDITIONAL REQUIREMENTS.—

(1) MINIMUM PASSAGE RATE.—An aviation maintenance technician school shall maintain a pass rate of at least 70 percent of students that take the written, oral, or practical (or any combination thereof) FAA mechanic tests within 60 days of graduation for the most recent 3-year period.

(2) FAA INSPECTION.—An aviation maintenance technician school shall allow the Administrator such access as the Administrator determines necessary to inspect the 1 or more locations of the school for purposes of determining the school’s compliance with the interim final regulations required under subsection (a)(1) and the aviation maintenance technician school certificate issued for the school.

(3) DISPLAY OF CERTIFICATE.—An aviation maintenance technician school shall display its aviation maintenance technician school certificate at a location in the school that is visible by and normally accessible to the public.

(4) EARLY TESTING.—An aviation maintenance technician school may issue authenticated docu-
mentation demonstrating a student's satisfactory progress, completion of corresponding portions of the curriculum, and preparedness to take the aviation mechanic written general knowledge test, even if the student has not met the experience requirements of section 65.77 of title 14, Code of Federal Regulations (or any successor regulation). Any such documentation shall specify the curriculum the student completed and the completion date.

SEC. 30. LIMITATION ON DELEGATION.

Section 44702(d) of title 49, United States Code, is amended by adding at the end the following:

"(4)(A) With respect to a critical system design feature of a transport category airplane, the Administrator may not delegate any finding of compliance with applicable airworthiness standards or review of any system safety assessment required for the issuance of a certificate, including a type certificate, or amended or supplemental type certificate, under section 44704, until the Administrator has reviewed and validated any underlying assumptions related to human factors."

"(B) The requirement under subparagraph (A) shall not apply if the Administrator determines the matter involved is a routine task."
“(C) For purposes of subparagraph (A), the term ‘critical system design feature’ includes any feature (including a novel or unusual design feature) for which the failure of such feature, either independently or in combination with other failures, could result in catastrophic or hazardous failure conditions, as those terms are defined by the Administrator.”.

SEC. 31. INDEPENDENT STUDY ON TYPE CERTIFICATION REFORM.

(a) REPORT AND DEADLINES.—Not later than 30 days after the date of enactment of this Act, the Administrator shall enter into an agreement with the Transportation Research Board to review, develop, and submit a report to the Administrator in accordance with the requirements and elements set forth in this section.

(b) ELEMENTS.—The review and report under subsection (a) shall set forth analyses, assessments, and recommendations addressing the following elements for transport category airplanes:

(1) Placement of time or other limits on type certificates or amendments to an original type certificate.

(2) Requiring the Administrator, when issuing an amended or supplemental type certificate for a design not in compliance with the latest amendments
of the applicable airworthiness standards, to document any exception from the latest amendment, issue an exemption in accordance with section 44701 of title 14, United States Code, or make a finding of an equivalent level of safety in accordance with section 21.21(a)(1) of title 14, Code of Federal Regulations.

(3) Safety benefits and costs for certification of transport category airplanes resulting from the implementation of paragraphs (1) and (2).

(4) Impact on the development and introduction of advancements in new safety enhancing design and technologies, and continued operation and operational safety support of products in service in the United States and worldwide, resulting from the implementation of paragraphs (1) and (2).

(c) INVESTIGATIONS AND REPORTS.—The review and report under subsection (a) shall take into consideration investigations, reports, and assessments concerning the Boeing 737 MAX, including but not limited to investigations, reports, and assessments by the Joint Authorities Technical Review, the National Transportation Safety Board, the Department of Transportation Office of the Inspector General, the Department of Transportation Special Committee, the appropriate committees of Congress
and other congressional committees, and foreign authorities. The review and report under subsection (a) also shall consider the impact of changes made by this Act and the amendments made by this Act.

(d) Stakeholder Comments.—The Transportation Research Board shall provide stakeholders with adequate opportunity to comment on the report developed under subsection (a) as it is being prepared and finalized. The Transportation Research Board shall include all stakeholder comments received as part of the report developed under subsection (a) and submitted to the Administrator.

(e) Report to Congress.—Not later than 270 days after the report developed under subsection (a) is submitted to the Administrator, the Administrator shall submit a report to the appropriate committees of Congress regarding the FAA’s response to the findings and recommendations of the report, what actions the FAA will take as a result of such findings and recommendations, and the FAA rationale for not taking action on any specific recommendation.