115th CONGRESS 2D Session

To reauthorize programs of the Federal Aviation Administration, and for other purposes.

H.R.4

IN THE HOUSE OF REPRESENTATIVES

April 13, 2018

Mr. SHUSTER (for himself, Mr. DEFAZIO, Mr. SMITH of Texas, Mr. LOBI-ONDO, Mr. LARSEN of Washington, Mr. BARLETTA, Ms. TITUS, Mr. GRAVES of Missouri, Ms. NORTON, Mr. HUNTER, Mr. GARAMENDI, Mr. DENHAM, Mr. CAPUANO, Mr. GRAVES of Louisiana, and Mrs. NAPOLI-TANO) introduced the following bill; which was referred to the Committee on Transportation and Infrastructure, and in addition to the Committees on Financial Services, Ways and Means, Science, Space, and Technology, and Natural Resources, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

A BILL

To reauthorize programs of the Federal Aviation Administration, and for other purposes.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,

3 SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

- 4 (a) SHORT TITLE.—This Act may be cited as the
- 5 "FAA Reauthorization Act of 2018".

1 (b) TABLE OF CONTENTS.—The table of contents for

2 this Act is as follows:

Sec. 1. Short title; table of contents.

Sec. 2. Effective date.

TITLE I—AUTHORIZATIONS

Subtitle A—Funding of FAA Programs

- Sec. 101. Airport planning and development and noise compatibility planning and programs.
- Sec. 102. Facilities and equipment.
- Sec. 103. FAA operations.
- Sec. 104. Adjustment to AIP program funding.
- Sec. 105. Funding for aviation programs.

Subtitle B—Passenger Facility Charges

- Sec. 111. Passenger facility charge modernization.
- Sec. 112. Pilot program for passenger facility charge authorizations.

Subtitle C—Airport Improvement Program Modifications

- Sec. 121. Clarification of airport obligation to provide FAA airport space.
- Sec. 122. Mothers' rooms at airports.
- Sec. 123. Extension of competitive access reports.
- Sec. 124. Grant assurances.
- Sec. 125. Government share of project costs.
- Sec. 126. Updated veterans' preference.
- Sec. 127. Special rule.
- Sec. 128. Marshall Islands, Micronesia, and Palau.
- Sec. 129. Nondiscrimination.
- Sec. 130. State block grant program expansion.
- Sec. 131. Midway Island Airport.
- Sec. 132. Property conveyance releases.
- Sec. 133. Minority and disadvantaged business participation.
- Sec. 134. Contract tower program.
- Sec. 135. Airport access roads in remote locations.
- Sec. 136. Buy America requirements.

Subtitle D—Airport Noise and Environmental Streamlining

- Sec. 151. Recycling plans for airports.
- Sec. 152. Pilot program sunset.
- Sec. 153. Extension of grant authority for compatible land use planning and projects by State and local governments.
- Sec. 154. Updating airport noise exposure maps.
- Sec. 155. Stage 3 aircraft study.
- Sec. 156. Addressing community noise concerns.
- Sec. 157. Study on potential health impacts of overflight noise.
- Sec. 158. Environmental mitigation pilot program.
- Sec. 159. Aircraft noise exposure.
- Sec. 160. Community involvement in FAA NextGen projects located in metroplexes.
- Sec. 161. Critical habitat on or near airport property.

Sec. 162. Clarification of reimbursable allowed costs of FAA memoranda of agreement.

TITLE II—FAA SAFETY CERTIFICATION REFORM

Subtitle A—General Provisions

- Sec. 201. Definitions.
- Sec. 202. Safety Oversight and Certification Advisory Committee.

Subtitle B—Aircraft Certification Reform

- Sec. 211. Aircraft certification performance objectives and metrics.
- Sec. 212. Organization designation authorizations.
- Sec. 213. ODA review.
- Sec. 214. Type certification resolution process.
- Sec. 215. Review of certification process for small general aviation airplanes.

Subtitle C—Flight Standards Reform

- Sec. 231. Flight standards performance objectives and metrics.
- Sec. 232. FAA task force on flight standards reform.
- Sec. 233. Centralized safety guidance database.
- Sec. 234. Regulatory Consistency Communications Board.

Subtitle D—Safety Workforce

- Sec. 241. Safety workforce training strategy.
- Sec. 242. Workforce review.

Subtitle E—International Aviation

- Sec. 251. Promotion of United States aerospace standards, products, and services abroad.
- Sec. 252. Bilateral exchanges of safety oversight responsibilities.
- Sec. 253. FAA leadership abroad.
- Sec. 254. Registration, certification, and related fees.

TITLE III—SAFETY

Subtitle A—General Provisions

- Sec. 301. FAA technical training.
- Sec. 302. Safety critical staffing.
- Sec. 303. International efforts regarding tracking of civil aircraft.
- Sec. 304. Aircraft data access and retrieval systems.
- Sec. 305. Advanced cockpit displays.
- Sec. 306. Marking of towers.
- Sec. 307. Cabin evacuation.
- Sec. 308. ODA staffing and oversight.
- Sec. 309. Funding for additional safety needs.
- Sec. 310. Funding for additional FAA licensing needs.
- Sec. 311. Emergency medical equipment on passenger aircraft.
- Sec. 312. HIMS program.
- Sec. 313. Acceptance of voluntarily provided safety information.
- Sec. 314. Flight attendant duty period limitations and rest requirements.
- Sec. 315. Secondary cockpit barriers.
- Sec. 316. Aviation maintenance industry technical workforce.

Sec. 317. Critical airfield markings.

Sec. 318. Regulatory Reform.

Subtitle B—Unmanned Aircraft Systems

- Sec. 331. Definitions.
- Sec. 332. Codification of existing law; additional provisions.
- Sec. 333. Unmanned aircraft test ranges.
- Sec. 334. Sense of Congress regarding unmanned aircraft safety.
- Sec. 335. UAS privacy review.
- Sec. 336. Public UAS operations by Tribal governments.
- Sec. 337. Evaluation of aircraft registration for small unmanned aircraft.
- Sec. 338. Study on roles of governments relating to low-altitude operation of small unmanned aircraft.
- Sec. 339. Study on financing of unmanned aircraft services.
- Sec. 340. Update of FAA comprehensive plan.
- Sec. 341. Cooperation related to certain counter-UAS technology.

TITLE IV—AIR SERVICE IMPROVEMENTS

Subtitle A—Airline Customer Service Improvements

- Sec. 401. Reliable air service in American Samoa.
- Sec. 402. Cell phone voice communication ban.
- Sec. 403. Advisory committee for aviation consumer protection.
- Sec. 404. Improved notification of insecticide use.
- Sec. 405. Advertisements and disclosure of fees for passenger air transportation.
- Sec. 406. Involuntarily bumping passengers after aircraft boarded.
- Sec. 407. Availability of consumer rights information.
- Sec. 408. Consumer complaints hotline.
- Sec. 409. Widespread disruptions.
- Sec. 410. Involuntarily denied boarding compensation.
- Sec. 411. Consumer information on actual flight times.
- Sec. 412. Advisory committee for transparency in air ambulance industry.
- Sec. 413. Air ambulance complaints.
- Sec. 414. Passenger rights.

Subtitle B—Aviation Consumers With Disabilities

- Sec. 441. Select subcommittee.
- Sec. 442. Aviation consumers with disabilities study.
- Sec. 443. Feasibility study on in-cabin wheelchair restraint systems.
- Sec. 444. Access advisory committee recommendations.

Subtitle C—Small Community Air Service

- Sec. 451. Essential air service authorization.
- Sec. 452. Extension of final order establishing mileage adjustment eligibility.
- Sec. 453. Study on essential air service reform.
- Sec. 454. Small community air service.
- Sec. 455. Air transportation to noneligible places.

TITLE V—MISCELLANEOUS

- Sec. 501. Review of FAA strategic cybersecurity plan.
- Sec. 502. Consolidation and realignment of FAA services and facilities.
- Sec. 503. FAA review and reform.

- Sec. 504. Aviation fuel.
- Sec. 505. Right to privacy when using air traffic control system.
- Sec. 506. Air shows.
- Sec. 507. Part 91 review, reform, and streamlining.
- Sec. 508. Aircraft registration.
- Sec. 509. Air transportation of lithium cells and batteries.
- Sec. 510. Remote tower pilot program for rural and small communities.
- Sec. 511. Ensuring FAA readiness to provide seamless oceanic operations.
- Sec. 512. Sense of Congress regarding women in aviation.
- Sec. 513. Obstruction evaluation aeronautical studies.
- Sec. 514. Aircraft leasing.
- Sec. 515. Report on obsolete test equipment.
- Sec. 516. Pilots sharing flight expenses with passengers.
- Sec. 517. Aviation rulemaking committee for part 135 pilot rest and duty rules.
- Sec. 518. Metropolitan Washington Airports Authority.
- Sec. 519. Terminal Aerodrome Forecast.
- Sec. 520. Federal Aviation Administration employees stationed on Guam.
- Sec. 521. Technical corrections.
- Sec. 522. Application of veterans' preference to Federal Aviation Administration personnel management system.
- Sec. 523. Public aircraft eligible for logging flight times.
- Sec. 524. Federal Aviation Administration workforce review.
- Sec. 525. State taxation.
- Sec. 526. Aviation and aerospace workforce of the future.
- Sec. 527. Future aviation and aerospace workforce study.
- Sec. 528. FAA leadership on civil supersonic aircraft.
- Sec. 529. Oklahoma registry office.
- Sec. 530. Foreign air transportation under United States-European Union Air Transport Agreement.
- Sec. 531. Training on human trafficking for certain staff.
- Sec. 532. Part 107 implementation improvements.
- Sec. 533. Part 107 transparency and technology improvements.
- Sec. 534. Prohibitions against smoking on passenger flights.
- Sec. 535. Consumer protection requirements relating to large ticket agents.
- Sec. 536. FAA data transparency.
- Sec. 537. Agency procurement reporting requirements.
- Sec. 538. Zero-emission vehicles and technology.
- Sec. 539. Employee Assault Prevention and Response Plans.
- Sec. 540. Study on training of customer-facing air carrier employees.
- Sec. 541. Minimum dimensions for passenger seats.
- Sec. 542. Study of ground transportation options.

TITLE VI—DISASTER RECOVERY REFORM ACT

- Sec. 601. Applicability.
- Sec. 602. State defined.
- Sec. 603. Wildfire prevention.
- Sec. 604. Additional activities.
- Sec. 605. Eligibility for code implementation and enforcement.
- Sec. 606. Program improvements.
- Sec. 607. Prioritization of facilities.
- Sec. 608. Guidance on evacuation routes.
- Sec. 609. Duplication of benefits.
- Sec. 610. State administration of assistance for direct temporary housing and permanent housing construction.

- Sec. 611. Assistance to individuals and households.
- Sec. 612. Multifamily lease and repair assistance.
- Sec. 613. Private nonprofit facility.
- Sec. 614. Management costs.
- Sec. 615. Flexibility.
- Sec. 616. Additional disaster assistance.
- Sec. 617. National veterinary emergency teams.
- Sec. 618. Dispute resolution pilot program.
- Sec. 619. Unified Federal environmental and historic preservation review.
- Sec. 620. Closeout incentives.
- Sec. 621. Performance of services.
- Sec. 622. Study to streamline and consolidate information collection.
- Sec. 623. Agency accountability.
- Sec. 624. Audit of contracts.
- Sec. 625. Inspector general audit of FEMA contracts for tarps and plastic sheeting.
- Sec. 626. Relief organizations.
- Sec. 627. Guidance on inundated and submerged roads.
- Sec. 628. Authorities.
- Sec. 629. Recoupment of certain assistance prohibited.
- Sec. 630. Statute of limitations.
- Sec. 631. Technical assistance and recommendations.
- Sec. 632. Guidance on hazard mitigation assistance.
- Sec. 633. Local impact.
- Sec. 634. Additional hazard mitigation activities.
- Sec. 635. National public infrastructure predisaster hazard mitigation.
- Sec. 636. Additional mitigation activities.

TITLE VII—FLIGHT R&D ACT

Subtitle A—General Provisions

- Sec. 701. Short title.
- Sec. 702. Definitions.
- Sec. 703. Authorization of appropriations.

Subtitle B—FAA Research and Development Organization

- Sec. 711. Associate Administrator for Research and Development.
- Sec. 712. Research advisory committee.

Subtitle C—Unmanned Aircraft Systems

- Sec. 721. Unmanned aircraft systems research and development roadmap.
- Sec. 722. Probabilistic metrics for exemptions.
- Sec. 723. Probabilistic assessment of risks.
- Sec. 724. Unmanned aerial vehicle-manned aircraft collision research.
- Sec. 725. Special rule for research and development.
- Sec. 726. Beyond line-of-sight research and development.

Subtitle D—Cybersecurity

- Sec. 731. Cyber Testbed.
- Sec. 732. Cabin communications, entertainment, and information technology systems cybersecurity vulnerabilities.
- Sec. 733. Cybersecurity threat modeling.

- Sec. 734. National Institute of Standards and Technology cybersecurity standards.
- Sec. 735. Cybersecurity research coordination.
- Sec. 736. Cybersecurity research and development program.

Subtitle E—FAA Research and Development Activities

- Sec. 741. Research plan for the certification of new technologies into the national airspace system.
- Sec. 742. Aviation fuel research, development, and usage.
- Sec. 743. Air traffic surveillance over oceans and other remote locations.
- Sec. 744. Single-piloted commercial cargo aircraft.
- Sec. 745. Electromagnetic spectrum research and development.

TITLE VIII—AVIATION REVENUE PROVISIONS

Sec. 801. Expenditure authority from Airport and Airway Trust Fund. Sec. 802. Extension of taxes funding Airport and Airway Trust Fund.

1 SEC. 2. EFFECTIVE DATE.

2 Except as otherwise expressly provided, this Act and

3 the amendments made by this Act shall take effect on the

4 date of enactment of this Act.

5 TITLE I—AUTHORIZATIONS 6 Subtitle A—Funding of FAA 7 Programs

8 SEC. 101. AIRPORT PLANNING AND DEVELOPMENT AND

9 NOISE COMPATIBILITY PLANNING AND PRO-

10 GRAMS.

(a) AUTHORIZATION.—Section 48103(a) of title 49,
United States Code, is amended by striking "section
47504(c)" and all that follows through the period at the
end and inserting the following: "section 47504(c)—

- 15 "(1) \$3,350,000,000 for fiscal year 2018;
- 16 "(2) \$3,350,000,000 for fiscal year 2019;
- 17 "(3) \$3,350,000,000 for fiscal year 2020;

"(4) \$3,350,000,000 for fiscal year 2021;
 "(5) \$3,350,000,000 for fiscal year 2022; and
 "(6) \$3,350,000,000 for fiscal year 2023.".
 (b) OBLIGATION AUTHORITY.—Section 47104(c) of

5 title 49, United States Code, is amended in the matter
6 preceding paragraph (1) by striking "2018," and inserting
7 "2023,".

8 SEC. 102. FACILITIES AND EQUIPMENT.

9 (a) AUTHORIZATION OF APPROPRIATIONS FROM AIR10 PORT AND AIRWAY TRUST FUND.—Section 48101(a) of
11 title 49, United States Code, is amended by striking para12 graphs (1) through (5) and inserting the following:

13 "(1) \$2,920,000,000 for fiscal year 2018.
14 "(2) \$2,984,000,000 for fiscal year 2019.
15 "(3) \$3,049,000,000 for fiscal year 2020.
16 "(4) \$3,118,000,000 for fiscal year 2021.

17 "(5) 3,190,000,000 for fiscal year 2022.

18 "(6) \$3,263,000,000 for fiscal year 2023.".

(b) SET ASIDES.—Section 48101(d) of title 49,
United States Code, is amended by inserting ", carried
out using amounts appropriated under subsection (a),"
after "air traffic control modernization project".

1 SEC. 103. FAA OPERATIONS.

2	(a) IN GENERAL.—Section 106(k)(1) of title 49,
3	United States Code, is amended by striking subpara-
4	graphs (A) through (F) and inserting the following:
5	"(A) \$10,231,000,000 for fiscal year 2018;
6	"(B) \$10,434,000,000 for fiscal year 2019;
7	"(C) \$10,639,000,000 for fiscal year 2020;
8	''(D) \$10,861,000,000 for fiscal year
9	2021;
10	"(E) \$11,095,000,000 for fiscal year 2022;
11	and
12	''(F) \$11 ,329,000,000 for fiscal year
13	2023.".
14	(b) Authority to Transfer Funds.—Section
15	106(k)(3) of title 49, United States Code, is amended by

16 striking "fiscal years 2012 through 2018," and inserting17 "fiscal years 2018 through 2023,".

18 SEC. 104. ADJUSTMENT TO AIP PROGRAM FUNDING.

19 Section 48112 of title 49, United States Code, and20 the item relating to such section in the analysis for chap-21 ter 481 of such title, are repealed.

22 SEC. 105. FUNDING FOR AVIATION PROGRAMS.

23 Section 48114(a)(1)(A)(ii) of title 49, United States
24 Code, is amended by striking "in fiscal year 2014 and
25 each fiscal year thereafter" and inserting "in fiscal years
26 2014 through 2018".

Subtitle B—Passenger Facility Charges

10

3 SEC. 111. PASSENGER FACILITY CHARGE MODERNIZATION. 4 Section 40117(b) of title 49, United States Code, is 5 amended-6 (1) in paragraph (1) by striking "or \$3" and inserting "\$3, \$4, or \$4.50"; 7 8 (2) by repealing paragraph (4); 9 (3) in paragraph (6)— 10 (A) by striking "specified in paragraphs 11 (1) and (4)" and inserting "specified in paragraph (1)"; and 12 13 (B) by striking "imposed under paragraph 14 (1) or (4)" and inserting "imposed under para-15 graph (1)"; and 16 (4) in paragraph (7)(A)— (A) by striking "specified in paragraphs 17 18 (1), (4), and (6)" and inserting "specified in 19 paragraphs (1) and (6)"; and 20 (B) by striking "imposed under paragraph 21 (1) or (4)" and inserting "imposed under para-22 graph (1)".

1 SEC. 112. PILOT PROGRAM FOR PASSENGER FACILITY 2 CHARGE AUTHORIZATIONS. 3 Section 40117(l) of title 49, United States Code, is 4 amended-5 (1) in the subsection heading by striking "AT 6 NONHUB AIRPORTS"; and 7 (2) in paragraph (1) by striking "nonhub". Subtitle C—Airport Improvement 8 **Program Modifications** 9 SEC. 121. CLARIFICATION OF AIRPORT OBLIGATION TO 10 11 PROVIDE FAA AIRPORT SPACE. 12 Section 44502 of title 49, United States Code, is amended by adding at the end the following: 13 14 "(f) AIRPORT SPACE.— 15 "(1) IN GENERAL.—Except as provided in para-16 graph (2), the Administrator of the Federal Aviation 17 Administration may not require an airport owner, 18 operator, or sponsor (as defined in section 47102) to 19 provide building construction, maintenance, utilities, 20 administrative support, or space on airport property 21 to the Federal Aviation Administration without ade-22 quate compensation. 23 "(2) EXCEPTIONS.—Paragraph (1) does not 24 apply in any case in which an airport owner, oper-25 ator, or sponsor—

1	"(A) provides land or buildings without
2	compensation to the Federal Aviation Adminis-
3	tration for facilities used to carry out activities
4	related to air traffic control or navigation pur-
5	suant to a grant assurance; or
6	"(B) provides goods or services to the Fed-
7	eral Aviation Administration without compensa-
8	tion or at below-market rates pursuant to a ne-
9	gotiated agreement between the owner, oper-
10	ator, or sponsor and the Administrator.".
11	SEC. 122. MOTHERS' ROOMS AT AIRPORTS.
12	(a) Lactation Area Defined.—Section 47102 of
13	title 49, United States Code, is amended by adding at the
14	end the following:
15	"(29) 'lactation area' means a room or other lo-
16	cation in a commercial service airport that—
17	"(A) provides a location for members of
18	the public to express breast milk that is shield-
19	ed from view and free from intrusion from the
20	public;
21	"(B) has a door that can be locked;
22	"(C) includes a place to sit, a table or
23	other flat surface, and an electrical outlet;

1	"(D) is readily accessible to and usable by
2	individuals with disabilities, including individ-
3	uals who use wheelchairs; and
4	"(E) is not located in a restroom.".
5	(b) Project Grant Written Assurances for
6	Large and Medium Hub Airports.—
7	(1) IN GENERAL.—Section 47107(a) of title 49,
8	United States Code, is amended—
9	(A) in paragraph (20) by striking "and" at
10	the end;
11	(B) in paragraph (21) by striking the pe-
12	riod at the end and inserting "; and"; and
13	(C) by adding at the end the following:
14	((22)) with respect to a medium or large hub
15	airport, the airport owner or operator will maintain
16	a lactation area in each passenger terminal building
17	of the airport in the sterile area (as defined in sec-
18	tion 1540.5 of title 49, Code of Federal Regulations)
19	of the building.".
20	(2) Applicability.—
21	(A) IN GENERAL.—The amendment made
22	by paragraph (1) shall apply to a project grant
23	application submitted for a fiscal year begin-
24	ning on or after the date that is 2 years after
25	the date of enactment of this Act.

1 (B) SPECIAL RULE.—The requirement in 2 the amendment made by paragraph (1) that a 3 lactation area be located in the sterile area of 4 a passenger terminal building shall not apply 5 with respect to a project grant application for 6 a period of time, determined by the Secretary 7 of Transportation, if the Secretary determines 8 that construction or maintenance activities 9 make it impracticable or unsafe for the lacta-10 tion area to be located in the sterile area of the 11 building.

12 (c) TERMINAL DEVELOPMENT COSTS.—Section
13 47119(a) of title 49, United States Code, is amended by
14 adding at the end the following:

15 "(3) LACTATION AREAS.—In addition to the
16 projects described in paragraph (1), the Secretary
17 may approve a project for terminal development for
18 the construction or installation of a lactation area at
19 a commercial service airport.".

(d) PRE-EXISTING FACILITIES.—On application by
an airport sponsor, the Secretary may determine that a
lactation area in existence on the date of enactment of
this Act complies with the requirement of section
47107(a)(22) of title 49, United States Code, as added
by this section, notwithstanding the absence of one of the

facilities or characteristics referred to in the definition of
 the term "lactation area" in section 47102 of such title,
 as added by this section.

4 SEC. 123. EXTENSION OF COMPETITIVE ACCESS REPORTS.

5 Section 47107(r)(3) of title 49, United States Code,
6 is amended by striking "2018" and inserting "2023".

7 SEC. 124. GRANT ASSURANCES.

8 (a) CONSTRUCTION OF RECREATIONAL AIRCRAFT.—
9 Section 47107 of title 49, United States Code, is amended
10 by adding at the end the following:

11 "(u) CONSTRUCTION OF RECREATIONAL AIR-12 CRAFT.—

13 "(1) IN GENERAL.—The construction of a cov14 ered aircraft shall be treated as an aeronautical ac15 tivity for purposes of—

16 "(A) determining an airport's compliance
17 with a grant assurance made under this section
18 or any other provision of law; and

19 "(B) the receipt of Federal financial assist-20 ance for airport development.

21 "(2) COVERED AIRCRAFT DEFINED.—In this
22 subsection, the term 'covered aircraft' means an air23 craft—

24 "(A) used or intended to be used exclu-25 sively for recreational purposes; and

"(B) constructed or under construction by
 a private individual at a general aviation air port.".

4 (b) COMMUNITY USE OF AIRPORT LAND.—Section
5 47107 of title 49, United States Code, as amended by this
6 section, is further amended by adding at the end the fol7 lowing:

8 "(v) Community Use of Airport Land.—

9 "(1) IN GENERAL.—Notwithstanding subsection 10 (a)(13), and subject to paragraph (2), the sponsor 11 of a public-use airport shall not be considered to be 12 in violation of this subtitle, or to be found in viola-13 tion of a grant assurance made under this section, 14 or under any other provision of law, as a condition 15 for the receipt of Federal financial assistance for 16 airport development, solely because the sponsor has 17 entered into an agreement, including a revised 18 agreement, with a local government providing for the 19 use of airport property for an interim compatible 20 recreational purpose at below fair market value.

21 "(2) RESTRICTIONS.—This subsection shall
22 apply only—

23 "(A) to an agreement regarding airport
24 property that was initially entered into before
25 the publication of the Federal Aviation Admin-

1	istration's Policy and Procedures Concerning
2	the Use of Airport Revenue, dated February
3	16, 1999;
4	"(B) if the agreement between the sponsor
5	and the local government is subordinate to any
6	existing or future agreements between the spon-
7	sor and the Secretary, including agreements re-
8	lated to a grant assurance under this section;
9	"(C) to airport property that was acquired
10	under a Federal airport development grant pro-
11	gram;
12	"(D) if the airport sponsor has provided a
13	written statement to the Administrator that the
14	property made available for a recreational pur-
15	pose will not be needed for any aeronautical
16	purpose during the next 10 years;
17	"(E) if the agreement includes a term of
18	not more than 2 years to prepare the airport
19	property for the interim compatible recreational
20	purpose and not more than 10 years of use for
21	that purpose;
22	"(F) if the recreational purpose will not
23	impact the aeronautical use of the airport;
24	"(G) if the airport sponsor provides a cer-
25	tification that the sponsor is not responsible for

1	preparation, start-up, operations, maintenance,
2	or any other costs associated with the rec-
3	reational purpose; and
4	"(H) if the recreational purpose is con-
5	sistent with Federal land use compatibility cri-
6	teria under section 47502.
7	"(3) STATUTORY CONSTRUCTION.—Nothing in
8	this subsection may be construed as permitting a di-
9	version of airport revenue for the capital or oper-
10	ating costs associated with the community use of
11	airport land.".
12	SEC. 125. GOVERNMENT SHARE OF PROJECT COSTS.
13	Section 47109(a) of title 49, United States Code, is
14	amended—
15	(1) in paragraph (1) by striking "primary air-
16	port having at least .25 percent of the total number
17	of passenger boardings each year at all commercial
18	service airports;" and inserting "medium or large
19	hub airport;"; and
20	(2) by striking paragraph (5) and inserting the
21	following:
22	"(5) 95 percent for a project that—
23	"(A) the Administrator determines is a

1	project for which the sponsor received a grant
2	in fiscal year 2011; and
3	"(B) for which the United States Govern-
4	ment's share of allowable project costs could
5	otherwise be 90 percent under paragraph (2) or
6	(3)..
7	SEC. 126. UPDATED VETERANS' PREFERENCE.
8	Section 47112(c)(1)(C) of title 49, United States
9	Code, is amended—
10	(1) by striking "or Operation New Dawn for
11	more" and inserting "Operation New Dawn, Oper-
12	ation Inherent Resolve, Operation Freedom's Sen-
13	tinel, or any successor contingency operation to such
14	operations for more"; and
15	(2) by striking "or Operation New Dawn
16	(whichever is later)" and inserting "Operation New
17	Dawn, Operation Inherent Resolve, Operation Free-
18	dom's Sentinel, or any successor contingency oper-
19	ation to such operations (whichever is later)".
20	SEC. 127. SPECIAL RULE.
21	Section 47114(d)(3) of title 49, United States Code,
22	is amended by adding at the end the following:
23	"(C) During fiscal years 2018 through
24	2020—

20

1	"(i) an airport that accrued appor-
2	tionment funds under subparagraph (A) in
3	fiscal year 2013 that is listed as having an
4	unclassified status under the most recent
5	national plan of integrated airport systems
6	shall continue to accrue apportionment
7	funds under subparagraph (A) at the same
8	amount the airport accrued apportionment
9	funds in fiscal year 2013, subject to the
10	conditions of this paragraph;
11	"(ii) notwithstanding the period of
12	availability as described in section
13	47117(b), an amount apportioned to an
14	airport under clause (i) shall be available
15	to the airport only during the fiscal year in
16	which the amount is apportioned; and
17	"(iii) notwithstanding the waiver per-
18	mitted under section $47117(c)(2)$, an air-
19	port receiving apportionment funds under
20	clause (i) may not waive its claim to any
21	part of the apportioned funds in order to
22	make the funds available for a grant for
23	another public-use airport.
24	"(D) An airport that re-establishes its
25	classified status shall be eligible to accrue ap-

	21
1	portionment funds pursuant to subparagraph
2	(A) so long as such airport retains its classified
3	status.".
4	SEC. 128. MARSHALL ISLANDS, MICRONESIA, AND PALAU.
5	Section 47115 of title 49, United States Code, is
6	amended—
7	(1) by striking subsection (i);
8	(2) by redesignating subsection (j) as sub-
9	section (i); and
10	(3) in subsection (i) (as so redesignated) by
11	striking "fiscal years 2012 through 2018" and in-
12	serting "fiscal years 2018 through 2023".
13	SEC. 129. NONDISCRIMINATION.
14	Section 47123 of title 49, United States Code, is
15	amended—
16	(1) by striking "The Secretary of Transpor-
17	tation" and inserting the following:
18	"(a) IN GENERAL.—The Secretary of Transpor-
19	tation"; and
20	(2) by adding at the end the following:
21	"(b) Indian Employment.—
22	"(1) TRIBAL SPONSOR PREFERENCE.—Con-
23	sistent with section 703(i) of the Civil Rights Act of
24	1964 (42 U.S.C. 2000e– $2(i)$), nothing in this section
25	shall preclude the preferential employment of Indi-

1	ans living on or near a reservation on a project or
2	contract at—
3	"(A) an airport sponsored by an Indian
4	tribal government; or
5	"(B) an airport located on an Indian res-
6	ervation.
7	"(2) STATE PREFERENCE.—A State may imple-
8	ment a preference for employment of Indians on a
9	project carried out under this subchapter near an
10	Indian reservation.
11	"(3) IMPLEMENTATION.—The Secretary shall
12	cooperate with Indian tribal governments and the
13	States to implement this subsection.
14	"(4) Indian tribal government defined.—
15	In this section, the term 'Indian tribal government'
16	has the same meaning given that term in section
17	102 of the Robert T. Stafford Disaster Relief and
18	Emergency Assistance Act (42 U.S.C. 5122).".
19	SEC. 130. STATE BLOCK GRANT PROGRAM EXPANSION.
20	Section 47128(a) of title 49, United States Code, is
21	amended by striking "not more than 9 qualified States
22	for fiscal years 2000 and 2001 and 10 qualified States
23	for each fiscal year thereafter" and inserting "not more
24	than 20 qualified States for each fiscal year".

23

1 SEC. 131. MIDWAY ISLAND AIRPORT.

2 Section 186(d) of the Vision 100—Century of Avia3 tion Reauthorization Act (117 Stat. 2518) is amended in
4 the first sentence by striking "fiscal years 2012 through
5 2018" and inserting "fiscal years 2018 through 2023".

6 SEC. 132. PROPERTY CONVEYANCE RELEASES.

7 Section 817(a) of the FAA Modernization and Re8 form Act of 2012 (49 U.S.C. 47125 note) is amended—
9 (1) by striking "or section 23" and inserting ",
10 section 23"; and

(2) by inserting ", or section 47125 of title 49,
United States Code" before the period at the end.
SEC. 133. MINORITY AND DISADVANTAGED BUSINESS PARTICIPATION.

15 Congress finds the following:

16 (1) While significant progress has occurred due 17 to the establishment of the airport disadvantaged 18 business enterprise program (49 U.S.C. 47107(e) 19 and 47113), discrimination and related barriers con-20 tinue to pose significant obstacles for minority- and 21 women-owned businesses seeking to do business in 22 airport-related markets across the Nation. These 23 continuing barriers merit the continuation of the air-24 port disadvantaged business enterprise program.

25 (2) Congress has received and reviewed testi26 mony and documentation of race and gender dis•HR 4 IH

1 crimination from numerous sources, including con-2 gressional hearings and roundtables, scientific re-3 ports, reports issued by public and private agencies, 4 news stories, reports of discrimination by organizations and individuals, and discrimination lawsuits. 5 6 This testimony and documentation shows that race-7 and gender-neutral efforts alone are insufficient to address the problem. 8

9 (3) This testimony and documentation dem-10 onstrates that discrimination across the Nation 11 poses a barrier to full and fair participation in air-12 port-related businesses of women business owners 13 and minority business owners in the racial groups 14 detailed in parts 23 and 26 of title 49, Code of Fed-15 eral Regulations, and has impacted firm develop-16 ment and many aspects of airport-related business 17 in the public and private markets.

(4) This testimony and documentation provides
a strong basis that there is a compelling need for the
continuation of the airport disadvantaged business
enterprise program and the airport concessions disadvantaged business enterprise program to address
race and gender discrimination in airport-related
business.

1	SEC. 134. CONTRACT TOWER PROGRAM.
2	(a) Air Traffic Control Contract Program.—
3	(1) Special Rule.—Section $47124(b)(1)(B)$ of
4	title 49, United States Code, is amended by striking
5	"exceeds the benefit for a period of 18 months after
6	such determination is made" and inserting the fol-
7	lowing: "exceeds the benefit—
8	"(i) for the 1-year period after such
9	determination is made; or
10	"(ii) if an appeal of such determina-
11	tion is requested, for the 1-year period de-
12	scribed in subsection $(d)(4)(D)$ ".
13	(2) Funding of cost-share program.—Sec-
14	tion 47124(b)(3)(E) of title 49, United States Code,
15	is amended to read as follows:
16	"(E) FUNDING.—Amounts appropriated pursu-
17	ant to section $106(k)(1)$ may be used to carry out
18	this paragraph.".
19	(3) Construction of Air traffic control
20	TOWERS.—
21	(A) Grants.—Section $47124(b)(4)(A)$ of
22	title 49, United States Code, is amended in
23	each of clauses $(i)(III)$ and $(ii)(III)$ by inserting
24	", including remote air traffic control tower
25	equipment certified by the Federal Aviation Ad-
26	ministration" after "1996".

1	(B) ELIGIBILITY.—Section
2	47124(b)(4)(B)(i)(I) of title 49, United States
3	Code, is amended by striking "pilot".
4	(C) Limitation on federal share.—
5	Section 47124(b)(4) of title 49, United States
6	Code, is amended by striking subparagraph (C).
7	(4) BENEFIT-TO-COST CALCULATION FOR PRO-
8	GRAM APPLICANTS.—Section 47124(b)(3) of title 49,
9	United States Code, is amended by adding at the
10	end the following:
11	"(G) BENEFIT-TO-COST CALCULATION.—Not
12	later than 90 days after receiving an application to
13	the Contract Tower Program, the Secretary shall
14	calculate a benefit-to-cost ratio (as described in sub-
15	section (d)) for the applicable air traffic control
16	tower for purposes of selecting towers for participa-
17	tion in the Contract Tower Program.".
18	(b) CRITERIA TO EVALUATE PARTICIPANTS.—Sec-
19	tion 47124 of title 49, United States Code, is amended
20	by adding at the end the following:
21	"(d) Criteria To Evaluate Participants.—
22	"(1) TIMING OF EVALUATIONS.—
23	"(A) TOWERS PARTICIPATING IN COST-
24	SHARE PROGRAM.—In the case of an air traffic
25	control tower that is operated under the pro-

1	gram established under subsection $(b)(3)$, the
2	Secretary shall annually calculate a benefit-to-
3	cost ratio with respect to the tower.
4	"(B) TOWERS PARTICIPATING IN CON-
5	TRACT TOWER PROGRAM.—In the case of an air
6	traffic control tower that is operated under the
7	program established under subsection (a) and
8	continued under subsection $(b)(1)$, the Sec-
9	retary shall not calculate a benefit-to-cost ratio
10	after the date of enactment of this subsection
11	with respect to the tower unless the Secretary
12	determines that the annual aircraft traffic at
13	the airport where the tower is located has de-
14	creased—
15	"(i) by more than 25 percent from the
16	previous year; or
17	"(ii) by more than 55 percent cumula-
18	tively in the preceding 3-year period.
19	"(2) Costs to be considered.—In estab-
20	lishing a benefit-to-cost ratio under this section with
21	respect to an air traffic control tower, the Secretary
22	shall consider only the following costs:
23	"(A) The Federal Aviation Administra-
24	tion's actual cost of wages and benefits of per-
25	sonnel working at the tower.

1	"(B) The Federal Aviation Administra-
2	tion's actual telecommunications costs directly
3	associated with the tower.
4	"(C) The Federal Aviation Administra-
5	tion's costs of purchasing and installing any air
6	traffic control equipment that would not have
7	been purchased or installed except as a result of
8	the operation of the tower.
9	"(D) The Federal Aviation Administra-
10	tion's actual travel costs associated with main-
11	taining air traffic control equipment that is
12	owned by the Administration and would not be
13	maintained except as a result of the operation
14	of the tower.
15	((E) Other actual costs of the Federal
16	Aviation Administration directly associated with
17	the tower that would not be incurred except as
18	a result of the operation of the tower (excluding
19	costs for non-contract tower related personnel
20	and equipment, even if the personnel or equip-
21	ment are located in the contract tower build-
22	ing).
23	"(3) Other criteria to be considered.—In
24	establishing a benefit-to-cost ratio under this section
25	with respect to an air traffic control tower, the Sec-

1	retary shall add a 10 percentage point margin of
2	error to the benefit-to-cost ratio determination to ac-
3	knowledge and account for the direct and indirect
4	economic and other benefits that are not included in
5	the criteria the Secretary used in calculating that
6	ratio.
7	"(4) REVIEW OF COST-BENEFIT DETERMINA-
8	TIONS.—In issuing a benefit-to-cost ratio determina-
9	tion under this section with respect to an air traffic
10	control tower located at an airport, the Secretary
11	shall implement the following procedures:
12	"(A) The Secretary shall provide the air-
13	port (or the State or local government having
14	jurisdiction over the airport) at least 90 days
15	following the date of receipt of the determina-
16	tion to submit to the Secretary a request for an
17	appeal of the determination, together with up-
18	dated or additional data in support of the ap-
19	peal.
20	"(B) Upon receipt of a request for an ap-
21	peal submitted pursuant to subparagraph (A),
22	the Secretary shall—
23	"(i) transmit to the Administrator of
24	the Federal Aviation Administration any

1	updated or additional data submitted in
2	support of the appeal; and
3	"(ii) provide the Administrator not
4	more than 90 days to review the data and
5	provide a response to the Secretary based
6	on the review.
7	"(C) After receiving a response from the
8	Administrator pursuant to subparagraph (B),
9	the Secretary shall—
10	"(i) provide the airport, State, or local
11	government that requested the appeal at
12	least 30 days to review the response; and
13	"(ii) withhold from taking further ac-
14	tion in connection with the appeal during
15	that 30-day period.
16	"(D) If, after completion of the appeal pro-
17	cedures with respect to the determination, the
18	Secretary requires the tower to transition into
19	the program established under subsection
20	(b)(3), the Secretary shall not require a cost-
21	share payment from the airport, State, or local
22	government for 1 year following the last day of
23	the 30-day period described in subparagraph
24	(C).".

1 SEC. 135. AIRPORT ACCESS ROADS IN REMOTE LOCATIONS.

Notwithstanding section 47102 of title 49, United
States Code, for fiscal years 2018 through 2021, the definition of the term "terminal development" under that section includes the development of an airport access road
that—

- 7 (1) is located in a noncontiguous State;
- 8 (2) is not more than 3 miles in length;

9 (3) connects to the nearest public roadways of
10 not more than the 2 closest census designated
11 places; and

12 (4) is constructed for the purpose of connecting
13 the census designated places with a planned or
14 newly constructed airport.

15 SEC. 136. BUY AMERICA REQUIREMENTS.

(a) NOTICE OF WAIVERS.—If the Secretary of Transportation determines that it is necessary to waive the application of section 50101(a) of title 49, United States
Code, based on a finding under section 50101(b) of that
title, the Secretary, at least 10 days before the date on
which the waiver takes effect, shall—

(1) make publicly available, in an easily identifiable location on the website of the Department of
Transportation, a detailed written justification of
the waiver determination; and

(2) provide an informal public notice and com ment opportunity on the waiver determination.

3 (b) ANNUAL REPORT.—For each fiscal year, the Sec4 retary shall submit to the Committee on Transportation
5 and Infrastructure of the House of Representatives and
6 the Committee on Commerce, Science, and Transportation
7 of the Senate a report on waivers issued under section
8 50101 of title 49, United States Code, during the fiscal
9 year.

10 Subtitle D—Airport Noise and

11 Environmental Streamlining

12 SEC. 151. RECYCLING PLANS FOR AIRPORTS.

13 Section 47106(a)(6) of title 49, United States Code,
14 is amended by inserting "that includes the project" before
15 ", the master plan".

16 SEC. 152. PILOT PROGRAM SUNSET.

17 (a) IN GENERAL.—Section 47140 of title 49, United18 States Code, is repealed.

19 (b) CONFORMING AMENDMENT.—Section 47140a of
20 title 49, United States Code, is redesignated as section
21 47140.

(c) CLERICAL AMENDMENTS.—The analysis for
chapter 471 of title 49, United States Code, is amended—

24 (1) by striking the items relating to sections25 47140 and 47140a; and

1	(2) by inserting after the item relating to sec-
2	tion 47139 the following:
	"47140. Increasing the energy efficiency of airport power sources.".
3	SEC. 153. EXTENSION OF GRANT AUTHORITY FOR COMPAT-
4	IBLE LAND USE PLANNING AND PROJECTS
5	BY STATE AND LOCAL GOVERNMENTS.
6	Section 47141(f) of title 49, United States Code, is
7	amended by striking "2018" and inserting "2023".
8	SEC. 154. UPDATING AIRPORT NOISE EXPOSURE MAPS.
9	Section 47503(b) of title 49, United States Code, is
10	amended to read as follows:
11	"(b) Revised Maps.—
12	"(1) IN GENERAL.—An airport operator that
13	submitted a noise exposure map under subsection
14	(a) shall submit a revised map to the Secretary if,
15	in an area surrounding an airport, a change in the
16	operation of the airport would establish a substantial
17	new noncompatible use, or would significantly reduce
18	noise over existing noncompatible uses, that is not
19	reflected in either the existing conditions map or
20	forecast map currently on file with the Federal Avia-
21	tion Administration.
22	"(2) TIMING.—A submission under paragraph
23	(1) shall be required only if the relevant change in
. .	

the operation of the airport occurs during—

"(A) the forecast period of the applicable
 noise exposure map submitted by an airport op erator under subsection (a); or

4 "(B) the implementation period of the air5 port operator's noise compatibility program.".

6 SEC. 155. STAGE 3 AIRCRAFT STUDY.

7 (a) STUDY.—Not later than 180 days after the date
8 of enactment of this Act, the Comptroller General of the
9 United States shall initiate a review of the potential bene10 fits, costs, and other impacts that would result from a
11 phaseout of covered stage 3 aircraft.

12 (b) CONTENTS.—The review shall include—

(1) a determination of the number, types, frequency of operations, and owners and operators of
covered stage 3 aircraft;

(2) an analysis of the potential benefits, costs,
and other impacts to air carriers, general aviation
operators, airports, communities surrounding airports, and the general public associated with phasing
out or reducing the operations of covered stage 3
aircraft, assuming such a phaseout or reduction is
put into effect over a reasonable period of time;

(3) a determination of lessons learned from the
phaseout of stage 2 aircraft that might be applicable
to a phaseout or reduction in the operations of cov-

1	ered stage 3 aircraft, including comparisons between
2	the benefits, costs, and other impacts associated
3	with the phaseout of stage 2 aircraft and the poten-
4	tial benefits, costs, and other impacts determined
5	under paragraph (2);
6	(4) a determination of the costs and logistical
7	challenges associated with recertifying stage 3 air-
8	craft capable of meeting stage 4 noise levels; and
9	(5) a determination of stakeholder views on the
10	feasibility and desirability of phasing out covered
11	stage 3 aircraft, including the views of—
12	(A) air carriers;
13	(B) airports;
14	(C) communities surrounding airports;
15	(D) aircraft and avionics manufacturers;
16	(E) operators of covered stage 3 aircraft
17	other than air carriers; and
18	(F) such other stakeholders and aviation
19	experts as the Comptroller General considers
20	appropriate.
21	(c) REPORT.—Not later than 18 months after the
22	date of enactment of this Act, the Comptroller General
22	
23	shall submit to the Committee on Transportation and In-

mittee on Commerce, Science, and Transportation of the
 Senate a report on the results of the review.

3 (d) COVERED STAGE 3 AIRCRAFT DEFINED.—In this
4 section, the term "covered stage 3 aircraft" means a civil
5 subsonic jet aircraft that is not capable of meeting the
6 stage 4 noise levels in part 36 of title 14, Code of Federal
7 Regulations.

8 SEC. 156. ADDRESSING COMMUNITY NOISE CONCERNS.

9 When proposing a new area navigation departure pro-10 cedure, or amending an existing procedure that would di-11 rect aircraft between the surface and 6,000 feet above 12 ground level over noise sensitive areas, the Administrator 13 of the Federal Aviation Administration shall consider the 14 feasibility of dispersal headings or other lateral track vari-15 ations to address community noise concerns, if—

- 16 (1) the affected airport operator, in consulta17 tion with the affected community, submits a request
 18 to the Administrator for such a consideration;
- (2) the airport operator's request would not, in
 the judgment of the Administrator, conflict with the
 safe and efficient operation of the national airspace
 system; and
- (3) the effect of a modified departure procedure
 would not significantly increase noise over noise sensitive areas, as determined by the Administrator.

1SEC. 157. STUDY ON POTENTIAL HEALTH IMPACTS OF2OVERFLIGHT NOISE.

3 (a) IN GENERAL.—Not later than 180 days after the
4 date of enactment of this Act, the Administrator of the
5 Federal Aviation Administration shall enter into an agree6 ment with an eligible institution of higher education to
7 conduct a study on the health impacts of noise from air8 craft flights on residents exposed to a range of noise levels
9 from such flights.

10 (b) SCOPE OF STUDY.—The study shall—

(1) include an examination of the incremental
health impacts attributable to noise exposure that
result from aircraft flights, including sleep disturbance and elevated blood pressure;

15 (2) be focused on residents in the metropolitan
16 area of—

- 17 (A) Boston;
- 18 (B) Chicago;
- 19 (C) the District of Columbia;
- 20 (D) New York;
- 21 (E) the Northern California Metroplex;
- 22 (F) Phoenix;
- 23 (G) the Southern California Metroplex; or
- 24 (H) such other area as may be identified
- 25 by the Administrator;

(3) consider, in particular, the incremental 1 2 health impacts on residents living partly or wholly 3 underneath flight paths most frequently used by air-4 craft flying at an altitude lower than 10,000 feet, in-5 cluding during takeoff or landing; and 6 (4) include an assessment of the relationship 7 between a perceived increase in aircraft noise, in-8 cluding as a result of a change in flight paths that 9 increases the visibility of aircraft from a certain lo-10 cation, and an actual increase in aircraft noise, par-11 ticularly in areas with high or variable levels of non-12 aircraft-related ambient noise. 13 (c) ELIGIBILITY.—An institution of higher education is eligible to conduct the study if the institution— 14 15 (1) has— 16 (A) a school of public health that has par-17 ticipated in the Center of Excellence for Air-18 craft Noise and Aviation Emissions Mitigation 19 of the Federal Aviation Administration; or 20 (B) a center for environmental health that 21 receives funding from the National Institute of 22 Environmental Health Sciences; 23 (2) is located in one of the areas identified in

24 subsection (b);

1	(3) applies to the	e Administrator in a timely
2	fashion;	
3	(4) demonstrates t	to the satisfaction of the Ad-

4 ministrator that the institution is qualified to con-5 duct the study;

6 (5) agrees to submit to the Administrator, not
7 later than 3 years after entering into an agreement
8 under subsection (a), the results of the study, in9 cluding any source materials used; and

10 (6) meets such other requirements as the Ad-11 ministrator determines necessary.

(d) REPORT.—Not later than 90 days after the Administrator receives the results of the study, the Administrator shall submit to the Committee on Transportation
and Infrastructure of the House of Representatives and
the Committee on Commerce, Science, and Transportation
of the Senate a report containing the results.

18 SEC. 158. ENVIRONMENTAL MITIGATION PILOT PROGRAM.

(a) IN GENERAL.—The Secretary of Transportation
shall carry out a pilot program involving not more than
6 projects at public-use airports in accordance with this
section.

(b) GRANTS.—In carrying out the program, the Sec-retary may make grants to sponsors of public-use airports

from funds apportioned under section 47117(e)(1)(A) of
 title 49, United States Code.

3 (c) USE OF FUNDS.—Amounts from a grant received 4 by the sponsor of a public-use airport under the program 5 shall be used for environmental mitigation projects that 6 will measurably reduce or mitigate aviation impacts on 7 noise, air quality, or water quality at the airport or within 8 5 miles of the airport.

9 (d) ELIGIBILITY.—Notwithstanding any other provi-10 sion of chapter 471 of title 49, United States Code, an 11 environmental mitigation project approved under this sec-12 tion shall be treated as eligible for assistance under that 13 chapter.

(e) SELECTION CRITERIA.—In selecting from among
applicants for participation in the program, the Secretary
may give priority consideration to projects that—

(1) will achieve the greatest reductions in air(1) wil

21 (2) will be implemented by an eligible consor-22 tium.

(f) FEDERAL SHARE.—The Federal share of the cost
of a project carried out under the program shall be 50
percent.

(g) MAXIMUM AMOUNT.—Not more than \$2,500,000
 may be made available by the Secretary in grants under
 the program for any single project.

4 (h) IDENTIFYING BEST PRACTICES.—The Secretary
5 may establish and publish information identifying best
6 practices for reducing or mitigating aviation impacts on
7 noise, air quality, and water quality at airports or in the
8 vicinity of airports based on the projects carried out under
9 the program.

(i) SUNSET.—The program shall terminate 5 years
after the Secretary makes the first grant under the program.

(j) DEFINITIONS.—In this section, the following defi-nitions apply:

(1) ELIGIBLE CONSORTIUM.—The term "eligible consortium" means a consortium that is comprised of 2 or more of the following entities:

18 (A) Businesses incorporated in the United19 States.

20 (B) Public or private educational or re21 search organizations located in the United
22 States.

23 (C) Entities of State or local governments
24 in the United States.

25 (D) Federal laboratories.

1	(2) Environmental mitigation project.—
2	The term "environmental mitigation project" means
3	a project that—
4	(A) introduces new environmental mitiga-
5	tion techniques or technologies that have been
6	proven in laboratory demonstrations;
7	(B) proposes methods for efficient adapta-
8	tion or integration of new concepts into airport
9	operations; and
10	(C) will demonstrate whether new tech-
11	niques or technologies for environmental mitiga-
12	tion are—
13	(i) practical to implement at or near
14	multiple public-use airports; and
15	(ii) capable of reducing noise, airport
16	emissions, or water quality impacts in
17	measurably significant amounts.
18	SEC. 159. AIRCRAFT NOISE EXPOSURE.
19	(a) REVIEW.—The Administrator of the Federal
20	Aviation Administration shall conduct a review of the rela-
21	tionship between aircraft noise exposure and its effects on
22	communities around airports.
23	(b) Report.—
24	(1) IN GENERAL.—Not later than 2 years after
25	the date of enactment of this Act, the Administrator

shall submit to Congress a report containing the re sults of the review.

3 (2)PRELIMINARY RECOMMENDATIONS.—The 4 report shall contain such preliminary recommenda-5 tions as the Administrator determines appropriate 6 for revising the land use compatibility guidelines in 7 part 150 of title 14, Code of Federal Regulations, 8 based on the results of the review and in coordina-9 tion with other agencies.

10SEC. 160. COMMUNITY INVOLVEMENT IN FAA NEXTGEN11PROJECTS LOCATED IN METROPLEXES.

12 (a) COMMUNITY INVOLVEMENT POLICY.—Not later 13 than 180 days after the date of enactment of this Act, the Administrator of the Federal Aviation Administration 14 15 shall complete a review of the Federal Aviation Administration's community involvement practices for Next Gen-16 17 eration Air Transportation System (NextGen) projects lo-18 cated in metroplexes identified by the Administration. The 19 review shall include, at a minimum, a determination of 20how and when to engage airports and communities in per-21 formance-based navigation proposals.

(b) REPORT.—Not later than 60 days after completion of the review, the Administrator shall submit to the
Committee on Transportation and Infrastructure of the
House of Representatives and the Committee on Com-

merce, Science, and Transportation of the Senate a report
 on—

3 (1) how the Administration will improve com4 munity involvement practices for NextGen projects
5 located in metroplexes;

6 (2) how and when the Administration will en7 gage airports and communities in performance-based
8 navigation proposals; and

9 (3) lessons learned from NextGen projects and 10 pilot programs and how those lessons learned are 11 being integrated into community involvement prac-12 tices for future NextGen projects located in 13 metroplexes.

14 SEC. 161. CRITICAL HABITAT ON OR NEAR AIRPORT PROP-

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ERTY.

(a) FEDERAL AGENCY REQUIREMENTS.—The Secretary of Transportation, to the maximum extent practicable, shall work with the heads of appropriate Federal
agencies to ensure that designations of critical habitat, as
that term is defined in section 3 of the Endangered Species Act of 1973 (16 U.S.C. 1532), on or near airport
property do not—

23 (1) result in conflicting statutory, regulatory, or
24 Federal grant assurance requirements for airports or
25 aircraft operators;

ort-owned lands that have be- at for a threatened or endan- such lands— n prepared for future develop-
at for a threatened or endan- such lands—
such lands—
n prepared for future develop-
en designated as noise buffer
by the airport to prevent en-
es that are incompatible with
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1	(2) in subparagraph (E) by striking the period
2	at the end and inserting "; and"; and
3	(3) by adding at the end the following:
4	"(F) to an airport operator of a congested air-
5	port (as defined in section 47175) and a unit of
6	local government referred to in paragraph (1)(B) to
7	carry out a project to mitigate noise, if the project—
8	"(i) consists of—
9	"(I) replacement windows, doors, and
10	the installation of through-the-wall air-con-
11	ditioning units; or
12	"(II) a contribution of the equivalent
13	costs to be used for reconstruction, if re-
14	construction is the preferred local solution;
15	"(ii) is located at a school near the airport;
16	and
17	"(iii) is included in a memorandum of
18	agreement entered into before September 30,
19	2002, even if the airport has not met the re-
20	quirements of part 150 of title 14, Code of Fed-
21	eral Regulations, and only if the financial limi-
22	tations of the memorandum are applied.".

	47
1	TITLE II—FAA SAFETY
2	CERTIFICATION REFORM
3	Subtitle A—General Provisions
4	SEC. 201. DEFINITIONS.
5	In this title, the following definitions apply:
6	(1) FAA.—The term "FAA" means the Fed-
7	eral Aviation Administration.
8	(2) SAFETY OVERSIGHT AND CERTIFICATION
9	ADVISORY COMMITTEE.—The term "Safety Over-
10	sight and Certification Advisory Committee" means
11	the Safety Oversight and Certification Advisory
12	Committee established under section 202.
13	(3) Systems safety approach.—The term
14	"systems safety approach" means the application of
15	specialized technical and managerial skills to the
16	systematic, forward-looking identification and con-
17	trol of hazards throughout the lifecycle of a project,
18	program, or activity.
19	SEC. 202. SAFETY OVERSIGHT AND CERTIFICATION ADVI-
20	SORY COMMITTEE.
21	(a) IN GENERAL.—Not later than 60 days after the
22	date of enactment of this Act, the Secretary of Transpor-
23	tation shall establish a Safety Oversight and Certification
24	Advisory Committee (in this section referred to as the
25	"Advisory Committee").

1	(b) DUTIES.—The Advisory Committee shall provide
2	advice to the Secretary on policy-level issues facing the
3	aviation community that are related to FAA certification
4	and safety oversight programs and activities, including, at
5	a minimum, the following:
6	(1) Aircraft and flight standards certification
7	processes, including efforts to streamline those proc-
8	esses.
9	(2) Implementation and oversight of safety
10	management systems.
11	(3) Risk-based oversight efforts.
12	(4) Utilization of delegation and designation au-
13	thorities.
14	(5) Regulatory interpretation standardization
15	efforts.
16	(6) Training programs.
17	(7) Expediting the rulemaking process and giv-
18	ing priority to rules related to safety.
19	(c) FUNCTIONS.—The Advisory Committee shall
20	carry out the following functions (as the functions relate
21	to FAA certification and safety oversight programs and
22	activities):
22	(1) Foster industry collaboration in an open

1	(A) the private sector, including represent-
2	atives of—
3	(i) general aviation;
4	(ii) commercial aviation;
5	(iii) aviation labor;
6	(iv) aviation maintenance;
7	(v) aviation, aerospace, and avionics
8	manufacturing;
9	(vi) unmanned aircraft systems opera-
10	tors and manufacturers; and
11	(vii) the commercial space transpor-
12	tation industry;
13	(B) members of the public; and
14	(C) other interested parties.
15	(3) Establish consensus national goals, strategic
16	objectives, and priorities for the most efficient,
17	streamlined, and cost-effective certification and over-
18	sight processes in order to maintain the safety of the
19	aviation system and, at the same time, allow the
20	FAA to meet future needs and ensure that aviation
21	stakeholders remain competitive in the global mar-
22	ketplace.
23	(4) Provide policy guidance for the FAA's cer-
24	tification and safety oversight efforts.

1	(5) Provide ongoing policy reviews of the FAA's
2	certification and safety oversight efforts.
3	(6) Make appropriate legislative, regulatory,
4	and guidance recommendations for the air transpor-
5	tation system and the aviation safety regulatory en-
6	vironment.
7	(7) Establish performance objectives for the
8	FAA and industry.
9	(8) Establish performance metrics and goals for
10	the FAA and the regulated aviation industry to be
11	tracked and reviewed as streamlining and certifi-
12	cation reform and regulation standardization efforts
13	progress.
14	(9) Provide a venue for tracking progress to-
15	ward national goals and sustaining joint commit-
16	ments.
17	(10) Develop recruiting, hiring, training, and
18	continuing education objectives for FAA aviation
19	safety engineers and aviation safety inspectors.
20	(11) Provide advice and recommendations to
21	the FAA on how to prioritize safety rulemaking
22	projects.
23	(12) Improve the development of FAA regula-
24	tions by providing information, advice, and rec-
25	ommendations related to aviation issues.

1	(13) Facilitate the validation of United States
2	products abroad.
3	(d) Membership.—
4	(1) IN GENERAL.—The Advisory Committee
5	shall be composed of the following members:
6	(A) The Administrator of the FAA (or the
7	Administrator's designee).
8	(B) Individuals appointed by the Secretary
9	to represent the following interests:
10	(i) Aircraft and engine manufacturers.
11	(ii) Avionics and equipment manufac-
12	turers.
13	(iii) Labor organizations, including
14	collective bargaining representatives of
15	FAA aviation safety inspectors and avia-
16	tion safety engineers.
17	(iv) General aviation operators.
18	(v) Air carriers.
19	(vi) Business aviation operators.
20	(vii) Unmanned aircraft systems man-
21	ufacturers and operators.
22	(viii) Aviation safety management ex-
23	pertise.
24	(ix) Aviation maintenance.
25	(2) Nonvoting members.—

1	(A) IN GENERAL.—In addition to the
2	members appointed under paragraph (1), the
3	Advisory Committee shall be composed of non-
4	voting members appointed by the Secretary
5	from among individuals representing FAA safe-
6	ty oversight program offices.
7	(B) DUTIES.—The nonvoting members
8	shall—
9	(i) take part in deliberations of the
10	Advisory Committee; and
11	(ii) provide input with respect to any
12	final reports or recommendations of the
13	Advisory Committee.
14	(C) LIMITATION.—The nonvoting members
15	may not represent any stakeholder interest
16	other than FAA safety oversight program of-
17	fices.
18	(3) TERMS.—Each member and nonvoting
19	member of the Advisory Committee appointed by the
20	Secretary shall be appointed for a term of 2 years.
21	(4) Committee characteristics.—The Advi-
22	sory Committee shall have the following characteris-
23	ties:

1	(A) An executive-level membership, with
2	members who can represent and enter into com-
3	mitments for their organizations.
4	(B) The ability to obtain necessary infor-
5	mation from experts in the aviation and aero-
6	space communities.
7	(C) A membership size that enables the
8	Committee to have substantive discussions and
9	reach consensus on issues in a timely manner.
10	(D) Appropriate expertise, including exper-
11	tise in certification and risked-based safety
12	oversight processes, operations, policy, tech-
13	nology, labor relations, training, and finance.
14	(5) LIMITATION ON STATUTORY CONSTRUC-
15	TION.—Public Law 104–65 (2 U.S.C. 1601 et seq.)
16	may not be construed to prohibit or otherwise limit
17	the appointment of any individual as a member of
18	the Advisory Committee.
19	(e) Chairperson.—
20	(1) IN GENERAL.—The Chairperson of the Ad-
21	visory Committee shall be appointed by the Sec-
22	retary from among those members of the Advisory
23	Committee that are executive-level members of the
24	aviation industry.

(2) TERM.—Each member appointed under
 paragraph (1) shall serve a term of 1 year as Chair person.

4 (f) MEETINGS.—

5 (1) FREQUENCY.—The Advisory Committee
6 shall meet at least twice each year at the call of the
7 Chairperson.

8 (2) PUBLIC ATTENDANCE.—The meetings of
9 the Advisory Committee shall be open to the public.
10 (g) SPECIAL COMMITTEES.—

(1) ESTABLISHMENT.—The Advisory Committee may establish special committees composed of
private sector representatives, members of the public, labor representatives, and other interested parties in complying with consultation and participation
requirements under this section.

17 (2) RULEMAKING ADVICE.—A special com18 mittee established by the Advisory Committee may—

19 (A) provide rulemaking advice and rec20 ommendations to the Administrator with re21 spect to aviation-related issues;

(B) afford the FAA additional opportunities to obtain firsthand information and insight
from those parties that are most affected by existing and proposed regulations; and

(C) expedite the development, revision, or
 elimination of rules without circumventing pub lic rulemaking processes and procedures.

4 (3) APPLICABLE LAW.—Public Law 92–463
5 shall not apply to a special committee established by
6 the Advisory Committee.

7 (h) SUNSET.—The Advisory Committee shall termi8 nate on the last day of the 6-year period beginning on
9 the date of the initial appointment of the members of the
10 Advisory Committee.

(i) TERMINATION OF AIR TRAFFIC PROCEDURES ADVISORY COMMITTEE.—The Air Traffic Procedures Advisory Committee established by the FAA shall terminate
on the date of the initial appointment of the members of
the Advisory Committee.

16 Subtitle B—Aircraft Certification 17 Reform

18 SEC. 211. AIRCRAFT CERTIFICATION PERFORMANCE OB-

19 JECTIVES AND METRICS.

(a) IN GENERAL.—Not later than 120 days after the
date on which the Safety Oversight and Certification Advisory Committee is established under section 202, the Administrator of the FAA shall establish performance objectives and apply and track metrics for the FAA and the

aviation industry relating to aircraft certification in ac cordance with this section.

3 (b) COLLABORATION.—The Administrator shall carry
4 out this section in collaboration with the Safety Oversight
5 and Certification Advisory Committee.

6 (c) PERFORMANCE OBJECTIVES.—In carrying out 7 subsection (a), the Administrator shall establish perform-8 ance objectives for the FAA and the aviation industry to 9 ensure that, with respect to aircraft certification, progress 10 is made toward, at a minimum—

(1) eliminating certification delays and improv-ing cycle times;

13 (2) increasing accountability for both FAA and14 industry entities;

15 (3) achieving full utilization of FAA delegation16 and designation authorities;

17 (4) fully implementing risk management prin-18 ciples and a systems safety approach;

19 (5) reducing duplication of effort;

20 (6) increasing transparency;

21 (7) establishing and providing training, includ22 ing recurrent training, in auditing and a systems
23 safety approach to certification oversight;

(8) improving the process for approving or ac-
cepting certification actions between the FAA and
bilateral partners;
(9) maintaining and improving safety;
(10) streamlining the hiring process for—
(A) qualified systems safety engineers to
support FAA efforts to implement a systems
safety approach; and
(B) qualified systems engineers to guide
the engineering of complex systems within the
FAA; and
(11) maintaining the leadership of the United
States in international aviation and aerospace.
(d) Performance Metrics.—In carrying out sub-
section (a), the Administrator shall apply and track per-
formance metrics for the FAA and the regulated aviation
industry established by the Safety Oversight and Certifi-
cation Advisory Committee.
(e) DATA GENERATION.—
(1) BASELINES.—Not later than 1 year after
the date on which the Safety Oversight and Certifi-
cation Advisory Committee establishes initial per-
formance metrics for the FAA and the regulated
aviation industry under section 202, the Adminis-
trator shall generate initial data with respect to each

of the metrics applied and tracked under this sec tion.

3 (2) MEASURING PROGRESS TOWARD GOALS.—
4 The Administrator shall use the metrics applied and
5 tracked under this section to generate data on an
6 ongoing basis and to measure progress toward the
7 achievement of national goals established by the
8 Safety Oversight and Certification Advisory Com9 mittee.

10 (f) PUBLICATION.—The Administrator shall make 11 data generated using the metrics applied and tracked 12 under this section available to the public in a searchable, 13 sortable, and downloadable format through the internet 14 website of the FAA and other appropriate methods and 15 shall ensure that the data is made available in a manner 16 that—

17 (1) does not provide identifying information re-18 garding an individual or entity; and

19 (2) protects proprietary information.

20 SEC. 212. ORGANIZATION DESIGNATION AUTHORIZATIONS.

(a) IN GENERAL.—Chapter 447 of title 49, United
States Code, is amended by adding at the end the following:

24 "§ 44736. Organization designation authorizations
25 "(a) DELEGATIONS OF FUNCTIONS.—

1	"(1) IN GENERAL.—Except as provided in para-
2	graph (3), when overseeing an ODA holder, the Ad-
3	ministrator of the FAA shall—

"(A) require, based on an application submitted by the ODA holder and approved by the Administrator (or the Administrator's designee), a procedures manual that addresses all procedures and limitations regarding the functions to be performed by the ODA holder;

10 "(B) delegate fully to the ODA holder each 11 of the functions to be performed as specified in 12 the procedures manual, unless the Adminis-13 trator determines, after the date of the delega-14 tion and as a result of an inspection or other 15 investigation, that the public interest and safety 16 of air commerce requires a limitation with re-17 spect to 1 or more of the functions; and

18 "(C) conduct regular oversight activities by
19 inspecting the ODA holder's delegated functions
20 and taking action based on validated inspection
21 findings.

22 "(2) DUTIES OF ODA HOLDERS.—An ODA
23 holder shall—

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1	"(A) perform each function delegated to
2	the ODA holder in accordance with the ap-
3	proved procedures manual for the delegation;
4	"(B) make the procedures manual avail-
5	able to each member of the appropriate ODA
6	unit; and
7	"(C) cooperate fully with oversight activi-
8	ties conducted by the Administrator in connec-
9	tion with the delegation.
10	"(3) EXISTING ODA HOLDERS.—With regard to
11	an ODA holder operating under a procedures man-
12	ual approved by the Administrator before the date of
13	enactment of this section, the Administrator shall—
14	"(A) at the request of the ODA holder and
15	in an expeditious manner, approve revisions to
16	the ODA holder's procedures manual;
17	"(B) delegate fully to the ODA holder each
18	of the functions to be performed as specified in
19	the procedures manual, unless the Adminis-
20	trator determines, after the date of the delega-
21	tion and as a result of an inspection or other
22	investigation, that the public interest and safety
23	of air commerce requires a limitation with re-
24	spect to one or more of the functions; and

1	"(C) conduct regular oversight activities by
2	inspecting the ODA holder delegated functions
3	and taking action based on validated inspection
4	findings.
5	"(b) ODA OFFICE.—
6	"(1) Establishment.—Not later than 90 days
7	after the date of enactment of this section, the Ad-
8	ministrator of the FAA shall identify, within the
9	FAA Office of Aviation Safety, a centralized policy
10	office to be known as the Organization Designation
11	Authorization Office or the ODA Office.
12	"(2) PURPOSE.—The purpose of the ODA Of-
13	fice shall be to oversee and ensure the consistency of
14	the FAA's audit functions under the ODA program
15	across the FAA.
16	"(3) FUNCTIONS.—The ODA Office shall—
17	"(A) improve performance and ensure full
18	utilization of the authorities delegated under
19	the ODA program;
20	"(B) create a more consistent approach to
21	audit priorities, procedures, and training under
22	the ODA program;
23	"(C) review, in a timely fashion, a random
24	sample of limitations on delegated authorities

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1	under the ODA program to determine if the
2	limitations are appropriate;
3	"(D) ensure national consistency in the in-
4	terpretation and application of the requirements
5	of the ODA program, including any limitations,
6	and in the performance of the ODA program;
7	and
8	"(E) at the request of an ODA holder, re-
9	view and approve new limitations to ODA func-
10	tions.
11	"(c) DEFINITIONS.—In this section, the following
12	definitions apply:
13	"(1) FAA.—The term 'FAA' means the Fed-
14	eral Aviation Administration.
15	"(2) ODA HOLDER.—The term 'ODA holder'
16	means an entity authorized to perform functions
17	pursuant to a delegation made by the Administrator
18	of the FAA under section 44702(d).
19	"(3) ODA UNIT.—The term "ODA unit"
20	means a group of 2 or more individuals who per-
21	form, under the supervision of an ODA holder, au-
22	thorized functions under an ODA.
23	"(4) Organization.—The term "organization"
24	means a firm, partnership, corporation, company,

association, joint-stock association, or governmental
 entity.

3 "(5) ORGANIZATION DESIGNATION AUTHORIZA4 TION; ODA.—The term 'Organization Designation
5 Authorization' or 'ODA' means an authorization by
6 the FAA under section 44702(d) for an organization
7 comprised of 1 or more ODA units to perform approved functions on behalf of the FAA.".

9 (b) CLERICAL AMENDMENT.—The analysis for chap10 ter 447 of title 49, United States Code, is amended by
11 adding at the end the following:

"44736. Organization designation authorizations.".

12 SEC. 213. ODA REVIEW.

(a) ESTABLISHMENT OF EXPERT REVIEW PANEL.—
(1) EXPERT PANEL.—Not later than 60 days
after the date of enactment of this Act, the Administrator of the FAA shall convene a multidisciplinary
expert review panel (in this section referred to as the
"Panel").

- 19 (2) Composition of panel.—
- 20 (A) APPOINTMENT OF MEMBERS.—The
 21 Panel shall be composed of not more than 20
 22 members appointed by the Administrator.
- 23 (B) QUALIFICATIONS.—The members ap24 pointed to the Panel shall—

1	(i) each have a minimum of 5 years of
2	experience in processes and procedures
3	under the ODA program; and
4	(ii) represent, at a minimum, ODA
5	holders, aviation manufacturers, safety ex-
6	perts, and FAA labor organizations, in-
7	cluding labor representatives of FAA avia-
8	tion safety inspectors and aviation safety
9	engineers.
10	(b) SURVEY.—The Panel shall conduct a survey of
11	ODA holders and ODA program applicants to document
12	and assess FAA certification and oversight activities, in-
13	cluding use of the ODA program and the timeliness and
14	efficiency of the certification process.
15	(c) Assessment and Recommendations.—The
16	Panel shall assess and make recommendations con-
17	cerning—
18	(1) the FAA's processes and procedures under
19	the ODA program and whether the processes and
20	procedures function as intended;
21	(2) the best practices of and lessons learned by
22	ODA holders and individuals who provide oversight
23	of ODA holders;
24	(3) performance incentive policies related to the
25	ODA program for FAA personnel;

1 (4) training activities related to the ODA pro-2 gram for FAA personnel and ODA holders; 3 (5) the impact, if any, that oversight of the 4 ODA program has on FAA resources and the FAA's 5 ability to process applications for certifications out-6 side of the ODA program; and 7 (6) the results of the survey conducted under 8 subsection (b). 9 (d) REPORT.—Not later than 180 days after the date 10 the Panel is convened under subsection (a), the Panel shall submit to the Administrator, the Safety Oversight and 11 12 Certification Advisory Committee, the Committee on 13 Transportation and Infrastructure of the House of Representatives, and the Committee on Commerce, Science, 14 15 and Transportation of the Senate a report on the findings and recommendations of the Panel. 16 17 (e) DEFINITIONS.—The definitions contained in section 44736 of title 49, United States Code, as added by 18 19 this Act, apply to this section. 20(f) APPLICABLE LAW.—Public Law 92–463 shall not 21 apply to the Panel.

(g) SUNSET.—The Panel shall terminate on the date
of submission of the report under subsection (d), or on
the date that is 1 year after the Panel is convened under
subsection (a), whichever occurs first.

1	SEC. 214. TYPE CERTIFICATION RESOLUTION PROCESS.
2	(a) IN GENERAL.—Section 44704(a) of title 49,
3	United States Code, is amended by adding at the end the
4	following:
5	"(6) Type certification resolution proc-
6	ESS.—
7	"(A) IN GENERAL.—Not later than 15
8	months after the date of enactment of this
9	paragraph, the Administrator shall establish an
10	effective, timely, and milestone-based issue reso-
11	lution process for type certification activities
12	under this subsection.
13	"(B) PROCESS REQUIREMENTS.—The res-
14	olution process shall provide for—
15	"(i) resolution of technical issues at
16	pre-established stages of the certification
17	process, as agreed to by the Administrator
18	and the type certificate applicant;
19	"(ii) automatic elevation to appro-
20	priate management personnel of the Fed-
21	eral Aviation Administration and the type
22	certificate applicant of any major certifi-
23	cation process milestone that is not com-
24	pleted or resolved within a specific period
25	of time agreed to by the Administrator and
26	the type certificate applicant; and

1 "(iii) resolution of a major certifi-2 cation process milestone elevated pursuant 3 to clause (ii) within a specific period of 4 time agreed to by the Administrator and 5 the type certificate applicant.

6 "(C) Major CERTIFICATION PROCESS 7 MILESTONE DEFINED.—In this paragraph, the 8 term 'major certification process milestone' 9 means a milestone related to a type certification 10 basis, type certification plan, type inspection 11 authorization, issue paper, or other major type 12 certification activity agreed to by the Adminis-13 trator and the type certificate applicant.".

(b) TECHNICAL AMENDMENT.—Section 44704 of
title 49, United States Code, is amended in the section
heading by striking "airworthiness certificates,"
and inserting "airworthiness certificates,".

18 SEC. 215. REVIEW OF CERTIFICATION PROCESS FOR SMALL

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GENERAL AVIATION AIRPLANES.

(a) IN GENERAL.—Not later than 1 year after the
date of enactment of this Act, the Inspector General of
the Department of Transportation shall initiate a review
of the Federal Aviation Administration's implementation
of the final rule titled "Revision of Airworthiness Stand-

ards for Normal, Utility, Acrobatic, and Commuter Cat-1 2 egory Airplanes" (81 Fed. Reg. 96572). 3 (b) CONSIDERATIONS.—In carrying out the review, 4 the Inspector General shall assess— 5 (1) how the rule puts into practice the Adminis-6 tration's efforts to implement performance and risk-7 based safety standards; (2) whether the Administration's implementa-8 9 tion of the rule has improved safety and reduced the 10 regulatory cost burden for the Administration and 11 the aviation industry; and 12 (3) if there are lessons learned from, and best 13 practices developed as a result of, the rule that could 14 be applied to airworthiness standards for other cat-15 egories of aircraft. 16 (c) REPORT.—Not later than 180 days after the date of initiation of the review, the Inspector General shall sub-17 mit to the Committee on Transportation and Infrastruc-18 ture of the House of Representatives and the Committee 19 20 on Commerce, Science, and Transportation of the Senate 21 a report on the results of the review, including findings 22 and recommendations.

Subtitle C—Flight Standards Reform

3 SEC. 231. FLIGHT STANDARDS PERFORMANCE OBJECTIVES
4 AND METRICS.

5 (a) IN GENERAL.—Not later than 120 days after the 6 date on which the Safety Oversight and Certification Advi-7 sory Committee is established under section 202, the Ad-8 ministrator of the FAA shall establish performance objec-9 tives and apply and track metrics for the FAA and the 10 aviation industry relating to flight standards activities in 11 accordance with this section.

(b) COLLABORATION.—The Administrator shall carry
out this section in collaboration with the Safety Oversight
and Certification Advisory Committee.

(c) PERFORMANCE OBJECTIVES.—In carrying out
subsection (a), the Administrator shall establish performance objectives for the FAA and the aviation industry to
ensure that, with respect to flight standards activities,
progress is made toward, at a minimum—

20 (1) eliminating delays with respect to such ac-21 tivities;

(2) increasing accountability for both FAA andindustry entities;

24 (3) achieving full utilization of FAA delegation25 and designation authorities;

1	(4) fully implementing risk management prin-
2	ciples and a systems safety approach;
3	(5) reducing duplication of effort;
4	(6) eliminating inconsistent regulatory interpre-
5	tations and inconsistent enforcement activities;
6	(7) improving and providing greater opportuni-
7	ties for training, including recurrent training, in au-
8	diting and a systems safety approach to oversight;
9	(8) developing and allowing utilization of a sin-
10	gle master source for guidance;
11	(9) providing and utilizing a streamlined appeal
12	process for the resolution of regulatory interpreta-
13	tion questions;
14	(10) maintaining and improving safety; and
15	(11) increasing transparency.
16	(d) Metrics.—In carrying out subsection (a), the
17	Administrator shall apply and track performance metrics
18	for the FAA and the regulated aviation industry estab-
19	lished by the Safety Oversight and Certification Advisory
20	Committee.
21	(e) DATA GENERATION.—
22	(1) BASELINES.—Not later than 1 year after
23	the date on which the Safety Oversight and Certifi-
24	cation Advisory Committee establishes initial per-
25	formance metrics for the FAA and the regulated

aviation industry under section 202, the Adminis trator shall generate initial data with respect to each
 of the metrics applied and tracked under this sec tion.

5 (2) MEASURING PROGRESS TOWARD GOALS.— 6 The Administrator shall use the metrics applied and 7 tracked under this section to generate data on an 8 ongoing basis and to measure progress toward the 9 achievement of national goals established by the 10 Safety Oversight and Certification Advisory Com-11 mittee.

12 (f) PUBLICATION.—The Administrator shall make 13 data generated using the metrics applied and tracked 14 under this section available to the public in a searchable, 15 sortable, and downloadable format through the internet 16 website of the FAA and other appropriate methods and 17 shall ensure that the data is made available in a manner 18 that—

(1) does not provide identifying information re-garding an individual or entity; and

21 (2) protects proprietary information.

22 SEC. 232. FAA TASK FORCE ON FLIGHT STANDARDS RE23 FORM.

(a) ESTABLISHMENT.—Not later than 90 days afterthe date of enactment of this Act, the Administrator of

1	the FAA shall establish the FAA Task Force on Flight
2	Standards Reform (in this section referred to as the "Task
3	Force").
4	(b) Membership.—
5	(1) APPOINTMENT.—The membership of the
6	Task Force shall be appointed by the Administrator.
7	(2) NUMBER.—The Task Force shall be com-
8	posed of not more than 20 members.
9	(3) Representation requirements.—The
10	membership of the Task Force shall include rep-
11	resentatives, with knowledge of flight standards reg-
12	ulatory processes and requirements, of—
13	(A) air carriers;
14	(B) general aviation;
15	(C) business aviation;
16	(D) repair stations;
17	(E) unmanned aircraft systems operators;
18	(F) flight schools;
19	(G) labor unions, including those rep-
20	resenting FAA aviation safety inspectors; and
21	(H) aviation safety experts.
22	(c) DUTIES.—The duties of the Task Force shall in-
23	clude, at a minimum, identifying best practices and pro-
24	viding recommendations, for current and anticipated
25	budgetary environments, with respect to—

1	(1) simplifying and streamlining flight stand-
2	ards regulatory processes;
3	(2) reorganizing Flight Standards Services to
4	establish an entity organized by function rather than
5	geographic region, if appropriate;
6	(3) FAA aviation safety inspector training op-
7	portunities;
8	(4) FAA aviation safety inspector standards
9	and performance; and
10	(5) achieving, across the FAA, consistent—
11	(A) regulatory interpretations; and
12	(B) application of oversight activities.
13	(d) REPORT.—Not later than 1 year after the date
14	of enactment of this Act, the Task Force shall submit to
15	the Committee on Transportation and Infrastructure of
16	the House of Representatives and the Committee on Com-
17	merce, Science, and Transportation of the Senate a report
18	detailing—
19	(1) the best practices identified and rec-
20	ommendations provided by the Task Force under
21	subsection (c); and
22	(2) any recommendations of the Task Force for
23	additional regulatory action or cost-effective legisla-
24	tive action.

1 (e) APPLICABLE LAW.—Public Law 92–463 shall not 2 apply to the Task Force. 3 (f) TERMINATION.—The Task Force shall terminate 4 on the earlier of— 5 (1) the date on which the Task Force submits 6 the report required under subsection (d); or 7 (2) the date that is 18 months after the date 8 on which the Task Force is established under sub-9 section (a). 10 SEC. 233. CENTRALIZED SAFETY GUIDANCE DATABASE. 11 (a) ESTABLISHMENT.—Not later than 1 year after 12 the date of enactment of this Act, the Administrator of 13 the FAA shall establish a centralized safety guidance data-14 base that will— 15 (1) encompass all of the regulatory guidance 16 documents of the FAA Office of Aviation Safety; 17 (2) contain, for each such guidance document, 18 a link to the Code of Federal Regulations provision 19 to which the document relates; and 20 (3) be publicly available in a manner that— 21 (A) does not provide identifying informa-22 tion regarding an individual or entity; and 23 (B) protects proprietary information. (b) DATA ENTRY TIMING.— 24

1 (1) EXISTING DOCUMENTS.—Not later than 14 2 months after the date of enactment of this Act, the 3 Administrator shall begin entering into the database 4 established under subsection (a) all of the regulatory 5 guidance documents of the Office of Aviation Safety 6 that are in effect and were issued before the date on 7 which the Administrator begins such entry process. 8 (2) NEW DOCUMENTS AND CHANGES.—On and 9 after the date on which the Administrator begins the 10 document entry process under paragraph (1), the 11 Administrator shall ensure that all new regulatory 12 guidance documents of the Office of Aviation Safety 13 and any changes to existing documents are included 14 in the database established under subsection (a). 15 (c) CONSULTATION REQUIREMENT.—In establishing

15 (c) CONSULTATION REQUIREMENT.—In establishing
16 the database under subsection (a), the Administrator shall
17 consult and collaborate with appropriate stakeholders, in18 cluding labor organizations (including those representing
19 aviation workers and FAA aviation safety inspectors) and
20 industry stakeholders.

(d) REGULATORY GUIDANCE DOCUMENTS DEFINED.—In this section, the term "regulatory guidance
documents" means all forms of written information issued
by the FAA that an individual or entity may use to interpret or apply FAA regulations and requirements, includ-

ing information an individual or entity may use to deter mine acceptable means of compliance with such regula tions and requirements.

4 SEC. 234. REGULATORY CONSISTENCY COMMUNICATIONS 5 BOARD.

6 (a) ESTABLISHMENT.—Not later than 180 days after 7 the date of enactment of this Act, the Administrator of 8 the FAA shall establish a Regulatory Consistency Commu-9 nications Board (in this section referred to as the 10 "Board").

(b) CONSULTATION REQUIREMENT.—In establishing
the Board, the Administrator shall consult and collaborate
with appropriate stakeholders, including FAA labor organizations (including labor organizations representing FAA
aviation safety inspectors) and industry stakeholders.

(c) MEMBERSHIP.—The Board shall be composed of
FAA representatives, appointed by the Administrator,
from—

19 (1) the Flight Standards Service;

20 (2) the Aircraft Certification Service; and

21 (3) the Office of the Chief Counsel.

(d) FUNCTIONS.—The Board shall carry out the fol-lowing functions:

24 (1) Establish, at a minimum, processes by25 which—

1	(A) FAA personnel and regulated entities
2	may submit anonymous regulatory interpreta-
3	tion questions without fear of retaliation; and
4	(B) FAA personnel may submit written
5	questions, and receive written responses, as to
6	whether a previous approval or regulatory inter-
7	pretation issued by FAA personnel in another
8	office or region is correct or incorrect.
9	(2) Meet on a regular basis to discuss and re-
10	solve questions submitted pursuant to paragraph (1)
11	and the appropriate application of regulations and
12	policy with respect to each question.
13	(3) Provide to an individual or entity that sub-
14	mitted a question pursuant to paragraph (1) a time-
15	ly response to the question.
16	(4) Establish a process to make resolutions of
17	common regulatory interpretation questions publicly
18	available to FAA personnel and regulated entities
19	without providing any identifying data of the indi-
20	viduals or entities that submitted the questions and
21	in a manner that protects any proprietary informa-
22	tion.
23	(5) Ensure the incorporation of resolutions of
24	questions submitted pursuant to paragraph (1) into
25	regulatory guidance documents.

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Performance 1 METRICS, (e) TIMELINES, AND 2 GOALS.—Not later than 180 days after the date on which 3 the Safety Oversight and Certification Advisory Com-4 mittee establishes performance metrics for the FAA and 5 the regulated aviation industry under section 202, the Administrator, in collaboration with the Advisory Committee, 6 7 shall-

8 (1) establish performance metrics, timelines,
9 and goals to measure the progress of the Board in
10 resolving regulatory interpretation questions sub11 mitted pursuant to subsection (d)(1); and

(2) implement a process for tracking the
progress of the Board in meeting the metrics,
timelines, and goals established under paragraph
(1).

16 Subtitle D—Safety Workforce

17 SEC. 241. SAFETY WORKFORCE TRAINING STRATEGY.

(a) SAFETY WORKFORCE TRAINING STRATEGY.—
19 Not later than 60 days after the date of enactment of this
20 Act, the Administrator of the FAA shall establish a safety
21 workforce training strategy that—

(1) allows employees participating in organization management teams or conducting ODA program audits to complete, in a timely fashion, appro-

1	priate training, including recurrent training, in au-
2	diting and a systems safety approach to oversight;
3	(2) seeks knowledge-sharing opportunities be-
4	tween the FAA and the aviation industry regarding
5	new equipment and systems, best practices, and
6	other areas of interest;
7	(3) functions within the current and anticipated
8	budgetary environments; and
9	(4) includes milestones and metrics for meeting
10	the requirements of paragraphs (1) , (2) , and (3) .
11	(b) REPORT.—Not later than 270 days after the date
12	of establishment of the strategy required under subsection
13	(a), the Administrator shall submit to the Committee on
14	Transportation and Infrastructure of the House of Rep-
15	resentatives and the Committee on Commerce, Science,
16	and Transportation of the Senate a report on the imple-
17	mentation of the strategy and progress in meeting any
18	milestones and metrics included in the strategy.
19	(c) DEFINITIONS.—In this section, the following defi-
20	nitions apply:
21	(1) ODA; ODA HOLDER.—The terms "ODA"
22	and "ODA holder" have the meanings given those
23	terms in section 44736 of title 49, United States

24 Code, as added by this Act.

1 (2) ORGANIZATION MANAGEMENT TEAM.—The 2 term "organization management team" means a 3 team consisting of FAA aviation safety engineers, 4 flight test pilots, and aviation safety inspectors over-5 seeing an ODA holder and its certification activity.

6 SEC. 242. WORKFORCE REVIEW.

7 (a) WORKFORCE REVIEW.—Not later than 90 days
8 after the date of enactment of this Act, the Comptroller
9 General of the United States shall conduct a review to as10 sess the workforce and training needs of the FAA Office
11 of Aviation Safety in the anticipated budgetary environ12 ment.

13 (b) CONTENTS.—The review required under sub-14 section (a) shall include—

(1) a review of current aviation safety inspector
and aviation safety engineer hiring, training, and recurrent training requirements;

18 (2) an analysis of the skills and qualifications 19 required of aviation safety inspectors and aviation 20 safety engineers for successful performance in the 21 current and future projected aviation safety regu-22 latory environment, including the need for a systems 23 engineering discipline within the FAA to guide the 24 engineering of complex systems, with an emphasis 25 on auditing designated authorities;

(3) a review of current performance incentive
 policies of the FAA, as applied to the Office of Avia tion Safety, including awards for performance;

4 (4) an analysis of ways the FAA can work with
5 industry and labor, including labor groups rep6 resenting FAA aviation safety inspectors and avia7 tion safety engineers, to establish knowledge-sharing
8 opportunities between the FAA and the aviation in9 dustry regarding new equipment and systems, best
10 practices, and other areas of interest; and

(5) recommendations on the most effective
qualifications, training programs (including e-learning training), and performance incentive approaches
to address the needs of the future projected aviation
safety regulatory system in the anticipated budgetary environment.

(c) REPORT.—Not later than 270 days after the date
of enactment of this Act, the Comptroller General shall
submit to the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Commerce, Science, and Transportation of the
Senate a report on the results of the review required under
subsection (a).

1	Subtitle E—International Aviation
2	SEC. 251. PROMOTION OF UNITED STATES AEROSPACE
3	STANDARDS, PRODUCTS, AND SERVICES
4	ABROAD.
5	Section 40104 of title 49, United States Code, is
6	amended by adding at the end the following:
7	"(d) Promotion of United States Aerospace
8	STANDARDS, PRODUCTS, AND SERVICES ABROAD.—The
9	Administrator shall take appropriate actions to—
10	"(1) promote United States aerospace safety
11	standards abroad;
12	"(2) facilitate and vigorously defend approvals
13	of United States aerospace products and services
14	abroad;
15	"(3) with respect to bilateral partners, utilize
16	bilateral safety agreements and other mechanisms to
17	improve validation of United States type certificated
18	aeronautical products and appliances and enhance
19	mutual acceptance in order to eliminate
20	redundancies and unnecessary costs; and
21	"(4) with respect to foreign safety authorities,
22	streamline validation and coordination processes.".

1	SEC. 252. BILATERAL EXCHANGES OF SAFETY OVERSIGHT
2	RESPONSIBILITIES.
3	Section 44701(e) of title 49, United States Code, is
4	amended by adding at the end the following:
5	"(5) Foreign Airworthiness directives.—
6	"(A) ACCEPTANCE.—The Administrator
7	may accept an airworthiness directive issued by
8	an aeronautical safety authority of a foreign
9	country, and leverage that authority's regu-
10	latory process, if—
11	"(i) the country is the state of design
12	for the product that is the subject of the
13	airworthiness directive;
14	"(ii) the United States has a bilateral
15	safety agreement relating to aircraft cer-
16	tification with the country;
17	"(iii) as part of the bilateral safety
18	agreement with the country, the Adminis-
19	trator has determined that such aero-
20	nautical safety authority has a certification
21	system relating to safety that produces a
22	level of safety equivalent to the level pro-
23	duced by the system of the Federal Avia-
24	tion Administration;
25	"(iv) the aeronautical safety authority
26	of the country utilizes an open and trans-

1	parent notice and comment process in the
2	issuance of airworthiness directives; and
3	"(v) the airworthiness directive is nec-
4	essary to provide for the safe operation of
5	the aircraft subject to the directive.
6	"(B) Alternative approval process.—
7	Notwithstanding subparagraph (A), the Admin-
8	istrator may issue a Federal Aviation Adminis-
9	tration airworthiness directive instead of accept-
10	ing an airworthiness directive otherwise eligible
11	for acceptance under such subparagraph, if the
12	Administrator determines that such issuance is
13	necessary for safety or operational reasons due
14	to the complexity or unique features of the Fed-
15	eral Aviation Administration airworthiness di-
16	rective or the United States aviation system.
17	"(C) ALTERNATIVE MEANS OF COMPLI-
18	ANCE.—The Administrator may—
19	"(i) accept an alternative means of
20	compliance, with respect to an airworthi-
21	ness directive accepted under subpara-
22	graph (A), that was approved by the aero-
23	nautical safety authority of the foreign
24	country that issued the airworthiness di-
25	rective; or

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1	"(ii) notwithstanding subparagraph
2	(A), and at the request of any person af-
3	fected by an airworthiness directive accept-
4	ed under such subparagraph, approve an
5	alternative means of compliance with re-
6	spect to the airworthiness directive.
7	"(D) LIMITATION.—The Administrator
8	may not accept an airworthiness directive
9	issued by an aeronautical safety authority of a
10	foreign country if the airworthiness directive
11	addresses matters other than those involving
12	the safe operation of an aircraft.".
13	SEC. 253. FAA LEADERSHIP ABROAD.
14	(a) IN GENERAL.—To promote United States aero-
15	space safety standards, reduce redundant regulatory activ-
16	ity, and facilitate acceptance of FAA design and produc-
17	tion approvals abroad, the Administrator of the FAA
18	shall—
19	(1) attain greater expertise in issues related to
20	dispute resolution, intellectual property, and export
21	control laws to better support FAA certification and
22	other aerospace regulatory activities abroad;

(2) work with United States companies to more
accurately track the amount of time it takes foreign
authorities, including bilateral partners, to validate

United States type certificated aeronautical prod ucts;

3 (3) provide assistance to United States compa4 nies that have experienced significantly long foreign
5 validation wait times;

6 (4) work with foreign authorities, including bi-7 lateral partners, to collect and analyze data to deter-8 mine the timeliness of the acceptance and validation 9 of FAA design and production approvals by foreign 10 authorities and the acceptance and validation of for-11 eign-certified products by the FAA;

(5) establish appropriate benchmarks and
metrics to measure the success of bilateral aviation
safety agreements and to reduce the validation time
for United States type certificated aeronautical
products abroad; and

(6) work with foreign authorities, including bilateral partners, to improve the timeliness of the acceptance and validation of FAA design and production approvals by foreign authorities and the acceptance and validation of foreign-certified products by
the FAA.

(b) REPORT.—Not later than 1 year after the date
of enactment of this Act, the Administrator of the FAA
shall submit to the Committee on Transportation and In-

4 (1) describes the FAA's strategic plan for inter-5 national engagement;

6 (2) describes the structure and responsibilities
7 of all FAA offices that have international respon8 sibilities, including the Aircraft Certification Office,
9 and all the activities conducted by those offices re10 lated to certification and production;

(3) describes current and forecasted staffing
and travel needs for the FAA's international engagement activities, including the needs of the Aircraft
Certification Office in the current and forecasted
budgetary environment;

(4) provides recommendations, if appropriate,
to improve the existing structure and personnel and
travel policies supporting the FAA's international
engagement activities, including the activities of the
Aviation Certification Office, to better support the
growth of United States aerospace exports; and

(5) identifies cost-effective policy initiatives,
regulatory initiatives, or legislative initiatives needed
to improve and enhance the timely acceptance of
United States aerospace products abroad.

(c) INTERNATIONAL TRAVEL.—The Administrator of 1 2 the FAA, or the Administrator's designee, may authorize 3 international travel for any FAA employee, without the 4 approval of any other person or entity, if the Adminis-5 trator determines that the travel is necessary— 6 (1) to promote United States aerospace safety 7 standards; or 8 (2) to support expedited acceptance of FAA de-9 sign and production approvals. 10 SEC. 254. REGISTRATION, CERTIFICATION, AND RELATED 11 FEES. 12 Section 45305 of title 49, United States Code, is 13 amended-14 (1) in subsection (a) by striking "Subject to 15 subsection (b)" and inserting "Subject to subsection (c)'';16 17 (2) by redesignating subsections (b) and (c) as 18 subsections (c) and (d), respectively; and 19 (3) by inserting after subsection (a) the fol-20 lowing: 21 "(b) CERTIFICATION SERVICES.—Subject to sub-22 section (c), and notwithstanding section 45301(a), the Ad-23 ministrator may establish and collect a fee from a foreign 24 government or entity for services related to certification, 25 regardless of where the services are provided, if the fee"(1) is established and collected in a manner
 consistent with aviation safety agreements; and
 "(2) does not exceed the estimated costs of the
 services.".

5 **TITLE III—SAFETY** 6 **Subtitle A—General Provisions**

7 SEC. 301. FAA TECHNICAL TRAINING.

8 (a) E-LEARNING TRAINING PILOT PROGRAM.—Not 9 later than 90 days after the date of enactment of this Act, 10 the Administrator of the Federal Aviation Administration, 11 in collaboration with the exclusive bargaining representa-12 tives of covered FAA personnel, shall establish an e-learn-13 ing training pilot program in accordance with the require-14 ments of this section.

15 (b) CURRICULUM.—The pilot program shall—

16 (1) include a recurrent training curriculum for
17 covered FAA personnel to ensure that the personnel
18 receive instruction on the latest aviation tech19 nologies, processes, and procedures;

20 (2) focus on providing specialized technical
21 training for covered FAA personnel, as determined
22 necessary by the Administrator;

23 (3) include training courses on applicable regu24 lations of the Federal Aviation Administration; and

(4) consider the efficacy of instructor-led online
 training.

3 (c) PILOT PROGRAM TERMINATION.—The pilot pro4 gram shall terminate 1 year after the date of establish5 ment of the pilot program.

6 (d) E-LEARNING TRAINING PROGRAM.—Upon termi7 nation of the pilot program, the Administrator shall estab8 lish an e-learning training program that incorporates les9 sons learned for covered FAA personnel as a result of the
10 pilot program.

11 (e) DEFINITIONS.—In this section, the following defi-12 nitions apply:

(1) COVERED FAA PERSONNEL.—The term
"covered FAA personnel" means airway transportation systems specialists and aviation safety inspectors of the Federal Aviation Administration.

17 (2) E-LEARNING TRAINING.—The term "e18 learning training" means learning utilizing electronic
19 technologies to access educational curriculum outside
20 of a traditional classroom.

21 SEC. 302. SAFETY CRITICAL STAFFING.

(a) UPDATE OF FAA'S SAFETY CRITICAL STAFFING
MODEL.—Not later than 270 days after the date of enactment of this Act, the Administrator of the Federal Aviation Administration shall update the safety critical staff-

1	ing model of the Administration to determine the number
2	of aviation safety inspectors that will be needed to fulfill
3	the safety oversight mission of the Administration.
4	(b) Audit by DOT Inspector General.—
5	(1) IN GENERAL.—Not later than 90 days after
6	the date on which the Administrator has updated
7	the safety critical staffing model under subsection
8	(a), the Inspector General of the Department of
9	Transportation shall conduct an audit of the staffing
10	model.
11	(2) CONTENTS.—The audit shall include, at a
12	minimum—
13	(A) a review of the assumptions and meth-
14	odologies used in devising and implementing the
15	staffing model to assess the adequacy of the
16	staffing model in predicting the number of avia-
17	tion safety inspectors needed—
18	(i) to properly fulfill the mission of
19	the Administration; and
20	(ii) to meet the future growth of the
21	aviation industry; and
22	(B) a determination on whether the staff-
23	ing model takes into account the Administra-
24	tion's authority to fully utilize designees.
25	(3) Report on Audit.—

1 (A) REPORT TO SECRETARY.—Not later 2 than 30 days after the date of completion of the 3 audit, the Inspector General shall submit to the 4 Secretary a report on the results of the audit. 5 (B) REPORT TO CONGRESS.—Not later 6 than 60 days after the date of receipt of the re-7 port, the Secretary shall submit to the Com-8 mittee on Transportation and Infrastructure of 9 the House of Representatives and the Com-10 mittee on Commerce, Science, and Transpor-11 tation of the Senate a copy of the report, to-12 gether with, if appropriate, a description of any 13 actions taken or to be taken to address the re-14 sults of the audit.

15 SEC. 303. INTERNATIONAL EFFORTS REGARDING TRACK-16 ING OF CIVIL AIRCRAFT.

The Administrator of the Federal Aviation Administration shall exercise leadership on creating a global approach to improving aircraft tracking by working with—
(1) foreign counterparts of the Administrator in
the International Civil Aviation Organization and its
subsidiary organizations;
(2) other international organizations and fora;

- 24 and
- 25 (3) the private sector.

3 (a) ASSESSMENT.—Not later than 90 days after the 4 date of enactment of this Act, the Administrator of the 5 Federal Aviation Administration shall initiate an assess-6 ment of aircraft data access and retrieval systems for part 7 121 air carrier aircraft that are used in extended 8 overwater operations to—

9 (1) determine if the systems provide improved 10 access and retrieval of aircraft data and cockpit 11 voice recordings in the event of an aircraft accident; 12 and

13 (2) assess the cost effectiveness of each system14 assessed.

(b) SYSTEMS TO BE EXAMINED.—The systems to beexamined under this section shall include, at a minimum—

17 (1) automatic deployable flight recorders;

18 (2) emergency locator transmitters; and

19 (3) satellite-based solutions.

(c) REPORT.—Not later than 1 year after the date
of initiation of the assessment, the Administrator shall
submit to the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Commerce, Science, and Transportation of the
Senate a report on the results of the assessment.

(d) PART 121 AIR CARRIER DEFINED.—In this sec tion, the term "part 121 air carrier" means an air carrier
 that holds a certificate issued under part 121 of title 14,
 Code of Federal Regulations.

5 SEC. 305. ADVANCED COCKPIT DISPLAYS.

6 (a) IN GENERAL.—Not later than 180 days after the 7 date of enactment of this Act, the Administrator of the 8 Federal Aviation Administration shall initiate a review of 9 heads-up display systems, heads-down display systems em-10 ploying synthetic vision systems, and enhanced vision sys-11 tems (in this section referred to as "HUD systems", 12 "SVS", and "EVS", respectively).

13 (b) CONTENTS.—The review shall—

(1) evaluate the impacts of single- and dual-installed HUD systems, SVS, and EVS on the safety
and efficiency of aircraft operations within the national airspace system; and

(2) review a sufficient quantity of commercial
aviation accidents or incidents in order to evaluate
if HUD systems, SVS, and EVS would have produced a better outcome in that accident or incident.
(c) CONSULTATION.—In conducting the review, the
Administrator shall consult with aviation manufacturers,
representatives of pilot groups, aviation safety organiza-

tions, and any government agencies the Administrator
 considers appropriate.

3 (d) REPORT.—Not later than 1 year after the date 4 of enactment of this Act, the Administrator shall submit 5 to the Committee on Transportation and Infrastructure 6 of the House of Representatives and the Committee on 7 Commerce, Science, and Transportation of the Senate a 8 report containing the results of the review, the actions the 9 Administrator plans to take with respect to the systems 10 reviewed, and the associated timeline for such actions.

11 SEC. 306. MARKING OF TOWERS.

Section 2110 of the FAA Extension, Safety, and Security Act of 2016 (49 U.S.C. 44718 note) is amended—

14 (1) by striking subsections (a) through (c) and15 inserting the following:

16 "(a) Application.—

17 "(1) IN GENERAL.—Except as provided by
18 paragraph (2), not later than 1 year after the date
19 of enactment of the FAA Reauthorization Act of
20 2018 or the availability of the database developed by
21 the Administrator of the Federal Aviation Adminis22 tration pursuant to subsection (c), whichever is
23 later, all covered towers shall be either—

24 "(A) clearly marked consistent with appli25 cable guidance in the advisory circular of the

1	Federal Aviation Administration issued Decem-
2	ber 4, 2015 (AC 70/7460–IL); or
3	"(B) included in the database described in
4	subsection (c).
5	"(2) Meteorological evaluation tower.—
6	A covered tower that is a meteorological evaluation
7	tower shall be subject to the requirements of para-
8	graphs (1)(A) and (1)(B).";
9	(2) by redesignating subsections (d) and (e) as
10	subsections (b) and (c), respectively;
11	(3) in subsection $(b)(1)(A)$ (as so redesig-
12	nated)—
13	(A) in clause (i)(I) by striking "self-stand-
14	ing or" and inserting "a meteorological evalua-
15	tion tower or tower"; and
16	(B) in clause (ii)—
17	(i) in subclause (IV) by striking "or"
18	at the end;
19	(ii) in subclause (V) by striking the
20	period at the end and inserting a semi-
21	colon; and
22	(iii) by adding at the end the fol-
23	lowing:
24	"(VI) is located within the right-
25	of-way of a rail carrier, including

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1	within the boundaries of a rail yard,
2	and is used for a railroad purpose;
3	"(VII) is determined by the Ad-
4	ministrator to pose no hazard to air
5	navigation; or
6	"(VIII) has already mitigated
7	any hazard to aviation safety in ac-
8	cordance with Federal Aviation Ad-
9	ministration guidance or as otherwise
10	approved by the Administrator."; and
11	(4) in subsection (c) (as so redesignated)—
12	(A) by striking paragraph (1) and insert-
13	ing the following:
14	((1) develop a database that contains the loca-
15	tion and height of each covered tower that, pursuant
16	to subsection (a), the owner or operator of such
17	tower elects not to mark, except that meteorological
18	evaluation towers shall be marked and contained in
19	the database;";
20	(B) in paragraph (3) by striking "and" at
21	the end;
22	(C) in paragraph (4) by striking the period
23	at the end and inserting a semicolon; and
24	(D) by adding at the end the following:

"(5) ensure that the tower information in the 1 2 database is de-identified and that the information 3 only includes the location and height of covered tow-4 ers; and "(6) make the database available for use not 5 6 later than 1 year after the date of enactment of the 7 FAA Reauthorization Act of 2018.". 8 SEC. 307. CABIN EVACUATION. 9 (a) REVIEW.—The Administrator of the Federal Aviation Administration shall review— 10 11 (1) evacuation certification of transport-cat-12 egory aircraft used in air transportation, with regard 13 to---(A) emergency conditions, including im-14 15 pacts into water; 16 (B) crew procedures used for evacuations 17 under actual emergency conditions; and 18 (C) any relevant changes to passenger de-19 mographics and legal requirements (including 20 the Americans with Disabilities Act of 1990) 21 that affect emergency evacuations; and 22 (2) recent accidents and incidents where pas-23 sengers evacuated such aircraft. 24 (b) CONSULTATION; REVIEW OF DATA.—In conducting the review, the Administrator shall— 25

1 (1) consult with the National Transportation 2 Safety Board, transport-category aircraft manufac-3 turers, air carriers, and other relevant experts and 4 Federal agencies, including groups representing pas-5 sengers, airline crewmembers, maintenance employ-6 ees, and emergency responders; and

7 (2) review relevant data with respect to evacu-8 ation certification of transport-category aircraft.

9 (c) REPORT TO CONGRESS.—Not later than 1 year 10 after the date of enactment of this Act, the Administrator shall submit to the Committee on Transportation and In-11 12 frastructure of the House of Representatives and the Com-13 mittee on Commerce, Science, and Transportation of the Senate a report on the results of the review and related 14 15 recommendations, if any, including any recommendations for revisions to the assumptions and methods used for as-16 17 sessing evacuation certification of transport-category air-18 craft.

19 SEC. 308. ODA STAFFING AND OVERSIGHT.

(a) REPORT TO CONGRESS.—Not later than 270 days
after the date of enactment of this Act, the Administrator
of the Federal Aviation Administration shall submit to the
Committee on Transportation and Infrastructure of the
House of Representatives and the Committee on Com-

1	merce, Science, and Transportation of the Senate a report
2	on the Administration's progress with respect to—
3	(1) determining what additional model inputs
4	and labor distribution codes are needed to identify
5	ODA oversight staffing needs;
6	(2) developing and implementing system-based
7	evaluation criteria and risk-based tools to aid ODA
8	team members in targeting their oversight activities;
9	(3) developing agreements and processes for
10	sharing resources to ensure adequate oversight of
11	ODA personnel performing certification and inspec-
12	tion work at supplier and company facilities; and
13	(4) ensuring full utilization of ODA authority.
14	(b) ODA DEFINED.—In this section, the term
15	"ODA" has the meaning given that term in section 44736
16	of title 49, United States Code, as added by this Act.
17	SEC. 309. FUNDING FOR ADDITIONAL SAFETY NEEDS.
18	Section 44704 of title 49, United States Code, is
19	amended by adding at the end the following:
20	"(f) Funding for Additional Safety Needs.—
21	"(1) Acceptance of applicant-provided
22	FUNDS.—Notwithstanding any other provision of
23	law, the Administrator may accept funds from an
24	applicant for a certificate under this section to hire
25	additional staff or obtain the services of consultants

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1	and experts to facilitate the timely processing, re-
2	view, and issuance of certificates under this section.
3	"(2) Rules of construction.—
4	"(A) IN GENERAL.—Nothing in this sec-
5	tion may be construed as permitting the Admin-
6	istrator to grant priority or afford any pref-
7	erence to an applicant providing funds under
8	paragraph (1).
9	"(B) POLICIES AND PROCEDURES.—The
10	Administrator shall implement such policies and
11	procedures as may be required to ensure that
12	the acceptance of funds under paragraph (1)
13	does not prejudice the Administrator in the
14	issuance of any certificate to an applicant.
15	"(3) Receipts credited as offsetting col-
16	LECTIONS.—Notwithstanding section 3302 of title
17	31, any funds accepted under this subsection—
18	"(A) shall be credited as offsetting collec-
19	tions to the account that finances the activities
20	and services for which the funds are accepted;
21	"(B) shall be available for expenditure only
22	to pay the costs of activities and services for
23	which the funds are accepted; and
24	"(C) shall remain available until ex-
25	pended.".

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3 (a) IN GENERAL.—Chapter 509 of title 51, United
4 States Code, is amended by adding at the end the fol5 lowing:

6 "§ 50924. Funding to facilitate FAA licensing

7 "(a) IN GENERAL.—Notwithstanding any other pro8 vision of law, the Secretary of Transportation may accept
9 funds from a person applying for a license or permit under
10 this chapter to hire additional staff or obtain the services
11 of consultants and experts—

12 "(1) to facilitate the timely processing, review,
13 and issuance of licenses or permits issued under this
14 chapter;

15 "(2) to conduct environmental activities, stud16 ies, or reviews associated with such licenses or per17 mits; or

"(3) to conduct additional activities associated
with or necessitated by such licenses or permits, including pre-application consultation, hazard area determination, or on-site inspection.

22 "(b) RULES OF CONSTRUCTION.—

23 "(1) IN GENERAL.—Nothing in this section
24 may be construed as permitting the Secretary to
25 grant priority or afford any preference to an appli26 cant providing funds under subsection (a).

1	"(2) Policies and procedures.—The Sec-
2	retary shall implement such policies and procedures
3	as may be required to ensure that the acceptance of
4	funds under subsection (a) does not prejudice the
5	Secretary in the issuance of any license or permit to
6	an applicant.
7	"(c) Receipts Credited as Offsetting Collec-
8	TIONS.—Notwithstanding section 3302 of title 31, any
9	funds accepted under this section—
10	((1) shall be credited as offsetting collections to
11	the account that finances the activities and services
12	for which the funds are accepted;
13	((2) shall be available for expenditure only to
14	pay the costs of activities and services for which the
15	funds are accepted; and
16	"(3) shall remain available until expended.".
17	(b) Clerical Amendment.—The analysis for chap-
18	ter 509 of title 51, United States Code, is amended by
19	adding at the end the following:
	"50924. Funding to facilitate FAA licensing.".
20	SEC. 311. EMERGENCY MEDICAL EQUIPMENT ON PAS-
21	SENGER AIRCRAFT.
22	(a) IN GENERAL.—Not later than 1 year after the
23	date of enactment of this Act, the Administrator of the
24	Federal Aviation Administration shall evaluate and revise,
25	as appropriate, regulations in part 121 of title 14, Code
	•HR 4 IH

of Federal Regulations, regarding emergency medical
 equipment, including the contents of first-aid kits, applica ble to all certificate holders operating passenger aircraft
 under that part.

5 (b) CONSIDERATION.—In carrying out subsection (a), 6 the Administrator shall consider whether the minimum 7 contents of approved emergency medical kits, including 8 approved first-aid kits, include appropriate medications 9 and equipment to meet the emergency medical needs of 10 children.

11 SEC. 312. HIMS PROGRAM.

12 Not later than 180 days after the date of enactment 13 of this Act, the Administrator of the Federal Aviation Ad-14 ministration shall conduct a human intervention motiva-15 tion study (HIMS) program for flight crewmembers em-16 ployed by commercial air carriers operating in United 17 States airspace.

18 SEC. 313. ACCEPTANCE OF VOLUNTARILY PROVIDED SAFE-

19 TY INFORMATION.

(a) IN GENERAL.—There shall be a presumption that
an individual's voluntary disclosure of an operational or
maintenance issue related to aviation safety under an aviation safety action program meets the criteria for acceptance as a valid disclosure under such program.

1 (b) DISCLAIMER REQUIRED.—Any dissemination of 2 a disclosure that was submitted and accepted under an 3 aviation safety action program pursuant to the presump-4 tion under subsection (a), but that has not undergone re-5 view by an event review committee, shall be accompanied 6 by a disclaimer stating that the disclosure—

7 (1) has not been reviewed by an event review
8 committee tasked with reviewing such disclosures;
9 and

10 (2) may subsequently be determined to be ineli11 gible for inclusion in the aviation safety action pro12 gram.

(c) REJECTION OF DISCLOSURE.—A disclosure described under subsection (a) shall be rejected from an
aviation safety action program if, after a review of the disclosure, an event review committee tasked with reviewing
such disclosures determines that the disclosure fails to
meet the criteria for acceptance under such program.

(d) AVIATION SAFETY ACTION PROGRAM DEFINED.—In this section, the term "aviation safety action
program" means a program established in accordance with
Federal Aviation Administration Advisory Circular 120–
66B, issued November 15, 2002 (including any similar
successor advisory circular), to allow an individual to vol-

untarily disclose operational or maintenance issues related
 to aviation safety.

3 SEC. 314. FLIGHT ATTENDANT DUTY PERIOD LIMITATIONS 4 AND REST REQUIREMENTS.

5 (a) MODIFICATION OF FINAL RULE.—

6 (1) IN GENERAL.—Not later than 30 days after 7 the date of enactment of this Act, the Secretary of 8 Transportation shall modify the final rule of the 9 Federal Aviation Administration published in the 10 Federal Register on August 19, 1994 (59 Fed. Reg. 11 42974; relating to flight attendant duty period limi-12 tations and rest requirements) in accordance with 13 the requirements of this subsection.

14 (2) CONTENTS.—The final rule, as modified
15 under paragraph (1), shall ensure that—

16 (A) a flight attendant scheduled to a duty
17 period of 14 hours or less is given a scheduled
18 rest period of at least 10 consecutive hours; and
19 (B) the rest period is not reduced under

20 any circumstances.

21 (b) FATIGUE RISK MANAGEMENT PLAN.—

(1) SUBMISSION OF PLAN BY PART 121 AIR CARRIERS.—Not later than 90 days after the date of enactment of this Act, each air carrier operating under
part 121 of title 14, Code of Federal Regulations (in

1	this section referred to as a "part 121 air carrier"),
2	shall submit to the Administrator of the Federal
3	Aviation Administration for review and acceptance a
4	fatigue risk management plan for the carrier's flight
5	attendants.
6	(2) CONTENTS OF PLAN.—A fatigue risk man-
7	agement plan submitted by a part 121 air carrier
8	under paragraph (1) shall include the following:
9	(A) Current flight time and duty period
10	limitations.
11	(B) A rest scheme consistent with such
12	limitations that enables the management of
13	flight attendant fatigue, including annual train-
14	ing to increase awareness of—
15	(i) fatigue;
16	(ii) the effects of fatigue on flight at-
17	tendants; and
18	(iii) fatigue countermeasures.
19	(C) Development and use of a methodology
20	that continually assesses the effectiveness of im-
21	plementation of the plan, including the ability
22	of the plan—
23	(i) to improve alertness; and
24	(ii) to mitigate performance errors.

1	(3) REVIEW.—Not later than 1 year after the
2	date of enactment of this Act, the Administrator
3	shall review and accept or reject each fatigue risk
4	management plan submitted under this subsection.
5	If the Administrator rejects a plan, the Adminis-
6	trator shall provide suggested modifications for re-
7	submission of the plan.
8	(4) PLAN UPDATES.—
9	(A) IN GENERAL.—A part 121 air carrier
10	shall update its fatigue risk management plan
11	under paragraph (1) every 2 years and submit
12	the update to the Administrator for review and
13	acceptance.
14	(B) REVIEW.—Not later than 1 year after
15	the date of submission of a plan update under
16	subparagraph (A), the Administrator shall re-
17	view and accept or reject the update. If the Ad-
18	ministrator rejects an update, the Adminis-
19	trator shall provide suggested modifications for
20	resubmission of the update.
21	(5) COMPLIANCE.—A part 121 air carrier shall
22	comply with the fatigue risk management plan of the
23	air carrier that is accepted by the Administrator
24	under this subsection.

(6) CIVIL PENALTIES.—A violation of this sub section by a part 121 air carrier shall be treated as
 a violation of chapter 447 of title 49, United States
 Code, for purposes of the application of civil pen alties under chapter 463 of that title.

6 SEC. 315. SECONDARY COCKPIT BARRIERS.

Not later than 1 year after the date of enactment of this Act, the Administrator of the Federal Aviation Administration shall issue an order requiring the installation of a secondary cockpit barrier on each aircraft that is manufactured for delivery to a passenger air carrier in the United States operating under the provisions of part 121 of title 14, Code of Federal Regulations.

14 SEC. 316. AVIATION MAINTENANCE INDUSTRY TECHNICAL 15 WORKFORCE.

(a) STUDY.—The Comptroller General of the United
States shall conduct a study on technical workers in the
aviation maintenance industry.

19 (b) CONTENTS.—In conducting the study, the Comp-20 troller General shall—

(1) analyze the current Standard Occupational
Classification system with regard to the aviation
profession, particularly technical workers in the aviation maintenance industry;

1	(2) analyze how changes to the Federal employ-
2	ment classification of aviation maintenance industry
3	workers might affect government data on unemploy-
4	ment rates and wages;
5	(3) analyze how changes to the Federal employ-
6	ment classification of aviation maintenance industry
7	workers might affect projections for future aviation
8	maintenance industry workforce needs and project
9	technical worker shortfalls;
10	(4) analyze the impact of Federal regulation,
11	including Federal Aviation Administration oversight
12	of certification, testing, and education programs, on
13	employment of technical workers in the aviation
14	maintenance industry;
15	(5) develop recommendations on how Federal
16	Aviation Administration regulations and policies
17	could be improved to address aviation maintenance
18	industry needs for technical workers; and
19	(6) develop recommendations for better coordi-
20	nating actions by government, educational institu-
21	tions, and businesses to support workforce growth in
22	the aviation maintenance industry.
23	(c) REPORT.—Not later than 1 year after the date
24	of enactment of this Act, the Comptroller General shall

25 submit to the Committee on Transportation and Infra-

structure of the House of Representatives and the Com mittee on Commerce, Science, and Transportation of the
 Senate a report on the results of the study.

4 (d) DEFINITIONS.—In this section, the following defi-5 nitions apply:

6 (1) AVIATION MAINTENANCE INDUSTRY.—The
7 term "aviation maintenance industry" means repair
8 stations certificated under part 145 of title 14, Code
9 of Federal Regulations.

10 (2) TECHNICAL WORKER.—The term "technical 11 worker" means an individual authorized under part 12 43 of title 14, Code of Federal Regulations, to main-13 tain, rebuild, alter, or perform preventive mainte-14 nance on an aircraft, airframe, aircraft engine, pro-15 peller, appliance, or component part or employed by 16 an entity so authorized to perform such a function.

17 SEC. 317. CRITICAL AIRFIELD MARKINGS.

18 Not later than 180 days after the date of enactment
19 of this Act, the Administrator of the Federal Aviation Ad20 ministration shall issue a request for proposal for a study
21 that includes—

(1) an independent, third party study to assess
the durability of Type III and Type I glass beads
applied to critical markings over a 2-year period at
not fewer than 2 primary airports in varying weath-

1	er conditions to measure the retroreflectivity levels
2	of such markings on a quarterly basis; and
3	(2) a study at 2 other airports carried out by
4	applying Type III beads on half of the centerline
5	and Type I beads to the other half and providing for
6	assessments from pilots through surveys adminis-
7	tered by a third party as to the visibility and per-
8	formance of the Type III glass beads as compared
9	to the Type I glass beads over a 1-year period.
10	SEC. 318. REGULATORY REFORM.
11	Section 106(p)(5) of title 49, United States Code, is
12	amended by inserting "or aerospace" after "aviation".
13	Subtitle B—Unmanned Aircraft
13 14	Subtitle B—Unmanned Aircraft Systems
14	Systems
14 15	Systems sec. 331. definitions.
14 15 16	Systems SEC. 331. DEFINITIONS. Except as otherwise provided, the definitions con-
14 15 16 17	Systems SEC. 331. DEFINITIONS. Except as otherwise provided, the definitions con- tained in section 45501 of title 49, United States Code
14 15 16 17 18	Systems SEC. 331. DEFINITIONS. Except as otherwise provided, the definitions con- tained in section 45501 of title 49, United States Code (as added by this Act), shall apply to this subtitle.
14 15 16 17 18 19	Systems SEC. 331. DEFINITIONS. Except as otherwise provided, the definitions con- tained in section 45501 of title 49, United States Code (as added by this Act), shall apply to this subtitle. SEC. 332. CODIFICATION OF EXISTING LAW; ADDITIONAL
 14 15 16 17 18 19 20 	Systems SEC. 331. DEFINITIONS. Except as otherwise provided, the definitions con- tained in section 45501 of title 49, United States Code (as added by this Act), shall apply to this subtitle. SEC. 332. CODIFICATION OF EXISTING LAW; ADDITIONAL PROVISIONS.
 14 15 16 17 18 19 20 21 	SEC. 331. DEFINITIONS. Except as otherwise provided, the definitions con- tained in section 45501 of title 49, United States Code (as added by this Act), shall apply to this subtitle. SEC. 332. CODIFICATION OF EXISTING LAW; ADDITIONAL PROVISIONS. (a) IN GENERAL.—Subtitle VII of title 49, United

"CHAPTER 455—UNMANNED AIRCRAFT SYSTEMS

"Sec.

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- "45501. Definitions.
- "45502. Integration of civil unmanned aircraft systems into national airspace system.
- "45503. Risk-based permitting of unmanned aircraft systems.

"45504. Public unmanned aircraft systems.

- "45505. Special rules for certain unmanned aircraft systems.
- "45506. Certification of new air navigation facilities for unmanned aircraft and other aircraft.
- "45507. Special rules for certain UTM and low-altitude CNS.
- "45508. Operation of small unmanned aircraft.
- "45509. Special rules for model aircraft.
- "45510. Carriage of property for compensation or hire.
- "45511. Micro UAS operations.

3 **"§ 45501. Definitions**

4 "In	n this chapter, th	e following definit	ions apply:
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5 "(1) AERIAL DATA COLLECTION.—The term
6 'aerial data collection' means the gathering of data
7 by a device aboard an unmanned aircraft during
8 flight, including imagery, sensing, and measurement
9 by such device.

- 10 "(2) ARCTIC.—The term 'Arctic' means the
 11 United States zone of the Chukchi Sea, Beaufort
 12 Sea, and Bering Sea north of the Aleutian chain.
- 13 "(3) CERTIFICATE OF WAIVER; CERTIFICATE
 14 OF AUTHORIZATION.—The terms 'certificate of waiv15 er' and 'certificate of authorization' mean a Federal
 16 Aviation Administration grant of approval for a spe17 cific flight operation.

1	"(4) CNS.—The term 'CNS' means a commu-
2	nication, navigation, or surveillance system or serv-
3	ice.
4	"(5) Model Aircraft.—the term 'model air-
5	craft' means an unmanned aircraft that is—
6	"(A) capable of sustained flight in the at-
7	mosphere;
8	"(B) flown within visual line of sight of the
9	person operating the aircraft; and
10	"(C) flown for hobby or recreational pur-
11	poses.
12	"(6) PERMANENT AREAS.—The term 'perma-
13	nent areas' means areas on land or water that pro-
14	vide for launch, recovery, and operation of small un-
15	manned aircraft.
16	"(7) Public unmanned aircraft system.—
17	The term 'public unmanned aircraft system' means
18	an unmanned aircraft system that meets the quali-
19	fications and conditions required for operation of a
20	public aircraft (as defined in section 40102(a)).
21	"(8) SENSE-AND-AVOID CAPABILITY.—The term
22	'sense-and-avoid capability' means the capability of
23	an unmanned aircraft to remain a safe distance
24	from and to avoid collisions with other airborne air-
25	craft.

1	"(9) Small unmanned Aircraft.—The term
2	'small unmanned aircraft' means an unmanned air-
3	craft weighing less than 55 pounds, including every-
4	thing that is on board or otherwise attached to the
5	aircraft.
6	"(10) UNMANNED AIRCRAFT.—The term 'un-
7	manned aircraft' means an aircraft that is operated
8	without the possibility of direct human intervention
9	from within or on the aircraft.
10	"(11) UNMANNED AIRCRAFT SYSTEM.—The
11	term 'unmanned aircraft system' means an un-
12	manned aircraft and associated elements (including
13	communication links and the components that con-
14	trol the unmanned aircraft) that are required for the
15	pilot in command to operate safely and efficiently in
16	the national airspace system.
17	"(12) UTM.—The term 'UTM' means an un-
18	manned aircraft traffic management system or serv-
19	ice.
20	"§45502. Integration of civil unmanned aircraft sys-
21	tems into national airspace system
22	"(a) Required Planning for Integration.—
23	"(1) Comprehensive plan.—Not later than
24	November 10, 2012, the Secretary of Transpor-
25	tation, in consultation with representatives of the

1	aviation industry, Federal agencies that employ un-
2	manned aircraft systems technology in the national
3	airspace system, and the unmanned aircraft systems
4	industry, shall develop a comprehensive plan to safe-
5	ly accelerate the integration of civil unmanned air-
6	craft systems into the national airspace system.
7	"(2) CONTENTS OF PLAN.—The plan required
8	under paragraph (1) shall contain, at a minimum,
9	recommendations or projections on—
10	"(A) the rulemaking to be conducted under
11	subsection (b), with specific recommendations
12	on how the rulemaking will—
13	"(i) define the acceptable standards
14	for operation and certification of civil un-
15	manned aircraft systems;
16	"(ii) ensure that any civil unmanned
17	aircraft system includes a sense-and-avoid
18	capability; and
19	"(iii) establish standards and require-
20	ments for the operator and pilot of a civil
21	unmanned aircraft system, including
22	standards and requirements for registra-
23	tion and licensing;
24	"(B) the best methods to enhance the tech-
25	nologies and subsystems necessary to achieve

1	the safe and routine operation of civil un-
2	manned aircraft systems in the national air-
3	space system;
4	"(C) a phased-in approach to the integra-
5	tion of civil unmanned aircraft systems into the
6	national airspace system;
7	"(D) a timeline for the phased-in approach
8	described under subparagraph (C);
9	"(E) creation of a safe airspace designa-
10	tion for cooperative manned and unmanned
11	flight operations in the national airspace sys-
12	tem;
13	"(F) establishment of a process to develop
14	certification, flight standards, and air traffic re-
15	quirements for civil unmanned aircraft systems
16	at test ranges where such systems are subject
17	to testing;
18	"(G) the best methods to ensure the safe
19	operation of civil unmanned aircraft systems
20	and public unmanned aircraft systems simulta-
21	neously in the national airspace system; and
22	"(H) incorporation of the plan into the an-
23	nual NextGen Implementation Plan document
24	(or any successor document) of the Federal
25	Aviation Administration.

1	"(3) DEADLINE.—The plan required under
2	paragraph (1) shall provide for the safe integration
3	of civil unmanned aircraft systems into the national
4	airspace system as soon as practicable, but not later
5	than September 30, 2015.
6	"(4) REPORT TO CONGRESS.—Not later than
7	February 14, 2013, the Secretary shall submit to
8	Congress a copy of the plan required under para-
9	graph (1).
10	"(5) ROADMAP.—Not later than February 14,
11	2013, the Secretary shall approve and make avail-
12	able in print and on the Administration's internet
13	website a 5-year roadmap for the introduction of
14	civil unmanned aircraft systems into the national
15	airspace system, as coordinated by the Unmanned
16	Aircraft Program Office of the Administration. The
17	Secretary shall update, in coordination with the Ad-
18	ministrator of the National Aeronautics and Space
19	Administration (NASA) and relevant stakeholders,
20	including those in industry and academia, the road-
21	map annually. The roadmap shall include, at a min-
22	imum—
23	"(A) cost estimates, planned schedules,
24	and performance benchmarks, including specific

and performance benchmarks, including specific
tasks, milestones, and timelines, for unmanned

	110
1	aircraft systems integration into the national
2	airspace system, including an identification of—
3	"(i) the role of the unmanned aircraft
4	systems test ranges established under sub-
5	section (c) and the Unmanned Aircraft
6	Systems Center of Excellence;
7	"(ii) performance objectives for un-
8	manned aircraft systems that operate in
9	the national airspace system; and
10	"(iii) research and development prior-
11	ities for tools that could assist air traffic
12	controllers as unmanned aircraft systems
13	are integrated into the national airspace
14	system, as appropriate;
15	"(B) a description of how the Administra-
16	tion plans to use research and development, in-
17	cluding research and development conducted
18	through NASA's Unmanned Aircraft Systems
19	Traffic Management initiatives, to accommo-
20	date, integrate, and provide for the evolution of
21	unmanned aircraft systems in the national air-
22	space system;
23	"(C) an assessment of critical performance
24	abilities necessary to integrate unmanned air-

1	and how these performance abilities can be
2	demonstrated; and
3	"(D) an update on the advancement of
4	technologies needed to integrate unmanned air-
5	craft systems into the national airspace system,
6	including decisionmaking by adaptive systems,
7	such as sense-and-avoid capabilities and cyber
8	physical systems security.
9	"(b) RULEMAKING.—Not later than 18 months after
10	the date on which the plan required under subsection
11	(a)(1) is submitted to Congress under subsection $(a)(4)$,
12	the Secretary shall publish in the Federal Register—
13	"(1) a final rule on small unmanned aircraft
14	systems that will allow for civil operation of such
15	systems in the national airspace system, to the ex-
16	tent the systems do not meet the requirements for
17	expedited operational authorization under section
18	45508;
19	"(2) a notice of proposed rulemaking to imple-
20	ment the recommendations of the plan required
21	under subsection $(a)(1)$, with the final rule to be
22	published not later than 16 months after the date of
23	publication of the notice; and

"(3) an update to the Administration's most re cent policy statement on unmanned aircraft systems,
 contained in Docket No. FAA-2006-25714.

4 "(c) EXPANDING USE OF UNMANNED AIRCRAFT
5 SYSTEMS IN ARCTIC.—

6 "(1) IN GENERAL.—Not later than August 12, 7 2012, the Secretary shall develop a plan and initiate 8 a process to work with relevant Federal agencies and 9 national and international communities to designate 10 permanent areas in the Arctic where small un-11 manned aircraft may operate 24 hours per day for 12 research and commercial purposes. The plan for op-13 erations in these permanent areas shall include the 14 development of processes to facilitate the safe oper-15 ation of unmanned aircraft beyond line of sight. 16 Such areas shall enable over-water flights from the 17 surface to at least 2,000 feet in altitude, with in-18 gress and egress routes from selected coastal launch 19 sites.

20 "(2) AGREEMENTS.—To implement the plan
21 under paragraph (1), the Secretary may enter into
22 an agreement with relevant national and inter23 national communities.

24 "(3) AIRCRAFT APPROVAL.—Not later than 1
25 year after the entry into force of an agreement nec-

1 essary to effectuate the purposes of this subsection, 2 the Secretary shall work with relevant national and 3 international communities to establish and imple-4 ment a process, or may apply an applicable process 5 already established, for approving the use of un-6 manned aircraft in the designated permanent areas 7 in the Arctic without regard to whether an un-8 manned aircraft is used as a public aircraft, a civil 9 aircraft, or a model aircraft.

10 "§45503. Risk-based permitting of unmanned aircraft 11 systems

12 "(a) IN GENERAL.—Not later than 120 days after 13 the date of enactment of this section, the Administrator 14 of the Federal Aviation Administration shall establish pro-15 cedures for issuing permits under this section with respect 16 to certain unmanned aircraft systems and operations 17 thereof.

18 "(b) PERMITTING STANDARDS.—Upon the submis-19 sion of an application in accordance with subsection (d), 20 the Administrator shall issue a permit with respect to the 21 proposed operation of an unmanned aircraft system if the 22 Administrator determines that the unmanned aircraft sys-23 tem and the proposed operation achieve a level of safety 24 that is equivalent to—

1	"(1) other unmanned aircraft systems and op-
2	erations permitted under regulation, exemption, or
3	other authority granted by the Administrator; or
4	((2) any other aircraft operation approved by
5	the Administrator with similar risk characteristics or
6	profiles.
7	"(c) SAFETY CRITERIA FOR CONSIDERATION.—In
8	determining whether a proposed operation meets the
9	standards described in subsection (b), the Administrator
10	shall consider the following safety criteria:
11	"(1) The kinetic energy of the unmanned air-
12	craft system.
13	((2) The location of the proposed operation, in-
14	cluding the proximity to—
15	"(A) structures;
16	"(B) congested areas;
17	"(C) special-use airspace; and
18	"(D) persons on the ground.
19	"(3) The nature of the operation, including any
20	proposed risk mitigation.
21	"(4) Any known hazard of the proposed oper-
22	ation and the severity and likelihood of such hazard.
23	"(5) Any known failure modes of the unmanned
24	aircraft system, failure mode effects and criticality,
25	and any mitigating features or capabilities.

1	"(6) The operational history of relevant tech-
2	nologies, if available.
3	"(7) Any history of civil penalties or certificate
4	actions by the Administrator against the applicant
5	seeking the permit.
6	"(8) Any other safety criteria the Administrator
7	considers appropriate.
8	"(d) APPLICATION.—An application under this sec-
9	tion shall include evidence that the unmanned aircraft sys-
10	tem and the proposed operation thereof meet the stand-
11	ards described in subsection (b) based on the criteria de-
12	scribed in subsection (c).
13	"(e) SCOPE OF PERMIT.—A permit issued under this
14	section shall—
15	"(1) be valid for 5 years;
16	((2) constitute approval of both the airworthi-
17	ness of the unmanned aircraft system and the pro-
18	posed operation of such system;
19	"(3) be renewable for additional 5-year periods;
20	and
21	"(4) contain any terms necessary to ensure
22	aviation safety.
23	"(f) NOTICE.—Not later than 120 days after the Ad-
24	ministrator receives a complete application under sub-
25	section (d), the Administrator shall provide the applicant

written notice of a decision to approve or disapprove of
 the application or to request a modification of the applica tion that is necessary for approval of the application.

4 "(g) PERMITTING PROCESS.—The Administrator 5 shall issue a permit under this section without regard to 6 subsections (b) through (d) of section 553 of title 5 and 7 chapter 35 of title 44 if the Administrator determines that 8 the operation permitted will not occur near a congested 9 area.

"(h) EXEMPTION FROM CERTAIN REQUIREMENTS.—
To the extent consistent with aviation safety, the Administrator may exempt applicants under this section from
paragraphs (1) through (3) of section 44711(a).

14 "(i) WITHDRAWAL.—The Administrator may, at any
15 time, modify or withdraw a permit issued under this sec16 tion.

"(j) APPLICABILITY.—This section shall not apply to
small unmanned aircraft systems and operations authorized by the final rule on small unmanned aircraft systems
issued pursuant to section 45502(b)(1).

21 "(k) EXPEDITED REVIEW.—The Administrator shall 22 review and act upon applications under this section on an 23 expedited basis for unmanned aircraft systems and oper-24 ations thereof to be used primarily in, or primarily in di-25 rect support of, emergency preparedness, emergency response, or disaster recovery efforts, including efforts in
 connection with natural disasters and severe weather
 events.

4 "§ 45504. Public unmanned aircraft systems

5 "(a) GUIDANCE.—Not later than November 10,
6 2012, the Secretary of Transportation shall issue guidance
7 regarding the operation of public unmanned aircraft sys8 tems to—

9 "(1) expedite the issuance of a certificate of au10 thorization process;

11 "(2) provide for a collaborative process with 12 public agencies to allow for an incremental expan-13 sion of access to the national airspace system as 14 technology matures and the necessary safety anal-15 ysis and data become available, and until standards 16 are completed and technology issues are resolved;

"(3) facilitate the capability of public agencies
to develop and use test ranges, subject to operating
restrictions required by the Federal Aviation Administration, to test and operate unmanned aircraft systems; and

"(4) provide guidance on a public entity's responsibility when operating an unmanned aircraft
without a civil airworthiness certificate issued by the
Administration.

1	"(b) Standards for Operation and Certifi-
2	CATION.—Not later than December 31, 2015, the Admin-
3	istrator shall develop and implement operational and cer-
4	tification requirements for the operation of public un-
5	manned aircraft systems in the national airspace system.
6	"(c) Agreements With Government Agen-
7	CIES.—
8	"(1) IN GENERAL.—Not later than May 14,
9	2012, the Secretary shall enter into agreements with
10	appropriate government agencies to simplify the
11	process for issuing certificates of waiver or author-
12	ization with respect to applications seeking author-
13	ization to operate public unmanned aircraft systems
14	in the national airspace system.
15	"(2) CONTENTS.—The agreements shall—
16	"(A) with respect to an application de-
17	scribed in paragraph (1)—
18	"(i) provide for an expedited review of
19	the application;
20	"(ii) require a decision by the Admin-
21	istrator on approval or disapproval within
22	60 business days of the date of submission
23	of the application; and
24	"(iii) allow for an expedited appeal if
25	the application is disapproved;

1	"(B) allow for a one-time approval of simi-
2	lar operations carried out during a fixed period
3	of time; and
4	"(C) allow a government public safety
5	agency to operate unmanned aircraft weighing
6	4.4 pounds or less, if operated—
7	"(i) within the line of sight of the op-
8	erator;
9	"(ii) less than 400 feet above the
10	ground;
11	"(iii) during daylight conditions;
12	"(iv) within Class G airspace; and
13	"(v) outside of 5 statute miles from
14	any airport, heliport, seaplane base, space-
15	port, or other location with aviation activi-
16	ties.
17	"§45505. Special rules for certain unmanned aircraft
18	systems
19	"(a) IN GENERAL.—Notwithstanding any other re-
20	quirement of this subtitle, and not later than August 12,
21	2012, the Secretary of Transportation shall determine if
22	certain unmanned aircraft systems may operate safely in
23	the national airspace system before completion of the plan
24	and rulemaking required by section 45502 or the guidance
25	required under section 45504.

"(b) ASSESSMENT OF UNMANNED AIRCRAFT SYS TEMS.—In making the determination under subsection
 (a), the Secretary shall determine, at a minimum—

4 "(1) which types of unmanned aircraft systems, 5 if any, as a result of their size, weight, speed, oper-6 ational capability, proximity to airports and popu-7 lated areas, and operation within visual line of sight 8 do not create a hazard to users of the national air-9 space system or the public or pose a threat to na-10 tional security; and

"(2) whether a certificate of waiver, certificate
of authorization, or airworthiness certification under
section 44704 is required for the operation of unmanned aircraft systems identified under paragraph
(1).

16 "(c) REQUIREMENTS FOR SAFE OPERATION.—If the 17 Secretary determines under this section that certain un-18 manned aircraft systems may operate safely in the na-19 tional airspace system, the Secretary shall establish re-20 quirements for the safe operation of such aircraft systems 21 in the national airspace system.

22 "§ 45506. Certification of new air navigation facilities
23 for unmanned aircraft and other aircraft
24 "(a) IN GENERAL.—Not later than 18 months after
25 the date of enactment of this section, and notwithstanding

section 2208 of the FAA Extension, Safety, and Security
 Act of 2016 (49 U.S.C. 40101 note), the Administrator
 of the Federal Aviation Administration shall initiate a
 rulemaking to establish procedures for issuing air naviga tion facility certificates pursuant to section 44702 to oper ators of—

7 "(1) UTM for unmanned aircraft operations
8 that occur primarily or exclusively in airspace 400
9 feet above ground level and below; and

10 "(2) low-altitude CNS for aircraft operations
11 that occur primarily or exclusively in airspace 400
12 feet above ground level and below.

13 "(b) MINIMUM REQUIREMENTS.—In issuing a final
14 rule pursuant to subsection (a), the Administrator, at a
15 minimum, shall provide for the following:

"(1) CERTIFICATION STANDARDS.—The Admin-16 17 istrator shall issue an air navigation facility certifi-18 cate under the final rule if the Administrator deter-19 mines that a UTM or low-altitude CNS facilitates or 20 improves the safety of unmanned aircraft or other aircraft operations that occur primarily or exclu-21 22 sively in airspace 400 feet above ground level and 23 below, including operations conducted under a waiv-24 er issued pursuant to subpart D of part 107 of title 25 14, Code of Federal Regulations.

1	"(2) CRITERIA FOR CONSIDERATION.—In deter-
2	mining whether a UTM or low-altitude CNS meets
3	the standard described in paragraph (1), the Admin-
4	istrator shall, as appropriate, consider—
5	"(A) protection of persons and property on
6	the ground;
7	"(B) remote identification of aircraft;
8	"(C) collision avoidance with respect to ob-
9	stacles and aircraft;
10	"(D) deconfliction of aircraft trajectories;
11	"(E) safe and reliable interoperability or
12	noninterference with air traffic control and
13	other systems operated in the national airspace
14	system;
15	"(F) detection of noncooperative aircraft;
16	"(G) geographic and local factors;
17	"(H) aircraft equipage; and
18	"(I) qualifications, if any, necessary to op-
19	erate the UTM or low-altitude CNS.
20	"(3) Application.—An application for an air
21	navigation facility certificate under the final rule
22	shall include evidence that the UTM or low-altitude
23	CNS meets the standard described in paragraph (1)
24	based on the criteria described in paragraph (2) .

"(4) Scope of Certificate.—The Adminis-
trator shall ensure that an air navigation facility
certificate issued under the final rule—
"(A) constitutes approval of the UTM or
low-altitude CNS for the duration of the term
of the certificate;
"(B) constitutes authorization to operate
the UTM or low-altitude CNS for the duration
of the term of the certificate; and
"(C) contains such limitations and condi-
tions as may be necessary to ensure aviation
safety.
"(5) NOTICE.—Not later than 120 days after
the Administrator receives a complete application
under the final rule, the Administrator shall provide
the applicant with a written approval, disapproval,

18 "(6) LOW RISK AREAS.—Under the final rule, 19 the Administrator shall establish expedited proce-20 dures for approval of UTM or low-altitude CNS op-21 erated in— "(A) airspace away from congested areas; 22

or request to modify the application.

23 \mathbf{or}

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1	"(B) other airspace above areas in which
2	operations of unmanned aircraft pose very low
3	risk.
4	"(7) EXEMPTION FROM CERTAIN REQUIRE-
5	MENTS.—To the extent consistent with aviation safe-
6	ty, the Administrator may exempt applicants under
7	the final rule from requirements under sections
8	44702, 44703, and 44711.
9	"(8) CERTIFICATE MODIFICATIONS AND REV-
10	OCATIONS.—A certificate issued under the final rule
11	may, at any time, be modified or revoked by the Ad-
12	ministrator.
13	"(c) CONSULTATION.—In carrying out this section,
14	the Administrator shall consult with other Federal agen-
15	cies, as appropriate.
16	"§45507. Special rules for certain UTM and low-alti-
17	tude CNS
18	"(a) IN GENERAL.—Notwithstanding any other re-
19	quirement of this chapter, and not later than 120 days
20	after the date of enactment of this section, the Secretary
21	of Transportation shall determine if certain UTM and low-
22	altitude CNS may operate safely in the national airspace
23	system before completion of the rulemaking required by

24 section 45506.

"(b) Assessment of UTM and Low-Altitude 1 2 CNS.—In making the determination under subsection (a), 3 the Secretary shall determine, at a minimum, which types 4 of UTM and low-altitude CNS, if any, as a result of their 5 operational capabilities, reliability, intended use, and areas 6 of operation, and the characteristics of the aircraft in-7 volved, do not create a hazard to users of the national 8 airspace system or the public.

9 "(c) REQUIREMENTS FOR SAFE OPERATION.—If the 10 Secretary determines that certain UTM and low-altitude 11 CNS may operate safely in the national airspace system, 12 the Secretary shall establish requirements for their safe 13 operation in the national airspace system.

14 "(d) EXPEDITED PROCEDURES.—The Secretary shall
15 provide expedited procedures for reviewing and approving
16 UTM or low-altitude CNS operated to monitor or control
17 aircraft operated primarily or exclusively in airspace
18 above—

19 "(1) croplands;

20 "(2) areas other than congested areas; and

21 "(3) other areas in which the operation of un22 manned aircraft poses very low risk.

23 "(e) CONSULTATION.—In carrying out this section,
24 the Administrator shall consult with other Federal agen25 cies, as appropriate.

"§ 45508. Operation of small unmanned aircraft

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"(a) EXEMPTION AND CERTIFICATE OF WAIVER OR 2 3 AUTHORIZATION FOR CERTAIN OPERATIONS.—Not later than 270 days after the date of enactment of this section, 4 5 the Administrator of the Federal Aviation Administration shall establish a procedure for granting an exemption and 6 7 issuing a certificate of waiver or authorization for the op-8 eration of a small unmanned aircraft system in United 9 States airspace for the purposes described in section 10 45501(1).

11 "(b) OPERATION OF EXEMPTION AND CERTIFICATE12 OF WAIVER OR AUTHORIZATION.—

13 "(1) EXEMPTION.—An exemption granted
14 under this section shall—

"(A) exempt the operator of a small unmanned aircraft from the provisions of title 14,
Code of Federal Regulations, that are exempted
in Exemption No. 11687, issued on May 26,
2015, Regulatory Docket Number FAA-20150117, or in a subsequent exemption; and

21 "(B) contain conditions and limitations de22 scribed in paragraphs 3 through 31 of such Ex23 emption No. 11687, or conditions and limita24 tions of a subsequent exemption.

25 "(2) CERTIFICATE OF WAIVER OR AUTHORIZA26 TION.—A certificate of waiver or authorization
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1	issued under this section shall allow the operation of
2	small unmanned aircraft according to—
3	"(A) the standard provisions and air traf-
4	fic control special provisions of the certificate of
5	waiver or authorization FAA Form 7711–1 (7–
6	74); or
7	"(B) the standard and special provisions of
8	a subsequent certificate of waiver or authoriza-
9	tion.
10	"(c) Notice to Administrator.—Before operating
11	a small unmanned aircraft pursuant to a certificate of
12	waiver or authorization granted under this section, the op-
13	erator shall provide written notice to the Administrator,
14	in a form and manner specified by the Administrator, that
15	contains such information and assurances as the Adminis-
16	trator determines necessary in the interest of aviation
17	safety and the efficiency of the national airspace system,
18	including a certification that the operator has read, under-
19	stands, and will comply with all terms, conditions, and lim-
20	itations of the certificate of waiver or authorization.
21	"(d) Waiver of Airworthiness Certificate
\mathbf{a}	Not-with star $\lim_{n \to \infty} a_n a_{n+1} = 44711(a)(1)$ the holder of a con-

21 (d) WAIVER OF MIRWORTHINESS CERTIFICATE.
22 Notwithstanding section 44711(a)(1), the holder of a cer23 tificate of waiver or authorization granted under this sec24 tion may operate a small unmanned aircraft under the

terms, conditions, and limitations of such certificate with out an airworthiness certificate.

3 "(e) PROCEDURE.—The granting of an exemption or
4 the issuance of a certificate of waiver or authorization, or
5 any other action authorized by this section, shall be made
6 without regard to—

7 "(1) section 553 of title 5; or

8 ((2) chapter 35 of title 44.

9 "(f) STATUTORY CONSTRUCTION.—Nothing in this
10 section may be construed to—

"(1) affect the issuance of a rule by or any
other activity of the Secretary of Transportation or
the Administrator under any other provision of law;
or

"(2) invalidate an exemption or certificate of
waiver or authorization issued by the Administrator
before the date of enactment of this section.

"(g) EFFECTIVE PERIODS.—An exemption or certificate of waiver or authorization issued under this section,
or an amendment of such exemption or certificate, shall
cease to be valid on the effective date of a final rule on
small unmanned aircraft systems issued under section
45502(b)(1).

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1 "§ 45509. Special rules for model aircraft

2 "(a) IN GENERAL.—Notwithstanding any other pro-3 vision of law relating to the incorporation of unmanned aircraft systems into Federal Aviation Administration 4 5 plans and policies, including this subtitle, the Administrator of the Federal Aviation Administration may not 6 7 promulgate any rule or regulation regarding a model aircraft or an aircraft being developed as a model aircraft 8 9 (other than the registration of certain model aircraft pur-10 suant to section 44103), if—

11 "(1) the aircraft is flown strictly for hobby or
12 recreational use;

"(2) the aircraft is operated in accordance with
a community-based set of safety guidelines and within the programming of a community-based organization;

"(3) the aircraft is limited to not more than 55
pounds unless otherwise certified through a design,
construction, inspection, flight test, and operational
safety program administered by a community-based
organization;

"(4) the aircraft is operated in a manner that
does not interfere with and gives way to any manned
aircraft;

25 "(5) the aircraft is not operated over or within
26 the property of a fixed site facility that operates
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amusement rides available for use by the general
 public or the property extending 500 lateral feet be yond the perimeter of such facility unless the oper ation is authorized by the owner of the amusement
 facility; and

"(6) when flown within 5 miles of an airport, 6 7 the operator of the aircraft provides the airport op-8 erator and the airport air traffic control tower (when 9 an air traffic facility is located at the airport) with 10 prior notice of the operation (model aircraft opera-11 tors flying from a permanent location within 5 miles 12 of an airport should establish a mutually agreed 13 upon operating procedure with the airport operator 14 and the airport air traffic control tower (when an air 15 traffic facility is located at the airport)).

16 "(b) Commercial Operation for Instructional OR EDUCATIONAL PURPOSES.—A flight of an unmanned 17 18 aircraft shall be treated as a flight of a model aircraft for purposes of subsection (a) (regardless of any com-19 pensation, reimbursement, or other consideration ex-20 21 changed or incidental economic benefit gained in the 22 course of planning, operating, or supervising the flight), 23 if the flight is—

24 "(1) conducted for instructional or educational25 purposes; and

"(2) operated or supervised by a member of a
 community-based organization recognized pursuant
 to subsection (e).

4 "(c) STATUTORY CONSTRUCTION.—Nothing in this 5 section may be construed to limit the authority of the Ad-6 ministrator to pursue enforcement action against persons 7 operating model aircraft who endanger the safety of the 8 national airspace system.

9 "(d) COMMUNITY-BASED ORGANIZATION DE10 FINED.—In this section, the term 'community-based orga11 nization' means an entity that—

12 "(1) is described in section 501(c)(3) of the In13 ternal Revenue Code of 1986;

14 "(2) is exempt from tax under section 501(a) of
15 the Internal Revenue Code of 1986;

16 "(3) the mission of which is demonstrably the17 furtherance of model aviation;

18 "(4) provides a comprehensive set of safety 19 guidelines for all aspects of model aviation address-20 ing the assembly and operation of model aircraft and 21 that emphasize safe aeromodeling operations within 22 the national airspace system and the protection and 23 safety of individuals and property on the ground;

24 "(5) provides programming and support for any
25 local charter organizations, affiliates, or clubs; and

"(6) provides assistance and support in the de velopment and operation of locally designated model
 aircraft flying sites.

4 "(e) RECOGNITION OF COMMUNITY-BASED ORGANI5 ZATIONS.—Not later than 180 days after the date of en6 actment of this section, the Administrator shall establish,
7 and make available to the public, a process for recognizing
8 community-based organizations that meet the eligibility
9 criteria under subsection (d).

10 "§45510. Carriage of property for compensation orhire

"(a) IN GENERAL.—Not later than 1 year after the
date of enactment of this section, the Secretary of Transportation shall issue a final rule authorizing the carriage
of property by operators of small unmanned aircraft systems for compensation or hire within the United States.
"(b) CONTENTS.—The final rule required under subsection (a) shall provide for the following:

"(1) SMALL UAS AIR CARRIER CERTIFICATE.—
The Administrator of the Federal Aviation Administration, at the direction of the Secretary, shall establish a small UAS air carrier certificate for persons
that undertake directly, or by lease or other arrangement, the operation of small unmanned aircraft systems to carry property in air transportation, includ-

ing commercial fleet operations with highly auto-	
mated unmanned aircraft systems. The requirements	
to obtain a small UAS air carrier certificate shall—	
"(A) account for the unique characteristics	
of highly automated small unmanned aircraft	
systems; and	
"(B) include only those obligations nec-	
essary for the safe operation of small unmanned	
aircraft systems.	
"(2) Small uas air carrier certification	
PROCESS.—The Administrator, at the direction of	
the Secretary, shall establish a process for the	
issuance of a small UAS air carrier certificate de-	
scribed in paragraph (1) that is streamlined, simple,	
nonformance based and right based Such cortifi	

simple, performance-based, and risk-based. Such certification process shall consider—

"(A) safety and the mitigation of oper-ational risks from highly automated small un-manned aircraft systems to the safety of other aircraft, and persons and property on the ground;

"(B) the safety and reliability of highly automated small unmanned aircraft system design, including technological capabilities and

1	operational limitations to mitigate such risks;
2	and
3	"(C) the competencies and compliance pro-
4	grams of manufacturers, operators, and compa-
5	nies that both manufacture and operate small
6	unmanned aircraft systems and components.
7	"(3) Small uas air carrier classifica-
8	TION.—The Secretary shall develop a classification
9	system for small unmanned aircraft systems air car-
10	riers to establish economic authority for the carriage
11	of property by small unmanned aircraft systems for
12	compensation or hire. Such classification shall only
13	require—
14	"(A) registration with the Department of
15	Transportation; and
16	"(B) a valid small UAS air carrier certifi-
17	cate as described in paragraph (1).
18	"§45511. Micro UAS operations
19	"(a) IN GENERAL.—Not later than 60 days after the
20	date of enactment of this section, the Administrator of the
21	Federal Aviation Administration shall charter an aviation
22	rulemaking advisory committee to develop recommenda-
23	tions for regulations under which any person may operate
24	a micro unmanned aircraft system, the aircraft component
25	of which weighs 4.4 pounds or less, including payload,

without the person operating the system being required
 to pass any airman certification requirement, including
 any requirements under section 44703, part 61 of title 14,
 Code of Federal Regulations, or any other rule or regula tion relating to airman certification.

6 "(b) CONSIDERATIONS.—In developing recommenda-7 tions for the operation of micro unmanned aircraft sys-8 tems under subsection (a), the members of the aviation 9 rulemaking advisory committee shall consider rules for op-10 eration of such systems—

11 "(1) at an altitude of less than 400 feet above12 ground level;

13 "(2) with an airspeed of not greater than 4014 knots;

15 "(3) within the visual line of sight of the oper-16 ator;

17 "(4) during the hours between sunrise and sun-18 set;

19 "(5) by an operator who has passed an aero-20 nautical knowledge and safety test administered by 21 the Federal Aviation Administration online specifi-22 cally for the operation of micro unmanned aircraft 23 systems, with such test being of a length and dif-24 ficulty that acknowledges the reduced operational

1	complexity and low risk of micro unmanned aircraft
2	systems;
3	"(6) not over unprotected persons uninvolved in
4	its operation; and
5	"(7) at least 5 statute miles from the geo-
6	graphic center of a tower-controlled airport or air-
7	port denoted on a current Federal Aviation Adminis-
8	tration-published aeronautical chart, except that a
9	micro unmanned aircraft system may be operated
10	closer than 5 statute miles to the airport if the oper-
11	ator—
12	"(A) provides prior notice to the airport
13	operator; and
14	"(B) receives, for a tower-controlled air-
15	port, prior approval from the air traffic control
16	facility located at the airport.
17	"(c) CONSULTATION.—
18	"(1) IN GENERAL.—In developing recommenda-
19	tions for recommended regulations under subsection
20	(a), the aviation rulemaking advisory committee
21	shall consult with—
22	"(A) unmanned aircraft systems stake-
23	holders, including manufacturers of micro un-
24	manned aircraft systems;

"(B) community-based aviation organiza-
tions;
"(C) the Center of Excellence for Un-
manned Aircraft Systems; and
"(D) appropriate Federal agencies.
"(2) FACA.—The Federal Advisory Committee
Act (5 U.S.C. App.) shall not apply to an aviation
rulemaking advisory committee chartered under this
section.
"(d) RULEMAKING.—Not later than 180 days after
the date of receipt of the recommendations under sub-
section (a), the Administrator shall issue regulations in-
corporating recommendations of the aviation rulemaking
advisory committee that provide for the operation of micro
unmanned aircraft systems in the United States—
"(1) without an airman certificate; and
((2) without an airworthiness certificate for the
associated unmanned aircraft.
"(e) Scope of Regulations.—
"(1) IN GENERAL.—In determining whether a
person may operate an unmanned aircraft system
under 1 or more of the circumstances described
under paragraphs (1) through (3) of subsection (b),
the Administrator shall use a risk-based approach
and consider, at a minimum, the physical and func-

tional characteristics of the unmanned aircraft sys tem.

3 "(2) LIMITATION.—The Administrator may
4 only issue regulations under this section for un5 manned aircraft systems that the Administrator de6 termines may be operated safely in the national air7 space system pursuant to those regulations.
8 "(f) RULES OF CONSTRUCTION.—Nothing in this
9 section may be construed—

"(1) to prohibit a person from operating an unmanned aircraft system under a circumstance described under paragraphs (1) through (3) of subsection (b) if—

14 "(A) the circumstance is allowed by regula-15 tions issued under this section; and

16 "(B) the person operates the unmanned
17 aircraft system in a manner prescribed by the
18 regulations; or

"(2) to limit or affect in any way the Administrator's authority to conduct a rulemaking, make a
determination, or carry out any activity related to
unmanned aircraft or unmanned aircraft systems
under any other provision of law.".

24 (b) Conforming Amendments.—

25 (1) REPEALS.—

1	(A) IN GENERAL.—Sections 332(a),
2	332(b), 332(d), 333, 334, and 336 of the FAA
3	Modernization and Reform Act of 2012 (49
4	U.S.C. 40101 note) are repealed.
5	(B) CLERICAL AMENDMENT.—The items
6	relating to sections 333, 334, and 336 of the
7	FAA Modernization and Reform Act of 2012
8	(49 U.S.C. 40101 note) in the table of contents
9	contained in section 1(b) of that Act are re-
10	pealed.
11	(2) PENALTIES.—Section 46301 of title 49,
12	United States Code, is amended—
13	(A) in subsection (a)—
14	(i) in paragraph $(1)(A)$ by inserting
15	"chapter 455," after "chapter 451,"; and
16	(ii) in paragraph (5)(A)(i) by striking
17	"or chapter 451," and inserting "chapter
18	451, chapter 455,'';
19	(B) in subsection $(d)(2)$ by inserting
20	"chapter 455," after "chapter 451,"; and
21	(C) in subsection $(f)(1)(A)(i)$ by striking
22	"or chapter 451" and inserting "chapter 451,
23	or chapter 455".
24	(3) CLERICAL AMENDMENT.—The analysis for
25	subtitle VII of title 49, United States Code, is

1		amended	by	inserting	after	the	item	relating	to
2		chapter 4	53 t	he followir	ng:				
	"455.	. Unmanneo	l air	craft systen	1S)1" .

3 SEC. 333. UNMANNED AIRCRAFT TEST RANGES.

4 (a) EXTENSION OF PROGRAM.—Section 332(c)(1) of
5 the FAA Modernization and Reform Act of 2012 (49
6 U.S.C. 40101 note) is amended by striking "September
7 30, 2019" and inserting "the date that is 6 years after
8 the date of enactment of the FAA Reauthorization Act
9 of 2018".

10 (b) SENSE-AND-AVOID AND BEYOND LINE OF SIGHT
11 SYSTEMS AT TEST RANGES.—

12 (1) IN GENERAL.—To the extent consistent 13 with aviation safety, the Administrator of the Fed-14 eral Aviation Administration shall permit and en-15 courage flights of unmanned aircraft equipped with 16 sense-and-avoid and beyond line of sight systems at 17 the 6 test ranges designated under section 332(c) of 18 the FAA Modernization and Reform Act of 2012.

(2) WAIVERS.—In carrying out paragraph (1),
the Administrator may waive the requirements of
section 44711 of title 49, United States Code, including related regulations, to the extent consistent
with aviation safety.

24 (c) Test Range Defined.—

1	(1) IN GENERAL.—In this section, the term
2	"test range" means a defined geographic area where
3	research and development are conducted as author-
4	ized by the Administrator of the Federal Aviation
5	Administration.
6	(2) Inclusions.—Such term includes any of
7	the 6 test ranges established by the Administrator of
8	the Federal Aviation Administration under section
9	332(c) of the FAA Modernization and Reform Act
10	of 2012, as in effect on the day before the date of
11	enactment of this subsection, and any public entity
12	authorized by the Federal Aviation Administration
13	as an unmanned aircraft system flight test center
13 14	as an unmanned aircraft system flight test center before January 1, 2009.
14	before January 1, 2009.
14 15	before January 1, 2009. SEC. 334. SENSE OF CONGRESS REGARDING UNMANNED
14 15 16	before January 1, 2009. SEC. 334. SENSE OF CONGRESS REGARDING UNMANNED AIRCRAFT SAFETY.
14 15 16 17	before January 1, 2009. SEC. 334. SENSE OF CONGRESS REGARDING UNMANNED AIRCRAFT SAFETY. It is the sense of Congress that—
14 15 16 17 18	before January 1, 2009. SEC. 334. SENSE OF CONGRESS REGARDING UNMANNED AIRCRAFT SAFETY. It is the sense of Congress that— (1) the unauthorized operation of unmanned
14 15 16 17 18 19	before January 1, 2009. SEC. 334. SENSE OF CONGRESS REGARDING UNMANNED AIRCRAFT SAFETY. It is the sense of Congress that— (1) the unauthorized operation of unmanned aircraft near airports presents a serious hazard to
 14 15 16 17 18 19 20 	before January 1, 2009. SEC. 334. SENSE OF CONGRESS REGARDING UNMANNED AIRCRAFT SAFETY. It is the sense of Congress that— (1) the unauthorized operation of unmanned aircraft near airports presents a serious hazard to aviation safety;
 14 15 16 17 18 19 20 21 	before January 1, 2009. SEC. 334. SENSE OF CONGRESS REGARDING UNMANNED AIRCRAFT SAFETY. It is the sense of Congress that— (1) the unauthorized operation of unmanned aircraft near airports presents a serious hazard to aviation safety; (2) a collision between an unmanned aircraft

1	(3) Federal aviation regulations, including sec-
2	tions 91.126 through 91.131 of title 14, Code of
3	Federal Regulations, prohibit unauthorized operation
4	of an aircraft in controlled airspace near an airport;
5	(4) Federal aviation regulations, including sec-
6	tion 91.13 of title 14, Code of Federal Regulations,
7	prohibit the operation of an aircraft in a careless or
8	reckless manner so as to endanger the life or prop-
9	erty of another;
10	(5) the Administrator of the Federal Aviation
11	Administration should pursue all available civil and
12	administrative remedies available to the Adminis-
13	trator, including referrals to other government agen-
14	cies for criminal investigations, with respect to per-
15	sons who operate unmanned aircraft in an unauthor-
16	ized manner;
17	(6) the Administrator should place particular
18	priority on continuing measures, including partner-
19	ships with nongovernmental organizations, to edu-
20	cate the public about the dangers to the public safe-
21	ty of operating unmanned aircraft near airports
22	without the appropriate approvals or authorizations;
23	and
24	(7) manufacturers and retail sellers of small

24 (7) manufacturers and retail sellers of small
25 unmanned aircraft systems should take steps to edu-

cate consumers about the safe and lawful operation
 of such systems.

3 SEC. 335. UAS PRIVACY REVIEW.

4 (a) REVIEW.—The Secretary of Transportation, in 5 consultation with the heads of appropriate Federal agencies, appropriate State and local officials, and subject-mat-6 7 ter experts and in consideration of relevant efforts led by 8 the National Telecommunications and Information Ad-9 ministration, shall carry out a review to identify any po-10 tential reduction of privacy specifically caused by the inte-11 gration of unmanned aircraft systems into the national 12 airspace system.

13 (b) CONSULTATION.—In carrying out the review, the Secretary shall consult with the National Telecommuni-14 15 cations and Information Administration of the Department of Commerce on its ongoing efforts responsive to the 16 Presidential memorandum titled "Promoting Economic 17 Competitiveness While Safeguarding Privacy, Civil Rights, 18 and Civil Liberties in Domestic Use of Unmanned Aircraft 19 Systems" and dated February 15, 2015. 20

(c) REPORT.—Not later than 180 days after the date
of enactment of this Act, the Secretary shall submit to
the Committee on Transportation and Infrastructure of
the House of Representatives and the Committee on Com-

merce, Science, and Transportation of the Senate a report 1 2 on the results of the review required under subsection (a). 3 SEC. 336. PUBLIC UAS OPERATIONS BY TRIBAL GOVERN-4 MENTS. 5 (a) Public UAS Operations by Tribal Govern-MENTS.—Section 40102(a)(41) of title 49, United States 6 7 Code, is amended by adding at the end the following: 8 "(F) An unmanned aircraft that is owned 9 and operated by, or exclusively leased for at 10 least 90 continuous days by, an Indian Tribal 11 government, as defined in section 102 of the 12 Robert T. Stafford Disaster Relief and Emer-13 gency Assistance Act (42 U.S.C. 5122), except 14 as provided in section 40125(b).". 15 (b) CONFORMING AMENDMENT.—Section 40125(b) of title 49, United States Code, is amended by striking 16 17 "or (D)" and inserting "(D), or (F)". 18 SEC. 337. EVALUATION OF AIRCRAFT REGISTRATION FOR 19 SMALL UNMANNED AIRCRAFT. 20 (a) METRICS.—Beginning not later than 180 days 21 after the date of enactment of this Act, the Administrator 22 of the Federal Aviation Administration shall develop and 23 track metrics to assess compliance with and effectiveness 24 of the registration of small unmanned aircraft systems by 25 the Federal Aviation Administration pursuant to the in-

terim final rule issued on December 16, 2015, entitled 1 2 "Registration and Marking Requirements for Small Un-3 manned Aircraft" (80 Fed. Reg. 78593) and any subse-4 quent final rule, including metrics with respect to— 5 (1) the levels of compliance with the interim 6 final rule and any subsequent final rule; 7 (2) the number of enforcement actions taken by 8 the Administration for violations of or noncompli-9 ance with the interim final rule and any subsequent 10 final rule, together with a description of the actions; 11 and 12 (3) the effect of the interim final rule and any 13 subsequent final rule on compliance with any fees 14 associated with the use of small unmanned aircraft 15 systems. 16 (b) EVALUATION.—The Inspector General of the Department of Transportation shall evaluate— 17 18 (1) the Administration's progress in developing 19 and tracking the metrics set forth in subsection (a); 20 and 21 (2) the reliability, effectiveness, and efficiency 22 of the Administration's registration program for 23 small unmanned aircraft. 24 (c) REPORT.—Not later than 1 year after the date 25 of enactment of this Act, the Inspector General of the Department of Transportation shall submit to the Committee
 on Transportation and Infrastructure of the House of
 Representatives and the Committee on Commerce,
 Science, and Transportation of the Senate a report con taining—

6 (1) the results of the evaluation required under7 subsection (b); and

8 (2) recommendations to the Administrator and
9 Congress for improvements to the registration proc10 ess for small unmanned aircraft.

11 SEC. 338. STUDY ON ROLES OF GOVERNMENTS RELATING
12 TO LOW-ALTITUDE OPERATION OF SMALL
13 UNMANNED AIRCRAFT.

(a) IN GENERAL.—Not later than 60 days after the
date of enactment of this Act, the Inspector General of
the Department of Transportation shall initiate a study
on—

18 (1) the regulation and oversight of the low-alti19 tude operations of small unmanned aircraft and
20 small unmanned aircraft systems; and

(2) the appropriate roles and responsibilities of
Federal, State, local, and Tribal governments in regulating and overseeing the operations of small unmanned aircraft in airspace 400 feet above ground
level and below.

1	(b) Considerations.—In carrying out the study,
2	the Inspector General shall consider, at a minimum—
3	(1) the recommendations of Task Group 1 of
4	the Drone Advisory Committee chartered by the
5	Federal Aviation Administration on August 31,
6	2016;
7	(2) the legal and policy requirements necessary
8	for the safe and financially viable development and
9	growth of the unmanned aircraft industry;
10	(3) the interests of Federal, State, local, and
11	Tribal governments affected by low-altitude oper-
12	ations of small unmanned aircraft;
13	(4) the existing authorities of Federal, State,
14	local, and Tribal governments to protect the inter-
15	ests referenced in paragraph (3);
16	(5) the degree of regulatory consistency re-
17	quired for the safe and financially viable growth and
18	development of the unmanned aircraft industry;
19	(6) the degree of local variance possible among
20	regulations consistent with the safe and financially
21	viable growth and development of the unmanned air-
22	craft industry;
23	(7) the appropriate roles of State, local, and
24	Tribal governments in regulating the operations of
25	small unmanned aircraft within the lateral bound-

1	aries of their jurisdiction in the categories of air-
2	space described in subsection $(a)(2)$;
3	(8) the subjects and types of regulatory author-
4	ity that should remain with the Federal Government;
5	(9) the infrastructure requirements necessary
6	for monitoring the low-altitude operations of small
7	unmanned aircraft and enforcing applicable laws;
8	(10) the number of small businesses involved in
9	the various sectors of the unmanned aircraft indus-
10	try and operating as primary users of small un-
11	manned aircraft; and
12	(11) any best practices, lessons learned, or poli-
13	cies of jurisdictions outside the United States relat-
14	ing to local or regional regulation and oversight of
15	small unmanned aircraft and other emergent tech-
16	nologies.
17	(c) REPORT TO CONGRESS.—Not later than 180 days
18	after initiating the study, the Inspector General shall sub-
19	mit to the Committee on Transportation and Infrastruc-
20	ture of the House of Representatives and the Committee
21	on Commerce, Science, and Transportation of the Senate
22	a report on the results of the study.

SEC. 339. STUDY ON FINANCING OF UNMANNED AIRCRAFT SERVICES.

3 (a) IN GENERAL.—Not later than 60 days after the
4 date of enactment of this Act, the Comptroller General
5 of the United States shall initiate a study on appropriate
6 fee mechanisms to recover the costs of—

7 (1) the regulation and safety oversight of un8 manned aircraft and unmanned aircraft systems;
9 and

10 (2) the provision of air navigation services to 11 unmanned aircraft and unmanned aircraft systems. 12 (b) CONSIDERATIONS.—In carrying out the study, 13 the Comptroller General shall consider, at a minimum— 14 (1) the recommendations of Task Group 3 of 15 the Drone Advisory Committee chartered by the 16 Federal Aviation Administration on August 31, 17 2016;

(2) the total annual costs incurred by the Federal Aviation Administration for the regulation and
safety oversight of activities related to unmanned
aircraft;

(3) the annual costs attributable to various
types, classes, and categories of unmanned aircraft
activities;

1	(4) air traffic services provided to unmanned
2	aircraft operating under instrument flight rules, ex-
3	cluding public aircraft;
4	(5) the number of full-time Federal Aviation
5	Administration employees dedicated to unmanned
6	aircraft programs;
7	(6) the use of privately operated UTM and
8	other privately operated unmanned aircraft systems;
9	(7) the projected growth of unmanned aircraft
10	operations for various applications and the estimated
11	need for regulation, oversight, and other services;
12	(8) the number of small businesses involved in
13	the various sectors of the unmanned aircraft indus-
14	try and operating as primary users of unmanned air-
15	craft; and
16	(9) any best practices or policies utilized by ju-
17	risdictions outside the United States relating to par-
18	tial or total recovery of regulation and safety over-
19	sight costs related to unmanned aircraft and other
20	emergent technologies.
21	(c) REPORT TO CONGRESS.—Not later than 180 days
22	after initiating the study, the Comptroller General shall
23	submit to the Committee on Transportation and Infra-
24	structure of the House of Representatives and the Com-
25	mittee on Commerce, Science, and Transportation of the

Senate a report containing recommendations on appro priate fee mechanisms to recover the costs of regulating
 and providing air navigation services to unmanned aircraft
 and unmanned aircraft systems.

5 SEC. 340. UPDATE OF FAA COMPREHENSIVE PLAN.

6 (a) IN GENERAL.—Not later than 270 days after the 7 date of enactment of this Act, the Secretary of Transpor-8 tation shall update the comprehensive plan developed pur-9 suant to section 332 of the FAA Modernization and Re-10 form Act of 2012 (49 U.S.C. 40101 note) to develop a 11 concept of operations for the integration of unmanned air-12 craft into the national airspace system.

13 (b) CONSIDERATIONS.—In carrying out the update,14 the Secretary shall consider, at a minimum—

15 (1) the potential use of UTM and other tech-16 nologies to ensure the safe and lawful operation of 17 unmanned aircraft in the national airspace system; 18 (2) the appropriate roles, responsibilities, and 19 authorities of government agencies and the private 20 sector in identifying and reporting unlawful or 21 harmful operations and operators of unmanned air-22 craft;

23 (3) the use of models, threat assessments, prob-24 abilities, and other methods to distinguish between

lawful and unlawful operations of unmanned air craft; and

3 (4) appropriate systems, training, intergovern4 mental processes, protocols, and procedures to miti5 gate risks and hazards posed by unlawful or harmful
6 operations of unmanned aircraft systems.

7 (c) CONSULTATION.—The Secretary shall carry out
8 the update in consultation with representatives of the avia9 tion industry, Federal agencies that employ unmanned air10 craft systems technology in the national airspace system,
11 and the unmanned aircraft systems industry.

12 SEC. 341. COOPERATION RELATED TO CERTAIN COUNTER13 UAS TECHNOLOGY.

14 In matters relating to the use of systems in the na-15 tional airspace system intended to mitigate threats posed by errant or hostile unmanned aircraft system operations, 16 the Secretary of Transportation shall consult with the Sec-17 retary of Defense to streamline deployment of such sys-18 tems by drawing upon the expertise and experience of the 19 20 Department of Defense in acquiring and operating such 21 systems consistent with the safe and efficient operation 22 of the national airspace system.

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1	TITLE IV—AIR SERVICE
2	IMPROVEMENTS
3	Subtitle A—Airline Customer
4	Service Improvements
5	SEC. 401. RELIABLE AIR SERVICE IN AMERICAN SAMOA.
6	Section 40109(g) of title 49, United States Code, is
7	amended—
8	(1) in paragraph (2) by striking subparagraph
9	(C) and inserting the following:
10	"(C) review the exemption at least every 30
11	days (or, in the case of an exemption that is nec-
12	essary to provide and sustain air transportation in
13	American Samoa between the islands of Tutuila and
14	Manu'a, at least every 180 days) to ensure that the
15	unusual circumstances that established the need for
16	the exemption still exist."; and
17	(2) by striking paragraph (3) and inserting the
18	following:
19	"(3) Renewal of exemptions.—
20	"(A) IN GENERAL.—Except as provided in
21	subparagraph (B), the Secretary may renew an
22	exemption (including renewals) under this sub-
23	section for not more than 30 days.
24	"(B) EXCEPTION.—The Secretary may
25	renew an exemption (including renewals) under

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1	this subsection that is necessary to provide and
2	sustain air transportation in American Samoa
3	between the islands of Tutuila and Manu'a for
4	not more than 180 days.
5	"(4) Continuation of exemptions.—An ex-
6	emption granted by the Secretary under this sub-
7	section may continue for not more than 5 days after
8	the unusual circumstances that established the need
9	for the exemption cease.".
10	SEC. 402. CELL PHONE VOICE COMMUNICATION BAN.
11	(a) IN GENERAL.—Subchapter I of chapter 417 of
12	title 49, United States Code, is amended by adding at the
13	end the following:
	end the following: "§ 41725. Prohibition on certain cell phone voice com-
13	
13 14	"§ 41725. Prohibition on certain cell phone voice com-
13 14 15	"§ 41725. Prohibition on certain cell phone voice com- munications
13 14 15 16	"§ 41725. Prohibition on certain cell phone voice com- munications "(a) PROHIBITION.—The Secretary of Transpor-
 13 14 15 16 17 	"§ 41725. Prohibition on certain cell phone voice com- munications "(a) PROHIBITION.—The Secretary of Transpor- tation shall issue regulations—
 13 14 15 16 17 18 	 *§ 41725. Prohibition on certain cell phone voice communications "(a) PROHIBITION.—The Secretary of Transportation shall issue regulations— "(1) to prohibit an individual on an aircraft
 13 14 15 16 17 18 19 	 *\$41725. Prohibition on certain cell phone voice communications "(a) PROHIBITION.—The Secretary of Transportation shall issue regulations— "(1) to prohibit an individual on an aircraft from engaging in voice communications using a mo-
 13 14 15 16 17 18 19 20 	 *§ 41725. Prohibition on certain cell phone voice communications "(a) PROHIBITION.—The Secretary of Transportation shall issue regulations— "(1) to prohibit an individual on an aircraft from engaging in voice communications using a mobile communications device during a flight of that
 13 14 15 16 17 18 19 20 21 	 *\$41725. Prohibition on certain cell phone voice communications "(a) PROHIBITION.—The Secretary of Transportation shall issue regulations— "(1) to prohibit an individual on an aircraft from engaging in voice communications using a mobile communications device during a flight of that aircraft in scheduled passenger interstate or intra-

1	"(A) member of the flight crew on duty on
2	an aircraft;
3	"(B) flight attendant on duty on an air-
4	craft; and
5	"(C) Federal law enforcement officer act-
6	ing in an official capacity.
7	"(b) DEFINITIONS.—In this section, the following
8	definitions apply:
9	"(1) FLIGHT.—The term 'flight' means, with
10	respect to an aircraft, the period beginning when the
11	aircraft takes off and ending when the aircraft
12	lands.
13	"(2) Mobile communications device.—
14	"(A) IN GENERAL.—The term 'mobile
15	communications device' means any portable
16	wireless telecommunications equipment utilized
17	for the transmission or reception of voice data.
18	"(B) LIMITATION.—The term 'mobile com-
19	munications device' does not include a phone in-
20	stalled on an aircraft.".
21	(b) Clerical Amendment.—The analysis for chap-
22	ter 417 of title 49, United States Code, is amended by
23	inserting after the item relating to section 41724 the fol-
24	lowing:

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"41725. Prohibition on certain cell phone voice communications.".

1	SEC. 403. ADVISORY COMMITTEE FOR AVIATION CON-
2	SUMER PROTECTION.
3	Section 411 of the FAA Modernization and Reform
4	Act of 2012 (49 U.S.C. 42301 prec. note) is amended—
5	(1) in subsection (b)—
6	(A) by redesignating paragraphs (3) and
7	(4) as paragraphs (4) and (5), respectively; and
8	(B) by inserting after paragraph (2) the
9	following:
10	"(3) independent distributors of travel;";
11	(2) in subsection (g) by striking "first 2 cal-
12	endar years" and inserting "first 6 calendar years";
13	and
14	(3) in subsection (h) by striking "2018" and in-
15	serting "2023".
16	SEC. 404. IMPROVED NOTIFICATION OF INSECTICIDE USE.
17	Section 42303(b) of title 49, United States Code, is
18	amended to read as follows:
19	"(b) REQUIRED DISCLOSURES.—An air carrier, for-
20	eign air carrier, or ticket agent selling, in the United
21	States, a ticket for a flight in foreign air transportation
22	to a country listed on the internet website established
23	under subsection (a) shall—
24	"(1) disclose, on its own internet website or
25	through other means, that the destination country
26	may require the air carrier or foreign air carrier to

1	treat an aircraft passenger cabin with insecticides
2	prior to the flight or to apply an aerosol insecticide
3	in an aircraft cabin used for such a flight when the
4	cabin is occupied with passengers; and
5	((2)) refer the purchaser of the ticket to the
6	internet website established under subsection (a) for
7	additional information.".
8	SEC. 405. ADVERTISEMENTS AND DISCLOSURE OF FEES
9	FOR PASSENGER AIR TRANSPORTATION.
10	(a) Full Fare Advertising.—
11	(1) IN GENERAL.—Section 41712 of title 49,
12	United States Code, is amended by adding at the
13	end the following:
14	"(d) Full Fare Advertising.—
15	"(1) IN GENERAL.—It shall not be an unfair or
16	deceptive practice under subsection (a) for a covered
17	entity to state in an advertisement or solicitation for
18	
10	passenger air transportation the base airfare for the
19	passenger air transportation the base airfare for the air transportation if the covered entity clearly and
19	air transportation if the covered entity clearly and
19 20	air transportation if the covered entity clearly and separately discloses—
19 20 21	air transportation if the covered entity clearly and separately discloses— "(A) the government-imposed fees and
19 20 21 22	air transportation if the covered entity clearly and separately discloses— "(A) the government-imposed fees and taxes associated with the air transportation;

"(2) FORM OF DISCLOSURE.—

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5

2 "(A) IN GENERAL.—For purposes of paragraph (1), the information described in para-3 4 graphs (1)(A) and (1)(B) shall be disclosed in the advertisement or solicitation in a manner 6 that clearly presents the information to the con-7 sumer.

8 "(B) INTERNET ADVERTISEMENTS AND 9 SOLICITATIONS.—For purposes of paragraph 10 (1), with respect to an advertisement or solicita-11 tion for passenger air transportation that ap-12 pears on an internet website or a mobile appli-13 cation, the information described in paragraphs 14 (1)(A) and (1)(B) may be disclosed through a 15 link or pop-up, as such terms may be defined 16 by the Secretary, that displays the information 17 in a manner that is easily accessible and 18 viewable by the consumer.

19 "(3) DEFINITIONS.—In this subsection, the fol-20 lowing definitions apply:

"(A) BASE AIRFARE.—The term 'base air-21 22 fare' means the cost of passenger air transpor-23 tation, excluding government-imposed fees and 24 taxes.

"(B) COVERED ENTITY.—The term 'cov-1 2 ered entity' means an air carrier, including an 3 indirect air carrier, foreign air carrier, ticket 4 agent, or other person offering to sell tickets for 5 passenger air transportation or a tour or tour 6 component that must be purchased with air transportation.". 7 8 (2) LIMITATION ON STATUTORY CONSTRUC-9 TION.—Nothing in the amendment made by para-10 graph (1) may be construed to affect any obligation 11 of a person that sells air transportation to disclose 12 the total cost of the air transportation, including

13 government-imposed fees and taxes, prior to pur-14 chase of the air transportation.

(3) REGULATIONS.—Not later than 120 days
after the date of enactment of this Act, the Secretary of Transportation shall issue final regulations
to carry out the amendment made by paragraph (1).
(4) EFFECTIVE DATE.—This subsection, and

the amendments made by this subsection, shall take
effect on the earlier of—

22 (A) the effective date of regulations issued23 under paragraph (3); and

24 (B) the date that is 180 days after the25 date of enactment of this Act.

(b) DISCLOSURE OF FEES.—Section 41712 of title 1 2 49, United States Code, as amended by this section, is further amended by adding at the end the following: 3 4 "(e) DISCLOSURE OF FEES.— 5 "(1) IN GENERAL.—It shall be an unfair or de-6 ceptive practice under subsection (a) for any air car-7 rier, foreign air carrier, or ticket agent to fail to in-8 clude, in an internet fare quotation for a specific 9 itinerary in air transportation selected by a con-10 sumer-"(A) a clear and prominent statement that 11 12 additional fees for checked baggage and carry-13 on baggage may apply; and 14 "(B) a prominent link that connects di-15 rectly to a list of all such fees. 16 "(2) SAVINGS PROVISION.—Nothing in this sub-17 section may be construed to derogate or limit any 18 responsibilities of an air carrier, foreign air carrier, 19 or ticket agent under section 399.85 of title 14,

Code of Federal Regulations, or any successor provi-

sion.".

20

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1SEC. 406. INVOLUNTARILY BUMPING PASSENGERS AFTER2AIRCRAFT BOARDED.

3 Section 41712 of title 49, United States Code, as
4 amended by this Act, is further amended by adding at the
5 end the following:

6 "(f) INVOLUNTARILY DENIED BOARDING AFTER7 AIRCRAFT BOARDED.—

8 "(1) IN GENERAL.—It shall be an unfair or de-9 ceptive practice under subsection (a) for an air car-10 rier or foreign air carrier subject to part 250 of title 11 14, Code of Federal Regulations, to involuntarily 12 deplane a revenue passenger onboard an aircraft, if 13 the revenue passenger—

14 "(A) is traveling on a confirmed reserva-15 tion; and

16 "(B) checked-in for the relevant flight17 prior to the check-in deadline.

18 "(2) SAVINGS PROVISION.—Nothing in this sub19 section may be construed to limit the authority of an
20 air carrier, foreign air carrier, or airman to remove
21 a passenger in accordance with—

22	"(A) section 91.3 , 121.533 (d), or 121.580
23	of title 14, Code of Federal Regulations, or any
24	successor provision; or

25 "(B) any other applicable Federal, State,
26 or local law.".

1	SEC. 407. AVAILABILITY OF CONSUMER RIGHTS INFORMA-
2	TION.
3	Section 42302(b) of title 49, United States Code, is
4	amended—
5	(1) in the matter preceding paragraph (1) by
6	striking "on the" and inserting "in a prominent
7	place on the homepage of the primary";
8	(2) in paragraph (2) by striking "and" at the
9	end;
10	(3) in paragraph (3) by striking the period at
11	the end and inserting "; and"; and
12	(4) by adding at the end the following:
13	"(4) the air carrier's customer service plan.".
14	SEC. 408. CONSUMER COMPLAINTS HOTLINE.
15	Section 42302 of title 49, United States Code, is
16	amended by adding at the end the following:
17	"(d) Use of New Technologies.—The Secretary
18	shall periodically evaluate the benefits of using mobile
19	phone applications or other widely used technologies to
20	provide new means for air passengers to communicate
21	complaints in addition to the telephone number estab-
22	lished under subsection (a) and shall provide such new
23	means as the Secretary determines appropriate.".

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1 SEC. 409. WIDESPREAD DISRUPTIONS.

2 (a) IN GENERAL.—Chapter 423 of title 49, United
3 States Code, is amended by adding at the end the fol4 lowing:

5 "§ 42304. Widespread disruptions

6 "(a) GENERAL REQUIREMENTS.—In the event of a 7 widespread disruption, a covered air carrier shall imme-8 diately publish, via a prominent link on the air carrier's 9 public internet website, a clear statement indicating 10 whether, with respect to a passenger of the air carrier 11 whose travel is interrupted as a result of the widespread 12 disruption, the air carrier will—

13 "(1) provide for hotel accommodations;

14 "(2) arrange for ground transportation;

15 "(3) provide meal vouchers;

"(4) arrange for air transportation on another
air carrier or foreign air carrier to the passenger's
destination; and

19 "(5) provide for sleeping facilities inside the air-20 port terminal.

21 "(b) DEFINITIONS.—In this section, the following22 definitions apply:

23 "(1) WIDESPREAD DISRUPTION.—The term
24 'widespread disruption' means, with respect to a cov25 ered air carrier, the interruption of all or the over26 whelming majority of the air carrier's systemwide
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flight operations, including flight delays and can cellations, as the result of the failure of 1 or more
 computer systems or computer networks of the air
 carrier.

5 "(2) COVERED AIR CARRIER.—The term 'cov6 ered air carrier' means an air carrier that provides
7 scheduled passenger air transportation by operating
8 an aircraft that as originally designed has a passenger capacity of 30 or more seats.

10 "(c) SAVINGS PROVISION.—Nothing in this section
11 may be construed to modify, abridge, or repeal any obliga12 tion of an air carrier under section 42301.".

(b) CONFORMING AMENDMENT.—The analysis for
14 chapter 423 of title 49, United States Code, is amended
15 by adding at the end the following:

"42304. Widespread disruptions.".

16 SEC. 410. INVOLUNTARILY DENIED BOARDING COMPENSA17 TION.

18 Not later than 60 days after the date of enactment
19 of this Act, the Secretary of Transportation shall issue a
20 final rule to revise part 250 of title 14, Code of Federal
21 Regulations, to clarify that—

(1) there is not a maximum level of compensation an air carrier or foreign air carrier may pay to
a passenger who is involuntarily denied boarding as
the result of an oversold flight;

1	(2) the compensation levels set forth in that
2	part are the minimum levels of compensation an air
3	carrier or foreign air carrier must pay to a pas-
4	senger who is involuntarily denied boarding as the
5	result of an oversold flight; and
6	(3) an air carrier or foreign air carrier must
7	proactively offer to pay compensation to a passenger
8	who is voluntarily or involuntarily denied boarding
9	on an oversold flight, rather than waiting until the
10	passenger requests the compensation.
11	SEC. 411. CONSUMER INFORMATION ON ACTUAL FLIGHT
10	TIMES.
12	111165.
12 13	(a) Study.—The Secretary of Transportation shall
13	(a) Study.—The Secretary of Transportation shall
13 14	(a) STUDY.—The Secretary of Transportation shall conduct a study on the feasibility and advisability of modi-
13 14 15	(a) STUDY.—The Secretary of Transportation shall conduct a study on the feasibility and advisability of modi- fying regulations contained in section 234.11 of title 14,
13 14 15 16	 (a) STUDY.—The Secretary of Transportation shall conduct a study on the feasibility and advisability of modi-fying regulations contained in section 234.11 of title 14, Code of Federal Regulations, to ensure that—
13 14 15 16 17	 (a) STUDY.—The Secretary of Transportation shall conduct a study on the feasibility and advisability of modi-fying regulations contained in section 234.11 of title 14, Code of Federal Regulations, to ensure that— (1) a reporting carrier (including its contrac-
 13 14 15 16 17 18 	 (a) STUDY.—The Secretary of Transportation shall conduct a study on the feasibility and advisability of modifying regulations contained in section 234.11 of title 14, Code of Federal Regulations, to ensure that— (1) a reporting carrier (including its contractors), during the course of a reservation or ticketing
 13 14 15 16 17 18 19 	 (a) STUDY.—The Secretary of Transportation shall conduct a study on the feasibility and advisability of modifying regulations contained in section 234.11 of title 14, Code of Federal Regulations, to ensure that— (1) a reporting carrier (including its contractors), during the course of a reservation or ticketing discussion or other inquiry, discloses to a consumer
 13 14 15 16 17 18 19 20 	 (a) STUDY.—The Secretary of Transportation shall conduct a study on the feasibility and advisability of modifying regulations contained in section 234.11 of title 14, Code of Federal Regulations, to ensure that— (1) a reporting carrier (including its contractors), during the course of a reservation or ticketing discussion or other inquiry, discloses to a consumer upon reasonable request the projected period be-
 13 14 15 16 17 18 19 20 21 	 (a) STUDY.—The Secretary of Transportation shall conduct a study on the feasibility and advisability of modifying regulations contained in section 234.11 of title 14, Code of Federal Regulations, to ensure that— (1) a reporting carrier (including its contractors), during the course of a reservation or ticketing discussion or other inquiry, discloses to a consumer upon reasonable request the projected period between the actual wheels-off and wheels-on times for

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actual wheels-off and wheels-on times during the
 most recent calendar month for a reportable flight.
 (b) DEFINITIONS.—In this section, the terms "re porting carrier" and "reportable flight" have the mean ings given those terms in section 234.2 of title 14, Code
 of Federal Regulations (as in effect on the date of enact ment of this Act).

8 (c) REPORT.—Not later than 1 year after the date 9 of enactment of this Act, the Secretary shall submit to 10 the Committee on Transportation and Infrastructure of 11 the House of Representatives and the Committee on Com-12 merce, Science, and Transportation of the Senate a report 13 on the results of the study.

14SEC. 412. ADVISORY COMMITTEE FOR TRANSPARENCY IN15AIR AMBULANCE INDUSTRY.

(a) IN GENERAL.—Not later than 90 days after the
date of enactment of this Act, the Secretary of Transportation shall establish an advisory committee to make recommendations for a rulemaking—

20 (1) to require air ambulance operators to clear21 ly disclose charges for air transportation services
22 separately from charges for non-air transportation
23 services within any invoice or bill; and

24 (2) to provide other consumer protections for25 customers of air ambulance operators.

 2 The advisory committee shall be composed of the following 3 members: 4 (1) The Secretary of Transportation. 5 (2) 1 representative, to be appointed by the Secretary, of each of the following: 6 Secretary, of each of the following: 7 (A) Each relevant Federal agency, as de termined by the Secretary. 9 (B) Air ambulance operators. 10 (C) State insurance regulators.
 4 (1) The Secretary of Transportation. 5 (2) 1 representative, to be appointed by the 6 Secretary, of each of the following: 7 (A) Each relevant Federal agency, as d 8 termined by the Secretary. 9 (B) Air ambulance operators.
 5 (2) 1 representative, to be appointed by th 6 Secretary, of each of the following: 7 (A) Each relevant Federal agency, as d 8 termined by the Secretary. 9 (B) Air ambulance operators.
 6 Secretary, of each of the following: 7 (A) Each relevant Federal agency, as d 8 termined by the Secretary. 9 (B) Air ambulance operators.
 7 (A) Each relevant Federal agency, as d 8 termined by the Secretary. 9 (B) Air ambulance operators.
 8 termined by the Secretary. 9 (B) Air ambulance operators.
9 (B) Air ambulance operators.
10 (C) State insurance regulators.
11 (D) Health insurance providers.
12 (E) Consumer groups.
13 (c) RECOMMENDATIONS.—The advisory committee
14 shall make recommendations with respect to each of the
15 following:
16 (1) Cost-allocation methodologies needed to en
17 sure that charges for air transportation services as
18 separated from charges for non-air transportation
19 services.
20 (2) Cost- or price-allocation methodologies
21 prevent commingling of charges for air transpo
22 tation services and charges for non-air transpo
tation services in bills and invoices.
24 (3) Formats for bills and invoices to ensur
25 that customers and State insurance regulators ca

clearly distinguish between charges for air transpor tation services and charges for non-air transpor tation services.

4 (4) Data or industry references related to air5 craft operating costs to be used in determining the
6 proper allocation of charges for air transportation
7 services and charges for non-air transportation serv8 ices.

9 (5) Guidance materials to instruct States, polit-10 ical subdivisions of States, and political authorities 11 of 2 or more States on referring to the Secretary al-12 legations of unfair or deceptive practices or unfair 13 methods of competition by air ambulance operators.

14 (6) Protections for customers of air ambulance
15 operators, after consideration of the circumstances
16 in which the services of air ambulance operators are
17 used.

18 (7) Protections of proprietary cost data from19 inappropriate public disclosure.

20 (8) Such other matters as the Secretary deter-21 mines necessary or appropriate.

(d) REPORT.—Not later than 180 days after the date
of the first meeting of the advisory committee, the advisory committee shall submit to the Secretary, the Committee on Transportation and Infrastructure of the House

of Representatives, and the Committee on Commerce, 1 2 Science, and Transportation of the Senate a report con-3 taining the recommendations made under subsection (c). 4 (e) RULEMAKING.—Not later than 180 days after the 5 date of receipt of the report under subsection (d), the Secretary shall consider the recommendations of the advisory 6 7 committee and issue a final rule— 8 (1) to require air ambulance operators to clear-9 ly disclose charges for air transportation services 10 separately from charges for non-air transportation 11 services within any invoice or bill; and 12 (2) to provide other consumer protections for 13 customers of air ambulance operators. (f) DEFINITIONS.—In this section, the following defi-14 nitions apply: 15 16 (1) AIR AMBULANCE OPERATOR.—The term "air ambulance operator" means an air carrier oper-17 18 ating pursuant to part 135 of title 14, Code of Fed-19 eral Regulations, that provides medical, ambulance, 20 or related services. 21 (2) NON-AIR TRANSPORTATION SERVICES.—The 22 term "non-air transportation services" means those 23 services provided by air ambulance operators but not 24 other air carriers operating pursuant to part 135 of 25 title 14, Code of Federal Regulations.

(g) TERMINATION.—The advisory committee shall
 terminate on the date of submission of the report under
 subsection (d).

4 (h) NATURE OF AIR AMBULANCE SERVICES.—The
5 non-air transportation services of air ambulance operators
6 and prices thereof are neither services nor prices of an
7 air carrier for purposes of section 41713 of title 49,
8 United States Code.

9 SEC. 413. AIR AMBULANCE COMPLAINTS.

(a) CONSUMER COMPLAINTS.—Section 42302 of title
49, United States Code, is amended—

(1) in subsection (a) by inserting "(including
transportation by air ambulance)" after "air transportation";

15 (2) in subsection (b)—

16 (A) in the matter preceding paragraph 17 (1)—

18 (i) by inserting ", and an air ambu19 lance operator," after "passenger seats";
20 and

(ii) by inserting "or operator" after
"Internet Web site of the carrier"; and
(B) in paragraph (2) by inserting "or operator" after "mailing address of the air carrier"; and

2 following: "(c) Notice to Passengers on Boarding or 3 4 BILLING DOCUMENTATION.— 5 "(1) AIR CARRIERS AND FOREIGN AIR CAR-RIERS.—An air carrier or foreign air carrier pro-6 7 viding scheduled air transportation using any air-8 craft that as originally designed has a passenger ca-9 pacity of 30 or more passenger seats shall include 10 the hotline telephone number established under sub-11 section (a) on— 12 "(A) prominently displayed signs of the 13 carrier at the airport ticket counters in the 14 United States where the air carrier operates; 15 and "(B) any electronic confirmation of the 16 17 purchase of a passenger ticket for air transpor-18 tation issued by the air carrier. 19 "(2) AIR AMBULANCE OPERATORS.—An air am-20 bulance operator shall include the hotline telephone 21 number established under subsection (a) on any in-22 voice, bill, or other communication provided to a

passenger or customer of the operator.".

1

(3) by striking subsection (c) and inserting the

23

(b) UNFAIR AND DECEPTIVE PRACTICES AND UN FAIR METHODS OF COMPETITION.—Section 41712(a) of
 title 49, United States Code, is amended—

4 (1) by inserting "air ambulance customer,"
5 after "foreign air carrier," the first place it appears;
6 and

7 (2) by adding at the end the following: "In this
8 subsection, the term 'air carrier' includes an air am9 bulance operator and the term 'air transportation'
10 includes any transportation provided by an air am11 bulance.".

12 SEC. 414. PASSENGER RIGHTS.

(a) GUIDELINES.—Not later than 90 days after the
date of enactment of this Act, the Secretary of Transportation shall require each air carrier to submit for approval
a 1-page document that accurately describes the rights of
passengers in air transportation, including guidelines for
the following:

19 (1) Compensation (regarding rebooking options,
20 refunds, meals, and lodging) for flight delays of var21 ious lengths.

(2) Compensation (regarding rebooking options,
refunds, meals, and lodging) for flight cancellations.
(3) Compensation for mishandled baggage, including delayed, damaged, pilfered, or lost baggage.

(4) Voluntary relinquishment of a ticketed seat
 due to overbooking or priority of other passengers.
 (5) Involuntary denial of boarding and forced
 removal for whatever reason, including for safety
 and security reasons.

6 (b) APPROVAL OF GUIDELINES.—Not later than 90 7 days after each air carrier submits its guidelines for ap-8 proval to the Secretary under subsection (a), the air car-9 rier shall make available such 1-page document on its 10 website.

Subtitle B—Aviation Consumers With Disabilities

13 SEC. 441. SELECT SUBCOMMITTEE.

Section 411 of the FAA Modernization and Reform
Act of 2012 (49 U.S.C. 42301 prec. note), as amended
by this Act, is further amended—

17 (1) by redesignating subsections (g) and (h) as18 subsections (h) and (i), respectively; and

19 (2) by inserting after subsection (f) the fol-20 lowing:

21 "(g) SELECT SUBCOMMITTEE FOR AVIATION CON22 SUMERS WITH DISABILITIES.—

23 "(1) IN GENERAL.—The Secretary shall estab24 lish a select subcommittee of the advisory committee
25 to advise the Secretary and the advisory committee

1	on issues related to the air travel needs of pas-
2	sengers with disabilities.
3	"(2) DUTIES.—The select subcommittee shall—
4	"(A) identify the disability-related access
5	barriers encountered by passengers with disabil-
6	ities;
7	"(B) determine the extent to which the
8	programs and activities of the Department of
9	Transportation are addressing the barriers
10	identified under subparagraph (A);
11	"(C) recommend consumer protection im-
12	provements related to the air travel experience
13	of passengers with disabilities;
14	"(D) advise the Secretary with regard to
15	the implementation of section 41705 of title 49,
16	United States Code; and
17	"(E) conduct such other activities as the
18	Secretary considers necessary to carry out this
19	subsection.
20	"(3) Membership.—
21	"(A) COMPOSITION.—The select sub-
22	committee shall be composed of members ap-
23	pointed by the Secretary, including at least 1
24	individual representing each of the following:
25	"(i) National disability organizations.

"(ii) Air carriers and foreign air car-1 2 riers with flights in air transportation. "(iii) Airport operators. 3 "(iv) Contractor service providers. 4 5 "(B) INCLUSION.—A member of the select 6 subcommittee may also be a member of the ad-7 visory committee. "(4) Reports.— 8 9 "(A) IN GENERAL.—Not later than 1 year 10 after the date of establishment of the select 11 subcommittee, the select subcommittee shall submit to the advisory committee and the Sec-12 13 retary a report on the air travel needs of pas-14 sengers with disabilities that includes— "(i) an assessment of existing dis-15 16 ability-related access barriers and any 17 emerging disability-related access barriers 18 that will likely be an issue in the next 5 19 years;

20 "(ii) an evaluation of the extent to
21 which the programs and activities of the
22 Department of Transportation are elimi23 nating disability-related access barriers;

24 "(iii) a description of consumer pro-25 tection improvements related to the air

travel experience of passengers with dis-
abilities; and
"(iv) any recommendations for legisla-
tion, regulations, or other actions that the
select subcommittee considers appropriate.
"(B) REPORT TO CONGRESS.—Not later
than 60 days after the date on which the Sec-
retary receives the report under subparagraph
(A), the Secretary shall submit to Congress a
copy of the report, including any additional
findings or recommendations that the Secretary
considers appropriate.
"(5) CHAIRPERSON.—The Secretary shall des-
ignate, from among the individuals appointed under
paragraph (3), an individual to serve as chairperson
of the select subcommittee.
"(6) VACANCIES AND TRAVEL EXPENSES.—
Subsections (c) and (d) shall apply to the select sub-
committee.
"(7) TERMINATION.—The select subcommittee
established under this subsection shall terminate
upon submission of the report required under para-
graph (4)(A).".

3 (a) STUDY.—Not later than 180 days after the date
4 of enactment of this Act, the Comptroller General of the
5 United States shall conduct a study that includes—

6 (1) a review of airport accessibility best prac-7 tices for individuals with disabilities, including best 8 practices that improve infrastructure facilities and 9 communications methods, including those related to 10 wayfinding, amenities, and passenger care;

(2) a review of air carrier and airport training
policies related to section 41705 of title 49, United
States Code;

14 (3) a review of air carrier training policies re15 lated to properly assisting passengers with disabil16 ities; and

17 (4) a review of accessibility best practices that 18 exceed those recommended under Public Law 90-19 480 (popularly known as the Architectural Barriers 20 Act of 1968; 42 U.S.C. 4151 et seq.), the Rehabili-21 tation Act of 1973 (29 U.S.C. 701 et seq.), the Air 22 Carrier Access Act of 1986 (Public Law 99–435; 23 100 Stat. 1080 et seq.), and the Americans with 24 Disabilities Act of 1990 (42 U.S.C. 12101 et seq.). 25 (b) REPORT.—Not later than 1 year after the date of enactment of this Act, the Comptroller General shall 26 •HR 4 IH

submit to the Secretary of Transportation, the Committee
 on Transportation and Infrastructure of the House of
 Representatives, and the Committee on Commerce,
 Science, and Transportation of the Senate a report on the
 study, including findings and recommendations.

6 SEC. 443. FEASIBILITY STUDY ON IN-CABIN WHEELCHAIR 7 RESTRAINT SYSTEMS.

8 (a) STUDY.—Not later than 2 years after the date 9 of enactment of this Act, the Secretary of Transportation, 10 in consultation with the Architectural and Transportation 11 Barriers Compliance Board, aircraft manufacturers, and 12 air carriers, shall conduct a study to determine—

13 (1) the feasibility of in-cabin wheelchair re-14 straint systems; and

(2) if feasible, the ways in which individuals
with significant disabilities using wheelchairs, including power wheelchairs, can be accommodated with
in-cabin wheelchair restraint systems.

(b) REPORT.—Not later than 1 year after the initiation of the study under subsection (a), the Secretary of
Transportation shall submit to the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Commerce, Science, and
Transportation of the Senate a report on the findings of
the study.

1SEC. 444. ACCESS ADVISORY COMMITTEE RECOMMENDA-2TIONS.

3 (a) IN GENERAL.—Not later than 1 year after the
4 date of enactment of this Act, the Secretary of Transpor5 tation shall issue a notice of proposed rulemaking address6 ing—

7 (1) accommodations for air travelers with dis-8 abilities with respect to in-flight entertainment;

9 (2) accessible lavatories on single-aisle aircraft;10 and

11 (3) service animals.

(b) RULEMAKING.—Not later than 1 year after the
date on which the notice of proposed rulemaking is issued,
the Secretary shall publish a final rule based on such notice.

Subtitle C—Small Community Air Service

18 SEC. 451. ESSENTIAL AIR SERVICE AUTHORIZATION.

Section 41742(a)(2) of title 49, United States Code,
is amended by striking "\$150,000,000 for fiscal year
2011" and all that follows before "to carry out" and inserting "\$153,000,000 for fiscal year 2018, \$156,000,000
for fiscal year 2019, \$159,000,000 for fiscal year 2020,
\$162,000,000 for fiscal year 2021, \$165,000,000 for fiscal year 2022, and \$168,000,000 for fiscal year 2023".

1	SEC. 452. EXTENSION OF FINAL ORDER ESTABLISHING
2	MILEAGE ADJUSTMENT ELIGIBILITY.
3	Section 409(d) of the Vision 100—Century of Avia-
4	tion Reauthorization Act (49 U.S.C. 41731 note) is
5	amended by striking "2018" and inserting "2023".

6 SEC. 453. STUDY ON ESSENTIAL AIR SERVICE REFORM.

7 (a) STUDY.—

8 (1) IN GENERAL.—The Comptroller General of 9 the United States shall conduct a study on the ef-10 fects of section 6 of the Airport and Airway Exten-11 sion Act of 2011, Part IV (Public Law 112–27), sec-12 tion 421 of the FAA Modernization and Reform Act 13 of 2012 (Public Law 112–95), and other relevant 14 Federal laws enacted after 2010, including the 15 amendments made by those laws, on the Essential 16 Air Service program.

17 (2) SCOPE.—In conducting the study under
18 paragraph (1), the Comptroller General shall ana19 lyze, at a minimum—

20 (A) the impact of each relevant Federal
21 law, including the amendments made by each
22 law, on the Essential Air Service program;

23 (B) what actions communities and air car24 riers have taken to reduce ticket prices or in25 crease enplanements as a result of each law;

1	(C) the issuance of waivers by the Sec-
2	retary under section 41731(e) of title 49,
3	United States Code;
4	(D) whether budgetary savings resulted
5	from each law; and
6	(E) options for further reform of the Es-
7	sential Air Service program.
8	(b) REPORT.—Not later than 180 days after the date
9	of enactment of this Act, the Comptroller General shall
10	submit to the Committee on Transportation and Infra-
11	structure of the House of Representatives and the Com-
12	mittee on Commerce, Science, and Transportation of the
13	Senate a report on the results of the study conducted
14	under subsection (a).
15	SEC. 454. SMALL COMMUNITY AIR SERVICE.
16	(a) ELIGIBILITY.—Section 41743(c) of title 49,
17	United States Code, is amended—
18	(1) by striking paragraph (1) and inserting the
19	following:
20	"(1) SIZE.—On the date of submission of the
21	relevant application under subsection (b), the airport
22	serving the community or consortium—
23	"(A) is not larger than a small hub air-
24	port, as determined using the Department of

1	Transportation's most recently published classi-
2	fication; and
3	"(B) has—
4	"(i) insufficient air carrier service; or
5	"(ii) unreasonably high air fares.";
6	(2) in paragraph (4) —
7	(A) by striking "once," and inserting
8	"once in a 10-year period,"; and
9	(B) by inserting "at any time" after "dif-
10	ferent project"; and
11	(3) in paragraph (5)—
12	(A) by redesignating subparagraphs (E)
13	and (F) as subparagraphs (F) and (G), respec-
14	tively; and
15	(B) by inserting after subparagraph (D)
16	the following:
17	"(E) the assistance will be used to help re-
18	store scheduled passenger air service that has
19	been terminated;".
20	(b) Authorization of Appropriations.—Section
21	41743(e)(2) of title 49, United States Code, is amended
22	to read as follows:
23	"(2) Authorization of appropriations.—
24	There is authorized to be appropriated to the Sec-
25	retary \$10,000,000 for each of fiscal years 2018

through 2023 to carry out this section, of which
 \$4,800,000 per fiscal year shall be used to carry out
 the pilot program established under subsection (i).
 Such sums shall remain available until expended.".
 (c) REGIONAL AIR TRANSPORTATION PILOT PRO GRAM.—Section 41743 of title 49, United States Code, is
 amended by adding at the end the following:

8 "(i) REGIONAL AIR TRANSPORTATION PILOT PRO-9 GRAM.—

10 "(1) ESTABLISHMENT.—The Secretary shall es11 tablish a regional air transportation pilot program to
12 provide operating assistance to air carriers in order
13 to provide air service to communities not receiving
14 sufficient air carrier service.

15 "(2) GRANTS.—The Secretary shall provide 16 grants under the program to encourage and main-17 tain air service at reasonable airfares between com-18 munities that have experienced, as determined by 19 the Secretary, significant declines in air service.

"(3) APPLICATION REQUIRED.—In order to
participate in the program, a State, local government, economic development authority, or other public entity shall submit to the Secretary an application, in a manner that the Secretary prescribes, that
contains—

1	"(A) an identification of an air carrier that
2	has provided a written agreement to provide the
3	air service in partnership with the applicant;
4	"(B) assurances that the applicant will
5	provide the non-Federal share and that the
6	non-Federal share is not derived from airport
7	revenue;
8	"(C) a proposed route structure serving
9	not more than 8 communities; and
10	"(D) a timeline for commencing the air
11	service to the communities within the proposed
12	route structure.
13	"(4) CRITERIA FOR PARTICIPATION.—The Sec-
14	retary may approve up to 3 applications each fiscal
15	year, subject to the availability of funds, if the Sec-
16	retary determines that—
17	"(A) the proposal of the applicant can rea-
18	sonably be expected to encourage and improve
19	levels of air service between the relevant com-
20	munities;
21	"(B) the applicant has adequate financial
22	resources to ensure the commitment to the com-
23	munities;
24	"(C) the airports serving the communities
25	are nonhub, small hub, or medium hub airports,

1	as determined using the Department of Trans-
2	portation's most recently published classifica-
3	tions; and
4	"(D) the air carrier commits to serving the
5	communities for at least 2 years.
6	"(5) PRIORITIES.—The Secretary shall
7	prioritize applications that—
8	"(A) would initiate new or reestablish air
9	service in communities where air fares are high-
10	er than the average air fares for all commu-
11	nities;
12	"(B) are more likely to result in self-sus-
13	taining air service at the end of the program;
14	"(C) request a Federal share lower than
15	50 percent; and
16	"(D) propose to use grant funds in a time-
17	ly fashion.
18	"(6) FEDERAL SHARE.—The Federal share of
19	the cost of operating assistance provided under the
20	program may not exceed 50 percent.
21	"(7) SUNSET.—This subsection shall cease to
22	be effective on October 1, 2023.".
23	SEC. 455. AIR TRANSPORTATION TO NONELIGIBLE PLACES.
24	(a) DEFINITIONS.—Section 41731(a)(1)(A)(ii) of
25	title 49, United States Code, is amended by striking

"Wendell H. Ford Aviation Investment and Reform Act
 for the 21st Century," and inserting "FAA Extension,
 Safety, and Security Act of 2016 (Public Law 114–190),".
 (b) PROGRAM SUNSET.—Section 41736 of title 49,
 United States Code, is amended by adding at the end the
 following:

7 "(h) SUNSET.—

8 "(1) PROPOSALS.—No proposal under sub9 section (a) may be accepted by the Secretary after
10 the date of enactment of this subsection.

"(2) PROGRAM.—The Secretary may not provide any compensation under this section after the
date that is 2 years after the date of enactment of
this subsection.".

15 **TITLE V—MISCELLANEOUS**

16 SEC. 501. REVIEW OF FAA STRATEGIC CYBERSECURITY
17 PLAN.

18 (a) IN GENERAL.—Not later than 1 year after the 19 date of enactment of this Act, the Administrator of the 20 Federal Aviation Administration shall initiate a review of 21 the comprehensive and strategic framework of principles 22 and policies (referred to in this section as the "frame-23 work") developed pursuant to section 2111 of the FAA 24 Extension, Safety, and Security Act of 2016 (49 U.S.C. 44903 note). 25

(b) CONTENTS.—In undertaking the review under
subsection (a), the Administrator shall—
(1) assess the degree to which the framework
identifies and addresses known cybersecurity risks
associated with the aviation system;
(2) review existing short- and long-term objec-
tives for addressing cybersecurity risks to the na-
tional airspace system; and
(3) assess the Administration's level of engage-
ment and coordination with aviation stakeholders
and other appropriate agencies, organizations, or
groups with which the Administration consults to
groups with which the Administration consults to
groups with which the Administration consults to carry out the framework.
groups with which the Administration consults to carry out the framework.(c) UPDATES.—Upon completion of the review under
groups with which the Administration consults to carry out the framework. (c) UPDATES.—Upon completion of the review under subsection (a), the Administrator shall modify the frame-
groups with which the Administration consults to carry out the framework. (c) UPDATES.—Upon completion of the review under subsection (a), the Administrator shall modify the frame- work, as appropriate, to address any deficiencies identified
groups with which the Administration consults to carry out the framework. (c) UPDATES.—Upon completion of the review under subsection (a), the Administrator shall modify the frame- work, as appropriate, to address any deficiencies identified by the review.
groups with which the Administration consults to carry out the framework. (c) UPDATES.—Upon completion of the review under subsection (a), the Administrator shall modify the frame- work, as appropriate, to address any deficiencies identified by the review. (d) REPORT TO CONGRESS.—Not later than 180 days
groups with which the Administration consults to carry out the framework. (c) UPDATES.—Upon completion of the review under subsection (a), the Administrator shall modify the frame- work, as appropriate, to address any deficiencies identified by the review. (d) REPORT TO CONGRESS.—Not later than 180 days after initiating the review required by subsection (a), the
groups with which the Administration consults to carry out the framework. (c) UPDATES.—Upon completion of the review under subsection (a), the Administrator shall modify the frame- work, as appropriate, to address any deficiencies identified by the review. (d) REPORT TO CONGRESS.—Not later than 180 days after initiating the review required by subsection (a), the Administrator shall submit to the Committee on Trans-
groups with which the Administration consults to carry out the framework. (c) UPDATES.—Upon completion of the review under subsection (a), the Administrator shall modify the frame- work, as appropriate, to address any deficiencies identified by the review. (d) REPORT TO CONGRESS.—Not later than 180 days after initiating the review required by subsection (a), the Administrator shall submit to the Committee on Trans- portation and Infrastructure of the House of Representa-

made to the framework.

1	SEC. 502. CONSOLIDATION AND REALIGNMENT OF FAA
2	SERVICES AND FACILITIES.
3	Section 804(a) of the FAA Modernization and Re-
4	form Act of 2012 (49 U.S.C. 44501 note) is amended—
5	(1) in paragraph (2) by striking "The purpose
6	of the report shall be—" and all that follows
7	through "(B) to reduce" and inserting "The purpose
8	of the report shall be to reduce"; and
9	(2) by striking paragraph (4) and inserting the
10	following:
11	"(4) INPUT.—The report shall be prepared by
12	the Administrator (or the Administrator's designee)
13	with the participation of—
14	"(A) representatives of labor organizations
15	representing air traffic control system employ-
16	ees of the FAA; and
17	"(B) industry stakeholders.".
18	SEC. 503. FAA REVIEW AND REFORM.
19	(a) AGENCY REPORT.—Not later than 60 days after
20	the date of enactment of this Act, the Administrator of
21	the Federal Aviation Administration shall submit to the
22	Committee on Transportation and Infrastructure of the
23	House of Representatives and the Committee on Com-
24	merce, Science, and Transportation of the Senate a de-
25	tailed analysis of any actions taken to address the findings
26	and recommendations included in the report required
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1	under section 812(d) of the FAA Modernization and Re-
2	form Act of 2012 (49 U.S.C. 106 note), including—
3	(1) consolidating, phasing-out, or eliminating
4	duplicative positions, programs, roles, or offices;
5	(2) eliminating or streamlining wasteful prac-
6	tices;
7	(3) eliminating or phasing-out redundant, obso-
8	lete, or unnecessary functions;
9	(4) reforming and streamlining inefficient proc-
10	esses so that the activities of the Administration are
11	completed in an expedited and efficient manner; and
12	(5) reforming or eliminating ineffectual or out-
13	dated policies.
14	(b) Additional Review.—Not later than 18
15	months after the date of enactment of this Act, the Ad-
16	ministrator shall undertake and complete a thorough re-
17	view of each program, office, and organization within the
18	Administration to identify—
19	(1) duplicative positions, programs, roles, or of-
20	fices;
21	(2) wasteful practices;
22	(3) redundant, obsolete, or unnecessary func-
23	tions;
24	(4) inefficient processes; and
25	(5) ineffectual or outdated policies.

(c) ACTIONS TO STREAMLINE AND REFORM FAA.—
 Not later than 60 days after the date of completion of
 the review under subsection (b), the Administrator shall
 undertake such actions as may be necessary to address
 the findings of the Administrator under such subsection.

6 (d) REPORT TO CONGRESS.—Not later than 120 days 7 after the date of completion of the review under subsection 8 (b), the Administrator shall submit to the Committee on 9 Transportation and Infrastructure of the House of Rep-10 resentatives and the Committee on Commerce, Science, and Transportation of the Senate a report on the actions 11 12 taken by the Administrator pursuant to subsection (c), in-13 cluding any recommendations for legislative or administrative actions. 14

15 SEC. 504. AVIATION FUEL.

(a) USE OF UNLEADED AVIATION GASOLINE.—The
Administrator of the Federal Aviation Administration
shall allow the use of an unleaded aviation gasoline in an
aircraft as a replacement for a leaded gasoline if the Administrator—

(1) determines that an unleaded aviation gasoline qualifies as a replacement for an approved leaded gasoline;

(2) identifies the aircraft and engines that are eligible to use the qualified replacement unleaded gasoline; and

4 (3) adopts a process (other than the traditional
5 means of certification) to allow eligible aircraft and
6 engines to operate using qualified replacement un7 leaded gasoline in a manner that ensures safety.

8 (b) TIMING.—The Administrator shall adopt the
9 process described in subsection (a)(3) not later than 180
10 days after the later of—

(1) the date of completion of the Piston Avia-tion Fuels Initiative of the Administration; or

(2) the date of publication of an American Society for Testing and Materials Production Specification for an unleaded aviation gasoline.

16 (c) SENSE OF CONGRESS.—It is the sense of Con-17 gress that the Piston Aviation Fuels Initiative of the Ad-18 ministration and the American Society for Testing and 19 Materials should work to find an appropriate unleaded 20 aviation gasoline by January 1, 2024.

21 SEC. 505. RIGHT TO PRIVACY WHEN USING AIR TRAFFIC
22 CONTROL SYSTEM.

Notwithstanding any other provision of law, the Administrator of the Federal Aviation Administration shall,
upon request of a private aircraft owner or operator, block

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the registration number of the aircraft of the owner or
 operator from any public dissemination or display, except
 in data made available to a Government agency, for the
 noncommercial flights of the owner or operator.

5 SEC. 506. AIR SHOWS.

6 On an annual basis, the Administrator of the Federal 7 Aviation Administration shall work with representatives of 8 Administration-approved air shows, the general aviation 9 community, and stadiums and other large outdoor events 10 and venues to identify and resolve, to the maximum extent practicable, scheduling conflicts between Administration-11 12 approved air shows and large outdoor events and venues where---13

14 (1) flight restrictions will be imposed pursuant
15 to section 521 of title V of division F of Public Law
16 108–199 (118 Stat. 343); or

17 (2) any other restriction will be imposed pursu18 ant to Federal Aviation Administration Flight Data
19 Center Notice to Airmen 4/3621 (or any successor
20 notice to airmen).

21 SEC. 507. PART 91 REVIEW, REFORM, AND STREAMLINING.

(a) ESTABLISHMENT OF TASK FORCE.—Not later
than 90 days after the date of enactment of this Act, the
Administrator of the Federal Aviation Administration
shall establish a task force comprised of representatives

of the general aviation industry who regularly perform part 91 operations, labor unions (including those representing FAA aviation safety inspectors and FAA aviation safety engineers), manufacturers, and the Govern-

5 ment to—

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6 (1) conduct an assessment of the FAA over7 sight and authorization processes and requirements
8 for aircraft under part 91; and

9 (2) make recommendations to streamline the 10 applicable authorization and approval processes, im-11 prove safety, and reduce regulatory cost burdens and 12 delays for the FAA and aircraft owners and opera-13 tors who operate pursuant to part 91.

14 (b) CONTENTS.—In conducting the assessment and
15 making recommendations under subsection (a), the task
16 force shall consider—

17 (1) process reforms and improvements to allow
18 the FAA to review and approve applications in a fair
19 and timely fashion;

20 (2) the appropriateness of requiring an author21 ization for each experimental aircraft rather than
22 using a broader all makes and models approach;

(3) ways to improve the timely response to letters of authorization applications for aircraft owners
and operators who operate pursuant to part 91, in-

1	cluding setting deadlines and granting temporary or
2	automatic authorizations if deadlines are missed by
3	the FAA;
4	(4) methods for enhancing the effective use of
5	delegation systems;
6	(5) methods for training the FAA's field office
7	employees in risk-based and safety management sys-
8	tem oversight; and
9	(6) such other matters related to streamlining
10	part 91 authorization and approval processes as the
11	task force considers appropriate.
12	(c) Report to Congress.—
13	(1) IN GENERAL.—Not later than 1 year after
14	the date of enactment of this Act, the Administrator
15	shall submit to the Committee on Transportation
16	and Infrastructure of the House of Representatives
17	and the Committee on Commerce, Science, and
18	Transportation of the Senate a report on the results
19	of the task force's assessment.
20	(2) CONTENTS.—The report shall include an
21	explanation of how the Administrator will—
22	(A) implement the recommendations of the
23	task force;
24	(B) measure progress in implementing the
25	recommendations; and

1	(C) measure the effectiveness of the imple-
2	mented recommendations.
3	(d) Implementation of Recommendations.—Not
4	later than 18 months after the date of enactment of this
5	Act, the Administrator shall implement the recommenda-
6	tions made under this section.
7	(e) DEFINITIONS.—In this section, the following defi-
8	nitions apply:
9	(1) FAA.—The term "FAA" means the Fed-
10	eral Aviation Administration.
11	(2) PART 91.—The term "part 91" means part
12	91 of title 14, Code of Federal Regulations.
13	(f) Applicable Law.—Public Law 92–463 shall not
14	apply to the task force.
15	(g) SUNSET.—The task force shall terminate on the
16	day the Administrator submits the report required under
17	subsection (c).
18	SEC. 508. AIRCRAFT REGISTRATION.
19	Not later than 180 days after the date of enactment
20	of this Act, the Administrator of the Federal Aviation Ad-
21	ministration shall initiate a rulemaking to increase the du-
22	ration of aircraft registrations for noncommercial general
23	aviation aircraft to 10 years.

3 (a) COOPERATIVE EFFORTS TO ENSURE COMPLI4 ANCE WITH SAFETY REGULATIONS.—

5 (1) IN GENERAL.—The Secretary of Transpor-6 tation, in coordination with appropriate Federal 7 agencies, shall carry out cooperative efforts to en-8 sure that shippers who offer lithium ion and lithium 9 metal batteries for air transport to or from the United States comply with U.S. Hazardous Mate-10 11 rials Regulations and ICAO Technical Instructions. 12 (2) COOPERATIVE EFFORTS.—The cooperative

efforts the Secretary shall carry out pursuant toparagraph (1) include the following:

(A) Encouraging training programs at locations outside the United States from which
substantial cargo shipments of lithium ion or
lithium metal batteries originate for manufacturers, freight forwarders, and other shippers
and potential shippers of lithium ion and lithium metal batteries.

(B) Working with Federal, regional, and
international transportation agencies to ensure
enforcement of U.S. Hazardous Materials Regulations and ICAO Technical Instructions with
respect to shippers who offer noncompliant

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shipments of lithium ion and lithium metal batteries.

(C) Sharing information, as appropriate, with Federal, regional, and international transportation agencies regarding noncompliant shipments.

7 (D) Pursuing a joint effort with the inter-8 national aviation community to develop a proc-9 ess to obtain assurances that appropriate en-10 forcement actions are taken to reduce the likeli-11 hood of noncompliant shipments, especially with 12 respect to jurisdictions in which enforcement 13 activities historically have been limited.

(E) Providing information in brochures
and on the internet in appropriate foreign languages and dialects that describes the actions
required to comply with U.S. Hazardous Materials Regulations and ICAO Technical Instructions.

20 (F) Developing joint efforts with the inter21 national aviation community to promote a bet22 ter understanding of the requirements of and
23 methods of compliance with U.S. Hazardous
24 Materials Regulations and ICAO Technical In25 structions.

1 (3) REPORTING.—Not later than 120 days after 2 the date of enactment of this Act, and annually 3 thereafter for 2 years, the Secretary shall submit to 4 the Committee on Transportation and Infrastructure 5 of the House of Representatives and the Committee 6 on Commerce, Science, and Transportation of the Senate a report on compliance with the policy set 7 8 forth in subsection (e) and the cooperative efforts 9 carried out, or planned to be carried out, under this 10 subsection.

11 (b) LITHIUM BATTERY AIR SAFETY ADVISORY COM-12 MITTEE.—

(1) ESTABLISHMENT.—Not later than 60 days
after the date of enactment of this Act, the Secretary shall establish, in accordance with the requirements of the Federal Advisory Committee Act
(5 U.S.C. App.), a lithium ion and lithium metal
battery air safety advisory committee (in this subsection referred to as the "Committee").

20 (2) DUTIES.—The Committee shall—

(A) facilitate communication between manufacturers of lithium ion and lithium metal cells
and batteries, manufacturers of products incorporating both large and small lithium ion and
lithium metal batteries, air carriers, and the

1	Federal Government regarding the safe air
2	transportation of lithium ion and lithium metal
3	cells and batteries and the effectiveness and
4	economic and social impacts of the regulation of
5	such transportation;
6	(B) provide the Secretary, the Federal
7	Aviation Administration, and the Pipeline and
8	Hazardous Materials Safety Administration
9	with timely information about new lithium ion
10	and lithium metal battery technology and trans-
11	portation safety practices and methodologies;
12	(C) provide a forum for the Secretary to
13	provide information on and to discuss the ac-
14	tivities of the Department of Transportation re-
15	lating to lithium ion and lithium metal battery
16	transportation safety, the policies underlying
17	the activities, and positions to be advocated in
18	international forums;
19	(D) provide a forum for the Secretary to
20	provide information and receive advice on—
21	(i) activities carried out throughout
22	the world to communicate and enforce rel-
23	evant United States regulations and the
24	ICAO Technical Instructions; and
25	(ii) the effectiveness of the activities;

1	(E) provide advice and recommendations to
2	the Secretary with respect to lithium ion and
3	lithium metal battery air transportation safety,
4	including how best to implement activities to in-
5	crease awareness of relevant requirements and
6	their importance to travelers and shippers; and
7	(F) review methods to decrease the risk
8	posed by air shipment of undeclared hazardous
9	materials and efforts to educate those who pre-
10	pare and offer hazardous materials for ship-
11	ment via air transport.
12	(3) Membership.—The Committee shall be
13	composed of the following members:
14	(A) Individuals appointed by the Secretary
15	to represent—
16	(i) large volume manufacturers of lith-
17	ium ion and lithium metal cells and bat-
18	teries;
19	(ii) domestic manufacturers of lithium
20	ion and lithium metal batteries or battery
21	packs;
22	(iii) manufacturers of consumer prod-
23	ucts powered by lithium ion and lithium
24	metal batteries;

1	(iv) manufacturers of vehicles powered
2	by lithium ion and lithium metal batteries;
3	(v) marketers of products powered by
4	lithium ion and lithium metal batteries;
5	(vi) cargo air service providers based
6	in the United States;
7	(vii) passenger air service providers
8	based in the United States;
9	(viii) pilots and employees of air serv-
10	ice providers described in clauses (vi) and
11	(vii);
12	(ix) shippers of lithium ion and lith-
13	ium metal batteries for air transportation;
14	(x) manufacturers of battery-powered
15	medical devices or batteries used in med-
16	ical devices; and
17	(xi) employees of the Department of
18	Transportation, including employees of the
19	Federal Aviation Administration and the
20	Pipeline and Hazardous Materials Safety
21	Administration.
22	(B) Representatives of such other Govern-
23	ment departments and agencies as the Sec-
24	retary determines appropriate.

1	(C) Any other individuals the Secretary de-
2	termines are appropriate to comply with Fed-
3	eral law.
4	(4) Report.—
5	(A) IN GENERAL.—Not later than 180
6	days after the establishment of the Committee,
7	the Committee shall submit to the Secretary,
8	the Committee on Transportation and Infra-
9	structure of the House of Representatives, and
10	the Committee on Commerce, Science, and
11	Transportation of the Senate a report that—
12	(i) describes and evaluates the steps
13	being taken in the private sector and by
14	international regulatory authorities to im-
15	plement and enforce requirements relating
16	to the safe transportation by air of bulk
17	shipments of lithium ion cells and bat-
18	teries; and
19	(ii) identifies any areas of enforce-
20	ment or regulatory requirements for which
21	there is consensus that greater attention is
22	needed.
23	(B) INDEPENDENT STATEMENTS.—Each
24	member of the Committee shall be provided an
25	opportunity to submit an independent state-

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1	ment of views with the report submitted pursu-
2	ant to subparagraph (A).
3	(5) MEETINGS.—
4	(A) IN GENERAL.—The Committee shall
5	meet at the direction of the Secretary and at
6	least twice a year.
7	(B) Preparation for ICAO meetings.—
8	Notwithstanding subparagraph (A), the Sec-
9	retary shall convene a meeting of the Com-
10	mittee in connection with and in advance of
11	each meeting of the International Civil Aviation
12	Organization, or any of its panels or working
13	groups, addressing the safety of air transpor-
14	tation of lithium ion and lithium metal batteries
15	to brief Committee members on positions to be
16	taken by the United States at such meeting and
17	provide Committee members a meaningful op-
18	portunity to comment.
19	(6) TERMINATION.—The Committee shall ter-
20	minate on the date that is 6 years after the date on
21	which the Committee is established.
22	(7) TERMINATION OF FUTURE OF AVIATION AD-
23	VISORY COMMITTEE.—The Future of Aviation Advi-
24	sory Committee shall terminate on the date on which

the lithium ion battery air safety advisory committee
 is established.

3 (c) MEDICAL DEVICE BATTERIES.—

4 (1) LIMITED EXCEPTIONS TO RESTRICTIONS ON 5 AIR TRANSPORTATION OF MEDICAL DEVICE BAT-6 TERIES.—The Secretary shall issue limited excep-7 tions to the restrictions on transportation of lithium 8 ion and lithium metal batteries to allow the ship-9 ment on a passenger aircraft of not more than 2 re-10 placement batteries specifically used for a medical 11 device if—

12 (A) the intended destination of the bat13 teries is not serviced daily by cargo aircraft if
14 a battery is required for medically necessary
15 care; and

16 (B) with regard to a shipper of lithium ion
17 or lithium metal batteries for medical devices
18 that cannot comply with a charge limitation in
19 place at the time, each battery is—

20 (i) individually packed in an inner
21 packaging that completely encloses the bat22 tery;

23 (ii) placed in a rigid outer packaging;24 and

1 (iii) protected to prevent a short cir-2 cuit.

3 (2) MEDICAL DEVICE DEFINED.—In this subsection, the term "medical device" means an instru-4 5 ment, apparatus, implement, machine, contrivance, 6 implant, or in vitro reagent, including any compo-7 nent, part, or accessory thereof, which is intended 8 for use in the diagnosis of disease or other condi-9 tions, or in the cure, mitigation, treatment, or pre-10 vention of disease, in a person.

(3) SAVINGS CLAUSE.—Nothing in this subsection may be construed as expanding or restricting
any authority of the Secretary under section 828 of
the FAA Modernization and Reform Act of 2012
(49 U.S.C. 44701 note).

16 (d) PACKAGING IMPROVEMENTS.—Not later than 17 180 days after the date of enactment of this Act, the Sec-18 retary, in consultation with interested stakeholders, shall 19 submit to the Committee on Transportation and Infra-20structure of the House of Representatives and the Com-21 mittee on Commerce, Science, and Transportation of the 22 Senate an evaluation of current practices for the pack-23 aging of lithium ion batteries and cells for air transpor-24 tation, including recommendations, if any, to improve the

packaging of such batteries and cells for air transportation
 in a safe, efficient, and cost-effective manner.

3 (e) DEPARTMENT OF TRANSPORTATION POLICY ON 4 INTERNATIONAL REPRESENTATION.—It shall be the pol-5 icy of the Department of Transportation to support the 6 participation of industry in all panels and working groups 7 of the Dangerous Goods Panel of the International Civil 8 Aviation Organization and any other international test or 9 standard setting organization that considers proposals on 10 the safety or transportation of lithium ion and lithium metal batteries in which the United States participates. 11

12 (f) HARMONIZATION WITH ICAO TECHNICAL IN-13 STRUCTIONS.—Pursuant to section 828 of the FAA Modernization and Reform Act of 2012 (49 U.S.C. 44701 14 15 note), not later than 30 days after the date of enactment of this Act, the Secretary shall conform United States reg-16 17 ulations on the air transport of lithium cells and batteries with the lithium cells and batteries requirements in the 18 2015–2016 edition of the ICAO Technical Instructions 19 20(including all addenda), including the revised standards 21 adopted by the International Civil Aviation Organization 22 that became effective on April 1, 2016.

23 (g) DEFINITIONS.—In this section, the following defi-24 nitions apply:

1 ICAO (1)TECHNICAL INSTRUCTIONS.—The 2 term "ICAO Technical Instructions" has the meaning given that term in section 828(c) of the FAA 3 4 Modernization and Reform Act of 2012 (49 U.S.C. 44701 note). 5 6 (2)U.S. HAZARDOUS MATERIALS REGULA-7 TIONS.—The term "U.S. Hazardous Materials Regu-8 lations" means the regulations in parts 100 through 9 177 of title 49, Code of Federal Regulations (includ-10 ing amendments adopted after the date of enactment 11 of this Act). 12 SEC. 510. REMOTE TOWER PILOT PROGRAM FOR RURAL 13 AND SMALL COMMUNITIES. 14 (a) IN GENERAL.—Not later than 180 days after the 15 date of enactment of this Act, the Secretary of Transportation shall establish a pilot program under which, upon 16 17 approval of an application submitted by an operator of a 18 public-use airport, the Secretary shall install and operate 19 at the airport a remote air traffic control tower in order to assess the operational benefits of remote air traffic con-20 21 trol towers.

(b) APPLICATIONS.—The operator of an airport seeking to participate in the pilot program shall submit to the
Secretary for approval an application that is in such form

and contains such information as the Secretary may re quire.

3 (c) Selection Criteria.—

4	(1) Selection of Airports.—From among
5	the applications submitted under subsection (b), the
6	Secretary, after consultation with representatives of
7	labor organizations representing operators and em-
8	ployees of the air traffic control system, shall select
9	for participation in the pilot program 7 airports as
10	follows:

12 (B) 3 nonprimary airports without existing13 air traffic control towers.

(A) 1 nonhub, primary airport.

- 14 (C) 2 airports with air traffic control tow15 ers participating in a program established
 16 under section 47124 of title 49, United States
 17 Code.
- 18 (D) 1 airport selected at the discretion of19 the Secretary.

(2) PRIORITY SELECTION.—In selecting from
among the applications submitted under subsection
(b), the Secretary shall give priority to applicants
that can best demonstrate the capabilities and potential of remote air traffic control towers, including

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1	applicants proposing to operate multiple remote air
2	traffic control towers from a single facility.
3	(3) AUTHORITY TO REALLOCATE AIRPORT SE-
4	LECTION.—If the Secretary receives an insufficient
5	number of applications, the Secretary may reallocate
6	the distribution of airport sites described in para-
7	graph (1).
8	(d) Safety Risk Management Panel.—
9	(1) SAFETY RISK MANAGEMENT PANEL MEET-
10	ING.—Prior to the operational use of a remote air
11	traffic control tower, the Secretary shall convene a
12	safety risk management panel for the tower to ad-
13	dress any safety issues with respect to the tower.
14	(2) SAFETY RISK MANAGEMENT PANEL BEST
15	PRACTICES.—The safety risk management panels
16	shall be created and utilized in a manner similar to
17	that of safety risk management panels previously es-
18	tablished for remote air traffic control towers, taking
19	into account—
20	(A) best practices that have been devel-
21	oped; and
22	(B) operational data from remote air traf-
23	fic control towers located in the United States.

(e) AIRPORT IMPROVEMENT PROGRAM.—The pilot
 program shall be eligible for airport improvement funding
 under chapter 471 of title 49, United States Code.

4 (f) POSSIBLE EXPANSION OF PROGRAM.—Not later 5 than 30 days after the date that the first remote air traffic 6 control tower is commissioned, the Administrator of the 7 Federal Aviation Administration shall establish a repeat-8 able process by which future certified remote air traffic 9 control tower systems may be commissioned at additional 10 airports.

11 (g) DEFINITIONS.—

12 (1) IN GENERAL.—In this section, the following13 definitions apply:

14 (A) AIR NAVIGATION FACILITY.—The term
15 "air navigation facility" has the meaning given
16 that term in section 40102(a) of title 49,
17 United States Code.

18 (B) Remote AIR TRAFFIC CONTROL 19 TOWER.—The term "remote air traffic control tower" means a remotely operated air naviga-20 21 tion facility, including all necessary system com-22 ponents, that provides the functions and capa-23 bilities of an air traffic control tower.

24 (2) APPLICABILITY OF OTHER DEFINITIONS.—
25 The terms "nonhub airport", "primary airport", and

"public-use airport" have the meanings given such
 terms in section 47102 of title 49, United States
 Code.

4 (h) SUNSET.—The pilot program shall terminate on
5 the date that is 3 years after the date of enactment of
6 this Act.

7 SEC. 511. ENSURING FAA READINESS TO PROVIDE SEAM8 LESS OCEANIC OPERATIONS.

9 Not later than September 30, 2018, the Secretary of 10 Transportation shall make a final investment decision for 11 the implementation of a reduced oceanic separation capa-12 bility that, by March 31, 2019, shall be operational and 13 in use providing capabilities at least equivalent to that of-14 fered in neighboring airspace, and such service shall be 15 provided in the same manner as terrestrial surveillance is 16 provided.

17SEC. 512. SENSE OF CONGRESS REGARDING WOMEN IN18AVIATION.

19 It is the sense of Congress that the aviation industry 20 should explore all opportunities, including pilot training, 21 science, technology, engineering, and mathematics edu-22 cation, and mentorship programs, to encourage and sup-23 port female students and aviators to pursue a career in 24 aviation. 221

3 The Secretary of Transportation may implement the policy set forth in the notice of proposed policy titled "Pro-4 5 posal to Consider the Impact of One Engine Inoperative Procedures in Obstruction Evaluation Aeronautical Stud-6 7 ies" published by the Department of Transportation on 8 April 28, 2014 (79 Fed. Reg. 23300), only if the policy 9 is adopted pursuant to a notice and comment rulemaking 10 and, for purposes of Executive Order 12866 (5 U.S.C. 601 11 note; relating to regulatory planning and review), is treat-12 ed as a significant regulatory action within the scope of 13 section 3(f)(1) of such Order.

14 SEC. 514. AIRCRAFT LEASING.

15 Section 44112(b) of title 49, United States Code, is16 amended—

17 (1) by striking "on land or water"; and

18 (2) by inserting "operational" before "control".

19 SEC. 515. REPORT ON OBSOLETE TEST EQUIPMENT.

(a) REPORT.—Not later than 180 days after the date
of enactment of this Act, the Administrator of the Federal
Aviation Administration shall submit to the Committee on
Transportation and Infrastructure of the House of Representatives and the Committee on Commerce, Science,
and Transportation of the Senate a report on the National

1	Test Equipment Program of the Federal Aviation Admin-
2	istration (in this section referred to as the "Program").
3	(b) CONTENTS.—The report shall include—
4	(1) a list of all known outstanding requests for
5	test equipment, cataloged by type and location,
6	under the Program;
7	(2) a description of the current method under
8	the Program of ensuring calibrated equipment is in
9	place for utilization;
10	(3) a plan by the Administrator for appropriate
11	inventory of such equipment;
12	(4) the Administrator's recommendations for
13	increasing multifunctionality in future test equip-
14	ment and all known and foreseeable manufacturer
15	technological advances; and
16	(5) a plan to replace, as appropriate, obsolete
17	test equipment throughout the service areas.
18	SEC. 516. PILOTS SHARING FLIGHT EXPENSES WITH PAS-
19	SENGERS.
20	(a) GUIDANCE.—
21	(1) IN GENERAL.—Not later than 90 days after
22	the date of enactment of this Act, the Administrator
23	of the Federal Aviation Administration shall make
24	publicly available, in a clear and concise format, ad-
25	visory guidance that describes how a pilot may share

1	flight expenses with passengers in a manner con-
2	sistent with Federal law, including regulations.
3	(2) Examples included.—The guidance shall
4	include examples of—
5	(A) flights for which pilots and passengers
6	may share expenses;
7	(B) flights for which pilots and passengers
8	may not share expenses;
9	(C) the methods of communication that pi-
10	lots and passengers may use to arrange flights
11	for which expenses are shared; and
12	(D) the methods of communication that pi-
13	lots and passengers may not use to arrange
14	flights for which expenses are shared.
15	(b) Report.—
16	(1) IN GENERAL.—Not later than 180 days
17	after the date on which guidance is made publicly
18	available under subsection (a), the Comptroller Gen-
19	eral of the United States shall submit to the Com-
20	mittee on Transportation and Infrastructure of the
21	House of Representatives and the Committee on
22	Commerce, Science, and Transportation of the Sen-
23	ate a report analyzing Federal policy with respect to
24	pilots sharing flight expenses with passengers.

1	(2) EVALUATIONS INCLUDED.—The report sub-
2	mitted under paragraph (1) shall include an evalua-
3	tion of—
4	(A) the rationale for such Federal policy;
5	(B) safety and other concerns related to
6	pilots sharing flight expenses with passengers;
7	and
8	(C) benefits related to pilots sharing flight
9	expenses with passengers.
10	SEC. 517. AVIATION RULEMAKING COMMITTEE FOR PART
11	135 PILOT REST AND DUTY RULES.
12	(a) IN GENERAL.—Not later than 180 days after the
13	date of enactment of this Act, the Administrator of the
14	Federal Aviation Administration shall convene an aviation
15	rulemaking committee to review, and develop findings and
16	recommendations regarding, pilot rest and duty rules
17	under part 135 of title 14, Code of Federal Regulations.
18	(b) DUTIES.—The Administrator shall—
19	(1) not later than 2 years after the date of en-
20	actment of this Act, submit to the Committee on
21	Transportation and Infrastructure of the House of
22	Representatives and the Committee on Commerce,
23	Science, and Transportation of the Senate a report
24	based on the findings of the aviation rulemaking
25	committee; and

1	(2) not later than 1 year after the date of sub-
2	mission of the report under paragraph (1), issue a
3	notice of proposed rulemaking based on any con-
4	sensus recommendations reached by the aviation
5	rulemaking committee.
6	(c) COMPOSITION.—The aviation rulemaking com-
7	mittee shall consist of members appointed by the Adminis-
8	trator, including—
9	(1) representatives of industry;
10	(2) representatives of aviation labor organiza-
11	tions, including collective bargaining units rep-
12	resenting pilots who are covered by part 135 of title
13	14, Code of Federal Regulations, and subpart K of
14	part 91 of such title; and
15	(3) aviation safety experts with specific knowl-
16	edge of flight crewmember education and training
17	requirements under part 135 of such title.
18	(d) Considerations.—The Administrator shall di-
19	rect the aviation rulemaking committee to consider—
20	(1) recommendations of prior part 135 rule-
21	making committees;
22	(2) accommodations necessary for small busi-
23	nesses;
24	(3) scientific data derived from aviation-related
25	fatigue and sleep research;

1	(4) data gathered from aviation safety reporting
2	programs;
3	(5) the need to accommodate the diversity of
4	operations conducted under part 135; and
5	(6) other items, as appropriate.
6	SEC. 518. METROPOLITAN WASHINGTON AIRPORTS AU-
7	THORITY.
8	(a) FINDINGS.—Congress finds that—
9	(1) the Metropolitan Washington Airports Au-
10	thority (in this section referred to as "MWAA"),
11	which operates Ronald Reagan Washington National
12	Airport and Dulles International Airport by lease
13	with the Department of Transportation, has rou-
14	tinely performed poorly on audits conducted by the
15	Inspector General of the Department of Transpor-
16	tation;
17	(2) the responsible stewardship of taxpayer-
18	owned assets by MWAA is of great concern to Con-
19	gress;
20	(3) a March 20, 2015, audit conducted by the
21	Inspector General titled "MWAA's Office of Audit
22	Does Not Have an Adequate Quality Assurance and
23	Improvement Program'' (Report No. ZA–2015–035)
24	found that MWAA's quality assurance and improve-

1	ment program did not conform with the standards
2	of the Institute of Internal Auditors; and
3	(4) the Inspector General's audit made 7 rec-
4	ommendations to strengthen MWAA governance, its
5	Office of Audit, and its quality assurance and im-
6	provement program.
7	(b) Implementing Audit Recommendations.—
8	(1) Study.—The Inspector General of the De-
9	partment of Transportation shall conduct a study on
10	MWAA's progress in implementing the recommenda-
11	tions of the audit referred to in subsection (a).
12	(2) Report.—The Inspector General shall sub-
13	mit to the Committee on Transportation and Infra-
14	structure of the House of Representatives and the
15	Committee on Commerce, Science, and Transpor-
16	tation of the Senate a report on the study, including
17	the Inspector General's findings, conclusions, and
18	recommendations for strengthening and improving
19	MWAA's Office of Audit.
20	SEC. 519. TERMINAL AERODROME FORECAST.
21	(a) IN GENERAL.—The Administrator of the Federal
22	Aviation Administration shall permit a covered air carrier
23	to operate to or from a location in a noncontiguous State
24	without a Terminal Aerodrome Forecast or Meteorological
25	Aerodrome Report if—

1	(1) such location is determined to be under vis-
2	ual meteorological conditions;
3	(2) a current Area Forecast, supplemented by
4	other local weather observations or reports, is avail-
5	able; and
6	(3) an alternate airport that has an available
7	Terminal Aerodrome Forecast and weather report is
8	specified.
9	(b) PROCEDURES.—A covered air carrier shall—
10	(1) have approved procedures for dispatch or
11	release and enroute weather evaluation; and
12	(2) operate under instrument flight rules
13	enroute to the destination.
14	(c) COVERED AIR CARRIER DEFINED.—In this sec-
15	tion, the term "covered air carrier" means an air carrier
16	operating in a noncontiguous State under part 121 of title
17	14, Code of Federal Regulations.
18	SEC. 520. FEDERAL AVIATION ADMINISTRATION EMPLOY-
19	EES STATIONED ON GUAM.
20	It is the sense of Congress that—
21	(1) the Administrator of the Federal Aviation
22	Administration and the Secretary of Defense should
23	seek an agreement that would enable Federal Avia-
24	tion Administration employees stationed on Guam to

1	have access to Department of Defense hospitals,
2	commissaries, and exchanges on Guam;
3	(2) access to these facilities is important to en-
4	sure the health and well-being of Federal Aviation
5	Administration employees and their families; and
6	(3) in exchange for this access, the Federal
7	Aviation Administration should make payments to
8	cover the applicable administrative costs incurred by
9	the Department of Defense in carrying out the
10	agreement.

11 SEC. 521. TECHNICAL CORRECTIONS.

(a) AIRPORT CAPACITY ENHANCEMENT PROJECTS
AT CONGESTED AIRPORTS.—Section 40104(c) of title 49,
United States Code, is amended by striking "section
47176" and inserting "section 47175".

16 (b) PASSENGER FACILITY CHARGES.—Section 17 40117(a)(5) of title 49, United States Code, is amended by striking "charge or charge" and inserting "charge". 18 19 (c) Overflights of National Parks.—Section 40128(a)(3) of title 49, United States Code, is amended 20 by striking "under part 91 of the title 14," and inserting 21 22 "under part 91 of title 14,".

23 (d) PLANS TO ADDRESS NEEDS OF FAMILIES OF
24 PASSENGERS INVOLVED IN FOREIGN AIR CARRIER ACCI25 DENTS.—Section 41313(c)(16) of title 49, United States

Code, is amended by striking "An assurance that the for eign air carrier" and inserting "An assurance that".

3 (e) OPERATIONS OF CARRIERS.—The analysis for
4 chapter 417 of title 49, United States Code, is amended
5 by striking the item relating to section 41718 and insert6 ing the following:

"41718. Special rules for Ronald Reagan Washington National Airport.".

7 (f) SCHEDULES FOR CERTAIN TRANSPORTATION OF
8 MAIL.—Section 41902(a) of title 49, United States Code,
9 is amended by striking "section 41906" and inserting
10 "section 41905".

(g) WEIGHING MAIL.—Section 41907 of title 49,
United States Code, is amended by striking "and -administrative" and inserting "and administrative".

14 (h) STRUCTURES INTERFERING WITH AIR COM15 MERCE OR NATIONAL SECURITY.—Section 44718(b)(1) of
16 title 49, United States Code, is amended—

(1) in the matter preceding subparagraph (A)
by striking "air navigation facilities and equipment"
and inserting "air or space navigation facilities and
equipment"; and

21 (2) in subparagraph (A)—

22 (A) in clause (v) by striking "and" at the23 end;

24 (B) by redesignating clause (vi) as clause25 (vii); and

1	(C) by inserting after clause (v) the fol-
2	lowing:
3	"(vi) the impact on launch and re-
4	entry for launch and reentry vehicles arriv-
5	ing or departing from a launch site or re-
6	entry site licensed by the Secretary of
7	Transportation; and".
8	(i) FEES INVOLVING AIRCRAFT NOT PROVIDING AIR
9	TRANSPORTATION.—Section 45302 of title 49, United
10	States Code, is amended by striking "44703(f)(2)" each
11	place it appears and inserting "44703(g)(2)".
12	(j) CHAPTER 465.—The analysis for chapter 465 of
13	title 49, United States Code, is amended by striking the
14	following:
	"46503. Repealed.".
15	(k) Solicitation and Consideration of Com-
16	MENTS.—Section 47171(l) of title 49, United States Code,
17	is amended by striking "4371" and inserting "4321".
18	
	(1) Adjustments to Compensation for Signifi-
19	(I) ADJUSTMENTS TO COMPENSATION FOR SIGNIFI- CANTLY INCREASED COSTS.—Section 426 of the FAA
19 20	
	CANTLY INCREASED COSTS.—Section 426 of the FAA
20	CANTLY INCREASED COSTS.—Section 426 of the FAA Modernization and Reform Act of 2012 is amended—

(2) in subsection (c) (49 U.S.C. 41731 note) by
striking "the Secretary may waive" and inserting
"the Secretary of Transportation may waive".
(m) Aircraft Departure Queue Management
PILOT PROGRAM.—Section 507(a) of the FAA Moderniza-

tion and Reform Act of 2012 (49 U.S.C. 44505 note) is 6 amended by striking "section 48101(a)" and inserting 7 8 "section 48101(a) of title 49, United States Code,".

9 SEC. 522. APPLICATION OF VETERANS' PREFERENCE TO 10 FEDERAL AVIATION ADMINISTRATION PER-11 SONNEL MANAGEMENT SYSTEM.

12 Section 40122(g)(2)(B) of title 49, United States 13 Code, is amended—

14 (1) by inserting "3304(f)," before "3308-15 3320"; and

16 (2) by inserting "3330a, 3330b, 3330c, and 3330d," before "relating". 17

18 SEC. 523. PUBLIC AIRCRAFT ELIGIBLE FOR LOGGING 19 FLIGHT TIMES.

20 The Administrator of the Federal Aviation Adminis-21 tration shall issue regulations modifying section 22 61.51(j)(4) of title 14, Code of Federal Regulations, so 23 as to include aircraft under the direct operational control 24 of forestry and fire protection agencies as public aircraft eligible for logging flight times. 25

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3 (a) IN GENERAL.—Not later than 120 days after the
4 date of enactment of this Act, the Comptroller General
5 of the United States shall conduct a review to assess the
6 workforce and training needs of the Federal Aviation Ad7 ministration (in this section referred to as the "FAA")
8 in the anticipated budgetary environment.

9 (b) CONTENTS.—In conducting the review, the10 Comptroller General shall—

(1) identify the long-term workforce and train-ing needs of the FAA workforce;

13 (2) assess the impact of automation, digitaliza14 tion, and artificial intelligence on the FAA work15 force;

16 (3) analyze the skills and qualifications required
17 of the FAA workforce for successful performance in
18 the current and future projected aviation environ19 ment;

(4) review current performance incentive policies of the FAA, including awards for performance;
(5) analyze ways in which the FAA can work
with industry and labor, including labor groups representing the FAA workforce, to establish knowledge-sharing opportunities between the FAA and the

1	aviation industry regarding new equipment and sys-
2	tems, best practices, and other areas of interest; and
3	(6) develop recommendations on the most effec-
4	tive qualifications, training programs (including e-
5	learning training), and performance incentive ap-
6	proaches to address the needs of the future pro-
7	jected aviation regulatory system in the anticipated
8	budgetary environment.

9 (c) REPORT.—Not later than 270 days after the date 10 of enactment of this Act, the Comptroller General shall 11 submit to the Committee on Transportation and Infra-12 structure of the House of Representatives and the Com-13 mittee on Commerce, Science, and Transportation of the 14 Senate a report on the results of the review.

15 SEC. 525. STATE TAXATION.

16 Section 40116(d)(2)(A) of title 49, United States17 Code, is amended by adding at the end the following:

18 "(v) except as otherwise provided under section 19 47133, levy or collect a tax, fee, or charge, first tak-20 ing effect after the date of enactment of this clause, 21 upon any business located at a commercial service 22 airport or operating as a permittee of such an air-23 port that is not generally imposed on sales or serv-24 ices by that State, political subdivision, or authority

1	unless wholly utilized for airport or aeronautical pur-
2	poses.".
3	SEC. 526. AVIATION AND AEROSPACE WORKFORCE OF THE
4	FUTURE.
5	(a) FINDINGS.—Congress finds that—
6	(1) in 2016, United States air carriers carried
7	a record high number of passengers on domestic
8	flights, 719 million passengers;
9	(2) the United States aerospace and defense in-
10	dustry employed 1.7 million workers in 2015, or
11	roughly 2 percent of the Nation's total employment
12	base;
13	(3) the average salary of an employee in the
14	aerospace and defense industry is 44 percent above
15	the national average;
16	(4) in 2015, the aerospace and defense industry
17	contributed nearly \$202.4 billion in value added to
18	the United States economy;
19	(5) an effective aviation industry relies on indi-
20	viduals with unique skill sets, many of which can be
21	directly obtained through career and technical edu-
22	cation opportunities; and
23	(6) industry and the Federal Government have
24	taken some actions to attract qualified individuals to

careers in aviation and aerospace and to retain
 qualified individuals in such careers.

3 (b) SENSE OF CONGRESS.—It is the sense of Con4 gress that—

5 (1) public and private education institutions 6 should make available to students and parents infor-7 mation on approved programs of study and career 8 pathways, including career exploration, work-based 9 learning opportunities, dual and concurrent enroll-10 ment opportunities, and guidance and advisement 11 resources;

(2) public and private education institutions
should partner with aviation and aerospace companies to promote career paths available within the industry and share information on the unique benefits
and opportunities the career paths offer;

17 (3) aviation companies, including air carriers, 18 manufacturers, commercial space companies, un-19 manned aircraft system companies, and repair sta-20 tions, should create opportunities, through appren-21 ticeships or other mechanisms, to attract young peo-22 ple to aviation and aerospace careers and to enable 23 individuals to gain the critical skills needed to thrive 24 in such professions; and

1 (4) the Federal Government should consider the 2 needs of men and women interested in pursuing ca-3 reers in the aviation and aerospace industry, the 4 long-term personnel needs of the aviation and aero-5 space industry, and the role of aviation in the 6 United States economy in the creation and adminis-7 tration of educational and financial aid programs. 8 SEC. 527. FUTURE AVIATION AND AEROSPACE WORKFORCE 9 STUDY. 10 (a) IN GENERAL.—Not later than 90 days after the 11 date of enactment of this Act, the Comptroller General 12 of the United States shall conduct a study— 13 (1) to identify the factors influencing the supply 14 of individuals pursuing a career in the aviation or 15 aerospace industry; and 16 (2) to identify best practices or programs to 17 incentivize, recruit, and retain young people in avia-18 tion and aerospace professions. 19 (b) CONSULTATION.—The Comptroller General shall 20 conduct the study in consultation with— 21 (1) appropriate Federal agencies; and 22 (2) the aviation and aerospace industry, institu-23 tions of higher education, and labor stakeholders. 24 (c) REPORT TO CONGRESS.—Not later than 1 year 25 after the date of enactment of this Act, the Comptroller General shall submit to the Committee on Transportation
 and Infrastructure of the House of Representatives and
 the Committee on Commerce, Science, and Transportation
 of the Senate a report on the results of the study and
 related recommendations.

6 SEC. 528. FAA LEADERSHIP ON CIVIL SUPERSONIC AIR7 CRAFT.

8 (a) IN GENERAL.—The Administrator of the Federal 9 Aviation Administration shall exercise leadership in the 10 creation of Federal and international policies, regulations, 11 and standards relating to the certification and safe and 12 efficient operation of civil supersonic aircraft.

13 (b) EXERCISE OF LEADERSHIP.—In carrying out14 subsection (a), the Administrator shall—

(1) consider the needs of the aerospace industry
and other stakeholders when creating policies, regulations, and standards that enable the safe commercial deployment of civil supersonic aircraft technology and the safe and efficient operation of civil
supersonic aircraft; and

21 (2) obtain the input of aerospace industry
22 stakeholders regarding—

23 (A) the appropriate regulatory framework
24 and timeline for permitting the safe and effi25 cient operation of civil supersonic aircraft with-

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1	in United States airspace, including updating or
2	modifying existing regulations on such oper-
3	ation;
4	(B) issues related to standards and regula-
5	tions for the type certification and safe oper-
6	ation of civil supersonic aircraft, including noise
7	certification, including—
8	(i) the operational differences between
9	subsonic aircraft and supersonic aircraft;
10	(ii) costs and benefits associated with
11	landing and takeoff noise requirements for
12	civil supersonic aircraft, including impacts
13	on aircraft emissions;
14	(iii) public and economic benefits of
15	the operation of civil supersonic aircraft
16	and associated aerospace industry activity;
17	and
18	(iv) challenges relating to ensuring
19	that standards and regulations aimed at
20	relieving and protecting the public health
21	and welfare from aircraft noise and sonic
22	booms are economically reasonable, techno-
23	logically practicable, and appropriate for
24	civil supersonic aircraft; and

1	(C) other issues identified by the Adminis-
2	trator or the aerospace industry that must be
3	addressed to enable the safe commercial deploy-
4	ment and safe and efficient operation of civil
5	supersonic aircraft.
6	(c) INTERNATIONAL LEADERSHIP.—The Adminis-
7	trator, in the appropriate international forums, shall take
8	actions that—
9	(1) demonstrate global leadership under sub-
10	section (a);
11	(2) address the needs of the aerospace industry
12	identified under subsection (b); and
13	(3) protect the public health and welfare.
14	(d) Report to Congress.—Not later than 1 year
15	after the date of enactment of this Act, the Administrator
16	shall submit to the Committee on Transportation and In-
17	frastructure of the House of Representatives and the Com-
18	mittee on Commerce, Science, and Transportation of the
19	Senate a report detailing—
20	(1) the Administrator's actions to exercise lead-
21	ership in the creation of Federal and international
22	policies, regulations, and standards relating to the
23	certification and safe and efficient operation of civil
24	supersonic aircraft;

(2) planned, proposed, and anticipated actions
 to update or modify existing policies and regulations
 related to civil supersonic aircraft, including those
 identified as a result of industry consultation and
 feedback; and

6 (3) a timeline for any actions to be taken to up7 date or modify existing policies and regulations re8 lated to civil supersonic aircraft.

9 SEC. 529. OKLAHOMA REGISTRY OFFICE.

10 The Administrator of the Federal Aviation Adminis-11 tration shall consider the aircraft registry office in Okla-12 homa City, Oklahoma, as excepted during a Government 13 shutdown or emergency (as it provides excepted services) 14 to ensure that it remains open during any Government 15 shutdown or emergency.

16SEC. 530. FOREIGN AIR TRANSPORTATION UNDER UNITED17STATES-EUROPEAN UNION AIR TRANSPORT

18 AGREEMENT.

(a) CERTAIN FOREIGN AIR TRANSPORTATION PERMITS.—The Secretary of Transportation may not issue a
permit under section 41302 of title 49, United States
Code, or an exemption under section 40109 of such title,
authorizing a person to provide foreign air transportation
as a foreign air carrier under the United States-European
Union Air Transport Agreement of April 2007 (as amend-

ed) in a proceeding in which the applicability of Article
 17 bis of such Agreement has been raised by an interested
 person, unless the Secretary—

4 (1) finds that issuing the permit or exemption 5 would be consistent with the intent set forth in Arti-6 cle 17 bis of the Agreement, that opportunities cre-7 ated by the Agreement do not undermine labor 8 standards or the labor-related rights and principles 9 contained in the laws of the respective parties to the 10 Agreement; and

(2) imposes on the permit or exemption such
conditions as may be necessary to ensure that the
person complies with the intent of Article 17 bis.

14 (b) PUBLIC INTEREST TEST.—Section 41302(2) of
15 title 49, United States Code, is amended—

16 (1) in subparagraph (A) by striking "under an
17 agreement with the United States Government; or"
18 and inserting "; and"; and

(2) in subparagraph (B) by striking "the foreign air transportation" and inserting "after considering the totality of the circumstances, including the
factors set forth in section 40101(a), the foreign air
transportation".

24 (c) PUBLIC INTEREST REQUIREMENTS.—

1	(1) POLICY.—Section 40101(a) of title 49,
2	United States Code, is amended by adding at the
3	end the following:
4	"(17) preventing entry into United States mar-
5	kets by flag of convenience carriers.".
6	(2) INTERNATIONAL AIR TRANSPORTATION.—
7	Section 40101(e)(9) of title 49, United States Code,
8	is amended—
9	(A) in subparagraph (D) by striking "and"
10	at the end;
11	(B) in subparagraph (E) by striking the
12	period at the end and inserting "; and"; and
13	(C) by adding at the end the following:
14	"(F) erosion of labor standards associated
15	with flag of convenience carriers.".
16	(3) FLAG OF CONVENIENCE CARRIER DE-
17	FINED.—Section 40102(a) of title 49, United States
18	Code, as amended by this Act, is further amended
19	by adding at the end the following:
20	"(48) 'flag of convenience carrier' means a for-
21	eign air carrier that is established in a country other
22	than the home country of its majority owner or own-
23	ers in order to avoid regulations of the home coun-
24	try.".

1SEC. 531. TRAINING ON HUMAN TRAFFICKING FOR CER-2TAIN STAFF.

3 (a) IN GENERAL.—Chapter 447 of title 49, United
4 States Code, as amended by this Act, is further amended
5 by adding at the end the following:

6 "§44737. Training on human trafficking for certain
7 staff

8 "In addition to other training requirements, each air9 carrier shall provide training—

10 "(1) to ticket counter agents, gate agents, and
11 other air carrier workers whose jobs require regular
12 interaction with passengers; and

13 "(2) on recognizing and responding to potential14 human trafficking victims.".

(b) CLERICAL AMENDMENT.—The analysis for chapter 447 of title 49, United States Code, as amended by
this Act, is further amended by adding at the end the following:

"44737. Training on human trafficking for certain staff.".

19 SEC. 532. PART 107 IMPLEMENTATION IMPROVEMENTS.

20 (a) IN GENERAL.—Not later than 30 days after the
21 date of enactment of this section, the Administrator of the
22 Federal Aviation Administration shall publish a direct
23 final rule—

(1) revising section 107.205 of title 14, Code of
 Federal Regulations, by striking the second sentence
 of subsections (a) and (c); and

4 (2) revising section 107.25 of such title by
5 striking "and is not transporting another person's
6 property for compensation or hire".

(b) DETERMINATION OF WAIVER.—In determining 7 8 whether to grant a waiver under part 107 of title 14, Code 9 of Federal Regulations, to authorize transportation of an-10 other's property for compensation or hire beyond the visual line of sight of the remote pilot, from a moving vehicle, 11 or over people, the Administrator shall consider the tech-12 13 nological capabilities of the unmanned aircraft system, the qualifications of the remote pilot, and the operational envi-14 15 ronment.

16 SEC. 533. PART 107 TRANSPARENCY AND TECHNOLOGY IM-17 PROVEMENTS.

18 (a) TRANSPARENCY.—Not later than 30 days after the date of enactment of this Act, the Administrator of 19 20 the Federal Aviation Administration shall publish on the 21 Federal Aviation Administration website a representative 22 sample of the safety justifications, offered by applicants 23 for small unmanned aircraft system waivers and airspace 24 authorizations, that have been approved by the Adminis-25 tration for each regulation waived or class of airspace au-

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thorized, except that any published justification shall not
reveal proprietary or commercially sensitive information.
(b) Technology Improvements.—Not later than
90 days after the date of enactment of this Act, the Ad-
ministrator shall revise the online waiver and certificates
of authorization processes—
(1) to provide real time confirmation that an
application filed online has been received by the Ad-
ministration; and
(2) to provide an applicant with an opportunity
to review the status of the applicant's application.
SEC. 534. PROHIBITIONS AGAINST SMOKING ON PAS-
SEC. 534. PROHIBITIONS AGAINST SMOKING ON PAS- SENGER FLIGHTS.
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SENGER FLIGHTS. Section 41706 of title 49, United States Code, is amended— (1) by redesignating subsection (d) as sub- section (e); and
SENGER FLIGHTS. Section 41706 of title 49, United States Code, is amended— (1) by redesignating subsection (d) as sub- section (e); and (2) by inserting after subsection (c) the fol-
SENGER FLIGHTS. Section 41706 of title 49, United States Code, is amended— (1) by redesignating subsection (d) as sub- section (e); and (2) by inserting after subsection (c) the fol- lowing:
SENGER FLIGHTS. Section 41706 of title 49, United States Code, is amended— (1) by redesignating subsection (d) as sub- section (e); and (2) by inserting after subsection (c) the fol- lowing: "(d) ELECTRONIC CIGARETTES.—
SENGER FLIGHTS. Section 41706 of title 49, United States Code, is amended— (1) by redesignating subsection (d) as sub- section (e); and (2) by inserting after subsection (c) the fol- lowing: "(d) ELECTRONIC CIGARETTES.— "(1) INCLUSION.—The use of an electronic cig-
SENGER FLIGHTS. Section 41706 of title 49, United States Code, is amended— (1) by redesignating subsection (d) as sub- section (e); and (2) by inserting after subsection (c) the fol- lowing: "(d) ELECTRONIC CIGARETTES.— "(1) INCLUSION.—The use of an electronic cig- arette shall be treated as smoking for purposes of

1 device that delivers nicotine to a user of the device 2 in the form of a vapor that is inhaled to simulate 3 the experience of smoking.". 4 SEC. 535. CONSUMER PROTECTION REQUIREMENTS RELAT-5 ING TO LARGE TICKET AGENTS. 6 (a) IN GENERAL.—Not later than 90 days after the 7 date of enactment of this Act, the Secretary of Transpor-8 tation shall issue a final rule to require large ticket agents 9 to adopt minimum customer service standards. 10 (b) PURPOSE.—The purpose of the final rule shall be to ensure that, to the maximum extent practicable, there 11 is a consistent level of consumer protection regardless of 12 13 where consumers purchase air fares and related air transportation services. 14 15 (c) STANDARDS.—In issuing the final rule, the Secretary shall consider, at a minimum, establishing stand-16 17 ards for— 18 (1) providing prompt refunds when ticket re-19 funds are due, including fees for optional services 20 that consumers purchased but were not able to use 21 due to a flight cancellation or oversale situation; 22 (2) providing an option to hold a reservation at 23 the quoted fare without payment, or to cancel with-24 out penalty, for 24 hours;

1	(3) disclosing cancellation policies, seating con-
2	figurations, and lavatory availability with respect to
3	flights;
4	(4) notifying customers in a timely manner of
5	itinerary changes; and
6	(5) responding promptly to customer com-
7	plaints.
8	(d) DEFINITIONS.—In this section, the following shall
9	apply:
10	(1) TICKET AGENT.—
11	(A) IN GENERAL.—Subject to subpara-
12	graph (B), the term "ticket agent" has the
13	meaning given that term in section 40102(a) of
14	title 49, United States Code.
15	(B) INCLUSION.—The term "ticket agent"
16	includes a person who acts as an intermediary
17	involved in the sale of air transportation di-
18	rectly or indirectly to consumers, including by
19	operating an electronic airline information sys-
20	tem, if the person—
21	(i) holds the person out as a source of
22	information about, or reservations for, the
23	air transportation industry; and
24	(ii) receives compensation in any way
25	related to the sale of air transportation.

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1	of the initial report required under sub-
2	paragraph (A), the Inspector General of
3	the Department of Transportation shall re-
4	view and determine the validity of the
5	model used by the Administrator and the
6	Chief Operating Officer to complete the
7	calculations required under subparagraph
8	(A).
9	"(ii) Validation process.—In the
10	event that the Inspector General deter-
11	mines that the model used by the Adminis-
12	trator and the Chief Operating Officer to
13	complete the calculations required by sub-
14	paragraph (A) is not valid—
15	"(I) the Inspector General shall
16	provide the Administrator and Chief
17	Operating Officer recommendations
18	on how to revise the model;
19	"(II) the Administrator and the
20	Chief Operating Officer shall complete
21	the calculations required by subpara-
22	graph (A) utilizing the revised model
23	and resubmit the revised initial report
24	required under subparagraph (A) to
25	the Inspector General; and

1	"(III) not later than 3 months
2	after completion of the revised initial
3	report required under subparagraph
4	(A), the Inspector General shall re-
5	view and determine the validity of the
6	revised model used by the Adminis-
7	trator and the Chief Operating Officer
8	to complete the calculations required
9	by subparagraph (A).
10	"(iii) Access to data.—The Admin-
11	istrator and the Chief Operating Officer
12	shall provide the Inspector General of the
13	Department of Transportation with unfet-
14	tered access to all data produced by the
15	cost accounting system operated and main-
16	tained pursuant to subsection (e).
17	"(C) REPORT TO CONGRESS.—Not later
18	than 60 days after completion of the review and
19	receiving a determination that the model used is
20	valid under subparagraph (B), the Adminis-
21	trator and the Chief Operating Officer shall
22	submit to the Committee on Transportation and
23	Infrastructure, the Committee on Appropria-
24	tions, and the Committee on Ways and Means
25	of the House of Representatives, and the Com-

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1	mittee on Commerce, Science, and Transpor-
2	tation, the Committee on Appropriations, and
3	the Committee on Finance of the Senate a re-
4	port describing the results of the calculations
5	completed under subparagraph (A).
6	"(D) PUBLICATION.—Not later than 60
7	days after submission of the report required
8	under subparagraph (C), the Administrator and
9	Chief Operating Officer shall publish the initial
10	report, including any revision thereto if required
11	as a result of the validation process for the
12	model.
13	"(2) AIR TRAFFIC SERVICES BIENNIAL DATA
14	REPORTING.—
15	"(A) BIENNIAL DATA REPORTING.—Not
16	later than March 31, 2019, and biennially
17	thereafter for 8 years, the Administrator and
18	the Chief Operating Officer shall, using the
19	validated model, complete the following calcula-
20	tions for each segment of air traffic services
21	users for the most recent full fiscal year:
22	"(i) The total costs allocable to the
23	use of the air traffic services for that seg-
24	ment.

"(ii) The total revenues received from 2 that segment.

3 "(B) REPORT TO CONGRESS.—Not later 4 than 15 days after completing the calculations 5 under subparagraph (A), the Administrator and 6 the Chief Operating Officer shall complete and 7 submit to the Committee on Transportation and 8 Infrastructure, the Committee on Appropria-9 tions, and the Committee on Ways and Means 10 of the House of Representatives, and the Com-11 mittee on Commerce, Science, and Transpor-12 tation, the Committee on Appropriations, and 13 the Committee on Finance of the Senate a re-14 port containing the results of such calculations.

15 "(C) PUBLICATION.—Not later than 60 16 days after completing the calculations pursuant 17 to subparagraph (A), the Administrator and the 18 Chief Operating Officer shall publish the results 19 of such calculations.

20 "(3) SEGMENTS OF AIR TRAFFIC SERVICES 21 USERS.—

22 "(A) IN GENERAL.—For purposes of this 23 subsection, each of the following shall constitute 24 a separate segment of air traffic services users:

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1	"(i) Passenger air carriers conducting
2	operations under part 121 of title 14, Code
3	of Federal Regulations.
4	"(ii) All-cargo air carriers conducting
5	operations under part 121 of such title.
6	"(iii) Operators covered by part 125
7	of such title.
8	"(iv) Air carriers and operators of pis-
9	ton-engine aircraft operating under part
10	135 of such title.
11	"(v) Air carriers and operators of tur-
12	bine-engine aircraft operating under part
13	135 of such title.
14	"(vi) Foreign air carriers providing
15	passenger air transportation.
16	"(vii) Foreign air carriers providing
17	all-cargo air transportation.
18	"(viii) Operators of turbine-engine air-
19	craft operating under part 91 of such title,
20	excluding those operating under subpart
21	(K) of such part.
22	"(ix) Operators of piston-engine air-
23	craft operating under part 91 of such title,
24	excluding those operating under subpart
25	(K) of such part.

"(x) Operators covered by subpart (K) 1 2 of part 91 of such title. "(xi) Operators covered by part 133 3 of such title. 4 "(xii) Operators covered by part 136 5 6 of such title. 7 "(xiii) Operators covered by part 137 8 of such title. 9 "(xiv) Operators of public aircraft 10 that qualify under section 40125. "(xv) Operators of aircraft that nei-11 12 ther take off from, nor land in, the United 13 States. 14 "(B) ADDITIONAL SEGMENTS.—The Sec-15 retary may identify and include additional seg-16 ments of air traffic users under paragraph (A) 17 as revenue and air traffic services cost data be-18 comes available for that additional segment of 19 air traffic services users. "(4) DEFINITIONS.—For purposes of this sub-20 21 section: "(A) AIR TRAFFIC SERVICES.—The term 22 23 'air traffic services' means services— "(i) used for the monitoring, direct-24 25 ing, control, and guidance of aircraft or

1	flows of aircraft and for the safe conduct
2	of flight, including communications, navi-
3	gation, and surveillance services and provi-
4	sion of aeronautical information; and
5	"(ii) provided directly, or contracted
6	for, by the Federal Aviation Administra-
7	tion.
8	"(B) AIR TRAFFIC SERVICES USER.—The
9	term 'air traffic services user' means any indi-
10	vidual or entity using air traffic services pro-
11	vided directly, or contracted for, by the Federal
12	Aviation Administration within United States
13	airspace or international airspace delegated to
14	the United States.".
15	SEC. 537. AGENCY PROCUREMENT REPORTING REQUIRE-
16	MENTS.
17	Section 40110(d) of title 49, United States Code, is
18	amended by adding at the end the following:
19	"(5) ANNUAL REPORT ON THE PURCHASE OF
20	FOREIGN MANUFACTURED ARTICLES.—
21	"(A) REPORT.—Not later than 90 days
22	after the end of the fiscal year, the Secretary
23	of Transportation shall submit a report to Con-
24	gress on the dollar amount of the acquisitions
25	made by the agency from entities that manufac-

1	ture the articles, materials, or supplies outside
2	of the United States in such fiscal year.
3	"(B) CONTENTS.—The report required by
4	subparagraph (A) shall separately indicate—
5	"(i) the dollar value of any articles,
6	materials, or supplies purchased that were
7	manufactured outside of the United States;
8	and
9	"(ii) a summary of the total procure-
10	ment funds spent on goods manufactured
11	in the United States versus funds spent on
12	goods manufactured outside of the United
13	States.
14	"(C) AVAILABILITY OF REPORT.—The Sec-
15	retary shall make the report under subpara-
16	graph (A) publicly available on the agency's
17	website not later than 30 days after submission
18	to Congress.".
19	SEC. 538. ZERO-EMISSION VEHICLES AND TECHNOLOGY.
20	(a) PASSENGER FACILITY CHARGE ELIGIBILITY.—
21	Section 40117(a)(3) of title 49, United States Code, is
22	amended by adding at the end the following:
23	"(H) A project for—
-0	
24	"(i) converting or retrofitting vehicles

1	zero-emission vehicles and equipment (as
2	defined in section 47102); or
3	"(ii) acquiring, by purchase or lease,
4	eligible zero-emission vehicles and equip-
5	ment (as defined in section 47102).".
6	(b) Airport Improvement Program Eligi-
7	BILITY.—
8	(1) AIRPORT DEVELOPMENT DEFINED.—Sec-
9	tion 47102(3) of title 49, United States Code, as
10	amended by this Act, is further amended by adding
11	at the end the following:
12	"(P) converting or retrofitting vehicles and
13	ground support equipment into eligible zero-
14	emission vehicles and equipment or acquiring,
15	by purchase or lease, eligible zero-emission vehi-
16	cles and equipment.
17	"(Q) constructing or modifying airport fa-
18	cilities to install a microgrid in order to provide
19	increased resilience to severe weather, ter-
20	rorism, and other causes of grid failures.".
21	(2) Additional definitions.—Section 47102
22	of title 49, United States Code, as amended by this
23	Act, is further amended by adding at the end the
24	following:

1	"(30) 'eligible zero-emission vehicle and equip-
2	ment' means a zero-emission vehicle, equipment re-
3	lated to such a vehicle, and ground support equip-
4	ment that includes zero-emission technology that
5	is—
6	"(A) used exclusively at a commercial serv-
7	ice airport; or
8	"(B) used exclusively to transport people
9	or materials to and from a commercial service
10	airport.
11	"(31) 'microgrid' means a localized grouping of
12	electricity sources and loads that normally operates
13	connected to and synchronous with the traditional
14	centralized electrical grid, but can disconnect and
15	function autonomously as physical or economic con-
16	ditions dictate.
17	"(32) 'zero-emission vehicle' means a zero-emis-
18	sion vehicle as defined in section 88.102–94 of title
19	40, Code of Federal Regulations, or a vehicle that
20	produces zero exhaust emissions of any criteria pol-
21	lutant (or precursor pollutant) under any possible
22	operational modes and conditions.".
23	(3) Special apportionment categories.—
24	Section 47117(e)(1)(A) of title 49, United States
25	Code, is amended by inserting "for airport develop-

1	ment described in section 47102(3)(P)," after
2	"under section 47141,".
3	(c) ZERO-EMISSION PROGRAM.—Chapter 471 of title
4	49, United States Code, is amended—
5	(1) by striking section 47136;
6	(2) by redesignating section 47136a as section
7	47136; and
8	(3) in section 47136, as so redesignated, by
9	striking subsections (a) and (b) and inserting the
10	following:
11	"(a) IN GENERAL.—The Secretary of Transportation
12	may establish a pilot program under which the sponsors
13	of not less than 10 public-use airports may use funds
14	made available under this chapter or section 48103 for
15	use at such airports to carry out—
16	"(1) activities associated with the acquisition,
17	by purchase or lease, and operation of zero-emission
18	vehicles, including removable power sources for such
19	vehicles; and
20	((2)) the construction or modification of infra-
21	structure to facilitate the delivery of fuel and serv-
22	ices necessary for the use of such vehicles.
23	"(b) ELIGIBILITY.—A public-use airport is eligible
24	for participation in the program if the vehicles or ground
25	support equipment are—

	-01
1	"(1) used exclusively at the airport; or
2	"(2) used exclusively to transport people or ma-
3	terials to and from the airport.";
4	(4) in section 47136, as so redesignated, by
5	striking subsections (d) and (e) and inserting the
6	following:
7	"(d) FEDERAL SHARE.—The Federal share of the
8	cost of a project carried out under the program shall be
9	the Federal share specified in section 47109.
10	"(e) TECHNICAL ASSISTANCE.—
11	"(1) IN GENERAL.—The sponsor of a public-use
12	airport may use not more than 10 percent of the
13	amounts made available to the sponsor under the
14	program in any fiscal year for—
15	"(A) technical assistance; and
16	"(B) project management support to assist
17	the airport with the solicitation, acquisition,
18	and deployment of zero-emission vehicles, re-
19	lated equipment, and supporting infrastructure.
20	"(2) Providers of technical assistance.—
21	To receive the technical assistance or project man-
22	agement support described in paragraph (1), partici-
23	pants in the program may use—
24	"(A) a nonprofit organization selected by
25	the Secretary; or

1	"(B) a university transportation center re-
2	ceiving grants under section 5505 in the region
3	of the airport.";
4	(5) in section 47136, as so redesignated, in sub-
5	section (f) by striking "section 47136" and inserting
6	"the inherently low emission airport vehicle pilot
7	program"; and
8	(6) in section 47136, as so redesignated, by
9	adding at the end the following:
10	"(g) Allowable Project Cost.—The allowable
11	project cost for the acquisition of a zero-emission vehicle
12	shall be the total cost of purchasing or leasing the vehicle,
13	including the cost of technical assistance or project man-
14	agement support described in subsection (e).
15	"(h) Flexible Procurement.—A sponsor of a
16	public-use airport may use funds made available under the
17	program to acquire, by purchase or lease, a zero-emission
18	vehicle and a removable power source in separate trans-
19	actions, including transactions by which the airport pur-
20	chases the vehicle and leases the removable power source.
21	"(i) TESTING REQUIRED.—A sponsor of a public-use
22	airport may not use funds made available under the pro-
23	gram to acquire a zero-emission vehicle unless that make,
24	model, or type of vehicle has been tested by a Federal vehi-
25	cle testing facility acceptable to the Secretary.

1 "(j) REMOVABLE POWER SOURCE DEFINED.—In 2 this section, the term 'removable power source' means a 3 power source that is separately installed in, and removable 4 from, a zero-emission vehicle and may include a battery, 5 a fuel cell, an ultra-capacitor, or other advanced power 6 source used in a zero-emission vehicle.".

7 (d) CLERICAL AMENDMENT.—The analysis for chap8 ter 471 of title 49, United States Code, is amended by
9 striking the items relating to sections 47136 and 47136a
10 and inserting the following:

"47136. Zero-emission airport vehicles and infrastructure.".

11SEC. 539. EMPLOYEE ASSAULT PREVENTION AND RE-12SPONSE PLANS.

13 (a) IN GENERAL.—Not later than 90 days after the date of enactment of this Act, each air carrier operating 14 under part 121 of title 14, Code of Federal Regulations 15 (in this section referred to as a "part 121 air carrier"), 16 shall submit to the Administrator of the Federal Aviation 17 Administration for review and acceptance an Employee 18 19 Assault Prevention and Response Plan related to the cus-20 tomer service agents of the air carrier and that is devel-21 oped in consultation with the labor union representing 22 such agents.

(b) CONTENTS OF PLAN.—An Employee Assault Prevention and Response Plan submitted under subsection (a)
shall include the following:

(1) Reporting protocols for air carrier customer
 service agents who have been the victim of a verbal
 or physical assault.

4 (2) Protocols for the immediate notification of
5 law enforcement after an incident of verbal or phys6 ical assault committed against an air carrier cus7 tomer service agent.

8 (3) Protocols for informing Federal law enforce9 ment with respect to violations of section 46503 of
10 title 49, United States Code.

(4) Protocols for ensuring that a passenger involved in a violent incident with a customer service agent of an air carrier is not allowed to move through airport security or board an aircraft until appropriate law enforcement has had an opportunity to assess the incident and take appropriate action.

17 (5) Protocols for air carriers to inform pas18 sengers of Federal laws protecting Federal, airport,
19 and air carrier employees who have security duties
20 within an airport.

(c) EMPLOYEE TRAINING.—A part 121 air carrier
shall conduct initial and recurrent training for all employees, including management, of the air carrier with respect
to the plan required under subsection (a), which shall include training on de-escalating hostile situations, written

protocols on dealing with hostile situations, and the re porting of relevant incidents.

3 SEC. 540. STUDY ON TRAINING OF CUSTOMER-FACING AIR 4 CARRIER EMPLOYEES.

5 (a) IN GENERAL.—Not later than 180 days after the
6 date of enactment of this Act, the Secretary of Transpor7 tation shall conduct a study on the training received by
8 customer-facing employees of air carriers.

9 (b) CONTENTS.—The study shall include—

10 (1) an analysis of the training received by cus11 tomer-facing employees with respect to the manage12 ment of disputes on aircraft; and

(2) an examination of how institutions of higher
learning, in coordination with air carriers, customerfacing employees and their representatives, consumer
advocacy organizations, and other stakeholders,
could—

18 (A) review such training and related prac-19 tices;

20 (B) produce recommendations; and

21 (C) if determined appropriate, provide sup-22 plemental training.

(c) REPORT.—Not later than 1 year after the date
of enactment of this Act, the Secretary shall submit to
the Committee on Transportation and Infrastructure of

the House of Representatives and the Committee on Com merce, Science, and Transportation of the Senate a report
 on the results of the study.

4 SEC. 541. MINIMUM DIMENSIONS FOR PASSENGER SEATS.

5 (a) IN GENERAL.—Not later than 1 year after the 6 date of enactment of this Act, and after providing notice 7 and an opportunity for comment, the Administrator of the 8 Federal Aviation Administration shall issue regulations 9 that establish minimum dimensions for passenger seats on 10 aircraft operated by air carriers in interstate air transportation or intrastate air transportation, including mini-11 12 mums for seat pitch, width, and length, and that are nec-13 essary for the safety and health of passengers.

(b) DEFINITIONS.—The definitions contained in section 40102(a) of title 49, United States Code, apply to
this section.

17 SEC. 542. STUDY OF GROUND TRANSPORTATION OPTIONS.

18 Not later than 1 year after the date of enactment 19 of this Act, the Comptroller General of the United States 20 shall conduct a study that examines the ground transpor-21 tation options at the Nation's 10 busiest airports in order 22 to—

(1) understand the impact of new and emerging
transportation options for travelers to get into and
out of airports;

1 (2) determine whether it is appropriate to use 2 airport improvement funds and revenues from pas-3 senger facility charges to address traffic congestion 4 and passenger travel times between urban commer-5 cial centers and airports; and 6 (3) review guidelines and requirements for air-7 port improvement funds and passenger facility charges to determine under what conditions such 8 9 funds may be used to address traffic congestion in 10 urban commercial centers for travel to airports. TITLE VI—DISASTER RECOVERY 11 **REFORM ACT** 12 13 SEC. 601. APPLICABILITY. 14 Except as otherwise expressly provided, the amend-

14 Except as otherwise expressly provided, the anend15 ments in this title to the Robert T. Stafford Disaster Re16 lief and Emergency Assistance Act (42 U.S.C. 5121 et
17 seq.) apply to each major disaster and emergency declared
18 by the President on or after August 1, 2017, under such
19 Act.

20 SEC. 602. STATE DEFINED.

In this title, the term "State" has the meaning given
that term in section 102(4) of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C.
5122(4)).

1 SEC. 603. WILDFIRE PREVENTION.

2 (a) MITIGATION ASSISTANCE.—Section 420 of the
3 Robert T. Stafford Disaster Relief and Emergency Assist4 ance Act (42 U.S.C. 5187) is amended—

5 (1) by redesignating subsection (d) as sub6 section (e); and

7 (2) by inserting after subsection (c) the fol-8 lowing:

9 "(d) HAZARD MITIGATION ASSISTANCE.—Whether 10 or not a major disaster is declared, the President may pro-11 vide hazard mitigation assistance in accordance with sec-12 tion 404 in any area affected by a fire for which assistance 13 was provided under this section.".

14 (b) CONFORMING AMENDMENTS.—The Robert T.
15 Stafford Disaster Relief and Emergency Assistance Act
16 (42 U.S.C. 5121 et seq.) is amended—

17 (1) in section 404(a) (42 U.S.C. 5170c(a)) (as
18 amended by section 636(a) of this Act)—

(A) by inserting before the first period ",
or any area affected by a fire for which assistance was provided under section 420"; and
(B) in the third sentence by inserting "or
event under section 420" after "major disaster"
each place it appears; and

(2) in section 322(e)(1) (42 U.S.C. 5165(e)(1)),
 by inserting "or event under section 420" after
 "major disaster" each place it appears.

4 (c) REPORTING REQUIREMENT.—Not later than 1 5 year after the date of enactment of this Act and annually thereafter, the Administrator of the Federal Emergency 6 7 Management Agency shall submit to the Committee on 8 Homeland Security and Governmental Affairs of the Sen-9 ate, the Committee on Transportation and Infrastructure 10 of the House of Representatives, and the Appropriations Committees of the Senate and the House of Representa-11 tives a report containing a summary of any projects car-12 13 ried out, and any funding provided to those projects, under subsection (d) of section 420 of the Robert T. Staf-14 15 ford Disaster Relief and Emergency Assistance Act (42) U.S.C. 5187) (as amended by this section). 16

17 SEC. 604. ADDITIONAL ACTIVITIES.

18 Section 404 of the Robert T. Stafford Disaster Relief
19 and Emergency Assistance Act (42 U.S.C. 5170c) is
20 amended by adding at the end the following:

"(f) USE OF ASSISTANCE.—Recipients of hazard
mitigation assistance provided under this section and section 203 may use the assistance to conduct activities to
help reduce the risk of future damage, hardship, loss, or

1	suffering in any area affected by a wildfire or windstorm,
2	including-
3	"(1) reseeding ground cover with quick-growing
4	or native species;
5	"(2) mulching with straw or chipped wood;
6	"(3) constructing straw, rock, or log dams in
7	small tributaries to prevent flooding;
8	"(4) placing logs and other erosion barriers to
9	catch sediment on hill slopes;
10	"(5) installing debris traps to modify road and
11	trail drainage mechanisms;
12	"(6) modifying or removing culverts to allow
13	drainage to flow freely;
14	"(7) adding drainage dips and constructing
15	emergency spillways to keep roads and bridges from
16	washing out during floods;
17	"(8) planting grass to prevent the spread of
18	noxious weeds;
19	"(9) installing warning signs;
20	"(10) establishing defensible space measures;
21	"(11) reducing hazardous fuels; and
22	"(12) windstorm damage, including replacing or
23	installing electrical transmission or distribution util-
24	ity pole structures with poles that are resilient to ex-
25	treme wind and combined ice and wind loadings for

1	the basic wind speeds and ice conditions associated
2	with the relevant location.".
3	SEC. 605. ELIGIBILITY FOR CODE IMPLEMENTATION AND
4	ENFORCEMENT.
5	Section 406(a)(2) of the Robert T. Stafford Disaster
6	Relief and Emergency Assistance Act (42 U.S.C.
7	5172(a)(2)) is amended—
8	(1) by striking "and" at the end of subpara-
9	graph (B);
10	(2) by striking the period at the end of sub-
11	paragraph (C) and inserting "; and"; and
12	(3) by adding at the end the following:
13	"(D) base and overtime wages for extra
14	hires to facilitate the implementation and en-
15	forcement of adopted building codes for a pe-
16	riod of not more than 180 days after the major
17	disaster is declared.".
18	SEC. 606. PROGRAM IMPROVEMENTS.
19	(a) HAZARD MITIGATION.—Section 406(c) of the
20	Robert T. Stafford Disaster Relief and Emergency Assist-
21	ance Act (42 U.S.C. 5172(c)) is amended—
22	(1) in paragraph $(1)(A)$, by striking "90 per-
23	cent of"; and
24	(2) in paragraph (2)(A), by striking "75 per-
25	cent of".

1	(b) PARTICIPATION.—Section 428(d) of such Act (42
2	U.S.C. 5189f) is amended—
3	(1) by inserting "(1) IN GENERAL.—" before
4	"Participation in"; and
5	(2) by adding at the end the following:
6	"(2) NO CONDITIONS.—The President may not
7	condition the provision of Federal assistance under
8	this Act on the election by a State, Tribal, or local
9	government, or owner or operator of a private non-
10	profit facility to participate in the alternative proce-
11	dures adopted under this section.".
12	(c) CERTIFICATION.—Section 428(e)(1) of such Act
13	(42 U.S.C. 5189f(e)(1)) is amended—
13	(42 U.S.C. 5189f(e)(1)) is amended—
13 14	(42 U.S.C. 5189f(e)(1)) is amended—(1) in subparagraph (E), by striking "and" at
13 14 15	(42 U.S.C. 5189f(e)(1)) is amended—(1) in subparagraph (E), by striking "and" at the end;
13 14 15 16	 (42 U.S.C. 5189f(e)(1)) is amended— (1) in subparagraph (E), by striking "and" at the end; (2) in subparagraph (F), by striking the period
 13 14 15 16 17 	 (42 U.S.C. 5189f(e)(1)) is amended— (1) in subparagraph (E), by striking "and" at the end; (2) in subparagraph (F), by striking the period and inserting "; and"; and
 13 14 15 16 17 18 	 (42 U.S.C. 5189f(e)(1)) is amended— (1) in subparagraph (E), by striking "and" at the end; (2) in subparagraph (F), by striking the period and inserting "; and"; and (3) by adding at the end the following:
 13 14 15 16 17 18 19 	 (42 U.S.C. 5189f(e)(1)) is amended— (1) in subparagraph (E), by striking "and" at the end; (2) in subparagraph (F), by striking the period and inserting "; and"; and (3) by adding at the end the following: "(G) once certified by a professionally li-
 13 14 15 16 17 18 19 20 	 (42 U.S.C. 5189f(e)(1)) is amended— (1) in subparagraph (E), by striking "and" at the end; (2) in subparagraph (F), by striking the period and inserting "; and"; and (3) by adding at the end the following: "(G) once certified by a professionally licensed engineer and accepted by the Administry
 13 14 15 16 17 18 19 20 21 	 (42 U.S.C. 5189f(e)(1)) is amended— (1) in subparagraph (E), by striking "and" at the end; (2) in subparagraph (F), by striking the period and inserting "; and"; and (3) by adding at the end the following: "(G) once certified by a professionally licensed engineer and accepted by the Administrator, the estimates on which grants made pur-

1 SEC. 607. PRIORITIZATION OF FACILITIES.

Not later than 180 days after the date of enactment
of this Act, the Administrator of the Federal Emergency
Management Agency shall provide guidance and training
on an annual basis to State, Tribal, and local governments, first responders, and utility companies on—

7 (1) the need to prioritize assistance to hospitals,
8 nursing homes, and other long-term care facilities to
9 ensure that such health care facilities remain func10 tioning or return to functioning as soon as prac11 ticable during power outages caused by natural haz12 ards, including severe weather events; and

(2) how hospitals, nursing homes and other
long-term care facilities should adequately prepare
for power outages during a major disaster or emergency.

17 SEC. 608. GUIDANCE ON EVACUATION ROUTES.

18 (a) IN GENERAL.—

(1) IDENTIFICATION.—The Administrator of
the Federal Emergency Management Agency, in coordination with the Administrator of the Federal
Highway Administration, shall develop and issue
guidance for State, local, and Tribal governments regarding the identification of evacuation routes.

25 (2) GUIDANCE.—The Administrator of the Fed26 eral Highway Administration, in coordination with
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1	the Administrator of the Federal Emergency Man-
2	agement Agency, shall revise existing guidance or
3	issue new guidance as appropriate for State, local,
4	and Tribal governments regarding the design, con-
5	struction, maintenance, and repair of evacuation
6	routes.
7	(b) Considerations.—
8	(1) IDENTIFICATION.—In developing the guid-
9	ance under subsection $(a)(1)$, the Administrator of
10	the Federal Emergency Management Agency shall
11	consider—
12	(A) whether evacuation routes have re-
13	sisted impacts and recovered quickly from dis-
14	asters, regardless of cause;
15	(B) the need to evacuate special needs pop-
16	ulations, including—
17	(i) individuals with a physical or men-
18	tal disability;
19	(ii) individuals in schools, daycare
20	centers, mobile home parks, prisons, nurs-
21	ing homes and other long-term care facili-
22	ties, and detention centers;
23	(iii) individuals with limited-English
24	proficiency;
25	(iv) the elderly; and

1	(v) individuals who are tourists, sea-
2	sonal workers, or homeless;
3	(C) the sharing of information and other
4	public communications with evacuees during
5	evacuations;
6	(D) the sheltering of evacuees, including
7	the care, protection, and sheltering of animals;
8	(E) the return of evacuees to their homes;
9	and
10	(F) such other items the Administrator
11	considers appropriate.
12	(2) DESIGN, CONSTRUCTION, MAINTENANCE,
13	AND REPAIR.—In revising or issuing guidance under
14	(a)(2), the Administrator of the Federal Highway
15	Administration shall consider—
16	(A) methods that assist evacuation routes
17	to—
18	(i) withstand likely risks to viability,
19	including flammability and hydrostatic
20	forces;
21	(ii) improve durability, strength (in-
22	cluding the ability to withstand tensile
23	stresses and compressive stresses), and
24	sustainability; and

1	(iii) provide for long-term cost sav-
2	ings;
3	(B) the ability of evacuation routes to ef-
4	fectively manage contraflow operations;
5	(C) for evacuation routes on public lands,
6	the viewpoints of the applicable Federal land
7	management agency regarding emergency oper-
8	ations, sustainability, and resource protection;
9	and
10	(D) such other items the Administrator
11	considers appropriate.
12	SEC. 609. DUPLICATION OF BENEFITS.
13	(a) IN GENERAL.—Section 312(b) of the Robert T.
14	Stafford Disaster Relief and Emergency Assistance Act
15	(42 U.S.C. 5155(b)) is amended by adding at the end the
16	following:
17	"(4) WAIVER OF GENERAL PROHIBITION.—
18	"(A) IN GENERAL.—The President may
19	waive the general prohibition provided in sub-
20	section (a) upon request of a Governor on be-
21	half of the State or on behalf of a person, busi-
22	ness concern, or any other entity suffering
23	losses as a result of a major disaster or emer-
24	gency, if the President finds such waiver is in
25	the public interest and will not result in waste,

1	fraud, or abuse. In making this decision, the
2	President may consider the following:
3	"(i) The recommendations of the Ad-
4	ministrator of the Federal Emergency
5	Management Agency made in consultation
6	with the Federal agency or agencies ad-
7	ministering the duplicative program.
8	"(ii) If a waiver is granted, the assist-
9	ance to be funded is cost effective.
10	"(iii) Equity and good conscience.
11	"(iv) Other matters of public policy
12	considered appropriate by the President.
13	"(B) GRANT OR DENIAL OF WAIVER.—A
14	request under subparagraph (A) shall be grant-
15	ed or denied not later than 45 days after sub-
16	mission of such request.
17	"(C) Prohibition on determination
18	THAT LOAN IS A DUPLICATION.—Notwith-
19	standing subsection (c), in carrying out sub-
20	paragraph (A), the President may not deter-
21	mine that a loan is a duplication of assistance,
22	provided that all Federal assistance is used to-
23	ward a loss suffered as a result of the major
24	disaster or emergency.".

(b) FUNDING OF A FEDERALLY AUTHORIZED WATER
 RESOURCES DEVELOPMENT PROJECT.—

3 (1)ELIGIBLE ACTIVITIES.—Notwithstanding 4 section 312 of the Robert T. Stafford Disaster Relief 5 and Emergency Assistance Act (42 U.S.C. 5155) 6 and its implementing regulations, assistance pro-7 vided pursuant to section 404 of such Act may be 8 used to fund activities authorized for construction 9 within the scope of a federally authorized water re-10 sources development project of the Army Corps of 11 Engineers if such activities are also eligible activities 12 under such section.

(2) FEDERAL FUNDING.—All Federal funding
provided under section 404 pursuant to this section
shall be applied toward the Federal share of such
project.

17 (3) NON-FEDERAL MATCH.—All non-Federal
18 matching funds required under section 404 pursuant
19 to this section shall be applied toward the non-Fed20 eral share of such project.

(4) TOTAL FEDERAL SHARE.—Funding provided under section 404 pursuant to this section
may not exceed the total Federal share for such
project.

1	(5) NO EFFECT.—Nothing in this section
2	shall—
3	(A) affect the cost-share requirement of a
4	hazard mitigation measure under section 404;
5	(B) affect the eligibility criteria for a haz-
6	ard mitigation measure under section 404;
7	(C) affect the cost share requirements of a
8	federally authorized water resources develop-
9	ment project; and
10	(D) affect the responsibilities of a non-
11	Federal interest with respect to the project, in-
12	cluding those related to the provision of lands,
13	easements, rights-of-way, dredge material dis-
14	posal areas, and necessary relocations.
15	(c) APPLICABILITY.—This section shall apply to each
16	disaster and emergency declared pursuant to the Robert
17	T. Stafford Disaster Relief and Emergency Assistance Act
18	(42 U.S.C. 5121 et seq.) after January 1, 2016.
19	SEC. 610. STATE ADMINISTRATION OF ASSISTANCE FOR DI-
20	RECT TEMPORARY HOUSING AND PERMA-
21	NENT HOUSING CONSTRUCTION.
22	Section 408(f) of the Robert T. Stafford Disaster Re-
23	lief and Emergency Assistance Act (42 U.S.C. 5174(f))
24	is amended—

1	(1) in paragraph (1) , by striking the paragraph
2	heading and inserting "STATE- OR TRIBAL-ADMINIS-
3	TERED ASSISTANCE AND OTHER NEEDS ASSIST-
4	ANCE.—'';
5	(2) in paragraph $(1)(A)$ —
6	(A) by striking "financial"; and
7	(B) by striking "subsection (e)" and in-
8	serting "subsections $(c)(1)(B)$, $(c)(4)$, and (e) if
9	the President and the State or Tribal govern-
10	ment comply, as determined by the Adminis-
11	trator, with paragraph (3)";
12	(3) in paragraph $(1)(B)$ —
13	(A) by striking "financial"; and
14	(B) by striking "subsection (e)" and in-
15	serting "subsections $(c)(1)(B)$, $(c)(4)$, and (e) ";
16	and
17	(4) by adding at the end the following:
18	"(3) IN GENERAL.—
19	"(A) Application.—A State or Tribal
20	government desiring to provide assistance under
21	subsection $(c)(1)(B)$, $(c)(4)$, or (e) shall submit
22	to the President an application for a grant to
23	provide financial assistance under the program.
24	"(B) CRITERIA.—The President, in con-
25	sultation and coordination with State, Tribal,

1	and local governments, shall establish criteria
2	for the approval of applications submitted
3	under subparagraph (A). The criteria shall in-
4	clude, at a minimum—
5	"(i) the demonstrated ability of the
6	State or Tribal government to manage the
7	program under this section;
8	"(ii) there being in effect a plan ap-
9	proved by the President as to how the
10	State or Tribal government will comply
11	with applicable Federal laws and regula-
12	tions and how the State or Tribal govern-
13	ment will provide assistance under its plan;
14	"(iii) a requirement that the State,
15	Tribal, or local government comply with
16	rules and regulations established pursuant
17	to subsection (j); and
18	"(iv) a requirement that the Presi-
19	dent, or the designee of the President,
20	comply with subsection (i).
21	"(C) QUALITY ASSURANCE.—Before ap-
22	proving an application submitted under this
23	section, the President, or the designee of the
24	President, shall institute adequate policies, pro-
25	cedures, and internal controls to prevent waste,

1	fraud, abuse, and program mismanagement for
2	this program and for programs under sub-
3	sections $(c)(1)(B)$, $(c)(4)$, and (e) . The Presi-
4	dent shall monitor and conduct quality assur-
5	ance activities on a State or Tribal govern-
6	ment's implementation of programs under sub-
7	sections $(c)(1)(B)$, $(c)(4)$, and (e) . If, after ap-
8	proving an application of a State or Tribal gov-
9	ernment submitted under this section, the
10	President determines that the State or Tribal
11	government is not administering the program
12	established by this section in a manner satisfac-
13	tory to the President, the President shall with-
14	draw the approval.
15	"(D) AUDITS.—The Office of the inspector
16	general shall provide for periodic audits of the

16 general shall provide for periodic audits of the
17 programs administered by States and Tribal
18 governments under this subsection.

19 "(E) APPLICABLE LAWS.—All Federal 20 laws applicable to the management, administra-21 tion, or contracting of the programs by the Federal Emergency Management Agency under 22 23 this section shall be applicable to the manage-24 ment, administration, or contracting by a non-25 Federal entity under this section.

1	"(F) REPORT.—Not later than 18 months
2	after the date of enactment of this paragraph,
3	the inspector general of the Department of
4	Homeland Security shall submit a report to the
5	Committee on Homeland Security and Govern-
6	mental Affairs of the Senate and the Committee
7	on Transportation and Infrastructure of the
8	House of Representatives on the State or Tribal
9	government's role to provide assistance under
10	this section. The report shall contain an assess-
11	ment of the effectiveness of the State or Tribal
12	government's role to provide assistance under
13	this section, including—
14	"(i) whether the State or Tribal gov-
15	ernment's role helped to improve the gen-
16	eral speed of disaster recovery;
17	"(ii) whether the State or Tribal gov-
18	ernment providing assistance under this
19	section had the capacity to administer this
20	section; and
21	"(iii) recommendations for changes to
22	improve the program if the State or Tribal
23	government's role to administer the pro-
24	grams should be continued.

1	"(G) Prohibition.—The President may
2	not condition the provision of Federal assist-
3	ance under this Act by a State or Tribal gov-
4	ernment requesting a grant under this section.
5	"(H) Miscellaneous.—
6	"(i) Notice and comment.—The
7	Administrator may waive notice and com-
8	ment rulemaking, if the Administrator de-
9	termines doing so is necessary to expedi-
10	tiously implement this section, and may
11	carry out this section as a pilot program
12	until such regulations are promulgated.
13	"(ii) FINAL RULE.—Not later than 2
14	years after the date of enactment of this
15	paragraph, the Administrator shall issue
16	final regulations to implement this sub-
17	section as amended by the Disaster Recov-
18	ery Reform Act.
19	"(iii) WAIVER AND EXPIRATION.—The
20	authority under clause (i) and any pilot
21	program implemented pursuant to such
22	clause shall expire 2 years after the date of
23	enactment of this paragraph or upon
24	issuance of final regulations pursuant to
25	clause (ii), whichever occurs sooner.".

1	SEC. 611. ASSISTANCE TO INDIVIDUALS AND HOUSEHOLDS.
2	Section 408(h) of the Robert T. Stafford Disaster
3	Relief and Emergency Assistance Act (42 U.S.C. 5174(h))
4	is amended—
5	(1) in paragraph (1) , by inserting ", excluding
6	financial assistance to rent alternate housing accom-
7	modations under subsection $(c)(1)(A)(i)$ and finan-
8	cial assistance to address other needs under sub-
9	section (e)" after "disaster";
10	(2) by redesignating paragraph (2) as para-
11	graph (3);
12	(3) by inserting after paragraph (1) the fol-
13	lowing:
14	"(2) OTHER NEEDS ASSISTANCE.—The max-
15	imum financial assistance any individual or house-
16	hold may receive under subsection (e) shall be equiv-
17	alent to the amount set forth in paragraph (1) with
18	respect to a single major disaster.";
19	(4) in paragraph (3) (as so redesignated), by
20	striking "paragraph (1)" and inserting "paragraphs
21	(1) and (2)"; and
22	(5) by inserting after paragraph (3) (as so re-
23	designated) the following:
24	"(4) Exclusion of necessary expenses for
25	INDIVIDUALS WITH DISABILITIES.—

1	"(A) The maximum amount of assistance
2	established under paragraph (1) shall exclude
3	expenses to repair or replace damaged accessi-
4	bility-related improvements under paragraphs
5	(2), (3) , and (4) of subsection (c) for individ-
6	uals with disabilities.
7	"(B) The maximum amount of assistance
8	established under paragraph (2) shall exclude
9	expenses to repair or replace accessibility-re-
10	lated personal property under subsection $(e)(2)$
11	for individuals with disabilities.".
12	SEC. 612. MULTIFAMILY LEASE AND REPAIR ASSISTANCE.
13	(a) LEASE AND REPAIR OF RENTAL UNITS FOR
14	TEMPORARY HOUSING.—Section 408(c)(1)(B)(ii)(II) of
15	the Robert T. Stafford Disaster Relief and Emergency As-
16	sistance Act (42 U.S.C. $5174(c)(1)(B)(ii)(II))$ is amended
17	to read as follows:
18	"(II) Improvements or re-
19	PAIRS.—Under the terms of any lease
20	FAIRS.—Under the terms of any lease
20	agreement for property entered into
20	
	agreement for property entered into
21	agreement for property entered into under this subsection, the value of the

1	(b) Rental Properties Impacted.—Section
2	408(c)(1)(B)(ii)(I)(aa) of the Robert T. Stafford Disaster
3	Relief and Emergency Assistance Act (42 U.S.C.
4	5174(c)(1)(B)(ii)(I)(aa)) is amended to read as follows:
5	"(aa) enter into lease agree-
6	ments with owners of multifamily
7	rental property impacted by a
8	major disaster or located in areas
9	covered by a major disaster dec-
10	laration to house individuals and
11	households eligible for assistance
12	under this section; and".
12 13	under this section; and". (c) INSPECTOR GENERAL REPORT.—Not later than
13	(c) INSPECTOR GENERAL REPORT.—Not later than
13 14	(c) INSPECTOR GENERAL REPORT.—Not later than 2 years after the date of the enactment of this Act, the
13 14 15	(c) INSPECTOR GENERAL REPORT.—Not later than 2 years after the date of the enactment of this Act, the inspector general of the Department of Homeland Security
13 14 15 16	(c) INSPECTOR GENERAL REPORT.—Not later than 2 years after the date of the enactment of this Act, the inspector general of the Department of Homeland Security shall assess the use of the authority provided under section
 13 14 15 16 17 	(c) INSPECTOR GENERAL REPORT.—Not later than 2 years after the date of the enactment of this Act, the inspector general of the Department of Homeland Security shall assess the use of the authority provided under section $408(c)(1)(B)$ of the Robert T. Stafford Disaster Relief
 13 14 15 16 17 18 	(c) INSPECTOR GENERAL REPORT.—Not later than 2 years after the date of the enactment of this Act, the inspector general of the Department of Homeland Security shall assess the use of the authority provided under section 408(c)(1)(B) of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C.
 13 14 15 16 17 18 19 	(c) INSPECTOR GENERAL REPORT.—Not later than 2 years after the date of the enactment of this Act, the inspector general of the Department of Homeland Security shall assess the use of the authority provided under section $408(c)(1)(B)$ of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5174(c)(1)(B)), including the adequacy of any benefit-cost

23 SEC. 613. PRIVATE NONPROFIT FACILITY.

24 Section 102 of the Robert T. Stafford Disaster Relief25 and Emergency Assistance Act (42 U.S.C. 5122) is

1 amended in paragraph (11)(B) by inserting "food banks,"
2 after "shelter workshops,".

3 SEC. 614. MANAGEMENT COSTS.

4 Section 324 of the Robert T. Stafford Disaster Relief
5 and Emergency Assistance Act (42 U.S.C. 5165b) is
6 amended—

7 (1) in subsection (a) by striking "any adminis8 trative expense, and any other expense not directly
9 chargeable to" and inserting "direct administrative
10 cost, and any other administrative expense associ11 ated with"; and

12 (2) in subsection (b)—

13 (A) by striking "Notwithstanding" and in-14 serting the following:

15 "(1) IN GENERAL.—Notwithstanding";

16 (B) by striking "establish" and inserting
17 the following: "implement"; and

18 (C) by adding at the end the following:

19 "(2) SPECIFIC MANAGEMENT COSTS.—The Ad20 ministrator shall provide the following percentage
21 rates, in addition to the eligible project costs, to
22 cover direct and indirect costs of administering the
23 following programs:

24 "(A) HAZARD MITIGATION.—A grantee
25 under section 404 may be reimbursed not more

1	than 15 percent of the total amount of the
2	grant award under such section of which not
3	more than 10 percent may be used by the
4	grantee and 5 percent by the subgrantee for
5	such costs.
6	"(B) PUBLIC ASSISTANCE.—A grantee
7	under sections 403, 406, 407, and 502 may be
8	reimbursed not more than 12 percent of the
9	total award amount under such sections, of
10	which not more than 7 percent may be used by
11	the grantee and 5 percent by the subgrantee for
12	such costs.".
13	SEC. 615. FLEXIBILITY.
14	(a) DEFINITION.—In this section, the term "covered
14 15	(a) DEFINITION.—In this section, the term "covered assistance" means assistance provided—
15	assistance" means assistance provided—
15 16	assistance'' means assistance provided— (1) under section 408 of the Robert T. Stafford
15 16 17	assistance" means assistance provided— (1) under section 408 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42
15 16 17 18	assistance" means assistance provided— (1) under section 408 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5174); and
15 16 17 18 19	assistance" means assistance provided— (1) under section 408 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5174); and (2) in relation to a major disaster or emergency
15 16 17 18 19 20	 assistance" means assistance provided— (1) under section 408 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5174); and (2) in relation to a major disaster or emergency declared by the President under section 401 or 501
 15 16 17 18 19 20 21 	 assistance" means assistance provided— (1) under section 408 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5174); and (2) in relation to a major disaster or emergency declared by the President under section 401 or 501 of the Robert T. Stafford Disaster Relief and Emer-

1	(b) WAIVER AUTHORITY.—Notwithstanding section
2	3716(e) of title 31, United States Code, the Administrator
3	of the Federal Emergency Management Agency—
4	(1) subject to paragraph (2), may waive a debt
5	owed to the United States related to covered assist-
6	ance provided to an individual or household if—
7	(A) the covered assistance was distributed
8	based on an error by the Federal Emergency
9	Management Agency;
10	(B) there was no fault on behalf of the
11	debtor; and
12	(C) the collection of the debt would be
13	against equity and good conscience; and
14	(2) may not waive a debt under paragraph (1)
15	if the debt involves fraud, the presentation of a false
16	claim, or misrepresentation by the debtor or any
17	party having an interest in the claim.
18	(c) Monitoring of Covered Assistance Distrib-
19	uted Based on Error.—
20	(1) IN GENERAL.—The inspector general of the
21	Department of Homeland Security shall monitor the
22	distribution of covered assistance to individuals and
23	households to determine the percentage of such as-
24	sistance distributed based on an error.

1	(2) Removal of waiver authority based
2	on excessive error rate.—If the inspector gen-
3	eral determines, with respect to any 12-month pe-
4	riod, that the amount of covered assistance distrib-
5	uted based on an error by the Federal Emergency
6	Management Agency exceeds 4 percent of the total
7	amount of covered assistance distributed—
8	(A) the inspector general shall notify the
9	Administrator and publish the determination in
10	the Federal Register; and
11	(B) with respect to any major disaster or
12	emergency declared by the President under sec-
13	tion 401 or section 501, respectively, of the
14	Robert T. Stafford Disaster Relief and Emer-
15	gency Assistance Act (42 U.S.C. 5170; 42
16	U.S.C. 5191) after the date on which the deter-
17	mination is published under subparagraph (A),
18	the authority of the Administrator to waive
19	debt under subsection (b) shall no longer be ef-
20	fective.
21	SEC. 616. ADDITIONAL DISASTER ASSISTANCE.
22	(a) DISASTER MITIGATION.—Section 209 of the Pub-

(a) DISASTER MITIGATION.—Section 209 of the Pubic Works and Economic Development Act of 1965 (42
U.S.C. 3149) is amended by adding at the end the following:

"(e) DISASTER MITIGATION.—In providing assist ance pursuant to subsection (c)(2), if appropriate and as
 applicable, the Secretary may encourage hazard mitigation
 in assistance provided pursuant to such subsection.".

5 (b) Emergency Management Assistance Com-6 PACT GRANTS.—Section 661(d) of the Post-Katrina 7 Emergency Management Reform Act of 2006 (6 U.S.C. 8 761(d)) is amended by striking "for fiscal year 2008" and 9 inserting "for each of fiscal years 2018 through 2022". 10 (c)EMERGENCY MANAGEMENT Performance GRANTS PROGRAM.—Section 662(f) of the Post-Katrina 11 Emergency Management Reform Act of 2006 (6 U.S.C. 12 762(f)) is amended by striking "the program" and all that 13 follows through "2012" and inserting "the program, for 14 15 each of fiscal years 2018 through 2022".

(d) TECHNICAL AMENDMENT.—Section 403(a)(3) of
the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5170b(a)(3)) is amended by striking the second subparagraph (J).

20 SEC. 617. NATIONAL VETERINARY EMERGENCY TEAMS.

(a) IN GENERAL.—The Administrator of the Federal
Emergency Management Agency may establish one or
more national veterinary emergency teams at accredited
colleges of veterinary medicine.

1	(b) RESPONSIBILITIES.—A national veterinary emer-
2	gency team shall—
3	(1) deploy with a team of the National Urban
4	Search and Rescue Response System to assist
5	with—
6	(A) veterinary care of canine search teams;
7	(B) locating and treating companion ani-
8	mals, service animals, livestock, and other ani-
9	mals; and
10	(C) surveillance and treatment of zoonotic
11	diseases;
12	(2) recruit, train, and certify veterinary profes-
13	sionals, including veterinary students, in accordance
14	with an established set of plans and standard oper-
15	ating guidelines to carry out the duties associated
16	with planning for and responding to emergencies as
17	described in paragraph (1);
18	(3) assist State, Tribal, and local governments
19	and nonprofit organizations in developing emergency
20	management and evacuation plans that account for
21	the care and rescue of animals and in improving
22	local readiness for providing veterinary medical re-
23	sponse during a disaster; and
24	(4) coordinate with the Department of Home-
25	land Security, the Department of Health and

Human Services, the Department of Agriculture,
 State, Tribal, and local governments (including de partments of animal and human health), veterinary
 and health care professionals, and volunteers.

5 SEC. 618. DISPUTE RESOLUTION PILOT PROGRAM.

6 Section 1105(c) of the Sandy Recovery Improvement
7 Act of 2013 (42 U.S.C. 5189a note) is amended by strik8 ing "2015" and inserting "2022".

9 SEC. 619. UNIFIED FEDERAL ENVIRONMENTAL AND HIS-10 TORIC PRESERVATION REVIEW.

11 (a) REVIEW AND ANALYSIS.—Not later than 180 12 days after the date of enactment of this Act, the Adminis-13 trator of the Federal Emergency Management Agency shall review the Unified Federal Environmental and His-14 15 toric Preservation review process established pursuant to section 429 of the Robert T. Stafford Disaster Relief and 16 Emergency Assistance Act (42 U.S.C. 5189g), and submit 17 18 a report to the Committee on Transportation and Infra-19 structure of the House of Representatives and the Com-20 mittee on Homeland Security and Governmental Affairs 21 of the Senate that includes the following:

(1) An analysis of whether and how the unified
process has expedited the interagency review process
to ensure compliance with the environmental and

historic requirements under Federal law relating to
 disaster recovery projects.

3 (2) A survey and analysis of categorical exclu4 sions used by other Federal agencies that may be
5 applicable to any activity related to a Presidentially
6 declared major disaster or emergency under such
7 Act.

8 (3) Recommendations on any further actions,
9 including any legislative proposals, needed to expe10 dite and streamline the review process.

11 (b) REGULATIONS.—After completing the review, 12 survey, and analyses under subsection (a), but not later 13 than 2 years after the date of enactment of this Act, and after providing notice and opportunity for public comment, 14 15 the Administrator shall issue regulations to implement any regulatory recommendations, including any categorical ex-16 clusions identified under subsection (a), to the extent that 17 the categorical exclusions meet the criteria for a categor-18 ical exclusion under section 1508.4 of title 40, Code of 19 20Federal Regulations, and section II of DHS Instruction 21 Manual 023-01-001-01.

22 SEC. 620. CLOSEOUT INCENTIVES.

23 (a) FACILITATING CLOSEOUT.—Section 705 of the
24 Robert T. Stafford Disaster Relief and Emergency Assist-

1 ance Act (42 U.S.C. 5205) is amended by adding at the2 end the following:

3 "(d) Facilitating Closeout.—

4 "(1) INCENTIVES.—The Administrator may de5 velop incentives and penalties that encourage State,
6 Tribal, or local governments to close out expendi7 tures and activities on a timely basis related to dis8 aster or emergency assistance.

9 "(2) AGENCY REQUIREMENTS.—The Agency 10 shall, consistent with applicable regulations and re-11 quired procedures, meet its responsibilities to im-12 prove closeout practices and reduce the time to close 13 disaster program awards.".

14 (b) REGULATIONS.—The Administrator shall issue15 regulations to implement this section.

16 SEC. 621. PERFORMANCE OF SERVICES.

Section 306 of the Robert T. Stafford Disaster Relief
and Emergency Assistance Act (42 U.S.C. 5149) is
amended by adding at the end the following:

20 "(c) The Administrator of the Federal Emergency 21 Management Agency is authorized to appoint temporary 22 personnel, after serving continuously for 3 years, to posi-23 tions in the Agency in the same manner that competitive 24 service employees with competitive status are considered 25 for transfer, reassignment, or promotion to such positions. An individual appointed under this subsection shall be come a career-conditional employee, unless the employee
 has already completed the service requirements for career
 tenure.".

5 SEC. 622. STUDY TO STREAMLINE AND CONSOLIDATE IN6 FORMATION COLLECTION.

7 Not later than 1 year after the date of enactment
8 of this Act, the Administrator of the Federal Emergency
9 Management Agency shall—

10 (1) in coordination with the Small Business Ad-11 ministration, the Department of Housing and Urban 12 Development, and other appropriate agencies, con-13 duct a study and develop a plan, consistent with law, 14 under which the collection of information from dis-15 aster assistance applicants and grantees will be 16 modified, streamlined, expedited, efficient, flexible, 17 consolidated, and simplified to be less burdensome, 18 duplicative, and time consuming for applicants and 19 grantees;

(2) in coordination with the Small Business Administration, the Department of Housing and Urban
Development, and other appropriate agencies, develop a plan for the regular collection and reporting
of information on Federal disaster assistance awarded, including the establishment and maintenance of

a website for presenting the information to the pub lic; and

3 (3) submit the plans to the Committee on
4 Transportation and Infrastructure of the House of
5 Representatives and the Committee on Homeland
6 Security and Governmental Affairs of the Senate.

7 SEC. 623. AGENCY ACCOUNTABILITY.

8 Title IV of the Robert T. Stafford Disaster Relief and
9 Emergency Assistance Act is amended by adding at the
10 end the following:

11 "SEC. 430. AGENCY ACCOUNTABILITY.

12 "(a) PUBLIC ASSISTANCE.—Not later than 5 days 13 after an award of a public assistance grant is made under 14 section 406 that is in excess of \$1,000,000, the Adminis-15 trator shall publish on the Agency's website the specifics 16 of each such grant award, including—

17 "(1) identifying the Federal Emergency Man-18 agement Agency Region;

19 "(2) the disaster or emergency declaration20 number;

21 "(3) the State, county, and applicant name;

22 "(4) if the applicant is a private nonprofit orga-23 nization;

24 "(5) the damage category code;

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1	"(6) the amount of the Federal share obligated;
2	and
3	"(7) the date of the award.
4	"(b) Mission Assignments.—
5	"(1) IN GENERAL.—Not later than 5 days after
6	the issuance of a mission assignment or mission as-
7	signment task order, the Administrator shall publish
8	on the Agency's website any mission assignment or
9	mission assignment task order to another Federal
10	department or agency regarding a major disaster in
11	excess of \$1,000,000, including—
12	"(A) the name of the impacted State or
13	Tribe;
14	"(B) the disaster declaration for such
15	State or Tribe;
16	"(C) the assigned agency;
17	"(D) the assistance requested;
18	"(E) a description of the disaster;
19	"(F) the total cost estimate;
20	"(G) the amount obligated;
21	"(H) the State or Tribal cost share, if ap-
22	plicable;
23	"(I) the authority under which the mission
24	assignment or mission assignment task order
25	was directed; and

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1	"(J) if applicable, the date a State or
2	Tribe requested the mission assignment.
3	"(2) Recording changes.—Not later than 10
4	days after the last day of each month until a mission
5	assignment or mission assignment task order de-
6	scribed in paragraph (1) is completed and closed
7	out, the Administrator shall update any changes to
8	the total cost estimate and the amount obligated.
9	"(c) DISASTER RELIEF MONTHLY REPORT.—Not
10	later than 10 days after the first day of each month, the
11	Administrator shall publish on the Agency's website re-
12	ports, including a specific description of the methodology
13	and the source data used in developing such reports, in-
14	cluding—
15	((1) an estimate of the amounts for the fiscal
16	year covered by the President's most recent budget
17	pursuant to section 1105(a) of title 31, United
18	States Code, including—
19	"(A) the unobligated balance of funds to
20	be carried over from the prior fiscal year to the
21	budget year;
22	"(B) the unobligated balance of funds to
23	be carried over from the budget year to the
24	budget year plus 1;

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1	"(C) the amount of obligations for non-
2	catastrophic events for the budget year;
3	"(D) the amount of obligations for the
4	budget year for catastrophic events delineated
5	by event and by State;
6	"(E) the total amount that has been pre-
7	viously obligated or will be required for cata-
8	strophic events delineated by event and by State
9	for all prior years, the current fiscal year, the
10	budget year, and each fiscal year thereafter;
11	"(F) the amount of previously obligated
12	funds that will be recovered for the budget
13	year;
14	"(G) the amount that will be required for
15	obligations for emergencies, as described in sec-
16	tion $102(1)$, major disasters, as described in
17	section 102(2), fire management assistance
18	grants, as described in section 420, surge ac-
19	tivities, and disaster readiness and support ac-
20	tivities; and
21	"(H) the amount required for activities not
22	covered under section $251(b)(2)(D)(iii)$ of the
23	Balanced Budget and Emergency Deficit Con-
24	trol Act of 1985 (2 U.S.C. 901(b)(2)(D)(iii));
25	and

1	"(2) an estimate or actual amounts, if available,
2	of the following for the current fiscal year shall be
3	submitted not later than the fifth day of each
4	month, published by the Administrator on the Agen-
5	cy's website not later than the fifth day of each
6	month:
7	"(A) A summary of the amount of appro-
8	priations made available by source, the trans-
9	fers executed, the previously allocated funds re-
10	covered, and the commitments, allocations, and
11	obligations made.
12	"(B) A table of disaster relief activity de-
13	lineated by month, including—
14	"(i) the beginning and ending bal-
15	ances;
16	"(ii) the total obligations to include
17	amounts obligated for fire assistance,
18	emergencies, surge, and disaster support
19	activities;
20	"(iii) the obligations for catastrophic
21	events delineated by event and by State;
22	and
23	"(iv) the amount of previously obli-
24	gated funds that are recovered.

1	"(C) A summary of allocations, obligations,
2	and expenditures for catastrophic events delin-
3	eated by event.
4	"(D) The cost of the following categories
5	of spending:
6	"(i) Public assistance.
7	"(ii) Individual assistance.
8	"(iii) Mitigation.
9	"(iv) Administrative.
10	"(v) Operations.
11	"(vi) Any other relevant category (in-
12	cluding emergency measures and disaster
13	resources) delineated by disaster.
14	"(E) The date on which funds appro-
15	priated will be exhausted.
16	"(d) Contracts.—
17	"(1) INFORMATION.—Not later than 10 days
18	after the first day of each month, the Administrator
19	shall publish on the Agency's website the specifics of
20	each contract in excess of \$1,000,000 that the Agen-
21	cy enters into, including—
22	"(A) the name of the party;
23	"(B) the date the contract was awarded;
24	"(C) the amount and scope of the contract;

1	"(D) if the contract was awarded through
2	competitive bidding process;
3	"(E) if no competitive bidding process was
4	used, the reason why competitive bidding was
5	not used; and
6	"(F) the authority used to bypass the com-
7	petitive bidding process.
8	The information shall be delineated by disaster, if
9	applicable, and specify the damage category code, if
10	applicable.
11	"(2) REPORT.—Not later than 10 days after
12	the last day of the fiscal year, the Administrator
13	shall provide a report to the appropriate committees
14	of Congress summarizing the following information
15	for the preceding fiscal year:
16	"(A) The number of contracts awarded
17	without competitive bidding.
18	"(B) The reasons why a competitive bid-
19	ding process was not used.
20	"(C) The total amount of contracts award-
21	ed with no competitive bidding.
22	"(D) The damage category codes, if appli-
23	cable, for contracts awarded without competi-
24	tive bidding.".

1 SEC. 624. AUDIT OF CONTRACTS.

2 Notwithstanding any other provision of law, the Ad-3 ministrator of the Federal Emergency Management Agency shall not reimburse a State, Tribe, or local government 4 5 or the owner or operator of a private nonprofit facility for any activities made pursuant to a contract entered into 6 7 after August 1, 2017, that prohibits the Administrator or 8 the Comptroller General of the United States from audit-9 ing or otherwise reviewing all aspects relating to the con-10 tract.

11SEC. 625. INSPECTOR GENERAL AUDIT OF FEMA CON-12TRACTS FOR TARPS AND PLASTIC SHEETING.

13 (a) IN GENERAL.—Not later than 30 days after the date of enactment of this Act, the inspector general of the 14 Department of Homeland Security shall initiate an audit 15 16 of the contracts awarded by the Federal Emergency Management Agency (in this section referred to as "FEMA") 17 18 for tarps and plastic sheeting for the Commonwealth of 19 Puerto Rico and the United States Virgin Islands in re-20sponse to Hurricane Irma and Hurricane Maria.

(b) CONSIDERATIONS.—In carrying out the auditunder subsection (a), the inspector general shall review—

(1) the contracting process used by FEMA to
evaluate offerors and award the relevant contracts to
contractors;

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1	(2) FEMA's assessment of the past perform-
2	ance of the contractors, including any historical in-
3	formation showing that the contractors had sup-
4	ported large-scale delivery quantities in the past;
5	(3) FEMA's assessment of the capacity of the
6	contractors to carry out the relevant contracts, in-
7	cluding with respect to inventory, production, and fi-
8	nancial capabilities;
9	(4) how FEMA ensured that the contractors
10	met the terms of the relevant contracts; and
11	(5) whether the failure of the contractors to
12	meet the terms of the relevant contracts and
13	FEMA's subsequent cancellation of the relevant con-
14	tracts affected the provision of tarps and plastic
15	sheeting to the Commonwealth of Puerto Rico and
16	the United States Virgin Islands.
17	(c) REPORT.—Not later than 270 days after the date
18	of initiation of the audit under subsection (a), the inspec-
19	tor general shall submit to the Committee on Transpor-
20	tation and Infrastructure of the House of Representatives
21	and the Committee on Homeland Security and Govern-
22	mental Affairs of the Senate a report on the results of
23	the audit, including findings and recommendations.

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1 SEC. 626. RELIEF ORGANIZATIONS.

2 Section 309 of the Robert T. Stafford Disaster Relief
3 and Emergency Assistance Act (42 U.S.C. 5152) is
4 amended—

5 (1) in subsection (a), by striking "and other re6 lief or" and inserting "long-term recovery groups,
7 domestic hunger relief, and other relief, or"; and

8 (2) in subsection (b), by striking "and other re9 lief or" and inserting "long-term recovery groups,
10 domestic hunger relief, and other relief, or".

11 SEC. 627. GUIDANCE ON INUNDATED AND SUBMERGED
12 ROADS.

13 The Administrator of the Federal Emergency Management Agency, in coordination with the Administrator 14 of the Federal Highway Administration, shall develop and 15 16 issue guidance for State, local, and Tribal governments regarding repair, restoration, and replacement of inun-17 18 dated and submerged roads damaged or destroyed by a 19 major disaster, and for associated expenses incurred by the Government, with respect to roads eligible for assist-20 21 ance under section 406 of the Robert T. Stafford Disaster 22 Relief and Emergency Assistance Act (42 U.S.C. 5172).

23 SEC. 628. AUTHORITIES.

24 Notwithstanding any other provision of law, the non25 federally funded actions of private parties and State, local,
26 or Tribal governments, on State, local, Tribal, and private
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land, and the effects of those actions, shall not be attrib-1 2 uted to the Federal Emergency Management Agency's ac-3 tions under the National Flood Insurance Act of 1968 (42) 4 U.S.C. 4001 et seq.), the Flood Disaster Protection Act 5 of 1973 (42 U.S.C. 4002 et seq.), the Biggert-Waters 6 Flood Insurance Reform Act of 2012 (subtitle A of title 7 II of division F of Public Law 112–141; 126 Stat. 916), 8 and the Homeowner Flood Insurance Affordability Act of 9 2014 (Public Law 113–89; 128 Stat. 1020) for the pur-10 poses of section 7 (16 U.S.C. 1536) and section 9 (16 11 U.S.C. 1538) of the Endangered Species Act. Actions 12 taken under the National Flood Insurance Act of 1968, 13 the Flood Disaster Protection Act of 1973, the Biggert-Waters Flood Insurance Reform Act of 2012, and the 14 15 Homeowner Flood Insurance Affordability Act of 2014, that may influence private actions do not create a Federal 16 17 nexus for the purpose of applying the requirements of sec-18 tion 7 of the Endangered Species Act of 1973 (16 U.S.C. 19 1536).

20 SEC. 629. RECOUPMENT OF CERTAIN ASSISTANCE PROHIB-21 ITED.

(a) IN GENERAL.—Notwithstanding section 3716(e)
of title 31, United States Code, and unless there is evidence of civil or criminal fraud, the Federal Emergency
Management Agency may not take any action to recoup

covered assistance from the recipient of such assistance
 if the receipt of such assistance occurred on a date that
 is more than 3 years before the date on which the Federal
 Emergency Management Agency first provides to the re cipient written notification of an intent to recoup.

6 (b) COVERED ASSISTANCE DEFINED.—In this sec7 tion, the term "covered assistance" means assistance pro8 vided—

9 (1) under section 408 of the Robert T. Stafford
10 Disaster Relief and Emergency Assistance Act (42
11 U.S.C. 5174); and

(2) in relation to a major disaster or emergency
declared by the President under section 401 or 501
of such Act (42 U.S.C. 5170; 42 U.S.C. 5191) on
or after January 1, 2012.

16 SEC. 630. STATUTE OF LIMITATIONS.

17 (a) IN GENERAL.—Section 705 of the Robert T.
18 Stafford Disaster Relief and Emergency Assistance Act
19 (42 U.S.C. 5205) is amended—

20 (1) in subsection (a)(1)—

21 (A) by striking "Except" and inserting
22 "Notwithstanding section 3716(e) of title 31,
23 United States Code, and except"; and

1	(B) by striking "report for the disaster or
2	emergency" and inserting "report for project
3	completion as certified by the grantee"; and
4	(2) in subsection (b)—
5	(A) in paragraph (1) by striking "report
6	for the disaster or emergency" and inserting
7	"report for project completion as certified by
8	the grantee''; and
9	(B) in paragraph (3) by inserting "for
10	project completion as certified by the grantee"
11	after "final expenditure report".
12	(b) Applicability.—
13	(1) IN GENERAL.—With respect to disaster or
14	emergency assistance provided to a State or local
15	government on or after January 1, 2004—
16	(A) no administrative action may be taken
17	to recover a payment of such assistance after
18	the date of enactment of this Act if the action
19	is prohibited under section $705(a)(1)$ of the
20	Robert T. Stafford Disaster Relief and Emer-
21	gency Assistance Act (42 U.S.C. $5205(a)(1)$),
22	as amended by subsection (a); and
23	(B) any administrative action to recover a
24	payment of such assistance that is pending on

25 such date of enactment shall be terminated if

the action is prohibited under section 705(a)(1)1 2 of that Act, as amended by subsection (a). 3 (2) LIMITATION.—This section, including the 4 amendments made by this section, may not be con-5 strued to invalidate or otherwise affect any adminis-6 tration action completed before the date of enact-7 ment of this Act. 8 SEC. 631. TECHNICAL ASSISTANCE AND RECOMMENDA-9 TIONS.

10 (a) TECHNICAL ASSISTANCE.—The Administrator of the Federal Emergency Management Agency shall provide 11 12 technical assistance to a common interest community that 13 provides essential services of a governmental nature on actions that a common interest community may take in 14 15 order to be eligible to receive reimbursement from a grantee that receives funds from the Agency for certain activi-16 ties performed after an event that results in a disaster 17 18 declaration.

(b) RECOMMENDATIONS.—Not later than 90 days
after the date of enactment of this Act, the Administrator
shall provide to the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Homeland Security and Governmental Affairs
of the Senate a legislative proposal on how to provide eligi-

bility for disaster assistance with respect to common areas
 of condominiums and housing cooperatives.

3 SEC. 632. GUIDANCE ON HAZARD MITIGATION ASSISTANCE.

4 (a) IN GENERAL.—Not later than 180 days after the
5 date of enactment of this Act, the Administrator of the
6 Federal Emergency Management Agency shall issue guid7 ance regarding the acquisition of property for open space
8 as a mitigation measure under section 404 of the Robert
9 T. Stafford Disaster Relief and Emergency Assistance Act
10 (42 U.S.C. 5170c) that includes—

(1) a process by which the State hazard mitigation officer appointed for such an acquisition shall, not later than 60 days after the applicant for assistance enters into an agreement with the Administrator regarding the acquisition, provide written notification to each affected unit of local government for such acquisition that includes—

18 (A) the location of the acquisition;

(B) the State-local assistance agreementfor the hazard mitigation grant program;

- (C) a description of the acquisition; and
 (D) a copy of the deed restriction; and
 (2) recommendations for entering into and implementing a memorandum of understanding be-
- tween units of local government and covered entities

1	that includes provisions to allow an affected unit of
2	local government notified under paragraph (1) to—
3	(A) use and maintain the open space cre-
4	ated by such a project, consistent with section
5	404 (including related regulations, standards,
6	and guidance) and consistent with all adjoining
7	property, subject to the notification of the ad-
8	joining property, so long as the cost of the
9	maintenance is borne by the local government;
10	and
11	(B) maintain the open space pursuant to
12	standards exceeding any local government
13	standards defined in the agreement with the
14	Administrator described under paragraph (1).
15	(b) DEFINITIONS.—In this section the following defi-
16	nitions apply:
17	(1) AFFECTED UNIT OF LOCAL GOVERN-
18	MENT.—The term "affected unit of local govern-
19	ment" means any entity covered by the definition of
20	local government in section 102 of the Robert T.
21	Stafford Disaster Relief and Emergency Assistance
22	Act (42 U.S.C. 5122), that has jurisdiction over the
23	property subject to the acquisition described in sub-
24	section (a).

1	(2) COVERED ENTITY.—The term "covered en-
2	tity" means—
3	(A) the grantee or subgrantee receiving as-
4	sistance for an open space project described in
5	subsection (a);
6	(B) the State in which such project is lo-
7	cated; and
8	(C) the applicable Regional Administrator
9	of the Federal Emergency Management Agency.
10	SEC. 633. LOCAL IMPACT.
11	In making recommendations to the President regard-
12	ing a major disaster declaration, the Administrator of the
13	Federal Emergency Management Agency shall give great-
14	er weight and consideration to severe local impact or re-
15	cent multiple disasters. Further, the Administrator shall
16	make corresponding adjustments to the Agency's policies
17	and regulations regarding such consideration. Not later
18	than 1 year after the date of enactment of this section,
19	the Administrator shall report to the Committee on Trans-
20	portation and Infrastructure of the House of Representa-
21	tives and the Committee on Homeland Security and Gov-
22	ernmental Affairs of the Senate on the changes made to
23	regulations and policies and the number of declarations
24	that have been declared based on the new criteria.

1 SEC. 634. ADDITIONAL HAZARD MITIGATION ACTIVITIES.

2 Section 404 of the Robert T. Stafford Disaster Relief
3 and Emergency Assistance Act (42 U.S.C. 5170c) is fur4 ther amended by adding at the end the following:

5 "(g) USE OF ASSISTANCE.—Recipients of hazard 6 mitigation assistance provided under this section and sec-7 tion 203 may use the assistance to conduct activities to 8 help reduce the risk of future damage, hardship, loss, or 9 suffering in any area affected by earthquake hazards, in-10 cluding—

"(1) improvements to regional seismic networks
in support of building a capability for earthquake
early warning;

14 "(2) improvements to geodetic networks in sup15 port of building a capability for earthquake early
16 warning; and

"(3) improvements to seismometers, Global Positioning System receivers, and associated infrastructure in support of building a capability for earthquake early warning.".

21 SEC.635.NATIONALPUBLICINFRASTRUCTURE22PREDISASTER HAZARD MITIGATION.

(a) PREDISASTER HAZARD MITIGATION.—Section
24 203 of the Robert T. Stafford Disaster Relief and Emer25 gency Assistance Act (42 U.S.C. 5133) is amended—

(1) in subsection (c) by inserting "Public Infra-
structure" after "the National";
(2) in subsection $(e)(1)(B)$ —
(A) by striking "or" at the end of clause
(ii);
(B) by striking the period at the end of
clause (iii) and inserting "; or"; and
(C) by adding at the end the following:
"(iv) to establish and carry out en-
forcement activities to implement the latest
published editions of relevant consensus-
based codes, specifications, and standards
that incorporate the latest hazard-resistant
designs and establish minimum acceptable
criteria for the design, construction, and
maintenance of residential structures and
facilities that may be eligible for assistance
under this Act for the purpose of pro-
tecting the health, safety, and general wel-
fare of the buildings' users against disas-
ters.";
(3) in subsection (f)—
(A) in paragraph (1) by inserting "for
mitigation activities that are cost effective"
after "competitive basis"; and

1	(B) by adding at the end the following:
2	"(3) REDISTRIBUTION OF UNOBLIGATED
3	AMOUNTS.—The President may—
4	"(A) withdraw amounts of financial assist-
5	ance made available to a State (including
6	amounts made available to local governments of
7	a State) under this subsection that remain un-
8	obligated by the end of the third fiscal year
9	after the fiscal year for which the amounts were
10	allocated; and
11	"(B) in the fiscal year following a fiscal
12	year in which amounts were withdrawn under
13	subparagraph (A), add the amounts to any
14	other amounts available to be awarded on a
15	competitive basis pursuant to paragraph (1).";
16	(4) in subsection (g)—
17	(A) in paragraph (9) by striking "and" at
18	the end;
19	(B) by redesignating paragraph (10) as
20	paragraph (12); and
21	(C) by adding after paragraph (9) the fol-
22	lowing:
23	"(10) the extent to which the State or local
24	government has facilitated the adoption and enforce-
25	ment of the latest published editions of relevant con-

1 sensus-based codes, specifications, and standards 2 that incorporate the latest hazard-resistant designs 3 and establish criteria for the design, construction, 4 and maintenance of residential structures and facili-5 ties that may be eligible for assistance under this 6 Act for the purpose of protecting the health, safety, 7 and general welfare of the buildings' users against 8 disasters; 9 "(11) the extent to which the assistance will 10 fund activities that increase the level of resiliency; 11 and"; 12 (5) by striking subsection (i) and inserting the 13 following: 14 "(i) PUBLIC NATIONAL INFRASTRUCTURE 15 PREDISASTER MITIGATION ASSISTANCE. "(1) IN GENERAL.—The President may set 16 17 aside from the Disaster Relief Fund, with respect to 18 each major disaster, an amount equal to 6 percent 19 of the estimated aggregate amount of the grants to 20 be made pursuant to sections 403, 406, 407, 408, 21 410, and 416 for the major disaster in order to pro-22 vide technical and financial assistance under this 23 section.

24 "(2) ESTIMATED AGGREGATE AMOUNT.—Not
25 later than 180 days after each major disaster dec-

laration pursuant to this Act, the estimated aggre-
gate amount of grants for purposes of paragraph (1)
shall be determined by the President and such esti-
mated amount need not be reduced, increased, or
changed due to variations in estimates.
"(3) NO REDUCTION IN AMOUNTS.—The
amount set aside pursuant to paragraph (1) shall
not reduce the amounts otherwise made available for
sections 403 , 404 , 406 , 407 , 408 , 410 , and 416
under this Act."; and
(6) by striking subsections (j) and (m) and re-
designating subsections (k), (l), and (n) as sub-
sections (j), (k), and (l), respectively.
(b) Applicability.—The amendments made to sec-
tion 203 of the Robert T. Stafford Disaster Relief and
Emergency Assistance Act (42 U.S.C. 5133) by para-
graphs (3) and (5) of subsection (a) shall apply to funds
appropriated after the date of enactment of this Act.
SEC. 636. ADDITIONAL MITIGATION ACTIVITIES.
(a) HAZARD MITIGATION CLARIFICATION.—Section
404(a) of the Robert T. Stafford Disaster Relief and
Emergency Assistance Act (42 U.S.C. 5170c(a)) is
amended by striking the first sentence and inserting the
following: "The President may contribute up to 75 percent
of the cost of hazard mitigation measures which the Presi-

dent has determined are cost effective and which substan tially reduce the risk of, or increase resilience to, future
 damage, hardship, loss, or suffering in any area affected
 by a major disaster.".

5 (b) ELIGIBLE COST.—Section 406(e)(1)(A) of such
6 Act (42 U.S.C. 5172(e)(1)(A)) is amended—

7 (1) in the matter preceding clause (i), by insert8 ing after "section," the following: "for disasters de9 clared on or after August 1, 2017, or a disaster in
10 which a cost estimate has not yet been finalized for
11 a project,";

12 (2) in clause (i), by striking "and";

13 (3) in clause (ii)—

14 (A) by striking "codes, specifications, and 15 standards" and inserting "the latest published 16 editions of relevant consensus-based codes, 17 specifications, and standards that incorporate 18 the latest hazard-resistant designs and establish 19 minimum acceptable criteria for the design, 20 construction, and maintenance of residential 21 structures and facilities that may be eligible for 22 assistance under this Act for the purposes of 23 protecting the health, safety, and general wel-24 fare of a facility's users against disasters";

1	(B) by striking "applicable at the time at
2	which the disaster occurred"; and
3	(C) by striking the period at the end and
4	inserting "; and"; and
5	(4) by adding at the end the following:
6	"(iii) in a manner that allows the fa-
7	cility to meet the definition of resilient de-
8	veloped pursuant to this subsection.".
9	(c) Other Eligible Cost.—Section $406(e)(1)$ of
10	such Act (42 U.S.C. $5172(e)(1)$) is further amended by
11	inserting at the end the following:
12	"(C) CONTRIBUTIONS.—Contributions for
13	the eligible cost made under this section may be
14	provided on an actual cost basis or on cost-esti-
15	mation procedures.".
16	(d) New Rules.—Section 406(e) of such Act (42
17	U.S.C. 5172(e)) is further amended by adding at the end
18	the following:
19	((5) New Rules.—
20	"(A) IN GENERAL.—Not later than 18
21	months after the date of enactment of this
22	paragraph, the President, acting through the
23	Administrator of the Federal Emergency Man-
24	agement Agency, shall issue a final rulemaking

1	that defines the terms 'resilient' and 'resiliency'
2	for purposes of this subsection.
3	"(B) INTERIM GUIDANCE.—Not later than
4	60 days after the date of enactment of this
5	paragraph, the Administrator shall issue in-
6	terim guidance to implement this subsection.
7	Such interim guidance shall expire 18 months
8	after the date of enactment of this paragraph
9	or upon issuance of final regulations pursuant
10	to subparagraph (A), whichever occurs first.
11	"(C) GUIDANCE.—Not later than 90 days
12	after the date on which the Administrator
13	issues the final rulemaking under this para-
14	graph, the Administrator shall issue any nec-
15	essary guidance related to the rulemaking.
16	"(D) REPORT.—Not later than 2 years
17	after the date of enactment of this paragraph,
18	the Administrator shall submit to Congress a
19	report summarizing the regulations and guid-
20	ance issued pursuant to this paragraph.".
21	(e) Conforming Amendment.—Section 205(d)(2)
22	of the Disaster Mitigation Act of 2000 (Public Law 106–
23	390) is amended by inserting "(B)" after "except that
24	paragraph (1)".

TITLE VII—FLIGHT R&D ACT Subtitle A—General Provisions

3 SEC. 701. SHORT TITLE.

1

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4 This title may be cited as the "FAA Leadership in
5 Groundbreaking High-Tech Research and Development
6 Act" or the "FLIGHT R&D Act".

7 SEC. 702. DEFINITIONS.

8 In this title, the following definitions apply:

9 (1) ADMINISTRATOR.—The term "Adminis10 trator" means the Administrator of the Federal
11 Aviation Administration.

12 (2) FAA.—The term "FAA" means the Fed-13 eral Aviation Administration.

14 (3) NASA.—The term "NASA" means the Na-

15 tional Aeronautics and Space Administration.

16 (4) SECRETARY.—The term "Secretary" means
17 the Secretary of Transportation.

18 SEC. 703. AUTHORIZATION OF APPROPRIATIONS.

19 (a) AUTHORIZATIONS.—Section 48102(a) of title 49,
20 United States Code, is amended—

(1) in the matter before paragraph (1) by striking "and, for each of fiscal years 2012 through
2015, under subsection (g)";

24 (2) at the end of paragraph (9), by striking25 "and"; and

1	(3) by striking paragraph (10) and inserting
2	the following:
3	"(10) for fiscal year 2018, \$181,000,000, in-
4	cluding—
5	"(A) \$128,500,000 for Safety Research
6	and Development programs, including—
7	"(i) Fire Research and Safety;
8	"(ii) Propulsion and Fuel Systems;
9	"(iii) Advanced Materials/Structural
10	Safety;
11	"(iv) Aircraft Icing/Digital System
12	Safety;
13	"(v) Continued Airworthiness;
14	"(vi) Aircraft Catastrophic Failure
15	Prevention Research;
16	"(vii) Flightdeck/Maintenance/System
17	Integration Human Factors;
18	"(viii) System Safety Management;
19	"(ix) Air Traffic Control/Technical
20	Operations Human Factors;
21	"(x) Aeromedical Research;
22	"(xi) Weather Program;
23	''(xii) Unmanned Aircraft Systems
24	Research;

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1	"(xiii) NextGen–Alternative Fuels for
2	General Aviation;
3	"(xiv) Joint Planning and Develop-
4	ment Office;
5	"(xv) Ocean and Other Remote Loca-
6	tions ATS Research Program;
7	"(xvi) Cybersecurity Research Pro-
8	gram;
9	"(xvii) Cybersecurity Threat Modeling
10	Program;
11	"(xviii) Single Piloted Commercial
12	Cargo Aircraft Program; and
13	"(xix) UAV-Manned Aircraft Collision
14	Research Program;
15	"(B) \$26,000,000 for Economic Competi-
16	tiveness Research and Development programs,
17	including-
18	"(i) NextGen–Wake Turbulence;
19	"(ii) NextGen–Air Ground Integration
20	Human Factors;
21	"(iii) Next Gen–Weather Technology
22	in the Cockpit; and
23	"(iv) Commercial Space Transpor-
24	tation Safety;

1 "(C) \$20,000,000 for Environmental Sus-2 tainability Research and Development pro-3 grams, including— "(i) Environment and Energy; and 4 5 "(ii) NextGen-Environmental Re-6 search-Aircraft Technologies, Fuels and Metrics; and 7 "(D) \$6,500,000 for Mission Support pro-8 9 grams, including— "(i) System Planning and Resource 10 11 Management; and 12 "(ii) William J. Hughes Technical 13 Center Laboratory Facility; 14 "(11) for fiscal year 2019, \$186,000,000, including-15 "(A) \$131,000,000 for Safety Research 16 17 and Development programs, including— "(i) Fire Research and Safety; 18 19 "(ii) Propulsion and Fuel Systems; 20 "(iii) Advanced Materials/Structural Safety; 21 "(iv) 22 Aircraft Icing/Digital System 23 Safety; "(v) Continued Airworthiness; 24

1	"(vi) Aircraft Catastrophic Failure
2	Prevention Research;
3	"(vii) Flightdeck/Maintenance/System
4	Integration Human Factors;
5	"(viii) System Safety Management;
6	"(ix) Air Traffic Control/Technical
7	Operations Human Factors;
8	"(x) Aeromedical Research;
9	"(xi) Weather Program;
10	''(xii) Unmanned Aircraft Systems
11	Research;
12	"(xiii) NextGen–Alternative Fuels for
13	General Aviation;
14	"(xiv) Joint Planning and Develop-
15	ment Office;
16	"(xv) Ocean and Other Remote Loca-
17	tions ATS Research Program;
18	"(xvi) Cybersecurity Research Pro-
19	gram;
20	"(xvii) Cybersecurity Threat Modeling
21	Program;
22	"(xviii) Single Piloted Commercial
23	Cargo Aircraft Program; and
24	"(xix) UAV-Manned Aircraft Collision
25	Research Program;

1	"(B) \$28,000,000 for Economic Competi-
2	tiveness Research and Development programs,
3	including-
4	"(i) NextGen–Wake Turbulence;
5	"(ii) NextGen–Air Ground Integration
6	Human Factors;
7	"(iii) Next Gen–Weather Technology
8	in the Cockpit; and
9	"(iv) Commercial Space Transpor-
10	tation Safety;
11	"(C) \$20,000,000 for Environmental Sus-
12	tainability Research and Development pro-
13	grams, including—
14	"(i) Environment and Energy; and
15	"(ii) NextGen–Environmental Re-
16	search–Aircraft Technologies, Fuels and
17	Metrics; and
18	"(D) \$7,000,000 for Mission Support pro-
19	grams, including—
20	"(i) System Planning and Resource
21	Management; and
22	"(ii) William J. Hughes Technical
23	Center Laboratory Facility;
24	"(12) for fiscal year 2020, \$190,000,000, in-
25	cluding—

1	"(A) \$133,500,000 for Safety Research
2	and Development programs, including—
3	"(i) Fire Research and Safety;
4	"(ii) Propulsion and Fuel Systems;
5	"(iii) Advanced Materials/Structural
6	Safety;
7	"(iv) Aircraft Icing/Digital System
8	Safety;
9	"(v) Continued Airworthiness;
10	"(vi) Aircraft Catastrophic Failure
11	Prevention Research;
12	"(vii) Flightdeck/Maintenance/System
13	Integration Human Factors;
14	"(viii) System Safety Management;
15	"(ix) Air Traffic Control/Technical
16	Operations Human Factors;
17	"(x) Aeromedical Research;
18	"(xi) Weather Program;
19	''(xii) Unmanned Aircraft Systems
20	Research;
21	"(xiii) NextGen–Alternative Fuels for
22	General Aviation;
23	"(xiv) Joint Planning and Develop-
24	ment Office;

1	"(xv) Ocean and Other Remote Loca-
2	tions ATS Research Program;
3	"(xvi) Cybersecurity Research Pro-
4	gram;
5	"(xvii) Cybersecurity Threat Modeling
6	Program;
7	"(xviii) Single Piloted Commercial
8	Cargo Aircraft Program; and
9	"(xix) UAV-Manned Aircraft Collision
10	Research Program;
11	((B) \$29,000,000 for Economic Competi-
12	tiveness Research and Development programs,
13	including—
14	"(i) NextGen–Wake Turbulence;
15	"(ii) NextGen–Air Ground Integration
16	Human Factors;
17	"(iii) Next Gen–Weather Technology
18	in the Cockpit; and
19	"(iv) Commercial Space Transpor-
20	tation Safety;
21	"(C) \$20,000,000 for Environmental Sus-
22	tainability Research and Development pro-
23	grams, including—
24	"(i) Environment and Energy; and

1	"(ii) NextGen-Environmental Re-
2	search–Aircraft Technologies, Fuels and
3	Metrics; and
4	"(D) \$7,500,000 for Mission Support pro-
5	grams, including—
6	"(i) System Planning and Resource
7	Management; and
8	"(ii) William J. Hughes Technical
9	Center Laboratory Facility;
10	"(13) for fiscal year 2021, \$195,000,000;
11	"(14) for fiscal year 2022, \$200,000,000; and
12	"(15) for fiscal year 2023, \$204,000,000.".
13	(b) Contingency Funding.—Section 48102(b) of
14	title 49, United States, Code, is amended by inserting
15	after paragraph (3) the following:
16	"(4) Notwithstanding subsection (a), no funds are
17	authorized for a fiscal year for Environmental Sustain-
18	ability Research and Development programs unless the
19	full amount authorized for that fiscal year under sub-
20	section (a) for the all of the following programs is appro-
21	priated for that fiscal year:
22	"(A) Safety Research and Development pro-
23	grams.
24	"(B) Economic Competitiveness Research and
25	Development programs.

"(C) Mission Support programs.". 1 2 (c) ANNUAL SUBMISSION OF THE NATIONAL AVIA-3 TION RESEARCH PLAN.—Section 48102(g) of title 49, 4 United States, Code, is amended to read as follows: 5 "(g) ANNUAL SUBMISSION OF THE NATIONAL AVIA-TION RESEARCH PLAN.—Notwithstanding subsection (a), 6 7 no funds are authorized to be appropriated for the Office 8 of the Administrator for a fiscal year unless the Secretary 9 has submitted the national aviation research plan to Con-10 gress no later than the date of submission of the President's budget request to Congress for that fiscal year, as 11 required under section 44501(c).". 12

13 Subtitle B—FAA Research and 14 Development Organization

15 SEC. 711. ASSOCIATE ADMINISTRATOR FOR RESEARCH AND

16 **DEVELOPMENT.**

(a) APPOINTMENT.—Not later than 3 months after
the date of enactment of this Act, the Administrator shall
appoint an Associate Administrator for Research and Development.

(b) SENIOR EXECUTIVE SERVICE.—The Associate
Administrator for Research and Development shall be a
Senior Executive Service position.

(c) RESPONSIBILITIES.—The Associate Adminis trator for Research and Development shall, at a minimum,
 be responsible for—

4 (1) management and oversight of all the FAA's
5 research and development programs and activities;
6 and

7 (2) production of all congressional reports from
8 the FAA relevant to research and development, in9 cluding the national aviation research plan required
10 under section 44501(c) of title 49, United States
11 Code.

(d) DUAL APPOINTMENT.—The Associate Administrator for Research and Development may be a dual-appointment, holding the responsibilities of another Associate Administrator.

16 SEC. 712. RESEARCH ADVISORY COMMITTEE.

17 (a) ADVICE AND RECOMMENDATIONS.—Section
18 44508(a)(1)(A) of title 49, United States Code, is amend19 ed to read as follows:

20 "(A) provide advice and recommendations to 21 the Administrator of the Federal Aviation Adminis-22 tration and Congress about needs, objectives, plans, 23 approaches, content, and accomplishments of all 24 aviation research and development activities and 25 programs carried out, including those under sections

1

3 (b) WRITTEN REPLY TO RESEARCH ADVISORY COM4 MITTEE.—Section 44508 of title 49, United States Code,
5 is amended by adding at the end the following:

6 "(f) WRITTEN REPLY.—

7 "(1) IN GENERAL.—Not later than 60 days
8 after receiving any recommendation from the re9 search advisory committee, the Administrator shall
10 provide a written reply to the research advisory com11 mittee that, at a minimum—

12 "(A) clearly states whether the Adminis13 trator accepts or rejects the recommendations;
14 "(B) explains the rationale for the Admin15 istrator's decision;

16 "(C) sets forth the timeframe in which the
17 Administrator will implement the recommenda18 tion; and

19 "(D) describes the steps the Administrator20 will take to implement the recommendation.

21 "(2) TRANSPARENCY.—The written reply to the
22 research advisory committee, when transmitted to
23 the research advisory committee, shall be—

24 "(A) made publicly available on the re-25 search advisory committee website; and

1	"(B) transmitted to the Committee on
2	Science, Space, and Technology of the House of
3	Representatives and the Committee on Com-
4	merce, Science, and Transportation of the Sen-
5	ate.
6	"(3) NATIONAL AVIATION RESEARCH PLAN.—
7	The national aviation research plan required under
8	section 44501(c) shall include a summary of all re-
9	search advisory committee recommendations and a
10	description of the status of their implementation.".
11	Subtitle C—Unmanned Aircraft
12	Systems
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13	SEC. 721. UNMANNED AIRCRAFT SYSTEMS RESEARCH AND
	SEC. 721. UNMANNED AIRCRAFT SYSTEMS RESEARCH AND DEVELOPMENT ROADMAP.
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13 14	DEVELOPMENT ROADMAP.
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 13 14 15 16 17 18 	DEVELOPMENT ROADMAP. No funds are authorized to be appropriated for the Office of the Administrator for a fiscal year unless the Secretary has submitted the unmanned aircraft systems roadmap to Congress on an annual basis as required
 13 14 15 16 17 18 19 	DEVELOPMENT ROADMAP. No funds are authorized to be appropriated for the Office of the Administrator for a fiscal year unless the Secretary has submitted the unmanned aircraft systems roadmap to Congress on an annual basis as required under section 45502(a) of title 49, United States Code,
 13 14 15 16 17 18 19 20 	DEVELOPMENT ROADMAP. No funds are authorized to be appropriated for the Office of the Administrator for a fiscal year unless the Secretary has submitted the unmanned aircraft systems roadmap to Congress on an annual basis as required under section 45502(a) of title 49, United States Code, (as added by this Act).
 13 14 15 16 17 18 19 20 21 	DEVELOPMENT ROADMAP. No funds are authorized to be appropriated for the Office of the Administrator for a fiscal year unless the Secretary has submitted the unmanned aircraft systems roadmap to Congress on an annual basis as required under section 45502(a) of title 49, United States Code, (as added by this Act). SEC. 722. PROBABILISTIC METRICS FOR EXEMPTIONS.

1	(1) develop parameters to conduct research and
2	development for probabilistic metrics to enable the
3	identification of hazards and the assessment of risks
4	as necessary to make determinations under section
5	45505(a) of title 49, United States Code, (as added
6	by this Act) that certain unmanned aircraft systems
7	may operate safely in the national airspace system;
8	(2) identify additional research needed to more
9	effectively develop and use such metrics and make
10	such determinations; and
11	(3) in developing parameters for probabilistic
12	metrics, this study shall take into account the utility
13	of performance standards to make determinations
14	under section 45505(a) of title 49, United States
15	Code, (as added by this Act).
16	(b) Consideration of Results.—The Adminis-
17	trator shall consider the results of the study conducted
18	under subsection (a) when making a determination de-
19	scribed in subsection (a)(1).
20	(c) REPORT.—Not later than 9 months after the date
21	of enactment of this Act, the Administrator shall transmit
22	the results of the study conducted under subsection (a)
23	to the Committee on Science, Space, and Technology of
24	the House of Representatives and the Committee on Com-
25	merce, Science, and Transportation of the Senate.

1 SEC. 723. PROBABILISTIC ASSESSMENT OF RISKS.

2 The Administrator shall conduct research and devel-3 opment to enable a probabilistic assessment of risks to in-4 form requirements for standards for operational certifi-5 cation of public unmanned aircraft systems in the national 6 airspace.

7 SEC. 724. UNMANNED AERIAL VEHICLE-MANNED AIRCRAFT 8 COLLISION RESEARCH.

9 (a) RESEARCH.—The Administrator shall coordinate 10 with NASA to conduct comprehensive testing of un-11 manned aerial vehicles colliding with a manned aircraft, 12 including—

(1) collisions between unmanned aerial vehicles
of various sizes, traveling at various speeds, and
commercial jet airliners of various sizes, traveling at
various speeds;

(2) collisions between unmanned aerial vehicles
of various sizes, traveling at various speeds, and propeller planes of various sizes, traveling at various
speeds;

(3) collisions between unmanned aerial vehicles
of various sizes, traveling at various speeds, and
blimps of various sizes, traveling at various speeds;
(4) collisions between unmanned aerial vehicles
of various sizes, traveling at various speeds, and

1	rotorcraft of various sizes, traveling at various
2	speeds; and
3	(5) collisions between unmanned aerial vehicles
4	and various parts of the aforementioned aircraft, in-
5	cluding-
6	(A) windshields;
7	(B) noses;
8	(C) engines;
9	(D) radomes;
10	(E) propellers; and
11	(F) wings.
12	(b) REPORT.—Not later than one year after the date
13	of enactment of this Act, the Administrator shall transmit
14	a report summarizing the costs and results of research
15	under this section to the Committee on Science, Space,
16	and Technology of the House of Representatives and the
17	Committee on Commerce, Science, and Transportation of
18	the Senate.
19	SEC. 725. SPECIAL RULE FOR RESEARCH AND DEVELOP-
20	MENT.

Except as necessary to support enforcement action under applicable provisions of law against persons operating unmanned aircraft in a manner that endangers the safety of the national airspace system, notwithstanding any other provision of law relating to the incorporation

1	of unmanned aircraft systems into FAA plans and policies,
2	the Administrator may not promulgate any rule or regula-
3	tion regarding the operation of an unmanned aircraft sys-
4	tem—
5	(1) that is flown strictly for research and devel-
6	opment use;
7	(2) that is operated less than 400 feet above
8	the ground and in Class G airspace;
9	(3) that is operated in a manner that does not
10	interfere with and gives way to any manned aircraft;
11	and
12	(4) when flown within 5 miles of an airport, the
13	operator of the aircraft provides the airport operator
14	and the airport air traffic control tower (when an air
15	traffic facility is located at the airport) with prior
16	notice of the operation (unmanned aircraft operators
17	flying from a permanent location within 5 miles of
18	an airport should establish a mutually-agreed upon
19	operating procedure with the airport operator and
20	the airport air traffic control tower (when an air
21	traffic facility is located at the airport)).

1	SEC. 726. BEYOND LINE-OF-SIGHT RESEARCH AND DEVEL-
2	OPMENT.
3	(a) AMENDMENTS.—Section 332(c)(2) the FAA
4	Modernization and Reform Act of 2012 (49 U.S.C. 40101
5	note) is amended—
6	(1) by striking "Administrator shall" and in-
7	serting "Administrator";
8	(2) at the beginning of each of subparagraphs
9	(A) through (F), by inserting "shall";
10	(3) at the end of subparagraph (E), by striking
11	"and";
12	(4) at the end of subparagraph (F), by striking
13	the period and inserting a semicolon; and
14	(5) by adding at the end the following new sub-
15	paragraphs:
16	"(G) shall allow beyond line-of-sight oper-
17	ation of unmanned aircraft systems to be flown
18	within the boundaries of a test range estab-
19	lished under this subsection;
20	"(H) may promulgate regulations gov-
21	erning beyond line-of-sight operation of un-
22	manned aircraft systems flown within the
23	boundaries of a test range established under
24	this subsection for the purposes of public safe-
25	ty; and

 "(I) shall allow NASA to authorize operation of beyond line-of-sight unmanned aircraft
 systems within the boundaries of any NASA center or facility.".

5 (b) STATUTORY CONSTRUCTION.—Nothing in the 6 amendments made by subsection (a) shall be construed to 7 limit the authority of the Administrator to pursue enforce-8 ment action under applicable provisions of law against per-9 sons operating unmanned aircraft in a manner that en-10 dangers the safety of the national airspace system.

11 Subtitle D—Cybersecurity

12 SEC. 731. CYBER TESTBED.

13 Not later than 6 months after the date of enactment of this Act, the Administrator shall develop an integrated 14 15 Cyber Testbed for research, development, evaluation, and validation of air traffic control modernization programs or 16 17 technologies, before they enter the national airspace system, as being compliant with FAA data security regula-18 19 tions. The Cyber Testbed shall be part of an integrated 20 research and development test environment capable of cre-21 ating, identifying, defending, and solving cybersecurity-re-22 lated problems for the national airspace system. This inte-23 grated test environment shall incorporate integrated test 24 capacities within the FAA related to the national airspace 25 system and NextGen.

1	SEC. 732. CABIN COMMUNICATIONS, ENTERTAINMENT, AND
2	INFORMATION TECHNOLOGY SYSTEMS CY-
3	BERSECURITY VULNERABILITIES.
4	(a) EVALUATION.—The Administrator shall evaluate
5	and determine the research and development needs associ-
6	ated with cybersecurity vulnerabilities of cabin commu-
7	nications, entertainment, and information technology sys-
8	tems on civil passenger aircraft. This evaluation shall in-
9	clude research and development to address—
10	(1) technical risks and vulnerabilities;
11	(2) potential impacts on the national airspace
12	and public safety; and
13	(3) identification of deficiencies in cabin-based
14	cybersecurity.
15	(b) ASSESSMENT.—The Administrator shall—
16	(1) conduct an assessment of opportunities to
17	cooperate with the private sector in conducting air-
18	craft in-cabin cybersecurity research and develop-
19	ment; and
20	(2) provide recommendations to improve re-
21	search and development on cabin-based cybersecurity
22	vulnerabilities.
23	(c) REPORT.—Not later than 9 months after the date
24	of enactment of this Act, the Administrator shall transmit
25	a report on the results of activities under this section to
26	the Committee on Science, Space, and Technology of the

House of Representatives and the Committee on Com merce, Science, and Transportation of the Senate. This
 report may contain classified annexes.

4 SEC. 733. CYBERSECURITY THREAT MODELING.

5 (a) Program.—

6 (1) IN GENERAL.—The Administrator shall con-7 sult the National Institute of Standards and Tech-8 nology to research and develop an internal FAA cy-9 bersecurity threat modeling program to detect cyber-10 security vulnerabilities, track how those 11 vulnerabilities might be exploited, and assess the 12 magnitude of harm that could be caused by the ex-13 ploitation of those vulnerabilities.

14 (2) UPDATES.—This program shall be updated
15 regularly, not less than once every 5 years.

16 (b) REPORT.—Not later than one year after the date of enactment of this Act, and within 7 days of each threat 17 modeling program update under subsection (a)(2), the Ad-18 ministrator shall transmit a report to the Committee on 19 20 Science, Space, and Technology of the House of Rep-21 resentatives and the Committee on Commerce, Science, 22 and Transportation of the Senate detailing the status, re-23 sults, and composition of the threat modeling program.

1 SEC. 734. NATIONAL INSTITUTE OF STANDARDS AND TECH-2 NOLOGY CYBERSECURITY STANDARDS.

Not later than 6 months after the date of enactment
of this Act, the FAA shall, in consultation with the National Institute of Standards and Technology, transmit to
the Committee on Science, Space, and Technology of the
House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate a report
that includes—

(1) a cybersecurity standards plan to implement
National Institute of Standards and Technology revisions to cybersecurity guidance documents within
timeframes set by the Office of Management and
Budget; and

(2) an explanation of why any such recommendations are not incorporated in the plan or
are not incorporated within such timeframes.

18 SEC. 735. CYBERSECURITY RESEARCH COORDINATION.

19 The Administrator shall, where feasible, cooperate on 20 cybersecurity research and development with other international air traffic management organizations, including 21 the European Aviation Safety Agency, the United King-22 Civil Aviation 23 dom Authority, Nav Canada, and 24 Airservices Australia.

3 (a) ESTABLISHMENT.—Not later than 6 months after 4 the date of enactment of this Act, the FAA, in consulta-5 tion with other agencies as appropriate, shall establish a 6 research and development program to improve the cyber-7 security of civil aircraft and the national airspace system.

8 (b) PLAN.—

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9 (1) IN GENERAL.—Not later than 1 year after 10 the date of enactment of this Act, the FAA shall de-11 velop a plan for the research and development pro-12 gram established under subsection (a) that contains 13 objectives, proposed tasks, milestones, and a 5-year 14 budgetary profile.

15 (2) NATIONAL ACADEMIES' STUDY.—The Ad-16 ministrator shall—

17 (A) enter into an arrangement with the
18 National Academies for a study of the plan de19 veloped under paragraph (1); and

(B) provide the results of that study to the
Committee on Science, Space, and Technology
of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate not later than 18 months
after the date of enactment of this Act.

Subtitle E—FAA Research and Development Activities

3 SEC. 741. RESEARCH PLAN FOR THE CERTIFICATION OF
4 NEW TECHNOLOGIES INTO THE NATIONAL
5 AIRSPACE SYSTEM.

6 Not later than 1 year after the date of enactment 7 of this Act, the Administrator, in consultation with NASA, 8 shall transmit a comprehensive research plan for the cer-9 tification of new technologies into the national airspace 10 system to the Committee on Science, Space, and Technology of the House of Representatives and the Committee 11 12 on Commerce, Science, and Transportation of the Senate. 13 This plan shall identify research necessary to support the 14 certification and implementation of NextGen, including both ground and air elements, and explain the plan's rela-15 tionship to other activities and procedures required for 16 certification and implementation of new technologies into 17 18 the national airspace system. This plan shall be informed by and conform to the recommendations of the National 19 Research Council report titled "Transformation in the 2021Air—A Review of the FAA Research Plan", issued on 22 June 8, 2015. This report shall include, at a minimum— 23 (1) a description of the strategic and prescrip-24 tive value of the research plan;

(2) an explanation of the expected outcomes
 from executing the plan;

3 (3) an assessment of the FAA's plan to use re4 search and development to improve cybersecurity
5 over the next 5 years, taking into account the cyber6 security research and development plan developed
7 under section 736(b);

8 (4) an assessment of the current software as9 surance practices, and the desired level or attributes
10 to target in the software assurance program;

11 (5) cost estimates, planned schedules, and per-12 formance benchmarks, including specific tasks, mile-13 stones, and timelines and including an identification 14 of cost and schedule reserves, for the certification of 15 new technologies into the national airspace system, 16 including NextGen, Automatic Dependent Surveil-17 lance-Broadcast, Data Communications, National 18 Airspace System Voice System, Collaborative Air 19 Traffic Management Technologies, NextGen Weath-20 er, and System Wide Information Management;

(6) methods for integrating emerging technologies throughout NextGen's development, certification, and implementation process; and

(7) best practices in research and development
 used by other organizations, such as NASA,
 NavCanada, and Eurocontrol.

4 SEC. 742. AVIATION FUEL RESEARCH, DEVELOPMENT, AND 5 USAGE.

6 The Administrator may conduct or supervise re-7 search, development, and service testing, currently being 8 conducted under the Piston Aviation Fuels Initiative 9 (PAFI) unleaded avgas program, that is required to allow 10 the use of an unleaded aviation gasoline in existing air-11 craft as a replacement for leaded gasoline.

12 SEC. 743. AIR TRAFFIC SURVEILLANCE OVER OCEANS AND 13 OTHER REMOTE LOCATIONS.

(a) ESTABLISHMENT OF PROGRAM.—The Administrator, in consultation with NASA and other relevant
agencies, shall establish a research and development program on civilian air traffic surveillance over oceans and
other remote locations. Such program shall—

(1) take into account the need for international
interoperability of technologies and air traffic control
systems; and

(2) recognize that Automatic Dependent Surveillance-Broadcast (ADS-B) is an element of the
Next Generation Air Transportation System.

1 (b) PILOT PROGRAM.—The Administrator shall es-2 tablish a pilot program to test, evaluate, and certify for 3 integration into the national airspace system air traffic 4 surveillance equipment for oceans and other remote loca-5 tions.

6 (c) PARTNERSHIP WITH PRIVATE INDUSTRY.—The
7 Administrator shall partner with private industry on the
8 research, development, testing, and evaluation under this
9 section.

10 (d) REPORT.—Not later than 18 months after the 11 date of enactment of this Act, the Administrator shall 12 transmit a report on activities under this section to the 13 Committee on Science, Space, and Technology of the 14 House of Representatives and the Committee on Com-15 merce, Science, and Transportation of the Senate.

16SEC. 744. SINGLE-PILOTED COMMERCIAL CARGO AIR-17CRAFT.

(a) PROGRAM.—The FAA, in consultation with
NASA and other relevant agencies, shall establish a research and development program in support of single-piloted cargo aircraft assisted with remote piloting and computer piloting.

(b) REVIEW.—The FAA, in consultation with NASA,shall conduct a review of FAA research and development

activities in support of single-piloted cargo aircraft as sisted with remote piloting and computer piloting.

3 (c) REPORT.—Not later than 6 months after the date
4 of enactment of this Act, the Administrator shall transmit
5 a report to the Committee on Science, Space, and Tech6 nology of the House of Representatives and the Committee
7 on Commerce, Science, and Transportation of the Senate
8 that describes—

9 (1) the program established under subsection10 (a); and

11 (2) the results of the review conducted under12 subsection (b).

13 SEC. 745. ELECTROMAGNETIC SPECTRUM RESEARCH AND 14 DEVELOPMENT.

15 The Administrator shall develop a program to re-16 search the use of spectrum in the civil aviation domain, 17 including aircraft and unmanned aircraft systems. This 18 research shall, at a minimum, address—

(1) how, operating within an Unmanned Aircraft System Traffic Management system, unmanned aircraft systems can safely use, for control
link, tracking, diagnostics, payload communication,
collaborative-collision avoidance (e.g. vehicle-to-vehicle communications), and other purposes—

25 (A) aviation-protected spectrum;

1	(B) commercial communications networks,
2	such as mobile communications networks; and
3	(C) any other licensed or unlicensed spec-
4	trum;
5	(2) how the reallocation of spectrum assigned
6	for use within frequency bands adjacent to those al-
7	located for position, navigation, and timing may im-
8	pact the safety of civil aviation; and
9	(3) measures to protect and mitigate against
10	spectrum interference in frequency bands used by
11	the civil aviation community to ensure public safety.
12	TITLE VIII—AVIATION REVENUE
13	PROVISIONS
14	SEC. 801. EXPENDITURE AUTHORITY FROM AIRPORT AND
15	AIRWAY TRUST FUND.
16	(a) IN GENERAL.—Section 9502(d)(1) of the Inter-
17	nal Revenue Code of 1986 is amended—
18	(1) in the matter preceding subparagraph (A)
19	by striking "October 1, 2018" and inserting "Octo-
20	1 1 202211 1
. .	ber 1, 2023''; and
21	(2) in subparagraph (A) by striking the semi-
21 22	

1	(b) Conforming Amendment.—Section 9502(e)(2)
2	of such Code is amended by striking "October 1, 2018"
3	and inserting "October 1, 2023".
4	SEC. 802. EXTENSION OF TAXES FUNDING AIRPORT AND
5	AIRWAY TRUST FUND.
6	(a) FUEL TAXES.—Section 4081(d)(2)(B) of the In-
7	ternal Revenue Code of 1986 is amended by striking "Sep-
8	tember 30, 2018" and inserting "September 30, 2023".
9	(b) TICKET TAXES.—
10	(1) PERSONS.—Section $4261(k)(1)(A)(ii)$ of
11	such Code is amended by striking "September 30,
12	2018" and inserting "September 30, 2023".
13	(2) PROPERTY.—Section $4271(d)(1)(A)(ii)$ of
14	such Code is amended by striking "September 30,
15	2018" and inserting "September 30, 2023".
16	(c) Fractional Ownership Programs.—
17	(1) Fuel tax.—Section 4043(d) of such Code
18	is amended by striking "September 30, 2021" and
19	inserting "September 30, 2023".
20	(2) TREATMENT AS NONCOMMERCIAL AVIA-
21	TION.—Section 4083(b) of such Code is amended by
22	striking "October 1, 2018" and inserting "October
23	1, 2023".
24	(3) EXEMPTION FROM TICKET TAXES.—Section
25	4261(j) of such Code is amended by striking "Sep-

- 1 tember 30, 2018" and inserting "September 30,
- 2 2023".