

SECTION-BY-SECTION SUMMARY

THE 21ST CENTURY AVIATION INNOVATION, REFORM, AND REAUTHORIZATION ACT H.R. 2997

Title I – Authorizations

Subtitle A – Funding of Federal Aviation Administration (FAA) Programs

Section 101. Airport Planning and Development and Noise Compatibility Planning and Programs. Authorizes from the Airport and Airway Trust Fund the following amounts for the Federal Aviation Administration’s Airport Improvement Program (AIP) account: \$3.424 billion for fiscal year 2018; \$3.499 billion for fiscal year 2019; \$3.576 billion for fiscal year 2020; \$3.655 billion for fiscal year 2021; \$3.735 billion for fiscal year 2022; and \$3.817 billion for fiscal year 2023. In addition, the obligation authority is extended to September 30, 2023.

Section 102. Facilities and Equipment. Authorizes from the Airport and Airway Trust Fund the following amounts for FAA’s Facilities & Equipment (F & E) account: \$2.920 billion for fiscal year 2018; \$2.984 billion for fiscal year 2019; and \$3.049 billion for fiscal year 2020. Starting in fiscal year 2020, the American Air Navigation Service Corporation (referred to in this document as “the Corporation”) will fund F & E activities related to air traffic control services from fees collected by the Corporation. Starting in fiscal year 2021, F & E activities, such as those related to safety oversight, that will remain with the FAA will be funded from the General Fund. Authorizes from the General Fund the following for FAA’s F & E account: \$189 million for fiscal year 2021; \$193 million for fiscal year 2022; and \$198 million for fiscal year 2023.

Section 103. FAA Operations. Authorizes from the General Fund the following for FAA’s Operations account: \$884 million for fiscal year 2018; \$912 million for fiscal year 2019; \$943 million for fiscal year 2020; \$1.967 billion for fiscal year 2021; \$2.010 billion for fiscal year 2022; and \$2.052 billion for fiscal year 2023. Authorizes from the Airport and Airway Trust Fund the following for FAA’s Operations account: \$9.347 billion for fiscal year 2018; \$9.522 billion for fiscal year 2019; and \$9.696 billion for fiscal year 2020. Starting in fiscal year 2020, the Corporation will fund all Operations activities related to air traffic control services from fees collected by the Corporation.

Section 104. Adjustment to AIP Program Funding. Discontinues a formula required in the FAA Modernization and Reform Act of 2012 that created additional contract authority for AIP if the appropriated funding levels for the F & E program were not equal to the authorized levels included in the Act.

Section 105. Funding for Aviation Programs. Discontinues the Airport and Airway Trust Fund guarantee included in the FAA Modernization and Reform Act of 2012, which provided a formula to determine the amount to be made available from the aviation trust fund each year to fund the FAA.

Section 106. Applicability. Technical provision setting the effective date of subtitle A at October 1, 2017.

Subtitle B – Passenger Facility Charges

Section 111. Passenger Facility Charge Modernization. Eliminates the following criteria imposed on passenger facility charges (PFC) of \$4 or \$4.50: (1) that the Secretary of Transportation (Secretary) must find, for medium or large hub airports, that a PFC of \$4 or \$4.50 will be used to fund a project that makes a “significant contribution to improving air safety and security, increasing competition among air carriers, reducing current or anticipated congestion, or reducing the impact of aviation noise on people living near the airport;” and (2) that the Secretary must find that a PFC of \$4 or \$4.50 will be used to fund a project that cannot be expected to be funded through AIP.

Section 112. Pilot Program for Passenger Facility Charge Authorizations. Expands the pilot program expediting the authorization of a PFC at nonhub airports to all primary airports.

Subtitle C – Airport Improvement Program Modifications

Section 121. Clarification of Airport Obligation to Provide FAA Airport Space. Prohibits the FAA from requiring airports to provide the agency with construction services or building space without compensation or reimbursement, with certain exceptions.

Section 122. Mothers’ Rooms at Airports. Requires, within two years of enactment, medium and large airports to maintain a “lactation area” in the sterile areas of each passenger terminal building for mothers to feed their infants. Allows the Secretary to temporarily waive the requirement that the lactation area be located in the sterile area if construction activities make it impracticable or unsafe to do so. Allows the construction or installation of lactation areas to be eligible for AIP funding at any commercial service airport.

Section 123. Extension of Competitive Access Reports. Extends the sunset date of competition access reports through fiscal year 2023.

Section 124. Grant Assurances. Allows general aviation airports to permit the construction of exclusively recreational aircraft by private individuals in airport hangars without violating any grant assurances. Permits the leasing of airport land not needed for aeronautical purposes to local governments for recreational use, provided the use is temporary and does not interfere with the safety of the airport.

Section 125. Government Share of Project Costs. Corrects an unintended consequence of the FAA Modernization and Reform Act of 2012 to ensure that small airports receiving fiscal year 2011 AIP grant funds for certain projects may complete the project at the originally intended cost share.

Section 126. Updated Veterans’ Preference. Updates the definition of “Afghanistan-Iraq war veteran” used for veterans’ preference purposes to carry out airport development projects.

Section 127. Special Rule. Extends for fiscal years 2018 through 2020 authority for airports without a classified status listed in the National Plan of Integrated Airport Systems to continue receiving the non-primary entitlement funding they received from AIP in fiscal year 2013.

Section 128. Marshall Islands, Micronesia, and Palau. Extends AIP eligibility for discretionary grants and funding from the Small Airport Fund to airports located in the Republic of the Marshall Islands, the Federated States of Micronesia, and Palau.

Section 129. Nondiscrimination. Ensures Indian tribes may establish employment and contracting preference for projects at tribally owned airports or airports located on Indian reservations.

Section 130. State Block Grant Program Expansion. Expands the number of states allowed to participate in the State Block Grant Program from 10 states to 20 states.

Section 131. Midway Island Airport. Extends the authority of the Secretary to enter into a reimbursable agreement with the Secretary of the Interior to provide AIP discretionary funds for airport development projects at Midway Island Airport.

Section 132. Property Conveyance Releases. Authorizes the Secretary to release an airport, city, or county from any of the terms, conditions, reservations, or restrictions contained in a deed in which the United States conveyed certain property. Requires that the airport, city, or county receive fair market value for the sale of any property interest and dedicate any sale proceeds to airport development.

Section 133. Minority and Disadvantaged Business Participation. Declares the findings of Congress that there remains a compelling need for the continuation of the airport disadvantaged business enterprise (DBE) program and the airport concessions DBE program.

Section 134. Contract Tower Program. Amends the FAA Contract Tower Programs in several ways. Before an airport is admitted into the contract tower program, the FAA performs a rigorous benefit-cost (b/c) analysis to ensure that the safety benefits will outweigh the economic costs. This section identifies the criteria that should be used to evaluate airports in the program as well as those applying to enter the program. Also outlines the criteria that may not be used by the FAA in the b/c analysis. Additionally, except for airports in the contract tower cost-share program, prohibits the Secretary from calculating a new b/c ratio for airports in the program unless the annual aircraft traffic at the airport decreases by more than 25 percent from the previous year or by more than 60 percent cumulatively over a three-year period. Requires the Secretary, within 90 days of receiving an application to the program, to calculate a b/c ratio for the purposes of selecting towers for participation in the program. Requires the Secretary to automatically add a 10-percentage point margin of error to the b/c ratio to acknowledge and account for the direct and indirect economic and other factors that are not included in the criteria the Secretary used in calculating that ratio. Outlines procedures to ensure that airports have an adequate opportunity to review and appeal the FAA's b/c analysis. Clarifies that construction and improvement of towers whose airport sponsors participated in the FAA Contract Tower

Program before the date of transfer of the operation of air traffic services to the Corporation will remain eligible for AIP grant funding and outlines what the eligibility requirements will be for such grant funding both before and after the date of transfer. Sets forth how safety oversight of contract towers will be conducted both before and after the date of transfer to the Corporation. Lastly, eliminates the cap on the federal share of contract tower construction costs.

Section 135. Airport Access Roads in Remote Locations. Expands the permissible use of AIP funds through fiscal year 2020 to include the development of an airport access road in a non-contiguous state for the purpose of enabling the construction of new airports.

Section 136. Buy America Requirements. Requires the FAA to issue an informal public notice of any project-specific Buy America waiver 10 days prior to issuance of the waiver. The justification of the waiver determination is required to be publicly available and easily accessible on the Department of Transportation's (DOT) website.

Subtitle D – Airport Noise and Environmental Streamlining

Section 151. Recycling Plans for Airports. Clarifies that projects appearing in an airport master plan must address the feasibility of solid waste recycling.

Section 152. Pilot Program Sunset. Repeals the airport ground support equipment emissions retrofit pilot program.

Section 153. Extension of Grant Authority for Compatible Land Use Planning and Projects by State and Local Governments. Extends the grant program for the compatible land use planning and project program through September 30, 2023.

Section 154. Updating Airport Noise Exposure Maps. Clarifies when airports must submit updated noise exposure maps to the Secretary in order to encourage additional participation in the Part 150 noise mitigation program.

Section 155. Stage 3 Aircraft Study. Directs the Comptroller General to conduct a review of the benefits, costs, and other impacts of a phaseout of stage 3 aircraft.

Section 156. Addressing Community Noise Concerns. Requires the FAA to consider the feasibility of dispersal headings or other lateral track variations to address noise concerns from affected communities when proposing new area navigation departure procedures or amending an existing procedure below 6,000 feet over noise sensitive areas.

Section 157. Study on Potential Health Impact of Overflight Noise. Directs the Administrator of the FAA (Administrator) to enter into an agreement with an eligible institution of higher education to conduct a study on the health impacts of noise from aircraft flights on residents exposed to a range of noise levels focusing on a major metropolitan area. The areas that may be studied include, but are not limited to, Boston, Chicago, New York, the Northern California Metroplex, Phoenix, the Southern California Metroplex, and Washington, District of Columbia.

Section 158. Environmental Mitigation Pilot Program. Directs the Secretary to carry out a pilot program comprised of no more than six projects at public-use airports aimed at achieving the most cost-effective and measurable reductions in or mitigation of the impacts of aircraft noise, airport emissions, and water quality at the airport or within five miles of the airport.

Section 159. Airport Noise Exposure. Directs the Administrator to conduct a review of the relationship between aircraft noise and its effect on communities surrounding airports. FAA is required to submit a report to Congress containing appropriate recommendations for revising land use compatibility guidelines in Part 150 of title 14, Code of Federal Regulations.

Section 160. Community Involvement in FAA NextGen Projects Located in Metroplexes. Directs the Administrator to conduct a review of the FAA’s community involvement in NextGen projects located in metroplexes. FAA is required to submit a report to Congress on how they can improve community involvement, how they will engage airports and communities in projects, and lessons learned from NextGen projects and pilot programs.

Section 161. Critical Habitat on or Near Airport Property. Directs the Secretary to work with other federal agencies and states to ensure that designations of critical habitat on or near airports do not interfere with the safe operation of aircraft.

Section 162. Clarification of Reimbursable Allowed Costs of FAA Memoranda of Agreement. Clarifies that certain noise mitigation projects are an eligible AIP expense under certain existing FAA memorandums of agreement.

Title II—American Air Navigation Services Corporation

This title transfers operation of air traffic services and related assets from the FAA to a separate not-for-profit corporate entity to provide more efficient operation and improvement of air traffic services in the United States.

Section 201. Purposes. Establishes that the purpose of the title is to transfer air traffic services from the FAA to a not-for-profit corporate entity to provide more efficient operation and improvement of air traffic services.

Subtitle A – Establishment of Air Traffic Services Provider

Section 211. American Air Navigation Services Corporation. Amends title 49, United States Code, by inserting a new Subtitle XI – the American Air Navigation Services Corporation at its end. The new Subtitle XI contains the following provisions:

Chapter 901—General Provisions

Section 211 of the bill also adds a new chapter 901 of title 49, United States Code, by adding the following new section.

Section 90101. Definitions. Provides a number of definitions and sets October 1, 2020, as the date of transfer, on which the American Air Navigation Services Corporation assumes operational control of air traffic services from the FAA.

Chapter 903 – Establishment of Air Traffic Services Provider; Transfer of Air Traffic Services

Section 211 of the bill also adds a new chapter 903 of title 49, United States Code, by adding the following new sections.

Section 90301. Establishment of Corporation. Establishes the American Air Navigation Services Corporation (hereinafter “Corporation”) as a federally chartered, not-for-profit corporation; entitles the Corporation to exclusive use of the name American Air Navigation Services Corporation; allows the Corporation to be incorporated in a state of its choosing; and allows it to do business under a name of its choosing.

Section 90302. Transfer of Air Traffic Services. Directs the Secretary to transfer operational control over air traffic services within the United States airspace and airspace delegated to the United States to the Corporation on the date of transfer. Grants the Corporation exclusive permission to provide air traffic services within United States airspace, except for the Department of Defense (DOD) (as determined by the President), entities to which the United States has delegated certain air traffic responsibilities, entities with which the Corporation has contracted, and certain providers of unmanned aircraft traffic management systems.

Section 90303. Role of Secretary in Transferring Air Traffic Services to Corporation. Directs the Secretary to manage and execute the transfer of air traffic services to the Corporation. Prohibits the Secretary from delegating authority under the subtitle to the Administrator unless otherwise provided.

Section 90304. Status and Applicable Laws. Establishes the legal status and laws applicable to the Corporation. Clarifies that the federal government is not liable for any actions or inactions of the Corporation. Directs that the Corporation be required to maintain its not-for-profit status under the Internal Revenue Code of 1986. Clarifies that the federal government does not implicitly or explicitly guarantee the Corporation’s debt.

Section 90305. Nomination Panels for Board. Defines the composition, terms and qualifications of the Nomination Panels for the Board of Directors of the Corporation. The Nomination Panels will be responsible for nominating qualified persons to serve on the Board of Directors of the Corporation. The Nomination Panels will be comprised of representatives appointed by the following aviation stakeholder groups: passenger air carriers, cargo carriers, regional air carriers, general aviation, business aviation, air traffic controllers, airports, and commercial pilots.

Section 90306. Board of Directors. Vests the powers of the Corporation in a Board of Directors that governs the Corporation. Establishes the following composition of the Board:

- The Chief Executive Officer (CEO);
- 2 directors appointed by the Secretary of Transportation;
- 1 director nominated by the passenger air carrier nomination panel;
- 1 director nominated by the cargo air carrier nomination panel;
- 1 director nominated by the regional air carrier nomination panel;
- 1 director nominated by the general aviation nomination panel;
- 1 director nominated by the business aviation nomination panel;
- 1 director nominated by the air traffic controller nomination panel;
- 1 director nominated by the airport nomination panel;
- 1 director nominated by the commercial pilot nomination panel;
- 2 at-large directors nominated and selected by the other directors.

This section outlines the nomination and appointment processes for both before and after the date of transfer. Before the date of transfer, each nomination panel submits to the Secretary a list, chosen by consensus, of four individuals nominated to be directors. The Secretary is required, no later than 30 days after the last nomination list submission, to appoint two individuals to be directors, and select the appropriate number of individuals to be directors from each list submitted by the nomination panels. After the date of transfer, the lists of four individuals nominated to be Directors are submitted to the Board of Directors for selection. The Secretary continues the appointment of two directors to fill vacant seats.

The section also outlines multiple other duties of the Board; establishes the authority, terms, requirements, and certain processes of the Board; and outlines the reporting requirements and accountability of the Corporation.

This section directs that each Director will serve terms that are four years in duration and imposes a term limitation eight years.

Section 90307. Fiduciary Duties and Qualifications of Directors. Outlines the qualifications necessary to serve on the Board and establishes the fiduciary duties of a Director to be solely and exclusively to the Corporation and not to the Nomination Panels, nor the stakeholder groups that nominated them. Directors must be United States citizens and may not be a government employee, employee of a union, or employee of a business that is a user of the Corporation's services or has a material interest in the Corporation. It also includes a private right of action for the Corporation in the event of breach of a Director's fiduciary duty.

Section 90308. Bylaws and Duties. Outlines the required bylaws of the Corporation and the duties and responsibilities of the Board including:

- Adoption of an annual budget;

- Approval of a strategic plan and updates to that plan;
- Adoption of an annual action plan;
- Authorization for issuance of indebtedness;
- Assessment, modification, and collection of air traffic services charges and fees;
- Hiring and supervision of the CEO;
- Establishment and maintenance of an appropriately funded reserve fund;
- Adoption of a code of conduct and code of ethics for Directors, officers, agents, and employees of the Corporation;
- Establishment of a process to ensure the fiduciary duty of a Director is solely and exclusively to the Corporation;
- Establishment of a process to remove a Director; and
- Adoption of a process for filling vacancies on the Board.

Section 90309. Committees of Board; Independent Auditors. Requires the Board of Directors to establish a Safety Committee, a Compensation Committee, a Technology Committee, and any other committee the Board deems is necessary or appropriate to carry out the Corporation’s responsibilities. Requires that the Corporation retain independent auditors to review financial statements and internal controls.

Section 90310. Advisory Board. Establishes an Advisory Board to provide policy advice to the Board of Directors and gives the Advisory Board the authority to submit recommendations for independent directors. The Advisory Board will include not more than 15 members, including representatives of air carriers, general aviation, business aviation, commercial service airports; operators and manufacturers of commercial unmanned aircraft systems; appropriate labor organizations; Department of Defense; and small communities, including those served by nonhub airports.

Section 90311. Officers and Their Responsibilities. Requires the Board of Directors to select and hire a CEO, establishes the CEO’s duties and scope of authority, and authorizes an interim CEO position to serve prior to the date of transfer and until the Board of Directors hires a CEO. It also sets forth the process for the CEO to appoint a Chief Operating Officer and a Chief Financial Officer subject to the approval of the Board.

Section 90312. Authority of Corporation. Outlines the general corporate powers of the Corporation, including the ability to enter contracts, acquire property, indemnify employees, and be a party to lawsuits. Prohibits the Corporation from selling or issuing equity shares in the Corporation.

Section 90313. Charges and Fees for Air Traffic Services. Allows the Corporation to assess and collect charges and fees from certain categories of air traffic services users beginning on the date of transfer. Outlines the duties of the Board to approve air traffic charges and fees.

Establishes processes for providing air traffic services users notice of any changes in fees or charges.

Requires the Corporation to publish an initial fee schedule at least 180 days before the date of transfer that must be approved by the Secretary. Increases in charges or fees also require Secretarial approval and must be submitted at least 90 days before the effective date.

Establishes criteria for Secretarial reviews including consistency with the United States international obligations, “International Civil Aviation Organization’s (ICAO) Policies on Charges for Air Navigation Services” (Ninth Edition), non-discrimination, safety considerations, and the Corporation’s financial requirements.

Prohibits charges and fees on public aircraft operations, including those operated by the Armed Services, and general aviation operations.

Sets forth that users will incur an obligation to pay fees upon the rendering of air traffic services by the Corporation. Allows the Corporation to file suit to collect delinquent fees. Allows the Corporation to assess penalties and interest for delinquent payment.

Section 90314. Preemption of Authority over Air Traffic Services. Preempts the application of state, local, and tribal law to air traffic control services.

Section 90315. Actions by and Against Corporation. Gives federal courts, rather than state or local courts, original jurisdiction over any lawsuit by or against the Corporation. Limits the ability of Corporation employees to provide expert testimony or expert opinion in certain circumstances.

Section 90316. Transfer of Federal Personnel to Corporation. Sets forth the process, timing, and other requirements related to the transfer of personnel and activities from the FAA to the Corporation. Requires the Secretary to begin a process to determine which employees, categories of employees, and activities of the FAA will be transferred to the Corporation. This process must be completed 180 days prior to the date of transfer. Contains certain protections of benefits for employees that are transferred to the Corporation and related processes. Ensures the ongoing validity of all required credentials, certificates, clearances, and any other permissions or approvals necessary for employees transferred to the Corporation to continue their work on the date of transfer and beyond. Contains processes to resolve certain employment-related issues that may arise during transition.

Section 90317. Transfer of Facilities to Corporation. Sets forth a process by which the Secretary must identify and transfer assets to the Corporation necessary to carry out air traffic services. Requires that the Corporation use proceeds from the sale of any assets received from the government to acquire or improve new air navigation facilities or other assets. Requires the Corporation to maintain equipment that is located in a noncontiguous state of the United States that is determined necessary to the Corporation. Establishes a moratorium on consolidation or realignment of air traffic services facilities until requisite processes are established, and directs the Corporation to establish a process

for the consolidation or realignment of facilities, in consultation with labor, six months before the date of transfer.

Section 90318. Approval of Transferred Air Navigation Facilities and Other Equipment. Authorizes the Corporation to operate air navigation facilities and other assets received from the FAA without separate certification or approval.

Section 90319. Use of Spectrum Systems and Data. Directs the Secretary to provide the Corporation with access to the spectrum systems (and any successor systems) and any data from those systems, that the FAA had been using before the date of transfer to provide air traffic services.

Section 90320. Transition Plan. Requires the Secretary, after conferring with the CEO of the Corporation, to establish a transition team whose purpose is to develop a transition plan, to be reviewed by the Secretary, and if approved, utilized by DOT during the transition period of air traffic services from FAA to the Corporation.

Chapter 905 – Regulation of Air Traffic Services Provider.

Section 211 of the bill also adds a new chapter 905 of title 49, United States Code, by adding the following new sections:

Section 90501. Safety Oversight and Regulation of Corporation. Directs DOT to conduct safety oversight of the Corporation, including the issuance of performance-based regulations and minimum safety standards for the operation of air traffic services as well as for the certification and operation of air navigation facilities. Directs DOT to identify the policies and administrative materials of the FAA for providing air traffic services before the date of transfer that will apply to the Corporation after the date of transfer. Requires the Corporation to submit any proposals to change airspace or traffic management procedures to DOT, who must approve, disapprove, or modify such proposals on an expedited basis. Allows the Secretary to delegate safety oversight functions to the Administrator. Brings oversight of the Corporation in line with the rest of the aviation industry.

Section 90502. Resolution of Disputes Concerning Air Traffic Services Charges and Fees. Establishes a dispute resolution mechanism for fees assessed to users. Requires that the Secretary establish a process for the handling of complaints and make determinations of correctness of fees.

Section 90503. International Agreements and Activities. Requires that the Corporation provide air traffic services in a manner consistent with the United States sovereign obligations under various international agreements or applicable foreign laws. Clarifies that the Corporation cannot represent or negotiate on behalf of the United States before any foreign government or international organization.

Section 90504. Availability of Safety Information. Requires that the Corporation provide users with the same safety information provided to users by the FAA before the date of transfer, as well as any additional safety information necessary for safe use of air traffic services. Permits the Corporation to provide weather information and maps used by flight crews.

Section 90505. Reporting of Safety Violations to FAA. Requires the Corporation to report possible safety violations it observes to the FAA, and assist the FAA in any related enforcement action.

Section 90506. Insurance Requirements. Requires that the Corporation to obtain insurance policies and coverages sufficient to cover the anticipated liability risks of its operations, including indemnification of employees acting within their scope of employment.

Chapter 907 – General Rights of Access to Airspace, Airports, and Air Traffic Services Vital to Ensuring Safe Operations for All Users

Section 211 of the bill adds a new chapter 907 of title 49, United States Code, by adding the following new sections.

Section 90701. Access to Airspace. Directs the Secretary to ensure that no user is denied access to airspace on the basis of the user being exempt from charges and fees.

Section 90702. Access to Airports. Requires the Secretary to determine whether a proposal to modify air traffic management procedures, assignments, or classifications of airspace would materially reduce access to a public use airport, which includes general aviation or rural airports.

Section 90703. Contract Tower Service After Date of Transfer. Directs the Secretary to take necessary actions to ensure the Corporation meets all contractual obligations of FAA contract towers that were in operation before the date of transfer. Outlines special rules governing the proposed closure of air traffic control towers that participated in FAA Contract Tower Program before the date of transfer when the proposed closure would result in an airspace change or reclassification. Includes a process for meaningful analysis of potential impacts of such a closure and community involvement. Outlines the impacts that must be analyzed by the Corporation as part of the review process.

Section 90704. Availability of Safety Information to General Aviation Operators. Requires the Corporation, in carrying out section 90504, to disclose all safety information to air traffic services users, including general aviation operators and the public.

Section 90705. Special Rules and Appeals Process for Air Traffic Management Procedures, Assignments, and Classifications of Airspace. Sets forth special rules and decisional standards for the Secretary when reviewing a proposal by the Corporation to

modify, reduce, decommission, or eliminate an air traffic service or navigation facility that would hinder access to a public-use airport or airspace for any class, category, or type of aircraft in operation. Outlines the judicial review process for such determinations.

Section 90706. Definitions. Defines the terms “material reduction” and “rural airport” for purposes of this chapter.

Chapter 909 – Continuity of Air Traffic Services to Department of Defense and Other Public Agencies.

Section 211 of the bill adds a new chapter 909 of title 49, United States Code, by adding the following new sections.

Section 90901. Continuity of Air Traffic Services Provided by Department of Defense. As directed by the President, permits the DOD to provide air traffic services within United States airspace and international airspace delegated to the United States after the date of transfer.

Section 90902. Military and Other Public Aircraft Exempt from User Fees. Prohibits the Corporation from imposing any charges or fees on aircraft owned or operated by the Armed Forces and other public aircraft.

Section 90903. Air Traffic Services for Federal Agencies. Requires the Secretary to establish processes ensuring that the Corporation supports all United States government activities supported by FAA before the date of transfer and on an ongoing basis thereafter.

Section 90904. Emergency Powers of Armed Forces. Clarifies that the safety oversight requirements outlined in section 90501 do not apply to airspace actions authorized under section 40106 of title 49, United States Code.

Section 90905. Adherence to International Agreements Related to Operations of Armed Forces. In carrying out section 90503, requires the Corporation to ensure that all obligations described in that section include obligations related to the operations of the Armed Forces.

Section 90906. Primacy of Armed Forces in Times of War. Allows for the temporary transfer of a duty, power, activity, or facility of the Administrator or the Corporation to DOD by the President during war.

Section 90907. Cooperation with Department of Defense and Other Federal Agencies after Date of Transfer. Requires the Corporation, DOT, and all federal agencies supported by the FAA’s operation of air traffic services enter into a tripartite agreement to ensure cooperation between the entities, facilitate the safe provision of

services, and address coordination and communication of day-to-day operations after the date of transfer.

Chapter 911 – Employee Management.

Section 211 of the bill also adds a new chapter 911 of title 49, United States Code, by adding the following new sections.

Section 91101. Definitions. Sets forth certain definitions relating to employee management.

Section 91102. Employee Management and Benefits Election. Establishes the CEO's authority to set wages, hours, and other terms of employment just like other private entities throughout the Nation. Ensures that employees initially transferred from the federal government to the Corporation are kept whole in terms of their benefits by allowing them to elect whether to retain federal benefits or opt for comparable benefits offered by the Corporation. Extends several important laws, including the whistleblower safeguards, to the Corporation and its employees.

Section 91103. Labor and Employment Policy. Applies much of the Federal Labor-Management Relations Statute (FLMRS) that governs labor-management relations in the federal government to the Corporation and its employees. The FLMRS includes a prohibition on strikes and other labor actions that would disrupt the provision of air traffic services.

Section 91104. Bargaining Units. Preserves the existing structure of bargaining units to ensure the units are system-wide and not divided piecemeal across the country. Prohibits supervisors and managers from joining a union.

Section 91105. Recognition of Labor Organizations. Requires the Corporation to recognize and bargain with the labor organizations selected by its employees.

Section 91106. Collective-Bargaining Agreements. Establishes certain requirements for collective bargaining agreements, including that such agreements be effective for no less than two years.

Section 91107. Collective-Bargaining Dispute Resolution. Establishes a process by which the Corporation and labor organizations will resolve their disputes arising in collective bargaining.

Section 91108. Potential and Pending Grievances, Arbitrations, and Settlements. Transfers existing enforceable grievance awards and arbitration awards as obligations of the Corporation, and preserves employees' and management's rights in such agreements in effect on the date of transfer.

Section 91109. Prohibition on Striking and Other Activities. Prohibits employees from engaging in strikes, work stoppages, slowdowns, and picketing of the Corporation and requires termination of employees who engage in such activity.

Section 91110. Legal Action. Establishes the jurisdiction of federal district courts to hear cases brought to enforce or vacate arbitration awards and establishes federal court jurisdiction for actions by and against labor organization under this bill.

Chapter 913 – Other Matters

Section 211 of the bill also adds a new chapter 913 of title 49, United States Code, by adding the following new sections.

Section 91301. Termination of Government Functions. Clarifies that any activity vested in law in the Secretary, Administrator, DOT, or the FAA that has been transferred to the Corporation pursuant to this Act shall cease to be a function of the government after the date of transfer.

Section 91302. Savings Provisions. Ensures the continued effectiveness of the government's pending and completed administrative actions and proceedings, including rulemakings, licensing proceedings, certain contract obligations, and various applications, until they are amended, modified, superseded, terminated, set aside or revoked. Ensures that certain legal claims, based on the government's acts or omissions before the date of transfer, will continue to be available after the date of transfer. Requires the Corporation to assume air traffic services related assets and liabilities from the FAA, and ensures certain liabilities, such as torts claims arising from the acts of transferred FAA employees, and environmental claims, remain with the federal government.

Chapter 915 – Congressional Oversight of Air Traffic Services Provider

Section 211 of the bill also adds a new chapter 915 of title 49, United States Code, by adding the following new sections.

Section 91501. Inspector General Reports to Congress on Transition. Requires the DOT Inspector General (IG), up until the date of transfer, to submit quarterly reports to Congress on the progress of the preparation of the DOT and the Corporation for the transfer of operational control of air traffic services.

Section 91502. State of Air Traffic Services. Requires the Corporation, not later than two years after the date of transfer, and every two years thereafter, to submit a report on the state of air traffic services, including charges and fees, safety, interaction between the Corporation and federal agencies, the Corporation's compliance with various laws, and international treaties/agreements.

Section 91503. Submission of Annual Financial Report. Requires the Corporation to annually submit a report on the financial and operational performance information of the

Corporation during the previous year to the Secretary, which will subsequently be submitted to Congress.

Section 91504. Submission of a Strategic Plan. Requires the Corporation, no later than 15 days after the initial strategic plan of the Corporation is approved by the Board, to submit the strategic plan to the Secretary, who shall then submit it to Congress. Also requires a similar submittal process for any updates to the strategic plan.

Section 91505. Submission of Annual Action Plan. Requires the Corporation to develop an annual report to Congress on the goals of the Corporation for the following year, including specific and tangible goals to help expedite the improvement of the Corporation as a whole.

Subtitle B – Amendments to Federal Aviation Laws

Section 221. Definitions. Adds the definition of “American Air Navigation Services Corporation” to section 40102 of title 49, United States Code.

Section 222. Sunset of FAA Air Traffic Entities and Officers. Sunsets the FAA’s Air Traffic Services Committee, the Air Traffic Organization Chief Operating Officer position, and the Chief NextGen Officer position on the date of transfer, and amends the authorities of the FAA’s Management Advisory Council and Aircraft Noise Ombudsman to reflect the separation of air traffic services.

Section 223. Role of Administrator. Clarifies that the Corporation, rather than the FAA, will conceive of and design changes to the airspace after the date of transfer as part of its provision of air traffic services, and clarifies that the FAA will continue prescribing regulations relating to the safe operation of aircraft.

Section 224. Emergency Powers. Requires appropriate military authorities to inform the Corporation as early as possible if military aircraft will deviate from safety regulations due to an emergency or urgent military necessity.

Section 225. Presidential Transfers in Time of War. Provides the President the same authority related to the Corporation as the President has related to the FAA if war should occur. Clarifies that if war occurs, the President would have the power to temporarily transfer to the Secretary of Defense an activity or facility of the Corporation (or of the FAA).

Section 226. Airway Capital Investment Plan Before Date of Transfer. Terminates the requirement that the Administrator produce an annual Airway Capital Investment Plan following the date of transfer. After the date of transfer, the Corporation will be responsible for such investment planning and will be required to provide an annual report containing financial and operational performance information and to retain independent auditors to conduct annual audits of the Corporation’s financial statements and internal controls.

Section 227. Aviation Facilities Before Date of Transfer. Sunsets certain authorities of the Administrator relating to the purchase and maintenance of air navigation facilities on the date of transfer. Adds the Corporation to a list of entities that must be consulted before the establishment of military aviation facilities to ensure conformity with plans and policies regarding airspace.

Section 228. Judicial Review. Allows a person disclosing a substantial interest in an order issued by the Secretary or the Administrator with respect to aviation duties and powers designated to be carried out by the Administrator to apply for judicial review of the order.

Section 229. Civil Penalties. Adds section 90501 to the list of sections to which a civil penalty may be imposed. Allows the Secretary to impose a civil penalty of not more than \$25,000 for violations of 90501.

Subtitle C – Other Matters

Section 241. Use of Federal Technical Facilities. Ensures the ongoing availability of the FAA’s research facilities to the Corporation.

Section 242. Ensuring Progress on NextGen Priorities Before Date of Transfer. Directs the Administrator to, in consultation with the NextGen Advisory Committee, prioritize the implementation of the following programs: Multiple Runway Operations; Performance-Based Navigation; Surface Operations and Data Sharing; and Data Communications. Directs the Administrator to establish near-term NextGen goals and amends existing law to require a NextGen metrics report to be included as part of the annual report required under the law.

Section 243. Severability. This section serves as the severability clause for the title in the event one or more parts of the title are found to be invalid.

Section 244. Prohibition on Receipt of Federal Funds. Prohibits the Corporation from accepting or receiving any of the uncommitted balance of the Airport and Airway Trust Fund.

Title III— FAA Safety Certification Reform

Subtitle A – General Provisions

Section 301. Definitions. This section sets forth definitions applicable to this title.

Section 302. Safety Oversight and Certification Advisory Committee (SOCAC). This section establishes SOCAC, comprised of industry stakeholders, including general aviation, commercial aviation, aviation labor, aviation maintenance, and the Administrator. The SOCAC is responsible for providing advice to the Secretary on policy level issues related to FAA safety certification and oversight programs and activities, establishing consensus national goals, strategic objectives and priorities to achieve the most efficient, streamlined and cost-effective certification and oversight processes. The SOCAC sunsets after six years.

Subtitle B – Aircraft Certification Reform

Section 311. Aircraft Certification Performance Objectives and Metrics. Directs the Administrator to work with the SOCAC to establish performance objectives for the FAA and the aviation industry related to aircraft certification, and apply and track performance metrics for both FAA and aviation industry. These performance objectives for aircraft certification shall ensure that progress is being made in eliminating delays, increasing accountability, and achieving full utilization of delegation, while maintaining leadership of the United States in international aviation. The data for the metrics will be publicly available on the FAA’s website.

Section 312. Organization Designation Authorizations. Amends existing law by requiring that when overseeing an organization designation authorization (ODA) holder, the Administrator must require a procedures manual that addresses all procedures and limitations regarding the ODA’s functions to ensure that such functions are delegated fully to the ODA (unless there is a safety or public interest reason to not delegate functions). Establishes a centralized ODA policy office within the FAA’s Office of Aviation Safety to oversee and ensure the consistency of audit functions under the ODA program across the FAA.

Section 313. ODA Review. Establishes a multidisciplinary expert review panel consisting of members appointed by the Administrator to conduct a survey of ODA holders and applicants to obtain feedback on the FAA’s efforts involving the ODA program and make recommendations to improve the FAA’s ODA-related activities. Within six months of the Panel convening, they will submit a report to the FAA and relevant congressional committees on any finding and recommendations.

Section 314. Type Certification Resolution Process. Requires the Administrator to establish a type certification resolution process, in which the certificate applicant and FAA will establish for each project specific certification milestones and timeframes for those milestones. If the milestones are not met within the specific timeframe, the milestone will be automatically elevated to the appropriate management levels of both the applicant and FAA and resolved within a specific period of time.

Section 315. Safety Enhancing Equipment and Systems for Small General Aviation Airplanes. Requires, within 180 days of enactment, that the Administrator establish and begin implementation of a risk-based policy that streamlines the installation of safety enhancing technologies for small general aviation aircraft so that the safety benefits of such technologies for small general aviation aircraft can be realized.

Section 316. Review of Certification Process for Small General Aviation Airplanes. Directs the DOT IG to review the final rule titled “Revision of Airworthiness Standards for Normal, Utility, Acrobatic, and Commuter Category Airplanes.” In this review, the DOT IG will assess how the rule puts into practice the FAA’s efforts to implement performance-based safety standards, if the rule has improved safety and reduced regulatory cost burden and lessons learned.

Subtitle C – Flight Standards Reform

Section 331. Flight Standards Performance Objectives and Metrics. Directs the Administrator, in collaboration with the SOCAC established in section 302 of this Act, to establish performance objectives and to apply and track metrics for the FAA and aviation industry relating to flight standards activities, and achieving national goals established by the Advisory Committee.

Section 332. FAA Task Force on Flight Standards Reform. Directs the FAA to establish an FAA Task Force on Flight Standards Reform (Task Force). The Task Force will be comprised of 20 industry experts and stakeholders, and be responsible for identifying best practices and providing recommendations for simplifying and streamlining flight standards processes, training for aviation safety inspectors, and achieving consistency in FAA regulatory interpretations and oversight.

Section 333. Centralized Safety Guidance Database. Directs the Administrator to establish a Central Safety Guidance Database that will include all regulatory guidance documents of the FAA Office of Aviation Safety within one year of enactment, and make the database available to the public.

Section 334. Regulatory Consistency Communications Board. Requires the Administrator to establish a Regional Consistency Communications Board that will be composed of FAA representatives from Flight Standards Service, Aircraft Certification Service and Office of the Chief Counsel. The Board will be responsible for establishing a process by which FAA personnel as well as regulated entities may submit regulatory interpretation questions anonymously without fear of retaliation. The SOCAC will establish performance metrics for both industry and the FAA in regard to the actions of the Board.

Subtitle D – Safety Workforce

Section 341. Safety Workforce Training Strategy. Directs the FAA to establish a safety workforce training strategy that addresses a number of goals. These goals include allowing employees participating in organization management teams or ODA program audits to complete appropriate training in auditing and a systems safety approach to oversight and seeking knowledge-sharing opportunities between the FAA and the aviation industry.

Section 342. Workforce Review. Directs the Comptroller General to conduct a study to assess the workforce and training needs of the FAA's Office of Aviation Safety. This study will look at current hiring and training requirements for inspectors and engineers, and analyze the skills and qualifications of safety inspectors and engineers.

Subtitle E – International Aviation

Section 351. Promotion of United States Aerospace Standards, Products, and Services Abroad. Amends existing law by directing the Administrator to take appropriate actions to

promote United States aerospace standards abroad, to defend approvals of United States aerospace products and services abroad and to utilize bilateral safety agreements to improve validation of United States certified products.

Section 352. Bilateral Exchanges of Safety Oversight Responsibilities. Amends existing law by giving the Administrator the ability to accept an airworthiness directive necessary to provide for safe operation of aircraft issued by the aeronautical authority of a foreign country and leverage their regulatory process, if certain criteria are met. Also allows for an alternative approval process and alternative means of compliance under certain circumstances.

Section 353. FAA Leadership Abroad. Directs the Administrator to promote United States aerospace safety standards abroad and to work with foreign governments to facilitate the acceptance of FAA approvals and standards internationally. The Administrator is directed to further assist American companies who have experienced significantly long foreign validation wait times and work with foreign governments to improve the timeliness of their acceptance of FAA validations and approvals. Lastly, the FAA is required to track and analyze the amount of time it takes foreign authorities to validate certificated aeronautical product types certified in the United States and establish benchmarks and metrics to reduce the validation times.

Section 354. Registration, Certification, and Related Fees. Allows the Administrator to establish and collect a fee from a foreign government or entity for certification services if the fee is consistent with aviation safety agreements and does not exceed the cost of the services.

Title IV— Safety

Subtitle A – General Provisions

Section 401. FAA Technical Training. Within 90 days of enactment, requires the Administrator to establish an e-learning training pilot program to provide technical training for FAA personnel on the latest aviation technologies, processes, and procedures. Terminates the pilot program one year after establishment. After elimination of the pilot program, the FAA will establish a permanent e-learning program that utilizes lessons learned from the pilot.

Section 402. Safety Critical Staffing. Within 270 days of the date of enactment and at least two years before the date of transfer, the Administrator is directed to update the FAA’s safety critical staffing model. Requires the DOT IG to conduct a study of the staffing model used by the FAA to determine the number of aviation safety inspectors that are needed to fulfill the mission of the FAA and adequately ensure aviation safety. Requires reports on the audit to both the Secretary and to Congress.

Section 403. International Efforts Regarding Tracking of Civil Aircraft. Directs the Administrator to exercise leadership on creating a global approach to improve aircraft tracking by working with foreign counterparts in the ICAO, other international organizations, and the private sector.

Section 404. Aircraft Data Access and Retrieval Systems. Requires the FAA to initiate a study of aircraft data access and retrieval technologies for Part 121 commercial aircraft used in extended overwater operations to determine if such technologies provide improved access and retrieval of the data in the event of an accident. A report to Congress is required not later than one year after initiation of the study.

Section 405. Advanced Cockpit Displays. Within 180 days of enactment, requires the FAA to review heads-up display systems, heads-down display systems employing synthetic vision systems, and enhanced vision systems and the impacts of single and dual installed heads-up systems. A report to Congress is required no later than one year after enactment.

Section 406. Marking of Towers. Includes a technical correction to section 2110 of the FAA Extension, Safety, and Security Act of 2016 to clarify that the term “covered towers” does not include towers located within the right-of-way of a rail carrier, including within the boundaries of a rail yard, and are used for railroad purposes. Furthermore, to ensure safety while providing flexibility to covered tower operators, section 2110 is revised to allow covered tower operators or owners to either submit the tower’s information into the database established in the section or mark the tower according to FAA marking requirements. This option does not apply to Meteorological Evaluations Towers, which must be both marked in accordance with FAA marking requirements and entered into the database.

Section 407. Cabin Evacuation. Requires the FAA, in consultation with the National Transportation Safety Board and appropriate stakeholders, to review evacuation certification of transport category aircraft, including emergency conditions, crew procedures, relevant changes to passenger demographics, legal requirements that affect emergency evacuations, and recent accidents and incidents where passengers had to evacuate. Requires, not later than one year after the date of enactment, a report to be submitted to Congress on the results of the review and any associated recommendations.

Section 408. ODA Staffing and Oversight. Directs the Administrator to report to appropriate Congressional Committees no later than 270 days after enactment on its progress in implementing specific DOT IG recommendations regarding the FAA’s staffing and oversight of ODA prior to the date of transfer. Requires the report to contain the FAA’s progress with respect to ensuring full ODA utilization authority prior to and after the date of transfer.

Section 409. Funding for Additional Safety Needs. Allows the Administrator to accept funds from an applicant for a certificate in order to hire additional support staff or to obtain the services of consultants and experts to help streamline the review and issuance of certificates. Outlines other policies and procedures to be implemented by the Administrator to ensure that the acceptance of funds does not prejudice the Administrator in the issuance of any certificate. Contains a clause requiring that any funds accepted under the section shall be credited as offsetting collections.

Section 410. Funding for Additional FAA Licensing Needs. Allows the Secretary to accept funds from a person applying for a license or permit in order to hire additional staff or to obtain the services of consultants or experts to help streamline the issuances of licenses or permits.

Outlines policies and procedures to be implemented by the Secretary and contains a clause requiring that any funds accepted under the section shall be credited as offsetting collections.

Section 411. Emergency Medical Equipment on Passenger Aircraft. Directs the Administrator to evaluate and revise existing regulations on emergency medical equipment, and consider whether the minimum contents of approved medical kits on passenger aircraft meet the emergency needs of children.

Section 412. Human Intervention Motivation Study (HIMS) Program. Authorizes the existing HIMS program for flight crewmembers employed by commercial air carriers operating in the United States.

Section 413. Acceptance of Voluntarily Provided Safety Information. Requires the FAA to automatically accept voluntary disclosures submitted under the Aviation Safety Action Program into the program even if they have not undergone a review by the event review committee. Requires a disclaimer be attached to the disclosure that states the disclosure has not gone through an event review committee. If the event review committee determines that the disclosure fails to meet criteria for acceptance, the disclosure will be rejected from the program.

Section 414. Flight Attendant Duty Period Limitations and Rest Requirements. Directs the Administrator to revise the final rule issued on August 19, 1994, related to flight attendant duty period limitations and rest requirements. The revised rule must ensure that a flight attendant has at least a scheduled rest period of 10 consecutive hours, and that the rest period cannot be reduced under any circumstances. Requires all part 121 air carriers to submit to the Administrator a fatigue risk management plan. The Administrator is required to review and accept or reject the fatigue risk management plan for each part 121 carrier. If the Administrator rejects a plan, the Administrator must provide modifications needed for the resubmission of the plan. Part 121 air carriers must update their fatigue risk management plans every two years and resubmit them to the Administrator. If a part 121 air carrier violates this subsection, it shall be subject to civil penalties.

Section 415. Secondary Cockpit Barriers. Requires, not later than one year after the date of enactment, the Administrator to issue an order requiring the installation of a secondary cockpit barrier on all new passenger air carrier aircraft.

Section 416. Aviation Maintenance Industry Technical Workforce. Requires the Comptroller General to conduct a study and issue recommendations on aviation workforce data and workforce needs in the aviation maintenance sector. Requires a report to Congress no later than one year after the date of enactment.

Section 417. Critical Airfield Markings. Requires a study on the durability of and use of Type III and Type I retroreflective glass beads on airport runways.

Subtitle B – Unmanned Aircraft Systems

Section 431. Definitions. This section sets forth definitions applicable to this subtitle.

Section 432. Codification of Existing Law; Additional Provisions. Amends existing law by inserting a new chapter 455, “Unmanned Aircraft Systems” in order to codify unmanned aircraft system-related provisions included in the FAA Modernization and Reform Act of 2012 and to add several new unmanned aircraft system (UAS)-related provisions to the Chapter. The new chapter 455 contains the following provisions:

Section 45501. Definitions. Codifies definitions from section 331 of the FAA Modernization and Reform Act of 2012 and adds new definitions for terms used in this chapter.

Section 45502. Integration of Civil Unmanned Aircraft Systems into National Airspace System (NAS). Codifies portions of section 332 of the FAA Modernization and Reform Act of 2012 that require the Secretary to develop a comprehensive plan and roadmap for UAS integration. The provisions also require the Secretary to conduct a rulemaking relating to the operation of small unmanned aircraft systems (sUAS) and to take actions to expand use of UAS in Arctic regions.

Section 45503. Risk-Based Permitting of Unmanned Aircraft Systems. Establishes a new basis for licensing any UAS and UAS operations not covered by regulations applicable to the operation of sUAS. Sets forth permitting standards and certain criteria that the Administrator must consider in assessing applications, and provides the FAA with flexibility to waive certain statutory requirements if the operations will occur away from congested areas. Permits issued under this section will have a validity of five years. Applications for UAS operations related to disaster recovery and emergency preparedness would be handled on an expedited basis.

Section 45504. Public Unmanned Aircraft Systems. Codifies section 334 of the FAA Modernization and Reform Act of 2012, which directs the Secretary to take steps to facilitate operations of UAS by government entities.

Section 45505. Special Rules for Certain Unmanned Aircraft Systems. Codifies section 333 of the FAA Modernization and Reform Act of 2012, which directs the Secretary to determine if certain UAS may operate in the NAS. Assessment of UAS will determine which types of UAS do not create a hazard to users of the NAS or to national security, and will determine whether a certificate of waiver or authorization of airworthiness is required. If the Secretary determines certain UAS may operate safely in the NAS, the Secretary shall establish requirements for the safe operation of such systems.

Section 45506. Certification of New Air Navigation Facilities for Unmanned Aircraft and Other Aircraft. Establishes a rulemaking process to develop standards for an

unmanned aircraft traffic management system (UTM) and other communication, navigation, and surveillance systems for low altitude airspace. UTM is expected to enhance and improve the operation of unmanned aircraft to allow for more sophisticated operations.

Section 44507. Special Rules for Certain UTM and Low-Altitude CNS. Establishes a process for the FAA to approve certain UTM and low-altitude Communication, Navigation, and Surveillance (CNS) prior to the completion of the rulemaking required under section 45506. Requires the FAA to create expedited procedures for approving systems operated in airspace above croplands and other areas in which the operation of unmanned aircraft pose very low risk.

Section 45508. Operation of Small Unmanned Aircraft. Establishes a streamlined process for the FAA to permit the operation of sUAS used for aerial data collection prior to the agency's completion of the rulemaking for such aircraft. Aerial data collection includes applications such as imaging, measurement, and other forms of sensing.

Section 45509. Special Rules for Model Aircraft. Codifies, in part, section 336 of the FAA Modernization and Reform Act of 2012, which establishes criteria under which an aircraft may be operated as a model aircraft under certain conditions. Allows certain qualified not-for-profit organizations to receive payment for instruction in the flight of model aircraft. Includes conforming amendments, specifically provisions that would allow the FAA to assess civil penalties for violations under chapter 455. Allows FAA to require aircraft registration. Clarifies that current certification processes will remain available pending completion of the air carrier rulemaking.

Section 45510. Carriage of Property for Compensation or Hire. Within one year of enactment, requires the Secretary to issue a final rule authorizing sUAS operators to carry property for compensation or hire within the United States. Requires the Administrator to establish the sUAS air carrier certificate, establish a streamlined, performance-based, and risk-based certification process, and create a sUAS air carrier classification, all for the purposes of carriage of property for compensation or hire.

Section 45511. Micro UAS Operations. Charters an aviation rulemaking committee to develop recommendations for regulations under which any person may operate a micro unmanned aircraft system. Requires the Secretary to charter the advisory committee no later than 60 days after the date of enactment. Requires the Secretary, no later than 180 days after receiving the recommendations, to issue regulations regarding the recommendations of the rulemaking committee.

Section 433. Unmanned Aircraft Test Ranges. Includes several provisions relating to UAS test ranges established by the FAA Modernization and Reform Act of 2012, and extends the authorization of the test ranges for six years. Directs the Administrator to permit the operation of aircraft equipped with sense-and-avoid and beyond line of sight technologies at the test ranges and, in furtherance of that objective, provides the Administrator the ability to waive certain statutory requirements.

Section 434. Sense of Congress Regarding Unmanned Aircraft Safety. Expresses the concern of Congress about the safety risks caused by unauthorized operation of UAS in proximity to airports and the safety risks of potential collisions between UAS and conventional passenger aircraft. It further expresses Congress' sense that the FAA should take measures to reduce such risks through enforcement actions and educational initiatives.

Section 435. UAS Privacy Review. Directs the Secretary to conduct a study to identify potential reductions in privacy caused specifically by UAS. Directs the Secretary to consider the efforts led by and consult with the National Telecommunications and Information Administration relating to privacy and UAS integration. Requires the Secretary to submit a report to Congress on the study's findings within six months of enactment of this Act.

Section 436. Public UAS Operations by Tribal Governments. Allows certain tribal governments to operate unmanned aircraft as public aircraft.

Section 437. Evaluation of Aircraft Registration for Small Unmanned Aircraft. Directs the Administrator to develop metrics, assess compliance and effectiveness of the agency's Interim Final Rule entitled "Registration and Marking Requirements for Small Unmanned Aircraft. (80 *Fed. Reg.* 78,593). Directs the DOT IG to evaluate the Administration's progress in developing these metrics and also the reliability, effectiveness and efficiency of the program, and provide a report to Congress.

Section 438. Study on Roles of Governments Relating to Low-Altitude Operation of Small Unmanned Aircraft. Requires the DOT IG to study and report to Congress on the regulation of low-altitude operations of small unmanned aircraft and the appropriate roles and responsibilities of federal, state, local, and tribal governments in regulating such activity. Requires the DOT IG to consider various factors including recommendations of the Drone Advisory Committee, the interests of various jurisdictions, the interests of industry, and other factors.

Section 439. Study on Financing of Unmanned Aircraft Services. Requires the Comptroller General to study appropriate fee mechanisms to recover the costs of the FAA regulation and oversight of unmanned aircraft. It requires the Comptroller General to consider a number of factors including resources necessary for safe unmanned aircraft operations and best practices or policies of other countries. Requires the Comptroller General to report to Congress.

Section 440. Update of FAA Comprehensive Plan. Requires the FAA to update the comprehensive plan required by the FAA Modernization and Reform Act of 2012 to include a concept of operations addressing unlawful or harmful operations of unmanned aircraft.

Section 441. Cooperation Related to Certain Counter-UAS Technology. Requires the Secretary to consult with the Secretary of Defense on matters related to the deployment of counter-UAS in the national airspace by drawing upon their expertise and experience of the DOD.

Title V – Air Service Improvements

Subtitle A – Airline Customer Service Improvements

Section 501. Reliable Air Service in American Samoa. Requires the Secretary to review the emergency air transportation by foreign carriers exemption, in the case of sustaining air transportation between the Islands of Tutuila and Manu’a in American Samoa, every 180 days instead of every 30 days.

Section 502. Cell Phone Voice Communication Ban. Directs the Secretary to issue regulations prohibiting an individual on an aircraft from using a cell phone during a domestic scheduled passenger flight, with exemptions applying to any member of the flight crew or flight attendant on duty on an aircraft, as well as federal law enforcement acting in an official capacity.

Section 503. Advisory Committee for Aviation Consumer Protection. Adds independent distributors of travel to the Advisory Committee for Aviation Consumer protection created under the FAA Modernization and Reform Act of 2012 and extends it through fiscal year 2023.

Section 504. Improved Notification of Insecticide Use. Requires that air carriers disclose to passengers whether a country with which they are booking a ticket to may treat the aircraft with insecticide or apply an aerosol insecticide when the cabin is occupied with passengers.

Section 505. Advertisements and Disclosure of Fees for Passenger Air Transportation. States that it is not an unfair and deceptive practice for an air carrier to post the base airfare for air transportation in an advertisement or solicitation if the additional taxes, fees, and total cost of the air transportation are disclosed clearly to the consumer via a link on the air carrier’s website. Requires the Secretary to issue a final regulation no later than four months after the date of enactment. Also makes it an unfair and deceptive practice to fail to disclose additional fees for checked or carry-on baggage in a link when providing an internet fare quotation to a consumer.

Section 506. Involuntarily Bumping Passengers After Aircraft Boarded. Amends existing law by making it an unfair and deceptive practice to involuntarily deplane a revenue passenger, who is traveling on a confirmed reservation, and checked-in prior to the check-in deadline of the flight, after they have boarded the aircraft.

Section 507. Availability of Consumer Rights Information. Amends existing law to require air carriers to post customer service and consumer information on the homepage of the air carrier’s website.

Section 508. Consumer Complaints Hotline. Amends existing law to require the Secretary evaluate the benefits of mobile phone applications or other technologies and to utilize such technologies to supplement the consumer complaints hotline established under the FAA Modernization and Reform Act of 2012.

Section 509. Widespread Disruptions. Adds a new section to existing law to require air carriers, in the event of a widespread disruption, to immediately publish on their website whether or not the air carrier will provide accommodations and other amenities for impacted passengers. The term “widespread disruption” is defined in the section.

Section 510. Involuntarily Denied Boarding Compensation. Requires the Secretary, no later than 60 days after the date of enactment, to issue a final rule clarifying current regulation with respect to compensation offered in the event of an involuntary denied boarding of a revenue passenger.

Section 511. Consumer Information on Actual Flight Times. Directs the Secretary to conduct a study on the feasibility and advisability of modifying regulations regarding the actual wheels off and wheels on times for reportable flights. Requires a report to Congress no later than one year after the date of enactment.

Section 512. Advisory Committee for Transparency in Air Ambulance Industry. Establishes a Committee to improve transparency among air ambulances in a variety of ways and requires the Committee to produce recommendations on various methodologies to be included in a report to Congress. Requires the Secretary to issue a final rule on the recommendation on the disclosure of charges.

Section 513. Air Ambulance Complaints. Amends existing law to include air ambulance operators in the scope of certain consumer protection laws and to enable consumers to report alleged unfair and deceptive practices by air ambulances to the Secretary.

Section 514. Passenger Rights. Requires air carriers to submit to the Secretary a one-page document outlining the rights of passengers. The document shall include the various forms of compensation in the event of flight delays and cancellations, compensation for mishandled or lost baggage, voluntary denied boarding practices due to overbooking, and involuntary denied boarding practices. This document shall be available on the air carrier’s website.

Subtitle B – Aviation Consumers with Disabilities

Section 541. Select Subcommittee. Establishes a “Select Subcommittee for Aviation Consumers with Disabilities” to the “Advisory Committee for Aviation Consumer Protection” that was created under the FAA Modernization and Reform Act of 2012. The Select Subcommittee will advise the Secretary on issues related to air travel for consumers with disabilities and will be comprised of members appointed by the Secretary from national disability organizations; air carriers and foreign air carriers; airport operators; and contract service providers. Requires both a report to the Advisory Committee and a report to Congress.

Section 542. Aviation Consumers with Disabilities Study. Requires the Comptroller General to complete a study reviewing accessibility best practices for individuals with disabilities, specifically those recommended under the Architectural Barriers Act of 1960, the Rehabilitation Act of 1973, the Air Carrier Access Act of 1986, and the Americans with Disabilities Act of

1990. Requires a report to be submitted no later than one year after the date of enactment to the Secretary and to Congress.

Section 543. Feasibility Study on In-Cabin Wheelchair Restraint Systems. Requires, no later than two years after enactment, the Secretary to conduct a study on the feasibility of in-cabin wheelchair restraint systems and other ways air travel consumers with disabilities can be safely accommodated within them. Requires the feasibility study to be done in consultation with the Architectural and Transportation Barriers Compliance Board, aircraft manufacturers, and air carriers, and requires a report no later than one year after the completion of the study.

Section 544. Access Advisory Committee Recommendations. Directs the Secretary to issue a notice of proposed rulemaking addressing accommodations for travelers with disabilities, specifically with respect to accommodations for in-flight entertainment, accessible lavatories on single-aisle aircraft, and service animals and requires the Secretary to issue a final rule no later than one year thereafter.

Subtitle C – Small Community Air Service

Section 551. Essential Air Service Authorization. Authorizes the Essential Air Service Program (EAS) at the following levels: \$175 million for fiscal year 2017; \$178 million for fiscal year 2018; \$182 million for fiscal year 2019; \$185 million for fiscal year 2020; \$327 million for fiscal year 2021; \$337 million for fiscal year 2022; and \$347 million for fiscal year 2023.

Section 552. Extension of Final Order Establishing Mileage Adjustment Eligibility. Extends the effectiveness of a statutory clarification that the most commonly used route between an eligible place and the nearest medium or large hub airport is to be measured by highway mileage when reviewing any action to eliminate compensation for EAS to such place, or to terminate the location's compensation eligibility for such service.

Section 553. Study on Essential Air Service Reform. Requires the Comptroller General to conduct a report on the effectiveness and budgetary savings of reforms made to EAS program over the past five years, and requires that the report contain options for further reform of the program.

Section 554. Small Community Air Service. Allows any airport that is a small hub or smaller to apply for a grant under the Small Community Air Service Development Program (SCASDP). Directs the Secretary to give special consideration to communities seeking to restore scheduled air service that has been terminated. Authorizes the appropriation for the SCASDP of \$10 million in fiscal year 2017 through fiscal year 2023, of which \$4.8 million each year is made available for a new Regional Air Transportation Pilot Program. The pilot program will focus on establishing or reestablishing air service to communities that have experienced declines in service. Allows communities to reapply for SCASDP grants after 10 years.

Section 555. Air Transportation to Noneligible Places. Amends existing law to extend the definition of what constitutes an "eligible place" to receive small community air service funding

through the FAA Extension, Safety, and Security Act of 2016. Terminates the Air Transportation to Noneligible Places program two years after the date of enactment of the subsection.

Title VI – Miscellaneous

Section 601. Review of FAA Strategic Cybersecurity Plan. No later than 120 days after the Interim CEO of the Corporation is hired, the Administrator in consultation with the Interim CEO, is directed to conduct a review of the aviation cybersecurity framework that was developed as part of the FAA Extension, Safety and Security Act of 2016. In conducting the review, the Administrator is tasked with considering how the framework should be updated to reflect the transfer of operational control of air traffic services from the FAA to the Corporation. Requires a report to Congress no later than 120 days after the review is initiated.

Section 602. Consolidation and Realignment of FAA Services and Facilities. Amends section 804 of FAA Modernization and Reform Act of 2012 by clarifying the input the Administrator should receive in preparing a National Facilities Realignment and Consolidation Report. Notwithstanding new section 90317(c), directs the Secretary to continue to carry out any consolidation or realignment project commenced under Section 804.

Section 603. FAA Review and Reform. Requires the FAA to complete a report on actions the agency has taken to implement reforms to eliminate wasteful, inefficient, or redundant practices, procedures, or positions as required by section 812 of the FAA Modernization and Reform Act of 2012. Requires the FAA to conduct an additional review to identify additional wasteful, inefficient, or redundant practices, procedures, or positions in need of reform.

Section 604. Aviation Fuel. Directs the Administrator to allow the use of qualified unleaded aviation gasoline in aircraft as a replacement for leaded gasoline. Identifies the aircraft and engines that are eligible to use the qualified replacement unleaded gasoline. Adopts a process that allows eligible aircraft and engines to operate safely with the qualified replacement unleaded gasoline. Expresses that it is the Sense of Congress that the Piston Aviation Fuels Initiative of the Administration, in collaboration with the American Society for Testing and Materials, should work to find an appropriate unleaded fuel by January 1, 2023.

Section 605. Right to Privacy When Using Air Traffic Control System. Ensures that the aircraft owners will still be able to request that their aircraft registration information is not displayed in the Aircraft Situational Display to the public.

Section 606. Air Shows. Encourages the Administrator to work on an annual basis with airshows, general aviation communities, stadiums, and other large outdoor events and venues to identify and resolve scheduling conflicts between approved air shows and large outdoor events that have temporary flight restrictions imposed.

Section 607. Part 91 Review, Reform, and Streamlining. Directs the FAA to establish a Task Force comprised of general aviation aircraft owners, operators, labor, and government representatives to assess the oversight and authorization processes and requirements for aircraft

under part 91 of title 14 Code of Federal Regulations, and make recommendations to streamline the processes and reduce regulatory cost burdens and delays. Sunsets the program on the day the report to Congress is submitted. Not later than 18 months after the date of enactment, the Administrator is directed to implement the recommendations of the Task Force.

Section 608. Aircraft Registration. Directs the Administrator to initiate a rulemaking to increase the duration of registration for noncommercial general aviation aircraft to 10 years.

Section 609. Air Transportation of Lithium Cells and Batteries. Directs the Secretary, in coordination with appropriate federal agencies, to carry out cooperative efforts to ensure shippers of lithium ion and lithium metal batteries for air transport comply with ICAO Technical Instructions and Hazardous Material Regulations in the United States and work with appropriate federal agencies and international partners to ensure enforcement of existing applicable regulations. Establishes the Lithium Ion Battery Safety Advisory Committee to facilitate communications between manufacturers of lithium ion cells and batteries, manufacturers whose products incorporate such batteries, and the federal government on the effectiveness and economic impacts of regulation of the transportation of lithium ion cells and batteries. This section requires a review of best practices for safe transportation of these batteries and how to reduce the risk and safety threats posed by the air transportation of undeclared hazardous materials. The Advisory Committee will be comprised of industry and government representatives appointed by the Secretary and will terminate six years after the Committee has been established. Also directs the Secretary, in consultation with interested stakeholders to submit to appropriate Congressional Committees an evaluation of current practices for packaging of lithium ion batteries and cells and any suggestions to improve the packaging in a safe, efficient, and cost effective manner. Directs the Secretary to harmonize the regulations of the United States regarding air transport of lithium cells and batteries with ICAO technical standards. Directs the Secretary to issue a limited exception on the restriction of the air transportation of medical device batteries with specific parameters. Lastly, creates a new policy for DOT to support the participation of industry in working groups associated with ICAO to address the safe air transportation of these batteries.

Section 610. Remote Tower Pilot Program for Rural or Small Communities. Directs the Secretary to establish a remote air traffic control tower pilot program to assess the benefits of such towers. Sets forth the criteria the Secretary, after consultation with representatives of labor organizations representing employees of the air traffic control system, must use in the selection of sites where remote towers will be installed. Directs the Secretary to convene safety risk management panels for each remote tower site to review best practices that have already been developed and to analyze operational data from remote towers. Requires that the pilot program established be eligible for airport improvement funding and that the Secretary establish a repeatable process to help expand the program.

Section 611. Ensuring FAA Readiness to Provide Seamless Oceanic Operations. No later than September 30, 2018, requires the Secretary to make a final investment decision on the implementation of a reduced oceanic separation capability that shall be operational by March 31, 2019.

Section 612. Sense of Congress Regarding Women in Aviation. Expresses the Sense of Congress on the importance of the aviation industry encouraging and supporting women pursuing careers in aviation.

Section 613. Obstruction Evaluation Aeronautical Studies. Requires the Secretary to pursue adoption of the proposed policy titled “Proposal to Consider the Impact of One Engine Inoperative Procedures in Obstruction Evaluation Aeronautical Studies” only if the policy is treated as a significant regulatory action pursuant to Executive Order 12866.

Section 614. Aircraft Leasing. Clarifies existing law to say an aircraft lessor is only liable for losses and damages when the aircraft is in operational control of said lessor.

Section 615. Report on Obsolete Test Equipment. Requires the Administrator to submit a report on the National Test Equipment Program of the FAA to identify obsolete test equipment and provide a plan to replace that equipment no later than 180 days after the date of enactment.

Section 616. Retired Military Controllers. Amends the current statutory hiring process for air traffic controllers by directing the Administrator to establish a program that enables military controllers to be considered for an original appointment to an air traffic controller position when the individual is on terminal leave pending retirement from active duty military or retired from active duty military service within five years of applying to the position, and within five years of applying to the position has held either an air traffic control specialist certification or a facility rating.

Section 617. Pilots Sharing Flight Expenses with Passengers. Requires the Secretary to issue advisory guidance on how pilots can share flight expenses with other passengers within the parameters of existing federal law.

Section 618. Aviation Rulemaking Committee for Part 135 Pilot Rest and Duty Rules. Establishes a rulemaking committee, which will be comprised of industry representatives, labor organizations, and safety experts, to review and provide recommendations on pilot rest and duty rules for part 135 operations. Requires the Administrator to submit a report on its findings and issue a notice of proposed rulemaking based on the consensus recommendations of the committee not later than one year after submittal of the report to Congress.

Section 619. Metropolitan Washington Airports Authority. Directs the DOT IG to conduct a study of the Metropolitan Washington Airports Authority (MWAA) to determine if MWAA has adopted previous DOT IG recommendations regarding MWAA’s Office of Audit.

Section 620. Terminal Aerodrome Forecast. Directs the FAA to allow a part 121 air carrier operating in a noncontiguous state to conduct operations to a destination in a noncontiguous state if certain operational weather requirements are met. Clarifies flight rules for a non-contiguous state to ensure operators receive available weather information.

Section 621. FAA Employees Stationed on Guam. States the Sense of Congress that the Administrator and the Secretary of Defense should seek an agreement that would enable FAA

employees stationed on Guam to have access to DOD hospitals, commissaries, and exchanges in Guam.

Section 622. Technical Corrections. Makes technical corrections to several provisions contained in the FAA Modernization and Reform Act of 2012 and title 49, United States Code.

Section 623. Application of Veterans' Preference to Federal Aviation Administration Personnel Management System. Applies veterans' hiring preference to the FAA.

Section 624. Public Aircraft Eligible for Logging Flight Times. Directs the Administrator to update current regulations for logging of flight time to include aircraft under operational control of forest fire protection agencies.

Section 625. FAA Workforce Review. Requires the Comptroller General to conduct a review and develop recommendations to assess the long-term workforce and training needs of the FAA. Requires a report to Congress on the recommendations no later than 270 days after the date of enactment.

Section 626. State Taxation. Clarifies existing law to ensure non-generally applied taxes and fees generated at airports are wholly used for airport or aeronautical purposes.

Section 627. Aviation and Aerospace Workforce of the Future. Expresses the Sense of Congress on how important it is to ensure the prevalence of programs and career pathway initiatives leading to employment in the aviation sector.

Section 628. Future Aviation and Aerospace Workforce Study. Requires the Comptroller General to conduct a study on various factors and best practices influencing the supply of young individuals in the aviation and aerospace industry. Requires a report be submitted to Congress no later than one year after the date of enactment.

Section 629. FAA Leadership on Civil Supersonic Aircraft. Requires the FAA to exercise leadership and produce a report to Congress on the development of civil supersonic aircraft. Requires the Administrator to submit the report to Congress no later than one year after the date of enactment.

Section 630. Oklahoma Registry Office. Directs the Administrator to consider the FAA's aircraft registry office located in Oklahoma City, Oklahoma as excepted, during a government shutdown or emergency, to ensure it remains open.

Section 631. Foreign Air Transportation under United States-European Union Air Transport Agreement. Ensures that permits or exemptions issued by the Secretary to foreign air carriers do not undermine any labor standards and would prevent market entry into the United States by "flag of convenience carriers." Requires, if an interested person raises the applicability of Article 17 bis of the United States-European Union Air Transport Agreement of 2007, that the Secretary would be prohibited from issuing a foreign air carrier permit or exemption unless the Secretary finds issuance would be consistent with Article 17 bis and imposes additional

conditions on such permit or exemption to ensure compliance with Article 17 bis. Also adds to the necessary required findings before the Secretary may issue a permit to a foreign air carrier from any jurisdiction.

Section 632. Training on Human Trafficking for Certain Staff. Amends existing law to extend existing training requirements regarding human trafficking to other frontline airline personnel. The personnel in this section include ticket counter agents, gate agents, and other employees who engage in regular interaction with passengers.

Section 633. Part 107 Implementation Improvements. Gives the Administrator the authority to grant a waiver to operate beyond visual line of sight, over people, or at night for the purposes of transporting property. Requires the Secretary to publish a direct final rule on the expansion of waiver authority no later than 30 days after the date of enactment.

Section 634. Part 107 Transparency and Technology Improvements. Requires FAA to publish information on approved small unmanned aircraft system waivers and airspace authorizations and provide real time data on application status.

Section 635. Prohibitions Against Smoking on Passenger Flights. Amends existing law and the statutory definition of smoking to ban the use of e-cigarettes on commercial aircraft.

Section 636. Consumer Protection Requirements Relating to Large Ticket Agents. Requires the Secretary to issue a final rule, no later than 90 days after the date of enactment, requiring large ticket agents to adopt minimum customer service standards. These standards include, issuing refunds for optional fees, disclosing policies on cancellation, notifying passengers of itinerary changes, and more. Defines the term “large ticket agent” to mean a ticket agent with an annual revenue of \$100,000,000.00 or more.

Section 637. Agency Procurement Reporting Requirements. Requires the Secretary to submit a report on the value of acquisitions made by the agency from entities that manufacture supplies outside of the United States. The report is required to indicate the dollar value of any materials or supplies purchased that were manufactured outside the United States as well as a summary of the total procurement of funds spent on said goods compared to goods manufactured in the United States. The report is required no later than 90 days after the end of the fiscal year.

Section 638. Zero-Emission Vehicles and Technology. Reforms the FAA’s Voluntary Airport Low Emissions and Zero Emissions Vehicle Programs and clarifies that airports have the option to use AIP or PFCs to fund projects under those programs.

Section 639. Employee Assault Prevention and Response Plans. Requires part 121 air carriers, in collaboration with the FAA, to establish employee assault prevention and response plans. This section requires the plans to be developed in consultation with the labor union representing customer service agents. Directs that the plans include reporting protocols for customer service agents who have been assaulted, for notifying law enforcement, and for informing federal law enforcement of certain violations.

Section 640. Study on Training of Customer-Facing Air Carrier Employees. Requires the Secretary to conduct a study on training received by air carriers' customer-facing employees and take appropriate actions to address any shortcomings in the training by way of recommendations and if determined appropriate, other supplemental training. Requires the study to be conducted no later than 180 days after the date of enactment and a report to Congress no later than one year thereafter.

Section 641. Minimum Dimensions for Passenger Seats. Requires the FAA to issue regulations establishing minimum seat dimension standards on passenger aircraft for the health and safety of airline passengers. The regulations may only be established after a public notice and opportunity for comment period.

Section 642. Study on Ground Transportation Options. Requires the Comptroller General to conduct a study on ground transportation options to and from major airports. The study should review the ground transportation options at various airports and determine whether or not it is appropriate to use AIP and PFC funds to address congestion issues to airports.

Sec. 643 Adjustment. This provision makes a technical adjustment to the statutory discretionary spending limits in fiscal year 2021, to accommodate the transfer of operational control of air traffic services from the FAA to the Corporation.

Title VII –Research, Engineering, and Development

Subtitle A – General Provisions

Sec. 701. Short Title; Table of Contents. Establishes the short title of the bill as the “FLIGHT R&D Act.”

Sec. 702. Definitions. Defines Administrator, FAA, NASA, and Secretary.

Sec. 703. Authorization of Appropriations. Authorizes appropriations for fiscal years 2018 through 2023 for FAA.

Subtitle B– FAA Research and Development Organization

Sec. 711. Associate Administrator for Research and Development. Directs the Administrator to appoint an Associate Administrator for Research and Development no later than three months after the enactment of the Act and provides the responsibilities of the position. This position shall be a Senior Executive Service position.

Sec. 712. Research Advisory Committee. Directs the FAA Research, Engineering, and Development Advisory Committee (REDAC) to report to Congress as well as the Administration. Directs the Administrator to provide a written response within 60 days of receiving a recommendation from the FAA Research, Engineering, and Development Advisory Committee (REDAC) and outlines the details required in that response. This section requires

that the National Aviation Research Plan also include a summary of all REDAC recommendations and status of their implementation.

Sec. 713. Plan To Determine Research and Development Responsibility. Directs the Administrator to enter into an agreement with an external independent systems engineering and technical assistance organization to develop a plan for the transition of FAA research and development activities. The plan must examine all FAA research and development activities, take into account required transfer of the national air traffic control system, recommend research and development activities that should and should not be transferred to non-federal entities, identify the necessary authorities that exist or are required to carry out said recommendations, assess the pros and cons of transferring activities to a non-federal entity, and take into account the safety of national security, the national airspace system, foreign policy, and economic interests of the United States. No later than one year after the enactment, the Administrator shall submit a plan to the Research, Engineering, and Development Advisory Committee and the Committee on Science, Space, and Technology. No later than six months after receiving this plan, the Research, Engineering, and Development Advisory Committee shall submit an assessment of the plan to the Committee on Science, Space, and Technology of the House of Representatives and the Committee on Commerce, Space, and Transportation of the Senate.

Subtitle C – Unmanned Aircraft Systems

Sec. 721. Unmanned Aircraft Systems and Research Development Roadmap. Updates the current provision requiring a yearly roadmap for integrating UAS into the NAS to also include plans for conducting and utilizing research and development.

Sec. 722. Probabilistic Metrics for Exemptions. Directs the Administrator to commission an independent study within 30 days to develop parameters to conduct research and development for probabilistic metrics to enable the identification of hazards and the assessment of risks necessary to make determinations under Sec. 333(a) of the FAA Modernization and Reform Act of 2012. Requires the study to be transmitted to Congress no later than nine months after enactment.

Sec. 723. Probabilistic Assessment of Risks. Directs FAA to conduct research and development to inform probabilistic assessments to guide certification requirements for the integration of public unmanned aircraft systems in the national airspace.

Sec. 724. Unmanned Aerial Vehicle-Manned Aircraft Collision Research. Directs the Administrator to coordinate with NASA to conduct testing of unmanned aerial vehicles colliding with manned aircraft. The section also requires a report one year after enactment on the status of the research.

Sec. 725. Special Rule for Research and Development. This section allows UAS operators who are using UAS for research and development purposes to operate so long as they meet certain requirements (to be established by the FAA) to ensure safety, making the U.S. competitive with foreign states.

Sec. 726. Beyond Line-of-Sight Research and Development. This amendment allows UAS operators to perform beyond line-of-sight operations within UAS test ranges and NASA centers and facilities.

Subtitle D – Cyber Security

Sec. 731. Cyber Testbed. Directs the Administrator to establish a Cyber Testbed for research, development, testing, evaluation, and validation within six months after the bill's enactment.

Sec. 732. Cabin Communications, Entertainment, and Information Technology Systems Cybersecurity Vulnerabilities. Directs the Administrator to issue a report to Congress within nine months on the research and development needs associated with cybersecurity of cabin communications, entertainment, and information technology systems on civil passenger aircraft.

Sec. 733. Cybersecurity Threat Modeling. Directs the Administrator to research and develop an internal FAA cyber threat modeling program in consultation with the National Institute of Standards and Technology and report to Congress one year after the bill's enactment regarding the program's status.

Sec. 734. National Institute of Standards and Technology Cybersecurity Standards. In response to GAO recommendations, this section directs the FAA to report to Congress within six months of enactment on its plan to implement NIST revisions to cybersecurity guidance documents within timeframes set by OMB.

Sec. 735. Cybersecurity Research Coordination. Instructs the Administrator to cooperate on cybersecurity research with international air traffic management organizations in Europe, the UK, Canada, and Australia.

Sec. 736. Cybersecurity Research and Development Program. Directs the FAA to establish a research and development program to improve cybersecurity in civil aircraft and the national airspace system. Requires a plan one year after enactment on the new program, which will then be studied by the National Academies and transmitted to Congress within 18 months.

Subtitle E – FAA Research and Development Activities

Sec. 741. Research Plan for the Creation of New Technologies into the National Airspace System. Directs FAA, in consultation with NASA, to develop a research plan for the certification of new technologies into the national airspace system within one year.

Sec. 742. Aviation Fuel Research, Development, and Usage. Authorizes the Administrator to conduct or supervise research and development currently done by the Piston Aviation Fuels Initiative unleaded avgas program.

Sec. 743. Air Traffic Surveillance Over Oceans and Other Remote Locations. Directs the Administrator, in consultation with NASA, to establish a research and development program on civilian air traffic surveillance over oceans and remote locations. Establishes a pilot program to integrate surveillance equipment into the national airspace system and report to Congress in 18 months.

Sec. 744. Single-Piloted Commercial Cargo Aircraft. Establishes a research and development program in support of single-piloted cargo aircraft assisted with remote piloting and computer piloting and requires a report on the program within 6 months.

Sec. 745. Electromagnetic Spectrum Research and Development. This provision directs the FAA to research the potential use of non-aviation protected spectrum for UAS operations, as well as the impacts of reallocated spectrum on the safety of the aviation enterprise.

Title VIII – Airport and Airway Trust Fund Provisions and Related Taxes

Sec. 801. Expenditure authority from Airport and Airway Trust Fund. Extends general expenditure authority for the Airport and Airway Trust Fund from September 30, 2017 through September 30, 2023, for the duration of the legislation.

Sec. 802. Extension of taxes funding Airport and Airway Trust Fund. Extends aviation taxes funding the Airport and Airway Trust Fund from September 30, 2017 through September 30, 2023, for the duration of the legislation. This extension covers taxes on fuel, the transportation of people, and the transportation of property.

Sec. 803. Taxes temporarily modified after September 30, 2020. Proportionally reduces all existing aviation taxes funding the Airport and Airway Trust Fund beginning after September 30, 2020, and through September 30, 2023, following the transition period of air traffic services to the Corporation. The provision targets the residual taxes, as reduced, to raise sufficient annual revenue to fund the Airport Improvement Program.