SECTION-BY-SECTION SUMMARY

THE FAA REAUTHORIZATION ACT OF 2018 H.R. 4

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 FAA's Airport Improvement Program (AIP) account: \$3.350 billion annually for each of fiscal years 2018-2023. 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; \$3.049 billion for fiscal year 2020; \$3.118 billion for fiscal year 2021; \$3.190 billion for fiscal year 2022; and \$3.263 billion for fiscal year 2023.

Section 103. FAA Operations. Authorizes from the General Fund the following for FAA's Operations account: \$10.231 billion for fiscal year 2018; \$10.434 million for fiscal year 2019; \$10.639 million for fiscal year 2020; \$10.861 billion for fiscal year 2021; \$11.095 billion for fiscal year 2022; and \$11.329 billion for fiscal year 2023.

Section 104. Adjustment to AIP Program Funding. Discontinues a formula required in the *FAA Modernization and Reform Act of 2012* (P.L. 112-095) 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.

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 it 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, the section 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 55 percent cumulatively over a three-year period. Further, it 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. Additionally, it 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. Finally, it outlines procedures to ensure that airports have an adequate opportunity to review and appeal the FAA's b/c analysis.

Section 135. Airport Access Roads in Remote Locations. Expands the permissible use of AIP funds through fiscal year 2021 to include the development of an airport access road in a noncontiguous 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 phase out 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— FAA Safety Certification Reform

Subtitle A – General Provisions

Section 201. Definitions. This section sets forth definitions applicable to this title.

Section 202. 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 211. 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 212. 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 213. 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 214. 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 215. Review of Certification Process for Small General Aviation Airplanes. Directs the DOT Inspector General (IG) to review the final rule titled "Revision of Airworthiness Standards for Normal, Utility, Acrobatic and Commuter Category Airplanes." In this review, the 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 231. Flight Standards Performance Objectives and Metrics. Directs the Administrator, in collaboration with the SOCAC, 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 232. 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 233. 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 234. 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 241. 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 242. 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 251. 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 252. 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 253. 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 254. 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 III — Safety

Subtitle A – General Provisions

Section 301. 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 302. Safety Critical Staffing. Within 270 days of the date of enactment, 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 303. 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 International Civil Aviation Organization (ICAO), other international organizations, and the private sector.

Section 304. 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 305. 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 306. Marking of Towers. Clarifies section 2110 of the *FAA Extension, Safety, and Security Act of 2016* (P.L. 114-190) to ensure 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 307. 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 308. 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. Requires the report to contain the FAA's progress with respect to ensuring full ODA utilization authority.

Section 309. 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 310. 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 311. 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 312. 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 313. 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 314. 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 315. 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 316. 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 317. Critical Airfield Markings. Requires a study on the durability of and use of Type III and Type I retroflective glass beads on airport runways.

Section 318. Regulatory Reform. Extends special rulemaking procedures for aviation rulemaking committees to aerospace rulemaking committees.

Subtitle B – Unmanned Aircraft Systems

Section 331. Definitions. This Section sets forth definitions applicable to this subtitle.

Section 332. 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 Communication, Navigation, and Surveillance (CNS). Establishes a process for the FAA to approve certain UTM and low-altitude 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 333. 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 334. 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 335. 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 336. Public UAS Operations by Tribal Governments. Allows certain tribal governments to operate unmanned aircraft as public aircraft.

Section 337. 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 338. 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 339. 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. 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 340. 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 341. 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 Department of Defense (DOD).

Title IV – Air Service Improvements

Subtitle A – Airline Customer Service Improvements

Section 401. 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 402. 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 403. 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 404. 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 405. 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 406. 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 407. 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 408. 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 409. 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 410. 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 411. 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 412. Advisory Committee for Transparency in Air Ambulance Industry.

Establishes a Committee to improve transparency for air ambulances 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 413. 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 414. 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 441. 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 442. 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* (P.L. 90-480), the *Rehabilitation Act of 1973* (P.L.93-112), the *Air Carrier Access Act of 1986* (P.L. 99-435), and the *Americans with Disabilities Act of 1990* (P.L. 110-325). Requires a report to be submitted no later than one year after the date of enactment to the Secretary and to Congress.

Section 443. 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 444. 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 451. Essential Air Service Authorization. Authorizes the Essential Air Service Program (EAS) at the following levels: \$153 million for fiscal year 2018; \$156 million for fiscal year 2019; \$159 million for fiscal year 2020; \$162 million for fiscal year 2021; \$165 million for fiscal year 2022; and \$168 million for fiscal year 2023.

Section 452. 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 453. 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 454. 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 2018 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 455. 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 V – Miscellaneous

Section 501. Review of FAA Strategic Cybersecurity Plan. Not later than one year after the date of enactment, the Administrator will initiate a review of the FAA's cybersecurity strategic framework that was created under the *FAA Extension, Safety, and Security Act of 2016*. Upon review, the Administrator will modify the framework to address any identified deficiencies.

Section 502. 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.

Section 503. 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 504. 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, 2024.

Section 505. 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 506. 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 507. 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 508. Aircraft Registration. Directs the Administrator to initiate a rulemaking to increase the duration of registration for noncommercial general aviation aircraft to 10 years.

Section 509. 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 510. 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 511. Ensuring FAA Readiness to Provide Seamless Oceanic Operations. Requires that no later than September 30, 2018, 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 512. 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 513. 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 514. 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 515. 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 516. 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 517. 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 it 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 518. 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 519. 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 520. 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 521. 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 522. Application of Veterans' Preference to Federal Aviation Administration Personnel Management System. Applies veterans' hiring preference to the FAA.

Section 523. 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 524. 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 525. 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 526. 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 527. 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 528. 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 529. 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 530. 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 531. 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 532. 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 533. 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 534. 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 535. 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 536. FAA Data Transparency. Directs the Administrator and the Chief Operating Officer (COO) of the FAA to complete an initial data report, which will include a variety of data and calculations assessing the air traffic control system. The Section also requires the Inspector General to validate the model used by the Administrator and the COO to complete the calculations. After the initial report and model validation, the Administrator and the COO are required to submit data reports starting no later than March 31, 2019 and biennially thereafter for eight years.

Section 537. 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 538. 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 539. 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 540. 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 541. 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 542. 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.

Title VI – Disaster Recovery Reform Act

Section 601. Applicability. Clarifies applicability of the division.

Section 602. State Defined. Provides the definition of "State" for the Division.

Section 603. Wildfire Prevention. Aids states affected by wildfires with hazard mitigation assistance.

Section 604. Additional Activities. Allows hazard mitigation assistance to be used for activities that help reduce the risk of future damage, hardship, loss, or suffering in any area affected by a wildfire or windstorm.

Section 605. Eligibility for Code Implementation and Enforcement. Clarifies the eligibility of surge code enforcers for disaster assistance to facilitate disaster recovery.

Section 606. Program Improvements. Makes clarifications to improve various *Robert T. Stafford Disaster Relief and Emergency Assistance Act* (Stafford Act, P.L. 93-288) programs.

Section 607. Prioritization of Facilities. Prioritizes assistance to special needs facilities.

Section 608. Guidance on Evacuation Routes. Requires the Federal Emergency Management Agency (FEMA) and the Federal Highway Administration to develop guidance on evacuation routes.

Section 609. Duplication of Benefits. Allows for the President to waive Section 312 of the Stafford Act to ensure victims of disaster can still receive disaster assistance. It also allows hazard mitigation assistance, under certain circumstances, to be used for federally authorized water resource development projects.

Section 610. State Administration of Assistance for Direct Temporary Housing and Permanent Housing Construction. Authorizes states to use federal disaster assistance to directly administer temporary and permanent housing assistance for disaster victims.

Section 611. Assistance to Individuals and Households. Amends the Stafford Act to increase the amount of assistance available to individuals with disabilities.

Section 612. Multifamily Lease and Repair Assistance. Amends the Stafford Act to allow greater flexibility and options for housing disaster victims.

Section 613. Private Non-Profit Facility. Clarifies eligibility under the definition of "private non-profit facility."

Section 614. Management Costs. Amends the Stafford Act to establish fixed rates to reimburse states and local governments for direct and indirect administrative costs incurred to implement disaster recovery projects.

Section 615. Flexibility. Allows certain disaster assistance debts to be waived if such assistance was distributed based on an error by FEMA, there was no fault on behalf of the debtor, and the collection of the debt would be against equity and good conscience.

Section 616. Additional Disaster Assistance. Helps improve the economic recovery of regions affected by hurricanes and other disasters.

Section 617. National Veterinary Emergency Teams. Establishes a pilot program for veterinarians to accompany urban search and rescue teams to take care of the search and rescue of canines and to provide guidance to communities on pet care and sheltering during disasters.

Section 618. Dispute Resolution Pilot Program. Extends the dispute resolution pilot to the year 2022.

Section 619. Unified Federal Environmental and Historic Preservation Review. Requires the FEMA Administrator to review the expedited inter-agency environmental and historic preservation review process and survey other agencies' categorical exclusions and requires the FEMA Administrator to issue regulations to implement any recommendations, including categorical exclusions, identified in the report and survey.

Section 620. Closeout Incentives. Allows the Administrator to develop incentives that would encourage state, local, and tribal governments to closeout expenditures and activities on a timely basis related to disaster or emergency assistance.

Section 621. Performance of Services. Allows the Administrator to appoint temporary FEMA employees, after serving continuously for one-year, to positions in the agency in the same manner as competitive service employees.

Section 622. Study to Streamline and Consolidate Information Collection. Directs the FEMA Administrator, along with other appropriate federal agencies, to conduct a study and develop a plan and an innovative means for sharing information among disaster assistance agencies.

Section 623. Agency Accountability. Directs FEMA to provide regular reports on their website regarding disaster spending, disaster contracts, and other related disaster activities.

Section 624. Audit of Contracts. Prohibits FEMA from reimbursing any contract that prohibits oversight or auditing.

Section 625. Inspector General Audit of FEMA Contracts for Tarps and Plastic Sheeting. Requires the IG to audit FEMA contracts for tarps and plastic sheeting in response to Hurricanes Irma and Maria in Puerto Rico and the U.S. Virgin Islands.

Section 626. Relief Organizations. Clarifies and ensures certain relief organizations may provide assistance in disaster response.

Section 627. Guidance on Inundated and Submerged Roads. Ensures guidance is developed to allow FEMA to more accurately evaluate damages to inundated roads.

Section 628. Authorities. Clarifies what constitutes a federal action for purposes of consultation.

Section 629. Recoupment of Certain Assistance Prohibited. Establishes a three-year statute of limitations for FEMA to recover household and individual assistance.

Section 630. Statute of Limitations. Implements a statute of limitations on FEMA's ability to recover grant assistance from recipients after a disaster in cases where there is no evidence of fraud, waste, or abuse.

Section 631. Technical Assistance and Recommendations. Requires the FEMA Administrator to provide recommendations on how common areas of condominiums and housing cooperatives may be eligible for disaster assistance.

Section 632. Guidance on Hazard Mitigation Assistance. Requires guidance to localities on upkeep of properties purchased with FEMA funds.

Section 633. Local Impact. Directs FEMA to appropriately weigh and consider severe local impact when evaluating whether to recommend a major disaster declaration, thus ensuring a more level playing field for smaller communities when impacted by severe disasters.

Section 634. Additional Hazard Mitigation Activities. Allows hazard mitigation assistance to be used for activities that help reduce the risk of future damage, hardship, loss, or suffering in any area affected by earthquakes.

Section 635. National Public Infrastructure Predisaster Hazard Mitigation. Amends the Stafford Act to modify the predisaster hazard mitigation grant program.

Section 636. Additional Mitigation Activities. Clarifies the activities eligible for hazard mitigation assistance under the Stafford Act.

Title VII –Flight R&D Act

Subtitle A – General Provisions

Section 701. Short Title. Establishes the short title of the bill as the "FLIGHT R&D Act."

Section 702. Definitions. Defines "Administrator," "FAA," "NASA," and "Secretary."

Section 703. Authorization of Appropriations. Amends Section 48102(a) of Title 49 United States Code to authorize \$181 million for fiscal year 2018, \$186 million for fiscal year 2019, \$190 million for fiscal year 2020, \$195 million for fiscal year 2021, \$200 million for fiscal year 2022, and \$204 million for fiscal year 2023 for research, engineering, and development at the FAA. Section 48102(b) of Title 49 United States Code is amended to not authorize funds for Environmental Sustainability Research and Development programs unless the full amount authorized for Safety Research and Development programs, Economic Competitiveness Research and Development programs, and Mission Support programs is appropriated. Section 48102(g) of title 49 United States Code is amended to not authorize or appropriate funds for the Office of the Administrator for a fiscal year unless the Secretary has submitted the National Aviation Research Plan (NARP) to Congress.

Subtitle B – FAA Research and Development Organization

Section 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 enactment and provides the responsibilities of the position. This position shall be a Senior Executive Service position. The Associate Administrator for Research and Development may be a dual-appointment.

Section 712. Research Advisory Committee. This Section amends section 44508(a)(1)(A) of Title 49 United States Code to direct the FAA research advisory committee to provide advice and recommendations to Congress, along with the Administrator, about the needs, objectives, plans, approaches, content, and accomplishments of the aviation research program. Section 44508 is further amended to direct the Administrator to provide a written response within 60 days of receiving a recommendation from the FAA research advisory committee that states the Administrator's acceptance or rejection of recommendations, explanation of the decision, and an outline for implementation. The Administrator's written reply must be made publicly available

and transmitted to the House Committee on Science, Space, and Technology and the Senate Committee on Commerce, Science, and Transportation. This Section also requires that the NARP include a summary of all research advisory committee recommendations and status of their implementation.

Subtitle C – Unmanned Aircraft Systems

Section 721. Unmanned Aircraft Systems and Research Development Roadmap. Provides for no funds to be authorized for the Office of the Administrator for a fiscal year unless the Secretary has submitted the annual unmanned aircraft systems roadmap to Congress.

Section 722. Probabilistic Metrics for Exemptions. Directs the Administrator to commission an independent study, within 30 days of enactment, 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 that certain unmanned aircraft systems may operate safely in the NAS. The study also must identify additional research needed to more effectively develop and use such metrics. A report is due to Congress nine months after enactment containing the results of the study.

Section 723. Probabilistic Assessment of Risks. Directs the FAA to conduct research and development to enable a probabilistic assessment of risks to inform requirements for standards for the integration of public unmanned aircraft systems in the national airspace.

Section 724. Unmanned Aerial Vehicle-Manned Aircraft Collision Research. Directs the Administrator to coordinate with

National Aeronautics and Space Administration (NASA) to conduct testing of unmanned aerial vehicles colliding with manned aircraft, as described in the section. A report is due to Congress summarizing the costs and results of this research.

Section 725. Special Rule for Research and Development. Prohibits the Administrator from promulgating rules or regulations regarding the operation of an UAS that is flown strictly for the purpose of research and development within certain parameters.

Section 726. Beyond Line-of-Sight Research and Development. Amends Section 332(c)(2) of the *FAA Modernization and Reform Act of 2012* to allow UAS operators to perform beyond line-of-sight operations within UAS test ranges and NASA centers and facilities. This Section also allows the Administrator to promulgate regulations governing beyond line-of-sight operation of such flights for the purposes of public safety.

Subtitle D – Cybersecurity

Section 731. Cyber Testbed. Directs the Administrator to establish a Cyber Testbed for research, development, testing, evaluation, and validation of air traffic control modernization programs or technologies as being compliant with FAA data security regulations within six

months after the bill's enactment. The Cyber Testbed will be part of an integrated research and development test environment to identify and solve cybersecurity-related problems for the NAS.

Section 732. Cabin Communications, Entertainment, and Information Technology Systems Cybersecurity Vulnerabilities. Directs the Administrator to evaluate and determine research and development needs associated with cybersecurity vulnerabilities on-board passenger aircraft. The Administrator is directed to conduct an assessment of opportunities to cooperate with the private sector, and provide recommendations to improve research and development on cabin-based cybersecurity vulnerabilities. A report is due to Congress nine months after enactment on the research and development needs associated with cybersecurity of cabin communications, entertainment, and information technology systems on civil passenger aircraft.

Section 733. Cybersecurity Threat Modeling. Directs the Administrator to consult with the National Institute of Standards and Technology (NIST) to research and develop an internal FAA cybersecurity threat modeling program. This program must be updated at least every five years. A report is due one year after enactment, and within seven days of each program update, detailing the status, results, and composition of the threat modeling program.

Section 734. National Institute of Standards and Technology Cybersecurity Standards. Directs the FAA, in consultation with NIST, to submit a report containing a cybersecurity standards plan six months after enactment.

Section 735. Cybersecurity Research Coordination. Directs the Administrator to cooperate on cybersecurity research and development with other international air traffic management organizations.

Section 736. Cybersecurity Research and Development Program. This section directs the FAA to establish a research and development program to improve the cybersecurity of civil aircraft and the NAS six months after enactment. One year after enactment, the FAA shall submit a plan for the research and development program that contains objectives, proposed tasks, milestones, and a five-year budget. The Administrator shall enter into an arrangement with the National Academies for a study of the plan and report the results to Congress within 18 months of enactment.

Subtitle E – FAA Research and Development Activities

Section 741. Research Plan for the Creation of New Technologies into the NAS. Directs the Administrator, in consultation with NASA, to submit a comprehensive research plan for the certification of new technologies into the NAS. The plan must identify research necessary to support the certification and implementation of NextGen and explain the plan's relationship to other activities and procedures required for certification and implementation of new technologies into the NAS.

Section 742. Aviation Fuel Research, Development, and Usage. Authorizes the Administrator to conduct or supervise research, development, and service testing required to allow the use of an unleaded aviation gasoline in existing aircraft as a replacement for leaded gasoline.

Section 743. Air Traffic Surveillance Over Oceans and Other Remote Locations.

Establishes a research and development program on civilian air traffic surveillance over oceans and other remote locations. The Administrator shall establish a pilot program to test, evaluate, and certify for integration into the NAS such air traffic surveillance equipment. Eighteen months after enactment a report is due on the establishment of these programs.

Section 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. A report is due six months after enactment on the program and the results of a review of the program conducted by the FAA in consultation with NASA.

Section 745. Electromagnetic Spectrum Research and Development. Directs the Administrator to develop a program to research the use of spectrum in civil aviation including how UAS can safely use spectrum and commercial communication networks for control link, tracking, diagnostics, payload communication, collaborative-collision avoidance, and other purposes. This research must also include how the reallocation of spectrum may impact the safety of civil aviation and measures to protect and mitigate against spectrum interference.

Title VIII – Aviation Revenue Provisions

Section 801. Expenditure Authority from Airport and Airway Trust Fund. Extends general expenditure authority for the Airport and Airway Trust Fund from September 30, 2018 through September 30, 2023, for the duration of the legislation.

Section 802. Extension of taxes funding Airport and Airway Trust Fund. Extends aviation taxes funding the Airport and Airway Trust Fund from September 30, 2018 (or September 30, 2021, in the case of the fuel surtax for fractional ownership programs) 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.