Committee on Transportation and Infrastructure
U.S. House of Representatives
Washington, DC 20515

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January 31, 2014

SUMMARY OF SUBJECT MATTER

TO: Members, Subcommittee on Aviation
FROM: Staff, Subcommittee on Aviation
RE: Subcommittee Hearing on "The FAA Modernization and Reform Act of 2012: Two Years Later"

PURPOSE

The Subcommittee on Aviation will meet on Wednesday, February 5, 2014, at 10:00 a.m. in 2167 Rayburn House Office Building to receive testimony from the Federal Aviation Administration (FAA), Department of Transportation Office of Inspector General (DOT IG), and Government Accountability Office (GAO). The Subcommittee will hear from the witnesses regarding the progress the FAA has made in implementing provisions in the *FAA Modernization and Reform Act of 2012* (Reform Act)[1] in the last two years.

BACKGROUND

The Reform Act was enacted on February 14, 2012, and contains provisions intended to improve the safety and efficiency of our civil aviation system now and into the future. It provides the FAA with resources needed to safely operate the air traffic control system, invest in airport infrastructure, and continue implementing the Next Generation Air Transportation System (NextGen) program. It also provides policy direction to the FAA, on matters such as safely integrating unmanned aircraft systems (UAS) into the National Airspace System (NAS), streamlining the deployment of NextGen capabilities, and consolidating FAA services and facilities. Finally, the Reform Act provides greater stability to allow government and industry stakeholders to make long-term investment and policy decisions. Prior to its enactment, the FAA was operating under a series of 23 short-term extensions for nearly five years.[2]

[1] P.L. 112-95
[2] Vision 100--Century of Aviation Reauthorization Act (P.L. 108-176) was enacted on December 12, 2003, and expired on September 30, 2007.

Safety

The United States is the gold standard in aviation safety due to the commitment of government regulators and industry professionals, including manufacturers, air traffic controllers, pilots, flight attendants, and mechanics. Safety is also the top priority of the Subcommittee. In furtherance of this priority, the Reform Act requires the FAA to establish and implement a safety assessment system for foreign maintenance, repair, and overhaul facilities that are certificated by the agency.[3] The goal is to ensure that foreign facilities are subject to appropriate oversight, identify deficiencies, and improve safety. In addition, the Reform Act requires the FAA to develop a strategic runway safety plan to improve runway safety, in part, by reducing runway incursions, losses of standard separation, and operational errors.[4] The agency has not yet implemented a safety assessment system for foreign repair stations; however, the runway safety plan was transmitted to Congress on September 13, 2012.

Unmanned Aircraft Systems

The development and application of unmanned aircraft systems (UAS) is rapidly advancing, far exceeding existing rules and regulations for integrating them into the NAS. Currently, public UAS – such as those operated by federal, state, and local government entities – are operating in the NAS but only with FAA authorization.[5] Commercial use of UAS in the NAS is currently prohibited by the FAA.

The Reform Act requires the FAA to ***safely*** integrate civil UAS into the NAS by September 30, 2015.[6] In doing so, the FAA is required to establish a minimum of six test ranges to conduct research and development activities to address certification standards, coordination with NextGen, privacy issues, and the verification of the operational safety of UAS. Although the establishment of the test ranges was delayed, on December 30, 2013, the FAA announced the selection of the six test site operators.[7]

According to the FAA, while the selection of these test sites will not allow immediate access to the NAS for commercial and civil purposes, the data that is generated will help the FAA answer research questions such as solutions for "sense and avoid," command and control, ground control station standards and human factors, airworthiness, lost link procedures, and the interface with the air traffic control system.[8] Much of this data will be analyzed at the FAA's William J. Hughes Technical Center in Egg Harbor Township, New Jersey, and will ultimately be used to develop regulations and operational procedures for future commercial and civil use of the NAS by UAS.

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[3] P.L. 112-95, Section 308 – Inspection of Repair Stations Located outside the United States.
[4] P.L. 112-95, Section 314 – Runway Safety.
[5] http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/aaim/organizations/uas/coa/.
[6] The Subcommittee notes that it is the responsibility of the FAA to determine if civil UAS can be safely integrated into the NAS by the established deadline.
[7] FAA Press Release, *FAA Selects Unmanned Aircraft Systems Research and Test Site*, December 30, 2013; University of Alaska; State of Nevada; Now York's Griffiss International Airport; North Dakota Department of Commerce; Texas A&M University-Corpus Christi; and Virginia Polytechnic Institute and State University (Virginia Tech).
[8] FAA Fact Sheet, *FAA UAS Test Site Program*, December 30, 2013.

The Reform Act also requires the FAA to determine if some UAS, due to their size, speed, operational capability, proximity to airports and population centers, and operation with the visual line of sight,[9] are capable of operating safely in the NAS before the completion of a required UAS integration plan and rulemaking.[10] The agency was tasked to assess whether these particular UAS do not create a hazard or pose a threat and therefore may not require certification or authorization from the FAA to operate. The agency recently announced that its Small UAS rulemaking, where the FAA intends to address this mandate, will be further delayed with publication not expected until November 2014.

Next Generation Air Transportation System

It has long been recognized that our current air traffic system will be unable to accommodate future air traffic demands. Ground-based radar, voice communication congestion, and controller workload limit the capacity and efficiency of the NAS. For more than a decade, the FAA has been developing a program to modernize the system with new technologies. The future air traffic system will utilize space-based navigation, text message-like communications between pilots and controllers, and automation tools that will reduce the workload of controllers. When it is properly implemented, NextGen will reduce delays and operating costs, improve safety and efficiency, increase capacity, and lessen aviation's impact on the environment. While the FAA has made progress implementing some NextGen programs, it has also experienced significant setbacks including cost overruns and schedule delays on other programs.

The Reform Act includes the most significant reforms to the NextGen program since its inception. It required the FAA to appoint a Chief NextGen Officer, responsible for overseeing the entire NextGen program and held accountable by Congress,[11] requires the acceleration of NextGen technologies and capabilities, including expediting environmental review procedures to improve airspace efficiency,[12] and requires the development of operational incentives to encourage the equipage of aircraft with NextGen technologies.[13] Last year, the FAA appointed a Chief NextGen Officer. However, the agency's progress in achieving other NextGen mandates included in the Reform Act has not been consistent. For example, the FAA has not yet completed a plan to accelerate NextGen technologies at major airports or established a public-private partnership incentive program to encourage airspace users to install NextGen avionic equipment on aircraft.

Good Governance

As previously mentioned, the Reform Act requires the FAA to develop a "National Facilities Realignment and Consolidation Report"[14] and submit it to Congress. The report is intended to support the transition to NextGen and reduce capital, operating, maintenance, and administrative costs of the FAA without adversely affecting safety. Further, the FAA is required

[9] P.L. 112-95, Section 333 – Special Rules for Certain Unmanned Aircraft Systems.
[10] P.L. 112-95, Section 332 – Integration of Civil Unmanned Aircraft Systems Into National Airspace System.
[11] P.L. 112-95, Section 204 – On June 3, 2013, Mr. Michael Whitaker was sworn in as the Chief NextGen Officer.
[12] P.L. 112-95, Section 213 – Acceleration of NextGen Technologies.
[13] P.L. 112-95, Section 222 – Operational Incentives.
[14] P.L. 112-95, Section 804 – Consolidation and Realignment of FAA Services and Facilities.

to include recommendations on realigning and consolidating FAA facilities with input from a diverse group of government and industry stakeholders. Perhaps most importantly, the Reform Act requires the agency to implement its recommendations unless Congress enacts a joint resolution of disapproval. The report was due in June 2012; however, it has not yet been submitted.

The Reform Act also requires the FAA to review each program, office, and organization with the agency to identify (1) duplicative positions, programs, roles, or offices; (2) wasteful practices; (3) redundant, obsolete, or unnecessary functions; (4) inefficient processes; and (5) ineffectual or outdated policies.[15] This provision requires the FAA to report to Congress and grants the agency the necessary authority to address its findings. To increase accountability, the GAO is currently reviewing and analyzing the agency's progress to date, as well as their future plans, to fully implement each recommendation to streamline and reform the FAA.[16]

DOT IG and GAO

The Reform Act directs the DOT IG to conduct five reviews of FAA activities and policies, including: a report on disadvantaged small businesses participation in DOT and FAA programs;[17] an annual review of the Automatic Dependent Surveillance-Broadcast program; an assessment of the effectiveness of the FAA's Voluntary Disclosure Reporting Program; the enforcement of long, on-board delays; and an assessment[18] of the FAA's air traffic controller scheduling practices.[19] The Reform Act also mandates the GAO to conduct eight studies, including: alternative means of collecting passenger facility charges;[20] the effectiveness of the FAA's oversight of new technologies to prevent or mitigate smoke in the cockpit;[21] compensation for delayed baggage;[22] an analysis of the Collegiate Training Initiative program;[23] a review of FAA facility conditions;[24] an assessment of the impact of increases in aviation fuel prices; an air-rail code sharing study;[25] and periodic audits of the National Mediation Board's[26] programs and expenditures.[27] The Subcommittee notes that this work is in addition to roughly 35 ongoing or recently completed Congressional requests to the DOT IG and GAO on FAA activities and programs. The findings of these reviews will assist the Subcommittee in drafting the next FAA reauthorization law.

[15] P.L. 112-95, Section 812 – FAA Review and Reform.
[16] Congressional Request, Chairman Shuster and Chairman LoBiondo, 11/20/2013.
[17] As required by Section 140 of P.L. 112-95, the report was issued on 4/23/2013 (ZA-2013-072).
[18] As required by Section 609 of P.L. 112-95, the report was issued on 8/27/2013 (AV-2013-120).
[19] P.L. 112-95, Sections 140, 211, 344, 406, and 609.
[20] As required by Section 112 of P.L. 112-95, the report was issued on 2/14/2013 (GAO-13-262R).
[21] As required by Section 316 of P.L. 112-95, the report was issued on 6/4/2013 (GAO-13-551R).
[22] As required by Section 407 of P.L. 112-95, the report was issued on 6/24/2012 (GAO-12-804R).
[23] As required by Section 603 of P.L. 112-95, the report was issued on 8/24/2012 (GAO-12-996R).
[24] As required by Section 610 of P.L. 112-95, the report was issued on 9/10/2013 (GAO-13-757).
[25] As required by Section 810 of P.L. 112-95, the report was issued on 8/2/2013 (GAO-13-691).
[26] As required by Section 1004 of P.L. 112-95, the report was issued in 12/3/2013 (GAO-14-5).
[27] P.L. 112-95, Sections 112, 316, 407, 603, 610, 808, 810, and 1004.

Status of Provisions in the Reform Act

In addition to the provisions referenced earlier in this memorandum, below is a list of highlighted provisions in the Reform Act and their implementation status.[28]

Provision	Deadline	Status
Appoint Chief NextGen Officer (§204 (1))	N/A	Complete
Report on status of NextGen acceleration efforts at Core Airports (§213(a)(1))	8/14/2012	Incomplete
Publish report on efforts to accelerate NextGen procedures at Non- Core Airports (§213(b)(2)(A))	8/14/2013	Incomplete
Develop a plan to accelerate NextGen technology DataComm (§213(d))	2/14/2013	Incomplete
Develop and establish performance metrics for NextGen (§214)	8/12/2012	Complete
Develop plan to accelerate and streamline NextGen technology certification (§215)	8/12/2012	Incomplete
Evaluate surface systems technology use at Core Airports (§216)	12/13/2012	Incomplete
Issue final rule on safety of crew and passengers on air ambulance helicopters (§306)	6/1/2012	Incomplete
Secretary of State and DOT Secretary issue joint request for international drug and alcohol standards at foreign repair stations (§308(d)(1))	2/14/2013	Complete
Issue NPRM on inspections of foreign repair stations (§308(d)(2))	2/14/2013	Incomplete
Assess and implement plan to improve aircraft certification process (§312)	8/12/2012	Partially Complete
Submit advisory panel report on consistency of regulatory interpretation (§313)	2/14/2013	Complete
Develop process for tracking and investigating incidents in runway safety (§314(b))	8/4/2012	Complete
Develop comprehensive plan for UAS in the National Airspace (§332(a)(1))	11/10/2012	Complete
Develop 5 year roadmap plan for UAS Integration into National Airspace (§332(a)(5))	2/14/2013	Complete
Establish test range program for UAS (§332(c)(1))	6/30/2012	Partially Complete
Study impact of the use of cell phones on passenger aircraft (§410)	8/12/2012	Complete
Report to Congress on study on frontline manager staffing (§604(e))	11/14/2012	Incomplete
Report to Congress on study on FAA technical training and staffing (§605)	2/14/2013	Incomplete
Implement staffing model for aviation safety inspectors (§606)	1/1/2013	Complete
Review and evaluate FAA academy and other training efforts (§609(b))	2/14/2013	Incomplete
Develop plan on consolidation and realignment of FAA services and facilities (804)	6/13/2012	Incomplete
Review, streamline and reform FAA programs, processes and policies (§812)	7/13/2012	Partially Complete

[28] The Subcommittee notes that this is only a sample list. It is not wholly representative of the FAA's progress in implementing mandates required by the Reform Act, nor does it reflect the Subcommittee's priorities.

WITNESS LIST

The Honorable Michael Huerta
Administrator
Federal Aviation Administration

The Honorable Calvin Scovel, III
Inspector General
U.S. Department of Transportation

Dr. Gerald Dillingham
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