THE NEW ENGLAND COUNCIL

Committee Update

September 26, 2014

Department of Transportation Inspector General Announces New Audit and Audit Results on NextGen Air Traffic Control System

Dear Transportation Committee Member:

On Monday of this week, the Office of the Inspector General (OIG) for the U.S. Department of Transportation stated in a memo that the OIG would be conducting an audit to determine the "status of NextGen transformational programs."

The text of the memo is as follows:

"The Federal Aviation Administration's (FAA) Next Generation Air Transportation System (NextGen) is a multibillion dollar infrastructure project intended to modernize our Nation's aging air traffic system and provide more efficient air transportation management. To meet these goals, FAA is investing in six transformational programs[1] that are expected to provide the foundational technologies and infrastructure needed for NextGen. These programs will provide new capabilities such as a precise satellite-based surveillance system and digital data link communications for air traffic controllers and pilots. To date, FAA has invested nearly $3 billion in these programs and is requesting an additional $488 million for fiscal year 2015.

In April 2012, [OIG] reported[2] that FAA is taking an incremental approach towards implementing the transformational programs to minimize risk in the near term. However, this approach limits visibility into total costs, timelines, and expected benefits. We [OIG] also found that FAA's progress in implementing the programs has been impacted by a lack of finalized requirements and complex interdependencies with other FAA modernization programs, including integration challenges with automation systems controllers rely on to manage air traffic.

Given the importance of these transformational programs to NextGen, the Chairman and Ranking Member of the Senate Committee on Commerce, Science, and Transportation requested that [OIG update the] 2012 report. Accordingly, [OIG's] audit objectives are to identify any (1) formal changes FAA has made to its programs' scope, including costs and

schedules, and (2) adjustments in FAA's anticipated benefits with respect to reducing Agency costs and improving the flow of air traffic."

Monday's announcement by the OIG comes less than two weeks after an Audit Report by the Inspector General on NextGen noted that the benefits of implementing a key part of NextGen – the Automatic Dependent Surveillance-Broadcast (ADS-B) system – are "limited due to a lack of advanced capabilities and delays in user equipage."

The summary of that September 11, 2014, OIG report is as follows:

"The Automatic Dependent Surveillance-Broadcast (ADS-B) system is central to the Federal Aviation Administration's (FAA) Next Generation Air Transportation System (NextGen) goals. ADS-B technology is expected to allow FAA to transition from ground-based radar to a satellite-based system for managing air traffic. However, in 2010, [OIG] reported that FAA faces significant risks and challenges in finalizing ADS-B's technical requirements, managing its cost and schedules, and encouraging airspace users to equip with ADS-B avionics.

FAA recently completed ADS-B's ground infrastructure with the deployment of 624 ground radio stations in April 2014. However, controller and pilot use of ADS-B throughout the National Airspace System (NAS) remains years away, in part because FAA has yet to resolve significant hazards identified during operational testing or conduct more rigorous testing of the entire system. Moreover, while ADS-B will provide some useful services—particularly in areas with no radar coverage—the system's initial capabilities and benefits are limited. According to FAA, airspace users will gain the most benefits with the advanced capabilities of *ADS-B In*, which is expected to provide pilots enhanced merging and spacing capabilities for airport arrivals. However, requirements for *ADS-B In* advanced capabilities continue to evolve, creating significant challenges for certifying and equipping users with ADS-B avionics. Finally, the total cost and timeline to implement ADS-B and provide benefits for FAA and airspace users remain uncertain. FAA has increased its cost estimates for the total program by approximately $400 million and continues to adjust expected ADS-B benefits. As a result, FAA's costs for the current ADS-B program now outweigh the potential benefits to users, and risks of further cost and schedule increases remain.

[OIG] made six recommendations to ensure ADS-B is operationally suitable, safe to deploy in the NAS, and a viable program. FAA stated that it generally concurs with all but one of the recommendations. All recommendations will remain open and unresolved until FAA provides specific information on its planned actions and completion dates, as requested in [the OIG's] draft report."

[1] The six programs are Automatic Dependent Surveillance-Broadcast, System-Wide Information Management, Data Communications, National Airspace System Voice System, Common Support Services-Weather, and Collaborative Air Traffic Management Technologies.

[2] *Status of Transformational Programs and Risks to Achieve NextGen Goals* (OIG Report No. AV-2012-094), Apr. 23, 2012. OIG reports are available on our Web site at http://www.oig.dot.gov.

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