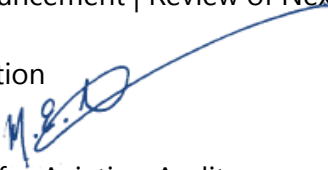




Memorandum

Date: May 17, 2018

Subject: INFORMATION: Audit Announcement | Review of NextGen Equipage Rates
Project No. 18A3004A000
Federal Aviation Administration

From: Matthew E. Hampton 
Assistant Inspector General for Aviation Audits

To: Director, Audit and Evaluation

The Federal Aviation Administration's (FAA) Next Generation Air Transportation System (NextGen) is a multibillion-dollar transportation infrastructure project intended to modernize our Nation's aging air traffic system and provide safer and more efficient air travel. Implementing NextGen is a complex undertaking and requires joint investments from FAA (new ground systems for controllers) and airspace users (new avionics and displays for pilots) to realize expected benefits.

There are several key NextGen technologies that require airspace users to purchase and install new avionics on their aircraft, including one effort that has been mandated by FAA, the Automatic Dependent Surveillance–Broadcast (ADS-B),¹ and others that are optional, such as Data Communications (DataComm) for controllers and pilots.² FAA has mandated that aircraft operating in most controlled domestic airspace be equipped with ADS-B *Out*³ technology by January 1, 2020.⁴ According to FAA, over 48,000 aircraft have successfully been equipped with ADS-B as of May 1, 2018. However, these represent a small fraction of the approximately 241,000 aircraft that need to install ADS-B equipment by the 2020 deadline.

¹ ADS-B technology uses the satellite-based Global Position System (GPS) and is intended to allow FAA to transition from ground-based radar to a satellite-based system for improving surveillance and management of air traffic.

² DataComm is expected to provide a 2-way digital communications link between controllers and flight crews, improving accuracy and safety. FAA has implemented data link technology at towers and is planning to implement the new system at high altitude facilities beginning in 2019.

³ ADS-B *Out* is the current stage of the program and refers to an aircraft broadcasting its position and other information to ground systems so the information can be seen on controller displays.

⁴ 14 CFR § 91.225 and 14 CFR § 91.227 (May 2010).

Citing concerns about whether operators will meet the 2020 deadline, the Chairmen of the House Committee on Transportation and Infrastructure and its Aviation Subcommittee requested that we provide information regarding equipage rates for ADS-B and other NextGen technologies on air carrier and general aviation aircraft as well as the reasons operators decide to equip their aircraft. In addition, they requested that we assess plans in place for meeting the 2020 ADS-B *Out* deadline.

Accordingly, our audit objectives are to: (1) determine the equipage rates for ADS-B and other NextGen-enabling technologies on commercial and general aviation aircraft; (2) ascertain the reasons behind aircraft operators' decisions to equip or not equip with these technologies; and (3) assess FAA and aircraft operators' plans to meet the 2020 ADS-B *Out* equipage deadline.

We plan to begin our audit next month and will contact your audit liaison to schedule an entrance conference. We will conduct our work at FAA Headquarters and other locations as necessary. If you have any questions, please contact me at (202) 366-0500 or Robin Koch, Program Director, at (404) 562-3770.

cc: DOT Audit Liaison, M-1
FAA Audit Liaison, AAE-100