

November 14, 2019

The Honorable Kay Granger Committee on Appropriations House of Representatives Washington, DC 20515

Dear Ranking Member Granger:

The enclosed report is in response to the provision in House Report 115-237, Departments of Transportation, and Housing and Urban Development, and Related Agencies Appropriations Bill, 2018 associated with the Consolidated Appropriations Act, 2018 (Public Law 115-141). The House Report directs the Federal Aviation Administration (FAA) to provide a report on the Next Generation very high frequency Air/Ground Communications (NEXCOM) Program plan to replace the aging air-to-ground analog radios (NEXCOM Segment 2 Phase 1 and 2) within 180 days of enactment of the act.

The FAA's report on the NEXCOM Radio Replacement and Deployment Schedule is intended to address the information requested in House Report 115-237.

We have sent an identical letter to Chairwomen Lowey, Chairman Shelby, and Vice Chairman Leahy.

Sincerely,

Steve Dickson Administrator

Enclosure

Office of the Administrator



November 14, 2019

The Honorable Nita Lowey Chairwoman, Committee on Appropriations House of Representatives Washington, DC 20515

Dear Madam Chairwoman:

The enclosed report is in response to the provision in House Report 115-237, Departments of Transportation, and Housing and Urban Development, and Related Agencies Appropriations Bill, 2018 associated with the Consolidated Appropriations Act, 2018 (Public Law 115-141). The House Report directs the Federal Aviation Administration (FAA) to provide a report on the Next Generation very high frequency Air/Ground Communications (NEXCOM) Program plan to replace the aging air-to-ground analog radios (NEXCOM Segment 2 Phase 1 and 2) within 180 days of enactment of the act.

The FAA's report on the NEXCOM Radio Replacement and Deployment Schedule is intended to address the information requested in House Report 115-237.

We have sent an identical letter to Ranking Member Granger, Chairman Shelby, and Vice Chairman Leahy.

Sincerely,

Steve Dickson Administrator

Enclosure

Office of the Administrator



November 14, 2019

The Honorable Patrick Leahy Ranking Member Committee on Appropriations United States Senate Washington, DC 20510

Dear Senator Leahy:

The enclosed report is in response to the provision in House Report 115-237, Departments of Transportation, and Housing and Urban Development, and Related Agencies Appropriations Bill, 2018 associated with the Consolidated Appropriations Act, 2018 (Public Law 115-141). The House Report directs the Federal Aviation Administration (FAA) to provide a report on the Next Generation very high frequency Air/Ground Communications (NEXCOM) Program plan to replace the aging air-to-ground analog radios (NEXCOM Segment 2 Phase 1 and 2) within 180 days of enactment of the act.

The FAA's report on the NEXCOM Radio Replacement and Deployment Schedule is intended to address the information requested in House Report 115-237.

We have sent an identical letter to Chairman Shelby, Chairwoman Lowey, and Ranking Member Granger.

Sincerely,

Steve Dickson Administrator

Enclosure

Office of the Administrator



November 14, 2019

The Honorable Richard Shelby Chairman, Committee on Appropriations United States Senate Washington, DC 20510

Dear Mr. Chairman:

The enclosed report is in response to the provision in House Report 115-237, Departments of Transportation, and Housing and Urban Development, and Related Agencies Appropriations Bill, 2018 associated with the Consolidated Appropriations Act, 2018 (Public Law 115-141). The House Report directs the Federal Aviation Administration (FAA) to provide a report on the Next Generation very high frequency Air/Ground Communications (NEXCOM) Program plan to replace the aging air-to-ground analog radios (NEXCOM Segment 2 Phase 1 and 2) within 180 days of enactment of the act.

The FAA's report on the NEXCOM Radio Replacement and Deployment Schedule is intended to address the information requested in House Report 115-237.

We have sent an identical letter to Vice Chairman Leahy, Chairwoman Lowey, and Ranking Member Granger.

Sincerely,

Steve Dickson Administrator

Enclosure

Office of the Administrator

Next Generation Air/Ground Communications (NEXCOM) Radio Replacement and Deployment Schedule

Report to Congress



Prepared by the:

Federal Aviation Administration (FAA)

October, 2019

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INTRODUCTION

Purpose

This report addresses the concerns stated within the House Report 115-237 - DEPARTMENTS OF TRANSPORTATION, AND HOUSING AND URBAN DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS BILL, 2018 regarding the Federal Aviation Administration's (FAA) Next Generation very high frequency Air/Ground Communications (NEXCOM) Program and provides the requested information. The specific language within the House Report is restated below:

Next generation very high frequency air/ground communications (NEXCOM).—

The Committee provides \$58,000,000 for Next Generation Very High Frequency Air/Ground Communications, an increase of \$5,000,000 above the budget request.

The NEXCOM Segment 2 (NS2) Phase 1 & 2 Program replaces and modernizes the aging, unsupportable, and obsolete National Airspace System (NAS) Safety Critical Service air-to- ground (A/G) analog radios that allow direct voice communication with pilots in Terminal, Enroute, and Flight Services.

The currently installed radios date back to 1967 and updated radio technology will improve system performance and dramatically reduce sustainment and support costs. These sustainment and support costs of the 50-year-old radios are significant and the FAA has had to resort to cannibalization of radio inventory for spare parts to support Safety Critical Service operational units.

The Committee recognizes the importance of replacing these radios and is concerned with the FAA's recently revised Capital Investment Plan which delays the procurement and installation of the required radios.

The Committee requests a report not later than 180 days after enactment that describes the FAA's plan to replace the radios and the revised deployment schedule.

Background

The NEXCOM Program replaces and modernizes the aging and obsolete National Air Space (NAS) air-to-ground (A/G) analog radios that allow direct voice communication with pilots. Replacing the radios is part of a larger program to address the limitations on increasing the allocation of radio frequency spectrum dedicated solely for controller communications. Additional frequencies are needed to ensure the air traffic system's capability grows to meet the projected U.S. air traffic requirements of the future.

The new Very High Frequency radios can handle both the existing 25 kHz bandwidth voice mode protocol for channel separation, or they can operate in more efficient 8.33 kHz bandwidth voice mode currently used in Europe. The 8.33 kHz voice-only mode divides the current bandwidth from one channel into three channels. This increase in the number of channels partitions the existing spectrum, so one of the three channels can be used for a stand-alone data communications system

(i.e., Data Communications program). The radios will support Voice over Internet Protocol and meet the requirements of future voice programs. In addition, replacement of obsolete radios improves A/G radio equipment maintainability and reliability and enhances A/G information security and communications control.

Emergency Hand Held Radios are included in the current program baseline. The NEXCOM Program expects contract award in Fiscal Year (FY) 2020, and should start deploying the Emergency Radios in FY 2021.

Segment 1a of the NEXCOM Program finished replacing all 25,000 en route radios with Multimode Digital Radios in FY 2013.

Segment 2 began replacing radios at terminal and flight services in FY 2009 with completion scheduled in FY 2026. Ultimately, 35,000 radios will be deployed into the NAS under the NEXCOM Segment 2 Program.

Overview

This report addresses the concerns noted in the 2018 House Appropriations Bill and provides specific information on the FAA's plan to replace the radios and the revised deployment schedule.

REPORT

On August 16, 2017, the NEXCOM Segment 2 Phase 2 Program was baselined by the FAA Joint Resource Council with the following cost and schedule baseline:

NEXCOM Segment 2		\$M										
		FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	Total	
Phase 2 (Baselined)	F & E	3.0	50.0	50.0	50.0	50.0	50.0	43.5	23.2	14.4	334.2	

Acquisition Program Baseline (APB) Milestones	APB Date	APB Duration
Final investment decision	Aug-17	0 months
Operational Readiness Decision (ORD) at 115 sites	Dec-19	28 months
ORD at 315th site	Dec-21	52 months
ORD at 445th site	Dec-23	76 months
Handheld Transceivers delivered to 44 sites	Dec-26	112 months
Emergency Transceivers delivered to all sites	Dec-26	112 months
ORD at last site	Dec-26	112 months

The 2018 House Appropriations Committee report recommended an increase of \$5 million in FY 2018 for NEXCOM Segment 2 Phase 2 above the budget request. FAA received a \$7 million increase in FY 2018 to the original cost baseline (from \$3 million to \$10 million).

NEXCOM Segment 2 Phase 1 received \$50 million in FY 2018 thus the combined funding received in FY 2018 for NEXCOM Segment 2 for both Phase 1 and Phase 2 was \$60 million.

This additional amount in FY 2018, taken from FY 2025 and beyond, will result in a net program cost baseline change of \$0.

The NEXCOM Phase 2 Program will use the additional \$7 million of FY 2018 funding to purchase more radios, which will provide additional equipment stock and funding to increment the number of sites per year thus resulting in a program completion by December 2026.