Brand New Air Traffic Control System

Overview

The Federal Aviation Administration (FAA) faces a rapidly growing, complex and demanding aviation sector, with commercial air travel returning to pre-COVID levels and new entrants, including drones, advanced air mobility, and commercial space. The air traffic control system is based on outdated technologies that are unable to meet these demands. The system is showing its age – which leads to delays and inefficiencies.

This proposal seeks to transform the United States' air traffic control system from its antiquated system to a modern system capable of meeting the demands of today and the future. This proposal will build a new, state of the art, air traffic control system that will enhance the safety and efficiency of our national airspace.

Communications

Telecommunications (Timeline: 2025-2028)

- Description: Full replacement of the existing TDM network with IP.
    - 4,000 new high speed network connections on fiber, satellite, and wireless and over 30,000 services – covers the entire US.

Radios (Timeline: 2025-2027)

- Description: Replacement of TDM Radios to full Voice IP.
    - ~25,000 new radios.

Voice Switch (Timeline: 2025-2028)

- Description: Full replacement of the small tower voice switch, medium, TRACON, En-Route, Air-Ground converter and Ground-Ground converter

Surveillance

Airborne (Timeline: 2025-2027)

- Description: Full replacement of the cooperative (beacon) and non-cooperative surveillance. Moving from 12 different configurations to 2.
    - Replacement of 618 Radars.

Surface (Timeline: 2025-2028)

- Description: Replacement of the current Surface Movement Radar.

Surface Awareness Initiative (Timeline: 2025-2027)

- Description: Deployment to 200 airports for surface awareness.

ADS-B in the Caribbean

- Description: Deploy ADS-B ground stations into the Caribbean to be able to improve the availability of the Caribbean traffic

Automation Programs

Flow Management and Data Services (Timeline: 2025-2028)

- Description: Rearchitect the antiquated slow Traffic Flow Management System (TFMS)

Alaska Automation Capability (Timeline: 2025-2028)

- Description: Move the Alaska Flight Service system to be like the continental U.S. (CONUS)

Terminal Flight Data Manager (Timeline: 2025-2028)

- Description: Deploy additional flight strips to 89 towers

DataComm (Timeline: 2025-2027)

- Description: Accelerate the Deployment of full services DataComm which enables texts to pilot vs current voice

Enhanced Information Display System (Timeline: 2025-2027)

- Description: Accelerate the deployment of replacing the antiquated Information Display Systems (IDS) that were deployed in the 90s (with floppy and CDs)

Common Automation Platform (Timeline: 2025-2028)

- Description: Move from 3 Automation systems to 2 common automation platforms (enroute and terminal)

Facilities

ARTCCs: (Timeline: FY25-FY28)

- Description: Building 6 new state-of-the-art Air Traffic Control Centers for the first time since 1960s, focusing on co-location hard-to-staff and needed facilities.

Tower/TRACON (Timeline: FY25-28)

- Description: Deploy 15 new Towers and 15 co-located TRACONs

Alaska

- 50 AWOS locations
- 60 VWOS locations
- 64 sites weather cameras

New York Area: Best Equipped/Better Served and Multiple Aircraft Ramp System

- Description: To have a better flow of air traffic into the most complex airspace, the FAA is looking to pilot best equipped best served to JFK and LGA, where starting in December 2025 to fly into these two airports between 3-8pm the aircraft must be equipped with MARS.