ANG The Future of the NAS Starts Here

FAA Office of NextGen (ANG)

REDAC / NAS Ops

Review of FY2024 – 2026 Proposed Portfolio

Operations Concept Validation & Infrastructure Evolution

BLI Number: 1A01C

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Operations Concept Validation & Infrastructure Evolution Overview

What are the benefits to the FAA

As NAS and Enterprise concepts evolve, this program identifies operational gaps and assesses potential opportunities that could mitigate these gaps. Activities include, but not limited to:

- Analysis and risk mitigation activities for identified priority areas in support of service analysis and strategic planning
- Assessment of potential enhancements for operational suitability, and inclusion in the architecture plans for the NAS

What determines program success

Proposed NAS level concepts are linked back to validated operational needs, supporting budget planning and investment decisions.

Operations Concept Validation & Infrastructure Evolution Program Support

People:

- Program Manager: Guillermo Sotelo, AJV-S11
- Subject Matter Experts: Traffic Managers, ATC, Discipline Experts, Airspace User Community

Laboratories:

- WJHTC, MITRE/CAASD, NASA, Volpe, DAB Test Bed, NEXTOR

Current FY24 Accomplishments

- NAS Integration of Transiting Operations (NITRO) – Integration of Higher Class A/ Upper Class E (HCA/UCE) and Space L/R operations into the NAS:
  - HCA/UCE Market Analysis – initial assessment delivered
- Advanced Air Mobility (AAM):
  - ATO AAM Integration Plan developed

Anticipated Research in FY25

Planned Research Activities

- New Entrants Operational Integration Analysis [Space Launch/Reentry Operations (LRO), Upper E Traffic Management (ETM), UAS Traffic Management (UTM), Urban Air Mobility (UAM)]

Expected Research Products

- Space LRO – identify unmet operational needs for dynamic airspace use
- ETM ConOps – assessment of operational gaps/ needs
- UTM – unmet operational needs for interoperability with ATM/ATC
- UAM – airspace and CNS unmet operational needs

Emerging FY26 Focal Areas

- Air Traffic Management and Extensible Traffic Management Concept Evolution
- Advanced Air Mobility (AAM) Use Cases (e.g., Regional Air Mobility, Cargo Low Altitude Mobility, Public Service Mobility)

Operations Concept Validation & Infrastructure Evolution

Research Requirements

- As new concepts evolve, this program identifies operational gaps and potential opportunities that could address these gaps in support of service analysis and strategic planning.

Outputs/Outcomes

- Proposed NAS level concepts linked back to validated operational needs, supporting budget and investment decision planning.

FY 2026 Planned Research

- Space – preliminary dynamic airspace use service level operational requirements
- UCA/UCE preliminary service level operational requirements
- UTM/ATM interoperability preliminary service level operational requirements
- Site-specific AAM airspace required changes
- Operational needs for cooperative deconfliction services

Out Year Funding Requirements

	FY24 (Enacted)	FY25 (President's Budget)	FY26 (CIP)	FY27 (CIP)	FY28 (CIP)	FY29 (CIP)
F&E	$3.0 M	$3.0 M	$6.0 M	$6.0 M	$6.0 M	$6.0 M