



# **Avionics for NextGen – DoD Perspective**



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## **Overview**

- 1. LSO Role
- 2. DoD NextGen Strategy
- 3. DOD NextGen Equity
- 4. ADS-B Accommodation
- 5. OPSEC Concerns
- 6. Consolidated Avionics Repository (CAR)





## **LSO Role**

MISSION: Identify emerging needs and determine DoD equity through analysis of FAA NextGen programs and new Air Traffic Management technologies, and formulate positions that are communicated to senior leaders to advocate for requirements and policy that affect DoD aviation and air traffic communities to enhance warfighting capabilities.

**VISION:** Enable safe and efficient military flight in changing global airspace.





## **DoD NextGen Strategy**

DoD NextGen Strategy informs and guides future DoD NextGen efforts:

- 1. Leverages foundational material.
- 2. Prioritizes and socializes what portions of FAA NextGen the DoD should implement on the ground and in the air to maintain its national and global mission fulfillment.
- 3. Strategy developed consistent with FAA portfolio structure but highlights and prioritizes key DoD equity.





# **DoD NextGen Equity**

The following equities were identified as areas in which NextGen may present "value" to DoD operations:



- 1. Assured Access to Airspace
- 2. Increased Flexibility
- 3. Increased Operating Efficiency
- 4. Increased Predictability
- 5. Increased Safety
- 6. Decrease Environmental Impact



## **ADS-B Accommodation Status**

#### Six Lines of Effort:

- 1. Overarching DoD/FAA ADS-B Accommodation MOA.
- 2. Addressing OPSEC issues for DoD flight operations which will be outlined in CONOPS.
- 3. Development of DoD/FAA accommodation operational procedure.
- 4. Ground system integration (eg. ensuring minimum operating network covers DoD required surveillance).
- 5. Cyber security assurance; recommendations to enhance resiliency of ADS-Eair-to-ground link.
- 6. Aircraft Equipage.





### **OPSEC Concerns**

- ADS-B and Mode S are not the OPSEC issue:
  - Rapid development of private sector flight-tracking (surveillance) technology coupled with global modernization plans towards a satellite-based aviation system presents challenges to DoD's national defense and security missions
- DHS led Aviation Government Coordinating Council (AGCC)
  - Cyber Work Group ADS-B Sub Group
  - Recommendations to enhance resiliency of ADS-B air-to-ground link.
- Interagency Aviation Bodies and Groups
- PBFA Aviation Security and Cybersecurity Sub Group





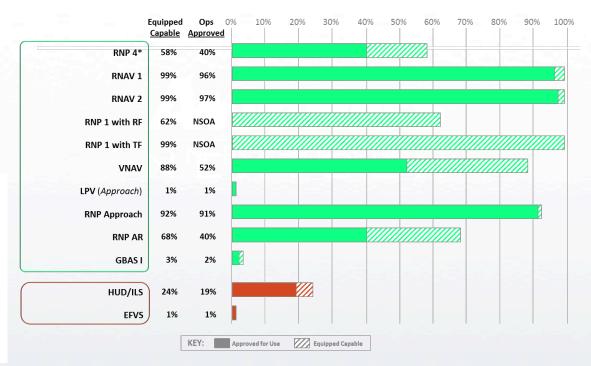
# **Consolidated Avionics Repository**

- The CAR is used for the collection and centralized aggregation of USAF aircraft Communication, Navigation, Surveillance/Air Traffic Management (CNS/ATM) capabilities.
  - The CAR consists of a data collection input template in a centralized database for platform information and preformatted output reports of capability and airworthiness certification.
  - The CAR provides leadership with CNS/ATM status information in order to best manage resources and deployment options.
    - Regular platform status updates give leadership a more accurate and timely picture of CNS/
      ATM equipage and consolidates data call requests to reduce overall workload.
    - Offers opportunity for SAF/AQ to execute common avionic buys across all platforms for cost reduction.





# **Notional Equipage Assessment**







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