

SWIM Users Forum

August 9, 2018

Washington, DC

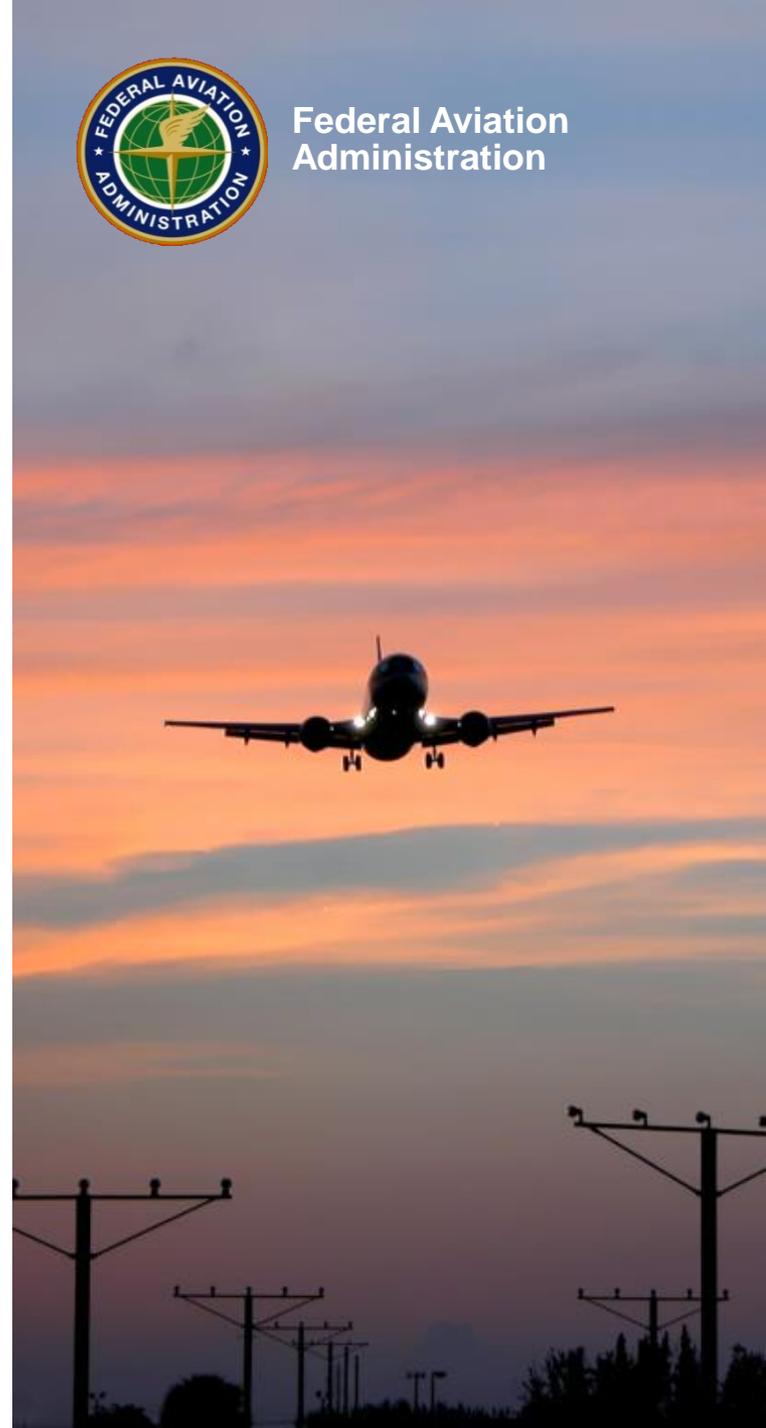
Hosted by:

The SWIM Program Office

Display/Webinar Version



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Before we begin, a few housekeeping items

- For internal FAA quality assurance, this webinar is being recorded (Not available for public distribution)
- Today's slides are available for download in the "Handouts" feature
- To ask questions or send comments during the webinar:
 - To ask questions verbally, please enter your audio PIN provided when you logged into the webinar
 - Send questions/comments in the "Chat"/"Questions" function in the webinar



On today's agenda

- **An Update from SWIM Terminal Data Distribution System (STDDS)**
- **MITRE's NAS Operational Dashboard Demo**
- **A look back at the ATCA Cyber Day**
- **Upcoming Events**

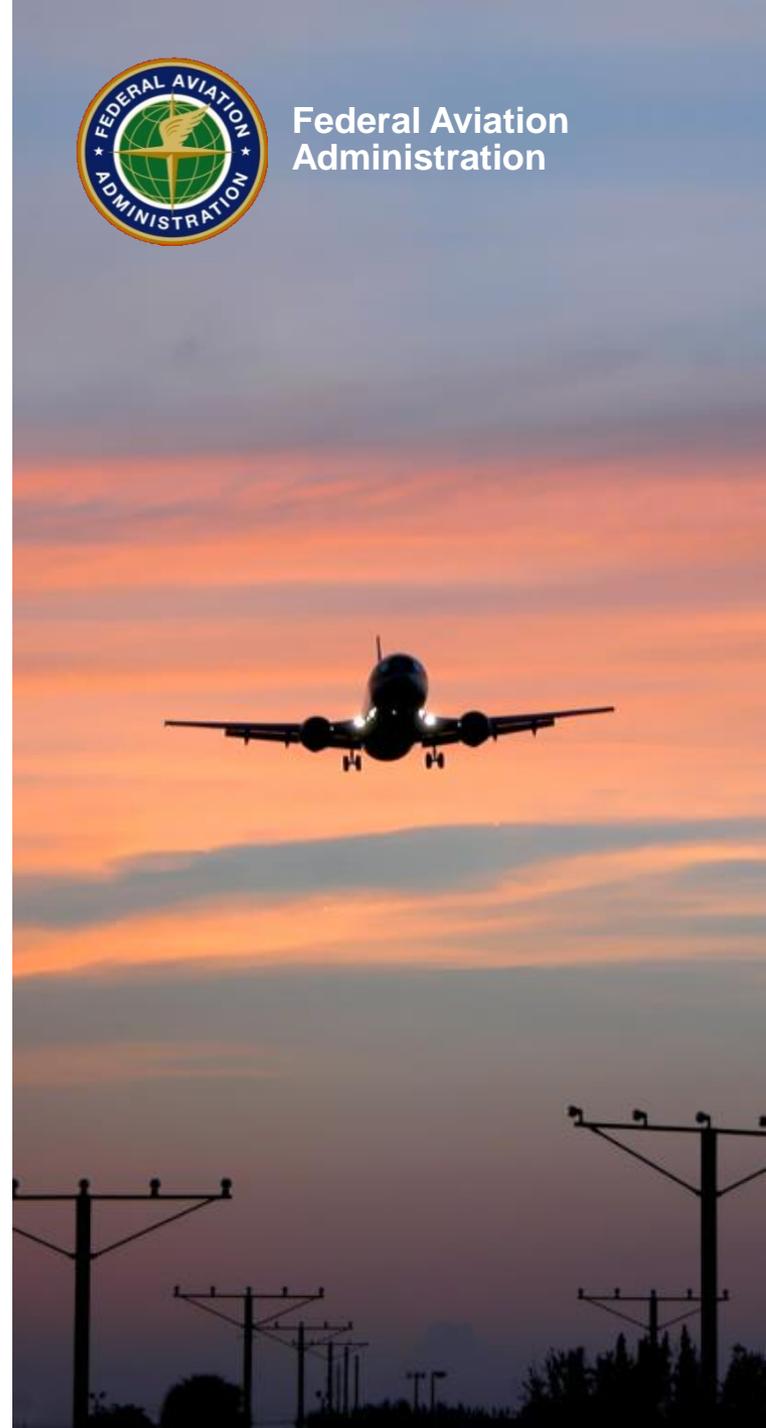


SWIM Terminal Data Distribution System STDDS

Presenter: Melissa Matthews
SWIM Capabilities Lead
FAA



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STDDS Updates

- **STDDS R4 Key Site Test at Bradley (Y90) Successful**
 - STDDS R4 completed key site testing at Y90 on July 27, 2018
 - Consumers of Y90 data should be automatically receiving R4 data
- **STDDS R4 Deployment Schedule**
 - Remaining Key Sites:
 - PHL begins on August 20, 2018
 - C90 begins on September 10, 2018
 - Waterfall deployment:
 - Begins in October 2018
 - Completion by January 2019

STDDS Updates (Continued)

- **STDDS R4 Resources**

- R4 changes are documented in the [Release Notes](#) and include:
 - Integration of SFDPS flight plan data to SMES, TAIS, and TDES
 - Enhanced SFDPS data in SMES requires ASDE-X release 10.4.2, which is being deployed during the same time frame as STDDS R4, meaning some sites may not have it initially
 - ASSC sites also require an updated release before enhanced SFDPS data will be available
 - Publication of filtered TDES data and TDLS D-ATIS messages
 - Subscribe via data.faa.gov in the near future

So you're connected to the data...

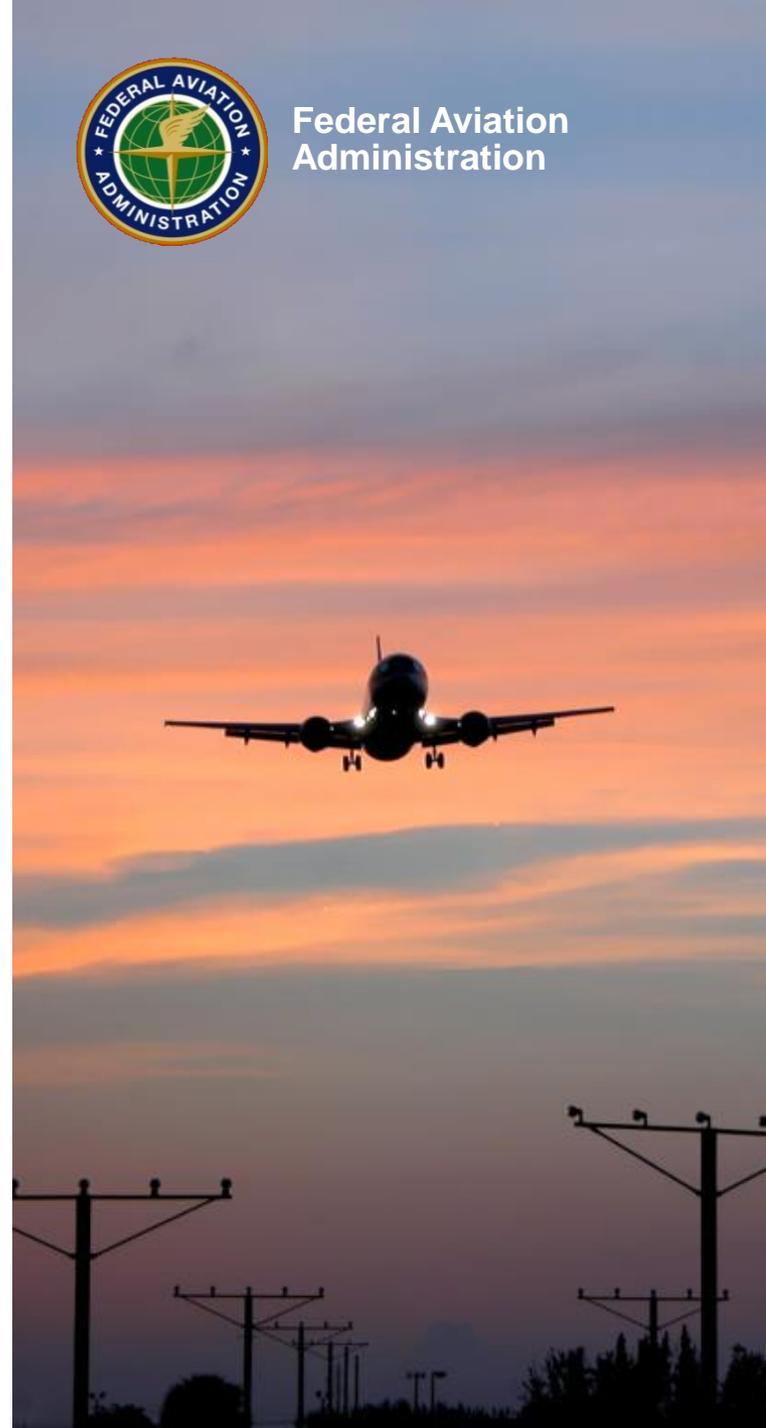
Now what do you do?

A demo of the NAS Operational Dashboard (NOD)

Presenter: Bob Flynn
Portfolio Manager for Traffic Flow Management
MITRE



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A Certification Symphony: The Global Harmonizing of PKI Standards and Practices

A summary from a Cyber Day panel
hosted by the Air Traffic Controllers
Association (ATCA) on July 18, 2018

Presenter: Christopher Yaw - Northrop Grumman

Panel Members:

Jim Laymon – FAA

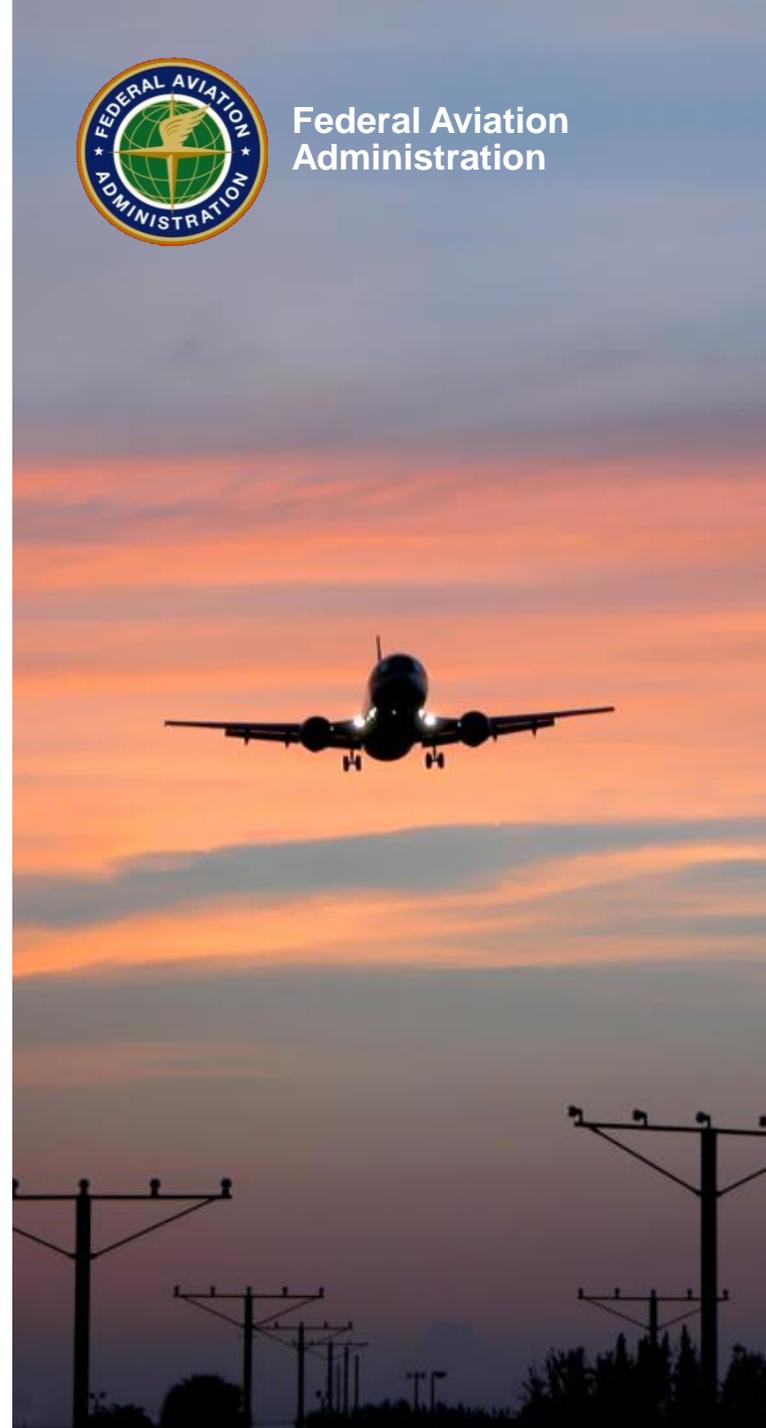
Bill Hoffman – Enterprise Engineering Services Inc.

David Almeida - LST

Rob Segers - FAA



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PKI Harmonization Is not a Technology Challenge

- **Current US PKI Bridge construct could be emulated to meet global requirements**
- **Pilots have been designed, planned, and have been or are being executed**
 - INNOVA Enterprise Security Harmonization Proof of Concept
- **PKI is already in use within the NAS**
 - FAA SWIM PKI based Identify and Access Management initial operational capability
 - https://www.faa.gov/air_traffic/technology/swim/iam/
- **Current security policy will support the use of PKI for non person identification**



PKI Harmonization Challenges

- **Policies need adoption at a global level and a authority needs to be identified for management**
 - ICAO is not an operational organization
 - How do you deal with entity or nation state revocation
- **PKI does not prevent malicious data, only identifies trusted devices**
- **How far down do you push PKI adoption within aviation elements**
 - Aviation platforms are becoming more and more software centric
 - UAS are becoming more and more prolific

What's Next, How to Learn More

- **ATCA Annual Conference, Sep 30 – Oct 3**

- <https://www.atca.org/annual>

- On the Frontiers of Integration, Innovation and Policy in Air Traffic Control

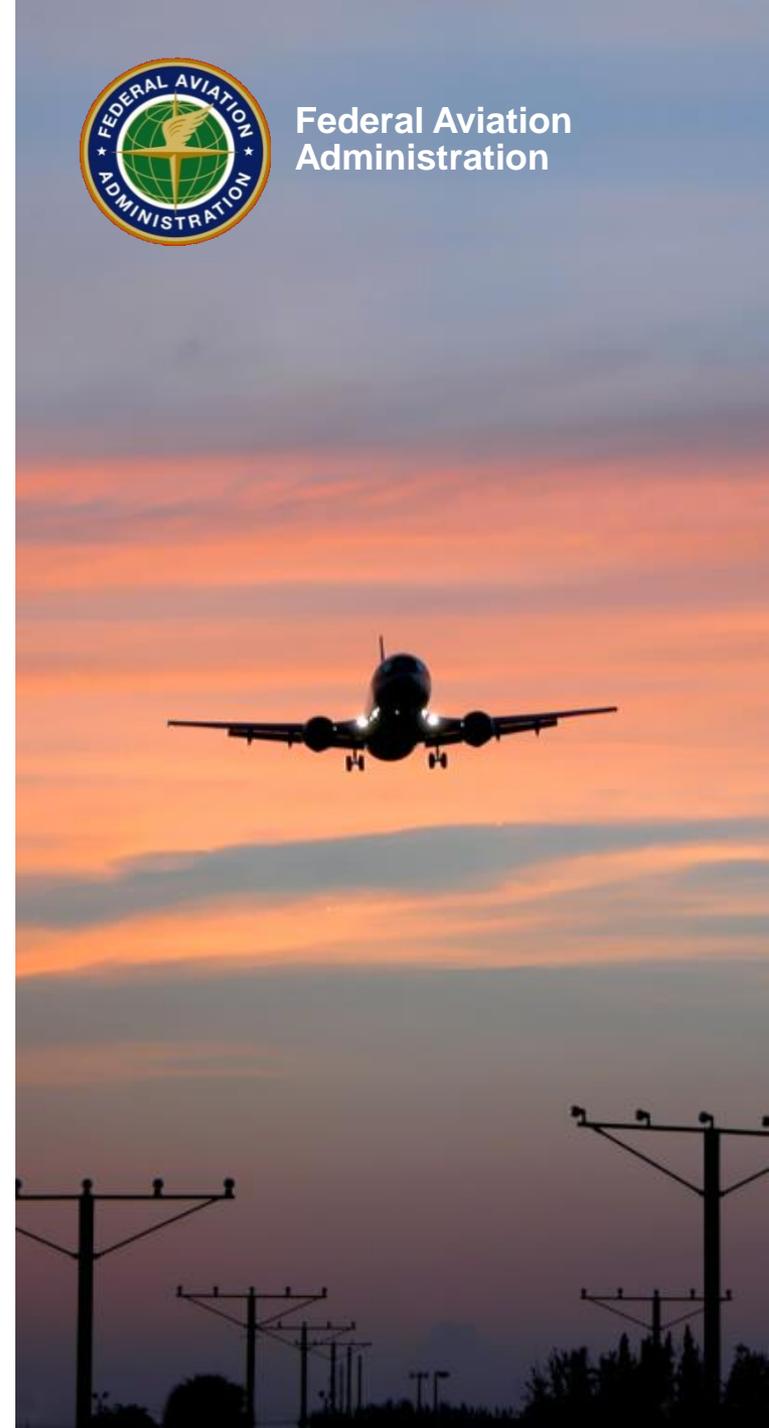
- Our National Airspace System (NAS) is part of the US Critical Infrastructure, and hence protecting it from cyber attacks is naturally of utmost priority
 - The NAS is a rather complex System of Systems – very distributed, asynchronously built, highly dependent, and YET still has to work together in a safe and secure fashion
 - With the modernization efforts and adoption of mainstream technologies in this domain, not to forget the disruptive effects of UASs, Aviation increasingly faces lower barriers to hacker entry, and needs to figure out how to best balance the benefits of information sharing with security and safety.



Upcoming Events



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SWIM at the ATCA Annual Conference

- **Visit the booth Oct. 1-3 at National Harbor in Maryland**
- **Meet SWIM experts and watch demos at the Exhibit Hall**
- **Check out a SWIM panel on Monday, October 1**
 - **Airlines use of SWIM Data: a New Twist on a Not So New Topic**

