

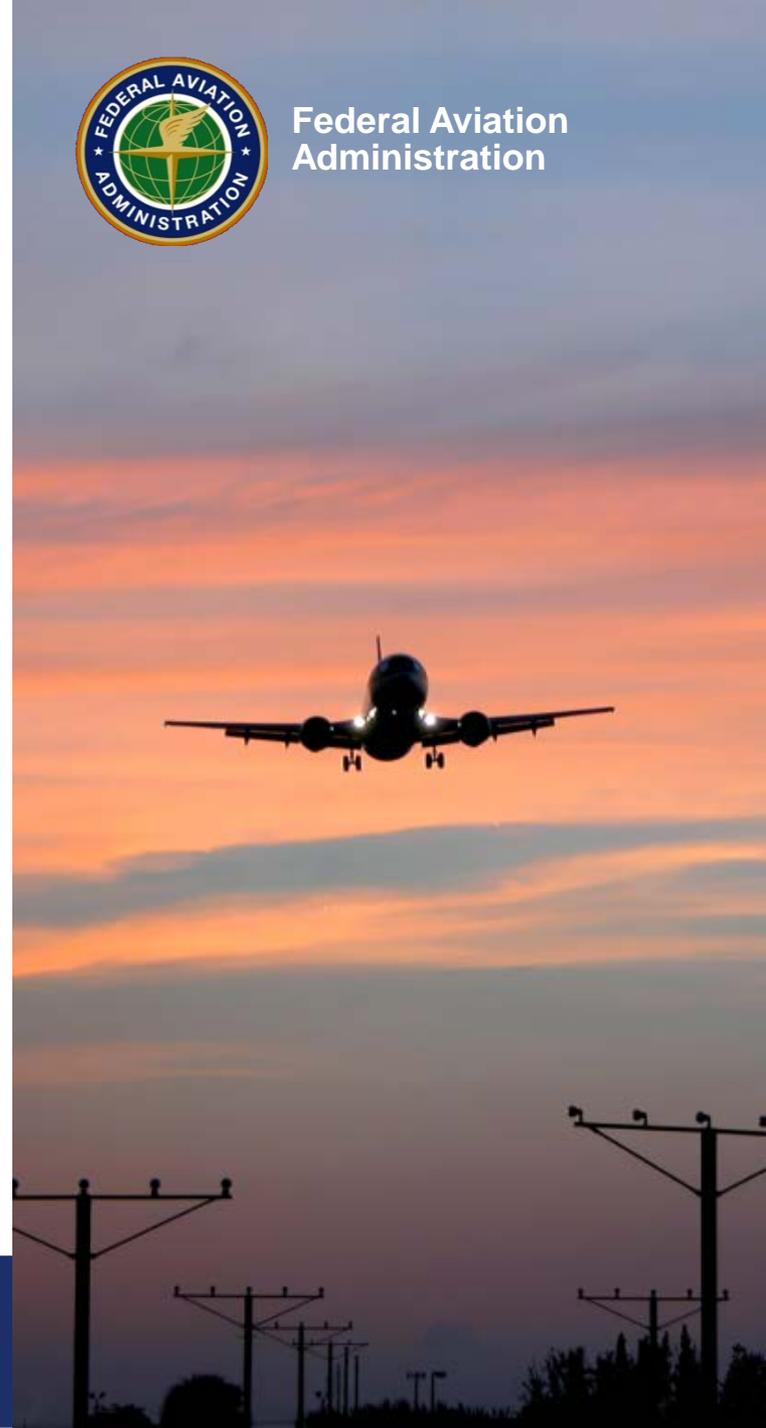
SWIM Users Forum #10

March 10, 2016
Washington, DC

Host: Jeri Groce, SWIM Program
Manager



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Today's Agenda

- **Old Business**
 - Re-cap from the December Users Forum
- **New Business**
 - NESG and TFMS Updates
 - SWIM email address
 - STDDS Update
 - Solace Update
 - Welcome to NSRR 2.0
 - Coming up...
- **Voice of the User**
 - Addressing your questions and concerns

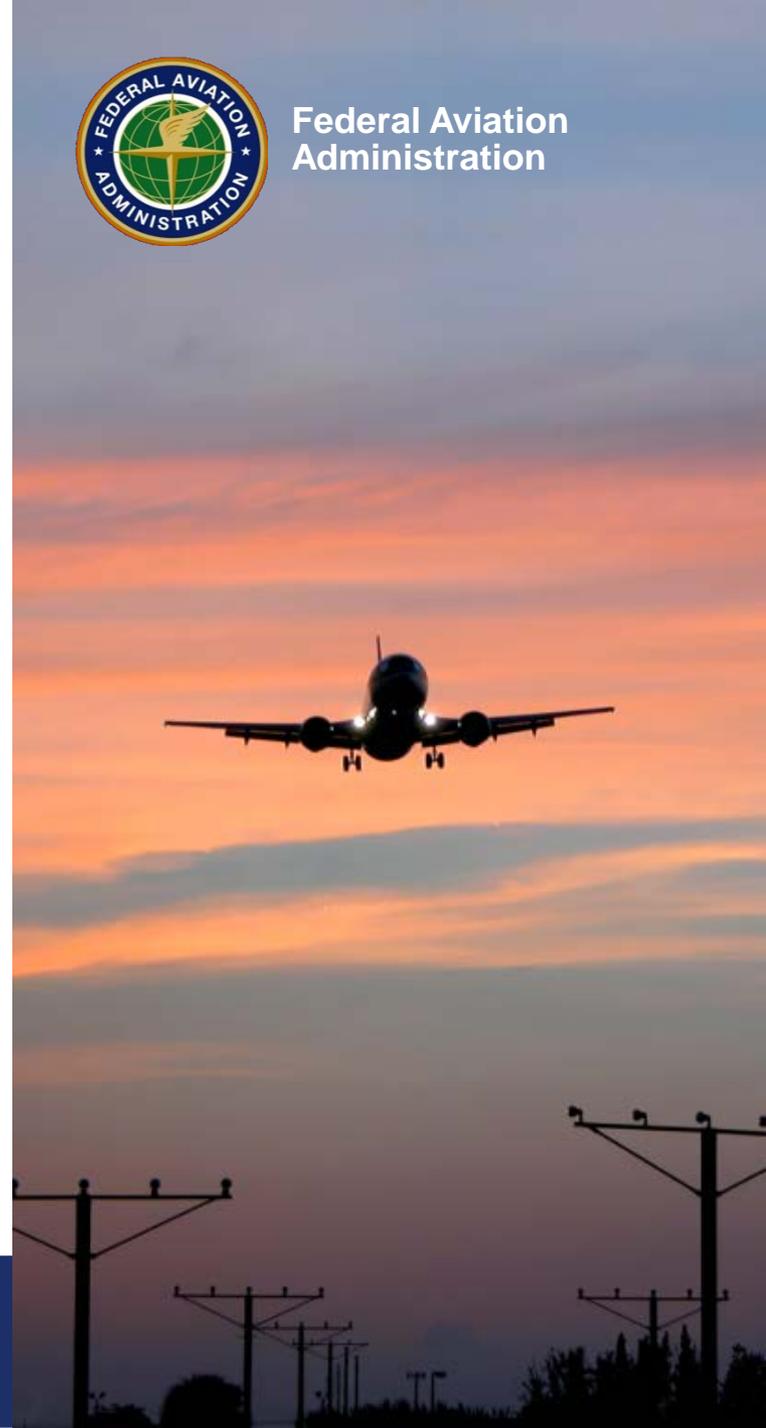


Old Business

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Questions/Answers from the December forum

- **Will the GUFIs be available in other SWIM feeds (e.g., TAIS, TBFM, etc.) to enable easy flight correlation?**
 - Yes, the FAA plans to address this in the future.
- **Does Solace provide a test framework / test server software so that developers can test connectivity before FNTB testing?**
 - Solace does provide a VMR (virtual message router) as different styles of VMs (virtual machines) that can be downloaded from dev.solacesystems.com. The VMR package contains a limited-use licensed Solace message server, along with a message client.
- **Is there any timeline for making a filtered FDPS available to external (non-FAA) consumers?**
 - Yes, it is available now

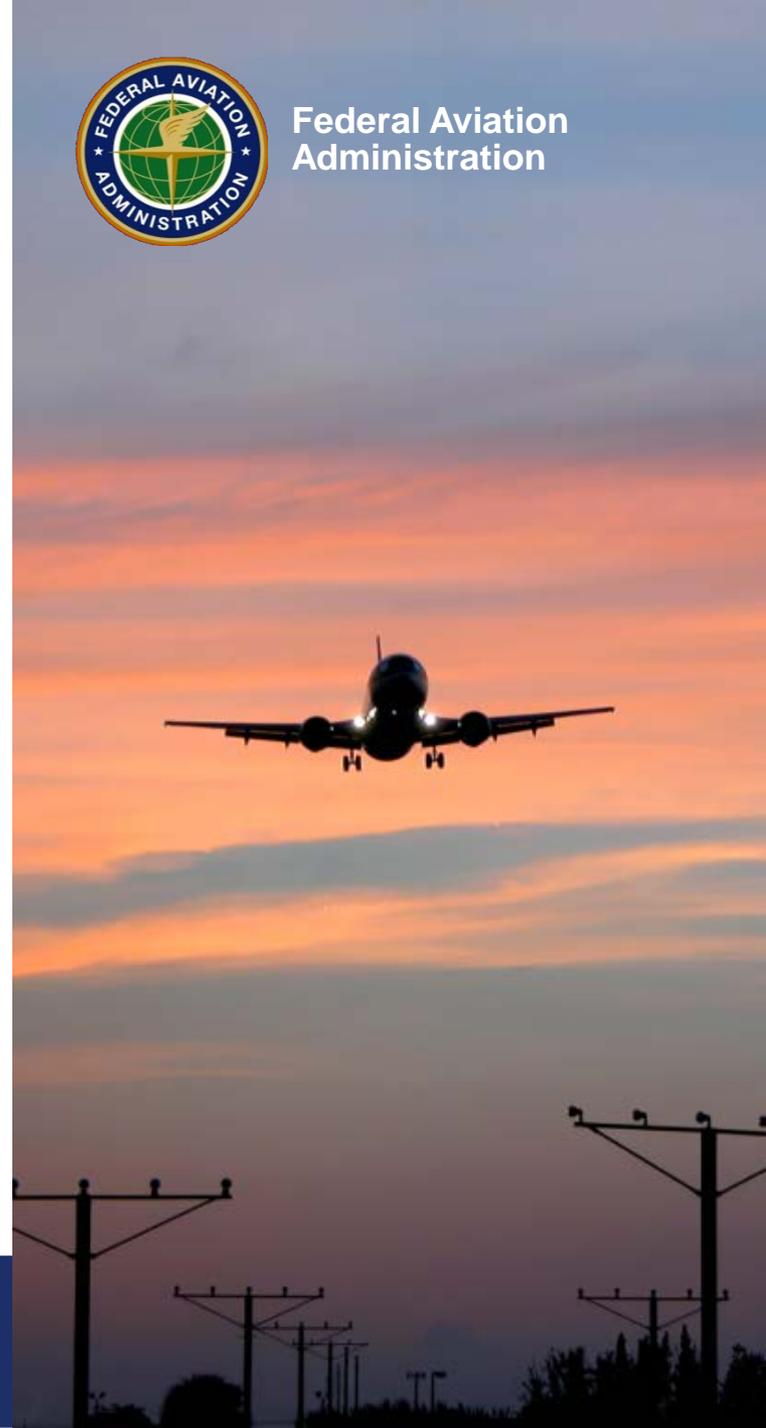


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TFMData R10 to R13 transition

- **TFMS R13 will be available summer 2016**
- **SWIM will provide mediation between R10 and R13**
- **Consumers will not need to make any changes to existing clients**
- **Documentation for TFMS R13 (TFMData v2.0.5) can be found on the NSRR**
- **Send an email to the data-to-industry@faa.gov if you are interested in becoming a test user**



Quick SWIM Updates

- NESG Bandwidth Capacity/Infrastructure upgrades at ACY and OEX
- TFMS Release 13 On-ramping (cutover to Ops scheduled for April 15th)
- New SWIM email
 - Future mass communication from the SWIM Program Office will come from swim@faa.gov (e.g., Users Forum invitations, ATCA, technical updates)
 - The SWIM email address is primarily for distribution purposes. Please continue using the “[Contact Us](#)” page on the SWIM website

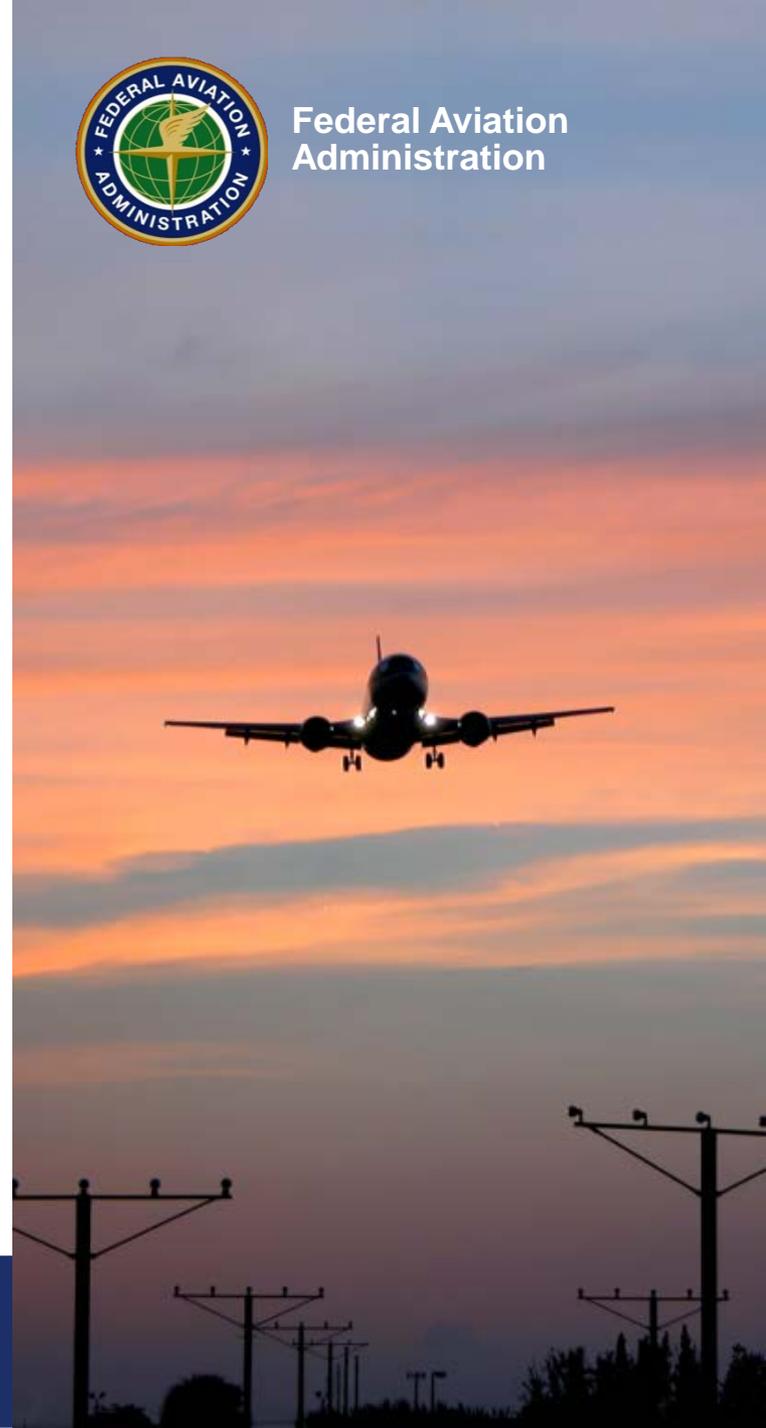


New Business: STDDS

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R3.2 Status

- **Deployment Status**

- Y90 key site completed January 2016—currently publishing R3.2 data
- NCT key site completed March 2016—currently publishing R3.2 data
- Waterfall deployment July – September 2016

- **R3.2 Changes**

- Introduction of TAIS (STARS) data
- Surface Movement Event quality improvements (“cha cha”)
- Versioned namespace “v2-0”
- RVR Input data time synchronization
- Sensitive data removed from filtered feeds (instead of anonymized)
- Updated TRACON names
- Numerous PTRs

- **Test Data/On-ramping**

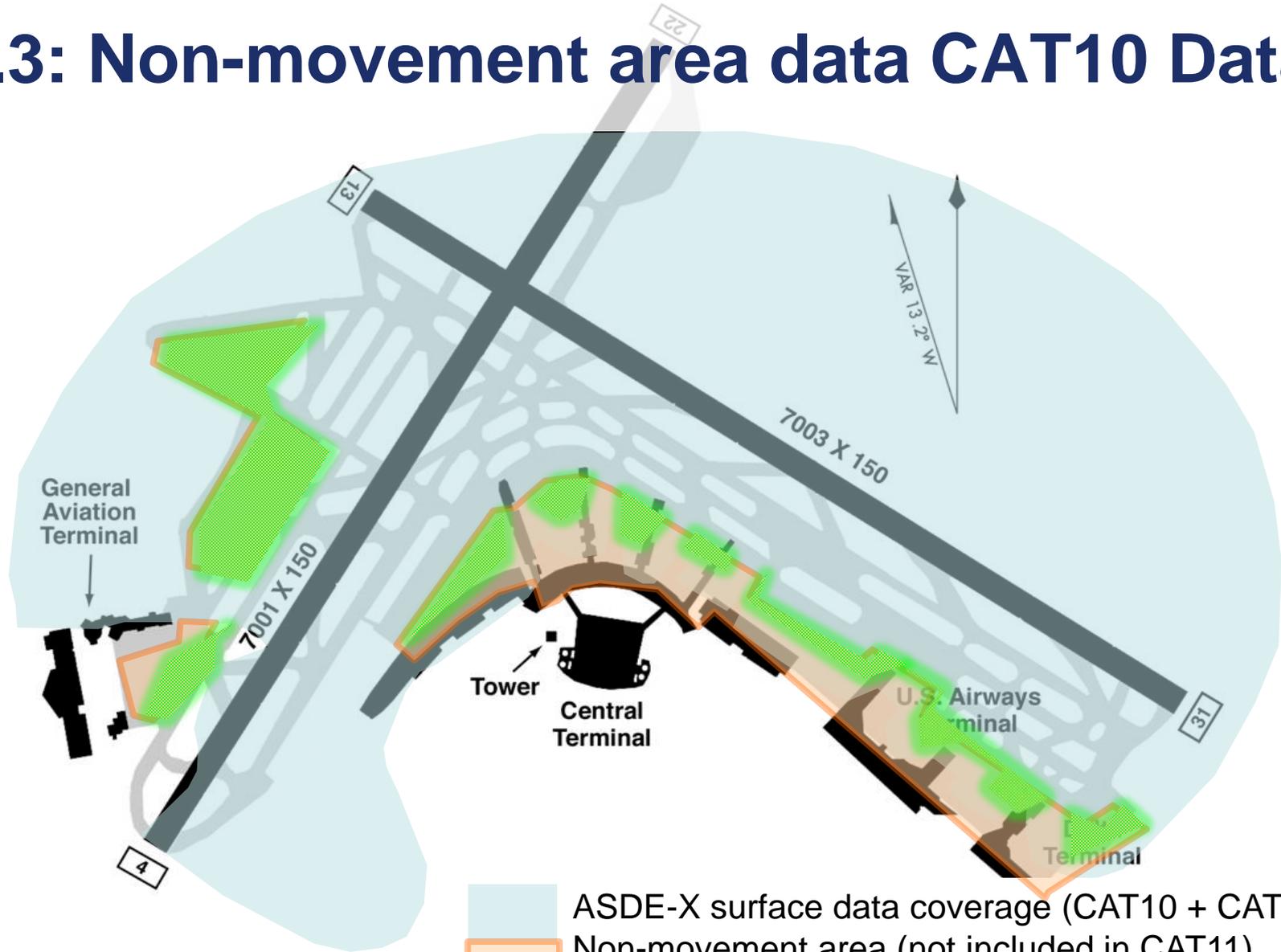
- R3.2 SMES/APDS for Y90 and NCT on R&D
- Working to get TAIS (STARS) data (improved R3.2 canned data and live data) on R&D network
- Solace deployed on R&D and FNTB



R3.3 Planning

- **APDS**
 - Airport Identifier added to body as well as header of message
 - Decrease in message frequency—messages will be sent every 60 seconds or upon data change (R3.2 sends messages every 2 seconds)
- **TAIS (STARS)**
 - TrackAndFlightPlan data (AIG200) to be altitude-filtered above 18000 ft Mean Sea Level.
 - Decrease frequency of Status data (AIG100) - to be sent every 60 seconds or upon data change (R2.3 sends messages every second)
- **SMES**
 - Addition of non-movement area data (CAT10)
 - Addition of ASDE-X Safety Alerts
- **FIXM**

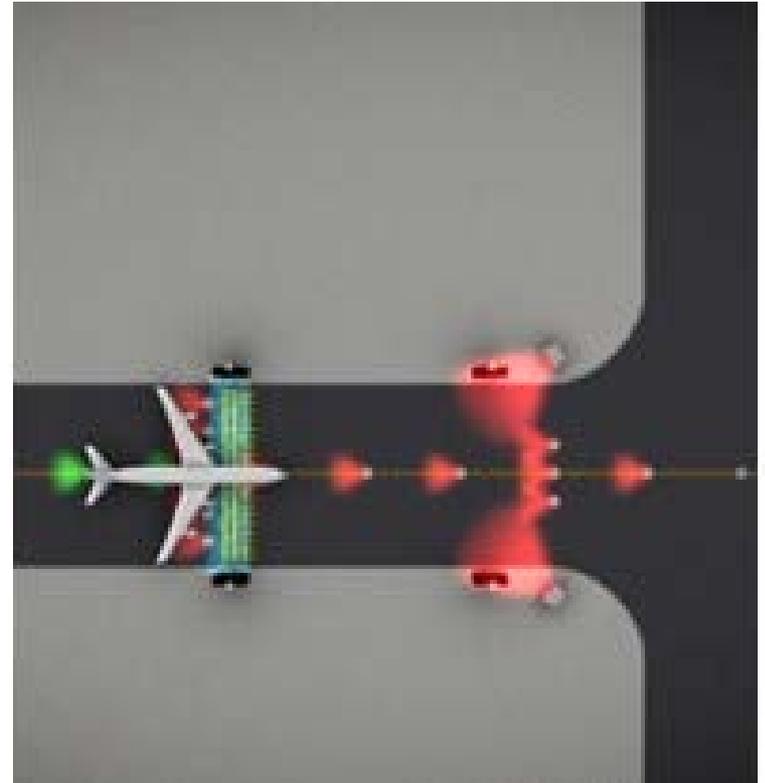
R3.3: Non-movement area data CAT10 Data



- ASDE-X surface data coverage (CAT10 + CAT11)
- Non-movement area (not included in CAT11)
- Non-movement area CAT10 coverage to be published in R3.3

R3.3: ASDE-X Safety Alerts

- Requested by ATO Safety
- 2 ASDE-X Safety Alert messages:
 - Safety Logic Alert Report (SLAR)
 - Sent 1/second continuously while an alert condition exists
 - Contains sensitive data; available to authorized users only
 - Safety Logic Hold Bar Message (SLHBM)
 - Sent 1/second continuously
 - Contains no sensitive data; available to all end users

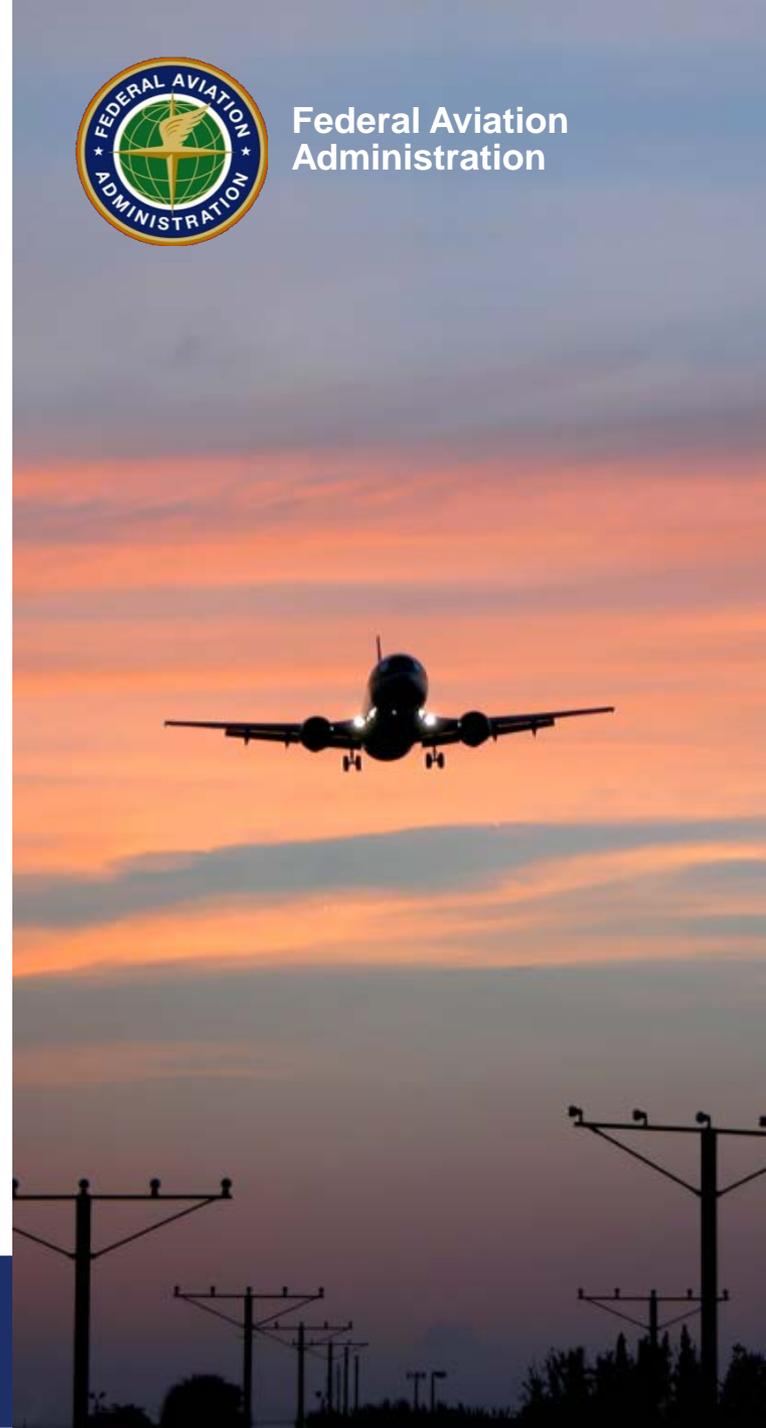


New Business: Solace Overview and Status

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Solace Overview

- **What is Solace**
 - Solace is a hardware based messaging middleware device that has been adopted by the SWIM program to support fan-out distribution of SWIM Subscription Services to the external SWIM community.
- **Benefits of Solace**
 - Provides durable endpoints that retain message during session interruption
 - Improves bandwidth savings through compression
 - Provides support for additional programming languages
- **Supported Protocols**
 - Solace Messaging Format (SMF)
 - All wire level messaging is provided through a protocol designed by Solace called SMF. Because of this, Solace can support Java, .NET, and C languages.
 - Java Messaging Service (JMS)
 - Solace has created their own implementation of JMS and supports the JMS 1.1 specification.
 - The supported version of the each library is maintained by SWIM and will be provided directly to consumers.
- **JumpStart Kit**
 - An updated JMS JumpStart Kit for the new Solace device will be available.
- **Additional Information**
 - Information on Solace, their supported APIs, and sample client code is available on their developer website at <http://dev.solacesystems.com>

Impact of Solace to Consumers

- **New Consumers Not Yet in R&D**
 - These consumers will see little to no impact with this change since they have not yet connected and likely have not developed a client yet.
- **Existing Consumers in R&D/FNTB but not in OPS**
 - These consumers will have to update their client to use the new Solace Device before moving to Operations.
 - ASDI Transition Users are excluded from this requirement to ensure they meet the transition deadline.
- **Existing Consumers in Operations**
 - These consumers are highly encouraged to adopt the new technology and migrate their client to Solace but at this time are not required to do so.
- **Existing Consumers in Operations Requesting New Services**
 - These consumers will be required to migrate their clients to Solace when adding any new service.

*****Specific special cases may be granted and will be evaluated on a case by case basis.***

Transitioning from AMQ or WL

- **What is Required**
 - The effort required to transition from AMQ or WL to Solace JMS is dependent on how a consumer has developed their client.
- **Pure JAVAX Client**
 - If a consumer's client used the core JAVAX methods to implement their JMS client then transition to Solace will be trivial and likely only require adding the Solace required JMS libraries and changing their Context Factory to Solace.
- **ActiveMQ or WL Specific Client**
 - If a consumer's client was developed using specific ActiveMQ or WebLogic properties or methods then the consumer's client will need to be updated to either replace all ActiveMQ references with Solace applicable ones or implement pure JAVAX methods.
- **Solace VPN (Virtual Provisioning of Resources not Network VPN)**
 - Solace provides virtual provisioning of resources called VPNs. Each Program, e.g. TFMS, is provisioned over its own VPN. Unlike with AMQ or WL, the client will need to specify the correct VPN when connecting. This can be accomplished through a JMS property or by appending `@VPNname` to their username when connecting.
- **Technical Support for consumers transitioning their clients to Solace will be available.**
- **If you are an existing operational consumer and would like to transition to the new Solace technology, contact the FAA POC you worked with to get connected and they will work with you through the process.**



Solace Availability

- **Available in R&D, FNTB, and OPS at ACY Today**
- **Planned to be available at OEX Summer 2016**
- **Services Available**
 - At the present time only Subscription Services are available over Solace and include:
 - Traffic Flow Management System (TFMS)
 - SWIM Terminal Data Distribution System (STDDS)
 - SWIM Flight Data Publication Service (SFPDS)
 - Time Based Flow Management (TBFM)
 - Integrated Terminal Weather Service (ITWS)



Coming Soon: SFDPS User Group Webinar

- **Intended audience:** SFDPS current and future consumers
- **Purpose:**
 - To discuss enhancements in upcoming Release 1.3.0, primarily batching of messages
 - Release 1.3.0 will require changes to client software
 - Webinar info
- **Date and Time:** 3/17/2016, 10 AM – 12 PM
- **Registration**
URL: <https://attendee.gotowebinar.com/register/2208061614105416193>
Webinar ID: 112-639-619
- An email will be sent to registered SFDPS consumers with the webinar info

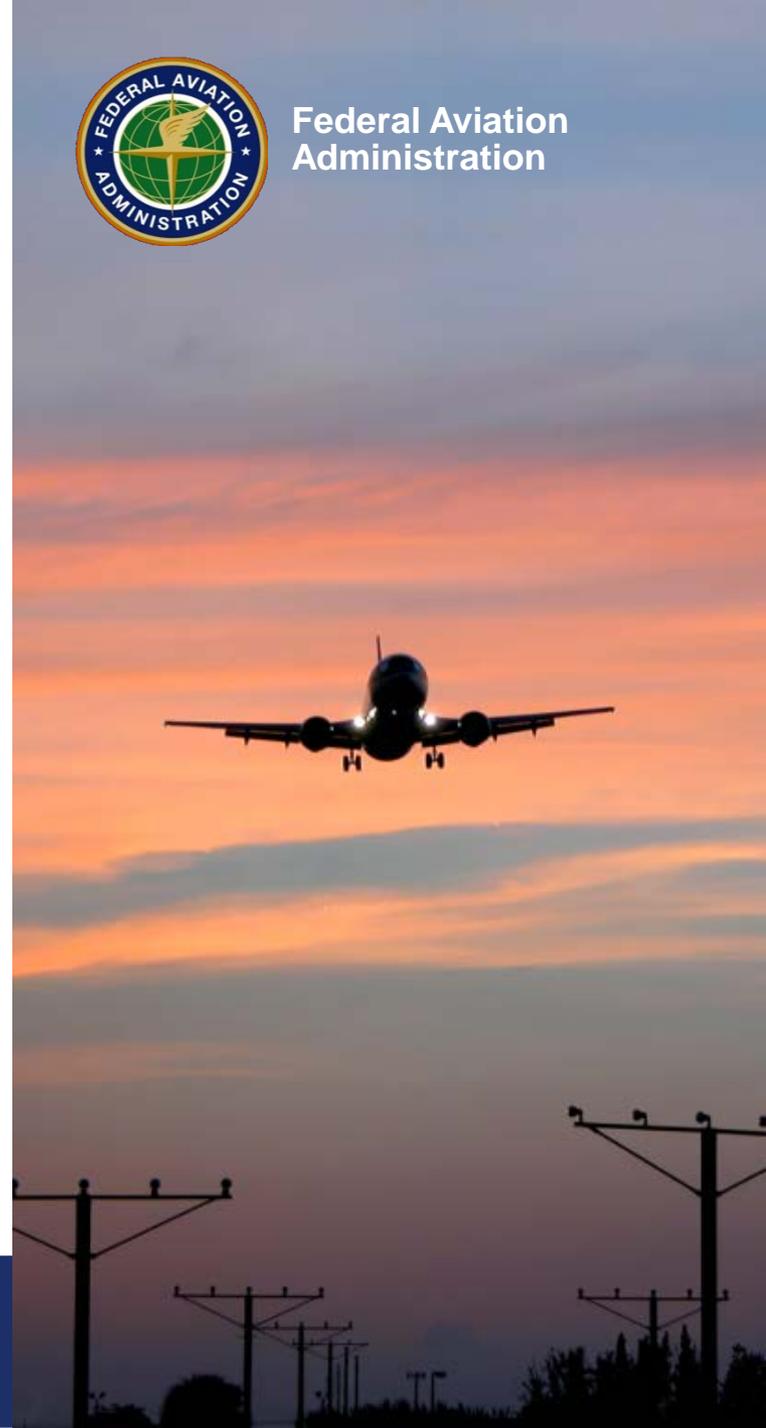


New Business: Welcome to NSRR 2.0

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NSRR 2.0 Update

On March 14, 2016, the NAS Service Registry and Repository (NSRR) will be transitioned to a new version located at nsrr.faa.gov.

The current version of NSRR (located at <https://swimrep.faa.gov/soa>) will be retired on April 1, 2016.



NSRR 2.0: New Features

- A new interface that presents service information the same way it's presented in WSDDs and JMSDDs.
- Streamlined support for Service Lifecycle Management processes.
- Allows users to choose to be automatically notified about current or planned service changes.
- A new, powerful search engine for searching through service information and associated documents.



Getting an account in NSRR 2.0

To create an account in NSRR 2.0, starting March 14, go to <https://nsrr.faa.gov/user/register> and follow the directions on the registration form

- Users that currently have “old” NSRR account still must re-register.
- Users that received accounts as part of alpha testing or NSRR 2.0 Early Access program don’t need to re-register. Their accounts will be transitioned.

Few things to remember

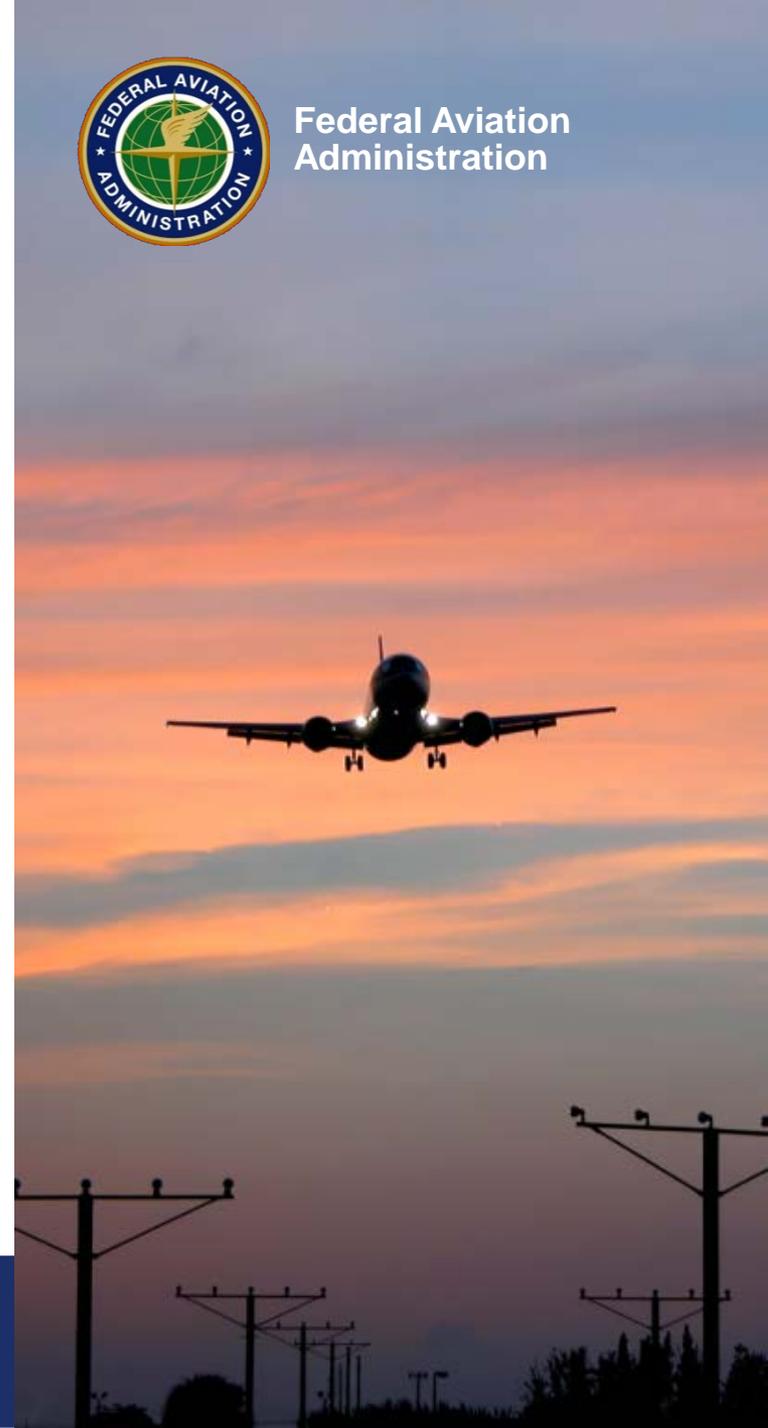
- To avoid data lost during the transition to the NSRR 2.0, do not add or modify any data or documents on the current NSRR site.
- Registration for the new user accounts starts March 14, 2016.
- If you have any problems with creating an account, contact NSRR-Support@faa.gov.
- After you have registered, don't forget to update your browser bookmark to point to <https://nsrr.faa.gov>, the home page of the new NSRR.

New Business: Coming Up...

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The SWIM Tour: Upcoming Events

- **May 17-19:** ATCA Technical Symposium
- **June 9:** Next SWIM Users Forum





Coming Soon...



NextGEN

SWIM Interactive Developer Workshop

June 2016



Voice of the User: Your questions. Your ideas.

March 10, 2016



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