NOTAM Modernization Summit
Session #1: Connecting to NOTAM Data

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Connecting to NOTAM Data

- FAA is streamlining consumer access to NOTAM data
    - Focusing on access points that meet distinct user needs

- Session is focused on system access to NOTAM data services
    - Machine-to-machine interfaces

FNS NOTAM Publication Service (NPS)	NOTAM Application Programming Interface (API)	Aeronautical Common Service (ACS)
Pub/Sub NOTAMs via JMS over SWIM	NOTAMs via REST using OpenAPI Standard	Integrated Aeronautical Information web services via SWIM

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Use Cases for NOTAMs via NPS
How might end users typically use the FNS NPS over SWIM?

Airline Dispatch systems include NOTAM data in decision-making tools

Uses NPS and FIL to load and update a local database to perform queries and analysis on stored data

Aviation system providing NOTAMs as part of flight planning service

Uses NPS and FIL to load and update local database to perform local processing for flight planning needs

Third party system provides a NOTAM history function for an airport

Uses NPS and FIL to load and update local database to retains and retrieve airport NOTAM data over time

Use Cases for NOTAM API
How might end users take advantage of the NOTAM API?

Mobile developer creates an app that integrates and displays nearby NOTAMs

Uses the NOTAM API geometry radius search based on end user's current location georeferenced data

Developer creates a website focused on NOTAMs for a local airport authority

Easily accesses only NOTAMs for local airport using NOTAM API query filter parameters

Tower light operator wants to integrate current NOTAM outages into their tower management application

Uses NOTAM API geometry radius search for Obstacle features

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Use Cases for Integrated AI from the ACS
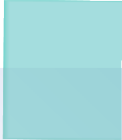## How might end users take advantage of integrated Aeronautical Information?

Flight planning system needs updates to airport reference and NOTAM data

Subscribes to Airport updates from ACS web service notification service

Airline dispatch system wants a single SWIM connection for static and dynamic AI
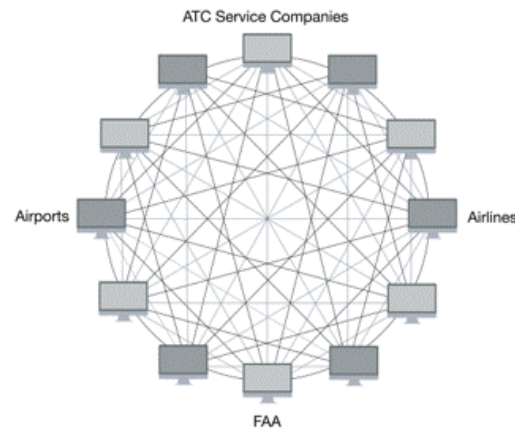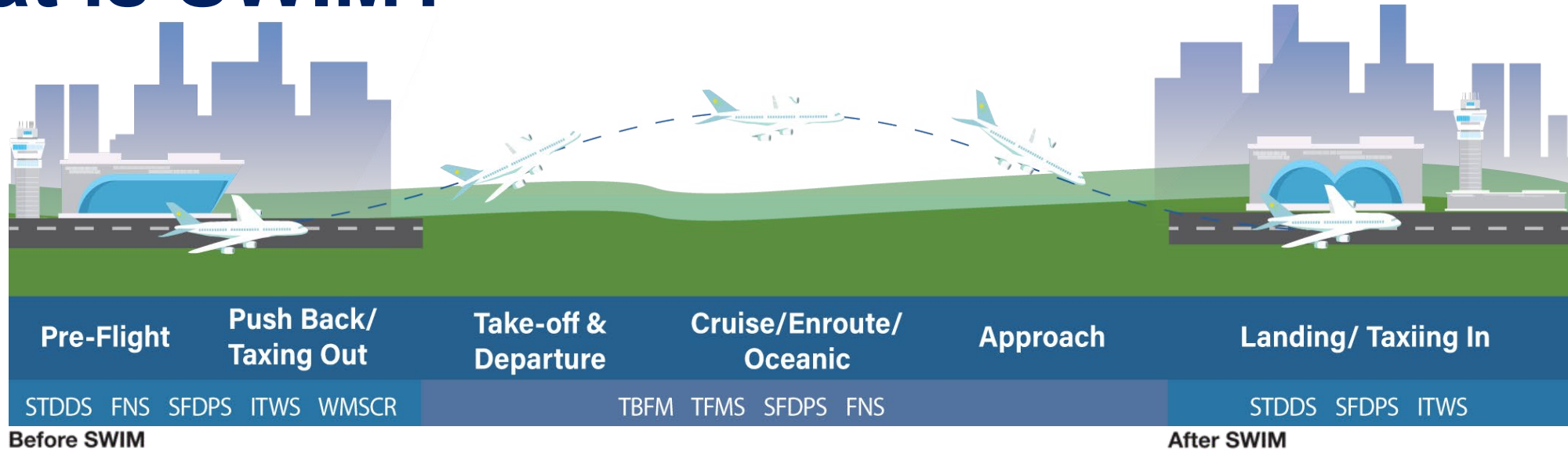
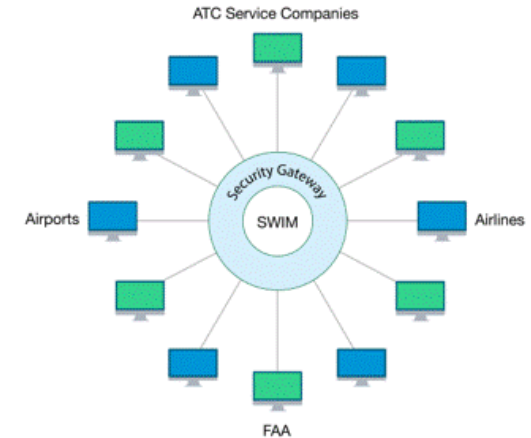Subscribes to ACS web service notification services over SWIM

Third-party application wants to query for the state of AI at a point in time

Submits ACS Data Query request via SWIM

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What is SWIM?

Pre-Flight	Push Back/ Taxing Out	Take-off & Departure	Cruise/Enroute/ Oceanic	Approach	Landing/ Taxiing In
STDDS FNS SFDPS ITWS WMSCR			TBFM TFMS SFDPS FNS		STDDS SFDPS ITWS

Before SWIM · **After SWIM**

SWIM provides the infrastructure, standards, and services needed to optimize the secure exchange of relevant data for NAS systems and the aviation community.
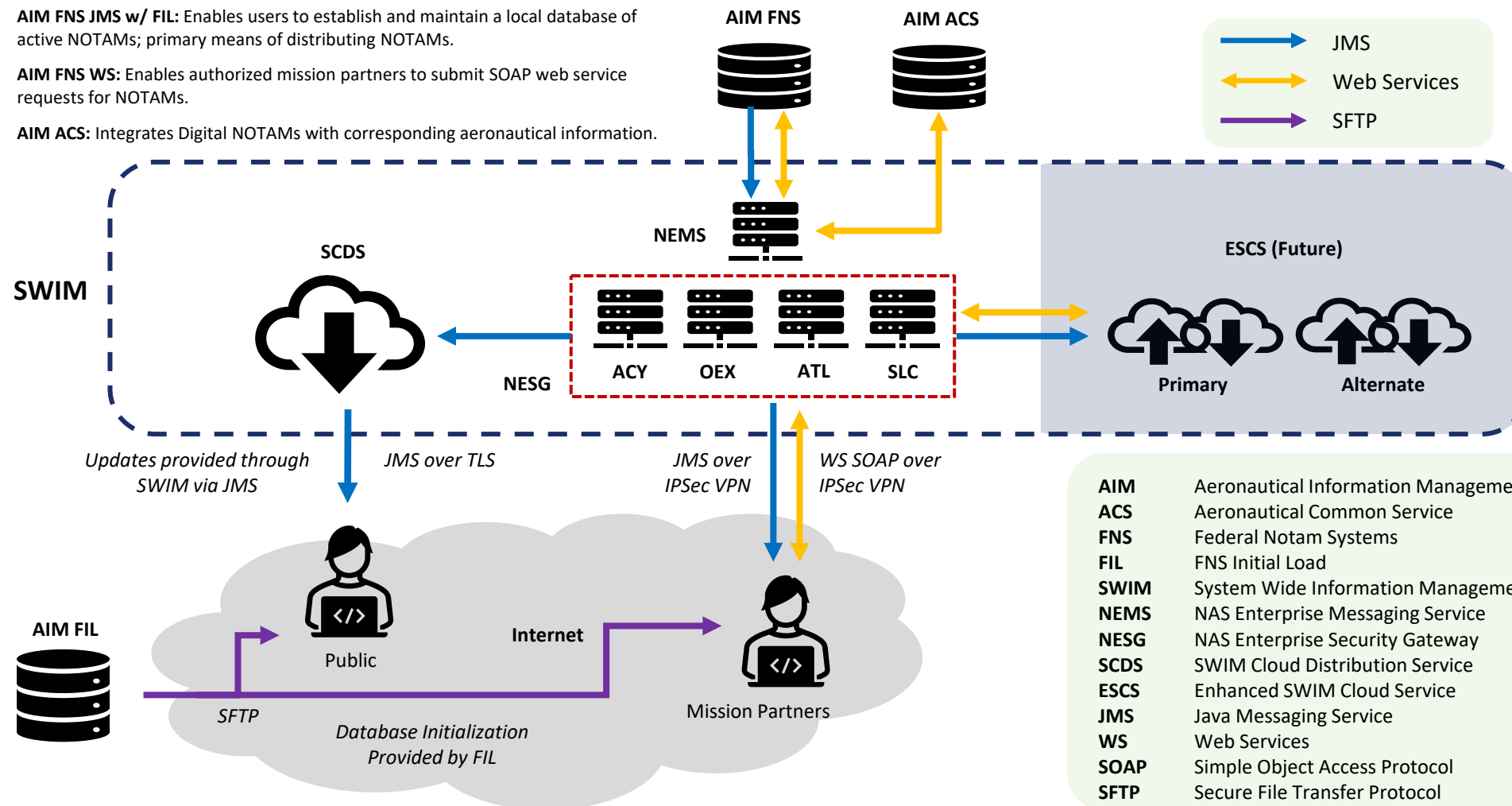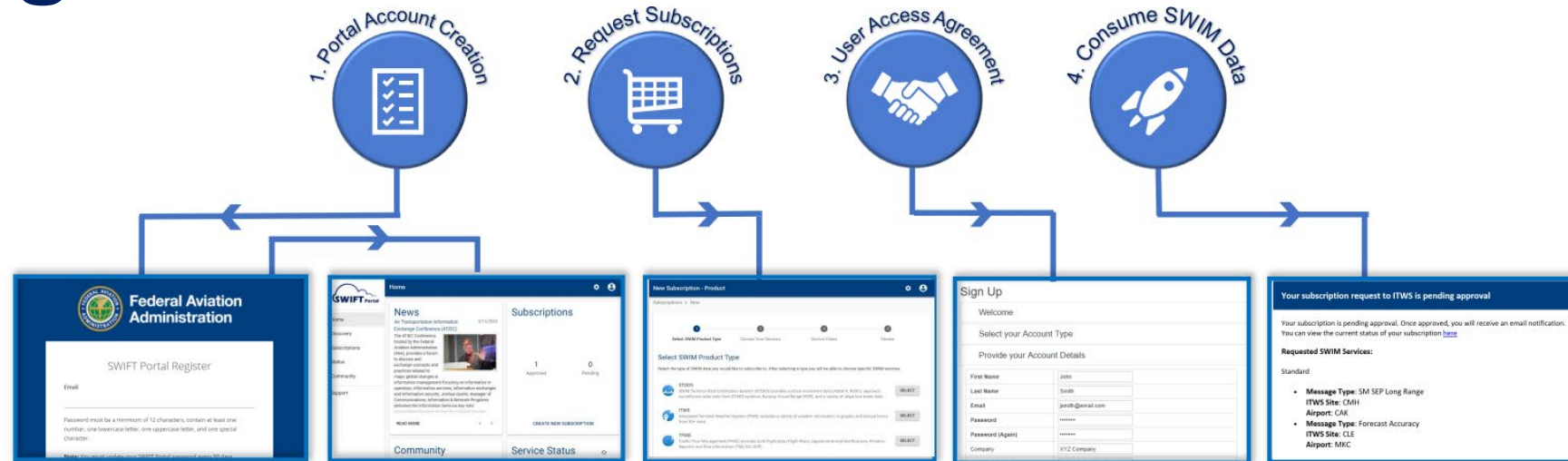
NOTAM Distribution Through SWIM

AIM FNS JMS w/ FIL: Enables users to establish and maintain a local database of active NOTAMs; primary means of distributing NOTAMs.

AIM FNS WS: Enables authorized mission partners to submit SOAP web service requests for NOTAMs.

AIM ACS: Integrates Digital NOTAMs with corresponding aeronautical information.

Legend:
- JMS
- Web Services
- SFTP

Acronyms:

AIM	Aeronautical Information Management
ACS	Aeronautical Common Service
FNS	Federal Notam Systems
FIL	FNS Initial Load
SWIM	System Wide Information Management
NEMS	NAS Enterprise Messaging Service
NESG	NAS Enterprise Security Gateway
SCDS	SWIM Cloud Distribution Service
ESCS	Enhanced SWIM Cloud Service
JMS	Java Messaging Service
WS	Web Services
SOAP	Simple Object Access Protocol
SFTP	Secure File Transfer Protocol

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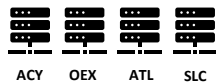
Getting Connected

SWIM Cloud Distribution Service (SCDS) via SWIFT Portal

- Primary means for users to get access to NOTAMs on SWIM
- Self-service portal for subscription request, monitoring, and modification
- Provides one-way distribution of public data

Direct Connect via FAA Security Gateway over IPSec VPN

- Provides Mission Partners with level-of-service required to support operations in the NAS
- Required path for Airline and their vendors who use NOTAMs to support their operational planning and decision-making
- Request, approval, and on-boarding provided by the SWIM Support Team and is a manual process

Enhanced SWIM Cloud Service (ESCS) (Future)

- Enhances SCDS to provide the level-of-service required to support Mission Partner's operational needs
- Provides two-way exchange between FAA and Mission Partners

SWIFT Portal

Check out the SWIFT Portal Support Page to learn more, ask a question, or reach out for help with a technical issue

Help and Support

Resource that will teach you everything about SWIFT Portal

🔍 Search

Have a question about SWIFT data? Checkout our documentation or ask our SWIM team.			Have a technical issue? Contact the SWIM Help Desk.	
FAQ	Guide	Ask A Question	**Call Help Desk** 1-855-FAA-NEMC	**Email Help Desk** 9-ATO-SECC-OPS@faa.gov

SWIFT Portal

portal.swim.faa.gov

SWIM Industry-FAA Team)

Explore SWIM data, subscribe to services, and collaborate with other users

Panel Discussion

- **James Linney (moderator)**: Director of Operations Support, ATO Technical Operations, Federal Aviation Administration (FAA)

- **Heidi Williams (moderator)**: Senior Director, Air Traffic Services & Infrastructure, National Business Aviation Association (NBAA)

- **Jeri Groce**: Group Manager, Enterprise Services, Aviation Weather & Aeronautical Services Programs, Federal Aviation Administration (FAA)

- **Alex Murray**: Senior SWIM Engineer, Noblis

- **Jill Olson**: Deputy Director (Acting) of Aeronautical Information Services, Federal Aviation Administration (FAA)

- **Michael Karrels**: Special Assignment Supervisor for Flight Control, Delta Air Lines

Heidi Williams

Senior Director, Air Traffic Services & Infrastructure, National Business Aviation Association (NBAA)

Heidi Williams joined the National Business Aviation Association (NBAA) in December of 2016. She is responsible for NBAA's policy and coordination with the FAA, state and local officials, and association members relating to air traffic control, air traffic management & design activities, NextGen, and Unmanned Aircraft Systems (UAS) & new entrants. Heidi also oversees the NBAA Air Traffic Services at the FAA Air Traffic Control System Command Center.

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Jeri Groce

Group Manager, Enterprise Services, Aviation Weather & Aeronautical Services Programs, Federal Aviation Administration (FAA)

Jeri Groce has served in FAA since 2010 and has held various leadership, managerial, and technical roles in Enterprise Services and the broader Program Management Organization. She currently is the Group Manager for Aviation Weather & Aeronautical Services (AJM-33).

Alex Murray

Senior SWIM Engineer, Noblis

Alex Murray is Senior Engineer and Technical Advisor to the SWIM program serving in roles ranging from working with users to on-board and effectively utilize SWIM, to advising the architecture and design of SWIM capabilities. He has been active in a multitude of SWIM projects for the past decade and provides a wealth of knowledge to the program helping further the future vision of SWIM.

Jill Olson
Deputy Director (Acting) of Aeronautical Information Services, Federal Aviation Administration (FAA)

Jill Olson has been with the FAA for 13 years. She started her career as a TERPS specialist and eventually got into management first as a team manager with Instrument Flight Procedures Group and then as the Aeronautical Information Group Manager. Jill's responsibilities are involved in all aspects of data as well as a new responsibility for NOTAM Policy and NOTAM Operations.

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Michael Karrels

Special Assignment Supervisor for Flight Control, Delta Air Lines

Michael Karrels has been a dispatcher for 15 years both at a regional level and at Delta Air Lines. Currently, he serves as the business owner for the Delta Air Lines NOTAM system and other mission-critical applications. Michael ensures the connectivity to Delta's NOTAM feeds and the dependent applications that use the NOTAM data.

Discussion Guidelines for Attendees

- Mute microphone if not speaking

- Introduce yourself and state your organization or company

- Keep comments to three minutes or less

- Raise your hand in the reactions tab to let the team know you would like to join in on the conversation

- Feel free to ask questions in the chat

- Let's get started!

This meeting is being recorded