

# ATO Space Collaborative Decision Making (SpCDM) Overview

July, 2023



...BY SHARING INFORMATION, VALUES, AND PREFERENCES, STAKEHOLDERS LEARN FROM EACH OTHER AND BUILD A COMMON POOL OF KNOWLEDGE, RESULTING IN DECISIONS AND ACTIONS THAT ARE MOST VALUABLE TO THE SYSTEM...

### **ATO SpCDM Purpose**

Recommendation of the Airspace Access Priorities Aviation Rulemaking Committee (AAP ARC)

-8/21/19 report

#### **ARC** recommendation #3

"...the FAA establish a CDM like space operations committee to recommend appropriate information to be exchanged with the FAA for more dynamic airspace management and situational awareness and to help implement the details charted by the steering committee." –p.21



### Preview: CDM charter highlights

#### Scope

- Data and information exchange
- Integrated air and space operations and initiatives
- Access to the NAS (airspace), policies and procedures
- Tools and technology, and data quality

**Executive Steering Committee (ESC) designations** 

**Space Operations Committee (SpOC) formation** 

Sub teams

**Handling of proprietary information** – (protect) to the full extent authorized by law

#### **Data and information exchange**

- Utilize relevant data elements
- Further define the data sets
- Focus on methods



### ATO SpCDM is and is not...

#### **ATO SpCDM is**

- √ Focused on space operations
- ✓ An operating paradigm and a philosophy through information exchange
- ✓ Follows best practices of 25+ history with Aviation CDM
- ✓ Allow space operators to build the collaboration framework with FAA – leverage existing industry bodies where appropriate rather than duplicate

### **ATO SpCDM is not**

- Not about licensing and regulation
- X ATO SpCDM is not a decision making body (e.g. FACA)
- × Will not make decisions or consensus for FAA, rather inform ATO Space Operations
- × Not creating data standards

The work is voluntary



### **ATO Space CDM Core Elements**

Executive Steering Committee (ESC)

Space Operations Committee (SpOC)

Data Exchange Sub Team

International Sub Team

Future Sub Team(s)

DE 1: Space Data Integrator (SDI) DE 2: Mission Planning & Data Exchange FY21

- ➤ Launch ATO Space CDM ✓
- FAA leadership approval 🗸
- Initiated charter

FY22

- Pilot sub-teams
- Initiate SpOC
- ➤ Launch sub-teams ✓

FY22-24

- Host general meetings/sub teams
- Assess program for future SpOC programs



### **ATO SpCDM Sub Teams**

Sub Teams provide a forum for the ATO service units within the FAA and industry to connect and address space-related issues. The collaborative nature of the sub team serves as a cornerstone to the CDM process.

#### **Sub Teams:**

- ✓ Consist of government and industry professionals with specific subject matter expertise from FAA and ESC member organizations
- ✓ Are charged by the ESC to explore specific tasks
- ✓ Provide recommendations and requests for tasks to the ESC and SpOC for deliberation, discussion, and approval

## Executive Steering Committee (ESC)

Space Operations Committee (SpOC)

Data Exchange Sub Team

International Sub Team

Future Sub Team(s)

DE 1: Space Data Integrator (SDI) DE 2: Mission Planning & Data Exchange



### ATO SpCDM 12-Month Schedule (as of July 2023)

	Key overall activities	Executive Steering Committee	SpOC	Location
	Significant meetings	Meet every 6 months	Meet every 2 months	Alternating locations
FY23 Q4	SpOC general meeting (VI)		August 23-24, 2023	Warrenton, VA
FY24 Q1	SpOC general meeting (VII)	October 23, 2023	October 24-25, 2023	Washington, DC
FY24 Q2	SpOC general meeting (VIII)		February 7-8, 2024	TBC – Florida Space Coast
FY24 Q3	SpOC general meeting (IVX)	April 25, 2024	April 23-24, 2024	Washington, DC
FY24 Q3	SpOC general meeting (X)		June 26-27, 2024	TBD

### **ATO SpCDM Space Operations Committee (SpOC)**

### Air Traffic Organization (ATO)

**System Operations** 

**NAS Operations** 

**Space Operations** 

Safety & Technical Training

**Air Traffic Services** 

International

Policy

Program Management Organization

Strategy

**Terminal Services** 

**Technical Operations** 

# Active Launch and Reentry Operators (LROs)

**ABL Space Systems** 

Blue Origin

Boeing

Firefly Aerospace

**Relativity Space** 

**Rocket Lab** 

Sierra Space

**Space Perspective** 

SpaceX

Stoke Space

United Launch Alliance

Virgin Galactic

Other stakeholders as appropriate e.g., FAA Office of Commercial Space (AST), NASA, Space Force, and key associations



### **ATO SpCDM SpOC**

#### Participants actively work with Space Operations

#### **Launch and Reentry Operators**

- Active intent to launch by 2025
- Actively working with Space Operations on launch and reentry operations
- Maintain launch and reentry operational vehicles
- Active with gov't agencies (NASA/DoD)

#### Will also include

- FAA Air Traffic Organization (ATO) representatives
- Key Associations

#### Considerations for the future

- > International Organizations
- Stakeholders as appropriate

Not expecting to include at this time

- Spaceports
- Regional Space Agencies
- > Facilitators of Space Ops



#### ATO SPACE CDM

# COLLABORATION IS THE ONLY WAY WE WILL ACHIEVE COMPREHENSIVE SPACE INTEGRATION

**Executive Steering Committee** 



## QUESTIONS

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