Surface Collaboration Team (SCT)

CDM General Session – April 3rd, 2025

FAA Co-Lead: Bryan Rogers, TMO - TCHU

Industry Co-Lead: Paul Amen, American Airlines

CDM Collaborative Decision Making

Federal Aviation Administration

SCT Team Members

Industry / FAA Members

- Bryan Rogers – TMO - TCHU / FAA Co-Lead
- Paul Amen – AAL / Industry Co-Lead
- Rachel Banning – Allegiant Air
- Lee Brown – JetBlue
- OPEN – FAA CSIT / AJR-1100
- Robert Herberger –AAL
- Dean Snell – NBAA
- Edwin Solley - SWA
- Dan Torres – FedEx
- David Uswajesdakul – UAL
- Tony Vassiliadis - DAL
- Kristen Wilson – NATCA
- Scott Masarky – DAL
- Ernie Stellings – A4A

Airport Members / Partners

- Paul Eubanks – ACI
- Curtis Hedgepeth - LAS McCarran / Reid
- John Howard - LAS McCarran / Reid
- Robert Kelley – FLL / Broward
- Dustin Loftis– PHX Sky Harbor
- Ralph Tamburro - PANYNJ
- Samer Tirhi - SeaTac
- *Robert Hanes – TFDM PO / AJM-224
- *Eric A. Wiggam – TFDM PO / AJM-224
- *Lidiya Gavrilenko - CSIT / AJM-224
- *Melissa Brown – MITRE CAASD
- *Isaac Robeson – Mosaic ATM

CDM Collaborative Decision Making

SCT Task Updates

Task 75: TFDM/Industry Engagement Throughout TFDM Development

Task 75: Results of Operational SMPs at CLT

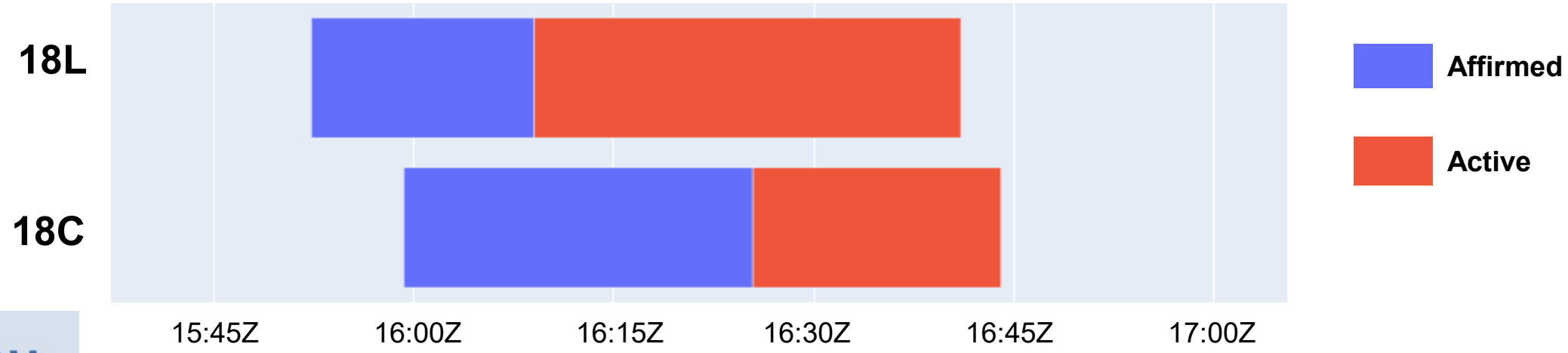
- **TFDM went operational (IOC) on May 14, 2024**
- **CLT SWG conducted multiple test SMPs in 2024**
- **First operational SMPs successfully ran on 2024-12-11**
  - Flights saved fuel by holding on the gates instead of sitting in queue
  - The SMP caused in no gate conflicts
- **CLT ATCT and AAL Hub Control Center (HCC) managed the SMP**
  - The FAA CSIT team supported both facilities
  - Representatives from DAL, JBU, SWA, and UAL observed from AAL HCC
- **Scope was kept limited, consistent with crawl / walk / run approach**
  - First time that ramp controllers had held flights on the gate for an SMP with current tool set

CDM Collaborative Decision Making

Task 75: Results of Operational SMPs at CLT

- **Metering was conducted separately per runway (18L and 18C)**
- **SMP Adjustments were not affirmed to simplify operations**

Runway	Affirmed Time	Start Time	End Time	Duration	Flights Affected When SMP Affirmed	Avg Assigned Metering Hold
18L	15:52Z	16:09Z	16:41Z	32 min	24	5 min
18C	15:59Z	16:25Z	16:44Z	19 min	23	2 min



CDM Collaborative Decision Making

Federal Aviation Administration

Task 75: Flight Counts in CLT SMPs on 2024-12-11

SMP Effect	Flight Category	18L SMP	18C SMP
Initial SMP	**Flights affected when SMP affirmed**	**24**	**23**
Flights Added to SMP	Flights changed runway into SMP	1	1
	Flights delayed into SMP	1	3
	Flights moved earlier into SMP	2	1
Flights Removed from SMP	Flights changed runways out of SMP	1	1
	Flights pushing back early before SMP start	1	0
	Flights delayed out of SMP	6	7
Flights Not Eligible to be Held	E Concourse flights	9	10
	GA/BA flights	1	2
	EDCT flights	4	1
	APREQ flights	3	1
Results	**Flights eligible to be metered**	**8**	**11**

Flights can fall into multiple categories.

For example, an E Concourse flight with an EDCT.

CDM Collaborative Decision Making

Federal Aviation Administration

Task 75: Close Out of Task and Final Report

- **Task has been outstanding since December 2016.**
- **Aviation Environment and NAS Priorities Have Changed.**
- **Original Project Description and Scope of Work Not Fully Relevant.**
- **The SCT Sub-Group Leadership and Members agree with the CDM Executive Committee's (EC) recommendation that Task #75 be closed and final report submitted.**
- **SCT Recommendations and Suggestions:**
  - On-going engagement between Industry, Airports and the FAA throughout the future deployment of TFDM.
  - Ensure a seamless transition from the current airport surface environment to a Surface CDM operation with TFDM.
  - Scope of Work and Project Description would supplement but not replace Task #82.

CDM Collaborative Decision Making

Task 75: SCT Recommendations and Next Steps:

- **Assign a New Task:**
  - This task new would help ensure the continued viability, reliability and expansion of the TFDM capability that benefits the National Airspace System.
  - Continue until the full implementation (IOC) of Configuration A airports is near completion.
  - Enhance training and development including pre-implementation surface management and/or surface metering trial runs.
  - Seek standardization where possible with other A-CDM processes outside the FAA / National Airspace System.
    - SWIM Data Exchange Worldwide.

- **Additional Recommendations:**
  - Consult, explain, and highlight all the benefits and objectives of TFDM to Senior Organization Leadership to get the full cooperation and 'buy in' by all applicable flight operators and/or airport operations divisions.
    - Focus on the benefits associated with surface management and data exchange, not just Surface Metering
  - Enhance the role of the TFDM Collaborative Site Implementation Team (CSIT) to schedule mini-return visits to the airports that they have already visited to update and evaluate their progress using CDM workshops or new in-person facility visits.
    - Due to recent delays to TFDM Implementation, a refresh is needed.

CDM Collaborative Decision Making

Task 75: Main Close Out Talking Points

- **<u>Surface Management</u> - Key Focus of Any New Tasking**
  - Surface metering is still a valuable component of Surface Management and should be considered when appropriate.
  - Flight operators concerns with impact to their operation when holding an aircraft at its departure gate past the current EOBT.
    - Compliance with a TFDM Target Off Block Time (TOBT / TMAT) when suggested during a surface metering program (SMP).
  - Access to the SWIM Data is very beneficial to both the FAA / ATC facilities as well as the flight operators and airports.
  - Having access to this new data allows controllers and flight operators to evaluate more parameters which can lead to better decisions on how to manage their operation.
    - Any formal detailed analysis of benefits realized from TFDM implementation going forward should also account for the incremental benefits associated with this valuable information exchange and not just savings and benefits associated with surface metering.
    - Benefits can be both qualitative and quantitative.
    - Positive feedback and examples noted at both Configuration A and Configuration B sites where TFDM has been implemented.
- **Encourage funding and implementation of more Configuration B (EFS) deployments.**
- **Emphasize airport CDM participation to facilitate access to SWIM TTP / TFCS data.**
  - Supports a more accurate and beneficial TFDM process at each airport.
  - Airport Authorities play an important role in the success of TFDM at their location.

CDM Collaborative Decision Making

Task 82: Collaborative Site Implementation Teams (CSIT)

- **TFDM Tech Talks to Industry / Stakeholders – On Hold**
- **Monthly TFDM CSIT Open Forums – On Hold**
- **CSIT Site Visits are an integral part of preparing non-FAA stakeholders for TFDM implementation (~18 months prior to IOC).**
  - Site Visit Goals:
    - Educate any local stakeholders that may be impacted by TFDM implementation
    - Inform local stakeholders of their role in TFDM Surface Metering
    - Introduce the local Surface Working Group concept as it relates to surface metering
    - Collect additional information for the TFDM Program Office to aid in site adaptation

Site Visit Overview

Day 1	Day 2	Day 3	Day 4
FAA-only	FAA-only	CSIT & Local Stakeholders	CSIT & Local Stakeholders
CSIT briefs FAA Tower: • Provides an overview of stakeholder presentations • Introduces local Surface Working Group Concept	CSIT tours local facility to provide context to previously collected site data May include: • Airport authority operations • Ramp tower(s) • FBO	Stakeholder Briefing Day 1: • Provide an overview of TFDM • How data exchange fits in • How Surface Metering has worked in practice	Stakeholder Briefing Day 2: • Site-specific TFDM implementation information • Roles and responsibilities in Surface metering

CDM Collaborative Decision Making

Task 82: CSIT Conclusions from CLT Operational SMP

- **31 minutes of metering hold equals taxi time and fuel saved**
  - Actual metering hold calculated using gate hold data from AAL ramp tool
  - Actual metering hold calculation was limited to flights eligible to be metered
  - Any gate hold beyond TOBT was not counted towards the actual metering hold
- **Compliance window was +/- 5 minutes**
  - Compliance calculation only considered flights that were eligible to held as part of this operational SMP test
  - Focus was on pushing back within +/- 5 minutes of TOBT given long ramp transit times

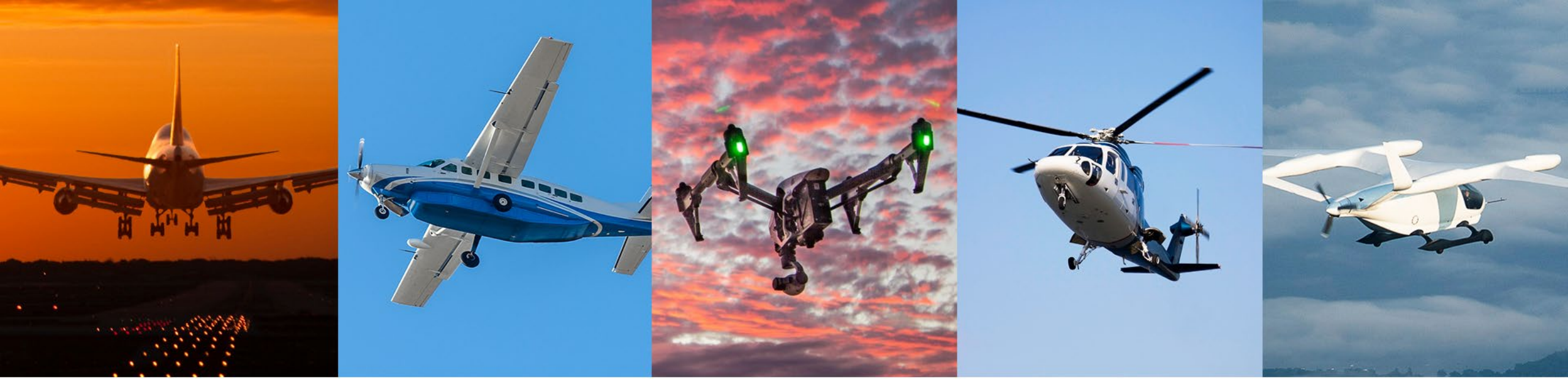
Runway	Start Time	End Time	Metered Flights	Avg Actual Metering Hold	Total Actual Metering Hold	TOBT Compliance	TMAT Compliance
18L	16:09Z	16:41Z	8 flights	2.4 min	19 min	75%	63%
18C	16:25Z	16:44Z	11 flights	1 min	12 min	91%	64%

- **CLT lessons learned will continue to be of value at other airports**
  - The collaboration between ATC and ramp tower enabled successful execution of SMP
  - The CLT stakeholder collaboration has spanned from before TFDM IOC through current day
  - SWG discussion on policies and procedures led to this success

CDM Collaborative Decision Making

SCT Team Upcoming Events

Questions?



Presented to:

By:

Date:

Federal Aviation Administration