

CDM

Collaborative Decision Making

Surface CDM Team (SCT)

CSG General Session – April 11th, 2023

FAA Co-Lead: Bryan Rogers, Operations Manager, IAH Tower

Industry Co-Lead: Paul Amen, Manager of Air Traffic Operations, AAL





SCT Team Members

Industry / FAA Members

- Bryan Rogers IAH OM / FAA Co-Lead
- Paul Amen AAL / Industry Co-Lead
- Lee Brown JetBlue
- Ron Foley NATCA
- Scott Farrow FAA CSIT / AJR-1100
- Dean Snell NBAA
- Edwin Solley SWA
- Dan Torres FedEx
- David Uswajesdakul UAL
- Tony Vassiliadis Delta
- Kristen Wilson NATCA

Airport Members / Partners

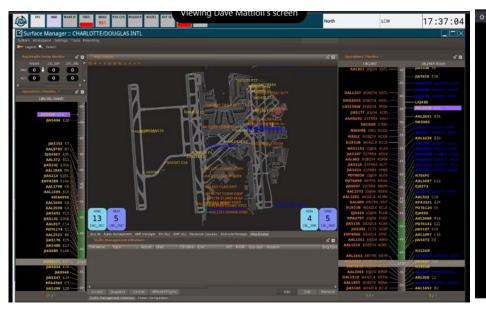
- Paul Eubanks –ACI
- Lisa Gahm DFW Airport
- Curtis Hedgepeth LAS McCarran / Reid
- John Howard LAS McCarran / Reid
- Robert Kelley FLL / Broward
- Chris Oswald ACI
- Dustin Loftis

 PHX Sky Harbor
- Ralph Tamburro PANYNJ
- Samer Tirhi SeaTac
- *Doug Swol TFDM PO / AJM-224
- * Lidiya Gavrilenko CSIT / AJM-224
- *Melissa Brown Mitre CAASD
- *Isaac Robeson Mosaic ATM



Task 75: TFDM/Industry Engagement Throughout TFDM Development

- New Tentative Waterfall
 - Configuration A Full suite of software tools. 27 large airports with the surface metering capability.
 - Configuration B The remaining 22 airport ATC control towers that will only have electronic flight control strips...No surface metering capability.
 - CLE ATCT Build 1 Configuration IOC in October 2022. Achieved full ISD status on March 1st, 2023.



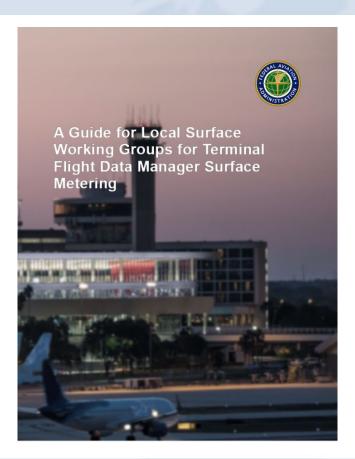




Task 82: Collaborative Site Implementation Teams (CSIT)

Resources

- Surface Working Group Guide
- TFDM User Guide
- TFDM Data
 Operational User
 Guide
- Post Site VisitSupport
- Developing Local
 Surface working
 Groups
- TFDM Open Forums





Contents
Executive Summary
1 Introduction
2 Overview of Terminal Flight Data Manager (TFDM)8
2.1 TFDM Benefits
2.2 About TFDM Surface Metering
3 Getting Your Surface Working Group (SWG) Started
3.1 The Purpose of the Surface Working Group (SWG)11
3.2 Recommended SWG Participants
3.3 Proposed SWG Roles & Responsibilities
3.4 Suggested SWG Documentation
3.5 Recommended Communication among Local Stakeholders
4 Preparing for TFDM Implementation
4.1 FAA Stakeholder Activities
4.2 Non-FAA Stakeholder Activities
4.3 Joint Stakeholder Activities
4.4 Locally adaptable parameters
4.5 Setting Expectations for Surface Metering Implementation: The Crawl/Walk/Run Approach19
5 Continuing Surface Metering Operations
5.1 Post-Implementation SWG Responsibilities
5.2 Surface Metering Use Cases
5.2.1 Surface Metering Use Case #1
5.2.2 Surface Metering Use Case #2
5.3 Surface Metering Performance Reporting
6 Surface Metering in Practice
6.1 Surface Metering Data from NASA's ATD-2 Field Demonstration
6.2 Lessons Learned in the Field
Appendix A—Glossary
Appendix B—Notional Surface Metering Performance Report
Appendix C—Sample Surface Metering Letter of Agreement



Task 82: Collaborative Site Implementation Teams (CSIT)

- TFDM Tech Talks to Industry / Stakeholders
- Monthly TFDM CSIT Open Forums
- 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 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

D 1	D 2	D 2	Down 4
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)	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

SEA CSIT

- November 2022
- Collected and validated the information that TFDM engineers will use to adapt the system to SEA airport.
- Briefed the local FAA Air Traffic Control Tower about the local stakeholder engagement necessary to ensure the successful implementation of TFDM.
- Provided local stakeholders with an in-depth briefing of how TFDM will work at SEA airport. SEA SWG Active and holding regular meetings.
- Prepared local stakeholders to create a local surface working group or adapt an existing surface group, and provided guidelines for what falls under the group's responsibilities with TFDM surface metering.





SCT Team Upcoming Events

- SCT Virtual Meeting Pre-PHX CSIT Date and Time TBD in April (Informal)
- Official PHX TFDM CSIT Initial Visit April 25 27, 2023
 - Potential in-person meeting in PHX during CSIT visit TBD
- Post PHX CSIT Review Team Meeting May 2023
 - Includes planning for in-person SCT Meeting at LAS CSIT
- LAS Official CSIT Initial Visit Tentative 13 15 June 2023 (In-Person Team Meeting?)
- Post LAS CSIT Review Team Meeting July 2023.
- The TFDM system continues to run in 24x7 operations in CLE and has run without fallback since IOC on October 24th.
- TFDM will deploy to five additional towers in 2023:
 - Indianapolis (April 24th)
 - Phoenix (June 5th)
 - Raleigh-Durham (July 24th)
 - Columbus (OH) (September 11th)
 - Las Vegas (October 23rd)
- Preliminary operational testing of the Build 2 TFDM (Surface Management) system in Charlotte will start in May.