Traffic Flow Management (TFM)

By: Mark Libby

ATCSCC
Collaboration
20 Domestic En Route Air Route Traffic Control Centers (ARTCCs)

5 Geographical Regions

1 Air Traffic Control System Command Center (ATCSCC)
ATCSCC

- National Oversight for all Traffic Flow Management and NAS Operations
- Coordinate and implement all National traffic management initiatives
  - Reroutes
  - AFP
  - Ground Stops
  - Miles-in-Trail (MIT)
  - GDP
- Focal point for stakeholder coordination
Strategic Planning

TFMS Strategic Planning

TFMS Operational Modeling & Planning

Time-based Flow Mgt/TMI and ATC Tactical Functions

Days 4 hours 2 hours Departure Arrival

- Weather
- Equipment
- Volume vs. Capacity
- Constraints
- Special Activities
- Stakeholder Preferences

Federal Aviation Administration

July 21, 2010
Operational Modeling & Planning

TFMS Strategic Planning

TFMS Operational Modeling & Planning

Preflight

Terminals

En Route

Terminals

Post Flight

Days

4 hours

2 hours

Departure

Arrival

TFMS Operational Modeling & Planning

• FSM Flight Schedule Monitor
• IPM Integrated Program Modeling
• CCFP Collaborative Convective Forecast Product
• TSD / CCSD Traffic Situation Display / Common Constraint Situation Display
• FEA / FCA Flow Evaluation Area / Flow Constrained Area
• Playbooks / CDRs (Coded-Departure Routes) / Preferential Routes

July 21, 2010

TFM Overview - Friends & Partners in Aviation Weather / Washington, D.C.

Federal Aviation Administration
Why did I get delayed?
Tactical Operations
A normal flight from Chicago O’Hare (ORD) to Newark, NJ (EWR)
Ground Delay Programs (GDP)
Airspace Flow Programs (AFP)
Reroutes or Integrated Collaborative Routing (ICR)

ORD + EWR
### TFM Overview

**Date:** July 21, 2010

**Location:** Washington, D.C.

**Software:** Create Reroute

#### Reroute Definition

- **Import Routes From:**
  - Playbook...
  - Route Search...
  - My Routes...
  - RMT File

- **Identify Flights based on:**
  - ETD
  - ETA
  - Public FEA/FCA Flight List

- **Start Time:** 02:14:24

- **End Time:**
  - Entry Time: From: 02:14:24
  - To: 02:14:24

- **Flight Status:**
  - All
  - Airborne
  - Not Airborne

#### Flight List

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**Destination Segments for Split Routes:**

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Next Gen

- RRIA → Reroute Impact Assessment
- CTOP → Collaborative Trajectory Option Program (Formerly known as SEVEN)
- ADS-B → Automatic Dependent Surveillance Broadcast
- Data Comm
- TBO → Trajectory Based Operations
- Surface
- Collaborative I-ATM (Integrated Air Traffic Management)
Collaborative I-ATM

Common Situational Awareness

Controller

Pilot

Traffic Manager

Dispatcher

TFM Overview - Friends & Partners in Aviation Weather / Washington, D.C.
Questions?
Collaborative Decision Making and the NGIP
(NextGen Implementation Plan)

Link to “CDM and NGIP”