

# CDM Automation Team

## CAT

Meeting Notes

November 5 & 6, 2014



**CDM**  
Collaborative  
Decision Making

CAT Meeting  
FedEx, Memphis, TN

November 5, 2014

In attendance:

Gino Siller, ATCSCC  
Jill Sparrow, ATCSCC  
Charlie Mead, AAL  
Brett Gilbertson, DAL  
RB Haggerty, A4A  
Scott Fitz, USA/AAL  
Jim McClay, NBAA  
Mike Namendorf, JBU  
Mike McAfee, FDX

Wednesday, November 5, 2014

Updates:

1. Jill shared the CAT briefing presented to CSG on October 14. The CSG was in favor of both pending CAT recommendations (ECR Tool Improvements and P-time Used for ETD when L-time is in past). CSG had also requested update on data quality. CSG has requested joint tasking be created for SCT/CAT that will address data quality metrics.
2. R10 deployment is scheduled for November 7. R10 will add Time Based Flow Metering schedule departure times into TFMS/FSM, however, the TBFM data is not expected to populate TFMS data until after January. Mike McAfee asked if it will be necessary to install FSM version 11.08. FSM 11.08 will add "TMA-RT" field which will contain the TBFM scheduled departure time. Jill did not believe there any other changes that would impact use of FSM and did not think it would be necessary to install the new version until the TBFM data is entered into TFMS.
3. ABRG and FxA entry modeling: Previously reported subbing issues for ABRG flights and FxA modeling are going to be addressed via CR after deployment of R10. The patch was initially scheduled for early December, but that has more than likely slipped due to the delayed R10 deployment. Jill will advise when deployment date for the patch is announced.
4. New version of Thin Client Traffic Situation Display (TSD-C) expected to deploy mid-December. PMO anticipates all users will have full access to TSD-C (other than EDCT changes, reroute assignments, etc). Mike M. has been compiling list of issues with current TSD-C. Plan is to review the list after deployment of the next version. New version of TSD-C currently in testing and hope is that some of the issues, such as the "No Subcarrier Flights In Dynamic List – System Error" may be resolved in the TPC testing process. Mike advised that the 'subcarrier' error message has slowed down from popping up every 15 seconds to maybe once a minute. The team will look at the current TSD-C in FedEx Ops later in the afternoon.

5. Charlie and Jill provided information regarding the use of CTOP for DFW OPAM. From AAL perspective, the CTOP overall worked very well. CTOP allowed AAL to move short-haul flights to different arrival fixes without significantly impacting length of the routes for those flights.

Charlie provided the following observations from AAL perspective:

CTOP process for DFW OAPM

Capacity was limited as controllers and pilots learned the airspace to 5 or 6 per corner post per 15 minutes. This produced capacity of 88 per hour which was sufficient for DFW's operation.

We identified about 90 city pairs for AAL & ENY where additional mileage over a secondary corner post was not excessive. AAL's prototype TOS engine generated two TOSs for AAL & ENY in each of those city pairs.

CTOP evaluated demand in each time period and moved flights to the secondary corner post when necessary to avoid a significant departure delay. We communicated route awards to the dispatchers. If they could not comply, the dispatcher would advise the ATC Desk, which would work with the TCA. (Fortunately, we had good weather and few routes were rejected.)

We monitored route compliance with TSD-C. We did not swap slots because delays were minimal. However, when flights had updated ERTDs, a software issue with TFMS was causing delays of 60-90 minutes beyond ERTD. The TCA helped resolve these issues, and revisions resolved them when they were run. Automatic Revision (AR) was turned off at AAL's request to avoid route changes that we were not prepared to communicate to the dispatchers. Manual revisions were run approximately every two hours.

The test was clearly a first step. AAL did not have several of the automation process that are designed into CTOP functional for this test. We learned a lot and plan to continue moving toward full CTOP participation.

Results were encouraging.

AAL arrival dependability in September had been running 80-90%.

18-19Sep the first two OAPM days ran with AFPs. AAL arrival dependability into DFW dropped to 35-55%.

20Sep CTOP was run, arrival dependability returned to 90%.

20-21Sep AFPs were run while we resolved some automation issues. Dependability fell to 75-80%.

22-27 Sep CTOP was run. Arrival dependability returned to 80-90%.

Jill shared ppt briefing which covered reported automation issues discovered during the DFW CTOPs. Most of the issues involved flights with CTDs that changed due to airline submitted L-times. The CTD changes created lengthy delays. Jill advised this is not working correctly and that there is a CR to fix the issue. Other issues included too many CTD changes with auto-revision (AR) which was turned off after the issue arose. Command Center implemented revisions every two hours in lieu of the AR. Jill believes the AR algorithm needs to be looked at, in particular the smoothing parameters. Charlie stated the reason AAL requested AR be turned off was due to AAL limited ability to process route changes and communicate those changes effectively to dispatchers. AAL did not want any route changes in between revisions. The timed cycle of the revisions worked for the ALL limited automation because they were able to send out all new routes to the dispatchers after each revision. Jill provided everyone with copy of the CTOP Algorithm Description. Charlie mentioned it would have been helpful to have had access to CTOP on the TAP as well as Real Time FSA in order to research specific flight issues. Jill will talk with Frank about access to historical RT FSA. Jill believes the access is no longer available due to FAA security.

6. Jill advised the CAT can expect the CSG to jointly task CAT with SCT to work on recommendation for Data Quality metrics and possible report card. Jill also advised CSG is considering tasking for SCT with regard to implementation of Advanced Electronic Flight Strips (AEFS) in towers. CAT may be asked to assist in study for PHX EDCT departure compliance. PHX is utilizing AEFS and it has been suggested the PHX EDCT departure compliance is very good, which may be due to use of AEFS.

Recommendations: ECR Tool Enhancements and Use of Ptime when Ltime is in the past:

The team worked through the draft recommendations. Corrections were made as necessary. The team will review the final drafts one last time during meeting on the 6<sup>th</sup>.

The remainder of Tuesday's meeting was spent in the FDX operation. The team looked at the TSD-C. FDX was able to show how list requests can be copy and pasted, however there is no copy/paste function for Reroute Monitor. FDX also displayed the error message received when attempting to print. The error message for 'subcarriers' was observed. Jill will take the issues to PMO.

Thursday, November 6

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Gino Siller, ATCSCC  
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### Data Quality Metrics/Surface Data Elements:

Charlie briefed the team on the Surface Data Elements, as well as metrics that are being considered by the SCT. The team discussed the similarities between Earliest Off Block Time (EOBT) and Airline Gate Time of Departure (LGTD), as well as timing parameters for notification of intent to operate and the DQ report card metrics for undeclared flights. There was also discussion as to when/if the CDM message specs will be changed, which release the new data element fields will be available, and do we work on departure and arrival metrics. Most of the DQ report card metrics were designed to measure data that impacts GDPs, which focuses on improvement to arrival data.

The team anticipates CSG to officially receive the joint tasking by mid-December. Jill suggested the SCT be invited to join us during the January CAT meeting. All were in agreement. All agreed CAT should hold a telcon one week prior to have a pre-meeting discussion. Telcon will be scheduled for January 22, 11:00.

The team brainstormed agenda for the joint meeting. All agreed the meeting should begin with full briefing from CAT on the current Data Quality report card and metrics and a full briefing from SCT on the 11 new surface data elements, as well as the status of surface data metrics.

### Questions for SCT:

1. EOBT: How is it derived?
2. Will flights with EDCTs have back calculation for Target Area and then back calculation for EOBT?
3. Will Actual Off Block Time (AOBT) be measured against EOBT or LGTD?
4. How is Target Movement Area Time (TMAT) expected to influence data for GDPs, AFPs, or CTOP? How does this impact TBFM?
5. Has or will surface data influence runway time?
6. How will GA communicate EOBT?
7. Do we use grade for the report card? Or red/yellow/green? Or percentage?
8. Is there a plan for new data elements or metrics with European CDM?

The remainder of the meeting was spent revisiting the drafted recommendations. Jill has IOU to follow-up on influence of Earliest Runway times on ETD; and to add pictures to the ECR Tool Enhancement recommendation that will help to clarify the intent of the recommendations.

### Future Meetings and Telcons

January 28-29

March 11-12

April 22-23