

Flow Evaluation Sub-team Meeting Summary



CDM

Collaborative
Decision Making

February 2015 FET Minutes
NBAA Convention - San Jose, CA.

Introduction

The Flow Evaluation Team (FET) conducted meetings in San Jose Ca., to discuss tasks that have been assigned by the CDM Steering Group (CSG) and to discuss other task assignment possibilities for the coming year.

Travel

The group reviewed the travel schedule for the FET.

2015 FET Meetings

Feb 26	Meeting in Atlanta to discuss CTOP use
Mar 23-26	CDM General Session is 2 days, Tuesday, March 25 and Wednesday, March 26 FET will meet for ½ day on March 24, and a full day on March 26
Apr 20-23	Meeting with SENEAM, Mexico. Location TBD.
May 12-15	Chicago host by UAL

**April and May meetings may change based on tasks assigned to the team.*

Closed Items

TFMS flight Plans

This task was closed and information turned over to CSG

Altitude Capped AFP'S

This task was closed and information turned over to CSG/ATCSCC

Planning- Web-Based Planning Tool

The FET completed a recommendation to support a “Webinar” type platform to allow for better situational awareness and collaboration.

Action: This recommendation has been tabled as the NAS Vision 2015 decided to utilize this platform this spring in severe weather in the development of reroute planning. We have the recommendation draft complete if we need to utilize at a later date.

Open Items

Action Items: The team reviewed the action items from the previous meeting

Reroute Process Tasking

MEX Playbook Routes

The group continued discussion on creation of playbook routes to support reroutes into Mexican airspace during constraint periods. Michael Murphy provided a PowerPoint that had initial route structure developed. This development was not coordinated and is just a starting point for discussion. Frank McIntosh provided some insight from his knowledge of ZAB airspace and this provided some interesting route options to discuss. The group talked about route possibilities, facilities and customers that should be coordinated with, and how to proceed with this route development. UAL has provided someone to

coordinate and this person has done some Mexican route structure development in the past. There are two possible pathways; one is to focus on a smaller group of flights between Texas and Southern California, and Arizona. The other possibility would include destinations in Florida and International flights as well. For the first iteration of the plan, we expect to keep to a smaller objective, but this could change as more facilities and SENEAM become involved in the conversations. The group needs to set up a meeting with key representatives in ZAB, ZLA, ZHU, and SENEAM.

Action: The team will coordinate with the ATCSCC International Office to set up an initial meeting with all key facilities to determine viable initial routing availability. The team expects to add SME's from ZHU, ZAB, ZLA, and Mexico air traffic to help formulate feasibility.

Coordination

IM/Electronic devices – The FET sub-team finalized their document and it was discussed with the group. No further work is needed at this point and the document will be delivered to the CSG.

Action: The sub-team will deliver our proposal to the CSG at the February meeting

Advisories – Not discussed at the November meeting. We will carry this item for discussion in November

Action: Discuss at next FET meeting

Route Segment CDRs

No discussion. Expect to discuss at next FET meeting

Action: Begin discussions in FET on how to revive this concept.

Additional CTOP areas of interest for exploration

The group discussed possible area where CTOP may prove valuable. The CSG is requesting the FET invest in the traffic management initiatives being planned for the Masters tournament in Augusta Georgia in April 2015. Coordination with ZTL has taken place and a meeting on Feb. 26th will occur to define CTOP use. ZTL was asked for their major concerns. They identified: Sector volume, TRACON volume, MIT restrictions and parking concerns as their focus areas. Michael Murphy provided a PowerPoint identifying some CTOP and FCA design possibilities that would meet the issues ZTL identified.

Action: The team has scheduled a meeting with ZTL to help develop a CTOP plan for the Masters Golf tournament in April. This will occur February 26th at ZTL.

Situational Awareness and Route Availability (SARA)

The FET continues to search for financial resources to sustain this tool. The FAA PMO does not have an available source to support efforts outside of the normal acquisition process for new tool evaluation. We feel AJV-7 may be able to assist. Perry Casselle joined the team for this meeting and would like a written and detailed need assessment from the FET. He will work with AJV-7 to see if funding is available.

Bill Ruggiero joined via telcon to discuss. He was very interested about the direction of where the tool was headed. We discussed the work done and where further development should occur. The outstanding issue is, and continues to be support for this tool. It will be imperative for this tool to be available, that we locate support that can not only provide server hosting, but can also take over development. Bill Ruggiero is not available to continue software support and this will need to be transferred to another source.

Bob Ocon provided an excellent concept for changes to the graphical display and use of SARA. His revisions are on target with the issues the group found with the interface. Phil Smith and Amy Spencer also provided updates to not only the look and feel of the GUI, but to the operations of controlling the interface as well. With the lack of support that we have, only minimal changes will occur for this year. The team will continue to work on modifications that will be necessary to make this tool more useful.

The group proceeded to discuss and storyboard the expectations and requirements for a test using this tool for the 2015 severe weather season. The objectives of this test are to evaluate if we can provide better situational awareness, reduce delays, reduce coordination, and increase efficiency for managing route availability. The tool will not be used to trigger any procedural methods or current practices. For 2015, only ZNY/N90 and first tier ARTCC involvement will be introduced. ZNY will make all changes to the tool during its use, therefore eliminating any workload on other facilities. This tool will be a mnemonic device for this year, only providing basic route availability and some communication capability, with restrictions on what can be communicated.

The tool consists of 2 basic capabilities. First is a graphical representation of route availability and the second is a text communication feature.

- Graphical Interface
 - The tool provides a map of the area that will be used for the test. The map will be based on N90/ZNY, and first tier ARTCC airspace. Currently the map does not include all of the items that would be of value to have. The FET felt airways, arrival and departure fixes, and ARTCC boundaries should be on the map as a minimum. Dr. Phil Smith will lead discussion and development on the user interface
 - In its current represented state, the tool would need to provide a status on every route, all the time, for each facility. This could be very time consuming for the person entering the data. We felt a better approach would be to only indicate routes that are impacted, and identify all 3 sections on the route for status. Therefore if a route is impacted, status on N90, ZNY, and the first tier ARTCC will be updated when any constraint occurs. The group discussed the use of another symbol on the display to indicate a route closure outside of first tier airspace.
 - The map provides 3 colors of route status. RED meaning closed, YELLOW meaning restricted, and GREEN indicating open. We discussed the YELLOW color and how to best define MIT restrictions. The FET felt there are other tools more adept at providing MIT restriction information, therefore the color YELLOW will indicate the route is being used for Pathfinders only. This will assist customers in understanding that they can ask to be a pathfinder on that route.
 - The MAP should provide text capability to share information that is known about route status. This could be either an open text box or a possible "hover" capability on the map to find additional information. This could be information regarding expected route opening time, use of pathfinders, a route is open but only for traffic destined to a specific set of destinations, etc.
 - Use of the tool will be mentioned on the ZNY SWAP Statement and will indicate a time that the tool and the NY Hotline will be activated. The FET felt the hotline and SARA have a connection that will benefit collaboration and both should be available at the same time.
- Communication
 - The tool provides a capability for stakeholders to input information or questions. We were confident that some procedures for the use of this component were necessary. The TCA position at the ATCSCC is a fully staffed position and therefore, we want to make certain this position is utilized as much as possible. Much of the work at the TCA position deals with routes during severe weather events. Customers felt they need better communication

with tower and approach control facilities to manage FAR117/Tarmac Rule concerns. The following procedures will apply to entering information into SARA for 2015

- The TCA must have already been communicated with and provided an opportunity to resolve the issue
- Stakeholders can only enter information into SARA once their flight reaches:
 - +100 minutes of surface delay
 - Are 30 minutes or less from timing out, or returning to the gate.

Action: Bob, Bill R, Phil and Amy will continue work to define requirements and graphic scenarios that could be utilized to show the CSG how the tool could be used this SWAP season.

Dynamic Weather Reroutes

When the FET was at ZFW for CTOP, we were given a very short overview of the testing that was going on with ZFW and AAL regarding work by NASA-AMES. The work provides an interface for managing routes, mostly for airborne flights dealing with en route weather. The team from NASA-AMES admitted this has been their focus. They would like to consider a pre-departure capability but they have this as a back-burner item. The tool uses CWIS, CWAM, FACET and some other capabilities to understand sector volume, live traffic conflicts, "Snap-to" route building, and future weather and airspace management. The FET will propose tasking to the CSG to review more of this work. They also briefed on NASCENT---NAS Constraint Evaluation and Notification Tool. This takes the idea of taking a reference route and finding an alternate route that provides savings and puts that into a national level (since DWR is based in DFW right now). Based on 10 min time savings.

Action: Formulate a recommendation for the CSG to task FET with development of pre-departure capabilities that could provide implementation into the current reroute tool, or redevelop the current tool

Post-Op Analysis Discussion

The group finalized a document on the need for post analysis tools. The document asks a lot of questions about what research and analysis is needed on a daily basis. Our current tools do not provide this in a simple manner and frequently multiple sources are needed to perform this work. More importantly, in many instances, you cannot locate the information needed at all. CTOP is an excellent example of a tool that has no post analysis capability or historical data. In fact, FSA provides information, but since it doesn't make a connection to FSM, this data is actually very incorrect and could lead to misinformation. The group will finalize this recommendation and submit to the CSG for their February session. We located a document from 2011 that detailed CSG tasking. It appears that no further action was taken regarding this work. FET feels it will be important to document the need from all stakeholders in regards to having post analysis capability.

Action: This task is completed and the final document will be delivered to the CSG at the February meeting.

FCA/Weather and capacity

The FET reviewed a recent Saturday when thunderstorms occurred in ZJX. The tool forecast a loss of 60 percent capacity in their airspace, and this was very close to what actually occurred. The tool is a prototype being provided by MIT/LL. It is not being sustained on any platform. The FET would like to see a tool like this or similar to this to be able to discuss AFP/CTOP use and have scientific data to support the decision-making process.

Action: Expect a recommendation for the CSG for the February meeting

CTOP Naming Convention

The group has a very large base of ideas on naming for CTOP. The current method does not provide any reference on what or where a CTOP event is occurring. The FET is concerned that once we are running multiple CTOP events, it will be very difficult to distinguish between them. The group spent a good deal of time discussion this week. Although we reduced the possibilities of naming to a more manageable level, more work will be necessary to reach a conclusion on the best convention we would want to recommend.

Examples of possible naming for CTOP:

Airport Departure/Arrival use use: **DFW-D-01, D10-A-01**

Facility where the FCA(s) are drawn– A or D for Arrival or Departure – Upnumber

En Route use: **ZFW-ZID-O-01, ZMP*ZFW-ZFW-O-01**

En Route facility where the FCA(s) are drawn(if the line is drawn through multiple facilities, then a "" will indicate start and stop points, ex. ZJX*ZDC –Facility with constraint –O for Overflights - Upnumber*

Action: Phil Smith will incorporate changes from the discussion today and will vet the document to the group for comment. Future discussions on this topic will continue to narrow the terminology for this and explore additional ideas.

CDM General Session Planning

The team briefly discussed the upcoming CDM session and what we would like to present. In lieu of multiple presentations, an idea surfaced to provide a video presentation of all our tasks so that it can be played for various breakouts, followed by a question and answer period. If adopted we plan to create video during the February meeting. AAL offered to provide Tim Niznik to present on CTOP

First	Last	Organization
Ron	Foley	FAA
Ernie	Stellings	NBAA
Al	Mahilo	FAA
Lisa	Ake	FAA
Michael	Murphy	FAA
Darin	Teitjan	SWA
Mike	Sterenchuk	AAL
Bob	Ocon	FAA
Phil	Smith	Ohio State
Dave	Vogt	DAL
Perry	Casselle	FAA