

NATCA Safety & Tech Update
Week of September 4, 2017

Flow Evaluation Team (FET): Tony Smith (DCC) is the Article 114 Representative to the Flow Evaluation Team (FET) for Collaborative Decision Making (CDM). His report is below.

The CDM/FET subgroup will be meeting next on September 5-8, 2017, at the Air Traffic Control System Command Center in Warrenton, Virginia, to resume work on our assigned tasking's. Our current tasking of identifying classes of scenarios and benefits of submitting Trajectory Option Sets (TOS). This tasking will focus on what benefits can be realized with the use of the Airborne Reroute (ABRR) and Pre-Departure Reroute (PDRR) capabilities when they come on-line.

The team will also coordinate with Nancy Smith and her NASA team to talk about Human in the Loop Testing (HITL) of the Integrated Departure Management (IDM) tool. This project is where the Ground Delay Program/Collaborative Trajectory Options Program (GDP/CTOP), Required Time of Arrival (RTA) and metering (TBFM) work together to provide end-to-end (gate-to-gate) flow management. This next round of HITL's will attempt to integrate additional "complications" into the scenario, such as variable winds, changing arrival rates and compliance issues.

Surface Concept Team (SCT): Kyle Andrews (ORD) is the NATCA Representative to the Surface Concept Team (SCT) for Collaborative Decision Making (CDM). Mr. Andrews forwarded the information below for the membership.

On August 24 the SCT participated in an ATD-2 Remote Demonstration Telcon to keep all interested parties updated on the progress of ATD - 2 at CLT. Following are some notes from that telcon.

Taxi estimates being used to predict gate conflict is a level of granularity that might be too ambitious. Gate conflict is not always the issue - ramp congestion conflict and priority of pushback (D0) vs. alley availability are possibly going to skew taxi time and identification of gate conflict.

NASA representatives consistently tout the high level of precision in predicting aircraft movement, by accurately estimating Earliest Off Block Time (EOBT), Ramp Transit Time (RTT), and taxi time. The human element involved in all of these times seems to be blithely ignored, i.e. an unfamiliar pilot may take extra time to start taxiing, and may taxi far slower than the average or default time used in flow algorithms. Although NASA seems very committed to determining ground movement times to a high level of precision, it does not appear that they are doing the same in determining airborne aircrafts times.

Variables such as wind speed; TRACON spacing requirements, sector saturation, etc. are not mentioned the way ground movement variables are. The SCT has an meeting scheduled for September 27 at the ATCSCC, at which time it is hoped that there will be some guidance as to near future tasking, and with previously discussed joint tasking with the CAT.

TERMINAL AUTOMATION MODERNIZATION REPLACEMENT (TAMR): Aaron Rose (NCT) is the TAMR Article 114 Representative for NATCA. His report to the membership is below.

For the last two weeks Mr. Rose has joined with TAMR SMEs Anthony Loguidice (ABE), Jon Bealles (A80), Mike Sanders (SCT), and Patrick Carter (D10) for the last STARS Enhancements 2 demonstration at the MITRE facility in McLean, VA. In addition, TAMR OSF lead Scott Kendrick was in attendance to uncover any possible risks to adaptation. Lee Moore (I90) from the Terminal CHI team provided invaluable input. This work package includes separation management tools, merging and spacing tools, dynamic spacing tools, airspace transfer tools, and improved methods of communications and coordination between controllers. Some of the enhancements the team embraced were Inter-Facility automated point out, extended scratchpads, non-verbal messaging tool, and airspace transfer tool. These enhancements to automation are in the development stage. During the demonstration, we welcomed visitors from the Enroute CHI team; for a discussion about the Inter-Facility enhancements. During the meeting Traver Albert (ZJX) and Alex Contreras (ZLA) brought their years of experience to bear; engaging with TAMR and MITRE to ensure enhancements work to the benefit of both Terminal and Enroute controllers.

Terminal Spacing and Sequencing (TSAS) held an Ops Safety Risk Management workgroup meeting the week of Aug 14th. Mr. Rose participated via phone to ensure TSAS would not be an issue upon incorporation into STARS. Many issues are listed as risks and not hazards. Until TSAS NATCA SMEs can demo some of the features the real hazards will not be uncovered.

Southern California TRACON (SCT) continues to experience tracking issues. WAM (Wide Area Multilateration) was installed and put to use early this month with fantastic results. There was a little hiccup with the PARROT but it was quickly corrected. Unfortunately, WAM is only used in the Los Angeles basin. Tracking issues continue in other portions of the airspace to include Orange County and San Diego. Long Beach radar is in the process of being raised which will help south of the LA basin. Jeff Woods and Aaron Rose are coordinating with the agency to fix the issues immediately and NATCA has determined this is a priority safety issue.

The survey and design phase for Chicago O'Hare's (ORD) additional Tower Display Workstations (TDWs) is being scheduled with Raytheon. Upon completion of this process the new TDWs will be scheduled for install. Funding has been procured for this project.

N90 AT Coach issues are still being worked by UFA, the developer, and Raytheon. Two of the three trouble reports are working as requested; work continues on the third. In addition, N90 will be receiving 4 additional Terminal Controller Workstations (TCWs) for their training lab.

TAMR is providing an additional AT Coach scenario generation class focusing on troubleshooting.

Mike Sanders (SCT) has taken over for Mickey Vitti (N90) as the NATCA representative on Automated Terminal Proximity Alert (ATPA) tool. Mike will be reaching out to facility reps, which have shown interest in utilizing ATPA in the future. Mickey and Mike worked last month to ensure training is available.

Work continues on the Joint Control Facility (JCF) issues related to the upcoming transition from Re-Host to STARS. JCF is not on the TAMR waterfall but the Navy will install STARS within the next two years. NATCA TAMR is working with JCF AT to ensure proper training is acquired and software issues mitigated.

Bakersfield California is on the waterfall for transition from ARTS to STARS in August 2018. Recent issues with radar and ARTS 2E at BFL have made it clear they may be in need of transition prior to Aug 2018. Mr. Rose is working on moving BFL left on the waterfall.

Two transitions occurred this reporting period. Charlotte, NC and Tulsa, OK both welcomed TAMR into their facility for a tech refresh, which upgraded processors and software. Thank you to both facilities for their professionalism and dedication to bargaining unit members.

TAMR Deployment and Common Terminal Digitizer (CTD) Update Submitted by Scott Robillard (K90)

As the fiscal year comes to a close, let's take a look at the FY17 milestones up until this point:

Equipment Deliveries (ED):	Planned 32	Completed: 25
Contractor Acceptance Inspection (CAI):	Planned 31	Completed 28
Initial Operating Capacity (IOC):	Planned 29	Completed 22

Programmatically, all sites under realignment still remain on the TAMR waterfall. K90 merger into A90, GRR/LAN/MBS/FNT/MKG into AZO, CAK/MFD into CLE and ERI into BUF represent the majority of the missed milestones. The other missed IOCs were Common Terminal Digitizer (CTD) sites, ROA and RFD, which were moved to January 2018 to accommodate CTD timeline difficulties. While it appears that TAMR is missing milestones, with the exception of CTD required sites, we are exactly where we are projected to be.

Site by site activities are as follows:

SYR Joint Site Survey (JSS) has been accomplished.

SHV Joint Site Survey (JSS) has been accomplished.

CMI Achieved IOC on STARS G4 ELITE

OKC Equipment Delivery

ALB Equipment Delivery

BHM Contractor Acceptance Inspection (CAI) The G4 STARS ELITE equipment has been installed and accepted by the FAA for BMH

MCI Contractor Acceptance Inspection (CAI) The G4 STARS ELITE equipment has been installed and accepted by the FAA for MCI

A11 Contractor Acceptance Inspection (CAI) The G4 STARS ELITE equipment has been installed and accepted by the FAA for A11

CLT Achieved IOC on STARS G4

TUL Achieved IOC on STARS G4 ELITE

RST Contractor Acceptance Inspection (CAI) The G4 STARS ELITE equipment has been installed and accepted by the FAA for RST

TAMR Software/Hardware Report Submitted by Kyle Ness (M98)

MSAW/CA Board

The board held a meeting August 14. The discussion centered on training, documentation edits and pending changes related to the Standards & Guidelines document. The Board is evaluating how to best identify safety critical parameters in new software releases prior to key site activity so the Board can determine if the parameter needs to be addressed in the Standards & Guidelines document. This includes any potential changes to Conflict Alert, MSAW, wake turbulence or anything Air Traffic feels pertinent to Board review.

System Technical Reports Working Group (STRWG)

Stakeholders are nearing refining concurrence on two changes to STARS software – assigned altitude amendments and enhanced CRDA. A new report related to ATPA processing based on scratchpad entries will be further discussed with Raytheon September 5. New on the workgroup agenda is a surveillance problem reported by Detroit related to tracks coasting when entering/exiting multilateration (MLAT) areas. NATCA is reviewing the proposed change.

Operating Testing and Evaluation (OT&E)

OT&E for S6.00R6 drop 8 is scheduled September 12-14. This will be the final evaluation for R6 and if successful, will allow the build to go to key site.

OT&E for S6.00R7 drop 3 originally scheduled October 17 – November 2 has been cancelled because the build will not meet entry or exit criteria due to several discrepancy reports.

Program Trouble Report Working Group (PTRWG)

Mr. Ness and Ross Costa (RSW) participated in the August meeting. NATCA elevated a PTR related to cursor home positioning when making certain keyboard entries even though the controller has 'no-home' selected. NATCA also elevated a problem with Quick Look ALL and Quick Look Plus whereas datablocks do not behave as expected. A PTR requesting a new function to more easily display significant points on the screen was reviewed by stakeholders and ranked.

STARS Software Planning Board

During a recent OT&E session, NATCA SMEs identified STARS trackball parameters that are more realistic of the 1-10 range that controllers choose at their workstation. The revised parameters while fairly simple, require a change to the software. NATCA is working with board stakeholders to get this change in an upcoming build.

Field Support

User evaluation of AT Coach changes requested by New York TRACON are ongoing at N90. The onsite evaluation allows N90 SMEs significantly more time to participate and make a thorough assessment.

Mr. Ness has been coordinating with Second Level Engineering, NATCA SBS and Terminal Requirements to change the display of Call Sign Mismatch (CSMM) on the STARS datablock – a condition when the ADS-B callsign does not match the beacon callsign. There were over 20,000 CSMM alerts in June and controllers are spending significant time advising pilots of their bogus transponder condition. CSMM display will be suspended until users are better educated and the NAS approached the equipage mandate in 2020. Mr. Ness participated in an ERC meeting August 23 to discuss the safety issues and mitigations associated with Duplicate Beacon Targets at Fargo. While the issue is primarily a surveillance/reflection problem, STARS software changes may mitigate some of the tracking problems reported by Fargo.

TERMINAL FLIGHT DATA MANAGER (TFDM): Matt Baugh (IAH) is the Article 114 Representative for TFDM. Mr. Baugh's update is below.

The first of many Training WorkGroups (TWG) was held in Gaithersburg with Leidos and the FAA/NATCA. The main risk associated with TFDM training is that it is being developed concurrently with the system. Any major slip in the training schedule would mean we would not have training material for PHX prior to Initial Operating Capability (IOC). That would cause a slip in their IOC and could lead to additional slips in the rest of the waterfall. At this time, we are on schedule and do not anticipate any further scheduling issues.

There is another concern with training revolving around the current 45-day training window. Our concern is that the amount of information that will be trained will be difficult to recall 30-45 days later. Internally, we have set a 30-day goal for controllers and we are preparing a refresher course for facilities to utilize, if they choose, for those controllers who are outside of either the 30 or 45-day window.

Advanced Electronic Flight Strips (AEFS)

Work is ongoing for the 5.4.0.0 build of AEFS. This build will include further stability increases, wrap the previous patch build for CLT into the baseline, as well as adding numerous wants/needs identified by the field sites over the past two years. This build should begin testing sometime later this year around December 3rd and be ready for field-testing in early to mid January.

- CLT
 - CLT is awaiting the next patch for build 5.3.0.3 which fix an issue previously found regarding ERAM and the Coordination Fix adaptation setting in the overlying center's airspace. With this set to "On" in ZTL, any revision received by AEFS kicked off the aircraft type of the revised strip. This issue was found in testing and turned "Off" but has since caused problems with A80 and any underlying Remove Strips message.
 - The patch is set to test the week of 09/11 and ZTL will turn the adaptation back to "On" sometime during the 09/14 shift. The patch has passed all of the tech center testing and we are confident that it will succeed in the field.
- PHX
 - Nothing new
- CLE
 - Nothing new
- LAS
 - Nothing new
- SFO
 - Nothing new
- EWR
 - Nothing new

SWIM Visualization Tool (SVT)

Our internal comparison with the NAS Operations Dashboard (NOD) and our Surface Situational Awareness (SSA) tool is ongoing. Even though the users have been granted temporary access to the NOD and it is being looked at to help other areas within our realm, we need to ensure that we have all of the capabilities the field needs wrapped up into as few pieces of glass as possible.

VOR MINIMUM OPERATING NETWORK (MON): John Vogelsang (P31) is the Article 114 Representative on the VOR MON project. His update is below.

The program is gearing up for a goal of 20-24 VOR discontinuances for FY18. We have a couple of program educational meetings scheduled in the coming months. The first will be at Kansas City Center on Tuesday Sept 12th. The next one will be at Indy Center on Wednesday October 25th. Anyone in those areas that wants to attend is welcome.

The following NR studies are either in progress or completed:

CGI-Cape Girardeau, MO

ANY-Anthony, KS

MSS-Massena, NY

ULW-Elmira, NY

CCT-Central City, KY

CSG-Columbus, GA

CTW-Newcomerstown, OH

MIP-Milton, PA

DAN-Danville, VA

GGT-Georgetown, NY

CMK-Carmel, NY

PDK-Peachtree, GA

COJ-Colt's Neck, NJ