

NATCA Safety & Tech Update.
Week of June 11, 2018

REMOTE RADIO CONTROL SYSTEM (RRCS): Corrie Conrad (PDX) is the RRCS Article 114 Representative. Ms. Conrad's report to the membership is below.

RRCS

All-Weather Inc. was awarded the contract for RRCS. A meeting will be held next week in Sacramento CA for a Human Factors Workgroup.

NME

No current update.

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.

Due to Severe Weather Avoidance Program season, there was no recent activity for the Surface Concept Team and the next meeting is not expected until September. Kyle Andrews visited CLT ATCT and was briefed by Pete Slattery (NATCA rep for ATD-2) on the ongoing effort by the ATD-2 project. The project is going well with many of the original ideas from the 2013 Surface ConOps being implemented. However, there is a concern that financial limitations may not allow all of the design/development automation that NASA has created to be included when this technology is given to the TFDM program.

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

Terminal Automation Modernization and Replacement (TAMR)

The Common Terminal Digitizer (CTD) is finally operational within the National Airspace System (NAS). This piece of equipment digitizes the analog feed from ASR8 radars to digital signals which STARS needs to display radar data. Roanoke (ROA) on June 1st became the first operational CTD site in the nation followed closely by Rockford (RFD) on June 4th. Both facilities transitioned to STARS and CTD with minimal issues. In addition to RFD and ROA, P80 and BUF also transitioned to TAMR/STARS.

Mr. Rose traveled to San Diego, Boston, Atlantic City, and Rockford over the last four weeks. During the SoCal trip R3F drop 4 software with improved tracking algorithms was tested and deemed suitable by AJV (FAA Requirements). Matt Morter (SCT) and Mike Sanders (SCT) were made available to participate in testing. SCT is in good hands with these two NATCA brothers.

An Article 114 meeting between the TAMR Program Office and NATCA TAMR was held in Boston on May 22nd. Items discussed included Terminal Spacing and Sequencing (TSAS) software build, software key site selection process, CTD, plain language documentation of software, weather source for terminal, and section 804 impacts to the TAMR waterfall.

While in Atlantic City, Mr. Rose, Ross Costa (RSW), and Hugh Wyckoff (TLH) tested the new and now improved Tower Display Monitor (TDM) which incorporates bonded glass to reduce glare. The TDM was deemed suitable for deployment by AJV. The new TDMs will start deployment throughout the NAS in about 6 to 8 months. Not all facilities will be receiving the new TDM though, these are replacements for failing GD monitors in the field. TAMR also needed the TDM replacement certified for operational use to complete deployment of STARS by the end 2019. The old monitors are end of life (EOL) and spares are hard to come by along with parts. Rockford, IL transition was smooth. "Thank you" goes out to Robert Wenc (FacRep) and the bargaining unit for welcoming the NATCA TAMR team with open arms. DFW will be receiving additional TDW (Tower Display Workstations) middle of August. Work will begin on July 17th with equipment delivery and cable runs.

TAMR Deployment and Common Terminal Digitizer (CTD) Update Submitted by Jim VanZee (GRR)

June began in a big way for TAMR as we successfully deployed the Common Terminal Digitizer (CTD) into the NAS for the first time at ROA. STARS ELITE and the CTD both went operational in the early morning of June 1st. A second IOC at RFD closely followed just three days later, on June 4th. By the end of this month, we will have added BFL to that list.

Significant TAMR events

Equipment deliveries

- Syracuse (SYR) 5/15/18

Site Surveys

- Memphis (MEM) 5/22/18
- Dubuque (DBQ) Remote Tower off Cedar Rapids (CID) 5/7/18
- Redding (RDD) Remote Tower off Northern California TRACON (NCT) 5/14/18
- *Note: All ARTS IE Site Surveys complete (May 2018)*

Initial Operating Capacity (IOC)

- Buffalo (BUF) 5/12/18
- Roanoke (ROA) 6/1/18
- Rockford (RFD) 6/4/18
- Portland (P80) 6/5/18

Our TAMR SME's continue to provide valuable support to facilities in the floorwalker role as we make significant overnight changes to the automation at many facilities. In ROA last week, facility management was extremely appreciative to have us there, and said that they "would have been absolutely lost if NATCA hadn't been there to support the transition".

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

System Technical Reports Working Group (STRWG)

Stakeholders are reviewing a proposed feature that would create AT Coach scenarios from STARS Continuous Data Recording (CDR) data. The intent is to take recorded data from live operations and create an AT Coach scenario file that can be manipulated by pseudo pilots, execute runtime commands and be edited by training personnel. Creating scenarios from operationally authentic events has significant potential to enhance controller training as well as provide an improved evaluation tool for STARS adaptation changes, regression testing and software enhancements. In essence, the tool would extrapolate track data in CDR recordings to create routes and waypoints that scenario tracks would then follow including track positions, altitude, speed, and heading changes. Weather data would also be included. An initial review of the tool in a test environment is pending.

MSAW/CA Board

The Board is reviewing proposed updates to change 13 of Standards and Guidelines document *JO 6190.20A*. On May 15, a meeting was held with FAA Human Factors to discuss interim results from the Conflict Alert study of controller reaction time. To date, CA and MSAW data has been analyzed from 20 facilities with focus on alerts that involve controller advisories and pilot maneuvers.

Operating Testing and Evaluation (OT&E)

S6.R8 testing begins June 11 - June 29. R8 is a stand-alone build for Terminal Spacing and Sequencing (TSAS) tools integrated with existing STARS baseline functionality. Several NATCA SMEs from the TAMR and TSAS teams will be evaluating required TSAS display items as well as running system baseline tests to ensure TSAS compatibility to existing STARS. New TSAS requirements to be evaluated include slot markers, data block CHI, TBFM timelines, keyboard and DCB commands. S6.R7 testing has been scheduled July 30 - August 17.

Software Planning Board (SPB)

NATCA and AJV-723 requested the board to move four software changes from R11 to R10: "All FUSED Tracks Coast on Leaving MLAT Area," "Monitor an Associated Flight Plan's Airport of Intended Landing," and "Weather Color." The fourth, "Overflights not dropped by Secondary Drop Filter" will move from R11 to R9.

Program Trouble Report Working Group (PTRWG)

NATCA initiated several PTR priority changes during the May meeting due to recent developments from the field and controller feedback. These include: Display of Hospital List, Aircraft Type Undo, Keyboard Command Syntax and Data Block Color Retention. The working group also concurred to Mr. Ness's suggested re-rankings of several PTRs related to ERAM and handoff functions since many require ERAM changes. Mr. Ness drafted two PTRs relating to aural alerts and FMA scratchpads which were ranked number 5 and 39 respectively.

TAMR NATCA Training submitted by Ross Costa (RSW)

This month Mr. Costa traveled to Kalamazoo(AZO), Elmira(ELM) and Erie(ERI) to deliver training briefs. In addition to scheduling class dates for Cadre Training and AT Coach Scenario Development, discussions revolved around transition plans. At AZO, discussed potential training classes and transition plans for Grand Rapids(GRR), Saginaw(MBS), Muskegon(MKG), Lansing(LAN), Flint(FNT) and Saginaw(MBS). Additionally, at Erie, we discussed the training needs for Buffalo(BUF) and Erie(ERI).

Mr. Costa also travelled to Raytheon in Sudbury, MA to have a meeting with the TAMR Program office and the Article 114 TAMR Representatives. The meeting included many issues; training, deployment, software engineering and the future of TAMR Program. Following this meeting, Mr. Costa travelled to the FAA Technical Center in Atlantic City to review and provide input on the new replacement Tower Display Monitors (TDM).

TAMR Operational Support Facilities (OSF) Update Submitted by Scott Kendrick (North Texas-OSF)

Mr. Kendrick attended the STARS Enhancements 2 telecon which is developing future STARS functionality and how to integrate that functionality between Terminal (STARS) and Enroute. (ERAM) as well as the SBS, TAMR look Ahead and weekly OSF Technical telecons.

Software Planning Board (SPB)

STARS will migrate to the Red Hat Enterprise Linux operating with the S6.R12 build. To prepare for the change, the SPB is working to adjust build content for R9, R10 and R11. The stakeholders agreed to PTR's for each software release.

Operating Testing and Evaluation (OT&E)

NATCA OSF SMEs from NTOSF, DVOSF and GCOSF are scheduled to attend the S6.R8 software test June 11th through June 28th, 2018. This will lead to formal test events for TSAS functionality in S6.R8 later this year.

STARS Safety Risk Management (SRM) Panel

Stakeholders paneled updated TSAS STR's being introduced in the S6R8 software build to determine if the new functionality introduces any safety risk to the NAS Program Trouble Report Working Group (PTRWG)

SMEs from OSF will attend the June meeting.

System Technical Reports Working Group (STRWG)

Proposal to develop off-line tool that will allow STARS sites to covert CDR data to ATCOACH scenarios. Stakeholders are nearing concurrence on the proposed software modification in addition to concurrence on the STR thinspec to correct unusable information in the FS/ESFL messages for sites.

Terminal Flight Data Manager (TFDM): Matt Baugh (IAH) is the TFDM Article 114 Representative. His update for the membership is below.

Most of the TFDM & TFMS operations team were on hand for a 3T (TFDM, TFMS, TBFM) 2-day event held at MITRE on May 16 & 17. The purpose of this meeting was to get an early look at how the 3 systems will integrate in the field, demonstrate their capabilities and look for any gaps/weaknesses. The meeting went very well, with extensive conversation from all parties. One action item taken out was for the 3T teams to schedule more consistent meetings with each other in order to ease the transition period of all systems being operational in the coming years.

Members of the Implementation team visited SAN & LAX to give a high-level briefing of TFDM and to survey the facilities and their equipment rooms to determine if they have enough space for TFDM when it gets there. LAX seemed to have ample space in the equipment room and multiple options for the tower were discussed and are possible to fit their needs. SAN has very limited space in their equipment rooms and it is possible they will require some type of help in getting the necessary space for the equipment racks. The tower had more flexibility and options are being looked at. These were just the first in many early site visits to facilities that were identified as having limited space. Over the next year or so we will be making the remaining visits and will attempt to work on solutions.

The Operations Team is working on finalizing our comments from the last Early User Involvement Event (EUIE). These comments will make up the bulk of the final changes we need Leidos to make in order for the system to be acceptable to us. There are still a few changes in progress that we need the system to have in order to meet the PHX Initial Operating Capability (IOC) of Nov. 2019. Operational testing is scheduled to begin in PHX in the April 2019 timeframe.

Advanced Electronic Flight Strips (AEFS)

Due to previous obligations, PHX and CLE are unable to provide AEFS with the required release of the system in order to update them to the new 5.4 build. We are still inquiring with each site about the possibility of updating their training systems, as this has no operational impact.

A site visit to CLT by representatives of LAS has been tentatively scheduled for late June. LAS is interested in seeing the new build in action and will be looking to make a final determination on whether or not they want to bring AEFS to their facility.

- CLT
 - Nothing new
- PHX
 - Nothing new
- CLE
 - Nothing new
- LAS
 - Nothing new
- SFO
 - Nothing new
- EWR
 - Nothing new

SWIM Visualization Tool (SVT)

AJT and TFDM are in the process of adding ZHU and S46 an SVT system for their underlying airports. Having an SVT depiction of their underlying facilities will ultimately increase their awareness of surface traffic and congestion, and should lead to more informed decisions regarding TMI's, flow changes, etc.

TIME BASED FLOW MANAGEMENT/TERMINAL SEQUENCING AND SPACING (TBFM/TSAS): Matt Gammon (ZID) is the Article 114 Representative for TBFM/TSAS. His report to the membership is below

TBFM

The week of April 30th member of the TBFM Ops Team attended a meeting in DC at MITRE to start working on improved metering to PHL. Representatives from the first-tier facilities attended and a lot of current data was looked at for PHL and there were a lot of great discussions about improvements moving forward. The main purpose of this meeting was to get a scope of the work that will need to be done and most agreed leaving the meeting that there is a lot of work to be done, but there is great buy-on to make the necessary changes to improve TBFM to PHL. Additionally, IDAC Site Requirement Surveys were conducted at AGS, CAE, LIT, and IAH. These Site Requirement surveys are necessary to make sure that the IDAC Tower equipment is installed correctly for each Tower's requirements.

The week of May 7th IDAC Site Requirement surveys were conducted at ATL and BHM. In conjunction with the IDAC activities, new Ops Team members visited ZTL for familiarization and additionally training on Arrival system management. Additionally, the Ops team supported the Program Office and visited ZOA to plan the implementation of 4.7, plans for IDAC training/implementation and eventual T2T connectivity with ZLA. As Sustainment has been identified as the Top priority for TBFM getting ZOA up on the most current system and having them be able to stay

on it was very important. ZOA was still on 4.5 version of TBFM due to issues with 4.6 and this meant that adjacent facilities could not move forward until a correct version was delivered and tested at ZOA. ZOA was very accommodating and a good plan was laid out for support for them from the Program office and Ops Team.

The following week of May 21st the TBFM Ops Team was at the Tech Center to participate in Tech Center Tuesday. There was a display with GUIs showing TBFM functionality as well as a display of TSAS. Ops Team members helped answer questions on the various systems within TBFM. These team members stayed at the Tech Center and helped facilitate a demonstration of the GIMS Speed Advisories. This presentation was given to NATCA FTR's. Additionally, Ops Team members were at PHL conducting TBFM training to the TMC's for the week. This training was a general refresher on TBFM Arrival System Management and additionally some classroom training was conducted as well. The same week TBFM Leadership meet at the Tech Center to review the information gleaned from the MITRE PHL meeting two weeks earlier and come up with a plan and general timeline to accomplish the PHL metering goals of NEC.

The week of May 28th was a Holiday week but still a busy work week for the team. Members of the team travelled to ZOA to support the installation of 4.7.1 P3. This new build was checked out in the support lab with the assistance of the Ops Team and was later loaded on the Ops String that week. The system was acceptable to the site and ZOA has remained on 4.7. This implementation is crucial to the overall Program goals of TBFM Sustainment. The same week the team conducted an IDAC Site Requirement Survey at GSO in support of eventual IDAC implantation at ZTL and their associated Towers. Additionally, TBFM Leadership met at MITRE for the first NEC Collaborative Workgroup meeting.

TSAS - submitted by TSAS subgroup lead Tom Glaze (D21)

The month of May was slow for TSAS. With the FAA now saying due to previous lawsuits at PHX that P50/PHX will no longer be the key site for TSAS. The FAA is supposed to have new direction for TSAS by the end of June.

The week of 4/30- was a non-travel week for some of the TSAS Team. Several members traveled to assist the TBFM Ops Team with IDAC site surveys. I as the TSAS lead attended via telcon 16 meetings as well as numerous unscheduled discussions involving TSAS.

The week of 5/7- three new TSAS Team members traveled to ZTL for the week to receive TBFM training and familiarization. I attended 20 telcons through the week.

The week of 5/14- all TSAS members worked via telcons. I had 14 telcons I was involved with that week.

The week of 5/21- originally scheduled as a training curriculum meeting at D01. This meeting was canceled due to the Training contract being delayed indefinitely. I attended via telcon 20 meetings that week.

The week of 5/28- This week was scheduled for much need TSAS lab testing at the Tech Center. This meeting was canceled last minute on late Thursday due to issues

with bad software builds in the ANG TSAS capability lab. I attended via telcon 18 meetings.

WAKE TURBULENCE: John Murdock (PHL) is the Article 114 Representative to the Wake Turbulence Office for NATCA. His update for the week is below.

The CWT Order is in the final stages of receiving signatures and approval. We anticipate the order being finalized and approved by mid-June. PHX/P50 and all underlying facilities will start workforce training on CWT June 17th and IOC is scheduled for July 17th.

We held multiple TELCONs with the military as Luke AFB posed an issue for Goodyear and Glendale airports and CWT. Luke AFB normally provides approach services to those airports. A few times a year Luke AFB closes and P50 assumes the approach control responsibilities. To avoid P50 from having to provide .65 wake separation standard to Glendale and Goodyear, Luke AFB has to implement CWT. The Air Force has approved the implementation of CWT at Luke AFB and they will go IOC the same date at PHX. This is a major milestone for a few reasons. P50 will not have to run different wake turbulence standards to different airports; this is a problem at multiple facilities that have implemented RECAT 1.5 and 2.0. And coming up at the next facilities there are multiple military facilities underlying the major TRACON.

We met with the Western SERCO managers and provided them a briefing of CWT that they will brief their respective facilities on. There were no issues presented from SERCO at the time of the briefing.