

NATCA Safety & Tech Update
Week of July 9, 2018

PROFESSIONAL STANDARDS: Andy Marosvari (BOI) is the Chairman for NATCA National Professional Standards. Garth Koleszar (ZLA) and Josh Cooper (SCT) are members of the National Professional Standards committee. Their report is below.

The Professional Standards program is in its 8th year and continues to have a positive impact on the professionalism of controllers nationwide. The program has 530 active members, with a total of over 820 trained to serve as committee members representing every facility in the National Airspace System. Committee members receive training on communication skills and conflict resolution during a 3-day course taught by NATCA. The next class will be held at ZID, May 15th through 17th.

To date, the Professional Standards program has received 2,712 submissions with 90% of those being resolved. That's 2445 issues that NATCA was able to resolve the issue at the lowest level, peer to peer, without management involvement in the outcome. Approximately 70% of those cases are submitted by management, demonstrating the FAA's belief that the peer to peer method used by the program is working. The recidivism rate is very low, indicating that the one on one discussions between committee members and controllers has a long-lasting, positive effect on the safety of the system and the professionalism of our controllers.

We now have an active PS tab on the NATCA website. It covers information for FacReps, Members, and PS members, with contact information for all active Professional Standards Committee member and District chairpersons. We also have a link to email us directly. Please take a moment and check it out!

If you have any questions about the Professional Standards Program, please don't hesitate to contact any of the NATCA National Professional Standards committee members at ps@natca.net.

Josh Cooper
Garth Koleszar
Andy Marosvari
Lydia Baune

<h1 style="text-align: center;">NATCA</h1> <h2 style="text-align: center;">Professional Standards <i>DASHBOARD</i></h2> <p style="text-align: center; color: red;">As of May 4, 2018</p>		
Facilities Covered	314	
Committee Members Trained	820	
Cases Submitted	2639	
Cases Submitted but not Accepted	76	3%
Cases Reported as Resolved	2379	90%
Cases Reported as Not Resolved	184	7%
Bargaining Unit Submissions	750	28%
Management Submissions	1820	69%
Other Submissions	69	3%
Average Case Resolution Time	7	Days

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.

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

It was another busy four weeks for the NATCA TAMR team. Four IOCs (Initial Operating Capacity), two Joint Site Surveys (JSS), and R8 software testing. Numerous coordination with facilities throughout the NAS to ensure each facility has what is needed software wise. SRQ (new tower), MKE, BFL, and PIA all joined the TAMR STARS family. Minor issues during IOC were reported but with the on-site NATCA Operational Support Facility (OSF) personnel and NATCA floorwalkers most, if not all, are resolved.

Mr. Rose attended the monthly TAMR Article 114 telcon which focused on ARTS 1E/STARS LITE adaptation issues, update on weather sources, and Common Terminal Digitizer (CTD). Still working with OSF to ensure when adding the ARTS 1E/STARS LITE facilities to larger sites Inter-Facility Data still passes as before.

Discussed the weather on the glass Operational Needs Assessment (ONA) should have initially been titled and research conducted on a new source of weather. Working with AJV requirements, James Keith (NATCA AJV), and Matt Tucker (NATCA WX Rep). The CTD is now deployed to 3 sites and evaluation is still ongoing. ROA, RFD, and BFL all report minor issues with the display of weather which we believe is associated with AP.

Meeting was held with the PMO, AJV, and Raytheon reference Plain Language Document (PLD) on June 27th. This meeting was to ensure that when a new software build is deployed the proper training materials will be distributed throughout the NAS. The agency in the past has distributed just the document and relied on each facility to research and train their workforce. NATCA TAMR is pushing for a training document to be distributed which will ensure nothing at the facility level is missed. The first PLD/training document should be in the field prior to R7 software deployment in Sept 2018.

Mr. Rose also during this reporting period attended the TAMR Strategic Software Planning (SSP) telcon, DSM JSS, RFD Post IOC, TAMR Risk Board, and GCN Stamp review.

Deployment of STARS concludes in Dec 2019 with Corpus Christi tech refresh. Segment 2 which is ARTS 2E to STARS transitions conclude April 15, 2019. We are nearing the end of the deployment phase. Sustainment, integration of new technology, and software improvements will all need to continue after 2019. With a new Operating System due in 2020 and continued advancements in technology the need for NATCA/Agency collaboration is essential. The terminal advancements we have made over the last 7 years need to continue and with support from the field these advancements and improvements will have a lasting effect on the NAS. Please continue to report any issues with STARS to the facility OSF or you can report discrepancies to Kyle Ness (kness@natca.net) or Aaron Rose (tamr@natca.net).

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

June was an active month for deployment – both for STARS and the CTD. TAMR successfully deployed at BFL, MKE, SRQ, and PIA since the last update. We continue to work well between the program office and air traffic at the facility level to respond to issues that puts everyone at ease with transitioning to the new automation.

Significant recent TAMR activity:

Equipment deliveries

- Kalamazoo ELITE string (AZO) 6/18/18
- Shreveport (SHV) 6/26/18

Site Surveys

- Boise (BOI) 6/12/18
- Des Moines (DSM) 6/26/18

Initial Operating Capacity (IOC)

- Bakersfield (BFL) 6/18/18
- Peoria (PIA) 6/29/18
- Milwaukee (MKE) 6/17/18

- Sarasota (SRQ) 6/23/18

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

Operational Testing and Evaluation (OT&E)

NATCA SMEs from Denver (D01), Northern California TRACON (NCT), Philadelphia (PHL) Southern California TRACON (SCT), Dallas TRACON (D10), Phoenix TRACON (P50), Seattle (S46) and Houston TRACON (I90) participated in R8 testing June 11-29. R8 integrates for Terminal Spacing and Sequencing (TSAS) tools integrated with existing STARS baseline functionality. The fundamental purpose for the test event was to ensure STARS functionality wasn't affected by the addition of new TSAS tools and display elements. While there was plenty of discussion and feedback on TSAS functions, no deficiencies in existing STARS software were discovered by the team. This was a three-week event that was largely unscripted so a big thank you goes to the NATCA SMEs for their hard work and willingness to use their know-how to run the test.

Systems Engineering

The display of color on STARS has been a predominant topic recently with focus on methodology to represent STARS colors equally across existing and new display equipment. The colors described in the STARS system specifications are in terms of Red Green Blue (RGB) input values that will produce the intended colors on a properly calibrated monitor. However, because of the variability of equipment design and manufacture, the same RGB input values on two monitors may produce colors on the display that are noticeably different to the eye especially when presented side-by-side, e.g. MDM3 vs. MDM4. Instead of using RGB inputs to define color standards, using color output values such as International Commission on Illumination (CIE) chromaticity coordinates and applying those values to device specifications would provide desired color consistency in any display used for air traffic control. Historically, color output on new STARS equipment was measured by controller test teams at the tech center by physically viewing new and old displays side-by-side then tweaking input values until the colors looked the same to the naked eye. Taking a more scientific approach, FAA Human Factors is undertaking a study to evaluate colors on STARS displays using spectroradiometer that produces output color measurements in terms of CIE values. Initial findings show the controller teams did a pretty good job matching color output with relatively few color discrepancies between display models. These deltas can be reconciled by adjusting RGB values according to the new CIE values. Once complete, the study recommendations and data can be referenced to establish new specifications and requirements.

FAA Civil Aerospace Medical Institute (CAMI) has developed a new standard color palette for ATC that provides colors that can be distinguished even by controllers with significant color vision deficiencies (FAA-HF-STD-010). The new CAMI palette will serve as the basis for updated FAA color vision tests and will be used by FAA flight surgeons during medical certifications. The CAMI palette has been accepted and published by the FAA, and it's likely that it will become an FAA requirement for new ATC systems. The CAMI color palette coupled with FAA Human Factors CIE output values can provide a color spectrum based on scientific methodology that may be employed across the entire ATC domain.

RTR Working Group

Approved site rule to restrict scratchpad entries at New York TRACON (N90).
Approved display of formation flight information in tab list for Houston TRACON (I90). Approved addition of weigh class criteria for CRDA at Seattle TRACON (S46).

Program Trouble Report Working Group (PTRWG)

Mr. Ness met with TSLE field support and NATCA SBS to review ranked PTRs regarding surveillance issues. As a result, several ranking adjustments were recommended to the PTRWG including potential closure of one report due to tracking improvements deployed at SCT.

TAMR NATCA Training submitted by Ross Costa (RSW)

This month Mr. Ross Costa (RSW) traveled to Atlantic City, NJ for a PTR (Program Trouble Report) Meeting. The group met and ranked new STARS software trouble reports. In addition, Mr. Costa traveled to Bakersfield, CA (BFL) for the cutover to STARS. Mr. Costa was joined at the site by Jill Carr (TPA) and Hugh Wycoff (TLH). The transition was smooth thanks in large part to the BFL controllers. Mr. Costa also participated in several teleconferences to discuss potential changes to how we disseminate information on software changes.

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

Mr. Kendrick attended the STARS Enhancements 2 telcon which is developing future STARS functionality and how to integrate that functionality between Terminal (STARS) and Enroute. (ERAM). The focus was on the Merging and Spacing capability for STARS. 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 attended the S6.R8 software OT&E June 11th through June 28th, 2018. This was a risk mitigation event for the software build and the TSAS functionality leading to the formal test in November.

STARS Safety Risk Management (SRM) Panel

Stakeholders held a panel to updated emergency rules request for N90 to disallow certain scratchpad entries due to the renaming of positions within the TRACON . This will be a temporary rule for 30 days to allow controllers the time to become familiar with the new position identifiers. (formally a "digit digit" now a "digit letter")

Program Trouble Report Working Group (PTRWG)

SMEs from OSF will attend the July meeting.

System Technical Reports Working Group (STRWG)

Proposal to develop an off-line tool that will allow STARS sites to covert CDR data to ATCOACH scenarios. Stakeholders concurrence on the proposed off-line software modification has been requested so the functionality can be scheduled to be included in the S6R10 software. In addition to concurrence on the STR Thinspecs to correct an issue with the ATCOACH scenario error checker not working properly.

Pre-Change Control Board (Pre-CCB)

Future STARS sites were brought forward for potential Change Control Board (CCB) changes and the benefits and impacts were discussed with all stakeholders. Changes that have general stakeholder consensus will be submitted to the TAMR CCB for final management approval. Most sites were moved by 30 days to allow more time for controller training

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

One of the benefits of TFDM will be it's adaptability and each sites ability to set the system up to best replace their paper environment. In order to make that transition smoother, we asked Leidos to create an adaptation tool. Their first attempt was wildly off the mark and was written and presented in XML code. Discussions continue with Leidos to develop a tool that controllers are able to understand and use in order to set up their own adaptations without having to call Tech Ops or Second Level, although they will be their to support each adaptation specialist if needed. At present, Second Level will have to work hand in hand at the tech center with each sites specialists initially in order to set up their system. We hope that Leidos' second attempt is much more on the mark and will allow the sites the freedom of handling their own adaptation. The timeline for this, unfortunately, is somewhere around site 8 in 2020.

Most of the TFDM Ops Team (NATCA, management, and retired controller contractors) met at the Tech Center the week of 06/11-14 for the 90% review of the TFDM Operations Manual. Over the 3 days the team made over 450 comments/discrepancies between the manual and the state of the system. This process serves as an informal test of where the system is versus where we expect it to be once we move into formal testing early next year. This document, along with the Training Manuals still in development, will also help facilities

Site prep at PHX will begin the week of July 9th with installation of the system to be completed in late August. During this install, cables will be run to the cab and the monitors will be tested, but then removed. With PHX already having the prototype AEFS, there isn't enough room to have both Advanced Electronic Flight Strips (AEFS) and TFDM monitors running side by side. There are options being looked at by the program to run AEFS on TFDM monitors with switches between systems occurring only during testing. If that option doesn't work, it is likely that we will have to get a mounting system of some kind to accomplish the Operational Testing (OT) that will start in March or April of 2019.

Advanced Electronic Flight Strips (AEFS)

Some of the Ops team was back at the Tech Center the week of 06/18-22 for risk mitigation testing of the newest AEFS build 5.5. Although we didn't find anything glaringly wrong with the system, we still have some concerns with the information we will be getting from NASA and ATD-2 and how that information will be displayed on the strips. There is an official lab test planned for July 31st and August 1st, with Suitability testing the following week. Site testing at CLT will occur the week of August 27-31, with the hopes of leaving the new build running upon completion of the testing.

The trip of LAS personnel to CLT to observe AEFS and it's capabilities was put on hold due to a last minute scheduling conflict. A follow on trip has yet to be scheduled.

- CLT
 - Site testing for the new build the last week of August. Build 5.5 is almost entirely comprised of enhancements for CLT and the integration with ATD-2, so it is imperative that the systems work seamlessly in order to have the best chance of success.
- PHX
 - Nothing new
- CLE
 - Nothing new
- LAS
 - Nothing new
- SFO
 - Nothing new
- EWR
 - Nothing new

SWIM Visualization Tool (SVT)

Preparations continue for S46, ZHU, HOU, and IAH to receive SVT. Once the details are finalized and site visits are conducted, each facility will be able to utilize all of the capabilities of SVT to view surrounding/underlying airports surface areas for increased situational awareness.