NATCA Safety & Tech Update
Week of August 6, 2018

NAS VOICE SWITCH (NVS): Jon Shedden (ZFW) represents the NATCA membership as their Article 114 Representative to the NVS project. His report is below.

The NAS Voice System (NVS) schedule has officially slipped. The FAA and Harris continue to work on a resolution.

Next Generation Air-Ground Communication (NEXCOM) continues deployment of new CM300/350 V2 radios to terminal facilities across the country. Some terminal facilities in the NAS using very old radios hear a pop back or "squelch tail" when they release their transmitters. The new radios being deployed under NEXCOM Segment 2 do not have this "feature" as the squelch tail is generally regarded as undesirable in radio communications. This issue has cropped up twice now during deployment and the program office should brief future affected facilities prior to install.

The NEXCOM program office has kicked off the Emergency Transceiver Replacement. This program is looking to replace aging tunable transceivers at DEN, HNL, PCT, PHX, SCT, and SLC. The Technical Interchange Meeting (TIM) scheduled in Denver the week of August 6th was postponed until later this year.

NAS Voice Recorder Program (NVRP) is the replacement for existing NAS voice recorders (DALR, DALR2, DVRS, DVR2). The Program Office presented to the JRC and received approval to proceed to Final Investment Analysis, leading up to the Final Investment Decision.

NVRP Operational Capability Demonstrations were in Oklahoma City on July 10th-11th.

Grand Rapids Tower/TRACON (GRR) is reporting multiple issues with their aging voice switch. There's one outstanding issue where a RADAR site is causing interference in the Tower Cab. That issue continues to be worked.

The **Tone Mitigation National Workgroup** met in September 2017 to discuss potential mitigations to the number and severity of tone/noise events across the NAS. This workgroup kicked off largely because of the number of tone/noise events occurring at PCT. One of the outcomes from these meetings was exploring the use of new headset bases which incorporate an active limiter.

D10/DFW successfully accepted their new IVSR on July 20th.

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

Congratulations goes to the NATCA TAMR team on another successful deployment to Jackson Mississippi on July 30th. Would also like to thank all the controllers at Jackson for their efforts to ensure a smooth transition. Welcome to the STARS family.

Mr. Rose traveled to Camarillo California (CMA), Washington D.C., and Atlantic City this reporting period. Naval Air Station Point Mugu (NTD) will be transitioning to STARS ELITE next year and CMA is a stand-alone tower serviced by the DOD. Meeting between the DOD and FAA took place with NATCA involvement on July 18th and involved future software builds and the upgrade to STARS ELITE. TAMR meeting was held on July 19th with CMA management, CMA FacRep Lisa Schaefer, and Mr. Rose. CMA advised how the DOD has informed CMA of software and adaptation changes. In addition, what requirements are needed to ensure a smooth transition to ELITE. More meetings are being scheduled between Point Mugu and CMA to address the lack of coordination to ensure the controllers are trained prior to adaptation and software changes. CMA is in good hands with Lisa Schaefer at the NATCA helm.

Washington D.C. trip involved a TAMR all hands meeting, meeting with TAMR PM, and a half day with AJV-7 FAA Requirements. Chris Hilbert from PHL received the "Star of STARS" award for the effort he puts forth every day to ensure the bargaining unit members have what they need with STARS and his deployment work. Thanks Chris Hilbert. Met with TAMR PM to ensure we start talking about STARS sustainment after the deployment phase is completed. Met with AJV-7 FAA requirements division, the approving authority for new software and hardware throughout STARS. Discussions centered around software build time tables and color usage on the main display monitor. While in D.C. Mr. Rose met with Doug Church (NATCA Communications) about Chris Hilbert and a couple more ideas for NATCA Insider. Mr. Rose also attended software testing at the William J. Hughes Technical Center (WJHTC) the week of July 30th. This software build is needed for Aspen, CO. So far so good.

Mr. Rose worked with Kyle Ness (M98) on the program trouble report (PTR) list. Cleaning it up, strategizing on the importance of, and ones that need to be closed were discussed. The next meeting will be on Aug 16th.

During the software test for R7, optical trackballs will be used. These trackballs are in use at Potomac Tracon for field testing with great results. The final hardware and suitability testing will be complete by Aug 16th.

Jim VanZee (GRR), Joe Yannone (Region X), and Mr. Rose started work on a Memorandum of Understanding between NATCA and the Agency with regard to Common Terminal Digitizer (CTD). Due to high levels of false weather depicted with ASR-8 radars NATCA wants to ensure the CTD radar feeds are not included in FUSION feeds at other than the primary Tracon. This MOU is still in the works and NATCA TAMR is working with NATCA National on wording.

Don Chapman (NATCA Section 804) called Aaron Rose to ensure his understanding of STARS capabilities reference facility consolidation. In addition, discussed training at Erie, PA prior to cutover to Buffalo, NY.

TAMR achieved its FY18 goal. TAMR met the internal plan goal of completing 8 STARS Sustainment 1 (SS1) Joint Site Surveys (JSS) by completing the JSS Out Brief at Lubbock (LBB) on 8/1/18. The deadline for this goal was 9/30/18, TAMR accomplished the goal nearly 2 months ahead of schedule. We have completed 90% of our FY18 Plan Goals and ALL of our FY18 APB milestones.

TAMR NATCA Training submitted by Ross Costa (RSW)
Mr. Costa (RSW) performed a STARS Training Briefing at Huntington, WV(HTS). Discussions involved training plans and path to IOC. Mr. Costa also travelled to Raytheon in Marlborough, MA for a group discussion on training and the new STARS Operating System (OS).

Mr. Costa also travelled to Jackson, MS (JAN). He was accompanied by Hugh Wycoff (TLH) and Scott Trafton (A90). The site had a successful transitioned to STARS.

TAMR Software/Hardware Report Submitted by Kyle Ness (M98)
<u>Operational Testing and Evaluation (OT&E)</u>
S6R7 testing began July 31 at the tech center in Atlantic City, NJ. NATCA SMEs from NCT, TPA, SYR, P50, ABE, PHL, A80, & D10 are participating in this three-week test. System archive testing also runs three weeks in August with three NATCA SMEs covering that event as well. There is a hardware dependency that makes R7 necessary for the remaining terminal sites that will transition from CARTS to STARS and legacy STARS sites that will transition to the latest processor/router hardware configuration. There are several software changes in R7 that were promoted by NATCA including; three fixes for PCT, changes to the ABC keyboard cursor speed to make it more reflective of the 1-10 speed settings, ARSA handoff limits between terminal facilities and ATPA in EFSL mode. Lastly, R7 fixes the long-standing problem of not displaying formation flight information on the departure data block.
<u>System Technical Reports Working Group (STRWG)</u>
The STRWG is reviewing a proposal to improve backup failure notification. Presently when the STARS backup system is not available a two-letter indicator is displayed in the System Status Area. However, that SSA field be inhibited and even if it is displayed, the indicator is green in color and can easily be missed. NATCA requested the SSA indicator display in yellow and be forced in the SSA regardless of controller settings. Another related proposal will show the controller when weather messages are not being received by the STARS system by also displaying a yellow indicator in the SSA. Stakeholders are also refining requirements documents for the STARS Operating System transition from Solaris to Linux. In summary, the approach is to restructure the primary and secondary disk drives to provide a common area which is available to both operating systems in a co-host fashion. This allows for the new OS to be installed while providing fallback capability.
<u>Rules Technical Report RTR Working Group (RTRWG)</u>
The RTRWG approved a new rule to allow specific SCT remote towers to view each other's coordination list since certain extended departure paths conflict with one

another. This rule will allow the towers to appropriately request release for their respective departures without verbal coordination with the TRACON.

Program Trouble Report Working Group (PTRWG)

A recent change to initial track uncertainty values in R6 is causing 'ISR' to briefly display on departure tracks when a STARS display is in PAM mode. A PTR has been written and NATCA will be advocating for a fix when possible. The next PTRWG meeting is scheduled August 16.

STARS Software Planning Board

The S6R8 build is dedicated to TSAS functionality and can be delivered to a site with TSAS tools either on or off. To achieve greater utility from the build in a TSAS off configuration, NATCA requested specific software content be added to the R8 build in hopes of delivering software fixes to a limited number of sites based on need. These include tracking improvements, handling of flight plans and PTL modifications. Keysite is planned summer of 2019.

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

TAMR has successfully deployed modern day STARS into over 90% of the NAS as of August 1, 2018 and is on pace to attain its mandate to have the terminal world on one common automation platform by the end of 2019. Throughout deployment, our NATCA team continues to perform strongly in all facets:

Collaboration: Even 90% of the way through the program, we continue to be involved in assisting Labor and Management at the facility level to work hand in hand with each other and everyone involved in the hardware and software transition. Our team is routinely engaged with the OSF, the Program Office, Engineering Services, TechOps, Terminal Requirements, and whoever else is needed, in order to ensure that Air Traffic at the facility understands and is happy with the performance of their new technology.

Education: NATCA's team of floorwalkers continues to provide critical support to the controllers at each facility when switching over from CARTS to STARS for the first time. Our team not only has an in-depth level of knowledge about the functionality of the system, they are also often able to assist the controllers in identifying minor issues with the site-specific adaptation, recommend new automation options that make the job easier and safer, and evaluate the performance of new hardware like the Common Terminal Digitizer (CTD). Frequently, during the first several days of operations on STARS, Air Traffic and TechOps at the facility will first turn to our floorwalkers for the answers they need to all of their questions and concerns.

Technology performance: NATCA's TAMR team continues to play a critical role in the performance evaluation of any hardware of software that impacts the performance of STARS and what information it's giving the controllers that use it. They are a part of all STARS and CTD software functionality needs and development, testing new software, and identifying non-STARS projects such as RADAR performance issues that may impact the quality of the data displayed on the glass. During the last month, TAMR Deployment has attained the following milestones in its schedule:

- STARS Equipment Deliveries
  - CLE ATCT for S804 additions of CAK and MFD airspace
- Initial Operating Capacity (IOC)
  - Jackson, MS (JAN)
- Joint Site Surveys (FAA and Raytheon)
  - Norfolk, VA (ORF)
  - Lubbock, TX (LBB)
  - All ARTS IIE Site surveys complete

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

Mr. Kendrick attended the STARS OS Day at Raytheon Marlborough that focused on OS Migration Development, First-In Last-Out (FILO) Deployment Approach, TSLE Development Environment & DMS Development Status and TAS Disk Partitions and Transition Plan along with other topics. The STARS Enhancements 2 telcon 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 Red Hat Enterprise Linux operating system 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. With the delay of the TSAS IOC the R8 software plan is being reworked to include fixes so the build can be released to sites and get updates out sooner.

Operating Testing and Evaluation (OT&E)

NATCA OSF SMEs from NTOSF, DVOSF, SEOSF and GCOSF started the S6.R7 software OT&E Jul 30th through August 17th, 2018.

STARS Safety Risk Management (SRM) Panel

Stakeholders paneled an updated site rules document, four PTR's that will be incorporated into the S6R7 software release and MSAW Order 6190.20A Change 13. No potential risks were identified to the NAS by implementation of these changes.

Program Trouble Report Working Group (PTRWG)

SMEs from OSF will attend the August meeting.

System Technical Reports Working Group (STRWG)

Reviewed Thinspecs for aircraft that departed into storm when weather display not present, Backup failure notifications and allow any RADAR to use run length bits similar to ASR 9 Mode S.

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.

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

Installation of TFDM equipment will begin at the Keysite Facility, PHX, the week of August 6th. Cables will be run to the tower but the monitors will be taken out and set up in the equipment room. Due to PHX, CLE, and CLT already having AEFS monitors upstairs, the transition at those sites will present their own difficulties with space. The program and contractor are working on fixes ranging from putting AEFS on the new TFDM monitors, to having to install and remove the TFDM monitors during testing/training until the actual IOC date.

Representatives from the program met with the contractor, Leidos, the week of July 25th for the Build 2 Critical Design Review (CDR). CDR is a milestone event that represents a finalizing of most of the requirements for the build as well as serving as an opportunity for us to view how they are approaching certain aspects of the system. Now Leidos will move forward with further development of the system, setting up for the next big event for us, the first of three Early User Involvement Events (EUIE's) for build 2. These events will be our opportunity to see and use the system in order to assess their progress and ensure that we have everything we need to be successful upon deployment to the first build 2 Keysite, CLT, in 2021.

New risks have been added to the program involving Adaptation, training of the adaptation, as well as training as a whole. Developing the training simultaneously with the system has always had its risks. However, as dates continue to slide a day or two or a week here and there with other parts of the program, the training is also delayed. If there is an overall slide for the program of more than two weeks, from November 12, 2019 to November 26, 2019, the new date for PHX IOC could slide as far out until February or March of 2020. This is due to the lack of availability for PHX to support the training time necessary for the controllers as well as numerous moratoriums throughout the holiday season. Training would likely need to be delayed until the beginning of January, 2020 in order to continuously train PHX and allow them to gain an overall efficiency with the system prior to going live.

The training team met last week at the tech center to go over the 60% Air Traffic and Air Traffic Cadre courses. This portion of the training only contained 5 of 10 courses, however, a lot of work was done over the course of the week that will make the remaining 5 courses an easier task to clean up and develop. Next week we will be at the tech center again to go over the OS/CIC/TMC 60% course, which will follow a similar schedule.

Advanced Electronic Flight Strips (AEFS)
Suitability testing will take place in early August for the most recent build, 5.5. This build is made up mostly of updates that will better allow ATD-2 and AEFS to transfer data, mainly APREQ times, more efficiently. Once ATD-2 gets a TMI from its sources, a TMC can use its capabilities to get a release time from the overlying center via the

Integrated Departure Scheduling Tool (IDST) interface. That time will then automatically transfer to AEFS and the associated electronic flight strip, wherever that may be.

This capability is one of the two main building blocks of TFDM and these 2 prototype systems interfacing will show us a great deal of what to expect in the near future.

- CLT
    - Site testing for the new build the last was delayed due to scheduling conflicts with Second Level. The new dates for site testing will be September 17-21. As with previous build installs, we will test on the midnight shift and, pending site acceptance, leave the new system running for the next day.
- PHX
    - Nothing new
- CLE
    - Nothing new
- LAS
    - LAS will be making a trip to CLT the week of August 20 to observe AEFS and will then make a determination on whether they want to move forward with the install process. If they decide to put AEFS in their tower, it will take approximately 4-6 months to get them set up and trained before they can begin using the system.
- SFO
    - Nothing new
- EWR
    - Nothing new

SWIM Visualization Tool (SVT
Pre-brief telecoms were held for S46 and the Houston area on July 6th and 12th, respectively. During these calls, the facilities were able to ask more direct questions about the systems capabilities and what benefits they can anticipate once the deployment is completed. As of now, the site visit and Kick-Off meeting for S46 is scheduled for September 13th. We are still in coordination with the Houston area to set up their visits. Since there are three facilities in the area, we are trying to find dates that work best for all of the key personnel. During those visits, we should be able to identify dates for their training and eventual IOC.