NATCA Safety & Tech Update
Week of September 4, 2018

ENTERPRISE-INFORMATION DISPLAY SYSTEM (E-IDS): **Amanda Richardson (ZOA) is the Article 114 Representative for Enterprise-Information Display System (E-IDS) work. Mrs. Richardson's report for the membership is below.**

Background: The Enterprise Information Display System (E-IDS) project aims to replace all existing IDSs in the NAS, providing the Agency with one enterprise solution across facility types. While some customization is necessary and should be available, one system will reduce overall costs for upkeep and training and resolve the upcoming end-of-life issues we have with our current IDSs in the field (IDS-4, ERIDS, etc.). The project is working towards finalizing requirements by the end of this year, with a contract scheduled to be awarded in 2019.

A Safety Workgroup will be conducted to review the E-IDS program as a whole and preliminary risks/hazards will be identified and discussed. This work will be ongoing. The Workgroup will meet in DC Sep 25-27th. 3 NATCA participants are included.

The NATCA E-IDS National Workgroup Participants have been identified and coordination is in process to begin Human Factors and Test work. The first meeting will occur in October and will fully onboard and prep the participants. Subsequent meetings will follow every 2 weeks to continue HF and Test work. This activity is scheduled for 1 year, to be revisited as necessary.

Testing telcons continued to review lab setup at WJHTC and discuss future needs.

The Draft Screening Information Request (SIR) has been released to Industry for review and comment. This is another important milestone for the project as a whole.

Upcoming activities:

- SRM Workgroup (Sep 25-27 in DC)
- Weekly / bi-weekly program status and engineering telcons (ongoing)
- Human Factors and Test Workgroup (ongoing, NATCA SMEs to begin in Oct)
- Training telcons (scheduled monthly – ongoing)
- Bi-weekly Risk Board Telcons (ongoing)
- Weekly check-in with Program Manager (ongoing)
- Weekly Systems Engineering Telcons (ongoing)

NAS MONITORING EQUIPMENT (NME): Corrie Conrad (PDX) is the Article 114 Representative for Navaids Monitoring Equipment (NME), Integrated Control Monitoring System (ICMS) and Remote Radio Control System (RRCS). Ms. Conrad's report to the membership is below

There was a JRC IID planned on June 20,2018 where they were going to suggest Alternative 2 – UIC based alternative. During a PMO PMR meeting IPNA (Work within the finance offers independent assessment) suggested for the money that the FAA is spending you may want to do legacy alternative – make minor changes to UIC and ICMS

The PMO decided in the end they are not comfortable with either. They delayed IID and are doing a market survey by Aug. 13, 2018. They should have the market survey back towards the end of September.

UIC Update

The FAA began deploying version 3 restricted. The training for the new version is not of quality and not coordinated with NATCA. I am reaching out to AJW to get this fixed.

RRCS Update

A contract was awarded to All Weather Inc. We have had a preliminary design review meeting in August. We will be meeting in September for a Maintenance Working Group meeting.

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

After a summer hiatus due to SWAP season at the ATCSCC, the Surface Concept team will resume activity with a scheduled telcon in mid-September to discuss Collaborative Site Implementation Team meetings anticipated for next year. The team is planning an on site meeting at CLT to observe how the ongoing ATD-2 project is being integrated at that airport, with the date expected to be late October or early November. The latest taskings from the CSG are expected to be finalized soon to give the team some direction forward going into 2109.

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

August 27th brought two new facilities on-line and into the STARS family. MLU and BGM both transitioned from ARTS IIE to STARS with very few issues. NATCA TAMR

SMEs led by Ross Costa (RSW) and Richard Thomas (GEG) were on-site to ensure deployment of the new system would come off without a hitch. Thank you to both facilities and the SMEs. Collaboration continues to ensure these transitions are smooth.
Mr. Rose spent the entire reporting period on the road traveling to Washington DC for a meeting with the TAMR Program Manager, Atlantic City, Omaha, and San Diego, While in Washington, Rose met with AJV (FAA Requirements) to discuss color usage and weather sources. The meeting with the TAMR Program Manager included what comes next after deployment and implementation. R7 software testing was the next stop in Atlantic City. Testing included fixes to cursor speed and tracking issues. Omaha (R90) has had issues with keyboards failing at an alarming rate. TSLE (Second Level Engineering) and NATCA visited the facility to ensure everything that can be done is completed in a timely manner. More information is needed and a way forward was agreed upon between the TAMR Program Office, TSLE, and NATCA. Research into the failures is underway and additional information will follow. The last week was spent in San Diego testing new software with the SCT tracker fixes. R6a software will be available for key site within the next week. Sites with tracking issues utilizing fusion should see an improvement with the new software.
Mr. Rose is working on a one-day terminal only meeting which includes AJV8, AJV7, AJT, Human Factors, and NATCA to discuss color usage and data block real estate (meaning what information goes in each section of a data block). According to the 7210.3 FAA Facilities Manual, color usage is restricted to certain meanings. Facilities and other programs (Terminal Spacing and Sequencing) in the past six months have requested additional use of colors. This needs to be coordinated nationally. This meeting is scheduled for Sept 19th in Washington D.C.

TAMR NATCA Training submitted by Ross Costa (RSW)
Mr. Rossano Costa (RSW) traveled to Clarksburg, West Virginia (CKB) to deliver a TAMR Training Briefing to the facility. Discussed training plans and any impacts that may occur on the path to IOC for STARS. Mr. Costa also traveled to Fullerton, CA to meet with Raytheon and the FAA to discuss training. Reviewed current training plans for STARS transitions. We also discussed software changes, new products and what the required training will encompass for the field for these upcoming STARS software changes. Finally, Mr. Costa traveled to Monroe, LA for their transition to STARS.

TAMR Software/Hardware Report Submitted by Kyle Ness (M98)
<u>Operational Testing and Evaluation (OT&E)</u>
August was a big month for software testing and NATCA SMEs were at the tech center each and every week of August. R7 run-for-record concluded August 17, system archive testing concluded August 24, and R7 regression concluded August 30. Many thanks to the SMEs who took time from families and summer activities to accomplish these important test events. Because R7 is critical to future STARS hardware configurations, the success of R7 testing means TAMR deployment can continue as planned with Aspen, Colorado as a key site.

NATCA SMEs will participate in a software early user evaluation at Raytheon in mid-September. This will give SMEs an opportunity to provide feedback on upcoming software changes and improvements in the R9 build.

System Technical Reports Working Group (STRWG)

Stakeholders recently approved two proposals to improve display of quick look regions during position consolidations and a false alarm indication that can appear when aircraft climb extremely fast.

Program Trouble Report Working Group (PTRWG)

The August meeting was very productive. Stakeholders reviewed 6 PTRs on the watch list, extended two and closed three and moved one to build planning. Stakeholders also reviewed several PTRs that were already ranked and adjusted in priority based on recent developments. Of note, PTRs related to Geographic Restriction Areas, ADS-B indicators, default settings for training displays and tracking. Several other unranked PTRs were discussed and moved into rankings. Because of NATCA's presence and input to the PTRWG, the PTR rankings are having a positive result shown by the PTRs that have been chosen for software build content. NATCA represented controllers will continue to see fixes and improvements important to them because their voice is being heard by other PTRWG stakeholders.

Mr. Ness requested several PTRs for closure for the September meeting that are no longer needed.

MSAW/CA Board

The board recently approved a waiver for MSAW processing at Aspen, Colorado for the upcoming transition to STARS in September. Due to the mountainous terrain and the unique descent profile of Aspen instrument approaches, existing MSAW adaptation standards will generate unwanted low altitude alarms. The intent of the wavier is to reduce nuisance alarms by extending adapted monitor volumes that will apply to both arrivals and departures.

Mr. Ness has been working with FAA Human Factors to categorize air traffic events in accordance with the ongoing MSAW/CA controller reaction time study. Human factors analysts identified several LA/CA cases that were difficult to classify without knowledge of air traffic rules and procedures or controller responsibilities. Working with other FAA Human Factors air traffic consultants, several questionable cases that were at risk of being unclassified will now be included in the dataset which in turn will bolster the sample size of the study.

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

NAS-wide deployment of STARS continues to successfully achieve its goals with NATCA as an integral piece of the process. With the new hardware/software capability to convert ASR-8 Analog radar feeds to digital (Common Terminal Digitizer), we have now converted four key-site facilities from ARTS to STARS and have agreed to continue deploying the new system into operational use at all remaining ASR-8 equipped facilities.

Our NATCA team also continues its strong collaborative efforts with all stakeholders in the deployment process. They do an outstanding job in routinely acting in a

liaison capacity, between Air Traffic at the facility level and the National Program Office, to address and resolve concerns or questions. The direct result of these efforts is evident in the continued "on-time and on-budget" deployment of an enormous project, with a workforce that is happy with their upgraded technology. During the month of August, TAMR Deployment has attained the following milestones in its schedule:

- STARS Equipment Deliveries
  - Kalamazoo, MI (AZO) ATCT for S804 additions of GRR and MKG airspace
  - Huntington, WV (HTS) ATCT

- Initial Operating Capacity (IOC)
  - Binghamton, NY (BGM)
  - Monroe, LA (MLU)

- Joint Site Surveys (FAA and Raytheon)
  - Corpus Christie, TX (CRP)
  - All Tech Refresh Site Surveys complete
  - All ARTS IIE Site Surveys complete
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TAMR Operational Support Facilities (OSF) Update Submitted by Scott Kendrick (North Texas-OSF)

STARS Enhancements 2 (SE2)

Reviewed Airspace Transfer use cases with EN ROUTE and Point Out scenarios. The described function affords both STARS and ERAM facilities with a capability that improves the overall safety and efficiency of NAS operations. The TAS (Transfer of Airspace) capability will allow for the transfer of defined volumes of airspace between STARS facilities, between ERAM facilities as well as between STARS and ERAM facilities.

Software Planning Board (SPB)

Stakeholders concurred with changes to the software build plan to include Approach Runway Verification (ARV) as an additional item for S6.00R10. This concept is something that Raytheon and FAA have been looking at to augment surface surveillance systems, mitigating recurring runway incidents on approaches throughout the NAS and for S6.00R11, SISO related changes for Improved Sign-In and Sign-out Processing and Reporting.

Operating Testing and Evaluation (OT&E)

NATCA OSF SMEs from NTOSF, NEOSF, DVOSF, PCTOSF, PCOSF and GCOSF attended the S6.R7 software Operational Test at WJHTC August 3rd through August 17th and 27th -31st 2018.

Program Trouble Report Working Group (PTRWG)

Attended the August meeting. Stakeholders re-ranked and ranked new PTR's that expands the Geographic restriction Area improvements, Tools menu DMS Directory Cleanup along with numerous other PTR's.

System Technical Reports Working Group (STRWG)
Stakeholders are reviewing three proposed software modifications to STARS. The first on fast climbing tracks changing beacon codes causes false conflict alerts, second one for Backup Failure Notifications and then also one on Quick look Region Consolidation issues.
In addition, Mr. Kendrick attended the STARS Enhancements 2, TSAS, SBS, Pre-CCB, TAMR Look Ahead and weekly OSF Technical telecons.

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 was completed in PHX, the week of August 20th. The installment went according to plan and the equipment was removed from upstairs and placed in the equipment room for future testing. The transition plans for PHX, CLE, and CLT is still being closely looked and developed due to their already having the prototype strip system and the added space constraints. The fixes are still being worked with the most effective being putting AEFS on the new TFDM monitors.

The 60% reviews of the ATC and OS/CIC/TMC courses was finalized and comments have been sent to Leidos for eventual integration into the training. We have since received the first versions of the Quick Reference Guides that will follow a similar process of review and revision until they meet our needs. These versions were more focused on the content and not so much on actually showing someone a short-cut or steps, but we will continue to work the issue.

A high level training program develop by Ray Adams (EWR) and some of the other Training team was presented to the Program leads in late August. With the number of facilities, we will be deploying to and the high course length, resources will be a major issue in the success of the training. After some clean up, we will brief both AJT and Tech Labor leads in order to gain their buy-in of the plan so that when the time comes, we have the personnel already in place for a successful waterfall.

Advanced Electronic Flight Strips (AEFS)

Suitability testing took place the week of August for 6-10 for the most recent build, 5.5. Representatives from CLT, CLE, EWR, & IAH as well as AJV-7 Requirements were able to make a suitability call which will allow the system to be deployed to CLT. There will be an additional round of regression and risk mitigation testing of this build the week of September 10th due to its added integration with the ATD-2 system in CLT. The following week of testing will be used by the site to make the decision of either leaving the build running or to fall back and re-work any issues that may be found.

- CLT

    - With the testing of the current build scheduled, discussions of what will be included in the next build. Once those requirements are discussed and finalized, the system will go through its process and eventually be brought to CLT and other facilities.
- PHX
    - Nothing new
- CLE
    - Nothing new
- LAS
    - Jamaal Haltom (LAS FacRep) and an FLM made a trip to CLT to observe the system the week of August 20. The next step is for LAS to take the information from the trip and make the determination of whether or not they believe the system will meet the facility's needs.
- SFO
    - Nothing new
- EWR
    - Nothing new

SWIM Visualization Tool (SVT)

Site visits to all three Houston area facilities (ZHU, IAH & HOU) as well as S46 will happen in September. During these visits, we will demo SVT to the sites, help them work through any physical configuration issues as well as leave them with a demo system in order to train and gain efficiency. Once they are comfortable, each site will have to make their own Initial Operating Capability (IOC) call.

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

The week of August 6th Ops Team members were at the Tech Center for TBFM Sustainment testing as an ongoing commitment to consistently test TBFM new builds prior to Key sites and National releases. This Sustainment testing is now scheduled once a month at a minimum and the objective is to have consistent Ops input into the testing process. This is also done with the help of support personnel who have historical knowledge of not only the TBFM system, but detailed processes that have been used in the past for TBFM testing. The same week TBFM Ops Team members visited ZBW in support of Northeast Corridor work for PHL Metering. The initial intent of the adjacent site visits is to gather information of the current adjacent support for Metering and discuss future work with the facility representatives.

The following week of August 13th the Ops team was at the Atlantic City Leidos location for the new 4.8 release Ops Evaluation testing. This was the second Ops

Eval of the 4.8 system and there were a number of fixes and advancements that were evaluated. A large enhancement that has been requested and will be part of the 4.8 system is the availability of IDAC to be used dynamically between arrival system and EDC (Miles-in-trail) system scheduling. Currently IDAC is hard-set to schedule into one or the other system; with the new enhancement facilities will be able to move back and forth between Arrival and EDC system IDAC scheduling. This means that IDAC Towers will not have to revert back to traditional Call-for-Release when the Center changes their TBFM constraint system for a given flow of Traffic. The NEC corridor team members visited PHL this week to continue with TRACON TMC familiarization and future PHL metering improvement design work.

The week of August 20th ZTL was given adaptation/customizations for future IDAC work. Ops team members were on site at ZTL and identified issues in the customizations that needed to be fixed and most were addressed on site. Briefings were given to Facility TMU personnel about how the system works and how it will minimize the amount of phone calls to the multiple towers under ZTL and give the associated Towers visibility in the overhead stream constraints. There will be a two part implementation, first having IDAC training at ZTL to allow CLT ATD-2 system to schedule into all of ZTL's Constraints and part two will be full IDAC implementation at all of ZTL's Towers that are on the current work package waterfall. The same week NATCA Ops Team Leadership participated in a Multi-meter HITL at MITRE. The purpose of this was to test many of the future tools/concepts at the same time to gather information.

The last week of August CLT presented briefings and gave ATD-2 Demonstrations to the Ops Team. A very big thank you to CLT NATCA and the NATCA National ATD-2 114 Rep Pete Slattery for his time and effort putting this event together. The briefings/demos were very informative and highlighted the need for TBFM/IDAC Representatives to begin working together with ATD2/TFDM Reps as these systems will be working closely together. The same week the NATCA National TFDM Article 114 Rep Matt Baugh gave a demonstration of the TFDM functionality in DC. This was very informative and we want to thank Matt and his team for their time and effort as well. This was great to have this around the same time as the ATD-2 demo at CLT as it allowed TBFM Ops team members to 'compare' notes and start thinking about future integration of these programs. The NEC group returned to ZNY this same week to continue working on future PHL Metering Adaptation. There are a number of challenges to work through with a project of this scope. The fact finding phase is generally complete and the team is moving forward with adaptation work that can be done at this point and planning on how to move forward with future work as not to disrupt current usage of the system. There will be a meeting at the Tech Center in September to work through these issues which we believe will be very beneficial.

<u>TSAS - submitted by TSAS subgroup lead Paul Carroll (PCT)</u>
The TSAS Team participated in a Risk Mitigation event at the Tech Center on August 21-24 and the 27th. During the event, the team supported ANG COT Testing for TSAS

with support from ERAM test beds metering to the terminal airspace. The lab utilized STARS S6.R8 D2 and TBFM 4.9.0 i39. The Team performed orthogonal testing as well as capability testing of the TSAS platform.
During the weeks the TSAS team did not travel, some members supported the TBFM Team for sustainment testing and work on the NEC (Northeast Corridor). Other members participated in numerous telcons with Leidos and Raytheon software engineers to enhance the TSAS system.