NATCA Safety & Tech Update
Week of June 13, 2016

FLIGHT DATA INPUT OUTPUT (FDIO): Ron Shusterman (A90) is the FDIO Article 48 Representative. Also included in Mr. Shusterman's duties are Article 48 representation for the Electronic Flight Strip Transfer System (EFSTS). Mr. Shusterman forwarded the information below for the membership.

- The Electronic Flight Strip Transfer System Keypad (ERK) is currently being utilized by BNA and PHL. The EFSTS had some software issues affecting the keypad and scanner which have been corrected via upgrade 1.3.3. Currently awaiting suitability calls from BNA and PHL which should occur by the end of June. EFSTS software upgrades and keypad kits should start shipping out, five at a time, to facilities currently using the legacy keypads by the end of June. Discussion on Phase 2 ERK is occurring now with scheduling of Keysite some time in September.
- New FDIO monitors and keyboards are starting to reach facilities as they are ordered. New keyboards are very ergonomic and have a recall button to view last five entries made.

NAS MONITORING EQUIPMENT (NME): Corrie Conrad (PDX) is the NME Article 48 Representative. Ms. Conrad's report to the membership is below.

- We anticipate receiving comments back on the NME Program Safety Plan (PSP) (from AJI) on June 14th. As such, a safety working group session is scheduled for Tuesday 6/21 to work through and adjudicate any outstanding comments. Conversely, if the comments received are more administrative vs substantive or critical in nature, this meeting will be cancelled.

- Training for the UIC for SFO controllers is currently being scheduled for the first two weeks of August and we plan to go online at the current SFO tower the week of Aug 22nd but a date for that week has not yet been decided.

Operational Contingency & Continuity Office (OCCO): Tammy Norman (ZTL) is the OCCO Article 48 Representative. This is a one year detail at the Eastern Service Center to work on this project. Ms. Norman's report for this month is below.

- **The OCCO's original charter, TOCO,** expired. Close out documents have been drafted, and the team continues to work on lessons learned. We are moving forward to Phase 2 under the permanent **Operational**

Contingency and Continuity Office (OCCO). The OCCO will remain in Atlanta. The OCCO charter has not been created, but manager Tony Jenkins has submitted a proposal for the updated structure and mission. We will continue to improve facilities' equipment and procedures in the NAS to adhere to Order JO 1900.47E : Air Traffic **Control Operational Contingency Plans (OCPs).**

- **This week OCCO will host a planning meeting** to discuss strategy and create methodology for assessing the throughput, meeting the administrator's goals, and the effectiveness of current TRACON airspace once ATC-0 and the above ARTCC(s) have assumed the airspace. OCCO will use this information to begin a gap analysis between a facilities current OCP performance estimates and actual performance data. The results will be used to create the next steps and aid in investment decisions. The gap analysis will be used for future improvements in the NAS as NextGen projects roll out. Contingency and continuity responsibilities cross all of the Service Units. We will host SMEs from each office to assist in this development plan.
- **The Administrator's Goals:** (1) Achieve 90% of the Airport Acceptance Rate (AAR) at Core airports within 24 hours of an event. (2) Return affected airspace to 90% capacity within 96 hours.
- **Site Surveys continue at the CONUS ARTCCs**. These onsite visits validate technical requirements needed for the support of ATC-0 outages. The work continues to enhance contingency infrastructure to support outages. I continue to notify the facility technical reps and fac reps of these upcoming visits to their facilities with the offer to join in the meetings. After the OCP is reviewed for any changes, the visit is mainly with tech ops to validate.
- **Order J.O. 7210.**3- **Facility Operation and Administration**, Chapter 17-Section 23: Contingency Plan Support System (CPSS) is currently being revised by the OCCO with support of the OSG (Operational Support Group from the service centers) SMEs and our Command Center SME. The discussions are ongoing. This document prescribes the policies and guidelines for managing ARTCC OCP data with the CPSS. **The Automated Contingency Tool (ACT-2)** is a web-based application used to collect, share, publish and distribute OCPs for access in the field during ATC-0 events. The OCCO is assisting MITRE in writing the requirements to allow this database to be suitable and efficient for contingency needs. MITRE reps will return to further discuss the improvement of the database. There are deficiencies in adapting the needs of the 1900.47E, limitations of database access and input, database output needs (i.e. reports, notifications, charts), training issues and deleting unwanted features.
- **The Office of the Inspector General of Aviation Audits** has continued requesting information from OCCO to complete their audit.

An Exit Conference is scheduled for the "ATC Disruptions" Audit. Each service unit and OCCO will be present.

- **Reps with the SMART tool (Simulation Model for ATC R&D and Training)** have invited OCCO to attend a briefing with their focus being on how they can add value to OCCO's contingency efforts. TOCO went to OKC last year and viewed the demonstration of the SMART tool. They showed how SMART can assist in the evaluation, refinement, and training of OPCs designed to respond to ATC-0 events. The system is amazingly adaptable to changing facilities, maps, frequencies, etc. A change in a scenario can be made in seconds vs. the time it takes to rewrite a change in an SGET scenario.

- **Safety Risk Management (SRM)** has been completed with all except two CONUS ARTCCs' OCPs. They are awaiting signatures. Manager Tony Jenkins briefed NATCA on the on the 1900.47E and answered questions on the SRM Document.

OSHA: Mike Odryna (ZBW) is the Chairman of NATCA's OSHA Committee. He has provided an update for the membership.

NATCA OSHA COMMITTEE UPDATE June 2016

Weekly Meetings:

- Continuing weekly meeting with Kathleen Edic (AJW-23-A) EOSH Services.
- POC: (Mike Odryna)

NATCA Academy OSHA Classes

- 11 Facility OSHA Reps from around the country attended the NATCA Academy class in Atlanta.
- The class covered OSHA and FAA regulations and contractual agreement. The class was taught by Mike Odryna

FAA Order 1050.22A Briefing

- NATCA was Briefed by the agency on FAA Order 1050.22A, Environmental Management System for the Air Traffic Organization. NATCA had several questions that were passed onto the agency.
- POC: Melinda Kim, Mike Odryna, Phil Barbarello, Dominic Petrelli, Kendal Manson

Establishment OSHECCOMs

- All facilities must be covered by an Establishment OSHECCOM and they are required to meet at least Quarterly. Establishment committees are used to discuss facility specific safety issues. If any issues cannot be resolved at the establishment level, the issue would then be forwarded to the Regional Committee.
- If you have any questions on how to set one up, please contact your NATCA Regional OSHA Rep. The current NATCA Regional OSHA committee list can be found here:

- http://www.natca.net/index.php/OSHA-home

OSH issue reporting

- If you have an OSH issue at your facility, use your normal reporting process. i.e. OCC, UCR etc. Also contact you NATCA Regional OSHA rep. The regional OSH Rep's work as liaisons between the lines of business.
- If you have a concern about something occurring at your facility, you can fill out the following form to request a member of the OSHA Committee contact you to discuss your concerns.
- OSHA Committee Information Request Form

Quarterly CSC EOSH Briefing for NATCA/PASS Safety Reps

- Dan Sherritt and Mike Odryna attended the quarterly EOSH briefing for the Central Service Center on June 7th. We discussed issues regarding up-coming training, facility issue reports and CSA EOSH Communications
- POC: (Mike Odryna, Dan Sherritt)

Committee Membership:

- We still have vacancies in both the Southwest and Great Lakes Regions.
- POC: (Mike Odryna)

Reprisal Order has been signed:

- NATCA still waiting for the agency to finalize the required training and publish it in ELMS
- The following e-mail address and phone number can be used by anybody to report any accusations of reprisal.
- By Email: OSHReprisalReports@FAA.GOV or by Phone: (866)276-5908

  POC: (Mike Odryna, Dominic Petrelli, and Nicole Vitale)

OSHA Committee Webinar:

- The webinar was held on May 26th and was attended by more than 15 individuals. The topic was "Roof Replacement Challenges" Stay tuned for the next webinar.
- POC: (Mike Odryna, Geoff Bacci)

Standard Design Working Group for Towers

- Mike Odryna attended, via telecom, the Standard Design working group. This group defines standard requirements to be built into all new ATC Towers.
- POC: (Mike Odryna)

Regional OSHECCOMs

- The NATCA Air Traffic Regional Reps and Region X reps attended their respective Regional OSHECCOM meetings throughout April, May and June. Minutes from the Regional OSHECCOM meetings can be found at:
- OSHECCOM KSN Site

Central Service Area Fire Life Safety

- 130 ATCTs in the CSA are covered by the program (116 have been certified compliant with 1960.20, and 14 are remaining).
- 4 towers scheduled to be certified compliant to OSHA on July 1, 2016 (MLI, CLE, MSP, IND).
- Terminal FLS Sustain Program
- 7 CSA Facilities (SAT, AUT, BTR, EVV, ELP, C90, ORD) are in design phase.
- C90 Construction scheduled to finish in July 2016.
- POC: Mike Odryna, Dan Sherritt

Fire Drill Requirement

- All FAA employees are required to participate in a fire drill annually. Ask your local management for the status of fire drills at your facility.
- POC: (Mike Odryna)

Current Facility issues being worked by the committee and others.

o FAY: Fumes	o PHX: Elevator Reliability
o LAK: IAQ Mold	o FAI/ATCT: Roof Replacement
o FNT: Odors	o YNG: Roof Replacement
o Alaska FSS: OTZ Housing/FAI HVAC-ROOF Replacement	o ARR Overall Facility Condition
o BOI: Elevator Reliability as second means of egress	o ILG: Mold/IAQ/Asbestos
o GRR: Odor, ASR Contamination	o DAL: Water Tank Leak
o Great Lakes Regional Office: Asbestos/Construction	o PNS: Water Leak
o NWM Regional Office: Water Quality Issues	o SGF Mold/IAQ
o ANC ATCT: Article 53 Investigation	o ZAN: Seismic Upgrade
o DSM SSC Office: Comprehensive Mold Evaluation	o FSM: Water Intrusion, IAQ
o NEW ATCT: Mold/IAQ	o SGF ATCT: HVAC Project

REMOTE TOWER: Kieron Heflin (IAD) represents NATCA in accordance with Article 48 on the Leesburg Remote Tower initiative. Mr. Heflin forwarded the information below for this week's update.

- Mr.Heflin had numerous meetings and Tel con's to continuously review and comment on SAAB/VSAATS Evaluation plan Phase 1A for the R-twr at Leesburg airport.
- Mr.Heflin had a meeting to review and comment/amend the Evaluation forms that would be recommended to Saab for the Phase 1A passive testing for the R-twr at Leesburg airport, these documents were produced by the FAA's Human Factors group.
- Mr.Heflin had a meeting with SAAB and all the interested parties to discuss in detail Evaluation plan Phase 1A for the R-twr at Leesburg airport and now are waiting for the revised addition of the plan.
- Mr.Heflin had a meeting to review and comment/amend the Concept of operations for the R-twr at Leesburg being put forth by Saab/VSATS.
- Mr.Heflin had a meeting with Saab/VSATS and all the interested parties to discuss the Concept of Operations for the R-twr at Leesburg. We are awaiting the amended version or the Concept of Operations.
- Mr.Heflin is currently having numerous meeting's and Tel con's to hammer out the Leesburg Sequence of Events & Draft Time line for a Safety Risk Assessment Panel. This has been in flux as frequently each step is predicated on the previous step/benchmark being met and if this is not met by any of the parties involved the time line moves. This is an ongoing process.

TERMINAL AUTOMATION MODERNIZATION REPLACEMENT (TAMR): Mitch Herrick (MIA) is the current Article 48 Representative for TAMR. Mr. Herrick will be retiring in July and Aaron Rose (NCT) will be the next Article 48 Representative on TAMR. Below is the TAMR report.

TAMR Phase 3 Segment 1 Update (In the future this will be the Systems Engineering update) submitted by Doug Peterson-D10.

- This is the final TAMR update from Segment 1 of the program. The last Segment 1 Large TRACON, N90, declared continuous operations on STARS on May 17, 2016. Many of the functions that were carried out under Segment 1 will now fall under Systems Engineering, which will include, software design and technical specifications, build planning, software testing and PTR prioritization.

- Hardware/software and programatic challenges. While the actual transitions of all large TRACONS is complete. The job is far from done. Some of our TRACONs, particularly, SCT, N90 and PCT, continue to have system performance issues that need significant long-term

improvement. SCT will continue to battle poor radar performance due to bad geographic locations for the foreseeable future. Our NATCA SBS brothers are working closely with a radar analysis sub-team known as **Surveillance Automation Analysis Team** (SAAT) that is doing analysis and seeking solutions. The unfortunate reality is that no solution is imminent. We will attack the problem incrementally as new ideas are introduced and tested. At some point new, improved, or relocated surveillance sources will be required, and that process has begun. N90 and PCT are our most complex TRACONs because of the combination of large geographic airspace, multiple Centers and congestion of traffic and adjacent facilities. This has given us some new software problems and priorities that we are aggressively pursuing. Scheduling challenges and new programs may cause a fairly substantial interruption or change to our software delivery timeline from 6-9 months to 22-26 months. This has operational impact implications. If we encounter a software problem that carries significant safety or operational risk, we will be forced to change product delivery schedules, a potential need to reduce operations or operate an with increased safety risk. None of those are attractive options. Some of the "hard" product delivery schedules that are competing for our resources are: Digital Recording Device End of Life (EOL) replacement, System Processor (X 3 000) EOL replacement, Avaya Router EOL replacement, Solaris to Linux Operating System replacement, Tower Display Monitor (TDM) EOL replacement , Surveillance Interface Modernization / Operational Internet Protocol(SIM/ODIP), Flight and Inter-Facility Data Interface (FIDI) parts 1 and 2, Terminal Sequencing and Spacing (TSAS), the eventual final content of Terminal Work Package 1. Most of those things are essential projects that have to get done and any schedule change carries ripple effect impact on other programs or systems. We will be facing some very hard choices in the next three to five years.

- Merge Software. The most significant activity with TAMR software is the release of Revision 4 (R4) which is the first step of the software "merge" which brings all the software modifications made for the large TRACON transitions together with the STARS ELITE and legacy STARS software baselines. This software will be deployed to first five "key site" facilities this month. R5 is the last step of the software merge which brings together all the late breaking changes and modifications and will roll out this fall.

TAMR Phase 3 Segment 2 Update (In the future this will be the STARS G1 Tech Refresh and ARTS IIE Replacement update) submitted by Scott Robillard-K90.

- Deployment activity of all types are occurring on a daily basis across the NAS. At the start of program, there were 91 ARTS IIE facilities. 8 of those facilities housed 2 ARTS IIEs which brought the total number of ARTS IIEs in the NAS to 95. In the short 2 years and 2 months of deployment we have deployed G4 Elite to 23 ARTS IIE sites. This is just the start. Before the end of July 2016, 6 more sites will join those 23. Those being FSD, FSM, PBI, COS, TLH and FAI.

- West Palm Beach (PBI) is a significant achievement for NATCA. At the inception of the TAMR Phase 3 program, PBI was not on the TAMR waterfall and was scheduled for realignment to MIA. Through the work of many NATCA activists, PBI will become a STARS G4 ELITE site on June 22, 2016.

- Tech refresh of G1/G2 to STARS G4 systems is an endeavor that is running in parallel to ARTS IIE replacement. To accommodate the enormous amount of work, the NATCA TAMR team has enlisted the services of Jill Carr (TPA), Teah Lord (F11) and Chris Hilbert (PHL) to join the team of core SMEs that bring facilities from the very first survey of the site to cutover.

- Currently, there is ongoing activity at 13 legacy G1 STARS facilities. R90, Y90, SBA, TUL, ICT, IND, RDU, D21, P50, LAS, DAB, and CVG all are at different points in transition from G1/2 to G4 STARS.

- **Common Terminal Digitizer** If there is one Achilles Heel for the STARS waterfall, it is all sites with an ASR8 that have not previously been digitized with a TDX-2000. Over the past 3 years NATCA has been deeply involved in the development of the Common Terminal Digitizer (CTD). Of the 41 ASR8's in the NAS, 23 of them have no digitization as of today and will require a successful deployment of the CTD to transition from ARTS IIE to STARS.

- The design of the CTD is promising and could be a lifecycle changer for the aging ASR8s. However, the CTD is currently not passing Design Testing and Evaluation (DT&E) in specific areas. After completion of DT&E the system must pass an Operation Test and Evaluation (OT&E) that includes a user evaluation by NATCA. Install of the CTD has already begun at 1 of the 2 key sites (ROA). The second key site will begin install in 1 month (RFD). The concern NATCA has voiced strongly is that a slip by the CTD could mortally damage the TAMR waterfall.

- As a mitigation, NATCA has pushed the Program Office to acquire any and all TDX-2000's to keep moving through the TAMR waterfall. It is

expected that three additional TDX-2000's will be installed which will reduce our exposure to a CTD failure to 20 ARTS IIE sites.

Training Update submitted by Bill Spence-BTV

- Training initiatives underway
  - Several IIE sites with training briefs.
  - Scheduling and coordinating R4 (Merge Software) training for the 80 (and counting) sites to transition to the TAMR software build.
  - Moving forward on a common simulation product for terminals across the NAS as part of standardizing simulation across all options.
  - Working with Program Office and Raytheon on a replacement for the TDM.

Surveillance update submitted by Joe Yannone-Region X

- Common Terminal Digitizer (CTD): The CTD is an integral part of the back end of the TAMR Segment 2 waterfall to digitize the remaining ASR-8 radars, as a STARS system only accepts a digital radar feed. Initial DTE testing was halted due to poor performance of the system. The Belgium contractor re-evaluated and re-optimized the system to provide a better performing system, however they still could not meet spec in IBI mode of the Mode S interface. While marginally passing spec in the other configurations, a decision was made to install and optimize the two key site facility systems to determine performance characteristics in an operational environment (since the test facility has coverage limitations and the vendor continues to fight the agency with excuses). The two keysites for the CTD are Rockford (RFD) and Roanoke (ROA). These conditions (poor and marginal performance) bring risk to the CTD schedule which could then gravely impact the TAMR schedule. NATCA has strongly recommended to the agency to pursue any and all avenues to acquire or re-configure existing TDX systems to digitize these ASR-8 facilities to buy some time to fix the issues with the CTD system so as not to impact the TAMR schedule.

- Surveillance Automation Analysis Team (SAAT): Concentration seemed to surround either potential STARS changes or surveillance changes (WAM, LGB tower raise, etc) to mitigate the tracking problems at SCT and to deal with the Inglewood Stadium risks. Nothing had yet been investigated by the team to see what could be done to improve the existing radar performance. Despite the issue being poorly located radars, could something be done to "dampen" the effects of the bad replies received from the aircraft which are caused by the environment and create poorly positioned reports sent to automation? A meeting was held between the Mode S

beacon system second level engineers (SLE) and MIT/Lincoln Labs, TSC and Noblis to brain storm ideas and for SLE to present their initial ideas and validate assumptions. Several promising ideas were exchanged and these will be briefed in the upcoming "in-person" SAAT meeting in DC. These changes would present a paradigm shift of previous surveillance system behaviorism while in a single-sensor environment. The previous mindset was that, when unsure - it was better to send ANYTHING as opposed to sending nothing. However, with the automation world transforming to multi-sensor tracking and fusion, along with overlapping surveillance coverage, the mentality may need to shift to, when unsure - NOTHING is better than possibly bad.

- Radar Performance Issues:
- *Centennial, CO Tower (APA)* - The false tag ups at APA are due to false beacon targets that are coming from the Parker (QPK) long range radar site. CARTS previously masked out these false targets in the past, whereas STARS has a higher standard for radar performance. Attempt made by OSF and TSLE personnel to mask these false targets via STARS adaptation have helped but is not completely successful. There are limits and without a STARS software fix these false targets coming from QPK will continue to clutter the displays unless some optimization is done at the QPK radar site. A change to the radar's STC has been implemented, tested and evaluated. Analysis has demonstrated a 30% reduction of false targets. There are additional steps that remain to take place to remedy this problem.
- *Pensacola, FL (P31)* - An ongoing issue with primary only false targets when opening in fusion. Several attempts have been made on the ASR-11 systems feeding P31 to fix this issue as well as changes to STARS adaptation. While there have been improvements, there have been numerous days where the clutter has been unmanageable. Several telecoms have occurred with various groups to push progress towards a better presentation. Now that a part has been replaced in the target processor, AJW-147 and TSOG will re-optimize the PNS radar, already having several parameters mapped out for changes to improve the performance. There is an additional part needed to repair the weather however the FAA Logistics Center no longer has an operational parts and must contract with Raytheon Canada to acquire/repair ASR-11 WX beam switches.

TIME BASED FLOW MANAGEMENT (TBFM): Eric Owens (I90) is the Article 48 Representative for TBFM. Mr. Owens' report to the membership is below:

- The week of May 16th, Eric Owens had a meeting at ZNY. They were meeting to discuss how to implement TBFM for use at ZNY, N90 and PHL. The meetings they have gone very well and all the facilities are working to come up with a solid plan to begin using TBFM in the future. However, this meeting was cut short because there is a concern about staffing at all three facilities. The facilities would like a commitment from the FAA that the staffing will increase to allow for the use of TBFM. Although this meeting was cut short, Eric Owens had Scott Hansen and Kevin Bell (TBFM OPS Team NATCA SMEs) stay at N90 and provide assistance and answer questions about N90s current use of TBFM.

- The week of May 23rd, Tom Glaze (TBFM OPS Team NATCA SME) and Eric Owens attended a Terminal Sequencing and Spacing/Interval Management (TSAS IM) Meeting at MITRE. The primary purpose was to determine if the use of IM could enhance TSAS. This was first meeting and there was a lot of very good discussion. The meeting included some simulated runs for us to get an idea of the concept. Eric Owens did not believe the traffic volume was set high enough to require the use of TSAS or IM. There are a lot of issues to work through to make this combination work well together. However, this meeting was a good start. They have two more meeting over the next couple of months.

- During this week, He also had Matt Gammon (TBFM NATCA SME) at ZSE to assist with the implementation of GIM-s. They will continue working with ZSE to ensure GIM-s is successful. However, at this time GIM-s has been turned off again.

- In addition, Kevin Bell (TBFM NATCA SME) was in Atlantic City working on the TBFM 4.5 build which is scheduled to be key sited at ZAB in August 2016.

- The week of May 26th, Eric Owens attended a 3T meeting at MITRE. This meeting was more geared towards TFDM. However, it is evident that the FAA is continuing its efforts to provide gate-to-gate metering in the future. In my opinion, the addition of electronic flight strips in the terminal facilities will be a good addition to the 3T efforts.

- ZDV was also at MITRE during this week conducting HITLs for their MetroPlex project. Eric Owens took a few minutes to discuss some of the issues they are facing with this project. ZDV currently meters into D01. With some of the restrictions being looked at, ZDV is concerned that they may no longer be able to meter and that the arrival rate will be significantly reduced. With D01 being one of the key sites for TSAS, they need to ensure that ZDV's ability to use TBFM in the future is not

negatively impacted. The TBFM OPS Team will continue to work with these facilities.

- Scott Hansen (TBFM NATCA SME) was at ZBW for the implementation of new OPDs.

- The week of May 31st, Eric Owens attended a meeting at ZAB to observe the operation and to discuss the arrival feed to P50. The main issue addressed is a perceived overfeed by ZAB. There does appear to be an overfeed during the evening push. However, the overfeed is caused by IFR aircraft canceling and continuing to P50 VFR. They are continuing to work with both facilities to come up with a reasonable resolution. It was agreed to have a follow-up meeting at P50 with management and NATCA Representatives from both facilities in attendance.

- Scott Hansen (TBFM NATCA SME) was at ZDC supporting the ZTL MetroPlex.

- The week if June 6th, Scott Hansen was at MITRE for a Path Stretch Demo. Overall, the concept is sound but there were some parts that were cumbersome.

- Kevin Bell and Matt Gammon (TBFM NATCA SMEs) were at ZKC helping with the implementation of Adjacent Center Metering (ACM) to ZDV. Initially, there was an issue with the adaptation that was resolved. After this issue was fixed everything has gone smoothly. Both Kevin and Matt will be back at ZKC to continue supporting this effort.

This week Eric Owens will be in DC for a TSAS meeting.

Terminal Flight Data Manager (TFDM): Matt Baugh (IAH) is the TFDM Article 48 Representative. His update for the membership is below.

- Matt and the TFDM program team went to PHL for an Operational Evaluation Review (OER). We have had OER's previously at PHX, EWR, IAH, and other sites. This meeting is held with local NATCA and management in order to brief them on the impact that TFDM will have in their facility, along current timelines. PHL will be a big time

location for TFDM as they are slated to be the key site to replacing the Departure Spacing Program (DSP).

- TFDM Final Investment Decision is still scheduled for 6/15 with a contract award coming two weeks later in the last week in June. Once those decisions have been made, the long road and work to build the TFDM program into a viable piece of equipment in the NAS will begin. There will be a user group set up in the coming months to aid in that endeavor.

Advanced Electronic Flight Strips (AEFS)

- EWR has reverted to using paper strips until the system can be made faster and more stable. SFO has also decided to not implement AEFS until the system can be "fixed". As such, AEFS implementation into any future towers has been put on hold until the system can be brought to a level of dependency that aligns with NATCA's standard for any new technology, "as good or better than what we have today". This process is planned to be 4-6 months of coding and testing. Additional time to get the system (GUI) more user friendly has not yet been discussed. However, if the GUI cannot be improved, future implementation is in jeopardy.

- Although the implementation has been put on hold, the work to make the system more user friendly and stable will continue and each facilities team has been vital in driving the improvements to the system.

- **PHX**
    - PHX is still in the process of turning off it's printers, however, due to the set-backs of the system, a fix to the FDIO shortfall is being tabled. To date, PHX is the most stable of the facilities and we are hesitant to make any changes to their system.
    - They will have AEFS installed in their TSS system the week of 6/20, in preparation for training new CPC-IT's on AEFS.
- **CLE**
    - CLE is still using AEFS and we continue to work on an emergency build that has proven, in the lab, to fix the latency issues suffered primarily in EWR. The build has also been shown to fix the 2 main reasons for the position freezes, although more may exist that have not been fixed.
    - Testing of the emergency build is scheduled for the week of 6/19-6/24 on the midnight shifts. Pending successful testing,

the facility will then make the decision of whether or not to begin working with the build on a continuing basis.

- **EWR**
  - As stated above, on May 26, EWR turned off AEFS and reverted to paper until the system can make needed software improvements, not only to the coding but to the GUI as well.
- **SFO**
  - SFO will move into their new tower later this year with paper strips. However, AEFS hardware installation in the new tower, minus the monitors, will continue as planned in preparation for the next build. Their TSS system was set up the week of 6/16.
  - Early testing of the 5.3.0.3 build by SFO has shown to be lacking in a few areas and we will continue to work to improve the system to meet theirs, and other facilities, needs.
- **LAS**
  - LAS is in a similar position to SFO and will be going to their new tower later this year with paper strips. Their hardware will be run to the new tower as previously schedule and their TSS system will be set up the week of 6/13.
- **CLT**
  - Due to the previous schedule of training set to begin in mid January, CLT's timeline has not yet been affected. Work will continue moving forward with their adaptation requests and hardware installations, minus the monitors in the cab.
  - A site visit to discuss local needs and provide familiarization training to the team will occur the week of 6/13.
  - CLT needs some form of electronic flight strip system to support the NASA ATD-2 project due to begin interface with TFDM around September 2017. With the delay now for AEFS, that goal from the TFDM program office is in jeopardy of being realized. A meeting is scheduled for 6/16 with NASA to discuss options in case AEFS cannot be brought up to a level of stability needed to interface with the NASA components.

SWIM Visualization Tool (SVT)

- Their will be a Configuration Control Board (CCB) meeting the week of 6/13 to discuss the future of SVT; what improvements should be made, where else to install the program, etc.