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SAFETY AND TECHNOLOGY DEPARTMENT UPDATE

Week ending April 15, 2016

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

- **SFO Universal Interlock Controller (UIC) update:**
  - They have yet to connect and test the "loops" and the UIC in the new tower, this should start taking place next week in the field. I will know more about possible dates of connecting the UIC in the old tower after testing has been completed.
- **NME**
  - Over the past couple of months, I have met with a panel along with Robert Utley to develop an Operational Safety Assessment. The PMO is working to finalize the SRMD so that it may be submitted to the safety panel for review.

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

- **Weekly Meetings:**
  - Continuing weekly meeting with Kathleen Edic (AJW-23-A) EOSH Services.
  - POC: (Mike Odryna)
- **FAA Sponsored OSHA 6000 Classes**
  - During the first week in February Shawn Kramer (NWM NATCA OSHA Rep.) attended an OSHA6000 class held in the Northwest Mountain Region.
  - The Eastern Service Center held two OSHA 6000 classes in Atlanta. These classes were made up of NATCA and PASS rep's as well as their FAA Management Counterparts.
    - The first class was proctored by Mike Odryna and the second class was proctored by Andy Lewis.
- **National OSHECCOM Meeting:**
  - Mike Odryna, Dominic Petrelli and Larry Trottini attended a National OSHECCOM meeting March 16th & 17th. We had a full agenda over the two Day Meeting. Topics of discussion were:
  - Agency OSH Program Update
  - PAD Program

  - UCR Program Update
  - OWCP report and trending DATA
  - SMIS Report
  - Tech Center OSHECCOM Charter Deviation Request
  - OCCUPATIONAL MEDICAL SURVEILLANCE PROGRAM (OCCMED)
  - OSHECCOM Member Training
  - Workplace Inspections
  - Injury Reports
  - POC: (Mike Odryna, Dominic Petrelli, Larry Trottini)
- **Administrator Briefing**
  - As required by the OSHECCOM Charter, The DASHO (Vaughn Turner) and the National OSEHCCOM Chair (Jeff Yarnell) and the National OSEHCCOM Vice Chair (Dominic Petrelli), Briefed Administrator Huerta on March 29th regarding the National OSHECCOM Meeting held on March 16th and 17th. The Administrator asked specific questions regarding the Agency OSH Program re-write mainly concerning timeframes for new Program development prior to formalization of the new policy. He also requested the specific costs for extending the PAD program to facilities with 10 or more FTEs.
  - POC: (Dominic Petrelli)
- **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
- **CFS 2016**
  - The entire OSHA committee was able to attend CFS 2016. As a committee, we met on Monday morning to do committee business and introduce new committee members. Afterwards we manned our booth where numerous people sought us out seeking answers to specific facility issues.
  - The OSHA Committee also gave out the Helping Hearts Award to the facility that had the highest percentage of individuals trained as CPR/AED Responders in 2015. The award went to Birmingham Alabama Tower and TRACON.
- **3900.68, ATO Radiation Safety Program**
  - NATCA received a briefing, from the Agency, on the new Radiation Safety Order 3900.68.
  - POC: (Mike Odryna, Dominic Petrelli, Melinda Kim, Dick Popp)
- **Quarterly CSS EOSH Briefing for NATCA/PASS Safety Reps**
  - Dan Sherritt and Mike Odryna attended the quarterly EOSH briefing for the Central Service Center on March 22nd. 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 and the Agency met to finalize the ELMS training for the reprisal program
  - 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 February 25th and was attended by more than 30 individuals. Stay tuned for the next webinar.

- POC: (Mike Odryna, Geoff Bacci)

- **Hearing Conservation Program (HCP) AVS/AIR:**
  - NATCA signed an MOU with the agency to define a working relationship between NATCA and AIR to develop a hearing conservation program.
  - POC: (Mike Collins, Mike Odryna, Dominic Petrelli, and Nicole Vitale)
- **NATCA Academy OSHA Class**
  - The NATCA OSHA class will be held in Atlanta on May 10th and 11th. This class in currently full with 16 participants. Watch the NATCA Academy website and the NATCA OSHA Committee Facebook page for future class announcements.
  - POC: (Ham Ghaffari, Carolyn Kamara, Mike Odryna)
- **Current Facility issues being worked by the committee.**

• FAY: Fumes	• PHX: Elevator Reliability
• SAT: Mold/IAQ	• FAI/ATCT: Roof Replacement
• FNT: Odors	• LAX/MIDO: OHSA Inspection/Citations
• Alaska FSS: OTZ Housing/FAI HAVC-ROOF Replacement	• ARR Overall Facility Condition
• BOI: Elevator Reliability as second means of egress	• ILG: Mold/IAQ
• GRR: Odor	• ORH: Water Leak
• BGM: Water Leak	• PNS: Water Leak
• SEE: Water Intrusion	• SGF Mold/IAQ
• ANC ATCT: Article 53 Investigation	• ZAN: Seismic Upgrade

RUNWAY SAFETY: Bridget Gee (DFW) is the Article 48 Representative for Runway Status Lights (RWSL) and also the National Runway Safety Action Team (RSAT) Lead. Her update is below.

- **Runway Status Lights (RWSL):**
  - ORD:

        - Being conducted in three phases: Phase 1, Runway 10L/28R, is scheduled to come online April 27, 2016. Phase 2 and 3 are scheduled to come online 2017.
        - Phase 1 (10L/28R): Pre-IOC briefing conducted 4/12/16. Initial Operating Capability (IOC) scheduled for 4/27/16.
        - Phase 2 (10C Enhancement) - Airport scheduled to start work Spring 2016. Phase 3 (9R Enhancement) - scheduled to begin early fall 2016.
    - DTW:
        - Continued hardware issues are attempting to be fixed and plan is to have system back online by the end of the month. Commission should take place within 30 days after that.
    - EWR:
        - 4th Technician completed training on 3/23/16. Joint Acceptance Inspection (JAI) was completed this past week and commissioning is set for 5/17/16.
    - BWI:
        - Construction is ongoing. System set to come online in 2017.
    - SFO:
        - Installation is complete with the exception of fixtures, due to be delivered July 2016. IOC planned for Nov 2016.
    - JFK:
        - The rest of the system was turned on 4/6/16 (IOC). The system is currently operating in Operation Suitability Demonstration (OSD), i.e. test phase making sure that it is suitable for commission.
        - Joint Acceptance Inspection (JAI) is planned to occur in May 2016.
    - BOS/DFW:
        - Work is ongoing to secure funding from the Agency and agreements with the airport operators at BOS and DFW.
- **Runway Safety**
    - Runway Incursion Device (RID)/Runway Incursion Prevention Device (RIPD) SRMP:
        - The SRMP panel was completed for the removal of the RID/RIPD systems from facilities. The panel followed the Agency's SMS 4.0 process to evaluate the risk associated with the removal of the RID/RIPD.
        - A thorough description of the process will be contained in the SRMD. The Agency provided no statistical difference in the rate of runway incursions caused by an Operational Incident (OI) at known RID/RIPD airports.
        - The provided data consisted of one year.
        - The panel agrees that the RID/RIPD is a good tool as it is just as effective as other tools used in the NAS.

        - In light of new data/information that the panel did not have, a follow-up to the original panel via telecon will be conducted to discuss the new information. The panel may agree with the new information and a possible change to their risk assessment. If not NATCA will be submitting a dissenting opinion with the filing of the SRMD when it is finalized.
    - Line Up And Wait (LUAW) SRMP:
        - The SRMP panel followed the Agency's SMS 4.0 process to consider the safety ramifications of emulating the USAF/USN standards that require controllers to issue traffic to aircraft within six flying miles of the same runway during Line Up and Wait (LUAW) operations. The Draft SRMD should be out within the next few weeks.
    - Closed Runway Occupancy Prevention Device (CROPD):
        - Testing is scheduled at JFK, RNO, and MDW this summer and into next year.
        - CROPD if proven reliable will be the first use of voice recognition to provide safety alerts.
        - Each facility's test will run for a few weeks after which all test equipment will be removed by the contractor, data examined by MITRE, and next steps planned.
        - Currently, work thru telcons are being conducted to discuss such items as procedures, FLM/CIC alert logging interface, plans for getting feedback to include specific questions to ask controllers, etc for the CROPD testing at JFK.
- Airport Construction Advisory Council (ACAC):
    - The ACAC continues to support construction activities throughout the NAS.
    - NATCA representatives are reminded that Bridget Gee represents NATCA on the council and can assist with challenges associate with airport construction.
- Root Cause Analysis Team (RCAT):
    - The RCAT met on 3/13/16.
    - The team reviewed FY16 serious runway incursion events at CNO, DFW, and SNA.
    - Events at DTW and FLL were on the agenda, however, the team felt it prudent to hold root cause findings and recommendations in abeyance until the official National Transportation Safety Board (NTSB) findings are made public to avoid any potential conflict with such reports.
    - Ric Loewen (DFW) and Ms. Gee reviewed draft recommendations and submitted changes once the changes have been completed they will be forwarded to NATCA.

TEMPORARY OPERATIONAL CONTINGENCY OFFICE (TOCO): Tammy Norman (ZTL) is the TOCO 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 TOCO's original charter** expired March 24th. With a verbal extension, the project office has continued to Phase 2 with 13 more projects/deliverables. On April 13th, Manager Tony Jenkins met with a sponsor to discuss the future of TOCO.
    - Mr. Jenkins has been *verbally told* by Bill Davis, Deputy VP of Mission Support Services-ATO, that the office is permanent. It will now be recognized as the Operational Contingency and Continuity Office (OCCO).
    - The team will develop governance to ensure contingency plans are valid, trained and updated to reflect changes in the NAS and the introduction of new technologies and capabilities.
    - The office will remain in Atlanta.
- **The Effective Date for the 1900.47E** is April 20th. All facilities' OCPs will have to go through the SRM process as well. If facilities have questions or need assistance, they are to contact their regional OSG. It is the OSG's job to verify the OCP for accuracy and completion. If OCPs are not completed by April 20th, the facility should notify their OSG that they are not finished and continue working until completion.
- **The IG is requesting proof** from the FAA that all centers including Alaska and P.R. have completed the SMS process and have new Operational Contingency Plans by April 29th.
    - Rodger A Dean, Senior Advisor, AJV-0 relayed this information to the TOCO and requested notice if this date was unrealistic.
    - This information is requested to close out recommendation #1 of the audit after the ZAU incident: *: Apply the lessons learned from the Chicago Center incident to the redesign of operational contingency plans to implement the divestiture of airspace for all Center facilities.*
- **The Proof of Concept Process** began on March 28, when members of the TOCO visited ZTL with the first Test Site Survey.
    - The TOCO will do a Site Survey for each of the CONUS ARTCCs and SJU. A memo was prepared to inform the facility stakeholder of the proof of concept procedures.
    - Ms. Norman will advise the NATCA facility reps and NATCA technical reps of the facility visits.
    - Members of the TOCO will meet with Air Traffic and the NATCA Contingency Rep to finalize divestments plans. Then, Air Traffic will work with local Tech Ops to complete requirements.
    - With the completion of the Site Surveys, the facility's requirements will be completed, and Tech ops and FTI/Harris Corp can make playbooks for

ATC-zero events. Extra equipment that is necessary for contingency purposes *shall be labeled* and reserved for contingency only.
    - The TOCO has determined a waterfall method for facilities to receive the funding to complete requirements. After all site surveys are completed, an installation schedule will be developed based on a prioritization already determined using *Decision Lens*.
- **The OCP Field Team Meeting in Atlanta:** The OSGs from each of the regions and the POC for the ACT-2 data base joined members of the TOCO March 15-17 to write the OCP guides for ATCT and TRACONs. The guides are general guidance for entering OCPs into the ACT-2 in compliance with JO 1900.47E. The guides can be found on the MyFAA.gov TOCO website.
- **The TOCO's Last Task:** Is to assess the effectiveness of current Tier 1 terminal domain OCPs against the Administrator's efficiency targets. "To address Tier 1 TRACON facilities, TOCO recently requested help from AJR to facilitate a TTX (tabletop exercise) at each ARTCC to examine throughput during a TRACON ATC-0 event.
    - The information derived from the TTX's will be used by TOCO to begin a gap analysis of the facilities' contingency performance estimates and actual performance data.
    - Result of the gap analysis will form the basis for next steps and executive investment decisions.
    - It will also be used to determine next steps for improving the NAS contingency posture during ATC-0 events".

TERMINAL AUTOMATION MODERNIZATION REPLACEMENT (TAMR): Mitch Herrick (MIA) leads NATCA's TAMR Team as the Article 48 Representative for this project. The update for the team is below.

- The past month has seen a swirl of TAMR accomplishments. STARS transitions were completed at multiple locations, and the deployment schedule will now accelerate for the next two years. Here is an explanation of each part of the program and where we currently are:
    - **TAMR Phase 1**. Legacy STARS facilities and Technical Refresh. **8 of 47** complete including A90 completed on 4/18/2016
    - **TAMR Phase 3 Segment 1.** ARTS IIIE facilties. Originally there were 11 there is now ONE. D10, D01, SDF, NCT, SCT, A80, M98, T75, PCT and C90 have all transitioned to STARS and the only remaining site in Segment 1 is N90 which will be completed in May of 2016. This was a monumental undertaking that many thought was not possible. Because of collaboration and NATCA's total immersion in the program we are making it happen. **9 of 11** completed.
    - **TAMR Phase 3 Segment 2**. ARTS IIE and IE sites. There were 98 and there are now 78. We have an extremely aggressive schedule over the next 2 years and the team has been transitioning these sites with few

complications. This is a huge undertaking and the work that is going into it by all aspects of the Agency is utterly enormous. We are up to this challenge. Deployment schedule includes: **3** in 2014, **10** in 2015, **28** in 2016, **32** in 2017, **15** in 2018, **10** in 2019 = **98 facilities**

- **41** ASR-8 Sites **23** requiring Common Terminal Digitizer (CTD) The biggest obstacle to the deployment schedule above is aging infrastructure of ASR radars (Specifically ASR-8s) that need to be digitized. This is known as the Common Terminal Digitizer (CTD) program (update on CTD and ASR-8s is in the Surveillance section below).

- **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. CTD First Article shipment to WJHTC was completed on February 19. This system will be used for onsite DTE and OTE testing. DTE is currently scheduled to commence April 19. The two keysites for the CTD are Rockford (RFD) and Roanoke (ROA). As the first keysite, RFD will also be utilized for additional "delta OTE" testing and AT User Evaluations including side-by-side comparison of the analog ASR-8 feeding the ARTS2e with the CTD-digitized ASR-8 feeding the TAMR system, this currently targeted for October of this year. Ongoing recent programmatic activities include setting up CTD/ERAM testing, setting up the new systems, installing sf optimizing the system using True North alignment versus Magnetic North, reviewing contractor proposal for ensuring the data paths to STARS are fully redundant and identical, and getting the radar feeds to the new system at the Tech Center fully prepared.
  - Radar Performance Issues:
    - *Elmira, NY (ELM)* - A tower raise is a necessity at this facility. Tree growth has been an ongoing issues at the radar site where coverage has suffered due to the foliage blocking radar line of sight. There have been several engineering studies that address the requirement for a tower raise. The issue, as it has been for years now, is the funding for such and the previous lack of prioritization of an ELM tower raise. Setting aside the entire safety aspect of these existing coverage problems due to the tree growth, another impact would be to TAMR deployment. The ELM radar would not pass the STARS performance requirements to certify the system to be used into STARS without coverage improvements. Until funding is secured for a tower raise at ELM, TAMR would be delayed indefinitely.
    - *Oklahoma City, OK (OKC)* - Identified during FFG (Fusion Focus Group) analysis, OKC radar currently has an issue with false

targets. The TSOG and OESG teams have been folded in to assist readying the issue. Several parameters will be changed and tested to help fix the issues there including PRF changes, ISLS and STC changes.

- *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. The facility is considering dropping back to single sensor operation until that time that a viable fix and/or optimization effort can be accomplished on the ASR-11 feeds.
- *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. The QPK radar work effort has started but has taken awhile to get going mainly due to the Center's resistance to any changes to the QPK radar.
- *Miami, FL (MIA)* - The radar will occasionally reconfigure into IBI mode due to an overload caused by mis-wired aircraft taxiing close to the radar. While the best solution would be to ensure that all aircraft were fixed with regard to the mis-wiring condition (an unrealistic short term approach), analysis uncovered that the second best way to attack this issue was at the source - i.e. eliminate the overload condition by ceasing these aircraft from replying while taxiing near the antenna. Discussions between AJW-145 engineering and the ESA OESG team, along with the facility tech ops group, led to the conclusion that the removal of the Terra Fix at the this radar would be the quickest and most effective solution. An SRM panel will be held soon to accommodate this request.

  - Provided a response from a radar perspective to the following Question for the Records (QFR) from the House Appropriations Hearing on FY 2017 Budget to FAA management. The question was as follows:

- Topic: Maintenance of Legacy Systems and Facilities: Question: What are FAA's most pressing state of good repair needs?
  - ***Response -***

- Radar Optimizations: The FAA's NextGen advances have placed an increased demand on radar accuracy and performance, yet there are no operational funds, or the required level of personnel available, to carry out the tasks of Radar Optimization efforts to keep up with the current pace of advancement. Many optimization efforts have had to seek F&E funding streams to accomplish operational work efforts, since operational funding for re-optimation efforts, tower raises and/or radar relocations are well under funded. In order for an Radar Engineer/Specialist to ascertain what is required to be accomplished for an optimization effort, they must first be able to diagnose the specific performance problem. However, the expertise is aging out of the workforce. There has not been a radar analysis/optimization course offered by the FAA in a very long time (at least 10 years now) to initiate the flow of a new, younger workforce to accomplish such tasks. For those that would like to self-teach, documentation is poorly outdated. The Radar Optimization Handbook is dated 1992. This document commonly references radar systems like the FPS-20, ARSR-3, ATCBI-4 which no longer operate within the National Air Space. In it there is very little mention of common systems like the ASR-9 and ARSR-4 or the Mode S and ATCBI-6; no mention of the ASR-11 or CARSR at all. A primary example of the lack of training can be found with wind turbine mitigation. The FAA has assigned a responsible office for reviewing Obstruction Evaluations related to wind turbines, however there is no vehicle for those offices to perform mitigation actions once the wind farm is eventually put in place. Often the problematic area - while typically localized - can effect the entire coverage volume of the affected Radar. There is a dire need for operational funding for special projects related to the development and urban sprawl surrounding an airport and/or a radar site. Such funding should also support radar tower raises and relocations as well. There is a need for growth and training to the Radar engineering and optimization expertise necessary at both a national and regional level to support this type of effort.
- Radar Infrastructure: Aging radar systems continue to operate well beyond their life expectancy, yet funding from infrastructure related projects has decreased. Commercial power interruptions and lack of proper input power has resulted in numerous failures of radar related hardware and countless man-hours to restore back to full capability. In many cases, the service/equipment restoration delayed - with impacts to air traffic control - due to the timeliness of parts and/or restriction from working non-business hours for restoration activities at many locations. While most radar

systems have an emergency back-up generator, however due to the age of some of these systems, the radar's sensitive electronic components often do not survive that transition from commercial to engine generator power. Power Conditioning Systems and Uninterruptable Power Systems should be required for all radar systems in the NAS today. Additionally, Grounding and Bonding has not been updated since the 1970's at many of our facilities; evident in the amount of restoration efforts expended following lighting strikes. Finally, improper or aging HVAC (heating, ventilation, and air conditioning) at many operational facilities has caused overheating at many radar sites which is yet another problem which exhaust resources (both material and manpower).

- **TAMR Phase 1 Update submitted by Jimmie White-PHL**
  - OT&E and CHI Tests R27 Regression test 4/4-4/8 was successful. This was a very important build to move the key site effort at I90 forward and open the door for R4 (merge) to be deployed in May. MIA and Eglin AFB have been running on R27 for two months without incident. R27 drop 10 reported suitable for national deployment on 4/14.
  - S6R4 (merge) Regression Testing set to begin 4/25-4/29.
  - TSAS CHI demo at Raytheon Marlborough 4/11-4/15. Thin specs 1,2,3, were completed. Completed meaning, the stakeholders agreed on the wording as of now, but changes may be added later. Due to limited resources, Raytheon was not able to do a full demo of TSAS functionality. Some aspects of the CHI were power point driven to have conversation. Very early on, the right track ball button was asked (for testing only) if it could be used as a highlighter (toggle on, toggle off) of key TSAS data block elements that we didn't necessarily want to see in a primary data block. The question still remains if this button be used for this function? If not, is there any other function for this button that is being considered? Are there any alternatives to do the highlight by other means (unused keyboard buttons etc.)? With these thin specs being agreed to, contract action can now take place. Software from Lockheed is expected early 2017. This will then be turned over to Raytheon to have it STARS ready hopefully by summer of 2017. TSLE will then have to do risk mitigation's before they can do an OT&E. It was originally thought to be key sited in 2018, but due other risk factors, it's now looking like 2019 for a release/key site. There are talks to request/provide a TBFM lab at the WJHTC for testing, to avoid other programs. This past week, PTR/STRs were ranked to start the TSAS ball rolling. The TBFM group was made aware, these items will likely rank low for PTRs that have been in the works for a few years. This is not a concern of the TBFM/Program office group, only that it is ranked. Again, this allows the TSAS thin specs to gain contract action. The TSAS stakeholders were also made aware of the concern TSAS may pose on TAMR. There are many STRs/PTRs in the works to keep

pending I.O.C. sites on STARS and resources need to be carefully thought out to NOT impact these sites. The program office believes there will be no impact to TAMR, because it will have it's own funding and Build. So, to them, there is no financial or bandwidth impact to TAMR. This is not necessarily true. Time, and personnel diverted to TSAS will impact TAMR in the foreseeable future, as lab space and staffing become an issue.

- Operational A90 declares I.O.C. at 1:20am 4/17 to be the latest legacy STARS site to upgrade from G1 to G4.

- **TAMR Phase 3 Segment 1 Update submitted by Doug Peterson-D10**
  - Potomac TRACON (PCT) completed their STARS transition on their fourth test event and declared continuous operations on March 22. They struggled with sub-standard performance from the flight strip printing subsidiary system, but agreed to continue to operate on STARS until revised software can be delivered in May.
  - Chicago TRACON (C90) completed an extremely smooth STARS transition and declared Continuous Operations on April 12, about 80 hours into their second test event. Thanks to a really strong team, STARS preparation and performance was almost flawless. Unfortunately ARMT, a peripheral system which C90 uses to generate flight progress strips, was plagued with performance issues that threatened continued STARS operation throughout. This is the same system that created strip issues at PCT and Atlanta TRACON (A80). The ARMT team responded quickly with code revisions that dramatically improved the situation. A fortunate side effect is that this improved ARMT software has already been installed at PCT, and dramatically improved their strip performance. The software is expected to be installed at A80 with similar results in the very near future. This is a significant schedule advancement over the STARS software change that was expected to improve strip performance at A80 and PCT in mid-May.
  - There were two significant failures in the last month. S06.R4.D3, which is the first software that merges all the capabilities across all STARS platforms, failed to achieve an "operationally suitable" designation after 4 weeks of testing. The software failed to ensure accurate data tag acquisition on ESL in the G1/G2 Legacy STARS platform. The software will be re-tested April 26-28. The second failure was S06.R3C.D6 software which included tracking performance improvements developed at Southern California TRACON and enhancements to ARMT. These enhancements are expected to provide significant improvement at PCT. The revised software, S06.R3C.D7, will be tested May 3-5.
- **TAMR Phase 3 Segment 2 Update submitted by Scott Robillard-K90**
  - Greetings from the ARTS IIE Deployment team. Over the past month what has seemed to be a busy period in the replacement of the ARTS IIE with STARS G4 ELITE has only gotten busier. Three sites completed their STARS transitions in the month of March.

- ACY achieved IOC March 12, 2016. CHA achieved IOC on March 14, 2016. CHA was the 4th of 30 ASR8 site that also required the deployment of the TDX-2000 to digitize the radar. GPT achieved IOC on March 18, 2016.
- IOCs in the ARTS IIE deployment is the culmination of approximately 18 months of work. Those types of activities are occurring throughout the NAS. Examples of those high level activities are the BFL Initial Site Survey (ISS), ABI STAMP review. ABI is a Part 1 S804 site. ABI will not be realigning and will be outfitted as a STARS G4 ELITE TRA-CAB. GSP Initial Site Survey (ISS), TLH Contractor Acceptance Inspection (CAI). CAI is where the FAA buys the installed, but not operational, system from the vendor. GFT, GGG and AVL ASR8 Prep Work to bring the radar up to standards prior to digitization.
- MSN Joint Site Survey (JSS), CRW Site Implementation Review (SIR). The SIR is the last look at the deployment plans prior to equipment delivery. FSM began TLSE shakedown 1. Shakedown 1 concludes with Air Traffic training.
- Change Control Board: IOC dates continue to finessed and adjusted to allow for S804 realignment studies and the deployment of the Common Terminal Digitizer.
- Looking ahead, the ARTS IIE world will see four (4) transitions to STARS G4 ELITE.
  - AMA on May 2, 2016
  - GEG on May 6, 2016
  - GRB and MYR are both scheduled for May 16, 2016
- At this point in the ARTS IIE replacement, NATCA has been a pivotal player in transitioning 18 facilities. By the middle of May 2016, 22 of the total 91 ARTS IIEs will be removed from the NAS.

TERMINAL FLIGHT DATA MANAGER (TFDM): Matt Baugh (IAH) is the TFDM Article 48 Representative. His TFDM update for the membership is below.

- Due to the budget cuts of over $60M to the program from FY17-19, and the IP&A decision to cut the benefits, Final Investment Decision (FID) has slipped from April to May 18, 2016. However, there is a slight risk that IP&A may not complete their analysis until June. Contract award will be given after a successful FID.
- It has been tasked to the TFDM team to find an additional $200K in additional benefits to the TFDM program due to Investment, Program and Analysis (IP&A) zeroing out the runway-balancing and departure queue management portion of the benefit analysis case from the Program Office (PO). If these additional benefits cannot be found the program is in danger of being scrapped.
- Interviews with the five sites identified by IP&A as showing a benefit with TFDM (DEN, DTW, MIA, MSP, and PHX) have begun and will continue into next week. As of 4/17, MSP is the only facility that held a meeting with the remaining four

scheduled the week of 4/18. Sam Tomlin, MSP's FacRep, did a wonderful job of representing MSP during their meeting and was able to very clearly describe to the IP&A group how TFDM would benefit their operation.

- The program met with the CFO Mark House for a TFDM Review/Discussion on April 12th. Key topics of the discussion were flexibility on the contract (CLIN review), segmentation of the program, and Departure Queue Management (DQM) concerns.
- **Advanced Electronic Flight Strips (AEFS)**
  - The latest build, 5.3.0.3, is expected in early June. Once this build completes its field testing in CLE and EWR, it will be rolled out to the additional facilities as coordinated. The training team was in SFO from 4/4-6 for the First Course Conduct and had a successful week. AJI has approved the Final Course Conduct, and we are awaiting final word that the training has been validated.
  - **PHX**
    - PHX is in the process of turning off its paper strips and will run a test of that capability on April 28th. If successful, they will leave the paper printers off and rely solely on the AEFS system. This would be a monumental benchmark for the system.
    - They will then be brought up on the 5.3.0.3 build pending its release and a successful test of the system in EWR and CLE.
  - **CLE**
    - The emergency build that was tested in EWR from 4/2-7 began testing in CLE from 4/11 and passed, and is still running. This build has greatly reduced the number of errors CLE has been seeing over the last 6 months.
  - **EWR**
    - An emergency build was tested in EWR the week of 4/2-7 and was successful. This build has been running in the background since it's initial test with no system failures and only 2 resets of individual positions.
    - EWR is currently awaiting the completion of a portable strip holder and AEFS screen protector in the event of an AEFS failure. This process should be completed by the end of this week.
    - EWR has continued to run shadow operations on a daily basis with a high rate of success and is planning on going IOC in late April or early May.
  - **SFO**
    - The team continues to work on SFO's local adaptations.
    - Once the 5.3.0.3 build has been installed in EWR, we are looking at sending the SFO team there for a demonstration of the new capabilities.
    - SFO has requested to move their IOC back to the summer of 2017, to allow further development of local adaptations and the release

of the 5.3.0.3 build, which will be the build a suitability call will be made on.

- **LAS**
  - A familiarization visit is scheduled for this week with members of the AEFS team and the LAS local. Additional adaptation visits are also in the works beginning in May.
  - LAS is planning on going IOC after the commission of their new tower, planned in late August, putting IOC in the October/November time frame.
- **CLT**
  - PLA Amendment is into Nextgen for final signature/approval.
  - The CLT kick-off is planned for the week of 5/4 in conjunction with the NASA ATD-2 briefings. We are working on getting a full training suite set up for the kick-off, space permitting.
  - CLT is planning on going IOC in the November/December time frame.

- **SWIM Visualization Tool (SVT)**
  - Deployment of the new software build, which includes additional filtering data for individual flights that are shown on the SVT display, has been implemented in all 11 sites. Meetings with the facilities will begin this week to establish the effectiveness of the new capabilities

WEATHER: Matt Tucker (ZTL) is the Weather Article 48 Representative. His update to the membership is below.

- **Offshore Precipitation. Capability (OPC)**
  - OPC is a product using lightning, satellite, and machine learning to create a proxy for NEXRAD in areas of no coverage, mainly offshore sectors at ZMA, ZHU, and ZJX. This product will also have use for ZNY'S oceanic sectors as with expanded coverage it will be able to show the track southbound out of NYC and eventually possibly the Atlantic tracks.
  - OPC has undergone a couple of validation reviews by the tech center and a third party. The reviews have come back very positive and that the product should be pursued for enhancements with the goal of going to glass. There are some issues that have to be worked, like since it is not RADAR can we use it like RADAR or will it have to be displayed and called differently than NEXRAD.
  - Two tabletop exercises where conducted at ZHU and ZMA with controllers from the oceanic sectors, TMC'S and a FLM at each facility. The tabletop was very low fidelity using OPC screen captures and track data overlaid to simulated the product on ERAM. The participants where all very positive about the product even to the point of asking how soon it could be on glass. The comments all included a possible workload increase due to having to issue the weather to aircraft where they have not had too in the

past. Even with this comment they all said OPC would be a very welcome addition since it would allow the controllers to be proactive instead of reactive.

- **Common Support Services-Weather (CSS-WX)**
  - The program held and Maintenance and Control (m&c) CHI meeting last week with both Harris and Raytheon to start the interface development. The group included tech ops personnel from Network Enterprise Operations (NEO), second level engineering, and an automation specialist from ZLA. The group looked and made comments on the first cut that both Harris and Raytheon made of the m&c display. Harris is using one that looks like the new WARP M&C display and Raytheon presented a similar concept. The group did recommend that the displays look and act the same as much as possible. The vendors both stated they would try within the bounds of the requirements documents for the respective programs.
- **Weather and Radar Processor (WARP)**
  - WARP failed factory acceptance testing in February and will be rerunning FAT starting this week. The update that was scheduled for deployment late June is now pushed to mid to late August. This update is the new mosaic for ERAM. The ERAM mosaic is undergoing it's meteorological evaluation and everything looks great. The parts that failed FAT had to do with a new M&C interface and a new gui for the CWSU'S.

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