NATCA Safety & Tech Update
Week of October 3, 2016

AIRSPACE: Jim Davis (PCT) is the National Airspace Representative for NATCA. Below are reports from the various airspace team leads and Mr. Davis.

ATL Metroplex

The Atlanta Metroplex team helped ZTL and A80 implement full time dual arrivals into ATL from the Northeast and Northwest on 9/15/16. This Dual feed is intended to help the facilities get used to giving and receiving 6 full time feeds prior to the New ATL STARs on 11/15/16.

Both A80 and ZTL have seen no major impacts from the 6 full time feeds into ATL. A80 is receiving a few more ties than in the past, but TBFM is providing gaps for the aircraft to fit in the stream. A80 is doing a great job with speed control and some minor vectors to merge the dual feeds into one stream. TBFM adaptations are still being tweaked in order to refine the delay absorption parameters.

There is another meeting with Delta and Southwest on 9/27/16 to further discuss metrics for the 11/15/16 STARs implementation. The meeting with Delta and Southwest on 9/12/16 went well; most of the same items we have been discussing were looked at a little more in depth. Delta is still concerned with throughput into ATL and doesn't want to increase first tier delays during implementation; thereby causing passengers to misconnect. Mitre presented some metrics examples of what they can measure and Delta selected the metrics they want to receive data on. Mitre is presenting these metrics examples to Delta at our 9/27 meeting and they are using pre and post 9/15 as a baseline.

Our upcoming activities: 9/26/16 (Regional Administrator Briefing), 9/27/16 (Delta Metrics Meeting), 10/3/16 (ESC Directors Brief), 10/5/16 (GBAA Briefing), 10/6/16 (Delta ATM Symposium)

Joey Tinsley ATL Metroplex Article 48

Florida Metroplex October Report

Florida Metroplex team had the following activates during the past month**:**

Prepared for Key stakeholder and Airport Authorities meetings in Tampa and Orlando.
Briefed the Key stakeholder and Airport Authorities in the Tampa and Orlando areas.
Completed preliminary design packages.
Coordinated ISIM and HITLs scenarios.
Supplied required input to Headquarters.

Submitted by Greg Harris, Florida Metroplex NATCA Art 48 rep

Cleveland/Detroit Metroplex Design & Implementation
The Community Involvement work this month consumed most of the team's time. Airport and Public Meetings where heard in both the Cleveland and Detroit Communities. Very few of the general public attended the public meetings in the Detroit area. Cleveland area was better attended but still far below other projects. Aviation technical trade personnel have been more involved from both cities. Most of the Congressional districts in the work area have been briefed also during this period.
The project is closing in on 2 years behind schedule as we look to a 2018 implementation date. The stress of this delay has caused us to re-adjust the plan to accommodate other projects and regulation changes increasing costs as we move forward.
Looking ahead we are continuing with TBFM HITLs at MITRE and working with Selfridge Approach for the airspace exchange with ZOB. Submit the plan to the Environmental office to finalize the current phase. I continue to work remotely on the project and hope to return to the team shortly.
Report submitted by Don Ossinger CLE/DTW Article 48 D & I liaison

Charlotte Metroplex September 2016
A post implementation meeting to refine the SIDs and STARs and airspace associated with procedures implemented in May and July of 2016 was conducted this month. Attendees included CLT TRACON, ZDC, ZID, ZJX, and ZTL. AERONAV personnel provided criteria updates. AAL, DAL, PSA, and SWA were also involved in the refinement process. Only one SID required adjustment, a waypoint was adjusted to make connectivity and automation less workload intensive. Three STARs required minor adjustments. Adjustments included renaming some waypoints that had been identified as causing hearback/readback issues, changing the anchor points on one STAR from an at or above to an at altitude, assisting aircraft FMS with vertical path issues. ZTL changed the stratum of three sectors to assist in making the procedures more efficient however the entire sector changing stratum has

led to some unforeseen issues (increased coordination). Modifications to the refined airspace were developed and being evaluated. The meeting proved very productive.

Ron Myers CLT Metroplex NATCA Article 48 lead

SoCal Metroplex

The SoCal Metroplex Project received a Finding of No Significant Impact/ Record of Decision on September 2, 2016. The decision enables the Agency to move forward with the project and begin phasing in use of the procedures, starting in November 2016 and continuing through April 2017.

I would like to congratulate and thank all of our SoCal Metroplex Brothers and Sisters who have dedicated so much of themselves to successfully get the project to this milestone.

The Team has conducted three webinars and three governmental and selected airport official briefings announcing the FONSI/ROD. Six Webinars and three community engagement workshops have been scheduled for the public. Work continues in the development of the products that will be used for the community briefings.

ZLA and SCT conducted SRM panels for their respective implementation, contingency plans and remaining LOAs. No risks were identified. Both facilities updated the MS Project and facility playbooks. Both facilities continue weekly coordination of flight checks of procedures, results have all been satisfactory.

SCT have conducted "dry runs' of their training plans and made minor adjustments as necessary. Refresher training plans continue to be developed. SMEs reviewed FIGs for their procedures. Leads provided a project updated to district Towers.

ZLA conducted all personnel Descend Via briefings. SMEs participated in telecons with ZOA and ZAB to continue LOA negotiations. SMEs continue to work with the FAST team to address ERAM adaptation and automation issues. Scheduling a meeting with Command Center, SCT and LAX Tower TMU teams to discuss and coordinate Traffic Management Initiatives for all three phases.

Coordination has begun to discuss dates and location of a follow up meeting with the SENEAM (Mexico Counterparts) team.

Leads along with SCT worked with NBAA to discuss a SMO RWY 21 LPV approach that had been accidentally dropped from production. All parties agreed to move forward with the design that was presented.

The leads continue to work closely with Glen Martin, Western Regional Administrator, to develop Power Points, videos, question & answer documents to be used to provide elected officials, airport officials and the general public with information about the changes that will occur during the three implementation phases.

Submitted by Jose Gonzalez Article 48 Rep, SoCal Metroplex

Denver Metroplex Update

The Denver Metroplex Team continued to work on documentation, Q-routes, HITL planning, and procedure modification due to criteria changes. The team has been working hard on completing Design Packages, Executive Summary, Initial Implementation Plan, and SRM-P findings which are all due as deliverables at the end of September.

The team spent a week constructing Q-routes to both support the new Metroplex procedures and their enroute flows. These proposed routes will be shared with the adjacent Centers over the coming months to receive their input and possible continuation. Benny Hutto joined the Team for a week to help the Team understand current and upcoming criteria and DCP changes and the impact these could have on the proposed procedures. These changes caused the Team to make slight modifications to the procedures. Also, the Team began to initially plan out the validation HITL's for April.

Mark Ostronic Denver Metroplex Article 48 NATCA Lead

Atlantic Coast Route Project (ACRP) Sept update

The ACRP team has completed all Q/Y route design work for the east coast from ZBV to ZSU. ISIM modeling was completed for the entire project. WE are now in the process of validation with all the facilities involved and evaluating the challenges associated with production.

ACRP will complete all route validation from the Canadian Border along the entire east coast of the NAS all the way to ZSU's southern boundaries by late October.

ACRP will be in Washington DC for the PBN co-leads meeting this upcoming week. Then ZJX, ZMA, ZSU and ZTL to complete all of the validation phase. We will be coordinating with the Eastern Service Center for production phase.

Much work lies ahead with LOAs, SOPs and facility level training prior to production, publication, and implementation. Industry and internal FAA outreach and briefings are also a big part of our upcoming schedule as well as close coordination with other PBN projects in the works.

Submitted by Article 48 Rep Jorge Rivera

CSA PBN 2016-09-24

MSP Community Engagement is in full swing. Last week we attended the MSP Noise Oversight Committee (NOC) Meeting where a CSA Environmental Specialist briefed on the NEPA Process and that results indicate that no impact to local noise will come from the MSP Post Implementation Amendments. An MSP Website is in final stages of development and will be hosted by the FAA NextGen Web Services. Publicly accessible items will

include the Environmental Briefing given this week and access to the Noise Screening Documentation. Fact sheets explaining the changes and a video walk through with voiceover will also be available for public education. These items will all be briefed to the Minneapolis Airports Commission (MAC) and NOC prior to going live on the web. Special Thanks go to Beth White from the NextGen Communications Office and Paul Dunholter from BridgeNet International, who have both been instrumental in giving the Facilities support. The facilities have also done excellent work preparing the materials necessary.

All T-Route designs for the BRD Decommissioning have been submitted for publication in the Federal Register and additional work for ZMP and the Denver Metroplex Team to develop Q Routes is planned for early October. ZMP is heavily impacted by the BRD Decom because the VOR MON project hasn't given much thought to the effects on surveillance when navaids are removed. Requested Land Lease extensions were not successful and this project is moving forward. This will have negative impacts to FAA facility operations as well as restrict under-equipped users in the immediate area. NAVAIDS provide needed surveillance structure in large areas of Non-Radar operations. In areas without VOR coverage, aircraft without the proper GPS or RNAV equipment may not be able to join the GPS based navigation system. Unless radar monitored, these aircraft will not be able to receive ATC services.

AUS and SAT proposed designs are being finalized next week and the Noise Screen for the Austin Publications have been submitted by Environmental. We have had meetings with both Airport Authorities and expect to also provide each airport with a similar web presence for Community Education. Those materials are in early development and will be finalized as soon as the notional designs have been completely agreed upon. Post Implementation changes to AUS are very minor but include a new STAR (DXEEE) from the Southwest. SAT is a new Implementation and Pre-Implementation plans are being developed. Full facility training will be necessary and plans will be made accordingly. The Southwest Regional Administrator's office is involved and providing support.

Additional research has been done in support of the ATKNN SID request off of KELP. This project has been cancelled because automation mitigations are available and preferred by all facilities involved.

Workgroup meetings continue to support the request to change the SID structure off of KDAL. D10 to ZFW delivery points are still being worked on, but meetings in October, November, and December have been scheduled to complete notional designs that can then be worked through the Community Engagement Process and moved forward in the development process.

Controllers from D10 and ZFW are being included in the Established on Departure HITLs being run for the Atlanta Airspace. These activities are scheduled for November.

Please Note: Continued review and support of ERAM ER136427 (Proper ERAM SID Functionality) is requested. Sabu Varghese, ZFW NATCA

Automation Rep is working and keeping affected facilities updated. Currently, it has been placed in a "future" bucket by the NUT (National User Team) because of its size (cost) and complexity…but we are hoping for attention to it soon.
Submitted by CSA PBN NATCA Art. 48, Brent Luna

Metroplex Study Team Lead Monthly Report – 9/24/16
The Las Vegas Metroplex Study Team completed all of its' conceptual design work by November 6 and then began work on the Study Team Final Report. The Study Team Final Report has now been edited by the team and the Metroplex Program Office Leads and has also finished going through the tech writing process. Also, for the first time in the Metroplex study team process, we established direct communication with the local airport authority and the Airport District Office to discuss potential noise sensitive areas and environmental hot spots. The final report has been signed by the Director of Airspace Services. A kickoff date for the D&I phase has yet to be determined. The D&I phase will commence when ZLA has determined it can commit the appropriate resources to the Las Vegas project after the implementation and post-implementation of the SoCal Metroplex procedures has been accomplished. The study team analysis of the conceptual designs has determined roughly $7.5M in potential annual benefits to the Las Vegas Valley with an $11M overall estimated cost to the agency. Pre-design coordination involving community involvement has already commenced.
We continue to work with the VOR MON program to determine the most efficient way to integrate the ongoing work being done by VOR MON with the need to replace procedures through the current PBN processes. The next VOR MON/PBN meeting is scheduled for December 1, 2016. We continue to work with AJV-14 to add additional co-lead support in each of the Service Centers to do this extra procedure design and development. We also continue to work with AJV-14 to improve the PBN Dashboard by finding ways to validate the accuracy of the Dashboard data along with efforts to examine the consistency of the data. The PBN Dashboard is the main support tool used by the OSG PBN Co-Leads to produce the Baseline Analysis Reviews (BAR) for PBN project requests through the 7100.41A process.
We are also engaged in the rewrite of the 8260.43 order that governs the scheduling and prioritization of procedure development in AJV-5 (Aeronautical Information Services) although work may soon commence on a prioritization plan with AJV-14 in the near future. We are currently looking at meeting dates in early November for the 8260.43 re-write workgroup to continue working on the draft document. I am currently the NATCA POC for the SFO CAR (Corrective Action Report). The CAR is reference the DYAMD and SERFR STARs into SFO and an issue with the descent profile leaving the confines of the Class B airspace with speeds higher than allowed in the FARs. We are looking to start work in the very near future on the amendment to the SERFR (via the 7100.41A process) to bring the procedure back in to

compliance after working through some ongoing community involvement and political issues in the Northern California area. We are also re-examining the lead operator roles and responsibilities as it relates to the ongoing Metroplex teams and the single site OSG PBN work. We will continue to have telcons with A4A and other industry representatives in the near future to discuss.

Submitted by Metroplex Study Team Lead Art. 48 Ed Hulsey

National Design and implementation Rep (Sep)

Metroplex:

1. The Funding issue for FY17 and remainder of FY 16 has been resolved.
2. Community Outreach continues to be challenging in developing and implementing PBN in the NAS. Metroplex has developed Community Outreach plans for the sites and outreach has now begun at all sites. There has been some movement on getting plans in place for outreach for our .41a projects however those plans are still disjointed. In addition, the Agency still has several groups working this issue with little or no coordination between them. It is hoped the SCT Metroplex record of decision (ROD) has been signed, there has been allot of time and resources spent on getting to this point. There are 3 scheduled implementations planned for Nov/March/April. The SCT Metroplex team has done an outstanding job getting to this point.
3. National Prioritization: Discussed with Lynn Ray, meeting to be scheduled.
4. PBN MOU addendum: Jodi McCarthy (Deputy VP Mission Support) is working with HR to get this done.

Joint Analysis Team (JAT):

The team has had several WebEx's to discuss which data sets are to be used in measuring time (block times), it has been determined that Ntexas Metroplex reduced overall mileage and increased OPD's, but there was an average of about a min longer flight time. The team is still looking at data.

Submitted by Mark McKelligan (ZBW) National D&I Rep

NATCA National Airspace Rep

Community outreach is still our biggest challenge moving forward, there are various reasons why it is very difficult to establish a standard process. One issue is each community is diverse and they approach the FAA with various issues in unlike formats. The community outreach was not accounted for in the original prototypes so the additional time and money needed has complicated the implementation process. Multiple groups appear to be creating processes to deal with outreach efforts and this causes confusion as we try to finalize this complex activity.

Moving forward, a national prioritization for PBN implementation is becoming more important. With the added outreach requirements, additional resource constraints and other implementation issues surrounding PBN there will be fewer procedures put into the system yearly. We are at the beginning stages, but have started discussions with the agency to figure out a realistic national prioritization for all procedure development.

Mark McKelligan has been the NATCA National D & I lead for more than 5 years, he has done an outstanding job representing the membership. He will be retiring this month and I would like to take this opportunity to personally thank him for his tireless work surrounding PBN and airspace, it has been a pleasure working with him. Fortunately, Mark will still be around to help us moving forward and I look forward to working with Mark in his new role as Deputy Director of Safety and Technology at the NATCA National office.

Submitted by Jim Davis (PCT) NATCA National Airspace Rep

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 Operational Contingency and Continuity Office (OCCO) has been handed off to System Operations, permanently. The new organization is called **ATO Operational Contingency Group (ATOC)** under the directorate AJR-1 Dave Foyle. Tony Jenkins, OCCO's manager retired on September 30th and Brian Holguin is the acting manager. The ATO has committed to a corporate view of operations, including ATO Contingency Operations, and a FOCUS on ATC Operations, for the future. The Core OCCO team is still being briefed and finding out our role in System Operations.

DOT/IG Audit Report AV-2015-112 response completed 9/23/16.

The OCCO Tech Team continues to complete site surveys for the ARTCCs.

ZOB Site Survey 8/29/16 - 9/1/16
ZBW Site Survey 9/12/16 – 98/16
ZNY Site Survey 9/19/16 – 9/22/16
ZMP Site Survey 9/26/16 – 9/29/16
ZAU Site Survey 10/5/16-10/6/16

Changes to 1900.47E to .47F:

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B-1 Appendix B: Abbreviations and Acronyms: AFTN, AIDC, ANSP, APREQ, ATFM, ATS, FIR, ICAO, RVSM, SARP, TCP
D-1 through D-7 Appendix D: Developing LOAs with Foreign ANSPs (with attachments)

Tech Center Meeting: Advanced Technologies and Oceanic Procedures (ATOP) Demo: I attended this demonstration. Testing and demonstration of the divesting capabilities in September proved groundbreaking achievements. This demo allowed for the continuity of Operations of the world's largest airspace and providing for the additional possibilities of relocating to the Tech Center (WJHTC). There were management, tech ops, PASS and controllers from ZOA and ZAN

TERMINAL AUTOMATION MODERNIZATION REPLACEMENT (TAMR): Aaron Rose (NCT) is the TAMR Article 48 Representative for NATCA. Below is the report from the TAMR Project for the past month.

Once again, a successful month for the TAMR program as we continue to deploy STARS throughout the NAS. We welcomed Portland Maine, Cedar Rapids Iowa, and Eugene Oregon to the ever-growing list of STARS ELITE facilities. The TAMR program reached its fiscal year milestones with the completion of Eugene.
On another note, during the monthly Article 48 TAMR meeting the program learned the Common Terminal Digitizer (CTD) is having issues during DT&E and OT&E. This will become an issue once non-digitized ASR8 radars approach on the waterfall of deployments. The TAMR PO also learned that the CTD program has already purchased the full order of this unproven product. One other issue is Tech Ops (TO) training for maintenance and deployment of the CTD. The first site will be ROA (IOC scheduled 4/14/2017) and training is nonexistent at this time for TO. The TAMR program is working closely with the CTD program office to determine how soon training and deployment of the CTD can occur. TAMR may have to adjust the waterfall due to CTD. This does not come as a surprise; NATCA has been the lone voice for the last six months warning the agency about CTD.
STARS is converting to a new operating system (LINUX) over the next two years. With this change comes a new simulation product from UFA, Inc. NATCA is in the beginning stages of requirements for the new AT Coach. Jeff Woods (NATCA PMO), Tom Adcock (NATCA Training), Bill Spence (TAMR Training), and Aaron Rose are working with the TAMR PO. We have requested to be in on the ground floor starting with demos from UFA, Inc. and Raytheon. Simplifying scenario generation and converting current scenarios are high on the list of requirements.

New York Tracon (N90) tested a new version of AT Coach this month. TAMR and Raytheon provided the fixes and support requested. One issue that was found during the test was something that previously worked. Raytheon has instructed UFA, Inc. to provide a fix, and this will be delivered the second week of Oct. Second level engineering prior to delivery at N90 will test it heavily.

Chicago Tracon (C90) is still having issues with conflict alerts (CA). As reported last month, the Air Traffic Manager is blocking all adaptation driven fixes until a Safety Risk is complete. NATCA TAMR is working closely with James Hall (FacRep) and Norval Holcolm (TAMR C90 SME) to alleviate any concerns the ATM may have.

Aaron Rose met with Matt Morter (SCT Staff Specialist) during a visit to SoCal Tracon on September 7th. Discussions included ongoing radar issues and ways to address through adaptation. All adaptation avenues have been investigated and we are now waiting for SBS and the SAATS team to raise the Long Beach radar, which is the first step to an improved radar presentation. The current ASR9 radars on the North and South side of LAX are blocked by obstructions that include hotels and office buildings.

Flying Cloud tower received a new radar display this month that has improved safety ten fold. From the tower perspective it was very hard to ascertain which runway aircraft are lined up on approach. With the addition of the new radar display controllers can quickly look using the display in Final Monitor Aid (FMA) mode to distinguish the runway. Thank you to all involved in ensuring our NAS is safe. It is little things like this that NATCA works so hard for and we will continue to work hard day in and day out.

TAMR Systems Engineering Update submitted by Kyle Ness (M98)

The TAMR program continues to deploy STARS to the ARTS IIE facilities and tech refresh the Legacy STARS sites. STARS software remains integral to advancing the waterfall of facilities in the NAS. Currently the emphasis is to refine the plan to get the Legacy STARS sites on the R4 "bridge" build. The incremental nature of software deployment means that these sties must first come up on R27 and then transition to R4 "bridge." We are currently working with the tech center to deliver the latest versions of R27 and R4 so we can effectively plan upcoming IOCs. Currently RDU and D21 are scheduled as the next sites to install R4 and related hardware updates. Thanks to our NATCA representatives at RDU, D21 and the keysites (MIA, MAF, SAF, ORF, DAB, I90) for their efforts to deploy the vital software.

Earlier this month Bill Spence (NATCA TAMR training lead) and I worked over two days with Raytheon and the Agency to modify and complete the R4 delta-briefing package. This comprehensive 200 slide PowerPoint details adaptable and non-adaptable functionality in addition to back-up systems. This package will go out with our NATCA SMEs to assist Legacy STARS sites as they coordinate their training.

NATCA activity at the tech center during September focused on three events: PTR working group, CTD OT&E and software testing. NATCA SMEs from PHL, D10, K90, TPA and SCT participated in these events and a big thanks goes to them for their hard work away from home. S6R3d testing is ongoing and we are hopeful for an eventual release that will bring several software fixes to the ARTS 3E TRACONs that transitioned to STARS.
Software planning continues to operate on a tightrope. The deployment schedule is tight and near term disruptions poses significant impacts to the larger schedule. In addition external clients and future deployment schedule monitoring is a weekly effort. The R6 "merge" development (this build will combine all STARS baselines into one) is ongoing and build content planning is approaching the final stages.

TAMR Deployment Lead report submitted Scott Robillard (K90)

STARS Deployment activity included tech refresh of G1/G2 to STARS G4 and G4 Elite also ARTS IIE replacements with STARS G4 ELITE. STARS systems are being deployed weekly without incurring delays, while minimizing outages or impacting the flying public.
A key component to transitioning the NAS to a single automation platform, which is fully NextGen compliant, is the digitizing of the ASR-8s. In total, there are 41 ASR-8 radars around the country. The week of September 12-16, 2016, NATCA fielded a test team at the Tech Center for the first look at the Common Terminal Digitizer (CTD). The team wrote 7 Discrepancy Reports (DR) on system performance. The team will have its second look at the new equipment October 24-28, 2016 at RFD. RFD is one of two Key Sites; the other is ROA. The CTD has already experienced two delays in deployment and is negatively affecting the TAMR waterfall.
To keep on track, the FAA has acquired TDX-2000's from the DOD and utilizing NDP assets that are existent in the NAS for national defense purposes. However, all known assets are planned for deployment. The vendor has discontinued the product. The vendor no longer builds software or hardware and the long-term supportability of the aging TDX-2000 is seriously in doubt. If all known TDX-2000 and NDP assets are fully deployed to support FAA facilities, the NAS will be left with 9 analog ASR-8 radars. This will leave 9 FAA facilities in ARTS IIE and these facilities will not be NextGen capable.
STARS is part of the gateway to NextGen. STARS itself includes many NextGen features such as Fusion, ATPA and CRDA. It also puts in place the ability for the FAA to deploy ADS-B technology. Without a CTD to digitize the ASR-8s, ARTS IIE cannot be replaced with G4 STARS ELITE; therefore no Gateway exists.
Currently the TAMR program is conducting work in 21 legacy STARS facilities and 50 ARTS IIE facilities. This starts with site surveys, progresses to equipment design and install and ends with operational cutover and the removal of legacy systems. The level of work being accomplished nation wide

is unprecedented. Since the last update, the following sites have transitioned to STARS:
Portland, ME, PWM
Cedar Rapids, IA, CID
Eugene, OR, EUG
Congratulations to all three!

Up coming major events.

CRW STARS transition October 3, 2016
BIS STARS transition October 9, 2016
CTD User evaluation RFD October 24-28, 2016

VERO BEACH, FL (VRB) and FORT PIERCE, FL (FPR) will be joining an expanded Palm Beach (PBI). This expansion of PBI, to incorporate VRB and FPR will bring terminal approach control service to the towers. This was facilitated by transitioning PBI into their new building and transitioning the site from ARTS IIE to STARS G4 ELITE. Miami ARTCC is currently providing services to VRB and FRP. Once the transfer is complete, it is expected that PBI will become the largest STARS G4 ELITE site in the NAS. VRB and FPR will benefit from terminal automation and advanced adaptation as remote towers off of PBI.
Once annually, the full NATCA Deployment Team meets with the FAA TAMR deployment team. October 11-14, 2016, 14 NATCA TAMR SMEs will be in Washington DC for three days of meetings with TAMR for a programmatic review of the previous year, planning for the remainder of the waterfall, planning for software deployment, conducting lessons learned, messaging, and strategic planning.

To recap, the Common Terminal Digitizer (CTD) is the largest threat to the FAA completing its mission of transitioning to one automation platform. Without the CTD the FAA will not meet its requirement to be NextGen compliant by 2020.

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

The month of September the TBFM National Ops Team had numerous activities. The week of August 29th, I attended a Terminal Sequencing and Spacing (TSAS) meeting in DC to continue work on requirements for the system. We are having monthly TSAS meetings in an attempt to hit the targeted date of April 2019.

September 6-16, 2016, the TBFM Ops Team travel to ZBW, BOS, MHT, PVD, BDL and ALB to conduct Integrated Departure and Arrival Capability (IDAC)

training. The training was successful and the facilities were using IDAC prior to us leaving the area. In addition to the IDAC activity, we also had an early departure-scheduling event at ZMP. I sent Scott Hansen (TBFM NATCA SME) to support this event.

We week of September 19, 2016, we had a 4.5 key site activity at ZAB. The 4.5 key site wen well and the national delivery should happen in six to eight weeks. We also had a TSAS meeting in Seattle. This meeting was conducted at the TRACON. The TSAS Ops Team presented information regarding TSAS to ZSE and S46. We also made a commitment to work with the Seattle facilities to ensure TBFM is ready for the TSAS install in 2019.

The week of September 26, 2016, The TBFM Ops Team traveled to ZOB, CLE, DTW and PIT to install IDAC. Our work is continuing there this week at ZOB, DTW, CLE, BUF, and ROC. If everything goes well, we will have completed our fourth install and implementation of IDAC this year. Our next IDAC install will be at ZDC, IAD, DCA, BWI, RDU and RIC beginning the week of October 31.

Upcoming activities:

October 11-14	TBFM Ops Team Meeting in DC.
October 17-21	4.6 Discovery Site at ZDV and ZAB D01/ZDV TSAS Briefing
October 19-21	3T Meeting at MITRE
October 24-28	ZID/ZTL T2T
October 31-November 10	ZDC/IAD/DCA/BWI/RDU/RIC IDAC

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

First, I would like to welcome two new members to the NATCA TFDM team; Kelly Eger from BOS and Louis Caggiano from EWR. Both will bring additional controller input and experience for the building of TFDM. Congratulations to the both of you and thank you for stepping up!

We had two successful Operational Evaluation Reviews (OER's) the week of 9/12 in Chicago for MDW and ORD. The controllers from both facilities were very active during all of the meetings and were able to give us valuable information in how business is done between the two facilities on a day-to-day basis. We were also able to visit the ramp facilities of SWA at MDW, and UAL and AAL at ORD. All of those visits will help us to build a better communication tool between the various ramps across the NAS and TFDM.

Leidos hosted a System Requirements Review (SRR) the week of 9/29 - 9/30. During the week of meetings, NATCA, FAA, and Leidos reviewed the contractual requirements of TFDM to verify Leidos understood exactly what we wanted them to eventually build. All sides walked away with very few action items and we plan to have those cleared up by the end of October for final submittal.

Representatives from Leidos and SAAB Sensis visited the AEFS lab in DC on Friday, 9/30, and had a good opportunity to see where we currently are with the AEFS prototype. After a few hours of demo and Q&A, I'm confident that they now have a grasp on what we will need with an electronic flight strip (EFS) system. An actual demo of the Leidos/SAAB Sensis EFS system is currently scheduled for 10/13. With the SRR completed and the AEFS demo under their belt, Leidos and SAAB Sensis will hopefully show us a solid first effort of TFDM with which to build on.

The previously scheduled MITRE 3T (TBFM, TFDM, & TFMS) meeting/demo has been rescheduled for 10/20 & 21. Upon completion of this meeting, the teams for the 3T's will have a better idea of how our three programs will interface with the other and how it will impact the NAS.

Advanced Electronic Flight Strips (AEFS)

We are still awaiting word from 3M to see if they are able to fix the screen resolution on their new 32" monitor. If they are unable to provide us with an operational monitor, we will have to begin a new search for a replacement.

- **PHX**
  - An issue with the font size of a locally created vehicle strip arose recently that was chopping off some of the call sign of the vehicle. Second level at the tech center has created a fix and has gotten it to PHX.
- **CLE**
  - Testing of the new ER2 build was completed the week of 9/11. After testing, it was decided to leave the system running. After three weeks, we have seen a drastic reduction in the number of freezes and issues in general.
  - With the successful running of the ER2 build, it will now be rolled into the next full 5.3.0.3 build due out for tech center testing in early November. It should be ready for field-testing in late November or early December.
- **EWR**
  - Nothing new
- **SFO**

    - Nothing new
- **LAS**
    - Nothing new
- **CLT**
    - An AEFS training suite was set up at NASA AMES the week of 9/26, and familiarization of NASA personal was accomplished. This will give the team at NASA a head start in preparation for ATD-2 integration with AEFS scheduled to happen in September 2017.

SWIM Visualization Tool (SVT)

We had a successful SVT kick-off and site demo in PHL on Monday, 9/19. With the addition of SVT, the TRACON will now have it's own adaptable surface viewer with which to rely on. The current ASDE-X feed they are working with is subject to what the tower is viewing. PHL has the action of getting the FAA its desired IP addresses for up to six individual viewers. Once that process is complete, expected in late October, they can begin using SVT on a daily basis.