NATCA Safety & Tech Update
Week of December 5, 2016

Airport Capacity Decision Support Tool (ADEST): Kristen Laubach represents the membership as the Article 114 Representative for ADEST. Her report is below.

No major changes to Airport Capacity Decision Support Tool (ADEST) over the past month. An issue arose in the staging phase where ADEST was unable to calculate the AAR for SFO. This is being looked into and will be resolved prior to moving into production. Programmers continue to develop/design a new prototype for ADEST under the Tableau platform however, it is uncertain if the project will continue as the FAA may cut funding.

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 implemented our up-numbered SIDs on 11/10/16, after a brief automation issue everything has gone as expected. We also implemented the New ATL STARs on 11/15/16.

The New ATL OPD STARs were implemented on 11/15/16 with actual OPD usage starting at 1000am the first day. In order to keep throughput at or above previous levels we decided to gradually use the OPD portion during the slower periods at first. The first day we used the OPDs from 1000-1400, the only issues we were having was the pilots not complying or understanding the Speeds on the STAR. The second day we started at 0930 and left them on continuously with no major issues. Delta saw no degradation in throughput, but the pilots were still asking questions regarding speeds and expected runways. All the ATC facilities were doing a great job explaining to the pilots what we expect when given certain clearances and also where to find the expected runway on the chart notes.

On the evening of 11/22/16 there were 4 a/c that descended past the last hard altitudes on the OPD, appearing to be descending for the MEAs on the chart. A80 caught all the a/c, but one international a/c did get close with a Departure from ATL. The ATM and FacRep at A80 decided it was best to stop using the OPD portion until we could all meet to discuss the issue. There were apparently similar issues at DFW when they first began OPDs, but it was never determined why the pilots were continuing to descend past the last hard altitude. We are meeting on 11/29/16 to discuss this with hopes to go back to using the OPDs on 11/30/16.

Delta and Southwest are also pushing ZTL and A80 to issue a runway transition rather than a landing direction. Both facilities are pushing to keep issuing the landing direction and we continue to let the airlines know that we are legal in issuing the landing direction. To limit the questions to ZTL about which runway to expect; both A80 and ZTL are making an effort to accept handoffs earlier and switch aircraft earlier. We are discussing the landing direction vs. runway transition on 12/5/16 at our post implementation meeting.

Joey Tinsley ATL Metroplex Article 48

Florida Metroplex December Report
Florida Metroplex team had the following activates during the past month:
Participated in South Florida HITL scenario scrub
Participated in South Florida HITL scenario
Briefed the ESA Directors on the progress of Florida Metroplex
Prepared for Daytona Beach Community Involvement
Supplied required input to Headquarters during numerous telcons
Meet with ACRP Representative to discuss projects.
Submitted by Greg Harris, Florida Metroplex NATCA Art 48 rep

Cleveland/Detroit Metroplex Design & Implementation
The Community Involvement may be coming to an end numerous Mayor and City leaders have been briefed around the surrounding airports of CLE and DTW.
We are currently reviewing AFS-420 recommendations to the procedures development and we are working with the teams to try to apply the recommendations.
The CLE/DTW project is trying to get back to a timeline for completion and get to 100% design some 15 months late. This was due to the added requirements for additional work required by headquarters with the community. We are trying to set a goal of February 5, 2017 to submit packages to environmental to re-engage the Metroplex process.
DTW had several issues during a Chart change on November 10th. There were some 80-frequency issues and other things wrong with the procedures. The attempt was made to correct the issues prior to publication, which was within the timelines of the process. This failed as the person that maintains the NASR database didn't do anything with the information. As a result, charts published wrong and will not be corrected until January chart date. This is not a new issue and has happen at several other locations but the weak link has never been fixed, I have asked for an investigation into this error and will continue to pursue it.
Report submitted by Don Ossinger CLE/DTW Article 48 D & I liaison

SoCal Metroplex
The SoCal Metroplex Team implemented 46 procedures on November 10, 2016.

The implementation was an overall success. There were minor flight plan issues that were quickly corrected. There was some climb via phraseology issues with some of the aircrews, but the team working along with our industry partners began to get the information out to flight crews to correct the issue.

The RNP approach at SAN and BUR were flown that morning and the procedure flys great.

The team is now beginning work planning for community engagement along with the final preparations for the March and April implementations.

Congratulations to the SoCal Team and all of the support team members.
Submitted by Jose Gonzalez, SoCal Article 48 Co-Lead

CSA PBN 2016-11-26
The first week of November was spent with Ed Hulsey and Mitch Nugent (CSA FPT NATCA Rep.) while we worked in OKC on revisions to the upcoming FAAO 8260.43, which identifies key stakeholders and sets forth a process to prioritize procedure publications from a National perspective. AIS (AJV-5) continues to be buried with all of the required routine review and maintenance of existing procedures, new procedures and amendments from National Initiatives such as Metroplex, VORMON, and ACRP. All of our single site PBN development also has to be scheduled for production and adds to the load. At each site we visit we stress the importance of eliminating any seldom used procedures and keeping the number of additional procedures to only what is necessary to meet the mission. Flight Check is also under an intense workload to fly all of the required navaids maintenance as well as any new or revised procedure that requires it. Disappointing discovery…only the 4 Challenger aircraft owned by the FAA are qualified to fly RNP procedures. Of those four, only one is designated for use in the contiguous United States. One is usually down for maintenance, one is dedicated to Alaska, and the 4th is overseas in support of the US Air Force. It is surprising that the Agency has set forth requirements for users to reach RNP capability, but our own fleet has only 4. None of the RJs or King Air Flight Check aircraft are RNP capable. This means that our STARs and SIDs are flown by one aircraft and then the RNP procedures have to wait for a Challenger to be scheduled. This causes RNP procedures to regularly be slipped in production and makes for a scheduling nightmare. To check even a modest single site project of a few SIDs/STARs and RNPs requires two different aircraft to be dispatched to the location and this usually never occurs on the same day. Facilities requesting new procedures need to make every effort possible to ensure FC Aircraft are allowed

to complete their work and this is sometimes very difficult depending on other traffic demands in the area. I bring this issue up because the Agency needs to focus on adding RNP capability to more of the FC fleet and this would enable them to visit a site only once and with only one aircraft.

The 2nd week in November was spent at the FAA Tech Center in place of Bennie Hutto. A80 and ZTL are working on HITL scenarios to allow for reduced separation when aircraft are established on diverging RNAV routes. If approved, TRACON controllers will be able to ship aircraft to Center frequencies sooner and aircraft will see a reduction in level-offs during the climb phase. These efforts focus on whether TRACON and Enroute controllers are able to discern if aircraft are truly on course and diverging. If the concept is proven as applicable, the changes will be incorporated into the 7110.65 and allowed at other airports across the country. Both A80 and D10 have sought waivers for these operations in the past and were denied. Ideally, these studies will prove the safety case and allow these operations to exist. Many thanks go to the Tech Center Staff and the A80/ZTL Controllers who have been "scrubbing" the scenarios for accuracy. This activity will continue in December, with final data collection being completed in early 2017. Final determinations and impacts to the .65 are TBD.

Finally, we spent two days in Columbus to meet with and listen to perspectives from NetJets, the Columbus Airport Environmental and Noise Representatives, and the CMH Tower and TRACON. We've had a previous request from CMH and Southwest Airlines for PBN work to commence. The November meetings were held to bring in additional interested parties and adjust our Baseline Analysis for final approval from the PBN Program Office (AJV-14). We came away with considerable new information and the Airport took the time to give us a tour of the surrounding communities that could be potentially impacted. We also visited several of the local noise monitoring sites and our OSG Environmental Specialist briefed the first stages of our Community Engagement planning. The meeting was attended by the Great Lakes Regional Administrator, Barry Cooper as well as the Central OSG Manager, Robert Beck.

Planning is also taking place for a PBN Co-Lead Meeting, to be held December 13th -15th at the Central Service Area. This will be the first time that all three sets of Service Area Co-Leads are able to meet to focus on how our projects move through the Support Group. There is quite a bit of disconnect between the OSGs and AJV-14 at HQ. Our goal is to bridge these gaps and ensure both offices are being served well by the projects and efforts in the field.

Please Note: Continued review and support of ERAM ER136427 (Proper ERAM SID Processing) 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

PBN and EoR

10/17-21 In Dc with Metroplex Study Team lead to begin process of transitioning into new role as Metroplex Study Team/PBN lead.

10/25 Participated in Las Vegas SITTI STAR telcon with Western PBN Co-lead, L30, ZLA and FAA HQ. L30 had expressed concern with the facility being able to prepare for the STAR on 1/5 and also brought up issues with whether or not the STAR is procedurally separated from slow climbing international departures when in a specific runway configuration. After the telcon, the L30 NATCA and management team came to the conclusion that the facility would be prepared for implementation and the issue with departures is manageable.

10/26-11/2 Annual Leave

11/4 Participated in a telcon with Nextgen and AFS-450 regarding ongoing study of EoR and the potential for wrong runway selection when RNP approaches serve multiple runways from the same downwind. Currently, AFS does not have enough data to definitively identify the level of potential collision risk due to wrong runway selection when conducting Duals and Trips. An identified mitigation is to possibly remove transitions to multiple runways or have unique paths to each runway, which will enable a controller to identify if an A/C is on the wrong track.

11/7-10 In DC to continue transition to new role.

11/9 Participated in a meeting with AJV-14 management, Nextgen and AFS to discuss the upcoming Salt Lake project. The PBN request is for new STARs, SIDs and RNPs. Salt Lake is a NIWG identified facility for EoR using TF leg GPS approaches instead of RNP-AR. The purpose of this meeting was to determine whether or not to design RNP-AR and TF procedures or TF only. Due to the relatively low level of RNP-AR equipage and the NIWG request to use Salt Lake as a TF Duals site, the determination was made to only design TF procedures with the potential to come back later for RNP-AR. SWA has declared they will not participate if RNP-AR is not designed. AFS took the task to manually design a TF approach and sim it. They will be participating in the kick-off meeting to brief their results.

11/15-17 Participated in a kick-off meeting at NCT with the new Western NATCA PBN co-lead to assist with his transition into his new role. Multiple procedures were tweaked with fixes the facilities had requested after Metroplex. Additionally, at the request of the ATM and FACREP, the workgroup was able to open the SERFR STAR and reach consensus on an amendment which will contain arrivals

within Class B with the current Class B and the proposed new Class B. Awaiting sim results.

11/21-23 Continued transition to new role.

Phil Hargarten, Western PBN Rep/National EoR Rep

PBN/Metroplex Design and Implementation Lead Monthly Report – 11/25/16
The Southern California Metroplex had a successful first implementation on November 9, 2016 and will follow-up this success with procedure implementations in March and April of 2017. The Atlanta Metroplex also had a very successful implementation on November 15, 2016. The Charlotte Metroplex team is looking forward to their upcoming implementation in January 2017. We continue to try and assist the Florida Metroplex team in getting the agency to provide clear guidance and direction on what community involvement should look like and entail before calling their designs complete and moving on to the evaluation phase. The Denver and Detroit/Cleveland teams continue to progress towards implementation and we are planning to kick off the Las Vegas Metroplex in January 2017 although full design team work will not begin until the fall of 2017.
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 are also working with the ACRP (Atlantic Coast Route Project) Leads to support the development of Q routes in the Northeast and then eventually the southern portion of the east coast and we just began the initial work with airspace and route structure in the Caribbean. 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 work brought on by the VOR MON and ACRP initiatives while also trying to develop a prioritization plan to assist with the efficiency of the projects.
We are also engaged in the rewrite of the 8260.43 order that governs the overarching scheduling and prioritization of procedure development in AJV-5 (Aeronautical Information Services). The 8260.43 re-write workgroup met in Oklahoma City on November 1-3 to continue working on the draft document. 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 PBN/Metroplex Design and Implementation Lead Art. 48 Ed Hulsey

NATCA National Airspace Rep
We are still working with the agency to try and implement a national prioritization process for PBN procedures. Resources are limited and we will not be able to meet all requests in a timely manner under the current process. We hope to finalize a productive process next year.
Atlanta and Southern California had successful implementation in November, we have received positive feedback. Congratulations to those 2 teams and I would like to thank them for their dedication and hard work!
Submitted by Jim Davis (PCT) NATCA National Airspace Rep

AIR TRAFFIC REQUIREMENTS (AJV-7): James Keith (D10) is NATCA's Article 114 Representative to the AJV-7 Office. His update for this report is below.

The holidays in November made this a short month for in AJV-7.

1. Jim Ullmann and Mark McKelligan attended AJV-7 managers meeting along with James Keith the Article 114 representative for AJV-7. The purpose was to introduce AJV-7 to the NATCA safety and technology director and deputy.

2. I assisted in creating a letter to AJT on Long Range Radar. The letter was emailed to AJT by our director of safety and technology Jim Ullmann. The letter pointed out the need for primary radar beyond the 2020 mandate for ADS-B.

3. The week of November 14-18 I attended the Advanced Interval Management (A-IM) work group. The workgroup is preparing the concept of operations for A-IM.

4. Terminal work package one- I attended weekly meetings in November discussing the concepts for terminal work package one.

   Offshore Precipitation Capability- AJT has not decided on which step to take on this capability. NATCA is meeting with AJT in December and this will be a topic of discussion.

RNAV and PERFORMANCE BASED NAVIGATION (PBN): Bennie Hutto (PCT) is the Article 114 Representative for RNAV and PBN criteria work. Mr. Hutto's report for the membership is below**.**

<u>RNAV ATS Routes</u>

We are still in the process of working with AJV-14 and AFS-400 regarding the "Lateral Protected Airspace Criteria for RNAV ATS Routes", which we hope will lead to change in criteria and reduction in the basic width of an RNAV route.

Pilot Controller Procedures & Systems Integration (PCPSI)

A meeting was scheduled for December 12th, but has been canceled.

NextGen Integration Work group (NIWG) PBN

Nothing new to report at this time.

Established on Departure Operations (EDO)

The Human-In-The-Loop-Simulations (HITLS) Shakedowns have been completed and the next step will be to perform the actual HITLS to start collected the required data to determine if EDO operations can be accomplished as planned. Below are the HITL dates for the data collection:

December 13-15 will be Group One Data Collection involving ZTL and A80.

January 24-26 will be Group Two Data Collection involving ZTL and A80.

January 31 - February 2 will be Group Three Data Collection involving "Other Facilities".

National Strategic Production Planning (NSPP)

We meet every Tuesday and discuss the procedures that are scheduled for implementation across the country and have no issues to report at this time.

Digital Approach Procedure Initiative

We are still working on Phase 2 of this initiative where the primary approach advertised on the ATIS when weather conditions are below Visual Approach minimums would be the RNAV (GPS) at those facilities where the majority of aircraft can fly this type of procedure and RNAV (RNP) approaches at locations where the majority of aircraft can fly this type of procedure. The facilities that have agreed to participate are PHL, SJC, SMF, and NCT. The test for all facilities will end on April 9, 2017 and our final report will go out in May 2017.

Performance Based Operations Rulemaking Committee (PARC) Navigation (NAV) WG

Nothing new to report at this time.

TERMINAL AUTOMATION MODERNIZATION REPLACEMENT (TAMR): Aaron Rose (NCT) is the TAMR Article 114 Representative for NATCA. Below is the report from the TAMR Project for the past month.

Mr. Rose worked from NorCal Tracon two out of the four weeks this reporting period. The other two weeks were spent in Washington DC and Atlantic City. A TAMR all hands meeting was held Nov 9th at FAA Headquarters with Scott Robillard (K90) and the entire TAMR Program Office. The meeting was a review of the previous three months and a look forward to the next three months. During the time in Washington Mr. Rose meet with AJI (FAA Training), AJV (AT Requirements), and AJT (FAA Air Traffic).

TAMR is working closely now Mr. Buddy Busbee, the new terminal requirements management point of contact. Mr. Busbee comes from the Front Line Management ranks of A80. Kyle Ness (M98) and Aaron Rose met and discussed plain language documents (PLD) and how they're written with Mr. Busbee. Adding pictures, video, and keyboard entries to the documents will be more useful for facilities in understanding new software. These changes will take place immediately.

Reviewed R4 training brief with AJI. Coordinated with Second Level Engineering (TSLE) on the adaptation changes that need to take place and the proper timing of the R4 software load reference training requirements.

On Nov 9th Mr. Rose attended Interval Management demonstration at the Mitre facility with the TSAS team. Steve Prichard (I90) provided an overall view of the product and how it will affect the terminal controller. This product will assist the controller in the sequencing of aircraft to Core 30 aerodromes. Section 804 (consolidations) telcon, and Common Terminal Digitizer (CTD) telcon also completed the same day. NATCA TAMR has suggested to the FAA that TDX2000 digitizers may have to be purchased to complete the waterfall by the end of 2019. The CTD is still not a proven product; NATCA is working diligently with the agency to help bring the CTD to an operational acceptance standard.

Issues still linger with AT Coach. N90 requires changes to AT Coach in order to complete the final transition to STARS in the training environment. Without the fixes N90 cannot transition to fusion or complete OAPM training. TAMR is working closely with Raytheon to close the loop and move N90 toward Operational Readiness Decision (ORD).

ATSAPs continue to be filed by facilities that have transitioned to STARS in the last six months. Rose answered ERC questions and coordinated with Operational Support Facilities (OSF) to alleviate adaptation issues, which led to the ATSAPs.

The week of Nov 15th Mr. Rose traveled to the William J. Hughes Technical Center. Meetings included the PMO Terminal Cohort, Scenario Processing and Organization Tool (SPOT) for terminal, TAMR hardware, and CTD meetings. The SPOT meeting with Tom Marynik (ZAB) and Gian Burdhimo (FAA PMO) was very productive. This tool is used in the Enroute world to create scenarios and tracks training requirements. The team has been exploring its use in the terminal environment. This has the ability to replace AT Coach and would bring terminal training into this century. Rose in addition to the above meetings attended an award ceremony for TSLE. Kyle Ness and Aaron Rose conducted an emergency test of new R3 software for D01. This passed and should be loaded the week of Nov 28th.

TAMR welcomed Columbia, SC to the STARS world on Nov 4. Congratulations!!!

Candy Barr (NEOSF) will be retiring on Nov 30th. Candy has been an important part of STARS since the late 1990's. Her hard work and dedication to NATCA cannot be over emphasized; depth of knowledge and spirit of union cannot be replaced. Candy will be missed, enjoy a well-deserved retirement.

TAMR Systems Engineering Update submitted by Kyle Ness (M98)

Mr. Ness traveled to the Tech Center November 14 -18 for informal meetings and to test a revision to the R3d software which fixes a data-block issue identified during key site activity at Denver TRACON (D01). Issues worked during the week were; software planning, upcoming OT&E events, surveillance field support and integrating software delivery targets with tech refresh implementation activity. There are five software builds that will be tested and/or deployed within the next five months. Discussions with TSLE revolved around effectively managing build content while maintaining an ambitious rollout schedule.

The PTR working group meeting was also held during the week with NATCA SMEs from NCT, PHL, RSW and M98 in attendance. This group meets monthly to evaluate, rank, and prioritize STARS software problems/improvements. During this meeting the group addressed approximately 35 PTRs. The value of having NATCA representation at these meetings was proven once again as we elevated a data block presentation issue to the highest position on the ranked order list. Two software issues of importance to Potomac TRACON (PCT) were also addressed.

Systems engineering has been and will continue supporting TAMR training with their work to brief legacy STARS and previous ARTS IIE sites on the new functionality associated with the S6R4 software. The R4 build marks a significant change for controllers already using STARS and there are many improvements that are not always easily explained. Support for NATCA SME on-site briefings is planned for CMH, BVT and A90 in January.

New York TRACON (N90) identified four software enhancements for STARS simulation (AT Coach) as they move forward with their ORD planning. In addition to flight strip creation, the basis of these issues is related to aircraft behavior when conducting simulated approaches. FAA software development asked NATCA to conduct an out-of-cycle review and rank of these problems to have them properly evaluated by software engineering and just last week the proposed fixes to these issues were made available. A meeting is planned after the Thanksgiving holiday to discuss the resolutions with N90.

Southern California TRACON (SCT) recently reported numerous tracking anomalies occurring primarily within a 30-mile radius of LAX, as well as other areas. Engineering has begun to analyze the reports and will communicate their findings back to SCT.

Chicago TRACON (C90) held a local SRM panel to review recommended adaptation changes that will reduce some nuisance/false Conflict Alerts. The panel determined the enabling conflict alert reduction areas did not present a hazard and adaptation changes are scheduled to be loaded 12/1/16.
Systems engineering has a busy month ahead. Budgetary forces are pressing for an expeditious review and approval of several software fixes and integrations. Two important items under review are improvements to non-mode C altitude estimation and coordination list improvements.

TAMR Deployment Lead report submitted Scott Robillard (K90)

Happy Holidays from the TAMR Deployment team. With leave taken and the Thanksgiving moratorium, deployments are impacted across the country and a natural slowdown occurs. Reflecting on the past year I would like to use this report to thank the outstanding SMEs on the NATCA Deployment team, which make this program work. Without the hard work and dedication of the entire team, the success we have had would not occur. In no particular order, my thanks go to:

Bill Spence (BTV) TAMR Training and SEG2 SME
Kyle Ness (M98) TAMR Systems Engineering and SEG2 SME
Jim VanZee (GRR) Deployment Lead Alternate and SEG2 SME
Richard Thomas (GEG) Waterfall SEG2 SME
Tim Poer (ABI) SEG2 SME
Ross Costa (RSW) SEGs SME
Chris Falcone (MDT) SEG2 SME and training
Jimmie White (PHL) Phase 1 Tech Refresh
Teah Lord (F11) Phase 1 Tech Refresh and training
Jill Carr (TPA) Phase 1 Tech Refresh and training
Chris Hilbert (PHL) Phase 1 Tech Refresh for all G1/2 to G4 ELITE and training
Jason Rose (D01) Training
Pat Carter (D10) Training
Joe Yannone (Region X) CTD, ASR8, Engineering Support
Dan Stefko (Region X) Engineering Support

The above SMEs are FacReps, regional, and facility leaders. They take time away from their families and facilities to accomplish tasks necessary to make us all successful. Without their dedication to NATCA and the membership TAMR would not be on track to bring the NAS onto a single automations platform for the first time in its history. This also modernizes the NAS to a NEXTGEN platform. Whether it be the 11 ARTS IIIEs, the 37 ARTS IIEs or the 14 Legacy STARS systems that have been upgraded to the STARS G4 platform, the knowledge and

skill displayed by the Aviation Safety Professionals on this team have made this endeavor possible.

Many thanks to all of you and I look forward to another productive year.

TERMINAL FLIGHT DATA MANAGER (TFDM): Matt Baugh (IAH) is the Article 114 Representative for TFDM. Mr. Baugh's update is below.

The protest period is still ongoing with one vender, but the process is expected to be completed within the year. The TFDM team had a meeting earlier in the month with ZNY management to address concerns of theirs as to how the addition of TFDM would affect their day-to-day operations when combined with TFDM, TBFM, and other upcoming pieces of the puzzle.

We are still trying to finalize the SSS requirements so that the team can continue forward with Leidos and the building of TFDM. In addition to the SSS meetings, the TFDM team has been involved in numerous requirements and human factors meetings in order to drive what Leidos will ultimately build. Jim Scarpelli of CLE, was brought on board this month to help with these processes. With his knowledge and skills having used AEFS for the past 2 years, Jim will be another valuable asset to the program. Thank you Jim for stepping up and volunteering your time and efforts for this program.

Advanced Electronic Flight Strips (AEFS)

- **PHX**
  - Nothing new
- **CLE**
  - Testing of the newest build, 5.3.0.3 is still scheduled for the first full week of December at the tech center.
- **EWR**
  - Nothing new
- **SFO**
  - Nothing new

- **LAS**
  - Nothing new
- **CLT**
  - Member of the CLT AEFS team are expected to make the trip up to the tech center to assist in the initial stress testing of the 5.3.0.3 build. Once the build is installed in CLE and PHX, we will begin with the training of CLT and continue with the installation there.

SWIM Visualization Tool (SVT)

PHL has provided the IP addresses to VOLPE for the on ramping of SVT to the monitors in the TRACON and it is expected that they will be IOC by the first week in December.

UNMANNED AIRCRAFT SYSTEMS (UAS): Steve Weidner (ZMP) is the NATCA Article 114 Representative for UAS. Jeff Richards (ZAU) is assisting Mr. Weidner on this project due to the workload and activity associated with it. Below is the update for the membership.

Small UAS Rule/Part 107

The small UAS rule is now fully implemented. As of December 5th, authorizations are being granted in Class B airspace. As a reminder, the rule went into effect on August 29th. Class G operations began immediately. Class D and E surface area authorizations began on October 3rd and Class C authorizations began on October 31st. All authorizations are to be requested through headquarters via the faa.gov/uas website. No approvals are to be made at the local level.

The agency continues to conduct weekly telcon/webinars on Wednesdays at 1pm Eastern Time to answer questions and brief on the rule. The last of these telcons/ webinars will be held on December 21st. Here is the link to register for these Webinar's: https://attendee.gotowebinar.com/register/3378736936558080770. Additionally, Mr. Weidner and Mr. Richards can be reach for questions on the small rule at Part107@natca.net.

A headquarters workgroup is being formed that will make facility visits in the coming months to assess how these processes are working. The goal of the work

group is to elicit feedback from the field and formulate recommendations on how this process can be improved. NATCA will be a part of this workgroup.

The Future of small UAS Approval Process

The authorization process described in the above section is time consuming and labor intensive. Given the volume of requests expected, continuing to manually approve each request will not be feasible. Therefore, the Agency issued a Request For Information (RFI) several weeks ago regarding the development of an automated UAS Notification and Authorization (N&A) systems. Mr. Weidner and Mr. Richards have been working with the agency to define the requirements for an approval system. The agency has reviewed all submitted RFI's for the development of a more automated UAS N&A system. The agency will now be conducting one-on-one interviews with several of the RFI submitters beginning the week of December 5th. The purpose of these meetings will be to determine the capabilities that may be available and to define a common format for data sharing.

A headquarters workgroup is being formed that will make facility visits in the coming months to assess how these processes are working. The goal of the work group is to elicit feedback from the field and formulate recommendations on how the N&A process can be improved.

SYR Visit

On November 30th, NATCA's Executive Vice-President, Trish Gilbert, visited SYR with Eastern Region RVP Dean Iacopelli, and Mr. Weidner to observe their UAS operation and tour the 174th Air National Guard (ANG) unit's UAS training squadron. Earlier this year the New York ANG began flying the MQ9 Reaper UAS from SYR, making SYR the first civilian, FAA controlled airport to have unmanned aircraft operations flying in the same pattern with manned aircraft operations. Our SYR controllers have worked hard to make this a successful operation and have built a great working relationship with the 174th ANG unit.

Because UAS do not have a pilot on board, they are unable to comply with FAR 91.113. FAR 91.113 require all pilots to see and avoid other aircraft. This requires the UAS to have an alternate means of compliance for FAR 91.113. This is accomplished in two different ways to make these operations possible. While the UAS is in the pattern at SYR, see and avoid is accomplished via the use of ground observers. When the UAS exits the pattern and transitions to restricted areas and/or MOA's, they fly with a Civil Air Patrol C182 chase plane. The C182 flies in what is essentially a formation flight with the UAS and provides see and avoid guidance to the UAS pilot.

Over the course of the next year, there will be an LSTAR radar system installed at SYR and the SYR UAS operations will transition to what is known as Ground Based Sense and Avoid (GBSAA) to comply with FAR 91.113. GBSAA takes radar feeds from as many sources as are available and provides the UAS pilot with primary and secondary target information. The system will eventually provide recommended guidance (much in the same way that TCAS functions) to the pilot that will enable the UAS to remain "well clear" of traffic. Any maneuver will require ATC approval, just as a manned aircraft would should they request to maneuver for traffic. The GBSAA system will allow the 174th to eliminate the chase plane, providing for a far less complicated operation.

VOR MINIMUM OPERATING NETWORK (MON): John Vogelsang (P31) is the Article 114 Representative on the VOR MON project. His update is below.

The program held a kickoff meeting at Boston Center on Nov 1st to give a high-level overview briefing to folks from a number of facilities in the area. We have some more meetings like this in the works for other areas of the country next year. There hasn't been a lot else going on this month but the entire group will be meeting in DC the first week of December to discuss updating the waterfall and other issues.