**AIRPORT CAPACITY DECISION SUPPORT TOOL (ADEST):** Kristen Laubach represents the membership as the Article 114 Representative for ADEST. Her report is below.

Airport Capacity Decision Support Tool (ADEST) team had a slow month. There was one telcon and programmers briefed us on the ongoing maintenance of ADEST. Certain background feeds are being updated and as a result, ADEST also needs to be updated to continue to receive data. An update to flight schedules and aircraft types has been implemented and programmers are now working on the NOTAM feed to insure ADEST receives the most current NOTAMs

**AIR TRAFFIC PROCEDURES (AJV-8):** Andy Marosvari (BOI) is the Article 114 Representative in the AJV-8 Office. Mr. Marosvari forwarded the summary below for this update.

Many of the changes in the 7110.65 X, effective October 12, 2017, were NATCA initiated or generated by other offices with extensive NATCA involvement. There were several Safety Risk Management Panels (SRMP) held through the month on changes that were worked on throughout the year with more panels upcoming in the next few months.

- A change to &110.65 X, 4-4-1 ROUTE USE would permit ATC to clear airborne GPS equipped aircraft, beyond ground-based NAVAID limitations in non-radar conditions. There is guidance currently in the .65 to permit this for aircraft departing an airport with certain provisions. This change would allow short distance, impromptu routings to establish a non-radar aircraft on a point-to-point routing that could exceed NAVAID limitations regardless of RADAR coverage. The SRMP for this change will be held January 8, 2018 through January 12, 2018 and will NATCA will be have two controllers on the panel.
- Based on an interpretation that was issued by the FAA last year, a change to 2-1-13, FORMATION FLIGHTS, was written, paneled and is in the final stages of approval. This new guidance will permit ATC to issue clearances to any aircraft within a formation flight to effect separation during flight formation break up. It also provides guidance on formation join up, currently not very well addressed in the 65. This change missed the publication deadline for March of 2018 but I will be requesting a NOTICE be issued to make it effective immediately.

Other initiatives and changes being worked on include Class E airspace functions. Class E airspace is actually divided into different parts, yet it is charted on VFR sectionals the same. This work was precipitated by an interpretation request from a Flight Standards District Office and involved a Class E extension to Class D airspace.

The term *Digital* and *Digitized* are both used in the 7110.65 and several requests for interpretation were received to clear up ambiguities when using both terms in the context of STARs displays versus ARTSIIE displays. A Document Change Proposal is being written to clear up the inconsistencies and will most likely be published next October.

Don't hesitate to contact me with any questions or suggestions for changes to either the 7110.65 or AIM.

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

### Denver Metroplex Update

The Denver Metroplex Project is ongoing and is currently involved in the Evaluation Phase of the project. The Denver Metroplex Team is working closely with the various lines of business as the Environmental Assessment is being conducted. The Draft Environmental Assessment is tentatively scheduled for public review with workshops and a public comment period in 2018. The Metroplex team continues to work closely with the ANM Regional Administrator's office and the Airports Division to fully utilize their expertise on noise sensitive areas.

The Denver Metroplex team is working with neighboring Centers to create a more efficient Time-Based Flow Management System for Denver area traffic along with developing strategic and tactical localized game plans to further optimize the flows. The Team has begun to create the training plans for individual areas and sectors along with the necessary training problems. Initial reviews of LOA's and SOP's have taken place to begin necessary changes for implementation.

**Mark Ostronic Denver Metroplex Article 114 NATCA Lead**

### SoCal Metroplex

The SoCal Metroplex Team continues to respond to noise complaints received from Ombudsman, the Regional Administrator's office and Headquarters. The majority of the complaints are legacy noise issues and not SoCal Metroplex related.
The team was successful with the post-implementation procedures that published on the October 12th cycle.
The core team has been working with Legal from Western Pacific and Headquarters finalizing mitigation proposals for the 2 of the 9 Petitioners. The final proposals will be presented to the Petitioners by November 3rd.
The team at the request of the Western Service Center conducted an EA review of all of the post-implementation procedures that are expected to be published through the March 2018 cycle. The review was to ensure that the EA specialist could finalize the IER and CAT X for the procedures.
The team created the JCKIE STAR to address concerns in the Lake Arrowhead area and provide safety benefits for aircraft operating in high terrain at night into ONT. The procedure is still being environmentally screened and a letter to The SHPO has been sent on November 1st.
The team is waiting for Headquarters and the Regional Administrator to provide a community outreach plan for the post-implementation procedures that will be implemented in February and March.
The SoCal Core Team members attended then ATCA Annual Conference to receive the Air Traffic Control Association (ATCA) Annual Team Award for Outstanding Achievement.
**Submitted by Jose Gonzalez Article 48 Rep, SoCal Metroplex**

### Florida Metroplex

Florida Metroplex team had the following activates during the past month:
Participated in Team meetings in Orlando, FL (2 weeks)
Participated in Team meetings in Jacksonville, FL (2 weeks)
Participated in Florida Metroplex Telcons
**Greg Harris Florida Metroplex Co-Lead**

**Atlanta Metroplex**
- Reviewed NACO and Jeppesen Charts.
- ATL Metroplex STARs have been implemented!
- We had your typical issues:

  - o Automation
  - o Wrong flight plans being filed
  - o FMS not loaded or pilots not being able to find the STAR
  - o Learning curve for ATC and pilots
- We also had the following:
  - o TBFM adaptation error – but was able to get it corrected in 2 days
  - o AIM and 7110.65 discrepancy- able to come up with a solution until it is resolved at the HQ's level

- We continued the open bridge from Monday to Wednesday:

  - o Monday was a very challenging day.  We went to a West Operation.  Thunderstorms passed through the area, the wind shifted, strong SW winds were prevalent, and aircraft were diverting and also holding.
  - o However, we made it through the day.
  - o ZTL and A80 have a different idea of when speeds need to be applied on the South West Corner.  Working through the issue.
  - o Tuesday we were still west, but without weather. The speed restriction on the SW corner was more dynamic from A80.
  - o Wednesday we were still west; no speed restrictions were requested from A80. Things went smooth.  Last day of ATL Metroplex Implementation.
- Overall ATL Metroplex STARs Implementation has been a success.
  **Christian Karns Atlanta Metroplex Co-Lead**

**Las Vegas Metroplex**
October Update
The Las Vegas Metroplex met regularly this month and completed preliminary design work on the NW, SW, NE and parts of the SE corner posts.  Our primary focus was SIDs and STARs into and out of LAS.  We were able to begin some work on routes into and out of HND as well.  In addition to our Core Design Team, which includes SMEs from ZLA, L30, and LAS, we were able to work with SMEs from ZOA, ZLC, and ZDV in order to complete our SIDs and STARs in the EnRoute environment.  We will be bringing in members from ZAB in the next couple weeks to complete designs into and out of the SE corner.
We are currently ahead of our original schedule; however, we did run into a potential issue last week while designing routes into and out of the SE corner.  The issue is with designing routes over the Grand Canyon and surrounding areas.  This could potentially become a big issue if we are required to remain clear of the protected area at all altitudes.  Our Environmental support is currently helping us find direction on what we need to do.  I will have more information regarding this issue on my next update.
**Chris Thomas Vegas Metroplex**

**Western PBN Update – November 2017**

The following Full Work Group Meetings were held for the month of October:

- Kickoff and design meeting for Spokane International Airport (KGEG) to amend three RNAV (RNP) IAPs. Minor track and speed revisions were made the IAPs serving RWYS 7, 3, and 21.

- FWG design meeting to resume SID design for Gunnison-Crested Butte Regional Airport (KGUC). The project's mission is to develop a RNAV SID for greater utility that are coincident with current Special SIDs. Due to TARGETS limitations for constructing Obstruction Evaluation Areas, the FWG requested to have the Flight Procedures Office perform a manual construction to determine accurate obstacle/terrain penetrations.

- Community Involvement kickoff meeting, facilitated by the WSC CI Team to present the FWG final designs of SIDs serving Salt Lake City International Airport (KSLC).

- FWG kickoff and design meeting for Pullman/Moscow Regional Airport (KPUW) to design a new RNAV (RNP) IAP to the new RWY 23. The new runway will be relocated approximately 30 feet to the east with a slight increase in elevation. The biggest challenge was determining the amount of ground removal required to eliminate Glide-path Qualification Surface penetrations while developing an approach path within criteria.

- FWG kickoff and design meeting, held in Anchorage, AK to discuss converting several Special RNAV SIDs for public use, in addition to amending T-routes, and developing a new Q-Route coincident with J804R and J889R. The group determined that due to the special enroute structure associated with the SIDs, AFS will continue to maintain the SIDs and public use SIDs are not necessary. International coordination with Canadian Airspace/ATC representatives was required for further development of the Q routes as replacement of J804R and J889R. The FWG determined that a complete analysis of T-222 is required to increase overall utility. Unlike most towns and cities in the lower 48 States, Alaska has many small communities that rely on low-level aircraft routes and flyover capability for delivery (air-drop) of needed supplies. Without these air route delivery systems, these communities are in jeopardy of missing basic supplies; groceries, mail, medicine etc.

- FWG design meeting to resume and finalize SID design for Palm Springs International Airport (KPSP) and Jack Northrop Field/Hawthorne Municipal Airport (KHHR).

- FWG kickoff and design meeting for Eagle County Regional Airport (KEGE) to replace the Cottonwood RNAV Special SID with a public RNP 1 SID. Due to the technical aspects of developing the SID, industry partners, in collaboration with AFS-460 will present flight simulator data and a flight deck video demonstration of LNAV engagement using an unusual form of flight data coding (VA-DF below 500' AGL) to exhibit an equivalent level of safety and a new standard with Initial Climb Area (ICA) removal for RNP 1 SIDs.
**Josh Haviland, Western PBN Rep**

**CSA PBN 2017-11-01**

A new Management Co-Lead for Central has been announced.  Berto Melendez has most recently been the OSG North Team Manager and brings an entire career full of EnRoute, TRACON, and Tower experience to the PBN Design Team.  Karol Archer remains a part of the Central PBN Team and her duties are being determined as the Co-Lead role fully transfers over to Berto.

The Austin-Bergstrom Airport project is still scheduled to publish December 7, 2017.  Community Engagement activities for the Austin post-implementation amendments continue to meet the local needs and are on track to support the new publication date.  Pre-Implementation activities will spool up in November and support next month's chart date.  We briefed the new San Antonio Airport Director and Staff regarding the desired PBN procedures that are being developed with SAT Tower/TRACON and our Industry partners.  This kicked off the Engagement portion of the project and the draft Community Engagement Plan for San Antonio will be discussed with the Airport in December.  We anticipate a very collaborative meeting as we adjust the Engagement Plan to fulfill the expectations that the Airport has for our project.  We have already met with the facility to discuss all of the impacts caused by the current design criteria.  These criteria problems plague every one of our projects and prevent us from offering the best product and service that we can.  We continue to request relief and change in the orders that have put some of these negative concepts in place.

We met with Columbus Airport, Columbus Tower/TRACON, Southwest Airlines, and NetJets to adjudicate the public comments received during the open comment period following our community workshops.  All design details are now agreed to and SIM databases have been delivered to SWA and NetJets so they can simulate and test the procedures and ensure accuracy prior to being submitted to FPT for publication.  The SIM runs should be completed in November so we can meet in December to finalize the designs.  More sites are starting the decom process under VORMON.  Several Operational Support Group personnel briefed ZKC in September.  The ZID briefing was done via telcon only…due to budget concerns.  On-site briefings are the most effective as discussion can lead to numerous side bar conversations to provide support in the ways preferred by the facility.  The DC VORMON Program Office meeting in November will not include PBN Co-Leads or other key OSG personnel.  Again, budget constraints were blamed.  Selective attendance does not allow for effective conversation between all central parties involved.  This is a major NAS-wide effort, but it isn't important enough to financially support getting the correct information and educational items to the people involved.  We are currently preparing for the following VOR decoms in FY17: BRD, BTL, DDD, ENW, HRK, HUW, RIS, STE, & SYO.  ZMP is also participating in discussions regarding potential Q-Route development that may involve ZDV, ZMP, ZAU, and ZID in the future.

Finally, the meetings this week with ZAU, C90, KPWK, KMKE, American Airlines, and Delta Airlines have gone very well.  There will be a number of publications for KORD, KPWK, and KMKE.  In January 2018, we will add KMDW and Southwest Airlines to our discussions and determine how to organize the different design efforts, what each project scope will be, and begin plans for initial Engagement activities at the associated airports.

**Submitted by CSA PBN NATCA Art. 114, Brent Luna**

**PBN/Metroplex Design and Implementation Lead Monthly Report – 11/117**
Metroplex:   The Florida Metroplex facility POCs met the weeks of October 2 and October 9 in Orlando to reevaluate the scope of the project because of budget, schedule and funding concerns. Because of the agency's self-imposed requirements for community involvement, the costs associated with this effort, along with the escalating environmental costs, on a project the size of Florida Metroplex has caused the original scope of the project to become unsustainable. Post-implementation of SoCal Metroplex amendments is scheduled for November 2017 and February 2018. The SoCal project is currently looking at a closeout sometime in March 2018 but may push to the right due to litigation and congressional inquiries. Detroit/Cleveland Metroplex is still working towards a May 2018 implementation date but may move to the right due to environmental timelines. DTW still has concerns over the ability to use of trips to maximize the proposed Metroplex designs. The Denver Metroplex team is looking at an implementation in June 2019 but may be displaced due to a confliction with the DataComm schedule. The Las Vegas Metroplex has already begun design work with a 25% design complete milestone meeting the week of October 23. Atlanta Metroplex completed their final implementation in October with a project closeout scheduled for December 2017. The next Metroplex Leads meeting is scheduled for January 9-11, 2018 in San Diego.
Part of the current Florida re-scoping options is to incorporate a portion of the AC Q routes from ZJX and ZMA. The Florida Metroplex team will work to connect the Q routes to the existing SIDs and STARs for an early implementation. The team will then reconnect the future Metroplex SIDs and STARs to the Q routes at a later date. The northern ACR Q routes (ZDC and north) could possibly be incorporated into the NE Corridor initiative or become a stand-alone project with a dedicated set of Co-Leads.
The PBN office is currently working with Flight Standards (AFS), Aeronautical Information Services (AIS), Service Center Operational Support Groups (OSGs), Flight Inspection, and PASS on a workgroup to look at ways to streamline the Instrument Flight Procedures (IFP) development processes to improve the way we validate incoming IFP requests. This workgroup will also look at ways to better prioritize valid requests that aligns better with safety needs and the PBN NAS Nav Strategy. This workgroup kicked off on March 28, 2017 with a weeklong meeting in Seattle and will met again in Atlanta the week of October 9. The timeline for completion of the draft implementation plan is June 2018. Also, the document defining Industry roles and responsibilities on PBN workgroups and projects is still currently in final status and is awaiting final signature.
**Submitted by PBN/Metroplex Design and Implementation Lead Art. 114 Ed Hulsey**

**NATCA National Airspace Rep**
Many of our Metroplex and .41 PBN projects are being affected by the recent budget cuts, the agency is deferring/canceling travel needed for the teams to develop procedures and adjust airspace.  Until a prioritization process is put in place and the budget is stabilized we will continue to see last minute decisions made that negatively impact all ongoing and future airspace and procedure development.

**Submitted by Jim Davis (PCT) NATCA National Airspace Rep**

**AIRSPACE TECHNICAL DEMONSTRATION 2 (ATD-2):**  Pete Slattery (CLT) represents the membership as the Article 114 Representative for ATD-2.  His report for is below.

The NASA/FAA ATD-2 Integrated Arrival, Departure & Surface (IADS) system has been in use between the CLT FAA air traffic control tower/TRACON and the CLT airport ramp tower for just over one month. Usage between the CLT atc tower and Washington Air Route Traffic Control Center (ZDC) began on November first. TMC's at CLT and airport ramp controllers indicate that they are pleased with the way the system performs and they are seeing the benefit of incorporating the system into their normal workflow.

Daily use of the system between the ATC tower and the airport ramp tower begins with the second bank of flights each day that typically starts at 0915 Local. Frequently, use of the system continues for the remainder of the day after coordination between the airport ramp tower and the FAA control tower. Occasionally the airport ramp tower advises the ATC tower that they will not be using the system for a specified period of time. This is due to a variety of reasons but mostly it is to ensure that ramp personnel remain current and familiar with their primary ramp traffic management system, Aerobahn. Even when ramp personnel are not using the system, CLT tower TMCs continue to use the system for the increased efficiency and benefits it provides to their operation.

The final connection between CLT and ZDC TBFM was completed on October 30th. After successful testing on Oct 31st, CLT began using the ATD-2 system's IDAC-like capability beginning on November 1st. This feature allows CLT to schedule departures into ZDC's TBFM system. ATD-2 schedules in a manner nearly identical to a standard FAA IDAC system. This means that when CLT schedules with ATD-2, it will appear to ZDC TMCs in a manner identical to all of the other facilities within Washington Center that are using the IDAC component of TBFM. At CLT however, the front-end is different since controllers there are using the NASA ATD-2 interface rather than the standard FAA IDAC display.

The chief difference between the two is, the ATD-2 system uses timelines that show all departures and arrivals at a given runway as well as any available slots in overhead streams. This allows CLT TMCs and controllers to have a much more accurate picture of the actual demand at that runway for the time the aircraft is predicted to be ready for departure. This take some of the 'guess-work' out of requesting a release time and should allow for more accurate estimates of not just when an aircraft will be ready to depart, but also, where it will fit into a constrained overhead stream. By having this information, TMCs and controllers are better able to plan the movement of aircraft on the surface in order to reduce or eliminate the possibility of missing an available slot to a constrained destination.

ATD-2 takes this information a step further and automatically shares release times with ramp controllers which then allows them to better decide when to push aircraft off the gate in order to meet their scheduled departure time. Sharing this info automatically with ramp controllers increases efficiency since it eliminates the need for time-consuming phone calls.

With Phases 1A and 1B complete, the full capabilities of ATD-2 are still on track to be implemented in micro-phase 1C by the end of November of this year. The three phases can be briefly described as follows:

- Phase 1A. Data Exchange and Integration. (Between ATC and Ramp)
- Phase 1B. IDAC-style APREQ Negotiation with ZDC + Phase 1A Capabilities.
- Phase 1C. Full Surface Departure Metering + Phases 1A & 1B Capabilities.

Other ATD-2 related activities that occurred since last update:

October 12: Phase 1A: Data Exchange & Integration Status Meeting I
October 18 & 19: ATD-2 support of TFDM Build 2 Kickoff Meeting in DC
October 23: Software Release 3.0.6 deployed to field
October 24: Phase 1A: Data Exchange & Integration Status Meeting II
November 1: Phase 1B: IDAC Style APREQ Negotiation with ZDC

Further information about ATD-2 can be found here:
https://www.nasa.gov/aero/nasa-air-traffic-management-demo-goes-live

As always, I will continue to look out for the best interests of TMCs and controllers as this research project enters its next phase.

**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**.**

### Aeronautical Charting Forum
Attended the Aeronautical Charting Forum held in Frederick, MD October 24th-26th where many topics were brought up for discussion.  The topics included Standard Terminal Arrival (STAR) Terminus Point Standardization, Inclusion of Minimum Safe Altitudes (MSA) for Obstacle Departure Procedures (ODPs), Standard Instrument Departures (SIDS), and Standard Terminal Arrivals (STARS), Temporary Flight Restriction (TFR) Charting, Standardized Communications on Departure Procedures and Standard Terminal Arrivals, Publish Standard Proposed Flight Plan Deletion Times in the Chart Supplement, Charting of ILS Classification System for Category I ILS Approaches, Updating Terminal Procedure Publication (TPP) Comparable Values of RVR and Visibility Table, Improving Off Route Obstruction Clearance Altitude (OROCA) to meet FAR 91.177 Requirements, Nome Sectional Panel Extension, Charting for helicopter routes designed to meet Navigation Specification Required Navigation Performance (RNP) (NAVSPEC) 0.3, Addition of specifications for VFR and Visual Segments on Copter Approach & Departure Procedures,

### Standard Terminal Arrival (STAR) Criteria WG
Participated via telcon with the STAR WG.  We discussed a recommendation that was brought to the Aeronautical Charting Forum (ACF) for the FAA to add Minimum Safe Altitudes (MSA's) not only on SIDS, but also STARS.  ACF accepted the issue and introduced it to the IFPP, which was brought up last month for discussion and continued this month. No decision has made on the issue and remains open.

### FAA 8260.3D (Draft)
A draft copy of the FAA 8260.3D was sent out by AFS for review and comments.  Based on initial review, NATCA along with AJV-14 did not concur with the majority of the requirements regarding Standard Terminal Arrival (STAR) design criteria and submitted numerous proposed language changes.  The FAA 82260.3D is scheduled to become effective around the December-2017/January-2018 timeframe, but based on our comments I am not sure if the document will be published during that time period or not.

**Pilot Controller Procedures & Systems Integration (PCPSI)**

**Planning and Schedule Review:** The PCPSI WG Q4 Face-to -Face meeting is scheduled for November 15th-17th in Henderson, NV.

**FAA 7110.65 4-7-1 DCP SRMP:** There will be a Safety Risk Management Panel (SRMP) held on December 6th-7th discussing the upcoming Document Change Proposal for the FAA 7110.65 regarding paragraph 4-7-1.

The background on this change is for Standard Terminal Arrival Routes (STARS) that provide course guidance to multiple runway transitions, pilots must be provided with runway transition information along with the descend via clearance. This allows pilots to program the Flight Management System (FMS) and fly the proper decent profile associated with the runway transition that was issued. On March 1, 2013, a memorandum was issued clarifying FAA JO 7110.65, Paragraph 4-7-1. The memorandum stated that Air Route Traffic Control Centers (ARTCC) should issue a landing direction and Terminal facilities should issue the runway transition to be flown. In limited situations when the procedures are covered in a letter of agreement, ARTCCs may issue the runway transition in lieu of Terminal. Once the aircraft is established on the runway transition, due to the behavior of some FMSs, runway changes and certain route changes become problematic for pilots. Prior to this change, controllers were required to vector aircraft to the final approach course when any runway change was issued once the aircraft past the point ten miles prior to the runway transition waypoint. This change provides limited relief from that requirement.

The change requires controllers utilizing descend via clearances on STARs with multiple runway transitions to issue the runway transition or landing direction in conjunction with the descend via clearance. After the aircraft has passed the point 10nm prior to the runway transition waypoint, an additional change relieves controllers from the requirement to vector aircraft to the final approach course if a change in runways is made, but does contain strict qualifiers.

**PARC NAV WG**

The PARC NAV WG held is final quarterly meeting in Atlanta at the Delta Training Center, but due to budget constraints I had to participate in the meeting via telcon. This meeting is not setup to be conducted via telcon, therefore it was extremely difficult to hear what was being discussed, but will provide what has been discussed in the past.

**RNP AR 50 second Rule Action Review**: Mike Cramer (MITRE) reported that he and Barry Miller (FAA) had completed a draft outline for a recommendation to remove the 50-second requirement from RNP AR procedure design; reducing it to 15 seconds and handling exceptions through operational mitigation or non-approval. The outline was distributed the morning prior to the telecon and all members were asked to provide review and any feedback directly to Mike and Barry within the next week or two (mid-October).

**A-RNP Team Status**:  Mike Cramer (MITRE) reported that the A-RNP subgroup had met on September 13th (virtual meeting).  The results were a "brainstorming" list of actions and topics that the group believes need to be worked out prior to coming to a recommendation on each of the 4 A-RNP issues.  Ron Renk (UAL) and Gary McMullin (SWA) were tasked with identifying locations where reduction of the OEA for A-RNP would be beneficial, and locations where the larger OEA is currently limiting application of A-RNP.  Gary had identified sites and Ron is writing the draft material.

Barry Miller (FAA) had an action to identify specifically which design assurance related requirements are the same for AR and A-RNP in the ACs and other regulatory guidance.  He produced a white paper for team review which was distributed to the entire working group for review and comment just prior to this telecon.  All interested members were asked to provide a review and feedback on the draft by mid-October directly to Mike and Barry.

A MITRE action from the A-RNP group was to continue to add to the table of bank angle limitations in various aircraft and systems.  The table is quite complete for Part 121, and Mike has sent it to NBAA (Rich Boll) for their input from Gulfstream, Cessna, and similar aircraft systems.

**RF.TF Concurrent Ops Action Review:**  Mike Cramer (MITRE) relayed that he and Mark Bradley (DAL) have completed a draft questionnaire for database and chart providers that will be used to add information to the options matrices regarding potential costs and complexity along the two primary paths.  This will either be sent out by the SG or by individual operators from the SG in the next week or two.

Mike also noted that the MITRE path analysis for the 10-degree offset trials in the 737 MAX engineering cab will be available by next week.

**Established on Departure Operations (EDO)**

The EDO Safety WG met on September 26th and 27th at the FAA Headquarters in Washington, DC.  We received briefings from the by the William J. Hughes Technical Center (WJHTC) regarding the EDO Human-In-The-Loop-Simulations (HITLS) and Fast-Time Simulations they conducted.  At this point, we are still in discussions with the FAA on the feasibility of EDO and no decision has been made yet.

**Washington National Airport (DCA) and Baltimore Washington International (BWI) Full Working Group Meeting based on Roundtable Recommendations**

Reviewed Power Points (PPTs) from the Eastern Service Center (ESC) Full Working Group (FWG) PBN Co-Leads, in which they will be presenting and discussing with the Washington National Roundtable on November 7th and Baltimore Roundtable on November 8th.  The FWG will also be conducting meetings at PCT on November 14th-16th, then again December 12th-14th.  These meetings deal with recommendations made by DCA and BWI Roundtables regarding community concerns with current Standard Instrument Departures (SIDS) as well as some Instrument Approach Procedures (IAPs).

**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.

### PRESIDENTIAL UAS INTEGRATION PILOT PROGRAM
The administration recently announced a UAS Integration Pilot Program (https://www.faa.gov/uas/programs_partnerships/uas_integration_pilot_program/splash/).

From the program announcement, *"This program will seek partnerships between state, local, and tribal government entities and private industry to gather operational and other data from advanced operational concepts, such as flights over people and package delivery.  It will also enable state, local, and tribal entities to determine what kind of pilot program activities, subject to FAA oversight, will occur in their respective jurisdictions."*

This is a pilot program that will allow public entities to be innovative regarding the use of UAS in their communities.  The main goal of the program is to safely expedite UAS integration through these initiatives.  The Secretary of Transportation expects to select at least 5 public entities within the next 180 days to participate with this program. The program is not prescriptive as to the types of operations to be tested, but rather want to see what ideas are proposed by the applicants.  The entities selected and the ideas proposed would dictate how these pilot programs may affect air traffic.  Mr. Richards and Mr. Weidner will be working closely with the agency as these efforts progress.

### LOW ALTITUDE AUTHORIZATION AND NOTIFICATION CAPABILITY (LAANC)
Again, the vast majority of Mr. Richards and Mr. Weidner's time this past month has been spent on the development of LAANC.  Mr. Richards and Mr. Weidner and their FAA counterparts have completed initial training at all prototype facilities - MIA, CVG, ZMP, LNK, RNO, SJC, PHX, ANC/LHD, and MRI.

The LAANC tool is operational at CVG, ZMP, LNK, RNO, SJC, and PHX.  There are still a few issues remaining to be worked out at ANC/LHD, MRI and MIA.  Once those issues are resolved, LAANC will become operational at those facilities as well.  Over the next 2-3 months, these test facilities will provide feedback and identify issues that need to be worked to improve the LAANC tool.  Once those updates are made, the intent is to deploy LAANC in facilities across the NAS throughout CY2018.  The initial deployment will simply replace the manual process in which notifications are accepted and authorizations are approved.  The tool itself will be used solely by staff support/management during the initial phase.  It is envisioned the future iterations will be incorporated into operations.

As a reminder, LAANC will automate the UAS authorization for Part 107 proponents.  There are still few legal issues to work through, but LAANC is expected to be able to provide notification for Part 101/Hobbyist proponents by early in CY2018.  The initial test version of LAANC will only include Part 107 authorizations.

The Agency is working with several industry partners who will provide this service to the various UAS proponents.  The Agency will provide UAS facility map data to the industry partners.  The partners will, in turn, develop tools that will provide authorization and notification services to the proponents, on a real-time basis, based on the UAS facility map data.  The authorizations and notifications will be instantly transmitted back to the facility for which the authorization/notification was made.

Should you be asked for a list of the industry partners who are authorized UAS Service Suppliers for LAANC, refer those inquiries to:

https://www.faa.gov/uas/programs_partnerships/uas_data_exchange/

  On that page, you will a section titled, Approved LAANC UAS Service Supplies.  In that section there are hyperlinks to the approved UAS Service Suppliers.  There are currently two approved suppliers, but more are expected to be added once they've completed the MOU process with the FAA and demonstrate that their system meets the LAANC requirements.

## UAS FACILITY MAPS
In an effort to improve the quality of Part 107 authorization requests coming into the FAA, the agency is making public the UAS Facility Maps that each terminal facility was asked to complete.  The agency has found that absent any guidance on what altitudes may be authorized around airports, proponents are simply requesting 400' AGL for every flight - whether they need it or not.  This is leading to a high rate of disapprovals and greatly increased coordination time with the affected facilities.

With the maps publicly available, it is believed that the proponents will become more precise with their authorization requests.  The next group of maps was made available on October 12th.  The agency will continue to publish new maps, along with any map updates on the normal 56-day chart update dates.  All maps are expected to be released by the end of 2017.  The maps can be viewed by clicking here.

## 14 CFR 99.7 SPECIAL SECURITY INSTRUCTIONS
Using its existing authority under 14 CFR 99.7 - Special Security Instructions, the FAA has implemented airspace restrictions that apply specifically to UAS.  The Agency continues published flight restrictions over several Department of Defense facilities, restricting UAS flights up to 400' AGL over these facilities.  The restrictions apply to all types and purposes of UAS flight operations and remain in effect 24 hours a day, 7 days a week.  These sites can be viewed on an interactive map by clicking here.

## UAS QUESTIONS
As a reminder, any UAS related questions can be addressed to Mr. Weidner and Mr. Richards at UAS@natca.net.