



National Air Traffic Controllers Association
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SAFETY AND TECHNOLOGY DEPARTMENT UPDATE

Week ending January 29, 2016

AIRSPACE: Jim Davis (PCT) leads the NATCA efforts on airspace initiatives as the National Airspace Lead. Below are reports from Mr. Davis and other airspace team leads.

- **Atlantic Coast Route Program (ACRP)**
 - The ACRP team met with several facilities on the east coast establishing facility local teams to work on the notional designs of Q-routes. For each facility the teams are asked to focus on notional designing of new Q routes where needed.
 - To overlay needed existing J routes, with more efficient Q routes. And removing J routes where they are no longer needed. The initial scope is north/south routes starting at the ZBW Canadian border working south joining the South Florida Metroplex to ZSU. We accomplished facility visits to ZBW 1/5/2016, ZNY 1/7/2016, ZDC the week of 1/13/2016.
 - The team met at Mitre for a joint meeting for ZDC, ZJX, and Fla. Metroplex 1/20-21/2016.
 - The joint ZDC/ZNY meeting in New York was cancelled due to winter storm Jonas hampering the travel to ZNY. That work will be made up in February.
 - The ACRP project established a Knowledge Service Network (KSN) for the project communication and document sharing. It is now available for use by the team and every facility involved with the project, with appropriate permission levels for access and file editing. Progress was made on the Plan document, which contains a statement of project vision, scope and goals. The document also has; risk, schedule, communication, and costs sections.
 - The team is meeting in DC the first week of February to evaluate their progress and strategize our future schedule. They will also be addressing IOUs for one Philadelphia, and one, Boston STAR connectivity to Q-routes. And working with the Military on the HAT"B" and Burner ATCA. This will allow the development of 4 Q-routes in restraint corridors increasing throughput, and proving a more efficient flow on the east coast for ZDC. The following week the team is preparing and confirming attendees to the first Full Work Group (FWG) meeting at MITRE March 1-3. The FWG meeting will involve industry stakeholders and DOD.
 - March 8-10, ACRP will be at ZMA for a joint meeting with Florida Metroplex involving ZDC, ZJX, and ZMA with continuation of Q-routes joining the AR routes to the south.
 - Submitted by ACRP Team Lead Art. 48 Jorge Rivera
- **ATL Metroplex**

- The Atlanta Metroplex project has been working toward their next implementation on 2/4/16.
 - They will be publishing 18 new ATL SIDs that will be NOTAMd 'ATC Assigned Only' until 4/12/16. The LOAs, SOPs and automation is all complete and ready for use.
 - All facilities will start training for the ATL SIDs shortly and everyone is scheduled to complete the training no later than 4/5/16.
- The ATL Team also has an upcoming 5/26/16 airspace change.
 - This airspace change only affects two facilities, ZTL and AGS ATCT.
 - A meeting is scheduled with AGS ATCT on 2/9/16 in order to make sure they have all the information needed to ensure a smooth airspace change.
- An Industry Day briefing is on 2/17/16. Invites have been sent out to 90+ people, not including Delta Air Lines. Delta has agreed to take care of all the people they wanted to invite from within.
 - Southwest completed flying the proposed STARs this week and Delta is scheduled to complete flying the STARs this weekend. Once the team has all the results, they will evaluate to see if there is a need to make any changes for fly-ability.
 - Delta also started their Dispatch Training Class this week. For this class we prepared two briefings, one briefing is recorded and one is just a PowerPoint presentation.
 - The team will attend as many briefings as possible over the next three weeks, but the recorded briefing is good for the briefings the team is not able to attend. So far the feedback on the briefing has been positive.
- Metroplex has asked the ATL Team to do some community outreach. In evaluating all of their new versus old procedures they decided to only meet with the airport authority from Rome, Ga.
 - This meeting yet hasn't been scheduled yet, but our ESC Environmentalist is working to get the team an appointment.
 - The changes around Rome are all above 12,000 feet, but they did shift the tracks by 4+ miles so the team determined that being open and honest with the Rome Airport will be best. There are expectations there will be no issues to come from this meeting.
- Submitted by Joey Tinsley ATL Metroplex Article 48
- **Washington DC Metroplex**
 - The DC Metroplex has been preparing for the procedures being implemented on February 4, 2016 under the Post Implementation process, which include amended Letter of Agreements, Standard Operating Procedures, Automation (ERAM/ARTS), Video Maps, NFDC Routes, Coded Departure Routes, SWAP Routes, and executing the required training.
 - The airports affected are Washington Dulles International Airport (KIAD), Manassas Regional Airport (KHEF), Baltimore Washington Thurgood Marshall International Airport (KBWI), and Richmond International Airport (KRIC).

- For KIAD, the CAVLR RNAV STAR is being amended to avoid Restricted Airspace as well as the creation of the WOOLY RNAV SID allowing General Aviation to avoid the Flight Restricted Zone (FRZ); KHEF has the TRSTN RNAV STAR being amended that removes three satellite airports from the procedure; KBWI has minor changes concerning the CONLE and FIXET RNAV SIDS and coding changes on the TERPZ RNAV SID for runway 28, which will allow Equivalent Lateral Spacing Operations (ELSO) to be used with the COLNE RNAV SID; KRIC has the Top Altitude being published in accordance with criteria on the KALLI RNAV SID as well as the COLIN SID being amended to allow for aircraft to depart from any runway.
- The team has received and reviewed all the Jeppesen charts for February 4th publication cycle with no errors found...
- The team has also been working on the procedural and automation changes for the last DC Metroplex Post Implementation occurring on March 31, 2016, which affects Washington National Airport (KDCA), KIAD, KHEF, KBWI, Leesburg Executive Airport (KJYO), Winchester Regional Airport (KOKV), Eastern West Virginia Regional Airport (KMRB), and Davison Army Airfield (KDAA) regarding RNAV SIDS.
 - The automation changes have been submitted to the ZDC 530 office who will provide them to ZDC FAST.
 - The team recently learned about the JUNNR RNAV STAR serving Greenville Spartanburg (KGSP), Greenville Downtown (KGMU), Donaldson Field (KGYH), and Spartanburg Downtown (KSPA) and after reviewing the procedure it was apparent the procedure did not provide the correct criteria allowing aircraft departing the Washington DC area using one of our RNAV SIDS to join the procedure correctly.
 - A teleconference was conducted with participants from the Charlotte and DC Metroplex teams, in which a solution was reached and ERAM automation will be used until the JANNR RNAV STAR can be amended in the future.
- The team is also in the process of closing out the DC Metroplex and have been working on the required documents to present to the Air Traffic Managers and Facility Representatives at Washington ARTCC and PCT TRACON.
 - Tentatively the close out briefing is scheduled for March 14, 2016 at 10:00 AM provided it meets the facilities requirements.
- Submitted by Bennie Hutto Article 48 Rep, DC Metroplex
- **Denver Metroplex Design & Implementation**
 - The Denver Metroplex Team began the month of January with a 75% Milestone Validation Briefing to their industry partners and community airports. These briefings have been pretty successful thus far and the feedback from the community airports has been mostly positive. The team would have like to have more participation and feedback from other industry partners but as of 75% they still only have comments from our

Lead carrier, United, and from Frontier Airlines. More specifically, the team has reached out several times to SkyWest Airlines, which serves as Denver's primary Regional Jet provider, but have had little contact with their representatives.

- Also the team hasn't received any response from Southwest Airlines, which is also another big provider to the Denver Airport.
- After the outreach, the Team spent most of the month completing design work on the SIDs and STARs. The team met with Bill Payne and a group of General Aviation pilots to discuss work on our satellite procedures.
 - The team also met with representatives from the Denver Airport Authority's Noise Office to discuss issues with the West Side SIDs. They were able to work with them to address any potential problems surrounding the noise sensors the airport has west of the airfield. The team believes by correcting these issues now will drastically reduce our impact to the surrounding communities and should allow a smoother transition for our environmental process.
- Mark Phipps (FAA Co-Lead) and Mr. Thomas met with a group from Denver ARTCC (ZDV) TMU, as well as, the ZDV POCs and members of the Metroplex MIST Team to discuss potential problems with metering for the new 8 STAR designs.
 - A lot of great information was presented and a commitment from Mr. Phipps and Mr. Thomas to work through their issues was made. They believe that through our TBFM HITLs with MITRE scheduled in a few months we can better identify any problem areas and address them through simulation.
 - They will continue to monitor this situation and Mr. Thomas update if any additional problems arise.
- Mr. Phipps and Mr. Thomas spent the last week of the month in San Diego attending the Metroplex Leads Meeting while our design team worked in Denver naming fixes and going through design packages.
- This update represents the work and status of the Denver Metroplex D&I for the month of January 2016.
- Submitted by Chris Thomas Article 48 Co-Lead Denver D&I
- **Charlotte Metroplex**
 - The Charlotte Metroplex Project continues to work post-implementation issues and prepare for the 2016 implementations. The team worked at Atlanta Center, Eastern Service Center (ESC), home facilities and via Go-To Meeting. The Leads attended a national Metroplex meeting the last week of January.
 - The leads worked with all facilities on post implementation issues.
 - A TELCON was held with CLT to discuss the northwest corner and the issue of traffic being high on a south operation.
 - ZTL is working to educate the workforce on the importance of being on profile for the operation at CLT. They have started briefing this during team training. As a fallback position the Metroplex team will develop a procedure for the south operation that ensures aircraft are at a manageable altitude for the TRACON.

- JQF tower advised the team that the SID wording was confusing pilots. The team worked with JQF and OKC to find wording that would solve the issue.
 - Overflights at CLT have become a challenge with the introduction of OPDs and the team is working with CLT and the surrounding Centers to identify routes to mitigate the issue.
 - The Team has started by-weekly TELCONs for the March and May implementations. They are assisting the facilities with LOA negotiations and have advised the ZTL and ZDC teams that we are prepared to use the Metroplex MOU to get an LOA complete. Facility POCs have briefed their teams. A TELCON is scheduled for next week and will bring the parties together for a face to face meeting prior to using the MOU.
 - The Leads briefed the Director of Air Traffic Operations and the Southern Regional Administrator on the project. They work closely with the all POCs as needed and maintain contact with facility FACREPs and Managers as we work the project.
 - Submitted by Bob Szymkiewicz CLT Metroplex Article 48 lead
- **Florida Metroplex**
 - The central portion of Florida Metroplex team was reconvened after being sent home in December because of the Continuing Resolution (CR). The team reviewed the results from the December 2015 HITL simulation.
 - During the review it was recommended that a SID and a STAR into and out of FMY be swapped. The team met and worked the recommendation.
 - The team has completed some ISIM scenarios and continues to work on the others. ISIM scenarios are scheduled to be run or displayed in February in the following facilities: DAB, FMY and ZSU.
 - Mr. Harris attended a National Metroplex leads meeting. He along with SME's and POC's from ZJX attended an ACRP meeting at MITRE to discuss Q-routes and how to work the two projects together and accomplish both of their goals.
 - Submitted by Greg Harris, Florida Metroplex NATCA Art 48 rep
- **Southern California Metroplex**
 - The SoCal Metroplex Core Team continues to respond to Air Traffic related public comments to the Draft Environmental Assessment (EA). The Draft EA received about 4,000 comments. The EA Team identified additional ATC comments that require unique responses from the Core Team.
 - A topical response has been completed for the interaction between the LADYJ SID and the STARS and approach transitions on the North downwind to LAX.
 - Review of environmental responses is scheduled for review by the Core Team and the EA Team for the weeks of Feb 8th and 15th at the Regional Office.
 - Glen Martin, AWP Regional Administrator, and the core team briefed staff for Congressman Lieu, Senator Boxer, and Councilman Bonin offices about current and proposed SoCal procedures and current traffic analysis to

address complaints by their respective constituents about legacy noise and traffic patterns.

- Councilman Bonin believes there have been changes and believes the FAA is not being fully transparent, as noted in his letter to the FAA.
- The team, at the request of Congresswoman Bass, District 37, and Congresswoman Napolitano, District 32, is developing analysis and presentations to address their concerns over the perceived changes in flight patterns over their districts.
- Team conducted a telecom to begin initial discussions with SENEAM (Mexico), to discuss impacts of proposed SoCal procedures.
- The termination of the MOU for GSGT Developers and Training Reps at ZLA has required the POCs to reevaluate the schedule for TTL development and the training plan development. There is a concern that the proposed November publication date may not be feasible.
- A HQ Tiger Team has validated the safety concerns associated with the STARS platform at SCT.
 - The decision to fallback to Common ARTS or not will be made in February. If the decision is made to fallback to ARTS, and if all of the issues are resolved, the earliest SCT will be able to return to STARS is August. This timeline will probably have an effect on training for SoCal procedures for the proposed November implementation date.
- The team finalized preparations for the meeting with our Industry partners scheduled for the week of February 1.
 - The meeting will address proposed changes to procedures to address community concerns and changes due to criteria.
- Submitted by Jose Gonzalez Article 48 Rep, SoCal Metroplex
- **Cleveland/Detroit Metroplex Design & Implementation**
 - The project timelines have been delayed as continue to work on an outreach plan to inform members of the aviation and legislative community on the proposed design alternatives.
 - Since they are one of the two projects to start this the road ahead is not clear as many FAA leaders try to merge their thoughts to one plan and in a way that it doesn't interfere with the NEPA law and defined processes.
 - The team is looking to late 2017 for full implementation with a successful environmental decision.
 - The teams have been working with the Service area on Raising the approach control altitudes at both CLE and D21, Control room re-configuration at D21, Lessons learned from Denver on RNP for its effect at DTW, Single site feeds for ZOB to utilize 3-mile separation, Re-allotment of airspace between ZOB, D21 and MTC (DoD Facility), TBFM implementation in late 2016 at ZOB, and review of the Delta simulator results reference to flyability questions.
 - Report submitted by Don Ossinger Article 48 D & I Representative.
- **Florida Metroplex Outreach**

- The scope and process of the outreach for the Florida Metroplex project is still being discussed at headquarters level.
 - Meetings will take place the month of February to hopefully clarify this effort and allow this effort to begin.
 - The local Outreach Team is continuing to familiarize themselves with the proposed changes.
- Mark Ostronic NATCA Metroplex Team
- **CSA PBN**
 - Mr. Luna is going to mention a few important items from the last reporting period. He had Back Surgery but is recovering well and will make the trip next week to DC to work with the VOR MON group and hear their needs and plans to move forward.
 - In December, there was a bit of turnover within the TetraTech specialists and they have a new lead.
 - The team was also visited by Dave Cook, the Eastern Service Center TetraTech lead. He spent most of his time with the specialists but the team was also able to have a few Q&A sessions with him that were very helpful and the team plans to take some of his suggestions and put them into practice.
 - In just a short time, the working relationship with our TetraTech specialists has greatly improved. The team still has a few challenges, but are much better equipped to handle them.
 - The .43 Rewrite Team came to Fort Worth in December and Ed Hulsey (Metroplex Study Team Lead) and Mr. Luna made several changes to the document. However; since then, HQ has halted collaborative work on this document. Mr. Hulsey and Mr. Luna anticipate being back at the table in 6 weeks or so.
 - There has been quite a bit of work on this at Mark McKelligan's (Metroplex D&I Lead) level and it is much appreciated.
 - The team also had discussions with ZFW, D10, KDFW, and KDAL about their future needs and areas they would be interested in working through the .41 process.
 - A meeting with Industry to follow up with the team's findings and brainstorm potential solutions is scheduled for Feb 16th.
 - They also spent time on Final Environmental Review work for the Minneapolis project as well as provided End of Day Reports for the 12/10 Publication Cycle.
 - January brought a Telcon with KSAT to determine their desires and discuss timelines to move their project quickly to meet a MagVar adjustment so the team could publish everything at one time.
 - A second Telcon with KCMH was held to determine the scope of their project and develop the Baseline Analysis Report for submission to AJV-14. KCMH is still a bit unsure about how much they want to change but the team continues to provide support and guidance so things that are working aren't broken just because it's new.

- The NATCA team continues to have weekly Team Meetings with their TetraTech specialists and our reporting products, tracking products, and agendas are reducing the length of these meetings and are able to delegate more and more to our support teams. They discuss important items with the new TetraTech Lead several times a week and this is keeping communications clear and simple.
- The team participated in a VOR MON round table but expect to get more information next week while we are in DC. The workload that the VOR MON is putting on the entire publication process is in direct conflict with the desires of AIS to slow work down so they can determine bandwidth. Something will have to give relatively soon.
- Another area of concern is the role our Environmental Specialists play in all aspects of our designs.
- The team is forcing the conversation to occur between AJV-14 and the Environmental office at HQ. The Environmental specialists were invited to all applicable meetings, but they don't get important feedback until designs have been finalized. This has to stop.
- Environmental needs to make us aware of all important areas and issues during design so the team is able to adjust and not create conflict. The Agency has quite a bit of work to do here and that's before we bring the community involvement piece into the process.
- Finally, this last week all 3 sets of Co-Leads, the three respective AJV-14 liaisons, and NISC contractors met in DC for the first of what will become quarterly meetings to ensure everything in the .41 is being handled in a similar fashion.
- Submitted by CSA PBN NATCA Art. 48, Brent Luna
- **Western PBN and EoR**
 - "NorCal" Initiative - In Response to Congressional inquiries, the Western OSG has developed a document detailing possible means to address community issues as a result of the implementation of Metroplex. This work was accomplished without the participation of NATCA representatives.
 - The week of 12/15, NATCA National Reps attended meetings in Seattle to receiving a briefing from the OSG on planned steps forward.
 - In collaboration with AJV-14, a work group has been formed with a NATCA coordinator (Phil Hargarten) and an FAA coordinator to begin planning meetings with facilities in NORCAL (NCT, ZOA, SFO, OAK, SJC) to get SME's in the room to determine if the recommendations in the NorCal document are feasible.
 - On January 7, meetings were held in OAK with managers and NATCA Reps to brief them on the OSG document. They also requested their assistance in setting dates to meet with SMEs. The meeting with SMEs will take place the week of 2/22.
 - 1/19-21 - Participated in a Denver EoR Widely Spaced "Post Ops Discussion". A review of the current state of EoR at Denver and future desires from the facility were discussed including EoR with Duals and

- Trips and RNAV Visuals. Additionally, Denver TRACON and Tower are planning to move towards all weather EoR (currently VMC required).
- Seattle EoR – Seattle began officially conducting EoR Operations on 4/7/15. About a month later, the Center runway was closed for resurfacing and EoR operations were discontinued. The Center Runway reopened on 12/16 and S46 was able to restart EoR operations. Almost immediately, an issue surfaced with connectivity from the STARs to the RNPs and aircraft were departing the RF track.
 - No losses of separation noted. A meeting was quickly put together with S46/ZSE and Alaska Airlines to discuss and fix the issue. This connectivity risk is a known problem and the workgroup did a redesign that day to fix this. At this point, controller confidence has eroded and very few are willing to conduct EoR operations until the fix is in place.
 - A meeting is being held at HQ on Monday, 2/1 to establish the absolute quickest possible publication date of the needed amendments. A white paper will be provided by COB Monday to NATCA detailing the issue and work being done to fix it.
 - Participated in the PBN Co-lead meeting in DC the week of 1/25. All PBN co-leads plus contract support were present in these meetings. Topics discussed included, MITRE Dashboard, weekly AJV-14 reporting, VOR MON, T-Route Development, Contract Support, etc. The Co-leads determined a quarterly meeting is needed to level-set 41 projects and needs.
 - **KASE SID:** The Western Co-leads made arrangements and coordination for a Kick-off meeting at Denver TRACON for a new RNAV SID at ASE. Coordination was affected with the FacRep, ATM, industry and Denver TRACON over several months. Upon finding out about this kick-off the Rocky Mountain District Manager injected himself into the process and after much discussion among his managers, cancelled the meetings. This issue has been elevated to the NATCA Airspace Rep and AJV-1 for dispute resolution.
 - Participated in a Telcon with the NextGen office about future funding requirements once EoR is rolled out nationwide and what training requirements may look like. Mr. Hargarten coordinated with the NATCA National Training Art48 to participate.
 - Mr. Hargarten and Tom Adcock (NATCA Training Lead) both concur that this program will need to be monitored closely to ensure such a large undertaking is well funded and that shortcuts aren't taken.
 - **DYAMD STAR (SFO)** - Soon after implementation of Metroplex, an issue with the DYAMD STAR was identified as the STAR drops aircraft out of Class B upon leaving 8000 for 7000 (the final altitude on the STAR). Operators were reducing speed to 210K as required below Class B although there is a speed at the last fix of the STAR of 230K.
 - A NOTAM has been issued to stop arrivals at 8000 however this is very problematic for industry and objections have been lobbied by

SWA, ASA, UAL and NBAA as they claim pilots may miss the NOTAM.

- A test was conducted with ZOA issuing DV except maintain 8000 but this is a very busy arrival sector and once the test concluded, ZOA is no longer willing to issue the amended clearance unless a fix is available by the July 21 publication date. NCT has offered to amend the DV clearance once aircraft check in with them but this is unacceptable to industry as the aircraft has already started down at that point.
- A Telcon with all stakeholders was held on 1/21 and an amendment is in the works to amend the DYAMD to 8000 however an impasse was reached with all the stakeholders on the NOTAM, amended clearance discussion and industry is threatening to file and only fly the conventional procedure.
- Currently awaiting ZOA determination on whether or not they will issue DV except maintain 8000 but the amended procedures are scheduled to be published on 7/21.
- Projects worked during this period: Seattle EoR/Greener Skies, Denver EoR, NORCAL “Initiative”, ASE RNAV SID, Seattle RNAV SID, GPI SID, NCT T-Routes, SJC STARs (2), SJC RNAV SID, SFO STAR (DYAMD), ZLC T-Routes, TUS SIDS, STARs, RNPs, GJT RNP and STARs, LAX RNAV SID, PAIE STARs, BLI RNAV STAR, EAT RNP, SUU STAR, BOI STAR, DEN SID, MFR SID, SAN SID,
- Submitted by Phil Hargarten Western Co-Lead
- **Metroplex Study Team**
 - 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 received by the Metroplex Program Manager and delivered to the Director of Airspace Services. It is my understanding the LVST Report has been signed by the Director of Airspace Services and is waiting for signature from the Western Service Area Director of Operations.
 - The team is still currently waiting for a decision on whether to move forward with the D&I phase of the project. The study team analysis of the conceptual designs has determined roughly \$7.5M in potential benefits to the Las Vegas Valley at a cost of approximately \$11M to the agency.
 - There continues to be a lot of energy around the issue of community noise. The team is currently involved with efforts to address noise concerns at

several locations where PBN procedures have been implemented and to look into ways we can enhance our processes to improve the outreach to the local communities and increase awareness of PBN projects throughout the NAS. They are also in the process of defining the way forward for projects that are currently underway.

- The team is also in the process of refining our agenda and determining if there is still a need for the Metroplex Summit Meeting that is currently scheduled to take place on March 1-3, 2016. In addition, PBN is also looking at ways to coordinate with the VOR MON program with upcoming meetings scheduled for February 2-3, 2016. They have also engaged the ERAW group to begin coordinating ways to identify potential automation issues pertaining to PBN procedure implementations on the front end. The team also continues to engage AJV-14 and MITRE to help improve the PBN Dashboard.
- Submitted by Metroplex Study Team Lead Art. 48 Ed Hulsey
- **National Design and Implementation Rep**
 - The agency is still consumed and being consumed by community outreach issues. There have been numerous meetings with multiple organizations and yet there is still not a defined process for Metroplex or .41 projects. The agency has gone to RTCA to ask for recommendations on community outreach, we do not expect a report until June. The FAA also is putting together a “Noise Team” with POC’s from allot of organizations, first meeting is mid February.
 - The Agency is pushing to have a Metroplex summit 3/1-3/3 at MITRE, even though there are no answers to current Metroplex status, future Metroplex and community outreach. The team recommended they change the meeting to an Industry day, but the FAA is determined to look as ridiculous as they can.
 - The VOR MON program has a meeting scheduled 2/2-2/4 with AJV-14 to help determine what VOR’s will be discontinued/decommissioned and the process for replacing procedures. The issues that will be addressed are:
 - SRM Panels are supposed to completed for each VOR that is being decommissioned and as far as we know this has not been done.
 - The agency has stated that between 5-9 VOR’s will be discontinued/decommissioned in FY 16, however it takes 2 years to develop and implement procedures to replace those being removed and no work has been done yet.
 - There are 307 VOR’s scheduled to be removed from the NAS during the next 10 years and there will need to be additional resources brought in accomplish this task.
 - There are only so many production slots and there needs to be a priority system developed to determine what project (Metroplex, .41, maintenance, VORMON, conventional etc,) will take precedent for the limited slots.
 - Submitted by Mark McKelligan (ZBW) National D&I Rep
- **NATCA National Airspace Rep**

- The initial draft for the NAS NAV Strategy is complete and ready to be discussed at the next RTCA NAC meeting in February. NATCA has stressed the importance of properly working decision support tools and how they relate to the success of the NAS NAV Strategy. There are pockets of strong support from industry as they realize the necessity of decision support tools moving forward. The Airspace Team will be briefing NATCA leadership prior to the February RTCA NAC meeting.
- Community Outreach is still a major roadblock for both Metroplex and .41 PBN projects. NATCA has made many suggestions during the various related meetings and are still waiting to have meaningful discussions with management. It appears the team is a long way from a defined process being established, the FAA has asked RTCA to answer related questions and an answer is not expected back from them until June.
- The dispute resolution process is being used for a .41 project in Aspen, it appears the kick-off meeting was un-collaboratively canceled. Mr. Davis' counterpart, Jodi McCarthy (Director of Airspace Services), and Mr. Davis have held some initial conversations so far. They will work our way through the associated emails and ask those involved questions so all the facts can be gathered and make a decision. This is the first time a dispute has made it to this level, the goal is to ensure the NAS gets what is needed in the Aspen area.
- Submitted by Jim Davis (PCT) NATCA National Airspace Rep

AJV-7 (AT Requirements): James Keith (D10) serves the membership as the DC Based Article 48 Representative to AJV-7. This office is in charge of Air Traffic Requirements. Mr. Keith's summary for this week is below.

- AJV-7 scheduled 5 centers and 3 TRACONS to visit the Traffic Management Units.
 - The purpose of these visits is to gain information from the Bargaining Unit to assist in building a shortfall analysis and a concept of operations for Advanced Methods.
 - Advanced Methods is a concept that is trying to allow for more strategic decision making in the TMU.
 - Also it is looking to see what kind of data the TMU needs and can that data be easier obtained. The best way to do this is talk to the controllers.
 - The team has visited Washington Center, Atlanta Center and Atlanta TRACON.
 - Next on the travel schedule are Los Angeles Center, New York Center, New York TRACON, Fort-Worth Center, and D10 TRACON in the next 6 weeks.
- Terminal Work Package one has completed the data collection process and will start the process of prioritizing the data. There is a stakeholders meeting at MITRE February 2 at 9.
- Jeff Woods (PMO Rep) and Mr. Keith met with AJV-7, PMO, and NextGen to discuss path stretch time lines.
 - They also discussed conflict probe not being necessary on the glass in order to continue with path stretch.

- An agreement was reached that future path stretch HITLs will not include conflict probe on the glass. The current time line for path stretch is associated with TBFM work package 4. However, we are working to find a quicker path.
- Mr. Woods and Mr. Keith, on the advice of the TBFM workgroup asked AJV-7 to readdress the key site locations for Terminal spacing and sequencing. The letter was written giving the PMO a list of possible replacements.
- Interval Management-(advanced) has been assigned to AJV-7 to construct the ConOps.
 - Mr. Keith has attended the initial meetings and will engage our article 48 representative Tom Zarick (IM Rep) in the up-coming weeks.
- Attended several meetings for UAS notifications to provide the field with a short-term solution to the requirement for UAS operators to notify ATC.
 - Steve Weidner (UAS Rep) and Jeff Richards (UAS Team Member) are now handling this subject matter has the agency moves toward a permanent solution.
- AIM Segment 3 is still in the planning stages and preparing for IARD.

RNAV and PERFORMANCE BASED NAVIATION (PBN): Dennis Kelly (PHL) is NATCA's Article 48 Representative for the criteria work on RNAV and PBN. Mr. Kelly's update for this week is below.

- **4-7-1 Clearance Items-** There was a meeting encompassing Metroplex and CLT on the use of 4-7-1, Clearance information and there are issues being raised by users on the landing direction/runway transition issuance.
 - They thought that the DCP that has been developed, which included removal of the requirement to issue the runway number as only a terminal one, was settled. This included the flexibility put an aircraft back on a runway transition after the 10-mile requirement if the pilot was able.
 - The users indicated that not all boxes are the same and that this might not be possible, which is also made worse by the pilot training.
 - In addition, some Metroplex procedures are moving the runway transition point out past TRACON boundaries making the runway assignment (not runway transition) a little more dicey.
 - The team is still negotiating how this can be streamlined.
- **Established on Required Navigation Performance (EOR) -** A connectivity issue has emerged at Seattle (SEA) putting EoR at risk since the facility has begun using the procedures. Due to improper design inputs from the user, a shared way-point was added after the connection point of the STAR and RNP causing pilots to get a disconnect which is a human factors issue. The result has been multiple aircraft leaving the RF turn and proceeding direct to a WP midway through the RF leg.
 - If crews close the box disconnect correctly, this would not be an issue but because of how often this is happening, the facility has implemented a VMC only requirement.

- To fix this, the STAR will be amended so as to share a common connection point at the end of the STAR and beginning of the RNP to remove the disconnectivity issue.
- In addition, a new fix will be added to the STAR past this connect point to accommodate other than shooting the RNP approach. It is important to have these STARs that connect to approaches to share the same fix in the beginning so these issues don't occur.
- **DEN/DO1** - December Count: 1611 approaches, which is the second highest monthly total, to date. Total Count since implementation of the program (Oct 2013): 27,500 approaches. FAA Headquarters is sponsoring/leading an EoR meeting to discuss the next steps
- **Flight Procedures Management Program 8260.43 draft** - AJV-5 is trying to change this order to take over the flight procedure request process with some of the following ideas for change: Establishing chart dates, outreach to customers and the aviation community, transition from Regional Airspace procedures team (RAPT), replaces the Regional Flight Procedure Teams (FPT) role and introduces the Flight Procedures Area Committee (FPAC), redefines responsibilities, and identifies members, establishes the Flight Procedures Integration Committee (FPIC) as the decision making body for IFP integration and scheduling, defines responsibilities, and identifies members, eliminates the National Airspace and Procedures Team (NAPT) and introduces the Instrument Procedures Oversight Committee (IPOC), defines responsibilities and identifies members, modification to the gateway, amend current orders (7100.41; 8260.60; 8260.19...).
 - Note: this is an attempt to control the whole process that is covered under many orders.
- **AJV-142 PBN Weekly reports** -
 - Bermuda International Airport (TXKF) Update - On December 8, 2015, representatives from AJV-141 participated in a teleconference with representatives from AJV-142, Flight Standards Service, Flight Procedure Standards Branch (AFS-420), and NAVTAC Contract Support to discuss criteria regarding the development of Performance Based Navigation (PBN) Standard Terminal Arrival Routes (STARs) where only Global Positioning System (GPS) capability is required rather than Radar Surveillance. AFS-420 stated that criteria allows for design of Area Navigation (RNAV) STARs with only GPS required.
 - As background, Bermuda will serve as host to the 2017 America's Cup Races. Bermuda currently has intermittent Radar Surveillance capability. New York Air Route Traffic Control Center (ZNY) currently provides Bermuda's terminal and oceanic air traffic services. Bermuda is in the process of developing their own air traffic system and has requested assistance in developing RNAV SIDs and STARs to service the TXKF airport with Radar Surveillance not being required.
 - The initial request with a recommendation to move forward has been processed by the E-OSG and has been sent to AJV-14 for further action.

- The work on this project will be done in accordance with FAA Order 7100.41 currently and then in accordance with FAA Order 7100.41A when that document is signed. Flight Standards Service, Flight Procedures Branch (AFS-420) has stated that criteria does allow for the creation of RNAV procedures in a non-radar environment.
- Currently, operations to TXKF are in accordance with domestic non-radar separation standards when radar is unavailable. The parties agreed that AJV-14 would work with Air Traffic Procedures (AJV-8) to get a determination on what separation standards will be required for the use of RNAV procedures in a non-radar environment as there could be impact to final designs based on required separation standards. This needs to occur prior to further development work on the requested RNAV procedures for TXKF. Further updates will be forthcoming.
- **EoR National Standard Change.** On December 10, 2015, a request submitted by AJV-14 on June 1, 2015 for a change to FAA Order JO 7110.65, Air Traffic Control, resulted in an approved Document Change Proposal (DCP) providing new standards for “simultaneous independent approaches to widely-spaced parallel runways without final monitors.”
 - This change to the NAS leverages work done by Flight Technologies & Procedures Division (AFS-400), Technology Development & Prototyping Division (ANG-C5), Air Traffic Procedures (AJV-8), and AJV-142 and an approved Air Traffic Control (ATC) waiver at Denver International Airport.
 - It is also the first national standard change based on the EoR concept, originally proposed by the Performance Based Aviation Operations Rulemaking Committee (PARC) in 2012. The new national standard will be effective on May 26, 2016 (Change 1 to FAA JO 7110.65W), a full year prior to the NAC Congressional PBN commitment to, “Develop an EoR widely-spaced operation national standard,” by the second quarter of calendar year 2017.
- **NextGen Integration Workgroup (NIWG)** - NextGen priorities have 3 year rolling plan - The FAA will not make any commitments and identify specific milestones and dates.
 - Scope - there are 4 focus areas, Multiple Runway ops, PBN, DataComm and Surface ops. They are going to examine additional locations for existing priorities and seek industry milestones on equipage. They want to ensure full transparency and collaboration. 1 assumption from 2014 is no broad based upgrades in equipage. Next: February 26 and June 17 NAC meetings with a goal of a final rolling plan in October. The NAC approves the first two and see the final report to present to the hill in October.
 - Expectations from industry are to train pilots and post analysis of benefits. PBN - 2018-2019 planning includes TBFM/TSAS, PBNRS, RNP track to fix and the PBN strategy.
 - DataComm - Industry commitments are that airlines will equip 1900 aircraft by the 4th quarter 2019. There are 1418 DataComm equipped

- aircraft in the NAS as of 1/6 with 598 from the DataComm equipage initiative.
- Surface - 2017 commitments include CLT Airspace Technology Demonstration (ATD2) demos funded by NASA is on track for end of Q4 and electronic flight data capability is required for this. This is for integrated arrival/departure/surface (IADS) traffic management. Goals include predictability, efficiency and throughput of surface movement with scheduling technologies.
 - Other commitments are use of 1 NM stagger separation 7110.308 operations (SFO), Use of reduced stagger separation for dependent operations to runways spaced greater than 4300', Simultaneous independent parallel operations using offset (DTW, MSP, PDX), Triple simultaneous independent parallel operations (ATL, IAD) and Wake Recat.
 - **Decision Support Systems (DSS)** - Timed Based Flow Management (TBFM) initially developed in the early 1990s via a partnership between NASA and the FAA. Focused on airports experiencing regular demand/capacity imbalances.
 - They admitted that it didn't work properly and wasn't really designed for controllers and wasn't deployed correctly.
 - They have since gone back and put together a training program after assessing the issues. This training program should be done at the end of FY2017.
 - Additions: extended metering, Ground Interval Management Spacing (GIM-S), Integrated Departure/Arrival Capability (IDAC), information sharing by 2017 and Terminal Sequencing and Spacing (TSAS) by the end of 2018. GIM-S is currently being employed at DEN/ZDV, SLC/ZLC and SEA/ZLC. IAH and MSP are close behind. IDAC, hopefully gets rid of phone calls, allows electronic call for release and is being implemented in 5 centers this year.
 - TSAS is a tool that extends the center metering to the terminal area for spacing and sequencing and will be implemented at 9 airports in the future. The key will be how much intervention happens in the terminal environment as it can erase enroute gains. Current guidelines for en route controllers are to deliver flights to their meter fixes within +/- 60 seconds of their Scheduled time of arrivals (STAs).
 - TSAS requires improved delivery accuracy (+/- 30 seconds) to produce the desired flight efficiency gains. This will be a two-way communication operation between TBFM and TSS with each impacting the other. The team has requested SEA as the first site and the last (9th) would be by 2022.
 - The reason for the long period of time to get the first 9 sites is that there are many adaptations and entities to deal with. This is a very optimistic timeline and getting the training done will be crucial.
 - **EoR Safety study** - Not much new on background except the emphasis on the use of TF turns instead of Rf to maximize participation. Most

controllers comfort level decreased due to the decreased time to react to non-normal events. There were no consistent overshoots when turning to FAC.

- The most overshoot issues were at the apex of the turn. Non-VNAV vertical profiles were very similar to the VNAV profiles. Collision risk in normal situations at 3600' apart is very low. The results were much different during malfunctions.
- The safety study is slated to be completed by the summer and will include many more scenarios.
- Next steps to consider for NIWG PBN subgroup:
 - GLS I, II, and III (TF 5) SWA pushed for this. FAA not really in support.
 - Low Vis approaches with Enhanced flight vision system (EFVS). FEDEX is leading this initiative and are using this now in some form. EFVS is the technology that allows you to comply with minimums, so approach doesn't change. Rules already allow you to do this down to 100', then regular vision needs to take over. The new proposal is to allow use of this to the threshold. Synthetic Vision Guidance System (SGVS) is not the same thing, it is more comprehensive than just what you are looking at. It can add other features like obstacles.
 - Advanced RNP Taskforce 5 (TF 5). This was called advanced PBN by TF5. The focus will be scalability (RNP4 to 2 to 1 to AR approach as an example, box will automatically do this), Rf and parallel Rf. NBAA has a problem with requiring advanced RNP legs due to their costs for upgrading equipment. SWA pushed for RNP AR to be able to be used by everyone so they shoot an RNP approach and then if you are capable, use the AR minimums.
 - EoR TF Analysis results, implications and options for next steps. Research shows that starting with TF first fits what the user equipage and needs are right now and then move to Rf. Users that have equipped for Rf have a problem with this as they think it slows the progress to get to Rf quicker.
 - WAAS/LPV - what's next with new criteria publication estimated Mar '16
 - 2-18 months expected for incorporation into production capability
 - Demo of 1-2 procedures under new criteria may be a good planning target
 - PBN Route Structure. There are over 100 ATS routes (V & J) supported by VORs. There are 215 PBN routes (Q & T) and increasing designed to replace most of the VOR routes. Other projects are Atlantic Coast Route Project. The PBN Route Structure ConOps proposes 5 Regional Q Route Working Groups: East Coast, Mississippi Valley, Big Mountain, Western Pacific and Alaska, Offshore, Caribbean and Hawaii. The PBN Route Structure ConOps also proposes 3 T Route Working Groups (One per Service

Area): Western Service Center, Central Service Center, Eastern Service Center

- **Metroplex**
 - Brief the plan for next steps and how it relates to PBN Strategy execution
 - Environment and community outreach changes and impacts brief (Metroplex and beyond)
 - VOR/DME MON – the DME part has been added as some are still needed while some VORs will leave.
 - Waiver to 7110.65 5-9-7 “Simultaneous Independent Approaches – Dual and Triple”. Support Dual EoR and ILS Triple runway configuration.
 - Noise mitigation using variable descent profiles on PBN approach. This discussion started because of something that is occurring in Europe and whether or not we need to address this subject. This started as a noise mitigation to get around noise sensitive areas. A proposal will be submitted later. Josh Gustin (FAA Metroplex Lead) advised that community outreach might lock onto this and cause lots of problems for current and future proposals, so this group may want to tread lightly.
- **Mitigation plan for Pilot Proficiency concern**
 - Executing the near-term Strategy objectives is a logical source for planning targets
 - RF to XLS. ILS and GLS inside the FAF needs more study, at or outside the FAF is OK right now.
- **PBN Strategy for the future document comments** - Both the Dept. of Defense (DoD) and National Business Aviation Association (NBAA) have raised objections to the new PBN strategy. While the DoD will probably not be bound to this due to their own priority and funding, the NBAA objections do have validity on their part. Some things they are concerned about: NBAA does not believe enough attention is being focused at business aviation growth at satellite airports in the vicinity of medium to large hubs.
 - While these operations do not affect the hub airport’s surface operations, they do impact the terminal airspace operations. PBN approaches are needed to de-conflict satellite and hub airports. NBAA fully supports expanding the use of RF legs to non-RNP AR terminal procedures; however, they view the proposed FAA criteria of requiring an electronic map display of an RF leg **on non-RNP AR procedures** as a serious impediment to any expanded application of RF legs due to equipage limitations in a significant portion of the business aviation turbojet fleet. These limitations will not be easily overcome without expensive aircraft upgrades, upgrades that have been shown to be historically uneconomical for many airframe types. **FAA should work to eliminate the variances between navigation systems through more rigid performance standards.** DME/DME is required in Class A above FL290. Most business aircraft are equipped with multi-sensor FMSs that are capable of DME/DME navigation. However, most of these aircraft do not meet the

referenced AC90-100A requirements for D/D navigation in the US NAS. This will need to be addressed by FAA, OEMs, and Operators.

- **UAS & Commercial Space are not mentioned in this document at all. Suggest in the Introduction or Executive Summary a statement along the lines of: "Unmanned Aircraft Systems and Commercial Space operations are not addressed in this document. However, both are expected to play a large and significant role in the NAS starting almost immediately for UAS and in the very near future for Commercial Space. As plans mature for how these operators will be integrated into current and future NAS systems those plans will be integrated into this document."**
- **VOR MON** - A continuation of the safety aspect of this comes from a very long power point on this implementation. Some conclusions are: Most decommissioning's will result in SRMDMs. SRM is built into the Service area decommissioning committee (SADC) Process.
 - The time frame is long for the SADC process but SMS is considered from the beginning. SRM panels for airspace and procedural changes will be conducted on a case-by-case basis. Every stakeholder is included in the process. They will be having clarification meeting on the VOR MON in DC 2/1-3.



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