NATCA Safety & Tech Update Week of January 30, 2017

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 December & January

425 OPD related issues of which 193 were MOR's. On the pilot side 70 + ASAP's were filed. ZTL issuing Descend Via and then A80 giving the runway transition caused the most confusion with the pilots. Not knowing if they were still cleared to descend and to what altitude they were cleared to. For A80 on the north side, long side planes were too fast and too high entering the airspace. Instead of entering the airspace at the 40 DME they would enter between the 24 -28 DME and side by side on the dual arrival. A80 lost the ability to apply speed, turns, and use altitude to sequence in their airspace. The Southside directional stars had very few issues. No speed at the 40 DME on the short side was only problem and A80 requested ZTL apply a speed resulting in a except clearance to every arrival while on short side. The OPD's were turned off until the Metroplex team could meet.

After the meeting on 12/13/2016, the OPD's were turned on and an attempt through A80 and TMU to ZTL to dynamically turn the OPD's on and off as traffic warranted. This went on for a week and again it was agreed to turn off the OPD's for various reasons. The main reason was A80 FLMs on arrival wall. On 12/23/16, the ATL OPD's speeds and altitudes were NOTAMed out. Use of the lateral path only on all 4 corners was to be used and is current situation as of today. On 12/26/16 to 1/2/17, Industry requested to have OPD's turned back on and requested ZTL issue the runway transition. ZTL is not opposed to this, however, due to new to the NAS and the complexity of the duals, an SRM was requested to mitigate risk. From 1/3-5/2017, Post implementation meetings began with all work to be completed by 1/27/17 for an August time slot implementation. It was during these meetings that we would need more than the 8 slots we had reserved and recommended we push back to October publication. We then asked for and were given 14 slots to implement.

On January 10, 2017, I was informed that all the STAR's being redesigned will need to meet the TARGETS 5.2 criteria. Currently, every STAR into ATL fails this criterion. One small change to any STAR will require all to be redesigned. During the week of January 17th to 20th, redesign continued with new criteria brought to the team. With the STAR's being changed it was revealed that with the current day-to-day operations at ATL, the ILS's would need to be redone as well causing a need for additional slots (as high as 54 more) along with the 14 already. Without the slots, waivers will be needed so we worked to get the waiver process started. We spent most of week giving

briefings and putting together a presentation to be shown to the COO and Delta airlines.

Submitted by Christian Karns Atlanta Metroplex Article 48 lead

Cleveland/Detroit Metroplex Design & Implementation

We are in the final 100% design package preparation, with a planned hand-off to the Environmental staff to begin the next phase of the project. Lots of work has been done since we have been on hold since 2015. The project has been reviewed by AFS-400, Airlines, MITRE, HQ, and our work groups. We have been the test bed for the agency Community involvement idea and the leaders creating our own path similar to the NEPA process. AFS-430 played with it since the criteria changed last March and added many things that the pilot/airline community didn't want. We have been run our plan through TARGETs 5.2 Beta version 1 thru 6 and then again in the recently released 5.2.0 version. This was very troublesome since removed several months of work because it was unrealistic to modify or make someone fly. We hope to have all packages done and transferred to Environmental on February 6-2017.

DTW had several issues during a Chart change on November 10th. Most changes have been made in the published January chart date. There are outstanding issues with the missed approach and chart notes. One issue is that headquarters is working on removing an LNAV chart notes that restricts RJ's and a few others from flying the procedure. The airport will begin running a triple arrival operation as staffing permits.

CLE has some spectrum issue with the new higher airspace. Spectrum would not pass in the current configuration with the current standards and a plan by the facility has come up with several solutions that are being reviewed in the service area.

Report submitted by Don Ossinger CLE/DTW Article 48 D & I liaison

SoCal Metroplex

The SoCal Metroplex Team has been preparing for the March 2 and April 27 Implementations.

The Core team has been working with Glen Martin, Western Regional Administrator, and his staff on the following items:

 Completed E-Blast for webinars and community engagement in Spanish and English and sent to Congressional, key elected officials, airport management (utilized previous email list)

- Completed Congressional, key elected official letters in Spanish and English for
 - community engagement of webinars and community engagement and sent to Congressional, key elected officials, airport management (utilized previous mailing list)
- Completed a flyer announcing webinars and community information briefings
- Coordination for posting of community engagement on the SoCal Metroplex and Beth White, FAA, for posting of community engagement on the Community Engagement website
- Completed 4 geographic specific PowerPoints for the 4 geographic specific webinars for the public that were conducted the week of January 16th
- Completed 3 new videos, North Downwind at LAX, New Offset Procedure at LAX and SNA departures. The new videos will be added to ATC 101, NextGen informational and SAN ZZOOO SID videos the team previously produced
- Updated the SoCal FAA Fact Sheet and Frequently asked Questions and Answers sheet to be distributed during community engagement
- Conducted 4 of 10 community engagement meetings
 - o January 23rd in Culver City
 - o January 24th in Monterey Park
 - o January 25th in Pacific Palisades
 - o January 26th in Torrance
- The Team will conduct community engagement meetings
 - o January 30th in Burbank
 - o January 31st in La Habra
 - o February 1st in Corona del Mar
 - o February 2nd in Solana Beach
 - o February 7th in Ontario
 - o February 8th in Long Beach
- Completed over 60 procedure display boards that have been used for webinars, videos, PowerPoints and community engagement.

The SMEs created the DIRBY STAR to LAX to replace the LEENA STAR. The DIRBY STAR will allow cargo and general aviation aircraft to transition from the north complex to the south complex and will allow better ground movement management at LAX. Thank you; team, for the great work and quick turnaround on this request.

Submitted by Jose Gonzalez Article 48 Rep, SoCal Metroplex

Florida Metroplex Januarys and February Report

Florida Metroplex team had the following activates during the past 2 months: Participated in South Florida HITL scenario review
Participated in the Daytona Beach Community Involvement briefing

Participated in DC meetings to brief VP

Supplied required input to Headquarters during numerous telcons

Participated in Metroplex Leads meeting

Participated in Florida Metroplex POC's meeting

Participated in Florida Metroplex central facilities to respond to central community involvement

Attended the ICAO/IATA/CANSO meeting

Caribbean Group activates:

Attended two Caribbean study meetings at ZMA

Participated in planning of 4 Caribbean study meetings

Submitted by Greg Harris, Florida Metroplex NATCA Art 48 rep and Caribbean Lead

Denver Metroplex Update - 01/25/17

The Denver Metroplex Team has been working to create outreach materials for the upcoming community involvement in April with Bridge net. During this process, we have been coordinating with the Regional Administrator and other lines of business to ensure locations are reserved and invitations are being sent.

The Team worked with MITRE to create the framework for the upcoming HITL in April. Additionally, the team has been working with the Western Service Center .41 Reps to align the efforts of the Salt Lake City RNAV Workgroup and the Denver Metroplex proposed designs.

Submitted by Mark Ostronic Denver Metroplex Article 114 NATCA Lead

CSA PBN 2017-01-28

The first days of December were spent in DC at the VORMON Program Meetings. Supporting activities for all decoms has become a major part of our overall workload. The most positive piece to come from our involvement has been DME retention. Unless there is a land lease or severe infrastructure problem, the Central VORMON coordinators keep all existing DMEs. The FMS back-up for PBN (RNAV) procedures is either a DME-DME or a DME-DME/IRU solution. We plan to continue operating this way until the NextGen DME Program is up and running. We are currently preparing for the following VOR decoms in FY17: BRD, BTL, DDD, ENW, HRK, HUW, RIS, STE, & SYO.

The re-write for FAAO 8260.43C continues. This order develops a national prioritization structure for all publications, once enacted. There are still

competing interests on who ultimately will decide what the priorities are and this Order might not be the adopted solution. The collaboration between FAA and NATCA continues until a different strategy is announced.

Preparation for Community Engagement for the following sites is being planned: KCMH, KAUS Post-Implementation, & KSAT. In Central the OSG Environmental Specialists have been assigned as the POCs for Community Engagement.

The most important activity in December was the first PBN Co-Lead Only Meeting, held at the Central Service Area. The meetings were facilitated by MITRE and attendees included all three Service Area Co-Leads in addition to our NAVTAC contract leads, our AJV-14 Liaisons, and our NISC contract support. The three days went fast and we will continue to pursue meetings of this type. It was very evident that the three Service Centers are working in very different ways, but this has engaged the Group Managers to attend the AJV-14 PBN Meetings in January. There are numerous areas of responsibility to work out, but we know how each other Service Center works and will be able to identify best practices that should be adopted across all 3.

After holiday leave, we have been focusing on developing the appropriate strategies and materials for Community Engagement in KAUS, KSAT, and KCMH. The Regional Administrators and their staff, FAA Public Relations, the NextGen Office, and our Environmental Specialists are all working together to produce site-specific plans for each project. We are also engaged with the FAA Website developers to create a Web presence for single-site projects, that keeps our projects separate from Metroplex endeavors. This web presence includes site-specific information and all applicable Environmental documentation at the point that each product is ready. The sites haven't split at the time of this report, but we anticipate a new landing page for single site projects very soon.

NATCA has also been heavily involved in discussions regarding the coding of FM vs. VM legs and how some FMS manufacturers are changing the coding published by the FAA. Other important criteria changes are being discussed, as numerous changes were adapted into TARGETs 5.2 that negatively impact most of our designs. We are still trying to find out how these changes will affect our KSAT designs, and hopefully the KAUS designs will not be impacted because they are already in production.

Arrival Route Descriptions for RWY 22L at KMDW were worked and agreed to by KMDW, C90, and Southwest Airlines.

Columbus Airport hosted a meeting this last week with the Great Lakes Regional Administrator and OSG Staff to have a final discussion regarding Community Engagement plans. A project Kick-Off Meeting is scheduled for February $14^{\rm th}$ - $16^{\rm th}$.

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/Metroplex Design and Implementation Lead Monthly Report - 1/28/17

Atlanta Metroplex: Currently in the Post-Implementation phase of the project. Due to issues that arose after the November 2016 implementation, the team is currently looking at several viable options to mitigate the concerns of ZTL, A80, and industry. Working with the Metroplex program office to determine what resources are necessary to allow the team to make the best data-driven decisions towards a solution that works for everyone. Christian Karns is currently the NATCA Art. 114 Rep for the Atlanta Metroplex project.

SoCal Metroplex: Currently engaged in community outreach activities in preparation for their March 2, 2017 and April 27, 2017 implementations. Jose Gonzales is currently the NATCA Art. 114 Rep for the SoCal project.

Charlotte Metroplex: Currently in the Post-Implementation phase of the project. They're working on procedure amendments and mitigating new TARGETS 5.2 criteria issues. Jim Williams is the NATCA Art. 114 Rep for the Charlotte Metroplex project.

Florida Metroplex: Currently engaged in community outreach activities involving airport authorities and select official briefings prior to the start of the Evaluation Phase and the environmental process. Greg Harris is the NATCA Art. 114 Rep for the Florida Metroplex project.

Denver Metroplex: Currently engaged in community outreach and involvement activities. Mark Ostronic is currently the NATCA Art. 114 Rep for the Denver Metroplex project.

Detroit Cleveland Metroplex: Currently preparing for 100% design package completion and beginning environmental work for the Evaluation Phase of the project. Also, dealing with issues arising from the unpopular agency

decision to move forward with the TARGETS 5.2 criteria. Don Ossinger is currently the NATCA Art. 114 Rep for the Detroit/Cleveland project.

Las Vegas Metroplex: Kicked off the Design and Implementation phase of the project on January 19, 2017. Currently working community involvement activities and some preliminary design work with L30 while ZLA finishes up the SoCal Metroplex activities. Chris Thomas is currently the NATCA Art. 114 Rep for the Las Vegas project.

ACRP (Atlantic Coast Route Project) is looking to implement new Q Routes in the Northeast pending funding issues for sufficient workforce training at the affected facilities. Future Q Route implementations in the Northeast and Florida pending a determination if SID/STAR procedure amendment work is necessary for connectivity. Jorge Rivera is currently the NATCA Art. 114 Rep for ACRP.

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. 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). 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. 114 Ed Hulsey

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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.

ATD-2 Engineering Shadow Evaluations (ESEs) at Charlotte have been on hiatus since mid November due to the holiday season and related moratoriums. NASA software engineers however have not been idle. They have been very busy incorporating all of the information they have gathered over the summer and fall into the ATD-2 user interfaces and the software that will power the system.

On January 24th the NASA engineering team returned to the CLT lab to conduct the first ESE of CY2017. At this time they introduced us to numerous enhancements and new features of the software. To date their team has accomplished the following:

- Since October 20th, 410 software tickets resolved.
- Initial Data exchange and integration.
- Initial Tactical Surface Metering capability.
- Updates to Ramp Manager software.
- Updates to Surface Based Trajectory Client software.
- Initial ATD-2 Dashboard concept capability.

There is also ongoing analysis of the following:

- The effect of uncertainty in the Estimated Off Block Time (EOBT) calculation and its affect on overall system efficiency.
- Simplifying the Ramp/airline user interface and tactical surface metering options.
- Ramp taxi-time variations based on airport configuration and traffic congestion levels.
- Improving ATD-2 prediction accuracy as more data sources (TFMS, TBFM, STARS scratchpad entries, SWIM, etc.) become available.

Next steps for ATD-2 are:

- Completing connections for equipment install in CLT tower and TRACON. Expected by mid-March.
- February ESE at Charlotte lab.
- Pilot engagement in ATD-2 lab during February ESE sessions. Very important that aircrews know what to expect from surface metering and what all of the new times will mean to them.
- March 6-8 HITL at NASA Ames for CLT, ZDC, ZTL, and Ramp/airline personnel.
- March 29 requirements freeze for phase one features and capabilities.

The series of Engineering shadow evaluations conducted CLT over the last seven to 8 months have been very beneficial for NASA's software engineers in helping them understand why we make the decisions we make to keep traffic flowing at the CLT airport. Today, the decisions we make are usually tactical in nature as we recognize and respond to upcoming and near immediate events as the traffic picture evolves. With ATD-2 equipment, and better information about aircraft readiness state, we should be able to see farther into the future and make decisions more strategically.

During the March HITL at NASA Ames, NATCA will be well represented and we will keep the needs of controllers and TMCs at the forefront of all the input we provide and any decisions we help make.

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 pace of meetings was slow leading into January but picked up toward months end. I have put a short list of things addressed in January.

- 1. The terminal CHI team met for the first time January 10-12th. The team received briefings on several terminal related programs and concepts.
- 2. Submitted a CAP to the ERC on aircraft types.
- 3. A path to put OPC (offshore precipitation capability) has been identified. However, the funding has not been.
- 4. Advanced IM workgroup meet 1/23-25 to continue work on the concept of operations document.
- 5. Terminal CHI team participated in two conference calls on 1/26 where MITRE did a storyboard exercise on terminal work package one concepts.
- 6. AJV-7 is working with the PMO in developing E-IDS.
- 7. AIMM sig 3 is progressing toward IARD. The issue of how information will be provided to ATC for training is still not resolved.

WAKE TURBULENCE: Kevin Connelly (SAT) is the Article 114 Representative to the Wake Turbulence Office for NATCA. His update for the week is below.

After successful rollouts of both Phase 2.0 options (with or without Super Heavy Category) at SCT and PHL we had a meeting in December to prepare for 2017. The waterfall is set for MSP, MIA, PCT, and LAS to go RECAT this year with Honolulu still working on technical issues with MicroEARTS that could be finished in the winter. We had the initial site briefing with M98/MSP on January 9th and have planned training end of February with IOC the 2nd week of March. On February 8th we will have our initial site visit in MIA to make plans for training and IOC in April/May. In addition Wake Research Office has planned meetings in February at VOLPE in Cambridge working on Phase 2.5 and I will update that next month. This week I am in D.C. for Collaboration Training with Larry Beck from AJV82.