

**NATCA Safety & Tech Update**  
**Week of August 1, 2016**

**AIR TRAFFIC REQUIREMENTS (AJV-7):** James Keith (D10) is NATCA's Article 48 Representative to the AJV-7 Office. His update for this report is below.

AIMM Sig 3- Continued work on shortfall analysis and con ops review.  
ATPA/Wake RECAT- attend this meeting where discussion continued on aircraft ID's and who in the agency are responsible for keeping this list up to date.

Terminal investment strategies- received a briefing from AJV-73 group manager on agencies terminal investment strategies mostly associated with TRACON evolution.

Path Stretch- Path stretch evaluation at MITRE took place 7/12-14/2016. Thanks to the TBFM ops team and members of the ERAM NUT team for attending this important evaluation.

QWERTY- Working with Arron Rose (TAMT) to finalize the effort to have these key boards tested.

RTCA work on Advanced Interval Management- Attended a daylong meeting at RTCA discussing Advanced IM. ALPA was also in attendance. Main topic of discussion is the separation responsibility. NATCA and ALPA both agree that separation responsibility belongs to air traffic controllers. RTCA is meeting in Buffalo 8/2-5/2016 to continue the discussion. I will be attending via web ex.

Surveillance strategy- Attended several work groups meeting along with Eric Labardini. The subject of these meeting is the RADAR availability in a post ADS-B NAS beginning in 2020.

ERAM sector enhancement- Dialed into ERAW meeting to discuss and brief the prioritization process of sector enhancement. I briefed the FTR's on prioritization on 7/27. The FTR's will be taking on the task of prioritization of sector enhancement and have their information to me by August 17<sup>th</sup>.

IM TSAS concept evaluation- July 26-27 MITRE held this and NATCA was well represented. The concept evaluation will continue for a 3 gathering in October. Thank you to Eric Owen for providing the needed SME's from your workgroup.

Similar call signs- attended a meeting to discuss the similar call sign top 5 issues. No conclusive decision was made and more work is needed to resolve this

**HUMAN PERFORMANCE:** Jay Barrett (MIA) is the Article 48 Representative for Human Performance. His report is below.

Discussion on expanding the Human Performance team to the field and enlisting advocates continues with Biggio and Arel. As expected the speed bump is resources. I continue to work the issue.

The fatigue office activities include:

- I received the go ahead from Biggio to pursue integrating the downloadable fatigue application with the all points safety app. We are in the testing phase with the web based Infinna created app, it is not really good, but we are working on getting it to a place where it will work and be a first attempt to getting something into the controllers and technicians hands that will inform them on their fatigue levels.
- It appears more conversation is taking place on ZOA's request for scheduling alternatives. The FSSC met with Biggio and allowed their FRMT to move forward with the rebaselining of Fatigue Hazard scores from 2011. The short version of the story is that Dr. Hursh the fatigue scientist the Agency contracted with at that time was not all that meticulous or standardized when he assisted back in 2011. We asked the new PhD. to rebaseline so that moving forward we could be comparing apple to apples with all the sleep/wake/break assumptions that are inputted into the model. This is completed and the FSSC is meeting next week to finalize exactly what the modeling parameters and assumptions will be.
- Our PhD is also working on a path to move away from using the fatigue hazard score (FHz) and moving to a risk assessment model that would be aligned with the SMS process and the red, yellow green matrix.
- The fatigue survey is a bit on hold as the team wanted to make some changes to the information desired. I will touch base with you after finalizing it.

The human factors office activities include:

- N90 certification standards completion is slipping due to resource issues. Jason went to visit and finalize the standards. ANGC is working closely with the contractor to finalize the checklists and evaluation forms that will be used. The money from the contract supporting this effort will dry up at the end of the fiscal year. So, time is an issue here. There is a commitment for starting to use them by October. Not sure how or if the new MOU will affect this effort.
- Jason and I developed 3 hrs of substance for the new OJTI training class that is about ready for prime time. I believe that by end of calendar year it will be implemented for all new OJTIs. The OJTI team used parts of our module on change and threw the rest over the side. Not a wasted effort though as we can use the materials we created in our HP workshops we plan on doing at facilities with training issues.

- We visited HCF at the end of June and have an assessment report that is going to Biggio. Essentially they need a lot of help in every area. We provided leadership and the facility with a list of 7 recommendations that we could assist with. We discussed with Biggio that anything we do will require long term on site support due to drift. He agrees. We are in a holding pattern awaiting the green light to begin.
- ZNY's training is a huge issue as well. We are working on a draft proposal to assist them much in the same way we are at N90. It will involve some workshops, standards development and FLM training.
- No movement on the group that Tom Adcock and I are working in a group that is reviewing a list of 39 poor performing facilities from a training perspective. These facilities have been identified as taking too long to certify or are below the average time to certification for similar facilities. This effort is data collection stage.
- I did a review of a new guide that was compiled by CAMI in OKC for OJTI. It is a HF laden instructor's handbook. It is really good information, but I am unsure how it will be used by OJTIs. I think it is outstanding, but 210 pages is a long read and it has not been incorporated into the new OJTI class the will be rolled out in December.
- We are actively working on templates and training to accompany and assist event investigators. The intent is for Jason and I to accompany the investigators for a few investigations and then provide training to our team and the RAP teams to be more HF focused during the investigations. We would also like to adjust the interviewing styles they currently are using. Our goal is to have the interviews look more like a conversation and less like an inquisition.

The Health and Wellness activities:

- I am still working on compiling info for the EAP involvement here. I would like to get info from the NEB on issues that have come up with them informing the Agency about things discussed in counseling sessions.
- I have asked the team to begin assembling information on stress research previously completed by the Agency. My intent is to consolidate this research and have discussions concerning actions the Agency can take to reduce stress levels as well as provide education to controls about the short and long term health effects concerning not managing stress properly.
- We are experiencing the beginnings of the run around on getting ARR ATCT facilities for breaks and training.

**NEXTGEN:** Kevin McLaughlin (SCT) is the National NextGen Representative for NATCA. His report to the membership is below.

One of the primary medium term goals for the NextGen Representative has been to advance the state of collaboration between NATCA and NASA. The White House Office of Technology and the Office of Management and Budget have targeted NASA for substantial increases in budget appropriation levels. Although there are numerous competing projects for these resources, significant funds should find their way to air traffic technology research such as trajectory based separation and interval management. With these increased funding levels, the importance of NASA as a collaborative partner increases as well. There are 10 NASA field centers, which provide leadership for and execution of NASA's work. These field centers are: Ames (Research), Armstrong (Flight Research), Glenn (Research), Goddard (Space Flight), JPL (Space Flight), Johnson (Space), Kennedy (Space), Langley (Research), Marshall (Space Flight), Stennis (Space). The majority of ATC related research takes place at NASA Ames and NASA Langley. NATCA has enjoyed a healthy collaborative relationship with the research and program management team at Ames, especially on the ATD-2 project. However, as the scope and depth of NASA ATC research and development deepens, it is critical that the NATCA/NASA collaborative relationship deepens also. With that goal in mind, I have met with John A. Cavalowski, Director-Airspace Operations and Safety Programs and Akbar Sultan-Deputy Director Airspace Operations. These meetings have been extremely positive with NASA very willing to embrace a deeper collaborative relationship going forward. We are working towards a visit to NASA Langley for the National Article 48 Reps and additional meetings between Jim Ullman, NATCA Director of Safety and Technology, and NASA Directors of Aeronautics, and other related programs. Additionally, NASA has expressed an interest in participating in Communicating For Safety 2017. In support of this effort, on August 1-4, I will be traveling to NASA Ames to participate in the NASA Airline Operations Workshop (AOW). The AOW is attended by both Industry and FAA and without this renewed emphasis on the NATCA/NASA relationship we would not be represented at this important gathering. Among the technologies showcased at the AOW are: Traffic Aware Strategic Aircrew Requests (TASAR), Flight Awareness Collaboration Tool (FACT ), and Four Dimensional Trajectory based Separation, among others.

**RNAV and PERFORMANCE BASED NAVIGATION (PBN):** Bennie Hutto (PCT) is the Article 48 Representative for RNAV and PBN criteria work. Mr. Hutto's report for the membership is below

**Q40/J42 Intersection Waypoint Addition**

After several conversations with the Eastern Service Center (ESC), Washington ARTCC (ZDC), and Atlanta ARTCC (ZTL), the waypoint named "YICUT" will be added at the intersection of Q40 and J42 to allow departing aircraft from the Washington Metro area to be correctly assigned J42 after the waypoint "YICUT". The waypoint should go into effect around November 10, 2016.

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

A meeting was held in Denver, CO at the Jeppesen building on June 21-23, 2016, in which Brent Luna covered for me as I was attending the ICAO PBN Study Workgroup meetings in Montreal, Quebec Canada. Topics and briefings during the meeting included the following:

- Top Altitude and Climb Maintain clearances- At the Aeronautical Charting Forum (ACF), NATCA raised concerns that definition contained in the FAA 7110.65 and AIM as now made every SID a Climb Via procedure, which was never the intention. A recommendation has been made to change the definition, therefore allowing Maintain or Climb and Maintain clearances to be issued when there are no altitude constraints published at a fix/waypoint.
- Charting Complexities
- Variables Associated with Procedural Compliance
- STAR Runway Transition Guidance – Follow up discussions from the Houston and Oklahoma City Flight Simulation regarding changing an aircraft's Runway Transition when the aircraft is within 10 miles of or has passed the Runway Transition Waypoint (RTW). Will go over the outcomes and proposed guidance and procedures
- TCAS phraseology – NBAA proposes Traffic Alert and Collision Avoidance System (TCAS)/Airborne Collision Avoidance System (ACAS) Resolution Advisory (RA) phraseology for inclusion in the AIM, and if needed, FAA 7110.65
- STAR Top Altitude Charting - NATCA & AFS-420 raised concerns at the ACF about only being allowed to publish a maximum of two Top Altitudes on a SID when those SIDS also cover additional airports and each airport would have the SID published for the airport. A recommendation is to allow more than two Top Altitudes for the additional airports on a SID.

**NextGen Integration Work group (NIWG) PBN**

Nothing new to report. Our next meeting will be held on August 2, 2016.

**Established on Departure Operations (EDO)**

The Dallas and Atlanta Metroplex developed RNAV SIDs that use a transitional waypoint into the terminal or enroute environment where once the lead aircraft passes the transitional waypoint, the longitudinal separation could be discontinued as the routes would be procedurally separated. The Atlanta waiver was originally denied and the agency never responded to the Dallas waiver. Since no movement had been made by the agency for over two years, it was brought to light when the Atlanta Metroplex implemented their RNAV SIDS and could not use EDO, which decreased the planned efficiency. Recently, a meeting was held in Atlanta and followed by a Work Group meeting in Washington, DC where several recommendations were made to move forward and would require studies to be conducted at the Tech Center in Atlantic City, NJ.

The Tech Center has responded with a few options on how to move forward with a cost ranging from \$300K to 450K. We will be discussing these options to determine how best to move forward and if any of the work could be performed at the facilities in Atlanta and Dallas.

#### **National Strategic Production Planning (NSPP)**

We meet every Tuesday and discuss the procedures that are scheduled for implementation across the country making sure they moving through the process correctly and in a timely manner.

#### **AJV-14 & Flight Standards Conversations**

- STAR Terminus - We have been discussing the recent changes to several documents (FAA 8260.3C, 8260.58A, and 7100.19G) concerning criteria for designing RNAV STARS. The changes for the STAR Terminus waypoint will have a direct impact on how we move forward designing STARS if the language is not changed. Currently, the language requires a mandatory altitude at the STAR Terminus waypoint for procedures that end with a track or heading even if the procedure is not a "Descend Via" procedure.

RNAV Airways - Due to recent workgroups designing Q and T routes, discussions have come up about the width of these routes and the lateral protected airspace criteria for RNAV En Route Segments. Under the current guidance contained within FAA 7400.2K, paragraph 20-5-3, the basic width of an RNAV route is 8 NM (4 NM on each side of the route centerline). We are working with the FAA to determine why the criteria is written this way when aircraft using these routes must be operating under RNAV 2 criteria. Under AC-100A, RNAV 2 requires a total system error of not more than 2 NM for 95 percent of the total flight time and the aircraft must correct to centerline as soon as they start to drift, so protecting 4 NM either side of the route doesn't make sense. We hope to have a resolution on this soon.

**VOR MINIMUM OPERATING NETWORK (MON):** John Vogelsang (P31) is the Article 48 Representative on the VOR MON project. His update is below:

The VOR MON program cleared a big hurdle this week when the Final Policy Statement was published in the Federal Register. This is the official notice to the public about the program and will allow them to make comments. So far in just a week the notice has received quite a few public comments. As expected a lot of folks think the program is a good idea they just don't want "their" VOR to go away. We also expect to receive quite a few Congressional Inquiries based on these comments as time goes on. Here is the link to the notice;

<https://www.federalregister.gov/articles/2016/07/26/2016-17579/provision-of-navigation-services-for-the-next-generation-air-transportation-system-nextgen>

In July the following VORs were discontinued:

BUA  
PNN  
EDS

The next three will be completed on the next charting date, which is 9/15/16:

POB  
AOH  
BTL

SYO and RIS have had their discontinuance dates pushed back due to several issues and will have new dates sometime in the future.