NATCA Safety & Tech Update
Week of June 27, 2016

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

Charlotte Metroplex – June 2016

The Charlotte Metroplex Project continues to work post-implementation issues from the previous two implementations and prepare for July 2016 implementations. The team worked at Atlanta Center (ZTL), Eastern Service Center (ESC), Charlotte TRACON and Jacksonville Center (ZJX).

The team continues to work on a myriad of issues as the July implementation approaches. All facilities are on schedule for the July 21st chart and implementation date. The POCs at all facilities continue to do the work at the local level and we work with the Plans & Procedures and Training departments as needed.

Prior to May's implementation there was quite a difference of opinion between ZTL and ZDC on whether ADAR's were needed to be in effect for the new SIDs. After much discussion it was agreed upon that ADARs would be used and this decision proved to be very effective for the May implementation. The transition to the new SID's has been almost seamless, splitting the previous MERRL arrival into two SIDs, and has proven effective and efficient. The issues raised over the airspace changes and new procedures implemented in May have been almost nonexistent; however the team continues to monitor the May procedures as well as the previous implementation procedures daily.

The northwest corner at CLT is an area that we continue to not only monitor but send to all facilities any issues as when on a South operation (short side) some of the regional jets (non vnav) cause the TRACON quite an increase in workload when the aircraft are high or fast on profile. A team of TBFM experts to meet with the CLT controllers was able to identify ways of refining the adaption. Industry partner tech pilot visited with ZTL controllers to observe and then discuss possible refinements and adjustments to make the procedure work more effectively.

We briefed Deputy Director of Air Traffic Operations Eastern Service South on upcoming airspace changes, procedures being implemented, as well as previous public outreach concerns and the issues that may be raised during the upcoming July public outreach.

The FAST shop at ZTL continues to have a heavy workload and we now have weekly telcons to work with the 530 shop before we schedule dates for up-numbered procedures. This new procedure appears to be keeping the workload manageable.

The leads continue to work with the Regional Administrator and the Metroplex office on lessons learned from the May public outreach and what is needed to make the next one even more successful. The next public outreach is scheduled for July 13th. We have been giving technical expertise in the designs for the outreach presentation.

Team has set a date of September 12th for a post implementation review and lessons learned.

Submitted by Ron Myers - CLT Metroplex NATCA Article 48 Lead

Florida Metroplex - June 2016

Florida Metroplex continued to work the southern part of the project. Miami Approach, Miami Center and Palm Beach Approach continued to work the challenges of the complex airspace of south Florida. The preliminary work is complete and now we are planning a HITL to evaluate the designs.

Met with Atlantic Coast Route Project (ACRP) Co-lead to discuss how to integrate Q-routes and Y-routes from the Florida Metroplex project to ACRP.

I attended a Metroplex Leads meeting in Chicago, IL and attended a Florida Metroplex core team-planning meeting.

Submitted by Greg Harris - Florida Metroplex NATCA Article 48 Lead

Atlanta Metroplex – June 2016

The Atlanta Metroplex team is continuing work towards our 9/15/16 changes and our 11/15/16 STARs implementation.

On 6/7 we briefed the Command Center on both our 9/15 and 11/15 changes, answering all of their questions. The briefing went well and was recorded for everyone at the Command Center.

The following week we met with the ZTL POCs, ZTL SMEs, ZME POCs and ZME SMEs regarding our future changes. The meeting went very well, ZME agreed to absorb one additional minute of TBFM delay. ZTL agreed to accept Satellite arrivals from the Northwest at FL350 (previously was FL330). ZTL also agreed that during operation changes at ATL that they would not require ZME to changes the STARs for any aircraft that were already airborne.

We have a meeting this week with ZTL and A80 regarding the usage of OPDs. The plan is to come up with some slower time frames to initially use the OPDs (the aircraft will use the lateral track even when not issued the OPD). By only using the OPDs during slower periods it will allow us to maintain throughput in ATL while giving the workforce time to be more familiar with how OPDs work

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Upcoming, we have a briefing for the ESC Directors on 6/30 and a briefing for Delta on 7/20. The GBAA (Georgia Business Aviation Association) has also invited us to participate in there quarterly meeting at the end of September, we are looking over our schedule to see if we can participate.

Submitted by Joey Tinsley - ATL Metroplex NATCA Article 48 Lead

Cleveland/Detroit Metroplex – June 2016

Worked to address issues from Last month's industry week. We did some minor corrections to what we could and designed a major overhaul to the DTW SIDs modifying 4 of them to an open RNAV SID and removing all of the altitudes in the structured climb to a few at or below altitudes.

Minor issues at CLE with the lead carrier UAL wanting to move forward.

Worked with Great Lakes regional office and administrator on our Customer Involvement plan and try to get all the powers to be at headquarters to agree on something to move forward. Currently we are estimating that we are going to be about 11 to 13 months behind schedule because of this added requirement.

Worked closely with or DAL representative on numerous issues and trying to move forward. Design Program manager and Ed Hulsey attended the meeting to talk about the number of speed restrictions on the STAR procedures. Speeds have been established to manage compression during the arrival and maintain in vectoring areas without having to re-state the speed restriction. Numerous examples around the NAS and discussions with other facilities help us determine that we are in line with other facilities in the NAS. Thanks to ATL Metroplex NATCA representative Joey Tinsley who helped in discussion on DAL operation with their Metroplex design and things to watch for.

Submitted by Don Ossinger - CLE/DTW Metroplex NATCA Article 48 Lead

Southern California Metroplex – June 2016

The SoCal Metroplex Legal Team continues to review responses to public comments to the Draft EA. There are approximately 300 comments that still require review. The contractor delivered the EA document, minus Appendix F (Response to Comments) to the team June 1, 2016.

The Team provided responses to request for information letters from Congressman Peters (SAN), Taber Law Group (SMO Noise), Congressman Sanchez (SNA) and Thella Bowens (SAN).

The Core Team received a briefing from MITRE on proposed Curved SID design for SIDs off of BUR and SNA. The team will present the information to the Area SMEs and work with industry partners to finalize a design.

The Core Team met with Gary Norek, FAA Director Airspace Services, and Glen Martin, Western Regional Administrator and his staff at the Western Regional Office. Discussions focused on post–ROD and pre-implementation outreach to address HQ environmental justice (EJ) concerns. HQ would like SoCal procedures to be run under the AEDT software program that provides noise results in EJ communities. Gary Norek also requested the team "storyboard" podcast videos that will describe SoCal procedures and their interactions to the public. The podcasts are planned to be listed on the SoCal website post-ROD.

Training scenarios, training plans, automation, LOAs, SOPs, video mapping and preferential routing issues continue to be addressed by team members at SCT and ZLA. The POCs for both facilities have begun work on a contingency implementation plan in the event the ROD is not signed in time to publish procedures in November 2016.

The SoCal Metroplex Team hosted the first meeting with Servicios a la Navegación en el Espacio Aéreo Mexicano (SENEAM), Mexican Air Traffic Counterparts, at the Southern California Terminal Radar Approach Control (SCT) on June 7 through June 9, 2016. The original intent of the meeting was to update radar handoff coordination procedures and airspace utilization agreements for Metroplex procedures between Tijuana Approach Control, Southern California Terminal Radar Approach Control and North Island Radar Air Traffic Control Facility, as well as Mazatlán Area Control Center and Los Angeles Air Route Traffic Control Center. The meeting plans evolved when an opportunity was presented to address legacy automation and operational coordination topics between the air traffic service providers with the necessary expertise in one location. The FAA and SENEAM participants were able to collaborate to achieve benefits of enhanced aviation efficiencies and safety.

The harmony demonstrated by the meeting participants was exceptional. The teams developed a list of commitments and actions to be completed in order to meet the implementation objectives of Metroplex RNAV/RNP procedures in the NAS. While the results of

this meeting were essential to the successful implementation of the SoCal Metroplex project and benefits in the NAS, it was an added benefit for all participants to share operational concepts as SENEAM works towards a PBN based operation in its own air traffic system.
Submitted by Jose Gonzalez - SoCal Metroplex NATCA Article 48 Lead

Denver Metroplex – June 2016

The team has completed design packages and has begun work on packages for the upcoming SRM panels in August. We have also participated in TBFM HITL scrubs at MITRE and will be traveling back to D.C. next week to complete the TBFM HITLs.

The Denver Metroplex Team continues to work on our Community Involvement Plan. Since my last update we have met with the Northwest Mountain Regional Administrator on 2 different occasions, as well as, the DO to develop a plan to move forward with our outreach meetings. Those plans are being finalized at this time and face to face meetings with federal and state select officials should begin mid to late August. Meetings for Local governments, Airports and affected communities will follow the federal and state briefings.

Submitted by Chris Thomas – Denver Metroplex NATCA Article 48 Lead

Las Vegas Metroplex – June 2016

The Las Vegas D&I team leads along with the representatives of the Metroplex Program office and the Regional Administrator held meetings to began to lie out the game plan for outreach. Presentations for the Pre-design phase of outreach were created along with in depth discussions on all parties' roles and responsibilities moving forward.

Submitted by Mark Ostronic – Las Vegas Metroplex Outreach NATCA Article 48 Lead

National Route Structure Program; Atlantic Coast Route Plan(ACRP) – June 2016

The notional design work has been completed for ZBW, ZNY, ZDC, and some of ZJX along the east coast. We are now in the process of merging the programs with Fl. Metroplex from the ZJX boundary.

- Completed ISIM HITLs at ZNY lab and have completed all design and test in for routes for ZBW, ZNY, ZDC.
- The Week of July 12 we will be Merge Targets files and programs for ACRP and Fl Metroplex at ZMA.
- WE spent a few days at the Easter Service Center, coordinating and briefing onACRP for our outreach phase. We had a briefing for the Directors, and a separate briefing for industry.

- ACRP and So Fl Metroplex leads all met last week and scheduled future meetings for the 2 programs in July.
- The leads of both programs will coordinate the progress of the "Q" route development. The increase of over 110 flights daily in and out of Cuba will require ACRP to expedite work at the FIR boundaries to handle the increase in traffic. Without it expect delays throughout the NAS.
- Upcoming Activities

  ACRP Merging and design overview with Fl. Metroplex.
- Directors facility managers, NATCA reps and industry invited to briefings and design sessions at ZMA for July
- The rest of the month will be spent preparing for the ZMA work

  Submitted by Jorge Rivera - National Route Structure Program/ACRP NATCA Article 48 Rep/Lead

CSC OSG PBN – June 2016

Some items in report are from May. The MSP Post-Implementation final proposals were developed and communicated to the Minneapolis Airport Commission Noise Oversight Committee (NOC). Co-Leads attended the monthly NOC meeting and the MSP ATM briefed the upcoming changes. PBN structure was developed to help mitigate the decommissioning of the BRD VOR. Planning route structure isn't difficult. ZMP is heavily impacted by the BRD Decom because the VOR MON project hasn't given much thought to the effects on surveillance when navaids are removed. NAVAIDS provide needed surveillance structure in large areas of Non-Radar operations. In areas without VOR coverage, aircraft without the proper GPS or RNAV equipment may not be able to join the GPS based navigation system. Unless radar monitored, these aircraft will not be able to receive ATC services.

Meetings have been held with the Austin and San Antonio Airport authorities to engage with them in a higher level of involvement to meet the new Agency goals. Each affected Regional Administrator and Staff have stepped in and provided much needed clarification and help with moving these projects forward.

A Workgroup in ZMP met to design T routes for the BRD Decom project as well as T & Q routes for another project involving Western and Canada. Austin continues to meet and develop the necessary post-implementation adjustments. San Antonio is doing the same. The teams in Austin and San Antonio are working well, as is ZHU, to develop the necessary structure for the entire area.

FAA HQ provided Training in the form of a Community Involvement Handbook. This is not official policy but it does include best practices and methodology that can be applied to each of our PBN endeavors.

After each of the San Antonio and Austin WG meetings. Central OSG holds internal meetings to review meeting minutes and tasks involved, before WG minutes and documentation is sent out to each WG for concurrence.

Co-Leads met with TetraTech to preliminarily set schedules and project priorities through August and September.

Additional reference products were developed for the MSP project. TelCons with the HQ Environmental specialist were held to expedite the Noise Screen for MSP. We intend to share these documents the with MSP team as they become available.

Central Co-Leads traveled to DC to work with AJV-14 to better develop their Project Tracking Tool (PTT). This is an immense challenge as it is an outdated and no longer supported platform. AJV-14 expressly wants this to be used instead of the Corporate Work Plan Tools used in other FAA lines of business. Even though positive changes were made, the updated version of PTT is still 18+ months away and very labor intensive for Co-Leads, TetraTech, and NISC contractors tasked with the entry of project data.

Projects at SAT and AUS were strategically slipped in the production pipeline because of recent changes to STAR Termination criteria that has had negative consequences affecting our designs. Co-Leads also feel it is best to allow more time for Community Engagement pieces to be completed. Internal project timelines have been adjusted to allow for more environmental information to be shared with each Airport Authority before designs are finalized and sent to the Flight Procedures Team (FPT).

Finally, Bennie was working on another group in Canada so I was able to attend the PCPSI Meetings in Denver. Many criteria and design aspects were discussed with Industry Leadership and PCPSI Members that specialize in Human Factors and Safety Awareness. This group is able to make recommendations to the PARC and positive changes can be put into motion.

Please Note: Continued review and support of ERAM ER136427 (Proper ERAM SID Functionality) 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 Brent Luna - CSC OSG PBN NATCA Article 48 Lead

WSC OSG PBN – June 2016

5/2-4 Participated in PBN kick-off to design and implement RNP approaches and an RNAV STAR for Grand Junction, Colorado. The workgroup completed initial designs of two RNP approaches and one RNAV STAR. A survey for runway 29 and IAP runway markings will be needed and initial coordination through AJV-14 has begun to request the survey.

5/9-11 Participated in an introduction meeting with NextGen Managers at SLC TRACON. The purpose of the meeting was to introduce the facility to the concept of EoR with the possible future intention of implementing TF RNP EoR as requested by the NIWG. The airspace is constrained by mountainous terrain and the current downwinds would not be able to be adjusted. Therefore, there would need to be criteria released for TF RNPs to determine if the procedures can be designed within the airspace needs. The facility management and NATCA are very interested in EoR to improve the operation.

5/16-19 Participated in a PBN Scoping meeting with Tucson TRACON NATCA and Management with PBN Co-lead. A non-specific request was submitted by SWA for STARs, SIDs and RNPs. My co-lead and I felt there was a need to meet with the facility and scope a potential project to determine the needs of air traffic and determine if PBN procedures would work with the facility's operation. The work group was able to establish a need for air traffic and come up with some initial notional designs for three new RNAV STARs and RNPs. The BAR has been completed and will be submitted to AJV-14 this week to proceed to a full work group.

5/23-26 Similar to TUS, a non-specific request was made by SWA for STARs, SIDs and RNPs at Salt Lake. As with TUS, the co-leads concurred there was a need to conduct a scoping meeting with Air Traffic to determine facility needs. The work group was able to come up with notional designs for several STARs and SIDs. Collaborative project with NextGen possible to integrate with EoR.

6/6-9 Participated in full work group meeting with Las Vegas TRACON to kick-off a new STAR with connectivity to industry built RNAV visual approaches. Also, to kick-off amendments to RNAV SIDs at Henderson Airport at the request of NBAA. The work group was able to come to consensus on all procedures and the procedures are being finalized for submission to environmental.

6/14-16 Participated in a kick-off meeting at NCT for a ZOA request to split two STARs serving San Jose Airport. Early in the meeting, it became clear there would not be consensus between the facilities and

industry to split the procedures. My co-lead and I are in agreement that the will of one facility should not be imposed on another and intend to conduct analysis and determine the pros and cons of splitting the procedures and the potential impacts to air traffic and industry. ZOA representatives were not prepared to participate in a discussion on whether or not the procedures should be split so the meeting will be re-attempted at a later date.

6/21-23 Participated in meetings with NexGen and PMO in Seattle to discuss potential projects in Seattle in anticipation of implementing TSAS, TBFM and GIM-s integration in the Puget Sound Area. Meetings were held with ZSE, S46 and SEA reps and managers in order to begin scoping the needs of the facilities and determine the best path forward for all stakeholders.
Submitted by Phil Hargarten – WSC OSG PBN NATCA Article 48 Lead & National EoR Rep

Metroplex Study Team – June 2016

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 signed by the Director of Airspace Services with a likely D&I phase kickoff sometime in the Fall 2016 timeframe after a determination of what the airport and community outreach will look like and finalizing funding issues. Also, the tower/TRACON move into their new facility sometime in August. The study team analysis of the conceptual designs has determined roughly $7.5M in potential benefits to the Las Vegas Valley with an $11 cost to the agency. Pre-design coordination involving community involvement has already commenced.
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. There is ongoing talks with AJV-14 to add additional co-lead support in each of the Service Centers to do this extra procedure design and development. We also continue to work with AJV-14 to improve the PBN Dashboard by finding ways to validate the accuracy of the Dashboard data along with efforts to examine the consistency of the data. The PBN Dashboard is the main support tool used by the OSG PBN Co-Leads to produce the Baseline Analysis Reviews (BAR) for PBN project requests through the 7100.41A process.

We are also engaged in the rewrite of the 8260.43 order that governs the scheduling and prioritization of procedure development in AJV-5 (Aeronautical Information Services). No future meeting dates have been scheduled at this time. I am currently the NATCA POC for the SFO CAR (Corrective Action Report). The CAR is reference the DYAMD and SERFR STARs into SFO and an issue with the descent profile leaving the confines of the Class B airspace with speeds higher than allowed in the FARs. There is currently a deadline of July 24, 2016 to have a response to the CAR signed. 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.

Submitted by Ed Hulsey - Metroplex Study Team NATCA Article 48 Lead

National Design and implementation Rep – June 2016

VORMON: NATCA has forwarded an addendum to the PBN MOU for additional OSG Co-leads in the service centers because of the 7100.41 workload and the VORMON workload. Without the additional resources the VORMON program will not come close to making their waterfall. Natca is awaiting a response from the agency.

Metroplex: Community Outreach continues to be challenging in developing and implementing PBN in the NAS. Metroplex has developed Community Outreach plans for the sites, however funding for all the activities has become a road block. If the FAA wants Outreach to be part of all PBN projects, whether Metroplex or 7100.41 projects it is incumbent upon them to find the funding. Additionally issues have arised from the Office of Environmental and Energy (AEE) briefing "policy" guidelines to non FAA entities ie. Airports/Noise Committees and not briefing the OSG Co-leads nor have they been willing to send the guide handbook to them, because it has not been signed off by congress, you can't make this stuff up.

Funding has become an issue, we were briefed last week that there is a 2.2 million dollar shortfall of FE funding for this calendar year, due mostly to community outreach. There are several Metroplex teams that have not been able to move on to the evaluation phase because they have been waiting for a community outreach plan. After discussion with Josh Gustin (PBN Manager) the belief is NextGen will provide the additional funding for this year.

Submitted by Mark McKelligan (ZBW) – NATCA Article 48 National D&I Rep

NATCA National Airspace Rep – June 2016

We continue to work with the agency on community outreach for all the PBN projects, funding and a standardized process are the 2 major issues we are trying to address. Community outreach was not part of the original process so the funding needed to accomplish it was not

addressed when the projects started, this may cause us to delay some projects. The RTCA NIWG should submit their recommendations to the FAA in June concerning community outreach, we hope to finalize the process after that.

Jeff Woods (NATCA PMO Rep) and I are still working on the SEA Integration project. The RTCA NAC will be briefed in June along with the Western Service Area. We are hoping to put a team together this summer that will refine the details of our process and identify all the key areas to be addressed.

Submitted by Jim Davis - NATCA Article 48 National Airspace Rep

DATACOMM: Chad Geyer (ZLA) is the Article 48 Representative for DataComm. Below is his update.

The Tower Data Link Services (TDLS) Version 12 has been deployed to 36 sites and only 36 remain. 29 of those sites are Controller Pilot Data Link Communication (CPDLC) capable and only 27 remain. Across the country, approximately 1000 CPDLC clearances are being sent everyday with that number increasing as more sites become operational and additional aircraft begin to participate.

This update will discuss the different types of clearances that are sent in a CPDLC clearance. The first is a cleared as filed (CAF). A cleared as filed uplink is an initial clearance that does not include route information. This means that the filing of the aircraft was such that additional route information was not sent to the aircraft and the flight strip would not have between the pluses routing. Every clearance will always include a Standard Instrument Departure (SID), if applicable, that the pilot would have to manually enter. The SID is not sent in loadable format. To send the SID in a loadable format, the runway would have to be included in the uplink.

The next message type is an Uplink Message (UM) 79. A UM79 is a loadable route message that clears the aircraft to a point to rejoin the pilots filed route. The message text to the pilot would say “Cleared to XXX via route clearance”. This type of message would be used if there is between the pluses routing on the flight strip. This should be an indication to the pilot that there is embedded route information that must be loaded to view. When the pilot views the last page of the uplink, they will see a button that says “LOAD”. Once the pilot loads the route information, they would be able to view the entire route from their legs page. Again, the pilot must always manually load their SID and Transition, if applicable. One of the issues that we are seeing in the field is that some of the pilots are not loading the route and just accepting the clearance. This is a pilot training issue and Harris corporation is working with the airlines to improve their training. The local 48 teams at the participating airports have been briefed on this issue and are working with their controllers to understand what to

look for when a pilot calls confused on their routing. As more and more sites become CPDLC enabled and pilots get to use the system more, instances of this confusion on the pilot site should diminish.

Another message type is an Uplink Message 80. A UM80 is a message that embeds the entire route from departure airport to the destination airport. This message will contain a text that includes the verbiage "Cleared Route Clearance". When the pilot sees this text, they should again look for a load prompt on the last page of the message. The pilot will have to load the message and then view the legs page to see the entire routing. Again, the pilot must always manually load the SID and transition, if applicable.

The final message type is a Non-Route Revision. This message is sent to the flight deck when local information is changed and does not require routing. Such messages would be Request Altitude changes, EDCT's, Departure Frequencies, and other local information that would be selected on the Editor Window of the Departure Clearance application.

ENROUTE AUTOMATION MODERNIZATION (ERAM): Julio Henriques (ZNY) leads the ERAM efforts for NATCA. This week's update is provided by Dan Mullen (ZID).

Keysite Testing of EAD500 was completed at ZNY and ZDC on June 9. The remaining ARTCCs will install this new release over the next few weeks. This release contains the new Unconditional Track Control function (The Hammer), a Vertical Rate Indicator, and Pending Notification for SAAs, along with other changes. The next release, EAD510, is expected in early September.

The National User Team (NUT) held its quarterly meeting the week of June 13. Some of the issues worked on by the team include:

- Approval of the Corrective Action Request (CAR) addressing the lack of destination in some Terminal flight plans.
- The addition of the "P" altitude in the data block for Procedure Altitude clearances.
- Correction of ERAM behavior regarding Conflict Probe for aircraft in Hold.
- Discussion of the Contingency Flight Data Management (CFDM) failure tool.
- ARTCC Radar position monitor replacement options.
- How Airborne Re-route (ABRR) will be integrated into ERAM.
- The automatic addition of flights to the Continuous Range Readout view.

Additionally, the team was briefed on several future enhancements being planned, and completed work on engineering documents. The

Data Comm Program Office briefed the NUT on the progress of the program and the work required to integrate Data Comm into ERAM.

A combined ERAM/OAPM task team has been working to try to solve some of the problems with Conflict Alert and Probe that have developed since the introduction of the new OAPM procedures. There is currently no way to adapt these procedures so that ERAM won't show alerts, even though flights are separated by the procedures.

AJV-7 (Requirements) has continued to brief us regularly about enhancements planned for the NAS, so the ERAM team can help with the design from the earliest possible point. These enhancements are still several years away, but the tech design needs to start very early in the process. Some examples are: Handoff to Non-U.S. Facilities, Conflict Probe in 3-mile airspace, and Path Stretch.

The membership is strongly encouraged to continue reporting any instances of ERAM working incorrectly. This will help the Facility Tech Reps (FTRs) get issues identified and fixed as quickly as possible. Every time the software is updated, there is a possibility of unintended consequences, and we will see very large software changes in the next few years. Even though ERAM is fully deployed, we are still discovering issues that need to be fixed, and ways to improve the system for the users.

The ERAM team has been asked to respond to several Corrective Action Requests (CARs) recently. When the Event Review Committee (ERC) determines that the response to an ATSAP issue needs a technical change, they have been asking us to determine what solution will work correctly with the current systems. This process has been producing good results that are supported by the NUT.

FLIGHT DATA INPUT OUTPUT (FDIO): Ron Shusterman (A90) is the FDIO Article 48 Representative. Also included in Mr. Shusterman's duties are Article 48 representation for the Electronic Flight Strip Transfer System (EFSTS). Mr. Shusterman forwarded the information below for the membership.

Participated in Telcons for FDIO and EFSTS. There are 15 facilities left to receive new FDIO keyboards in the near future. Keyboards are working fine with very minimal change from existing keyboards. New FDIO printers should be arriving at the tech center in January for six months of evaluation by NATCA and FAA. Software update to EFSTS will be installed at BNA and PHL in July. Both facilities are using new EFSTS Replacement Keypads (ERK) with no issues other than EFSTS software needing to be updated. Phase two of the new ERK will be tested in September at MSP.

INTEGRATED DISPLAY SYSTEM REPLACEMENT (IDS-R): Richie Smith (N90) leads NATCA's efforts on the IDS-R project as the Article 48 Representative. Below is Mr. Smith's report.

> On June 15th the next IDS replacement product officially became a program by achieving IARD (Investment Analysis Readiness Decision). This basically means that the project is approved for funding but is still years from deployment and faces many decisions on requirements, cost analysis, etc.
>
> The FAA is treating EIDS as a new program as opposed to it being the latest product under the heading of IDS Replacement. This decision may or may not be a problem to the future support of NIDS. An obvious example is that the position of Program Manager for EIDS is open for bidding and the IDSR (NIDS) PM is applying. If he is selected who will run IDSR? Would that person run both separate projects? Only time will tell.
>
> The technical issues that terminated System Acceptance Testing on the SCT network have appeared in I90's network. This caused an outage on June 18th that shut down the network for over twelve hours. Where as the program office and vendor know the outage was caused by "an IP storm" that causes information packets to overwhelm the FTI lines, the answer as to why the packet transmissions increased to this level is presently unknown. The PO has doubled the bandwidth of some of the lines at I90 and the network is being closely monitored.
>
> The latest software built was distributed last week and no problems have been reported with it yet. There are over 90 "fixes" bundled in this release and this should get many facilities to a much more comfortable configuration. The next operating system was scheduled for testing in July but that date has been postponed with September seemingly being the new target.

NAS VOICE SWITCH (NVS): Jon Shedden (ZFW) represents the NATCA membership as their Article 48 Representative to the NVS project. His report for this week is below:

> NAS Voice Systems (NVS) demo labs are currently running on Build 11. Build 12 is still in development (these are beta builds), but should be deployed soon. Factory Acceptance Testing (FAT) was scheduled to begin in November 2016, but it has been delayed until February of 2017. The contractor is working on defect resolution and stability improvements.

Chris Lloyd, NVS Training Lead, is currently participating in Task And Skills Analysis (TASA) for the controller, supervisor, and configuration specialist user roles on NVS.

NVS and ERAM began working together to ensure installation compatibility in the DSR console. NVS and ERAM met in Atlantic City to discuss the new display sizes for both NVS and ERAM. At this time it appears there will not be issues with either deployment.

Next Generation Air-Ground Communication (NEXCOM) continues deployment of new CM300/350 V2 radios to terminal facilities across the country. Deployment is going well. 12 new radios are in work or are going operational in June/July at various sites across the NAS.

Due to configuration issues, the testing of a new RCAG at Houston Center (ZHU) was delayed. This RCAG will replace the ARINC's VHF Extended Range Network (VERN) in Cancun. The FAA successfully replaced the Key West VERN last summer. These RCAG/VERN radios provide long-range directional radio coverage in the Gulf of Mexico.

NAS Voice Recorder Program (NVRP) is the replacement for existing NAS voice recorders (DALR, DALR2, DVRS, DVR2). The NVRP Integrated Requirements Team met on March 24th to begin validating and shaping the requirements for the initial Program Requirements (iPR) document. Key site for NVRP will be Seattle Center in the 2018 time frame.

The Headset contract (Plantronics) expires this month. Plantronics was awarded the contract so most everything will remain the same. There will be a few headset models that will no longer be available under the new contract due to obsolescence. Mr. Shedden is working with the program office and LR to develop a briefing on the changes.

The Headset Splitter final design has been completed. The splitter which is designed to allow three or four headsets to connected to existing voice switches should be produced and deployed later this year. Air Traffic Services is currently looking at the quantity necessary to address the ATSAP CAR. A SRM Panel is tentatively scheduled for the week of July 18th.

Grand Rapids Tower/TRACON (GRR) is reporting multiple issues with their aging voice switch. The Voice Switching Team in Oklahoma City (AJW-173) is working closely with GRR to resolve their issues. There's also a radio coverage/spectrum issue being worked, as well as an issue with Tech Ops staffing and training. The controllers have presented a list of issues to Tech Ops and AJW-173. They are meeting soon to address these issues.

Waterloo Tower/TRACON (ALO) is reporting issues with the phone system used operationally in the tower. One of the issues has been resolved (inaudible phone) while the second one remains in work.

SURVEILLANCE BROADCAST SERVICES (SBS) OFFICE: Eric Labardini (ZHU) is the Article 48 Representative to the SBS Office. Below is the update for SBS**.**

The NATCA Surveillance and Broadcast Services (SBS) team includes: Eric Labardini (ZHU), National SBS Article 48 Rep, Craig Bielek (A90), Dan Hamilton (SFO), National Airport Surface Surveillance Capability (ASSC) Rep, Andrew Stachowiak (I90), and Tom Zarick (ZDV), National Interval Management Rep.

ADS-B:

- As of this update 24,488 aircraft (roughly 15% of the NAS) are equipped to broadcast with ADS-B Rule compliant avionics in the NAS. The SBS PO rough estimate of avionics installation capacity nationwide is 50,000 aircraft per year. With the January 1, 2020 deadline to equip quickly approaching, concern is high that equipage levels will fall short of the estimated total NAS fleet (100,000-160,000). Users that wait too close to 2020 may find that the availability of installers falls short of demand.
- SBS and Flight Standards have been working to standardize how they count ADS-B traffic. The number above is a total of all ADS-B operators. However, it's been noted by AFS that the number includes a couple thousand that are double counted due to registration changes. In addition, the number of non-compliant operations may be around 4,000. Most of these non-compliant operators are filtered today via automation that reads the accuracy of their reports and rejects the ones that do not meet standards.
- ADS-B IOCs have been completed at all EnRoute (ERAM and MEARTS) facilities.
- 75 of 155 Terminal sites have reached their ADS-B IOC and 72 are operating on Fusion. The remaining Terminal sites are ARTS 2E sites awaiting an upgrade to the ELITE (STARS) build. The Terminal ADS-B/Fusion transition proceeds in this order: Kickoff meeting, ADS-B Flight Inspection, ADS-B IOC, Fusion Operational Suitability Demonstration (OSD) and Fusion Operations. The most recent and upcoming Terminal events:
  - Gulfport (GPT) ADS-B/Fusion kickoff meeting June 1
  - Greensboro (GSO) OSD June 1
  - Atlantic City (ACY) ADS-B/Fusion kickoff meeting June8
  - Greensboro (GSO) ADS-B IOC on June 11
  - Fairbanks (FAI) ADS-B/Fusion kickoff meeting June 21
- As noted below, an issue with ADS-B avionics occurred at SCT on June 11. Fortunately, ADS-B avionics events are rare due to the filtering mechanisms already in place. However, no one should conclude that ADS-B is perfect any more than radar or any other automation system. Problems do occur when standards for installation or configuration within aircraft or ground systems are not

met. In those cases, the aircraft may report higher accuracy than actual and be accepted by automation. ADS-B is a cooperative surveillance source relying on the position information determined onboard the aircraft. Other issues have been flagged by ATC before, and Flight Standards does address them with the user. However, this is a reactive approach and leaves ATC vulnerable to safety compromising situations before they are finally addressed by the Agency. NATCA is calling for a change in the approach. We need a proactive, timely response, and the SBS Program Office has a Compliance Monitor in place today to flag avionics issues. The problem today is that this mountain of data collected by the Compliance Monitor has to be culled through by a handful of Flight Standards ADS-B specialists at the headquarters level. Instead, NATCA proposes that the Compliance Monitor feed directly into the SBS network via automated means to reject non-compliant aircraft from ADS-B services. This would not prevent avionics issues from occurring, but it would prevent repeat offenders from impacting our operations. In addition, ADS-B enhanced validation parameters need to be closely monitored by the SBS network and/or automation systems to identify invalid reports faster and thus dampen the operational effects.

Advanced IM/FIM-S

- Received JRC approval to continue development of Advanced IM applications.

ASDE-X Tech Refresh:

- Tech refresh continues with a smooth deployment.
- Due to an aircraft that landed on a taxiway at SEA, there is a new program in development that will focus on an addition to safety logic predicting to taxiways. As this new program develops, more details will follow.

ASSC:

- PDX Outreach briefings took place on June 14th and 15th. The meetings were very successful and the facility is looking forward to receiving the system.
- The team is finishing up final preparations for OT&E (Operational Testing & Evaluation) that starts the week of July 11th at SFO, which is the Key site for the system.
- Field Fam will commence at SFO in early August.

CLT WAM:

- A WAM system failure occurred this week due to a Radio Station outage within the CLT airspace. By design in CLT eight of the eleven WAM Radios are considered “critical”, and a failure of a critical Radio means the loss of WAM services. Fortunately, STARS modifications have improved the tracker to the extent that the facility was able to remain on Fusion. Future WAM site designs need to

consider the effect on system availability when designed with critical Radios.

FMA in Fusion:

- A first set of scenario dry runs was completed June 7-8 to support an upcoming Ops Eval in July. Another dry run is planned the week before the event as well.
- Beyond the Ops Eval, the remainder of the safety analysis lies with the Separation Standards group as they compare captured flight test data between Fusion and Single Sensor reports.

GIM-S:

- ZSE has temporarily suspended GIM-S operations until some Enhancement and Adaptation requests can be addressed by the Program Office.
- ZKC Kickoff meeting now finalized and scheduled for July 13th.
- ZDV hopeful to turn on a second arrival feed on or around the week of July 18th.

IM/TSAS

- The second IM/TSAS Integration demo postponed until the end of July to refine the scenarios based on feedback from the first demo.

MEARTS Fusion:

- Coordination has begun with the 3NM Fusion keysite, HCF, on the resources and time lines to reach an IOC. The SRMD is making progress with a targeted approval the end of September. Targeted dates for an IOC at HCF will depend on the facility's ability to support the numerous prerequisites, including training.

Space Based ADS-B:

- An Agency JRC decision on June 22 marked a change in direction for Space Based ADS-B (SBA). The most recent SRMD highlighted the fact that introducing SBA in the limited manner proposed under the Ingest & Process phase actually introduces numerous operational concerns. Alleviating the risks identified would have resulted in expensive, one-time modifications to ATOP. The Agency appears to have regrouped and now intends to discard the Ingest & Process effort in favor of the longer term Reduced Oceanic Separation (ROS) effort.
- ROS safety work continues and the most recent ROS SRMP identified numerous potential risks that have yet to be ranked. The biggest concerns point to the nature of procedural operations and limitations on communication in an oceanic environment. Whether SBA or any other technology will actually lead to a reduction in separation standards will largely depend on the answer to this question.

Terminal Fusion:

- NATCA SBS and NATCA TAMR team members evaluated a change in pixel setting for Tower Display Workstations (TDW) at the Tech Center. The proposed change reduces the pixel size and appears

to resolve an issue with the TDW Fused position symbol when ranged out to 60NM. AJV-7 is trying to determine whether an SRMD is needed before the change can be made. NATCA believes the change is an adaptation parameter within STARS and does not modify the STARS SRMD requirements.

- The Surveillance Automation Alternatives Team (SAAT) continues to meet to discuss long term solutions for the surveillance problems that SCT is facing in the Los Angeles basin, as well as other key areas for SCT. The immediate concern is how to enhance the coverage on the LAX finals and protect against the impact of the construction of the new NFL Stadium in Inglewood. Current ideas being considered are raising the Long Beach Radar to a height that will give it a better line of sight to the LA finals and the possibility of introducing WAM to the LA Basin to reinforce the surveillance in that area.
- SCT experienced a significant ADS-B avionics issue on June 11 affecting tracking for one United B787 aircraft. It is clear that the issue lies within the B787 aircraft's avionics. This was a known issue in older avionics sets that are not presented to controllers (ADS-B Version 1). When the issue occurs, the onboard ADS-B avionics loses accurate position data from the onboard position source. The last known position and trajectory continue to be reported until position information is restored. For controllers, this appeared as if the aircraft had missed a turn and continued on their last heading. All indications were that the issue had been resolved with their upgrade to US ADS-B Rule compliant versions (ADS-B Version 2), but obviously this aircraft needs more investigation. Of all B787 aircraft in operation, the issue has only been seen on this United B787 and one AeroMexico B787. NATCA continues to press the Agency to issue an emergency Airworthiness Directive for the aircraft in question, but to date we have seen no clear indication that the aircraft's issues have been resolved. The lack of response to this issue represents a clear danger to operations.

Vehicle ADS-B:

- 845 vehicles equipped at 16 Airports.

An outreach briefing took place at PDX on June 14th. The facility and Airport are very interested in having the vehicles equip.