NATCA Safety & Tech Update
Week of May 1, 2017

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

Denver Metroplex Update – 04/27/17
The Denver Metroplex Team has conducted its validation HITL at MITRE this month. This has been a vital test to see what procedural, LOA, and SOP modifications along with traffic management adaptations need to be made for a successful implementation.
The team has also conducted eight of the twelve scheduled public Pre-Environmental Assessment workshops this month. They discussed the proposed procedures with the public and solicited feedback on how to mitigate impacts for the communities in the Denver area.
Mark Ostronic Denver Metroplex Article 114 NATCA Lead

Florida Metroplex April 2017 Report

Florida Metroplex team had the following activates during the past month:
Participated in meeting with ESC
Participated in South California Metroplex implementation

Caribbean Group activates:
Attended Caribbean study meetings at ZMA
Participated in Caribbean Study Teleconference with ESC
Participated in Caribbean Study Teleconference with ZSU

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

Cleveland/Detroit Metroplex Design & Implementation
We have been preparing an implementation plan for the new routing structure around the two core airports. Currently we are working on letters of agreement with all the surrounding facility of Detroit, Cleveland and Cleveland Center. We have meet with ZAU to work to a draft agreement, started talks with ZID, ZMP and Toronto Center. There has been an agreement to move a small piece of airspace from LAN approach to FNT approach for route protection. A portion of FNT airspace to D21 for route protection. Agreements to move D21 ceiling to 170 and CLE ceiling to 140 from ZOB. Airspace is being adjusted between CAK and CLE with their draft LOA. MFD is reviewing an airspace transfer with CLE. ERI, YNG and TOL still need to be scheduled.

Worked with the NAV-Canada flight production team on production time lines, which differ from our OKC timelines. This is important since a big portion of our work is under US Air Traffic control it is in the sovereign country of Canada and the rules differ slightly. We are also working with them on a couple of routes into Canadian airports in D21 airspace with their own NAVAID shutdown schedule.
Selfridge ANGB (MTC) assumed airspace from ZOB and adjusted D21 boundaries on April 27th. MTC will be working airspace 100 and below to the south of its current boundary. This was a mostly limited radar operation for the Center.
Continued to work the following issues for the facility groups: Spectrum for CLE, 3 – mile for ZOB, airway removal, Delta flight SIMs data, D21 control room configuration. We are working on a wavier for PRM approach plates to add information and remove some chart notes on others. We also continue to find out the progress of the offset ILS to 22R/4L on the acceptable risk safety action.
Report submitted by Don Ossinger CLE/DTW Article 48 D & I liaison

SoCal Metroplex
The SoCal Metroplex Team successfully implemented Phase III on April 27, 2017. The 40 procedures implemented consisted of 13 SIDS, 17 STARS and 10 Approaches.
I would like to thank the SoCal Team members and all the support teams including the support staff at the facilities who have put in countless hours of work that have made this project a success.
There were several automation issues after the implementation. There was an issue with entry and or exit fixes between ZLA and SCT on several STARS. The ZLA FAST team implemented temporary changes to mitigate the problem. The FAST team also created an emergency ERAM modification and installed it April 28th, which permanently corrected the issue.
There were issues with several carriers not familiar with climb via phraseology and compliance requirements not being understood by flight crews. Initially there were some flights that did not have the new procedures loaded into the FMS. The FMS issue decreased as the day progressed.
VNY tower advised that FATKO waypoint was published 1.7 miles off the end of RWY 16 and should be 2.2 miles to clear the BUR RWY 8 ILS and VNY traffic pattern. VNY Tower provided mitigation by issuing RWY heading until clear of the ILS and pattern traffic, then issuing a heading to the appropriate SID. A telcon is scheduled for next week to discuss possible amendments for a long-term solution during post-implementation.
The RSA and Runway closures at LAX are ongoing through the end of May.
A post-implementation design team meeting was held April 5th and 6th with LGB Tower to address issues with the TOPMM SID. The amendments to the SID have been submitted to AFS-420 and 460 for waiver approval and are expected to be published in the October publication cycle. There are an

additional 16 procedures that have been sent to AFS-420 and 460 for post implementation amendments in the October cycle.
Rob and I presented the Directors at the Western Service Center with a pre-implementation briefing on April 17th. The briefing also provided them with an update on the eight principles suing the FAA under the SoCal Project. Possible mitigations have been discussed with the attorneys of 3 of the principles, and a 180-day extension has been requested by one of the litigants.
Submitted by Jose Gonzalez Article 48 Rep, SoCal Metroplex

CSA PBN 2017-04-29
The Austin-Bergstrom Airport Advisory Council was briefed on the August 2017 post-implementation amendments by Kelvin Solco, Southwest Regional Administrator and Bob Morris, Austin ATCT/TRACON ATM. The Austin Community Engagement website went live on the FAA website and many of the materials were used during the Austin briefings. Recently, AIS kicked back the amendments during their QC review. The project was built and submitted with TARGETS 5.1.1, as that was the most current version at the time of our November 2016 submission deadlines. Several criteria changes were implemented in January 2017 with the TARGETs 5.2 build. We are working with Bennie Hutto, National Criteria Rep, the PBN Program Office, and the Central Operation Support Group to draft the appropriate Waivers and Letters of Approval. This identifies even more challenges to publication because the extended production timelines. It is impossible to submit a project under current criteria and feel confident that the rules won't be changed during the publication process.
More sites are starting the decom process under VORMON. 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.
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. Great Lakes and Southwest Regional Administrators, their Staff, and Communications have given us tremendous support for every level of this growing activity.
We traveled to Corpus Christi (KCRP) to develop notional designs and introduce ourselves to the local Airport Authority. The controllers and managers at KCRP are incredible to work with and further work is beginning to get project approval and continue the early stages of local engagement.

The San Antonio project is picking up energy as we have started development of Community Engagement materials and met with our Southwest Regional Administrator and the San Antonio Airport Director and staff. Engagement activities will be in full swing in the next 4-6 weeks.
We continue to spend most our time developing the appropriate strategies and materials for Community Engagement in KAUS, KSAT, KCMH, and KCRP. 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.
Submitted by CSA PBN NATCA Art. 48, Brent Luna

PBN/Metroplex Design and Implementation Lead Monthly Report – 4/29/17
Metroplex: Because of budget and funding reductions and concerns, there have been numerous budget drills conducted by the Metroplex program over the last 60 days. Because of the agency's self-imposed requirements for community involvement, the costs associated with this effort on a project the size of Florida Metroplex has caused the project to be unsustainable. Several options for rescoping Florida were presented to Lynn Ray (VP, Mission Support) on March 24. We are currently looking at ways to help the project fit into current and future funding projections so we can deliver benefits to the facilities in a sustainable way moving forward. SoCal Metroplex executed its final implementation (Phase 3) on April 27. Post-implementation of SoCal Metroplex amendments is scheduled for October 2017. Denver Metroplex conducted HITLs at Mitre during the week of April 24. Detroit/Cleveland Metroplex is still working towards a May 2018 implementation date.
Funding issues has also caused us to look at other PBN projects as well, not just Metroplex. ACRP has undergone some significant changes as we look at ways to integrate some of the PBN projects. ACRP has never had a dedicated funding stream associated with the project which has caused the PBN office to pursue a re-scoping effort for the work that's already been done on the Atlantic Coast Q Routes and look at integration with other projects to streamline the funding. The timelines associated with former ACRP Q Routes is TBD. Also, PBN work associated with the VOR MON program may also be delayed because there is no BFOT for PBN related procedures in the VOR MON budget.
The PBN office is currently working with Flight Standards (AFS), Aeronautical Information Services (AIS), Service Center Operational Support Groups (OSGs), Flight Inspection, and PASS on a workgroup to look at ways to streamline the Instrument Flight Procedures (IFP) development processes to improve the way we validate incoming IFP requests. This workgroup will also look at ways to better prioritize valid requests that aligns better with

safety needs and the PBN NAS Nav strategy. This workgroup kicked off on March 28 with a weeklong meeting in Seattle and will have a second weeklong meeting starting May 2. The timeline for completion of this work is TBD. Also, the document defining Industry roles and responsibilities on PBN workgroups and projects is currently in draft status and is awaiting final approval. The only question at this point is what the FAA's role will be in resolving disagreements as they relate to PBN projects and how to mitigate these disagreements.

Submitted by PBN/Metroplex Design and Implementation Lead Art. 114 Ed Hulsey

NATCA National Airspace Rep

Community involvement and resources continue to be the main limiting factors on all PBN and Airspace projects. The communities are seeking more input and the agency is seeking more money to keep up. These two factors are slowing some projects and will likely cancel others; we continue to work with the agency to find solutions to move the NAS forward.

RTCA is pursuing changes to the "NE Corridor" and we are trying to figure out exactly what changes they are seeking. The agency is creating a workgroup and we are starting to identify the various reps that will be needed to participate on the workgroup. This is in the very beginning stages, more details to come when we have them.

We are scheduled to start full design work in Las Vegas under the Metroplex process in September of this year. Recent Metroplex implementations have gone well in Southern California.

Submitted by Jim Davis (PCT) NATCA National Airspace Rep

DATACOMM: Chad Geyer (ZLA) is the Article 114 Representative for DataComm. Below is his update.

Last week Controller Pilot Data Link Communication (CPDLC) sites sent over 4060 clearances a day. There are many different entities and systems that must work together to ensure that a CPDLC clearance is delivered. The process begins when the Airline Operations Center (AOC) files a flight plan. This is the same flight plan information that the pilot loads into their Flight Management System (FMS) before they receive their clearance from the controller. This flight plan is added into the local ERAM flight Data approximately two hours prior to the P-Time. Just prior to the strip printing in a tower, ERAM will check the routing and verify that it meets the current adaptation for routing. If it does not, when the strip prints it will include an Adapted Departure Routing (ADR) or Adapted Departure Arrival Routing (ADAR). This is the between the plusses routing that you see on the strip. When the strip prints in the tower, ERAM send a message over the TDLS ERAM Direct Connect (TEDC) interface to the Tower Data Link Services

(TDLS) system. This information not only has the flight plan information, it also includes whether the aircraft is requesting a Pre-Departure Clearance (PDC), CPDLC or neither.
At the same time the controller is receiving the flight data, the pilot is logging on to the DataComm Network Service (DCNS). ERAM has two facilities located at ZLC and ZTL that are known as the National Application Processor (NAP) Realm. The NAP Realm maintains log on information for all the aircraft across the nation and one of these sites are the active site with the other being in back up. When the pilot is getting ready for departure, they will log onto the network. The network includes everything outside of the FAA demarcation area such as the Antennas on the airport and the network processing sites for Rockwell Collins (formerly known as ARINC) and SITA. The pilot logs on by typing into the ATC Comm page of the FMS their Flight ID, tail number and departure airport. This information must match exactly with a flight plan in ERAM for the log on to be accepted. Once the logon is accepted, the clearance will be sent to the aircraft once the controller processes it.

TDLS will display the clearance to the controller when ERAM sends the flight data. The controller then populates the correct information into the clearance and selects send. When the controller pushes send, the system will send a separate message to the AOC asking for gate information for that flight. TDLS will also send a message to ERAM asking if it has logon information for that flight. If the pilot has logged on, the system will begin to make virtual connection with the aircraft, and if they have not logged on, the flight information will wait in TDLS until ERAM passes along the log on information.
When TDLS receives the logon information it sends a message through the DCNS to the aircraft requesting to connect. The avionics system under the covers will answer the request with a conformation and send it back to TDLS, which creates a session between that aircraft and TDLS. The two can now send information back and forth. Once the session is created, TDLS will send the clearance to the aircraft. TDLS determines what it will send to the flight deck based on what the airline filed and if any changes were made by ERAM. If no changes were made to the routing, the aircraft receives a Cleared as Filed (CAF). If changes were made to route either by TMU (a revision) or by and ADR/ADAR, TDLS will send the new route information up to the point of the change and then the aircraft gets a then as filed. When the clearance is uplinked to the aircraft, TDLS will also send the information in the clearance to the AOC to keep them up to date on changes. When the pilot receives the

clearance, they either load the new route information into the FMS with the touch of a button or just accept the clearance if it is a CAF. Once the pilot selects accept, the response is sent through the network and a Wilco is displayed on the Departure Clearance Application (DCL). TDLS will also send the pilot response to the AOC to keep everyone on the same page. Once the aircraft departs, ERAM sends a message to TDLS with the departure time of the aircraft. Five minutes after departure, TDLS sends a session termination message to the aircraft and the session is ended and the logon is closed.

NAS VOICE SWITCH (NVS): Jon Shedden (ZFW) represents the NATCA membership as their Article 114 Representative to the NVS project. His report is below.

NAS Voice System (NVS) Factory Acceptance Testing (FAT) Dry Run began the second week in April. Due to issues with travel funding, Mr. Shedden has not traveled to see the completed system. Mr. Shedden is scheduled to travel to the Harris facility in Melbourne, FL the first week of May. FAT is still scheduled to begin the week of July 18th.
Mr. Shedden, Chris Bakke (SLC), and Chris Lloyd (ZDC) participated in an NVS latency demonstration at the WJHTC the week of April 18th. They participated in scenarios designed to hear and evaluate the latency for A/G and G/G calls.

Next Generation Air-Ground Communication (NEXCOM) continues deployment of new CM300/350 V2 radios to terminal facilities across the country. Deployment is going well.

NAS Voice Recorder Program (NVRP) is the replacement for existing NAS voice recorders (DALR, DALR2, DVRS, DVR2). The Program Office presented to the JRC and received approval to proceed to Final Investment Analysis, leading up to the Final Investment Decision. Key site for NVRP will be Seattle Center in the 2018 time frame.

Grand Rapids Tower/TRACON (GRR) is reporting multiple issues with their aging voice switch. There's one outstanding issue where a RADAR site is causing interference in the Tower Cab. That issue continues to be worked.

Potomac TRACON (PCT) is reporting a large number of tone events. This has also caused NATCA and the FAA to take a closer look at the headsets to determine if they provide adequate protection against these events. Meetings continue to occur regarding the FAA's memo for the handling of tone incidences.

RUNWAY SAFETY: Bridget Gee (DFW) is NATCA's Runway Safety Action Team (RSAT) Representative. She also serves as the Article 114 Representative to the Runway Status Lights (RWSL) Program. Below is her report to the membership.

A **Runway Status Lights (RWSL**):

ORD: Being conducted in three phases: Phase 1, Runway 10L/28R, was turned online April 27, 2016. Phase 2 and 3 are scheduled to come online 2017.

Phase 1 (10L/28R): ORD achieved 4/10/17.

Phase 2 (10C Enhancement) – 10C target operational date Nov 2017. Shelter installation scheduled to begin June 2017 with an installation complete date of 8/31/2017.

Phase 3 (9R Enhancement) – 9R construction estimated to be completed Spring 2018 and IOC Fall 2018.

DTW: ORD declared 4/20/16. A site visit is warranted for shadow operations on the 21L REL's. This will occur prior to IOC.

Phase 2 (21L): Cable installation (2 Circuits) begins June 2017.

BWI: IOC took place on 3/8/17 with the RELs (Runway Edge Lights) only. The Build 3.1 is scheduled to be installed 5/9/17. I will return for another shadow ops for the THLs (takeoff hold lights 5/8/17.
SFO: IOC (Initial Operating Capability) was declared on 11/30/16. ORD planned for May/June 2017.

BOS: Pre-construction meeting to be held on 4/12/17. Site prep begins on 5/10/17.

DFW: Construction in process.

San Diego: Still in the planning phase.

Runway Safety:

Flyover/Wrong Surface Landing/Departures Top 5 – Runway Safety has two of the Top 5 Safety topics. A great deal of work has been taking place in order to prepare for Recurrent trainings on both topics. Flyovers will be an eLMs course for tower and approach controllers. Wrong Surface Landings/Departures will be an ILT course both of which are scheduled for the July recurrent training. A SSI SRM panel will take place May 22-24, which will address all runway incursions between all LOBs.

Closed Runway Occupancy Prevention Device (CROPD): Live Testing at JFK was completed last year. The FY17 focus site will be RNO. The week of June 5th, the plan is to start setting up equipment, running the initial testing, and doing the initial traning. The live use will begin July 10th.

Airport Construction Advisory Council (ACAC): The ACAC continues to support construction activities throughout the NAS and Internationally. We brief weekly on current projects in the NAS.

Automation of Construction Notice Diagrams: Multiple meetings and edits have been conducted for the detailed requirements in which myself, the ACAC, and Runway Safety office were involved in. I am currently waiting on the draft of final requirements to be completed in order to review. This project is ongoing.

Root Cause Analysis Team (RCAT): Bridget Gee is the RCAT Industry Co-Chair on the RCAT. Our last meeting was scheduled for February 23rd. At that time, we analyzed the current A and B runway incursions in the NAS since the start of fiscal 2017. We also began using data from the SRAP (Surface Risk Analysis Process) to allow for a more in depth look into Category C events. Next meeting is yet to be scheduled.

Airport Construction CAR – The RTCA Airport Construction Task Group's final report is with AJV. AJV is actually in control of the way forward currently as they are reviewing the RTCA's TOC Airport Construction Task Group's recommendations. I am currently awaiting review and commit by AJV. Once completed, we will be able to finalize our recommendations.

Runway Incursion Prevention Shortfall Analysis (RIPSA)- Research was conducted at 15 airports without any surface surveillance system and we are waiting on a final report of that research. Currently, a site selection process is underway. Final selection is yet to be completed.

ICAO – ADOP (Aerodrome Design and Operations Panel) – My final report was submitted to IFATCA and NATCA on 12/12. Work is ongoing with the ADOP.

ICAO - AOWG (Aerodrome Operations Working Group) - The AOWG is responsible for the development of SARP's and the PANS procedures pertaining to emergency response at and in the vicinity of aerodromes. Mr. Jean-Louis Pirat, Chairman of ADOP, specifically asked for my assistance on this working group due to the need of air traffic experience. Work is ongoing.

ICAO - Runway Safety Action Plan Working Group – This group is promoting the implementation of strategies to reduce the number and severity of runway safety-related accidents and incidents on an on-going basis. I am on 3 subgroups within this working group in which the majority of our efforts right now are in data analysis.

SURVEILLANCE BROADCAST SERVICES (SBS) OFFICE: Eric Labardini (ZHU) is the Article 114 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 114 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

Travel has been severely restricted in April due to internal Agency funding concerns. In addition, the Agency has assumed that funding after a CR extension in May will also be severely restricted. The Agency has agreed to prioritize operational sensitive activities to prevent any impact on facilities. So, provided funds are actually available the assumption is that Terminal rollout activities, ASSC, and MEARTS fusion activities will continue. Other less mature efforts are likely to be halted until funding issues can be resolved.

ADS-B:

- As of March 31, 2017, the number of Rule Compliant ADS-B Out in the US reached 27,431. ADS-B In equipped aircraft reached 24,548.
- Current equipage levels are falling short of the projected numbers needed to reach the Jan 1, 2020 deadline to equip with ADS-B. Avionics Installation capacity NAS wide could also be exceeded the longer users wait to equip. So far, the Agency has been clear that the deadline is firm. Time will tell, as the deadline looms closer.
- Most, if not all, Air Carriers have provided the Agency with a plan to meet the deadline.

- The military, as previously released in the press, expects to be unable to meet this deadline for several versions of their fighter and older aircraft. They are working with the Agency on a compromise that requires DOD radar availability at key sites to be identified.
- GA equipage is a harder question and being carried as a High risk by the SBS Program Office. Increased avionics availability and competition among manufacturers continues to bring the overall cost for GA users down. In addition, the Agency has initiated another rebate program and it is showing some interest, but not as high as expected.
- The SBS PO very rough estimate of avionics installation capacity nationwide is 50,000 aircraft per year. The rough estimate of all NAS aircraft that need to equip is 160,000. Users that wait too close to 2020 may find that the capacity for installation falls short of demand. Facilities may see these GA ADS-B operators flying more check flights as they attempt to validate their installations and claim the rebate.
- An issue not screened by automation systems but an important assumption for future ADS-B dependent applications is the broadcast call sign of the user. ADS-B sends this information to automation systems for comparison to the filed call sign. When a mismatch occurs a Call Sign Mismatch (CSMM) alert can be generated. The number of CSMM conditions present across NAS wide has been such that it is unreasonable to recommend enabling these alerts. ERAM and MEARTS have already done so. STARS alerts are only present when the ADS-B CHI is enabled (not a requirement), and the SBS Article 114 work group has agreed to disable the alerts completely as soon as practical. The Agency continues to work on reducing the numbers.
- ADS-B IOCs have been completed at all EnRoute (ERAM and MEARTS) facilities.
    - All but one ERAM site has promoted ADS-B to the top of their sort cells. ZMA intends to promote ADS-B on June 22, 2017.
- 99 of 155 Terminal sites have reached their ADS-B IOC and 95 are operating on Fusion. The majority of 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:
    - Fort Wayne (FWA) OSD 4/4/17
    - Fort Wayne (FWA) Fusion Operations 4/5/17
    - Huntsville (HSV) Fusion Operations 4/5/17
    - Eugene, OR (EUG) ADS-B IOC 4/5/17
    - Portland, ME (PWM) OSD 4/10/17
    - Fort Wayne (FWA) Fusion Operations 4/12/17
    - Wilkes Barre (AVP) OSD 4/13/17
    - Bismarck, ND (BIS) ADS-B IOC 4/18/17
    - Bismarck (BIS) OSD 4/18/17
    - Charleston, WV (CRW) OSD 4/18/17
    - Portland, ME (PWM) Fusion Operations 4/20/17

- Las Vegas (L30) Fusion Operations 4/25/17
- Wilkes-Barre (AVP) Fusion Operations 4/26/17
- Charleston, WV (CRW) ADS-B IOC 4/27/17
- West Palm Beach (PBI) ADS-B Flight Inspection 5/2/17
- Columbia (CAE) ADS-B Flight Inspection 5/10/17
- Cedar Rapids (CID) ADS-B Flight Inspection 5/16/17
- Montgomery (MGM) ADS-B Fusion Kickoff 5/16/17
- Eugene (EUG) OSD 5/18/17
- Lexington (LEX) ADS-B Fusion Kickoff 5/23/17

- NATCA SBS continues to work with the Agency toward a more proactive approach to ADS-B avionics issues. Though these are infrequent occurrences, the Agency's approach to date has been hampered by a lack of resources, bureaucracy, and legal constraints associated with investigating avionics issues flagged by the SBS Compliance Monitor. These issues occur when standards for installation or configuration within aircraft or ground systems are not met. ADS-B is a cooperative surveillance source relying on the position information determined onboard the aircraft. In order to reduce or prevent the number of safety compromising events in the NAS we need a proactive, timely response. NATCA SBS continues to prompt the Agency to reopen analysis of the risk associated with erroneous position in the ADS-B SRMD. In addition, an ATSAP has been filed covering the known issues to date. The Agency has indicated potential mitigations are being worked. However, an SRM Panel is the appropriate place to determine whether the mitigations are acceptable.

Advanced Surveillance - Enhanced Procedural Separation (ASEPS)

- NATCA National has selected JT Lenhart (ZOA) as the National ATOP Representative. ASEPS representation is shifting primarily to JT, and Eric is supporting on technical ADS-B aspects.
- ASEPS continues to explore a reduced oceanic separation standard. This may be supported by Space Based ADS-B (SBA) or with changes to ADS-C, currently used in ATOP. In any environment, including oceanic, separation standards are closely tied to the combined performance of Communication, Navigation, and Surveillance (CNS). While SBA represents are dramatic change in surveillance, little is changing in the ability to communicate with aircraft.

ASDE-X Tech Refresh:

- Testing has completed on next wave of system enhancements
- CLT is next to receive the updated software and system enhancements.

ASSC:

- ISD (In Service Decision) achieved on April 26th.
- ORD (Operational Readiness Decision) for SFO and CLE scheduled for the next 2 month.
- CVG will remain on track regardless of the Amazon construction on the airport. The current plan is to complete IOC on time and add additional RU's (Remote Units) after the amazon construction completes. This decision

allows the program to remain on track and provide controllers with a surface tool much more advanced than what they currently have.

Caribbean ADS-B

- Recent discussions on airspace redesign have pointed to the need for additional ADS-B surveillance in the ZMA to ZSU corridor of the Caribbean. Options for land based ADS-B Radio Stations and RCAG sites continue to be explored. Greg Harris (NATCA ZMA), Jeff Woods (NATCA PMO) and Eric Labardini (NATCA SBS) continue to support the discussions.

FMA in Fusion:

- Operational evaluation and SRMP have concluded. An issue has been raised that requires some additional separation standards analysis, IBI mode. This will likely delay the completion of the SRMD and an operational start of FMA use of Fusion until the end of July 2017.

GOMEX

- ZHU's Gulf of Mexico airspace continues to challenge the SBS Program Office. As oil or gas production shifts or shuts down offshore platforms, the associated ADS-B, AWOS or RCAG has to relocate at a significant cost.
- SBS continues to ask for updates from ZHU on shifts in aircraft operations and demand on platforms. The intent is to match communication and surveillance needs with traffic flows.

MEARTS Fusion:

- HCF started Fusion operations on February 22, 2017, a significant achievement after years of effort. Unfortunately, a number of latent radar issues have resulted in a pause in Fusion operations just days after the start.
- Second Level Engineering and LEIDOS have analyzed most of the trouble tickets submitted. Recommended adaptation changes have been delivered to HCF, and they are working to evaluate the effectiveness. Staffing shortages within the facility are delaying that effort.
- Efforts to continue deploying 3NM Fusion in MEARTS have been postponed until key site issues are fully resolved.
- HCF intends to restart Fusion by the end of July 2017. However, support is needed to do so and travel funding remains somewhat questionable.

Surveillance Portfolio Analysis Work Group

- Eric Labardini and James Keith (NATCA AJV-7) have been working closely with the Agency's multifaceted analysis of post 2020 radar infrastructure needs. The ADS-B business case was built on an assumption that today's robust radar infrastructure could be reduced once ADS-B becomes the primary surveillance source.
- The Agency seems to have built their business case on an assumption that 100+ secondary radar sources could be removed throughout the NAS. This causes concern in airspace that does not require ADS-B (many Class D or other Approach Controls). NATCA has been pointing toward another option, removing overlapping radar sources completely rather than harming operational capabilities nationwide. There seems to be an awakening to this idea and analysis of the benefits is underway.

Terminal Fusion:

- The Fusion Focus Group continues to track and resolve facility reported issues with Fusion. These are largely issues with the underlying surveillance infrastructure, and experts from all fields are available to assist. Please report any issues to your OSF and our NATCA SBS group for assistance. It is critical that actual data is recorded for evaluation and resolution.
- NATCA remains very focused on the Common Terminal Digitizer (CTD) effort necessary to incorporate numerous ASR-8 sites into STARS Elite as well as Fusion.
- SCT issues continue to be a large focus. NATCA SBS is heavily involved in the Surveillance Automation Analysis Team (SAAT), which is examining long-term alternatives to help improve overall surveillance in the SCT airspace. Their efforts are aimed at mitigating tracking issues in the LA Basin, including the effect of the new Stadium near LAX.
    - NATCA and the Agency have agreed to move forward with raising the LGB radar site. This was thought to be one of the easier solutions to put in place, but the Agency cannot seem to get out of their own way to do so.
    - Meanwhile the SAAT team has been working on a costly Wide Area Multilateration (WAM) design. Agency and Stadium proponents have completed negotiations over funding and announced that a shared cost agreement allowing WAM deployment to move forward.
    - WAM in the LA Basin area will be in 3 phases: update 9 existing ADS-B Radios to support WAM via Virtual Radar (CLT configuration), add 8 new Radios to supplement the WAM coverage (still using VR), then update STARS to allow for WAM in Native format (1 second update rate).
    - The SCT WAM SRMP was Completed March 7-8. No additional hazards from the national safety case were identified.
    - The first phase is moving along rapidly. The first phase Radio updates are complete. Coordination with ZLA and SCT on contractor test flights in March/April have been completed, and these "tuning" flights were completed in early April. The contractor believes regression-tuning flights will be necessary to address ATCRBS performance. A flight inspection to evaluate the service from an Air Traffic perspective could occur as early as July, and operational use by August 2017.
- SAAT has agreed to begin analyzing Potomac (PCT) Fusion issues for potential solutions. The facility has been struggling with a number of issues related to problem radar sites or a lack of coverage. Radar analysis is ongoing.
- A long-awaited estimate for adding identified radars to CLE has finally been delivered. SBS management is analyzing the cost and trying to identify funding sources.

Vehicle ADS-B

- 1,114 vehicles equipped at 18 Airports
- FLL is the most recent to install. ORD added additional transponders

- The agency has restructured this program. The program will be run by an agency new hire with 1 contractor providing support. Further clarification is needed as to what the long term plans are for this program.