

**NATCA Safety & Tech Update**  
**Week of November 20, 2017**

**ADVANCED TECHNOLOGIES & OCEANIC PROCEDURES (ATOP):** John Lenhart (ZOA) is the Article 114 Representative for Advanced Technologies & Oceanic Procedures (ATOP). Mr. Lenhart's report is below.

Items worked:

- CAR 2016-025 (Oceanic WX Deviations)
- Oceanic Contingency
- ZAN/ZOA LOA.

The Agency has changed their stance on CAR 2016-025. They have proposed to work collaboratively on a procedure that will allow Oceanic Controllers to provide WX Deviations in a reduced separation environment. This is what NATCA has been working towards for just under two years. We all know not everything is as fast as we would like, but I have to spot light and give credit to the ATSAP program and the ERC. The filings of ATSAPs by controllers and the ERC issuing out a CAR put NATCA in an environment to make progress when the other side would rather move on. The works not over and there will be a lot of work to do, but progress is happening.

NATCA took part in a meeting in reference to Oceanic Contingency. NATCA and the Agency are working hard on Domestic contingencies and both sides recognize the need for an Oceanic plan if one of the Oceanic sites goes down. The work that has been done thus far has been sporadic and unorganized at best. NATCA will be at the table to develop the actual operational needs from hour zero to long-term outages and will be involved in developing a ConOps to get this project on track.

NATCA and the Agency met at ZAN to negotiate the ZAN/ZOA LOA and to discuss the Agencies unilateral decision to shut down ADS-C reduced separation in ZAN S68. The two sides included very knowledgeable and professional personnel. The LOA negotiations went well and the NATCA and Agency side collaboratively drafted a memorandum to HQ for an interpretation regarding ZAN S68. A very productive meeting.

**ATO OPERATIONAL CONTINGENCY GROUP (ATOC):** Jason Grider (ZFW) is the Article 114 Representative for NATCA. Also, included in Mr. Grider's duties is Article 114 representation for the Business Continuity Plan (BCP). Mr. Grider's report for this month is below.

During the month of October, the ATOC group has been focusing on the development of guidebooks on how to develop Operational Contingency Plans (OCP's) for each type of air traffic facility. Mr. Grider has been working directly with each member of the ATOC group in laying out the outlines for these guidebooks. The group plans to utilize these guidebooks to go out to each identified facility in the NAS that will need divestment OCP's and facilitate the development of their plans.

Mr. Grider has been working closely with NATCA members from ZOA, ZAN, and ZNY to continue the work that has already been started for oceanic contingency plans. The plan is to put together a workgroup that will consist of SME's from each facility, members of FAST, 2<sup>nd</sup> level engineering, and management to develop a CONOPS for what requirements are needed to develop plans that can be implemented at zero hour during an outage. Once the group defines all of the requirements they will continue the workgroup to develop the OCP's for each facility.

Mr. Grider and Susan Shoemaker reached out to NATCA training and safety for guidance on what requirements will need to be developed for controllers during contingency events. They have made a request with AJI to begin developing training requirements for controllers who may be working airspace that they are not certified on.

Mr. Grider, Dean Iacopelli, and Ryan Smith participated in an article 7 briefing from BCP on the movement of personnel during a contingency event. The agency was not able to get the right people on the phone to complete the briefing. NATCA has requested that the briefing be rescheduled ASAP.

The BCP has cancelled all of its test and certifications until after the beginning of the year due to the lack of funding. Mr. Grider has been in contact with his counterpart in the group and will be working closely with them to complete all of the requirements for the BCP so that it can be operationally ready in the next calendar year.

**HUMAN PERFORMANCE:** Jay Barrett (MIA) is the Article 114 Representative for Human Performance. His report is below.

### **Human Factors Activities**

F11 - We collect data at the facility 2 weeks ago. The facility has been using the standards for just over 2 months. Feedback was good in that as the OJTI and FLM have gained some comfort in using the standards they believe they are an improvement. Generally they like the reduced subjectivity as well as a clear understanding of what needs to be know and when in the progression of training.

N90 - We partnered with the NDIS workgroup to deliver informational briefings to the workforce at the facility. These briefings lasted about an hour and provided an overview of the entire NDIS project as well as integration of the training standards that will be implemented in early January.

VSRP - I attended the VSRP workshop in OKC this past week and briefed the group on the AIRTRACS taxonomies we have been using in AJI. The HP office has been training the regional RAP teams on these taxonomies and how to use them. AIRTRACS is an air traffic specific process that provides much more detailed analysis of incidents.

### **Health & Wellness**

Work is progressing on the ATC survival guide. We have batted around possibly changing the title. It should be completed in January as the NDIS group has asked if it might be ready to deliver to the employees that will be hired into N90.

### **Fatigue**

ZOA - The report should be finished this next week. The draft has been reviewed and some small modifications are being made.

I will be attending an international FRMS (fatigue risk management systems) conference next week. This yearly conference that reports out on current research and fatigue process around the aviation community.

**OSHA:** Mike Odryna (ZBW) is the Chairman of NATCA's OSHA Committee. He has provided an update for the membership.

### **3900.19C**

Following the INI briefing held in May on the new Draft revision to Order 3900.19. NATCA is coordinating with the Agency to develop collaborative groups to develop OSH Programs for all LOBs and Staff Offices.

POC: (Dominic Petrelli, Mike Odryna, Ryan Smith, Dean Iacopelli, Phil Barbarello, Grant Mulkey)

### **3900.XX Air Fall Protection Program**

NATCA received an INI briefing on the new Aircraft Certification Service (AIR) Fall Protection Program on August 24<sup>th</sup>. Subsequently we have negotiated an MOU governing the implementation and management of the program.

POC: (Mike Odryna, Scott Odle, Dominic Petrelli, Mike Collins)

### **3900.XX Air AAIS, 3900.XX Air BBP**

NATCA received an INI briefing on a proposed new order. FAA Order 3900.XX AIR AAIS, "Aircraft Certification Service Aircraft Accident Investigation Safety Program and FAA Order 3900.XX AIRBBP Aircraft Certification Service Bloodborne Pathogens Program. Subsequently we have negotiated an MOU governing the implementation and management of the program.

POC: (Mike Odryna, Scott Odle, Dominic Petrelli, Mike Collins)

### **New Orleans Lakefront Tower Mold Issues**

The remediation of the Mold and Build back has been completed. Some issues are still being resolved with hopes of completion in the near future.

POC: (Mike Odryna, Geoff Bacci, Lawrence Pharr, Deb Stewart)

### **OSH issue reporting**

If you have an OSH issue at your facility, use your normal reporting process. I.e. OCC, UCR etc. Also, contact your NATCA Regional OSHA rep. The regional OSH Rep's work as liaisons between the lines of business.

If you have a concern about something occurring at your facility, you can fill out the following form to request a member of the OSHA Committee contact you to discuss your concerns.

[OSHA Committee Information Request Form](#)

### **OSHA Committee Webinar:**

The OSHA Committee held another in a string of webinars in August and September. The newest webinar will be regarding the importance of attending Pre-Construction Meetings and how they relate to Contingency plans. The second webinar was a repeat of the IAQ PIR webinar.

The next webinar will be regarding facility cleanliness and Fire Life Safety.

POC: (Mike Odryna)

### **Committee Membership:**

We still have a vacancy Great Lakes Region.

POC: (Mike Odryna)

### **PHL ATCT Housekeeping Issues**

The Agency along with NATCA are continuing to work towards a strategy to ensure the cleaning requirements set forth in the janitorial contract and TechOps requirements for equipment cleaning are adhered to.

POC: (CJ Jacques)

### **New OSHA 6008 training**

The Agency sent out an email stating that the new OSHA6008 course is a direct replacement to the OSHA6000 requirement for OSHECCOM Members. The National OSHECCOM has now agreed to this training.

POC: (Mike Odryna, Dominic Petrelli, Larry Trottni)

### **Regional OSHECCOMs**

The NATCA Air Traffic Regional Reps and Region X reps attended their respective Regional OSHECCOM meetings throughout September, October and November in the Great Lakes, Southwest, Central, Northwest Mountain, New England and Eastern Regions. Minutes from the Regional OSHECCOM meetings can be found at:

[OSHECCOM KSN Site](#)

### **NATCA Rep. OSHA Training**

Mike Odryna met with the agency to update NATCA Rep training requirements and offerings. While the current training list is still valid, an updated list of training available for all NATCA OSH Reps will be available ASAP

POC: (Mike Odryna, Dominic Petrelli)

### **PCT Housekeeping Issues**

The Agency along with NATCA have started to develop a strategy to ensure the cleaning requirements set forth in the janitorial contract and TechOps requirements for equipment cleaning are adhered to.

POC: (CJ Jacques)

### **Public Access Defibrillator Program**

On May 1<sup>st</sup>, a new PAD Program subcontractor was contracted to replace Emergency University. Contractor, Website and Training info will be coming out shortly.

POC: (Mike Odryna)

**Current Facility issues being worked by the committee and others.**

FAY: Fumes	NEW: IAQ Mold Build back
PAQ: Asbestos	CMI: Roof Replacement
GRR: Odor, ASR Contamination	ARR: Overall Facility Condition
NWM Regional Office: Water Quality Issues	PHF: Mold/IAQ
HSV: IAQ, Fumes	NWM Regional Office Design
DSM SSC Office: Comprehensive Mold Evaluation	FSM: Water Intrusion, IAQ
GTF: Mold	SGF ATCT: HVAC Project
CRP: IAQ, Exterior Door Broken, SFAS Out of service	Nome: Asbestos in the floor tile Mastic, REHAB
DTW: IAQ Investigation	PTK: Mold Remediation
JNU: REHAB Issues	Tallahassee: Water Leaks
ABE: Overall House Keeping, Flies	PHL: Overall House Keeping, Rodents
DLG: Living Quarters REHAB	BRW: Ongoing REHAB, Mold, Open Walls, Broken Walkway
PIA: Water Mold	KTN: Facility REHAB
FMY: IAQ	Minneapolis TRACON: OSHA Inspection
AUS: Fire Alarm Issues	OMA: water intrusion, mold, window replacement
GSO: Water Intrusion	LEB: Water Quality
LGA: Siding	LAX: Mold & Water intrusion Issues
MDT: Water Leaks/ Slip Trips and Fall	PIT: Water Intrusion
DSM: Cab Roof Water Intrusion	OMA: Windows and Water intrusion
KET FSS: Facility REHAB	LIT: Mold Remediation
DWH: Failed Water Test	ADS: Failed Water Test
CRP: Failed Water Test	PUB: Breakroom build
Great Lakes Regional Office: Asbestos removal, Water testing	MDT: Flies

**PROFESSIONAL STANDARDS:** Andy Marosvari (BOI) is the Chairman for NATCA National Professional Standards. Garth Koleszar (ZLA) and Josh Cooper (SCT) are members of the National Professional Standards committee. Their report is below.

The Professional Standards program is in its 7<sup>th</sup> year and continues to have a positive impact on the professionalism of controllers nationwide. The program has 530 active members, with a total of over 850 trained to serve as committee members representing every facility in the National Airspace System. Committee members receive training on communication skills and conflict resolution during a 3-day course taught by NATCA. The second class of FY18 will be held at ZLC, from JAN 17 until JAN 19.

To date, the Professional Standards program has received 2,498 submissions with 90% of those being resolved. That's 2247 issues that NATCA was able to resolve the issue at the lowest level, peer to peer, without management involvement in the outcome. Approximately 70% of those cases are submitted by management, demonstrating the FAA's belief that the peer-to-peer method used by the program is working. The recidivism rate is very low, indicating that the one on one discussions between committee members and controllers has a long-lasting, positive effect on the safety of the system and the professionalism of our controllers.

We now have an active PS tab on the NATCA website. It covers information for FacReps, Members, and PS members, with contact information for all active Professional Standards Committee member and District chairpersons. We also have a link to email us directly. Please take a moment and check it out!

If you have any questions about the Professional Standards Program, please don't hesitate to contact any of the NATCA National Professional Standards committee members at [ps@natca.net](mailto:ps@natca.net).

**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.

#### **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) – Shelter work completed 9/1/17. Meetings held to discuss fiber installation took place on 9/11/17. 10C IOC (Initial Operating Capability) date estimated end of Dec 2017.

Phase 3 (9R Enhancement) – 9R construction estimated to be completed Spring 2018 and IOC Fall 2018. Drawings have been received. The work is out for a bid.

BOS: Shelter electrical work completed 10/6/17. Airfield conduit/cabling estimated to be completed early November. IOC estimated June 2018.

DFW: Shelter installation began 10/10/17. Shelter equipment delivered 10/18. Work is on going.

San Diego: Shelter installation estimated to be completed 12/17/17. IOC estimated Jan 2019.

### **Runway Safety:**

Taxiway Lander ASDE-X Enhancement – A National workgroup is under development to develop and solidify a plan for deployment of taxiway alerting at SEA. The workgroup is in a process of developing a testing plan, requirements, procedures, and training for the taxiway lander alerting system. 85 days of behind the scenes data was completed. The parameters for the alert are specific to an arrival aircraft being predicted to land on a taxiway within 3,000 feet or 20 seconds. During the data collection period, there were 7 total taxiway predictions. None of which would of alarmed due to them staying outside of the requirements. The next steps are continued work with AJV8 in order to develop procedures for a flight check aircraft with is estimated to take place end of December/beginning of January timeframe.

Once all elements are completed and if agreed upon the deployment of taxiway alerting at SEA would be the end result with potential to go to other airports down the road.

Surface Safety Group – The Root Cause Analysis Team (RCAT), which I am the co-lead of, will be moving into a new direction in order to improve surface safety risk management in the NAS. The group is designed to continuously develop, improve, and distribute educational and training materials, recommend necessarily policy, procedural changes based on trend data, research technology, and monitor the effectiveness of safety requirements using the runway safety metric and individual safety performance targets stemming from the SMS process. This is a massive change for the runway safety group, as it will allow for more data driven discussion making.

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.



Runway Incursion Prevention Shortfall Analysis (RIPSA)- Research was conducted at 15 airports without any surface surveillance system. A final site selection is yet to be completed.

Here is the updated RIPSA timeline, which includes detailed activities:

- Attend airfield lighting vendor conference in DFW - Oct 22-27, 2017
- Publish technology acquisition RFI - Dec 2017
- Evaluate RFI responses for candidate technologies – Jan/Feb 2018
- Re-engage candidate airports, conduct on-site assessments and preliminary site surveys – Feb/Mar 2018
- Initiate contract award(s) to technology vendor(s) – Mar 2018
- Complete contract award, hold kickoff meeting with vendor(s) – Apr/May 2018
- Commence MOU development with test site(s) – Q3FY18
- Finalize MOU with test site(s) - Q4FY18
- Conduct engineering and infrastructure site surveys with vendor(s) - Q4FY18
- Conduct SRMP for test site(s) - Q1FY19
- Commence test system(s) installation at test site(s) – Q2FY19
- Complete test system(s) installation at test site(s) – Q3/Q4FY19
- Commence testing and evaluation process – FY20

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 reviewed Runway Safety Programme achievements, objectives and priorities, and develop a Runway Safety Action Plan for the future.

The Action Plan will be presented at the 2017 Global Runway Safety Symposium in Lima in November 20-22 for endorsement. The purpose of the Action Plan is to strengthen runway safety initiatives at a global level. I will be on two panels at the Symposium in Lima, Peru. The first panel is on Root causes of runway accidents and incidents and the second panel is on Preventing Runway Excursions.

**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)**, **Tom Zarick (ZDV)**, National Interval Management Rep, and **Chris Aymond (MSY)**, National Terminal Interval Management Rep

**ADS-B:**

- As of October 1, 2017, the number of Rule Compliant ADS-B Out aircraft in the US reached 37,147. ADS-B In equipped aircraft reached 32,635.
- Total ADS-B equipage levels are falling short of the projected numbers needed to reach the Jan 1, 2020 deadline. So far, the Agency has been clear that the deadline is firm. The stage is set for a potential showdown, as the date looms closer.
- Most, if not all, Air Carriers have provided the Agency with a plan to meet the deadline. However, the means to achieve those plans in the short amount of time remaining is becoming a larger question. One example that stands out is Honeywell avionics which has yet to offer an ADS-B solution for B737 aircraft; Southwest Airlines and others are heavily dependent on Honeywell avionics. United Airlines, Rockwell, and the SBS Program Office have partnered to make significant progress in upgrading the United B737 Rockwell avionics fleet with 106 of 110 planned ADS-B installations complete. American, Delta, Alaska, and many other airlines are showing increased fleet ADS-B equipage.
- The military 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 sites to be identified. This could be leveraged to identify critical military radars necessary for Fusion in the NAS. Many DOD Air Traffic facilities do not even plan to track aircraft via ADS-B.
- 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 has brought the cost for GA users down significantly. The Agency did complete another rebate program on September 19, but interest was not as high as expected. Users have approximately five months to complete their installations afterward. Facilities may see GA ADS-B operators flying more check flights as they attempt to validate their installations and claim the rebate.

- 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. The actual number that needs to equip could be much lower depending on the number of users that remain outside of ADS-B Rule airspace (where a transponder is required). Users that wait too close to 2020 may find that the capacity for installation falls short of demand.
- ADS-B IOCs have been completed at all Enroute (ERAM and MEARTS) facilities. All ERAM sites have promoted ADS-B to the top of their sort cells.
- 108 of 155 Terminal sites have reached their ADS-B IOC, and 103 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:
  - Mobile (MOB) ADS-B Flight Inspection 10/18
  - Duluth (DLH) ADS-B Flight Inspection 10/18
  - Baton Rouge (BTR) Fusion Operational 10/19
  - Sioux City (SUX) ADS-B Flight Inspection 10/31
  - Madison (MSN) ADS-B/Fusion Kickoff 10/31
  - Toledo (TOL) ADS-B/Fusion Kickoff 11/2
  - Bangor (BGR) ADS-B IOC 11/6
  - Moline (MLI) ADS-B IOC 11/7
  - Moline (MOL) Fusion OSD 11/7
  - Moline (MLI) Fusion Operational 11/8
  - Waco (ACT) ADS-B/Fusion Kickoff 11/13
  - Abilene (ABI) ADS-B Flight Inspection 11/15
  - Mobile (MOB) ADS-B IOC 11/15
  - Mobile (MOB) Fusion OSD 11/15
  - Bangor (BGR) Fusion OSD 11/20
  - Longview (GGG) ADS-B Flight Inspection 11/29
  - Fayetteville (FAY) ADS-B Flight Inspection (WX reschedule) 11/28
  - Casper (CPR) ADS-B/Fusion Kickoff 11/29
  - Youngstown (YNG) ADS-B/Fusion Kickoff 11/30
  - Sioux City (SUX) ADS-B IOC 12/1
  - Moses Lake (MWH) ADS-B Flight Inspection 12/6
  - Bangor (BGR) Fusion Operational 12/5
  - Mobile (MOB) Fusion Operational 12/5

### **ADS-B Avionics Issues:**

- 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 aircraft reports include this information, and automation systems compare to the filed call sign. When a mismatch occurs a Call Sign Mismatch (CSMM) alert can be generated. The issue has been highlighted in Equip 2020 meetings since ADS-B dependent applications (CAVS, Advanced Interval Management, etc.) are dependent on this functionality. Monthly tracking continues to trend upward. ***The SBS Article 114 work group has recommended disabling CSMM alerts across all automation platforms.***
- NATCA SBS continues to work with the Agency toward a more proactive approach to ADS-B avionics issues that result in position error. Though these are infrequent occurrences, the Agency's ability to respond has been hampered by a lack of resources, bureaucracy, and legal constraints. 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. Multiple ATSAP reports have been filed on the known issues to date. Controllers and facilities are encouraged to report any identified events through ATSAP and any other mechanism.
- In order to reduce the number of safety compromising events in the NAS an effective, efficient response mechanism is needed. The Agency has deployed additional mitigations including enhanced validation (EV) and a No Services Aircraft List (NSAL).
- Governance of the NSAL has been a concern. Though all parties appear to be in agreement that issues identified by facilities are not debatable, there is no formal governance at the moment and issues are being dealt with on a case-by-case basis. NATCA is working with the Agency to streamline this process as much as possible. However, all indications are that there will always be lag time in adding aircraft to the NSAL. First, the issue has to be identified by a facility after a significant event has occurred. Second, the PO needs to be notified. Third, the PO needs to direct the provider to implement the NSAL change. This can mean days pass before resolution.
- The current version of enhanced validation (EV) has a limited effect (15nm around a Terminal Radar) on these issues. Additional EV techniques are being investigated to expand the range beyond 15nm and tighten the parameters used. Initial review of the operational implications is positive. Further, this is a real time benefit that limits the effect on operations. The biggest question is funding and timing to implement. With 2020 approaching rapidly, these changes are needed sooner than later to limit the random effects of avionics issues.

- SBS Article 114 work group discussions resulted in all B787 aircraft being placed on the NSAL. These aircraft have a latent avionics issue that causes false position information to be displayed to the controller. This has alarmed several facilities and caused both SCT and NCT to demote ADS-B in their sort cell priorities. Boeing has released a Service Bulletin to address the problem. United, American and a few foreign carriers have confirmed completing the Service Bulletin allowing them to be removed from the NSAL. All other B787 aircraft will remain on the NSAL until verification of the Service Bulletin is received.

**Advanced IM**

- After months of delay, American Airlines has decided to go ahead with providing funding for equipping their entire A321 fleet with ADSB-In in support of the AIRS project. It is widely believed that the success of this project will determine the future of upcoming ADSB-In applications.

**ASDE-X Tech Refresh:**

- Dan Hamilton is working with Bridget Gee (runway safety Rep) In the development of Taxiway alerts.
- Tech refresh training continues to move forward as we roll it out to facilities. BOS PVD and BDL were trained the week of Nov 6th.

**ASSC:**

- CVG Cadre training will be conducted the week of 27th.
- ASSC with ADS-B only SRMP will take place on Nov 14 & 15. This Panel is pertaining to deploying ASSC at up to 50 sites that do not currently have any type of Surface Surveillance.

**FMA in Fusion:**

- The SRMD allowing the combined use of FMA and Fusion reached final approval on November 1.
- Operational start of FMA use of Fusion is now pending a Notice allowing this operation, planned for November 2017.
- The change in procedure is not anticipated to require additional controller training as these facilities are already trained on both FMA and Fusion.

**GIM-S:**

- ZDV was briefed on some upcoming changes to GIM-S that are rolling out with TBFM release 4.8. In lieu of these changes, ZDV may hold off on any adaptation changes for the time being.

**MEARTS Fusion:**

- 3nm Fusion in MEARTS is a complex undertaking requiring multiple Tower, Approach, and Enroute sectors to come online with Fusion at the same time. The lessons learned in this undertaking will help the effort with future MEARTS and ERAM sites.
- ZAN has been on Fusion since August 2015. HCF has been on Fusion since August 1, 2017.
- Plans are being made for the continued deploying 3NM Fusion in MEARTS at ZSU and ZUA. Due to the significant impact of Hurricane Irma on Puerto Rico (ZSU), the focus for the time being will be on ZUA (Guam).

**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 predominant surveillance source.
- The Agency 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.
- An SRM Panel was held August 1-3 to analyze the risks associated with partial or complete removal of radar systems in a post 2020 environment. The conclusions of the Panel were that partial removal actually resulted in higher risks than complete removal. This assumes that complete removal would only occur where the effects were minimized by other overlapping radar sources nearby.

**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. The CTD schedule is the driver for TAMR Elite rollout and therefore the drive for the follow up ADS-B/Fusion rollout.
- 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. The result is a multi-faceted approach including WAM, raising LGB radar, introducing other nearby radar feeds, STARS software changes, and radar software changes. In addition, SAAT is focused on mitigating tracking issues in the LA Basin due to the construction of a new NFL stadium on final approach to LAX.
  - The LGB radar site is now back online and in use at SCT. The radar site was raised from 37 feet to 67 feet. Feedback from SCT has been positive.
  - Agreements are being worked with the military to ensure availability and performance of the North Island radar. Adding this additional surveillance source shows promise for tracking issues around SAN airport.

- The first phase of WAM achieved an IOC on August 10, and was soon promoted to the highest priority in sort cells. Analysis of formerly identified radar tracking issues showed much improvement with WAM implemented. Feedback from SCT personnel has been very positive. However, a false track event on October 19 caused the site to lose confidence and disable the service until investigation and mitigation was complete. Indications from the provider are that a resolution is forthcoming and will be made available as soon as possible.
- SAAT has been 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 confirming the benefit of adding Quantico (NYG) radar to PCT as well as reducing obstructions near Dulles. Funding for the additional NYG feed is being sought.
- SBS Article 114 agreed to a path forward to add multiple radars to CLE in support of Fusion. The radar sensors should be incorporated at CLE by June 2018.
- Recent N90 discussions on a transition to Fusion have centered on the continued staffing concerns. The facility is in a critical state and does not expect to be able to support Fusion transition activities until September 2018.

**Vehicle ADS-B:**

- 1279 vehicles equipped at 20 airports.
- Further inquiries continue to come in regarding equipping airports in the NAS.

A reorganization of performance compliance and monitoring is currently underway.

**WEATHER:** Matt Tucker (ZTL) is NATCA's Article 114 Representative for Weather. His update for the membership is below.

#### NEXTGEN Weather Processor (NWP) and Common Support Services-Weather (CSS-WX)

Both programs are progressing toward integration activities at the FAA Technical Center, Harris delivered their hardware and installed in July and Raytheon's hardware arrived at the Tech Center on Nov 17<sup>th</sup>. The testing teams have been working on developing the integration testing and will begin testing CSS-WX in January once the latest software builds have been delivered. A number of items that should have been in the Factory Acceptance testing have been deferred to later software builds and this has created a risk for key site testing in July.

Work continues on the development of the Aviation Weather display with many meetings with Lincoln Labs and Raytheon on weather product dependencies. Some rework on the AWD menu structure will be required due to the large number of products that will be available within the AWD. One of the largest issues to still be worked is the zoom filtering of METAR/SPECI and PIREP data on the display. All current reporting stations including buoys and non-aviation reporting stations will be available within the system so this creates an enormous amount of observations that could be displayed so a way of filtering and deconflicting the data has to be developed. In addition, a display priority draw scheme needs to be developed. I.e. what products can overlay or have to be pushed to the background and when.

#### Integrated Terminal Weather System (ITWS)

Traveled to Phoenix TRACON and provided training on ITWS to 25 controllers and TMCS on the use of ITWS and the display of ITWS information for the Northern Arizona Airspace. P50 is using ITWS to provide weather information at Flagstaff and Prescott airports due to not having any ASR radar coverage in the area. The training was conducted with the help Darin Myers from Lincoln Labs MIT.