

NATCA Safety & Tech Update
Week of September 24, 2018

AUTOMATED TERMINAL PROXIMITY ALERT (ATPA): Mike Sanders (SCT) represents the membership as the Article 114 Representative for ATPA. Mr. Sander's report is below.

ATPA is now available for any facility operating under a STARS platform. To enable, Air Traffic will determine airports/runways they wish to utilize and then work with the OSF on adaptation. Training is required for all controllers at facilities using ATPA, through a recently developed eLMS course and a brief lab demonstration of ATPA entries and features. Please provide feedback on training. ATPA is voluntary on part of the individual controller at his/her display. Facilities are not permitted to make any portion of ATPA mandatory. If you have any question on training or adaptation, please contact me below. Mike Sanders, atpa@natca.net 913.904.6937

ENTERPRISE-INFORMATION DISPLAY SYSTEM (E-IDS): Amanda Richardson (ZOA) is the Article 114 Representative for Enterprise-Information Display System (E-IDS) work. Mrs. Richardson's report for the membership is below.

Background: The Enterprise Information Display System (E-IDS) project aims to replace all existing IDSs in the NAS, providing the Agency with one enterprise solution across facility types. While some customization is necessary and should be available, one system will reduce overall costs for upkeep and training and resolve the upcoming end-of-life issues we have with our current IDSs in the field (IDS-4, ERIDS, etc.). The project is working towards finalizing requirements by the end of this year, with a contract scheduled to be awarded in 2019.

A Safety Workgroup will be conducted to review the E-IDS program as a whole and preliminary risks/hazards will be identified and discussed. This work will be ongoing. The Workgroup will meet in DC, Sep 25-27th. 3 NATCA participants are included. The follow up meeting is scheduled for 1 telcon in November. Any need for additional SRM work will be addressed regularly.

The NATCA E-IDS National Workgroup Participants have been identified and coordination is complete to begin Human Factors and Test work. The first meeting will occur in October and will fully onboard and prep the participants. Subsequent meetings will follow every 2 weeks to continue HF and Test work. This activity is scheduled for 1 year, to be revisited as necessary. The National Workgroup scoping document also allows for sub workgroups and additional SMEs, as needed. Any additional needs that are identified during this work will be addressed in accordance with the scoping document. The team is also working to create a guideline agenda for all Workgroup participants to follow. This will allow us to stay

on task and on schedule, and will give the leads an opportunity to benchmark and adjust as necessary.

Testing telcons continued to review lab setup at WJHTC and discuss future needs. The team will further discuss Air Traffic needs with the SMEs beginning with the Oct 18th telcon.

Upcoming activities:

- SRM Workgroup (Sep 25-27 in DC)
- Article 114 Rep meetings and training, CFS 2018 (Oct 22-24)
- Weekly / bi-weekly program status and engineering telcons (ongoing)
- Human Factors and Test Workgroup (ongoing, NATCA SMEs to begin in Oct)
- Training telcons (scheduled monthly – ongoing)
- Bi-weekly Risk Board Telcons (ongoing)
- Weekly check-in with Program Manager (ongoing)
- Weekly Systems Engineering Telcons (ongoing)

OPERATIONAL PLANNING AND SCHEDULING (OPAS): Jason Doss (ZJX) leads the NATCA effort for web-based scheduling and other operational programs. His update is below.

WMT Scheduler

Continued extensive testing in preparation for the migration from LDAP to MyAccess authentication, working with the agency and developer to identify, troubleshoot and resolve issues as they were identified. Unfortunately, during the migration, the developer encountered several issues resulting in an extended disruption for many users. We were in constant communication with agency counterparts and the developer to resolve the issues encountered by members. Those efforts were ultimately unsuccessful, activating our contingency plan to return to LDAP authentication until the errors could be identified and resolved. We will continue collaborating with the agency to determine the cause of the failed migration and develop a plan to fix, test and implement MyAccess authentication.

CRU/A-SISO

Worked with the agency to conduct several audits of CRU data. Worked an issue where timesheets were being submitted with an incorrect facility code and another where SISO data was not being processed in a timely manner. CRU continues to serve with limitations awaiting a modern replacement to address issues of inaccurate timesheets and antiquated technology. Last month the agency expressed interest in resuming installations of A-SISO, though no actions have been taken.

ATOMS

The recent issues with the WMT migration bring to light the need for a viable time keeping and scheduling replacement. Several of the requirements for ATOMS

directly address the need for reliable scheduling and pay software, offering redundancy with servers in multiple data centers and an ability to make updates real-time, avoiding prolonged outages for routine maintenance. We will continue working with the agency to develop a better solution for pay and scheduling.

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 regarding the new Draft revision to Order 3900.19. NATCA is coordinating with the Agency to develop collaborative groups charged with developing OSH Programs for all LOBs and Staff Offices.

POC: (Mike Odryna, Ryan Smith, Dean Iacopelli, Grant Mulkey)

New Orleans Lakefront Tower Mold Issues

The remediation of the Mold and Build back have been completed. Some issues are still being resolved with hopes of completion in the near future. A new HVAC system is in the design process. The design should be completed ASAP.

POC: (Mike Odryna, Geoff Bacci, 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 you 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](#)

Several ATCT have Housekeeping concerns

The Agency along with NATCA are continuing to work towards a strategy to ensure the cleaning requirements set forth in the janitorial contracts and TechOps requirements for equipment cleaning are adhered to. If you have questions regarding the janitorial contract regarding your facility, ask your manager for a copy. You can also request a copy through your local OSHECCOM. We will be holding a webinar on this topic in the near future.

POC: (CJ Jacques, Mike Odryna)

Hearing Conservation Program (HCP) SOP

The Agency briefed NATCA on a proposed HCP SOP. After reviewing all the documentation, we responded with suggested edits and questions for clarification.

POC: (CJ Jacques, Mike Odryna, Dominic Petrelli, Nicole Vitale)

Regional OSHECCOMs

The NATCA Air Traffic Regional Reps and Region X reps attended their respective Regional OSHECCOM meetings throughout the summer and into September in all the Legacy Regions. Minutes from the Regional OSHECCOM meetings can be found at:

[OSHECCOM KSN Site](#)

Peoria Tower (PIA)

Peoria Tower has numerous IAQ and Asbestos issues. We are working with the Agency to develop a short-term and long-term strategy to solve the issues.

POC: (Mike Odryna, Drew MacQueen)

NATCA Rep. OSHA Training

The current list of training available for all NATCA OSH Reps is still current and in force. For a list of approved training send an email to OSHA@NATCA.NET.

POC: (Mike Odryna, Dominic Petrelli)

ATC-0 Determination

ATC-Zero declaration at an Air Traffic facility is the responsibility of AT Management/CIC not TechOps. Example: If the Fire Alarm activates, ATC-Zero should be declared immediately and Evacuation procedures started. If it is found that the alarm activated erroneously and an all-clear is given, ATC-Zero can be cancelled.

The safety of Air Traffic Employees is the direct responsibility of Air Traffic management, not TechOps.

POC: (Mike Odryna)

Public Access Defibrillator Program

If your facility needs PAD training, send an email to 9-faa-cpr-aedtrainingreport@faa.gov or follow this link to obtain more information regarding the program.

https://employees.faa.gov/org/linebusiness/ato/operations/technical_operations/atc_facilities/eosh_services/osh/faid/

POC: (Mike Odryna)

Current Facility issues being worked by the committee and others.

FAY: Fumes	NEW: IAQ Mold, Build back, New HVAC, Patio Drainage
PAQ: Asbestos	ARR: Overall Facility Condition
GRR: Odor, ASR Contamination	PHF: Mold/IAQ
HSV: IAQ, Fumes	FSM: Water Intrusion, IAQ
DSM SSC Office: Comprehensive Mold Evaluation	SGF ATCT: HVAC Project
GTF: Mold	PTK: Mold Remediation, tower Closure
CRP: IAQ	Tallahassee: Water Leaks
ATL Tower: Elevator Fire	PHL: Overall House Keeping, Rodents
ABE: Overall House Keeping, Flies	BRW: Ongoing REHAB, Mold, Open Walls, Broken Walkway
MFD: Mold Remediation	Minneapolis TRACON: OSHA Inspection
PIA: Water Mold, Overall facility condition, Asbestos	OMA: water intrusion, mold, window replacement
FMY: IAQ, Roof Project	LEB: Water Quality
GSO: Water Intrusion	LAX: Mold & Water intrusion Issues
LGA: Siding, Contingency Planning	RSW: Water Intrusion

DSM: Cab Roof Water Intrusion	LIT: Mold Remediation
KET FSS: Facility REHAB	PUB: Breakroom build
DWH: Failed Water Test	MDT: Flies
Great Lakes Regional Office: Asbestos removal, Water testing	MIA: Lead in water
F11: Asbestos Floor Tile Abatement	MYR: Improper Wiring
DLH: Mold	MFD: Mold
ZHU: Water Intrusion	PIT: Water Leaks

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 August 1, 2018, the number of Rule Compliant ADS-B Out aircraft in the US reached 54,535. ADS-B In equipped aircraft reached 45,310. The growth in aircraft equipage has been significant, and some areas of the NAS are seeing high percentages of air traffic equipped. There is still significant risk around meeting the January 1, 2020 deadline to equip. The actual NAS fleet numbers needed are somewhat vague.
- By 2020, the Agency estimates that 6000-7000 US registered air carriers will need to be ADS-B Out equipped. Airlines operators have all published their plans to meet the deadline and recent trend data indicates significant increase in equipage. Several airlines have significant portions (over 30%) of their fleet equipped including: UPS (97%), JetBlue, Delta, United, American, Alaska, and FedEx. American has also announced a plan to equip 320 Airbus aircraft with ADS-B In.
- For GA, the very rough estimate of avionics installation capacity nationwide is 50,000 aircraft per year and delays are becoming common at multiple avionics installation facilities. Users that wait too close to 2020 may find that the capacity for installation falls short of demand. Agency estimates of the overall GA fleet range widely from 100,000-160,000 aircraft. However, only aircraft that operate in ADS-B Rule airspace (where a transponder is required) will have to equip. This drops the number that need to equip to an uncertain extent. Further, MITRE studies have indicated that another 25,000-40,000 registered aircraft aren't even seen operating in the NAS. Based on all this data, the actual number of GA aircraft needed to equip may actually be closer to the 80,000 range. At the current rate of equipage, 85,000 aircraft will be equipped by the deadline.

- The military has already indicated they will be unable to meet the 2020 deadline. Several of their older airframes simply cannot accommodate the new avionics. The military does expect to equip newer fighters and all of their larger aircraft, and the effort to do so has begun. To deal with the exception aircraft, the Agency is working on agreements with DOD to ensure specific radar sources remain in place.
- 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. 3 of 4 MEARTS facilities are operating on Fusion with ZSU next to transition.
- 133 of 155 Terminal sites have reached their ADS-B IOC, and 127 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:
 - Bakersfield (BFL) ADS-B/Fusion Kickoff 8/23
 - Peoria (PIA) ADS-B/Fusion Kickoff 8/28
 - New York Tracon (N90) Fusion Planning Meeting 9/11
 - Terre Haute (HUF) ADS-B IOC 9/12
 - Terre Haute (HUF) Fusion OSD 9/12
 - Cleveland (CLE) ADS-B/Fusion CADRE Class 10/10
 - Terre Haute (HUF) Fusion Operational 10/11
 - Cleveland (CLE) Fusion OSD 10/12&10/15
 - Erie (ERI) ADS-B Flight Inspection 10/17

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 it 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 show this as a significant problem. 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 position accuracy 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).
 - The NSAL (aka “blacklist”) is effective in dealing with chronic non-compliant aircraft, but it lacks the ability to respond quickly. As such it will likely always be needed as a backstop to compliance or enforcement issues. An issue identified and reported immediately takes a minimum of one day to place the aircraft on the NSAL.
 - Enhanced validation (EV) shows the most promise operationally as it is a real time response to invalid ADS-B targets. The latest update to EV already deployed within 15nm around a Terminal Radar has shown positive results. Additional EV techniques are being analyzed, including expanding the range beyond 15nm and further increasing the responsiveness. SBS Engineering is working diligently with Harris to incorporate these changes with additional EV parameters in 2018. With 2020 approaching rapidly, these changes are needed sooner than later to limit the sporadic effects of non-compliant avionics.
- SBS Article 114 work group discussions resulted in all B787 aircraft being placed on the NSAL. These aircraft had a latent avionics issue that causes false position information to be displayed to the controller. This alarmed several facilities and caused both SCT and NCT to demote ADS-B in their sort cell priorities. Boeing has since released a Service Bulletin to address the problem. Most of the B787 operators in the US have confirmed completing the Service Bulletin allowing them to be removed from the NSAL. Other B787 operators are being removed from the NSAL as verification of the Service Bulletin is received by Flight Standards.

Advanced Interval Management (IM):

- Discussions with American Airlines and ALPA surrounding Third Party Flight ID phraseology continue. Next meeting is scheduled for Oct 25th.
- The Time-Based Spacing Demo to be held at Mitre this month has been postponed due to events beyond the team’s control. Demo is now scheduled for early November.
- AIRS Working Group meeting scheduled in DC the week of Sept. 17th.

ASEPS:

- The Agency is now exploring a pivot to other potential areas where Space Based ADS-B could be beneficial. ZMA Caribbean airspace is currently the primary focus to prove this capability. This “pivot” away from ATOP means that Eric Labardini has taken a more prominent role in numerous ongoing discussions.
- The Agency anticipates a favorable decision from a Joint Resources Council meeting September 20. Provided this occurs the ZMA Caribbean effort will next require a formal kickoff meeting and a follow on SRMP.

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. ZUA transitioned to Fusion on March 26, 2018.
- A Fusion kickoff meeting, Air Traffic Cadre, and some limited Fusion observations took place the first week of April at San Juan CERAP (ZSU). Analysis of the observations resulted in a need for automation changes. Software changes are now in place and a Fusion Operational Suitability Demonstration is scheduled the week of September 24th.

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.
- The SPA WG has developed a draft list of 18 candidate sites for full removal. However, there are several that require more discussion and analysis. NATCA is working closely with the Agency on potential candidate sites. Another concern is the reliance on military radar sites to provide replacement coverage; these sites have historically had issue with availability and clutter.
- NATCA and Ops Support SMEs from SBS have reviewed these 18 sites identified by the SPA WG. With assumptions made about military radar availability, ADS-B availability, overlapping radar coverage and more the team found 7 to be potential candidates. A quick look of the NAS based on these same assumptions identified an additional 15 potential candidates for removal. This is only a high level review and any actual decisions would occur post 2020 with local facility engagement.
- An SRM Panel concluded that partial removal (only secondary or primary radar) 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. A subsequent Panel meeting concluded that ATC services would need to remain identical from a high level perspective. Only at the local level can determinations be made to compromise on today's coverage.

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.
- 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.
 - WAM has been plagued by numerous fits and starts harming the confidence of the facility. SBS Engineering has conducted a two month Technical Eval of the offline WAM system to combat reliability and tracking issues seen. Analysis indicates a significant reduction in false track probability. An Op Eval took place June 27-28 and WAM was returned top operational service on June 29. Yet another false target issue has prompted a stand down of SCT WAM service pending additional mitigations.
- 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 has confirmed the benefit of adding Quantico (NYG) radar to PCT as well as reducing obstructions near Dulles. However, the funding for the additional NYG feed has been difficult to obtain.
- Raleigh-Durham (RDU) has suffered for far too long with tracking issues. A thorough analysis of the situation was provided in late 2017 showing that the RDU ASR itself is screened by tree growth. Efforts to reduce this screening are underway and the airport authority is awaiting a contractor. SBS has agreed to fund additional radar sensors to help with the Fusion presentation, but if the tree screening is not resolved their tracking issues will continue.
- Systemwide changes to CLT WAM are being worked to boost availability. These include multiple redundant communication links from Radios, network architecture improvements, and a closer examination of which Radios are Critical. This last step could move CLT WAM away from having eight Critical Radios to only three. A Critical Radio failure means the entire WAM system is out of service so a reduction in Critical Radios would likely

mean greater availability. Whether this surveillance coverage is operationally acceptable is to be examined during a flight inspection July 23-27.

- A Fusion planning meeting with N90 took place on September 11. The outcomes are tentative at this point but promising. The transition to Fusion is needed soon at N90 to ensure they are well ahead of the January 1, 2020 deadline to equip with ADS-B. Without Fusion, N90 will not be able to take advantage of ADS-B.
- NATCA and Ops Support SMEs from SBS have completed a review of numerous requests for additional radar feeds across the NAS. Our team focused on those that benefit Fusion tracking. Issues such as service expansion were outside of SBS scope and should be worked through other channels.