

NATCA Safety & Tech Update
Week of June 25, 2018

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

Over the past several months the FAA has been standing up a new directorate called AJR-X. This directorate will be focused on all things contingency. ATOC will now be called Contingency Operations. NATCA received an article 7 briefing from the director of AJR-X and the manager of Contingency Operations (CO).

Mr. Grider has been working with AJR-X members to prepare for sight visits to ZOA and ZMA to assist these facilities in building contingency plans from the ground up. The CO group plans to spend up to 9 weeks working on site and at the Command Center providing subject matter expertise and contractor support to ensure that the OCP for each facility including the surrounding support facilities are complete and executable.

The BCP conducted a test of the ability to utilize the ATOP lab at the WJHTC to control traffic in the oceanic airspaces. NATCA provided SME's from ZAN, ZNY, and ZOA to observe the capabilities of the lab to load the sync database to allow controllers to utilize the lab for live traffic. The results were better than expected with the sync data being loaded in about twenty minutes. The capabilities demonstrated sparked many new ideas from the SME's present that would allow controllers to utilize the lab during an outage to stabilize the oceanic airspace in the event a facility is unable to provide service. The group is planning several test to prove the concept and to develop procedures to be able to safely clear airspace in a contingency event.

Mr. Grider is part of a training workgroup that has been established to develop requirements for controller training during a contingency event. The workgroup has met twice and is making good progress. They are working with the human factors experts to begin testing what would be the right amount of training needed to safely work during different scenarios. Once these requirements are defined, Mr. Grider will work with AJI to create training for controllers in the field.

ENROUTE AUTOMATION WORKGROUP (ERAW): Julio Henriques (ZNY) leads the ERAW efforts for NATCA. Rex Jackson (ZDC) provides this update, his report is below.

NATCA Technology Update – June 22, 2018

- Six FTR's supported initial Data Comm Functionality Verification (DFV) testing at ZID. UPS1111 was the first flight to receive a CPDLC message from an ARTCC. The

DFV process is ongoing with ZKC and ZME scheduled to begin in July.

- EAE112 completed Ops Eval testing and has been released in support of the Data Comm waterfall.

- The National User Team conducted a quarterly meeting in Fort Worth, TX the week of June 11th. The team received program briefings and worked on the following issues:

➤ Data Com

The Data Comm team briefed on the status of the program, the briefing included an update on the deployment schedule, failure mode issues, upcoming 8-1-1 changes, DFV planning at the key-sites and future enhancements.

➤ ADSB

SLE briefed the group on several instances of malfunctioning transponders showing invalid Mode-C, none of the issues were due to ERAM processing errors. Solutions and procedures are still being explored for these anomalies.

➤ GIMMS

Team members that participated in the first GIMMS demo provided an overview and shared ideas that would improve future demos. The forward plan is to have all user team members attend a demo before moving forward on the use cases.

➤ R-Side Conflict Probe

The R-Side Conflict Probe task team briefed on their recent conceptual demo at MITRE and presented a draft use case to the NUT. The concept brings conflict probe to the radar position with added functionality including time to conflict and graphical depiction of alerts.

➤ PDRR/ABRR

Members of the ABRR/PDRR task team briefed on the current status of the system, ABRR is enabled at all 20 ARTCC's and PDRR is activated at 18 ARTCC's as of June 21st. Other issue discussed was the PDRR 45-minute RAD warning parameter and the process for a site to request the timer be reduced to 35 minutes.

➤ Call Sign Starting with a Number

AJT briefed the team on an MBI recently distributed updating the procedure for foreign aircraft callsigns beginning with a number. The new procedure

specifies adding a “Q” to the beginning of the callsign. The 7110.10 and 7110.65 will be updated to reflect this procedure.

➤ STARS Enhancement 2

The task team briefed on the recent meeting with the STARS team, and as a result there were changes made to the 4th Line and Point Out use case. All changes were briefed and use cases updated. The new versions of the use cases will be sent to both teams for review.

➤ Route Menu Typing Buffer (ER 191793)

The team discussed and reached consensus on the problem statement. The desired behavior is to prevent an incorrect route from being uplinked from the Route Menu. To prevent this behavior the current position will be grayed out and not-selectable in the typing buffer. Although this behavior is latent today, Data Comm exasperates the broken functionality due to eliminating voice readbacks. The agreed upon fixes will be delivered in late August in support of the Data Comm program.

The National User Team discussed the need for Data Comm to be incorporated into the National Training Order and that a need exist for guidelines and training on how to conduct OJTI once Data Comm is deployed at a site. At this time AJI has not addressed the issue and sites are developing their own plans as an interim solution. The NUT has formed a task team to explore enhancements to FALCON replay to support the new technology being delivered in programs like Data Comm. Work on these topics is ongoing and NATCA is taking a lead role to ensure that the needs are captured and addressed at all levels.

ERAW was briefed on Tech Refresh Early D completion schedule and a proposed timeline for TR2 Full (R-side) deployment. The three TR2 Full keysites have not been selected as of this time but the candidates must have completed Data Comm IOC prior to June 1, 2019. There is concern that the TR2 Full schedule could impact commitments made by the North East Corridor (NEC) group in support of expanded metering into PHL for ZNY, ZDC and ZBW. ERAW also received information on Initial Trajectory Based Operations (ITBO) and the plans to deploy the program, into the NAS.

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 summer of this year, with a contract scheduled to be awarded in 2019.

The Cadre / SME scoping agreement has been finalized. Initial scheduling of CADRE will begin with Human Factors work and the upcoming SRM Panel in September.

Human Factors workgroup planning meetings continued, with an emphasis on onboarding the AT CADRE and Tech Ops / PASS participants.

A Safety Panel will be conducted to review the E-IDS program as a whole. Any hazards will be identified and worked through to find acceptable mitigations. The panel will be conducted at the end of September. 3-4 NATCA participants will be included.

Timers in current field IDSs were discussed. The E-IDS Team wants to ensure that all current needs of the field are appropriately addressed in the Engineering Requirements for E-IDS.

Initial testing telcon conducted to review lab setup at ACY and discuss future needs.

I traveled to DC and worked from HQ for the week of June 18th.

Upcoming activities:

- Weekly / bi-weekly program status and engineering telcons (ongoing)
- Human Factors workgroups NATCA, FAA, and PASS (ongoing)
- Training telcons (scheduled monthly – ongoing)
- Weather and weather products telcon (scheduled end of May)

FLIGHT DATA INPUT OUTPUT (FDIO): Corey Soignet (LFT) is the FDIO Article 114 Representative. Also included in Mr. Soignet's duties is Article 114 representation for the Electronic Flight Strip Transfer System (EFSTS). Mr. Soignet forwarded the information below for the membership.

FDIO

The first article testing is still on going and the new printer is in operation at the first key site ACY. ACY has helped the FDIO team identify an issue that was hidden in the programing code. That issue was quickly corrected and after further testing was reinstalled in ACY and no further issues have been discovered. The controllers

have commented on the quality of the font on the new printer along with it being noticeably quieter. The FDIO team installed the new printers in MCO/F11 and they reported back nothing but positives. MCO/F11 will continue to test the printers over the next couple of weeks. The new printer was installed in Puerto Rico but the controllers quickly identified a issue with the reverse shading that is used in their operation. The printer was then removed and the FDIO team is working on a software fix for the CERAP facilities.

EFSTS

MEM Tower is received the EFSTS Keypad Replacement on June 11-15, 2018. MEM Tower will be the last facility to install the new EFSTS Keypad Replacement.

FIDI

There is nothing to update at this time.

INTEGRATED DISPLAY SYSTEM REPLACEMENT (IDS-R): Richie Smith (N90) leads NATCA's efforts on the IDS-R project as the Article 114 Representative. Below is Mr. Smith's report.

Earlier in June NIDS software build V3.6.4 again failed preliminary testing at the Technical Center in Atlantic City. The bulk of the failure has been traced to incorrectly configured modems at the site. It appears that the FTI routers were reset to various settings without coordination with the tech center personnel.

The next attempt of V3.6.4 testing is proposed for the week of September 17. On the surface this is a strange move considering that the contract with the current vendor expires at the end of June. As of this writing, June 22, no announcement has been made about any of the options for the future- an extension with the current vendor for the build, a time based extension or a new contract, effective July 1, with either the current or a new vendor. Last year the contract was awarded at the eleventh hour and some time of confusion followed. Hopefully this year will be different.

Along a more productive line of information, the database team is in the process of updating facility pages to accommodate SWS and updating/upgrading network pages to make more streamlined databases. The available technology has changed and older databases need to be brought up to speed and ready for future upgrades.

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

The **NAS Voice System (NVS)** schedule has officially slipped. The FAA and Harris continue to work on a new schedule. The detailed schedule is expected around the April time frame.

Mr. Shedden is working on NVS requirements review.

Mr. Shedden will be at the Tech Center in Atlantic City the week of June 25th.

Next Generation Air-Ground Communication (NEXCOM) continues deployment of new CM300/350 V2 radios to terminal facilities across the country. Some terminal facilities in the NAS using very old radios hear a pop back or "squelch tail" when they release their transmitters. The new radios being deployed under NEXCOM Segment 2 do not have this "feature" as the squelch tail is generally regarded as undesirable in radio communications. This issue has cropped up twice now during deployment and the program office should brief future affected facilities prior to install.

The NEXCOM program office has kicked off the Emergency Transceiver Replacement. This program is looking to replace aging tunable transceivers at DEN, HNL, PCT, PHX, SCT, and SLC. There is a Technical Interchange Meeting (TIM) scheduled in Denver the week of August 6th.

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.

NVRP Operational Capability Demonstrations are schedule in Oklahoma City July 10th-11th.

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.

The **Tone Mitigation National Workgroup** met in September 2017 to discuss potential mitigation's to the number and severity of tone/noise events across the NAS. This workgroup kicked off largely because of the number of tone/noise events occurring at PCT. One of the outcomes from these meetings was exploring the use of new headset bases which incorporate an active limiter.

Mr. Shedden traveled to Potomac Consolidated TRACON the week of June 18th to kickoff the evaluation of the new headset bases. After briefings, a Safety Risk Management Panel, and a controlled familiarization, six controllers will begin evaluating the new bases the week of June 25th.

D10/DFW is currently working with the IVSR program office to resolve the outstanding issues preventing cut over of their new voice switch.

The FAA will be conducting **Time Division Multiplexing (TDM) to Internet Protocol (IP)** conversion in the Bangor, ME area in the coming months. This technology will assist the FAA as local telco providers move away from legacy TDM services to IP services.

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 June 1, 2018, the number of Rule Compliant ADS-B Out aircraft in the US reached 50,763. ADS-B In equipped aircraft reached 42,696. 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. Of those, 2194 are equipped as of June 1st. 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.
- As of June 1st, 41,726 General Aviation aircraft are ADS-B equipped. 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. The effort to do so has begun. To deal with the exceptions, 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.
- 132 of 155 Terminal sites have reached their ADS-B IOC, and 123 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:
 - Great Falls (GTF) Fusion OSD 5/30
 - Casper (CPR) Fusion Transition 5/30
 - Rochester (RST) ADS-B IOC 5/31
 - Terre Haute (HUF) ADS-B/Fusion Kickoff 5/31
 - Asheville (AVL) ADS-B IOC 6/1
 - Reading (RDG) Fusion OSD 6/5
 - Reading (RDG) ADS-B IOC 6/6
 - Rochester (RST) Fusion OSD 6/5
 - Asheville (AVL) Fusion OSD 6/12
 - Great Falls (GTF) Fusion Operational 6/12
 - Lake Charles (LCH) ADS-B IOC 6/13
 - Rockford (RFD) ADS-B Flight Inspection 6/20
 - Rochester (RST) Fusion Operational 6/20
 - Springfield (SPI) ADS-B IOC 6/20
 - Lake Charles (LCH) Fusion OSD 6/25
 - Springfield (SPI) Fusion OSD 6/26
 - Asheville (AVL) Fusion Operational 6/27
 - Reading (RDG) Fusion Operational 6/27
 - Lake Charles (LCH) Fusion Operational 7/10
 - Springfield (SPI) Fusion Operational 7/11
 - Erie (ERI) ADS-B/Fusion Kickoff 7/19

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.***

- A flight test was conducted February 27, 2018, to examine the effect of ADS-B Duplicate ICAO Address on ERAM and STARS. Engineering assumptions have always been that when this condition occurs with two aircraft within 6nm, the SBS network would either drop the tracks, swap the tracks or other. The results of the flight test show the events are much more conservative. Test aircraft as far apart as 50nm were still dropped from the SBS network and presented as radar only targets. The SBS Article 114 work group has concluded that Duplicate ICAO Address alerts are not worthwhile for controllers, and an effort is underway to remove these alerts from all ATC automation systems. They will still be available for Flight Standards compliance monitoring efforts.
- 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 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.

ASDE-X Tech Refresh:

- The agency will be upgrading RU communication lines at 8 airports to ethernet. This will allow for increased bandwidth due to traffic level increases. This has been in the works for some time and should start next year. DTW, LGA, PHL, PHX, ORD, LAX, ATL and SLC are the 8 sites currently running on RF modems and/or copper comm lines that are currently near max capacity.
- Tech refresh training continues amongst ASDE-X sites and the latest build should be fully deployed by the end of this fiscal year. After completion, we will start deployment on the next set of system enhancements.

ASSC:

- CVG IOC achieved on April 5th.
- PIT Cadre training will take place the week of July 30th.
- MCI field familiarization will start in late August.
- MSY will be next in line after MCI and PIT are complete.

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. The next planned event for ZSU is an Operational Suitability Demonstration in August provided the needed MEARTS software changes are available.

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 is planned June 27-28 and WAM may be returned to service shortly afterward.

- 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.
- NATCA and Ops Support SMEs from SBS have completed a review of numerous requests for additional radar feeds across the NAS. The focus of our team are those that benefit Fusion tracking. Issues such as service expansion are outside of SBS scope and should be worked through other channels.

Vehicle ADS-B:

- 1296 vehicles equipped at 20 airports.
- CVG SAT will be completed the week of June 25th which will add another 116 equipped vehicles to the matrix.
- LAS transmit has been approved and installation of vehicle transponders should start soon.
- MIA outreach meeting completed on June 12th.

Savannah airport has expressed interest in equipping transponders. This is interesting due to the fact SAV does not currently have Surface surveillance. The vehicle team will go through the normal process in the event the facility receives some type of surface surveillance in the future.