NATCA Safety & Tech Update
Week of July 24 and July 31, 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 (WX Deviations, not complete)
- T26 ATOP Demo (Tech Center)
- Atop Work Package 1 Hardware Completion
- Initial Discussions for ATOP Contingency
- ASEPS SRM

Car 2016-025 is still not satisfied. We are still working with AJV84 to expand on their Feb 2016 guidance in reference to WX Deviations in an Oceanic environment. It appears they do not want to state the fact that it was never considered in any risk model. Next step is to make a formal information request so we can move forward with the CAR.

All three Oceanic sites provided SME's to travel to the Tech Center and view test and provide input on the T26 ATOP drop. The End User test will be in October. Also while we were there NATCA was able to sign off on the provided 30 inch Dell monitors and back lit keyboards for the ATOP work stations. The concern with the 30-inch monitor in the D-side position was the font size. The techs fixed that problem. The equipment is now operationally acceptable and I have provided a memo to the ATOP Program office with NATCA's concurrence.

Since the Chicago fire ATC contingency is a hot item for the NAS. Oceanic contingency has not been addressed in an acceptable manner. A short-term contingency is to print strips and attempt to work the Oceanic traffic. It's not feasible, or acceptable. I met with the Agency and discussed the ATOP Business Continuity Plan (BCP). This will be a big undertaking. The initial premise is for the Tech Center to ingest the Oceanic facilities IP's so if a facility goes down we can work the traffic from the Tech Center. Obviously much more discussions and work will have to be done to get to the ideal goal.

ASEPS SRM is scheduled for August. I have selected the NATCA participants.

AIR TRAFFIC PROCEDURES (AJV-8): Andy Marosvari (BOI) is the Article 114 Representative in the AJV-8 Office. This week Mr. Marosvari worked on Professional Standards and his update is below.

> The Professional Standards program is in its 7th year and continues to have a positive impact on the professionalism of controllers nationwide. To date, the National Workgroup has trained nearly 850 members 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 most recent class was held in Boise in May, with 28 new committee members attending. The last class of FY17 will be held in Minneapolis August 22-24 with more classes planned for FY18.
> To date, the Professional Standards program has received 2,375 submissions with 90% of those being resolved. That's 2136 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 discussion between committee members and controllers has a long-lasting, positive effect on the safety of the system and the professionalism of our controllers.
> 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.
> Andy Marosvari
> Garth Koleszar
> Josh Cooper

AIR TRAFFIC REQUIREMENTS (AJV-7): James Keith (D10) is NATCA's Article 114 Representative to the AJV-7 Office. His update for this report is below.

> Terminal CHI team- the terminal CHI team attends the 3rd demo of terminal work package one concepts at MITRE July 18-20th. The team worked with several new concepts: spacing and merging tools, messaging tools for coordination, separation tools and auto point out capabilities with the ENROUTE sectors. The concepts are in the early stages and the terminal chi team along with the TAMR ops team is working with MITRE to mature the concepts. The fourth and final demo will be the last two weeks of August and the ENROUTE National User Team will be there for a few days to discuss the coordination tools and auto point out feature.

Advanced IM- we have continued working on the ConOps within the IM workgroup. NATCA now has a terminal rep for IM and I will be reducing my role on this project.
E-IDS- I am continuing to support Amanda Hodge on this project. We scheduled a conference call with the 804 team to get an idea of the number of E-IDS needed post 2020 after some consolidations have been completed. AJV-7 is tasked in coming up with a number of screens needed for the NAS. I will continue to work with Amanda moving forward on this project.

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 5000 clearances a day. The Data Comm Program held site visits with RSW and CHS. The facilities will be receiving the Tower Data Link Services System (TDLS), which include FDIO, D-ATIS, and PDC, and CPDLC services. VNY is also scheduled to receive a TDLS system, however, the site visit has not occurred yet. Site visits by the core team to current CPDLC facilities continue as they observe operations and validate training. These visits will continue throughout the summer.
Members of the core team met in OKC to discuss 12.5 requirements. One of the major enhancements will be the ability for the TDLS Application Specialist (TAS) to build different adaptations based on airport configurations. The controller in the tower cab can select different configurations to apply different defaults in the selectable fields of the editor window. Another enhancement is to allow for pilot re-logons with open transactions. The system today will terminate a session if a pilot performs a re-logon with an open transaction. This occurs about 250 times a week throughout the U.S.
Briefed the Pilot and Controller Phraseology System Integration (PCPSI) Working Group on the status of Data Comm Tower and En Route services. Several pilots that have used the system are happy with the enhancements made for pilot understanding and the program office continues to improve functionality to make the system more user friendly.
The Data Comm Implementation Team (DCIT) met in Washington, DC to discuss En Route functionality. Just as the program office did on the tower services, industry members meet monthly to finalize requirements and enhancements to improve deployment of En Route Services. Something as simple as error text to as complex as message concatenation is discussed by the group. This forward approach should ensure a seamless transition to En Route Services.
Facility Technical Representatives (FTR's) met at Leidos to view the current system. This event will occur every few months to give the FTR's a look at how the system is progressing and evaluate CHI, functionality and overall usability. The group then discusses what is observed and if changes need to

be made. This will help reduce the risk of issues that may be encountered in the field that may be deemed unacceptable by the controller workforce. Finally, another pilot demonstration was held at the WJHTC. Approximately 6 airlines were represented by their technical pilots. These demonstrations are held every few months just like the controller demos. The goal is to reduce the risk of pilot acceptability when the system is fielded at the end of next year.

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

Issues with 1st articles delivered: There is a dust issue, which is accumulating over the sensor. We are making sure it is not caused by the system used at the Tech Center for mass loading strips. So the Tech Center is not using the mega loader to see if the dust level decreases. Currently, the testing is at 8000 strips, failed previously at 12000 strips. Options are change proposal/engineering fix for the printer sensor or better quality control of paper. Blank strip button: It will only work if nothing is printing. It on average will print 17 strips/20presses. Human Factors evaluation concerns: room temperature, sunlight test for reflection/glare. Tech Center is working on these items. Updated prototypes of the printer: estimated deliver July 2017
Testing: FAALC is completing a new paper/cutter/display test.
Warranty: 1 year
Items to be discussed: Implementation, military & PASS meeting to discuss the printer
Schedule: Key site: November 2017- January 2018. 5 key sites to be conducted: Tower, TRACON, Honolulu, Alaska and Puerto Rico.
Contracts: 2-year base, which started July 2016. SLE will send the expected timeline. As it stands 1st article testing will be complete January 2018 with the Production CLIN exercised January/February 2018. SSM release – February/ March 2018.

EFSTS

Phase 2 kits were sent to all Phase 2 sites and all Phase 2 sites are completing install and the associated training. The EFSTS Team is currently at the Chattanooga Air Traffic Control Tower completing the install and training of the EFSTS system. CHA's install will conclude the scheduled and planned install of the EFSTS system at this time. The EFSTS team will continue to

support the EFSTS facilities with requested adaptations and technical support.

FIDI

There is nothing to update at this time.

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

Human Factors Activities

Certification Standards —-Tom Adcock and I convened a workgroup for 3 days that vetted the standards that were developed at N90. We used 4 controllers who are also OJTIs and 3 FLMs and 1 Training manager. The group did an outstanding job and worked very hard to get through all the standards. We now have a set of certification standards that could be used at all Tracons if that is the decision that is made after the F11 validation. This group also provided valuable feedback on what the implementation plan will ultimately look like. After we complete the validation at F11 we would like to reassemble the workgroup to complete work on the implementation plan.

F11 — We will begin training the standards on August 7. The plan will be for each training team to be trained as a group so that the day after the 2-day training class they can begin using the standards. There will be 8 training session with everyone completing the training by 8/25. The training will involve some HF material on teaching and learning as well as in-depth discussion of each of the standards. There will also be 3 lab runs where the OJTIs and FLMs will practice using the standards with our assistance. There will be ongoing onsite support from the HP office for a few months to assist the OJTIs and FLMs in using the standards and to help prevent any organizational drift that may occur in training.

Safety Culture Assessment - I visited TPA for a week where we did briefings and motivated the employees there to complete the survey. We had a very high participation rate of more than 85%. We are now compiling the data and assembling issues for discussion during the workshops. We will conduct the 3 hr. workshops beginning the week of August 14th. We will schedule 2 deliveries a day for 6 day in an effort to allow everyone an opportunity to participate. The facility leadership has been very supportive and went a long way to help us get participants for the surveys.

Investigation training - training was conducted in the central service area in Dallas fro the RAP panel. There will be additional training for the other 2

service areas in the next few months. We also hope to provide this training to the ERT in AJI fairly soon.

Health & Wellness

There hasn't been much going on here other than the work that continues on Academy materials for AT Basics as well as the survival guide. The stress materials for the next round of recurrent training have been delivered to the recurrent training team.

Fatigue

ZOA - next week Dr. Wesensten and I will visit ZOA and distribute the actigraphs for their employees to wear for the next month or so.

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.

On Friday July 28 the IDSR/NIDS waterfall officially completed with I90 declaring ORD. The two last networks to declare ORD (I90 and CMH) are still owed fixes to further stabilize their systems. Thanks to NATCA PMO representative Jeff Woods involvement the program office has agreed to maintain full time on site support at both facilities until a new software build is installed and for a minimum of three weeks afterward.
There are currently plans for three successive software builds to fix known issues in the software. The anticipated test date for the next (first) build is during the week of September 11, with the following week being discussed as a key site date.

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 ended June 23rd. The system still has stability problems so Harris will continue working on defect resolution prior to starting formal FAT. Formal FAT was scheduled to start July 18th, but has been officially delayed. The FAA is working with Harris to address the impacts to the schedule because of this delay.

Mr. Shedden was in Seattle the week of June 26th at the Seattle ARTCC developing Operational Test (OT) scenarios. The OT scenarios will be based on Seattle airspace.

Mr. Shedden was in back in Seattle the week of July 17th at the Seattle TRACON for their site survey. The site survey goes over all their position hardware as well as the layout and functions on the position maps.

Mr. Shedden will be in Anchorage the week of July 24th meeting with Alaska flight service personal to finalize their NVS requirements. Harris Human Factors personnel will be in attendance to get a better idea of their needs. Bill Straube will be in attendance representing NATCA AFSS.

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 radio communications. This issue has cropped up twice now during deployment, and Mr. Shedden is working with the program office on an information briefing for selected facilities.

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.

There were a large number of **tone incidences** being reported at Potomac TRACON (PCT)**.** 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. On May 17th, NATCA and the FAA collaborated on new guidance for how to handle tone incidences going forward. This new guidance will go into the 7210.3, and the FAA rescinded the memo governing tone incidences from 2007. A workgroup has been formally established, and members have been selected, to address the number and severity of tone incidences.

Plantronics, the provider of our **headsets**, has been debarred due to "adequate evidence of conduct indicating a lack of business honesty or integrity". This means that the FAA cannot buy any headsets from Plantations for three years. The FAA is currently working with NATCA to address this issue.

NEXTGEN: Kevin McLaughlin (SCT) is the National NextGen Representative for NATCA. His report to the membership is below.

The FAA NextGen Remote Tower Services Program has been pushing forward on supporting the State of Colorado and their efforts to install a Remote Tower Services (RTS) site at the Fort Collins–Loveland Municipal /Northern Colorado Regional Airport (FNL). NATCA has named Shawn Reuth, from NATCA Centennial Tower Local, as the Fort Collins RTS Representative. During early 2017, the FAA concluded the Request For Information (RFI) process soliciting proposals from Vendors seeking approval to construct and certify the FNL RTS installation. Five responses were received, with four Vendors having significant RTS experience with active RTS projects/proposals in some part of the world. These four proposals were evaluated by ANG-C on the merits of cost, program management, and vendor technical experience. The Agency conducted sit down meetings with the top two contenders ranked on a basis of cost and technical prowess. These two vendors were then evaluated on the criteria of "likelihood of successful system implementation at Fort Collins" and the final vendor selected signed an Other Transactional Agreement (OTA) with the FAA. An OTA is essentially a financial and programmatic Memorandum of Agreement but does not rise to the level of a contract. This process recently concluded with the announcement of Searidge as prime RTS vendor on the Fort Collins Remote Tower. Onsite activities began this month with the Site Survey on July 25-27.

Below is the Concept of Operations for the Fort Collins Remote Tower

- System Availability to be 24/7/365 Hours of Operation 8am-8pm
- Class D Airspace Classification
- SOPs Use Existing ATCT Processes, Procedures, Training, Technology Where Possible
- Will Meet LOA Requirements of Denver TRACON for Uninterrupted ATC Service
- FDIO w/ printer – with Interface for future Electronic Flight Strips
- Remote Tower Uses ATC Grade Video to Replace and Enhance “Out the Window” View
- Camera System Includes: 360º Panoramic, Distributed Cameras, PTZ Cameras to Fulfill Binocular Zoom Function

- Air Situation Display providing STARS Data from Denver TRACON

  The following preliminary timeline for Phase I and Phase II work has been identified.

  Phase I 12 month System Installation and Site Acceptance
  July 2017 Site Survey
  Sept-Oct 2017 Site Prep
  Jan-Feb 2018 System Install
  May-June 2018 System Technical Testing and Optimization
  Late 2018 Passive/Shadow Ops and Data Collection

  Phase II - (24 mo.) Op. & Tech Eval/Safety Risk Management (SRM) / Cert. & Approval Activities
  2019 Active Operational Evaluation and Data Collection
  2019+ Final Test Report/ SRM Documentation

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

3900.19C
Following last month's INI briefing 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)

Headset Tones
The Headset workgroup met with the Agency May 17th. The Agency has agreed to rescind the Headset tone guidance Dated Jun 14, 2007. Additionally, NATCA and the Agency has formed a workgroup that will develop a process to research any tone incidents individually to ascertain if any technical or administrative procedures can be put in place.
POC: (Jason Grider, Mike Odryna, Jon Shedden, Don Smith, Dean Iacopelli, CJ Jacques)

3900.XX Air Fall Protection Program
NATCA has requested an INI briefing on the new Aircraft Certification Service (AIR) Fall Protection Program
POC: (Mike Odryna, Scott Odle, Dominic Petrelli, Mike Collins)

3900.XX Air AAIS, 3900.XX Air BBP
Last month 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 Blood borne Pathogens Program. We found numerous issue and concerns with the proposed Order and are working with the Agency to address our issues.

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

New Orleans Lakefront Tower Mold Issues

The remediation of the Mold has completed. The build back will begin on August 1st.

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 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

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 not agreed to this, nor have we had an opportunity to review it. At this time, neither NATCA nor the National OSHECCOM agreed to this change.

POC: (Mike Odryna, Dominic Petrelli)

Regional OSHECCOMs

The NATCA Air Traffic Regional Reps and Region X reps attended their respective Regional OSHECCOM meetings throughout June and July 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)

ZDC ATC Zero

Monday night July 10th Washington ARTCC was evacuated due to toxic fumes from a roofing project infiltrating the control room. The facility remained in ATC Zero status for 2.5 hours. Once the Fire Department gave the all clear, ATC Zero was cancelled. This event combined with the same general occurrence at Memphis ARTCC 6 months ago have raised flags as to how and when the decision to evacuate was made.

POC: (CJ Jacques, Mike Odryna)

Public Access Defribulator Program

On May 1st, 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
IWA: Asbestos issues resulting from flooding of the facility	YNG: Roof Replacement
FAI ATCT: HVAC-ROOF Replacement	ARR: Overall Facility Condition
GRR: Odor, ASR Contamination	PHF: Mold/IAQ
NWM Regional Office: Water Quality Issues: New Regional Office Build	New NWM Regional Office Design
DAL ATC: Water intrusion and Mold	SGF Mold/IAQ
HSV: IAQ, Fumes	ZAN: Seismic Upgrade
DSM SSC Office: Comprehensive Mold Evaluation	FSM: Water Intrusion, IAQ
NWM Regional Office: Water Testing	SGF ATCT: HVAC Project
GTF: Mold	ZME: Odor in Control room
Mansfield Tower: Water, Security, FLS	Nome: Asbestos in the floor tile Mastic
CRP: IAQ	PTK: Mold Remediation
DTW: IAQ Investigation	Tallahassee: Water Leaks
JNU: Roof Issue	Wilmington: Doors Broken
ABE: Overall House Keeping	PHL: Overall House Keeping, Rodents
BTV: Post Remediation Rebuild	BGR: Ongoing remediation Efforts
SIT: Drinking Water	BRW: Ongoing REHAB
DLG: Generator fumes causing IAQ issues	KTN: Facility REHAB

PIA: Water Mold	Minneapolis TRACON: OSHA Inspection
LAS: Drinking Water Issues	BTV: Drinking Water Issues
AUS: Sewage Issues	OMA: water intrusion, mold, window replacement
GSO: Water Intrusion	LEB: Water Quality
LGA: Siding	LAX: Possible Mold Issues

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) – 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.

Phase 2 (21L): Cable installation (2 Circuits) begins June 2017. Pre-Construction meeting to take place in July, Fixture/Cable installation in August, Optimization and Shadow Operations to take place in October. Activation/JAI in November.

BWI: IOC took place on 3/8/17. JAI inspection was help on 6/21/17.
SFO: IOC (Initial Operating Capability) was declared on 11/30/16. ORD planned for August 2017.

BOS: Shelter delivery TBD. Some construction activities had to be shifted due to inability to excavate without Fish and Wildlife. Work on going.

DFW: Construction is in process and on schedule. Shelter work will begin mid-June and completed late August.

San Diego: Tower site survey to be held late July 2017.

Runway Safety:

Closed Runway Occupancy Prevention Device (CROPD): Live Testing at JFK was completed last year. The FY17 focus site is RNO. The **Live Testing began July 11** and extends to Aug 14, 2017. So far the testing appears to be going well. There have been minimal false alerts, and I have only had good reports from the facility. There will be an analysis process on the data after the testing is completed to verify the speech recognition preformed as designed. More information to follow.

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. The project went to an SRM panel. Unfortunately, the demo that was given to myself, the ACAC, and Runway Safety prior to the SRM panel was not the same presented to the panel itself. Work is now being conducted to bring the project back up to meet the requirements that were previously laid out once the requirements are met it will return the SRM panel. Another Demo has been scheduled for the week of July 31st, if the demo meets the requirements it will go back to the SRM panel.

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:

- FY15: Technology evaluations from market survey responses - completed
- FY16: Site assessments at 13 candidate airports – completed
- FY17: Program Plan development / Candidate Site(s) & Technology(s) Selection
    - Re-visiting viable technologies identified in FY15 assessments. This will lead to a down select of technology(s) that can be procured in the next 12 months.
- Engaging with local Regional Runway Safety Area Managers/RIM POC's to ensure potential technology solution(s) complement operations and planned construction activities
- Conduct detailed Site survey at short listed candidate airports to gauge infrastructure needs for selected technology solution(s)

- FY18: IGCE and Technology Solicitation & Procurement
- Match technology solution and sites based on operational needs and available infrastructure
- Procure technology solution from vendor
- Obtain MOU with Airport at test airport, Conduct SRM Panel for proposed technology solution
- FY19: Technology installation at candidate airport(s)
- FY20: Operational test and evaluation
- FY21: AMS Documentation / Technology Transfer

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. The next meeting is scheduled for July 3- 7, 2017. A full report will be completed once the official meeting minutes is distributed.

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 reviewing Runway Safety Programme achievements, objectives and priorities, and develops a Runway Safety Action Plan for the future. The working group is split into three sub-groups all of which IFATCA/NATCA is presented by Bridget Gee on:

- Data Review Sub-Group
- Hazard Identification and Risk Assessment Sub-Group
- Runway Safety Action Plan Sub-Group

The Runway Safety Action Plan Working Group is in the process of reviewing runway related accident reporting data, reviewing applicability of runway related accident sub-categories – scope of Runway Safety, reviewing Runway Safety indicators and metrics, and identifying Runway Safety data breakdown required for analysis and to be available on iSTARS.

The Working Group is also doing a safety risk assessment of Runway Safety category and sub-categories, will confirm Runway Safety risk priority, and identify mitigation measures

The Action Plan will be presented at the 2017 Global Runway Safety Symposium in Lima in November for endorsement. The purpose of the Action Plan is to strengthen runway safety initiatives at a global level.

The Runway Safety Action Plan Working Group will make recommendations to the GASP Study Group to assist the development of the 2020-2022 editions as well as develop new Runway Safety Action Plan.

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, 2017, the number of Rule Compliant ADS-B Out in the US reached 30,658. ADS-B In equipped aircraft reached 27,227.
- 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. 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 have yet to offer an ADS-B solution. Southwest Airlines and others are heavily dependent on Honeywell avionics. United Airlines has made significant progress in upgrading their B737 fleet with 96 of 110 planned ADS-B installations complete. Several other airlines are also showing increased fleet equipage.
- 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. 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 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 rebate program expires in September.
- 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 SBS Article 114 work group has recommended disabling these across all automation platforms. The issue was highlighted in recent Equip 2020 meetings since ADS-B dependent applications (CAVS, Advanced Interval Management, etc) are dependent on this functionality. Monthly tracking of CSMM conditions continues to trend upward.
- 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.
- 102 of 155 Terminal sites have reached their ADS-B IOC and 99 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:

    - West Palm Beach (PBI) Fusion Transition 6/27/17
    - Moline (MLI) ADS-B Fusion Kickoff 7/6/17
    - Mobile (MOB) ADS-B Fusion Kickoff 7/21/17
    - Duluth (DLH) ADS-B Fusion Kickoff 7/25/17
    - Bangor (BGR) ADS-B Fusion Kickoff 7/25/17
    - Lexington (LEX) ADS-B Flight Inspection 8/1/17
    - Abilene (ABI) ADS-B Fusion Kickoff 8/3/17
    - Sioux City (SUX) ADS-B Fusion Kickoff 8/8/17
    - Montgomery (MGM) ADS-B Flight Inspection 8/9/17
    - Longview (GGG) ADS-B Fusion Kickoff 8/17/17
    - Moses Lake (MHW) ADS-B Fusion Kickoff 8/17/17

- 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. Multiple ATSAP reports have been filed on the known issues to date. The Agency is working on mitigations including enhanced validation and a No Services Aircraft List (NSAL). NATCA

questions the effectiveness of these mitigations because they leave many documented issues unresolved and will not lead to a timely, proactive approach. Enhanced validation and the NSAL will be deployed soon by SBS.

- Article 114 discussions resulted in agreement that B787 aircraft would be placed on the NSAL as soon as possible. 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.

Advanced IM

- American Airlines CFO was briefed on AIRS project on July 20th. No word as of yet whether the funding decision to equip the American A321 fleet moves forward.
- Paired Approach work still moving forward. Development of Controller Display Features needed to support the application as well as the overarching A-IM ConOps work still in progress.
- GIM-S is still in a holding pattern until more PR's and ER's are addressed.

ASDE-X Tech Refresh:

- This program continues to move forward with minimal issues.
- The next phase of system enhancements are currently in testing at OKC.

ASSC:

- PMR taking place the week of 7/24.
- Initial installation underway at CVG.
- There are still some RU issues at CVG, but the team continues to move forward as those issues get worked out.
- An SRMD will take place in TPA in September to address the concept of an ADS-B only version of ASSC. This is largely based on the ADS-B 2020 rule and the agencies continued desire to remove SMR from the NAS.

FMA in Fusion:

- Operational evaluation and SRMP have concluded. Additional Sep Standards analysis of IBI mode has delayed the completion of the SRMD. Slow but steady progress is being made, and an operational start of FMA use of Fusion is now planned for September 2017.

Future Surface Surveillance:

Additional meetings will take place in D.C. the week of 7/24 regarding and ASDE3 and SMRi replacement. These meetings are purely informational.

MEARTS Fusion:

- 3nm Fusion in MEARTS is a complex undertaking, and involves bringing multiple Tower, Approach, and EnRoute sectors online at the same time. The lessons learned in this undertaking will help the effort with future MEARTS and ERAM sites.
- HCF started Fusion operations on February 22, 2017, a significant achievement after years of effort. Unfortunately, the number of latent radar issues resulted in a pause in Fusion operations just days after the start.
- Significant progress toward a return to Fusion at HCF was made the week of July 17. An OSD was conducted after software and adaptation changes were

introduced. NATCA, HCF Air Traffic, and many others agreed that the system is operationally suitable.

- HCF plans resume Fusion operations in the next few weeks once they deconflict with unrelated activities.
- Efforts to continue deploying 3NM Fusion in MEARTS at other sites have been postponed until key site issues are fully resolved and stable.

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.

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. Current target date for completion according to Western Service Area is October to November 2017.
    - Meanwhile the SAAT team has been working on a 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 first phase of WAM is moving along rapidly and planned to start operational use August 10, 2017. The first phase Radio updates are complete. Contractor testing and tuning are complete. An Air Traffic flight inspection was completed July 17. Feedback from SCT has been positive.
- 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 radar to PCT as well as reducing obstructions in the area.
- A long-awaited estimate for adding identified radars to CLE has finally been delivered. SBS Article 114 agreed to a path forward to add multiple radars to CLE in support of Fusion. A presentation to the facility was completed July 12.
- N90 discussions point to a planned transition to Fusion in January 2018. Support activities could start in November 2017 or earlier.

Vehicle ADS-B:

- 1170 Vehicles equipped at 18 Airports.

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)

Development continues for both programs. CSS-WX has delivered it's hardware to the Tech Center and plans to start Factory Acceptance testing in January followed by key site installs at ZTL and ZLC next summer. NWP will follow in the summer of 2019. Key site surveys are under way and a major decision on location of both system central nodes. The nodes will be located either at the NEMC or the ARTCC basement. This decision should be made in the next 45 days. There is no impact to air traffic on the location but engineering services will be doing the site prep work along with tech ops. NWP is delaying it's install at the Tech Center due to Dell is releasing a new line of high end processors and servers and the program is looking to avoid having to go back and upgrade the Tech Center and academy systems when deployment starts.

ICAO Meteorology Panel

The MET-P had a two-week meeting at ICAO to work on data standards for weather dissemination, Space Weather Centers, Regional Hazardous Weather Warning Center, and Radiation Sigmets. One of the issues that IFATCA, IFALPA, and IATA have been pushing on the global scene is the need to transition to phenomenon bases weather advisories and get away for

FIR (flight information region) in the US we already do this between our FIRs but we still do not cross the boundaries of other non US FIRs. The goal is to have a sigmet or Advisory cover the entire weather phenomena instead of the warning ending at a geopolitical boundary.
The panel was tasked by the Air Navigation Commission to determine the optimal number of space weather centers that would provide advisories for aviation. Currently there approximately 17 countries that have a space weather centers but this doesn't mean they can produce an aviation advisory. The panel agreed to 2 global centers that would work hand in hand to produce global products and 4 regional centers that would support the two global centers. The advisories that would be produced would be for flight crew exposure, GNSS impacts, and frequency or communication impacts.