NATCA Safety & Tech Update
Week of January 9, 2017

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

> Segment 1 Phase 2 (S1P2) is the En Route deployment of Controller Pilot Data Link Communication (CPDLC) service. The key sites for this part of DataComm will be ZKC, ZME and ZID. The Facility Tech Reps (FTR) have been engaged with the program in preparing the requirements needed to activate the CPDLC service at their facilities. The FTR's are building the adaptations that will be needed to use the service at the centers. Adaptations include sector and frequency configurations for all sectors and surrounding centers. These adaptations will ensure that when hand-offs are completed, correct frequency tables are automatically loaded into the Transfer of Communication service.
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> The DataComm Subject Matter Experts (SME) have been working on fine tuning Use Cases and requirements needed to guarantee that the system performs exactly as intended. As functionality is coded, the SME's validate the system is performing correctly. When changes are needed, the SME's will work with the National User Team (NUT) and National Computer Human Interface (CHI) team on requirement changes.
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> The DataComm SME's are also working on facility implementation plans, training development and procedure development. There are also additional activities that are required prior to deploying to a facility. The group must ensure that training scenarios are developed and ghost pilots are trained. This means that additional activities need to take place almost a year out from the first time the facility starts using DataComm operationally.
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> Additional activities that must be completed are validating service volume needs for message delivery and pilot training must be developed. To activate a service volume for a center the requested coverage needs need to be completed about 1-½ years out. This time is needed to acquire radio antenna locations for message transmission. Pilot training needs to be completed approximately 6 months prior to operational use to allow for the airlines to train their pilots.

ENROUTE AUTOMATION MODERNIZATION (ERAM): Julio Henriques (ZNY) leads the ERAM efforts for NATCA. This update is provided by Dan Mullen (ZID).

> We were advised that the Agency would stop supporting FRAC tokens on Jan 9th. FRAC tokens allow reps to log into the FAA network remotely, which is essential for the work many of us do. Alternative methods of logging in exist, but don't work on all devices and Apple computers are particularly affected. Mark Dillon (A80) led the effort to correct this problem, and he and

I had many meetings with FAA IT services and Harris Corporation to find a solution. In the end, a new way to log in was identified, and can be used by NATCA reps using Apple products. Reps needing access via the new method should contact the Safety and Tech department for details.

Operational testing of the latest ERAM release, EAD6002u, continues this week at ZSE and ZLC. This version of ERAM has significant changes to enroute data blocks, including a Visual Comm Indicator, a portal fence, and left-justification of characters. These chances are necessary for the deployment of DataComm and other NextGen programs.

The first phase of Airborne Reroute and Pre-Departure Reroute (ABRR/PDRR) deployment will begin Jan 23rd. Any route segment that is conformant with an active Traffic Management Initiative will be indicated by chevrons in the flight plan readout. This segment is protected and should not be altered. Full ABRR/PDRR deployment will begin when ARTCCs arena EAD6002.

The National User Team (NUT) held it's quarterly meeting in Austin Dec 12th-16th. Facility Tech Reps, National Reps, 2nd Level Engineering, Leidos and contract support attended. The following provides a synopsis of the meeting.

Data Com Briefings

The Data Com team briefed on the following topics: NSDA, status of S1P1, proposed S2P2 waterfall, adaptation for EAE100, procedures and training.

Airborne Re-Route (ABRR)

Members of the ABRR task team briefed on the following: recent testing at ZLC, ZMP and ZDV, training for TMU SMEs and status of ELMS training, suggested local procedures, conformant routes and an outlook for deployment. Site testing went well and accomplished what was planned. The trial run of the SME workshop also went well and training begins in January. The AT ELMS course has been delivered to the sites. The suggested local procedures were reviewed and discussed. Conformant routes will be turned on nationally on 1/23 and a briefing item for this has been sent to the sites. The deployment schedule is dependent on the field delivery of EAD600 and the dates that each site comes up on the system.

TBFM SIG 22514 Reject Messages

The task team briefed on new reject messages that will be sent from TFMS to ERAM and provided formatting for the messages that will be displayed to the user. A problem statement will be written for team review.

NEXRAD Outage

A new problem statement has been written to provide notification of NEXRAD outages to controllers and will be discussed during the next team telcon.

Path Stretch

The task team presented slides and a video that demonstrated this new capability. The intent of the tool is to provide the user with both a speed and off course vector to accomplish spacing. A draft use case has also been created and sent to the team for review.

WARP Anomaly

Steve Snyder briefed the team on a WARP issue that had been reported recently by a few sites. It involves the differences in weather depiction between the CWIS and AT WARP SMG. AT weather has never been provided data below 30 dbz while CWIS shows to a lower level. The effect of this difference was areas of weather shown on CWIS which were not on the AT display. All of the weather in question was of light intensity. Steve also stressed that all WARP issues should be reported first to the WARP/Harris Help Desk as ERAM only displays what is sent from WARP.

Improved Support for UAS

Two briefings on proposed changes to support UAS's were given. The first examined the current ERAM baseline for CHI and software impacts of increasing the supported route string length to 3000 characters. This included how the user would view, amend and interact with these larger flight plans. The second briefing described new methods to modify Aircraft Performance Tables to more accurately describe UAS in-flight behavior. These new tools could also be used to improve the characteristics used for all types of aircraft in the system. A task team of ZWB, ZMP, ZJX, ZNY, ZLC, ZTL, ZAB, Wayne Maxwell and Steve Snyder was formed to begin work on the issue.

ICAO Template

The task team presented three new use cases, ACL Equipage, Quick Template and Equipment Template. Each use case describes an aspect of the changes needed to update the Equipment Template to ICAO standards. The use cases will be updated and sent to the team for review and further discussion.

ER 162528 Multiple SD-Keys (ZDC ZDV)

The draft problem statement was discussed; its desired behavior is to use adaptation to create sector specific keypad options; this will include having two functions enabled by a single key. The task team will evaluate all the current adaptation options, update the problem statement if needed and bring it back for further discussion.

ER 76279 ADSB Broadcast Call Sign (ZOA ZHU ZID ZOB Sands Snyder)

The draft problem statement and other options were discussed during breakout session.

ER 160221 /OK Amendments

The team discussed and reached consensus on the updated problem statement; its desired behavior adds a site adaptable parameter that will control the eligibility window for making amendments to uncontrolled flights. The update was sent to SLE and at this time a use case is not needed.

ER 95932 Master Brightness (ZDV)

The task team discussed the ER during breakout session.

ER 163212 Multiple Altitude/Fix/Altitude (ZOA ZDC ZLC ZSE Snyder)

The task team discussed the ER during breakout session.

ER 166602 ERAM Processing Enhancement for non-ICAO

A draft problem statement has been written; its desired behavior is to improve the coordination of non-ICAO compliant aircraft types for flights that leave US airspace. The problem statement will be discussed during the next team telcon.

Foreign Call-sign Order

The draft order was discussed by the team. The intent of the order is to provide procedures for the processing of foreign aircraft identifications containing a numeric prefix. There will be further team discussion on the order.

ER Issues

The Future Bucket ER list was reviewed; this list contains all ERs that have been assigned to the Future Bucket. A task team had already evaluated the list and added prioritization where needed. The list was updated with the results of the discussion and will be maintained for use as packaging for future enhancements becomes possible.

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) Feature Checkout occurred at the Tech Center the week of November 14th. Feature Checkout was performed on NVS Version 12B and was used to determine the completeness of available features, as well as their interaction with other features. The Stability demonstration also occurred at the Tech Center, the week of November 28th. The Stability demonstration was run to determine the systems readiness for Factory Acceptance Testing (FAT) scheduled to begin in January. While the system performed well, and there has been significant improvements, it fell short of being able to begin FAT dry runs in January. Harris continues to focus on stability and fixing bugs, and the start of FAT will shift a few months to the right.

Mr. Shedden and Christopher Lloyd (ZDC) participated in a meeting on 1/4 regarding the FAA's comments on the 50% Supervisors manual. Harris is currently reviewing FAA comments on the 50% Operator manuals.

Mr. Shedden was in Atlantic City the week of November 14th for Feature Checkout, and the week of November 28th for the Stability demonstration. Mr. Shedden was also in Seattle for the collection of data to begin development of Operation Test and Evaluation (OT&E) scenarios.

Mr. Shedden will begin frequent travel to Harris' HQ in Melbourne, FL to observe progress in setup of the FAT system.

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

NAS Voice Recorder Program (NVRP) is the replacement for existing NAS voice recorders (DALR, DALR2, DVRS, DVR2). The Program Office presented to the JRC and received approval to proceed to Final Investment Analysis. 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.

Waterloo Tower/TRACON (ALO) reported issues with the phone system used operationally in the tower. Both issues have been resolved and we are working to close the CAR.

Mr. Shedden is participating in the rewrite of **FAA Order 6510.4 (A/G Order)**. The last version was written in 1980. There are both new and existing requirements in the order dictating how Air Traffic must use A/G frequencies. NATCA received a briefing from the Spectrum Office on September 27th. We have requested a SRM panel be convened to address the safety issues associated with this requirement. AJI is reviewing the request.

NAS MONITORING EQUIPMENT (NME): Corrie Conrad (PDX) is the NME Article 114 Representative. Ms. Conrad's report to the membership is below.

NME has been approved to move forward to Initial Investment Decision where we will be refining the requirements and alternatives. We are conducting another Safety Panel at the end of this month.

There was a policy change to the 6750.24 that states when the Far Field Monitor alarms you are no longer required to downgrade from a CAT II approach to a CAT I approach.

AJW-143 in OKC is developing version 3.A, which will update the software for this change, but will not update any other version of the software such as approach lights, engine generators, etc. like SFO and OKC currently have. The PO suggested it be done this way as not to give the UIC any unfair advantage over other vendors during the process of developing the NME.

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): Initial Operating Capability (IOC) took place 4/27/16.

Phase 2 (10C Enhancement) –Completion date shift due to south airfield shelter.

Phase 3 (9R Enhancement) - Scheduled to begin Spring 2017.

DTW: ORD declared 4/20/16

Phase 2 (21L): 3 REL (Runway Edge Lights) to be installed Spring 2017

BWI: Construction is ongoing. System set to come online in 2017.

SFO: IOC (Initial Operating Capability) was declared on 11/30/16. The RELs (runway entrance lights) were turned on. However, a software update is needed for the THLs (takeoff hold lights). I will be in SFO January 17-19. The 17th we plan on finishing the optimization, and the 18th we are planning on turning on the THLs.

BOS: MOA was delivered on 10/31. Design review meeting was held on 11/15. Work is ongoing to get the funding committed.

DFW: Final CSER (Contractor Site Engineering Report) was scheduled to be delivered 11/6. Pre-bid meeting for the SSC portion of the work on the west side of the airport was held on 12/7. The bid is expected to be awarded on 1/6/17 and a pre-construction meeting is scheduled for 1/19/17.

Runway Safety:

Closed Runway Occupancy Prevention Device (CROPD): Live Testing at JFK was completed. I have been awaiting an update on the JFK analysis results, which was originally targeted for December. However, due to the number of contractual products MITRE/CAASD is delivering to the FAA in December, plus the holidays. I was recently told that the report would not be available until mid-January. I am also awaiting an updated timeline to go to RNO and MDW.

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

Automation of Construction Notice Diagrams: Multiple meetings and edits have been conducted for the detailed requirements in which myself, the ACAC, and Runway Safety office were involved in. I am currently waiting on the draft of final requirements to be completed in order to review. The timeline will be pushed back, however I have not received the new timeline as of this time.

Root Cause Analysis Team (RCAT): Bridget Gee is the RCAT Industry Co-Chair on the RCAT. Our next meeting is scheduled for February 23rd. At that time, we will be analyzing the current A and B runway incursions in the NAS since the start of fiscal 2017.

BNA CAR: BNA due to the airport being expanded twice since the control tower was opened in 1981. The expansions have resulted in multiple runway and exit areas having limited or completely obstructed views from the tower. The inability to observe aircraft exiting the runways, or holding in position makes it difficult for BNA controllers to effectively control traffic. The CAR was submitted on 12/16. I am currently waiting for a response from the ERC.

Timely Airport Maintenance Notification CAR: This CAR was in briefed on June 21st. Research and outreach are currently being conducted. This CAR is also part of the Top 5 additionally had two SRM panels. I have multiple meetings this week reference this in CAR in particular which also has a due date is 1/20/17.

Airport Construction CAR – The RTCA Airport Construction Task Group's final report is with AJV. AJV is actually in control of the way forward currently as they are reviewing the RTCA's TOC Airport Construction Task Group's recommendations. I am currently awaiting review and commit by AJV. Once completed, we will be able to finalize our recommendations. CAR due date is 2/28/17.

Runway Safety Call 2 Action Communication Initiative – Runway Safety Best Practices Workgroup – We identified and reviewed Runway Safety best practices and will make recommendations for formalization where appropriate. The group in collaboration with the Runway Safety group and the Runway Safety Council will formalize the "best practices". I sit as the co-lead for this workgroup. The next workgroup meeting will be held in April. The only deliverable from this workgroup so far has been the Air Traffic Procedures Bulletin – October 2016.

Runway Incursion Prevention Shortfall Analysis (RIPSA)- RIPSA had its formal in brief to NATCA on 12/12. RIPSA is funded by the Runway Safety group. This Runway Incursion Reduction Program (RIRP) is tasked to investigate, develop, test, evaluate, and deploy low cost runway incursion prevention technologies. This is the result of the NTSB recommendation to "require, at all airports with scheduled passenger service, a ground movement safety system that will prevent runway incursions; the system should provide a direct warning capability to flight crews." Currently, research was conducted at 15 airports without any surface surveillance system and we are waiting on a final report of that research. Work is ongoing.

ICAO – ADOP (Aerodrome Design and Operations Panel) – My final report was submitted to IFATCA and NATCA on 12/12. Additional efforts are underway were I will begin working with the AOWG. Work is ongoing with the ADOP.

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. I am beginning this effort now more information to follow.