

PASS Liaison / Representative Update

Date of Update: 2-3-16

Program Name: **ERAM** System Enhancements/Technical Refresh (SE/TR)

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Current Program Status:

It was just announced that the 2nd major software release for ERAM SE/TR (EAD400) was delayed for national release a 2nd time. It will now be available on 2/16/16.

EAD400 was originally key site tested at Jacksonville ARTCC and Washington DC (Leesburg) ARTCC in October 2015. The Tech Ops issues were focused on at ZJX. PASS member Ed Thomas and I were in Jacksonville for the pre-ops portion of the test activities. There were issues discovered in the EAD400 software during ops testing that ended the keysite test activities early. The release was rebuilt and delivered to the keysites again on 1/11/16. It was put into operations late January at ZJX and ZDC, and the show stopper issue was discovered during the operational usage.

The next release will be EAD500. We have a planned EAD500 Ops Eval activity for the week of March 7th at the Tech Center. There may be a subsequent Ops Eval for the next known version, EAD510.

We are in the planning stages for a Tech Ops User Team meeting. The User Team is covered in the pending MOA between PASS and the FAA. We will be taking another look at updated Tech Refresh plans, and discussing a range of technical issues that impact our bargaining unit employees. The planned FID for ERAM Tech Refresh (p2) has been moved from March to September 2016. This will be the 2nd time we will have a chance to discuss Tech Refresh before that phase of ERAM goes to FID. On December 10th, PASS member Ben Rule and I visited the Lockheed Martin facility. We were presented with early plans for ERAM Technical Refresh. We reviewed the replacement hardware candidates and discussed maintenance and implementation approaches. The initial phase of Tech Refresh will kick off late 2018 and focus on the Data and/or Radar controller position.

ERAM Refresher Training

On 10/6 I submitted a TSAP on the need for ERAM refresher training. That TSAP was accepted and TIR 0903-1-16 went out to the affected lines of business, including myself as the ERAM Article 13 Rep. I plan to work with the PASS Article 13 AJI Training Rep David Bowerman to formulate our response. Dave and I are also working with AJW, AJI, AJM stakeholders to examine and make recommendations on what's needed for ERAM refresher training. We are in the process of creating a method to solicit feedback from the ERAM ARTCC SOC Reps on this topic. After the SOC refresher training is created, we have a desire to move on Technician refresher, then System Administrator (SS) refresher. Steve Nauss from AJI is personally involved in these efforts.

ERAM Stability/Backup

ZBW ARTCC and ZLA ARTCC both recently experienced Flight Data Management failures on their backup ERAM channels. At both facilities, ATC Operations were able to continue on the operational channel.

On New Year's Eve, ZDV ARTCC experienced issues with ERAM display processors in 2 different areas, and on both ERAM channels. Controllers were forced to utilize the legacy backup system EBUS for over 20 minutes. ZDV Tech Ops personnel remained calm, collaborated with Second Level Engineering, and restored ERAM Ops in less than 30 minutes. There was no ATC-0 declaration as the site personnel handled the situation very well. This incident did reiterate the need for increased stability/backup within ERAM.

Immediately after the August ZDC issue, the Article 48/13 team ramped up our dialogue about some semblance of backup functionality/system for ERAM's single point(s) of failure. The team preliminary agreed to move forward on a solution that should be able to be implemented during the SE/TR phase. I am pushing on a very consistent basis to ensure that Tech Ops (PASS specialists) have an opportunity to weigh on the proposed plan before it gets finalized. There are maintenance/system management considerations to whatever gets implemented, and I seem to have gotten the team to acknowledge this.

On January 27th, the Tech Ops National ERAM Workgroup discussed a new enhancement called Contingency Flight Data Management (cFDM). This enhancement will introduce a limited backup to ERAM's Flight Data Management (FDM). FDM was the cause of the 1st post-ORD ERAM system failure that resulted in ATC-0. I am pleased that I was able to get support from the FAA and Lockheed Martin Engineering to allow our ERAM site BUEs to begin to provide input towards that enhancement. cFDM should pave the way for the decommissioning of EBUS, the legacy Host then ERAM backup that runs in the En Route Communications Gateway (ECG) system. ECG is planning for a Tech Refresh next year that will not include EBUS.

Ongoing Program Status:

Article 13 Workgroup

Now that ORD is accomplished at all ARTCCs, PASS has been able to get more focus onto to Article 13 issues. There had previously been a joint Article 48/13 Workgroup consisting of NATCA, Director of Air Traffic Systems, ERAM Program Manager, Second Level Engineering Manager, PASS, Tech Ops AJW-134 Manager, and others. In addition to this meeting, we held a subgroup meeting to focus on PASS/Tech Ops Issues. The Article 48/13 Workgroup no longer exists in that format; hence we are putting together a more robust Article 13 Workgroup to cover areas of the pending MOA that are not covered by the User Team.

Risk to ERAM Program

One of the major issues we are facing with ERAM is the end-of-life situation with several LRU components. The LRUs of primary concern are the p52x system planar boards (motherboards) within the ERAM radar position processors. Each AT R-position has its own processors; one for channel A (p615) and one for channel B (p52x). It has been noted that ERAM's deployment phase experienced 4 years of delay before operation usage due to a number of factors including poor program management, lack of early union involvement, and sequestration. This cumulative delay led to the equipment going end of life early into the operational usage period we are now in. FAA Second Level Engineering is working to identify the cause of the system planar failures and whether there are any actions that can be taken to prolong the lifespan.

Ultimately, the solution is going to be an **ERAM Technical Refresh**. This has become the priority for the FAA's investment planning activities. Without Tech Refresh, ERAM will not be sustainable beyond 2018, even with all stopgap measures exhausted. There is a planned FID for Technical Refresh scheduled for 9/2016.

As a result of this need to deal with Tech Refresh, the planned Final Investment Decision (FID) for ERAM Sector Enhancements (SE) has been put on hold until 9/2016.

Ongoing Actions with updates:

PASS MOA with the FAA (PMO) for ERAM

MOA is in the final stages of completion. Thanks go out to Mike Riso for getting this done. Among other things, the MOA spells out specifics about inclusion on OT&E and other technical activities.

Understanding what is in the pending MOA, we have begun participating in all 3 OT&E activities:

Ops Eval

SSM Keysite

Release Site Test

Program Issues: (ongoing)

A number of programs that get implemented through ERAM, and the next phases of ERAM are up for Investment Decisions and are at various phases of implementation planning.

Identify Support Needs: (ongoing)

1. **Completing the MOA.**
2. **Refresher Training!!!** It has been 5-6 years since many of the certified specialists received ERAM training. ERAM has been steadily changing and everyone's detailed knowledge naturally degrades over time. Other than the tasks that we do regularly, we need refresher training to stay competent. Air Traffic has long mandated refresher/currency requirements, we need the same. We will eventually need to develop some onsite courses that can be delivered or taken locally to keep the workforce up to par on ERAM. This courses will also need to be updated periodically as the ERAM software matures and accommodates new program implementation.
3. **Commitment to safety** - PASS will need a firm commitment from the VP of Tech Ops and AJI that they:
 - First – acknowledge value the importance of 1st level Tech Ops system ERAM Managers, Maintainers, and Administrators (NAS/NOMS, Techs, SS's). Without first responders, the patient won't make it!
 - Second - are willing to commit resources (not much needed) to ensure that we have the refresher training we need to stay proficient enough to deal with unexpected partial or full ERAM failures, and do our jobs correctly. Air Traffic mandates this!!!
 - Third – mandate that any briefing materials that are produced for the Tech Ops work force are assigned to the people who manage, maintain, and administer the subject matter. Air Traffic mandates this!!!

These discussions would need to happen at the highest level (by PASS President/VP), as there is already agreement at the working level. The issue is that the higher ups don't support what their people identify as needed.