

# PARC Member F2F Summary

November 27-28, 2007

Arlington, VA

**27 November**

## **Welcome & Introductions**

Meeting Overview & Agenda Review

### **OTA**

**Powell**

Expected Results: Update to the PARC on Third Party OTA action.

Gary Powell provided the PARC with a status update on the FAA's third-party procedure development program. The two vendors who are currently signed up for the program were discussed, with it mentioned that although they were signed up (Naverus on March, 2007 and Jeppesen on August, 2007) they were not yet qualified. The schedule for vendor approval to get them qualified was stated to be aggressive, yet achievable. The program will only cover RNP SAAAR to start. The vendor will be responsible for all costs relating to the procedure, including maintenance. The only way the FAA would take over a procedure is if the vendor was going to cancel it, or sufficient time has passed that it was already on the FAA's list to be done by them in the near future. The program is not designed to relieve pressure on AVN for procedure development. In other words, the FAA will not be paying vendors to develop procedures that they do not have the time or staff to develop themselves. Once the draft AC is completed the FAA would like to coordinate more closely with the PARC and vendors.

### **SRMD Track-to-track Panel**

**Williams**

Expected Results: Update to the PARC on the Panel's work.

Jeff Williams briefed the PARC on the status of the track-to-track Safety Risk Management Document (SRMD). Once the SRMD is completed, Document Change Proposals will be initiated to implement the changes to codify RNAV routes at 8NM track-to-track in radar. However, work to go lower than 8NM is already occurring. Once the VP level signatures are achieved the next step will be to publish Notices allowing controllers to start using it, with more permanent documentation to follow. The end result of the process will result in national criteria for separation standards, criteria that does not exist today. It was noted that wake turbulence will still be a problem on long courses, and will be a limiting factor.

**Action:** The FAA took an action to provide an update to the PARC on the rulemaking status of the program by the next F2F.

### **RNP Procedure Update**

**Williams**

Expected Results: Follow-up briefing on new procedures being developed with higher VNAV/LNAV minimums.

This briefing was a result of concerns raised at the August F2F that there were some RNP procedures being developed at locations that did not provide significant benefit to users. A review of current procedures with both an RNP SAAAR and LNAV/VNAV line of minima was given, showing that there are only two procedures out of 34 where the RNP SAAAR minima are higher. Five have equal minima. Once updated survey data is obtained, this may change. The Accuracy Code application 8260.52 is being examined to determine if it is required for RNP SAAAR. Lastly, it was pointed out that operators have made adjustments to their expectations. For example, procedures that are in effect ILS overlays,

allowing the conduct of operations with glide slope out, using RNAV and vertical navigation flight paths.

**Action:** Once MITRE completes the Accuracy Code Assessment, the PARC will be briefed.

## **OEP**

**Mohler**

Expected Results: “Call to action”. OEP overview to help PARC provide the best inputs back to OEP.

An explanation of what the OEP is and how it works was provided to the PARC by OEP Director Gisele Mohler. A concern was raised that unless other Agencies besides the FAA were involved in the OEP program that coordination problems would occur later due to the large scope of OEP. The NextGen budget picture for 2009 will become clear this January. PARC feedback will be requested on what has been funded so far and what is planned to be funded. The next OEP publication in June will have a greater level of detail.

## **OEP PBN Elements**

**Williams**

Expected Results: Overview of how PBN Roadmap goals are mapped in OEP.

Jeff Williams provided a briefing to the PARC on how Performance-based Navigation was being integrated into OEP. Solution sets in OEP with both direct and indirect RNAV/RNP connectivity were provided. Commitments from the PBN Roadmap will be incorporated into OEP.

**Action:** The PARC took an action to begin their OEP Activity, and OEP discussions will be added to future PARC telecon discussions.

## **RNP SAAAR Update AT Final Recommendations**

**Cramer**

Expected Results: Discussion of the AT recommendations for 8260.52 criteria changes, PARC acceptance, and schedule for transmitting to FAA.

Mike Cramer provided a briefing on the RNP SAAAR Update AT final recommendations. Some discussions arose regarding the recommendations. Many PARC members expressed their opinions considering the subject of designing to 20 versus 25 degree bank angles for max design bank angle for RF legs, and there was agreement to discuss this issue in more detail off-line. In another discussion concerning GPA (Glide Path Angles) the PARC was reminded that “specials” are an option for specific scenarios. A question also was raised about what to do with RNP SAAAR procedures designed under old criteria. It was explained that these procedures will be valid with an implementation document for legacy procedures.

**Action:** New groups with specific expertise will need to be formed to discuss loss of procedure availability and also multiple glide path angles. This will be discussed during upcoming PARC telecons.

## **RAIM Prediction AT**

**DeCleene**

Expected Results: Update on AT activities.

Bruce DeCleene briefed the PARC on the status of the RAIM Prediction Action Team on behalf of team Chair Lou Volchansky. It was stressed to the PARC that any members who had an interest in the development of the RAIM prediction tool, and had not been involved in the AT discussions so far, should become involved as soon as possible. It is projected that the tool may not be ready with all operator requirements by April 1<sup>st</sup>. There was a question raised as to whether or not this tool was even

necessary, due to the current health of the satellite constellation. However, rather than wait for future satellite failures that would decrease the number in the constellation, we should implement the tool sooner rather than later to help avoid future problems.

**Action:** An action was taken to come to a decision on whether or not to push the schedule out by the next PARC F2F meeting. Another action was taken to further discuss the 70 waypoint limit.

### **Aviation Safety Oversight**

**Ferrante**

Expected Results: Information provided to the PARC.

Recent issues regarding communications were presented. The structure and operations of AOV were also discussed.

### **PARC Recommendations Status**

**McGraw**

Expected Results: Update to the PARC on the FAA's status on implementation of PARC recommendations.

The FAA's status on implementing the recommendations of the RNP Procedure Criteria AT, FASDAWG, VFWG, RPAT AT, and the NBAA Airspace recommendation was given. For the RNP Procedure Criteria AT recommendation regarding secondary obstacle surfaces, it was stated that for now the priority has been placed on getting FAA Order 8260.54A completed. In a discussion about RF legs, it was pointed out that RF does not mean SAAAR. The FAA felt that it is important to acknowledge that at this time it is a pretty big step to have RF legs outside of SAAAR. The FASDAWG recommendations are progressing and getting to the active phase. The 737 in OKC will be used to do the simulator tests for the FASDAWG recommendations. When discussing the VFWG recommendations it was acknowledged that a lot of work has been accomplished with positive comments from all sides. It was also mentioned that an Advisory Circular to address specific VF needs may be required. Seattle and Las Vegas were mentioned as possible sites for the initial implementation and validation of RPAT. The Hailey, ID (KSUN) example of airspace change demonstrates the length of time that the process takes with no contentious issues.

### **JPDO/NextGen**

**Arbuckle**

Expected Results: Information provided to the PARC and identification of potential PARC actions.

Doug Arbuckle provided an update to the PARC on JPDO/NextGen activities that have occurred since the last update provided at the May F2F. Current and upcoming activities were also discussed, as well as some ideas about future needs necessary to ensure that NextGen goals come to fruition.

**28 November**

**DME Reversion**

**Cramer**

Expected Results: Information provided to the PARC.

Mike Cramer presented a briefing on procedure design assessment required to determine the need to inhibit DME reversion. Examples of where significant benefit could be gained by this were discussed. It was suggested that this may be a problem that will go away on its own in a few years. However, if this can be solved in the near-term then it would also provide future benefit if the problem does not resolve itself later. The final recommendation will include which Advisory Circulars or Orders would need to be updated as well as discuss charting and other related issues. The benefits and implications of DME reversion should be included in the final recommendations for AC 90-101 and 8260.52.

**Action:** Mike Cramer took an action to take the DME reversion issue, mature it and present the possible solution to the RNP SAAAR Update Action Team during the Feb. 12-13 meeting for review, discussion and action.

**Operational Needs and Benefits of RNP AT**

**Clausen/Porter**

Expected Results: WG update to the PARC.

Perry Clausen provided an update on the status of the AT activities. The AT will focus on benefits that are real and achievable. They will focus on design procedures with clear benefits (such as separate tracks in and out of airports to relieve conventional operations). If RF legs are going to be included in Basic RNP, the group will work them. Otherwise they will not spend much time on them. It was agreed that RF leg capability is crucial. It was also stressed to not misconstrue that Basic and Advanced RNP are different capabilities.

**Flight Deck Automation Working Group**

**Abbott**

Expected Results: WG update to the PARC.

The Working Group status was briefed by Kathy Abbott. A key item discussed was manual skill degradation due to increasing automation. The PARC/CAST Initial Report has been completed and will be distributed to PARC Members for comment.

**Action:** A specific deadline for comments will be given at a later date, but it is expected that the PARC will have an action to provide comments by January 1<sup>st</sup>.

**TBO**

**Cramer**

Expected Results: Discussion of TORs

Mike Cramer presented the Terms of Reference for the new TBO Action Team. A decision was made that the Action Team's first task should be to identify all current work being done on TBO and to identify what gaps exist. Only then can a decision be made on how the AT should move forward.

**Action:** Refine AT scope, update ToRs and conduct gap analysis.

## **AC 90-100A**

**Alexander**

Expected Results: Update.

Frank Alexander provided a status update on the activities of the AC 90-100a Action Team. Recommendations were also provided.

**Action:** An ongoing action to apply OPSPECS consistently was reiterated.

## **Vertical Performance Requirements**

**Alexander**

Expected Results: Presentation of a draft proposal for developing vertical performance requirements for vertical RNP.

A need for vertical performance standards was briefed by Frank Alexander. Three recommendations were provided. There was general consensus on the first recommendation to develop minimum performance standards for VNAV and criteria for Vertical RNP for barometric and/or earth centered vertical navigation. However, it was also noted that criteria does exist e.g. RNP MASP, that may contain much of what is needed. What is not could be part of Mike Cramer's groups trajectory capability gap assessment. The second recommendation concerning follow on actions with regard to time of arrival/RTA will be covered by Mike Cramer's gap analysis activity in the TBO group. There was no consensus reached on the third recommendation regarding the formation of an activity to develop common standards for flight planning integration between ERAM, FMC, and AOC flight planning systems. Bottom line: Wait to see the results from Mike Cramer's gap analysis then use Frank Alexander's recommendations as follow-up.

## **RNP Charting**

**Rivas**

Expected Results: Review of RNP charting issues.

Pedro Rivas briefed the PARC on the outcome of the Charting AT telecon held November 20<sup>th</sup>. Issue #6, "RF legs should be annotated next to applicable legs. Add 'RF' next to RF legs" is currently rejected, but may be opened back up to discussion once Mark Steinbicker holds offline discussions with Vinny Chirasello. Other actions have been assigned by Pedro to different members of the team and the status will be reviewed in January/February.

**Action:** The FAA took an action to review the legality aspects of chart validation.

## **Rollover Issue**

**Rivas**

Expected Results: Discussion of possible membership.

Pedro Rivas provided a briefing to the PARC to remind them of the navigation database issue involving the impossible task of verifying current charts and waypoint data by comparing old and new aeronautical charts since current guidance allows points to be moved up to 5 miles without a name change.

**Action:** A formal request was made for the PARC to approve the formation of a joint PARC/ACF Working Group to resolve the issue. Pedro Rivas and Mark Steinbicker would be the group co-chairs and will draft ToRs for the group.

**Basic RNP WG****Burns**

Expected Results: Review of final recommendations and PARC acceptance.

Roger Burns provided an update to the PARC on the status of items being discussed by the Working Group. Item 3 was recommended to be re-opened to discussion for the short term. When discussing Item 6 it was stated that the understanding was that there would be two databases available for operators to choose from and it was suggested that the requirements be described in the AC. Item 9 would also remain open. For Item 10, the PARC was informed that the schedule for document publication for .54a and .52a will have an impact on the recommendation because the two documents need to be consistent. The new Item, 5A, will be discussed in the Working Group. Bruce DeCleene would also like the XYZ charting and box issue kept open for discussion as well.

**Communications WG****Kraft**

Expected Results: Review of the new and improved CWG and communication issues.

Tom Kraft briefed the PARC on the activities of the Communications Working Group. It was recommended that any 4D work done by the Comm WG be closely coordinated with Mike Cramer and his group. The WG is only working on approval for Iridium for oceanic communications at this time and not domestic communications. The WG will be holding another meeting in February, and will be looking for more feedback from the PARC after that meeting.

**Next Gen****Sabatini**

Expected Results: Overview.

Nick Sabatini, Associate Administrator for Aviation Safety, briefed the PARC on an overview of NextGen. He explained that NextGen is based on navigation, is evolutionary and deals with aircraft centric operations. PARC is doing the first major steps right now. A video is available which shows the full capability of aircraft in the NextGen plan. Enterprise Architecture will be revised to include all future Roadmaps.

**Future Capacity Requirements****Devlin**

Expected Results: Intro to MITRE method and tool.

Chris Devlin of MITRE provided information to the PARC on both the Model-Specific US Fleet Forecast and the FRAT PBN Operational Forecast. FRAT stands for Fleet Readiness Analysis Tool. The Forecast uses a bottom-up approach. It can be used to project PBN numbers into the future (what the capability is going to be). This Forecast however will be a conservative forecast because it leaves out General Aviation and business jets. Randy Kenagy urged that due to the limited scope of the Forecast that it not be used for policy decisions. David Jones asked if the tool could be made available to the Benefits Working Group, and was informed that it was available.

**NAS-wide Cold Temperature Risk Analysis****Cramer**

Expected Results: Information on method, some airport results.

Mike Cramer briefed the PARC on cold temperature risk analysis. Two questions were presented in his briefing for discussion. For the data used for analysis, five year temperature averages were used. Results were said to be available by March and will be forwarded to Mark Steinbicker.

**Migration of non-public elements of Notice 8000.300****Fulton**

Expected Results: Final Report presented to the PARC and proposed actions.

Ted Demosthenes briefed the PARC on the recommendations of the Action Team. He will be taking over the activity of the AT from Steve Fulton. The full recommendations will be provided to the PARC early in the week of Dec. 3-7, 2007. At that time a deadline for PARC comments on the recommendations will be set. They will also be discussed by the Document Strategy Working Group.

**Action:** Present the full recommendations to the PARC by 7 December 2007.

### **New Business/Future Meetings**

**Nakamura**

A location for the March 12-13 PARC F2F meeting will be discussed at the next PARC telecon. A reminder was given to avoid conflicts with both the Ops Specs and Aeronautical Charting Forum meetings.

A Public PARC F2F meeting should be planned for sometime next year.