

PARC Member F2F Summary

January 18-19, 2007

Atlanta, GA

18 January

Welcome & Introductions

Meeting Overview & Agenda Review

The meeting began with a welcome from Delta staff, who thanked the PARC for their work. Administrative details were discussed. The group was told of many other groups working issues outside of the PARC they should be aware of, and were solicited for suggestions for future items of discussion at upcoming PARC meetings.

OEP Discussion

McGraw

Expected Results: OEP briefing from John McGraw

There are many different groups working on issues, with cross membership among groups. For example, there is a public OEP meeting coming up in March/April. OEP now stands for “Operational Evolution Partnership”. It began as a 10 year look at capacity and efficiency, but is now being broadened. NexGen is getting up to speed and will be more of a comprehensive look at the future. Groups have been formed within the FAA to help NexGen programs move along – including the OEP Associates Team and the NexGen Review Board. The OEP changes were then shown graphically in the presentation – NGATS strategic initiative ring, wedge for aircraft and operator requirements, etc. A graphical presentation of how things work in OEP was provided, and then a close look at core programs was done. The “Avionics Evolution Waterfall” discussed and a sample capability path was gone through.

Randy Kenagy wondered what is the role of industry in this path? The answer he was given is that they determine what operational improvements are needed by voicing their needs. They also help to make decisions on what avionics are going to be used. The safety policy ring would be where the majority of influence of the PARC would be. Randy stated that this is how it should be, but work is needed on industry participation along every step of the way.

A better description of Avionics wedge was provided, discussing what is required and when from the JPDO.

John Ackland wondered if the air transport community was included in the Avionics matrix, and was informed that yes they are included. He also provided feedback on the briefing that the words in the boxes don't seem to match up with air transport/air carrier real world operations. It was stated that this is a draft of how to present information, and all feedback on improving it is welcome.

Wally Roberts wondered if the option of using LAAS to augment LPV or SBAS or WAAS to get Cat III autoland was no longer an option, but this was stated to be inaccurate and that that capability was currently being researched.

Jerry Davis provided feedback that the presentation focuses on the avionics side, and needs to also include how to use the avionics – be more capability focused. The briefing was again said to be a draft, and that it is not just for avionics, and that operational requirements will be included. While the title is currently “Avionics Matrix” that can be changed to reflect operational/capability requirements as well.

John Ackland stated that policy changes will have to be made in regulations to do everything in the OEP, and believes that this is a great time to make changes to simplify the overall process towards a more graceful future. John McGraw stated that there is a discussion going on regarding creation of one OPRM for all.

The plan is to have the briefing more filled out by the time of the public OEP meeting. Roger Wall believed that if the public meeting is held in March, there may not be enough time to properly coordinate with industry.

Bill Vaughn wondered if there was any discussion for the approval to use all this new stuff when you put it out there included in the briefing. He gave as an example the RNAV RNP procedures – how there are plenty out there but no operational approvals to use them. John McGraw agreed that this is necessary.

Randy Kenagy inquired about obtaining more information on the role of AVS in the OEP, and if there was anything publically available. He was told that there is no separate plan for AVS, and their roles are spread out through multiple places and are included in the main plan.

Frank Alexander inquired as to where security issues were listed. John McGraw stated that concerns over listing what the FAA was worried about led to a decision to have no separate section for security, and to instead include it in other areas and track it separately.

Dave Nakamura stated that periodic discussion of this in the PARC would be a good idea, and John McGraw stated that a good time for the next presentation would be after the public OEP meeting.

Critical Decisions Working Group

Davis

Expected Results: Group next steps and future organization and membership

The Group believes they are done. All work assigned to them has been completed, and they are waiting on future assignments. Jerry Davis has some of his own personal suggestions but needs input from the PARC and the FAA. They would like to get the FAA to implement some of the recommendations now to get benefits.

It was stated that the PARC has agreed with the Groups recommendations, and has sent a letter up to Nick Sabatini with recommendations, but that the PARC has not taken any action after that on recommendations given by the Group at the October PARC F2F in Orlando. It was questioned whether any remaining follow up activities would be CDWG work, PARC work, other outside group work, or simply a letter sent to FAA.

Jerry Davis was tasked with reviewing the Oct. F2F brief for recommendations not sent up to Nick Sabatini and to write a White Paper recommending to PARC what to do with them.

The PARC was also tasked with going through the PBN Roadmap to check for things needing to be done by the CDWG.

It was also stated that the Program Office has to sponsor efforts. To that end, John McGraw and Jeff Williams tasked themselves to look at the next steps and to determine the top tasks for the PARC. *These taskings will be tracked on the PARC telecons*

Communications Working Group

Kraft

Expected Results: Implementation strategies for Roadmap for Data Link

recommendations/Performance-Based Communications Program Office. Identification of points of contact for “Lead” operators and other aviation stakeholders for PARC CWG Core Group for an industry coordinated Roadmap for Performance Based Communications

Dave Nakamura provided the briefing on behalf of Tom Kraft. Dave inquired about Future Roadmaps and if they would be rolled into OEP or NexGen requests. John McGraw stated that this was in discussion now. Involvement level from the PARC would be the same, but the documents would not individually be published. There will be a post-public meeting discussion as to where everything will decide. ***This item will be added to future PARC Telecon Agendas for a post-public OEP meeting update***

The CWG will meet once comments on the Roadmap for Data Link are received from the FAA. A “Move Forward” strategy was presented. The PARC role in monitoring implementation will not be an

active one. The Group is looking to help further activities, and wants Points of Contact for better interaction. The CWG wants PARC help in obtaining feedback from the FAA. It was stated that AVS needs to coordinate with ATO, and that is the reason for a less than timely response. While the recommendations go to AVS, it is sometimes an ATO action. AVS has to coordinate with ATO, who then has to assign manpower to tasks.

Vertical Flight Working Group

Hickok

Expected Results: Review Group recommendations and reach consensus on issues prior to submission for PARC review Jan. 31st.

See briefing for material covered.

Controlled Airspace Issues: Sun Valley, A Case Study

Roberts

Expected Results: Implementation of NBAA's airspace recommendations for Order 8260.52
Brad Rush stated that to just move from controlled airspace is a minimum of 2 years – 4-5 years if any issues arise (such as environmental issues). Air Traffic is the office responsible for this issue, and questioned whether it is proper to have it in a TERPS order. Wally Roberts stated that it should not be an Air Traffic issue, it should be a HQ issue not a Regional issue. The expectation from the PARC is for the PARC to frame the issue and provide a recommendation to the FAA. AVS will coordinate with ATO. If the PARC sends a recommendation it should state that coordination between FAA offices is required. ***AOPA requested that this be written up as an Issue Paper.*** The Paper should answer why a steeper climb gradient is an issue and why is it required? If necessary an Action Team will be formed to formulate a proposal to forward to the FAA. NBAA requests assistance with writing Issue Paper. Randy Kenagy, Steve Hickok, Pedro Rivas or another ALPA representative were asked for assistance.

Basic RNP and RNP SAAAR Benefits Interaction AT

Cramer

Expected Results: Status update and Issue Paper.

The question the team was looking at was now that we've recommended what we want for RNP, what might happen if we implement RNP and RNP SAAAR at the same airport and try to do both simultaneously? They were looking for operational interaction between the two, and presented a chart showing the differences.

Wally Roberts asked where LPV fit in all this, and Mike Cramer stated that he does not have an answer to that today. Wally stated that it is important to remember that LPV is a reality in this mix.

Lou Selk wondered if there is a reason that SAAAR wouldn't use the same path. The answer was that could happen.

Basic RNP will cover 95% of airports as equally effectively as SAAAR. 99% of the time the minima for basic RNP and RNP SAAAR will be the same. A review of changes that would be needed to 8260.52 for RNP TERPS is required.

Mike Cramer was tasked by Dave Nakamura for a write up of the proposed work – what might be possible including background rationale. What are the tools and how to use them – a recommended design practice. This will be circulated to the PARC and we will see who wants to add to it.

AC90-101 and Order 8260.52 updates

Cramer

Expected Results: Review and reach consensus on PARC inputs on future updates required to both documents.

Mike Cramer stated that he is still collecting suggested updates at this point. He questioned as to whether all FAA inputs have been received due to the fact that there were edits proposed by the FAA to the initial document that have not been incorporated by Mike as of yet. Once he receives all suggested

updates, he will be consolidating them into a spreadsheet and distributing to the PARC. A Summary of suggested updates received so far was provided.

NGATS

Arbuckle

Expected Results: Update on NGATS activities and review/discussion of further interaction between the PARC, RNP implementation, and the NGATS plan.

The JPDO reorganization is planned to be announced on the 24th. The current acceptable term is NexGen (over NGATS). The terms have the same meaning. The “Some ideas and future needs” slide is work that the JPDO is looking to the PARC or some other group to do. This may be possible future assignments for the CDWG. ***Jerry Davis was tasked with reviewing the slide for future CDWG work.***

The term RTSP is being defined many different ways by many different groups – therefore Kathy Abbott’s IPT wants to move away from the term until it is properly defined. Fundamentally different definitions within ICAO and other groups right now eliminate usefulness of the term.

Additional Activities briefed to the PARC on Jan. 18th:

Roger Wall discussed the OEP process that was briefed to the ATMAC. Aviation community input was stated as being needed at the start of activity. The Nav Evolution Roadmap is being heavily coordinated. It was stated that the group is not pleased with many of the groups assumptions, and has recommended that they do not publish the document at this point, but they seem intent on publishing. The response given was that document needs a lot of work and is nowhere near ready for publication.

Ken Speir reviewed the ADS-B New Technologies Workshop briefing. The intent is to reduce surveillance costs for FAA, provide surveillance where it does not exist today, and provide a superior update rate. Why so soon? 180k airplanes are expected to need to equip. To gain the benefits of ADS-B you need near 100% equipage. A risk to the FAA program was stated as being an aggressive rulemaking program. It was questioned as to whether it is valuable to begin crafting requirements at this point. The 2015 timeframe from the FAA refers to infrastructure only – 2020 will be when system is widely used. Frank Alexander asked if the FAA was still looking for interim benefits, and was told that yes interim benefits were still desirable. ***Mike Cramer was tasked with working with Hassan Shahidi to determine accurate capacity projections for the future.***

19 January

- 8:30 - 9:00 **N8000.287/300 Omissions from Public Criteria** **Fulton**
Expected Results: Decision reached on where to place material from the RNP SAAAR Notice that did not make it into the public criteria.
Uncoordinated effort right now – group just beginning. Appendix 5 is too vague in AC 120-29A. Need to determine what is the right balance for public criteria. Any changes desired to existing standard? Proposed “two-tier” criteria. Omitted criteria still needs to be identified and located in a new location that will not expire on a yearly basis (such as a Notice). Does the omitted criteria need to be placed anywhere or is it not needed? If higher performance that .52 is needed it could be done as a special? ***TORs need to go out for PARC comment (again)***. Possibly a review by Fulton, Cramer, etc of the TORs first. Anything we come out with from this group will be migrated into the PBN Manual. Remove “Omissions” from this title, people don’t like it. Stop saying “omitted” ☺ What about a single document for public criteria, and anything else would be a special? McGraw – don’t lose focus, task of group is to determine what guidance – if any - from the expiring Notice should be migrated to a new location? Rush – take .326 and add as an attachment, and you’ve got everything you need.
- 9:00 - 10:00 **Third Party (OTA) Procedure Development AT** **Speir**
Expected Results: AT schedule and review of AT issues.
Using this contract vehicle is merely the easiest way to give people what they want. Thought they could use the ODA, but ran into legal issues. Lawyers suggested using the OTA contract vehicle as a first step, other option was to wait for statute to change which would be 3-4 year process if it happened at all. FAA is going down regulatory statute path, this is a way to jumpstart the process. FAA working on a draft OTA for third party procedure development – ensuring that all legal details are covered. Development, quality assurance, maintenance – total lifecycle process. OTA allows changes to be made as you move down the path – extremely flexible process. ***February Action Team meeting planned once guidance is received from Flight Standards. Giving the PARC notice now that there will be a short time between when guidance is received and group meets to review the guidance and begin work.*** This will be for RNP SAAAR only to start – can be expanded later to encompass more. Any publicly available procedure will be “owned” by the public (not owned by the person/company that developed the procedure).
- 10:00 - 10:30 **Flight Deck Automation Working Group** **Abbott**
Expected Results: PARC discussion of issues, work tasks, current views and planned actions, and key activities. Discuss schedule for completion of deliverables.
Joint WG with the CAST. Reminder of purpose of group. Scope question – is the group looking at any RNAV issues such as what is going on at ??? This group is looking at it, but has a broader scope. Not getting any data from the business aviation community. Kathy request for assistance from Wally Roberts. ***Delta request for reduction of capability ??? to “Changes In Last 10 Years” slide*** Ways to improve situation without creating other problems. Some items are more long term than others, may or may not need to be addressed now or ever by group. WG has just identified them as changes, still defining their tasks. Too soon to say what to do with any of them. Pedro – end user should not be pilot flying aircraft, agreed? Ackland – agreed, airline has responsibility. ***Can software changes on airplane discussion be added to tomorrow’s PARC Agenda – yes, Nakamura agrees to this.*** Training MUST be included in Manual Flying Skills concern. (Alexander) Kathy agrees absolutely. When is it planned that the analysis phase will be over and recommendations come out? (Foose) Analysis should be completed by May. (Abbott)

THIS ITEM WAS BRIEFED ON THURS. JAN 18TH

10:30 - 10:45 **Break**

10:45 - 11:15 **Human Factors Working Group** **Abbott**

Expected Results: PARC discussion of issues, work tasks, current views and planned actions, and key activities. Discuss schedule for completion of deliverables.

THIS ITEM WAS BRIEFED ON THURS. JAN 18TH

11:15 - 11:45 **RNP Parallel Approach Transition (RPAT)** **Porter**

Expected Results: Approval of the RPAT Concept document to be delivered to the FAA. Discuss Boeing input from Orlando F2F.

Concept was developed into more of an operational plan. Proposal in Oct. was that WG would reconcile Boeing comments into concept, which they did. Retitled it to "Operational Plan". Future RPAT enhancements section added. Requirement for branched missed approaches in future boxes – Fulton. Selk – this is probably needed, but extremely difficult to implement – not being used so it is being taken out of 424. Does the PARC want to see the document again? Boeing has some issues with the disposition of some of their comments. Boeing suggests a WG meeting out in Seattle with some Alaska Airlines and other participants (Naverus, United, etc), intent to take a larger benefit from future. Porter not sure how much can be added and still have a plan that can be implemented. Williams – can we move forward with what we have now to start getting some operational benefit, then add more later? Ackland, wants to add in everything now to make significant changes, does not want to take little steps. Believes everything can be done now. McGraw – we need to take a step, not wait three years before getting operational experience. Ackland – why does it have to take 3 years? McGraw -NexGen vision will require us to go beyond even what Ackland is proposing. Porter – his WG is not the group to take RPAT where Ackland wants to take it. Nakamura - group has already gone beyond its original tasking – any continued work would require the tasking to be re-written to accommodate future work. ***More RPAT discussions necessary during PARC telecons*** Nakamura – we will move forward with what we have, with the work that has been done by the group. TORs will be expanded for future work to address the additional comments.

11:45 - 1:00 **Lunch**

1:00 - 2:00 **Status of PARC Recommendations** **McGraw**

Expected Results: Update on current status of PARC recommendations that have been sent to the FAA.

Intent is not to delve into technical details of each – any questions of that type will be sent back to the respective WG. By and large the FAA concurs with recommendations – some will require more work. Other groups in FAA that AVS needs to coordinate with on recommendations. Draft response to the Data Link Roadmap is ready. Between Sabatini and Russ Chew to get them engaged and acting on the Roadmap. RNAV Alternate Action Team recommended to begin work – Frank Alexander will be starting up group in next couple of weeks. Air Traffic to work Part 77 rule project. FAA has agreement with Eurocontrol for PBN Training Courses. Plan is over next two years ICAO will host seminars in every region. Intent is to point towards other courses that are needed to take. First seminar will be invitation only, the rest it is believed that ICAO will make open seminars. CBT training prior to attending seminars. Rivas – when FAA non-concurs, it comes back with a rationale – can it be shown that the FAA understands the goal, propose ways that goal COULD be reached? Burns – what is meant by mid-term for RF legs? McGraw – will not be in criteria being developed now, but will be in the

future. Kenagy – have a meeting of the GAWG to discuss low level technical issues and have a discussion with the FAA on them. Roberts would like to participate in that meeting.

2:00 - 2:30 **New Business/Future Meetings**

McGraw – Guidance Materials for Various Operations. Recommendation that CDWG remain in effect and look at all guidance material that has been developed or is being developed, and determine if it is properly organized. Determine proper location of all guidance material. Nakamura – have group discussion and begin developing some TORs, ***Jerry Davis to draft TORs.*** Ackland – what about Handbook material? McGraw – lower priority, but could be considered.

Alexander - Where is 90-RNP? Still in internal review.

Vaughn – his proposed agenda addition that we rejected. POI and workforce not trained to level where they understand this. This is normal lifecycle of any technology. What does Vaughn have to do as an applicant before he can install something on his airplane? Inform his POI, POI will go to FAA for explanation. Speir – fully intend to explore new software developments. Certification office does not evaluate in any way the performance of the aircraft, only if it alters the performance that is documented in the AFM. 90-101 can be made a part of the certification process if a change is wanted. If not than it has to be part of the Ops Approval process. Vaughn – if he's got a CMO staff with knowledge and experience who go through autopilot change and it is acceptable to them, why is it not good enough. McGraw – again, staff is not trained to a high enough level yet. ALPA – they are not comfortable themselves that Regions have required skill. Vaughn – fears that HQ involvement in process will result in unnecessary delays. McGraw – does not believe that it will, is there a plan developed for their own approval? Lay out your (Continental) plan and communicate it to the POI so they can coordinate the effort with HQ – planning ahead will help speed process. ***This issue has been referred to Mike Cramers group and will be covered in the update to AC 90-101.***

Autopilot below DA – FAA is working on it.

Rivas – if lose engine on departure or missed approach, need an RNP path that gives you assurance. Do not revert to old fashioned ways in times of greatest criticality. Have we answered fully whether RNP is going to be used for aircraft separation in terminal areas? Williams – it is an unanswered question right now, but is the desired path. Fulton – June 06 added as priority one this issue (RNP separation). Air Services Australia started their trials yesterday, using RNP to follow a river into the runway.

Porter – vectoring aircraft to finals, coding 20 miles out. Being off the path does the aircraft sequence to ...???? Not sure there is a problem, but possibly a question to answer for the Approach and Landing Working Group. Should this be something the PARC talks about? Nakamura – sounds like an exploratory effort at this point, suggestion to Porter to have offline discussions with various PARC members to decide if formal action is required.

Draft Implementation Plan will be provided at next F2F (Williams)

April 11-12, 2007 – New proposed date due to conflicts with the March 28-29, March 27-28, and April 4-5 dates

June 13-14, 2007 – conflicts with ICAO-FAA-EUROCONTROL PBN Manual Training Courses scheduled for June 12-30 in Dakar and Nairobi. This may be the initial trial meeting and not the full course. Dates will be checked and an update will be provided at the next telecon.

August 16-17, 2007 – tentative date, please respond with potential conflicts.

October 17-18, 2007 – tentative date, please respond with potential conflicts.