

## PARC PBN Procedure Naming and Charting

***\*Previously briefed as part of the ICAO/IFPP Committee Report prior to meeting 14-02.***

### Meeting 14-02

Mike Webb, AFS-420, provided an update on the Performance Based Operations Aviation Rulemaking Committee (PARC) Performance Based Navigation (PBN) Procedure Naming Action Team activities since the last ACF. Mike reported that there has been good participation across all industry shareholders. The next meeting is to be held on 10 November 2014. The group is working towards a draft recommendation paper for the PARC steering group, to be readied by December 2014.

The group has come up with several instrument approach procedure (IAP) examples that depict single or multiple NAVSPECs, as well as sensor and functional requirements to be placed in a PBN requirements box located in the briefing strip portion of the chart ([See Slides #7 and #8 for prototype examples](#)). The group will begin discussing the depiction of PBN requirements on SIDs and STARs next.

Rich Boll, NBAA, asked whether there would be any change in how the IAPs are titled, specifically, if GPS would appear in the procedure title. Rich added that if GPS is *not* included in the title, the procedure would not be properly pulled from an aircraft's FMS. Mike responded that the plan is for GPS not to be part of the procedure title and stated that FMS manufacturers have and are addressing the issue. He restated that in the U.S., RNAV will remain in the procedure title, not RNP as it appears ICAO will recommend.

**ACTION:** Mike Web, AFS-420, will provide an update at the next ACF.

---

### MEETING 15-01

Mike Webb, AFS-420, provided an update on the Performance Based Operations Aviation Rulemaking Committee (PARC) Performance Based Navigation (PBN) Procedure Naming Action Team activities since the last ACF. Mike reviewed the PARC recommendations that the Action Team agreed upon and have forwarded to the FAA. The recommendations state that PBN procedures in the U.S. will retain "RNAV" in the procedure title despite the fact that ICAO will be adopting "RNP" in the title. The recommendations also state that PBN procedures will only include a single navigation specification shown in parentheses in the procedure title. Every PBN procedures will also contain a PBN Requirements Box depicted in the briefing strip portion of the chart.

Mike then discussed the inclusion and make-up of the PBN Requirements Box for instrument approaches.

The Action Team (AT) discussions regarding the PBN Requirements focused on where on an instrument approach chart the box would appear, the content and sequence of the content within the box, and recommended abbreviations and acronyms used within the box. Mike showed several examples of the recommended depiction ([Slides 10, 12, 18 and 20](#)).

Mike then discussed issues related to chart titling and use of different chart title parentheticals ([Slides 23, 25 and 27](#)).

John Collins, GA Pilot, inquired if such procedures would be expanded to the GA community to utilize. Mike replied that training will be need by the GA community as a whole in order to be able to utilize such procedures. John then inquired as to when the aviation community can anticipate seeing the first charts with PBN requirement boxes. Mike replied that the goal is to have everything in place by 2022.

**ACTION:** Mike Webb, AFS-420, will provide an update at the next ACF.

---

## **MEETING 15-02**

Mike Webb, AFS-420, provided an update on the Performance Based Operations Aviation Rulemaking Committee (PARC) Performance Based Navigation (PBN) Procedure Naming Action Team activities since the last ACF. Mike referred to his discussion during the IPG portion of the meeting where he reported on the charting of PBN Navigation Specifications in a PBN Requirements Box ([ACF -IPG Item 13-02-312](#)).

Regarding the changes to the PBN procedure naming, Mike stated that the U.S. delegation is working through different committees regarding the implementation of new ICAO procedure names. ICAO will be adopting “RNP” for the procedure title, while the US is still planning to retain “RNAV”. Concerns are being raised regarding how to deal with the titling mismatch. The delegation is going back to the AirNav Commission to readdress these issues. The meeting is to take place in January 2016.

**ACTION:** Mike Webb, AFS-420, will provide an update at the next ACF.

---

## **MEETING 16-01**

Mike Webb, FAA/AFS-420, provided an update on the Performance Based Operations Aviation Rulemaking Committee (PARC) Performance Based Navigation (PBN) Procedure Naming Action Team activities since the last ACF. Mike showed several [Instrument Approach Procedure \(IAP\) prototypes](#) with the new Equipment Notes Box added with a delineating line to the top portion of the existing notes box in the pilot briefing strip. Mike stated that the new section of the notes box will be for equipment requirement notes for conventional procedures and for PBN requirements for PBN procedures. He emphasized that the equipment box would only appear when specifically noted on the procedure source document. Mike asked for formal written

comments on the charting proposal to be sent to him no later than 30 June 2016 via email – [mike.webb@faa.gov](mailto:mike.webb@faa.gov).

Mike asked Divya Chandra, VOLPE, about her thoughts on the human factors aspect of the new equipment box. Some procedures will not have specific requirements and Mike asked Divya for her opinion of how users might respond to seeing either no notes box or an empty notes box. Divya commented that the lack of information might be of concern depending upon how often the equipment box appears on the charts. If it is present on a large percentage of procedures, pilots might be confused or concerned when encountering a procedure without. Mike discussed the possibility of showing the box whether there was data in it or not. Tom Schneider, FAA/AFS-420, stated that there is precedent for not showing a briefing strip informational box when there is not information to be placed in it, i.e., the approach lighting system box. Valerie Watson, FAA/AJV-553, and Ted Thompson, Jeppesen, agreed that an empty box would be more likely to cause pilot confusion by leading users to assume that necessary data had been inadvertently left off the plate. Consensus of the audience agreed and it was decided that the equipment box will not be shown unless the procedure source document specifically calls for equipment notes. Divya then stated that as long as the layout of other information on the chart isn't grossly impacted (it would not be), she felt that the lack of a box would have minimal impact.

There was ACF consensus in support of showing the equipment/requirement notes consolidated into the briefing strip notes box, separated by a delineating line, as shown on the prototypes and for NOT showing an empty (place holder) box when equipment notes are not specified on the procedure source document. It was also agreed that this notes box need not be labeled, but should only contain the specific information documented on the procedure source.

Mike then discussed the topic of changes to PBN procedure names. Mike re-stated the ICAO position for adopting "RNP" in procedure titles and reiterated that the U.S. is still planning to retain (and will file a difference to state this) the use of "RNAV" in the title. The U.S. is planning to change the parentheticals to remove GPS and include a single navigation specification shown in parentheses at the end of the procedure title. Mike stated that these changes are supported and he would like the implementation process to begin.

Rune Duke, AOPA, asked about the impacts of the titling changes on the FMS. Mike stated that because procedure title parentheticals are not included in the FMS title or verbalized by ATC, there should be no effect.

Mike stated that there may be redundancies for a time regarding items in the title and in the equipment box until all the titling changes can be accomplished, i.e., GPS will be in the procedure title and the equipment box until the titling changes can be made to remove GPS from the procedure title. Mike stated that he is working with Tom Schneider regarding the procedure name changes which require an update to FAA Order 8260.3 and FAA Order 8260.19.

**ACTION:** Mike Webb, AFS-420, will provide an update at the next ACF.

**ACTION:** Valerie Watson, FAA/AJV-553, to draft an IACC Requirement Document for depiction of the briefing strip Equipment Box for IAPs and report back at next ACF.

---

**MEETING 16-02**

Mike Webb, FAA/AFS-420, provided an update on the Performance Based Operations Aviation Rulemaking Committee (PARC) Performance Based Navigation (PBN) Procedure Naming Action Team activities during the Instrument Procedures Group portion of the ACF ([See IPG Issue Number 13-02-312](#)).

**ACTION:** Mike Webb, FAA/AFS-420, will provide an update at the next ACF.