

Federal Aviation Administration

APR 0 8 2019

Captain Mark Bradley Chairman, Performance Based Operations Aviation Rulemaking Committee (PARC) Delta Airlines 1030 Delta Boulevard Atlanta, GA 30354-1989

Dear Captain Bradley:

Thank you and the PARC for your recommendation on Required Navigation Performance with Authorization Required (RNP AR) approach obstacle clearance surface (OCS) transition harmonization.

We will develop draft RNP AR design criteria incorporating vertical OCS and height loss assumptions that are consistent with the current Lateral Navigation with Vertical Guidance (LNAV/VNAV) level surface missed approach transition. Contingent upon a successful Safety Risk Management Analysis, we will incorporate the revision in FAA Order 8260.58, United States Standard for Performance Based Navigation (PBN) Instrument Procedure Design. See the enclosed action plan for further explanation of the proposed revisions.

The Flight Technologies and Procedures Division will work with Aeronautical Information Services to incorporate this revision into Instrument Flight Procedure (IFP) design software and establish a concurrent release of the updated directive with implementation capability.

If you have any questions, please contact Mark Steinbicker, Manager, Flight Technologies and Procedures Division, at (202) 267-8790.

Sincerely,

Ali Bahrami

Associate Administrator for Aviation Safety

Enclosure

## **RNP AR OCS Transition Harmonization AVS Action Plan**

**Recommendation:** Harmonize the RNP AR procedure design criteria's vertical OCS and the height loss assumptions with the current RNP APCH LNAV/VNAV missed approach segment design criteria by applying the height loss criteria for an LNAV/VNAV line of minima to the missed approach transition in an RNP AR procedure design.

**Discussion:** Public RNP AR APCH design criteria in FAA Order 8260.58 Tdoes not permit heights above touchdown (HATs) down to 250' as intended. At locations with both an RNP AR and an LNAV/VNAV line of minima to the same runway end, 68% of the RNP AR approaches have higher mins and HATs then the LNAV/VNAV like of minima.

Harmonization of the missed approach surfaces will permit the RNP AR procedure to achieve lower HATs that LNAV/VNAV procedures achieve.

## Task 1: Update guidance in Order 8260.58A

Responsible Office(s)	Expected Completion Date
AFS-420	10/2020

**Proposed:** Update guidance in Order 8260.58A to harmonize the height loss method for RNP AR with the level surface method from LNAV/VNAV.

Task 2: Work with AIS to update IFP automation.	
Responsible Office(s)	<b>Expected Completion Date</b>
AFS-420 and AIS	10/2020

**Proposed:** Work with AIS to update TARGETS. TARGETS will require an update to the Requirement Specifications and a coding update to amend the software to support this change. AIS testing of the software and training will then be necessary prior to fielding the software.

Task 3: Work with interested parties to change existing procedures.	
<b>Responsible Office(s)</b>	<b>Expected Completion Date</b>
AFS-420 and Interested Parties	As needed

**Proposed:** This criteria change is intended to be applicable to future procedure designs. If an existing procedure could be revised to take advantage of the new criteria, we will assist requestors on a procedure-by-procedure basis by answering policy questions and by directing to them to the AIS IFP Gateway to initiate an amendment.