



U.S. Department
of Transportation
**Federal Aviation
Administration**

800 Independence Ave., S.W.
Washington, D.C. 20591

SEP 25 2015

COPY

Captain Mark R. Bradley
Chairman, Performance-Based Operations
Aviation Rulemaking Committee
1010 Delta Boulevard
Atlanta, GA 30354

Dear Captain Bradley:

Thank you for the Performance Based Aviation Rulemaking Committee (PARC) recommendations concerning Standard Terminal Arrival /Instrument Approach Procedure Common Point and Required Navigation Performance Cold Temp Effect on Intermediate Segments. We agree with the recommendations and are actively tracking these items for inclusion in the appropriate documents as described in the enclosed action plan.

If you have any questions concerning our action plan, please contact Bruce DeCleene, Manager, Flight Technologies and Procedures Division, at (202) 267-8790.

Sincerely,

Margaret Gilligan
Associate Administrator for Aviation Safety

Enclosure

STAR Guidance Action Plan

Recommendations:

1. **Common fixes** –The PARC Navigation WG concurs that there generally should only be one common fix between a STAR and an associated IAP; however, if a particular location or operation has a need for more, it can be allowed by special approval from AFS.
2. **Speed restrictions at the common point** – the WG concurs with the telecon results and the draft material from AFS 420 and recommends that when a speed restriction is necessary on the common point, the STAR termination fix must be coded as an AT restriction and the IAP initial fix must be coded as a MAX or AT or BELOW restriction. The speed value must be identical on both. Ex., AT 210 KT on the STAR, AT or BELOW 210 KT on the approach. The proposed draft language is adequate.
3. **Common fix FB or FO attribute.** The STAR – IAP connection waypoint attribute (FO/FB) applied to the common point when ending the STAR with a manual termination leg (FM, VM) should not require Flight Standards approval [as stated in an earlier draft that was sent to the PARC for informal review]. The point should be coded FO on the STAR and FB on the IAP as normal practice. The Navigation WG recommends that the following be established as normal design without flight standards special approval:
 - a. When a STAR and an approach have a common fix, A, and
 - b. STAR XYZ ends at a fix “A” followed by a manual termination leg (FM or VM originates at A in the STAR coding) and
 - c. IAP PQR RWxx begins with “A” as its IAF (or IF)
 - d. Then the STAR coding for fix A is “flyover”, and
 - e. The Approach coding for fix A is “flyby”.

Discussion:

- A. **General.** FAA is transferring guidance for instrument procedure design for Standard Terminal Arrival (STAR) from ATO to AVS. The present STAR guidance in FAA JO 7110.9E, other than the Air Traffic guidance, is being transferred to Flight Standards 8260-series orders. The guidance for documentation and implementation of STARs has been included in Order 8260.19G, which was signed on July 14, 2015 and made available on the FAA website on July 31, 2015. The overall procedure design guidance is going in Order 8260.3C and the PBN specific procedure design guidance is going in Order 8260.58A.
- B. We have incorporated the proposed guidance in these recommendations in draft changes for Orders 8260.3C and 8260.58A. One minor difference is that exceptions to the guidance on establishing more than one point that is common to both a STAR and an approach is being proposed to require waiver rather than approval. Inputs from stakeholders regarding the method of requesting exceptions, by waiver or approval, will be reviewed during the coordination process for Order 8260.3C.

Task 1: Update drafts, coordinate and publish guidance for STARs in Orders 8260.3C and 8260.58A.

Responsible Office(s): AFS-400 (TERPS Criteria Standards Branch)

Expected Completion Date: Tentative: 12/31/2015

Status: In work. Harmonization, evaluation and further coordination are in progress. Inputs from various stakeholders, not just from PARC and primarily for items unrelated to STAR criteria, have pushed back the coordination several times already. The estimated publication date is tentative until coordination and publication actions are complete.

RNP AR Guidance Action Plan

Recommendation:

Remove VEB ROC Application in RNP AR Intermediate Segments

Discussion:

1. **AFS sent a proposal to PARC** in a white paper which “discusses the issues associated with VEB ROC application in lieu of standard ROC in the intermediate segment and proposes the deletion of this requirement from RNP AR design criteria.”

2. **The Navigation WG reached consensus in support of this proposal as written.**

Circumstances have changed since the original criteria, particularly the fact that now all non-precision procedure segments, including the intermediate will be temperature limited if necessary when standard ROC and methods are applied. Since the AR methodology was defined before this temperature limit began being applied to segments other than final, the PARC team working on 8260.52a considered it appropriate to compensate using the method described in Section 2.9. Now that AFS is applying temperature limits to the intermediate (and all other segments), the Nav WG agrees that this eliminates the principal need for the AR connection method of section 2.9 and standard ROC can be applied. Reverting to the standard 500' ROC value for the intermediate in all cases will streamline the criteria and make it consistent across all designs.

Task 1: Update draft, coordinate and publish guidance in Order 8260.58A to delete the requirement for VEB ROC application in the intermediate segment for an RNP AR instrument approach procedure.

Responsible Office(s): AFS-400 (TERPS Criteria Standards Branch)

Expected Completion Date: Tentative: 12/31/2015

Status: In coordination. Estimated publication date is tentative.