

Transport Airplane Directorate Aircraft Certification Service Denver Aircraft Certification Office 26805 E. 68th Ave, Room 214 Denver, CO 80249

August 26, 2013

Jackie Bower Senior Manager, Corporate Quality Services Jeppesen Sanderson, Inc. 55 Inverness Drive East Englewood, CO 80112-5498

Dear Ms. Bower,

Thank you for forwarding Jeppesen Sanderson's revised *RNP AR Validation and Compare* processes to the Federal Aviation Administration for review. We understand that your processes have been modified to take into account the accuracy checks for navigation database validation specified by Advisory Circular (AC) 90-101A, *Approval Guidance for RNP Procedures with AR*.

We have reviewed your revised procedures and the PRNAV Tool qualification data relating to the Required Navigation Performance (RNP) Authorization Required (AR) procedures. Specific items reviewed include:

- 1. ADM 2.17 RNP Validation Procedure using the PRNAV Tool, revised 02-July-2013.
- 2. PRNAV Tool Qualification Plan, Version 1.0, dated 22 Jan 2013

We audited your tool qualification processes in accordance with Order 8110.49, Software Approval Guidelines, on August 8-9, 2013. During this audit, you demonstrated compliance with the tool qualification objectives applicable to a verification tool as specified by DO-178B, Software Considerations in Airborne Systems and Equipment Certification. You also demonstrated acceptable integration of this tool into your existing Type 1 Letter of Acceptance (LOA) navigation data processing procedures.

We have found Jeppesen Sanderson's procedures satisfactorily verify the ARINC 424 data file matches the government source. Subscribers to Jeppesen Sanderson's ARINC 424 data validation and comparison service, must perform the additional accuracy check of ensuring the navigation database (in binary format) satisfies the tolerance requirements specified by AC 90-101A, Appendix 3, paragraph 3a.

Jeppesen Sanderson's ARINC 424 data validation and comparison service does not include the flyability check specified by AC 90-101A, Appendix 3, paragraph 3b. An initial flyability check is required for all 14 CFR non-part 97 U.S. RNP AR procedures, as well as all foreign RNP AR procedures the operator is authorized to fly.

If you have any questions on this matter, please feel free to contact me at (303) 342-1081, or by e-mail at Todd.Dixon@faa.gov; or contact your project engineer, Ronnea Derby at (303) 342-1093 or by email at Ronnea.L.Derby@faa.gov.

Sincerely,

Todd Dixon

Manager, Denver Aircraft Certification Office

cc: AIR-130