



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

**Small Airplane Directorate
Atlanta Aircraft Certification Office
One Crown Center, Suite 450
1895 Phoenix Boulevard
Atlanta, GA 30349**

JAN 26 2010

Mr. Michael Greene, PhD
Chairman and CEO
1635 Pumphrey Ave.
Auburn, AL 36832

Dear Dr. Greene:

This is in response to your January 5, 2010, letter for Federal Aviation Administration (FAA) authorization to identify Air Data Attitude Heading Reference Systems, Model AHR150A/300A, with Technical Standard Order (TSO) C4c, C5f, C88b, C106 (ISU), and C6e (MSU) markings. By this letter, you are authorized to manufacture the Model AHR150A/300A in accordance with 14 CFR, Part 21, Subpart O, and the applicable TSO as listed below:

Model:	AHR150A/300A
Description:	Air Data Attitude Heading Reference System
Part Number(s):	AHR150A-1() (ISU) and AHR150A-2(MSU)/AHR300A-1()
TSO Marking:	TSO-C4c, C5f, C6e, C88b, and C106 (ISU), C6e(MSU)

We find your Statement of Conformance dated January 5, 2010, and your Achange Systems, Inc. Quality Control Manual, Revision F, dated December 12, 2008, acceptable.

The following data will be retained on file for this authorization:

- a) Plan for Software Aspects of Certification, Document, PSAC-AHR150A
- b) Software Configuration/Life Cycle Index Document, SCI-AHR150A
- c) Software Accomplishment Summary Document, SAS-AHR150A
- d) Interface Control Document for the System (used for installation and checkout), ICD-AHR150A
- e) Environmental Test Plan and Qualification for the System, ETP-AHR150A
- f) 8110-3 Approving Environmental Test Procedures and Test Results

g) Master Drawing List with TSO Label drawings for

1. AHR150A-1-XX, Inertial Sensing Unit
2. AHR300A-1-XX, Inertial Sensing Unit
3. AHR150A-2, Magnetic Sensing Unit

Effective this date, you are authorized to identify this Model and Part Number(s) with the applicable TSO markings in accordance with 14 CFR, Part 21.607(d).

This office accepts your statement of compliance with RTCA DO-178B, Level A category requirements. This compliance finding should not be considered an installation approval and the installation may be subject to additional software review related in the integration of this equipment into an airframe. Verification of compatibility with a particular aircraft installation is the responsibility of the installer and may require further FAA analysis, possible flight test, and changes to a Flight Manual Supplement.

This authorization is not transferable to another person or location and is effective until surrendered, withdrawn, or otherwise terminated by the Administrator.

Your responsibilities as a holder of a TSO authorization are outlined in 14 CFR, part 21, subpart O. Reporting failures, malfunctions, and defects is outlined in 14 CFR, part 21.3. Any design change made to the TSO item must be forwarded to this office as outlined in 14 CFR, part 21.611, with minor change submittal intervals not to exceed six months.

Please note that the technical data retained by the FAA may be subject to Freedom of Information Act (FOIA) requests. As such, this office will notify you of all requests pertaining to your data and afford you the opportunity to defend the release of data.

The Systems Engineer for your program is Myles Jalalian, telephone number 404-474-5572. The Program Management Specialist is Cherice Clarke, telephone number 404-474-5537.

Sincerely,



Rick Jones
Associate Manager, ACE-119A
Atlanta Aircraft Certification Office