



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

Engine & Propeller Directorate

Boston Aircraft Certification Office
12 New England Executive Park
Burlington, MA 01803-5299

APR 24 2009

In reply refer to: SH/sn/1/28/2009-468

Mr. Markus Görnemann
Certification Manager Parts & Appliances
European Aviation Safety Agency (EASA)
Postfach 10 12 53
D-50452 Koln
Germany

Dear Mr. Görnemann:

This letter refers to the tbone aviation a/s undated letter, by which they made application for Technical Standard Order (TSO) design approval. This letter also acknowledges receipt of tbone aviation a/s Statement of Conformance dated 6/1-2009, and of European Aviation Safety Agency (EASA) letter Reference EASA C1(2009)D/56094, dated 2009-2-12, certifying in accordance with 14 CFR § 21.617, that the Headset listed below complies with the requirements of TSO-C139, as designated in 14 CFR § 21.305(b).

Based on the EASA certification and receipt of the required data, we hereby accept tbone aviation a/s TSO design approval to include the Headset listed below for manufacture at tbone aviation a/s located at Yderlandsvej 23, DK-2300 Copenhagen S, Denmark.

Approved Model/Part Number

Description

P/N 258260-()

Headset

This letter of TSO design approval, together with the Form One Certificate of Airworthiness for Export, will authorize tbone aviation a/s to identify the Headset with the TSO marking requirements described in 14 CFR § 21.607(d) and in TSO-C139 and is issued in accordance with 14 CFR § 21.617, governing issuance of TSO design approval for import appliances. Each item must be accompanied by a Certificate of Airworthiness for Export issued by the Civil Aviation Authority (CAA) - Denmark or a duly authorized designee/ organization (14 CFR § 21.502(a)).

As required by the TSO, the following statement must be furnished with each manufactured unit:

“The conditions and tests required for TSO approval of this article are minimum performance standards. It is the responsibility of those installing this article either on or within a specific type or class of aircraft to determine that the aircraft installation conditions are within the TSO standards.

TSO articles must have separate approval for installation in an aircraft. The article may be installed only if performed under 14 CFR part 43 or the applicable airworthiness requirements.”

The deviations to the following TSO requirements requested in your TSO application have been granted. Our review has determined that your proposed implementation provides an equivalent level of safety to the requirements of the applicable TSO Minimum Performance Standards (MPS) when the Headset is installed and operated in accordance with FAA regulations.

1. Use of DO-160F instead of DO-160E
2. Replace/supplement RTCA/DO-214 § 2.2.1 with ISO/TR4870 and ANSI S3.2-1989
3. Earphone frequency response is outside the RTCA/DO-214 § 2.3.1 tolerance above 1.5 kHz.
4. Isolation (cross-talk) requirement exceeds the RTCA/DO-214 § 2.2.11 requirements above 4.5 kHz.

Any additional deviations from the established design approval should be accomplished in accordance with 14 CFR § 21.609. The request for approval to deviate, together with all pertinent data, should be submitted to the Federal Aviation Administration (FAA) through the EASA and should contain information to show that the particular deviation is compensated for by factors or design features providing an equivalent level of safety.

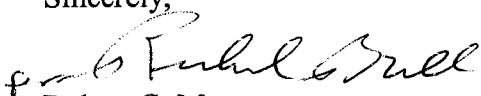
A letter of TSO design approval issued under 14 CFR § 21.617 is not transferable and is effective until surrendered, withdrawn or otherwise terminated by the FAA (14 CFR § 21.621).

The FAA may, upon notice, withdraw the letter of TSO design approval of any manufacturer who identifies with a TSO marking any article not meeting the performance standards of the applicable TSO (14 CFR § 21.619). The EASA airworthiness certification is essential to the determination that the item meets the performance standards of the applicable TSO.

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

If there are any questions, please feel free to have your staff contact Terry Fahr at (781) 238-7155.

Sincerely,



Robert G. Mann
Manager, Boston Aircraft Certification Office,
ANE-150