



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

**Transport Airplane Directorate
Aircraft Certification Service**

1601 Lind Avenue S.W.
Renton, Washington 98055-4056

JUL 28 2005

In Reply
Refer To: 130S-05-371a

Ms. Colleen M. Portch
Certification Services Administrator
Honeywell International, Inc.
15001 N.E. 36th Street
Redmond, WA 98052

Dear Ms. Portch:

Technical Standard Order (TSO) Approval for
TSO-C92c and TSO-C151b Class A Authorization for the TAWS Functions for the
MK VI/VIII EGPWC, P/N 965-1180-024, 965-1190-024, 965-1210-024, and 965-1220-024;
and TSO-C117a Authorization of Reactive Windshear Functions of the
MK VIII EGPWC P/N 965-1210-024 and 965-1220-024

The Federal Aviation Administration (FAA) is issuing a correction to letter 130S-05-359,
dated July 25, 2005, due to model number errors and Honeywell's request for separate
approval letters for each model of EGPWC.

The FAA received your letter 05FAA092, dated June 17, 2005, in which you certified that a
major change to the EGPWC constitutes a change in EGPWC function resulting in a new part
number and identified as "Release - 024". You certified that the new part numbers listed
below meet the applicable requirements of TSO's listed and are in conformance with Title 14
Code of Federal Regulations (CFR) part 21, subpart O.

Honeywell Letter & Date	Applicable TSO	EGPWC Model	Part Number	Function
05FAA092, June 17, 2005	C92c & C151b Class A	MK VI and MK VIII	965-1180-024 965-1190-024 965-1210-024 965-1220-024	TAWS
	C117a	MK VIII	965-1210-024 965-1220-024	Reactive Windshear Functions

You submitted Honeywell Document 060-4314-051, Revision New, dated June 16, 2005, entitled "MK IV/VI/VIII/XXII Enhanced Ground Proximity Warning Computers (EGPWC), Honeywell P/N's 965-XXXX-024 Summary of Compliance with TSO-C151b, TSO-C117a, TSO-C92c; Including DO-178B Software Data," with your letter, along with the other supporting data required by the TSO's. A list of Honeywell documents submitted to the FAA along with a compliance matrix for each applicable TSO is included in the Summary of Compliance document.

We acknowledge receipt of an FAA Form 8110-3, signed by Designated Engineering Representative G. A. Ostrom, DERY-635486-NM, which was submitted approving the Software Accomplishment Summary and other related data for this application.

The EGPWC enhancements and optional features meet the qualification testing and software testing standards; however the actual performance standards for additional features are not under these TSO's. These functions have not been evaluated for certification installation and should be evaluated under the Supplemental Type Certification process and listed in the aircraft installation manual.

TSO-C151b identifies RTCA DO-161A as the minimum operational performance standard for the equipment. DO-161A specifies in paragraph 2.1.2 and Appendix A page 4, a dynamic envelope of 1250 feet to 1050 feet AGL in Mode 2A conditions. Honeywell requested a deviation to reduce the Mode 2A maximum altitude from 1250 to 950 feet. The deviation only affects Excessive Closure Rate to Terrain and is activated only under a defined set of conditions that ensure that Terrain Awareness and Warning Systems (TAWS) functions provide terrain avoidance protection. The Seattle ACO (SACO) reviewed the deviation request and forwarded it to FAA Headquarters for concurrence via SACO memorandum 130S-05-248, dated June 6, 2005. Concurrence was provided via the enclosed AIR-100 memorandum, dated July 21, 2005.

Your certification is acceptable. Your quality control manual has been previously approved by the FAA and is on file in the Seattle Manufacturing Inspection District Office (ANM-108S).

Effective this date, you are authorized to use TSO procedures as prescribed by subpart O of 14 CFR part 21 and to identify the MK VI/VIII Enhanced Ground Proximity Warning Computers for the referenced part numbers with the applicable TSO markings as required by the TSO's.

Any design changes made to these TSO's must be forwarded to this office as outlined in 14 CFR 21.611(a), with minor change submittal intervals not to exceed six months. As a TSO manufacturer, you are required to report to the FAA any failure, malfunction, or defect related to your TSO authorization within 24 hours in accordance with the provisions of 14 CFR 21.3. You must also notify the FAA when you no longer manufacture a TSO approved article as required by 14 CFR 21.613(b).

This authorization pertains only to the manufacturing operations at the below address, and this office must be notified in advance of any proposed relocation.

Honeywell International, Inc.
Aerospace Electronic Systems
15001 NE 36th Street
Redmond, WA 98073-9701

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."

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

Please note that technical data retained by the FAA may be subject to the 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 contest the release of the data.

If you have any questions, please contact Mr. Patrice Adjibly of the Systems and Equipment Branch at (425) 917-6459.

Sincerely,



Kenneth J. Fairhurst
Acting Manager, Systems and
Equipment Branch
Seattle Aircraft Certification Office

Enclosure
AIR-100 memorandum dated July 21, 2005



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

Memorandum

Subject: **ACTION:** Request for Deviation to
TSO-C151b

Date: JUL 21 2005

From: Manager, Avionic Systems Branch,
AIR-130

Reply to Charisse R. Green
Attn. of: (202) 385-4637

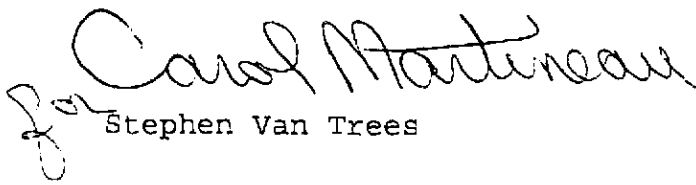
To: Manager, Systems and Equipment
Branch, ANM-130S, Seattle
Aircraft Certification Office

Cc: Bobbie Smith, AIR-103

This memorandum is in response to your request dated June 6, 2005, reference number 130S-05-248, for a deviation to Technical Standard Order, TSO-C151b, Terrain Awareness and Warning System, by Honeywell International Inc., for the MK VI/VIII/XXII Enhanced Ground Proximity Warning System (EGPWS) Release - 024.

After a review of your recommendation, past approvals, and their letter, dated May 24, 2005, Reference 05FAA077a, which contains their formal request and supporting documentation, we concur that it meets the intent of 14 CFR §21.609, Approval for deviation. We, therefore, grant the deviation request.

If you have any questions regarding this response, please contact Ms. Charisse R. Green at (202) 385-4637.


Stephen Van Trees

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AUG 2 2005