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SERVICE INFORMATION LETTER

MK V and MK VII Enhanced Ground Proximity Warning System (EGPWS) - Notification of Personal Computer Memory Card International Association (PCMCIA) Data Loading Media Issues and Resolution

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Transmittal Information

Publication Number D201712000005

Summary

This is the INITIAL release.

Revision History

This service information letter has had no revision(s) as shown in Table 1.

Table 1. Revision History

Revision Number	Revision Date
0	20 Dec 2017

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1. General Information

A. Effectivity

(1) This service information letter is applicable to EGPWS, PN 965-0976-0XX-XXX-XXX, 965-1676-00X, 965-1690-05X, and 965-1076-0XX-XXX-XXX.

B. Reason

(1) Background

- (a) The EGPWS uses a linear PCMCIA as "software media" to load terrain databases and software updates. Due to obsolescence, Honeywell introduced a new linear PCMCIA made by FMJ. These cards were made without a "write protect" switch as that is not necessary for data loading requirements. Initial testing showed no issues but after more extensive field experience Honeywell received feedback that while most of the PCMCIA cards worked fine, some of the PCMCIA cards did not work properly during a data load resulting in a possible PCMCIA card lock up and entering into an unrecoverable state.
- (b) Honeywell investigated the failures and has determined that the data bus timing within the EGPWS may cause conflicts with the FMJ PCMCIA card. The timing is such that many cards will work but due to component tolerances some cards may have failures. It should be noted that the data bus and timing issue is a result of the EGPWS design and not the FMJ PCMCIA card.
- (c) If you have any FMJ PCMCIA cards without a "write protect" switch and they are failing data load, you may return the card to Honeywell for replacement.

NOTE: If the data load is working correctly, there is no need to replace the PCMCIA card.

(2) Solution

- (a) FMJ has developed a new PCMCIA card with a write protect switch. The new card will be an update to the existing part number so that there will be no impact to FMJ or Honeywell part numbers, engineering documentation or installation paper work.
- (b) When using the new cards, the write protect switch needs to be turned to the ON position to prevent the EGPWS from conflicting with the data bus and preventing PCMCIA card corruptions and lock ups.
- (c) The typical data loading method is to insert the PCMCIA card into the EGPWS while the power is turned on. The EGPWS will then read the PCMCIA card and perform the data load. However, testing has shown that even with the write protect switch turned on there is a small chance that the data load will not work correctly. In this case, the PCMCIA card will not be corrupted and a data load may be accomplished as follows:
 - Turn power off the EGPWS.
 - Insert the PCMCIA.
 - Turn power on the EGPWS.
 - While the databases are being installed the IN PROG LED will light and the COMPUTER OK LED will turn off.

- After the databases are installed, the XFER COMP LED will turn off.
- Remove the PCMCIA card from the EGPWS.
- After approximately 15 seconds, the COMPUTER OK LED will turn on.
 - NOTE: This indicates the database was installed correctly.
- Close the front panel door on the EGPWS.
- (d) The related service bulletins (providing detail data load instructions and referenced below) will be updated to include this more reliable (but optional) data load procedure.

C. References

- (1) The documents that follow is necessary to install the Terrain Database and the Envelope Modulation Database.
 - Service Bulletin, ATA Number 965-1676-34-126 (Publication Number 012-0687-226), Install a Terrain Database and an Envelope Modulation Database for EGPWS, PN 965-1676-00X
 - Service Bulletin, ATA Number 965-0976/1690-34-125 (Publication Number 012-0687-225), Install a Terrain Database and an Envelope Modulation Database for EGPWS, PN 965-0976-0XX-XXX-XXX and PN 965-1690-05X
 - Service Bulletin, ATA Number 965-1076-34-82 (Publication Number 012-0702-182), Install a Terrain Database and an Envelope Modulation Database for EGPWS, PN 965-1076-0XX-XXX-XXX.

D. Contact Information

(1) The Honeywell Aerospace Technical Support (ATS) team can be contacted for additional information on this service information letter.

Honeywell Aerospace Technical Support

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