FIELD AEROSPACE

Enhanced Ground Proximity Warning System

DHC-8-100, 200, 300

Benefits

- Helps prevent accidents caused by Controlled Flight Into Terrain (CFIT)
- Uses aircraft inputs such as position, attitude, air speed and glideslope along with internal terrain, obstacles and airport databases to predict a potential conflict between aircraft's flight path and terrain or obstacles
- Exceeds requirement for a Terrain Awareness and Warning System (TAWS) rule and TSO C151
- Database updates available from Honeywell at no charge

Certification Basis

Transport Canada STC #SA00-124
FAA STC #ST01646NY
EASA STC #IM.A.S.00328
JCAB STC #174-TYO

The FIELD AVIATION EGPWS STC kit for the DHC-8 is a fully integrated solution for the installation of the Honeywell MK VIII Enhanced Ground Proximity Warning System. It was specifically designed to replace the existing MK II GPWS and provide commonality with factory installations on later production DHC-8 aircraft (post S/N 550).

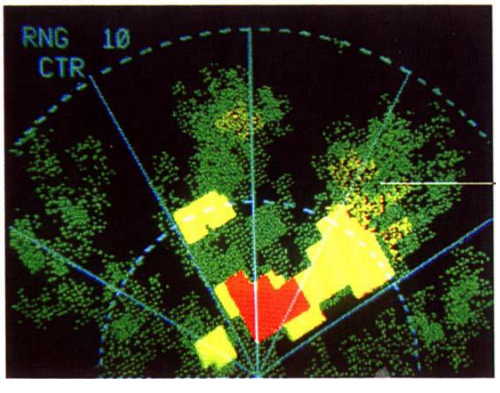
The existing MK II GPWS system components and provisions are removed or deactivated. Existing wiring is re-terminated and new wiring is added. A new mounting tray is installed in the previous MK II location and a GPS antenna is installed on the upper fuselage. Annunciator sets are installed on the pilot's and co-pilot's flight panels. A temperature probe is installed on the lower fuselage (Series 100 aircraft).

No additional cockpit displays are required as terrain data is displayed on the Primus 800 or RDS-86 radar PPI (for non-EFIS aircraft) or on the radar display or EHSI (for EFIS aircraft). Steep Approach operations are also supported.

For display on the EFIS, the EFIS symbol generator must be upgraded to P/N 7004544-314 per Honeywell SB 7004544-34-48 (Bombardier SB 8-34-185 also refers). The EFIS display controller must also be modified to P/N 7005819-813 per Honeywell SB 7005819-34-8. A Display Switching Unit (DSU) is installed on non-EFIS aircraft equipped with the Primus 800 radar.

Ground testing and a configuration check is performed post-installation and a flight after maintenance is also required to complete the modification.

With the kit packaging, the installation can be performed by operators during scheduled maintenance, or as a standalone modification. Installations can also be "provisions-only".



www.fieldaero.com
1.905.676.1540
customersupport@fieldaero.com

Innovation In Engineering & Integration

FIELD AEROSPACE

Enhanced Ground Proximity Warning System

Kit Content

- Honeywell MK VIII Enhanced Ground Proximity Warning Computer (EGPWC)
- AVTECH Display Switching Unit (DSU) (non-EFIS P800 aircraft only)
- GPS antenna
- Prewired harnesses
- Annunciator assemblies
- Miscellaneous electrical hardware
- Structural details and provisions
- Installation data package
- Certification documentation

Manpower

- Installation of kit requires approximately 140 man-hours, not including access and closeout

Weight

- Installed system results in an approximate weight change of +0.3 lbs (EFIS aircraft) and +3.3 lbs (non-EFIS aircraft)

Electrical Load Data

Series	Amperes	Bus
All	0.8 A (EFIS) 2.1 A (non-EFIS)	Left main 28VDC

P/N	Description
520230-001	Non-EFIS aircraft (Primus 800 radar) – EGPWC with internal GPS
520230-003	Non-EFIS aircraft (Primus 800 radar) – Steep Approach & EGPWC with internal GPS
520230-005	EFIS aircraft – EGPWC with internal GPS
520230-007	EFIS aircraft - Steep Approach & EGPWC with internal GPS
520230-009	Non-EFIS aircraft (RDW-86 radar) – EGPWC with internal GPS
520230-011	Non-EFIS aircraft (Primus 800 radar) – EGPWC without internal GPS (external GPS required)
520230-013	EFIS aircraft –Steep Approach & EGPWC without internal GPS (external GPS required)
520230-017	Non-EFIS aircraft (RDW-86 radar) – Steep Approach & EGPWC without internal GPS
520230-019	Non-EFIS aircraft (Primus 800 radar) – Steep Approach & EGPWC without internal GPS

Kit Price and Delivery

Kit prices from US $92,000 per aircraft. Fleet volume discounts may apply.

Typical lead time is approximately 16 weeks ARO.

www.fieldaero.com
1.905.676.1540
customersupport@fieldaero.com

Innovation In Engineering & Integration