NATIONAL TRANSPORTATION SAFETY BOARD

Vehicle Recorder Division Washington, D.C. 20594

December 28, 2016

Enhanced Ground Proximity Warning System

Specialist's Factual Report By Bill Tuccio, Ph.D.

1. EVENT SUMMARY

Location:Fort Lauderdale, FloridaDate:October 28, 2016Aircraft:McDonnell Douglas MD-10-10FRegistration:N370FEOperator:FedEx ExpressNTSB Number:DCA17MA022

2. GROUP

A group was not convened.

3. DETAILS OF INVESTIGATION

The National Transportation Safety Board (NTSB) Vehicle Recorder Division received the following Enhanced Ground Proximity Warning System (EGPWS):

Device Manufacturer/Model:	Honeywell Model 965-0976-003
Serial Number:	2401

3.1. Device Description

The EGPWS non-volatile memory¹ (NVM) does not continuously record; rather, the EGPWS device stores data to NVM only when certain criteria are met. The readout process at the manufacturer's facility produces several files of flight history data that encompass operational, documentary, fault, and warning information.

The flight history data warning file outputs performance data as related to the operation of the aircraft. These data only record when an alert or warning related to the EGPWS function activates and the unit then retains data points for 20 seconds prior to the activation of the warning and 10 seconds afterwards. The EGPWS parameters are only

¹ Non-volatile memory retains information when power is removed.

sampled 1 time per second, but the actual time of occurrence can be anywhere within the second.

3.2. Device Condition and Download

Upon arrival at the Vehicle Recorder Laboratory, an examination revealed the unit had not sustained any damage and information was extracted using the manufacturer's software. The extracted information was sent to the manufacturer for conversion.

3.3. Data Description

There were no EGPWS warnings generated on the accident flight.