



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety

December 11, 2018

Multi-Hazard Awareness Unit (KMH-820) Download

CEN19FA030

This document contains 3 embedded photos.

A. ACCIDENT

Location: Harmon, ND
Date: 11/18/2018
Aircraft: Cessna 441, Registration Number: N441CX
NTSB IIC: Arnold Scott

B. EXAMINATION PARTICIPANTS:

Eleazar Nepomuceno
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C. SUMMARY

Download of the KMH-820 Part Number 066-01175-2101, Serial Number 1900, was conducted on December 11, 2018 at the facilities of Honeywell, Redmond, WA.



Photo 1. Photo courtesy of Honeywell

D. INSPECTION OF THE UNIT PRIOR TO DOWNLOAD

Deformation was noted to the outer assembly edges. The interconnect appeared to be intact and none of the pins appeared to be damaged or bent.

E. DISASSEMBLY OF THE UNIT

The outer cover of the unit was removed. The Circuit Card Assemblies (CCAs) were removed and observed by NTSB investigators to be intact. The Terrain Database Version installed was: 426N, with a release date of 01/17/2001, TSO C151a Class B. The current version at the time of the accident was 605 with a release date of October 3, 2018.

F. KMH-820 DOWNLOAD

The flash memory chip (U28) was removed from the CCA board, cleaned and downloaded using a chip reader. The chip was then reinstalled onto the original CCA board and downloaded through normal means. Download of data from the last operational use was successful. The accident flight leg was established as flight 279.

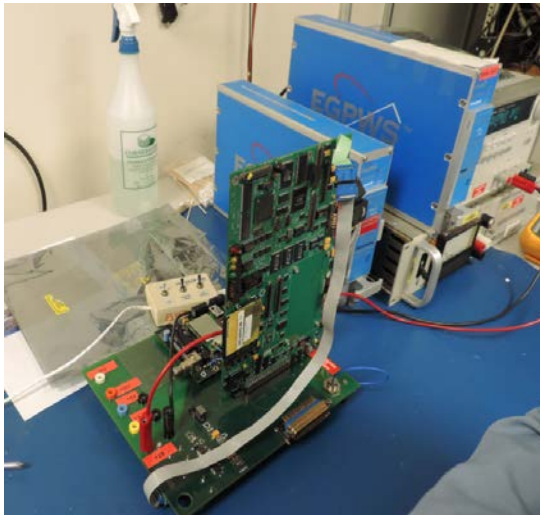
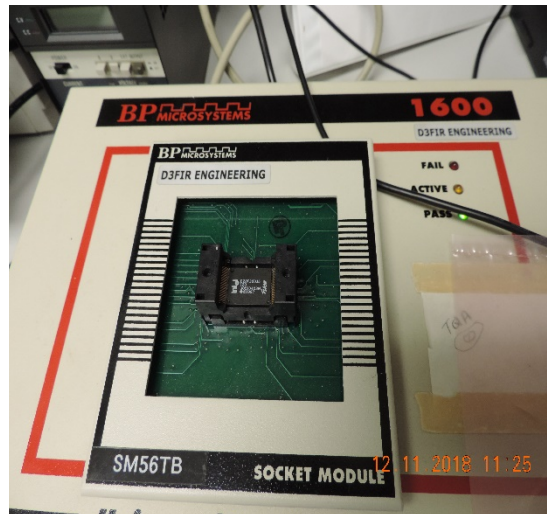


Photo 2 and 3. Photo courtesy of Honeywell



DATA FROM DOWNLOAD

Time of flight history dump:

6469:27:56 – Boot up/Operating time At Honeywell

Most recent takeoff:

FLIGHT LEG 279: (6469:19:36)
Lat/Long: 46.76838 / -100.74109
Corrected Alt: 1616.00 True Hdg: 0.00
Pos. Uncert: 0.00 Pos. Source: GPS1
GPS Alt #1: 1616.00 VFOM #1: 42.00
Airport: KBIS

No landing recorded on flight leg 279.

No warning data from flight leg 279.

Internal GPS Position Failed recorded in flight history for flight leg 279.

Mode 6 INOP recorded for flight leg 279.

```
MODE6 INOP      IN AIR      279      1      1 6469:27:51
MODE 6 INOP:      ( 6469:27:51)
GPWS COMPUTER OK
GPWS EXTERNAL FAULTS:
CONFIGURATION MODULE READ ERROR
```

TANA.csv: No data from flight leg 279

Submitted by: Investigator Eleazar Nepomuceno