From:	Rusu Vadim
To:	Read Leah
Cc:	Hsu Ben; Smith Greg
Subject:	ERA21LA083 (Farmingdale, NY, Hawker Beechcraft 800XP Accident, December 20, 2020) LH and RH DEEC email Report based on data from Honeywell
Date:	Thursday, July 15, 2021 2:31:46 PM
Attachments:	0-240s_CSV_export.csv 0-512s_CSV_export.csv 0-512s_DEEC1.png 0-240s_DEEC1.png
Importance:	High

Leah,
Please see the following email report for ERA21LA083 case.

Email Report Instructions
The narrative and attachments from this email report may be used in other reports at the discretion of the IIC. This email, including attachments (if applicable), should also be placed in the public docket by the IIC.

Email Report
The Vehicle Recorder Division received the following two data files from Honeywell:

- 114-by03.165.txt (contains the data extracted from DEEC1 s/n: 114-BY0324)
- 114-by03.177.txt (contains the data extracted from DEEC2 s/n: 114-BY0322)

Additionally, Honeywell DEEC Examination Report was provided in a form of pdf file.

The DEEC 1 and 2 devices were not provided to the NTSB.
Only the data from the left engine (DEEC1) was plotted. The data obtained from the right engine (DEEC2) was identical.

Per Honeywell (DEEC manufacturer), for this version of the DEEC, the values for weight on wheels (WOW), Mach number, and thrust reverser (TR) deployment are internally calculated values based on N1 speed, total pressure (PT2), and static pressure.
WOW, Mach, and TR Deploy are not directly obtained aircraft signals. This was taken into consideration when analyzing and viewing the incident data in this report.

Based on the provided data files, there was a go-around attempt and both engines responded to the power lever inputs. Due to 'recorder' (older DEEC model) limitations, it's impossible to determine at what altitude the TOGA switch was pressed (TOGA sw is not recorded and all we can see is that altitude was bellow 2000 ft). Because of lack of recorded parameters, the exact impact moment was not determined.

Attachments:

- 0-512s_DEEC1.png - contains all parameters during last 512s of DEEC1 operation
- 0-512s_CSV_export.csv - information from the plot "0-512s_DEEC1.png exported to CSV file
- 0-240s_DEEC1.png – depicts the same information but scaled and zoomed to only 240s time

frame

- 0-240s_CSV_export.csv - information from the plot "0-240s_DEEC1.png exported to CSV file

Prepared by: Vadim Rusu, Aerospace Engineer – Recorder Specialist, NTSB, RE-40.

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[redacted]