

Docket No. SA-531

Exhibit No. 10-B

NATIONAL TRANSPORTATION SAFETY BOARD

Washington, D.C.

Flight Data Recorder Ancillary 1 Specialist
Factual Report

(9 Pages)

NATIONAL TRANSPORTATION SAFETY BOARD

Vehicle Recorder Division

Washington, D.C. 20594

April 17, 2009

Flight Data Recorder - 10

Ancillary 1 Specialist's Factual Report By Cassandra Johnson

1. EVENT SUMMARY

Location: Burlington, Vermont
Date: March 10, 2009
Aircraft: Dash8-400Q, Registration: N188WQ
Operator: Colgan Air
NTSB Number: DCA09MA027_ANC2

On March 10, 2009, a Colgan Air Inc. Bombardier Dash 8-400Q, N188WQ, had a stick shaker activation while on final approach to Burlington, Vermont. The airplane subsequently landed safely. In support of the February 12, 2009 Colgan Air Dash-8-400Q, N200WQ, accident, the FDR from this aircraft, N188WQ, was provided to the Safety Board for readout and analysis.

2. FLIGHT DATA RECORDER GROUP

A flight data recorder (FDR) group was not convened for this FDR.

3. DETAILS OF FLIGHT DATA RECORDER INVESTIGATION

On March 12, 2009, the Safety Board's Vehicle Recorder Division received N188WQ's FDR:

Recorder Manufacturer/Model: **Honeywell SSFDR, Model 980-4700, 128 Word**
Recorder Serial Number: **13637**

The recorder was in good condition and the data were extracted normally from the recorder.

The FDR aboard N188WQ is the same type of FDR that was installed in the Colgan Air Dash-8-400Q, N200WQ, accident airplane. Additionally, the N188WQ FDR has all of the same FDR requirements and the same parameters recorded as the N200WQ FDR¹.

3.1. Recording Description

The N188WQ FDR recording contained approximately 26.6 hours of data. Timing of the FDR data is measured in subframe reference number (SRN), where each SRN equals one elapsed second. The FDR timing for N188WQ was not correlated to local time (eastern standard time) and, therefore, the FDR timing provided in this report are SRN.

¹ Refer to the Flight Data Recorder Group Chairman Factual Report for more information.

The FDR data was scanned and the stick shaker event flight was the sixth flight back from the end of the FDR recording and it's duration was approximately 54 minutes.

3.2. FDR Plots and Corresponding Tabular Data

The following 7 plots contain FDR data recorded during the March 10, 2009 stick shaker event and covers the final approach to Burlington, VT from a pressure altitude of 2,700 feet through touchdown. All of the FDR parameters plotted in these 7 plots are the same FDR parameters plotted in the N200WQ FDR factual report.

These plots are configured such that right turns are indicated by the trace moving toward the bottom of the page, left turns towards the top of the page, and nose up attitudes towards the top of the page.

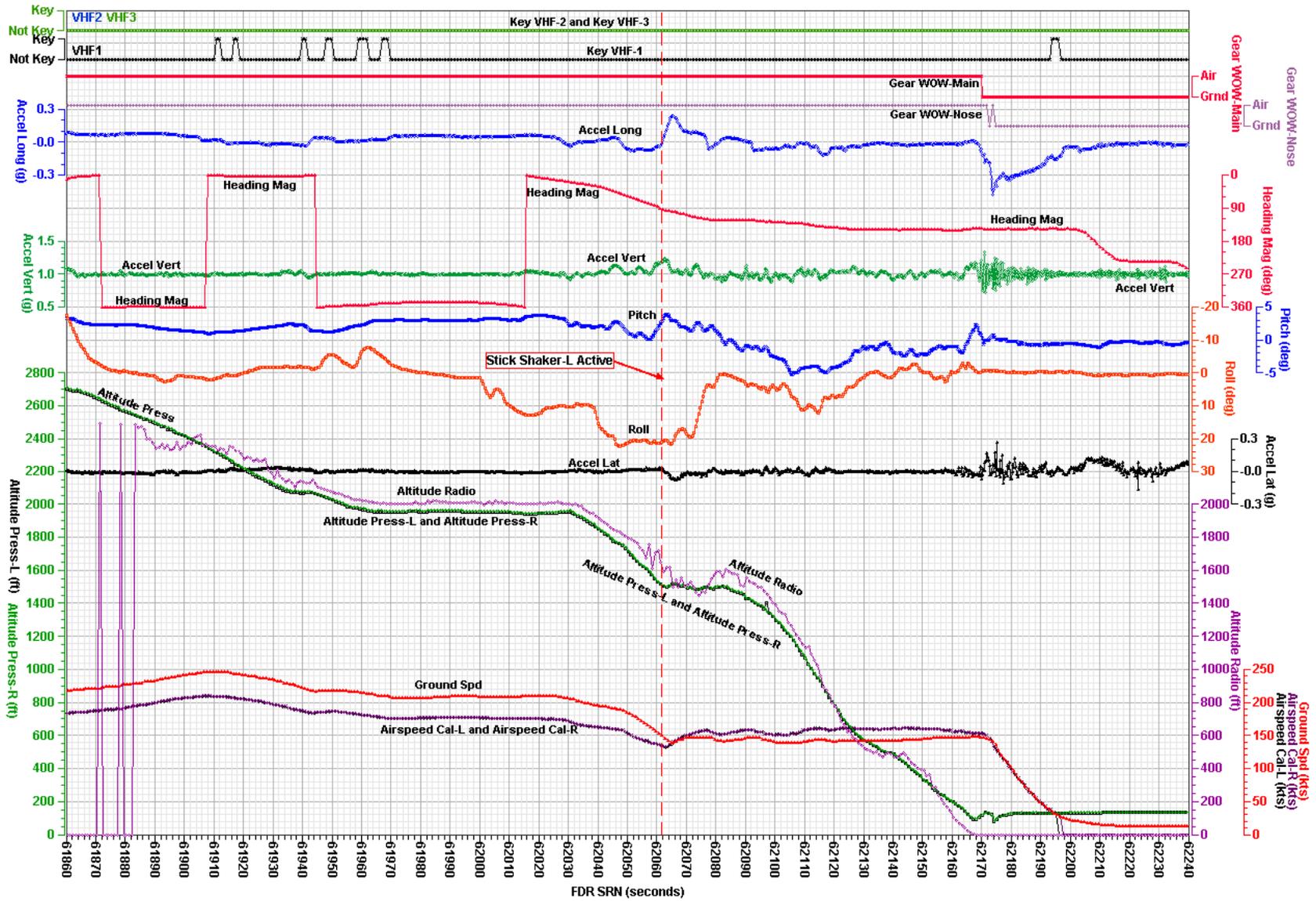
The corresponding tabular data used to create these 7 plots plus latitude and longitude are provided in electronic (.CSV) format as Attachment 10D to this report.

Plot 1

Colgan Air, Inc., Bombardier Dash-8-400Q, N188WQ, 10March2009 Final Approach to Burlington, VT

Location, Date: Burlington, VT, 02/10/09

NTSB No. DCA09MA027



Revised: 16 April 2009

Final Approach (Basic)

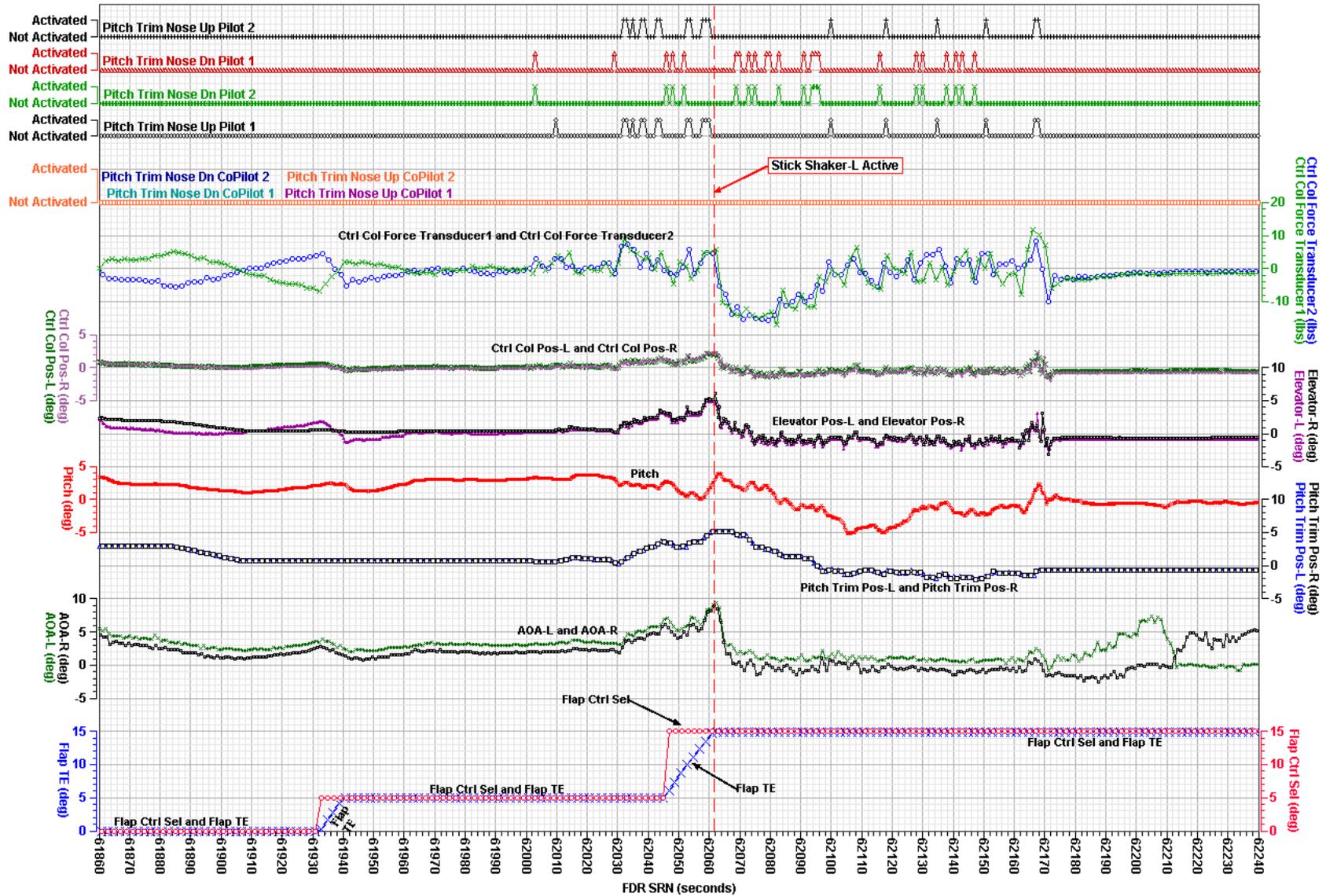
National Transportation Safety Board

Plot 2

Colgan Air, Inc., Bombardier Dash-8-400Q, N188WQ, 10March2009 Final Approach to Burlington, VT

Location, Date: Burlington, VT, 02/10/09

NTSB No. DCA09MA027



Revised: 16 April 2009

Final Approach (Pitch Control)

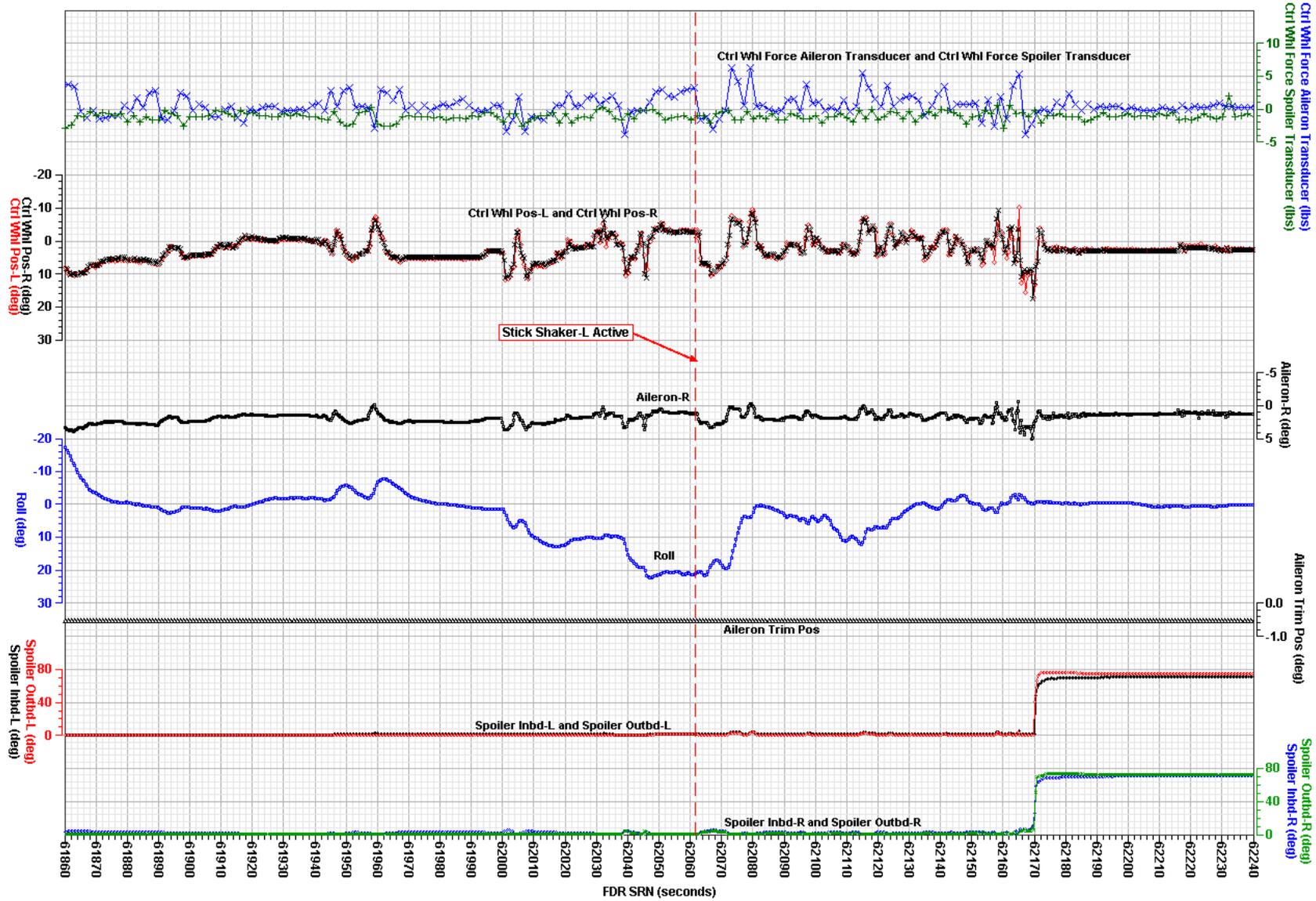
National Transportation Safety Board

Plot 3

Colgan Air, Inc., Bombardier Dash-8-400Q, N188WQ, 10March2009 Final Approach to Burlington, VT

Location, Date: Burlington, VT, 02/10/09

NTSB No. DCA09MA027



Revised: 16 April 2009

Final Approach (Roll Control)

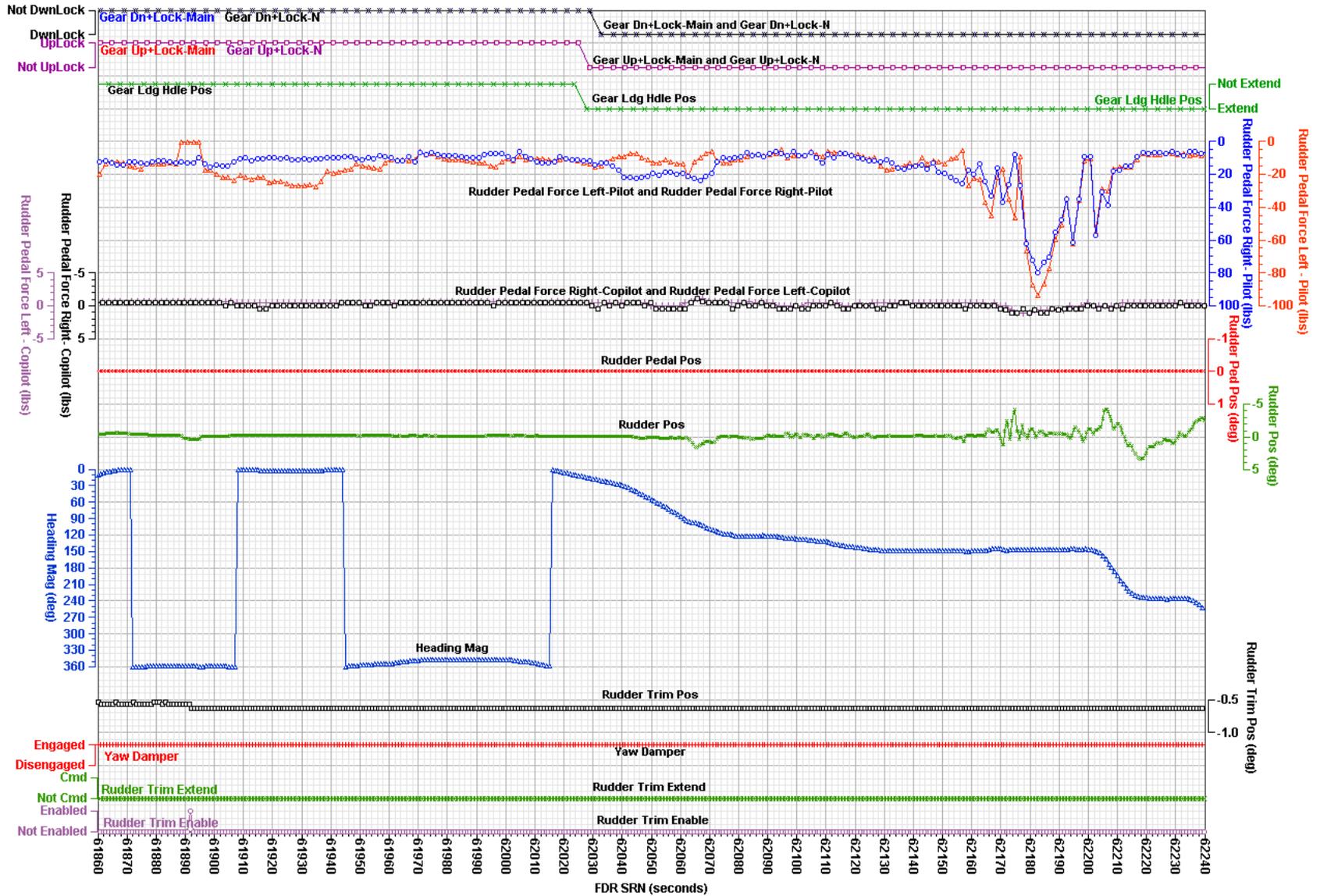
National Transportation Safety Board

Plot 4

Colgan Air, Inc., Bombardier Dash-8-400Q, N188WQ, 10March2009 Final Approach to Burlington, VT

Location, Date: Burlington, VT, 02/10/09

NTSB No. DCA09MA027



Revised: 14 April 2009

Final Approach (Yaw Control)

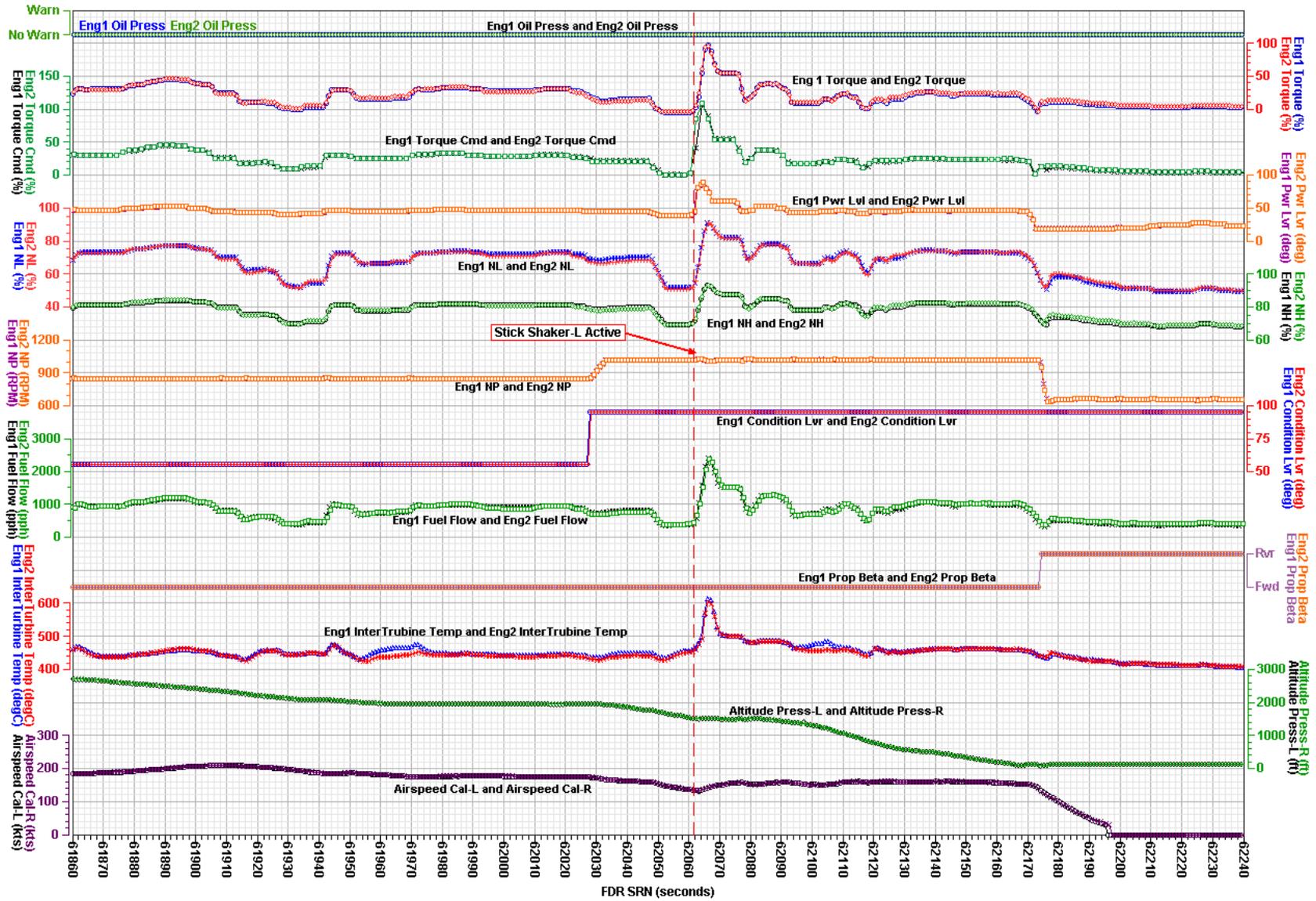
National Transportation Safety Board

Plot 5

Colgan Air, Inc., Bombardier Dash-8-400Q, N188WQ, 10March2009 Final Approach to Burlington, VT

Location, Date: Burlington, VT, 02/10/09

NTSB No. DCA09MA027



Revised: 16 April 2009

Final Approach (Engines)

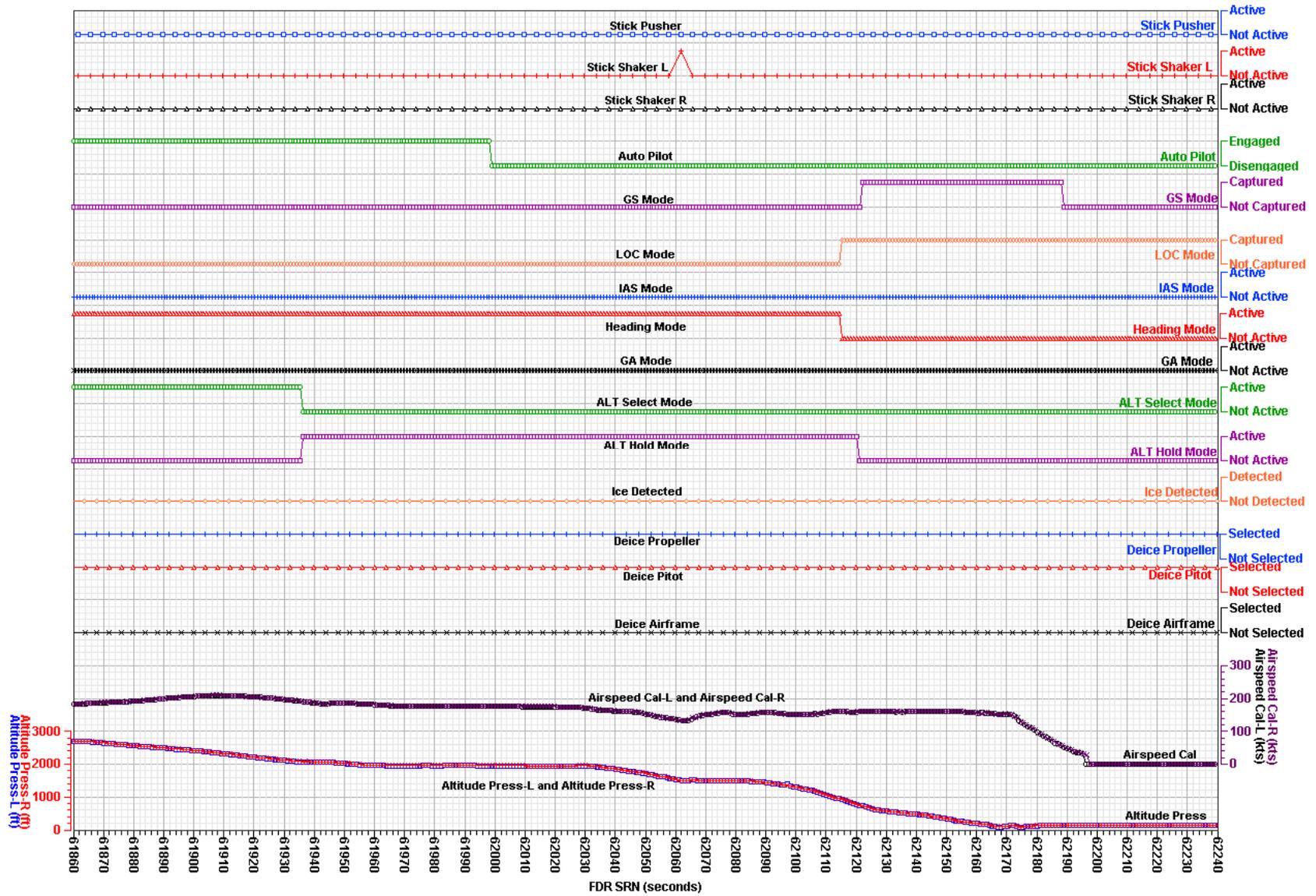
National Transportation Safety Board

Plot 6

Colgan Air, Inc., Bombardier Dash-8-400Q, N188WQ, 10March2009 Final Approach to Burlington, VT

Location, Date: Burlington, VT, 02/10/09

NTSB No. DCA09MA027



Revised: 14 April 2009

Final Approach (AP, Deice Discretes, AP Modes, Stick Discretes)

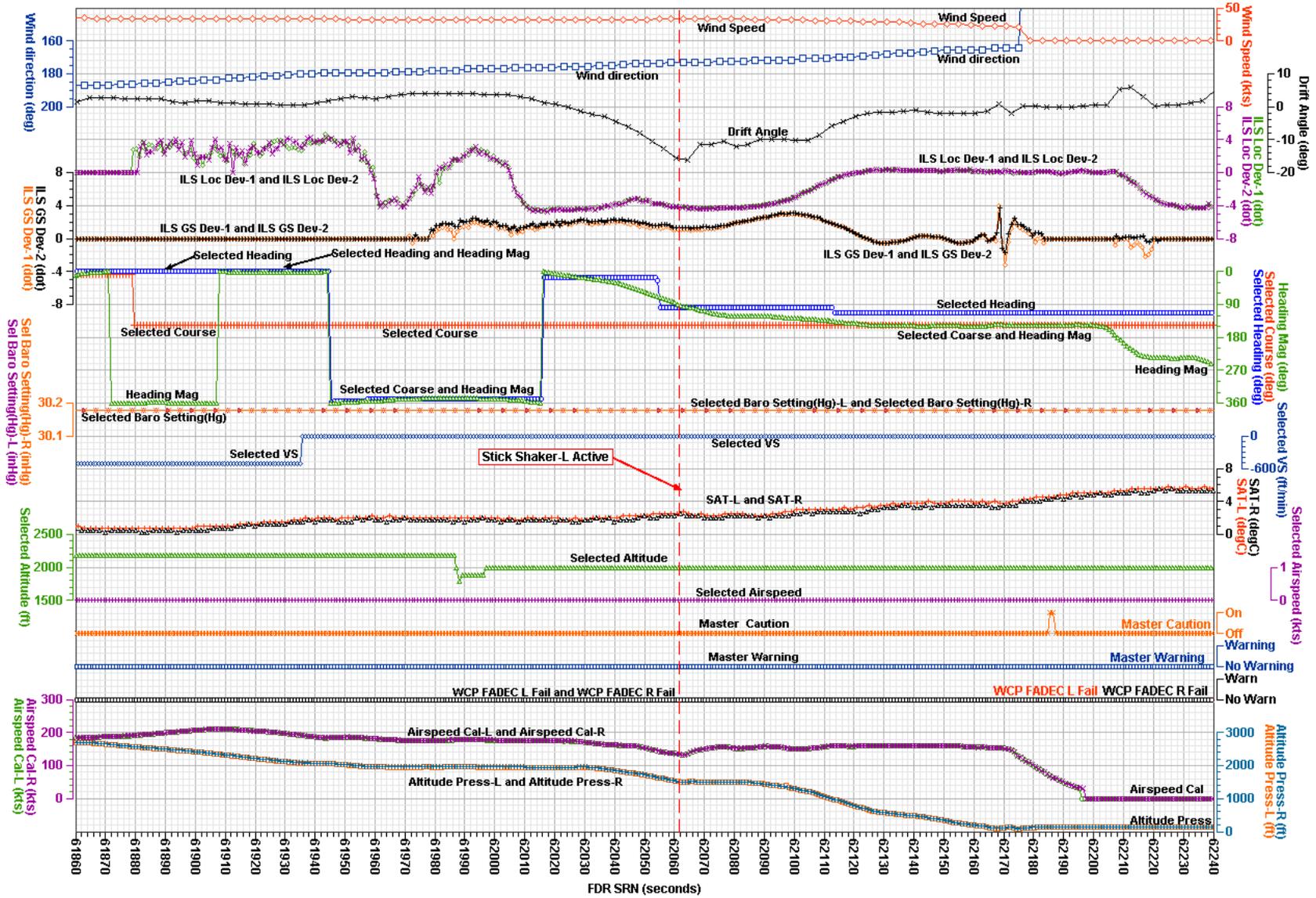
National Transportation Safety Board

Plot 7

Colgan Air, Inc., Bombardier Dash-8-400Q, N188WQ, 10March2009 Final Approach to Burlington, VT

Location, Date: Burlington, VT, 02/10/09

NTSB No. DCA09MA027



Revised: 16 April 2009

Final Approach (Master Caution/Warning, Winds, ILS, Misc)

National Transportation Safety Board