

# NATIONAL TRANSPORTATION SAFETY BOARD

Vehicle Recorder Division

Washington, D.C. 20594

June 2, 2016

## Flight Data Recorder

### Specialist's Factual Report Addendum – Additional Parameters By Greg Smith

#### 1. EVENT SUMMARY

Location: Gaithersburg, Maryland  
Date: December 8, 2014  
Aircraft: Embraer EMB-500  
Registration: N100EQ  
Operator: Sage Aviation LLC.  
NTSB Number: DCA15MA029

On December 8, 2014, about 1041 Eastern Standard Time (EST), an Embraer S.A. EMB-500 (Phenom 100), N100EQ, impacted terrain and houses about 0.75 miles short of runway 14 while on approach to Montgomery County Airpark (GAI), Gaithersburg, Maryland. The airline transport rated pilot and two passengers were fatally injured as well as three persons on the ground. The airplane was destroyed during the impact and ensuing fire. Marginal visual meteorological conditions prevailed at the time and the flight was operating on an instrument flight rules (IFR) flight plan. The airplane was registered to and operated by Sage Aviation LLC., of Chapel Hill, North Carolina, under the provisions of 14 *Code of Federal Regulations* Part 91 as a personal flight. The flight originated from Horace Williams Airport (IGX), Chapel Hill, North Carolina, with GAI as its intended destination.

#### 2. DETAILS OF ADDENDUM

This addendum provides plots and tabular data for additional flight data recorder parameters which were evaluated and validated after the Flight Recorder Specialist's Factual Report was published. These additional parameters are: the values and activation status of the Landing  $V_{FS}$  Bug,  $V_{AC}$  Bug,  $V_{AP}$  Speed Bug, and  $V_{REF}$  Bug; the status of EICAS Advisory and Caution messages related to air data system (ADS) and windshield heaters; and validity indications for the recorded Angle of Attack (AOA) parameters. Figure 1 shows the speed bug parameters with Altitude, Airspeed, Pitch, Roll and Auto Pilot Engagement for reference. Figure 2 shows the AOA validity and EICAS message status parameters with Altitude, Airspeed, Engine N1, Auto Pilot Engagement and Pitot-Static heater activation for reference. Attachment 1 contains the tabular data for the additional parameters in electronic comma separated value (\*.csv) format.

Figure 1

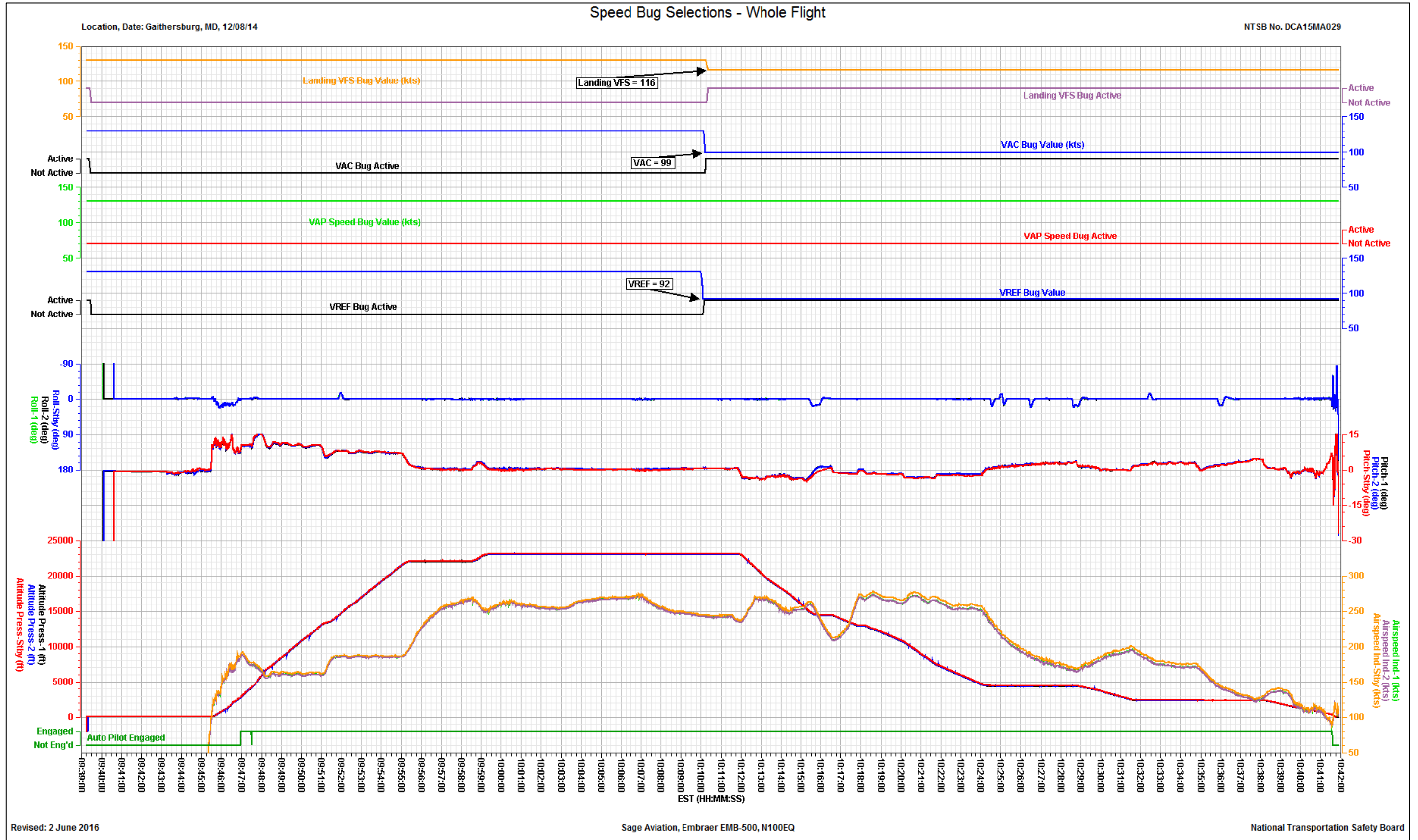
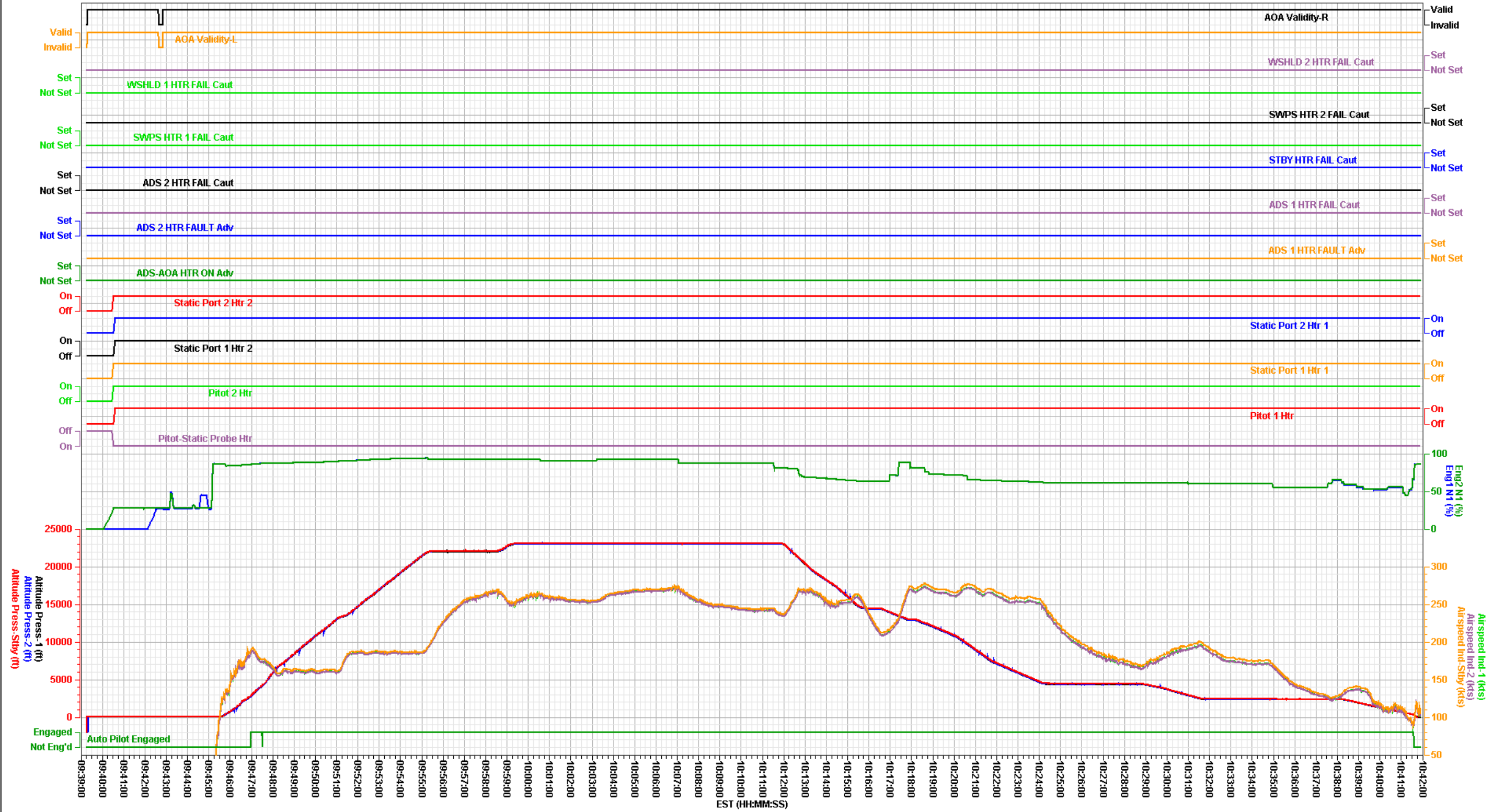


Figure 2

ADS/AOA Heating System Parameters - Whole Flight

Location, Date: Gaithersburg, MD, 12/08/14

NTSB No. DCA15MA029



Revised: 2 Jun 2016

Sage Aviation, Embraer EMB-500, N100EQ

National Transportation Safety Board