## **Etcher Shawn**

From: Gratton, Marc PWC

**Sent:** Wednesday, July 03, 2013 11:50 AM

To: Tuccio William

**Cc:** Etcher Shawn; McComb Sarah;

Subject: RE: US NTSB Number ERA13IA294 (Gulstream 200, Jamestown, New York, June 20, 2013,

Runway Overrun) - FADEC EEC Readout

## Hi Bill,

Looks like the data analysis had already been requested by Gulfstream. You should have received the traces from my colleague Real Gagné. The traces are pretty self explanatory; looks like the buckets were deployed and armed after landing (weight on wheel confirmed) however it appears the pilot left the engines at Thrust Reverser (TR) idle detent for approx. 18 sec. before applying full TR power as seen in the 3<sup>rd</sup> plot where TLA (Throttle Lever Angle) ARC (Angle Rating Code)remains at 20 (TR idle) for 18 sec. and then goes to 5 which is TR max power for 12 sec.. Considering the TR obtainable power is a function of IAS, upon applying full TR power after 18 sec. at TR idle and standing on the brakes the IAS had decreased to the point where he only got around 50 to 55% TR (N1) power at approx. 85% N2 where with normal landing speed you should get at least a min of approx 78% N1 (TR) and up to a max. of 98% N2 (with corresponding N1 increase) at higher speeds.

Hope this covers it.

Cheers,

Marc Gratton
Air Safety Investigator
Pratt & Whitney Canada Corp.
Ph.
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From: Tuccio William

Sent: 03 Jul 2013 9:38 AM To: Gratton, Marc PWC

Cc: Etcher Shawn; McComb Sarah;

Subject: [External] RE: US NTSB Number ERA13IA294 (Gulstream 200, Jamestown, New York, June 20, 2013, Runway

Overrun) - FADEC EEC Readout

## Mr. Gratton,

Thank you for your assistance with this matter. Attached is a ZIP of the two .BRC files we would like to decode. The preliminary report for this event is on our website

I also included a copy of a readout Mr. Beaudry did for us in October, 2012. If you are able to produce a report similar to the October, 2012 report, that would be helpful. However, for this case I may just need: (1) a brief description of how the EEC and recording mechanism works; (2) the tabular data; and (3) metadata describing the tabular data (i.e., units, source, discrete meanings).

Thank you,

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Bill Tuccio

National Transportation Safety Board

Aerospace Engineer

Office of Research & Engineering, Vehicle Recorder Division (RE-40)

iPhone

From: Gratton, Marc PWC

Sent: Tuesday, July 02, 2013 9:14 AM

To: Tuccio William; Beaudry, Claude PWC; Benoit, Richard PWC

Cc: Etcher Shawn; McComb Sarah;

Subject: RE: US NTSB Number ERA13IA294 (Gulstream 200, Jamestown, New York, June 20, 2013, Runway Overrun) -

**FADEC EEC Readout** 

Hi Bill,

.BRC files are raw data files that can be read by one of our specialized software. If you send me the files I would be happy to convert them into something us humans can read.

Cheers,

Marc Gratton
Air Safety Investigator
Pratt & Whitney Canada Corp.
Ph.

Fax email:

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