

Bowling David

From: Wintermute, Maggie [REDACTED]
Sent: Monday, January 20, 2020 10:41 AM
To: Bowling David
Cc: Allen, Jim (Product Integrity)
Subject: RE: [External] FW: EGPWS from Bombardier CL-600, N813WT Uvalde, Texas
Attachments: Warn_Honeywell_Proprietary.CSV; Warn_1545_Honeywell_Proprietary.xlsx

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Hello David,

Following up on our call from last week. Windshear alerting was disabled on this EGPWS unit. This is shown in the program pin configuration data in CEN19LA054.TXT:

```
Smart Callout Selected
Alternate Mode 6 Volume Selected
Windshear Disabled
Windshear INOP Disabled
Bank Angle Selected
```

Attached is the Warn spreadsheet data I mentioned that shows the airspeed, altitude rate, etc. at the time the EGPWS alerts were given. This data has been re-extracted from the raw data files we downloaded from the unit when NTSB was on site in July. Warn_1545 is the same data, zoomed in to the most recent flight leg (1545), which was the accident flight. The flight leg numbering used by the tool that created the warning spreadsheet is reversed from the numbering in the CEN19LA054.TXT file, so flight leg 1 in CEN19LA054.TXT is the same flight as flight leg 1545 in the spreadsheet.

The operating time is in column D. The first alert on this flight is a TAD (terrain awareness) caution at 5644:59:49. Radio altitude is in column P. The altitude rate in FPM is in column R; it went from -1391 FPM at 5645:01:05 to 80 FPM at 5645:01:06. Airspeed is in column H and ground speed in column J. Data that is marked with a * was flagged as invalid.

If you have any questions on the data, let me know.

Thanks,
Maggie Wintermute
EGPWS Systems Engineer
Honeywell Aerospace
[REDACTED]
Redmond, WA 98052
[REDACTED]

From: Bowling David [REDACTED]
Sent: Monday, January 13, 2020 7:39 AM
To: Wintermute, Maggie [REDACTED]
Cc: Allen, Jim (Product Integrity) [REDACTED]
Subject: RE: [External] FW: EGPWS from Bombardier CL-600, N813WT Uvalde, Texas

Thanks Maggie.

Talk to you then.

David

From: Wintermute, Maggie [REDACTED]
Sent: Monday, January 13, 2020 8:33 AM
To: Bowling David [REDACTED]
Cc: Allen, Jim (Product Integrity) [REDACTED]
Subject: RE: [External] FW: EGPWS from Bombardier CL-600, N813WT Uvalde, Texas

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Hi David,

Wednesday at 10 works. My number is [REDACTED]

Thanks,

Maggie Wintermute
EGPWS Systems Engineer
Honeywell Aerospace
[REDACTED]
Redmond, WA 98052
[REDACTED]

From: Bowling David [REDACTED]
Sent: Monday, January 13, 2020 6:12 AM
To: Wintermute, Maggie [REDACTED]
Cc: Allen, Jim (Product Integrity) [REDACTED] Bowling David [REDACTED]
Subject: RE: [External] FW: EGPWS from Bombardier CL-600, N813WT Uvalde, Texas

Hi Maggie.

Can I call you on Wednesday at 10:00 am your time? Would that work for you? If so, what is a good number to call you at?

Thanks,

David

From: Wintermute, Maggie [REDACTED]
Sent: Thursday, January 9, 2020 12:19 PM
To: Bowling David [REDACTED]
Cc: Allen, Jim (Product Integrity) [REDACTED]
Subject: RE: [External] FW: EGPWS from Bombardier CL-600, N813WT Uvalde, Texas

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Hello David,

Happy new year to you as well.

I'm available next week for a call. I'm available Tuesday afternoon (1:00 PM pacific time or later) or any time after 10:00 AM on Wednesday. Would this work for you?

Thanks,
Maggie

From: Bowling David [REDACTED]
Sent: Tuesday, January 07, 2020 1:21 PM
To: Wintermute, Maggie [REDACTED] Allen, Jim (Product Integrity)
[REDACTED]
Cc: Bowling David [REDACTED]
Subject: RE: [External] FW: EGPWS from Bombardier CL-600, N813WT Uvalde, Texas

Maggie,

Happy new year. I hope you had a wonderful holiday season. Thank you for sending me your previous response. I would like to talk about the data so I am clear on what I am looking at.

I am available all of this week and next week., if you'd like to pick a date and time.

Thank you and my best regards,

David

From: Wintermute, Maggie [REDACTED]
Sent: Monday, December 9, 2019 10:41 AM
To: Bowling David [REDACTED] Allen, Jim (Product Integrity) [REDACTED]
Subject: RE: [External] FW: EGPWS from Bombardier CL-600, N813WT Uvalde, Texas

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Hello Mr. Bowling,

Did my previous response make it to you? If you have any additional questions, please let me know. We can schedule a call if you prefer.

Thanks,
Maggie

From: Bowling David [REDACTED]
Sent: Monday, December 09, 2019 7:52 AM
To: Wintermute, Maggie [REDACTED]; Allen, Jim (Product Integrity)
[REDACTED]
Cc: Bowling David [REDACTED]
Subject: [External] FW: EGPWS from Bombardier CL-600, N813WT Uvalde, Texas

Good morning,

I'm following up on some questions I asked back in September about the information that came out of a EGPWS unit that you downloaded for us.

Please call/contact me when you get a chance.

Thank you, and best regards,

Dr. David Bowling
Regional Chief
National Transportation Safety Board
Office of Aviation Safety, Central Region

[REDACTED]
Denver, Colorado 80239
[REDACTED]



From: Bowling David
Sent: Tuesday, November 19, 2019 10:16 AM
To: [REDACTED]
Cc: Bowling David [REDACTED]
Subject: FW: EGPWS from Bombardier CL-600, N813WT Uvalde, Texas

Ms. Wintermute,

I sent the below e-mail to Jim Allen not realizing that, per Deb Eckrote, you were the person who worked with Jack Vanover on the download and examination of the EGPWS from a Challenger 600, N813WT, that impacted the runway at the Ox Ranch Airport near Uvalde, Texas, last January. Can you help me with the questions I posed to Jim back in September? Please feel free to contact me anytime.

Thanks for your help, and my best regards,

David Bowling

Dr. David Bowling
Regional Chief
National Transportation Safety Board
Office of Aviation Safety, Central Region

[REDACTED]
Denver, Colorado 80239
[REDACTED]



From: Bowling David

Sent: Wednesday, September 25, 2019 10:56 AM

To: Allen, Jim (Product Integrity) [REDACTED]

Cc: Michael Lemay [REDACTED] Bowling David [REDACTED]

Subject: RE: EGPWS from Bombardier CL-600, N813WT Uvalde, Texas

Jim,

Good day. I finally got to looking over the information derived from the EGPWS unit that came from the Challenger hard landing at Uvalde, Texas, that happened last January. First, thank you for doing this. I'd like to bring Honeywell on as a party, so I've enclosed a party form for the accident investigation.

So, I'm going through a lot of data and trying to understand what I am looking at. From Jackie Vanover's report, it says that Flight Leg 1545 was established as the last leg recorded. Looking at the EGPWS Notes, that shows a flight that originated at KFTW, and ended at 3TA6, which is Spring Ranch Airport at Brackettville, Texas. Granted, that is close to the Ox Ranch Airport (01TX, landing airport), but it's still 10 nm west-northwest. If that's the case, this would not be the accident flight. Am I interpreting this correctly? Is there a way from the data to know the date and times for that last recorded flight?

If you would, please call or e-mail me. I'd be most appreciative. And thanks again for downloading the unit for me.

My best regards,

David

Dr. David Bowling
Regional Chief
National Transportation Safety Board
Office of Aviation Safety, Central Region

[REDACTED]
Denver, Colorado 80239
[REDACTED]



From: Bowling David [REDACTED]

Sent: Wednesday, June 19, 2019 11:43 AM

To: Allen, Jim (Product Integrity) [REDACTED]

Cc: Bowling David [REDACTED] Eckrote Debra [REDACTED] Michael Lemay [REDACTED]

Subject: EGPWS from Bombardier CL-600, N813WT Uvalde, Texas

Jim,

I've attached the field notes for this case. It should provide your team a good summary of what's been looked at thus far. I've also enclosed a parties form (starts on page 2). When you get a chance, please sign and return it to me.

The EGPWS is presently in the NTSB, Seattle Office. Please have your team coordinate with Deb Eckrote for when they can bring the unit to you for readout.

Thanks for your support with this. Welcome to the investigation.

Best regards,

David

Dr. David Bowling
Regional Chief
National Transportation Safety Board
Office of Aviation Safety, Central Region
[REDACTED]

Denver, Colorado 80239
[REDACTED]



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