

From: [Crookshanks Clinton](#)
To: [Hodges Michael](#)
Cc: [Crookshanks Clinton](#)
Subject: RE: N2996S - Leading Edge Damage
Date: Monday, September 18, 2017 17:37:55

Mike,

Thanks for the additional information. The right wing leading edge damage is more significant than the left wing. In looking at the dimensions provided, I believe that the operator only measured the sharp portion of the dents and not all the leading edge deformation associated with each dent, particularly for the right wing. There are 3 major areas of damage on the right wing leading edge, one near the strut attach point, one near the center, and one near the wing tip. The inboard area of damage spans from inboard of the strut attach point at STA 84 to STA 102. The total length of damaged leading edge is about 20 inches and the leading edge rib at STA 102 is likely damaged. The center area of damage is between STA 120 and STA 138. The total length of damaged leading edge in this area is about 12 inches and the leading edge rib at STA 120 is likely damaged. The outboard area of damage is near STA 174. The total length of damaged leading edge in this area is about 6 inches and the leading edge rib at STA 174 is likely damaged. I am comfortable with the operator's measurements for the left wing that total about 11 inches of leading edge damage. There is also damage to the left horizontal stabilizer leading edge that appears to span about 6 inches. While any one of these damaged areas would be excluded from consideration, the total length of wing leading edge damage is in excess of 4 feet, not to mention the stabilizer damage. Therefore, this should be considered substantial damage.

Let me know if you have any questions.

Clint Crookshanks

Aerospace Engineer (Structures)
National Transportation Safety Board



From: Hodges Michael
Sent: Thursday, September 14, 2017 8:05 PM
To: Crookshanks Clinton <>
Subject: FW: N2996S - Leading Edge Damage

Hi Clint,

Here is an update on the damaged measurements.

It appears this was a fuel exhaustion accident. Thanks.

Mike