LOG H-1

TARGET Z2575 ← TAG #

COORD. LAT 40° 39' 54"

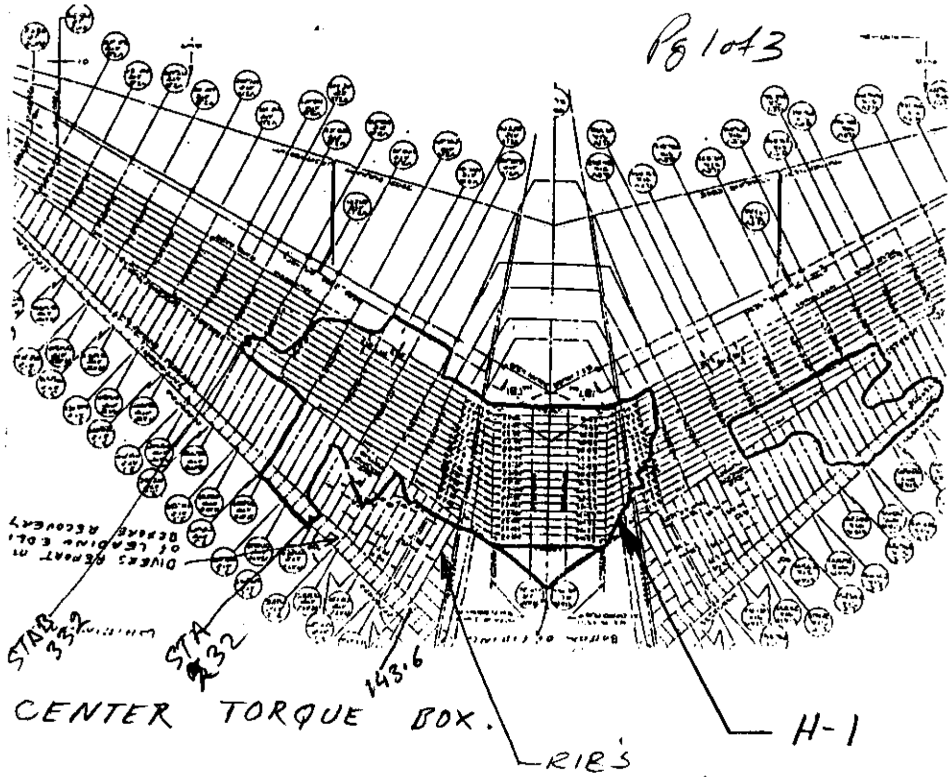
LONG 72° 37' 30"

DEBRIS FIELD GREEN

NAME: F. Livingston (TWA)

DATE: 9-18-96

See Additional Information



NOMENCLATURE: HORIZ. CENTER TORQUE BOX.

DESCRIPTION: HORIZ. STABILIZATOR CENTER TORQUE BOX MOSTLY INTACK. PLUS FOLLOWING ATTACHMENTS: 1) LEFT SIDE ~~AFT ATTACHMENT~~ STABILIZER HINGE RH 12/10/96 FITTING 2) RIGHT SIDE ~~AFT ATTACHMENT~~ STABILIZER HINGE RH 12/10/96 FITTING 3) BALL JOINT ATTACHMENT FORWARD AREA. 4) LEFT HAND HORIZ. STAB., SECTION ATTACHED FRONT SPAR AFT TO REAR SPAR STAB. STA. 187 5) RIGHT HAND HORIZ. STAB., SECTION 13 FEET ALONG FRONT SPAR AND 10 FEET ALONG AFT SPAR. 6) LEADING EDGE STRUCTURE STAB. STA. 245 TO STAB. STA 296, RH 12/10/96 RHS 7) TRAILING EDGE STRUCTURE ELEV. STA 81 TO ELEV. STA 131, RHS 12/10/96

[illegible] 12-10-96 TWT
R Hansen - TBC 12/10/96
Dennis Sontag 12-10-96 IAM
[illegible] 12-10-96 FAA
SD GREEN 12-10-96

OBSERVATION NOTES:

a) ~~NO BURN DAMAGE~~ RH 12/10/96

b) PUNCTURES THROUGH UPPER SKIN.

c) DAMAGE TO THE LEADING EGDE IS RH 12/10/96 ~~ASSUMED TO BE AERODYNAMIC AND~~ IMPACT RELATED

[signature] (TWA) 9/18/96

Dennis Sontag IAM 10/23/96

Lou Zaller FAA 10.29.96

[illegible] 10-25-96

Pg 2 of 3

H1

Additional Information

The right horizontal stabilizer inboard section remained attached to the horizontal stabilizer center torque box (H1). The outboard end of this section is at stab sta 360. The inboard leading edge from sta stab sta 143.6 to stab sta 232 are missing. The ribs and the web near stab sta 232 is crushed outboard. About 50 inches of the leading edge outboard of stab sta 235 remains attached. The outboard end of this section (stab sta 332) has a jagged fracture on its skins and stringers. The upper skin exhibited evidence of slightly downward bending. The lower skin stringers are bent up and forward. The rear spar remained attached to this section from the torque box to stab sta 285 and exhibited bending in aft direction at sta 285.

The torque box remained intact with few puncture holes on the upper skin. The rear spar of the torque box suffered no impact damage. The RHS stabilizer hing fitting's lug is rotated 10 degrees CCW approx when looking forward.

At the [redacted] front spar;

1)The upper chord at BL 0, is cracked through
2)The lower chord's vertical leg is fractured/separated from the horizontal leg from Stab LBL 14.5 to RBL 14.5.
3)This segment of web between LBL 14.5 and RBL 14.5 has a remnant of a diagonal buckle from the upper chord at RBL 14.5 to the lower chord at LBL 14.5. The web has broken out between the two mentioned BL's and has been displaced forward.
4)The RHS of the torque box is approx 1" higher than the LHS, at the front spar.
5)At the forward end of the LBL 14.5 rib web, there are diagonal-tension buckles going up and aft with a 10" tear perpendicular to the buckles. At the forward end of the RBL 14.5 rib web, there is a tear at he same orientation as the tear in the LHS web.

The jack screw extends above fitting by ten threads and is fractured at bottom end. The jack screw ball joint along with its mounting frames remained intact except the .25 diameter fasteners between the support frames are missing. These subject fastener holes are mis aligned on the upper supprt frames. There is minor deformation observed on the support frames of the screw jack, the LHS upper support has an 1/8" gap between support frames.

A portion of the left aft upper and lower skin from outboard of LBL 43.5 remained attached to the torque box. The upper and lower skin is bent upwards. The left lower stringers are bent slightly up and aft. The left upper skin and stringers are bent up and aft from 30 to 45 degrees. Approximately three feet of left rear spar remained attached to the torque box and is bent aft. The left front spar separated at the torque box, reference H5.

R Hanover TBC
12/15/96

Dennis Santiago IAM
12/16/96

12-16-96 TWA

12-16-96 - ALPA

Tom Todino
FAA 1-10-97

There are soot marks on the inside of the skin and stringers of the upper surface approximately 1 foot forward of the L.H. Rear Spar, about 3 feet from the root. Also there are other areas that are sooted.

There are blue paint transfer marks in the same location as noted above for the soot except on the skin upper surface.

H1 mates with H9 on lower skin, H1 mates with H6.

BOTH L & RHS OUTB'D ENDS EXHIBIT COMPRESSION TYPE FRACTURES ON THE UPR SURFACE & TENSION ON THE LOWER SURFACE.