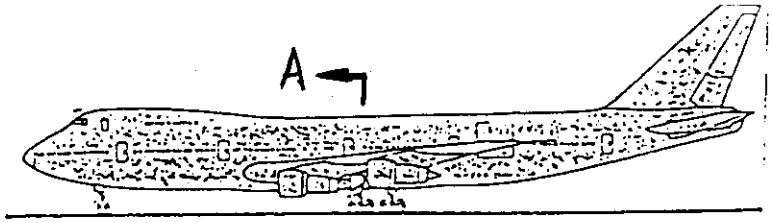


LOG # LF17

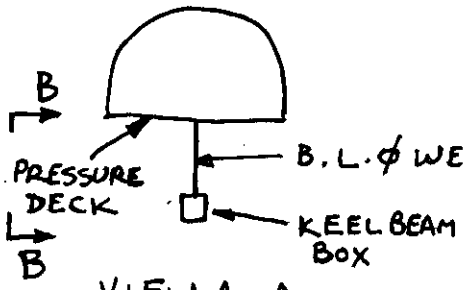
TARGET # C-109

COORD: LAT

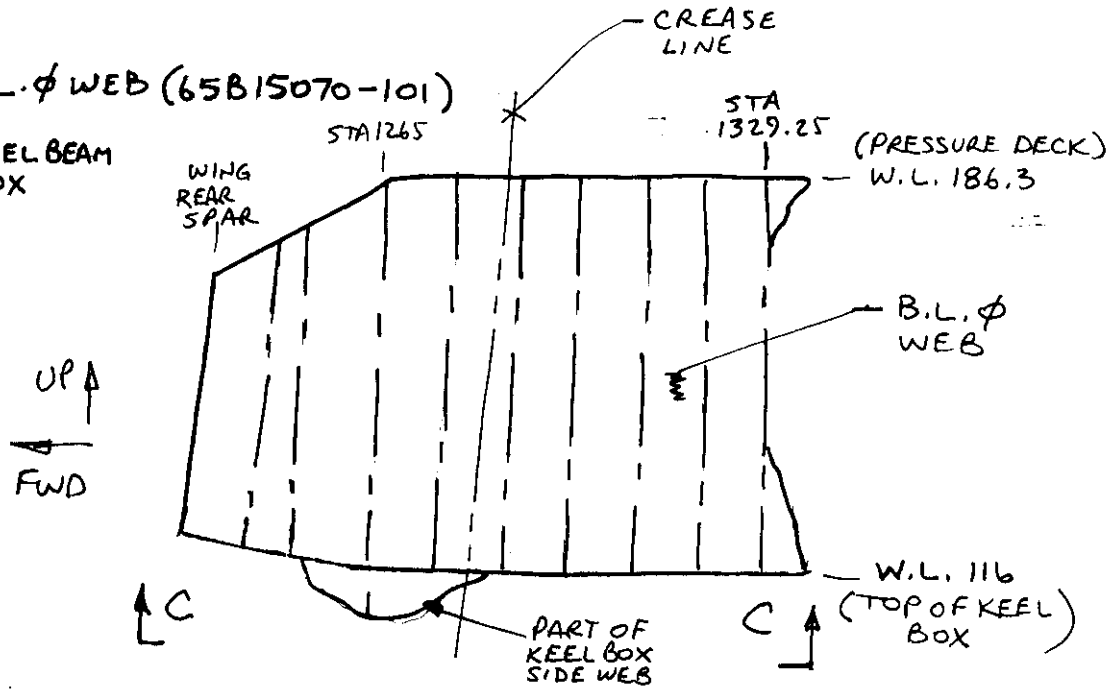
LONG

B. HOCKING
BOEING
10/23/96

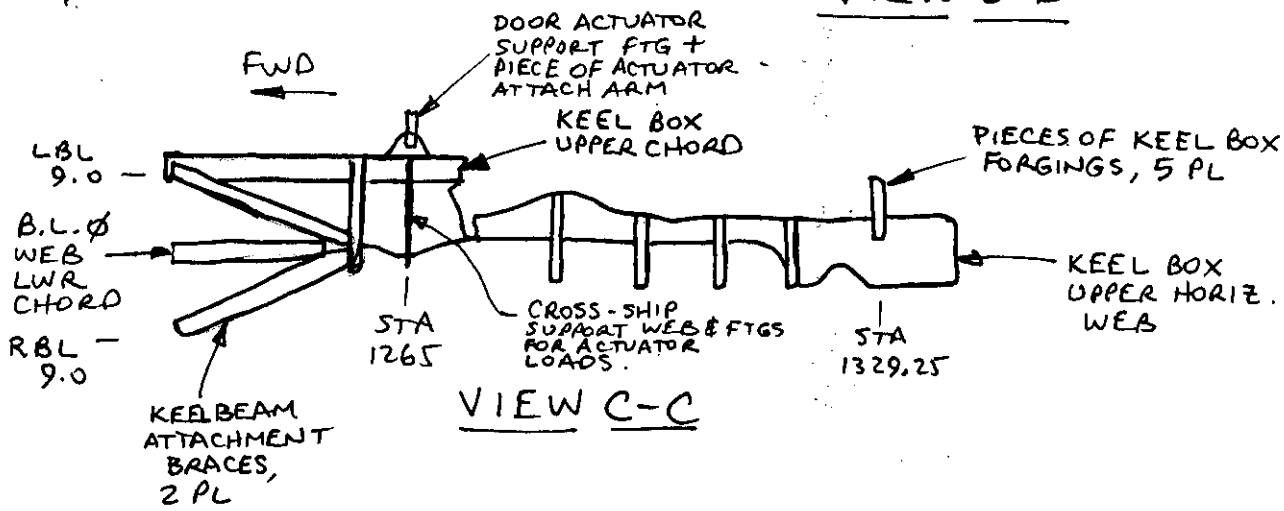
DEBRIS FIELD GREEN



VIEW A-A



VIEW B-B



VIEW C-C

DESCRIPTION FOLLOWING

R S Hagan 11/23/96

C J Hale - JAM 10-25-96.

B. HOCKING
BOEING
10/22/96

LOG # LF-17

TAG: C-109 (GREEN)

STRUCTURE IS PART OF THE B.L. Ø KEEL BEAM CENTER WEB EXTENDING FROM STA 1241 (REAR SPAR OF WING BOX) AFT TO STA ~1330, AND FROM THE PRESSURE DECK AT W.L. 186.3 DOWN TO W.L. 116 (TOP OF KEEL BEAM BOX). PARTS OF THE KEEL BOX UPPER SURFACE REMAIN ATTACHED, AS WELL, INCLUDING A PORTION OF THE BOX UPPER WEB, BOX VERTICAL WEB (LEFT SIDE, FROM STA ~1255 TO STA ~1277) WITH THE MAIN LANDING GEAR DOOR ACTUATOR SUPPORT FTG (LHS) AT STA 1265, WITH A PORTION OF ITS BACK-UP INTERCOSTAL AND FITTINGS. A PIECE OF ACTUATOR SUPPORT ARM REMAINS ATTACHED TO THE SUPPORT FITTING. REMNANTS OF KEEL BOX UPPER FORGINGS REMAIN ATTACHED IMMEDIATELY BELOW THE BOX UPPER WEB AT STATIONS ~1287, ~1301, ~1307, ~1319 AND ~1329. A PORTION OF THE KEEL BOX UPPER CHORD, LBL 9.0, REMAINS FROM ~STA 1235 TO ~1277. FROM STA ~1235 TO STA ~1255, ON THE KEEL BOX SLOPING UPPER SURFACE, REMAIN THE TWO KEEL BEAM ATTACHMENT BRACES (SEE SKETCH) AND THE B.L. Ø LWR CHORD.

THE B.L. Ø WEB ASSEMBLY IS BENT AS SHOWN IN THE SKETCH ALONG A LINE RUNNING FROM STA ~1283 AT THE TOP (W.L. 186.3) TO STA ~1281 AT THE BOTTOM (W.L. 116). THE THE BEND IS APPROXIMATELY 110°, WITH THE AFT PART OF THE WEB ASSY BENT OUTBOARD TO THE LEFT.

A PIECE OF TOILET DRAIN TUBE REMAINS ATTACHED TO THE WEB ASSY AT STA 1265, W.L. ~174, BY A DUCT CLAMP. THE DUCT REMNANT IS ABOUT EIGHT FEET LONG AND IS ATTACHED TO THE RIGHT HAND SIDE.

A LENGTH OF APU PNEUMATIC DUCT REMAINS ATTACHED TO THE WEB ASS'Y ON THE LEFT HAND SIDE AT STA 1265, W.L. ~146. ITS LENGTH IS ABOUT EIGHT FEET AND THE DUCT IS CRUSHED AND ALMOST BROKEN IN TWO AT ABOUT THREE FEET FROM ONE END.

A CONSIDERABLE AMOUNT OF HYDRAULIC TUBING REMAINS ATTACHED TO THE WEB ASS'Y, THE MAJORITY OF IT BEING LOCATED ON THE RIGHT HAND SIDE OF THE WEB. IN ADDITION, THE AIRPLANE'S LATERAL CONTROL MECHANISMS REMAIN ENTANGLED WITH THE B.L. Ø WEB ASS'Y, HELD BY CONTROL CABLES, LINKAGE AND HYDRAULIC TUBING WHICHS PASSES THROUGH THE WEB AT VARIOUS ~~PENETRATION~~ MFG. THRU HOLE PROVISIONS LOCATIONS.

— CONTINUED —

CJH/IAM
10-25-96
Stephen F. [illegible]
02-12-97

B. HOCKING, BOEING
10/23/96

LOG # LF-17
TAG # C-109 (GREEN)

THE WEB ASS'Y IS SOOTED AT THE FOLLOWING LOCATIONS:

1) THE LOWER SURFACE OF THE KEEL BEAM BOX FORWARD OF THE STA 1265 CROSS-SHIP INTERCOSTAL AND FITTING. SOOTING IS ALSO ON THE FORWARD SURFACE OF THE CROSS-SHIP INTERCOSTAL AND ON THE PORTION OF VERTICAL L.BL. 9.0 WEB FORWARD OF THE INTERCOSTAL (INBOARD SURFACE). THE SOOTING IS MODERATE.
2) THE B.L.Ø WEB IS SOOTED ON ITS RIGHT HAND SURFACE FROM THE REAR SPAR OF THE WING BOX AFT TO THE STA~ 1255 VERTICAL STIFFENER, FROM THE TOP OF THE KEEL BOX UPPER SURFACE UP TO APPROXIMATELY W.L. 143 (THIS APPEARS TO BE WHERE SOME SUPPORT STRUCTURE FOR THE LATERAL CONTROL SYSTEM WAS ATTACHED. THE SOOTING IS MODERATE.
3) THE LOWER PORTION AND FORWARD FACE OF THE LOWER PARTS OF THE LATERAL CONTROL SYSTEM ON THE RIGHT HAND SIDE OF THE B.L.Ø WEB ASS'Y IS SOOTED MODERATELY. THE LATERAL CONTROL SYSTEM COMPONENTS ON THE LEFT HAND SIDE DO NOT APPEAR TO BE SOOTED. (EXAMINATION OF THE WING BOX REAR SPAR AFT SURFACE REVEALS SOOTING ON BOTH SIDES OF B.L.Ø).
4) [1]

EXAMINATION OF ACCESSIBLE FRACTURE SURFACES APPEAR TO INDICATE DUCTILE FAILURE MODE.

[1] A LENGTH OF THE TOILET DRAIN TUBE IS MODERATELY SOOTED. THE PORTION SOOTED IS THAT WHICH NORMALLY EXTENDS DOWN THE WING BOX REAR SPAR TO THE LOWER DRAINAGE VALVE. APPROXIMATELY FOUR FEET OF THE TUBE IS SOOTED