LOWER SKIN PANEL - WING CENTER TANK

CW-202
C-186
GREEN

This section extends from RBL 98 to LBL ~~60~~ 69 and goes from approx S-1 to S-5.

There is only a 15" long section of the S-5 skin flange remaining on the panel. No other stringer remained attached to this panel. The panel is bent inboard/outboard with the RHS and LHS both bent downward from BL0. The right side is bent down approx 10 degrees and the left side is bent starting at 10 degrees and gradually increasing to about 45 degrees. A portion of the BL0 rib shear tie remains attached. The few rivets remaining in the skin panel exhibit shear in the inboard and outboard direction, but the fasteners at RBL 57.5 at S-2,3 and 4 are bent aft ranging from 45 to 60 degrees.

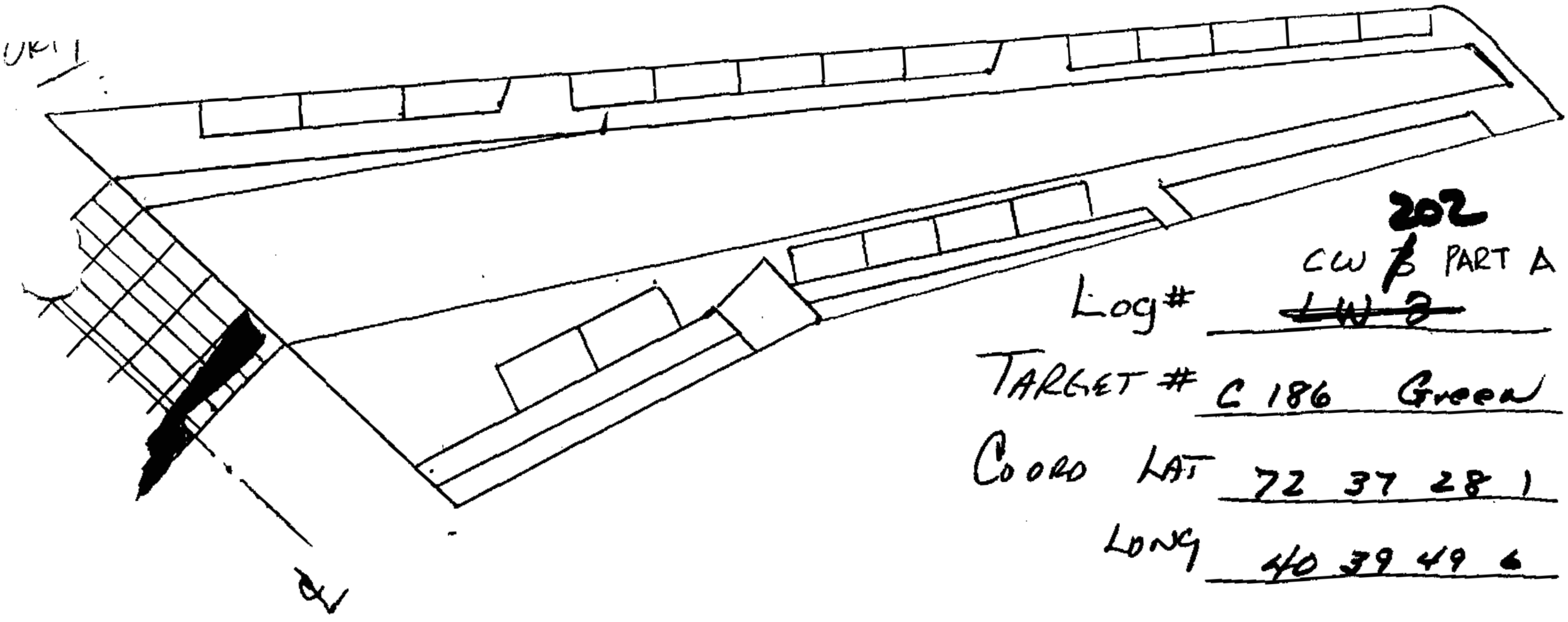
There is generally no soot in the interface between the stringer and the skin. On the right outboard side of this section (30"), there is evidence of pillowing of the skin between the stringers in upwards direction. There is no evidence of pillowing to the remainder of the skin panel.

The keel beam attachment stiffener at right and left BL 9.0 have pulled away from the lower skin and the fasteners exhibit evidence of tensile failures. There is evidence of sooting on the lower surface of the skin and is heavier on the right side than on the left. There is evidence of some impact and rub marks on the lower surface of the skin panel.

At approximately RBL 77 there is a segment of chord attached to the lower skin from the aft edge of the panel to the forward edge of the panel.

See Fire and Explosion Group notes for further documentation.

Stephen F Klapach Jr
FAA · 12-06-96
TWA 12-6-96
IAM 12-6-96
SD GREEN ALPA 12-6-96
BOEING 12/7/96



Log# CW ~~2~~ 202 PART A ~~LW 2~~

TARGET # C 186 Green

COORD LAT 72 37 28 1

LONG 40 39 49 6

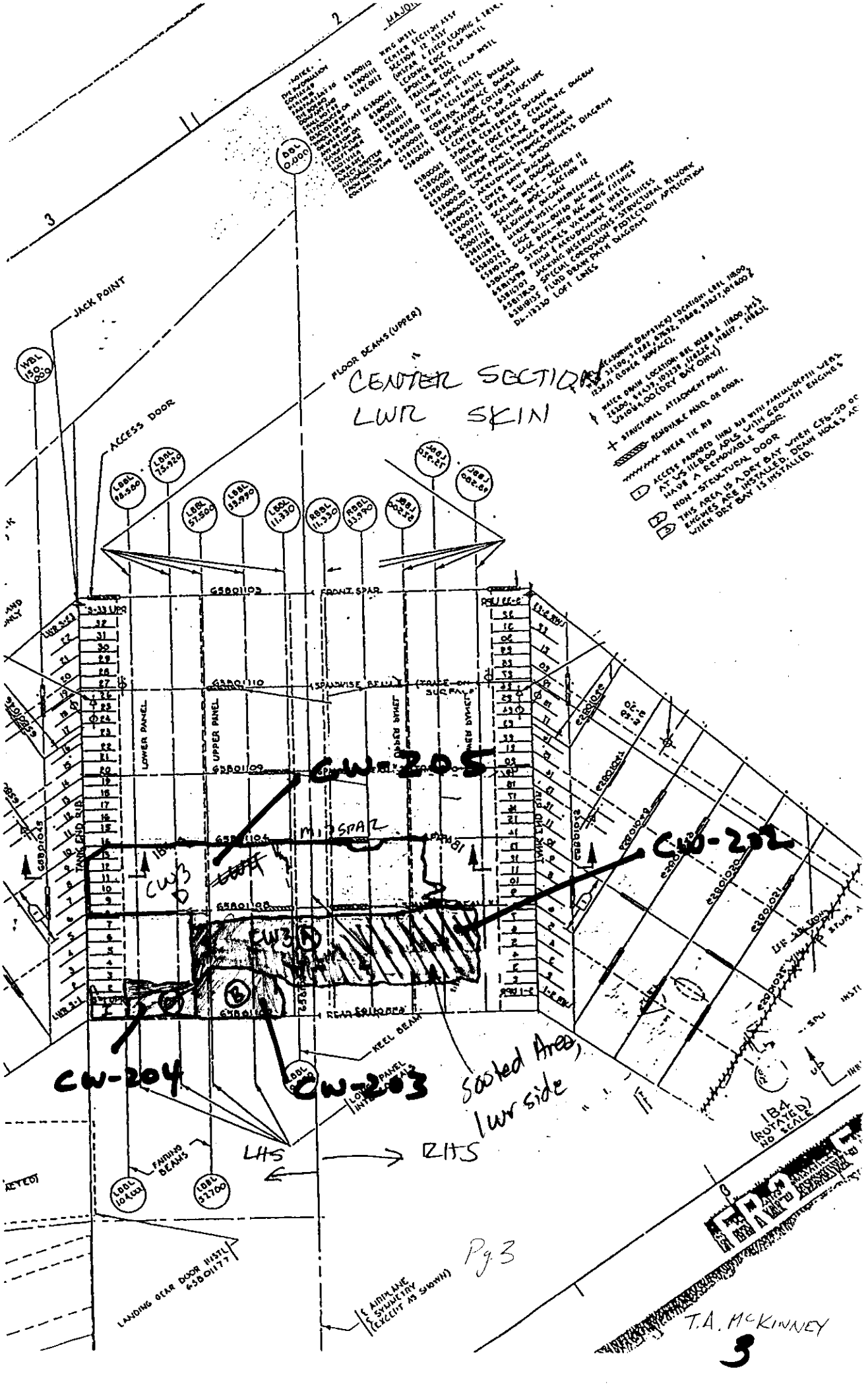
DEBRIS FIELD __________

① SKIN is severed Aft of ~~#8~~ 5 RH STR Left of BBL0 and at STR ~~8~~ 5 RH OB of RBL 75.

② Keel beam at R&LBL 11 seperated from skin.

③ Lower R/H side OB of the Keel beam shows indication of soot on the external skin. Interior skin has indication of light soot residue.

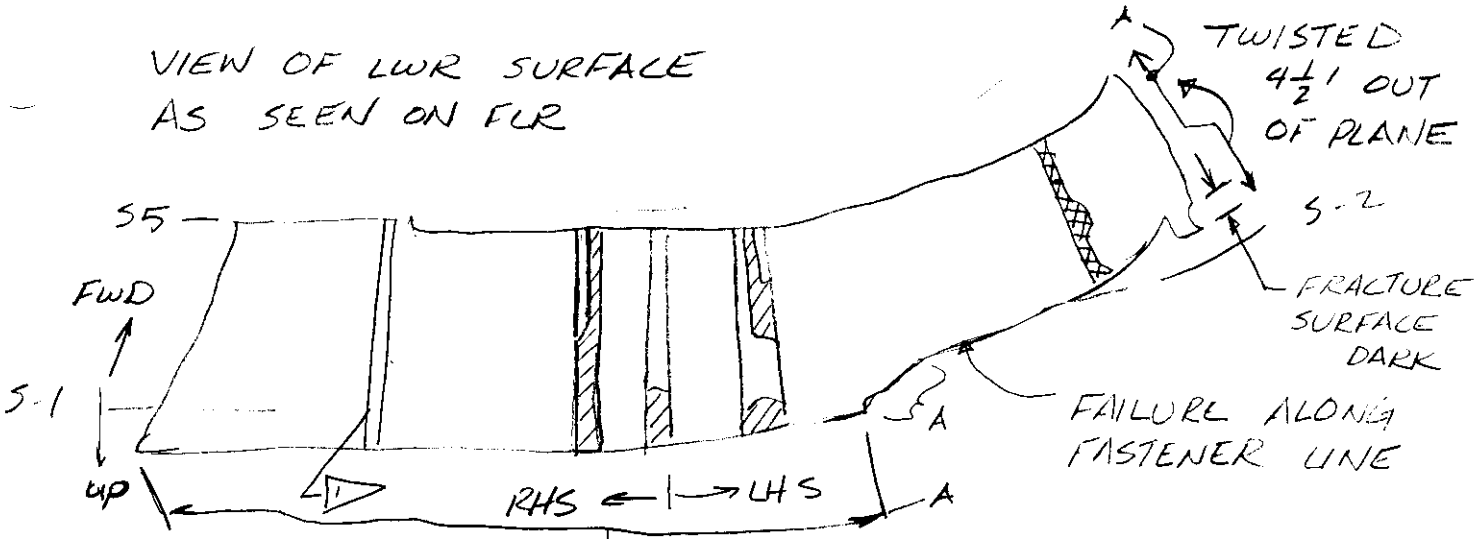
 T.A. McKINNEY


CENTER SECTION
LWR SKIN
JACK POINT
ACCESS DOOR
FLOOR BEAMS (UPPER)
FRONT SPAR
REAR SPAR
KEEL BEAM
LOWER PANEL
UPPER PANEL
CW-205
CW-202
CW-204
CW-203
CW3
MID SPAR
Soaked Area
lwr side
LHS
RHS
FAIRING BEAMS
LANDING GEAR DOOR INSTL 65B01177
(AIRPLANE SYMMETRY (EXCEPT AS SHOWN)
Pg 3
T.A. McKINNEY
3

CW-202 GREEN TAG C-186

PART A BOTTOM SURFACE OF LWR SKIN S-5

VIEW OF LWR SURFACE AS SEEN ON FLR



WHITE ENAMEL NOT VISIBLE THRU HEAVY LAYER OF OILY/SOOT. WITH HARD RUBBING WITH PAPER TOWEL & MOISTURE, WHITE ENAMEL CAN BE FOUND ENAMEL MORE 'EGG SHELL' IN COLOR THAN PURE WHITE IN 5% OF AREA DOWN TO PRIMER W/O OILY SOOT.

WHITE ENAMEL VISIBLE WITH LIGHT BLACKENING WITH LIGHT PRESSURE & PAPER TOWEL BLACKENING IS REMOVED

A = ANGLED FRACTURE FACE SEE PART G

LAT = 40° 39' 49.6"

LONG = 72° 37' 28"

UPPER SURFACE OF LOWER SKIN

NO STRINGERS THRU-OUT PART, PRIMER FROM UNDER STRINGERS HAS VERY LITTLE BLACKENING, EXCEPT AT LHS END OF PART (LAST 3') SHOWS SOME BLACKEING

▨ GREEN PRIMER WHERE UNDER WING BEAM TORE AWAY

▨ GREEN PRIMER WHERE KEEL BEAM BOX TORE AWAY FROM WING LOWER SURFACE — SEE LF-14 PART B

4 Pg 6 RH

PART A {CONT'D}

BETWEEN STR'S, FROM RBL 9 ⇒ RBL 101 AND THE MOST OUTB'D 3' ON LHS, HAVE OILY BLACKENING

ALL FRACTURE SURFACES ARE FREE OF BLACKENING

1 CHORD FROM UNDER WING BEAM w/ 2 STIFF'S ATTACHED SIGNS OF HEAT DAMAGE ON STIFF'S, PAINT ON CHORD DOWN TO PRIMER

CW-203

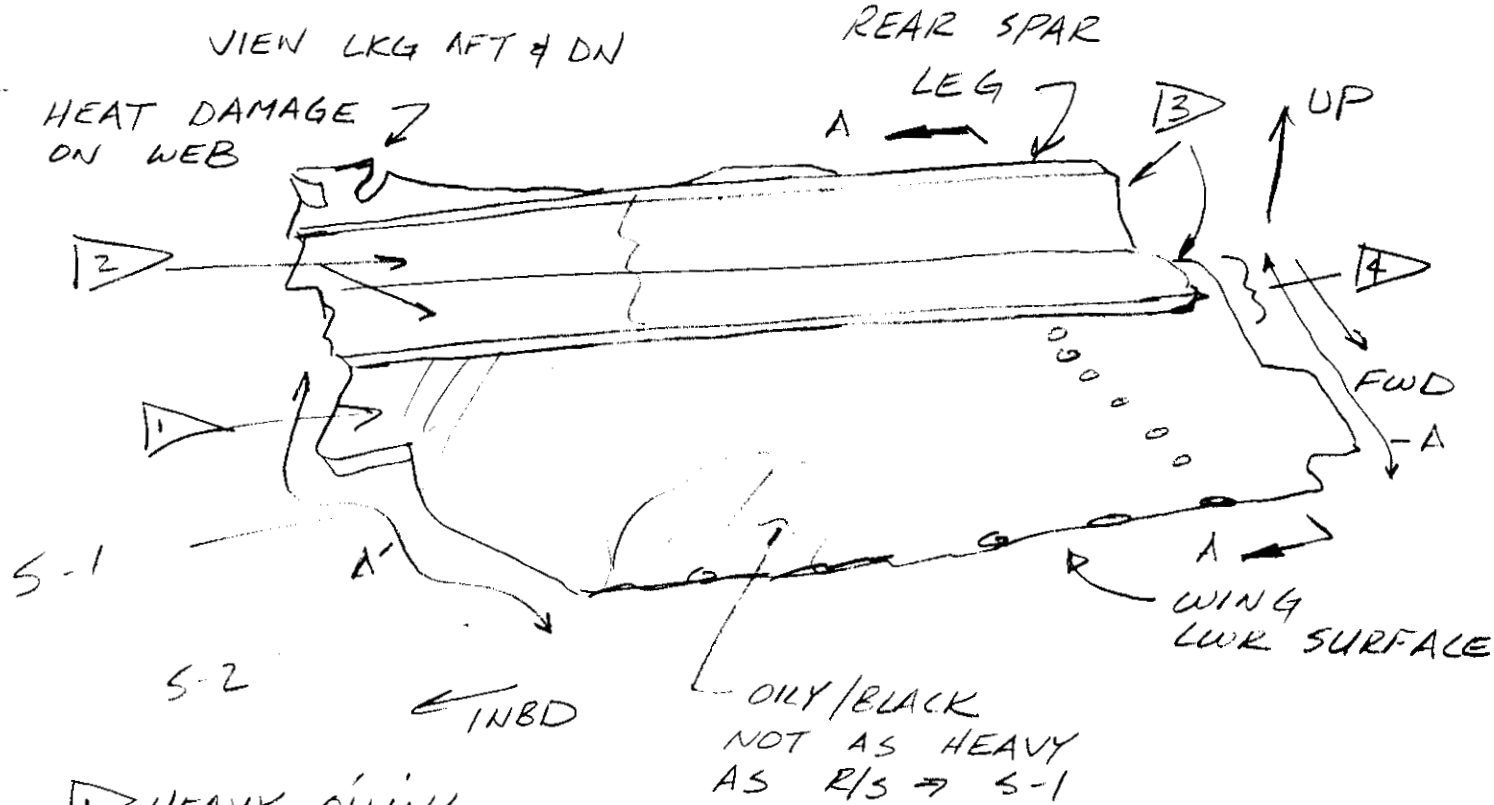
PART B – SEE NEXT PAGE FOR SKETCH

- BOTTOM SURFACE IS IDENTICAL TO PART A LHS
- THERE IS A DISTINCT DIFFERENCE BTWN AFT FACE OF VERTICAL LEG OF LWR R/S CHD & WING LWR SURFACE. R/S CHORD AFT VERT. FACE IS DARK WITH DRYISH SOOT. NOTE THE TWO SURFACES ARE SEPARATED BY VAPOR BARRIER PANEL IN DESIGNED CONDITION

5 R Hannan 2/12/96

PART B {CONT'D}

GREEN TAG # C-193



1 HEAVY OILING LIKE OIL PAN ON CAR

2 DRY BLACKENING, ALSO SAND MORE PREDOMINATE

3 DARK BLACKENING ON CHORD

4 MEDIUM AMOUNT OF BLACKENING ON WEB

GENERAL COMMENTS

- ALL OTHER SURFACES FREE OF BLACKENING

FRACTURE

A-A — 3" OUT OF PLANE

NOTE INBD END IS STRAIGHT

A = ANGLED FRACTURE FACE - SEE PART G