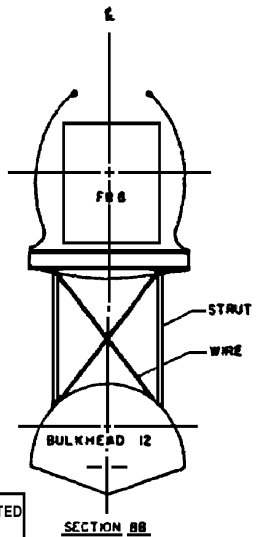
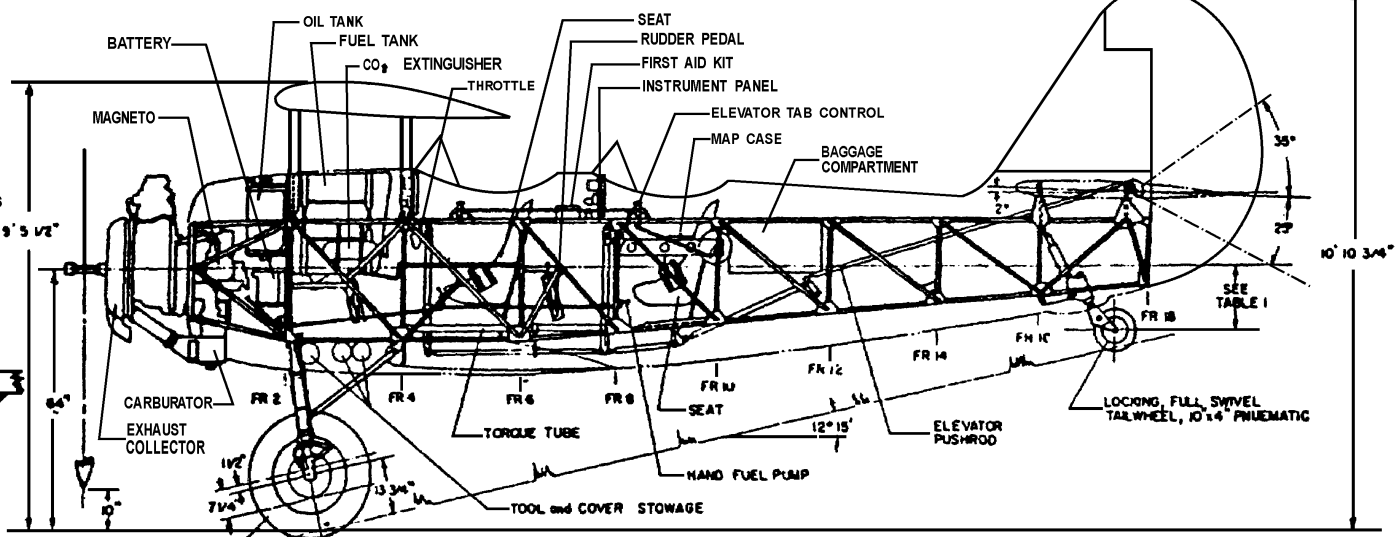
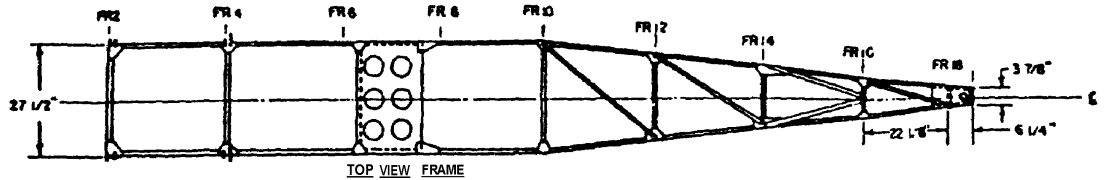
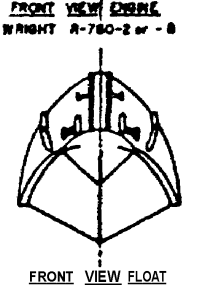
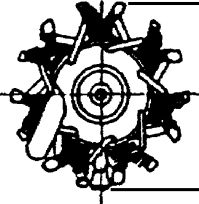
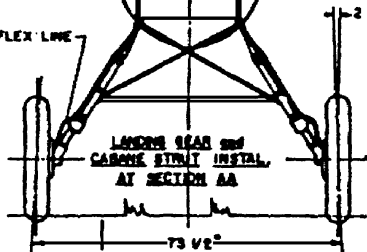
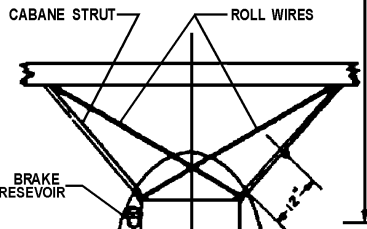
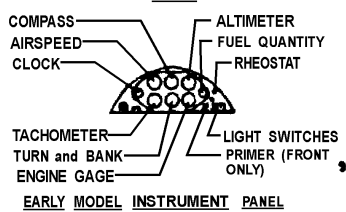
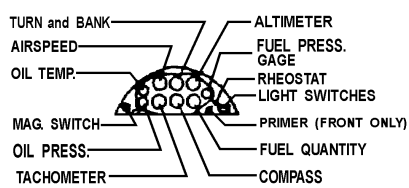


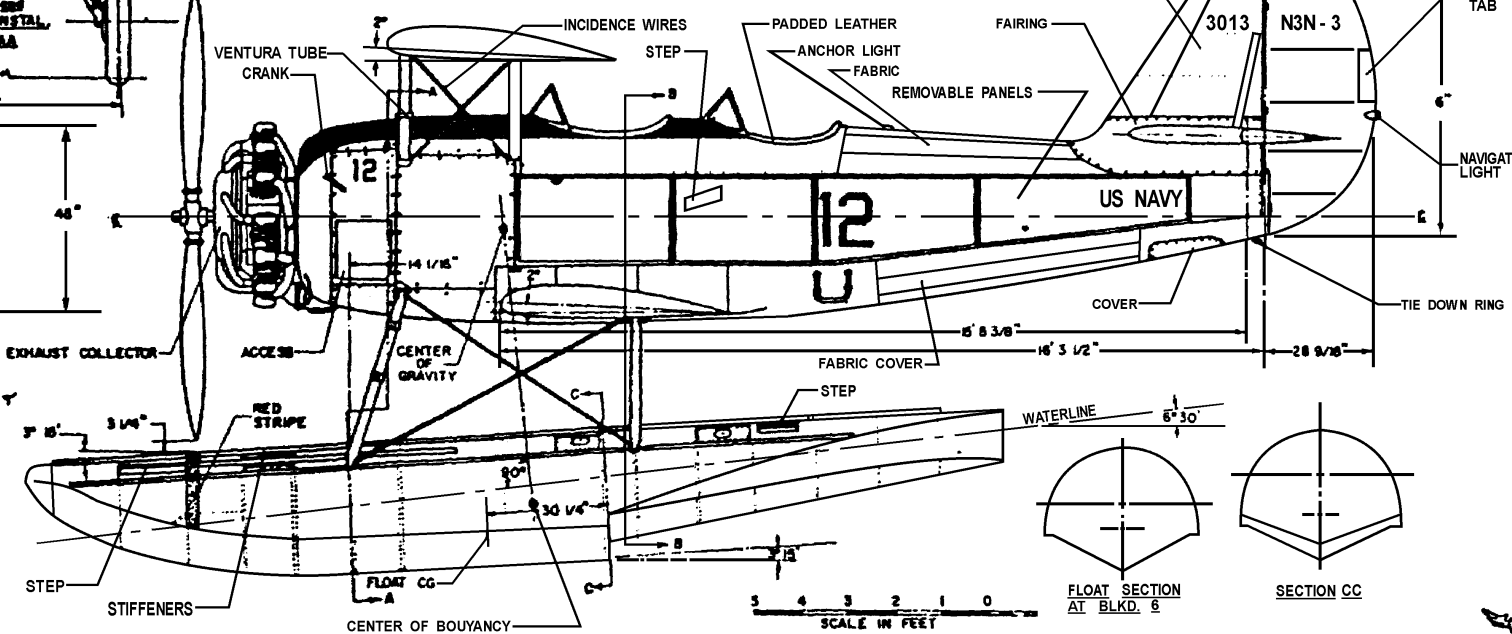
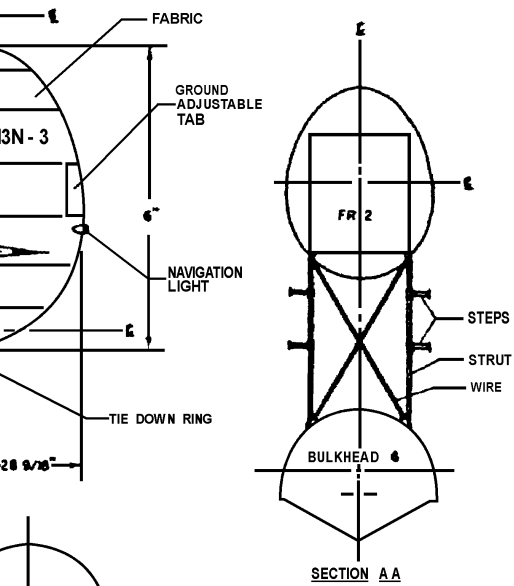
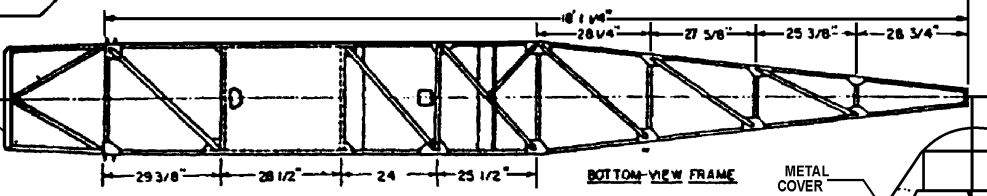
ACKNOWLEDGEMENTS: THANKS FOR YOUR HELP:  
FRAN and ART CARMANAH, PARNELL SCHOENKY,  
JAMES J. SLOAN, WARREN D. SHIPP.

TABLE 1

STATIC	15 3/16"
COMPRESSED	13 3/4"
EXTENDED	20 15/16"



NOTE: INTERPLANE STRUTS OMITTED FROM SIDE VIEW. SEE PLATE 2.



5 4 3 2 1 0  
SCALE IN FEET

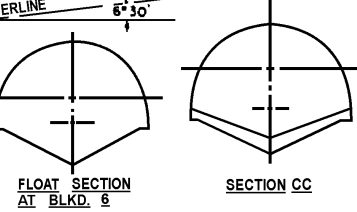
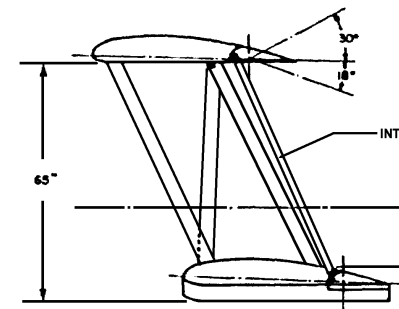
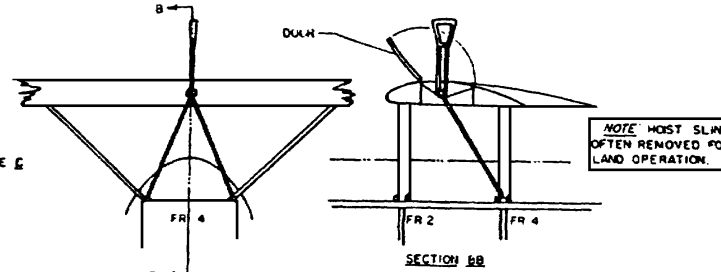
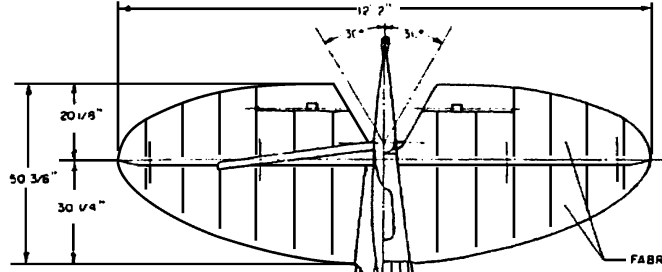
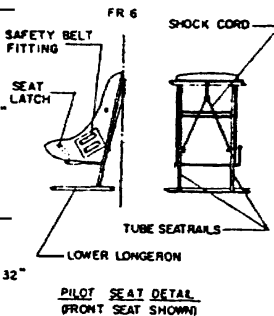
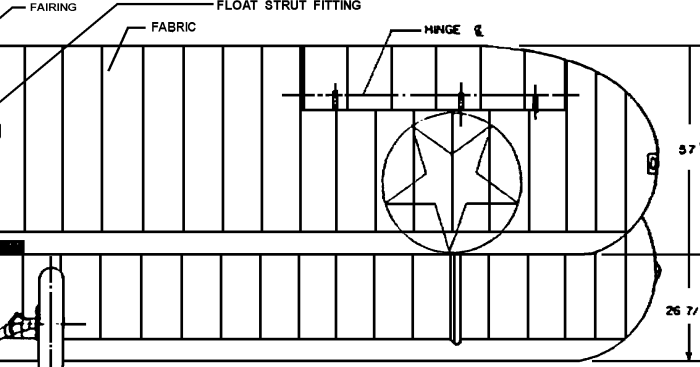
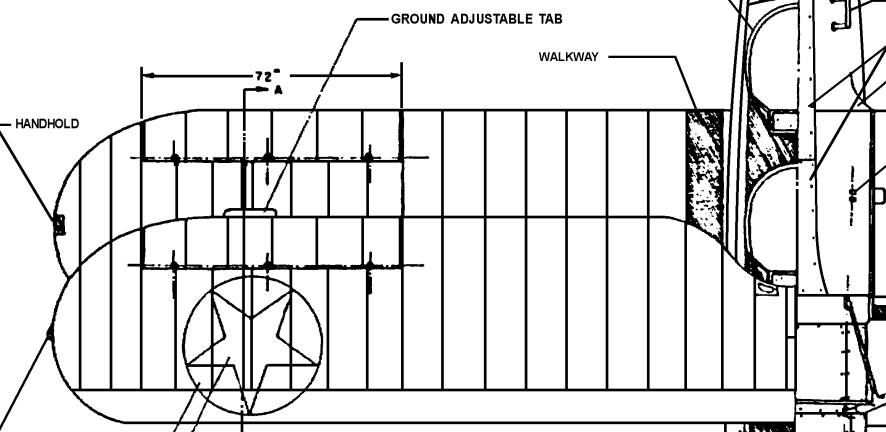
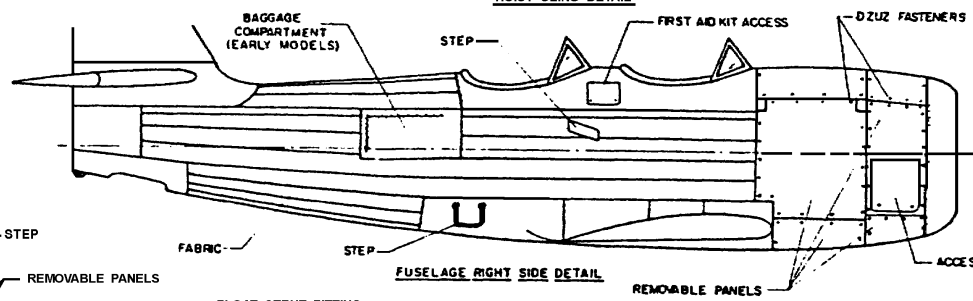


PLATE 1  
NAVAL AIRCRAFT FACTORY  
**N3N-3**  
DRAWN FOR THE AAHS JOURNAL BY  
DAVID H. BRAZELTON  
PEORIA, ILLINOIS | DEC 1961

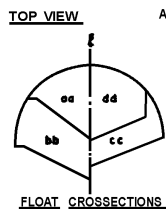
NOTE: BOTH CABANE AND INTERPLANE STRUTS ARE OF FIXED LENGTH SIMPLIFYING ASSEMBLY. WING ALIGNMENT ACCOMPLISHED BY ADJUSTING WIRES.



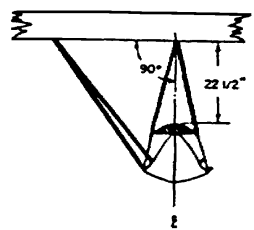
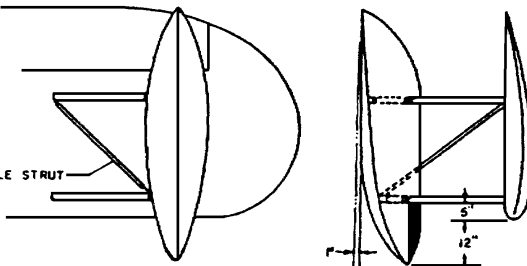
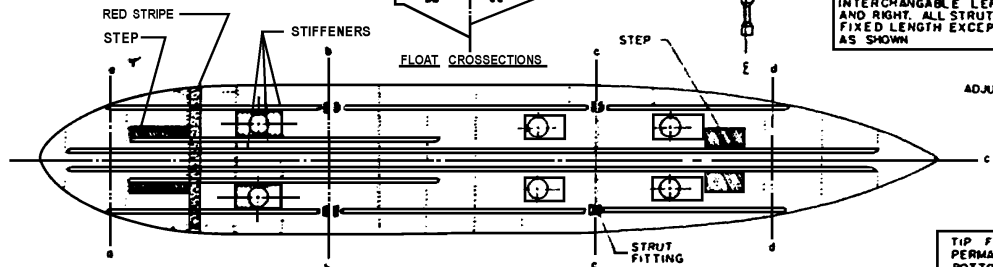
NOTE: LEFT HAND ELEVATOR TAB ADJUSTABLE FROM EITHER COCKPIT. RIGHT HAND ELEVATOR ADJUSTABLE ON GROUND ONLY, NORMALLY SET 3° UP.



NOTE: MARKINGS SHOWN ARE THOSE OF THE 1942 PERIOD.



NOTE: TIP FLOATS ARE INTERCHANGABLE LEFT AND RIGHT. ALL STRUTS OF FIXED LENGTH EXCEPT AS SHOWN



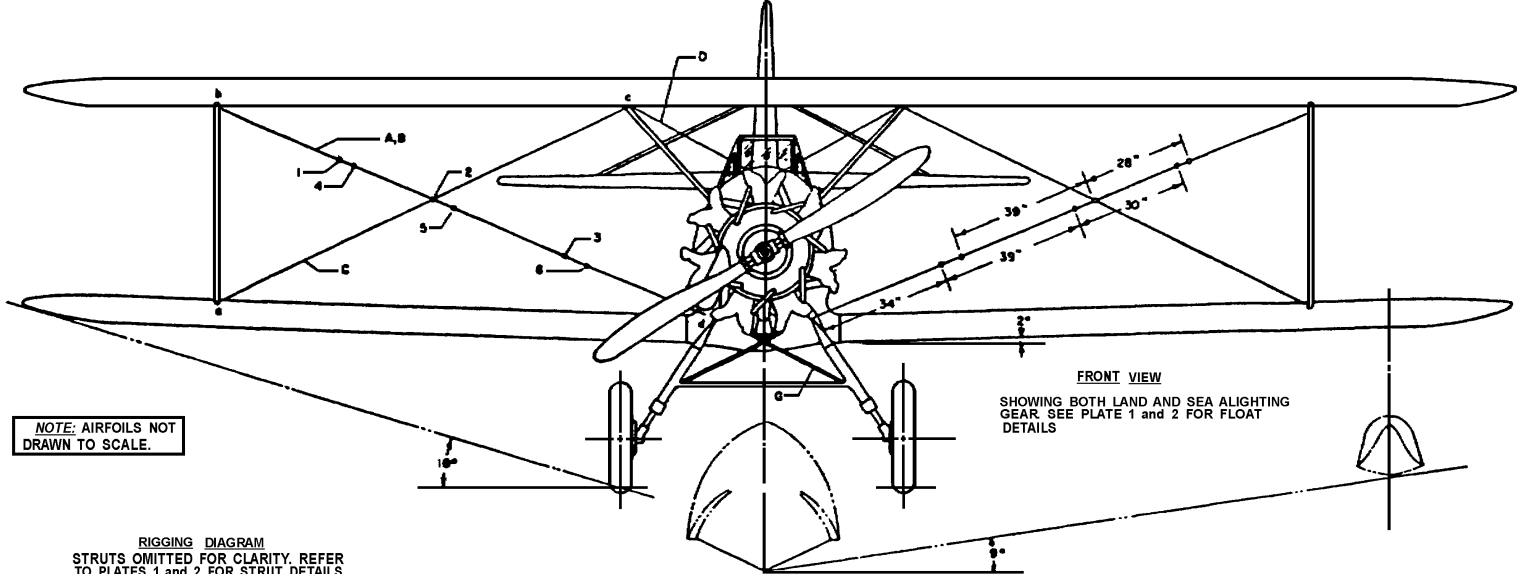


TABLE OF STREAMLINED TIE-RODS			
REF.	SPEC. NO	QUANT.	LENGTH
A	AN 674 AC - 13925	4	141 3/8"
B	AN 676 AC - 13950	4	141 7/16"
C	AN 675 AC - 11400	4	116 7/8"
D	AN 667 AC - 3950	2	
E	AN 678 AC - 4190	2	44 3/16"
F	AN 673 AC - 4500	2	45 15/16"
G	214282	2	35 3/4"

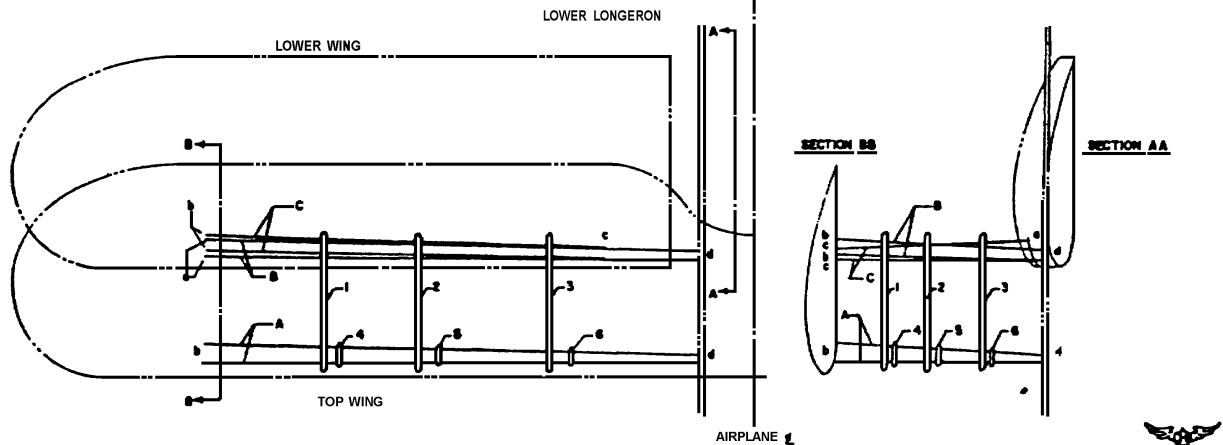
**NOTE:** REF E IS THE INCIDENCE WIRE FROM FUSELAGE TO TOP OF THE FRONT CABANE STRUT. REF F IS THE INCIDENCE WIRE FROM FUSELAGE TO THE TOP OF THE REAR CABANE STRUT. SEE PLATE I FOR ILLUSTRATION.

THE N3N-1 WAS THE FIRST AIRPLANE TO BE BUILT BY THE NAVAL AIRCRAFT FACTORY UNDER THE VINCEN-TRAMMEL NAVAL TREATY BILL OF 1935. 185 WERE BUILT BETWEEN JUNE 1936 AND 1938. A TOTAL OF 650 N3N-3 AIRCRAFT WERE BUILT FROM 1938 ON. A FEW N3N-3'S STILL FLY AT THE US NAVAL ACADEMY AT ANNAPOLIS, MARYLAND. OVER 200 WERE SOLD SURPLUS AFTER WORLD WAR 2. MANY OF THESE WERE MODIFIED FOR DUSTING OR SPRAYING. THE ENGINE WAS ALSO BUILT BY THE NAVAL AIRCRAFT FACTORY UNDER THE CONDITIONS OF THE SAME BILL.

NOTE: AIRFOILS NOT DRAWN TO SCALE.

FRONT VIEW  
SHOWING BOTH LAND AND SEA ALIGHTING GEAR. SEE PLATE 1 AND 2 FOR FLOAT DETAILS

RIGGING DIAGRAM  
STRUTS OMITTED FOR CLARITY. REFER TO PLATES 1 AND 2 FOR STRUT DETAILS.



NAVAL AIRCRAFT FACTORY **N3N-3** CONVERTABLE SEAPLANE

DRAWN FOR THE AMERICAN AVIATION HISTORICAL SOCIETY JOURNAL

DAVID H. BRAZELTON, Major, USAF PEORIA, ILLINOIS DECEMBER 1961

PLATE 3 TECHNICAL NOTES SCALE: 1/4" = 1'

WING	
SPAN, UPPER	34' 0"
LENGTH, EA. LOWER PANEL	15' 7 3/32"
CHORD, BOTH	57"
GAP, AT ROOT LOW WING	63"
DIHEDRAL, UPPER	0°
INCIDENCE, UPPER	-2°
INCIDENCE, LOWER	+2°
AREAS, INCL. AILERONS	
UPPER	150 SQ FT
LOWER	156 SQ FT
TOTAL	306 SQ FT
AILERON	
LENGTH	6' 0"
EFFECTIVE CHORD	14 1/4"
AREA	132.6 SQ FT
MOVEMENT	UP 30°
DOWN	18°
MEAN AERODYNAMIC CHORD	18"
LENGTH	54.0"
DIST. FROM L.E.L.W.	13.9"
DIST. ABOVE T.L.	15.33"
STAGGER	26 7/32"
AIRFOIL	CYH

EMPPANNAGE	
HORIZONTAL	
SPAN	12' 2"
MAX. CHORD, STAB.	30 1/4"
AREA, STAB.	23.5 SQ FT
INCIDENCE, STAB.	-2°
MAX. CHORD, ELEV.	20 1/8"
AREA, ELEV.	18.0 SQ FT
TOTAL AREA	38.5 SQ FT
ELEV. MOVEMENT	UP 38°
DOWN	25°
TAB MOVEMENT	UP 15°
DOWN	15°
AIRFOIL	NACA 0008
VERTICAL	
HEIGHT	6' 0"
MAX. CHORD, RUDDER	
AFT OF HINGE	28 9/16"
AREA, RUDDER	11.35 SQ FT
AREA, FIN	1.9 SQ FT
TOTAL AREA	20.25 SQ FT
RUDDER MOVEMENT	LEFT 30°
RIGHT	30°
AIRFOIL	NACA 0008
CROSS WEIGHT	

FINISH IN A/W REPORT M4098, SPEC SR-8E

LANDING GEAR, FLOATS, FUSELAGE STRUCTURE, INTERIOR OF COWLING, FIREWALL FLOORS, AND ENGINE MOUNT.

1 COAT ZINC CHROMATE  
2 COATS ALUMINUM LACQUER

EXTERIOR METAL SURFACES

1 COAT ZINC CHROMATE  
2 COATS ORANGE-YELLOW LACQUER

INTERIOR OF FLOATS, TAIL SURFACES, WINGS, AND AILERONS

1 COAT ZINC CHROMATE  
2 COATS ALUMINUM PIGMENTED ZINC CHROMATE PRIMER

SEATS, RUDDER PEDALS, CONTROLS, THROTTLE QUADRANT, BRAKE PEDALS

1 COAT ZINC CHROMATE  
2 COATS GLOSS BLACK LACQUER

FABRIC SURFACES

4 COATS CLEAR NITRATE DOPE  
2 COATS ORANGE-YELLOW NITRATE DOPE

GENERAL DIMENSIONS	PROPELLER
OA LENGTH 25' 10 5/8"	HUB BU AERO NO 8408 R
OA HEIGHT, LEVEL 10' 10 3/4"	BLADES BU AERO NO 4380 F
OA HEIGHT, 3 POINT 9' 4 1/2"	DIAMETER 9' 0"
HINGE DISTANCE FROM LELW 16' 3 1/2"	BLADE ANGLE AT 42° STA 14.5°
ELEVATOR 15' 8 3/8"	ATTACHING PARTS
DISTANCE CENTER OF MLG WHEEL TO LELW 18 1/2"	FRONT CONE AM 8007-30
DISTANCE CENTER OF MLG WHEEL TO FUSE 15 1/2"	REAR CONE AM 8008-30
HEIGHT, TOP WING FROM GND 9' 8 1/2"	SNAP RING AM 8009-30
MEAN GAP OF WINGS TO GROUND 62.3"	SPACER AM 8010-30
TO FLOAT 10"	HUB NUT AM 8011-30
HYDROSTATIC TYPE FUEL GAGE WAS ACCURATE AT 70 KTS. CONVERSION WAS NEEDED FOR MEASUREMENT IN THREE POINT OR STATIC WATERBORNE POSITION USING CONVERSION CARD ON PANEL.	INERTIA STARTER
	SERIES VI HAND OPERATED INERTIA STARTER WITH INTEGRAL BOOSTER MAG, ENGINE PRIMER, AND CRANK EXTENSION. STARTER WAS MOUNTED ON THE RH SIDE OF THE FIRST 50 PRODUCTION PLANES, LATER RETROFIT TO LH SIDE. CRANK STOWED ON ENGINE MOUNT ON LANDPLANE, BOLTED TO CRANK EXTENSION ON SEAPLANE.

USEFUL LOAD	ENGINE SPECIFICATIONS
CREW 400 LB.	DIAMETER 45"
GASOLINE 45 GAL.	OA LENGTH W/ACCESSORIES 46 23/64"
OIL 3.5 GAL.	DIAM. MOUNT BOLT CIRCLE 19 1/4"
EQUIPMENT	CENTER OF GRAVITY
MAPS 1 LB.	DIST. ABOVE L 0.3"
FIRST AID KIT 3 LB.	DIST. FWD OF MOUNT 7.0"
TOTAL 702 LB.	BORE 5.0"
AIR PRESSURES	STROKE 5.5"
NO. CYLINDERS 7	758 CU IN
MAIN TIRES 50 PSI	DISPLACEMENT 81:1
TAIL WHEEL TIRE 55 PSI	HP AT 2000 RPM, SEA LEVEL 235 HP.
OLEO STRUTS 10 PSI	445 LB.
MISCELLANEOUS NOTES	WEIGHT
1. CARBURETOR HEAT WAS CONTROLLED FROM THE FRONT SEAT ONLY.	MAGNETOS SCINTILLA MN7-D-F
2. REAR COCKPIT OF EARLY MODELS HAD MANUAL LOCK ON MIXTURE CONTROL WHICH HAD TO BE TAPED OPEN FOR SOLO.	CARBURETOR STROMBERG NA-F7
3. NO GENERATOR OR OIL COOLER WAS INSTALLED.	FUEL CONSUMPT. .55 LB/HP/HR
	OIL CONSUMPT. .025 LB/HP/HR
	ENGINE ROTATION CLOCKWISE
	PROP HUB SPLINE SAE NO 30
	PROP DRIVE DIRECT