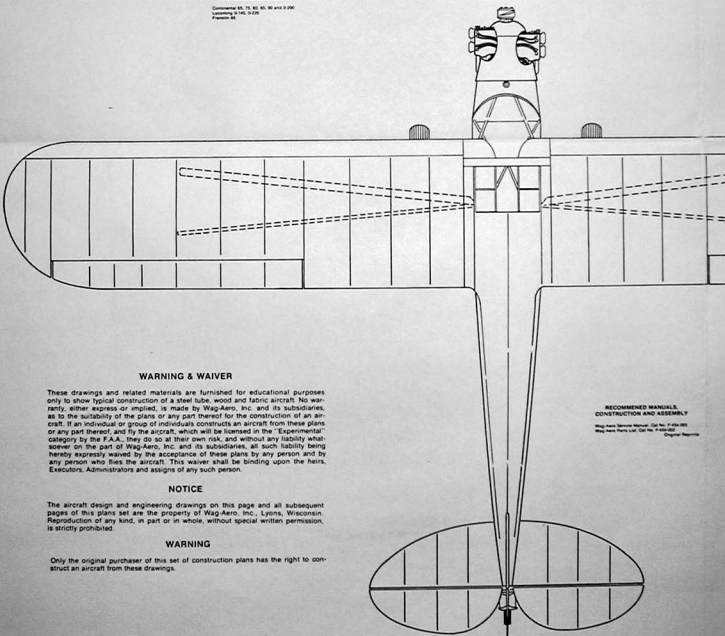


WING RIBS, SHEETS 014, 015

RECOMMENDED ENGINES

Continental 85, 75, 65, 40, 30 and 0-200
Lycoming 0-240, 0-290
Pittman 85



WARNING & WAIVER

These drawings and related materials are furnished for educational purposes only to show typical construction of a steel tube, wood and fabric aircraft. No warranty, either express or implied, is made by Wag-Aero, Inc. and its subsidiaries, as to the suitability of the plans or any part thereof for the construction of an aircraft. If an individual or group of individuals constructs an aircraft from these plans or any part thereof, and fly the aircraft, which will be licensed in the "Experimental" category by the F.A.A., they do so at their own risk, and without any liability whatsoever on the part of Wag-Aero, Inc. and its subsidiaries, all such liability being hereby expressly waived by the acceptance of these plans by any person and by any person who flies the aircraft. This waiver shall be binding upon the heirs, Executors, Administrators and assigns of any such person.

NOTICE

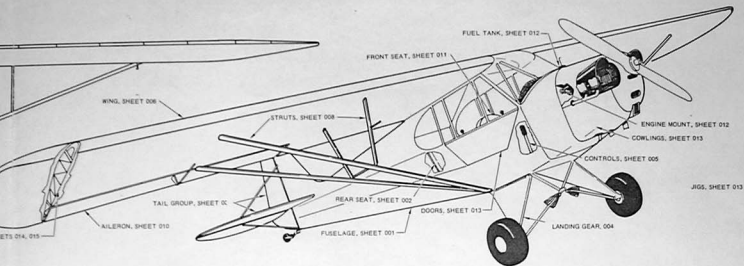
The aircraft design and engineering drawings on this page and all subsequent pages of this plan set are the property of Wag-Aero, Inc., Lyons, Wisconsin. Reproduction of any kind, in part or in whole, without special written permission, is strictly prohibited.

WARNING

Only the original purchaser of this set of construction plans has the right to construct an aircraft from these drawings.

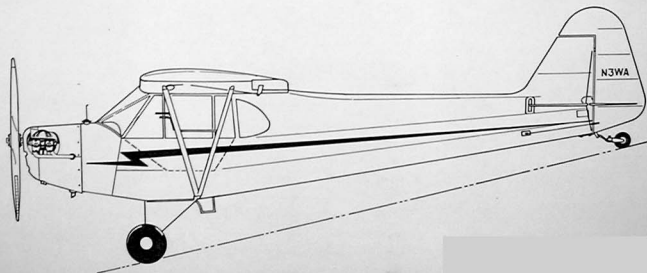
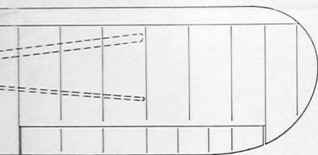
RECOMMENDED MANUALS, CONSTRUCTION AND ASSEMBLY

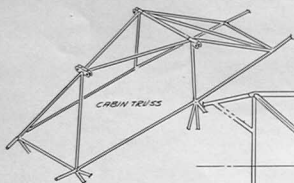
Wag-Aero Service Manual, Cat No. 7-454-001
Wag-Aero Parts List, Cat No. 7-454-002
Original Reports



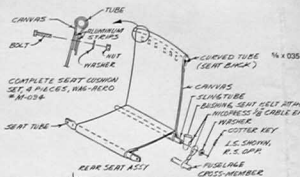
SPECIFICATIONS

Wing Span	35 ft. 2.5 in.
Length	22 ft. 4.5 in.
Height	6 ft. 8 in.
Wing Area	178.5 sq. ft.
Wing Cord	5 ft. 3 in.
Empty Weight	720 lbs.
Useful Load	660 lbs.
Gross Weight	1400 lbs.
Fuel Capacity	12 gal. standard 26 gal. auxiliary
Fuel Consumption	4.8 gal. per hour
Top Speed	102 mph
Cruise Speed	94 mph
Stall Speed	39 mph
Rate Of Climb	490' per min.
Cruising Range	standard - 220 miles auxiliary - 455 miles
Service Ceiling	11,200 ft.
Climb Ratio	10 to 1

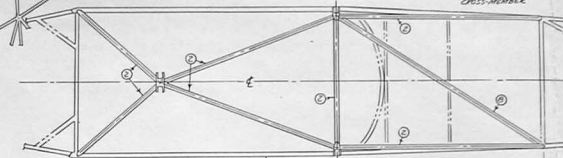




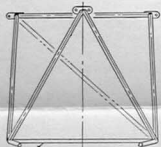
CABIN TRUSS



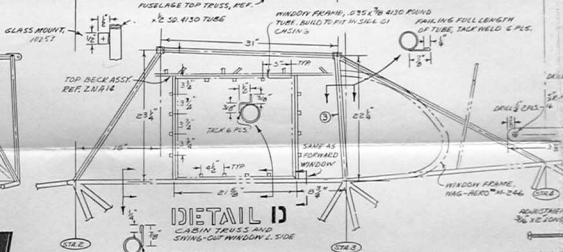
1/4 x 035



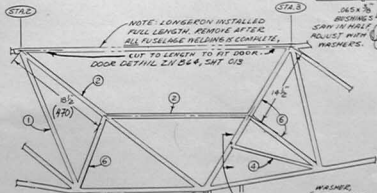
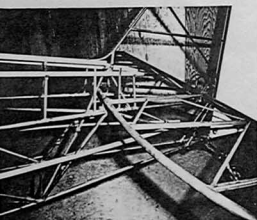
FUSELAGE TOP TRUSS, REF.



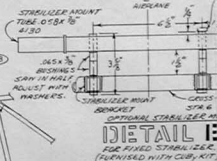
CROSS TUBE, STA. 2



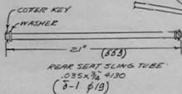
DETAIL D
CABIN TRUSS AND
SLING FOR WINDOW L SIDE



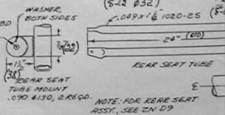
DETAIL E
DOOR OPENING, R. INT SIDE ONLY



DETAIL F
OPTIONAL STABILIZER MOUNT
FOR FIXED STABILIZER
(FURNISHED WITH CUB, KIT)

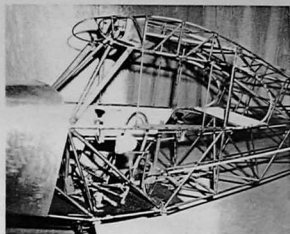


REAR SEAT SLING TUBE
0.35 x 3/8 x 1/30
(8-1 6/19)



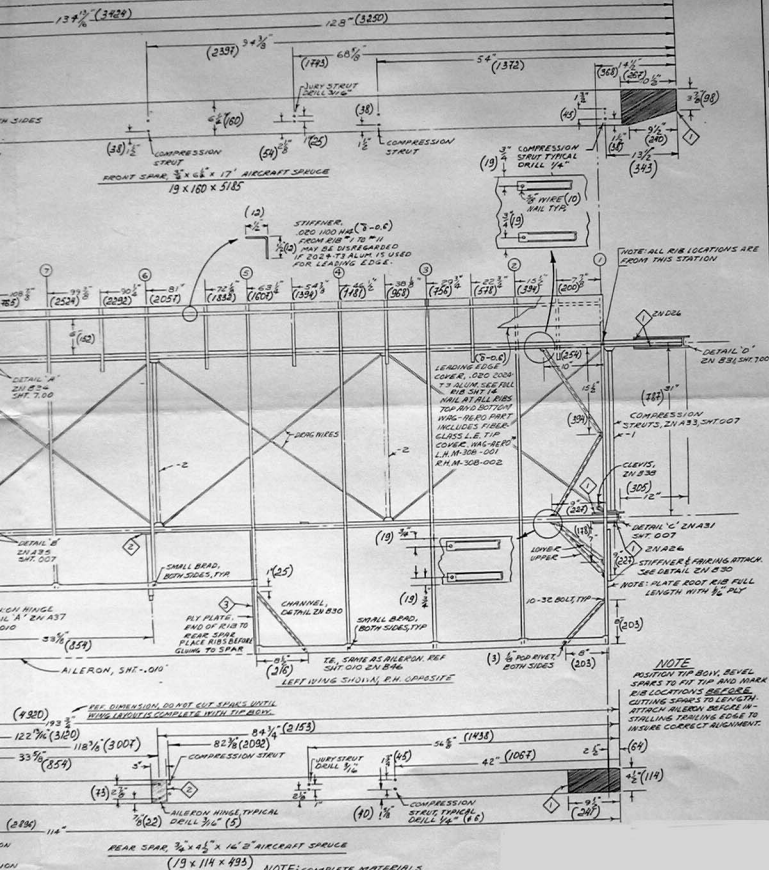
REAR SEAT TUBE MOUNT
0.90 x 1/30, 0.0600

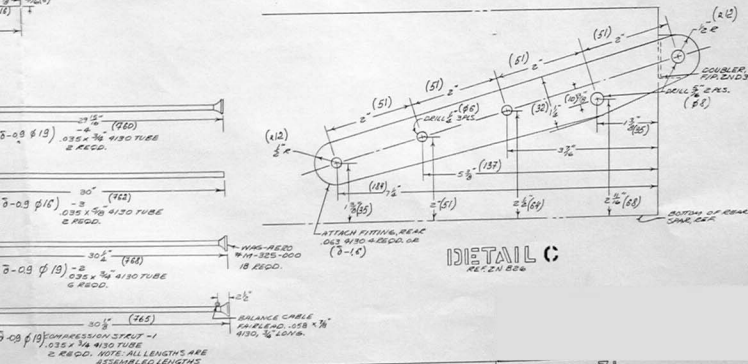
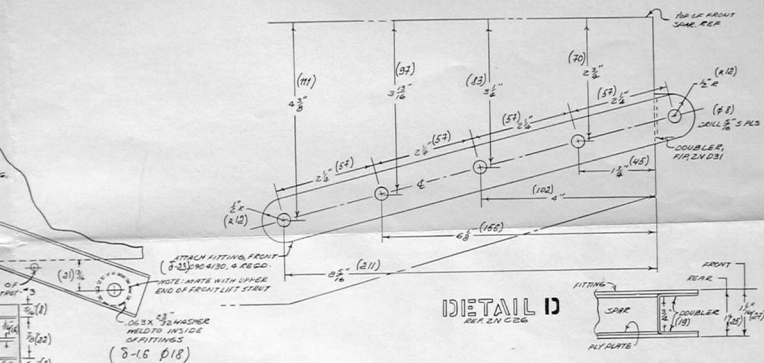
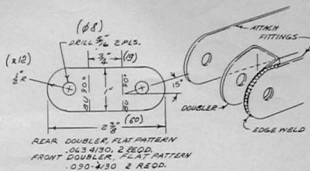
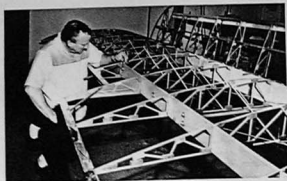
NOTE: FOR REAR SEAT
ASST., SEE 2N D9

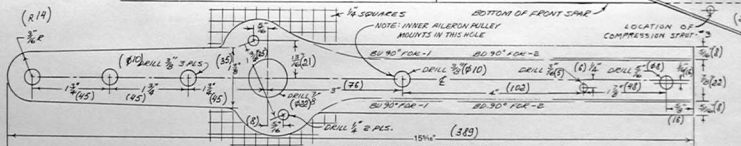
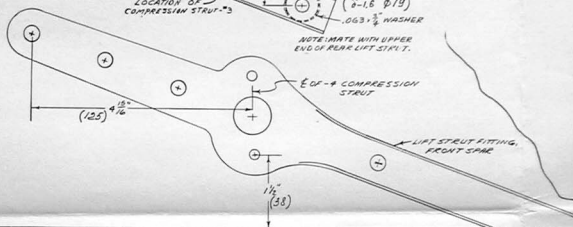
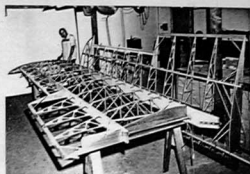
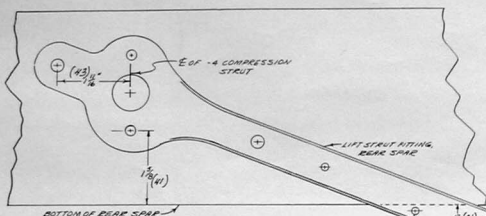


END OF SPAR

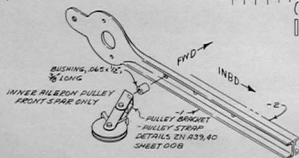
(5170) REF DIMENSION DO NOT CUT SPARS UNTIL WING LAYOUT IS COMPLETE WITH TIP ROW.



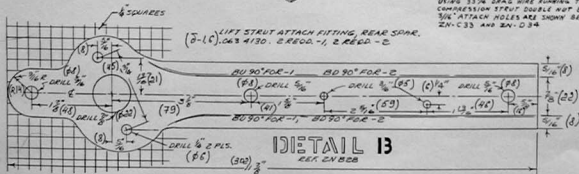




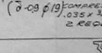
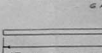
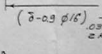
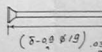
DETAIL A
REF. EN C28

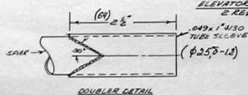
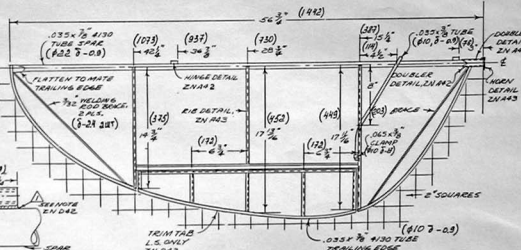
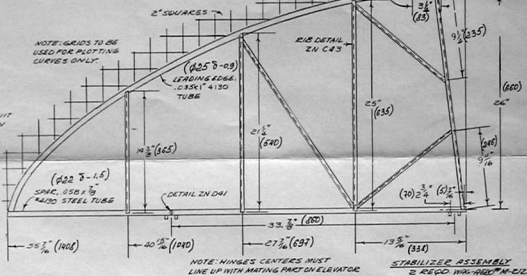
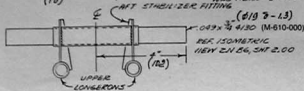
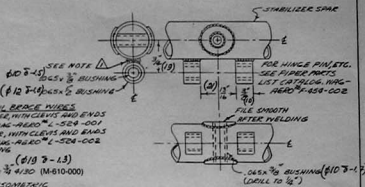


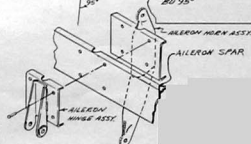
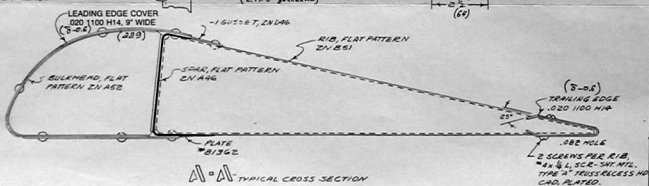
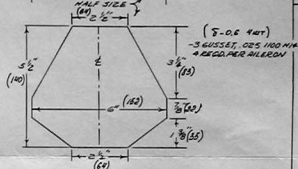
(3-16) LIFT STRUT ATTACH FITTING, REAR SPAR.
EN C-33, EN C-30, 2 RECD-1, 2 RECD-2



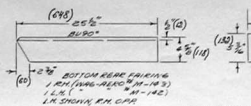
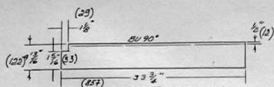
DETAIL B
REF. EN C28





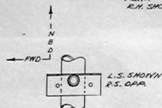


DETAIL A

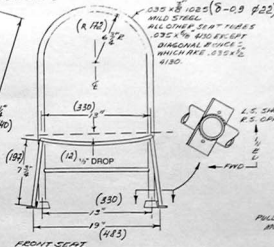


TOP CABIN FAIRING
1 RM. (WING-REAR)
1 L.H. (M-141)
R.H. SHOWN, L.H. OPA

ALL FAIRINGS FOR WING
TO FUSELAGE. QES 1100-N14

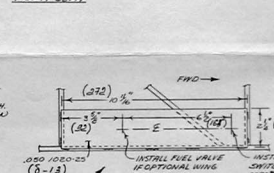
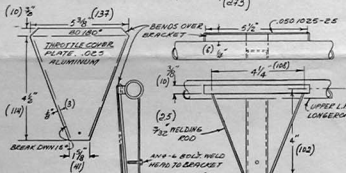
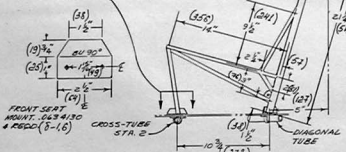


ANGLES TO FIT SEAT TUBES

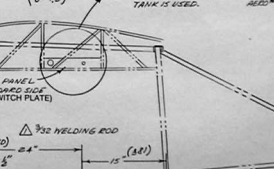
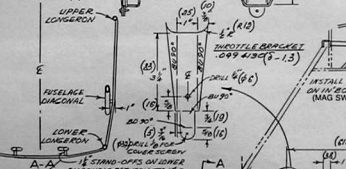


L.S. SHOWN
R.S. OPA

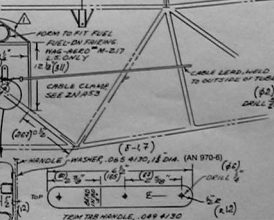
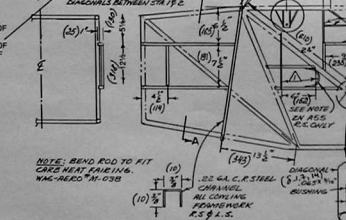
PULLER, STRUT
MOUNTED



FORWARD
LIFT STRUT



RUDDER CABLE
RUDDER PED

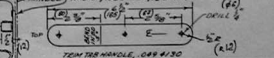


THROTTLE
CABLE
THROTTLE INTER
CONNECT ROD

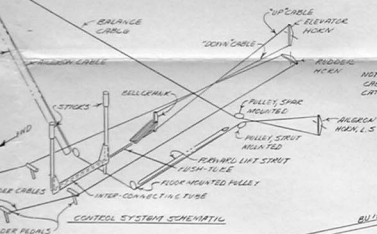
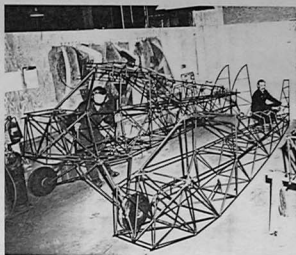
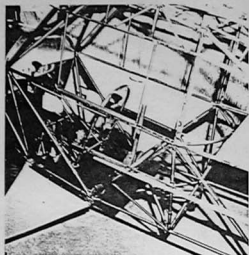
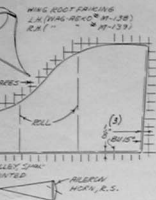
NOTE: BEND ROD TO FIT
CASE HEAT FAIRING.
WING-REAR M-038



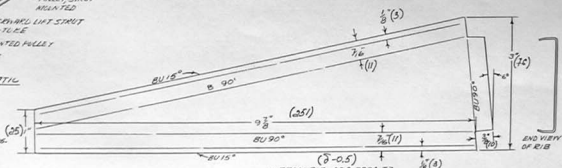
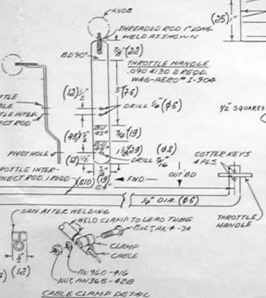
DIAGONAL
CABLE CLAMP
SEE 2N-145



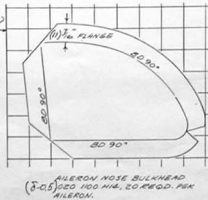
THROTTLE
CABLE
THROTTLE INTER
CONNECT ROD



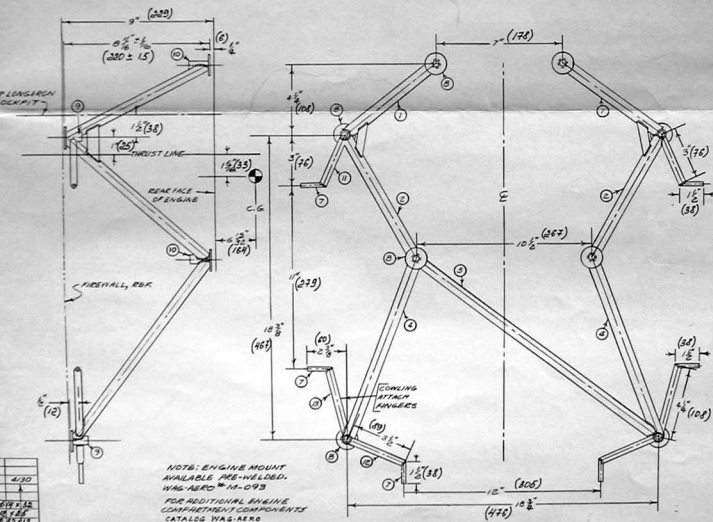
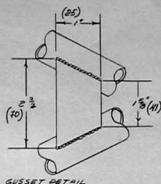
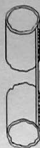
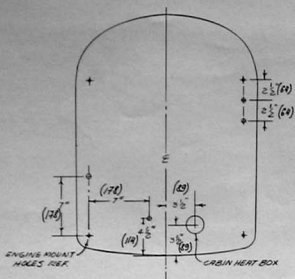
NOTE: FOR TERMINAL ENDS OF
CABLES, ETC. SEE
CATALOG, MAG-REX[®] F-454-002



AILERON RIB, 080 2024-T3
12 REQD. PER AILERON. FLANGES
ON 8 RIBS TO BE BENT AS SHOWN. 4 RIBS
TO BE BENT OPPOSITE.



NOTE: ALL BULKHEAD FLANGES
TO FACE OUT'RD EXCEPT AIRCORN
ENDS AND CUTOUTS.



NOTE: ENGINE MOUNT
AVAILABLE PRE-WELDED.
WAG-AERO® M-093

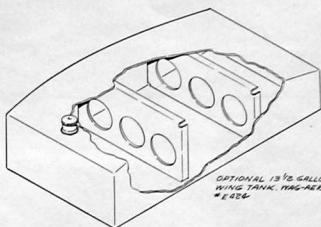
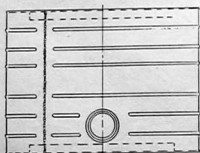
FOR ADDITIONAL ENGINE
COMPARTMENT COMPONENTS
CATALOG WAG-AERO
4454-002

NOTE:
ALL TUBES ARE
O.D. DIMENSION

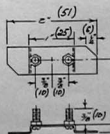
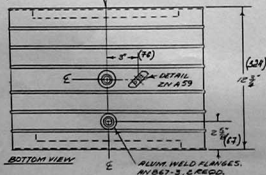
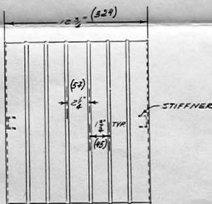
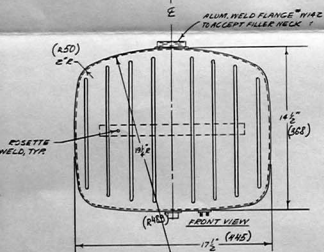
1000

2

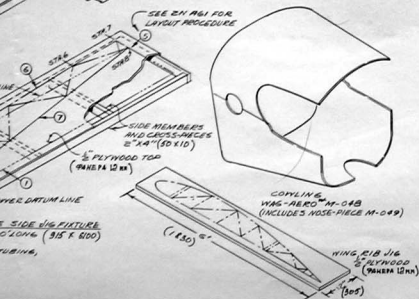
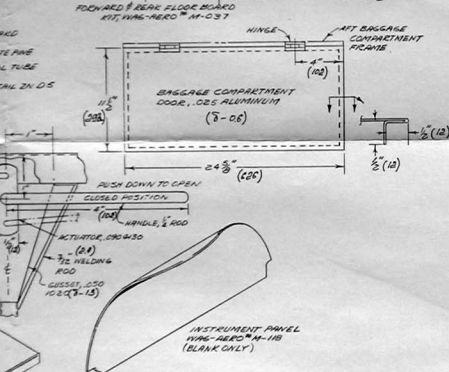
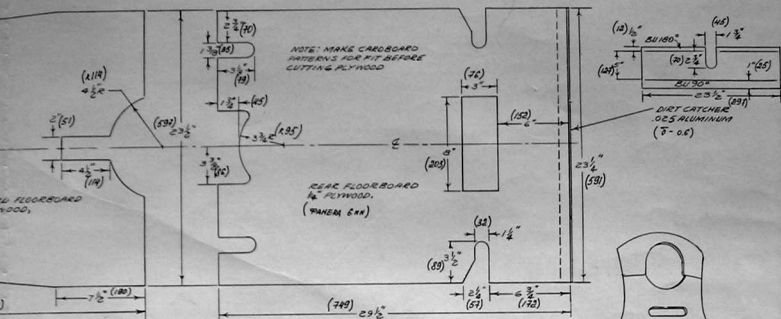
;



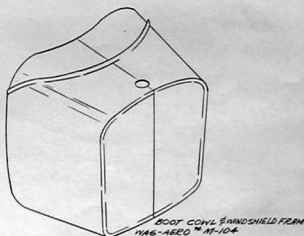
NOTE: FOR FUEL SYSTEM SEE SERVICE
MANUAL WAG-AERO® F-454-003, PAGE 10

[illegible]

NOTE
ALL
S.D.

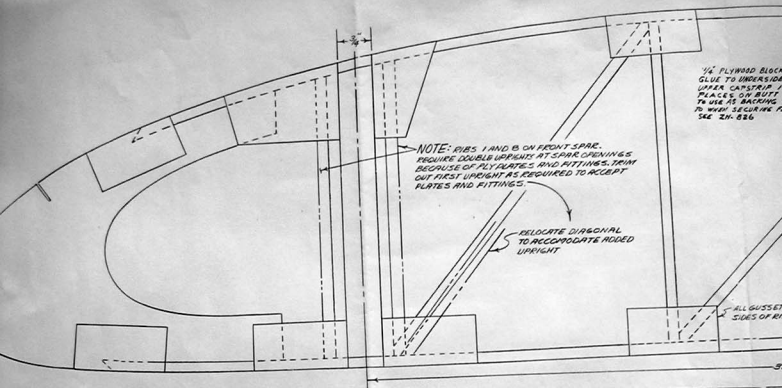


NOTE: FOR COVERING THE AIRCRAFT,
PRE-SEWN ENVELOPE KIT WAG-AERO
0-016-000

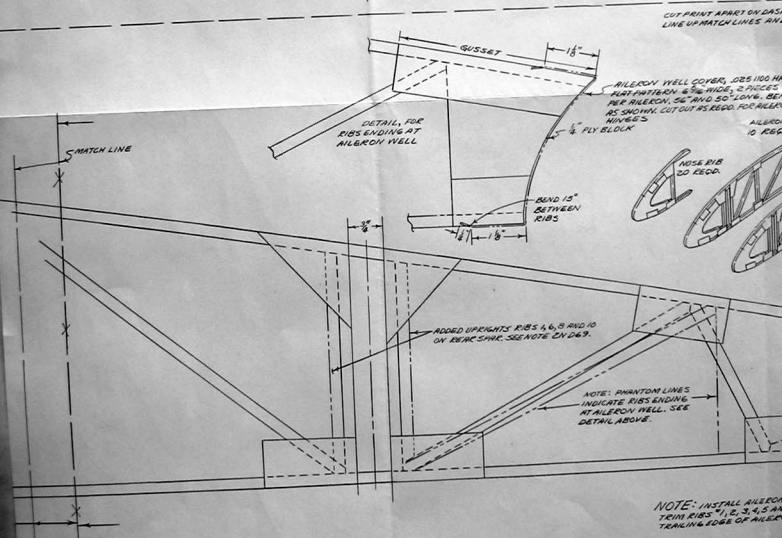


FUSELAGE SIDE LAYOUT

- LAYOUT (DRAWING) DATUM LINES ON TABLE PER DIMENSIONS ON SHT. 001. ALL CORNERS ARE 90° TO EACH OTHER.
- DRAW VERTICAL LINE FOR STR. 1, 30" OFF UPPER DATUM LINE.
- LOCATE TOP STR. 5 ON UPPER DATUM LINE BY MEASURING FROM STR. 1.
- LOCATE BOTTOM STR. 3 AT AFT END OF UPPER DATUM LINE.
- LOCATE BOTTOM STR. 8 AT AFT END OF UPPER DATUM LINE. MEASURE 10" UP TO LOCATE UPPER STR. 7. LOCATE UPPER STR. 6 BY MEASURING 30" FORWARD OF STR. 7 AND 9" UP ABOVE UPPER DATUM LINE.
- DRAW LINE FROM TOP STR. 6 TO TOP STR. 3.
- DRAW LINE FROM BOTTOM STR. 8 TO BOTTOM STR. 3.
- CUT REMAINDER OF LAYOUT PER DIMENSIONS ON SHT. 001.



1/4" PLYWOOD BLOCK
GLUE TO UNDERSIDE
UPPER CAPSTRIP
PLACES ON BUTT
TO USE AS BACKING
TO HOLD SECURING P
SEE 2H-886



PLYWOOD BLOCK 1"x1"
TO UNDERSIDE OF
CAPSTRIP IN 10
FEET OF BUTT RIBS
AS BACKING TO SCREW
IN SECURE TIGHTEN ATTACK TYP.
EN-856

NOTE: RIB #2, GUSSET FULL
LENGTH FROM NOSE TO TRAILING
EDGE WITH 1/8" PLY.

ALL GUSSETS BOTH
SIDES OF RIB

31" BETWEEN SPAR CENTERS

PORTION DASHED LINE
LINES AND ARROWS.

251100 H&B
2 PAGES
LOW. BEAD
FOR AIRCRAFT

AIRCRAFT RIB
10 REQD.

FULL LENGTH RIB
12 REQD.

HAL-REAR PART
TRAILING EDGE
COVER ONE PIECE

STACK NOSE RIBS
TIGHTER WHEN
MAKING CUT

NOTE: FOR NOSE RIBS AT
WING TIP SEE EN-871

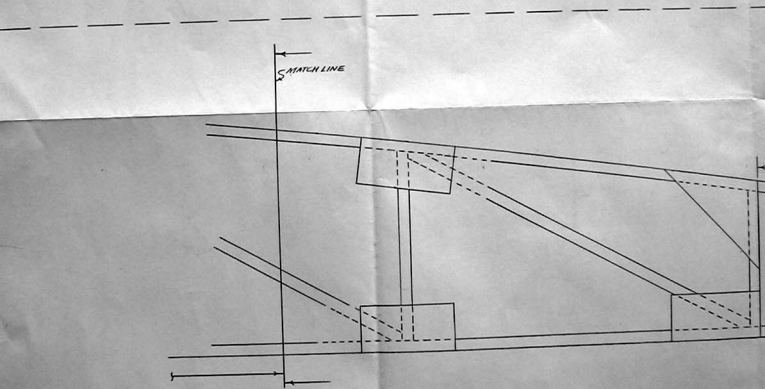
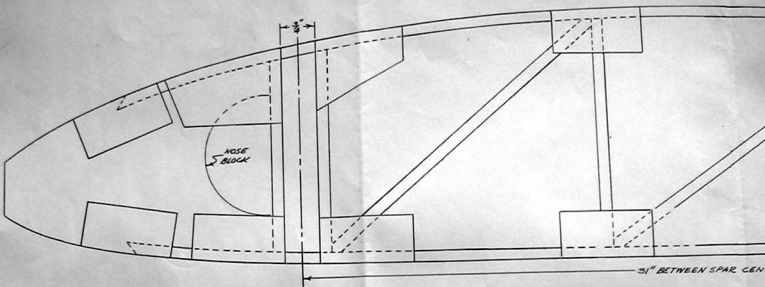
NOTE: USE THIS PATTERN FOR
ALL WING RIB NOSE BLOCKS
AS REQD.

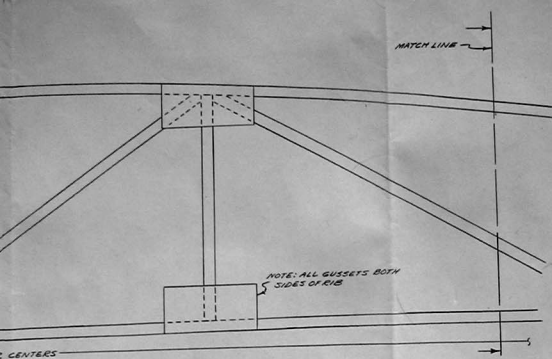
2 FRONT SPAR

RIB #11 USES 1/8" PLY BLOCK. TRIM RIB LENGTH TO MATCH TIP
BOW AND OUTRIG END OF AIRCRAFT. GUSSET ON REAR SIDE OF
RIB FROM REAR SPAR TO TRAILING EDGE WITH 1/8"
PLY. GUSSET CUT REAR SIDE AS SHOWN.
RIB #12 SAME EXCEPT GUSSETS
ARE REVERSED.

NOTE: ALL CAPSTRIPS, UPRIGHTS AND DIAGONALS
ARE 1/4" SURFACE.
ALL GUSSETS ARE 1/8" AIRCRAFT MANUFACTURE PLYWOOD
ALL NOSE BLOCKS ARE 1/4" AIRCRAFT PLYWOOD.

TALL AIRCRAFT AND THEN
1, 2, 3, 4, 5 AND 11 TO MATCH
RE OF AIRCRAFT.





CUT PRINT APART ON DASHED LINE.
LINE UP MATCH LINES AND ARROWS

NOTE:
ALL CAP STRIPS, UPRIGHTS AND DIAGONALS
ARE $\frac{1}{4}$ " AIRCRAFT SPRUCE.
ALL GUSSETS ARE $\frac{1}{8}$ " AIRCRAFT MANOGANY PLYWOOD.
NOSE BLOCK IS $\frac{1}{8}$ " AIRCRAFT BIRCH PLYWOOD.

