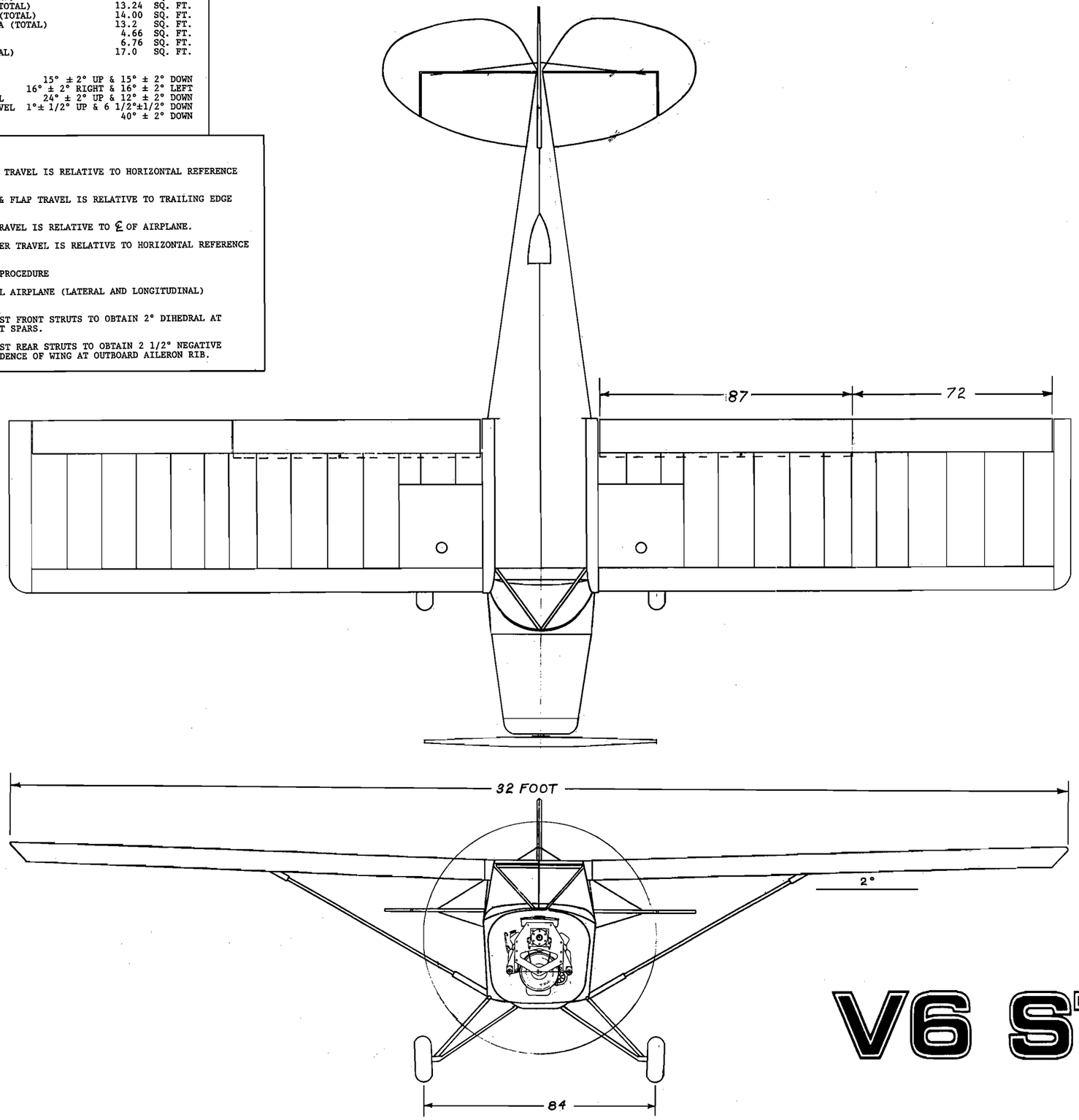
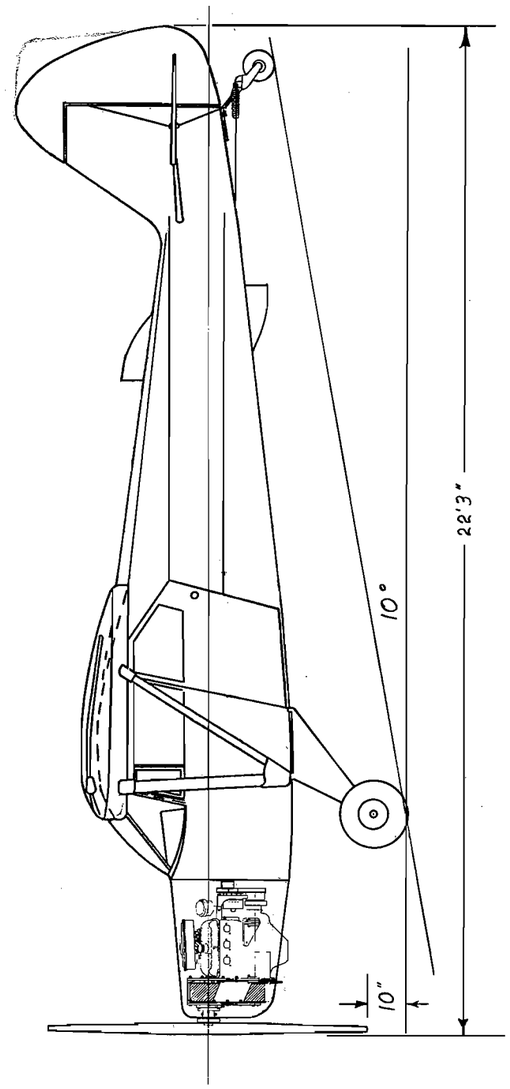
WING AREA (TOTAL)	168.0	SQ. FT.
AILERON AREA (TOTAL)	13.24	SQ. FT.
ELEVATOR AREA (TOTAL)	14.00	SQ. FT.
STABILIZER AREA (TOTAL)	13.2	SQ. FT.
FIN AREA	4.66	SQ. FT.
RUDDER AREA	6.76	SQ. FT.
FLAP AREA (TOTAL)	17.0	SQ. FT.

AILERON TRAVEL	15° ± 2° UP & 15° ± 2° DOWN
RUDDER TRAVEL	16° ± 2° RIGHT & 16° ± 2° LEFT
ELEVATOR TRAVEL	24° ± 2° UP & 12° ± 2° DOWN
STABILIZER TRAVEL	1°± 1/2° UP & 6 1/2°±1/2° DOWN
FLAP TRAVEL	40° ± 2° DOWN

NOTES:

1. ELEVATOR TRAVEL IS RELATIVE TO HORIZONTAL REFERENCE LINE.
2. AILERON & FLAP TRAVEL IS RELATIVE TO TRAILING EDGE OF WING.
3. RUDDER TRAVEL IS RELATIVE TO ℄ OF AIRPLANE.
4. STABILIZER TRAVEL IS RELATIVE TO HORIZONTAL REFERENCE LINE.
5. RIGGING PROCEDURE
   1. LEVEL AIRPLANE (LATERAL AND LONGITUDINAL)
   2. ADJUST FRONT STRUTS TO OBTAIN 2° DIHEDRAL AT FRONT SPARS.
   3. ADJUST REAR STRUTS TO OBTAIN 2 1/2° NEGATIVE INCIDENCE OF WING AT OUTBOARD AILERON RIB.





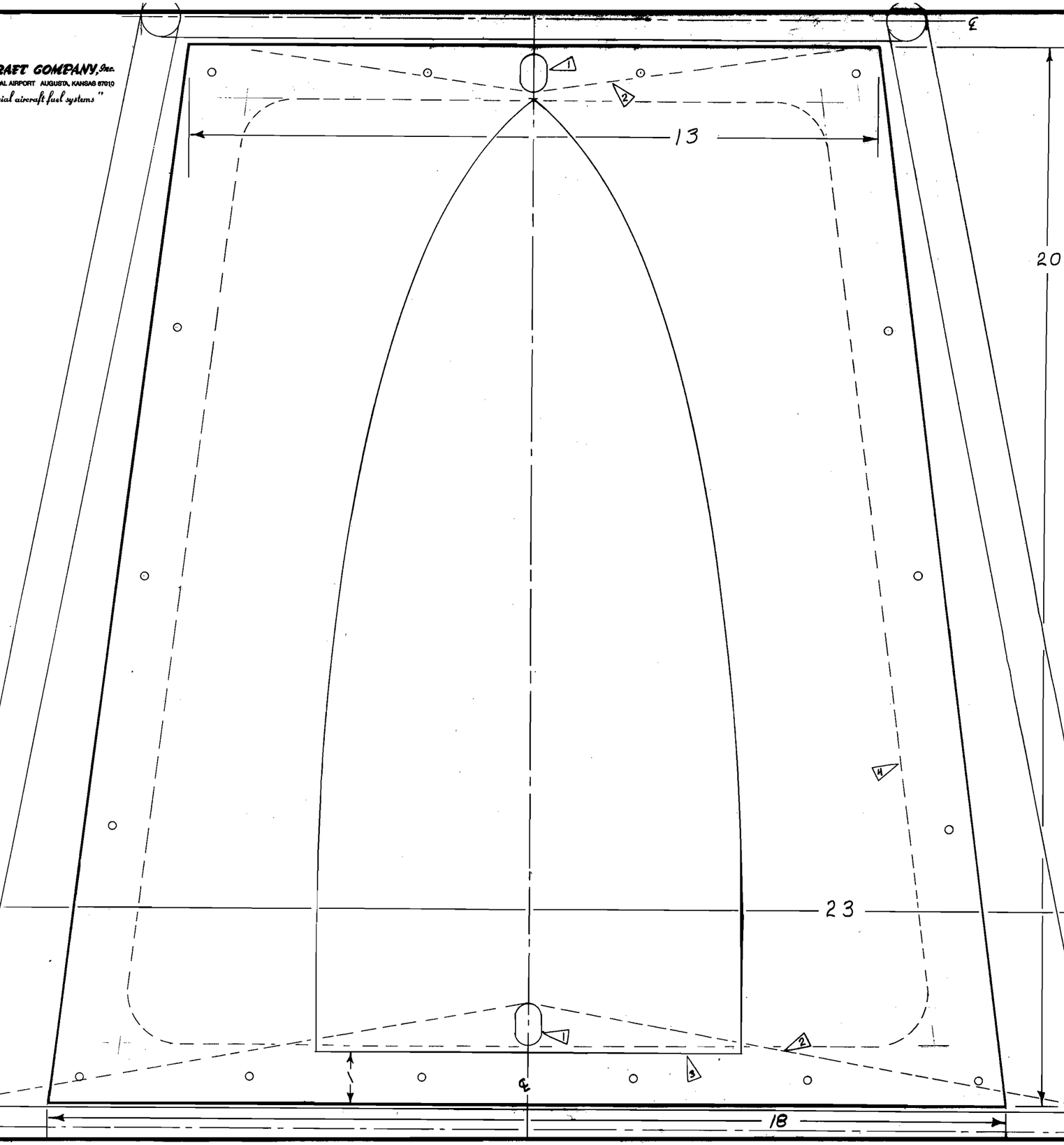
V6 STOL

Javelin Aircraft Company, Inc.
PHONE 316/733-1011 MUNICIPAL AIRPORT AUGUSTA, KANSAS 67010
"World's leading manufacturer of special aircraft fuel systems"

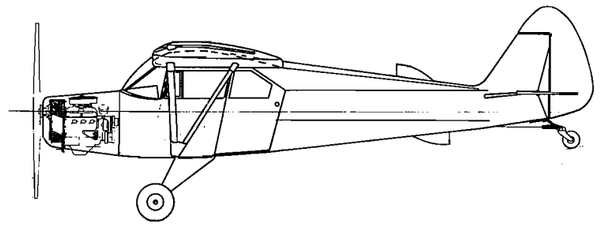
OUR 36TH ANNIVERSARY

QTY.	PART NO.	NAME OF PART		SIZE GAUGE	MATERIAL
SCALE 1/40		DRAWN BY	DAVID D. BLANTON	MODEL V6 STOL	
TOLERANCE ± 1/8		CHECKED BY	"	JAVELIN AIRCRAFT CO. INC. WICHITA, KANSAS	
		STRESS CHK.	R. FRIEDMAN		
DATE MARCH 89		APPROVED BY	D. Blanton		
3 VIEW				DRAWING NO. 450	SHEET 0

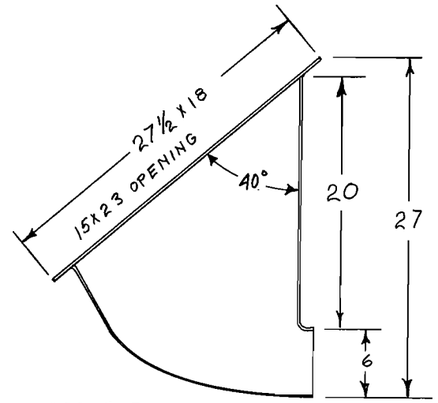
Javelin Aircraft Company, Inc.
PHONE 316/733-1011 MUNICIPAL AIRPORT AUGUSTA, KANSAS 67010
"World's leading manufacturer of special aircraft fuel systems"



1. TOP CENTER STRINGER 2 INCH HIGH FRONT 1 INCH HIGH REAR - THIS IS A FRONT VIEW.
2. 3/4 INCH CLEAR WHITE PINE - FRONT VIEW
3. 6 INCH x 8 INCH OPENING 18 INCH FAIRING 1 INCH MOUNTING FLANGE ALL FOUR SIDES
4. CUT OUT IN METAL FRAME 15 3/8 WIDE AT FRONT 10 7/8 WIDE AT REAR - 17 7/8 LONG



V6 STOL



453-3 BOTTOM SPILL
1/6 SCALE 6X16 OUTLET
1 1/2 FLANGE ALL FOUR SIDES

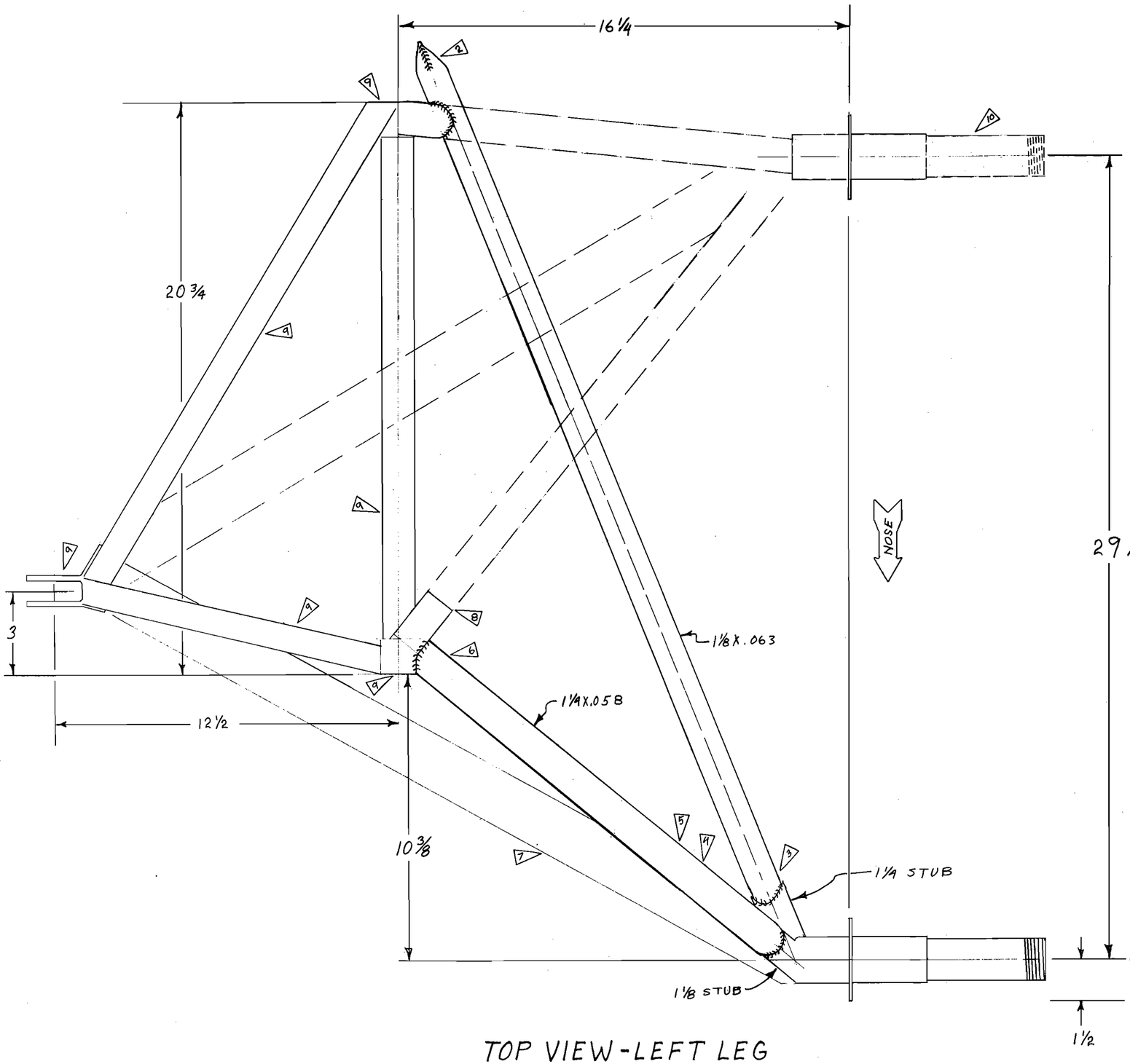
OUR 36TH ANNIVERSARY

THESE PARTS ARE MADE BY
RATTRAY AERO-PRODUCTS CO.
2357 AFTON ROAD
BELOIT WISCONSIN 53511
PHONE 608-362 9611

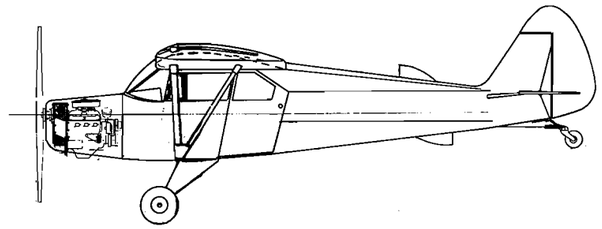
THIS DRAWING IS PHOTOGRAPHICALLY REDUCED 50% FROM THE ORIGINAL TO ALLOW IT TO BE PRINTED BY OFFSET PRESS.

PART NUMBER 453-4

QTY.	PART NO.	NAME OF PART		SIZE GAUGE	MATERIAL
SCALE FULL		DRAWN BY	D.D. BLANTON	MODEL. V6 STOL	
TOLERANCE ± 1/8		CHECKED BY	"	JAVELIN AIRCRAFT CO. INC. WICHITA, KANSAS	
		STRESS CHK.	"		
DATE FEB 89		APPROVED BY	D Blanton		
TOP SCOOP				DRAWING NO. 452	SHEET 0



TOP VIEW - LEFT LEG



V6 STOL

MATERIAL NEEDED
TO MAKE BOTH SIDES
6' 1/4 X .058 4130
6' 1/8 X .063 4130
2" X 20" X .063 SHEET 4130

ORDER FROM
AIR PARTS KC KANSAS

Javelin Aircraft Company, Inc.
PHONE 316/733-1011 MUNICIPAL AIRPORT AUGUSTA, KANSAS 67010
"World's leading manufacturer of special aircraft fuel systems"

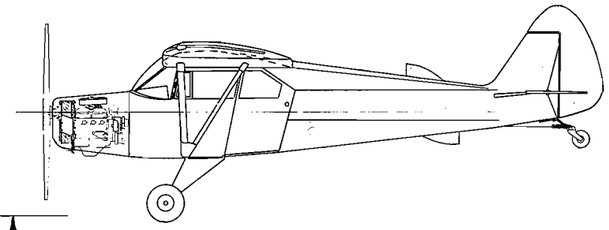
FLAG NOTES ARE IN BUILDERS MANUAL
PAGE 19

OUR 36TH ANNIVERSARY

THIS DRAWING IS PHOTOGRAPHICALLY REDUCED 50% FROM THE ORIGINAL TO ALLOW IT TO BE PRINTED BY OFFSET PRESS.

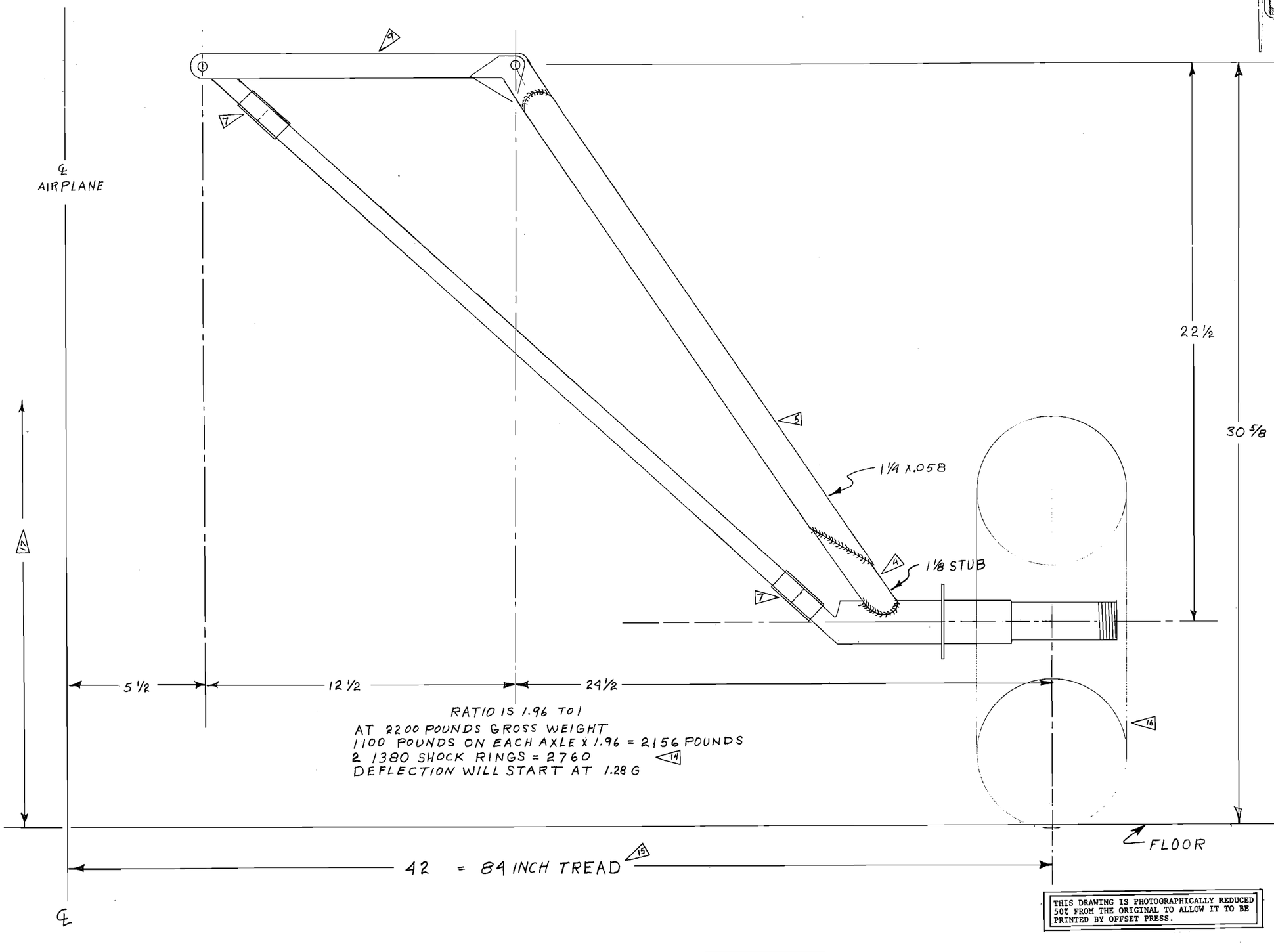
QTY.	PART NO.	NAME OF PART	SIZE GAUGE	MATERIAL
2	-2	REAR TUBE	1 1/8 X .063	4130
2	-1	FORWARD TUBE	1 1/4 X .058	4130

SCALE 1/2	DRAWN BY	D. D. BLANTON	MODEL V6 STOL
TOLERANCE ± 1/16	CHECKED BY	"	JAVELIN AIRCRAFT CO. INC. WICHITA, KANSAS
	STRESS CHK.	"	
DATE FEB 89	APPROVED BY	D. D. Blanton	
LANDING GEAR			DRAWING NO. 454 SHEET 0



V6 STOL

Javelin Aircraft Company, Inc.
PHONE 316/733-1011 MUNICIPAL AIRPORT AUGUSTA, KANSAS 67010
"World's leading manufacturer of special aircraft fuel systems"



RATIO IS 1.96 TO 1
AT 2200 POUNDS GROSS WEIGHT
1100 POUNDS ON EACH AXLE x 1.96 = 2156 POUNDS
2 1380 SHOCK RINGS = 2760
DEFLECTION WILL START AT 1.28 G 14

FLAG NOTES ARE IN BUILDERS MANUAL PAGE 19

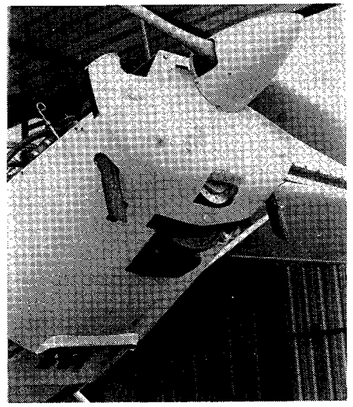
OUR 36TH ANNIVERSARY

THIS DRAWING IS PHOTOGRAPHICALLY REDUCED 50% FROM THE ORIGINAL TO ALLOW IT TO BE PRINTED BY OFFSET PRESS.

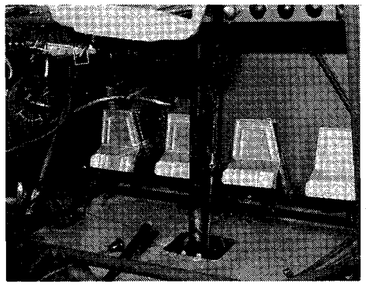
QTY.	PART NO.	NAME OF PART	SIZE GAUGE	MATERIAL
2	-2	REAR TUBE	1⅛X.063	4130
2	-1	FORWARD TUBE	1¼X.058	4130

SCALE ½	DRAWN BY	D. D. BLANTON	MODEL V6 STOL
TOLERANCE ± 1/16	CHECKED BY	"	JAVELIN AIRCRAFT CO. INC. WICHITA, KANSAS
	STRESS CHK.	"	
DATE FEB. 89	APPROVED BY	D Blanton	DRAWING NO. 456 SHEET 0

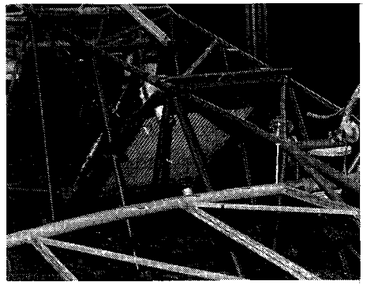
LANDING GEAR



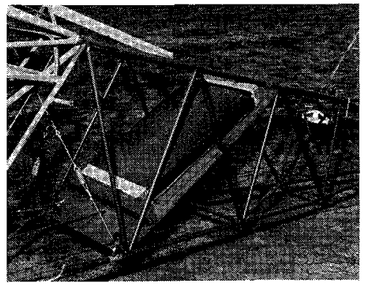
WE LIKE FOR THE OIL PAN TO BE EXPOSED TO HELP COOL THE OIL. SEE THE FORWARD EXHAUST STACKS TO HELP GET THE NOISE OUT OF THE CABIN. THE NOSE COWL IN THIS CASE IS A PIPER PA-25 PAWNEE.



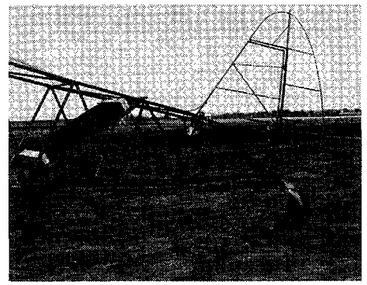
NEW TOE BRAKES ARE AVAILABLE FROM UNIVAIR. THEY OPERATE WITH CLEVELAND WHEELS AND BRAKES. IF YOU WANT TO SAVE MONEY KEEP THE WHEELS AND BRAKES YOU HAVE AND JUST ADD A RIGHT SIDE SCOTT MASTER CYLINDER FOR HEEL BRAKES.



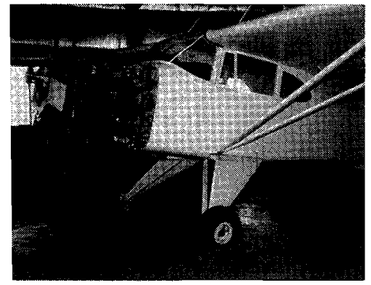
THE REAR FUSELAGE IS WASTE SPACE IN EVERY AIRPLANE, THIS IS A GOOD PLACE FOR THE RADIATOR AND IT PROVIDES BALANCE FOR THE 230HP ENGINE. YOU CAN TAXII FOREVER WITHOUT OVER-HEATING.



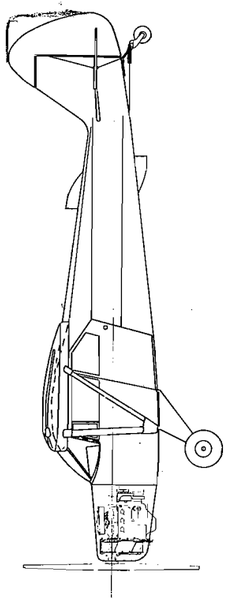
THIS IS AN IDEAL RADIATOR INSTALLATION THAT PROVIDES GOOD COOLING AND PUTS THE EMPTY WEIGHT C.G. WHERE IT BELONGS.

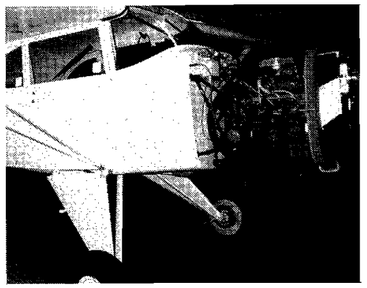


SEE THE TAIL WHEEL INSTALLATION (STEERING SPRINGS NOT INSTALLED YET) SEE STEERING CABLES OUT THE BOTTOM.

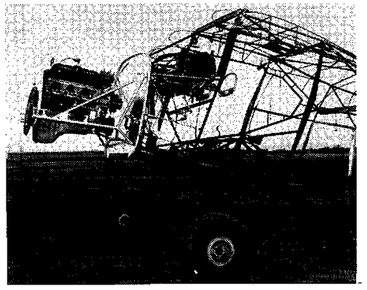


NOTICE THE WHITE BASE COAT, REGARDLESS OF WHAT COLOR IT'S GOING TO BE IN THE END. ANY COLOR SPRAYED ON SILVER WILL LOOK DULL.

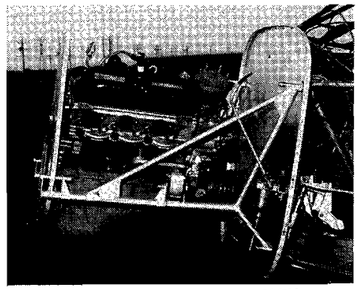




THE LANDING GEAR ANGLES FORWARD LIKE A JUNGMEISTER AND IT LOOKS GREAT. THE TOP OF THE LEGS ARE UNCHANGED.

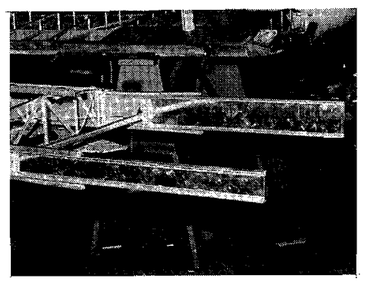


SEE THE 6 INCH x 800 TIRES FOR ROUGH FIELD OPERATIONS. SEE THE OIL SUMP, THIS WAS A REAR SUMP IN THE CAR. THE CARBURETOR SHOULD HAVE NUMBER 68 JETS DRILLED AND LOCKWIRED. NUMBER 85 POWER VALVE.

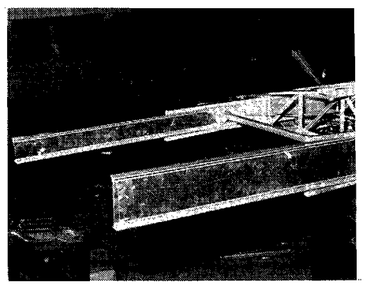


THE ENGINE MOUNT FOR THE 230V6 ENGINE IN THE V6 STOL IS AVAILABLE FROM JAVELIN AIRCRAFT COMPANY.

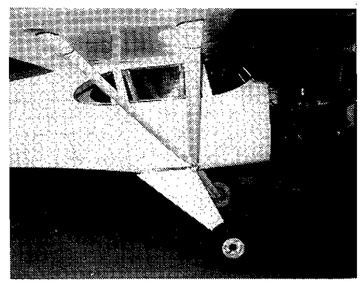
YOU CAN TELL THAT THE PICTURE WAS TAKEN ON AN AIRPORT BY ALL THE WIRES BEHIND THE T HANGERS.



SPAR EXTENSIONS AT THE TIP, REAR VIEW.



SPAR EXTENSION AT THE TIP, FRONT VIEW.

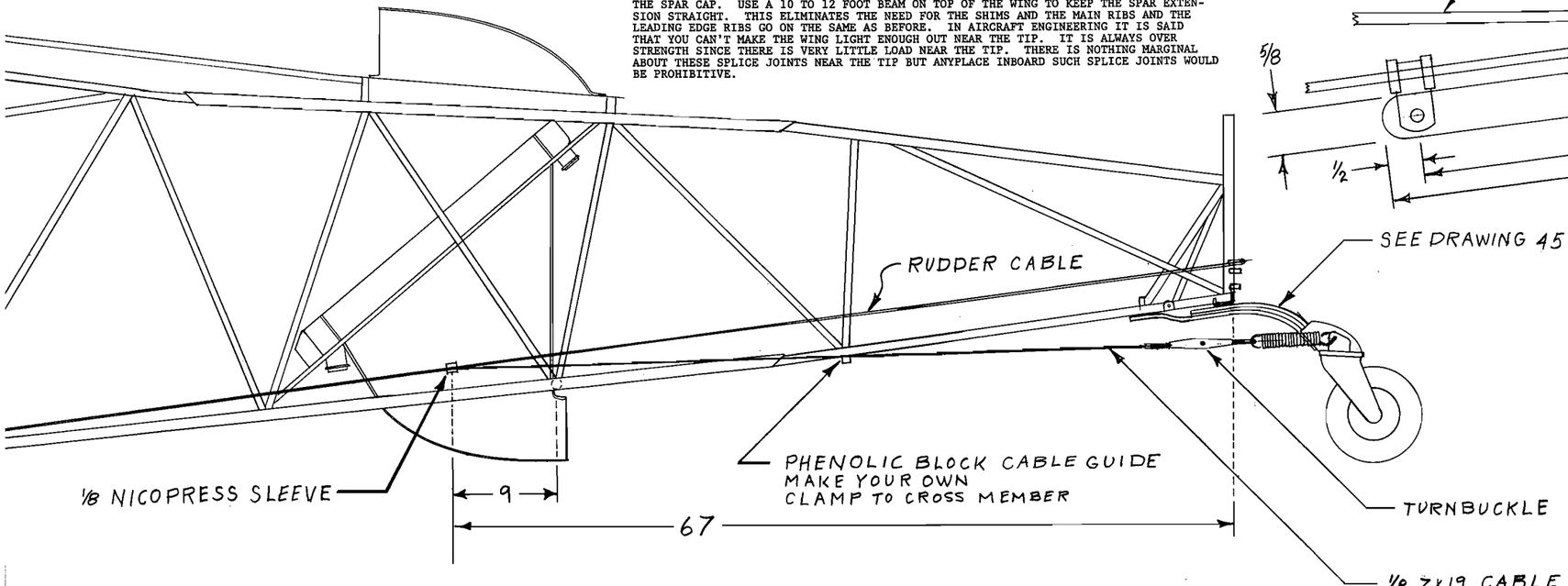


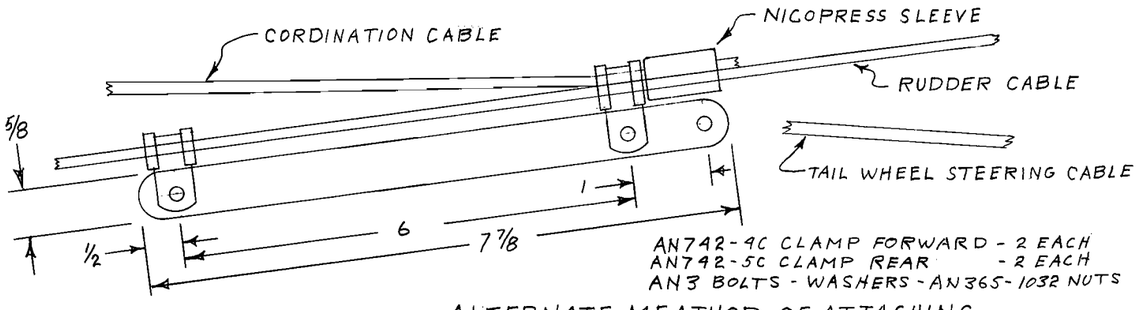
A BEAUTIFUL AIRPLANE THAT WILL CRUISE 130 MPH TRUE WITH FOUR PEOPLE AND BAGGAGE ON 6.8 GPH THATS 19 INCHES AND 4000 RPM ON THE ENGINE 2000 ON THE PROP. FOR GLIDER TOWING YOU MUST HAVE THE SEAPLANE PROPELLER M.F.C. 9055.

V6 STOL

NOTE FOR DRAWING 460:

IF YOU HAVE A SALVAGE WING PANEL AVAILABLE YOU CAN CUT OUT 29 INCH PIECES OF SPAR MATERIAL. ADDING THE SAME SPAR MATERIAL IS MUCH EASIER THAN BUILDING UP THE WEB AND SPAR CAPS AS SHOWN ABOVE. CUT OFF THE SPAR CAPS EVEN WITH THE BOTTOM OF THE HOLE IN THE WEB. FILE TO A PERFECT 90° FILE THE PART TO BE ADDED TO A PERFECT 90°. SPLICE THE PIECE ON WITH 3/8 X 3/4 X .095 ALUMINUM ANGLE. EIGHT PARTS REQUIRED 10 INCHES LONG INSTALL WITH 1/8 RIVETS 5 ON EACH SIDE OF THE BUTT JOINT TIGHT AGAINST THE SPAR CAP. USE A 10 TO 12 FOOT BEAM ON TOP OF THE WING TO KEEP THE SPAR EXTENSION STRAIGHT. THIS ELIMINATES THE NEED FOR THE SHIMS AND THE MAIN RIBS AND THE LEADING EDGE RIBS GO ON THE SAME AS BEFORE. IN AIRCRAFT ENGINEERING IT IS SAID THAT YOU CAN'T MAKE THE WING LIGHT ENOUGH OUT NEAR THE TIP. IT IS ALWAYS OVER STRENGTH SINCE THERE IS VERY LITTLE LOAD NEAR THE TIP. THERE IS NOTHING MARGINAL ABOUT THESE SPLICE JOINTS NEAR THE TIP BUT ANYPLACE INBOARD SUCH SPLICE JOINTS WOULD BE PROHIBITIVE.





ALTERNATE MEATHOD OF ATTACHING TAIL WHEEL STEERING CABLES

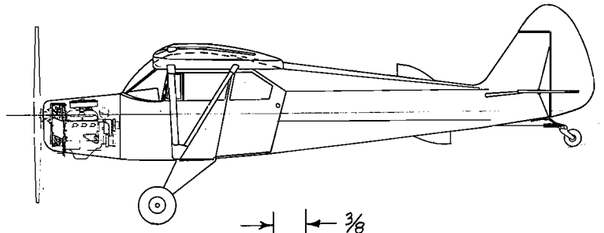
STRAP IS 1/16 STEEL OR ALUMINUM

SEE PAGE 27 OF THE BUILDERS MANUAL.

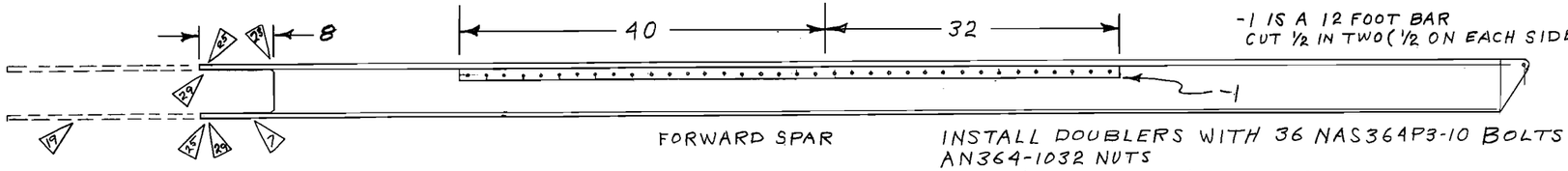
OUR 36TH ANNIVERSARY

Javelin Aircraft Company, Inc.
PHONE 316/733-1011 MUNICIPAL AIRPORT AUGUSTA, KANSAS 67010
"World's leading manufacturer of special aircraft fuel systems"

QTY.	PART NO.	NAME OF PART		SIZE GAUGE	MATERIAL
SCALE 1/4+FULL		DRAWN BY	D.D. BLANTON	MODEL V6 STOL	
TOLERANCE ± 1/16		CHECKED BY	"	JAVELIN AIRCRAFT CO. INC. WICHITA, KANSAS	
		STRESS CHK.	"		
DATE APRIL 89		APPROVED BY	D. Blanton		
TAIL WHEEL STEERING				DRAWING NO. 458	SHEET 0



℄ BOLT HOLE LIFT STRUT FITTING

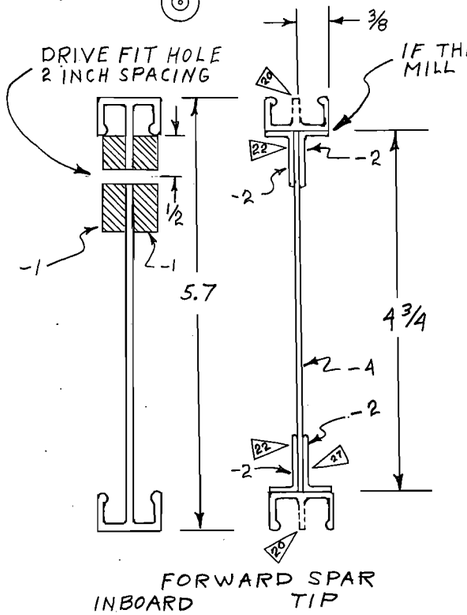


-1 IS A 12 FOOT BAR CUT ½ IN TWO (½ ON EACH SIDE)

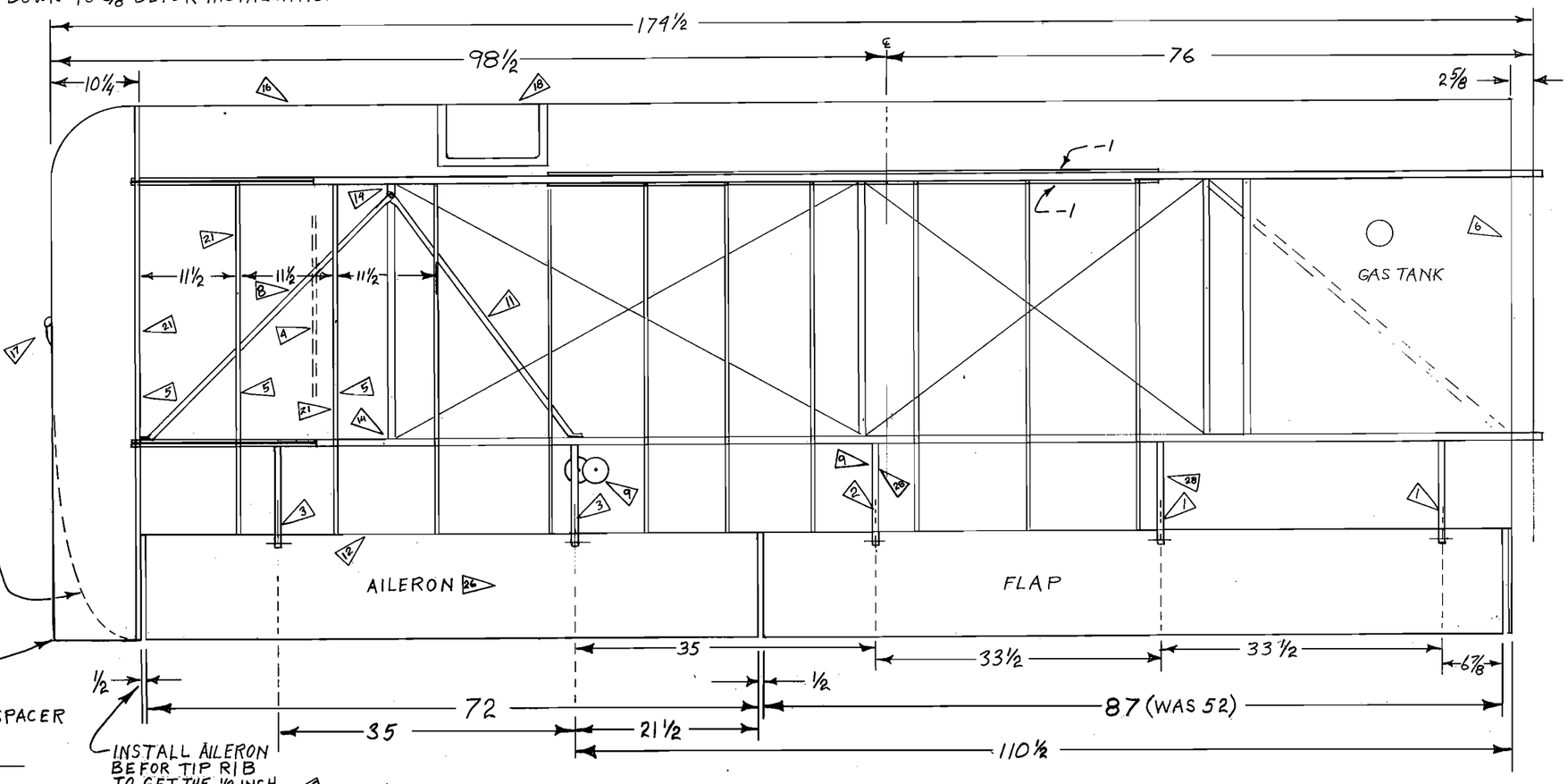
FORWARD SPAR

INSTALL DOUBLERS WITH 36 NAS364P3-10 BOLTS AN364-1032 NUTS

THESE DOUBLERS ARE NECESSARY TO INCREASE SPAN AND GROSS WEIGHT WITH THE SHORT LIFT STRUTS.

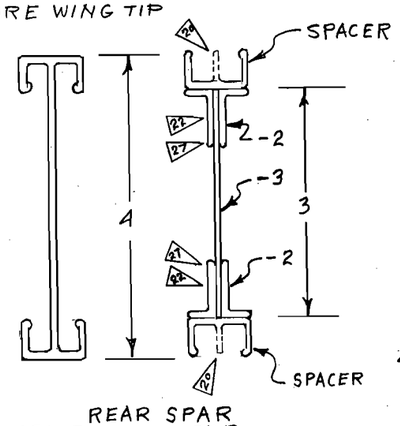


FORWARD SPAR
INBOARD TIP

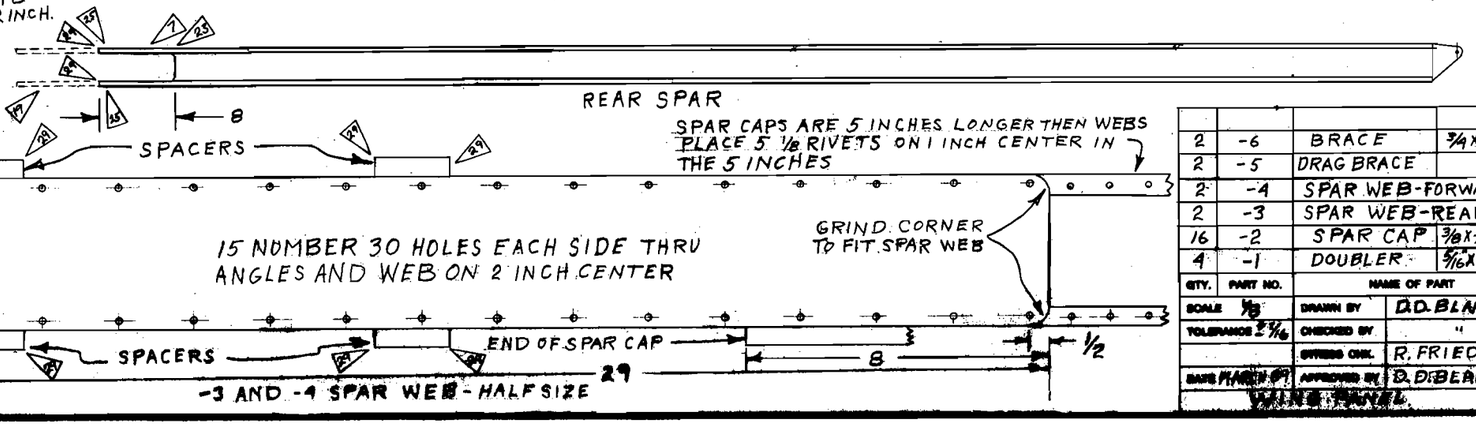


HOERNER WING TIP
BUY FROM
WAG AERO INC.
PART NUMBER M602000
INSTALL WITH METAL SCREWS
COVER WITH FABRIC
RAT-RAY
SQUARE WING TIP

INSTALL AILERON BEFOR TIP RIB TO GET THE ½ INCH.



REAR SPAR
INBOARD TIP

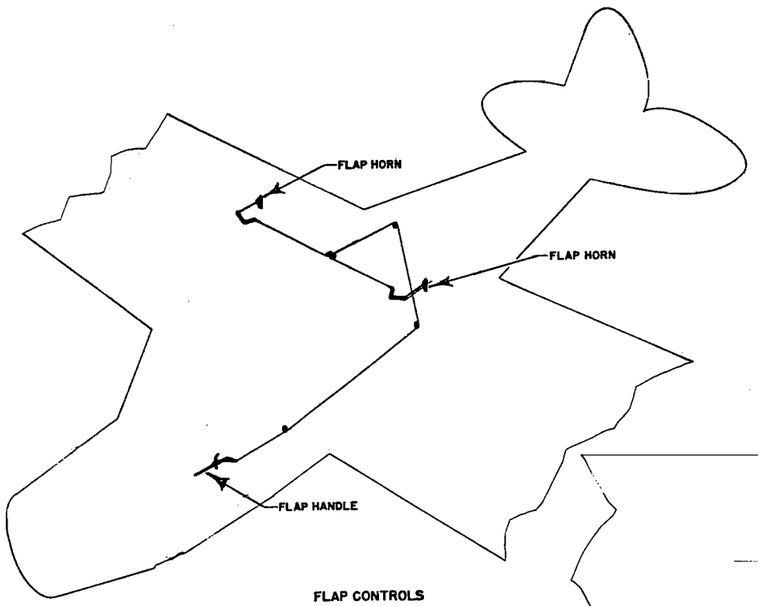


YOU MAY BE UNABLE TO FIND 3/8 X 3/4 X .095 ALUMINUM ANGLE FOR THE SPAR CAPS AND YOU WILL NEED TO BUY ½ X 3¼ X .095 OR 3/4 X 3/4 X .095. DO NOT FILE A NOTCH AND DISASSEMBLE THE RIBS AS DESCRIBED IN THE BUILDERS MANUAL (ITS A REAL MESS) YOU MUST PUT THE ANGLE ON A MILL AND CUT DOWN THE TOP LEG TO 3/8 INCH, CHAMFER THE EDGES 1/64 AT 45°. 6061-T4 OR T6 IS A SATISFACTORY ALTERNATE.

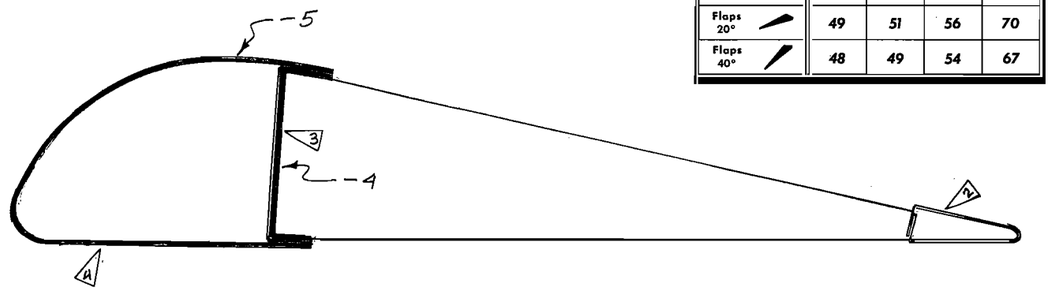
SEE PAGE 23 OF THE BUILDERS MANUAL.

QTY.	PART NO.	NAME OF PART	SIZE GAUGE	MATERIAL
2	-6	BRACE	3/4 X .035	4130
2	-5	DRAG BRACE		
2	-4	SPAR WEB-FORWARD 4 3/4 X 29 X .063		6061T4
2	-3	SPAR WEB-REAR 3 X 29 X .063		6061T4
16	-2	SPAR CAP	3/8 X 3/4 X .095 X 34 | 13	2024T3
4	-1	DOUBLER	5/16 X 1 1/4 X 6"	2024T3 OR 6061T4

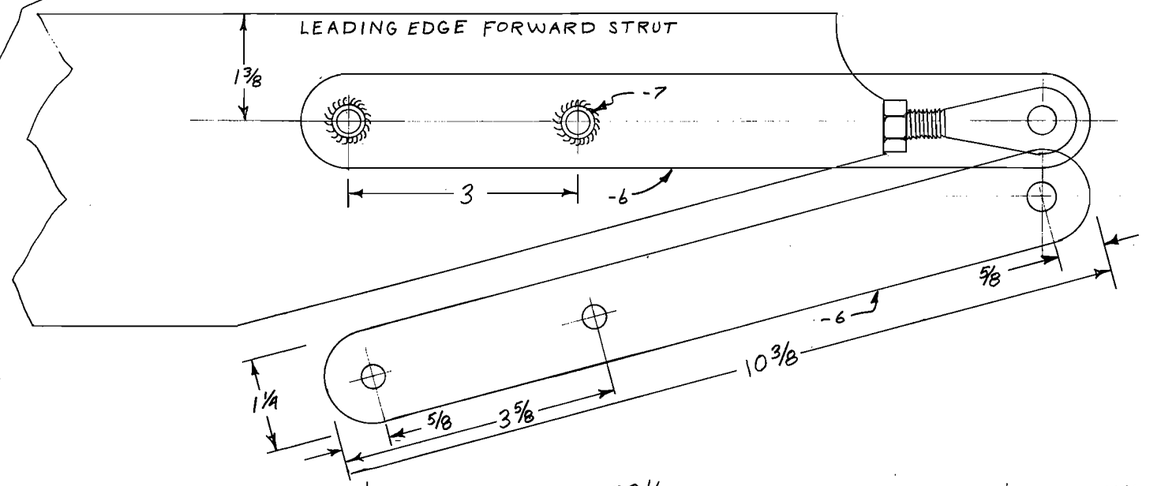
SCALE 1/8 | DRAWN BY D.D. BLANTON | MODEL V6 STOL
TOLERANCE ± 3/16 | CHECKED BY " | JAVELIN AIRCRAFT CO. INC. WICHITA, KANSAS
SUPERS CHK. R. FRIEDMAN
DATE MARCH 69 | APPROVED BY D. D. BEANTON
WING PANEL
DRAWING NO. 460 | SHEET 0

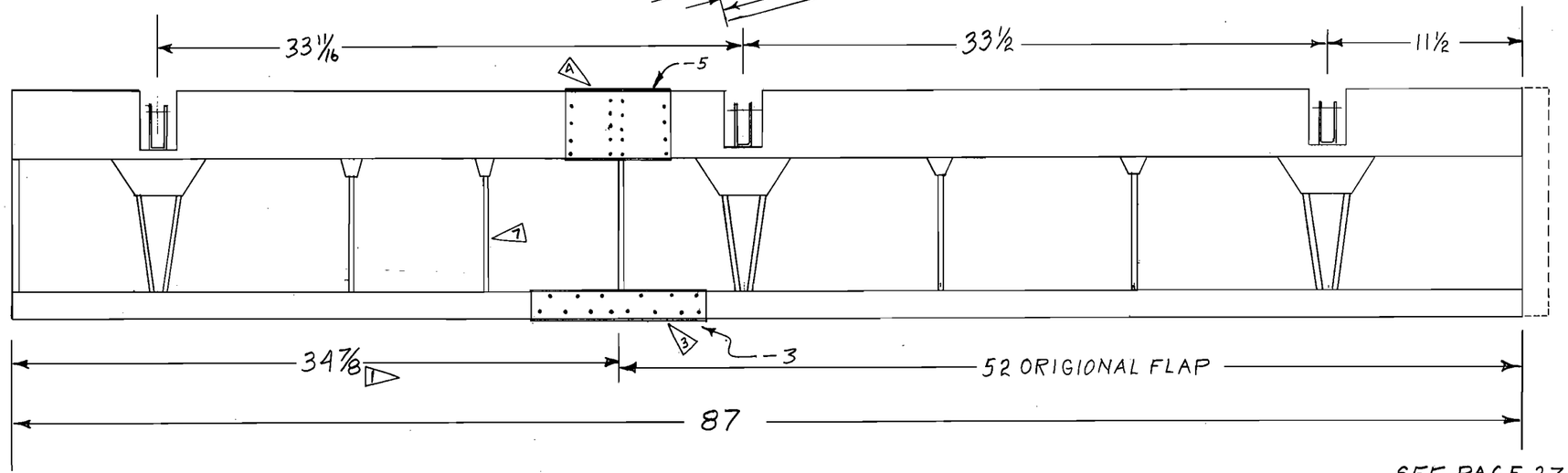


FLAP CONTROLS



Power Off — STALLING SPEEDS MPH — CAS				
Gross Weight 2200 lbs.	ANGLE OF BANK			
CONDITION	0°	20°	40°	60°
Flaps UP	55	57	63	78
Flaps 20°	49	51	56	70
Flaps 40°	48	49	54	67





IF YOU USE A PIECE OF ANOTHER FLAP TO ADD ON TO YOUR FLAP YOU CAN HAVE A GAP OF 2 INCHES BETWEEN THE FLAP AND AILERON. MAKE A FILLER BLOCK TO THE FLAP CONTINUE 1 1/2 INCH THICK FROM WHITE PINE AND ATTACH WITH WOOD SCREWS TO THE FLAP. AFTER THE COVER IS ON IT WILL LOOK FINE.

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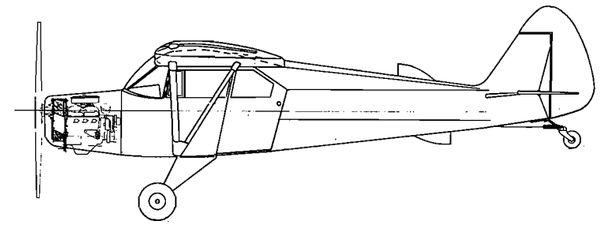
SEE PAGE 27 AND 45 OF THE BUILDERS MANUAL.

1. 34 7/8 INCH LONG PART FROM SALVAGE FLAP OR AILERON.
2. FOLD UP A DOUBLER 10 INCHES LONG FROM .020 ALUMINUM 2024T3. INSTALL WITH 1/8 MONEL POP RIVETS. LAP OVER IN FRONT. RIVET IN FRONT.
3. REMOVE END RIB. FOLD UP A SPAR DOUBLER 10 INCHES LONG FROM .032 2024T3. DRILL OUT RIVETS, PUT DOUBLER IN PLACE AND REPLACE RIVETS. SHORTEN RIB AND PUT IT BACK IN PLACE. USE 1/8 POP RIVETS IN LEADING EDGE.
4. MAKE A DOUBLER 6 INCHES WIDE TO WRAP AROUND THE LEADING EDGE. REMOVE RIVETS AND PUT DOUBLER IN PLACE AND INSTALL WITH 1/8 MONEL POP RIVETS DOWN THE CENTER AND BOTH SIDES.
5. MODIFY WING FIRST, THEN INSTALL FLAP AT ROOT. BUILD THE 34 7/8 EXTENSION ON THE WING USING THE WING AS A JIG.
6. IF YOU DON'T HAVE SALVAGE PARTS TO ADD ONTO THE FLAP, YOU MUST DUPLICATE PARTS OR BUY THEM FROM UNIVAIR.
7. ADD A RIB IN CENTER OF THIS BAY.
8. AFTER THE AIRPLANE IS COVERED YOU MUST INSTALL THE FAIRING STRIP ONTO THE WING. THIS STRIP DOUBLES THE LIFT OF THE FLAPS FOR TAKE OFF.
9. THESE FLAPS ARE SPRING LOADED UP. THE VNE SPEED (VELOCITY NEVER EXCEED) ON THIS AIRPLANE IS 150 MPH. THIS SPEED MUST NEVER BE EXCEEDED. IF YOU DO, CATASTROPHIC FLAP FLUTTER WILL OCCUR. THE FLAPS WILL TEAR OFF AND YOU MAY NOT BE SUCESSFUL IN LANDING THE AIRPLANE.

WING ASSEMBLY ORDER

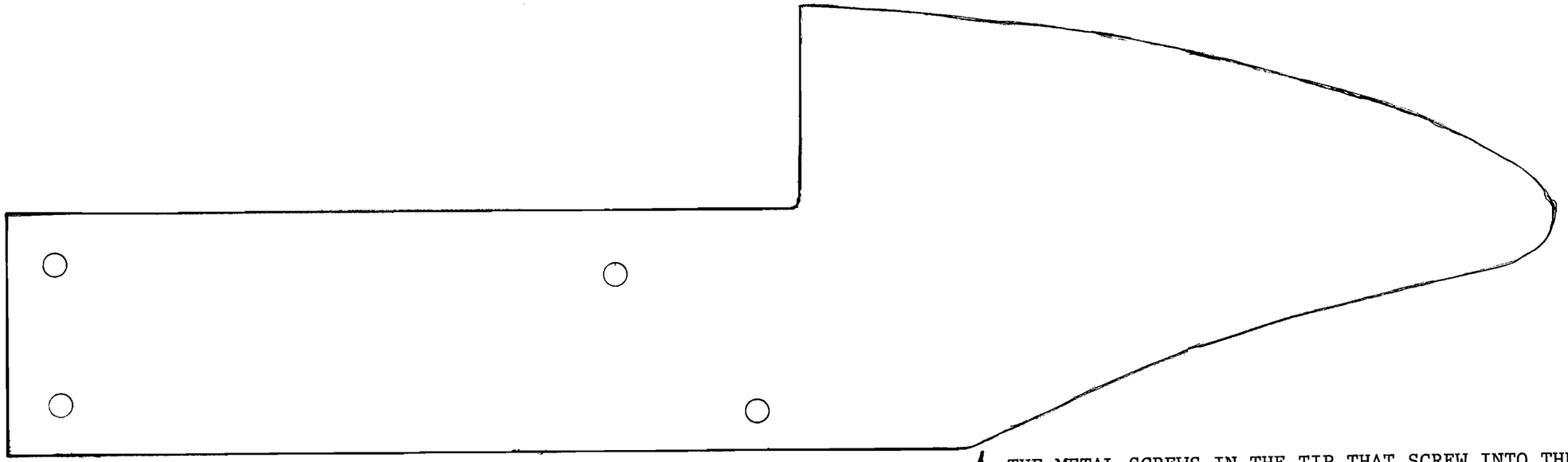
1. Remove tip bow, short rib, and the full rib at the outboard end of the aileron. Remove and replace compression member as necessary. Remove the small doubler on the front spar.
2. Install the -1 doublers.
3. Install -3 and -4 spar web and -2 spar caps with 1/8 rivets. (If the material is over 3/8 you should mill it down to 3/8.)
4. Install 3 short ribs with the aileron cut out. Use a 10 to 12 foot beam on the wing to locate ribs vertically on the spar.
5. Install the aileron slot fairing material. Use parts from a salvage wing or make new parts.
6. Place aileron in place and install bolt at inboard bracket. Use aileron to locate position for the outboard bracket.
7. Install outboard tip rib that was removed in step number 1. Provide 1/2 inch clearance from the aileron. Be sure metal screws are installed to hold the rib, this is all that holds the new tip until the fabric is put on. Install three leading edge ribs.
8. Build the flaps to fit and not necessarily the 87 inch as shown by this drawing. You must have 1/2 inch clearance from the aileron. This will be 1/4 clearance when the flaps and ailerons are covered.
9. Install leading edge metal same as origional. Install the flag 8 drag brace and install the flag 11 brace.
10. Carefully secure the position light and landing light wires.
11. Tape all joints with masking tape. Do not do anything on covering until you watch the STITS tape on covering.
12. Install inspection rings as the origional except that the ones at the aileron pulleys will move outboard to the next bracket.



V6 STOL

QTY.	PART NO.	NAME OF PART	SIZE GAUGE	MATERIAL
8	-7	BUSHING	7/16 X .065	4130
8	-6	STRUT FITTING DOUBLER	.09 OR .095	4130N
2	-5	LEADING EDGE DOUBLER		
2	-4	SPAR DOUBLER		
2	-3	TRAILING EDGE DOUBLER		
1	-2	RIGHT FLAP		
1	-1	LEFT FLAP		

SCALE 1/4 FULL	DRAWN BY	D.D. BLANTON	MODEL V6 STOL
TOLERANCE	CHECKED BY	"	JAVELIN AIRCRAFT CO. INC. WICHITA, KANSAS
	STRESS CHK.	"	
DATE APRIL 89	APPROVED BY	D. Blanton	
FLAP AND STRUT MODIFICATION			DRAWING NO. 462 SHEET 0

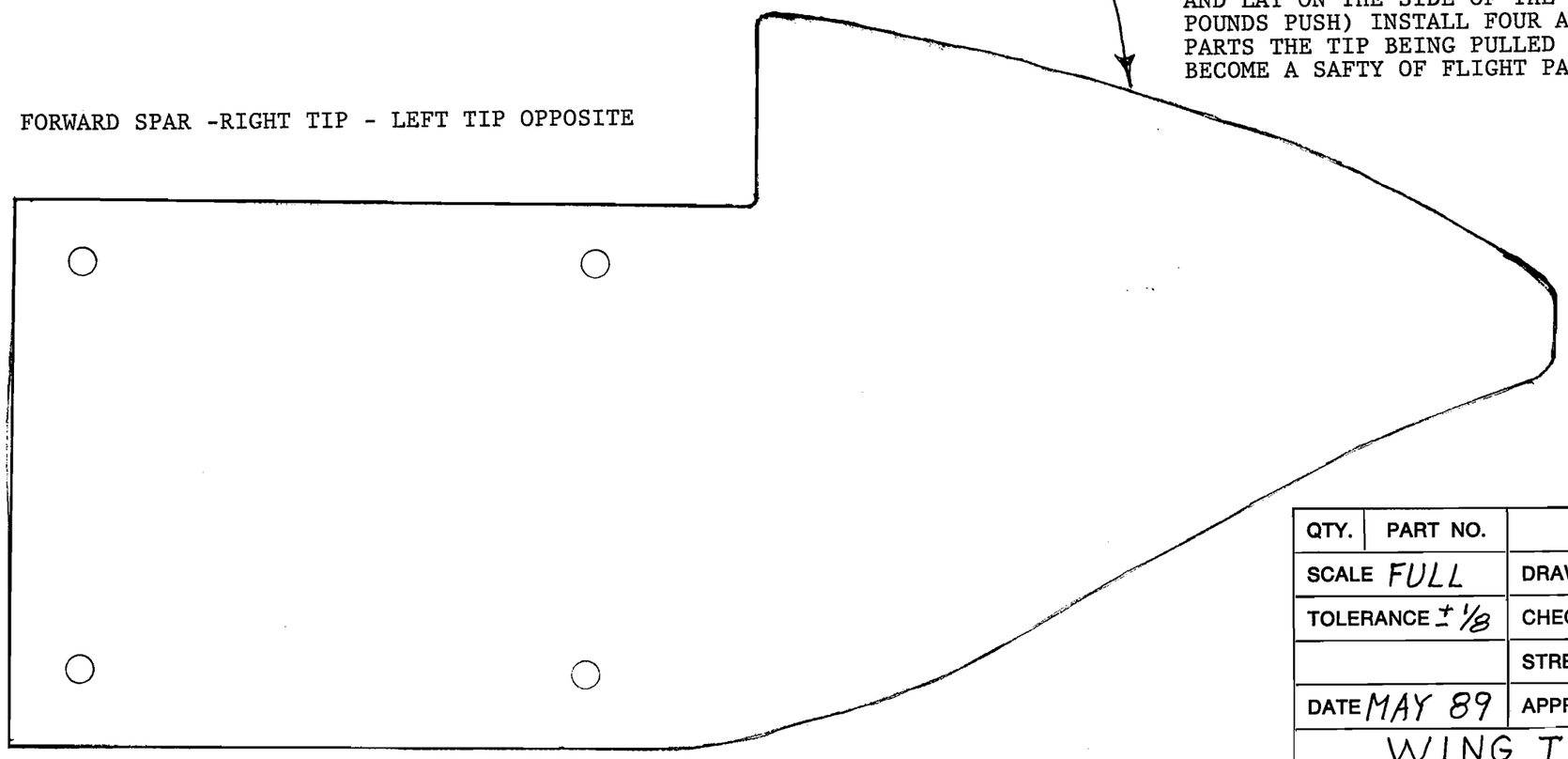


REAR SPAR - RIGHT TIP - LEFT TIP OPPOSITE

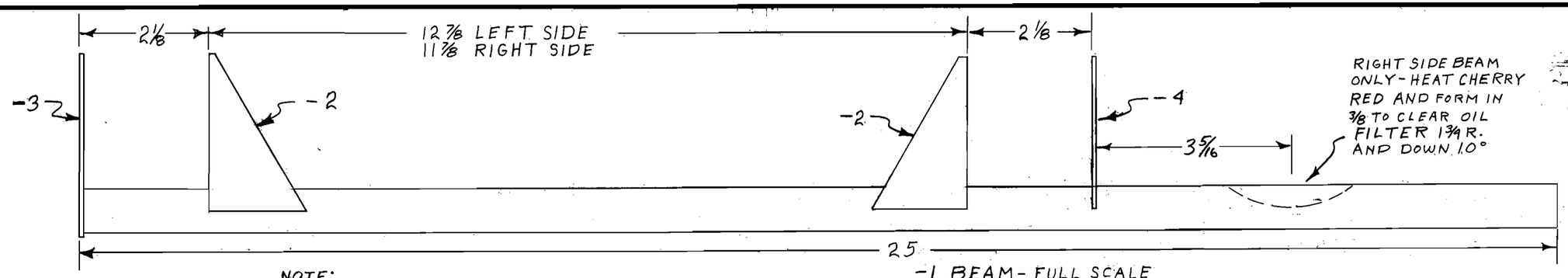
CONTOUR TO FIT YOUR TIPS

THE METAL SCREWS IN THE TIP THAT SCREW INTO THE TIP RIB ONLY HOLD IT IN PLACE WHILE YOU PUT THE FABRIC ON. ONCE THE AIRPLANE IS COVERED THE TIP IS HELD ON BY THE FABRIC. BUT AS THE FABRIC SHRINKS IT CAN PULL THE TIP INBOARD, THE LITTLE SCREWS IN THE RIB TO THE SPAR CANNOT HOLD THIS LOAD. THE RIB WILL DEFLECT AT LEAST 1/2 INCH. YOU MUST MAKE TWO PLYWOOD PARTS FOR EACH WING TIP FROM 3/8 FIR PLYWOOD THAT FIT INSIDE THE FIBERGLASS TIP AND LAY ON THE SIDE OF THE SPAR. WITH THESE PARTS PUSHED OUT TIGHT (50 POUNDS PUSH) INSTALL FOUR AN3 BOLTS IN EACH ONE. IF YOU DON'T INSTALL THESE PARTS THE TIP BEING PULLED INBOARD WILL JAM THE AILERON. THESE PARTS BECOME A SAFTY OF FLIGHT PART SO DO A GOOD JOB.

FORWARD SPAR -RIGHT TIP - LEFT TIP OPPOSITE



QTY.	PART NO.	NAME OF PART		SIZE GAUGE	MATERIAL
SCALE FULL		DRAWN BY	D.D. BLANTON	MODEL V6 STOL	
TOLERANCE ± 1/8		CHECKED BY	"	JAVELIN AIRCRAFT CO. INC. WICHITA, KANSAS	
		STRESS CHK.	"		
DATE MAY 89		APPROVED BY	D. Blanton		
WING TIP SUPPORTS				DRAWING NO. 464	SHEET 0



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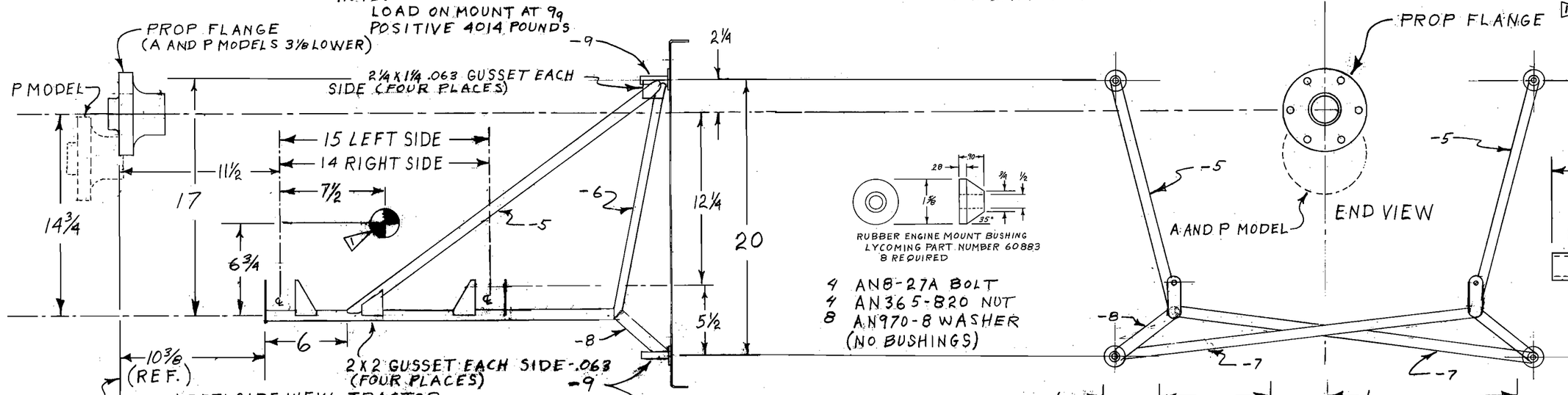
NOTE:
LOAD ON MOUNT AT 9g
POSITIVE 4014 POUNDS



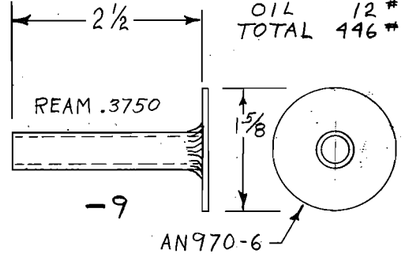
RUBBER ENGINE MOUNT BUSHING
LYCOMING PART NUMBER 60883
8 REQUIRED

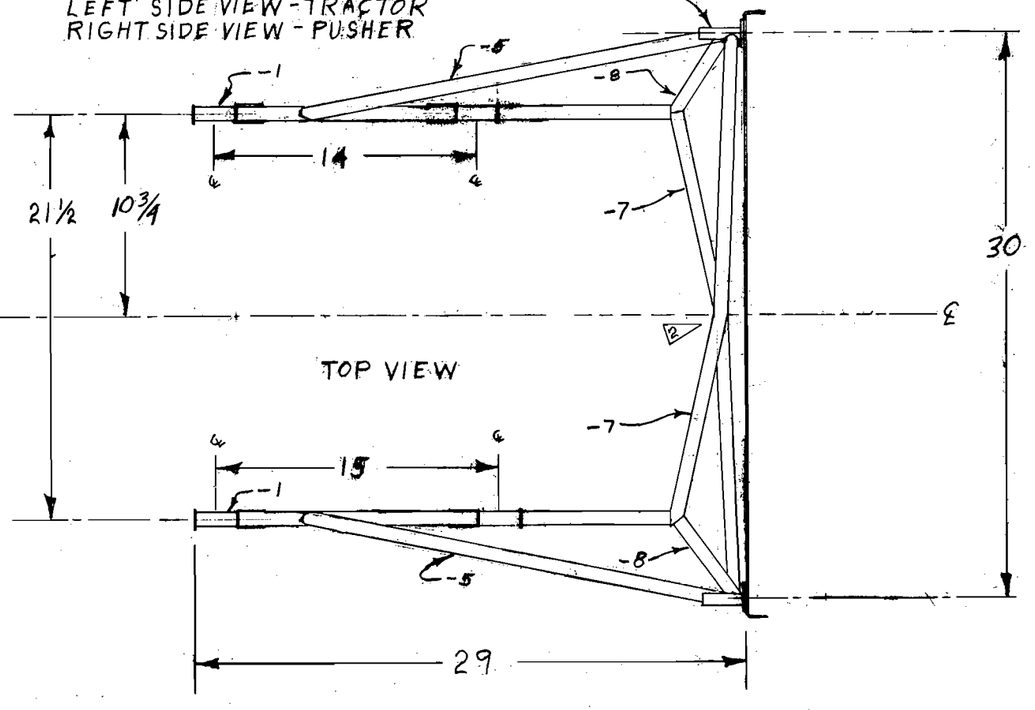
4 AN8-27A BOLT
4 AN365-820 NUT
8 AN970-8 WASHER
(NO BUSHINGS)

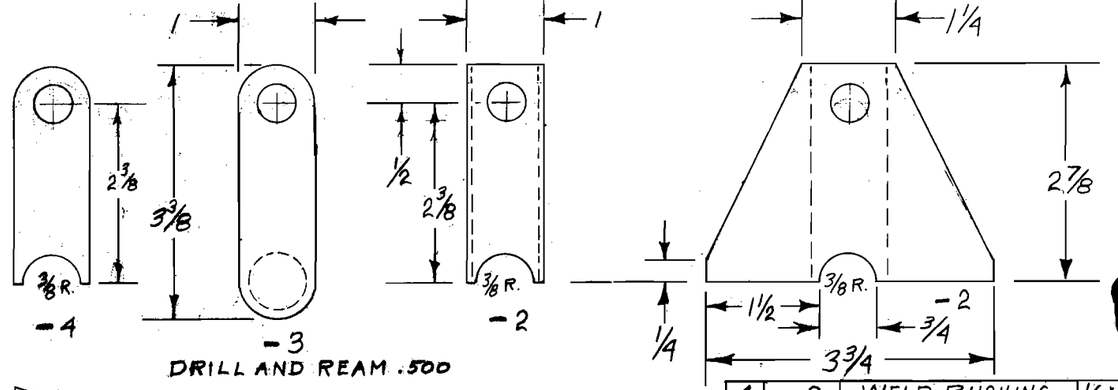
1 LONGITUDINAL AND VERTICAL CENTER OF GRAVITY OF ENGINE AND PROPELLER COMBINATION.

WEIGHTS

DRY ENGINE	387#
PROPELLER	35#
COOLANT	12#
OIL	12#
TOTAL	446#







2 HEAT TUBE TO CHERRY RED AND BEND 1 INCH BEFORE INSTALLATION. THIS STRUCTURE IS ORIENTATED TO CLEAR THE HARMONIC DAMPENER ON THE REAR OF THE CRANKSHAFT.

THIS IS A TYPICAL ENGINE MOUNT FOR THE JAVELIN FORD 230 CUBIC INCH V6
THE FIRE WALL DIMENSIONS SHOWN ARE FOR WICHAWK AND PIPER PACER SERIES
CHANGE FIRE WALL DIMENSIONS AND LENGTH TO FIT YOUR HOMEBUILT.

GAS WELD
CLEAN AND PRIME - PAINT (BLACK)

THIS DRAWING IS PHOTOGRAPHICALLY REDUCED 50% FROM THE ORIGINAL TO ALLOW IT TO BE PRINTED BY OFFSET PRESS.

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QTY.	PART NO.	NAME OF PART	SIZE GAUGE	MATERIAL
4	-9	WELD BUSHING	½ X .063	4130
2	-8	LEG	¾ X .035	4130
2	-7	BRACE	¾ X .035	4130
2	-6	SUPPORT	¾ X .035	4130
2	-5	SUPPORT	¾ X .049	4130
2	-4	LUG	.063	4130
2	-3	LUG	.063	4130
4	-2	LUG	.063	4130
2	-1	BEAM	¾ X .049	4130

SCALE FULL 1/4	DRAWN BY	D. BLANTON	MODEL 230V6 & A & P
TOLERANCE ± 1/16	CHECKED BY	"	JAVELIN AIRCRAFT CO. INC. WICHITA, KANSAS
	STRESS CHK.	"	
DATE SEPT. 83	APPROVED BY	R. Blanton	

ENGINE MOUNT

DRAWING NO. 468 SHEET 0

ALUMINUM BAR WEIGHT
5/16" X 1 1/4" X 12' = 5.52 POUNDS
5/16" X 1 1/2" X 12' = 6.62 POUNDS

AVAILABLE FROM
EARL M. JORGENSEN CO.
THEY HAVE 22 WAREHOUSES
NATION WIDE.

10,998 POUNDS ÷ 31 STATIONS = 35.47 EACH

PA-14
35 FOOT 5 1/2 INCH SPAN X 12 = 425 1/2 INCHES
-29 INCH CABIN = 396
SEMI SPAN 198 INCHES

GROSS WEIGHT
NORMAL CATEGORY 1850 POUNDS
UTILITY CATEGORY 1550 POUNDS
THIS IS A CAR PART 03 AIRPLANE
APPROVED FOR 9g ULTIMATE IN
UTILITY CATEGORY

GROSS WEIGHT 1550 #
LESS WING WEIGHT 220 #
LESS FUEL WEIGHT 108 # = 1/2
NET WEIGHT 1222 #

LOAD AT 9g ULTIMATE 10,998

NOTE: FUEL WEIGHT IS REACTING IN WING OF ALL THREE OF THESE AIRPLANES.

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PA-22 DOUBLER 24 INCH
7 1/2 OZ. TOTAL .095 WALL
1/8 RIVETS 2 INCH CENTER
THESE ARE REMOVED

5/16" X 1 1/4" X 6' 6061T4 EACH SIDE
3/16 STEEL BOLT ON 2 INCH CENTER

SECTION A-A

ANALYSIS OF SECTION A-A REVEALED POSITIVE MARGINS OF SAFTY ON BOTH THE TENSION AND COMPRESSION SIDES OF SPAR.

9143 ÷ 25 STATIONS = 36.57 EACH

ROUND TIP
LOOSE 6.7 SQ. FT.

PA-22
29 FOOT 8 INCH SPAN X 12 = 351 INCHES
-36 INCH CABIN = 315
SEMI SPAN 157 INCHES

THIS IS A FAR PART 3 AIRPLANE
APPROVED FOR 3.8 SAFE LOAD
5.7 ULTIMATE IN STANDARD
CATEGORY

GROSS WEIGHT 2000 #
LESS WING WEIGHT 180 #
LESS FUEL WEIGHT 216 #
NET WEIGHT 1604 #

LOAD AT 5.7g ULTIMATE 9,143

HORNER TIP

9998 ÷ 31 STATIONS = 32.25 EACH

17 INCHES ADDED TO TIP - 14 SQ. FT. ADDED EACH TIP

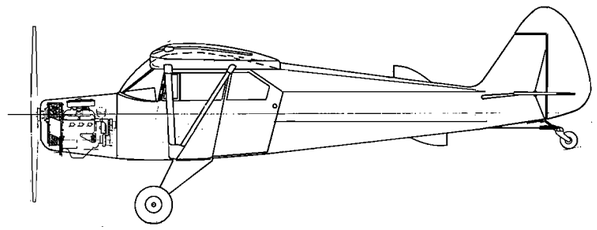
V6 STOL
32 FOOT SPAN X 12 = 384 INCHES
-36 INCH CABIN = 348
SEMI SPAN 174 INCHES

GROSS WEIGHT 2200 #
LESS WING WEIGHT 230 #
LESS FUEL WEIGHT 216 #
NET WEIGHT 1754 #

LOAD AT 5.7g ULTIMATE 9,998

INCLUDES 11 POUNDS FOR ADDED BEAMS

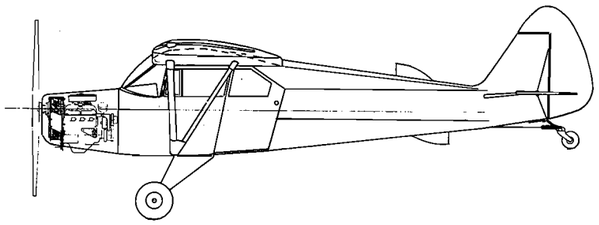
NEW DOUBLER



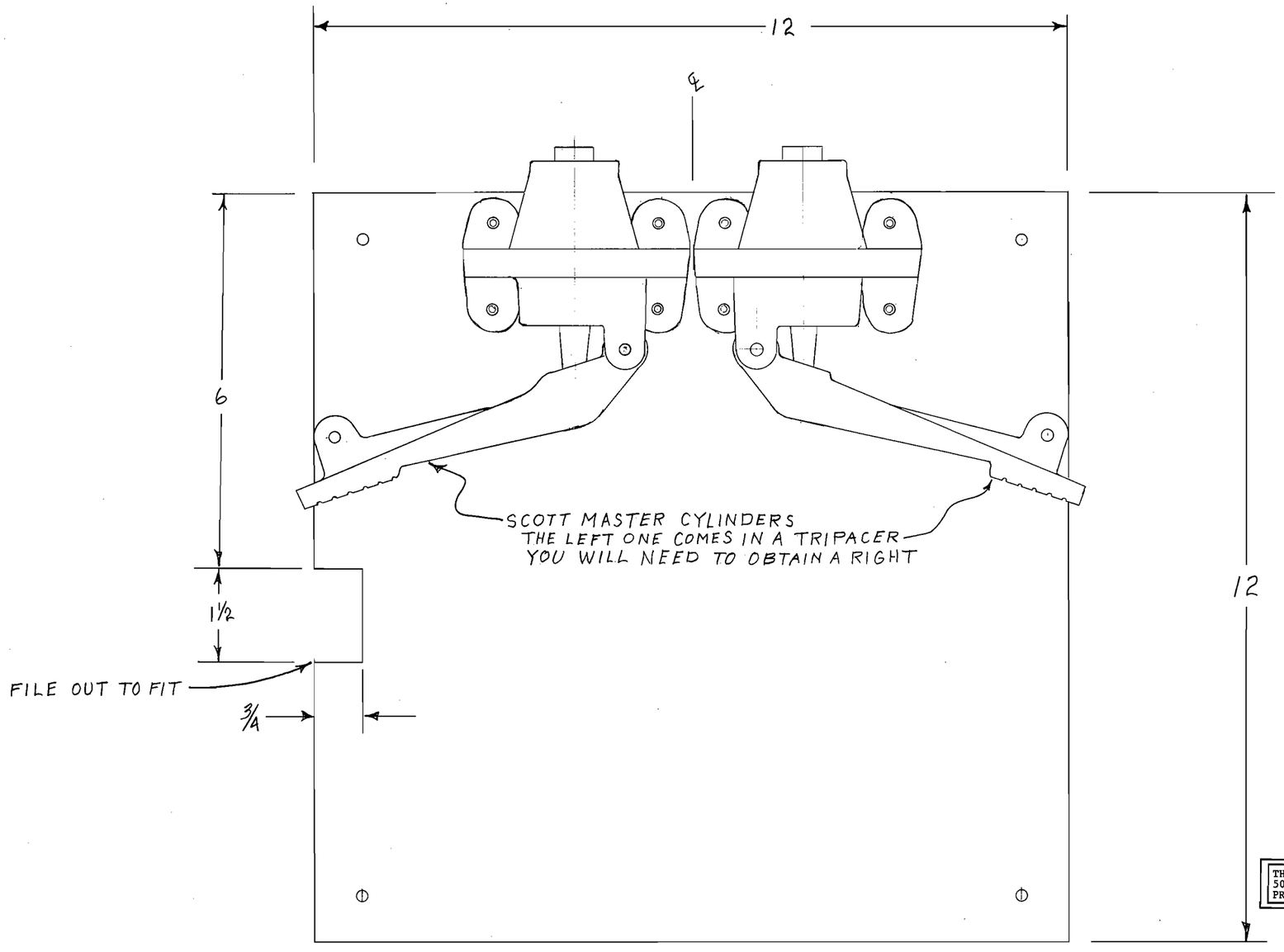
V6 STOL

THIS DRAWING IS PHOTOGRAPHICALLY REDUCED 50% FROM THE ORIGINAL TO ALLOW IT TO BE PRINTED BY OFFSET PRESS.

QTY.	PART NO.	NAME OF PART	SIZE GAUGE	MATERIAL
SCALE 1/8		DRAWN BY D.D. BLANTON	MODEL V6 STOL	
TOLERANCE ±.010		CHECKED BY	JAVELIN AIRCRAFT CO. INC. WICHITA, KANSAS	
		STRESS CHK. N. Eischen		
DATE MARCH 69		APPROVED BY D Blanton		
WING AIRLOAD AND STRESS ANALYSIS			DRAWING NO. 461	SHEET 0



V6 STOL



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COUNTER SINK THE FOUR CORNER HOLES
CLEAN CARPET HARDWARE FROM FLOOR
BOLT PLATE TO FLOOR
INSTALL 8 AN3 BOLT THROUGH EXISTING FLOOR.
TO MOUNT CYLINDERS.

PLATE SHOULD BE BUFFED AND POLISHED
INSTALL ON LEFT SIDE IN FRONT OF PILOT

SEE PAGE 20 OF THE BUILDERS MANUAL

THIS DRAWING IS PHOTOGRAPHICALLY REDUCED 50% FROM THE ORIGINAL TO ALLOW IT TO BE PRINTED BY OFFSET PRESS.

QTY.	PART NO.	NAME OF PART	SIZE GAUGE	MATERIAL
1	-1	PLATE	1/8	HARD ALUM.

SCALE FULL	DRAWN BY	D.D. BLANTON	MODEL V6 STOL
TOLERANCE ± 1/8	CHECKED BY	"	JAVELIN AIRCRAFT CO. INC. WICHITA, KANSAS
	STRESS CHK.	"	
DATE FEB 89	APPROVED BY	D. Blanton	

BRAKE PEDALS — DRAWING NO. 459 — SHEET 0

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NOTE: TOW HITCH MAY BE USED FOR:
HAND PROPPING
GROUND RUNNING
GLIDER TOWING
BANNER TOWING

NOTE: ALWAYS LEAVE HITCH OPEN EXCEPT WHEN IN USE. IT WILL RUIN THE RUBBER IF LEFT CLOSED

TAIL WHEEL BRACKET

1/4 COPPER TUBE FOR RELEASE CABLE

DRILL ON ℄ OF FUSELAGE TO RECEIVE DIMPLE OF TAIL SPRING

AN6-21A BOLT
AN960D616 WASHER
AN365-629 NUT

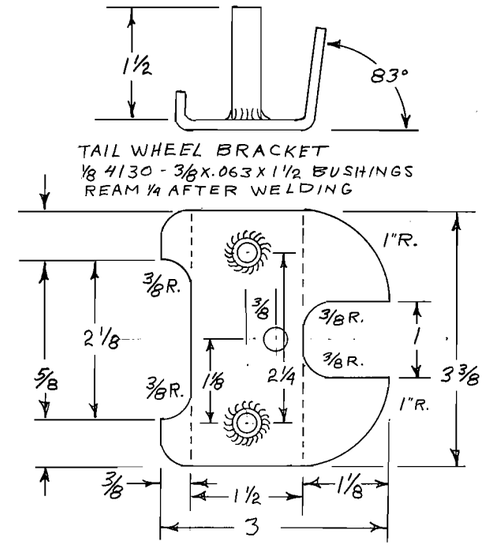
AN4-31A BOLT
AN960D416 WASHER
AN365-428 NUT

TAIL WHEEL STEERING SPRINGS
7 1/4 LENGTH 1 1/4 DIA. 33 COILS .157 WIRE 34# PRELOAD 30# MINIMUM 35# MAXIMUM
NOTE: WEAKER SPRING WILL NOT STEER AND WILL ALLOW GROUND LOOP.

UNIVAIR AIRCRAFT CORPORATION
ROUTE 3 BOX 59 AURORA COLORADO 80010
CHAMPION 3-428 ONE-1 TWO-2 ONE-3
ONLY BOTTOM LEAF HAS ROUND HOLE TO MOUNT TAIL WHEEL - SLOT TWO TOP LEAFS 3/8" (BOLT WILL SHEAR IF TOP LEAFS ARE NOT SLOTTED)
LEAFS ARE 1 1/2 WIDE

NOTE: This drawing shows the Wichawk tail spring for your V6 Stol, use the standard aeronca 3-428 tail spring with 3 leaves. You can add another -2 leaf if you need it. Cessna and Piper springs are too narrow.

1/2 NAS SOCKET HEAD TENSION BOLT
CHAMFERED WASHER UNDER HEAD
LARGE STEEL WASHER AT BOTTOM
AN365-820 NUT NOTE: AN BOLT IS NOT ADEQUATE TO MOUNT TAIL WHEEL

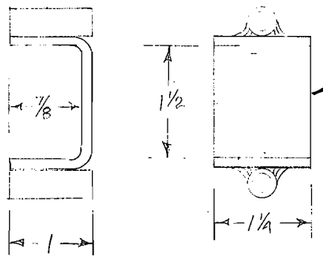


TAIL WHEEL BRACKET
1/8 4130 - 3/8x.063x1 1/2 BUSHINGS
REAM 1/4 AFTER WELDING

5/16 HOLE IN CENTER TO RECEIVE DIMPLE

0°
3°

AT GROSS WEIGHT, RE-ARCH EACH LEAF AS NECESSARY TO OBTAIN THIS ANGLE TO PREVENT SHIMMY.
NOTE: SHIMMY WILL UNLOCK TAIL WHEEL AND ALLOW A GROUNDLOOP.
NOTE: IF YOU DON'T HAVE THIS NEGATIVE ANGLE THE TAIL WHEEL WILL SHIMMY SO VIOLENT IT WILL BREAK STRUCTURE.
3° IS MINIMUM 6° IS BETTER.
NOTE: THEIR MUST BE SIX SHIMMY DAMPENER SPRINGS INSIDE THE TAIL WHEEL.



TAIL SPRING BRACKET (WELDED ASSEMBLY)
1/8 4130
3/8 X.063X1 BUSHINGS
REAM 1/4 AFTER WELDING

THIS TOW HITCH INSTALLATION HAS BEEN IN SERVICE WITH PERFECT PERFORMANCE SINCE 1971.

DISASSEMBLE TOW HITCH AND BRAZE AS SHOWN
MAKE SMOOTH FILLET
CADMIUM PLATE ASSEMBLY

3/32 7X19 CABLE

11/16 X 4
WELD 90°

NICOPRESS SLEEVE AND THIMBLE

MAKE A STEEL BLOCK 1 1/2 WIDE WITH 1/8 R. CORNERS. DRILL TWO 1/4 HOLES.

MAKE TAIL WHEEL BRACKET FROM 1/8 4130 STEEL.

BOLT BRACKET TO BLOCK. HEAT BRACKET TO CHERRY RED AND FORM.

MAKE TWO BUSHINGS FROM 3/8x.063 4130 STEEL.

DRILL 2 1/4 HOLES IN BRACKET.

INSTALL 1/4 BOLTS AND WELD AS SHOWN.

HEAT AND DENT TUBES IN FUSELAGE UNTIL BRACKET WILL SLIDE IN PLACE.

WITH THE CABIN LEVEL USE A BUBBLE TO SET BRACKET LEVEL - CLAMP IN PLACE.

WELD UP TAIL POST IN REAR - WELD ALONG EACH LANGERON - WELD THE TWO BUSHINGS TO THE LANGERON.

USE THE SAME FORM BLOCK TO FORM THE TAIL SPRING BRACKET.

USE THE TAIL WHEEL BRACKET TO HOLD THE BUSHINGS TO WELD.

CLEAN AND PAINT ALL PARTS WITH PRIMER AND FINISH COAT.

SEE PAGE 27 OF THE BUILDERS MANUAL.

5°

3200 SERIES
8" SCOTT TAIL WHEEL (MANY DOLLARS BUT THIS IS THE ONLY ONE TO USE DUE TO SHIMMY DAMPENER).

℄ RELEASE POINT

RUBBER BUMPER

10

5

FORK

3/32 7X19 CABLE

.063 4130

TURNBUCKLE

ADD A SPRING TO HOLD HANDLE DOWN

TOW HITCH RELEASE HANDLE CHROME PLATE

SCHWEIZER TOW HITCH SAW OFF AS SHOWN

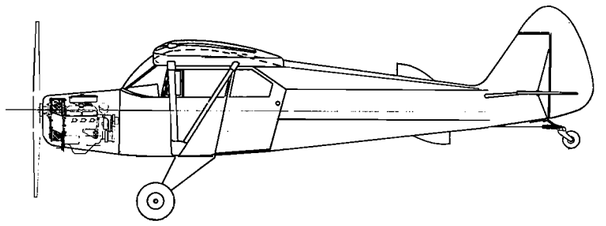
1/4 COPPER TUBE-ROUTE TO TAIL FLAR ENDS - OIL CABLE ON ASSEMBLY

THIS DRAWING IS PHOTOGRAPHICALLY REDUCED 50% FROM THE ORIGINAL TO ALLOW IT TO BE PRINTED BY OFFSET PRESS.

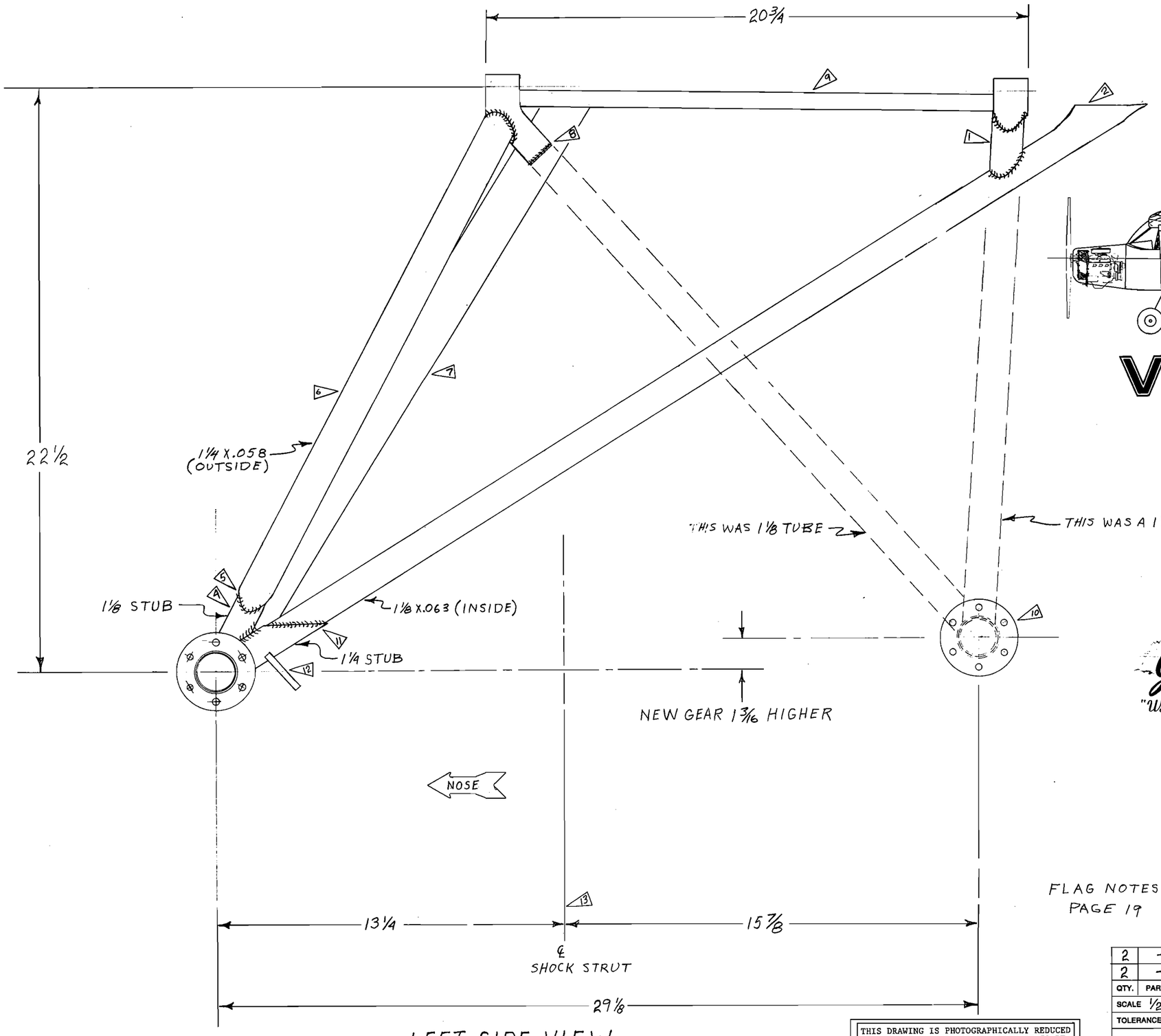
V6 STOL

QTY.	PART NO.	NAME OF PART	SIZE GAUGE	MATERIAL
1	-2	TAIL SPRING BRACKET	1/8	4130
1	-1	TAIL WHEEL BRACKET	1/8	4130

SCALE FULL	DRAWN BY	D.D. BLANTON	MODEL V6 STOL
TOLERANCE ± 1/16	CHECKED BY	"	JAVELIN AIRCRAFT CO. INC. WICHITA, KANSAS
	STRESS CHK.	"	
DATE FEB. 1989	APPROVED BY	D. Blanton	
TAIL WHEEL INSTALLATION			DRAWING NO. 457 SHEET 0



V6 STOL



LEFT SIDE VIEW

OUR 36TH ANNIVERSARY

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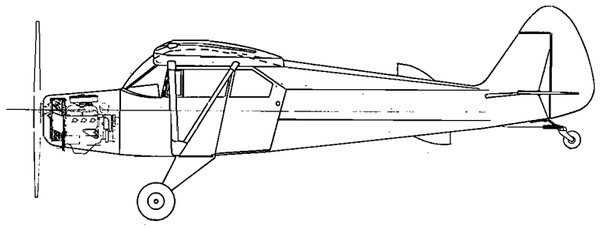
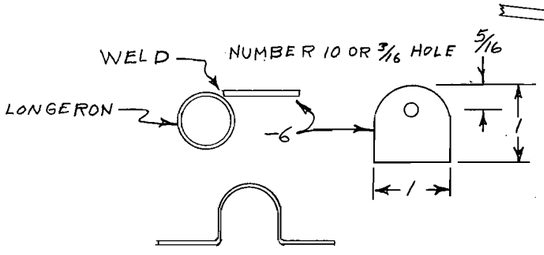
FLAG NOTES ARE IN BUILDERS MANUAL PAGE 19

THIS DRAWING IS PHOTOGRAPHICALLY REDUCED 50% FROM THE ORIGINAL TO ALLOW IT TO BE PRINTED BY OFFSET PRESS.

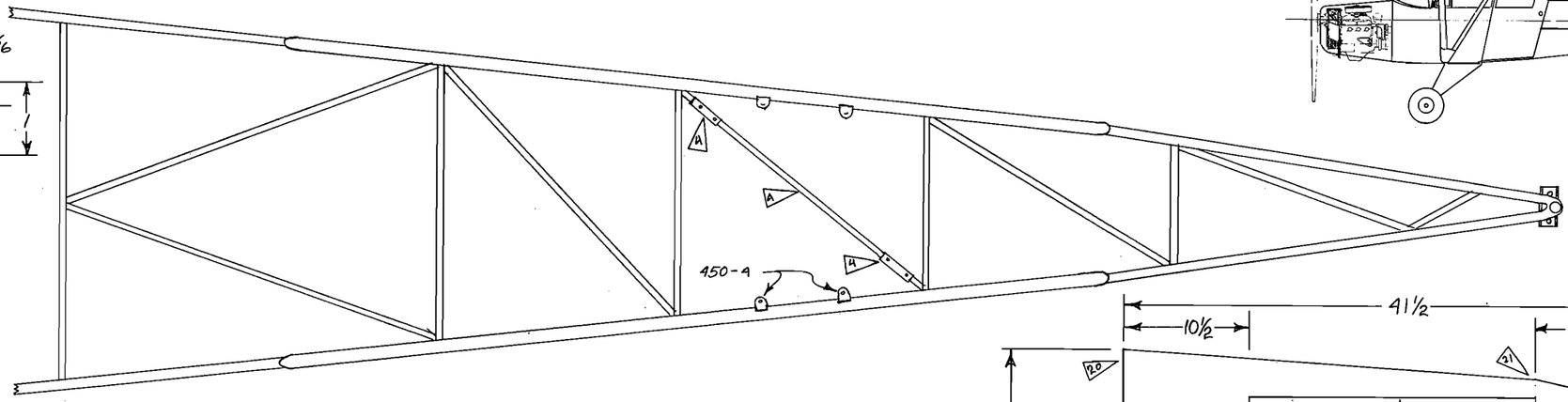
QTY.	PART NO.	NAME OF PART	SIZE GAUGE	MATERIAL
2	-2	REAR TUBE	1 1/8 X.063	4130
2	-1	FORWARD TUBE	1 1/4 X.058	4130

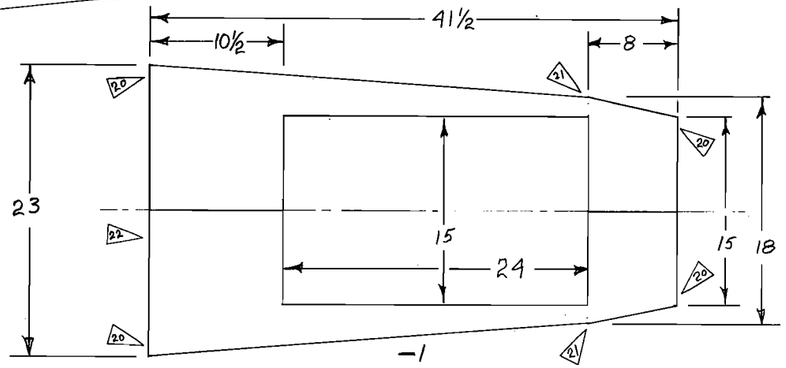
SCALE 1/2	DRAWN BY	D.D. BLANTON	MODEL V6 S10L
TOLERANCE ± 1/16	CHECKED BY	"	JAVELIN AIRCRAFT CO. INC. WICHITA, KANSAS
	STRESS CHK.	"	
DATE FEB 89	APPROVED BY	D. Blanton	
LANDING GEAR			DRAWING NO. 455 SHEET 0



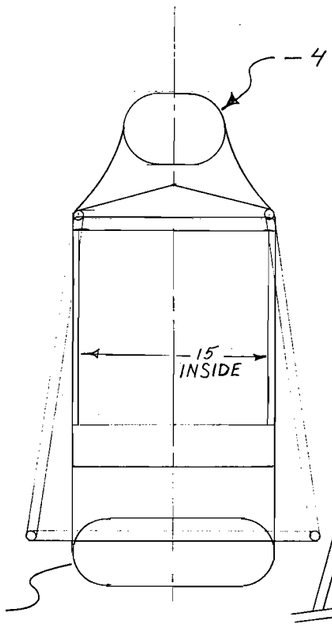


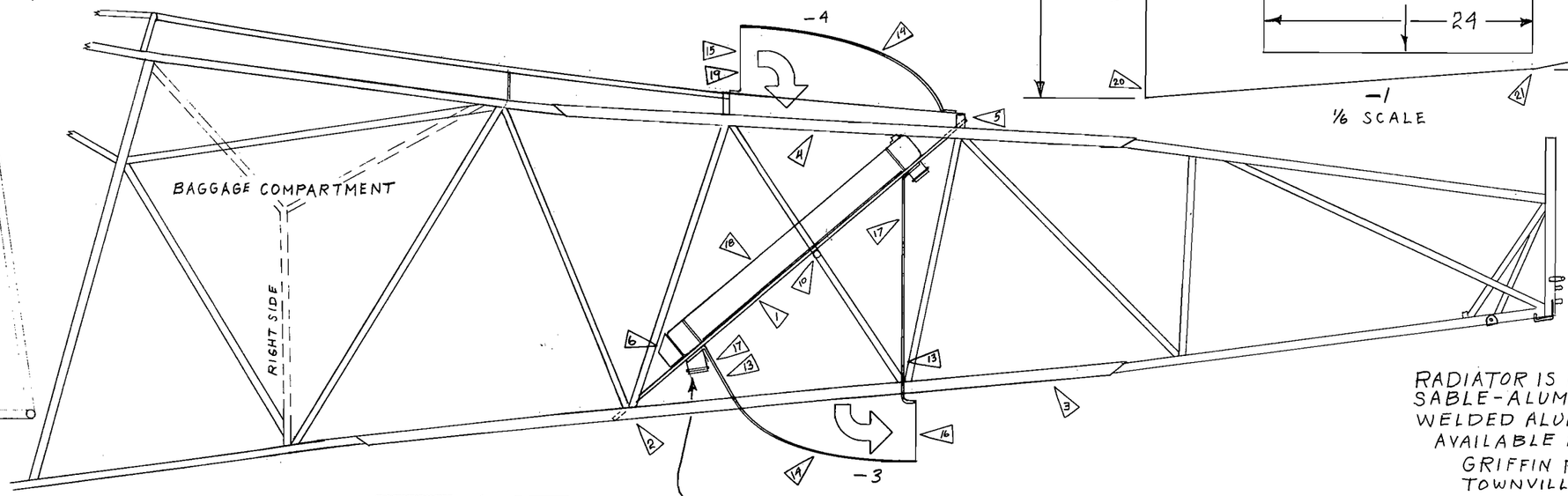
MAKE TO FIT TUBE SIZE
TWO NO. 10 HOLES
INSTALL WITH TWO
AN3 BOLTS AN365-1032 NUTS

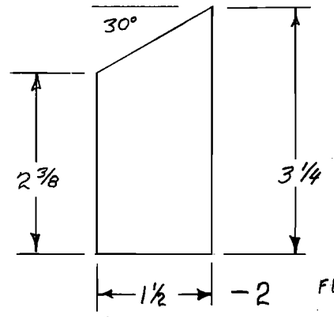




1/6 SCALE







FULL SCALE

1½ COLD NECK-WELD AT 40°.
RADIATOR MUST HAVE 1/8 N.P.T. (OR 1/4 N.P.T.).
AIR BLEED VALVE FITTING
AT TOP.
TOP NECK IS 1½ INCH.
MOUNTING FLANGE OF CORE
ON SAME SIDE AS NECKS.

RADIATOR IS FORD TAURUS AND
SABLE-ALUMINUM CORE WITH
WELDED ALUMINUM TANKS.
AVAILABLE FROM
GRIFFIN RACING RADIATORS
TOWNVILLE SOUTH CAROLINA
1-800-RACE RAD

OUR TOP 36TH ANNIVERSARY

THIS DRAWING IS PHOTOGRAPHICALLY REDUCED 50% FROM THE ORIGINAL TO ALLOW IT TO BE PRINTED BY OFFSET PRESS.

V6 STOL

SEE PAGE 21
OF THE
BUILDERS MANUAL

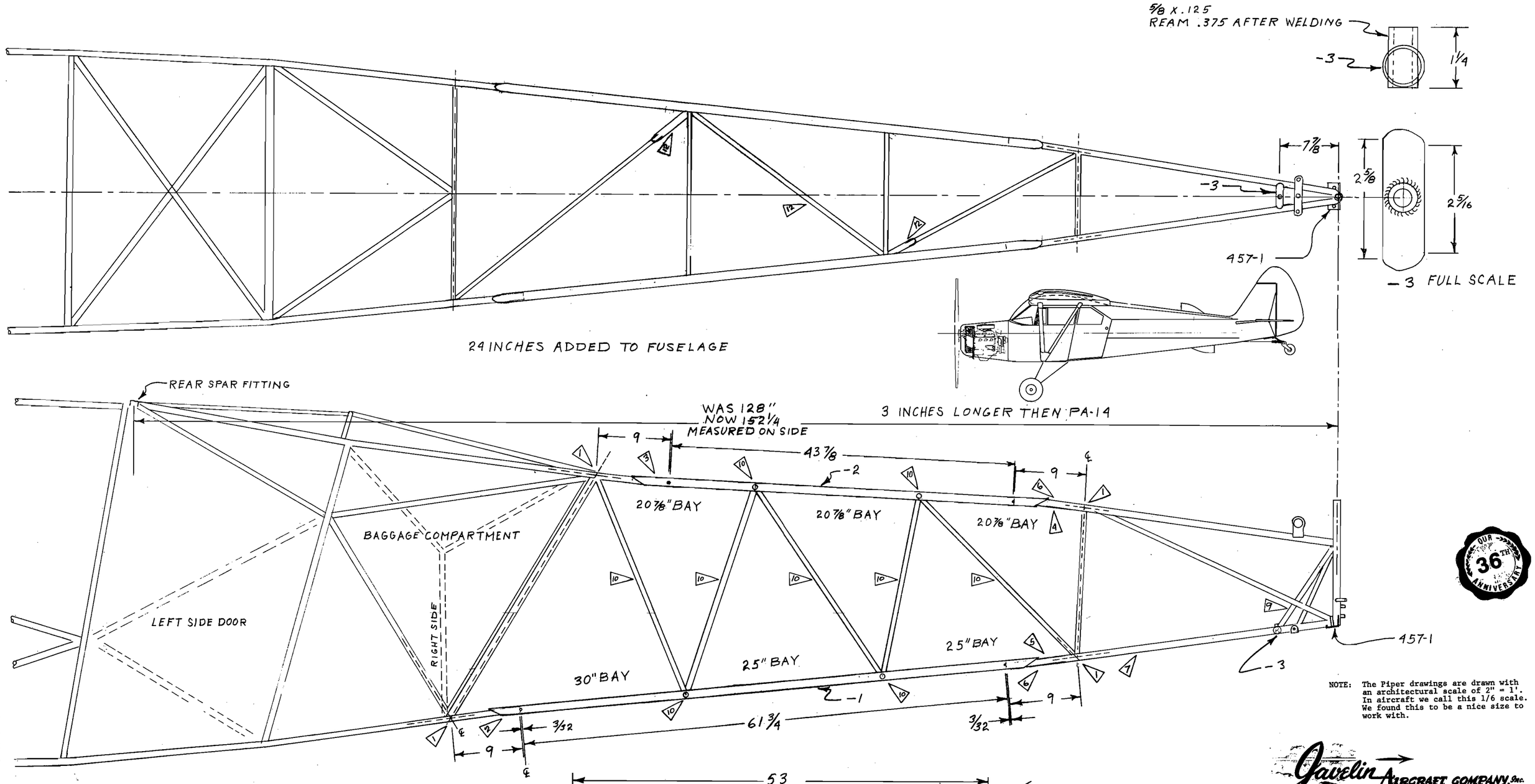
QTY.	PART NO.	NAME OF PART	SIZE GAUGE	MATERIAL
4	-6	WELD TAB	.063	4130
10	-5	CLAMP	.063	ALUM.
1	-4	TOP SCOOP		A
1	-3	BOTTOM SPILL		A
1	-2	SUPPORT BLOCK	CLEAR	W. PINE
1	-1	BASE PLATE	3/8 EXT.	AA FIR

SCALE NOTED	DRAWN BY	D.D. BLANTON	MODEL V6 STOL
TOLERANCE ±1/8	CHECKED BY	"	JAVELIN AIRCRAFT CO. INC. WICHITA, KANSAS
	STRESS CHK.	"	
DATE FEB 89	APPROVED BY	D Blanton	

RADIATOR INSTALLATION

DRAWING NO. 453 | SHEET 0

Javelin Aircraft Company, Inc.
PHONE 316/733-1011 MUNICIPAL AIRPORT AUGUSTA, KANSAS 67010
"World's leading manufacturer of special aircraft fuel systems"



NOTE: The Piper drawings are drawn with an architectural scale of 2" = 1'. In aircraft we call this 1/6 scale. We found this to be a nice size to work with.

OUR 36TH ANNIVERSARY

Javelin Aircraft Company, Inc.
PHONE 316/733-1011 MUNICIPAL AIRPORT AUGUSTA, KANSAS 67010
"World's leading manufacturer of special aircraft fuel systems"

SEE PAGE 13 OF THE BUILDERS MANUAL

V6 STOL

QTY.	PART NO.	NAME OF PART	SIZE GAUGE	MATERIAL
1	-3	CROSS MEMBER	7/8X.065	4130
2	-2	SPLICE TUBE	7/8X.035	4130
2	-1	SPLICE TUBE	7/8X.035	4130

SCALE NOTED	DRAWN BY	D.D. BLANTON	MODEL V6 STOL
TOLERANCE ± 1/8	CHECKED BY	"	JAVELIN AIRCRAFT CO. INC. WICHITA, KANSAS
	STRESS CHK.	"	
DATE JAN 87	APPROVED BY	D Blanton	
FUSELAGE EXTENSION			DRAWING NO. 457 SHEET 0