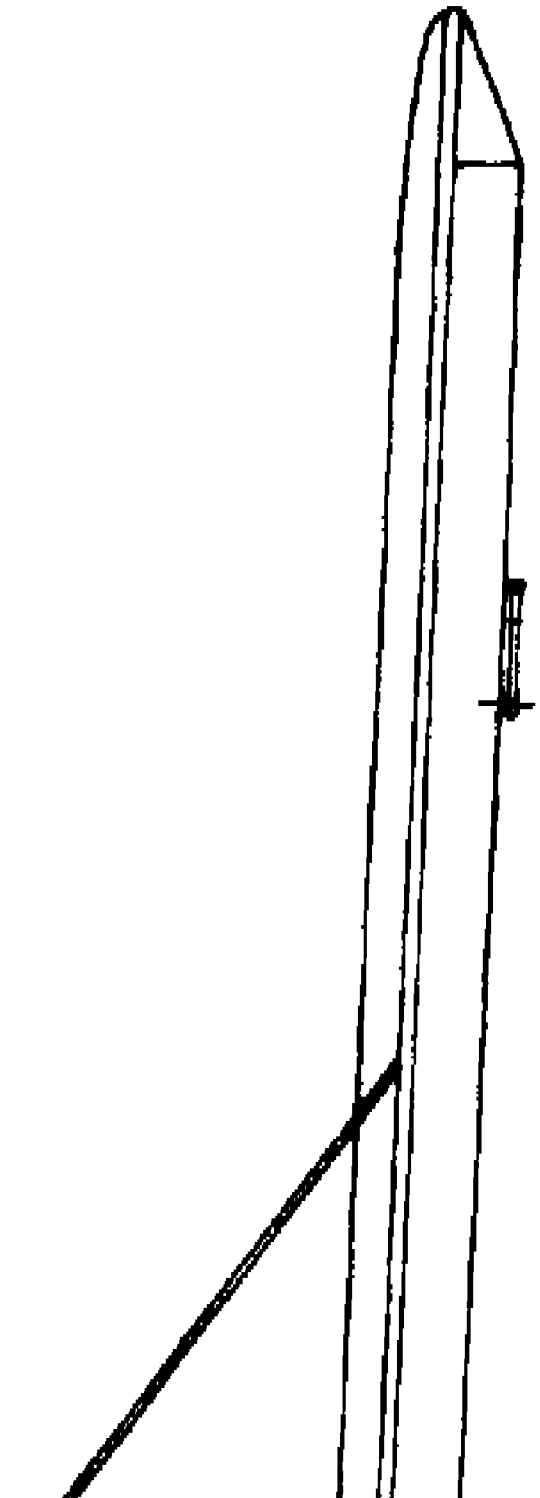
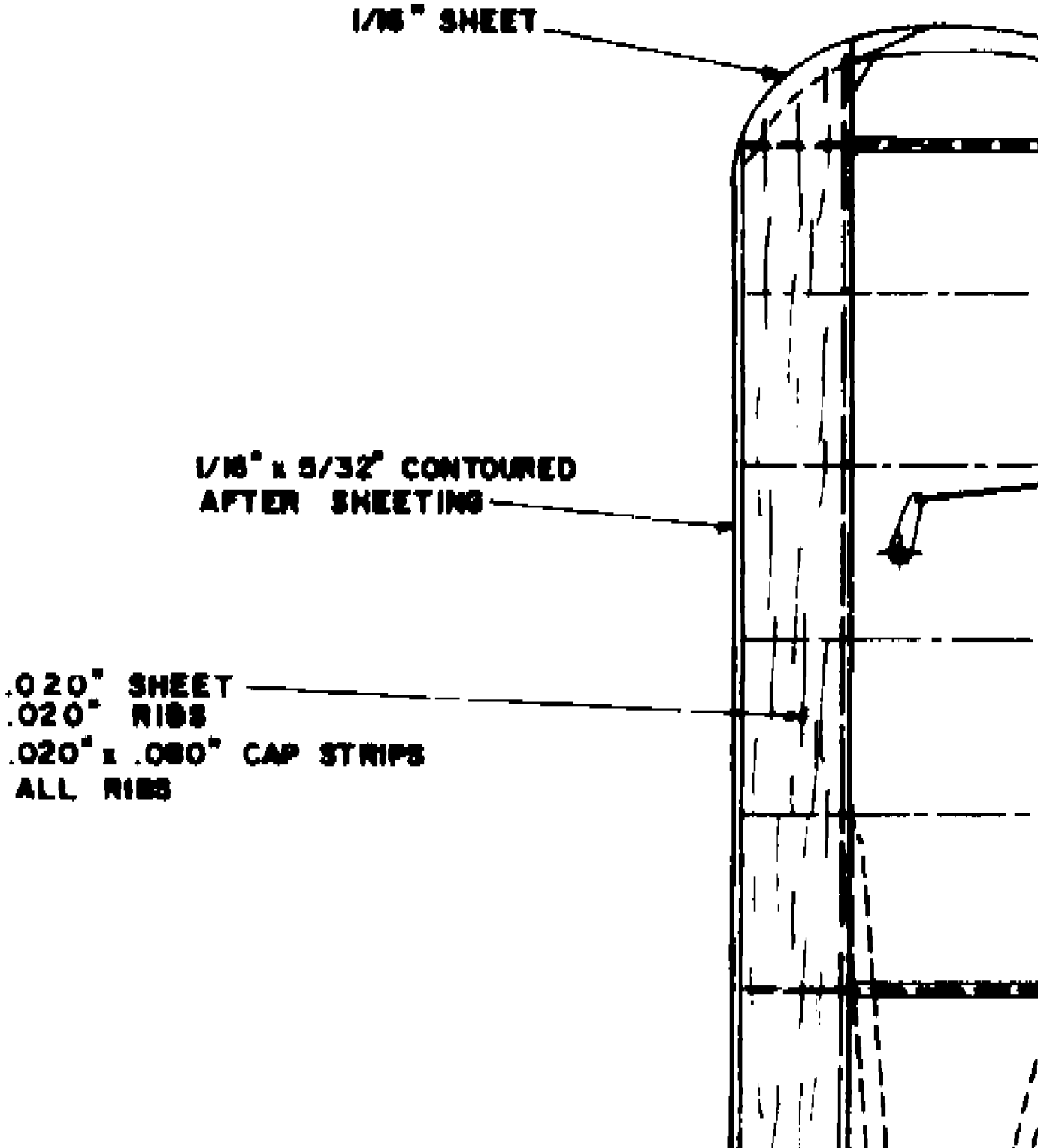
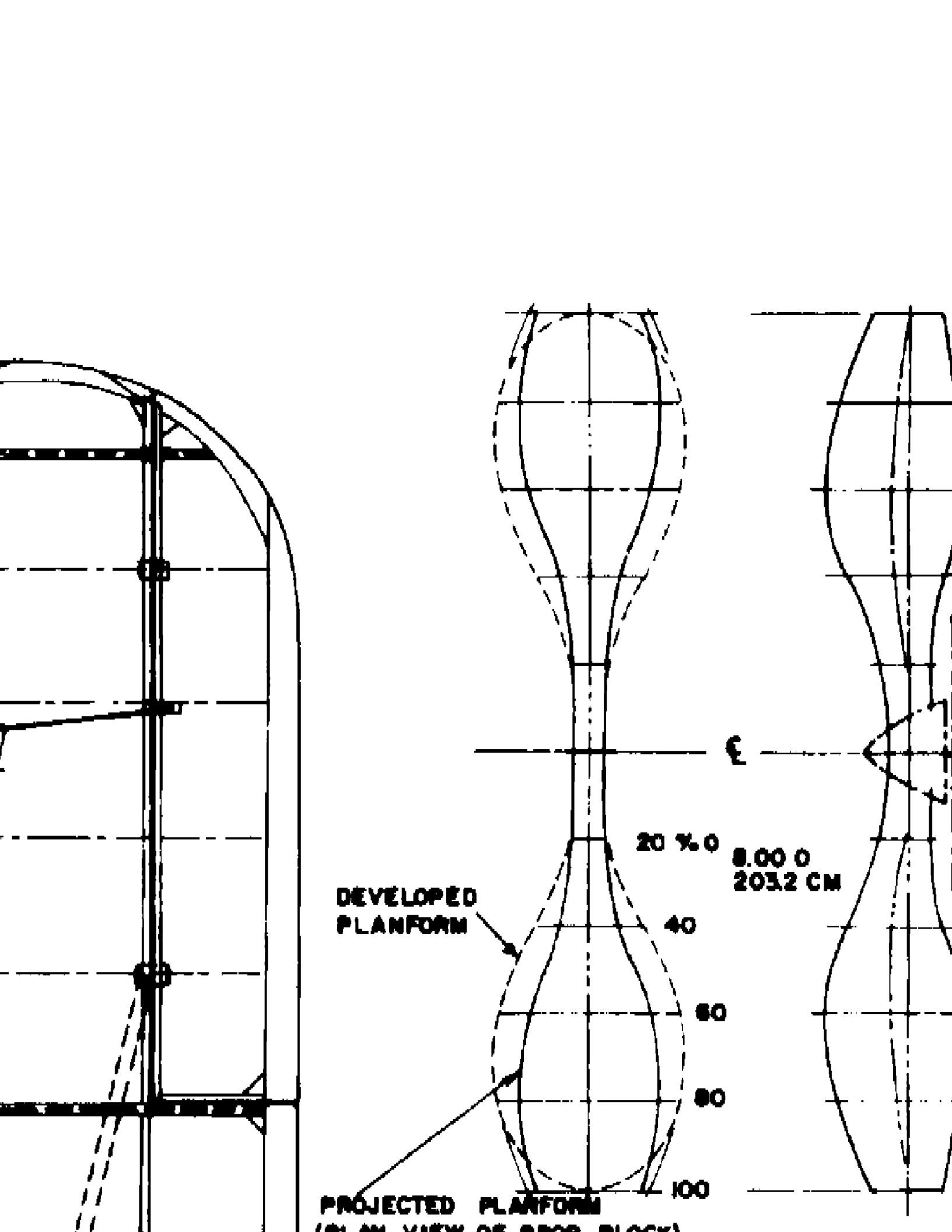
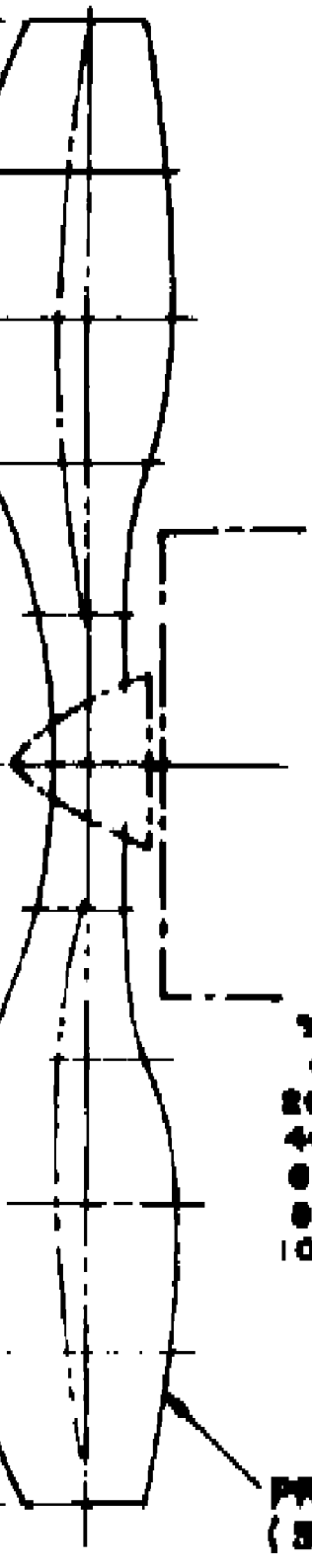
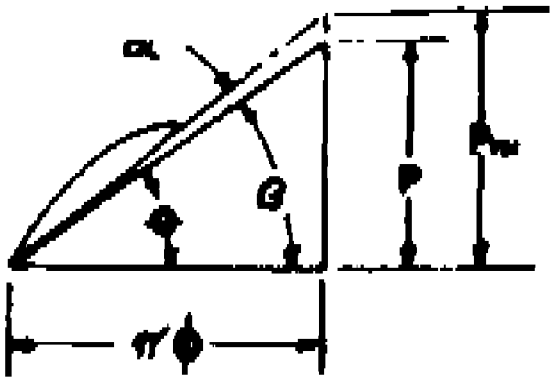
FRONT VIEW




1/16" SHEET
1/16" x 5/32" CONTOURED
AFTER SHEETING
.020" SHEET
.020" RIBS
.020" x .080" CAP STRIPS
ALL RIBS


20 %.0
8.00 0
203.2 CM
DEVELOPED
PLANFORM
40
60
80
100
PROJECTED PLANFORM





Φ BLADE STATION DIA.
P PITCH, ACTUAL
Ptn PITCH, THEORETICAL
Φ PITCH ANGLE, ACTUAL
β PITCH ANGLE, THEORETICAL
α ANGLE OF ATTACK

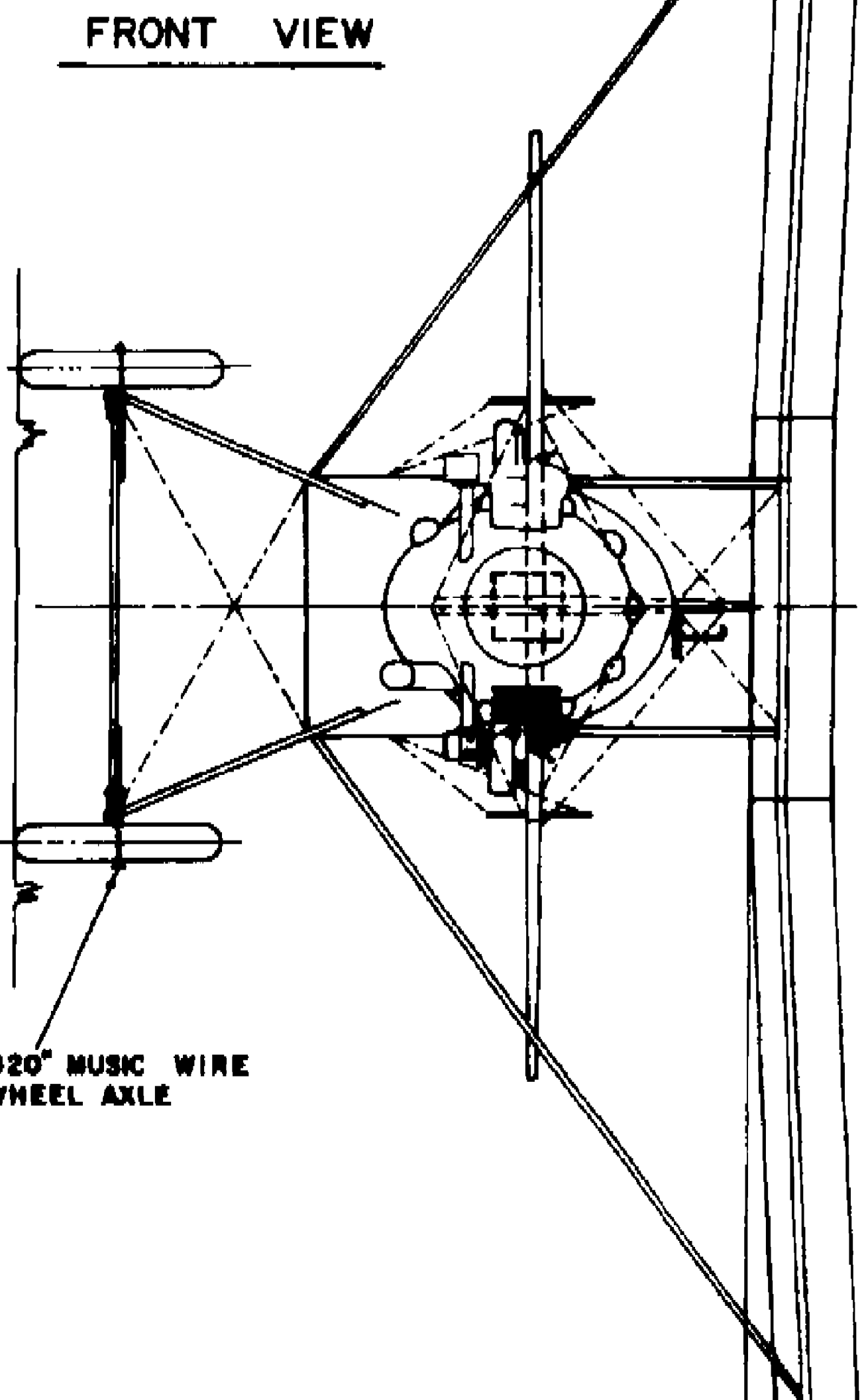
% Φ	Φ"	π Φ'	P"	P/πΦ	← TAN⁻¹ P/πΦ	α	β = Φ + α	Ptn"
0	0.0	0.0	14.80		90.0°	0.0°	90.0°	16.7
20	1.60	5.027		2.684	70.[illegible]	1.0	71.[illegible]	
40	3.20	10.053		1.444	55.27	2.0	57.27	
60	4.80	15.080		.962	43.[illegible]	3.0	46.[illegible]	
80	6.40	20.106		.721	35.80	3.0	38.80	
100	8.00	[illegible]	14.80	.577	30.00	2.0	32.00	15.7

PROPELLER DETAILS

PROJECTED PROFILE
(SIDE VIEW OF PROP BLOCK)

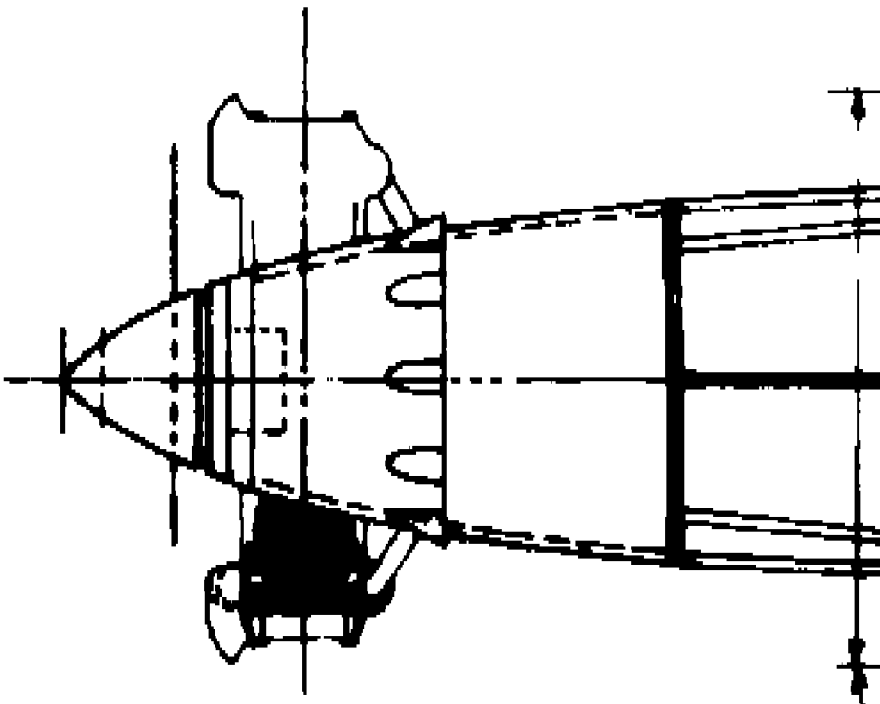
.005" – .010 SOFT
ALUMINUM HINGES

FRONT VIEW



.020" MUSIC WIRE
WHEEL AXLE

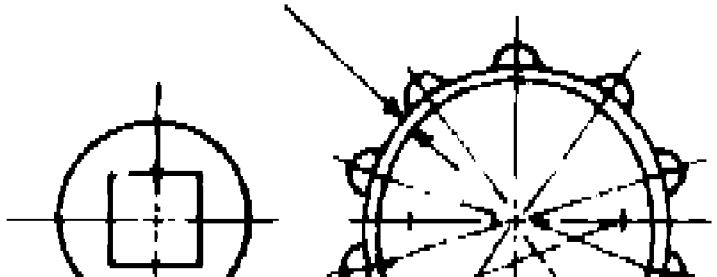
TOP VIEW

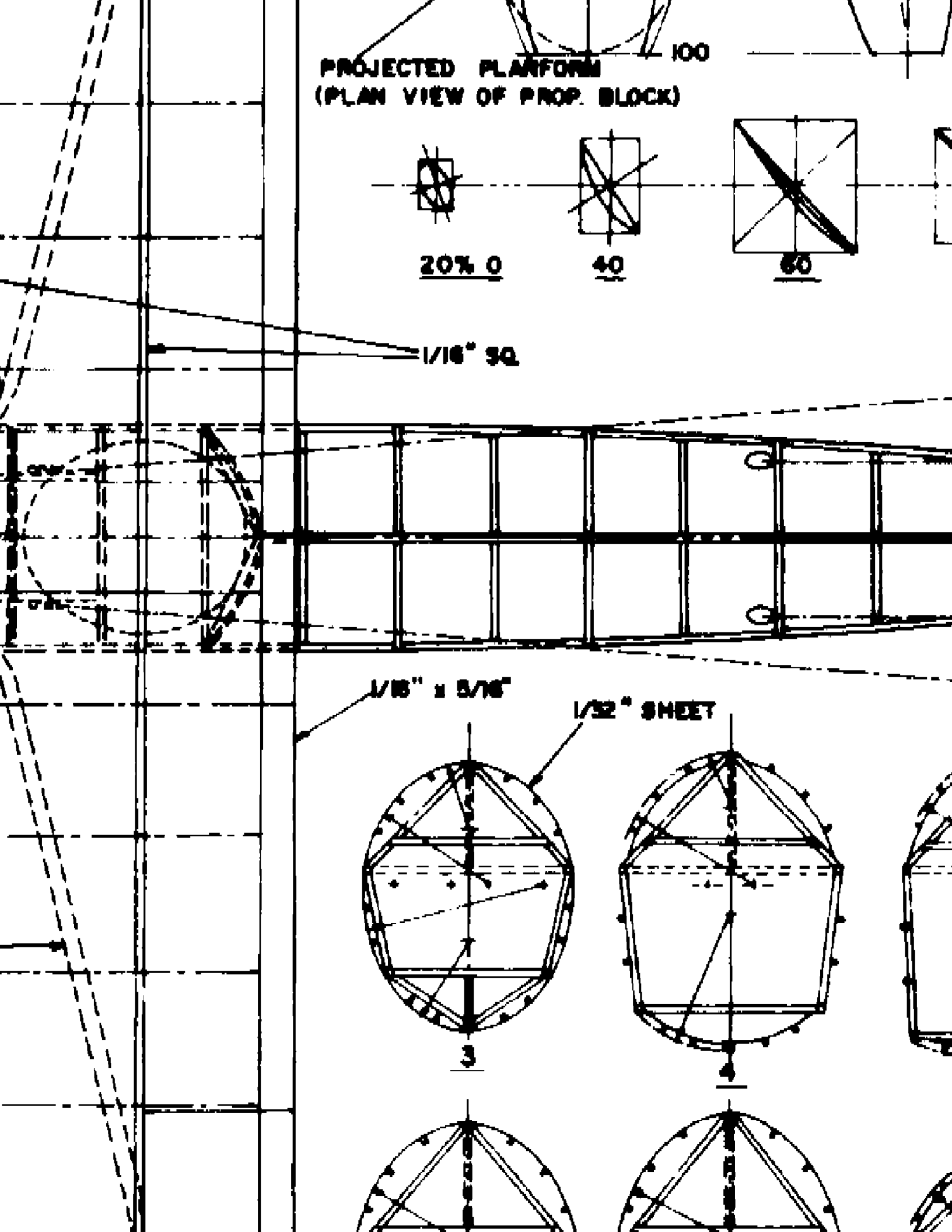


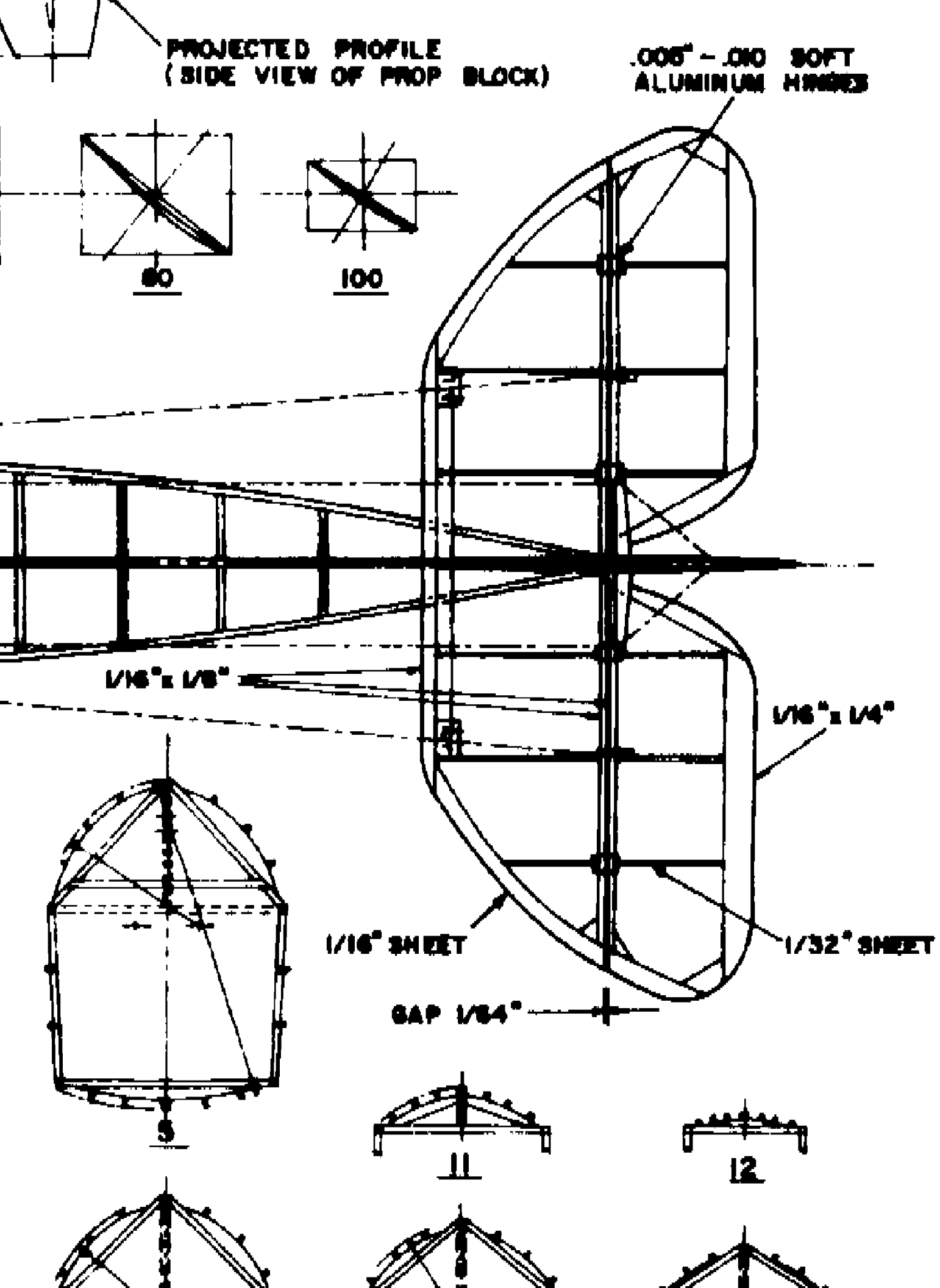
OVER THIS LENGTH FILL IN FRONT & REAR SPARS - FULL DEPTH, WITH 1/32" SHEET - VERTICAL GRAIN, FOR STRUT ATTACHMENTS.

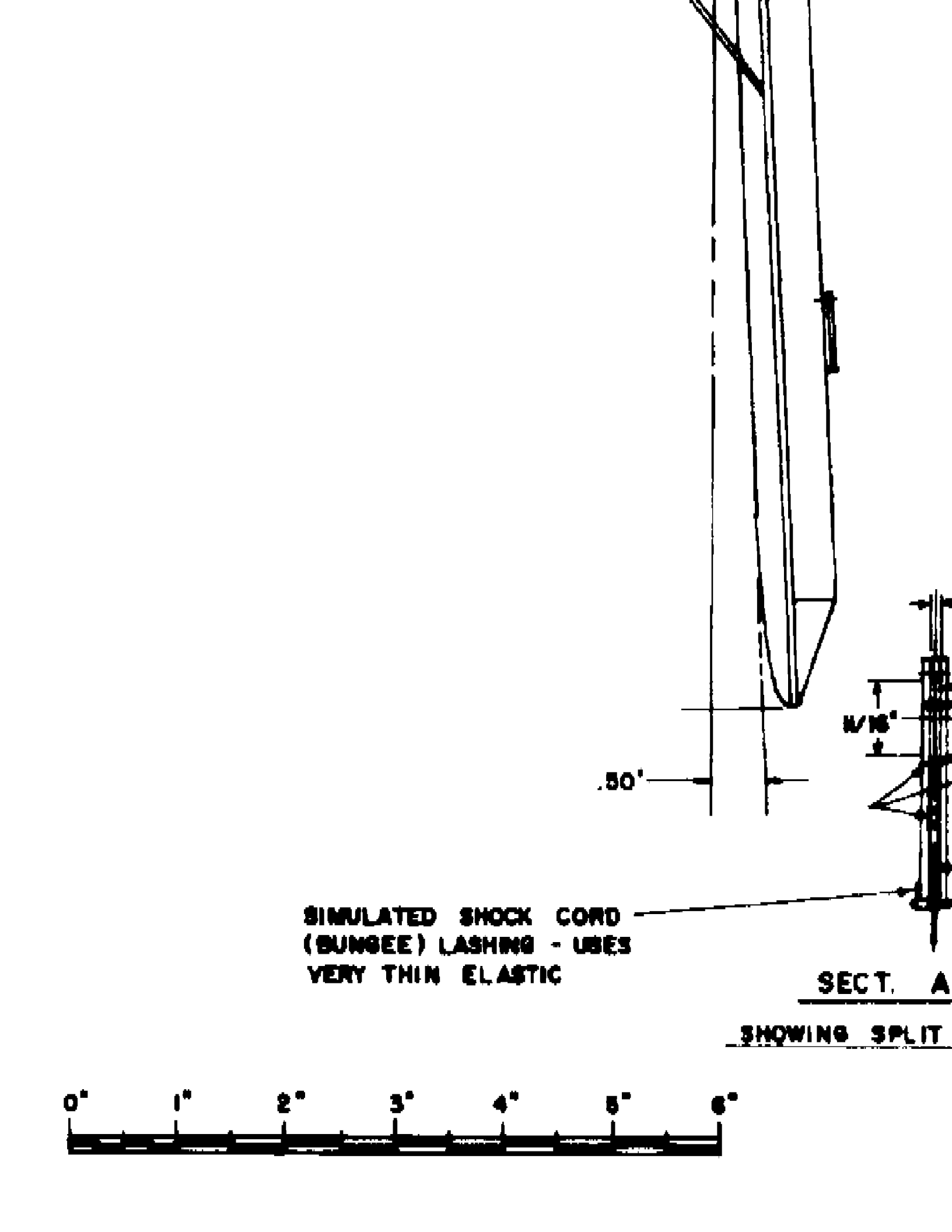
1/16" x 5/32" HARD BALSA, ALL WING STRUTS

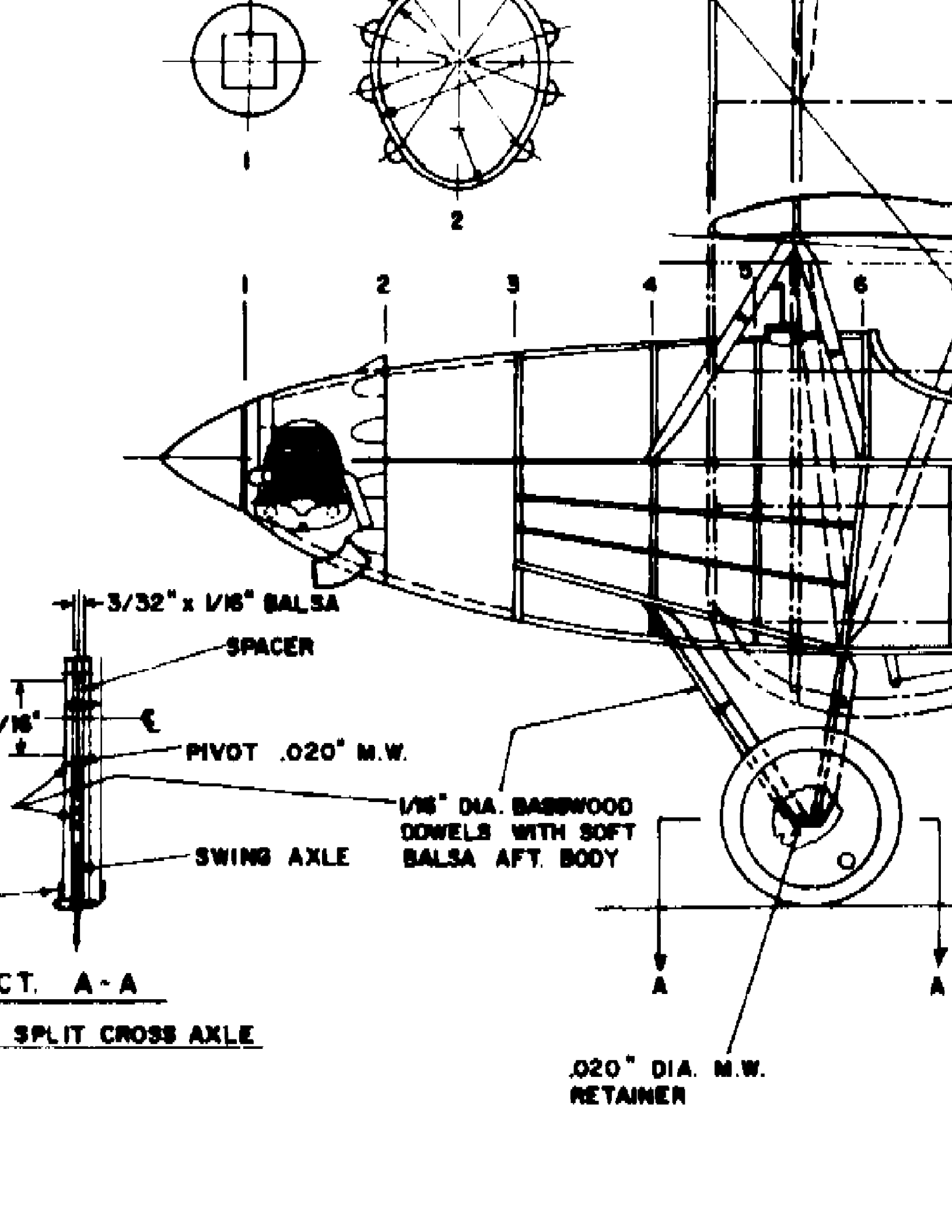
1/16" x 3/32" WALL THICKNESS




100
PROJECTED PLANFORM
(PLAN VIEW OF PROP. BLOCK)
20% 0
40
60
1/16" SQ.
1/16" x 5/16"
1/32" SHEET
3
4

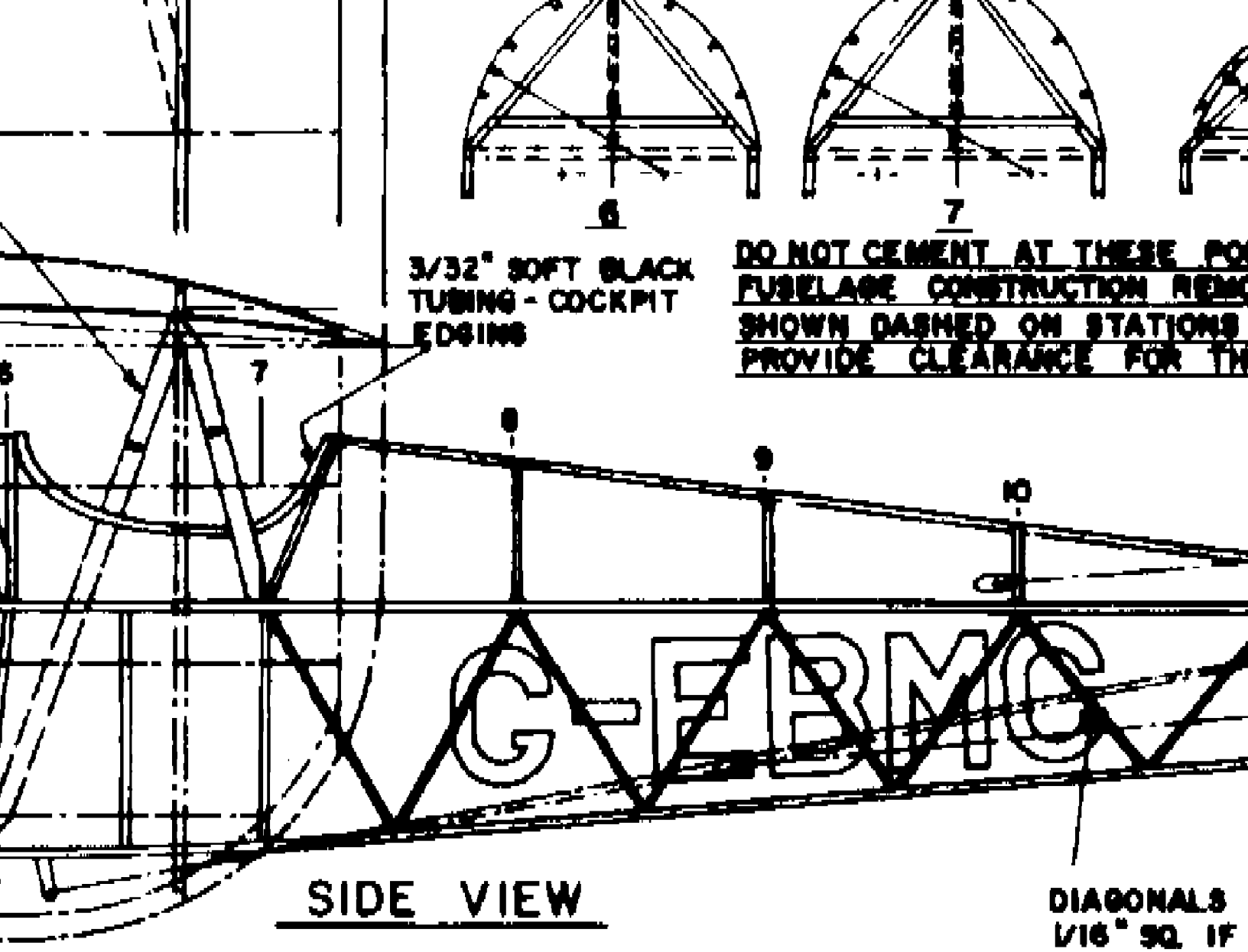

PROJECTED PROFILE
(SIDE VIEW OF PROP BLOCK)
.005" - .010 SOFT
ALUMINUM HINGES
80
100
1/16" x 1/8"
1/16" x 1/4"
1/16" SHEET
1/32" SHEET
GAP 1/64"
5
11
12


.50"
SIMULATED SHOCK CORD
(BUNGEE) LASHING - USES
VERY THIN ELASTIC
SECT. A
SHOWING SPLIT
0"
1"
2"
3"
4"
5"
6"



CT. A-A

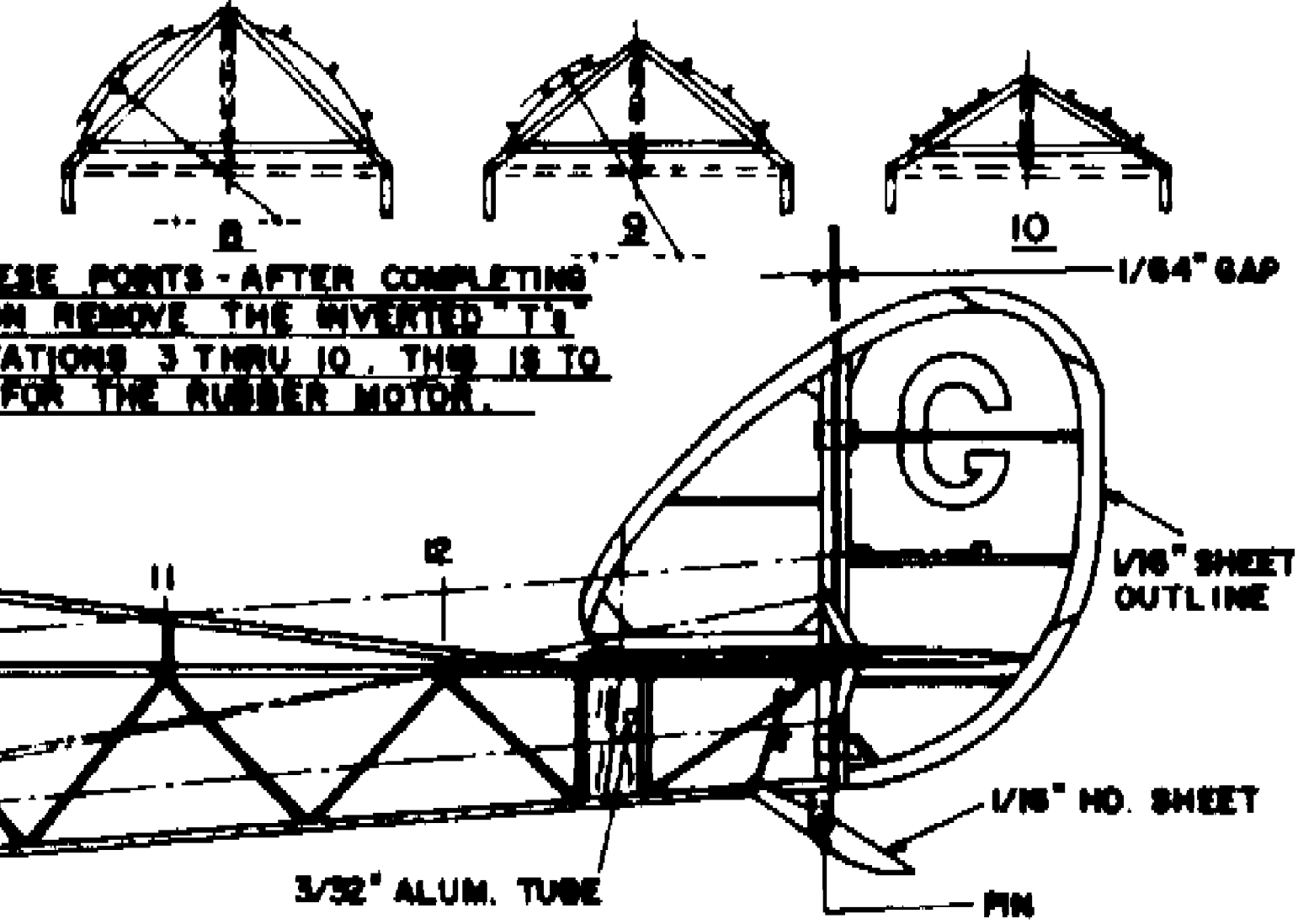
SPLIT CROSS AXLE



LONGERONS & TRUSSES 1/16" SQ.
STRINGERS 1/32" x 1/8"

A

CRANWELL CLA 3 WAS DESIGNED BY FLIGHT LIE
N. COMPER. BUILT BY THE CRANWELL LIGHT
AEROPLANE CLUB FOR THE 1925 LYMPNE RACE
WING SPAN = 21', ENGINE - BRISTOL CHERUB
REF: "AVIATION", SEPT. 7, 1925
JANES "ALL THE WORLDS AIRCRAFT", 1926
"ULTRALIGHTS", BY RICHARD RIDING
SCALE 1-1/7" = 1'



...SE PORTS - AFTER COMPLETING
...N REMOVE THE INVERTED "T's"
...ATIONS 3 THRU 10. THIS IS TO
...FOR THE RUBBER MOTOR.

...ONALS ARE 1/32" x 1/16",
..." SQ. IF DESIRED

...HT LIEUT.
...HT
... RACES.
...ERUB

..., 1926

FLYING MODELS

CRANWELL CLA 3

MODEL DESIGNED BY J. B. GRANT

INKED PLAN BY JOE DEMARCO

SHEET 1 OF 1