

49

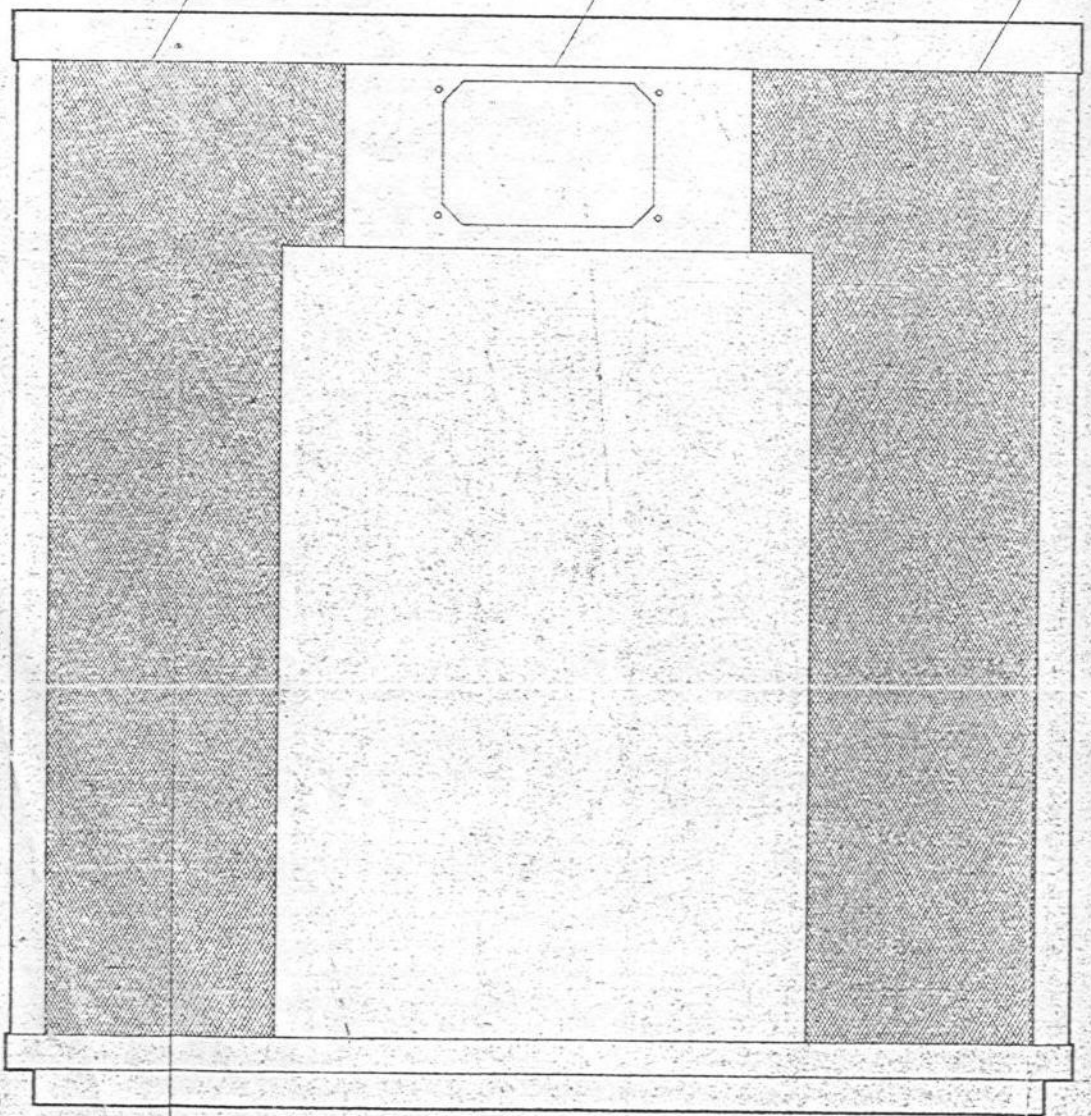
LEFT GRILLE ASSY
1 EQGD

-1

HORN BAFFLE PANEL
1 EQGD

A11

A10



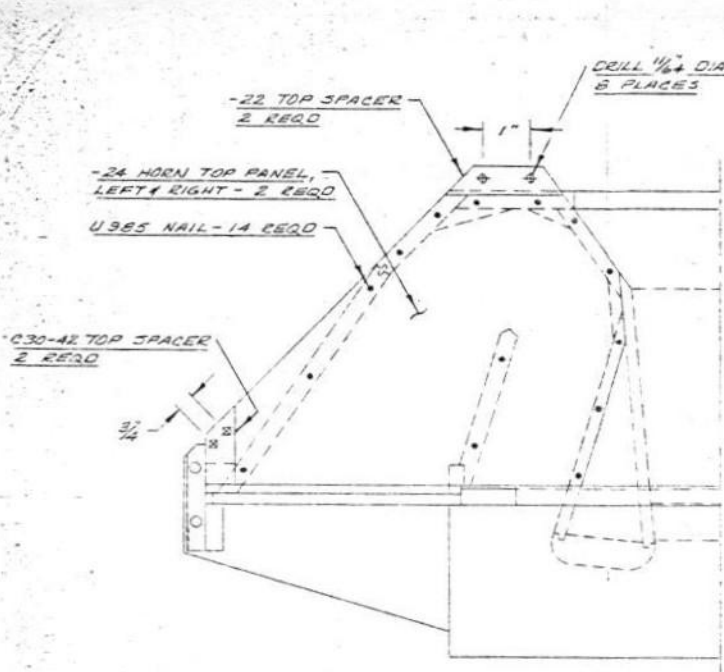
PART NO.	NO. REQD	NAME	MATERIAL & SPECIFICATION	SIZE
-1	1	HORN BAFFLE PANEL	3/4" TIMBLEND	17 1/4" x 8 1/2"
-2	2	TOP & BOTTOM PANEL	3/4" TIMBLEND	21 1/2" x 6 1/4"
-3	2	SIDE PANEL	3/4" TIMBLEND	32 1/8" x 3 5/16"
-4	1	BACK PANEL	1/2" TIMBLEND	32 1/8" x 9 13/16"
-5	2	SIDE EXTENSION BLOCK	WHITE PINE	9 1/4" x 1 1/4" x 1 1/4"
-6	1	TOP SCAB	3/4" VENEERED TIMBLEND	45 3/4" x 3 1/16"
-7	1	THICKENER PANEL	1/2" TIMBLEND	45 3/4" x 3 1/16"
-8	1	TOP PANEL	3/4" VENEERED TIMBLEND	45 3/4" x 23 7/8"
-9	1	REAR SUPPORT BLOCK	WHITE PINE	10" x 2 3/8" x 1 1/2"
-10	1	SUPPORT PANEL	1/2" TIMBLEND	10" x 6"
-11	1	BASE PANEL, RIGHT	3/4" VENEERED TIMBLEND	11" x 2 1/4"
-12	1	BASE PANEL, LEFT	3/4" VENEERED TIMBLEND	11" x 2 1/4"
-13	1	BASE PANEL, FRONT	3/4" VENEERED TIMBLEND	21 7/8" x 2 1/4"
-14	2	BOTTOM THICKENER, SIDE	3/4" WHITE PINE	4 3/16" x 1 1/4"
-15	2	BOTTOM THICKENER, SIDE ANGLE	3/4" WHITE PINE	11 1/8" x 1 1/8"
-16	1	BOTTOM THICKENER, CENTER	3/4" WHITE PINE	22 3/8" x 1 1/8"
-17	1	BOTTOM FRONT PANEL	3/4" VENEERED TIMBLEND	45 3/4" x 5 3/8"
-18	2	GRILLE PANEL GUIDE	1/2" WHITE PINE	40 11/16" x 5/16"
-19	2	SCAB	3/4" VENEERED TIMBLEND	41 1/4" x 2 1/4"
-20	2	OUTER SIDE PANEL	3/4" VENEERED TIMBLEND	41 1/4" x 5"
-21	2	TOP SPACER	WHITE PINE	3 3/16" x 1 3/16" x 1/4"
-22	2	TOP SPACER	WHITE PINE	4 3/4" x 1 3/16" x 1/4"
-23	1	REAR SUPPORT FILLER	1/2" TIMBLEND	10" x 3 1/4"
-24	2	HORN TOP PANEL, LEFT & RIGHT	1/2" TIMBLEND	17 3/16" x 13 5/16"
-25	1	RISER ANGLE PANEL, RIGHT	3/4" WHITE PINE	10 3/4" x 4"
-26	1	RISER ANGLE PANEL, LEFT	3/4" WHITE PINE	10 3/4" x 4"
-27	2	FRONT RISER PANEL	3/4" WHITE PINE	9 1/16" x 4 3/16"
-28	1	BOTTOM SUPPORT, CENTER	3/4" WHITE PINE	5 21/32" x 2 13/16"
-29	2	BOTTOM SUPPORT, CORNER	3/4" WHITE PINE	2 1/4" x 2 1/4"
-30	2	CENTER HORN SPLITTER, RIGHT & LEFT	3/4" WHITE PINE	31" x 4"
-31	2	CORNER FILLET	3/4" WHITE PINE	31" x 3 3/16"
-32	1	BOX PANEL, TOP	3/4" VENEERED TIMBLEND	22 1/2" x 7 1/8"
-33L	1	BOX PANEL, LEFT SIDE	3/4" VENEERED TIMBLEND	33" x 8 1/8"
-33R	1	BOX PANEL, RIGHT SIDE	3/4" VENEERED TIMBLEND	53" x 8 1/8"
-34	1	BOX PANEL, FRONT	3/4" VENEERED TIMBLEND	33" x 22 1/2"
-35	2	BAFFLE FILLET, TOP & BOTTOM	WHITE PINE	7 9/16" x 4 3/8" x 1 5/16"
-36	4	CROSS BRACE	3/4" TIMBLEND	15 1/8" x 2 3/16"
-37	2	SIDE CLEAT	WHITE PINE	40 3/4" x 1 3/16" x 1"
-38	2	REAR INNER HORN FILLET	WHITE PINE	40 3/4" x 1 3/4" x 7/16"
-39	2	FRONT INNER HORN FILLET	WHITE PINE	40 3/4" x 2 5/8" x 1/2"
-40L	1	FRONT INNER HORN PANEL, LEFT	1/2" TIMBLEND	40 3/4" x 9 13/16"
-40R	1	FRONT INNER HORN PANEL, RIGHT	1/2" TIMBLEND	40 3/4" x 9 13/16"
-41	2	HORN SEPARATOR PANEL, RIGHT & LEFT	3/4" TIMBLEND	40 3/4" x 6 7/8"
-42	2	REAR SIDE PANEL	3/4" TIMBLEND	40 3/4" x 5 1/16"
-43	2	FRONT SIDE PANEL	3/4" TIMBLEND	40 3/4" x 11 9/16"
-44	2	REAR THROAT PANEL	1/2" TIMBLEND	40 3/4" x 4 5/8"
-45	2	REAR OUTER HORN FILLET	3/4" WHITE PINE	40 3/4" x 4"
-46	2	FRONT THROAT ANGLE	3/4" TIMBLEND	12 1/8" x 7"
-47	2	REAR THROAT ANGLE	3/4" TIMBLEND	12 3/16" x 4 5/16"
-48	2	FRONT HORN UPRIGHT	ALDER	31 3/4" x 4 3/8" x 1 1/8"
-49	2	FRONT THROAT PANEL	1/2" TIMBLEND	31 3/4" x 11 7/16"
-50	1	SPEAKER BAFFLE PANEL	3/4" TIMBLEND	40 5/8" x 22 1/8"
-51	1	BOTTOM PANEL	1/2" TIMBLEND	43 5/16" x 19"
-52	2	BAFFLE FILLET, CORNER	3/4" WHITE PINE	5 9/16" x 4 1/16"
-53	2	BAFFLE FILLET, CORNER	3/4" WHITE PINE	5 9/16" x 4 1/16"
-54	1	TOP CENTER MOUNTING PANEL	1/2" TIMBLEND	12 1/4" x 12 3/16"
-55	1	THROAT SPACER	3/4" WHITE PINE	6 1/16" x 5 5/16"
-56	2	VENEER	AS NOTED	41" x 1 1/2"
-57	2	VENEER	AS NOTED	41" x 1 1/2"
-58	1	VENEER	AS NOTED	46 1/2" x 2 1/4"
-59	1	VENEER	AS NOTED	46 1/4" x 1 5/8"
-60	2	VENEER	AS NOTED	2 1/4" x 2 1/4"
-61	2	SPRINE	1/8" MARSONITE	40 1/2" x 7 1/16"
-62	4	SPIRAL CORREL	HARD MAPLE	1 3/4" x 3/8" DIA
-63	1	INNER SEAL	FELT	15" x 4 1/2" x 1/16"
-64	2	SOUND ABSORBENT PAD	3/4" FIBERGLASS	22 5/8" x 15 1/2"
-65	2	FILLER BLOCK	WHITE PINE	6 5/8" x 2 7/8"
-66	4	SIDE, GRILLE FRAME	ALDER	41 3/4" x 1" x 7/16"
-67	4	END, GRILLE FRAME	ALDER	10 5/16" x 1" x 7/16"
-68	2	SUPPORT, GRILLE FRAME	ALDER	8 9/16" x 1" x 3/4"
U839	4	WOOD SCREW	STEEL, FLAT HEAD PHILLIPS	#8 x 2 1/2"
U840	14	WOOD SCREW	STEEL, FLAT HEAD PHILLIPS	#8 x 1"
U845	30	WOOD SCREW	STEEL, FLAT HEAD PHILLIPS	#8 x 1 1/4"
U846	16	WOOD SCREW	STEEL, FLAT HEAD PHILLIPS	#8 x 1 1/2"
U870	25	WOOD SCREW	STEEL, FLAT HEAD PHILLIPS	#8 x 1 3/4"
U897	12	FINISH WASHER	BRASS, BLACK OXIDE	#8 C-3K
U992	100	NAIL	40 CC FINISHING NAIL	1 1/4" LONG
U991	2	JOINT NAIL	STEEL	#10 x 1 1/2"
U985	150	NAIL	60 CC BOX NAIL	1 7/8" LONG
U898	6	GLIDE	STEEL, SINGLE PRONG	3/8" - 20 KEYSLOTS
U898	4	T NUT	STEEL, BLACK OXIDE	1/4-20 x 5/16"
U908-1	2	GASKET SEAL	SPONGE RUBBER ADHESIVE	52 1/8" x 3/4" x 1/8"
U908-2	2	GASKET SEAL	SPONGE RUBBER ADHESIVE	20" x 1/4" x 1/8"
U999-1	1	GASKET SEAL	SPONGE RUBBER ADHESIVE	21 1/4" x 1/2" x 1/8"
U1000	34	GLUE BLOCK	3/4" WHITE PINE	2" x 3/4"
U1001	2	GRILLE CLOTH	AS DESIRED	43 1/4" x 14"

CLOSURE ASSY
REQD

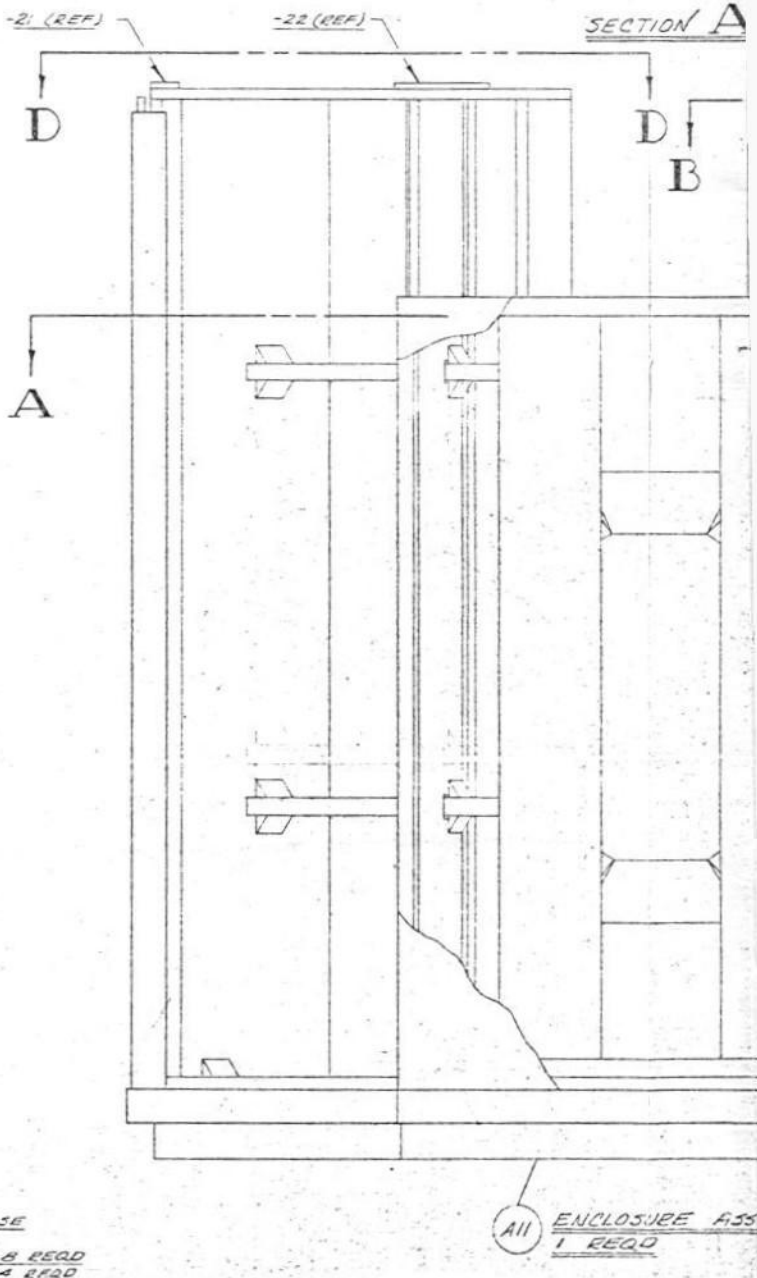
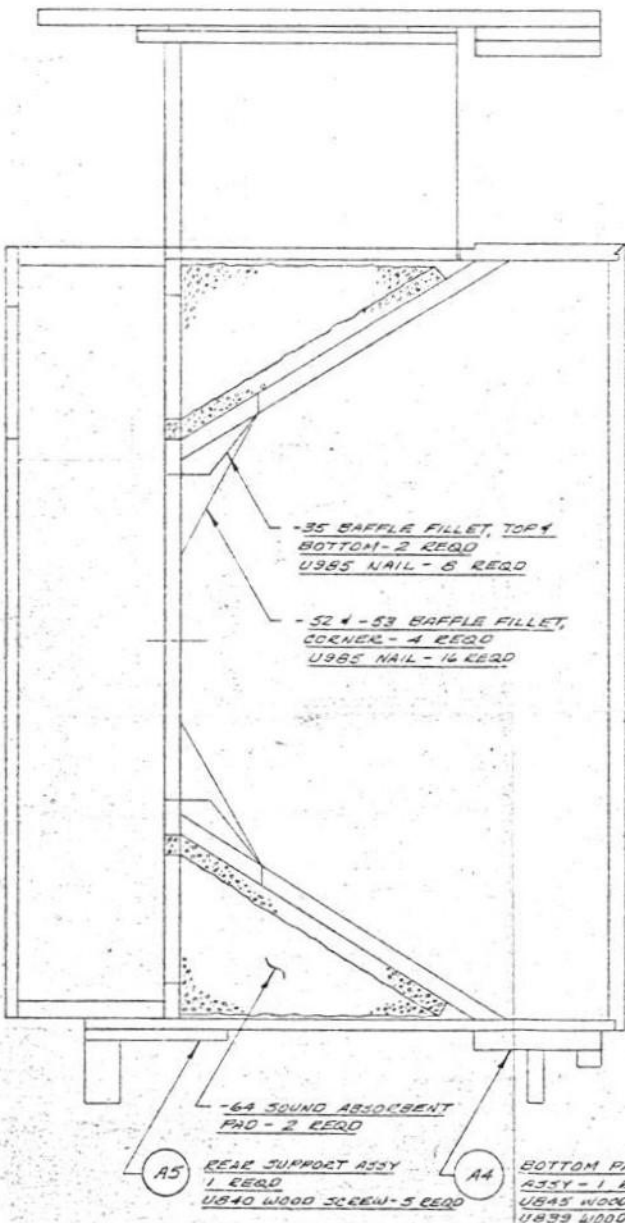
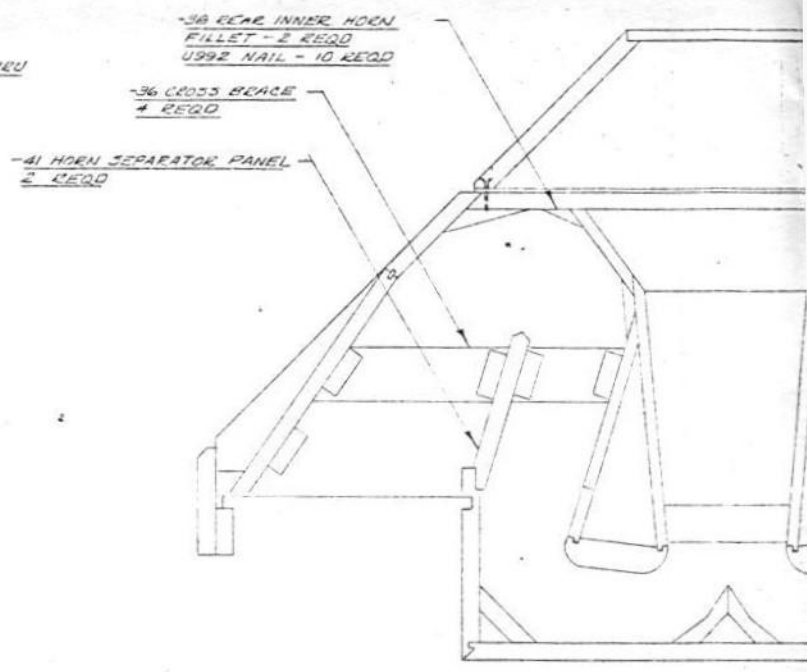
EIGHT GRILLE ASSY
1 REQD

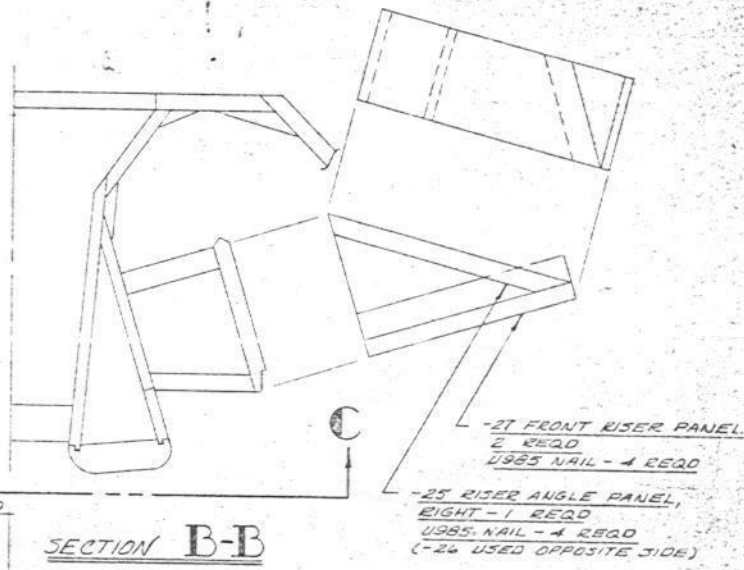
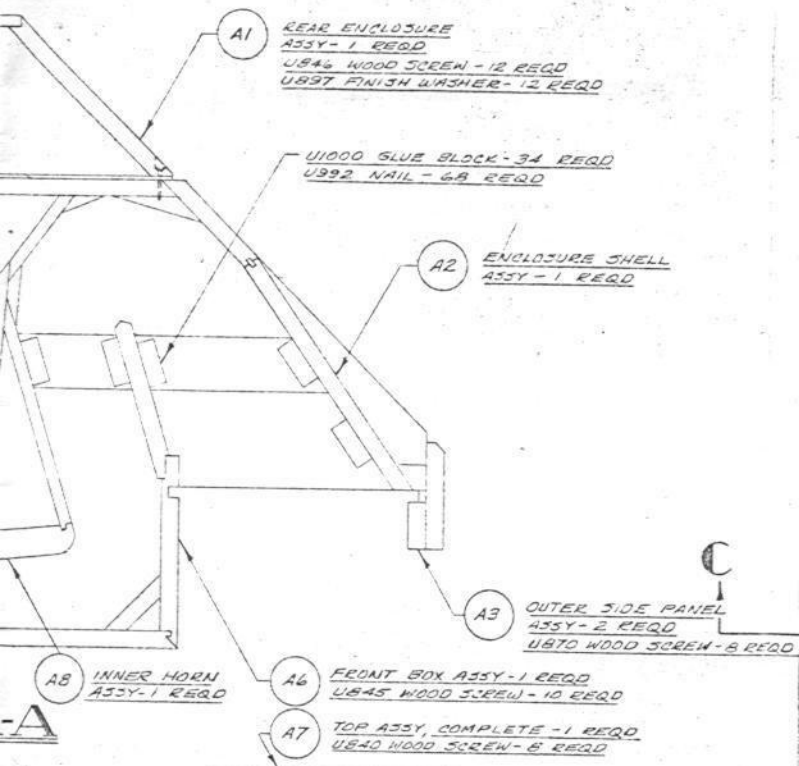
REVISION	BY	DATE	CHANGE OR ADDITION	
DRAFTSMAN	DATE	MATERIAL	FINISH	MODEL NUMBER
DEJ	7/99	LISTED		C30
CHECKER	SCALE	DATE		
7/10/01	1/4" SIZE	2-9-59		
DRAWN	NAME:			
1/10/01	THE HARTSFIELD			
APPROVED				SHEET NO. 1 OF 9

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3249 canina ave. • los angeles 39, california

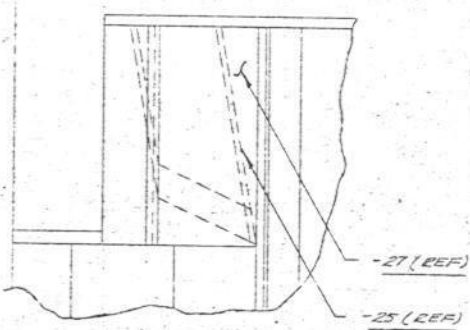


VIEW D-D

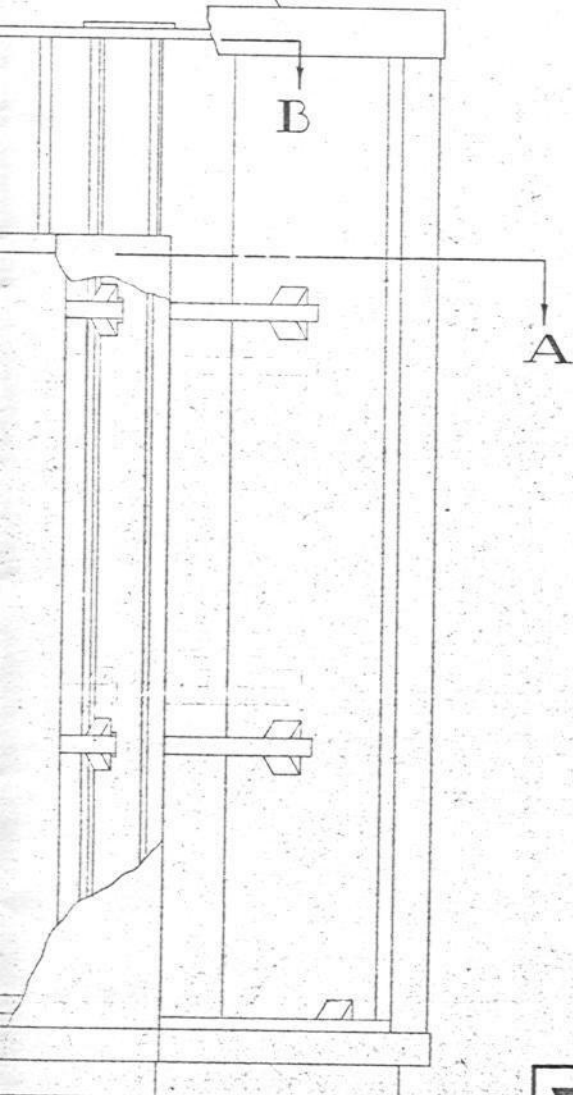




SECTION B-B



VIEW CC



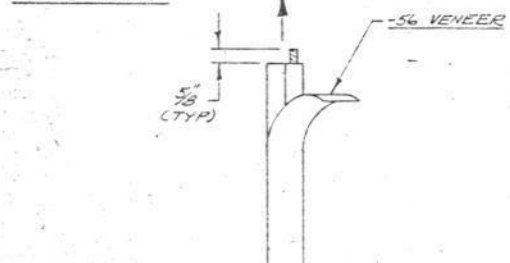
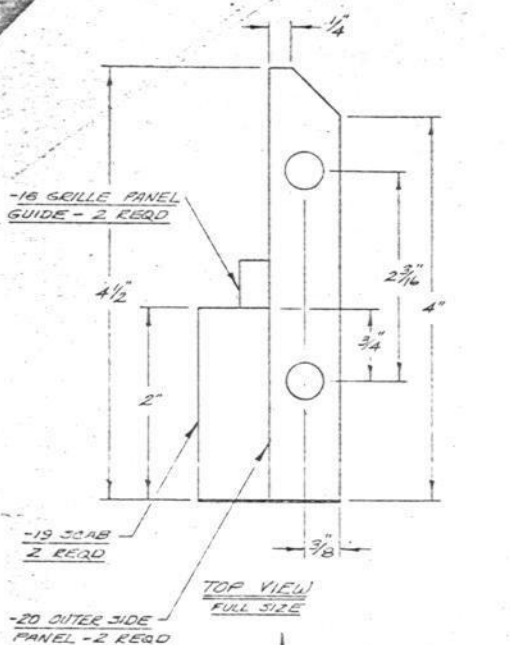
NOTE:

1. GLUING: OPPOSING WOOD SURFACES, AFTER BEING MATCHED AND FITTED, SHOULD BE GLUED THEN SCREWED OR CLAMPED TOGETHER UNTIL GLUE IS SET.
2. VENEER: MATCH IN TYPE AND GRAIN THE VENEERED PARTS USED ON THE ENCLOSURE.

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 3219 casitas ave. • los angeles 39, california

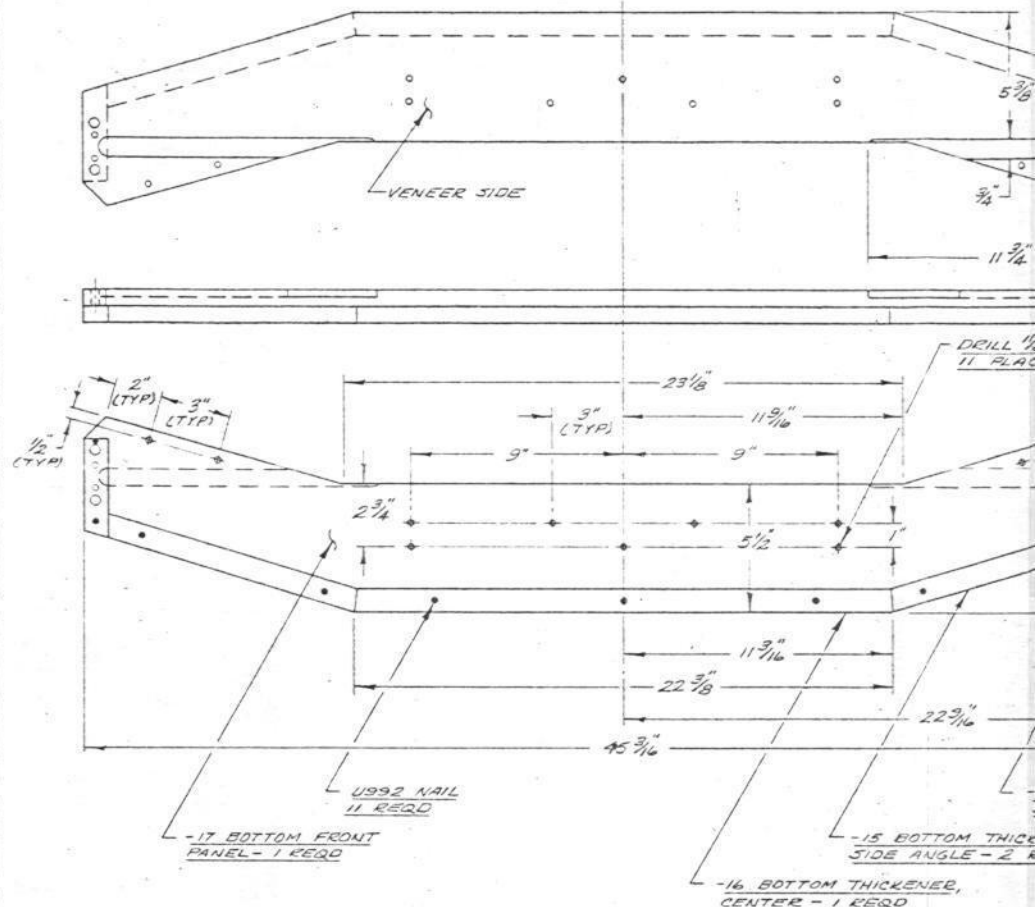
PRINTED IN U.S.A.

REVISION	BY	DATE	CHANGE OR ADDITION		MODEL NUMBER
	D.R.J.	4/16	MATERIAL LISTED	FINISH	C30
	W.C.H.	1/30/61	SCALE 1/4 SIZE	DATE 2-9-59	
	ENGINEER	1/30/61	NAME: THE HARTSFIELD		SHEET NO. 2 OF 9
	APPROVED				

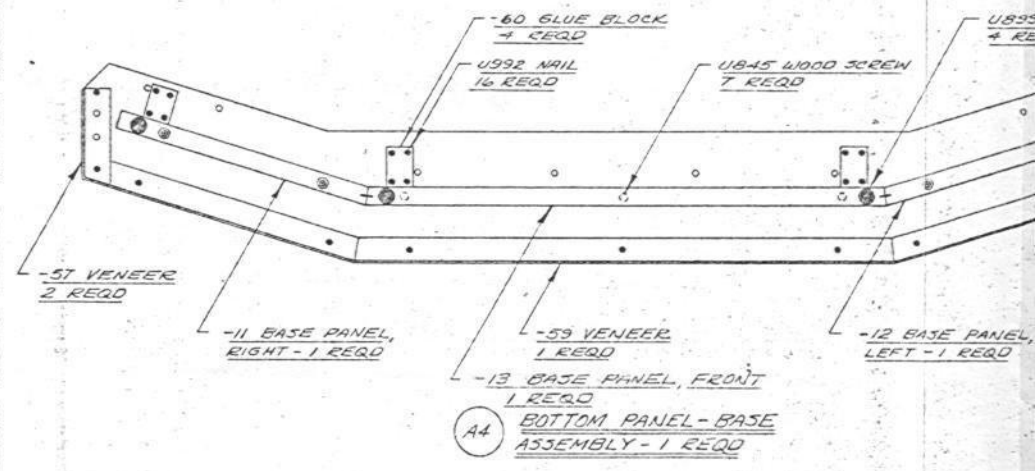


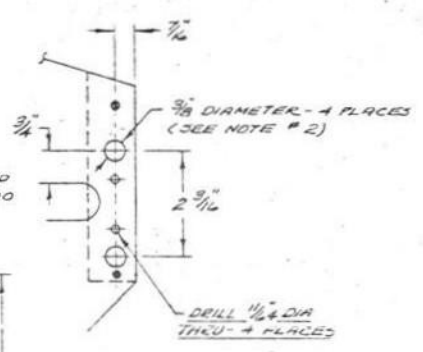
- NOTE:**
1. -19 & -20 SHOULD BE GLUED TOGETHER FIRMLY, THEN MACHINED TO DIMENSIONS SHOWN IN TOP VIEW.
 2. DRILL 3/8" DIAMETER HOLES IN 4 PLACES SHOWN - INSTALL W405 SPIRAL DOWELS.
 3. ASSEMBLE -18 & -56 AFTER MACHINING.

A3 OUTER SIDE PANEL ASSEMBLY - 2 REQD

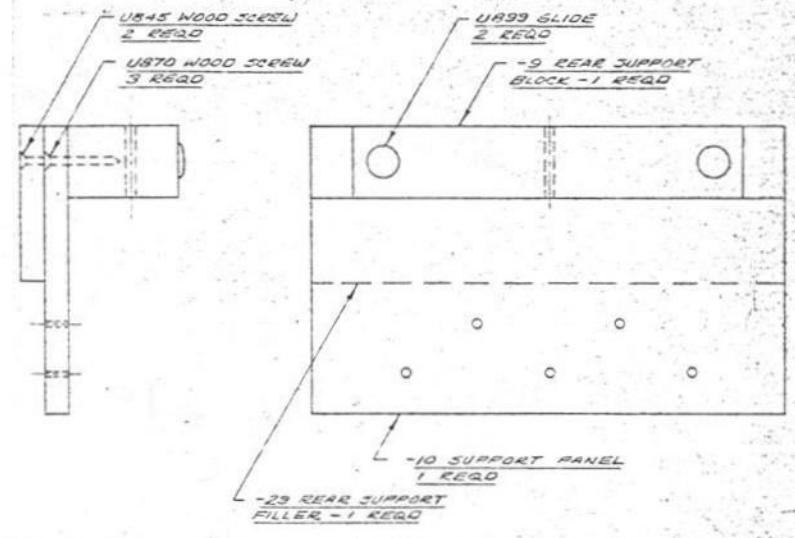


- NOTE:**
1. GLUE AND NAIL PARTS FIRMLY TOGETHER AND MACHINE TO DIMENSIONS SHOWN ABOVE.
 2. DRILL 3/8" DIA DOWEL HOLES AFTER ASSEMBLY HAS BEEN MACHINED.
 3. CONTINUE ASSEMBLY AS SHOWN BELOW.





DETAIL A
HALF SIZE

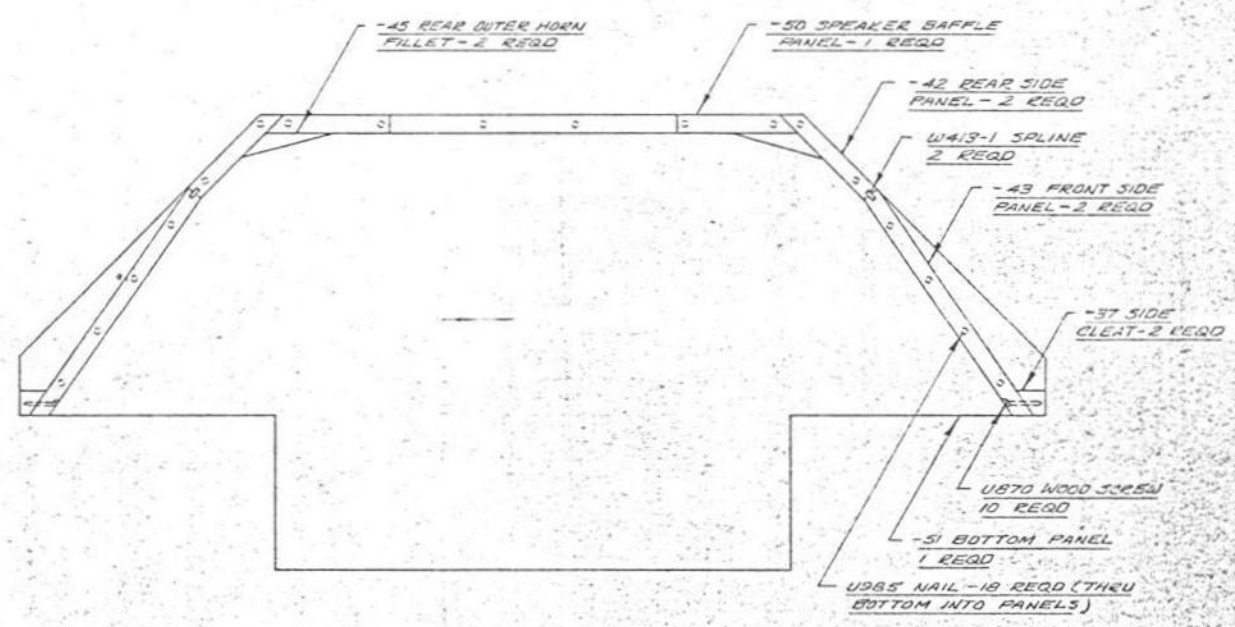
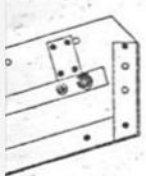


A5 REAR SUPPORT ASSEMBLY
1 REQD 1/2 SIZE

-14 BOTTOM THICKENER, SIDE - 2 REQD

THICKENER, REQD

U899 SLIDE REQD



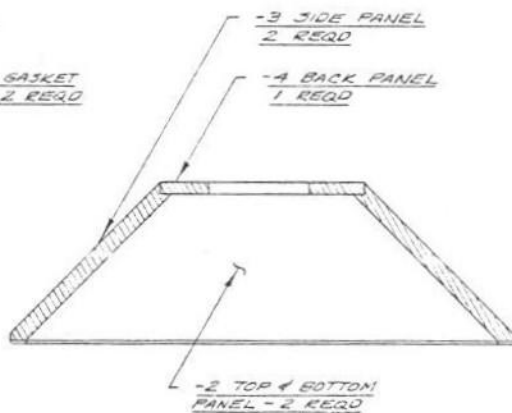
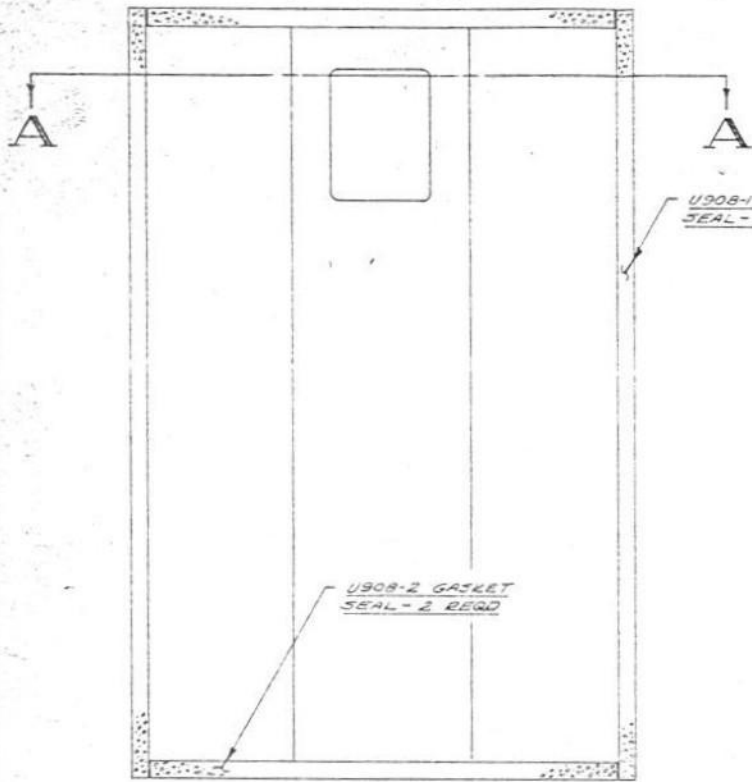
A2 ENCLOSURE SHELL ASSEMBLY - 1 REQD

REVISION	BY	DATE	CHANGE OR ADDITION	
1	D.P.J.	9/9/59	MATERIAL LISTED	FINISH
2	H.S.M.	9/21/59	SCALE 1/4" = NOTED	DATE 2-9-59
APPROVED			NAME: THE HARTSFIELD	

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MODEL NUMBER
E30

SHEET NO. **3** OF **9**

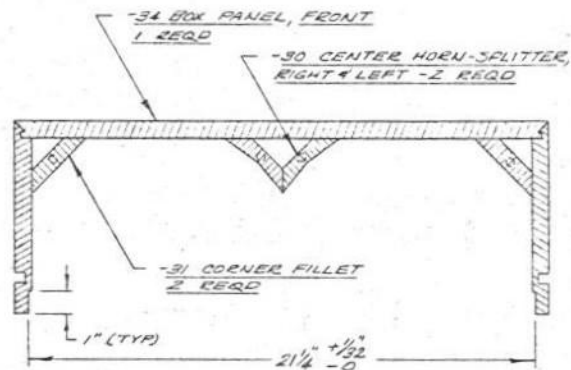
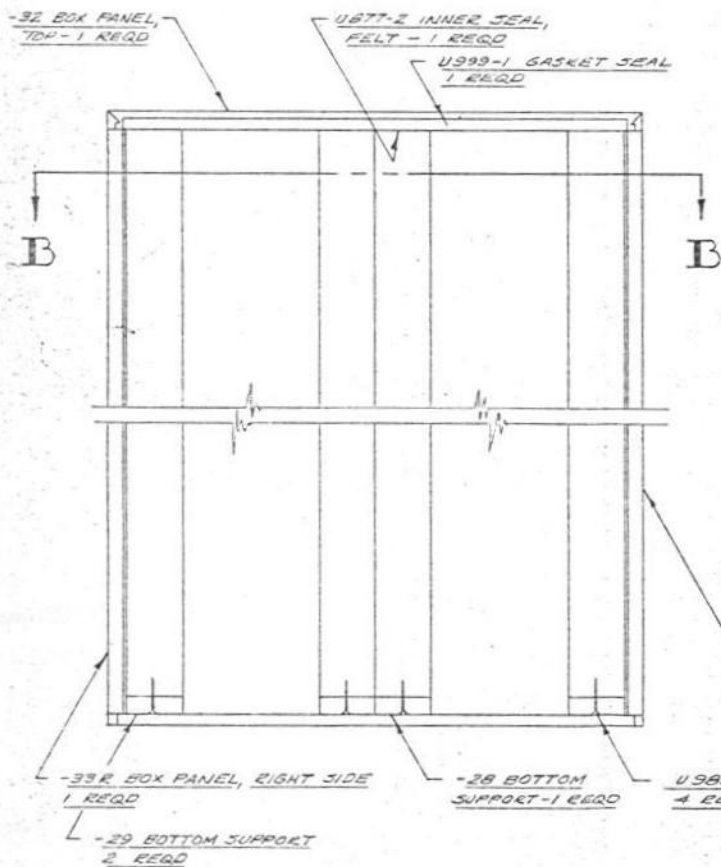


SECTION A-A

NOTE:

1. U995 NAILS USED TO FASTEN -2 TOP & BOTTOM PANELS

A1 REAR ENCLOSURE ASSY - 1 REQD



SECTION B-B

-33L BOX PANEL, LEFT SIDE 1 REQD

A6 FRONT BOX ASSY 1 REQD

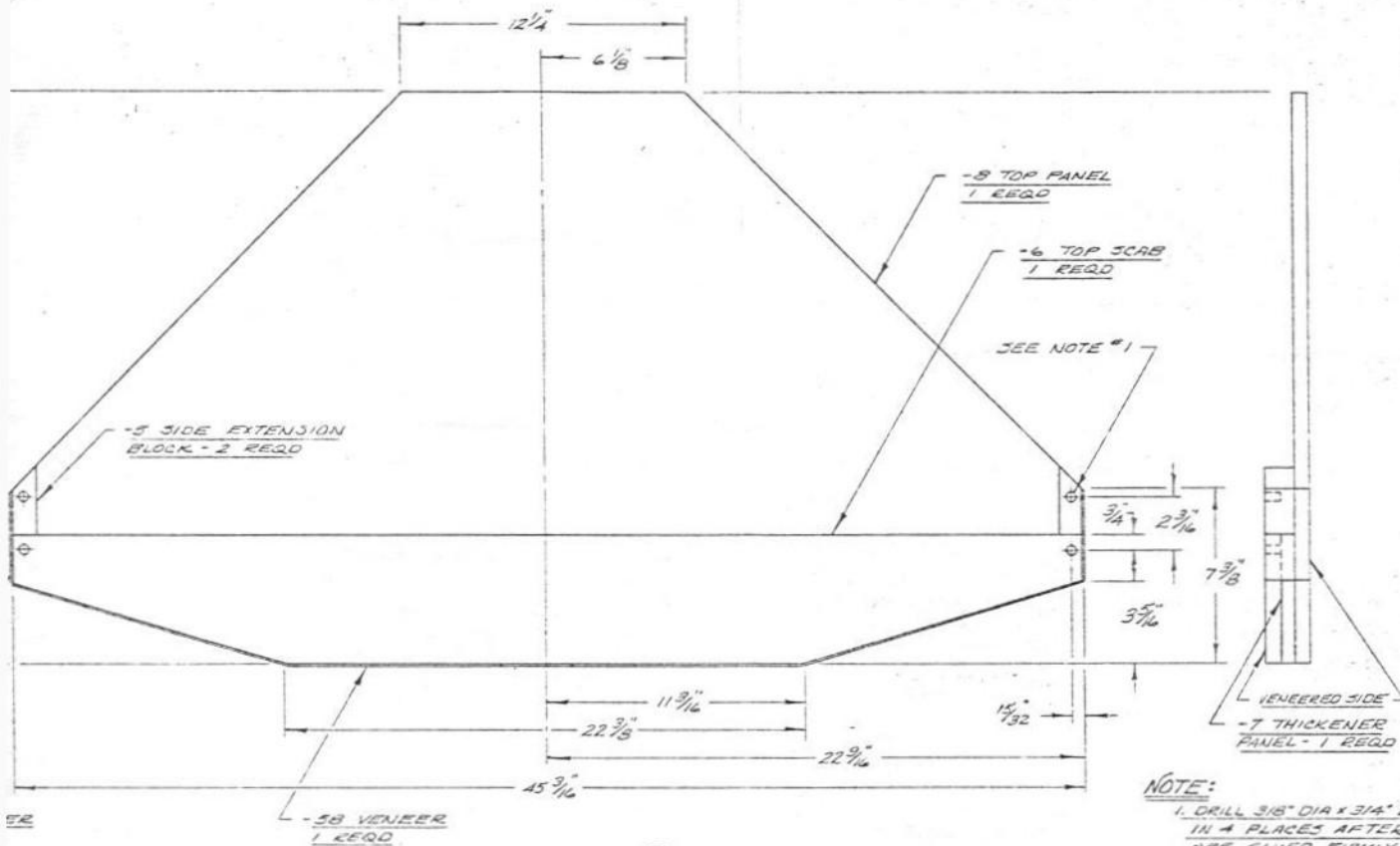
25 3/4

5 3/8

-40 VENEER 2 REQD

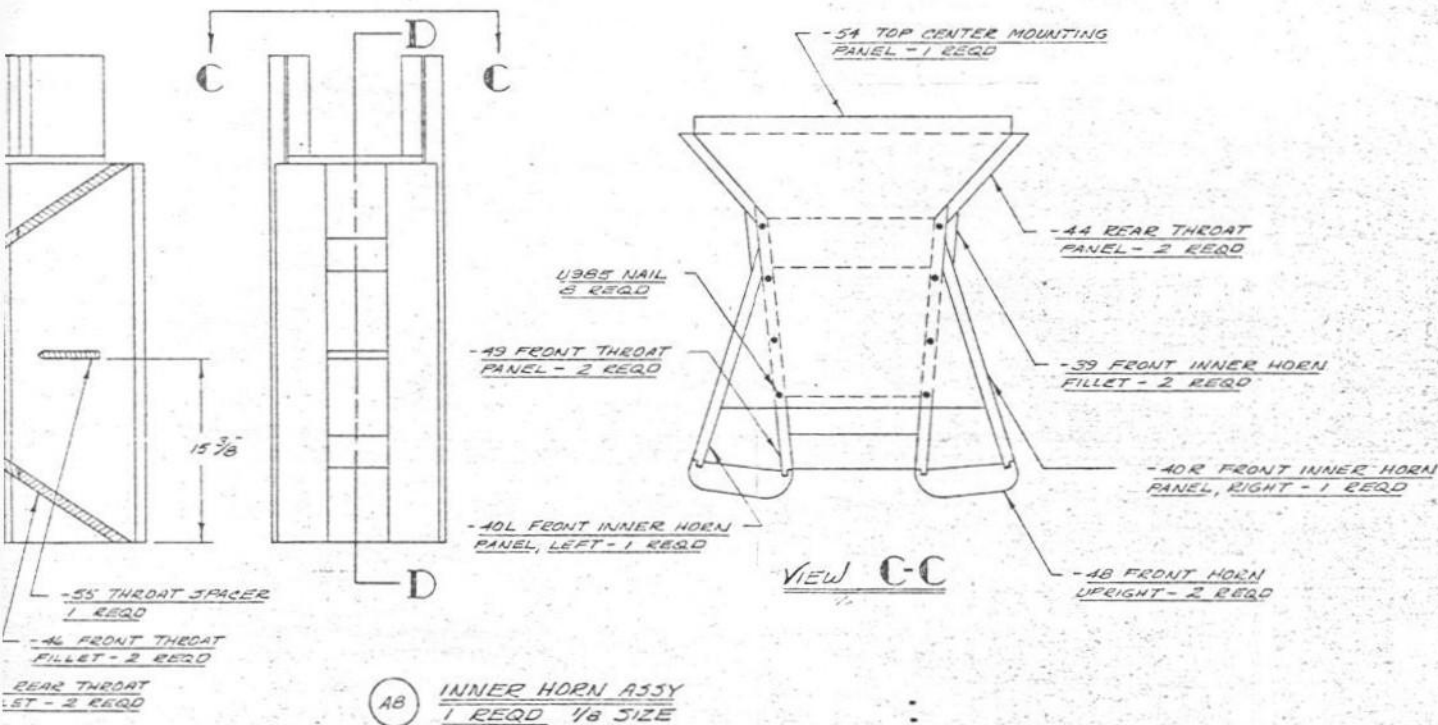
SECTION D-D

-41 FILL



(A7) TOP ASSY, COMPLETE
1 REQD

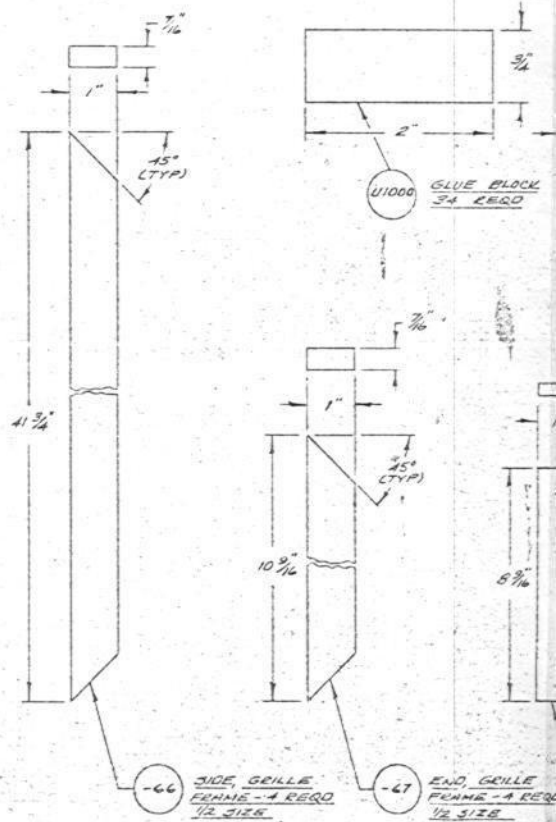
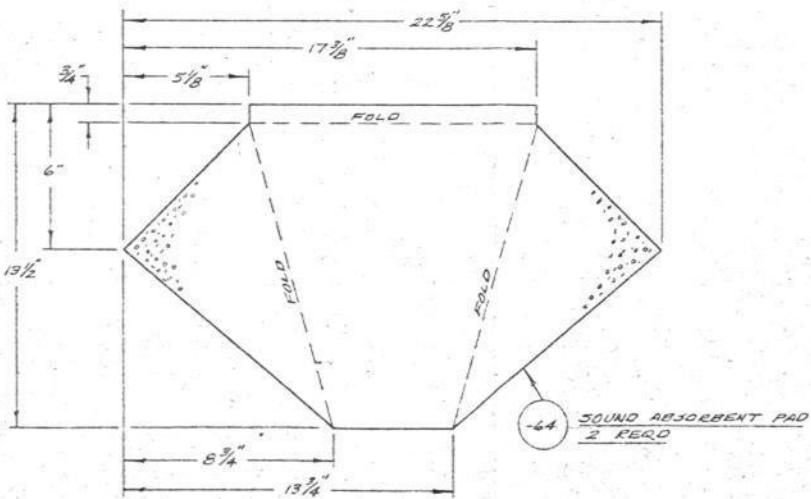
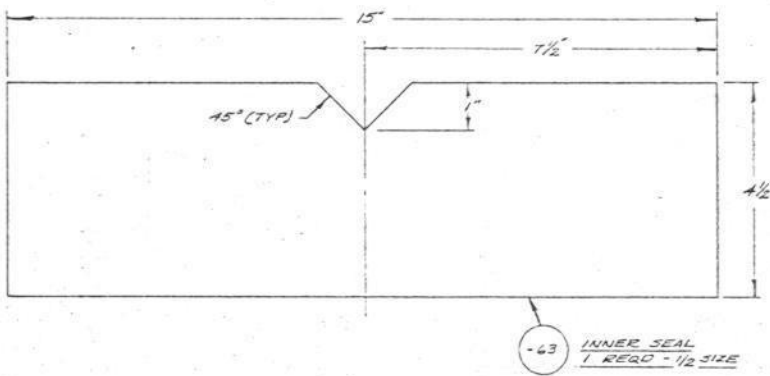
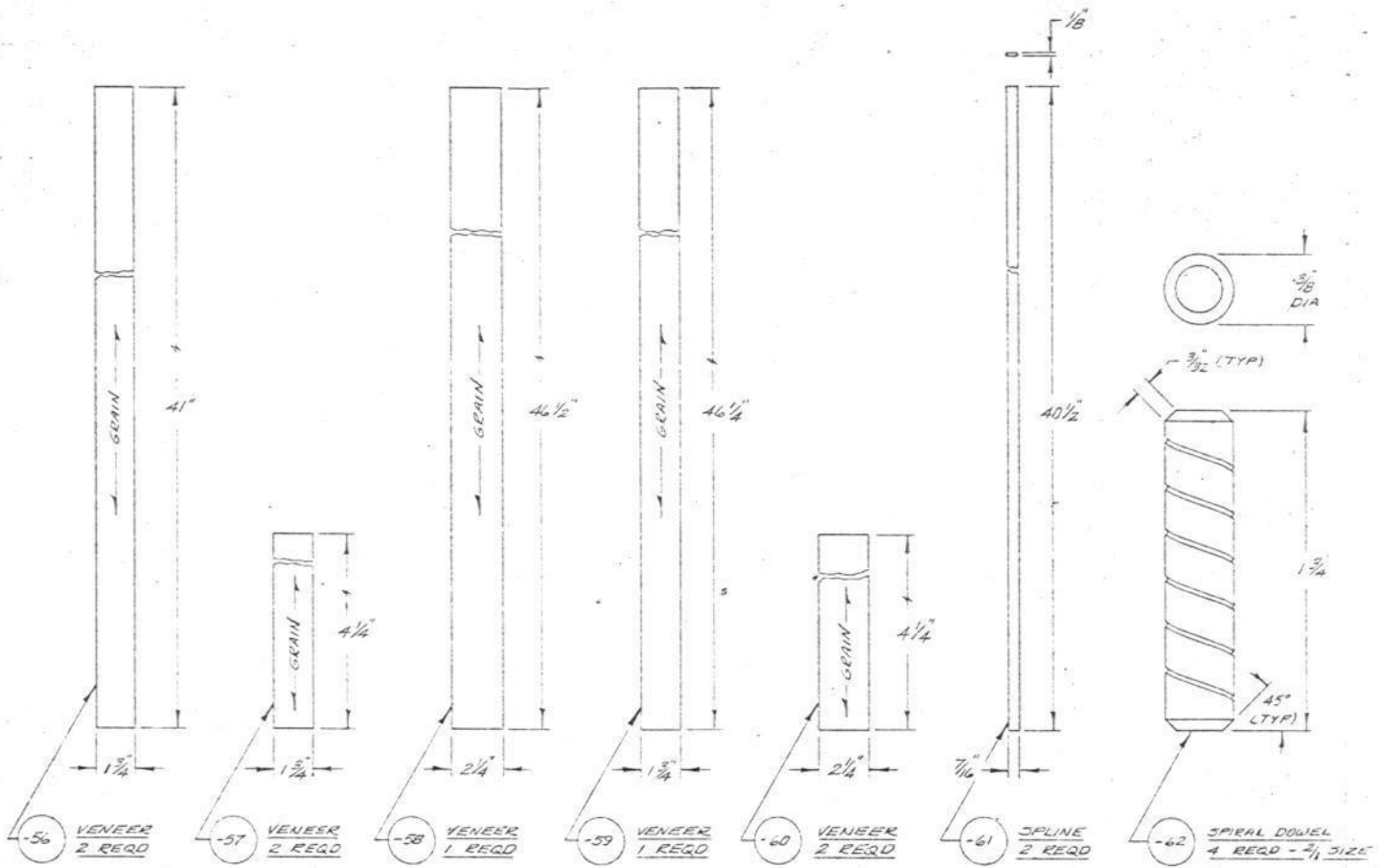
NOTE:
1. DRILL 3/8" DIA X 3/4" DEEP
IN 4 PLACES AFTER PIECES
ARE GLUED FIRMLY TOGETHER
AND MACHINED TO DIMENSIONS
SHOWN.

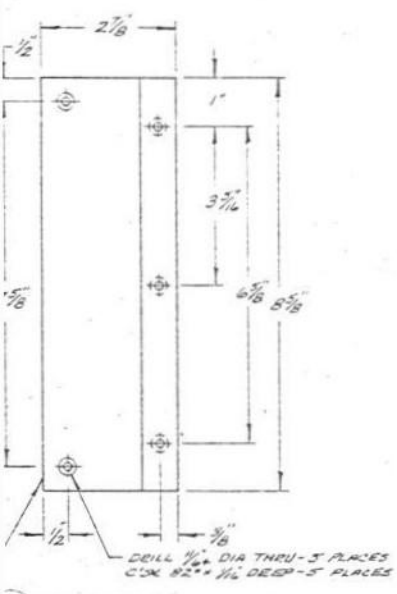
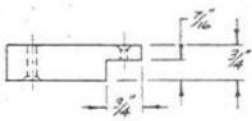


(A8) INNER HORN ASSY
1 REQD 1/8 SIZE

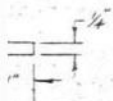
REVISION	BY	DATE	CHANGE OR ADDITION
A	W.P.	10-16-62	2, PHOTO NETWORK SUP-SKT BLOCKS & (4) U966 WOOD SCREWS DELETED.
DATE	MATERIAL	FINISH	MODEL NUMBER
7/19	LISTED		C30
DATE	SCALE	DATE	
7/19	1/4 & NOTED	2-9-59	
DATE	NAME:		
7/19	THE HARTSFIELD		
APPROVED			SHEET NO. 4 OF 9

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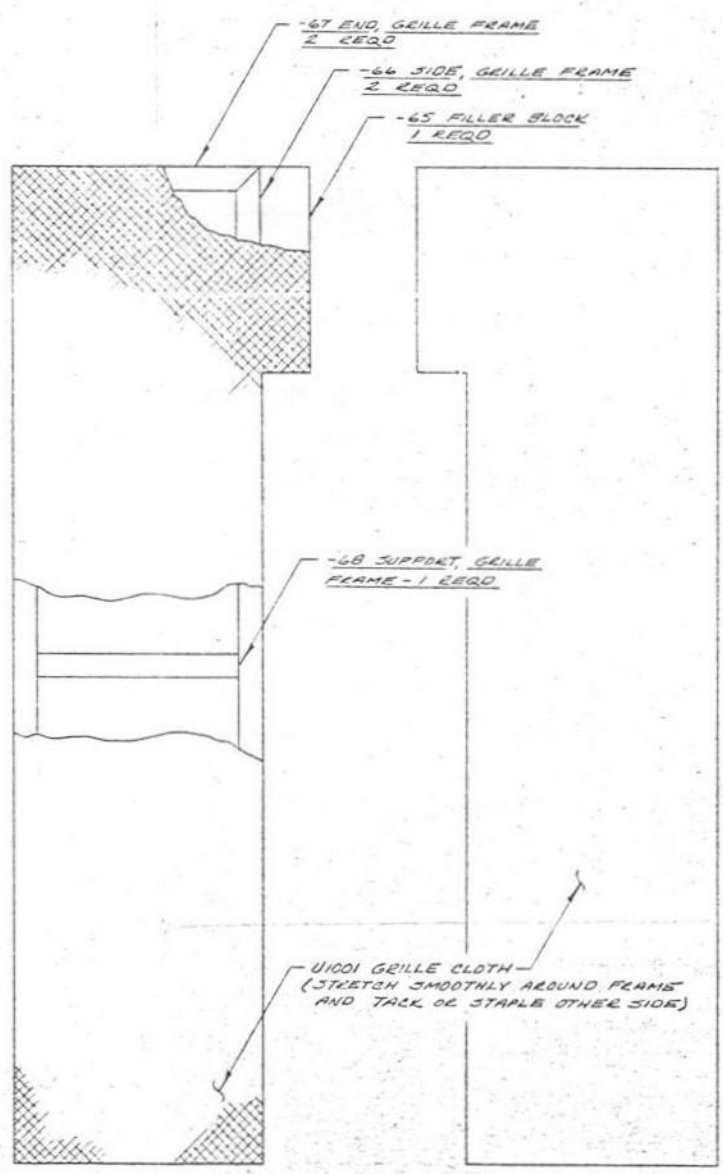




65 FILLER BLOCK
2 REQD



68 SUPPORT, GRILLE FRAME
2 REQD
1/2 SIDE



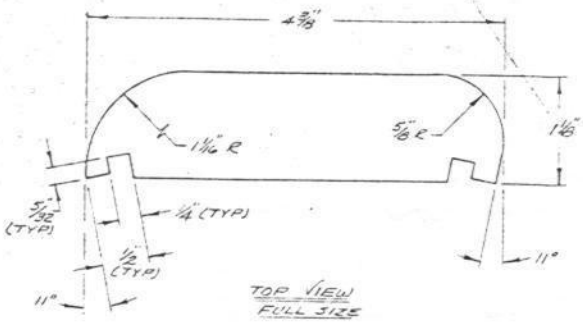
A9 LEFT GRILLE ASSY
1 REQD

A10 RIGHT GRILLE ASSY
1 REQD

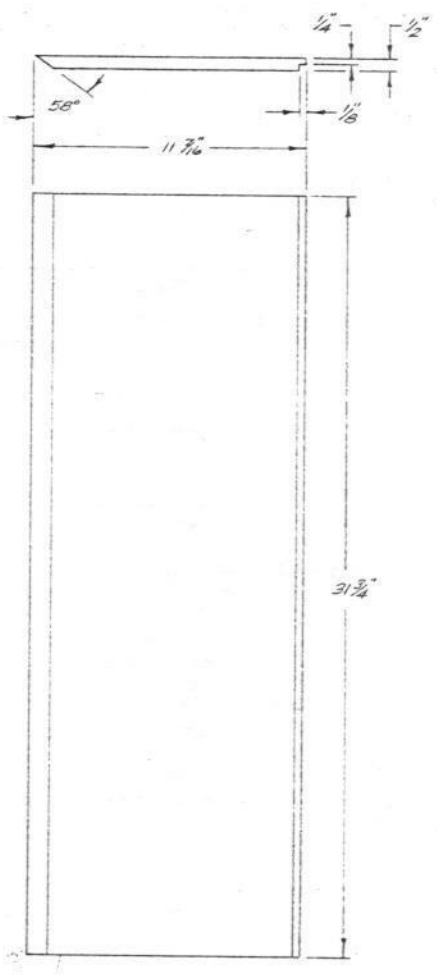
1. A10 GRILLE ASSY USES SAME PARTS AS A9 GRILLE ASSY. 65 FILLER BLOCK MOUNTED ON OPPOSITE SIDE.
2. USE U985 NAILS TO ASSEMBLE FRAMEWORK.

A	WP	10-16-65	(B) W407 NETWORK SUPPORT BLOCKS DELETED.
REVISION		BY	DATE
CHANGE OR ADDITION			

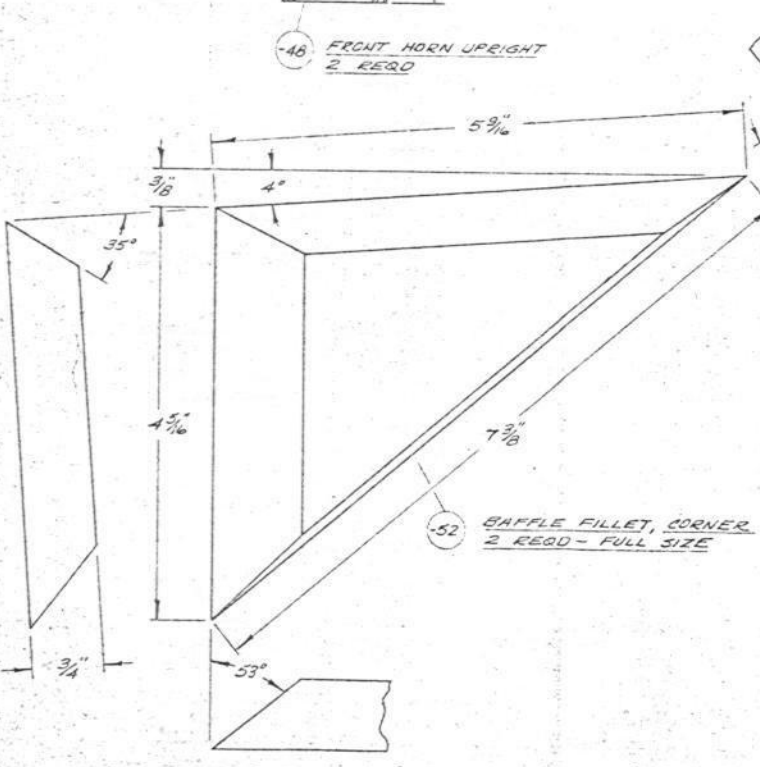
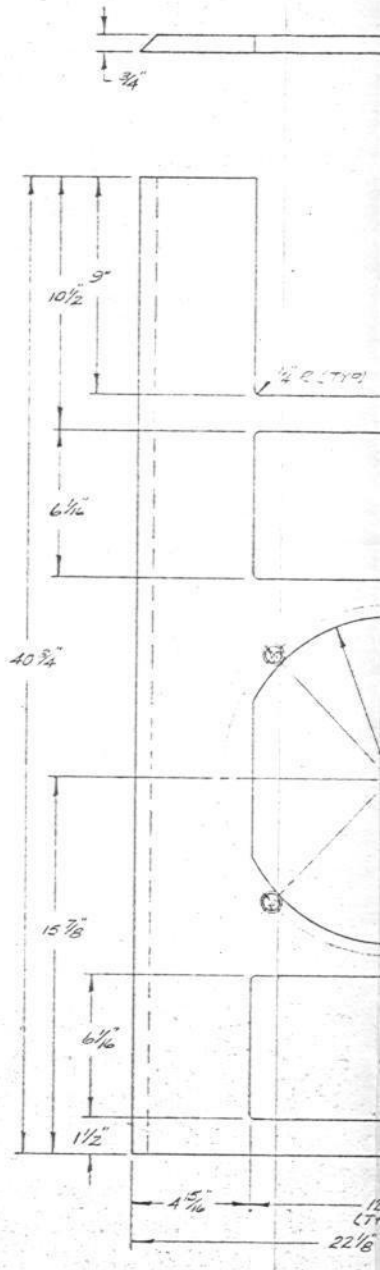
<p>JAMES B. LANSING SOUND, INC. 3249 canitas ave. • los angeles 39, california</p>	DRAFTSMAN <i>D.E.T.</i>	DATE 2/9/59	MATERIAL LISTED	FINISH	MODEL NUMBER
	CHECKER <i>R.B.V.</i>	SCALE 1/4" = 1"	DATE 2-9-59		<i>-C30</i>
	ENGINEER <i>W.C.M.</i>	NAME THE HARTSFIELD			SHEET NO. 5 OF 9
APPROVED					



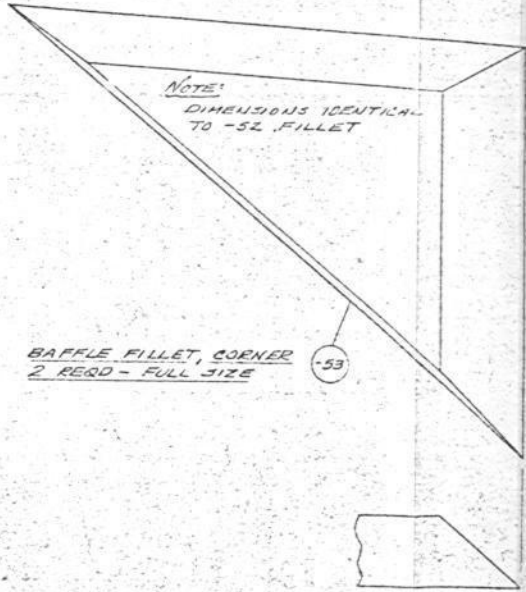
-46 FRONT HORN UPRIGHT
2 REQD



-49 FRONT THROAT PANEL
2 REQD



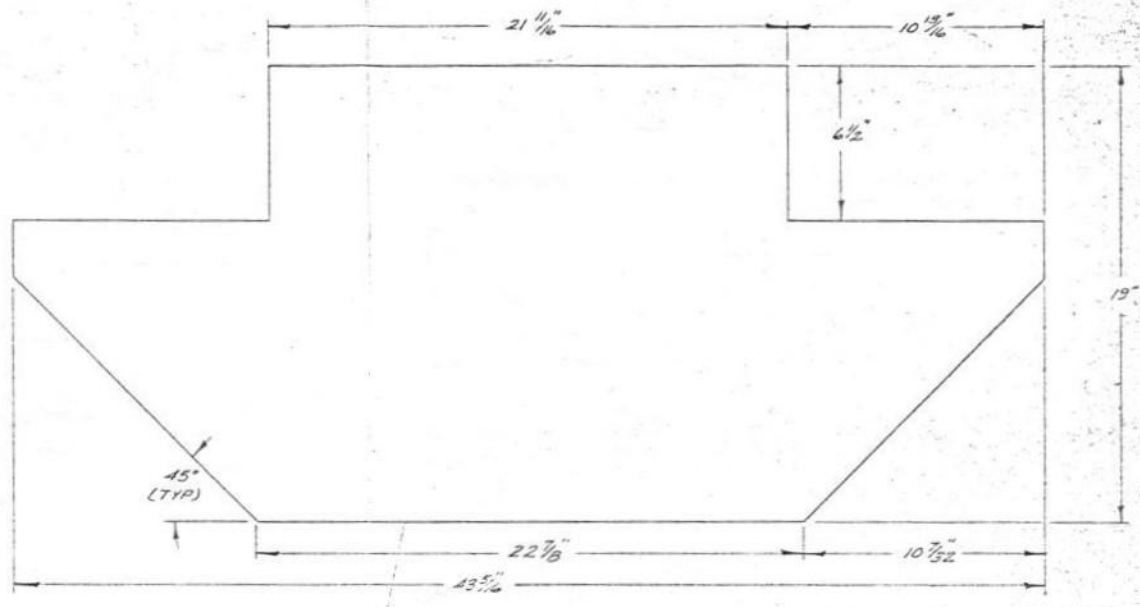
-52 BAFFLE FILLET, CORNER
2 REQD - FULL SIZE



BAFFLE FILLET, CORNER
2 REQD - FULL SIZE

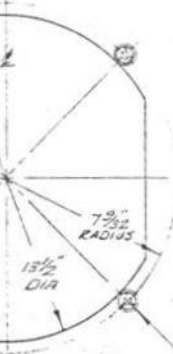
NOTE:
DIMENSIONS IDENTICAL
TO -52 FILLET

45° (TYP)



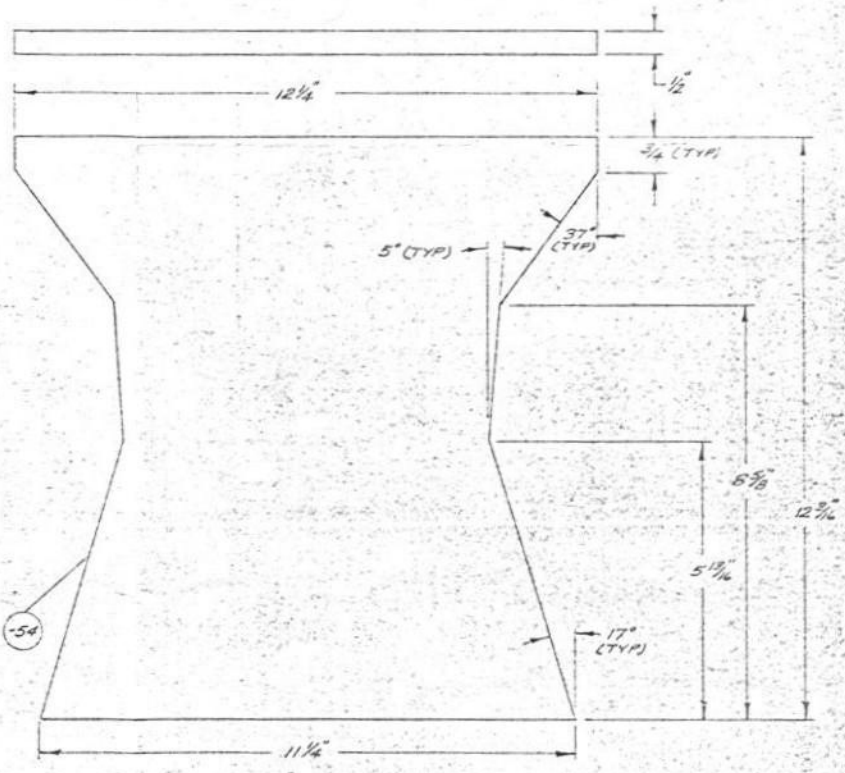
-50 SPEAKER Baffle PANEL
1 REQD

-51 BOTTOM PANEL
1 REQD



DRILL 1 3/16" DIA THRU
4 PLACES
CORNER 7/8" DIA x 1/16" DEEP
4 PLACES
INSTALL UB98 T-NUTS
4 PLACES

TOP CENTER MOUNTING PANEL
1 REQD - HALF SIZE



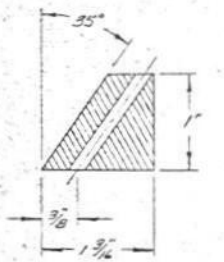
-54

REVISION	BY	DATE	CHANGE OR ADDITION
1	DEJ	2/9/59	LISTED
2	NI	2/9/59	SCALE 1/4" = 1"
3	NI	2/9/59	1/4" NOTED
4	NI	2/9/59	NAME: THE HARTSFIELD

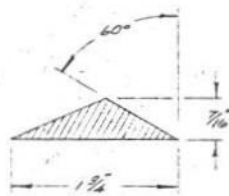
JAMES B. LANSING SOUND, INC.
3249 casitas ave. • los angeles 39, california

MODEL NUMBER
C30

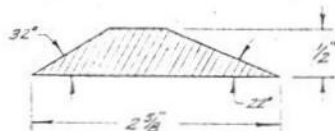
SHEET NO. 6 OF 9



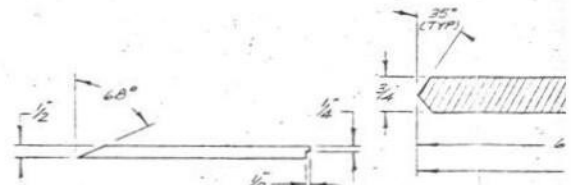
SECTION A-A
FULL SIZE



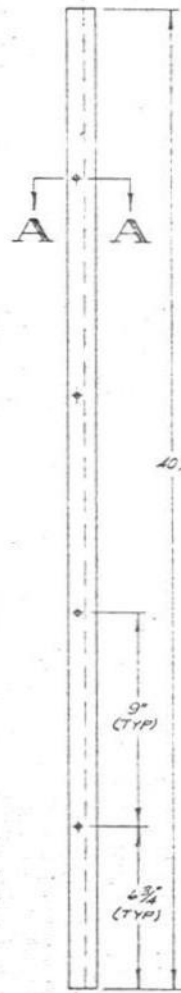
SECTION B-B
FULL SIZE



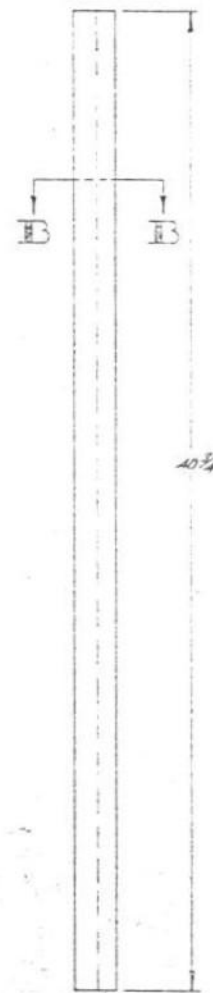
SECTION C-C
FULL SIZE



SECTION D-D
HALF SIZE



-37 SIDE CLEAT
2 REQD



-38 REAR INNER HORN
FILLET - 2 REQD



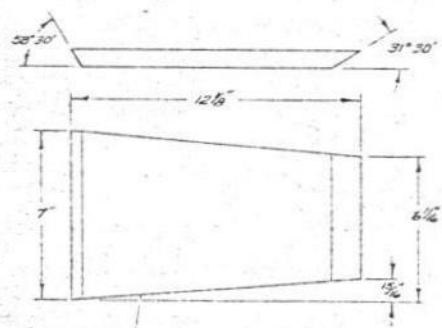
-39 FRONT INNER HORN
FILLET - 2 REQD



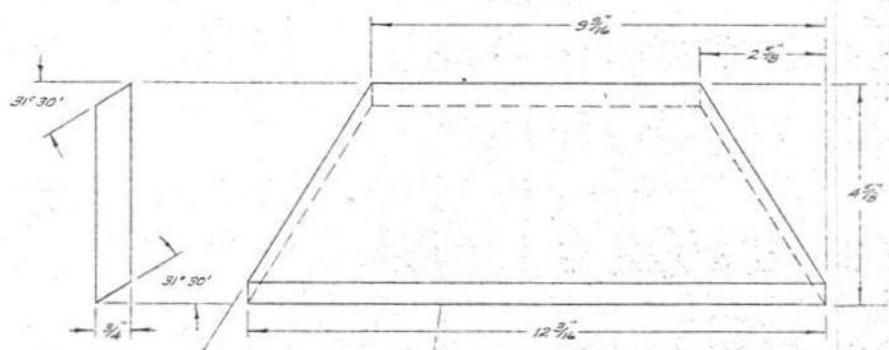
-40R FRONT INNER HORN PANEL,
RIGHT - 1 REQD (SHOWN)
-40L FRONT INNER HORN PANEL,
LEFT - 1 REQD (OPPOSITE)



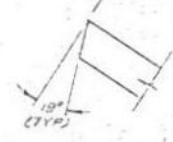
-41

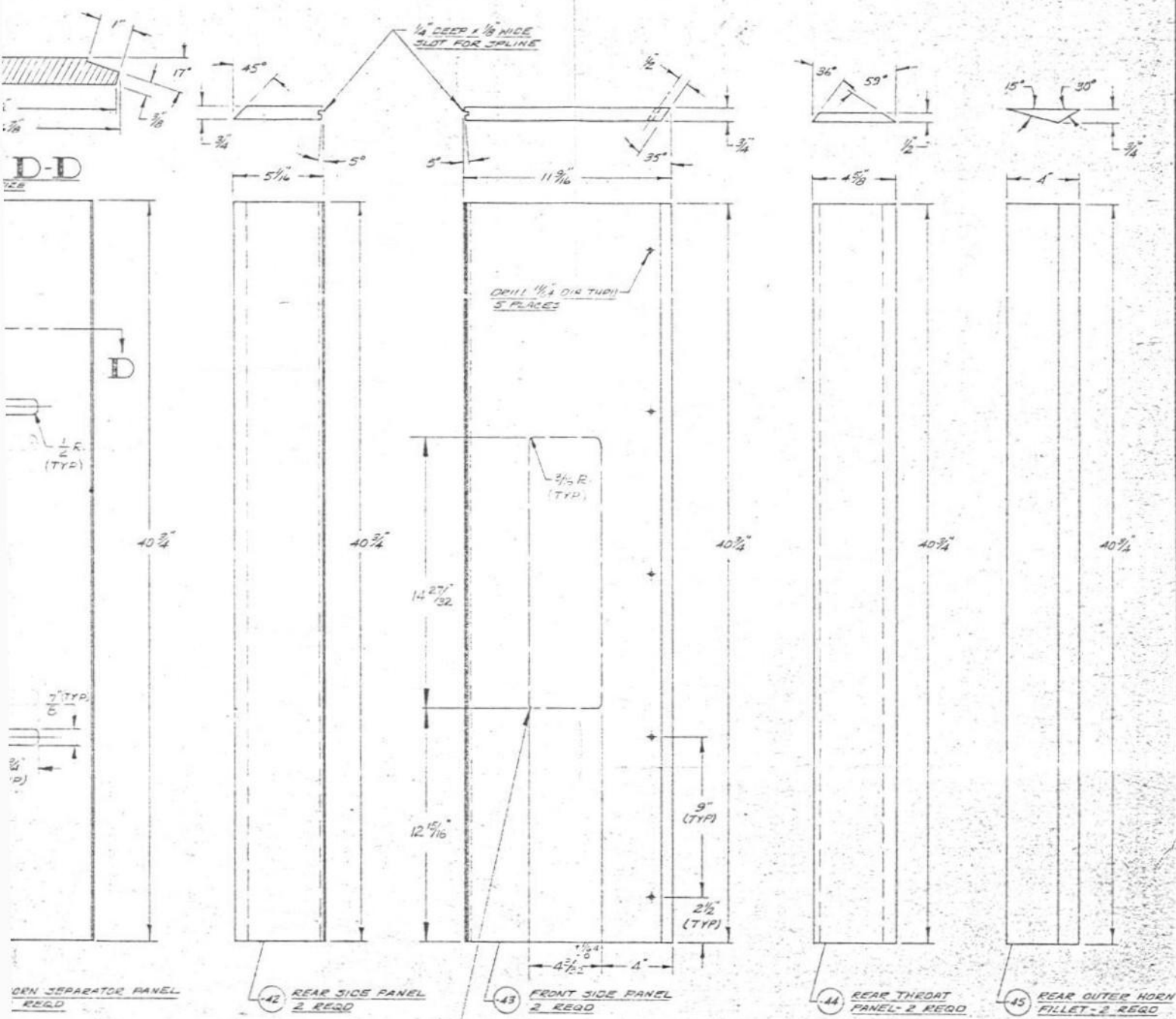


-46 FRONT THROAT ANGLE
2 REQD

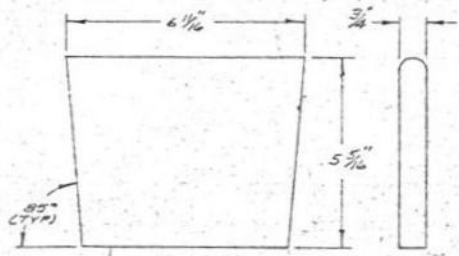


-47 REAR THROAT ANGLE
2 REQD - HALF SIZE





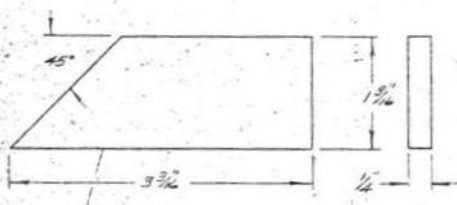
THIS CUTOUT REQD ONLY WHEN JBL SOLID STATE ENERGIZER TRANSDUCER IS INSTALLED. (ON ONE SIDE ONLY)



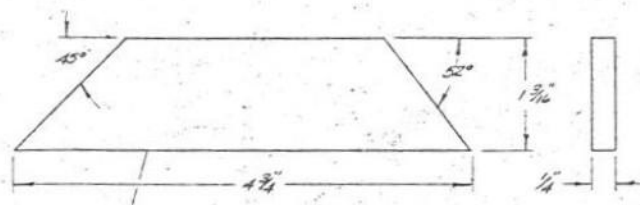
THROAT SPACER, 1 REQD - 3/18 SIZE

REVISION	BY	DATE	MATERIAL	FINISH	MODEL NUMBER
A	W.P.	10-11-53	$14\frac{27}{32} \times 4\frac{5}{8}$ " ENERGIZER CUTOUT SHOWN		C30
CHANGE OR ADDITION					
DRAFTSMAN	DATE	MATERIAL	FINISH	MODEL NUMBER	
D.E.J.	2/19	LISTED		C30	
CHECKER	SCALE	DATE			
G.H.M.	1/30	2-9-59			
ENGINEER	NAME:				
S.H.H.	THE HARTSFIELD				
APPROVED		SHEET NO. 7		OF 9	

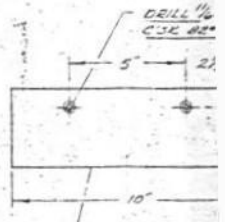
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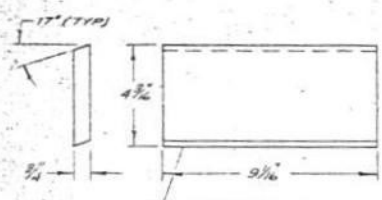
-21 TOP SPACER
2 REQD - FULL SIZE



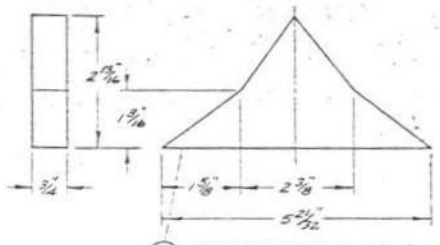
-22 TOP SPACER
2 REQD - FULL SIZE



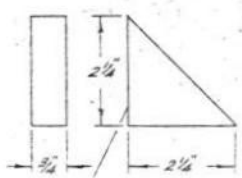
-23 EAR SUPPORT
1 REQD



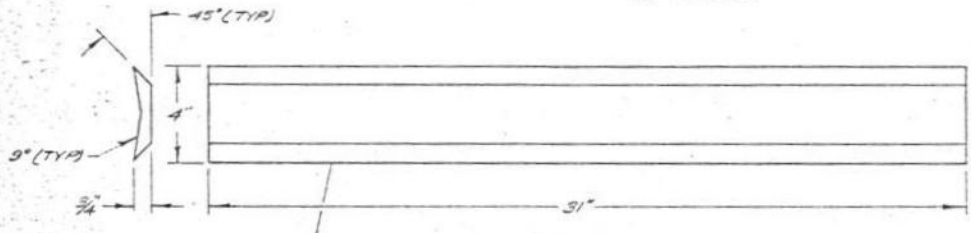
-24 FRONT SIZE PANEL
2 REQD



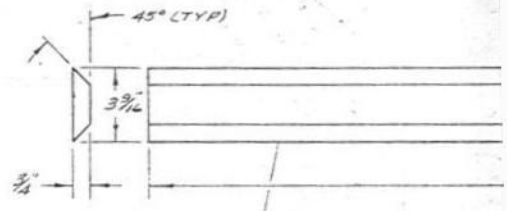
-28 BOTTOM SUPPORT, CENTER
1 REQD



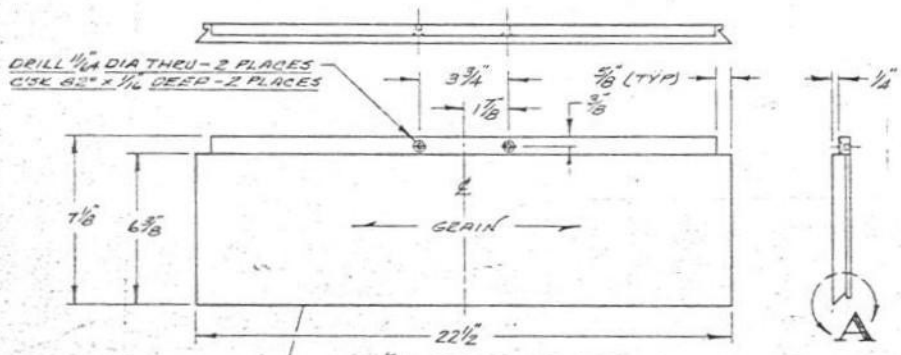
-29 BOTTOM SUPPORT, CORNER
2 REQD



-30 CENTER HORN SPLITTER,
RIGHT & LEFT - 2 REQD

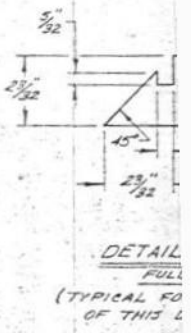


-31 CORNER FILLET
2 REQD

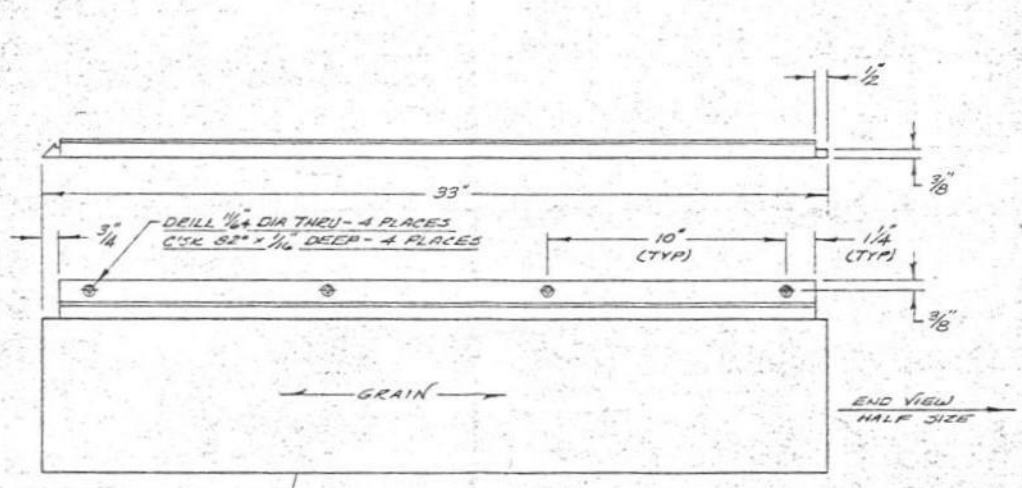


-32 BOX PANEL, TOP
1 REQD

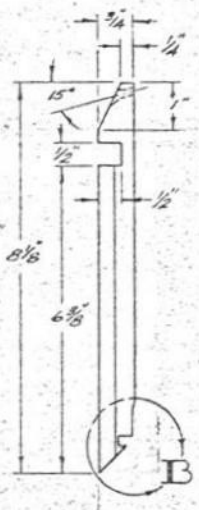
DETAIL A
FULL SIZE
(TYPICAL FOR ALL MITERS OF THIS DESIGN)



DETAIL B
FULL SIZE
(TYPICAL FOR ALL MITERS OF THIS DESIGN)



-33L BOX PANEL, LEFT SIDE (SHOWN)
1 REQD
-33R BOX PANEL, RIGHT SIDE (OPPOSITE)
1 REQD

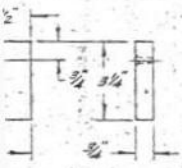


END VIEW
HALF SIZE

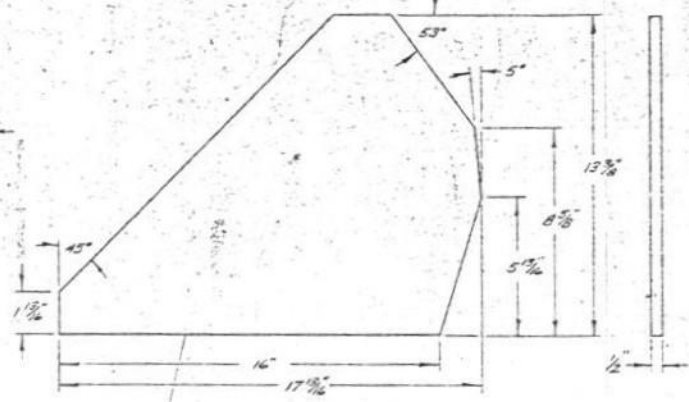


-34 BAFFLE FILLET
BOTTOM - 2

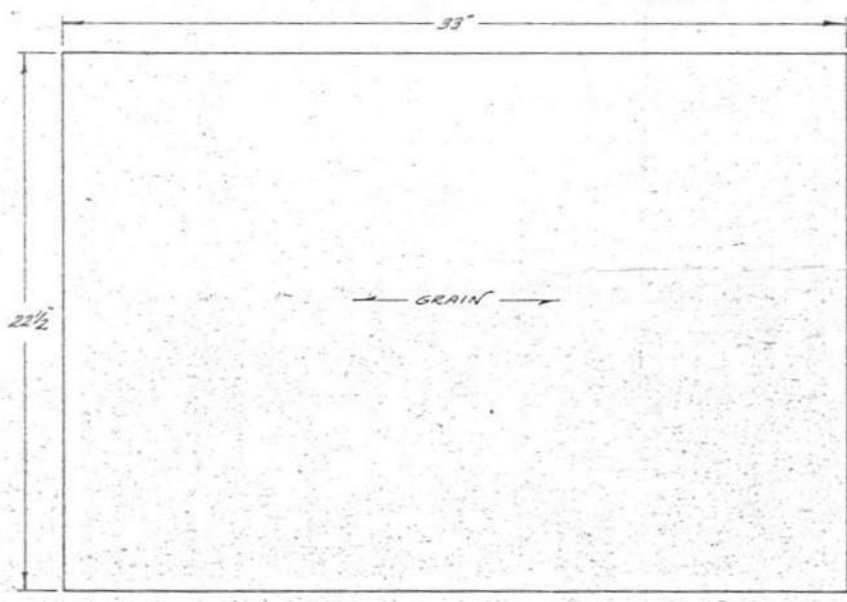
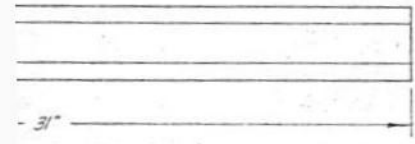
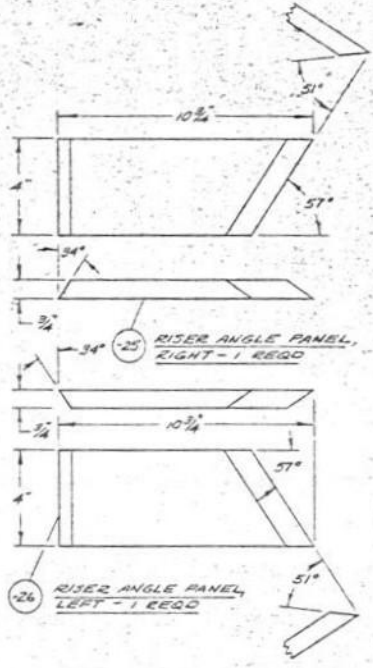
1/4 DIA THRU - 2 PLACES
1/16 DEEP - 2 PLACES



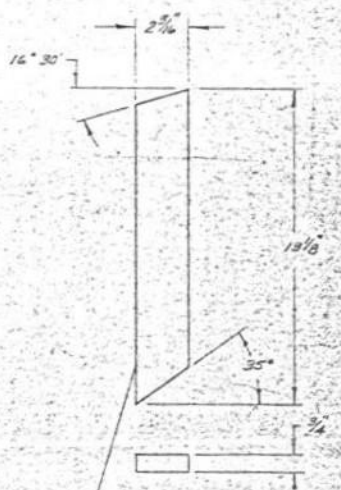
T FILLER



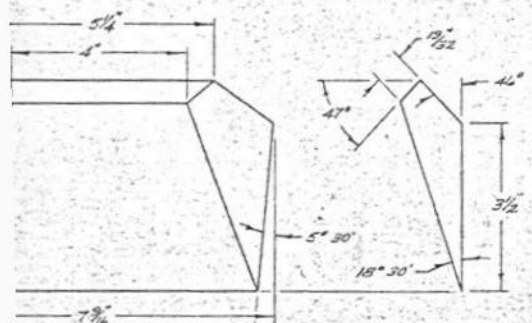
-24 HORN TOP PANEL, LEFT & RIGHT - 2 REQD



-34 BOX PANEL, FRONT 1 REQD



-36 CROSS BRACE 4 REQD



LET TOPS REQD
34° 30' (TYPICAL BOTH SIDES)

B
L SIZE
(FOR ALL MITRES DESIGN)

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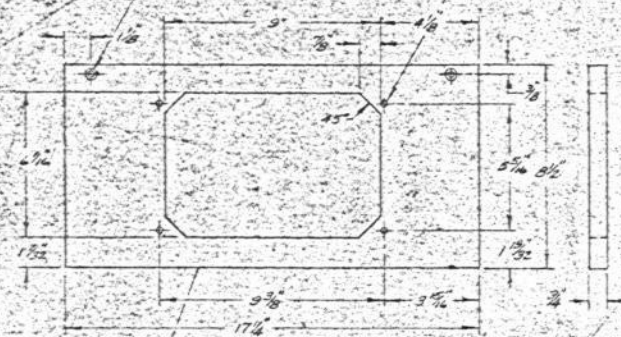
REVISION	BY	DATE	CHANGE OR ADDITION		
DRAFTSMAN	D.B.T.	7/6/59	MATERIAL	LISTED	FINISH
CHECKER	ORVA	7/26/59	SCALE	1/4" = NOTED	DATE
ENGINEER	W.B.M.	11/22/59	NAME:	THE HARTSFIELD	
APPROVED					

MODEL NUMBER
- C30

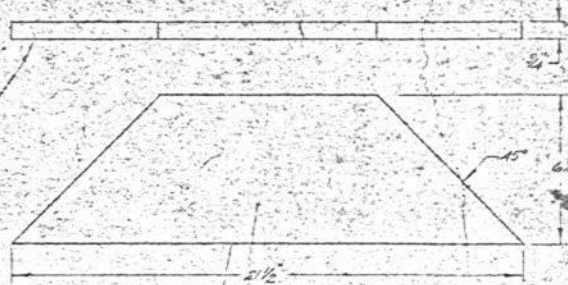
SHEET NO. 8 OF 9

DRILL $\frac{1}{8}$ " DIA THRU - 2 PLACES
C-BORE $\frac{1}{8}$ " DIA X $\frac{1}{4}$ " DEEP - 2 PLACES

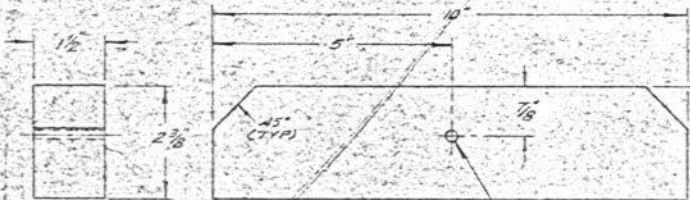
DRILL $\frac{1}{4}$ " DIA THRU
3 PLACES



1 HORN BAFFLE PANEL
1 REQD



2 TOP & BOTTOM PANEL
2 REQD



9 REAR SUPPORT BLOCK
1 REQD
HALF SIZE



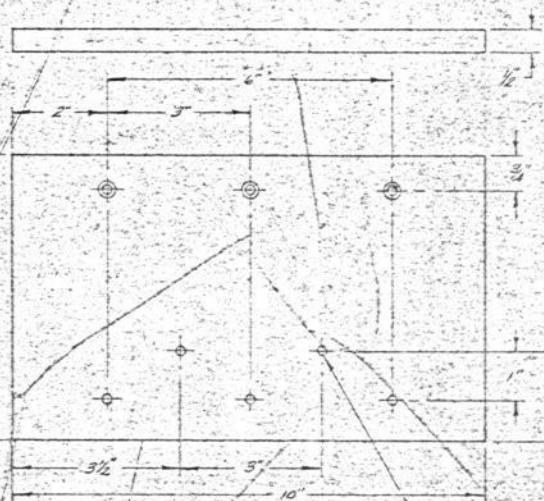
11 BASE PANEL, RIGHT
1 REQD - HALF SIZE



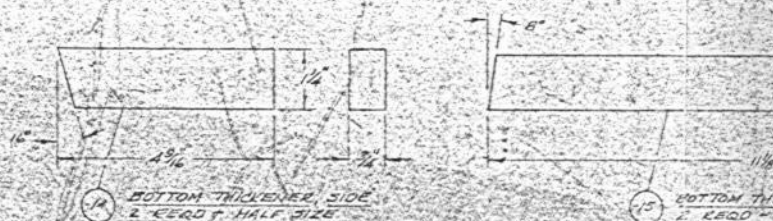
12 BASE PANEL, LEFT
1 REQD - HALF SIZE



13 BASE PANEL, FRONT
1 REQD - HALF SIZE



10 SUPPORT PANEL
1 REQD - HALF SIZE



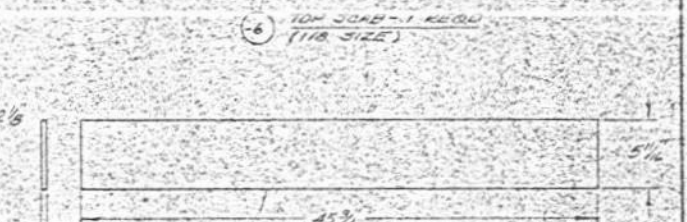
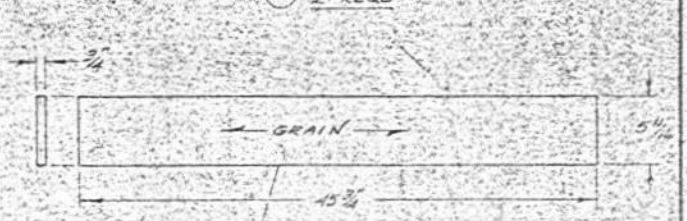
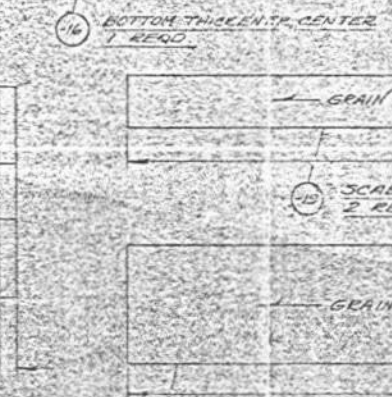
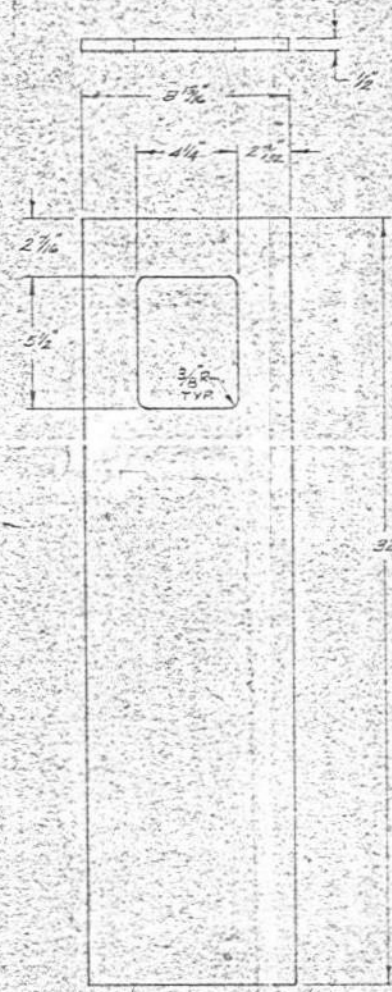
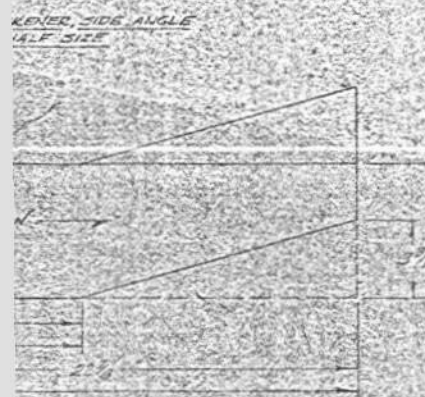
14 BOTTOM THICKENED SIDE
2 REQD - HALF SIZE



17 BOTTOM FRONT PANEL
1 REQD



18 SEALS PANEL GUIDE
2 REQD

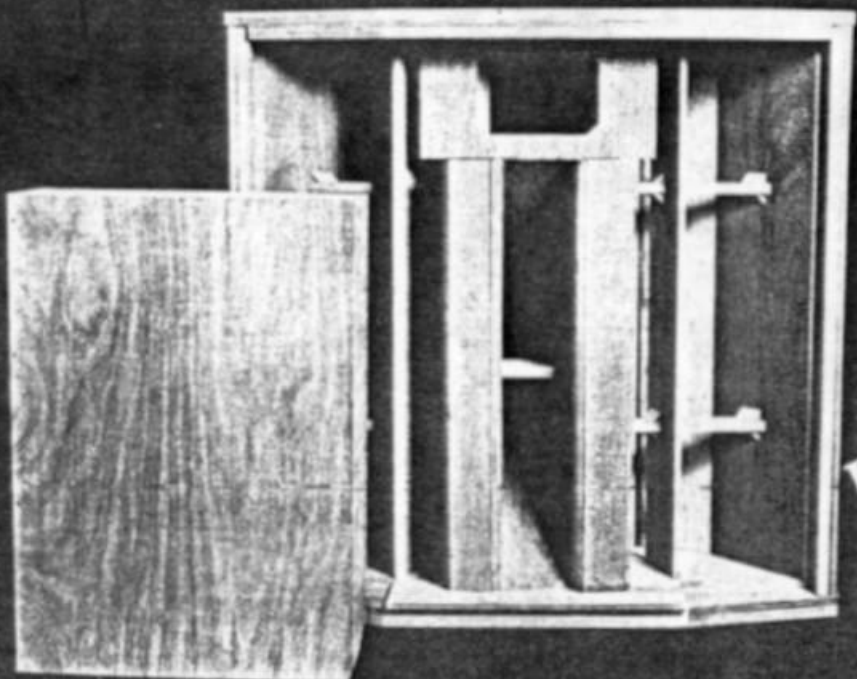


REVISION	BY	DATE	CHANGE OR ADDITION
1

<p>JAMES B. LANSING SOUND, INC. 3217 Century Ave. • Los Angeles 39, California</p>	DRAFTSMAN G.E.S.	DATE 1/29	MATERIAL LISTED	FINISH ...	MODEL NUMBER C-30
	ENGINEER ...	DATE 2-2-53	SCALE 1/4" = 1"	NAME THE HARTSFIELD	SHEET NO. 9 OF 9

JBLハーツフィールド(1)

齊藤宏嗣 & 読者

HARTS
FIELD

二年前のオートグラフから満を持して
いたハーツフィールドにとうとう挑戦し
た。工作の難しさ、高価なユニットなど
自作として過当かどうか迷っていたのが
読者訪問でオートグラフがあまりにも見
事に作られているのを見て、挑戦に踏み
切った。ページの都合で、今号に紹介す
るのは、設計図と、齊藤宏嗣 & 読者によ
る四分の一モデル製作記だが、次号には
実際の製作記と、書出しを掲載する。読
者の皆さんも、まず四分の一モデルから
作ってほしい。これはただの箱づくりで
はなく、「ひとつの工芸品を作ることだ」
と、思っ、あわてずゆっくりと挑戦して
もらいたい。なぜ四分の一モデルをつく
ったかという点、内部の構造とか、パー
ツの役割、組み合わせなどを理解するの
に欠かせないと考えたからだ。

写真のハーツフィールドは掲載してあ
る設計図をもとに、木取りして組み立て
たのが、かろうじて締め切りに間に合っ
たもの。詳細は次号に掲載する予定だが、
今号だけでも十分製作可能だ。編集部

JBLサウンドのルーツ
ハーツフィールド

齊藤宏嗣

ウエスタンエレクトリックからの二つ
の分派、アルテックとJBLは、業務用
とコンシューマー用の対照的な道を歩ん
てきた。今日では著名なJBL社も、デビ
ュー当時は無名に等しかったが、二つの
銘器によって不動のブランドとして、オ
ーディオ界に君臨する地位を得た。ステ
レオ時代の初頭を飾ったパラゴン、そし
てLP時代全盛期のハーツフィールドで
ある。そして、両器ともジェームス・B・
ランシング社長買下のエンジニア、パラ
ゴン氏とハーツフィールド氏によって開
発されている。正式名称D30083ハ
ーツフィールドを熟知するオーディオファ
ンは少ないが、JBLのルーツとして
・幻の銘器、とうわさされるモデルであ
る。JBLサウンドの原点として今回、
多くの方々の努力、協力によって正確な
オリジナル図面が全貌を公開されること
は、大変に喜ばしいことである。

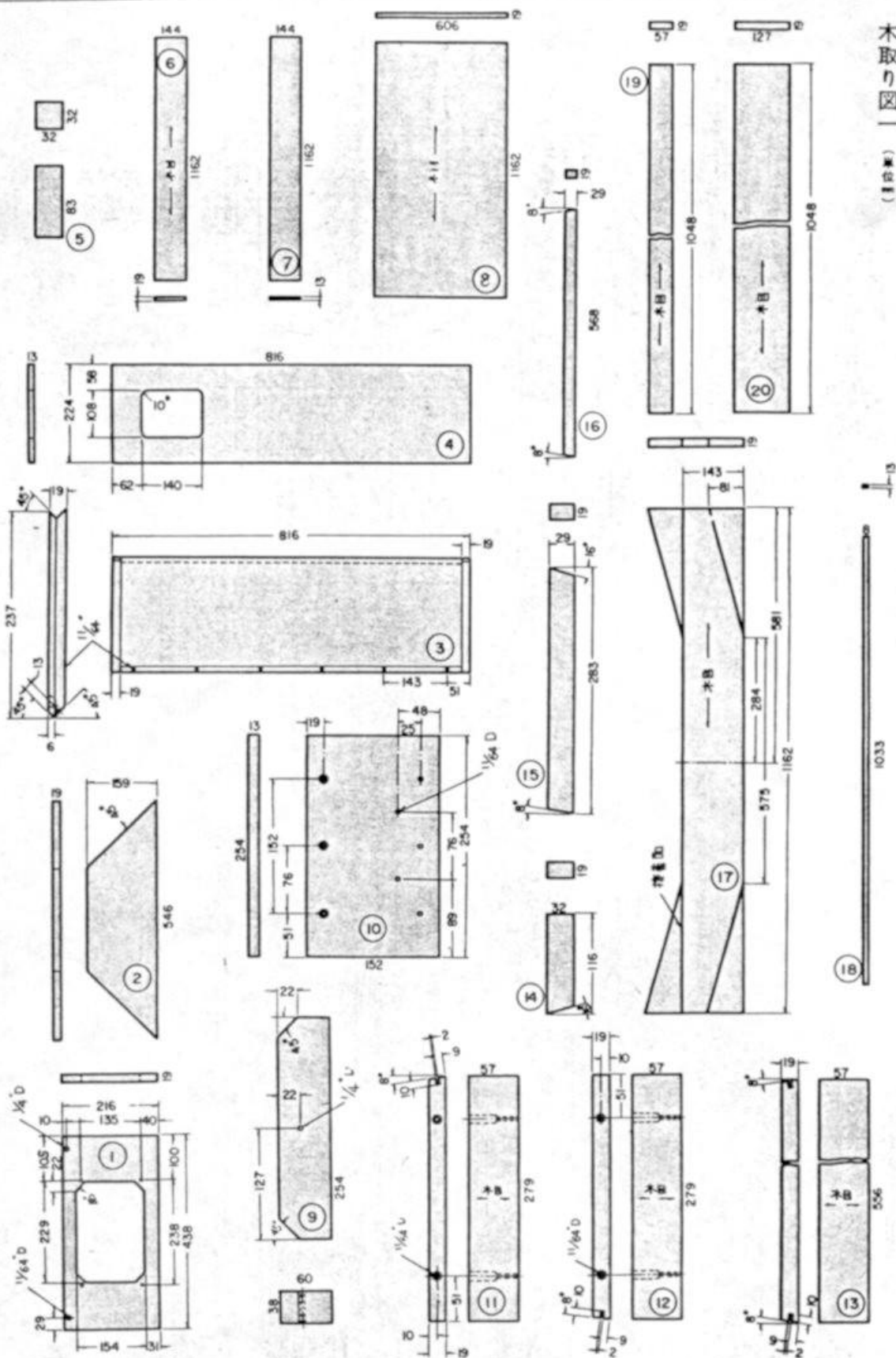
シアター用ユニットと
コーナー型ホーン

ハーツフィールドの原形は、シアター
用のユニットとして設計されたウーハー
150C-4C、ドライバ1375と5
37-509 (ホーンと音響レンズ) か

パーツ・リスト

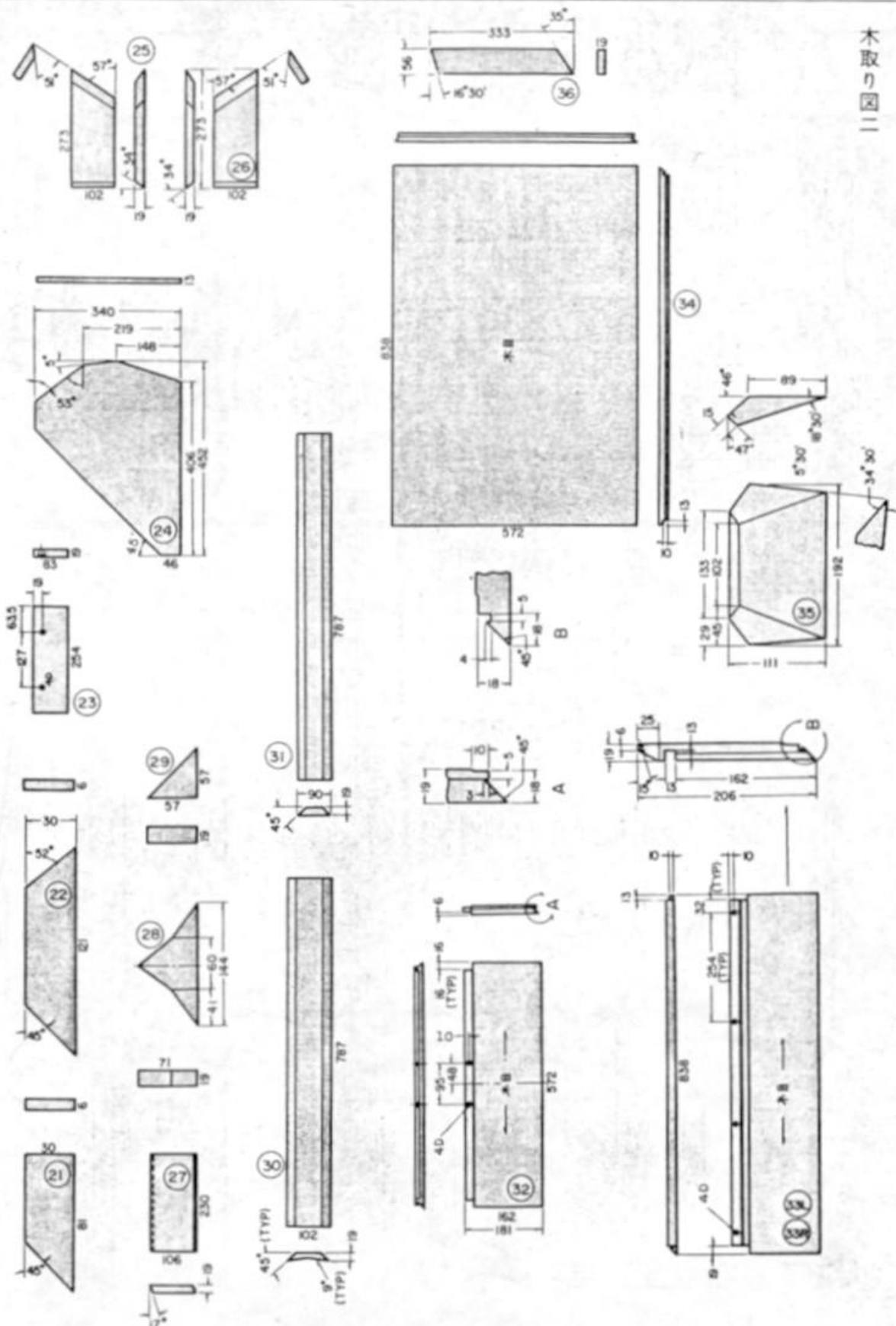
部品名・数量・単位

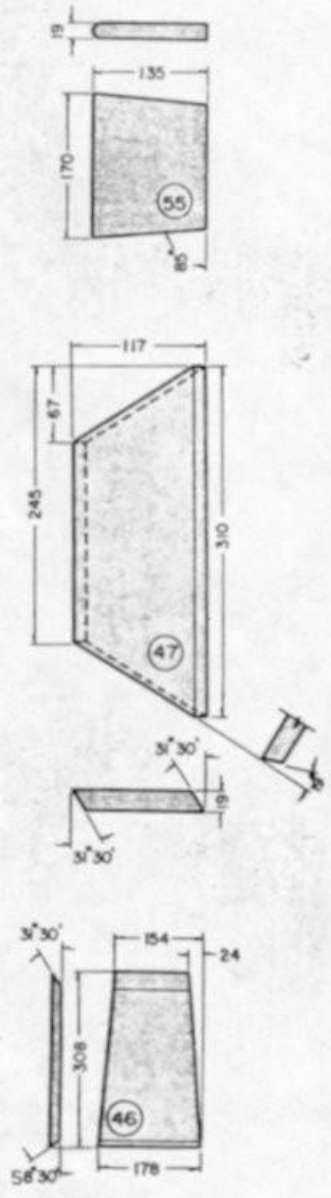
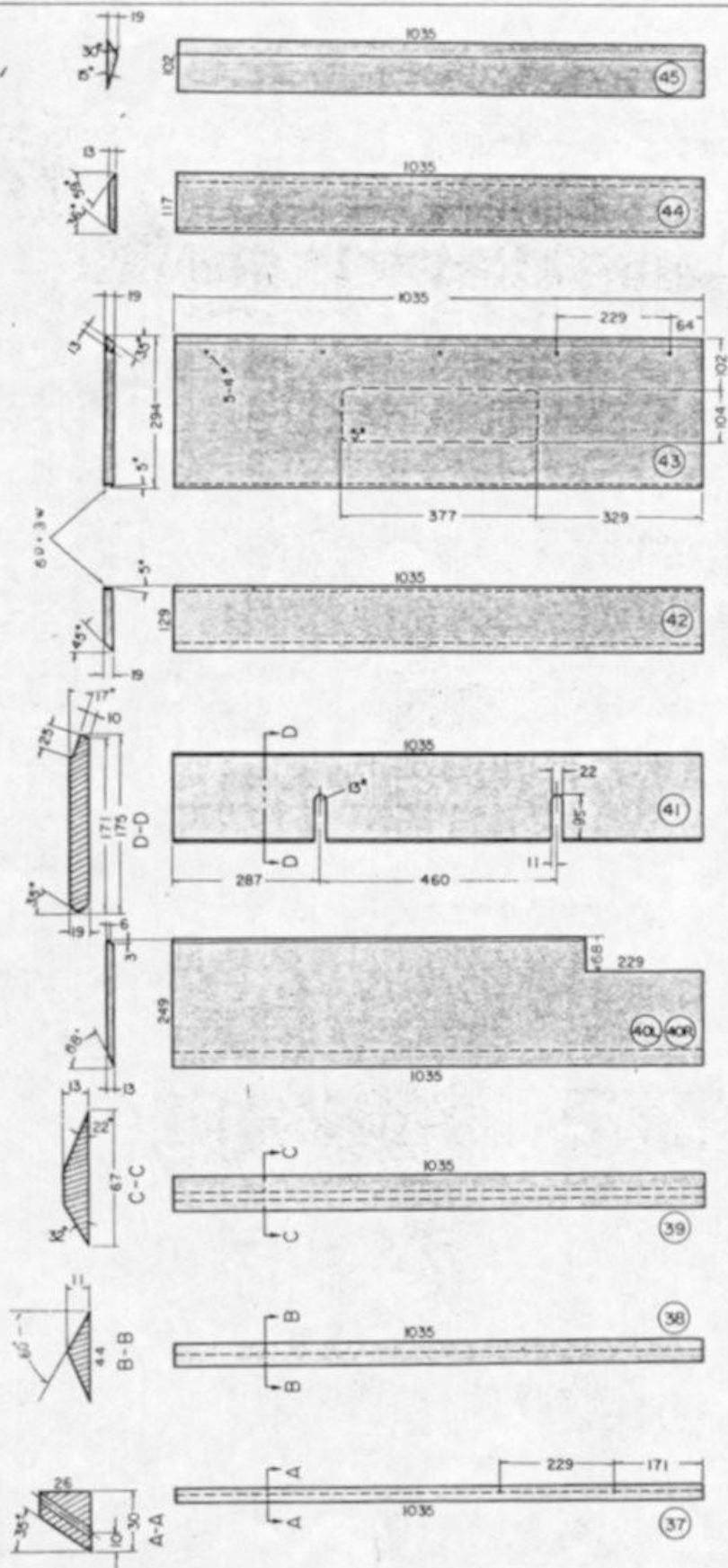
PART NO	NO REQD	NAME	MATERIAL SPECIFICATION	SIZE (mm)
1	1	HORN BAFFLE PANEL	19 TIMBLEND	438×216
2	2	TOP BOTTOM PANEL	19 TIMBLEND	546×159
3	2	SIDE PANEL	19 TIMBLEND	816×237
4	1	BACK PANEL	13 TIMBLEND	816×224
5	2	SIDE EXTENSION BLOCK	WHITE PINE	83×32×32
6	1	TOP SCAB	19 VENEERED TIMBLEND	1,162×144
7	1	THICKENER PANEL	13 TIMBLEND	1,162×144
8	1	TOP PANEL	19 VENEERED TIMBLEND	1,162×606
9	1	REAR SUPPORT BLOCK	WHITE PINE	254×60×38
10	1	SUPPORT PANEL	13 TIMBLEND	254×152
11	1	BASE PANEL RIGHT	19 VENEERED TIMBLEND	277×57
12	1	BASE PANEL LEFT	19 VENEERED TIMBLEND	279×57
13	1	BASE PANEL FRONT	19 VENEERED TIMBLEND	556×57
14	2	BOTTOM THICKENER SIDE	19 WHITE PINE	116×32
15	2	BOTTOM THICKENER SIDE	19 WHITEPINE	383×29
16	1	BOTTOM THICKENER CENTER	19 WHITE PINE	568×29
17	1	BOTTOM FRONT PANEL	19 VENEERED TIMBLEND	1,162×143
18	2	GRILLE PANEL GUIDE	13 WHITE PINE	1,034×8
19	2	SCAB	19 VENEERED TIMBLEND	1,048×57
20	2	OUTER SIDE PANEL	19 VENEERED TIMBLEND	1,048×127
21	2	TOP SPACER	WHITE PINE	81×30×6
22	2	TOP SPACER	WHITE PINE	121×30×6
23	1	REAR SUPPORT FILLER	13 TIMBLEND	254×83
24	2	HORN TOP PANEL LEFT RIGHT	13 TIMBLEND	437×340
25	1	RISER ANGLE PANEL RIGHT	19 WHITE PINE	273×102
26	1	RISER ANGLE PANEL LEFT	19 WHITE PINE	273×102
27	2	FRONT RISER PANEL	19 WHITE PINE	230×106
28	1	BOTTOM SUPPORT CENTER	19 WHITE PINE	144×71
29	2	BOTTOM SUPPORT CORNER	19 WHITE PINE	57×57
30	2	CENTER HORN SPLITTER RIGHT LEFT	19 WHITE PINE	787×102
31	2	CORNER FILLET	19 WHITE PINE	787×81
32	1	BOX PANEL TOP	19 VENEERED TIMBLEND	572×181
33L	1	BOX PANEL LEFT SIDE	19 VENEERED TIMBLEND	838×206
33R	1	BOX PANEL RIGHT SIDE	19 VENEERED TIMBLEND	838×206
34	1	BOX PANEL FRONT	19 VENEERED TIMBLEND	838×572
35	2	BAFFLE FILLET TOP-BOTTOM	WHITE PINE	192×111×33
36	4	CROSS BRACE	19 TIMBLEND	333×56
37	2	SIDE CLEAT	WHITE PINE	1,035×30×25
38	2	REAR INNER HORN FILLET	WHITE PINE	1,035×44×11
39	2	FRONT INNER HORN FILLET	WHITE PINE	1,035×67×13
40L	1	FRONT INNER HORN PANEL LEFT	13 TIMBLEND	1,035×249
40R	1	FRONT INNER HORN PANEL RIGHT	13 TIMBLEND	1,035×249
41	2	HORN SEPARATOR PANEL	19 TIMBLEND	1,035×175
42	2	REAR SIDE PANEL	19 TIMBLEND	1,035×129
43	2	FRONT SIDE PANEL	19 TIMBLEND	1,035×294
44	2	REAR THROAT PANEL	13 TIMBLEND	1,035×117
45	2	REAR OUTER HORN FILLET	19 WHITE PINE	1,035×102
46	2	FRONT THROAT ANGLE	19 TIMBLEND	308×178
47	2	REAR THROAT ANGLE	19 TIMBLEND	310×117
48	2	FRONT HORN UPRIGHT	ALDER	807×111×29
49	2	FRONT THROAT PANEL	13 TIMBLEND	807×291
50	1	SPEAKER BAFFLE PANEL	19 TIMBLEND	1,035×562
51	1	BOTTOM PANEL	13 TIMBLEND	1,100×483
52	2	BAFFLE FILLET CORNER	19 WHITE PINE	141×119
53	2	BAFFLE FILLET CORNER	19 WHITE PINE	141×119
54	1	TOP CENTER MOUNTING PANEL	13 TIMBLEND	311×310
55	1	THROAT SPACER	19 WHITE PINE	170×135
56	2	VENEER	AS NOTED	1,041×45
57	2	VENEER	AS NOTED	108×45
58	1	VENEER	AS NOTED	1,181×57
59	1	VENEER	AS NOTED	1,175×45
60	2	VENEER	AS NOTED	100×57
61	2	SPLINE	3 MASONITE	1,029×11
62	4	SPIRAL DOWEL	HARD MAPLE	45×10
63	1	INNER SEAL	FELT	381×114×2
64	2	SOUND ABSORBENT PAD	19 FIBERGLASS	575×343
65	2	SILLER BLOCK	WHITE PINE	219×75
66	4	FIDE GRILLE FRAME	ALDER	1,060×25×11
67	4	END GRILLE FRAME	ALDER	260×25×11
68	2	SUPPORT GRILLE FRAME	ALDER	217×25×6
U 839	4	WOOD SCREW	STEEL FLAT HEAD PHILLIPS	203×64
U 840	14	WOOD SCREW	STEEL FLAT HEAD PHILLIPS	203×25
U 845	30	WOOD SCREW	STEEL FLAT HEAD PHILLIPS	203×38
U 846	16	WOOD SCREW	STEEL FLAT HEAD PHILLIPS	203×38
U 870	25	WOOD SCREW	STEEL FLAT HEAD PHILLIPS	203×45
U 897	12	FINISH WASHER	BRASS BLACK OXIDE	203
U 992	100	NAIL	4D CC FINISHING NAIL	32
U 991	2	JOINT NAIL	STEEL	254×38
U 985	150	NAIL	6D CC BOX NAIL	48
U 899	6	GLIDE	STEEL SINGLE PRONG	16-508
U 898	4	T NUT	STEEL BLACK OXIDE	6-508×8
U 906-1	2	GASKET SEAL	SPONGE RUBBER ADHESIVE	816×19×3
U 906-2	2	GASKET SEAL	SPONGE RUBBER ADHESIVE	508×19×3
U 999-1	1	GASKET SEAL	SPONGE RUBBER ADHESIVE	540×13×3
U 1000	34	GLUE BLOCK	19 WHITE PINE	51×19
U 1001	2	GRILLE CLOTH	AS DESIRED	1,099×356



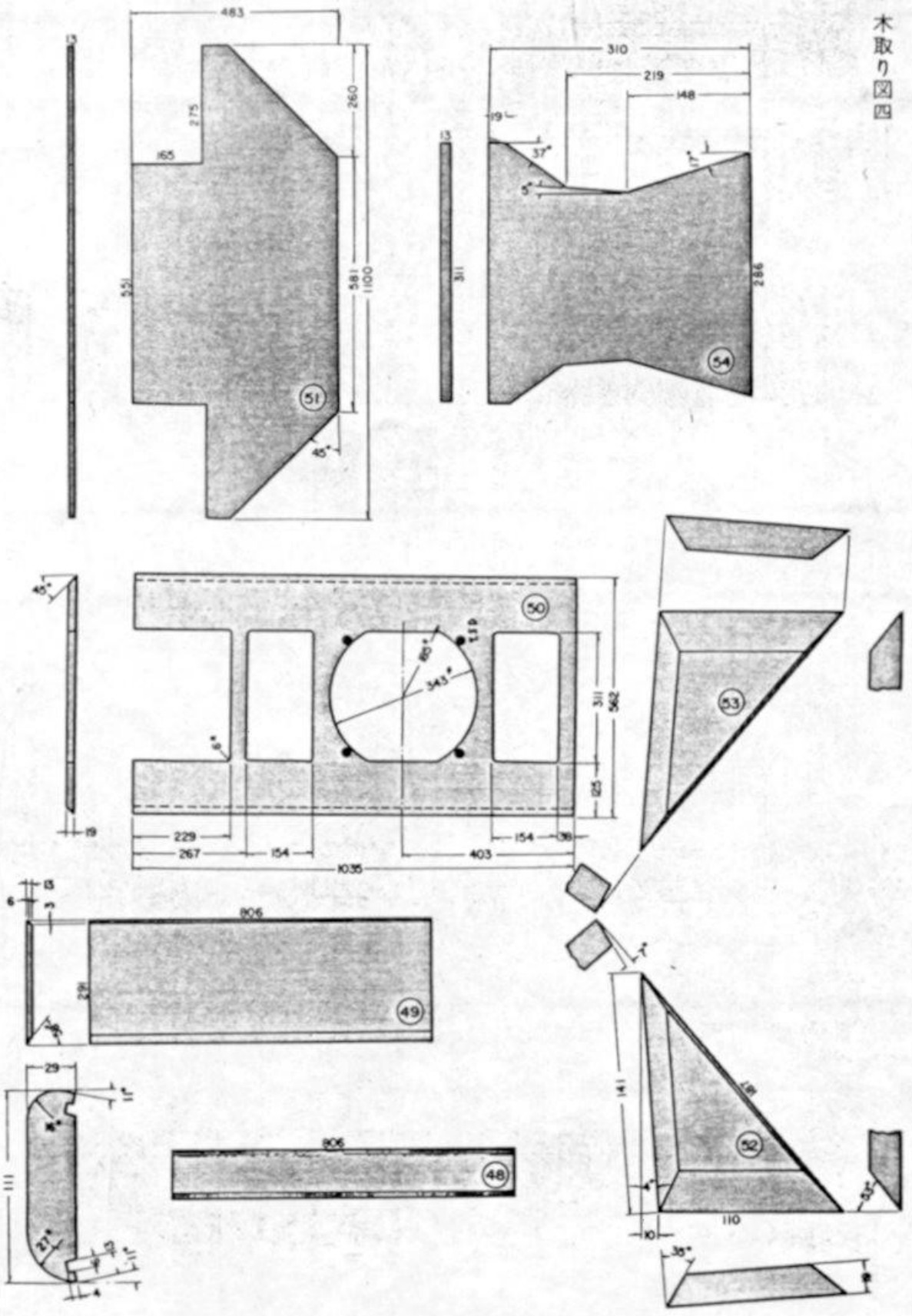
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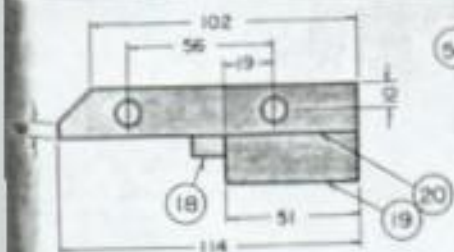
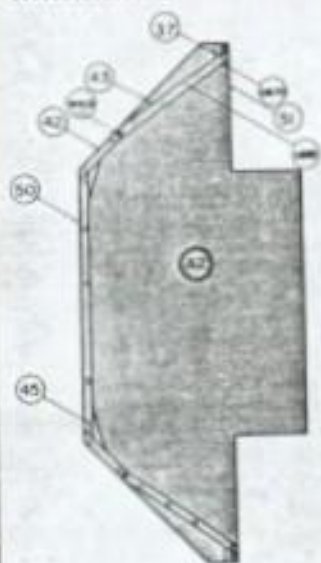
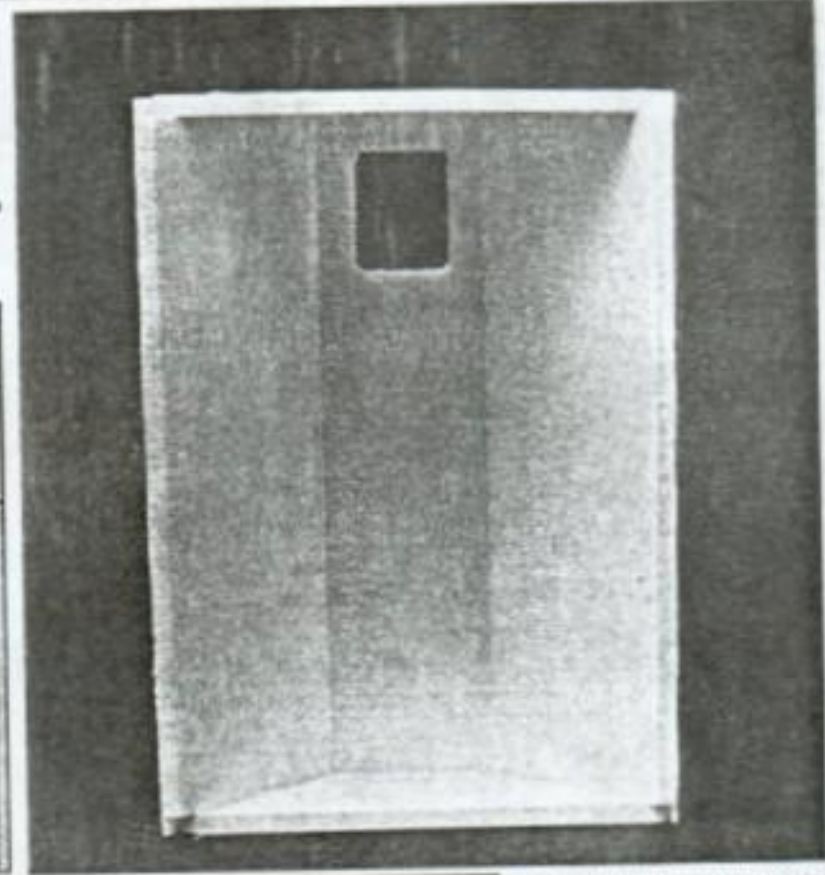
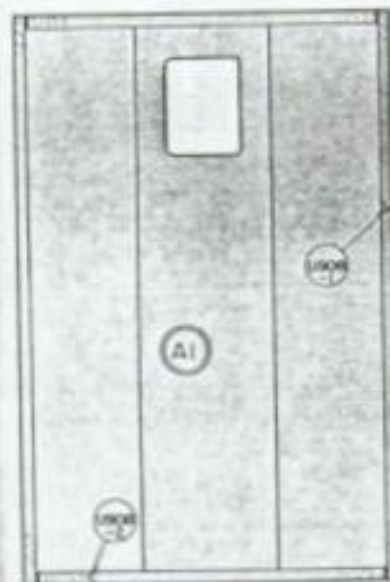
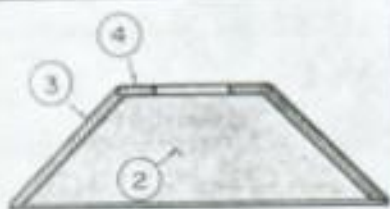
木取り図二



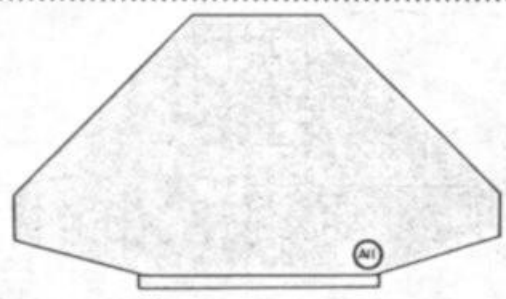
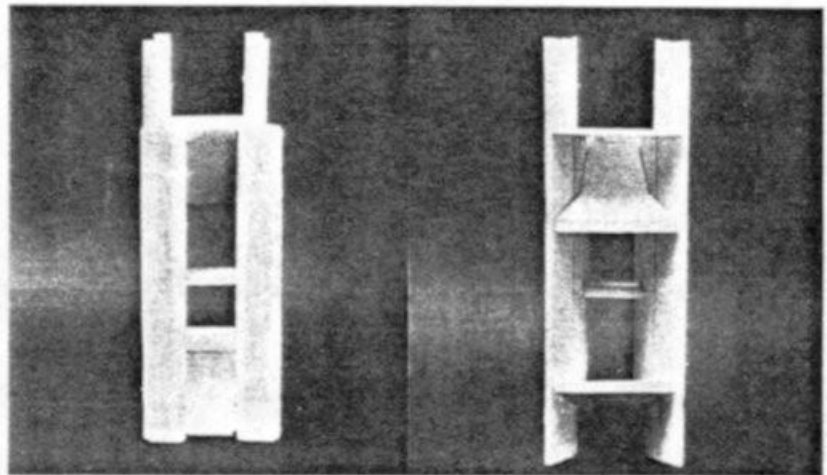
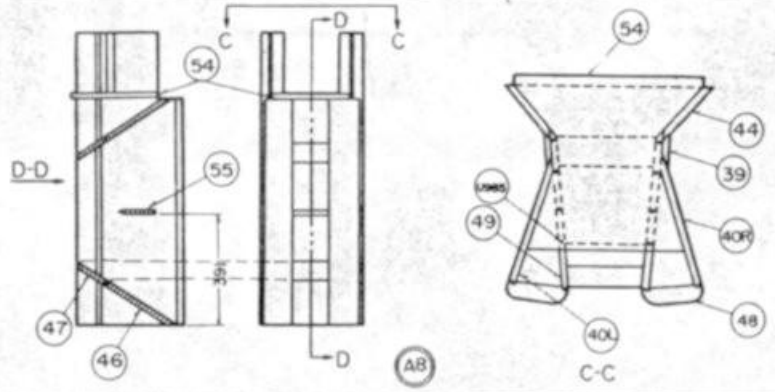
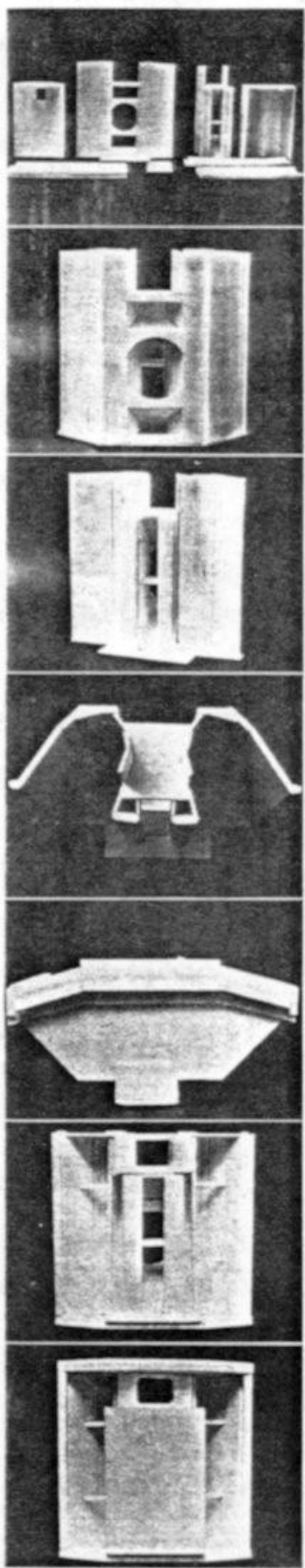


木取り図四

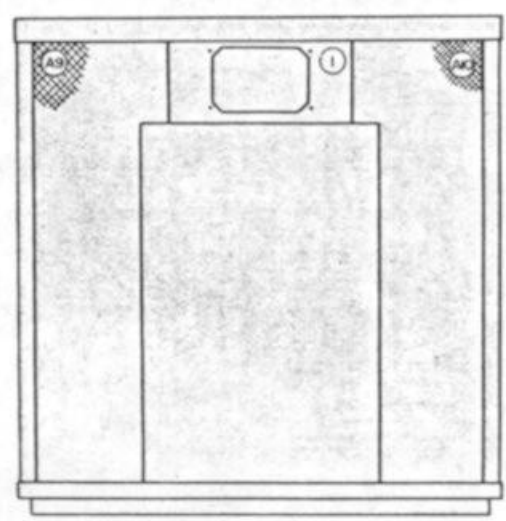


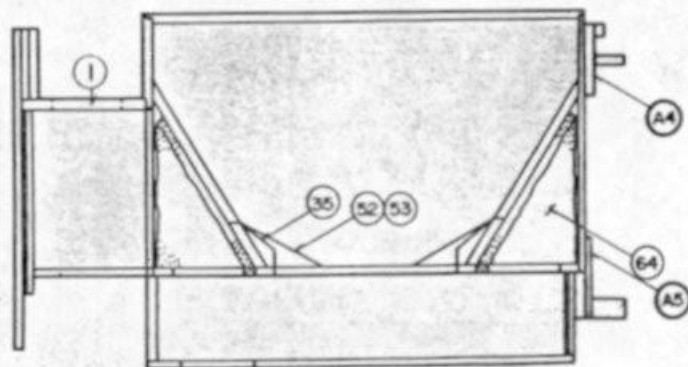
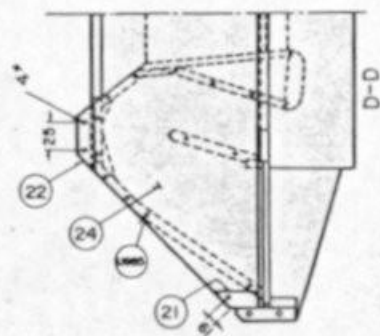
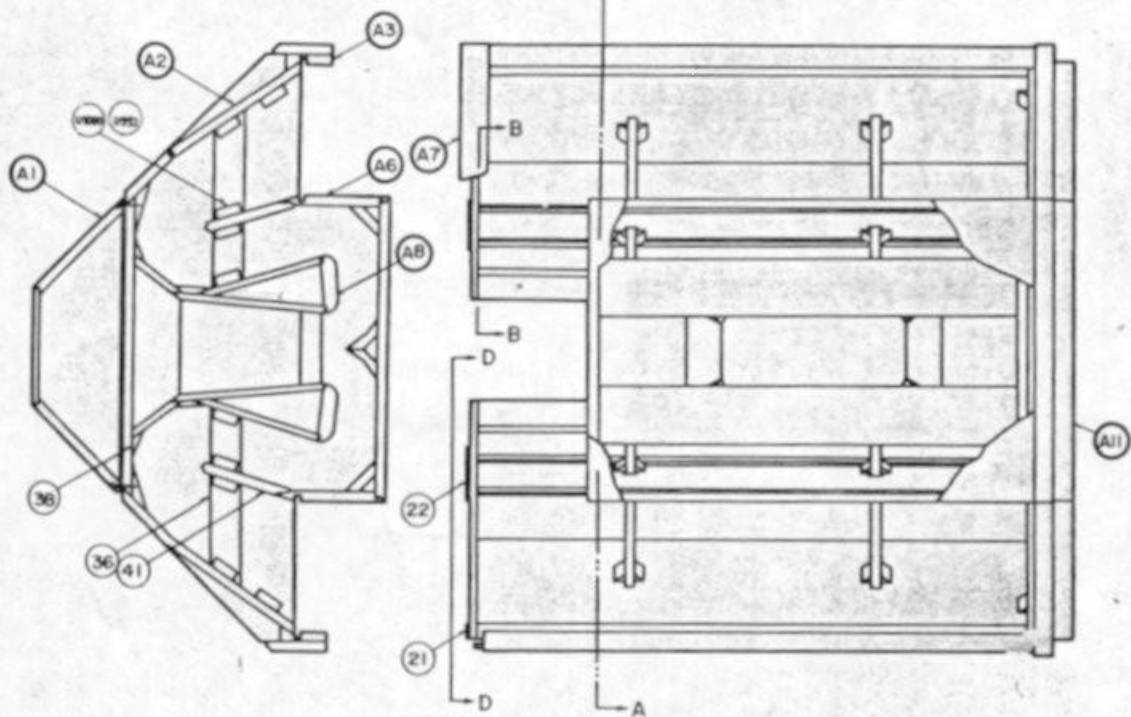
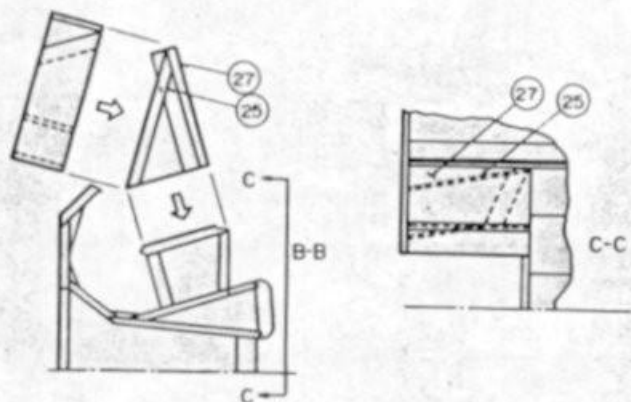


組み立て図一



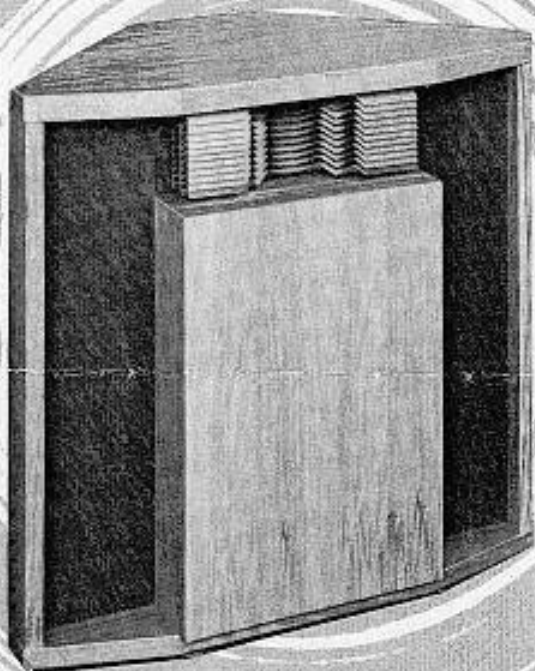
組み立て図二





協力：山水電気

INSTALLATION OF SPEAKER SYSTEMS



JIM LANSING

Signature



the Hartsfield

IMPORTANT NOTE

It is a feature of the HARTSFIELD Enclosure that speaker systems are easily installed and removed. Some caution is required, however. Careless removal of panels other than those which are specifically mentioned below will destroy the structural unity of the folded horn. Highly skilled craftsmen have shaped this structure precisely to the designer's specifications and have put a permanent seal on all joints. The restoration of a damaged horn requires tools, materials and skills which are not available to most hobbyists.

JAMES B. LANSING SOUND, INC., 2439 FLETCHER DRIVE, LOS ANGELES, CALIFORNIA

SECTION A: Disassembly of C30 (empty) Hartsfield Enclosure for Installation of O85 System Kit.

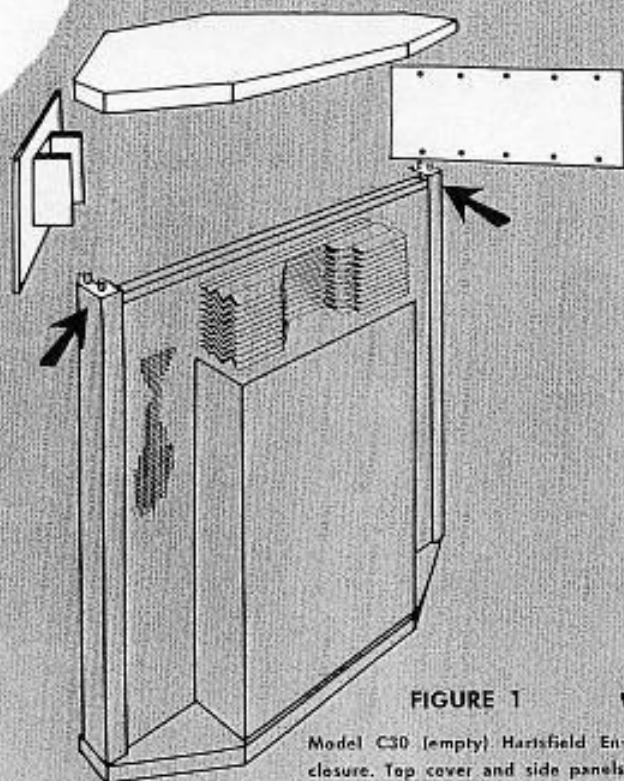


FIGURE 1

Model C30 (empty) Hartsfield Enclosure. Top cover and side panels exploded.

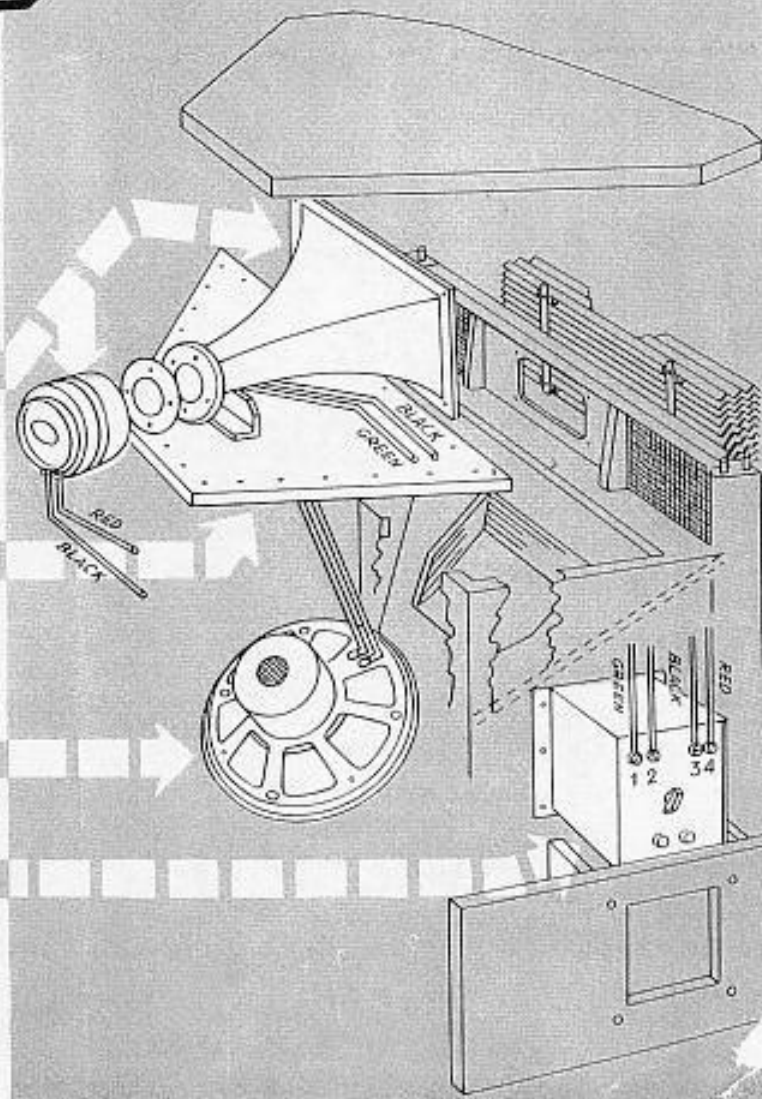
(1) Remove two **side panels**, loosening ten (10) #8 x 1½" long wood screws in each.

(2) The **top cover** is now secured at each of the front corners by two ¾" dowels. It can be lifted from the enclosure by exerting an upward force at these two corners (arrow position, Fig.1).



FIGURE 2

Rear view of HARTSFIELD showing baffle and components of the O85 Speaker System.



THE O85 SYSTEM KIT

(Components packaged with associated hardware)

Model 375 HF Driver with gasket and four (4) ¼-20 x 15/16" dome screws.
Model H5039 Rectangular Exponential Horn.

Model 10DB Cavity Cover with seventeen (17) #8 flat head wood screws (Phillips) and four (4) 28" lengths of 18-gauge stranded wire with insulation colored as follows: black (2), red (1), green (1).

Model 150-4C LF Speaker with four (4) ¼-20 x 1¼" machine screws.

Model N500H Dividing Network with six (6) #8 flat head wood screws (Phillips).

PART 1 D30085 SYSTEM

SECTION B: Installation of SIGNATURE 085 Speaker System Kit in the C30 (Empty) HARTSFIELD Enclosure.

(1) With the enclosure disassembled, as in Sect. A, above, note the four (4) tee-nuts (female screw fittings) which are installed in the **LF Speaker Mounting Baffle**. These indicate the position of the LF Speaker bolt ring. Install **LF Speaker Model 150-4C** with terminals toward the front of the enclosure, dropping the four machine screws through alternate bolt holes and threading them into the tee-nuts. Tighten securely and evenly, distributing pressure by tightening a little at a time and moving around the circle as many times as necessary. Do not overtighten. The cork gasket should provide a cushion between the baffle and the speaker frame. It should never be compressed to such an extent that the metal frame is in contact with the baffle.

(2) Connect lead wires to **LF Speaker, Model 150-4C** — green to red terminal; black to black. Connection is made as shown in Fig. 3.

(3) Thread lead wires through two $\frac{1}{8}$ " holes in the **Cavity Cover**, forward of the metal mounting bracket. Do not enlarge holes. Fit the gasketed surface of the **Cavity Cover** to the mounting surface of the enclosure and screw on tightly.

(4) Remove the **Serpentine Lens** by loosening four (4) 10-32 x $\frac{3}{4}$ " machine screws at the corners of the wood panel. Discard spacers found under the screw heads. **CAUTION:** As a protection against scratching, pad any finished surface of the enclosure before allowing it to come in contact with the **Serpentine Lens**.

(5) Place the Model H5039 **Exponential Horn** in a position such that the mouth flange fits against the lens panel. The position of the four corner holes should correspond with that of the holes in the panel. The forward surface of the throat flange should be flush against the metal mounting bracket. Push the four machine screws just removed through the holes in the mouth flange and in the lens panel. Now hold the **Serpentine Lens** in its mounting position and thread in the screws. Do not tighten the screws at this point.

(6) Place the gasket over the throat flange of the Model H5039 **Exponential Horn**. Now set the Model 375 **Driver**, terminals down, on the rubber pad in back of the Horn position. **CAUTION:** Be certain that the protective gummed paper has been removed from the mouth of the driver.

(7) Slip the machine screws through the throat flange of the **Exponential Horn**, through the gasket and screw them into the corresponding holes in the **HF Driver**. This is most easily accomplished by screwing into the top hole first; then into the two side holes. Do not tighten with the wrench at this point. The bottom screw, which must pass through the metal mounting bracket into the flange, can now be inserted and tightened.

(8) Tighten the remaining screws at the horn-driver and the horn-lens connections gradually, distributing the pressure between the two points to avoid excessive shearing strain on the wood lens panel.

(9) Center the Model N500H **Dividing Network** in the rectangular opening of the **left side panel** with black Bakelite panel facing out. Secure the base flange to the mounting blocks with the six wood screws. Connect lead wires to terminals of Model 375 **HF Driver** — red to red post; black to black. Bring these leads, together with the two **LF Speaker** leads, to the panel of the **Dividing Network**, where they will be accessible after the enclosure has been reassembled.

(10) Replace **top cover** and **side panels** following steps (2) and (1), Section A, in reverse.

(11) Connect speaker leads to terminal posts of Model N500H **Dividing Network** as follows: LF Green to Post 1; LF Black to Post 2; HF Black to Post 3; HF Red to Post 4.

(12) Connect amplifier leads to INPUT posts of the Model N500H **Dividing Network**. Polarity is immaterial. Leads should be connected across 16-ohm taps at the amplifier. HF attenuation can be adjusted to suit room conditions by means of the three-position panel switch.

SECTION C: Removal of SIGNATURE 085 Speaker System from D30085 Enclosure.

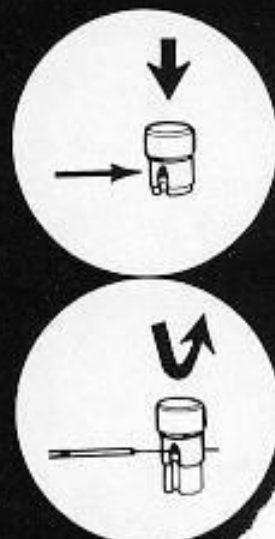
(1) Disconnect speaker leads at **Dividing Network**. Then remove **side panels** and **top cover** per steps (1) and (2), Section A.

(2) Perform the following steps under Section B in reverse: (7), (6), (5), (3), (2), (1).

FIGURE 3
Connecting to terminals
of SIGNATURE speakers.

1. Depress colored button,
opening hole in terminal
post.

2. Push stripped end of
lead wire in hole and re-
lease button.



PART II D30208 SYSTEM

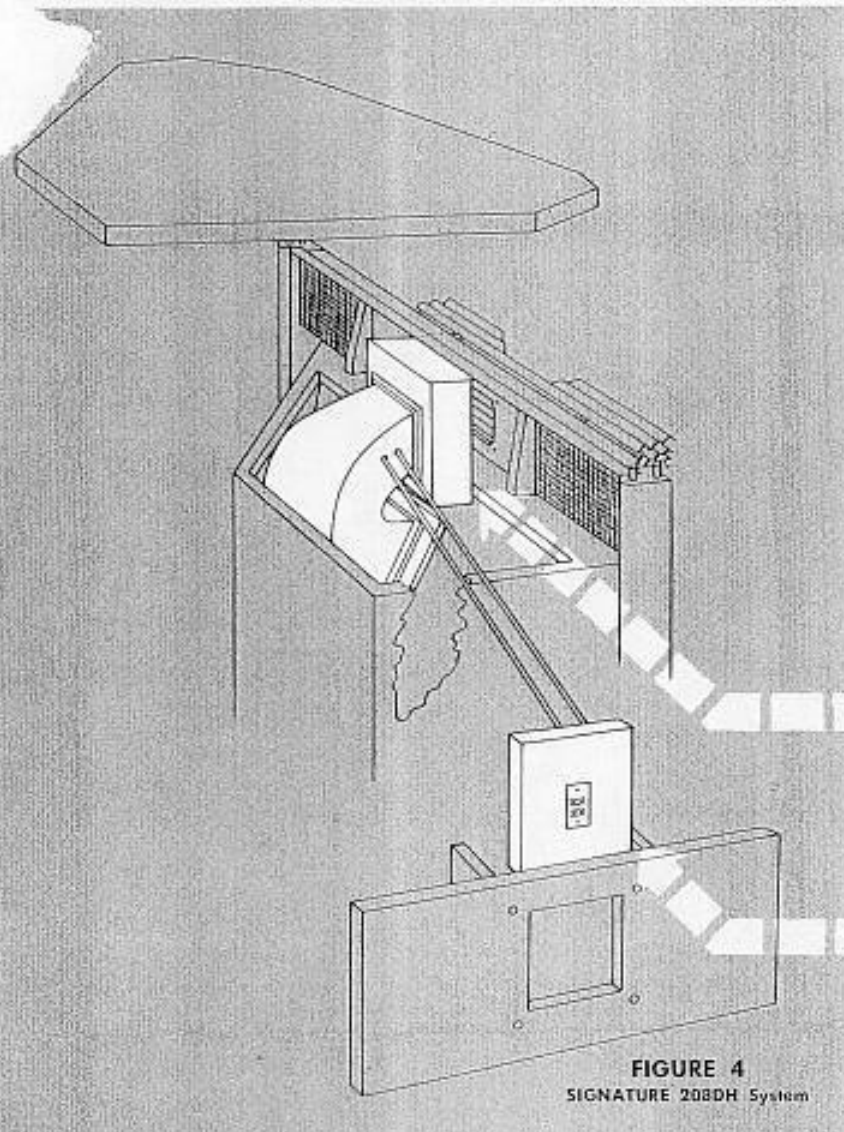


FIGURE 4
SIGNATURE 208DH System

The 208DH SYSTEM KIT

(Components packaged with associated hardware)

208DH Assembly, consisting of Speaker, Model D208, factory-mounted in H208 Horn Extension with insulated leads connected to voice coil terminals and brought out through side panel of Horn Extension. Packaged with four (4) #8 x 1/4" wood screws (Phillips).

Terminal Block with micarta terminal strip mounted and packaged with two (2) #8 x 1/4" wood screws (Phillips).

SECTION D: Disassembly of C30 (Empty) HARTSFIELD Enclosure for Installation of SIGNATURE 208DH System
Proceed as in Section A, Part I.

SECTION E: Installation of SIGNATURE 208DH System in the C30 (Empty) HARTSFIELD Enclosure.

(1) With the enclosure disassembled as in Sect A, Part I, fit the 208DH Assembly to the **LF Speaker Mounting Baffle**. If there is any question as to the orientation of parts, hold the 208DH Assembly upright, (speaker cone in a vertical plane). Turn the assembly in a direction such that the slope of the **Mounting Flange** corresponds with that of the baffle. Then slip the assembly into the enclosure. The **Mounting Flange** will rest on the baffle in one position only—the correct one. The mouth of the H208 **Horn Extension** will be centered to the aperture of the baffle and the D208 **Speaker** (at the throat of the horn extension) will face into the **Serpentine Lens**.

(2) Insert wood screws in four flange holes and screw firmly into baffle.

(3) Note that the **Terminal Block** has one stained surface. This surface is seen through the network

opening when the block is mounted and will be referred to as the outside surface. Install the **Terminal Block** as follows: (a) remove the micarta terminal strip from the outside surface, unscrewing the two round-headed screws; (b) thread speaker leads through the 5/8" hole from inside to outside; (c) solder the leads to the two lugs at the back of the terminal strip; (d) pull the lugs back into the 5/8" hole and replace the screws securing the terminal strip; (e) screw the **Terminal Block** in position, covering the Network opening.

(4) Replace **top cover** and **side panels**, performing the steps of Section A, Part I in reverse.

(5) Connect amplifier leads to screw lugs at terminal strip. Leads should be connected across 8-ohm tap at amplifier.

SECTION F: Removal of SIGNATURE 208DH System

(1) Remove **side panels** and **top cover** from enclosure, following steps (1) and (2) of Section A, Part I.

(2) Perform steps (4), (3), and (2), Section E, in reverse.

(3) Lift 208DH Assembly from the enclosure.