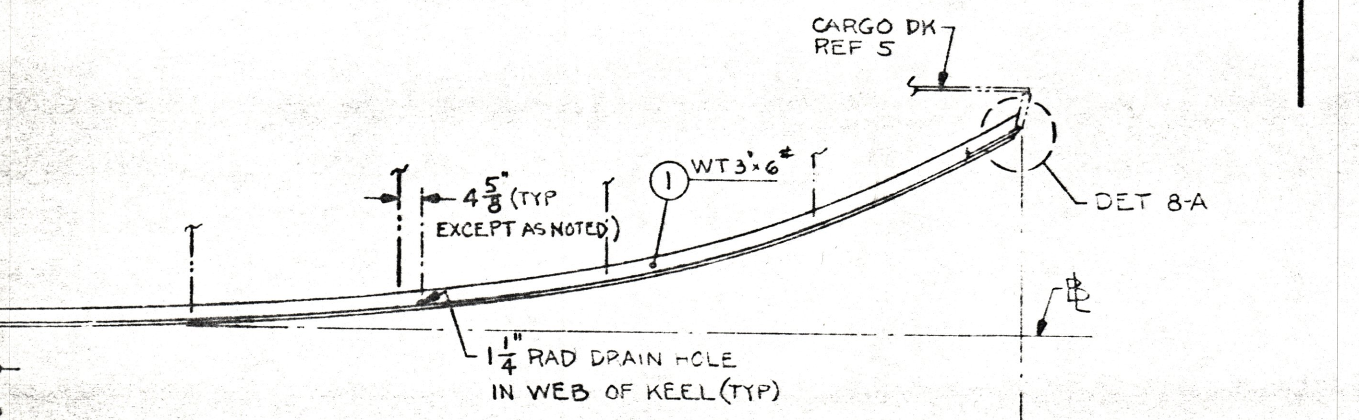
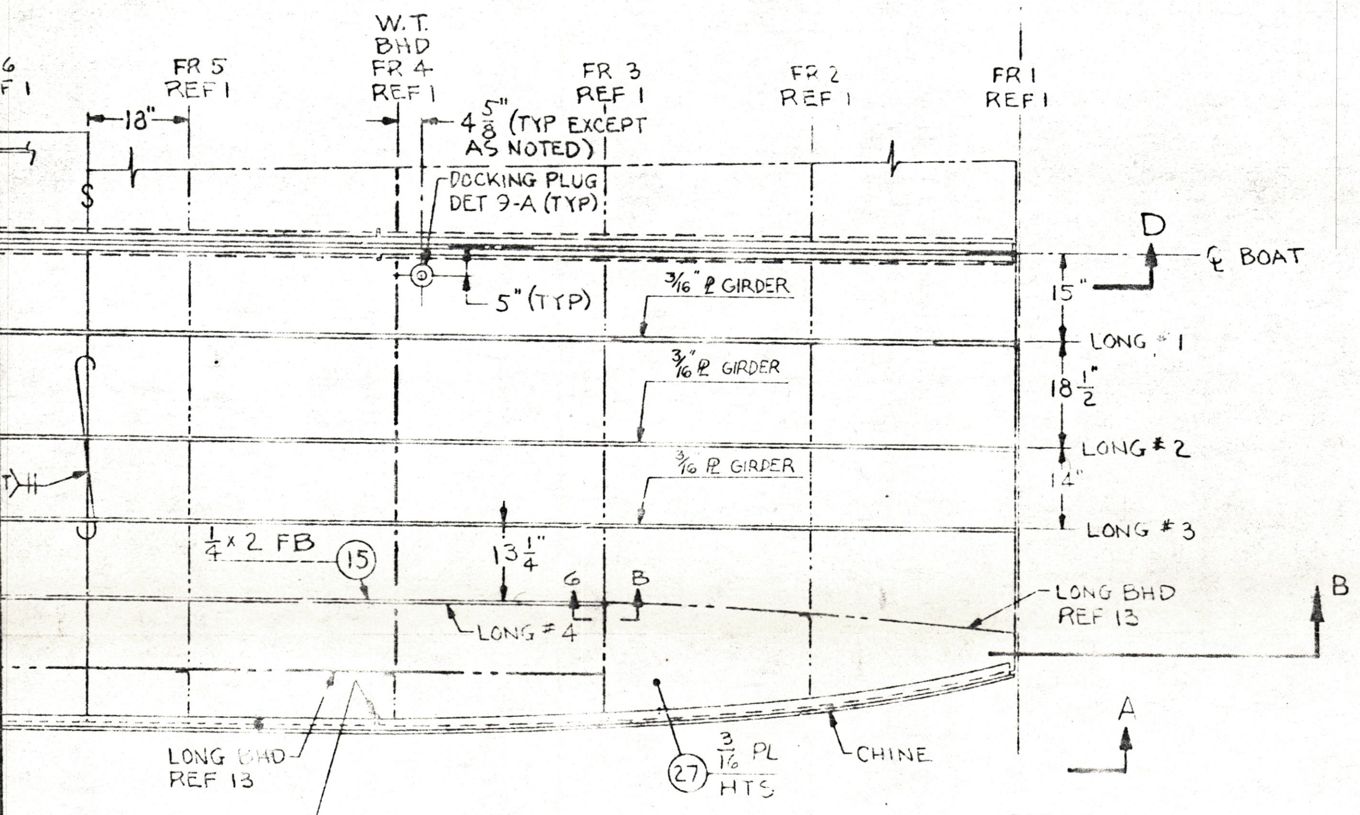
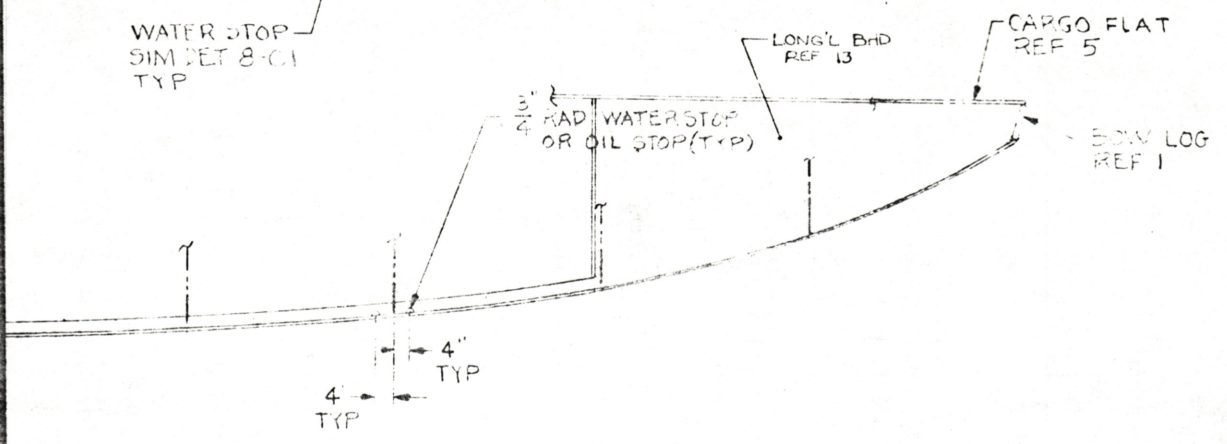
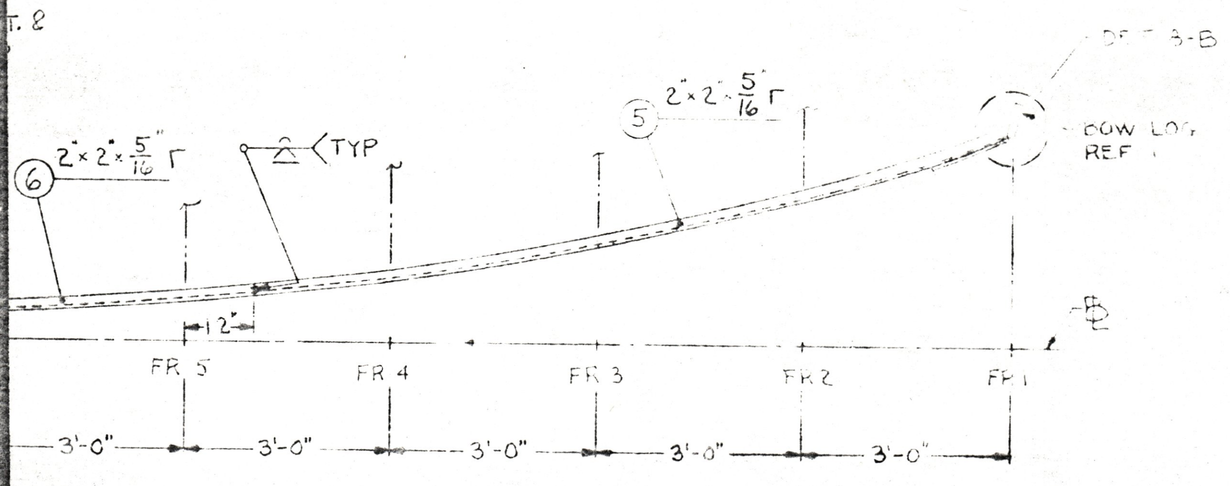

CARGO DK REF 5
WT 3"×6#
①
4 5/8" (TYP EXCEPT AS NOTED)
DET 8-A
℄
1 1/4" RAD DRAIN HOLE IN WEB OF KEEL (TYP)


FR 6 REF 1
FR 5 REF 1
W.T. BHD FR 4 REF 1
FR 3 REF 1
FR 2 REF 1
FR 1 REF 1
18"
4 5/8" (TYP EXCEPT AS NOTED)
DOCKING PLUG DET 9-A (TYP)
D
℄ BOAT
5" (TYP)
3/16" ℘ GIRDER
3/16" ℘ GIRDER
3/16 ℘ GIRDER
15"
LONG #1
18 1/2"
LONG #2
14"
LONG #3
1/4 × 2 FB
⑮
13 1/4"
6
B
LONG #4
LONG BHD REF 13
B
A
LONG BHD REF 13
㉗ 3/16 PL HTS
CHINE
WATER STOP SIM DET 8-C1 TYP


LONG'L BHD REF 13
CARGO FLAT REF 5
3/4" RAD WATERSTOP OR OIL STOP (TYP)
BOW LOG REF 1
4" TYP
4" TYP


DET 8
DET 8-B
⑤ 2"×2"×5/16" ⌐
⑥ 2"×2"×5/16" ⌐
TYP
BOW LOG REF 1
12"
℄
FR 5
FR 4
FR 3
FR 2
FR 1
3'-0"
3'-0"
3'-0"
3'-0"
3'-0"

111-5033172		1

MOLDED LINES

1. BOTTOM PLATING - INBD SIDE OF PLATING
2. KEEL - CENTER OF WEB OF TEE SECTION OR CENTER OF FLAT BAR
3. CHINE - HEEL OF ANGLE
4. BOTTOM PLATING LONG - INBD FACE OF FLAT BAR

GENERAL NOTES

1. UNLESS OTHERWISE NOTED ALL WELDS ARE TYPICAL FOR SIMILAR CONNECTIONS
2. QUANTITIES GIVEN ARE FOR ONE BOAT
3. HOLES FOR HOLD DOWN BOLTS OR FASTENERS ARE TO BE TEMPLATED FROM COMPONENTS
4. PAINTING TO BE IN ACCORDANCE WITH REF. 8
5. FLANGE OF KEEL PC. 1, 2, 3, AND CHINE ANGLE PC 5, 6, 7, & 8 ARE TO BE KNUCKLED TO SUIT CONTOUR OF BOTTOM PLATING TO AGREE WITH LINES AND OFFSETS
6. THREADS OF PIPE PLUGS OR THREAD FASTENERS OF REMOVABLE ITEMS ARE TO BE COATED WITH A MIXTURE OF ABOUT 50% TALLOW AND 50% WATERPROOF GREASE WITH PULVERIZED GRAPHITE TO FACILITATE REMOVAL.

NO	TITLE	MMC DWG NO	NAVSEA DWG NO
16	TRANSOM FR 13	123	117-5033177
15	PILOT HOUSE & ENCLOSURE	133	150-5033181
14	ENGINE FOUNDATION	138	182-5033196
13	LONG BHD & BULWARK	185	121-5033204
12	MISC FOUNDATIONS	137	180-5033185
11	STRG NOZ & STK ASSY AFR 2 DET	156	562-5033195
10	FW PIPING	150	532-5033208
9	SW PIPING	148	521-5033206
8	PAINTING SCHEDULE	167	631-5033215
7	SKEGS	125	114-5033173
6	SIDE PLTG	123	111-5033171
5	MAIN DK & CARGO FLAT	132	130-5033180
4	FRAMES 15 1/2 - 18 1/2	126	117-5033174
3	FRAMES 13-15	127	117-5033175
2	FRAMES 7-12	128	117-5033176
1	FRAMES 1-6	130	117-5033178

REFERENCES

REVISIONS

REV	ZONE		DESCRIPTION	CONTR BY DATE	USN BY LTR
A			PLAN-VIEW BOTTOM PLATING: ADDED 3/8" PLATING TO AFT SECTION OF TUNNEL ADDED SECTION 6-C TO DWG.	9/16/77	
B	2B3 5A1 5B1 5D1 7B1 10A1 10B2 10C1		MODIFIED: PLAN VIEW. EL 5-B, EL 5-D, EL 10-B, DET 7B, SECT 10-A. DELETED: DET. 10-B1 & ITEMS 13, 14, 16, 17, 18, 19, 20, 24 & 25.	[illegible]	

ITEM NO	QTY	DESCRIPTION	MATERIAL	SPEC NO	CODE IDENT	PART NO.	REMARKS	GR NO	UNIT WT LBS
41									
40	2	PLATE 5/16" THICK	↑	↑					
39	2	SQUARE BAR 1/2"		ASTM A131					
38	2	↑ ↑		↑					
37	2	PIPE (SPLIT) 2" SCH 40		ASTM A53					
36	2	↑ ↑		↑					
35	2	PLATE 3/8" THICK	STL	ASTM A131					
34	2	PLATE 3/8" THICK	STL	ASTM A131					
33	1P-15	PLATE 3/16 THICK	STL	ASTM A131					
32		↑ ↑	↑	↑					
31	1								
30	8								
29	1P-15								
28	1P-15			ASTM A131					
27	1P-15	PLATE 3/16" THICK		MIL-S-16113 GR HT					
26	1P-15	PLATE 5/16" THICK	STL	ASTM A131					
25									
24									
23	2	↑ ↑	↑	↑					
22	2								
21	2	FLAT BAR 2"×1/4"	STEEL	ASTM A131					
20									
19									
18									
17									
16									
15	2	FLAT BAR 2"×1/4"	STEEL	ASTM A131					
14									
13									
12	1	PLATE 3/8" THICK	↑	↑					
11	2	↑ ↑							
10	4	ANGLE 2"×2"×5/16"	STEEL	ASTM A131					
9	2	↑ ↑	↑	↑					
8	2								
7	2								
6	2								
5	2	ANGLE 2"×2"×5/16"							
4	1	WT 3"×6#	STEEL	ASTM A131					
3									
2	1	↑	↑	↑					
1	1	WT 3"×6#	STEEL	ASTM A131					

PARTS LIST

ITEM NO	QTY	DESCRIPTION	MAT'L	SPEC NO	CODE IDENT	PART NO	REMARKS	GR NO	UNIT WT LBS
51	2	↑ ↑	↑	↑					
50	2								
49	2	PLATE 3/8" THICK	STEEL	ASTM A131					
48	8	ROUND BAR 2 1/2 DIA	CRES	AISI 316L			TO MAKE 1" HALF COUP SEE DET "9-A"		
47	24	1/2 DIA LOCKWASHER	PLT-STL	↑					
46	10	1" I.P.S. CSK HD PIPE PLUG	CRES	COM'L			HEX HD		
45	2	ROUND BAR 2 1/2 DIA	CRES	AISI 316L			TO MAKE 1" HALF COUP SEE DET "9-A1"		
44	24	HEX STOPNUT 1/2"-13UNC 3B	PLT-STL	↑			ESNA #52NE-083		
43	24	WELDING STUD 1/2"-13UNC-2A × 1 1/4 (AW)	STL	COM'L			NELSON STUD 1 3/8" LG CPL# 101-013-150		
42	12	ZINC ANODES TYPE ZHC-23	ZINC	MIL-A-18001			SIZE 12"×6"×1 1/4"		

PARTS LIST (CONT'D)

THIS DRAWING DEVELOPED FROM LCM(6)HPI.
DRAWINGS SUPPLIED BY MARINETTE MARINE CO.
CONTRACT N0024-75-C-2090.

DRAWING PREPARED BY NAVSECNORDIV

DEV.		CH.	EL
DWG		APP	EL
BRANCH HEAD	E L Park		
DEPT HEAD			
TECH DIRECTOR			
APPROVED	FOR COMMANDER	DATE	[illegible]

CONTRACT DRAWING

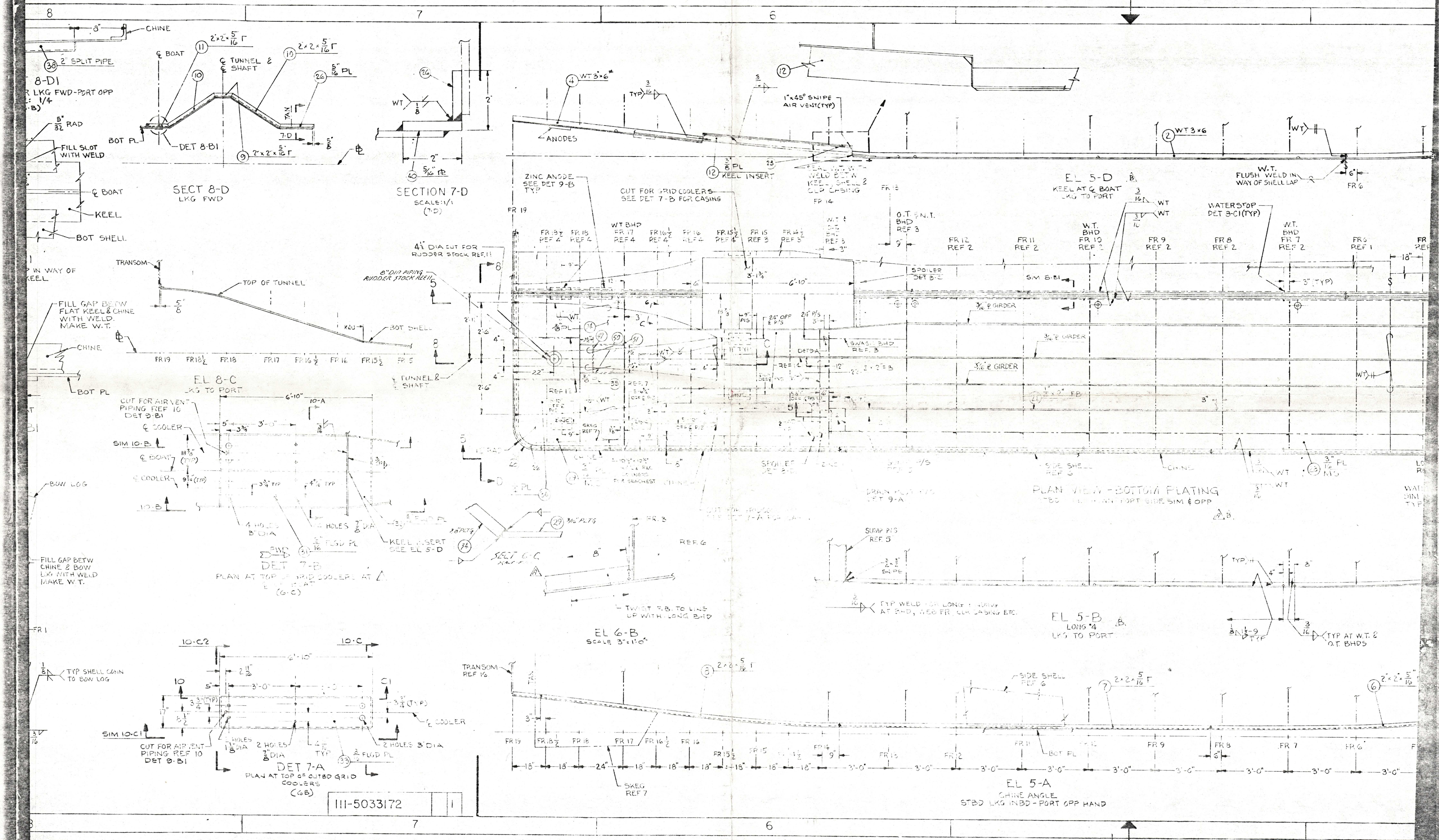
DEPARTMENT OF THE NAVY
NAVAL SEA SYSTEMS COMMAND
WASHINGTON, D.C.

LANDING CRAFT MECHANIZED LCM(6)-HPI

BOTTOM PLATING

SIZE	CODE IDENT NO	NAVSEA DRAWING NO	REV
H	53711	111-5033172	B

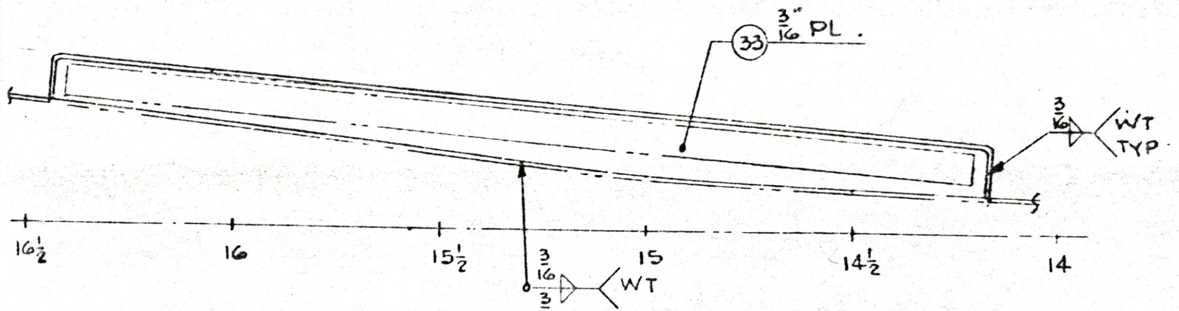
SCALE: 3/4 = 1'-0 & AS NOTED SHEET 1 OF 1


8
7
6
CHINE
8"
38 2" SPLIT PIPE
8-D1
R LKG FWD-PORT OPP
1/4
5/32" RAD
FILL SLOT WITH WELD
℄ BOAT
KEEL
BOT SHELL
IN WAY OF KEEL
FILL GAP BETW FLAT KEEL & CHINE WITH WELD. MAKE W.T.
CHINE
BOT PL
BOW LOG
FILL GAP BETW CHINE & BOW LOG WITH WELD MAKE W.T.
FR 1
1/8 TYP SHELL CONN TO BOW LOG
3/16
℄ BOAT
11 2"×2"×5/16" ⌐
℄ TUNNEL & ℄ SHAFT
10 2"×2×5/16 ⌐
10
26 5/16" PL
TAN
BOT PL
DET 8-B1
9 2"×2"×5/16 ⌐
7-D
5/8"
BL
SECT 8-D
LKG FWD
26
WT 1/8
2'
2"
40 5/16" PL
SECTION 7-D
SCALE:1/1
(7-D)
TRANSOM
TOP OF TUNNEL
5/8"
KNU
BOT SHELL
BL
FR 19
FR 18½
FR 18
FR 17
FR 16½
FR 16
FR 15½
FR 15
EL 8-C
LKG TO PORT
4½" DIA CUT FOR RUDDER STOCK REF. 11
8" DIA PIPING RUDDER STOCK REF 11
8
5
2'-11"
2'-6"
4"
22"
℄ TUNNEL & ℄ SHAFT
12" RAD
D
CUT FOR AIR VENT PIPING REF 10 DET 9-B1
℄ COOLER
SIM 10-B
℄ BOAT
18 7/8" (TYP)
℄ COOLER
9 7/16" (TYP)
10-B
6'-10"
10-A
5"
3'-0"
3 3/4"
3/16
3 3/4 TYP
4 1/16 TYP
4 HOLES 3" DIA
2 HOLES 7/8" DIA
31 3/16" FLGD PL
33 3/16" FLGD PL
KEEL INSERT SEE EL 5-D
FWD
DET 7-B
PLAN AT TOP OF GRID COOLERS AT ℄ BOAT
(6-C)
3/8" PLTG
34
29 3/16" PLTG
SECT 6-C
FR. 3
8"
REF. 6
TWIST F.B. TO LINE UP WITH LONG BHD
EL 6-B
SCALE 3"=1'-0"
10-C2
10-C
6'-10"
2 11/16"
10
5"
3'-0"
C1
17"
3 3/4" (TYP)
8 1/2
3 3/4" (TYP)
℄ COOLER
SIM 10-C1
CUT FOR AIR VENT PIPING REF 10 DET 9-B1
2 HOLES 1 1/8" DIA
2 HOLES 7/8" DIA
4 1/16 TYP
33 3/16 FLGD PL
2 HOLES 3" DIA
DET 7-A
PLAN AT TOP OF OUTBD GRID COOLERS
(6B)
111-5033172
1
4 WT 3"×6"
TYP 3/16
3
ANODES
1"×45° SNIPE AIR VENT (TYP)
12
12 3/8" PL KEEL INSERT
23
SEAL W.T. WITH WELD BETW KEEL, SHELL & CLR CASING
FR 14
FR 13
2 WT 3×6
WT
W.T. FLUSH WELD IN WAY OF SHELL LAP
6"
FR 6
EL 5-D
KEEL AT ℄ BOAT
LKG TO PORT
ZINC ANODE SEE DET 9-B TYP
CUT FOR GRID COOLERS SEE DET 7-B FOR CASING
FR 19
FR 18½ REF 4
FR 18 REF 4
WT BHD FR 17 REF 4
FR 16½ REF 4
FR 16 REF 4
FR 15½ REF 4
FR 15 REF 3
FR 14½ REF 3
W.T. & O.T. BHD REF 3
O.T. & N.T. BHD REF 3
9"
3"
FR 12 REF 2
FR 11 REF 2
W.T. BHD FR 10 REF 2
FR 9 REF 2
FR 8 REF 2
W.T. BHD FR 7 REF 2
FR 6 REF 1
3/16 WT
3/16 WT
WATERSTOP DET 8-C1 (TYP)
3" (TYP)
18"
SPOILER DET 8-C
SIM 8-B1
3'-1 3/4"
6'-10"
6"
12
13 7/8"
9" P/S
24" OFF ℄ P/S
24" P/S
3/16" ℞ GIRDER
3/16" ℞ GIRDER
3/16" ℞ GIRDER
SWASH BHD REF. 3
DET 9-A
REF 14
12"
3×2"=3
WT
3/8" PL
24
49
50
51
7½
REF 12
35
REF 7
5'-6¾" OFF ℄ P/S
ZINC
SKEG REF 7
1 1/8"
9"
5'-10" OFF ℄ P/S
40
26
3/16 PL 36
47
CHINE
2-10½"×10½" W/1¼ RAD CORNERS FOR SEACHEST
8"
SPOILER DET 8-C
ZINC
SUMP P/S REF 5
DRAIN PLUG P/S DET 9-A
CUT FOR GRID COOLERS SEE DET 7-A FOR CASING
21 1"×2" FB
3"
SIDE SHELL REF 6
CHINE
3/16 WT
3/16 WT
23 3/16" PL M.S.
PLAN VIEW - BOTTOM PLATING
STBD SIDE SHOWN PORT SIDE SIM & OPP
A B
WT
SUMP P/S REF 5
3/4×3/4 SNIPE
3/16 TYP WELD FOR LONG BINDING AT BHD, WEB FR, CLR CASING ETC.
EL 5-B
LONG 4
LKG TO PORT
TYP
4"
8"
1/8 1½-9 TYP
3/16 TYP AT W.T. & O.T. BHDS
TRANSOM REF 16
TAN
8 2×2×5/16 ⌐
3"
SIDE SHELL REF 6
7 2×2×5/16 ⌐
6 2"×2"×5/16"
FR 19
FR 18½
FR 18
FR 17
FR 16½
FR 16
FR 15½
FR 15
FR 14½
FR 14
9"
FR 13
FR 12
FR 11
BOT PL
FR 10
FR 9
FR 8
6"
FR 7
FR 6
18"
18"
24"
18"
18"
18"
18"
18"
18"
3'-0"
3'-0"
3'-0"
3'-0"
3'-0"
3'-0"
3'-0"
3'-0"
3'-0"
SKEG REF 7
EL 5-A
CHINE ANGLE
STBD LKG INBD - PORT OPP HAND
42 42

111-503315

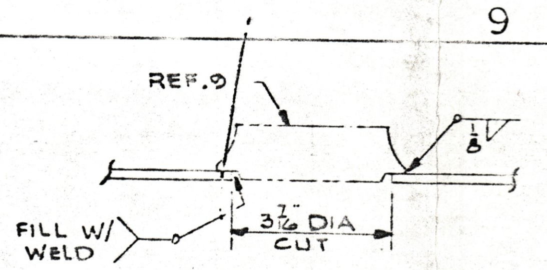
10 9 8

D C B A



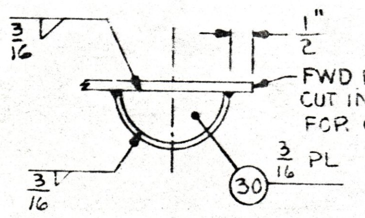
33
3" 16 PL.
3 16 WT TYP
16½
16
15½
15
14½
14
3 16 3 16 WT

EL 10-C1 B
SCALE : 1/8
(8A)



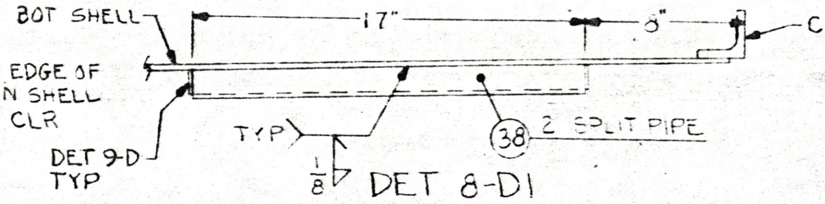
REF.9
1 8
FILL W/ WELD
3 7/16" DIA CUT

DETAIL 9-D1
SCALE: 1/2
(7B)



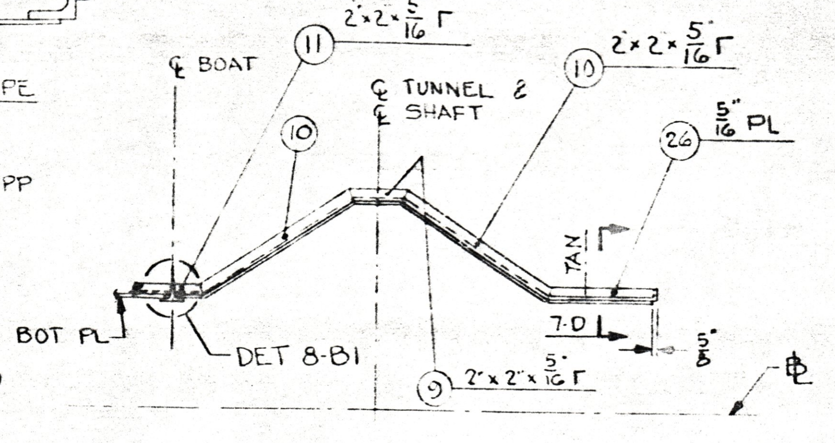
3 16
1" 2
FWD EDGE OF CUT IN SHELL FOR CLR
3 16
30
3 16 PL

DET 9-D
CAP PL FOR SPOILERS
SCALE : 1'2
(8-D)



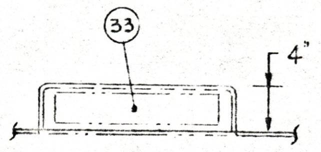
BOT SHELL
17"
8"
CHINE
DET 9-D TYP
TYP
1 8
38
2" SPLIT PIPE

DET 8-D1
STBD SPOILER LKG FWD-PORT OPP
SCALE: 1/4
(6-B)

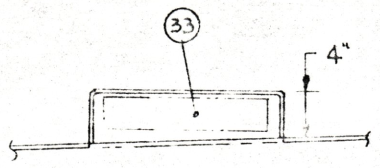


11
2"×2"× 5/16 Γ
℄ BOAT
℄ TUNNEL & ℄ SHAFT
10
10
2"×2"× 5/16 Γ
26
5" 16 PL
TAN
BOT PL
DET 8-B1
7-D
5 8
9
2"×2"× 5/16 Γ
BL

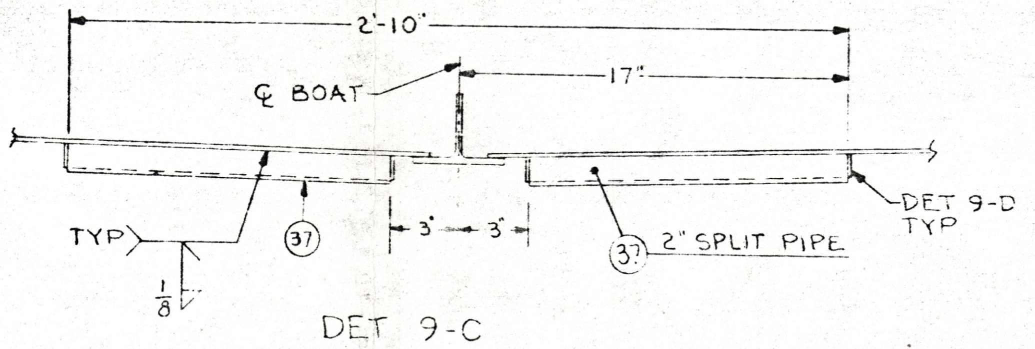
SECT 8-D
LKG FWD



SECTION 10-C2
SCALE : 1/8
(8A)

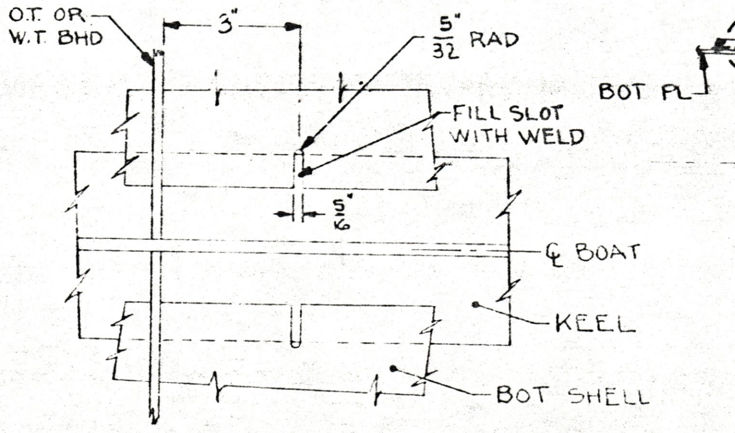


SECTION 10-C
SCALE : 1/8
(7A)



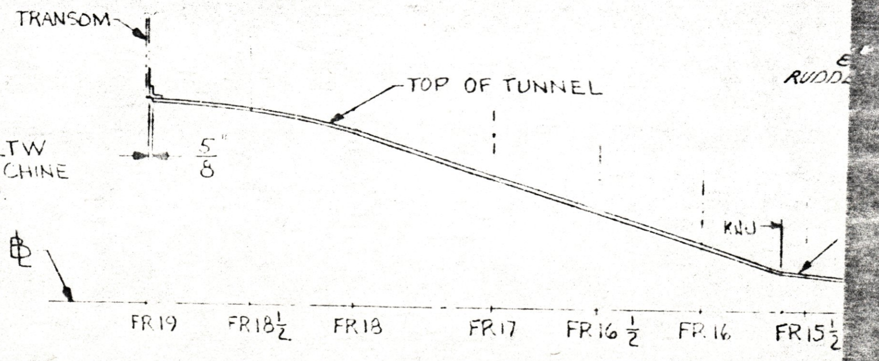
2'-10"
℄ BOAT
17"
TYP
1 8
37
3" 3"
37
2" SPLIT PIPE
DET 9-D TYP

DET 9-C
℄ SPOILER
SCALE: 1/4
(6-D)



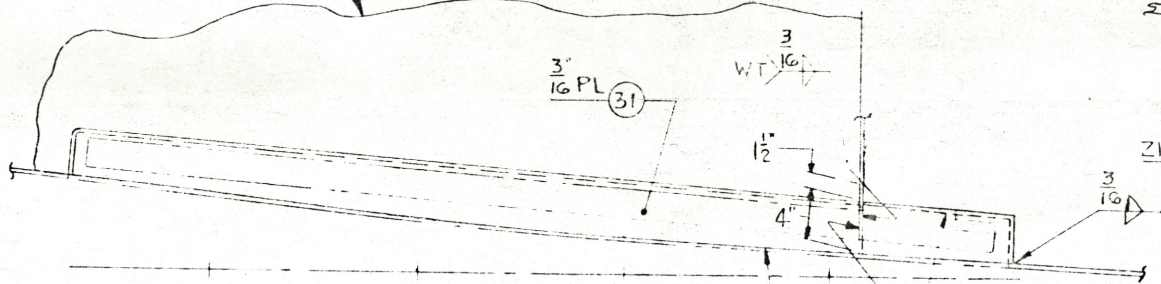
O.T. OR W.T. BHD
3"
5" 32 RAD
FILL SLOT WITH WELD
5 16
℄ BOAT
KEEL
BOT SHELL

DET 8-C1
TYP OIL OR WATER STOP IN WAY OF SHELL LAP & KEEL
SCALE: 1/2
(5-C)



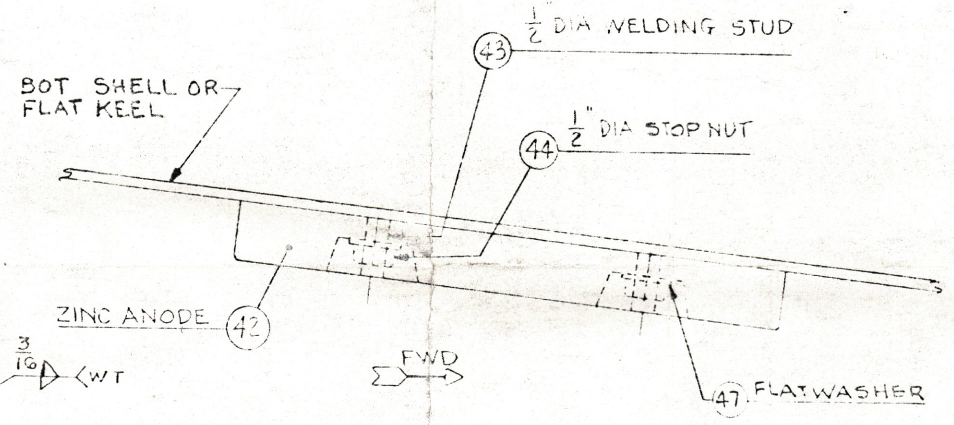
TRANSOM
TOP OF TUNNEL
5" 8
KNU
BL
FR19
FR18½
FR18
FR17
FR16½
FR16
FR15½
RUDD

EL 8-C
LKG TO PORT



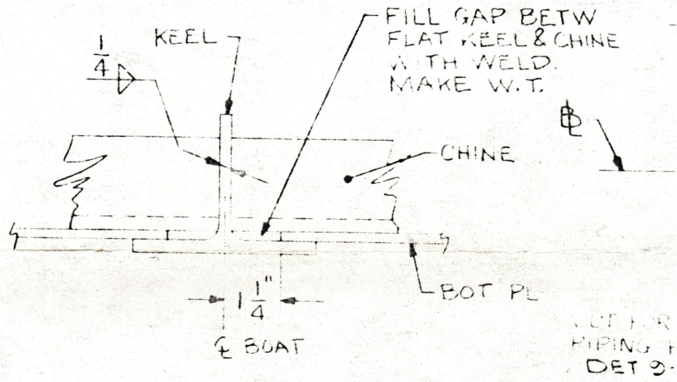
ENGINE FDN REF 4
3 16 WT
3" 16 PL 31
1½"
4"
7"
3 16 WT
15½
15
14½
14
3 16 3 16 WT
23
3 16 WT

EL 10-B B
SCALE : 1/8
(8B)



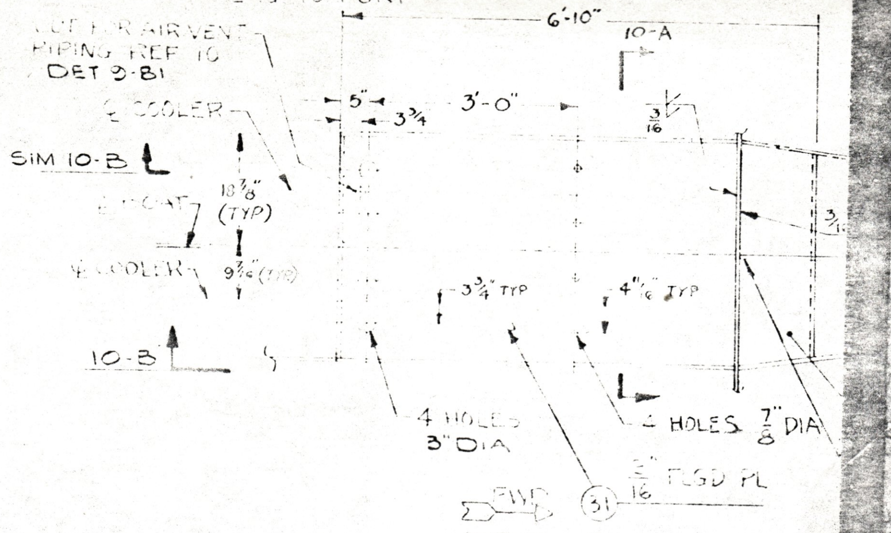
BOT SHELL OR FLAT KEEL
43
½" DIA WELDING STUD
44
½" DIA STOP NUT
ZINC ANODE
42
FWD
47
FLATWASHER

DET 9-B
TYP INSTALLATION OF ZINC ANODES
SCALE: 1/2



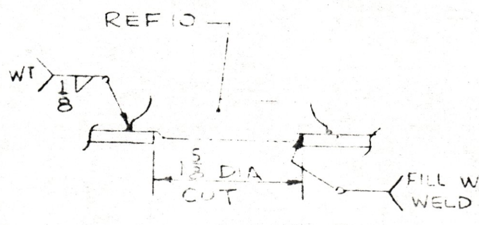
1 4
KEEL
FILL GAP BETW FLAT KEEL & CHINE WITH WELD. MAKE W.T.
CHINE
BOT PL
1¼"
℄ BOAT

DET 8-B1
SCALE: 1/2
(8-D)



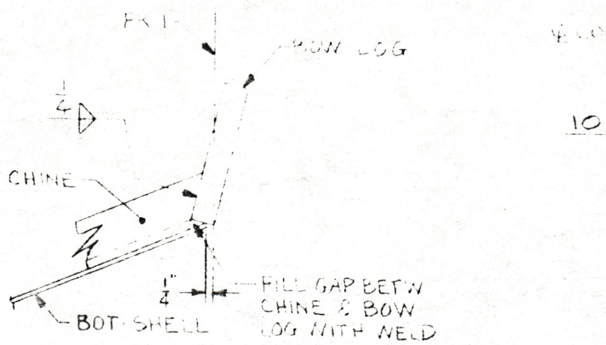
CUT FOR AIR VENT PIPING REF 10 DET 9-B1
6'-10"
10-A
5"
3¾
3'-0"
3 16
℄ COOLER
SIM 10-B
18⅜" (TYP)
℄ BOAT
℄ COOLER
9 3/16" (TYP)
3¾" TYP
4 1/16" TYP
10-B
4 HOLES 3" DIA
4 HOLES 7/8" DIA
FWD
31
3" 16 FLGD PL

DET 7-B
PLAN AT TOP OF GRID COOLERS AT ℄ OF BOAT
(6-C)



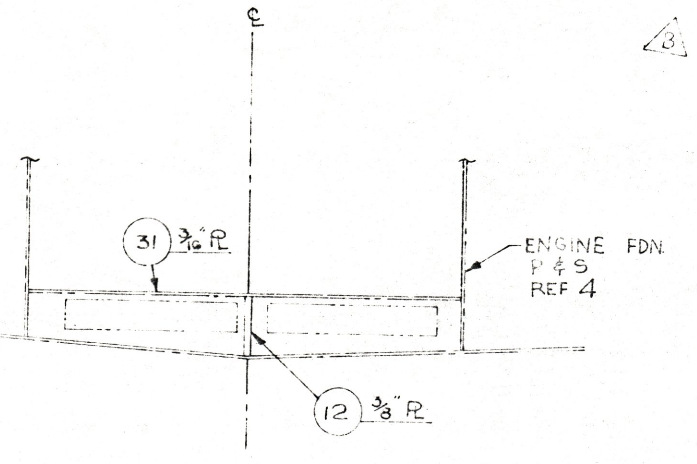
REF 10
WT 1 8
1 5/8 DIA CUT
FILL W/ WELD

DET 9-B1
SCALE : NONE



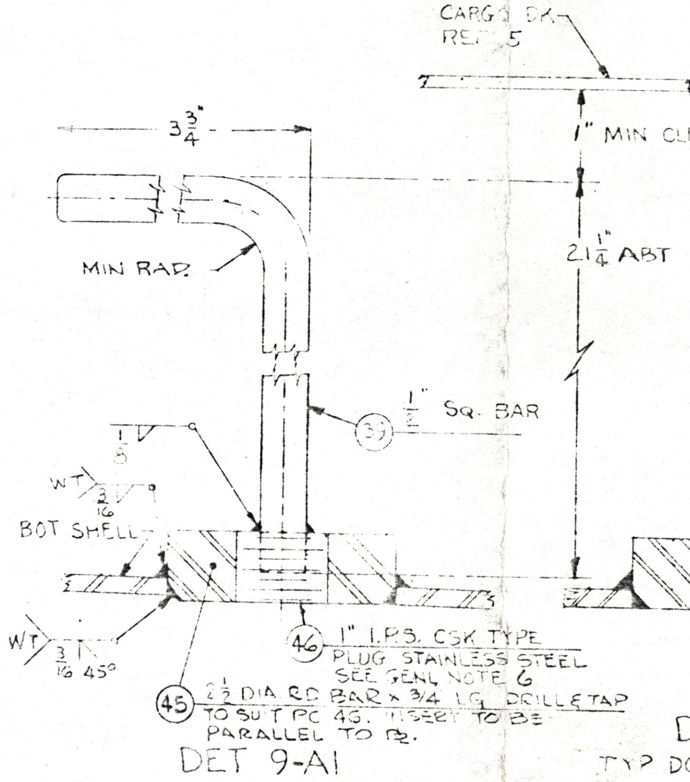
FR 1
BOW LOG
1 4
CHINE
BOT SHELL
1" 4
FILL GAP BETW CHINE & BOW LOG WITH WELD MAKE W.T.

DET 8-B
SCALE: 1/4
(3B)



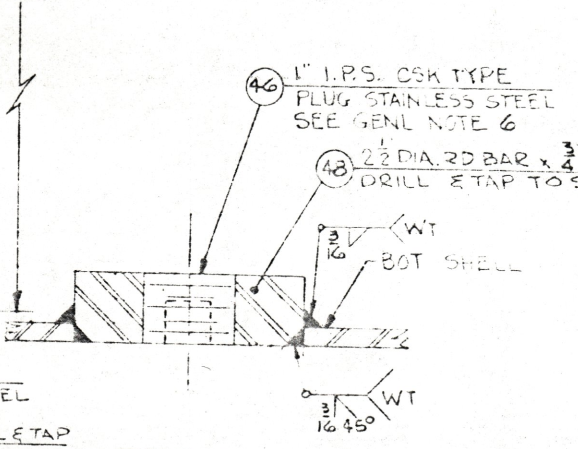
℄
31
3/16" PL
ENGINE FDN P & S REF 4
12
3/8" PL

SECT 10-A 3
SCALE : 1½"=1'-0"
(7-B)



CARGO DK REF 5
3¾"
1" MIN CLR
MIN RAD
21¼" ABT
39
½" SQ. BAR
1 8
WT 3 16
BOT SHELL
WT 3 16 45°
46
1" I.P.S. CSK TYPE PLUG STAINLESS STEEL SEE GENL NOTE 6
45
2½ DIA RD BAR × 3/4 LG. DRILL & TAP TO SUIT PC 46. INSERT TO BE PARALLEL TO BL.

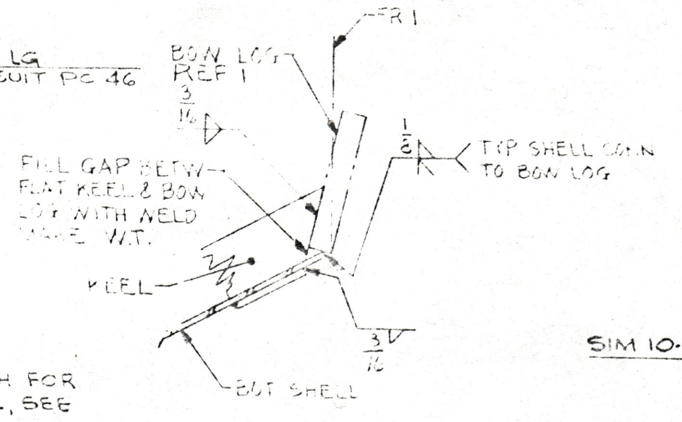
DET 9-A1
DRAIN PLUG IN CARGO DK SUMP P/S ACCESSIBLE FROM INBD SIDE ONLY
SCALE: 1/1
(6-B)



46
1" I.P.S. CSK TYPE PLUG STAINLESS STEEL SEE GENL NOTE 6
48
2½ DIA RD BAR × 3/4 LG DRILL & TAP TO SUIT PC 46
3 16 WT
BOT SHELL
3 16 45° WT

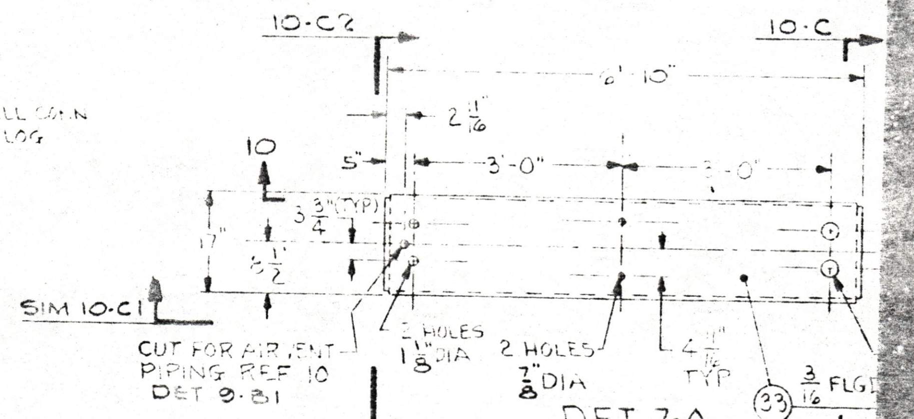
DET 9-A
TYP DOCKING PLUG
SCALE : 1/1

NOTE : WRENCH FOR PLUG REMOVAL, SEE REF. 15



FR 1
BOW LOG REF 1
3 16
1 8
TYP SHELL CONN TO BOW LOG
FILL GAP BETW FLAT KEEL & BOW LOG WITH WELD MAKE W.T.
KEEL
3 16
BOT SHELL

DET 8-A
SCALE: 1/4
(3-D)



10-C2
10-C
6'-10"
2 11/16
10
5"
3'-0"
3'-0"
3¾" (TYP)
17"
8½
SIM 10-C1
CUT FOR AIR VENT PIPING REF 10 DET 9-B1
2 HOLES 1⅛" DIA
2 HOLES 7/8" DIA
4 11/16 TYP
33
3 16 FLGD

DET 7-A
PLAN AT TOP OF OUTBD GRID COOLERS
(6B)

111-503

10 9 8