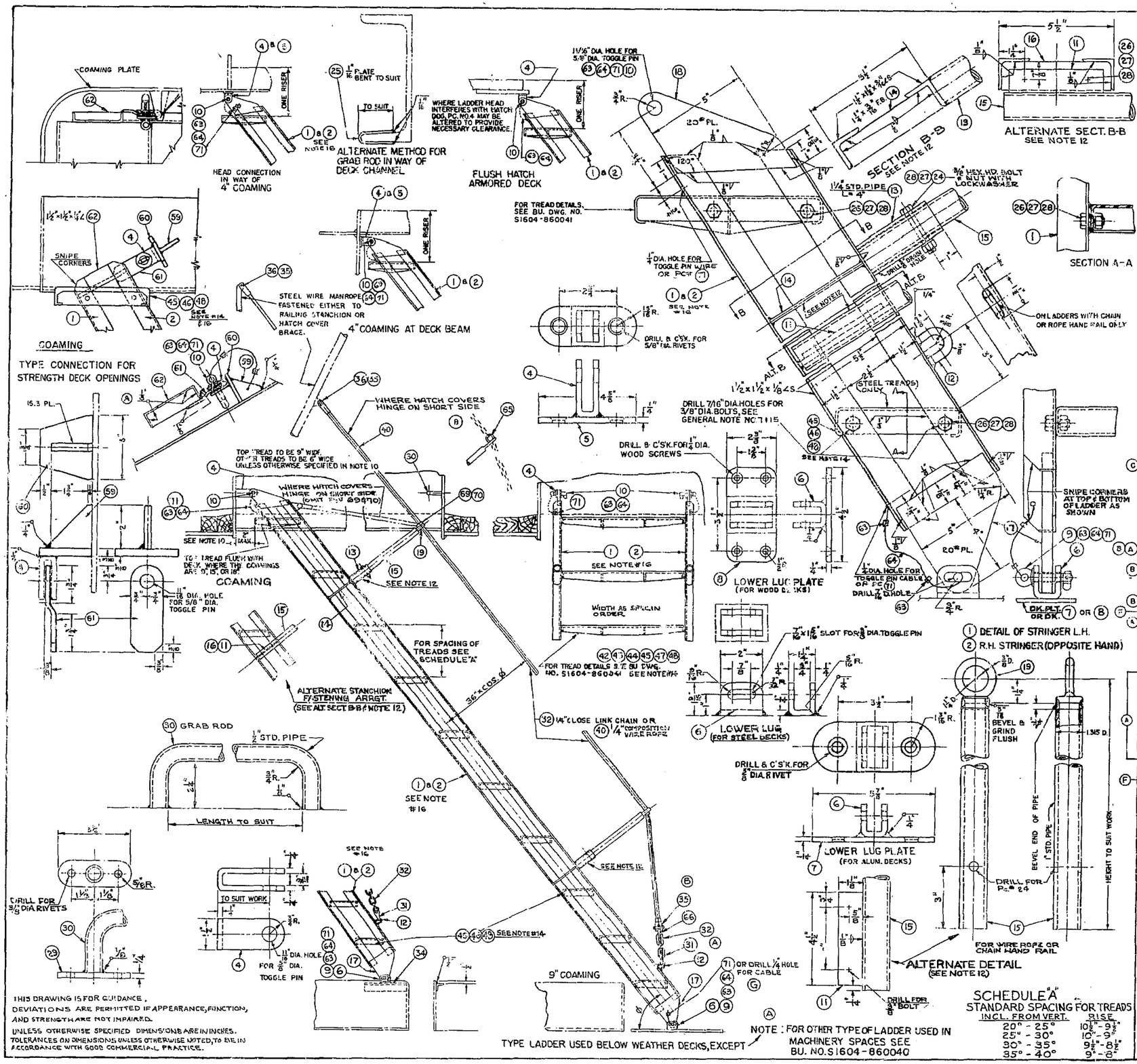

THIS DRAWING IS FOR GUIDANCE. DEVIATIONS ARE PERMITTED IF APPEARANCE, FUNCTION, AND STRENGTH ARE NOT IMPAIRED.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ON DIMENSIONS UNLESS OTHERWISE NOTED, TO BE IN ACCORDANCE WITH GOOD COMMERCIAL PRACTICE.

SCHEDULE "A"
STANDARD SPACING FOR TREADS

INCL. FROM VERT.	RISE
20° - 25°	10 1/2" - 9 1/2"
25° - 30°	10" - 9"
30° - 35°	9 1/2" - 8 1/2"
35° - 40°	9" - 8"

REVISIONS

REV.	DATE	DESCRIPTION	CODE IDENT NO.	APPR.
A	5/1/57	ADDED PCS 37 TO 45 TO SCHEDULE, DELETED [illegible] PC 38 ADDED LADDER RUNGS AS PC 38 TO SCHEDULE ADDED NOTE ON MACHINERY SPACE LADDERS ADDED TYPE CONNECTION FOR STRENGTH DECK OPENINGS ADDED SHACKLE & PIN PC 31 TO TOP END OF AIR [illegible] CHAIN HAND RAIL.		
B	11/14/57	METHOD SHOWN FOR RESTRAINING MANROPES IN CHAINS FROM SLIDING ON LADDERS LEADING TO ESCAPE HATCHES. ADDED PC'S. 48 TO 76 AND CHANGED PC'S 31, 32 & 36 & 38 IN SCHEDULE.		
C	4/14/59	REVISED SPEC'S IN SCHEDULE OF MATERIAL		
D	4/19/61	ADDED DETAIL 7 & NOTE		
E	7/12/67	PLAN REVISED TO SHOW IMPROVED METHOD FABRICATING LADDERS AND HANDRAILS		
F	4/8/68	CHANGED SPEC FOR PC# 31 IN SCHEDULE & ADDED NOTE TO PLAN.		
G	11/14/68	COML. SPECS ADDED TO 3/4" TOGGLE FASTENING MADE THROUGH BOLT.		
H	7/25/68	PC# 21 DELETED. 1/4 & 1/4 DIA. MOD. BUSHIPS LTR F02C/3 SEE E23 SD-770 OF 9 APRIL 1968.		
J	2/8/68	PC-51 MATL & NAME CHANGED AS PER BUSHIPS LTR 124S2-2 SEE C692A-2349 OF 3 DEC. 1968		

SCHEDULE OF MATERIAL

QUANTITIES REQUIRED FOR ONE INCLINED LADDER

ITEM	NAME	QTY	MAT	SPEC.	DIE	REMARKS
1	STRINGER, L.H.	1	STEEL OR ALUM.	COM'L		1 1/2" x 1/2" 3/4" [illegible] SEE NOTE 16.
2	STRINGER, R.H.	1		"		" " " " "
3						
4	UPPER LUG	2	"	"		1/4" THICK
5	UPPER LUG PLATE	2	"	"		" "
6	LOWER LUG	2	"	"		2" x 1/4" F.B.
7	LOWER LUG PLATE	2	"	"		2 5/8" x 1/4" F.B.
8	LOWER LUG PLATE	2	"	"		2 5/8" x 1/4" F.B.
9	TOGGLE PIN COMPLETE	2	STL. GALV.	"		5/8" DIA x 11/16" EFFECTIVE LG.
10	TOGGLE PIN COMPLETE	2	"	"		5/8" DIA. x 1 1/4" EFFECTIVE LG.
11	STANCHION CLIP	AS REQD	STEEL OR ALUMINUM	"		1 1/2" x 1/4" F.B.
12	STAPLE	2	STL. GALV.	"		3/8" DIA.
13	HANDRAIL SOCKET	AS REQD	STL. GALV.	"		1 1/2" STD. PIPE L=4"
14	STIFFENER	AS REQD	STEEL OR ALUMINUM	"		1 1/4" x 3/16" F.B.
15	STANCHION	AS REQD	"	"		1" STD. PIPE L.P.S.
16	STRINGER WEB	AS REQD	"	"		1 7/8" x 1/4" F.B.
17	LADDER FOOT	2	"	"		20 mm PL. 5" x 5 1/8"
18	UPPER LADDER END	2	"	"		20 mm PL. 3 1/2" x 8 1/2"
19	EYE	AS REQD	"	"		
20				"		
21				"		
22				"		
23	ROPE SOCKET 1/4"	2	STEEL	RR-S-550		TYPE B
24	HEX. HD. BOLT	AS REQD	ST. GALV.	COM'L		5/8"-16 NC-2 x 2 1/2" LONG
25	GRAB ROD PLATE	AS REQD	STEEL OR ALUMINUM	COM'L		1/2" PLATE L= TO SUIT
26	HEX. HD. BOLT	AS REQD	ST. GALV.	COM'L		3/8"-16 NC-2 X 1" LONG
27	HEX. NUTS	"	"	COM'L		3/8" - 16 NC-2
28	LOCK WASHERS	"	"	COM'L		FOR 3/8" BOLT
29	GRAB ROD BASE	2	STEEL OR ALUMINUM	"		1 1/4" x 1/4" F.B.
30	GRAB ROD	1	ASTM A53	"		1/2" STD. PIPE
31	OPEN EYE SNAP HOOK	6	STL. GALV. OR CAD. PLTD.	"		
32	1/4" CLOSE LINK CHAIN	2	ST. GALV.	"		
33						
34	RIVET	2	STL. GALV.	COM'L		1/4" x 1 1/2" x 1 1/2" L 6" LG.
35	ROPE SOCKET 1/4"	2	STL.	RR-S-550		TYPE A
36	TOGGLE PIN COMPLETE	2	STL. GALV.			5/8 D x 1 1/2" EFFECTIVE LENGTH
37	" " "	2	"			1/2" D x 1 1/2" EFFECTIVE LENGTH
38	LADDER RUNGS	AS REQD	STL.	COM'L		5/8" SQ. BAR
39	PIPE HAND RAIL	AS REQD	STL. ASTM A53	"		1" STD. PIPE (SEE NOTE 3)
40	MANROPE	2	COMP	MIL-M-21421		7/8" DIA (SEE NOTE 2)
41						
	FOR SCHEDULE OF PCS 42 TO 48 SEE BU. DWG SIGO4-860041					
49	BOTTOM SUPPORT PL.	2	STEEL OR ALUMINUM	COM'L		FOR 3" STR (2" x 1/4" F.B.)
50	" " "	2	"	"		" 4" " "
51	SUPPORT CLIP	2	"	"		2" x 2" x 1/4" L-2 1/4" LG
52	HEX. HD. BOLT	2	STL. GALV.	"		1/4" 20 NC-2 x 1" LG.
53	" NUT	2	"	"		1/4" 20 NC-2
54	STRINGER	2	STEEL OR ALUMINUM	"		3" x 3/8" F.B.
55	STRINGER	2	"	"		4" x 3/8" F.B.

SCHEDULE CONTINUED ON BU DWG NO. S1604-860040
FOR GEN. NOTES 2 & 8 BU. NO. S1604-860040
THIS DWG. DEVELOPED FROM BU. DWG. NOS. 71456, 229512, 23747, 259179, 283773, 229515, 229516, 229515, 278978, 468123 & 466124.
THIS DWG SUPERSEDES BU. DWG NOS. 110328, 139144, 590077A & 590077B.
AN (*) ASTERISK DENOTES MANDATORY REQUIREMENTS.

NYK SHIPYARD

DRAWN BY: ABORYO C.J.
EXAMINED BY: T. MOORE (93) HEAD ENGINEER
IN CHARGE OF WORK: DATE: 3/30/43

HULL TYPE DRAWING
INCLINED LADDERS
STEEL
ASSEMBLIES & DETAILS

SCALE 1 1/2" = 3" 0" = 1 FOOT

NAVY DEPARTMENT
BUREAU OF SHIPS

WASHINGTON, D.C. SEPT. 15, 1945

FOR CHIEF OF BUREAU

BU. No. S1604-860039