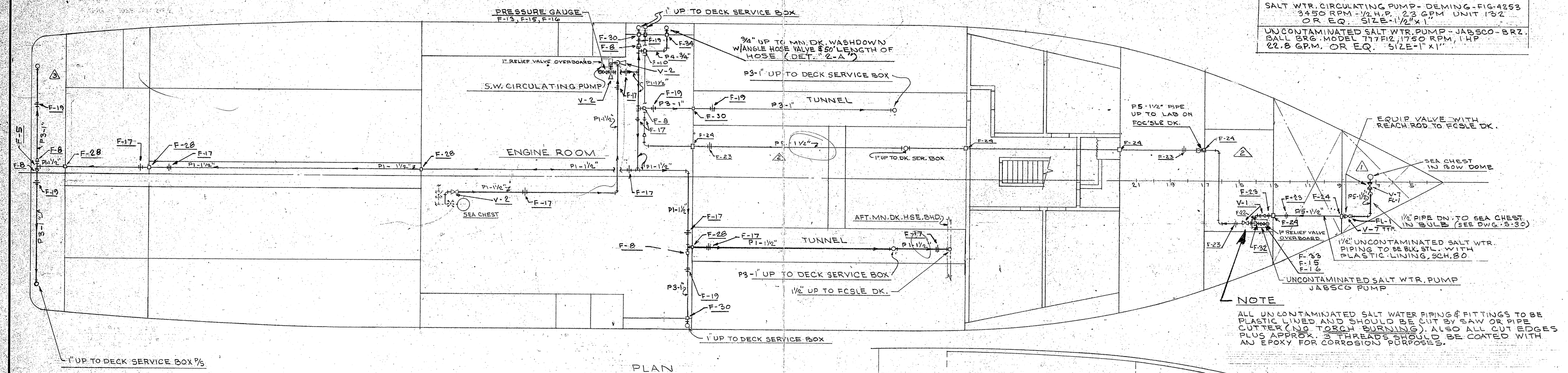
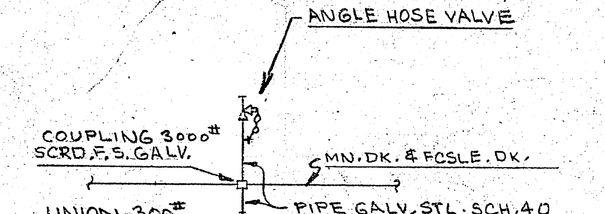
PUMP DATA
SALT WTR. CIRCULATING PUMP - DEMING - FIG. 4253 3450 RPM - ½ H.P. 23 GPM UNIT 132 OR EQ. SIZE - 1½" x 1"
UNCONTAMINATED SALT WTR. PUMP - JABSCO - BRZ. BALL SEG. MODEL 7177-FIG. 1750 RPM, 1 HP 22.8 G.P.M. OR EQ. SIZE - 1" x 1"

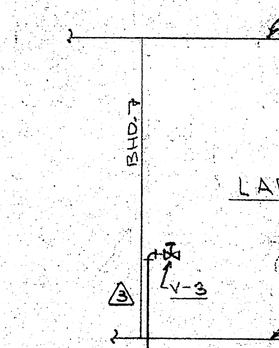


PLAN
PIPING BELOW MAIN DECK
3/16" = 1'-0"

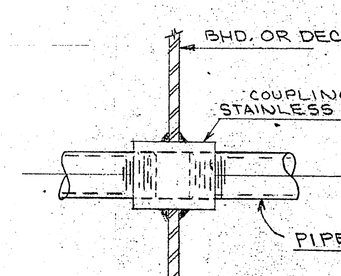
NOTE
ALL UNCONTAMINATED SALT WATER PIPING & FITTINGS TO BE PLASTIC LINED AND SHOULD BE CUT BY SAW OR PIPE CUTTER (NO TORCH BURNING). ALSO ALL CUT EDGES PLUS APPROX. 3 THREADS SHOULD BE COATED WITH AN EPOXY FOR CORROSION PURPOSES.



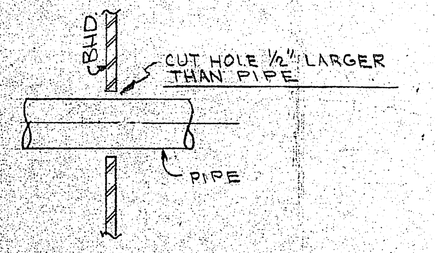
DET. "2-A"
DECK WASHDOWN
N.T.S.
SIM. DET. FOR ANCHOR WASHDOWN



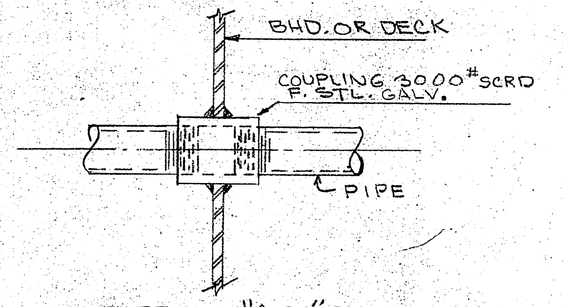
DETAIL "2-A1"
TYP. UNCONTAMINATED SALT WTR. OUTLET TO LAB.
N.T.S.



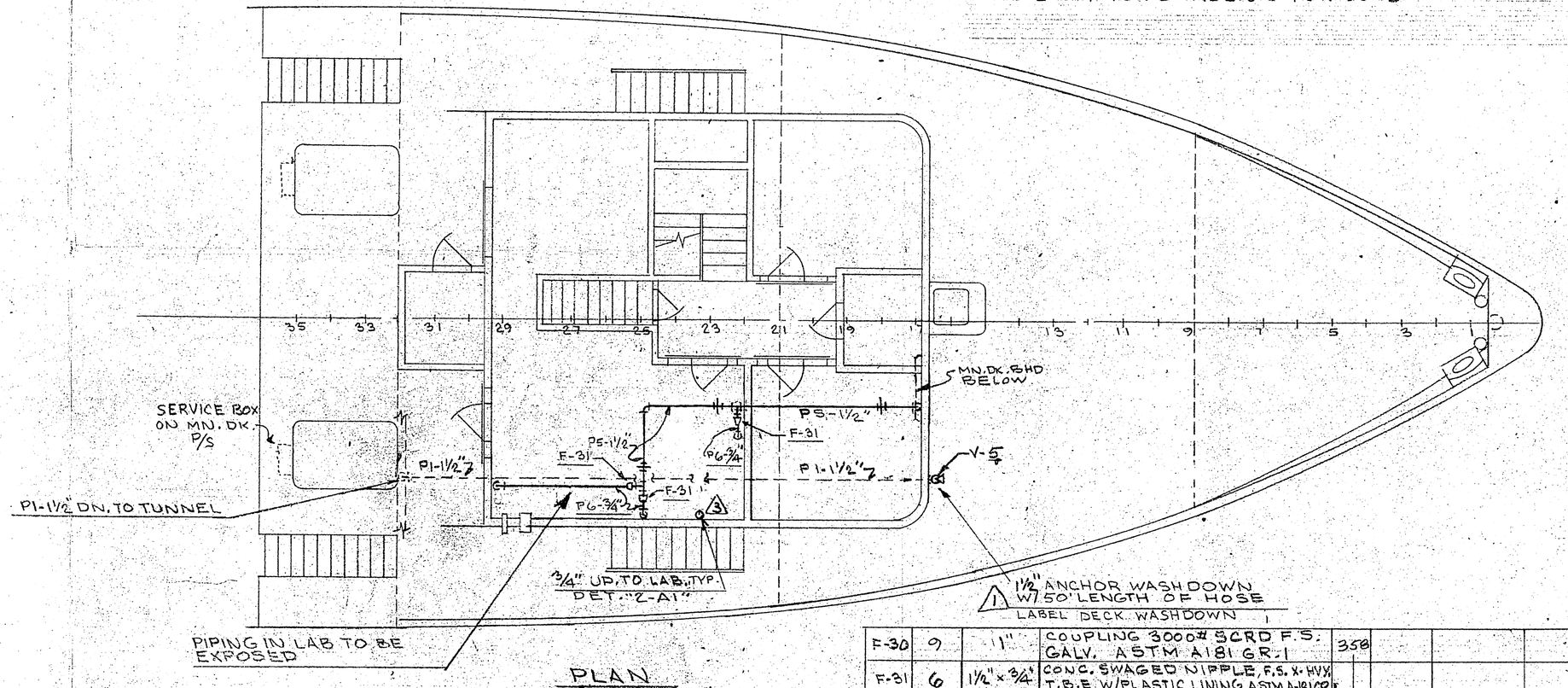
DETAIL "2-B"
W.T. BHD. & DECK PENETRATION FOR UNCONTAMINATED SALT WTR.
3" = 1'-0"



DETAIL "1-B"
TYP. N.T. BHD. PENETRATION
3" = 1'-0"



DETAIL "2-B1"
W.T. BHD. & DECK PENETRATION FOR SALT WATER SYSTEM
3" = 1'-0"



PLAN
PIPING BELOW & ABOVE FCSLE. DK.
3/16" = 1'-0"

1½" ANCHOR WASHDOWN W/50' LENGTH OF HOSE
LABEL DECK WASHDOWN

GENERAL NOTES

1. PIPING IN GALLEY & QUARTERS FROM S.W. CIRCULATING PUMP TO BE CONCEALED IN OVERHEAD.
2. ALL PIPING AND VALVES SHALL BE MARKED SHOWING ITS SERVICE AND PARTICULAR LIQUID.
3. ALL PIPING SHALL BE COLOR CODED IN ACCORDANCE WITH THE NATIONAL COLOR CODE AND SHALL INDICATE DIRECTION OF FLOW.
4. LABELING SHALL BE EMBOSSED AND ATTACHED WITH SCREWS.
5. ALL PIPES SUBJECT TO MECHANICAL INJURY OR UNDUE VIBRATION SHALL BE ADEQUATELY PROTECTED AND/OR SUPPORTED. (SEE DWG. N.P. P-11)
6. PIPING SHALL BE THOROUGHLY CLEANED AFTER INSTALLATION AND BEFORE FUNCTION TESTING.
7. ALL WELDING PROCEDURES SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF THE FEDERAL REGISTER VOL. 33-#245, 46 CFR 56.70-15.

F.G. NO.	QTY.	SIZE	DESCRIPTION	COST ITEM	P.O. No.	VENDOR	DATE REQ'D YARD	DATE REC'D
P1	225'	1½"	PIPE GALV. STL. SCH. 40 SMLS ASTM A-120	358				
P3	85'	1"						
P4	25'	¾"						
P5	225'	1½"	PIPE BLK. STL. SCH. 80 SMLS W/PLASTIC LINING ASTM A53 GR. B					
P6	70'	¾"						
F-1	10	1½"	90° ELBOW 150# SCRD M.I. GALV. ASTM A-153					
F-3	5	1"						
F-4	4	¾"						
F-5	8	1½"	TEE 150# SCRD M.I. GALV. ASTM A-153					
F-7	1	1"						
F-8	7	1½" x 1"	CONC. SWAGED NIPPLE F.S. X-HVY. T.B.E., GALV. ASTM A181 GR. I					
F-10	1	1½" x ¾"						
F-12	1	1" x ¾"						
F-13	1	1½" x ¼"	BUSHING HEX. HD. F.S. GALV. 3000# SCRD ASTM A181 GR. I					
F-15	2	0 to ⅛ 100#	PRESS. GAUGE BRZ. ASHCROFT #81½-1016					
F-16	2	¼"	GAUGE COCK ASHCROFT #1092 FEMALE BOTH ENDS					
F-17	10	1½"	UNION 150# SCRD. M.I. GALV. ASTM A-153					
F-18	3	1"	PIPE NIPPLE GALV. STL. 3" LG.					
F-19	6	1"	UNION 150# SCRD M.I. GALV. ASTM A-153					
F-20	2	¾"						
F-21	11	1½"	90° ELBOW 3000# F.S. SCRD W/PLASTIC LINING ASTM A181 GR. I					
F-22	2	1½" x 1"	CONC. RED. 3000# F.S. SCRD TBE W/PLASTIC LINING, ASTM A-181 GR. I					
F-23	12	1½"	UNION 3000# F.S. SCRD W/ PLASTIC LINING ASTM A181 GR. I					
F-24	9	1½"	COUPLING 3000# STAINLESS STL. SCRD ASTM A182					
F-25	10	¾"	90° ELBOW 3000# F.S. SCRD W/PLASTIC LINING ASTM A181 GR. I					
F-26	6	¾"	UNION					
F-27	3	¾"	COUPLING 3000# STAINLESS STL. SCRD ASTM A182	358				
F-28	6	1½"	COUPLING 3000# SCRD F.S. GALV. ASTM A-181 GR. I	358				
F-30	9	1"	COUPLING 3000# SCRD F.S. GALV. ASTM A181 GR. I	358				
F-31	6	1½" x ¾"	CONC. SWAGED NIPPLE, F.S. X-HVY T.B.E. W/PLASTIC LINING ASTM A-181 GR. I					
F-32	7	1½"	TEE 3000# F.S. SCRD W/PLASTIC LINING ASTM A-181 GR. I					
F-33	1	1½" x ¼	BUSHING HEX. HD. F.S. SCRD W/PLASTIC LINING 3000# ASTM A181 GR. I					
F-34	3	¾"	COUPLING 3000# SCRD F.S. GALV. ASTM A-181 GR. I					
V-1	2	1½"	GATE VALVE 200# SCRD U.B. STAINLESS STL. - LADISH #9250 (OR EQ)					
V-2	3	1½"	GATE VALVE, 150# SCRD. U.B. BRZ. CRANE #431-UB OR EQ.					
V-3	4	¾"	STERLING HEX. SHOULDERS, SS SINGLE SHN. FAIRLEY WOOD - WEIGHT 200-432 OR EQ.					
V-4	2	¾"	ANGLE VALVE 200# SCRD U.B. STAINLESS STL. W/NIPPLE, CAP & CHAIN LADISH #9254 OR EQ.					
V-5	1	1½"	ANGLE HOSE VALVE BRZ. SCRD, W/CAP & CHAIN CRANE # 117 OR EQ. W.P.P.I.					
V-6	2	¾"	ANGLE HOSE VALVE BRZ. SCRD W/CAP & CHAIN CRANE # 58 OR EQ. W.P.P.I.					
V-7	2	1½"	GATE VALVE 150# FLGD. STAINLESS STL. 0.S & Y. LADISH #8215 OR EQ.					
FL-1	3	1½"	FLANGE F.F.S.O. 150# STAINLESS STL. ASTM A182 F-304					
B-1	8	½" x 2¾/16	MACH. BOLTS HEX. HD. W/ HEX. HD. NUTS STAINLESS STL.					
G-1	2	1/16"	ASBESTOS GASKET, GRANITE FULL FACE FOR FCNO. FL-1 OR EQ.					
1	1	1½"	FIRE HOSE 50' LENGTH N.F.P.A. N.I.T.					
2	2	¾"	HOSE 50' LENGTH N.F.P.A. N.I.T.	358				

NO.	DESCRIPTION	DATE	BY
4	FINAL "AS BUILT"	7/15/74	JFK
3	AS BUILT IN FIELD	7/4/73	
2	ADDED UNCONT. S.W. TO PORT SIDE SERVICE BOX, RELOCATED UNCONTAMINATED S.W. LINE FROM P.S. TO P.S. & DELETED PIPING AFT.	10/11/73	JFK
1	ADDED PC. NO'S 1 & 2 & REV. PC. NO 3 V-4, V-7, FL-1 IN BILL OF MAT'L.	8/10/73	JFK
SYM.	ADDED VALVE @ SEA CHEST	4-10-73	JFK

REVISIONS

No 84-273

APPROVALS

ABS: 4-9-73

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U.S. NAVAL SHIP SYSTEMS COMMAND
WASHINGTON D.C. 20360

OCEANOGRAPHIC RESEARCH SHIP
AGOR (UTILITY) CLASS

HALTER MARINE SERVICES, INC.
P.O. BOX 29266 NEW ORLEANS, LA. 70129

SALT WATER PIPING

SCALE:	NOTE	DATE	3-27-73
DRAWN BY:	BERTUCCI	CK'D BY	J. Hubbell
HALTER HULL NO.	375, 376	HALTER JOB NO.	2187, 2188
NAVSHIPS NO.	AGOR 21-506-001		

HALTER DWG. NO. P-9
REV. E

000143

GYRE175