

NOTES:

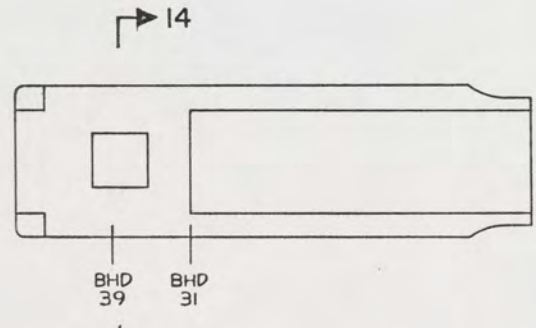
- THIS DRAWING HAS BEEN DEVELOPED FROM SHIPCHECK INFORMATION FOR ACCOMPLISHING THE INSTALLATION OF SALT WATER PIPING TO LCM-8, MOD-1.
- WELDING AND BRAZING REQUIREMENTS SHALL BE IN ACCORDANCE WITH NAVSEA STD ITEM NO. 009-12.
- EQUIPMENT AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH USCG AND ABS REGULATIONS.
- REPAIR ALL PAINT DAMAGED BY THIS INSTALLATION AND PAINT ALL NEW STEEL IN ACCORDANCE WITH U.S. ARMY TECHNICAL BULLETIN TB43-0144.
- MATERIAL ORDERED ON THIS DRAWING IS NOT INTENDED TO BE RESTRICTIVE. SUBSTITUTION OF EQUAL QUALITY MATERIAL MAY BE MADE.
- SLIGHT DEVIATIONS FROM DIMENSIONS SHOWN ARE PERMISSIBLE TO SUIT ACTUAL CONDITIONS FOUND ABOARD THE VESSEL.
- COMPONENTS SHOWN BY SOLID HEAVY LINES ARE NEW AND ARE TO BE INSTALLED IN ACCORDANCE WITH THIS DRAWING. PHANTOM LINES INDICATE EXISTING COMPONENTS INSTALLED BY DRAWINGS REFERENCED AS NOTED.
- RAW WATER PUMP FURNISHED WITH ENGINE, REF NO. 3.
- PIPING SHALL BE SUITABLY SECURED BY PIPE HANGERS TO PREVENT VIBRATION AND PROTECT AGAINST DAMAGE IN ACCORDANCE WITH NAVSEA 804-1385781.
- PIPING SYSTEMS SHALL BE THOROUGHLY CLEANED BY FLUSHING WITH THE MEDIUM FOR WHICH THE SYSTEM IS INTENDED.
- ALL THREADED PIPE JOINTS SHALL BE ASSEMBLED USING ANTISEIZE TAPE, FIND NO. M-14. PIPING SHALL BE TESTED HYDROSTATICALLY WITH WATER AND ALL JOINTS INSPECTED FOR TIGHTNESS IN ACCORDANCE WITH LCM-8 INSTALLATION INSTRUCTIONS; 55-1905-217-1.
- IDENTIFY PIPING SYSTEM IN ACCORDANCE WITH TB-43-0144.
- PIPES OR HOSES OBSCURED BY FLOOR PLATING OR ENGINE ROOM EQUIPMENT SHALL BE IDENTIFIED BY (COPPER, BRASS, CRES) TAGS IN ACCORDANCE WITH MIL-STD-130. TERMINATIONS AND USE SHALL BE CLEAR.

REFERENCE DRAWINGS APPLICABLE TO HULL NUMBERS 8540 THRU 8560 AND 8580 THRU 8618		
NO.	DRAWING NO.	TITLE
1	245-4510946	LCM-8, MOD 1, SALT WATER PIPING
2	13226E9456	LCM-8, MOD 1, MOD TO BILGE PIPING SYSTEM
3	13226E9448	LCM-8, MOD 1, ENGINE FOUNDATIONS
4	13226E9470	LCM-8, MOD 1, FUEL SYSTEM MODIFICATION

REFERENCE DRAWINGS APPLICABLE TO HULL NUMBERS 8520 THRU 8539		
NO.	DRAWING NO.	TITLE
1	245-2534209	LCM-8, MOD 1, SALT WATER PIPING
2	13229E2253	LCM-8, MOD 1, MOD TO BILGE PIPING SYSTEM
3	13226E9448	LCM-8, MOD 1, ENGINE FOUNDATIONS
4	13226E9470	LCM-8, MOD 1, FUEL SYSTEM MODIFICATION

SHEETS		STATUS OF REVISIONS	
NO.	DATE	DESCRIPTION	DATE
4		SEE ECP NO. 90HE3102 AND 90HE3103	10 MAR 84
3			
2			
1		SEE ECP NO. 90HE3309 AND 90HE3310	18 JUN 84

YARD	NO.	FIG.	QTY	DESCRIPTION	COMPL	MATERIAL
YARD	V-2	90664	2	GLOBE VALVE, 1/2" IPS (WALWORTH)	COHL	BRONZE
YARD	V-1	90664	2	GLOBE VALVE, 1" IPS (WALWORTH)	COHL	BRONZE
YARD	M-16	72582	2	COOLER, FUEL (DETROIT DIESEL) SEE NOTE 14		
YARD	M-15		40	HOSE CLAMP, LOW PRESSURE, 1 13/16"-2 3/4" RANGE		CRES
YARD	M-14		AR	TAPE, ANTISEIZE (SEE NOTE 11)		MIL-T-27730
YARD	M-13		4	BAR, 1/2" X 2" X 2 1/2"		ASTM B16
YARD	M-12	24161	6	HOSE, 1 5/8" ID X 2.09" OD X 6" L (GATES)	COHL	RBR
YARD	M-11	24161	AR	HOSE, 7/8" ID X 1.4" OD X L A/R (GATES)	COHL	RBR
YARD	M-10		8	SCREW, CAP, SOC HD-HEX, CRES, 5/16"-18 UNC-3A X 1" L		
YARD	M-9	80996	2	CLAMP, 2" PIPE SIZE, PIPE THREADED (GRINNELL)	COHL	M. I
YARD	M-8		4	NUT, HEX, PLAIN, CRES, 5/16"-18 UNC-2B		
YARD	M-7		12	WASHER, LOCK-SPRING, REG, CRES, 5/16" NOM ID		
YARD	M-6		4	SCREW, CAP, HEX-UD, CRES, PSVT, 5/16"-18 UNC-2A X 1" L		
YARD	M-5		AR	1/16" THK SHEET		ASTM D2000
YARD	M-4		2	PLATE, 1/4" X 2" X 4"		ASTM A36
YARD	M-3	24161	4	HOSE, 2" ID X 2.54" OD X 6" L (GATES)	COHL	RBR
YARD	M-2	24161	2	HOSE, 1 5/16" ID X 1.78" OD X 6" L (GATES)	COHL	RBR
YARD	M-1		24	HOSE CLAMP, LOW PRESSURE, 1 1/16"-2" RANGE		CRES
YARD	F-17	72423	2	ELBOW, 90°, REDUCING, FF X FEM, 2" X 1 1/4" IPS (FLAGG)	COHL	BRONZE
YARD	F-16	72423	2	UNION, FEMALE, 1/2" IPS, W/SB RING (FLAGG)	COHL	BRONZE
YARD	F-15	72423	2	TEE, REDUCING, 1 1/4" X 1 1/4" X 3/4" IPS (FLAGG)	COHL	BRONZE
YARD	F-14		4	BUSHING, HEX, 3/4" X 1/2" IPS		ANSI B16.15
YARD	F-13		2	ADAPTER, C X M, 1" X 1 1/4" IPS		ANSI B16.18
YARD	F-12		2	ELBOW, 90°, 1/2" IPS, CLASS 125		ANSI B16.15
YARD	F-11		4	ELBOW, 90°, 1", C X C		ANSI B16.18
YARD	F-10	72423	2	STREET ELBOW, 90°, 1/2" IPS, W/SB RING (FLAGG)	COHL	BRONZE
YARD	F-9	72423	4	COUPLING, REDUCING, 1 1/2" X 1 1/4" IPS, W/SB RING (FLAGG)	COHL	BRONZE
YARD	F-8		2	ELBOW, REDUCING, 90°, C X F, 1" X 1 1/4"		ANSI B16.18
YARD	F-7		8	ELBOW, 90°, 1 1/4" IPS, W/SB RING		MIL-F-1183/5
YARD	F-6		2	ELBOW, 45°, 1 1/4" IPS, W/SB RING		MIL-F-1183/5
YARD	F-5		2	TEE, REDUCING, 1 1/4" X 1 1/4" X 1" IPS, W/SB RING		MIL-F-1183/9
YARD	F-4	72423	2	TEE, REDUCING, 3/4" X 3/4" X 1 1/4" IPS, W/SB RING (FLAGG)	COHL	BRONZE
YARD	F-3		4	ELBOW, 90°, 3/4" IPS, W/SB RING		MIL-F-1183/5
YARD	F-2		4	UNION ELBOW, 90°, 3/4" IPS, W/SB RING		MIL-F-1183/11
YARD	F-1		6	ELBOW, 90°, 1" IPS, W/SB RING		MIL-F-1183/5
YARD	P-9		AR	THREADLESS COPPER PIPE, 2" IPS X .065 WALL		ASTM B302
YARD	P-8		AR	SEAMLESS COPPER WATER TUBE, 3/4" STD TUBE SIZE X .065 WALL		ASTM B88
YARD	P-7		4	THREADLESS COPPER PIPE, 1 1/2" IPS X .065 WALL X 3" L		ASTM B302
YARD	P-6		AR	SEAMLESS COPPER WATER TUBE, 1" STD TUBE SIZE X .065 WALL		ASTM B88
YARD	P-5		AR	SEAMLESS COPPER PIPE, 1/2" IPS, SCHED 40		ASTM B42
YARD	P-4		AR	SEAMLESS PIPE, BLACK, 1/4" IPS, SCHED 40		ASTM A53
YARD	P-3		AR	SEAMLESS COPPER PIPE, 1 1/4" IPS, SCHED 40		ASTM B42
YARD	P-2		AR	SEAMLESS COPPER PIPE, 3/4" IPS, SCHED 40		ASTM B42
YARD	P-1		AR	SEAMLESS COPPER PIPE, 1" IPS, SCHED 40		ASTM B42



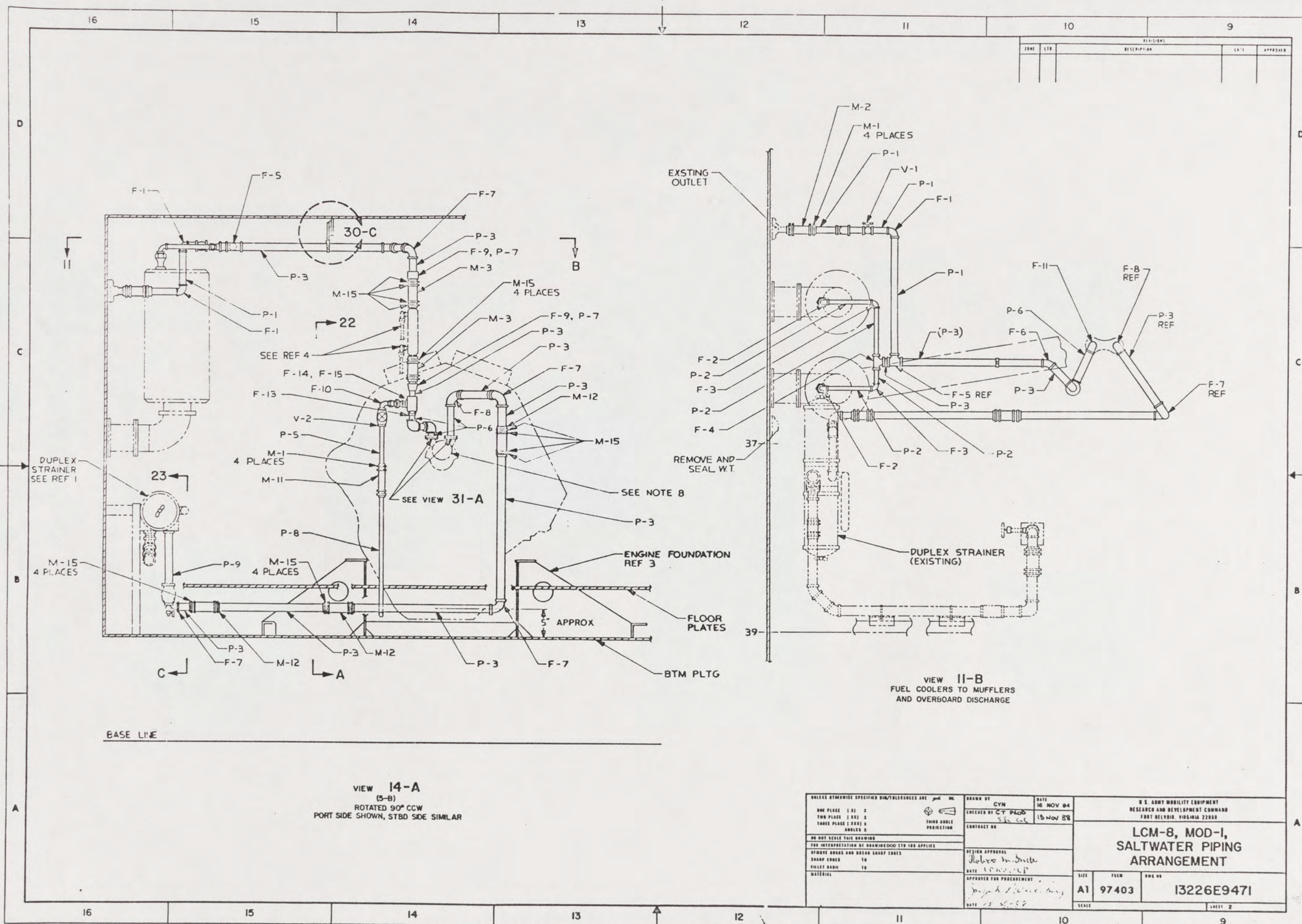
THIS DRAWING APPLIES TO HULL NUMBERS 8520 THROUGH 8560 AND 8580 THROUGH 8618 ONLY

UNLESS OTHERWISE SPECIFIED DIM/TOLERANCES ARE:		DRAWN BY: CYN		DATE: 16 NOV 84	
ONE PLACE ( )	±	CHECKED BY: G.T. PAND		DATE: 15 NOV 84	
TWO PLACE ( )	±	THIRD ANGLE PROJECTION			
THREE PLACE ( )	±				
ANGLES	±				
DO NOT SCALE THIS DRAWING FOR INTERPRETATION OF DRAWING DIMENSIONS					
REMOVE BORDERS AND BREAK SHARP EDGES					
SHARP EDGES	18		DATE: 15 NOV 84		
FILLET RADIUS	18		APPROVED FOR PROCUREMENT		
MATERIAL					
DESIGN APPROVAL: <i>[Signature]</i>					
APPROVED FOR PROCUREMENT: <i>[Signature]</i>					
DATE: 16 NOV 84					
U.S. ARMY MOBILITY EQUIPMENT RESEARCH AND DEVELOPMENT COMMAND FORT BELVOIR, VIRGINIA 22060		CONTRACT NO.		SIZE: A1	
LCM-8, MOD-1, SALT WATER PIPING ARRANGEMENT		97403		DWG NO: 13226E9471	
SCALE: NONE				SHEET 1 OF 4	

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BASE LINE

VIEW 14-A  
(5-B)  
ROTATED 90° CCW  
PORT SIDE SHOWN, STBD SIDE SIMILAR

VIEW 11-B  
FUEL COOLERS TO MUFFLERS  
AND OVERBOARD DISCHARGE

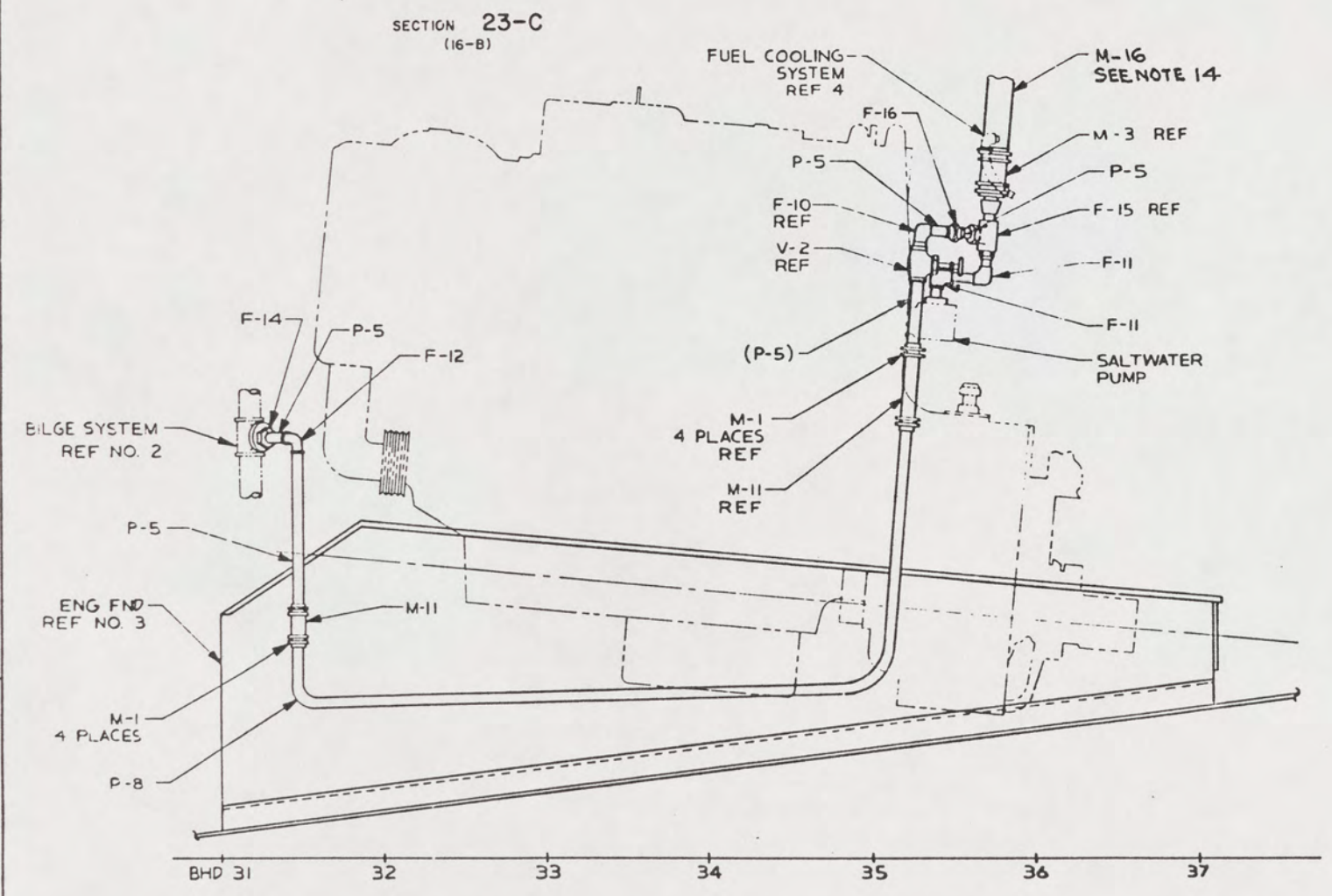
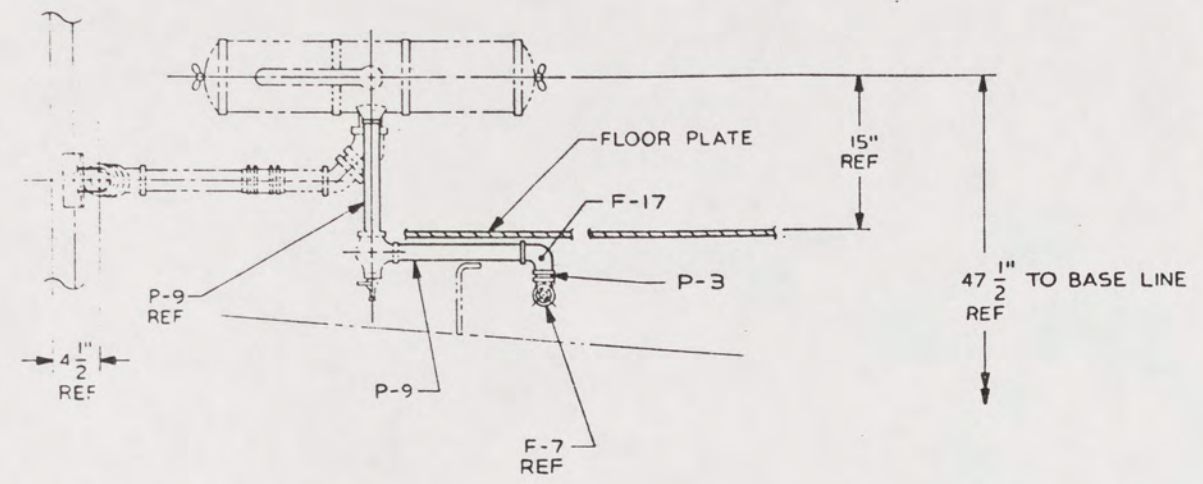
UNLESS OTHERWISE SPECIFIED DIM/TOLERANCES ARE IN INCHES		DESIGNED BY CYN	DATE 16 NOV 84	U.S. ARMY MOBILITY EQUIPMENT RESEARCH AND DEVELOPMENT COMMAND FORT BELVOIR, VIRGINIA 22060	
ONE PLACE (1/2) 0	TWO PLACE (1/32) 0	CHECKED BY CT PLOD	DATE 15 NOV 88	LCM-8, MOD-1, SALTWATER PIPING ARRANGEMENT	
THREE PLACE (1/1000) 0	FOUR PLACE 0	CONTRACT NO.			
DO NOT SCALE THIS DRAWING	FOR INTERPRETATION OF DIMENSIONS SEE 100 APPLIES	DESIGN APPROVAL Dobson M. Smith		SIZE A1	PART NO. 97403
SHARP EDGES 10	FILED EDGES 10	DATE 15 NOV 88		SCALE	
MATERIAL		APPROVED FOR PROCUREMENT James H. [Signature]			DOC NO. 13226E9471
		DATE 15 NOV 88			SHEET 2

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24 23 22 21 20 19 18 17

ZONE	LTB	DESCRIPTION	DATE	APPROVED
B		SEE ECP NO. 90HE3309 AND 90HE3310	18 JUN 50	8 m S



VIEW 22-A  
(14-C)  
PRIME LINES FROM SW PUMP DISCHARGE  
TO BILGE PUMPS  
PORT SIDE SHOWN, STBD SIDE OPP HD

24 23 22 21 20 19 18 17

84

UNLESS OTHERWISE SPECIFIED DIM/TOLERANCES ARE: $\frac{1}{16}$ IN		DRAWN BY CYM	DATE 16 NOV 54	U.S. ARMY MOBILITY EQUIPMENT RESEARCH AND DEVELOPMENT COMMAND FORT BELVOIR, VIRGINIA 22060
ONE PLACE (1.0) 2	TWO PLACE (0.01) 2	CHECKED BY C. P. P. C. S. C. C.	15 NOV 56	
THREE PLACE (0.001) 2	FOUR PLACE (0.0001) 2	CONTRACT NO.		LCM-8, MOD-1, SALTWATER PIPING ARRANGEMENT
DO NOT SCALE THIS DRAWING				
FOR INTERPRETATION OF DIMENSIONS SEE 100 APPLIES				APPROVED FOR PRODUCTION DATE: 15 NOV 56
SHARP CORNERS TO FILLET RADIUS TO				
MATERIAL		DATE: 15 NOV 56		SIZE A1
				FILE NO. 97403
				QWC NO. 13226E9471
				SCALE SHEET 3



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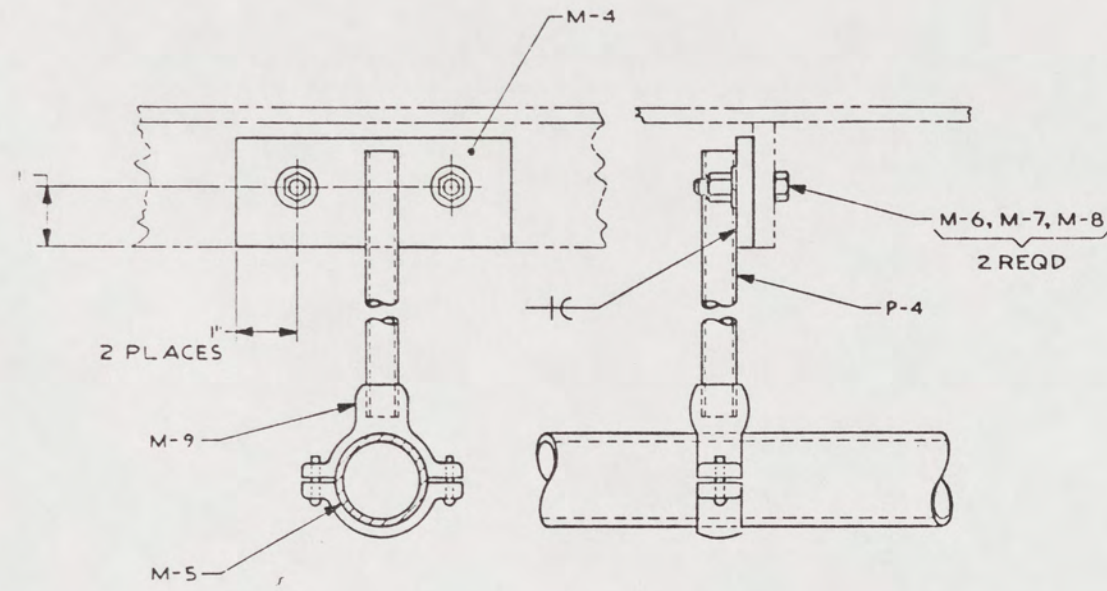
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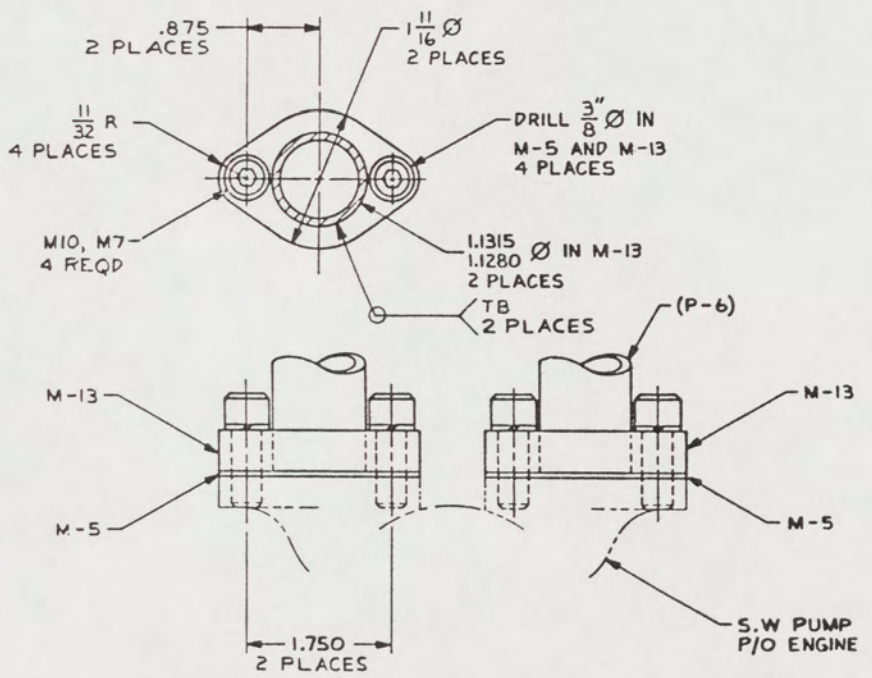
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REVISIONS			
NO.	DATE	DESCRIPTION	APPROVED



VIEW 30-C  
(14-D)  
SCALE NONE



VIEW 31-A  
SCALE 1/1

UNLESS OTHERWISE SPECIFIED DIM/TOLERANCES ARE: $\pm .005$ IN.		DESIGNED BY CYM	DATE 16 NOV 84	U.S. ARMY MOBILITY EQUIPMENT RESEARCH AND DEVELOPMENT COMMAND FORT BELVOIR, VIRGINIA 22060	
ONE PLACE ( .01 ) ±	TWO PLACE ( .001 ) ±	CHECKED BY SIC GC	DATE 15 NOV 85	LCM-8, MOD 1, SALTWATER PIPING ARRANGEMENT	
THREE PLACE ( .0001 ) ±	ANGLES ±	CONTRACT NO.			
DO NOT SCALE THIS DRAWING FOR INTERPRETATION OF DIMENSIONS SEE FOR APPLIES		DESIGN APPROVAL <i>Robert D. ...</i> DATE		SIZE A1	FORM 97403
REMOVE BURRS AND BREAK SHARP EDGES SHARP EDGES TO FILLET RADIUS TO		APPROVED FOR PROCUREMENT <i>...</i> DATE		QNTY 1	QNTY 13226E9471
MATERIAL		DATE		SCALE	SHEET 4

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