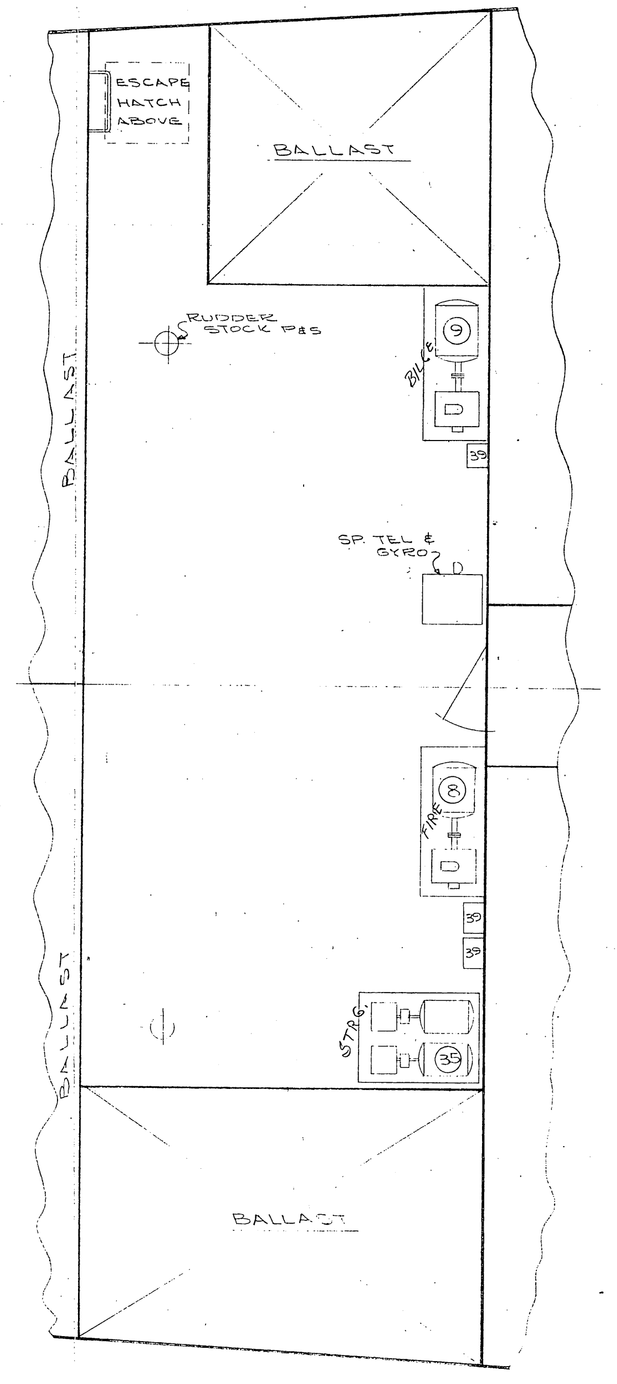
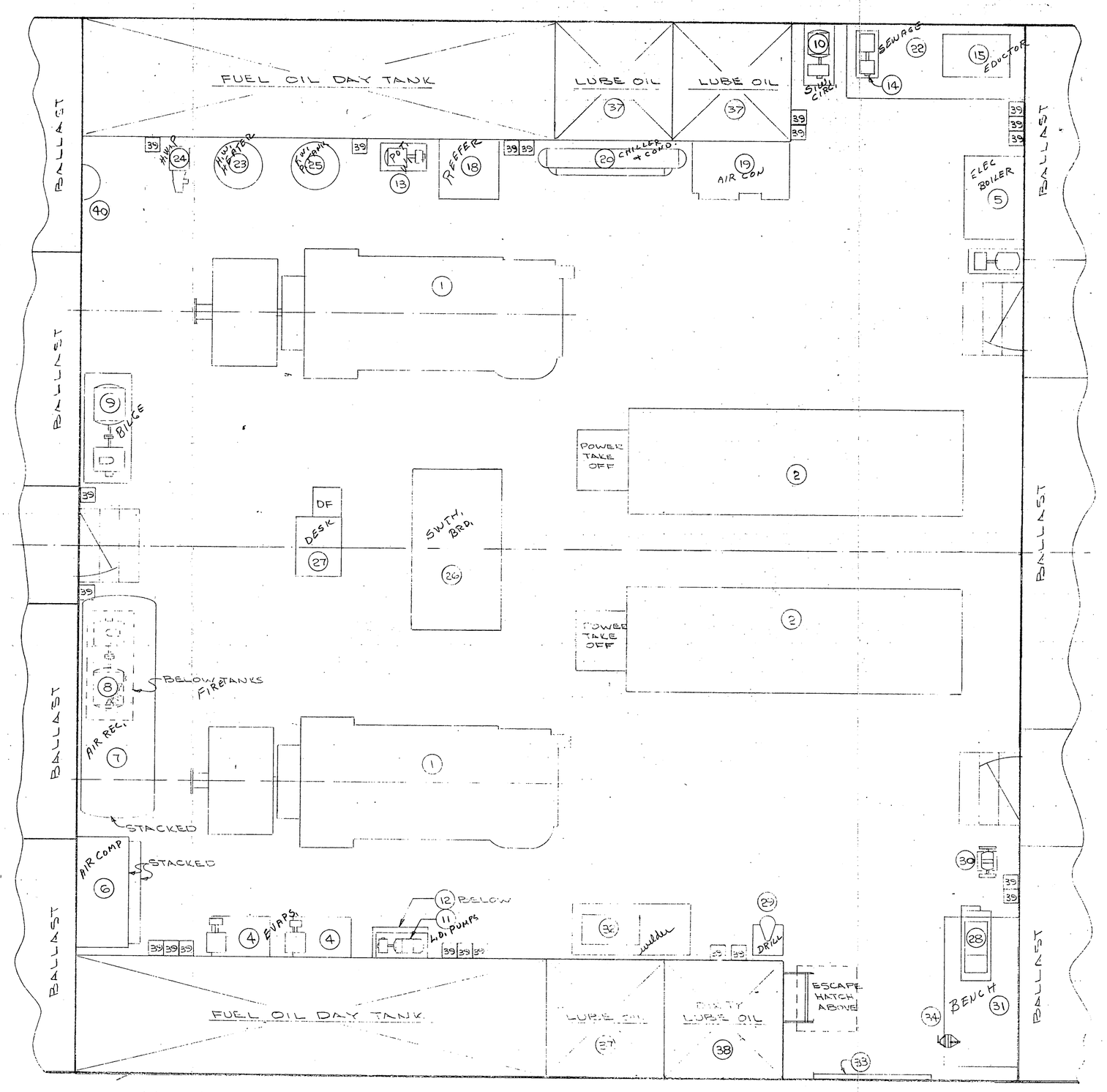
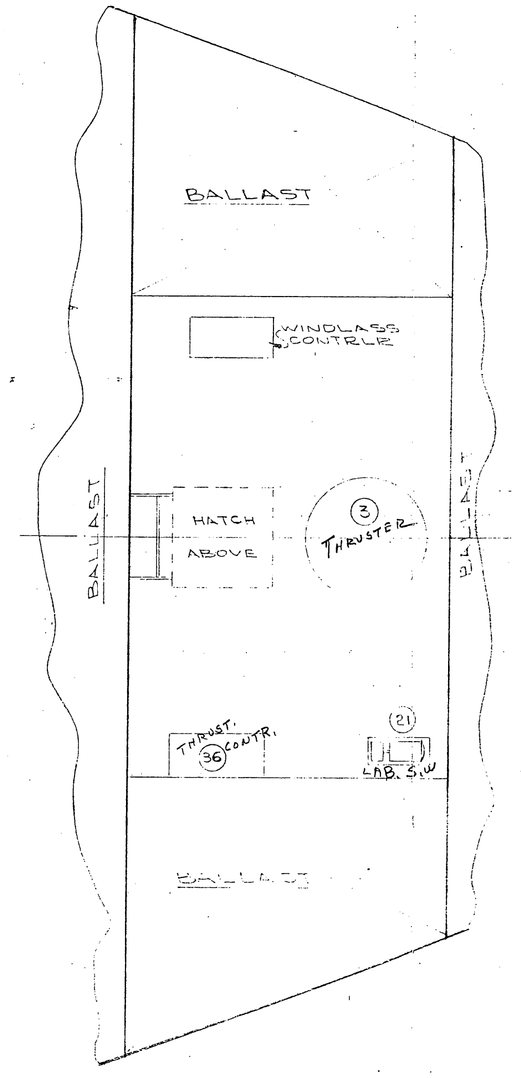


STEERING ROOM
3/8" = 1'-0"



NOTE:
BALLAST AND FUEL OIL MANIFOLD LOC. ON NPT BRKD. OF ENG RM.

ENGINE ROOM
3/8" = 1'-0"



FWD THRUSTER RM.
3/8" = 1'-0"

MACHINERY LIST

KEY NO.	ITEM	DESCRIPTION
1	MAIN PROPULSION	CAT. D398D (SEE NOTE)
2	DIESEL GENERATORS	CAT. D[illegible], (SEE NOTE)
NOT SHOWN	SHAFTS PROPELLERS	LIMEN TYPE 3350, 3 BLADE, STAINLESS STEEL, CONTROLLABLE PITCH, APPROX. 77" DIAMETER
NOT SHOWN	STERN BEARINGS	GOODRICH CUTLESS
NOT SHOWN	BKHD STUFFING BOXES	SYNTRON
NOT SHOWN	MUFFLERS	MAXIM (FOR MN ENG AND GEN. DIESELS) (SPARK ARRESTER TYPE) MSC 2 TYPE
3	THRUSTER	SCHOTTEL 150 HP TYPE SV460 VAC MOTOR OR BRUNVOLL TYPE SPP
4	WASTE HEAT EVAPORATOR	MAXIM HJ20 (400 GPH) W/NEC. PUMPS, QTY 2
5	ELECTRIC BOILER	CHROMALUX CES 36 W/NEC. PUMPS
6	AIR COMPRESSORS	GARDNER - DENVER
7	AIR RECEIVERS	STACKED
8	FIRE PUMPS	DEMING 250 GPM, 75' HEAD
9	BILGE PUMPS	MARFLOW 250 GPM
10	SW. CIRC. PUMP	DEMING
11	DO. PUMP	DEMING 25 GPM 25 PSI
12	LO. PUMP	DEMING 10 GPM 25 PSI
13	POTABLE WATER PUMP	15 GPM CENTRIFUGAL
14	SEWAGE SYSTEM AND PUMPS	AERATING SYSTEM, MACERATOR, PUMPS, CHLORINATOR (CAREL SON MK. 0)
15	EDUCTOR	FOR STANDBY SEWAGE SERVICE
16	FUEL FILTER/SEPARATOR	BOWSER BRIGGS 50 GPM,
INSTALL	MACH'Y VENT FANS	BUFFALO
18	REFR. COMPRESSOR	
19	A.C. COMPRESSOR	25 TON
---	PACKAGED A/C UNIT	10 TON W/LAB FOR LAB AND PILOT HOUSE ONLY
20	CHILLER CONDENSER, RECEIVER, A/C & REFR.	
21	LAB SALT WATER PUMP	JABSCO - LOC. IN THRUSTER SPACE
22	SEWAGE TANK	APPROX. 800 GAL, FLOAT SW. FOR PUMP
NOT SHOWN	KEEL COOLERS	FERROTITANIUM
23	HOT WATER HEATER	AERCO
24	HOT WATER PUMP	AERCO
25	FW PRESSURE TANK	
26	SWITCHBOARD	IN ACCORDANCE WITH IEEE 45
27	LOG DESK & PHONE HOOD	
28	LATHE	SOUTHBEND W/MILL ATTACHED
29	DRILL PRESS	
30	GRINDER	
31	WORK BENCH	
32	WELDING MACHINE	
33	TOOL BOARD	
34	VISE	
35	STEERING GEAR	ORBITROL (DUAL PUMP - PILOT HOUSE/EMERG HAND PUMP STEER
36	THRUSTER CONTROLLER	
37	LO SERVICE TANK	
38	DIRTY OIL TANK	
39	CONTROLLERS AND LIGHTS	LOCATE AS REQ'D REQ. ADJACENT TO BULKHEADS SWITCHES
40	WASH BASIN	
NOT SHOWN	WINDLASS	MARLEY WES 1/2
NOT SHOWN	CRANE	DAY BRIDGE MARINE PEDL
NOT SHOWN	CHAIN PAILS	ALUM. TWO - 15 FTM. DIA. x 2 FTM.
NOT SHOWN	WHISTLE TANK	
NOT SHOWN	ENGINE CONTROLS	WESTERBEKE (THROTTLE & OVERRIDE FROM PILOT HOUSE)

ENGINE NOTES:

MAIN ENGINES (MAX. RPM 1925) TURBO CHARGED AND AFTER COOLED, INCLUDING THE FOLLOWING: LO COOLER, FILTER AND SUMP PUMP, FO FILTER, TRANSFER PUMP & FLEX LINES, JACKET WATER PUMP (SYSTEM MODIFIED FOR KOOL-COOLING), AFTER COOLER, EXPANSION TANK, EXHAUST MANIFOLD, THERMOSTATS, ENGINE INSTRUMENTS (INCLUDING SERV. WATER), TACH DRIVE, 50 VOLT ALTERNATOR FOR REMOTE CONTROL, AIR CLEANER, AIR START (W/ SOLENOID 32 V. ELECTRIC "START"). SET UP FOR REMOTE OPN FROM PILOT HOUSE W/ALARMS & INDICATORS. PROVIDE WIRE OPERATED REMOTE WATERS, FUEL RACK, SHUTDOWNS. PROVIDE "BICERA" CRANKCASE RELIEF VALVES.

GENERATOR SETS:

[illegible] KW CONTINUOUS 460 VAC, 60 CYCLE 3 Ø, INCLUDING: L.O. COOLER & FILTER, F.O. FILTER, F.O. TRANSFER PUMP, F.O. PRIME PUMP, F.O. FLEX LINES, INLET WATER PUMP (SEA WATER PUMP, HEAT EXCHANGER), EXPANS. OIL TANK, MANIFOLD, THERMOSTATS, ENGINE INSTRUMENTS, AIR CLEANER & SERVICE INDICATOR, ELECTRIC STARTING, MOUNTING ISOLATORS (INCLUDING SOLE (GENERATOR) CENTRALLY REGULATED & EXCITED, 0.8 POWER FACTOR CROSS CURRENT COMPENSATION PARALLEL OPN), OPTIONAL AIR START; SET UP FOR REMOTE ALARMS & INDICATORS; GENERATOR W/ AMORTISSEUR WINDINGS; ENGINES WITH POWER TAKE OFF ATTACHMENTS. PROVIDE WIRE OPERATED REMOTE EMERGENCY RUN-BATT SWITCHOUTS. MAXIMUM ENGINE RPM 1225. PROVIDE "BICERA" CRANKCASE RELIEF VALVES.

SYM	DESCRIPTION	DATE	BY
	REVISIONS		

APPROVALS

ABS _____ SUPERVISOR _____
USCG _____ OWNER _____
USPHS _____ NAVAL ARCHITECT _____

U.S. NAVAL SHIP SYSTEM COMMAND
WASHINGTON DC. 20360

OCEANOGRAPHIC RESEARCH SHIP
AGOR (UTILITY) CLASS

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

PRELIMINARY MACHINERY ARRGT

SCALE-	AS NOTED	DATE	[illegible]	DRWG. NO. A-5
DRAWN BY-	J. [illegible]	CK'D. BY-		
HULL NO.		JOB NO.	[illegible]	REV. 1-1

GYRE-0086