



CAPTAIN STATEROOM LTS	15A 1PH 120V	T-4 L2-1	L2-2	T-6	CAPTAIN STATEROOM RECEPT	20A 1PH 120V
STBD CREW STATEROOM LTS	15A 1PH 120V	T-4 L2-3	L2-4	T-4	PORT CREW STATEROOM LTS	15A 1PH 120V
STBD AFT LAB RECEP	20A 1PH 120V	T-6 L2-5	L2-6	T-6	PORT AFT LAB RECEP	20A 1PH 120V
STBD CREW S/R RECEP	20A 1PH 120V	T-6 L2-7	L2-8	T-6	PORT CREW S/R RECEP	20A 1PH 120V
LAB HEAD & A/G/ ROOM LTS	15A 1PH 120V	T-4 L2-9	L2-10	T-6	HEAD RECEP	20A 1PH 120V
STBD MID LAB RECEP	20A 1PH 120V	T-6 L2-11	L2-12	T-6	PORT MID LAB RECEP	20A 1PH 120V
STBD LAB LIGHTS	15A 1PH 120V	T-4 L2-13	L2-14	T-4	PORT LAB LIGHTS	15A 1PH 120V
CENTER LAB LIGHTS	15A 1PH 120V	T-4 L2-15	L2-16	T-6	PASSAGEWAY RECEP	20A 1PH 120V
STBD OUTBD AFT LAB RECEP	20A 1PH 120V	T-6 L2-17	L2-18	T-6	PORT OUTBD AFT LAB RECEP	20A 1PH 120V
EMERGENCY LIGHT RELAY	15A 1PH 120V	T-4 L2-19	L2-20	T-6	SPARE	15A 1PH 120V
SPARE	20A 1PH 120V	T-6 L2-21	L2-22	T-6	SPARE	20A 1PH 120V
STBD OUTBD FWD LAB RECEP	20A 1PH 120V	T-6 L2-23	L2-24	T-6	PORT OUTBD FWD LAB RECEP	20A 1PH 120V
COMMON NEG. GROUND						

**DISTRIBUTION PANEL NO.2**  
LOCATED IN LAB ON SURVEY DECK  
NO.442100CU  
MH35-MHC35S  
SQUARE D  
208Y/120V

SPARE	L4-1	L4-2	SPARE			
SPARE	L4-3	L4-4	SPARE			
SPARE	L4-5	L4-6	SPARE			
SPARE	L4-7	L4-8	SPARE			
SPARE	L4-9	L4-10	SPARE			
SPARE	L4-11	L4-12	SPARE			
SPARE	L4-13	L4-14	SPARE			
SPARE	L4-15	L4-16	SPARE			
SPARE	L4-17	L4-18	SPARE			
SPARE	L4-19	L4-20	SPARE			
SPARE	L4-21	L4-22	SPARE			
SPARE	L4-23	L4-24	SPARE			
SPARE	L4-25	L4-26	WELDING MACHINE			
SPARE	L4-27	L4-28	80A 1PH 208V			
WORKSHOP LIGHTS	15A 1PH 120V	L4-29	L4-30	T-4	WORKSHOP RECEPT	20A 1PH 120V
COMMON NEG. GROUND						

**DISTRIBUTION PANEL NO.4**  
LOCATED IN WORKSHOP ON MAIN DECK  
NO.430100CU  
MH25-MHC25S  
SQUARE D  
208Y/120V

NAVIGATION LIGHT (RED)	15A 1PH 120V	T-4 L1-1	L1-2	T-4	FWD PILOT HOUSE LIGHTS	15A 1PH 120V
NAVIGATION LIGHT (GREEN)	15A 1PH 120V	T-4 L1-3	L1-4	T-4	AFT PILOT HOUSE LIGHTS	15A 1PH 120V
STERN LIGHT	15A 1PH 120V	T-4 L1-5	L1-6	T-4	RADAR UNIT #1	15A 1PH 120V
MASTHEAD LIGHT	15A 1PH 120V	T-4 L1-7	L1-8	T-4	RADAR UNIT #2	15A 1PH 120V
ANCHOR LIGHT	15A 1PH 120V	T-4 L1-9	L1-10	T-4	VHF RADIO#1	15A 1PH 120V
N.U.C. LIGHT (TOP RED)	15A 1PH 120V	T-4 L1-11	L1-12	T-4	VHF RADIO #2/SSB RADIO	15A 1PH 120V
N.U.C. LIGHT (MID WHITE)	15A 1PH 120V	T-4 L1-13	L1-14	T-4	LOUD HALER	15A 1PH 120V
N.U.C. LIGHT (BOTTOM RED)	15A 1PH 120V	T-4 L1-15	L1-16	T-4	DEPTH SOUNDER	15A 1PH 120V
FWD SEARCHLIGHT	20A 1PH 120V	T-4 L1-17	L1-18	T-4	GPS UNIT	15A 1PH 120V
AFT SEARCHLIGHT	20A 1PH 120V	T-4 L1-19	L1-20	T-4	NAV TECH UNIT	15A 1PH 120V
AFT PILOT HOUSE FLOOD LIGHTS (2X500W)	20A 1PH 208V	T-4 L1-21	L1-22	T-4	BLUDDER ANGLE INDICATOR	15A 1PH 120V
02 LEVEL FLOOD LIGHTS (2X500W)	20A 1PH 208V	T-4 L1-23	L1-24	T-4	TV ANTENNA	15A 1PH 120V
DECK LTS P/S PILOT HOUSE (DIE) 1PH 120V	T-4 L1-25	L1-26	T-4	HORN & STAIRWAY NIGHT LT	15A 1PH 120V	
DECK LTS AFT PILOT HOUSE (DMS) 1PH 120V	T-4 L1-27	L1-28	T-4	VIDEO CAMERAS	15A 1PH 120V	
DECK LTS 02 LEVEL FWD	20A 1PH 120V	T-4 L1-29	L1-30	T-4	BATTERY CHARGER	15A 1PH 120V
DECK LTS 02 LEVEL AFT	15A 1PH 120V	T-4 L1-31	L1-32	T-4	SPARE	15A 1PH 120V
EMERGENCY LIGHTS RELAY	15A 1PH 120V	T-4 L1-33	L1-34	T-4	SPARE	15A 1PH 120V
COMMON NEG. GROUND						

**DISTRIBUTION PANEL NO.1**  
LOCATED IN PILOT HOUSE  
NO.442100CU  
MH35-MHC35S  
SQUARE D  
208Y/120V

POWER FEED TO PANEL L4	100A 1PH 208V	T-6 L7-1	L7-2	T-4	FWD MIN. DK. AREA LTS	15A 1PH 120V
75KW GENSET BATTERY CHRGR	20A 1PH 120V	T-4 L7-3	L7-4	T-4	AFT MIN. DK. AREA LTS	15A 1PH 120V
WALK-IN COOLER COMPRESSOR	20A 1PH 208V	T-6 L7-5	L7-6	T-6	SPARE	20A 1PH 120V
WALK-IN FREEZER COMPRESSOR	20A 1PH 208V	T-6 L7-7	L7-8	T-4	GENSET GOVERNORS	20A 1PH 120V
GENERATOR ROOM BLOWER	20A 1PH 208V	T-4 L7-9	L7-10	T-6	SPARE	20A 1PH 120V
SPARE	15A 1PH 120V	T-6 L7-11	L7-12	T-6	SPARE	20A 1PH 120V
SPARE	20A 1PH 120V	T-6 L7-13	L7-14	T-6	SPARE	20A 1PH 120V
SPARE	20A 1PH 120V	T-6 L7-15	L7-16	T-6	SPARE	20A 1PH 120V
AUXILIARY MACH SPACE LTS	15A 1PH 120V	T-4 L7-17	L7-18	T-6	SPARE	20A 1PH 120V
GENERATOR ROOM LIGHTS	15A 1PH 120V	T-4 L7-19	L7-20	T-6	SPARE	20A 1PH 120V
COMMON NEG. GROUND						

**DISTRIBUTION PANEL NO.7**  
LOCATED IN UPPER GENERATOR ROOM  
NO.430100CU  
MH25-MHC25S  
SQUARE D  
208Y/120V

PORT SIDE LIGHTS	20A 1PH 120V	T-4 L5-1	L5-2	T-4	STBD SIDE LIGHTS	15A 1PH 120V
PORT RECEP & BERTH LIGHT	20A 1PH 120V	T-6 L5-3	L5-4	T-4	STBD RECEP & BERTH LTS	20A 1PH 120V
PORT RECEP & BERTH LIGHT	20A 1PH 120V	T-6 L5-5	L5-6	T-4	STBD RECEP & BERTH LTS	20A 1PH 120V
PASSAGEWAY LIGHTS	15A 1PH 120V	T-4 L5-7	L5-8	T-4	CLOTHES WASHER RECEP	20A 1PH 120V
THRUSTER COMPT. RECEP	20A 1PH 120V	T-4 L5-9	L5-10	T-4	CLOTHES DRYER	40A 1PH 208V
HEAD RECEP	20A 1PH 120V	T-6 L5-11	L5-12	T-6	SPARE	20A 1PH 120V
SPARE	15A 1PH 120V	T-6 L5-13	L5-14	T-6	SPARE	20A 1PH 120V
SPARE	20A 1PH 120V	T-6 L5-15	L5-16	T-6	SPARE	20A 1PH 120V
SPARE	20A 1PH 120V	T-6 L5-17	L5-18	T-6	SPARE	20A 1PH 120V
WATER HEATER #1	40A 1PH 208V	T-10/L5-19	L5-20	T-4	WATER HEATER #2	40A 1PH 208V
F.W. PRESSURE SET #1	15A 1PH 208V	T-4/L5-21	L5-22	T-4	F.W. PRESSURE SET #1	15A 1PH 208V
F.W. PRESSURE SET #2	15A 1PH 208V	T-4 L5-23	L5-24	T-4	F.W. PRESSURE SET #2	15A 1PH 208V
COMMON NEG. GROUND						

**DISTRIBUTION PANEL NO.5**  
LOCATED IN BOW THRUSTER COMPT.  
NO.430100CU  
MH25-MHC25S  
SQUARE D  
208Y/120V

FWD ENGINE ROOM LIGHTS	15A 1PH 120V	T-4/L6-1	L6-2	T-6/A	FWD ENGINE ROOM RECEPT	20A 1PH 120V
AFT ENGINE ROOM LIGHTS	15A 1PH 120V	T-4/L6-3	L6-4	T-6/A	AFT ENGINE ROOM RECEPT	20A 1PH 120V
SPARE	15A 1PH 120V	L6-5	L6-6	T-6/A	PORT ENGINE ROOM RECEPT	20A 1PH 120V
SPARE	15A 1PH 120V	L6-7	L6-8	T-6/A	STBD ENGINE ROOM RECEPT	20A 1PH 120V
SPARE	15A 1PH 120V	L6-9	L6-10	T-6/A	E.R. STAIRWELL RECEP	20A 1PH 120V
SPARE	20A 1PH 120V	L6-11	L6-12	T-6/A	BATTERY CHARGER	20A 1PH 120V
SPARE	15A 1PH 120V	L6-13	L6-14	T-6	SPARE	20A 1PH 120V
SPARE	15A 1PH 120V	L6-15	L6-16	T-6	SPARE	20A 1PH 120V
SPARE	15A 1PH 120V	L6-17	L6-18	T-6	SPARE	20A 1PH 120V
SPARE	20A 1PH 120V	L6-19	L6-20	T-6	SPARE	20A 1PH 120V
SPARE	20A 1PH 120V	L6-21	L6-22	T-6	SPARE	20A 1PH 120V
SPARE	20A 1PH 120V	L6-23	L6-24	T-6	SPARE	20A 1PH 120V
SPARE	15A 1PH 120V	L6-25	L6-26	T-6	SPARE	20A 1PH 120V
SPARE	15A 1PH 120V	L6-27	L6-28	T-6	SPARE	20A 1PH 120V
EMERGENCY LIGHT RELAY	15A 1PH 120V	T-4/L6-29	L6-30	T-6	SPARE	15A 1PH 120V
COMMON NEG. GROUND						

**DISTRIBUTION PANEL NO.6**  
LOCATED IN ENGINE ROOM  
NO.430100CU  
MH25-MHC25S  
SQUARE D  
208Y/120V

STEAM TABLE	30A 1PH 208V	T-6 L3-1	L3-2	F-26	GALLEY RANGE	20A 3PH 208V
DISH WASHER	30A 1PH 208V	T-6 L3-3	L3-4	T-6	VENT HOOD & WATER COOLER	20A 1PH 120V
CLOTHES DRYER	40A 1PH 208V	T-10 L3-5	L3-6	T-6	GALLEY REFRIGERATOR	20A 1PH 120V
TRASH COMPACTOR	20A 1PH 208V	F-6 L3-7	L3-8	T-6	GALLEY RECEP #1	20A 1PH 120V
GALLEY LIGHTS	15A 1PH 120V	L3-9	L3-10	T-6	GALLEY RECEP #2	20A 1PH 120V
MESS AREA LIGHTS	15A 1PH 120V	T-4 L3-11	L3-12	T-6	GALLEY RECEP #4	20A 1PH 120V
PASSAGEWAY LIGHTS	15A 1PH 120V	T-4 L3-13	L3-14	T-6	MESS AREA RECEP #1	20A 1PH 120V
PORT SIDE INTERIOR LIGHTS	15A 1PH 120V	T-4 L3-15	L3-16	T-6	MESS AREA RECEP #2	20A 1PH 120V
STBD SIDE INTERIOR LIGHTS	15A 1PH 120V	T-4 L3-17	L3-18	T-6	MESS AREA REFRIGERATOR	20A 1PH 120V
HEAD LIGHTS	15A 1PH 120V	T-4 L3-19	L3-20	T-6	MESS AREA ICE MAKER	20A 1PH 120V
COOLER / FREEZER LIGHTS	15A 1PH 120V	T-4 L3-21	L3-22	T-6	MESS AREA RECEP	20A 1PH 120V
PORT SIDE RECEP	20A 1PH 120V	T-4 L3-23	L3-24	T-6	SERVICE COUNTER RECEP	20A 1PH 120V
STBD SIDE RECEP	20A 1PH 120V	T-4 L3-25	L3-26	T-6	HEAD RECEP	20A 1PH 120V
SPARE	15A 1PH 120V	T-4 L3-27	L3-28	T-6	LOUNGE RECEP	20A 1PH 120V
SPARE	15A 1PH 120V	T-4 L3-29	L3-30	T-6	WASHING MACHINE RECEP	20A 1PH 120V
SPARE	20A 1PH 120V	T-4 L3-31	L3-32	T-6	SPARE	20A 1PH 120V
EMERGENCY LIGHTS RELAY	15A 1PH 120V	T-4 L3-33	L3-34	T-6	SPARE	20A 1PH 120V
COMMON NEG. GROUND						

**DISTRIBUTION PANEL NO.3**  
LOCATED IN MESS AREA ON MAIN DECK  
NO.442100CU  
MH35-MHC35S  
SQUARE D  
208Y/120V

- GENERAL NOTES**
1. ALL PANELS DISCONNECT AND STARTERS LOCATED IN MACHINERY SPACE TO BE DRIP PROOF.
  2. ALL BREAKERS AND WIRING IN MACHINERY SPACE TO BE RATED 50°C.
  3. ALL EQUIPMENT TO BE SQ "D".
  4. CABLES SUBJECT TO MECHANICAL DAMAGE TO BE L.F. GAUBERT T3IA OR EQUAL.
  5. ALL MOTOR STARTERS TO HAVE START/STOP IN COVER 120V CONTROL LOW VOLTAGE PROTECT.
  6. LOAD ON 208/120V PANEL TO BE BALANCED WITH-IN 15%.
  7. STEERING MOTORS TO BE EQUIPPED WITH BREAKERS SET AT 200% OF THE MOTORS LOCKED ROTOR CURRENT.
  8. ALL CABLE L.F. GAUBERT & CO. TYPE T3IA OR EQUAL.
  9. PROVIDE SUITABLE PORTABLE LIGHTS AS SET FORTH BY U.S.C.G. SUBCHAPTER V-112.05.
  10. ALL EQUIPMENT AND APPLIANCES SHALL BE UL APPROVED.
  11. ALL DISCONNECT SWITCHES PROTECTING EQUIPMENT SHALL BE LOCATED WITHIN SIGHT OF SUCH EQUIPMENT.

DRAWN BY: Robert Payne  
CHECKED BY:  
APPROVED BY:  
SCALE: NONE  
CONTRACT NO: S-185-32  
DWG. NO: S-185-E1

DATE: 1/8/00  
DATE:  
DATE:  
DATE:  
DATE:  
DATE:

PREPARED FOR: CAMERON OFFSHORE BOATS, INC.  
CAMERON, LOUISIANA

ALTERATIONS BY/DATE

TITLE: 160'-0" x 40'-0" x 13'-0" RESEARCH VESSEL

**ELECTRICAL ONE-LINE DIAGRAM**

MM MARINE MANAGEMENT INC.  
MARINE DESIGNERS & SURVEYORS  
P.O. Box 1803 Ocean Springs, MS 38868-1803  
PH: 601-672-2888 FAX: 601-672-2888

SHT: 1  
OF: 1  
ALT. NO: 0

THIS DRAWING WAS DEVELOPED FROM FIELD DATA TAKEN ABOARD THE VESSEL. THIS IS NOT A DESIGN DRAWING.