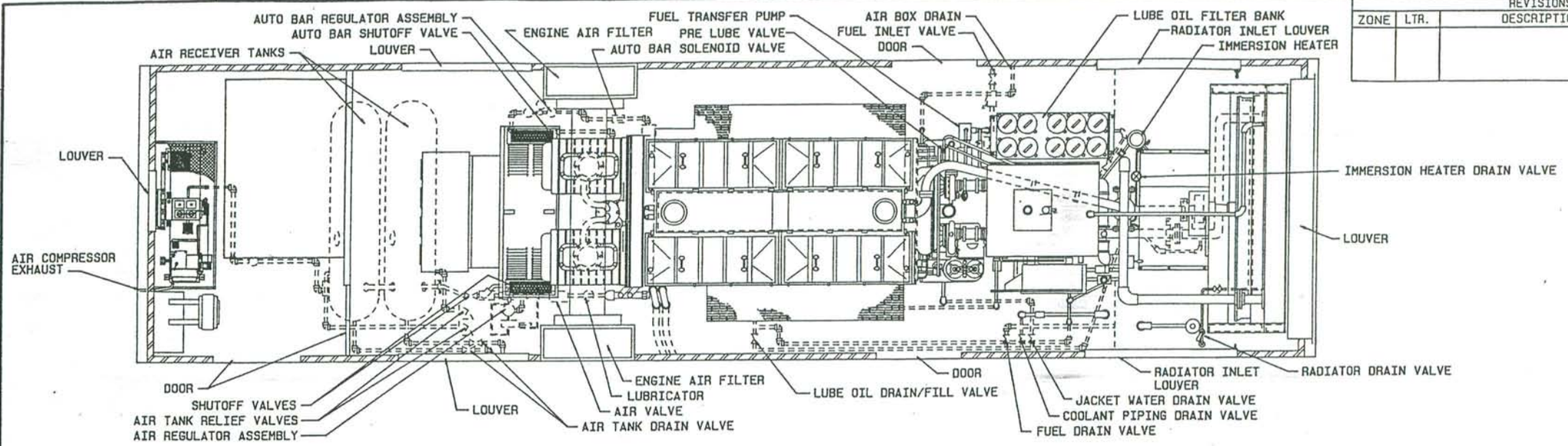
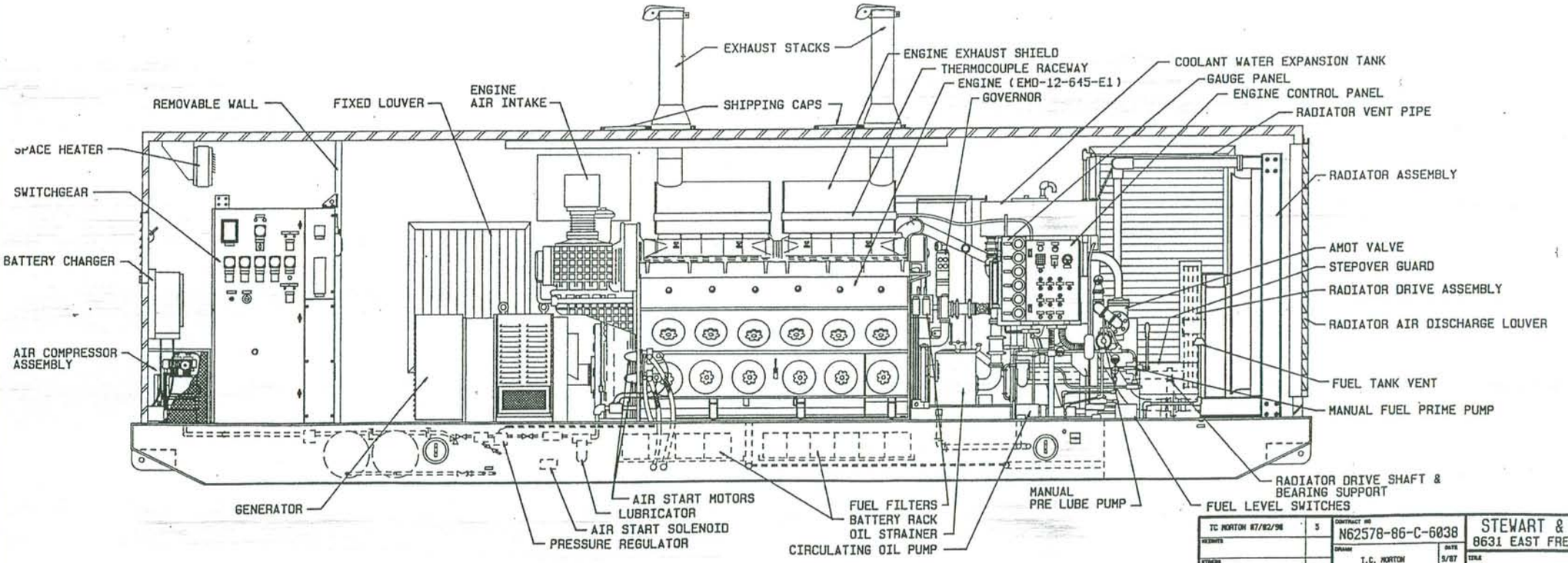
REVISIONS				
ZONE	LTR.	DESCRIPTION	DATE	APPROVED

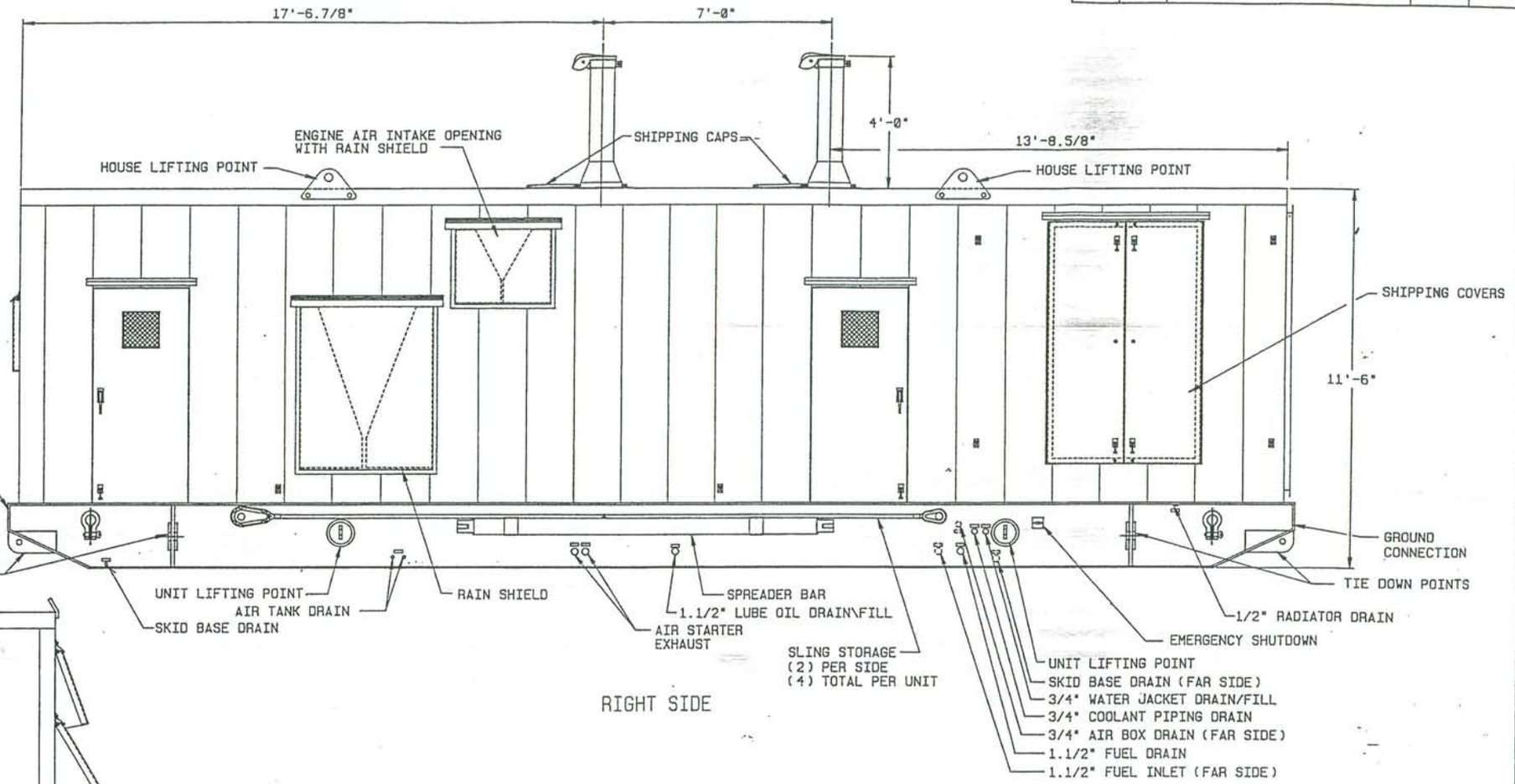




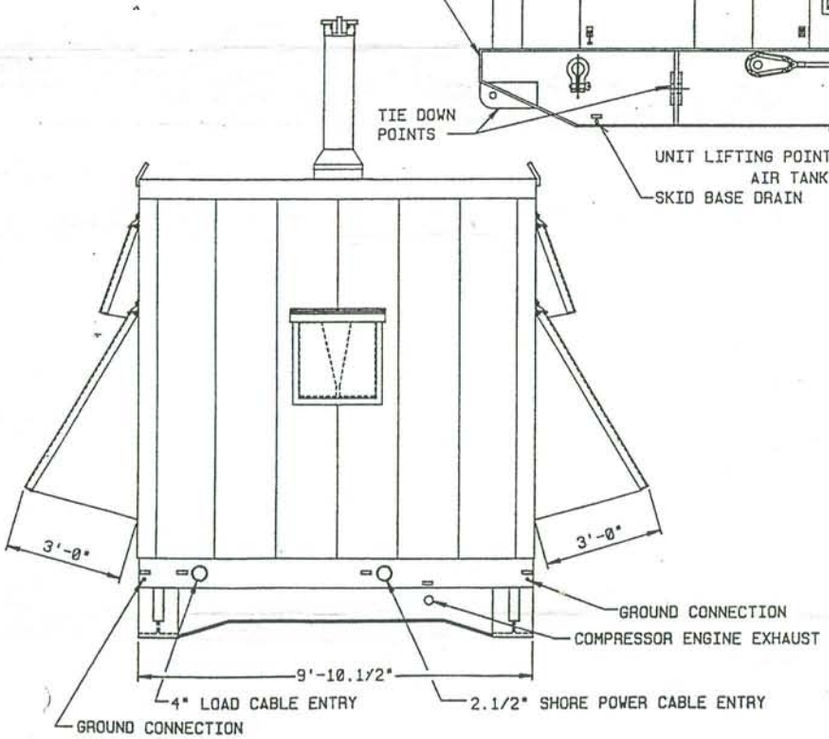
THIS DOCUMENT HAS BEEN PURCHASED BY THE GOVERNMENT AND MAY BE REPRODUCED AND USED IN CONNECTION WITH ANY GOVERNMENT PROCUREMENT OR MAINTENANCE OPERATION.

TC NORTON 07/02/98	5	CONTRACT NO N62578-86-C-6038	STEWART & STEVENSON SERVICES 8631 EAST FREEWAY HOUSTON, TEXAS, U.S.A.
WEIGHTS		DRAWN T.C. NORTON 5/87	TITLE GENERAL ARRANGEMENT
STRESS		CHECK D. MONROE 10/87	
MATERIALS & PROCESSES		ENGRG R. LEITNER 10/87	
MANUFACTURING ENGRG.			
QUALITY ASSURANCE R. GUZMAN	10/87	ENGRG ACTIVITY ICC/BAYLOR	SIZE D · FSCM NO. 74577 · DWG NO. HB10-6038120
MARITIME APPROVALS E. DOBBINS	10/87	CUSTOMER NEESA	SCALE NONE · RELEASE DATE · SHEET 1 OF 2

REVISIONS				
ZONE	LTR.	DESCRIPTION	DATE	APPROVED



RIGHT SIDE



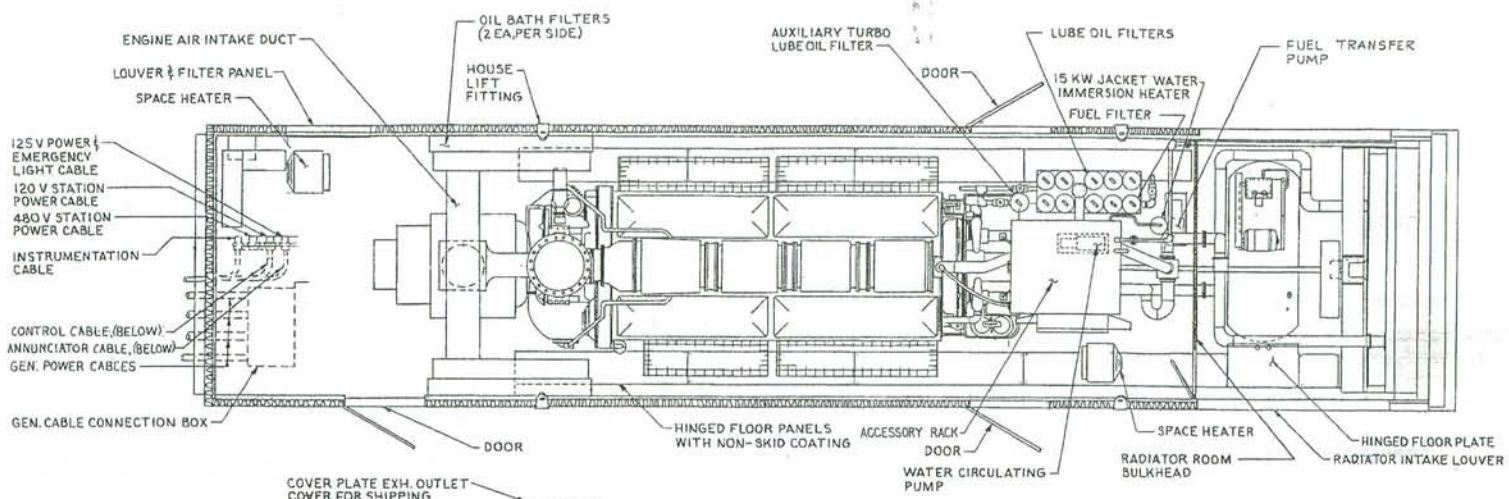
REAR VIEW

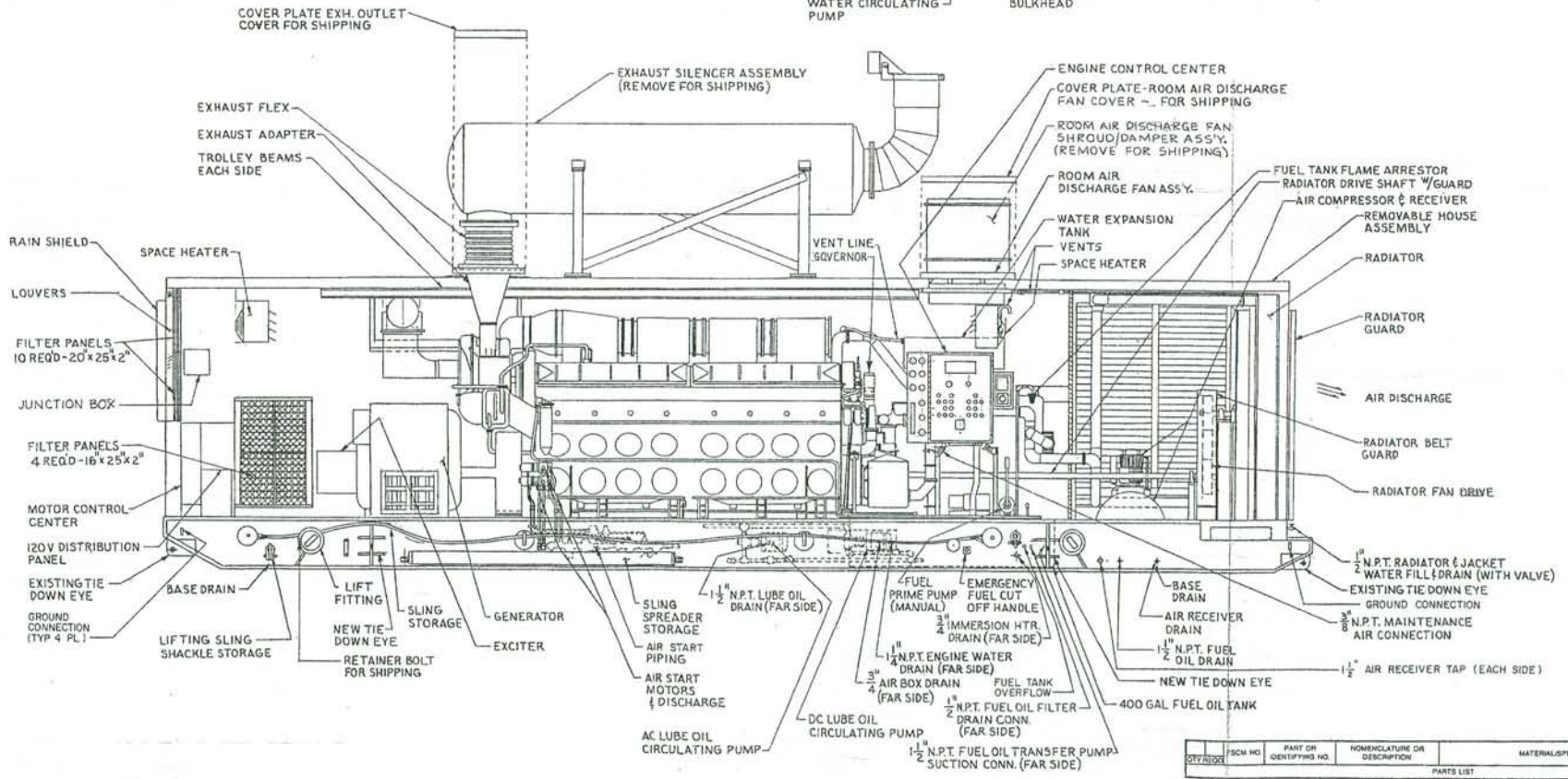
THIS DOCUMENT HAS BEEN PURCHASED BY THE GOVERNMENT AND MAY BE REPRODUCED AND USED IN CONNECTION WITH ANY GOVERNMENT PROCUREMENT OR MAINTENANCE OPERATION.

CONNECTION DIAGRAM

TC MORTON 18/04/90	13	CONTRACT NO N62578-86-C-6038	STEWART & STEVENSON SERVICES 8631 EAST FREEWAY HOUSTON, TEXAS, U.S.A.
		DRAWN T.C. MORTON DATE 2/89	TITLE GENERAL ARRANGEMENT
		CHECKED D. MONROE 18/87	
		ENGINEER R. LEITNER 18/87	
QUALITY ASSURANCE B. GUZMAN	18/87	ENGINEERING ACTIVITY ICC/BAYLOR	SIZE D FSCM NO. 74577 DWG NO. HB10-6038120
ADDITIONAL APPROVALS E. DOBBINS	18/87	CUSTOMER NEESA	SCALE NONE RELEASE DATE SHEET 2 OF 2

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	A	SEE NEESA DCN 92-1	1992-1-9	





QTY REQD	FSCM NO.	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL/SPECIFICATION	ITEM NO.

PARTS LIST

NEESA DRAWING NO 760

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
NAVAL ENERGY AND ENVIRONMENTAL SUPPORT ACTIVITY
PORT HUENEME, CALIFORNIA 93043-5014

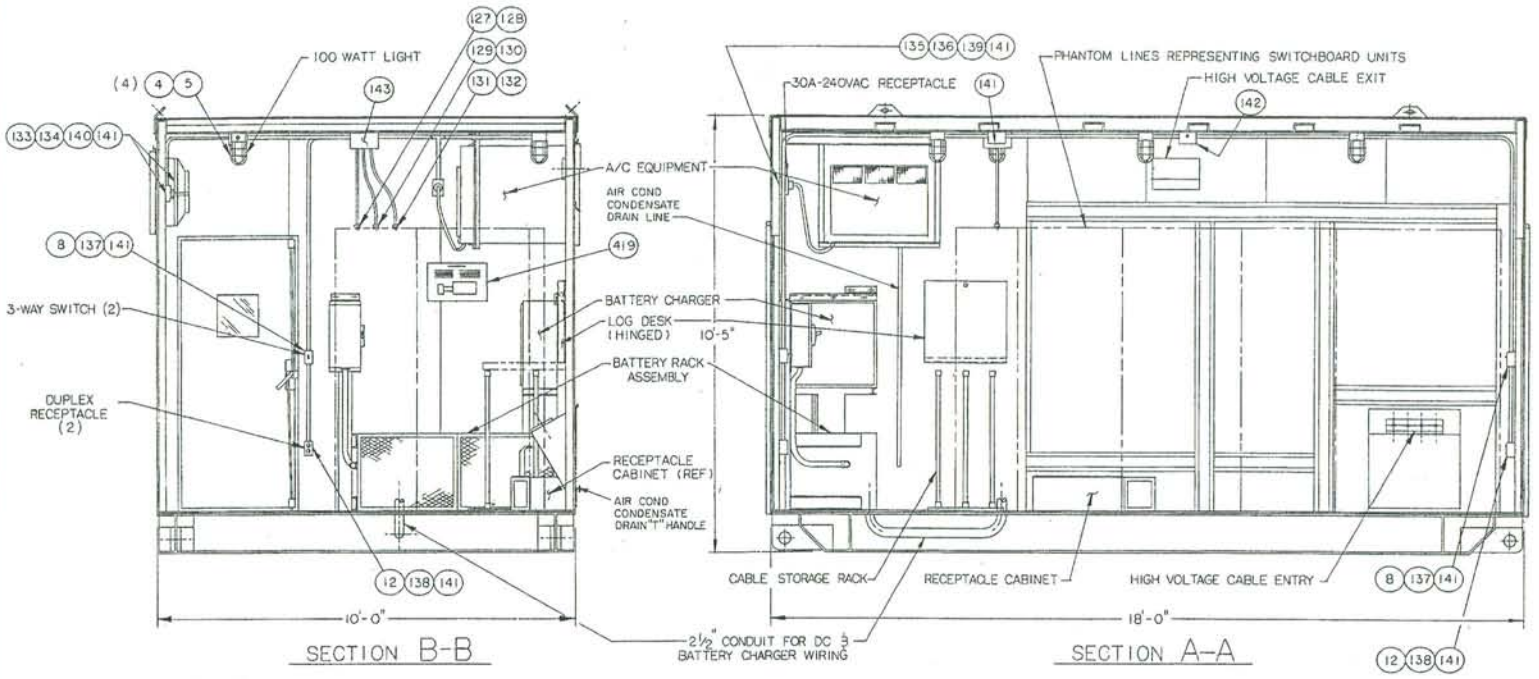
PREPARED 1986-03-06 CHECKED
REVIEWED
DIVISION DIR
DEPT HEAD
APPROVED DATE
ENERGY OFFICER

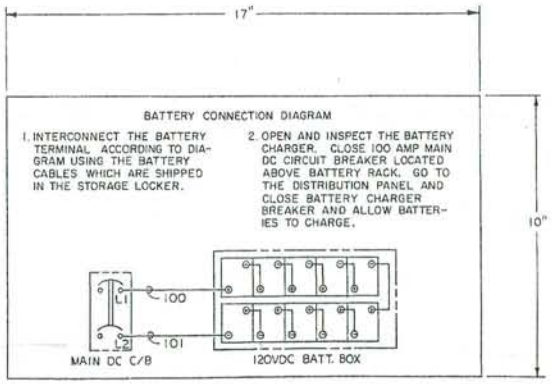
OVERHAUL 1500 KW
DIESEL POWER PLANTS
ENGINE HOUSE - GEN ARRANGEMENT
WITH OIL BATH FILTERS

SIZE F | CAGE NO 80091 | NAVFAC DRAWING NO 6276547
CONTR NO N47408-89-C-2011
SCALE 1/24 | SHEET 1 OF

LAYMAN'S TO NUSE OFFICER DATE

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	A	SEE NEESA DCN 92-17	19922-18	





DETAIL "A"
SCALE: 1/2
(419)

QTY REQD	FSCM NO.	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL/SPECIFICATION	ITEM NO.
1	80607	NAMEPLATE	11 X 17 BLACK	(DETAIL "A")	419
			REMOVED		393
			REMOVED		392
1	00843	ABN84	CONNECTION BOX	HOFFMAN, 8"X 8"X 4"	143
1	28488	275L	OUTLET BOX	BELL, WEATHERPROOF, (5) 3/4" OUTLETS	142
7	28488	273L	OUTLET BOX	BELL, WEATHERPROOF, (3) 3/4" OUTLETS	141
1	8F830	97111	RECEPT PLATE	HUBBELL, SINGLE RECEPTACLE	140
1	8F830	3392	RECEPT PLATE	HUBBELL, SINGLE RECEPTACLE	139
2	8F830	97101	RECEPT PLATE	HUBBELL, DUPLEX RECEPTACLE	138
2	8F830	97071	SWITCH PLATE	HUBBELL, TOGGLE SWITCH	137
1	8F830	2631	PLUG	HUBBELL, 3 WIRE GND, 30AMP, 277VAC	136
1	8F830	2630A	RECEPTACLE	HUBBELL, 3 WIRE GND, 30AMP, 277VAC	135
1	8F830	2311	PLUG	HUBBELL, 3 WIRE GND, 20AMP, 120VAC	134
1	8F830	2310A	RECEPTACLE	HUBBELL, 3 WIRE GND, 20AMP, 120VAC	133
1	08051	MS3106B 22-28 PX	PLUG/CLAMP	AMPHENOL, #23, 7 WIRE, 7 POLE, AWG 12	132
1	08051	MS3102A 22-28 SX-	RECEPTACLE	AMPHENOL, #23, 7 WIRE, 7 POLE, AWG 12	131
1	08051	MS3106B 22-28 P	PLUG/CLAMP	AMPHENOL, #22, 7 WIRE, 7 POLE, AWG 12	130
1	08051	MS3102A 22-28 S-	RECEPTACLE	AMPHENOL, #22, 7 WIRE, 7 POLE, AWG 12	129
1	77820	MS3106 F22-22-P	PLUG/CLAMP	BENDIX, #21, 4 WIRE, 4 POLE, AWG 10	128
1	77820	MS3102 F22-22-S	RECEPTACLE	BENDIX, #21, 4 WIRE, 4 POLE, AWG 10	127
			REMOVED		41
			REMOVED		14
2	8F830	8300	RECEPTACLE	HUBBELL, DUPLEX, 120VAC, 20AMP	12
2	8F830	9803	SWITCH	HUBBELL, LIGHT, 3 WAY, 120VAC/DC, 10A	8
4	7E838	100A/RS/VS	LAMP	WESTINGHOUSE, HIGH SHOCK, 120V, 100W	5
4	75282	VUTGG-2-100	LIGHTING FIXTURE	KILLARK, 100W, INCAND W/ GLOBE & GUARD	4

PARTS LIST

NEESA DRAWING NO 770

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
NAVAL ENERGY AND ENVIRONMENTAL SUPPORT ACTIVITY
PORT HUENEME, CALIFORNIA 93043-5014

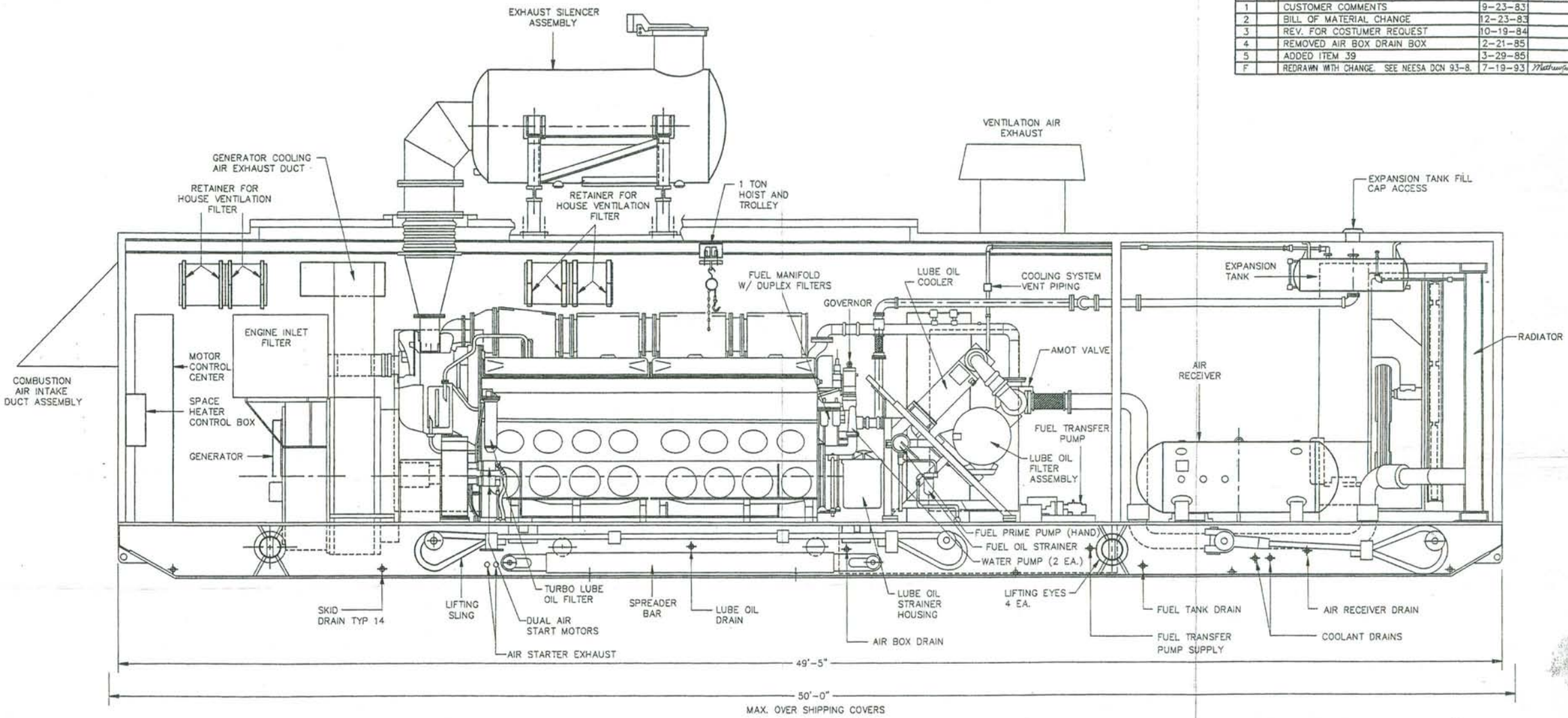
PREPARED 1988-10-18 | CHECKED | REVIEWED | DIVISION DIR | DEPT HEAD | APPROVED | DATE

OVERHAUL 1500 KW
DIESEL POWER PLANTS
SWITCHGEAR HOUSE GENERAL ARRANGEMENT

SATISFACTORY TO | DATE
NAVSE OFFICER | ENERGY OFFICER

SIZE F | CAGE NO 80091 | NAVFAC DRAWING NO 6276557
CONTR NO N47408-89-C-2011
SCALE NONE | SHEET 11 OF

REVISIONS				
NO.	ZONE	DESCRIPTION	DATE	APPROVED
1		CUSTOMER COMMENTS	9-23-83	
2		BILL OF MATERIAL CHANGE	12-23-83	
3		REV. FOR COSTUMER REQUEST	10-19-84	
4		REMOVED AIR BOX DRAIN BOX	2-21-85	
5		ADDED ITEM 39	3-29-85	
F		REDRAWN WITH CHANGE. SEE NEESA DCN 93-8.	7-19-93	Matthewson



CONTRACT NO.
N 62472-82-C-1663 &
N 62472-83-C-1621
FSCM NO. 3N219

PARA. 3.1.1.

NOTE: REMOVAL OF RADIATOR WITHOUT REMOVING THE HOUSE

1. DRAIN COOLING SYSTEM.
2. DISCONNECT WIRING TO RADIATOR FAN MOTOR AND LOSS OF AIR FLOW SWITCH.
3. DISCONNECT PIPE COUPLINGS ITEMS ON RADIATOR VENT LINE AND ON RADIATOR SUPPLY AND RETURN LINES.
4. REMOVE LOUVER ASSEMBLY FROM FRONT OF HOUSE.
5. REMOVE (8) RADIATOR MOUNTING BOLTS AND WASHERS.
6. SLIDE RADIATOR OUT THROUGH THE FRONT OF THE HOUSE, USING A FORKLIFT WITH THE FORKS SET AT 30" MAX. OUTSIDE TO OUTSIDE WIDTH.

CAD DWG FILE #WL26

ITEM NO.	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	QTY. REQD

LIST OF MATERIALS

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES:
OVERALL ±
FABRICATION ±
HOLE LOCATION ±
ANGULAR ±
DO NOT SCALE DRAWING

MATERIAL

APPROX. WT. LBS.

		DATE
PREPARED		6/14 1983
CHECKED		6/14 1983
APPROVED		6/14 1983
FIRST USED	082598	
ORIGINAL		

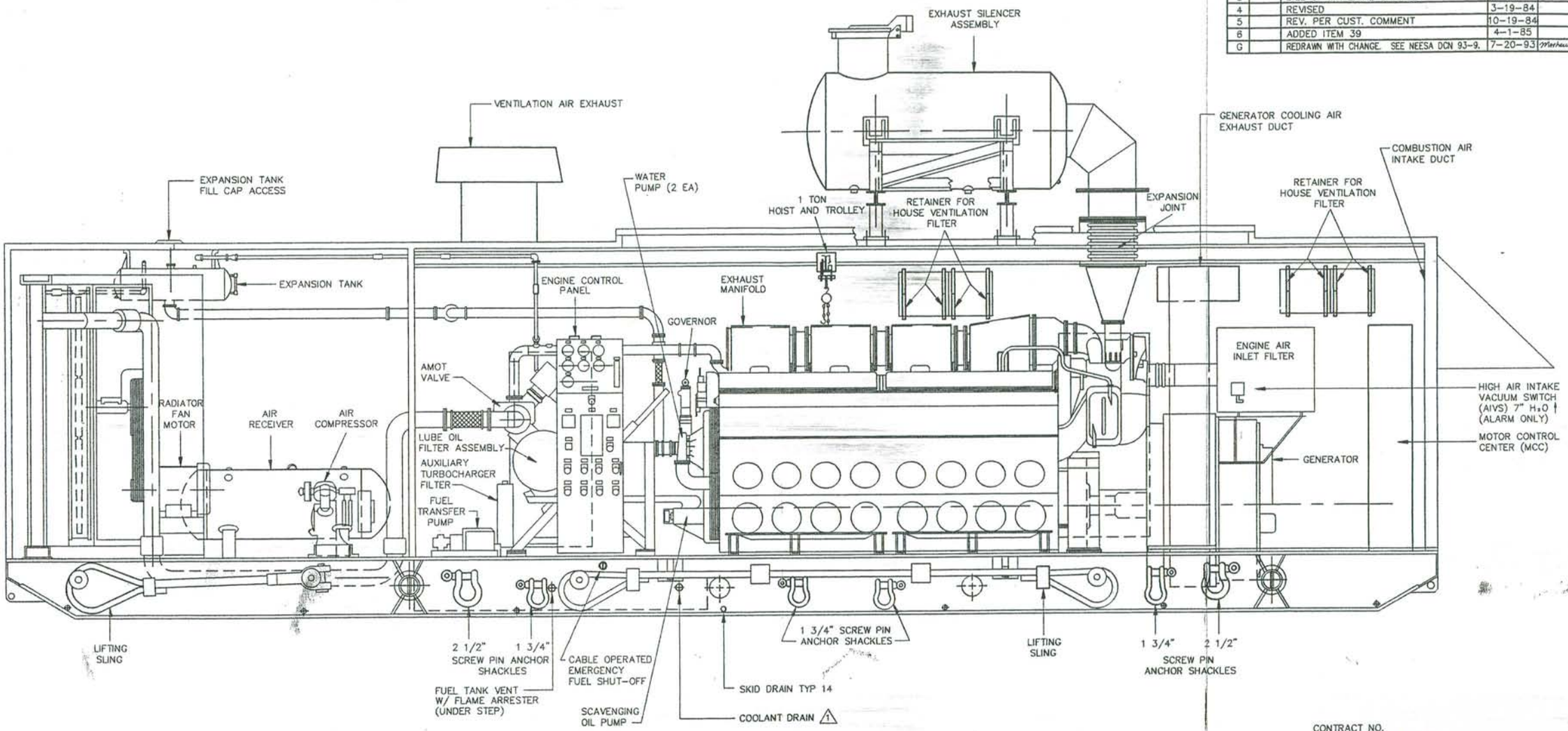
WILLIAMS & LANE
ENERGY SYSTEMS CORP.
SAN LEANDRO, CALIFORNIA 94577

OUTLINE-2000KW
HOUSED GENERATOR SET

GROUP	DRAWING NO.	SIZE	REV.
901A	001201	4	5

SCALE NONE SHEET 1 OF 6

REVISIONS				
NO.	ZONE	DESCRIPTION	DATE	APPROVED
1		RELOCATE COOLANT & AIR BOX DRAIN	6-27-83	
2		CUSTOMER COMMENTS	9-23-83	
3		BILL OF MATERIAL CHANGE	12-23-83	
4		REVISED	3-19-84	
5		REV. PER CUST. COMMENT	10-19-84	
6		ADDED ITEM 39	4-1-85	
G		REDRAWN WITH CHANGE. SEE NEESA DCN 93-9.	7-20-93	



CONTRACT NO.
N 62472-82-C-1663 &
N 62472-83-C-1621
FSCM NO. 3N219

PARA. 3.1.1

NOTE: REMOVAL OF RADIATOR WITHOUT REMOVING THE HOUSE

1. DRAIN COOLING SYSTEM.
2. DISCONNECT WIRING TO RADIATOR FAN MOTOR AND LOSS OF AIR FLOW SWITCH.
3. DISCONNECT PIPE COUPLINGS ITEMS ON RADIATOR VENT LINE AND ON RADIATOR SUPPLY AND RETURN LINES.
4. REMOVE LOUVER ASSEMBLY FROM FRONT OF HOUSE.
5. REMOVE (8) RADIATOR MOUNTING BOLTS AND WASHERS.
6. SLIDE RADIATOR OUT THROUGH THE FRONT OF THE HOUSE, USING A FORKLIFT WITH THE FORKS SET AT 30" MAX. OUTSIDE TO OUTSIDE WIDTH.

CAD DWG FILE #WL27

ITEM NO.	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	QTY. REQD

LIST OF MATERIALS

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

TOLERANCES:
OVERALL ±
FABRICATION ±
HOLE LOCATION ±
ANGULAR ±

DO NOT SCALE DRAWING

MATERIAL

APPROX. WT. LBS.

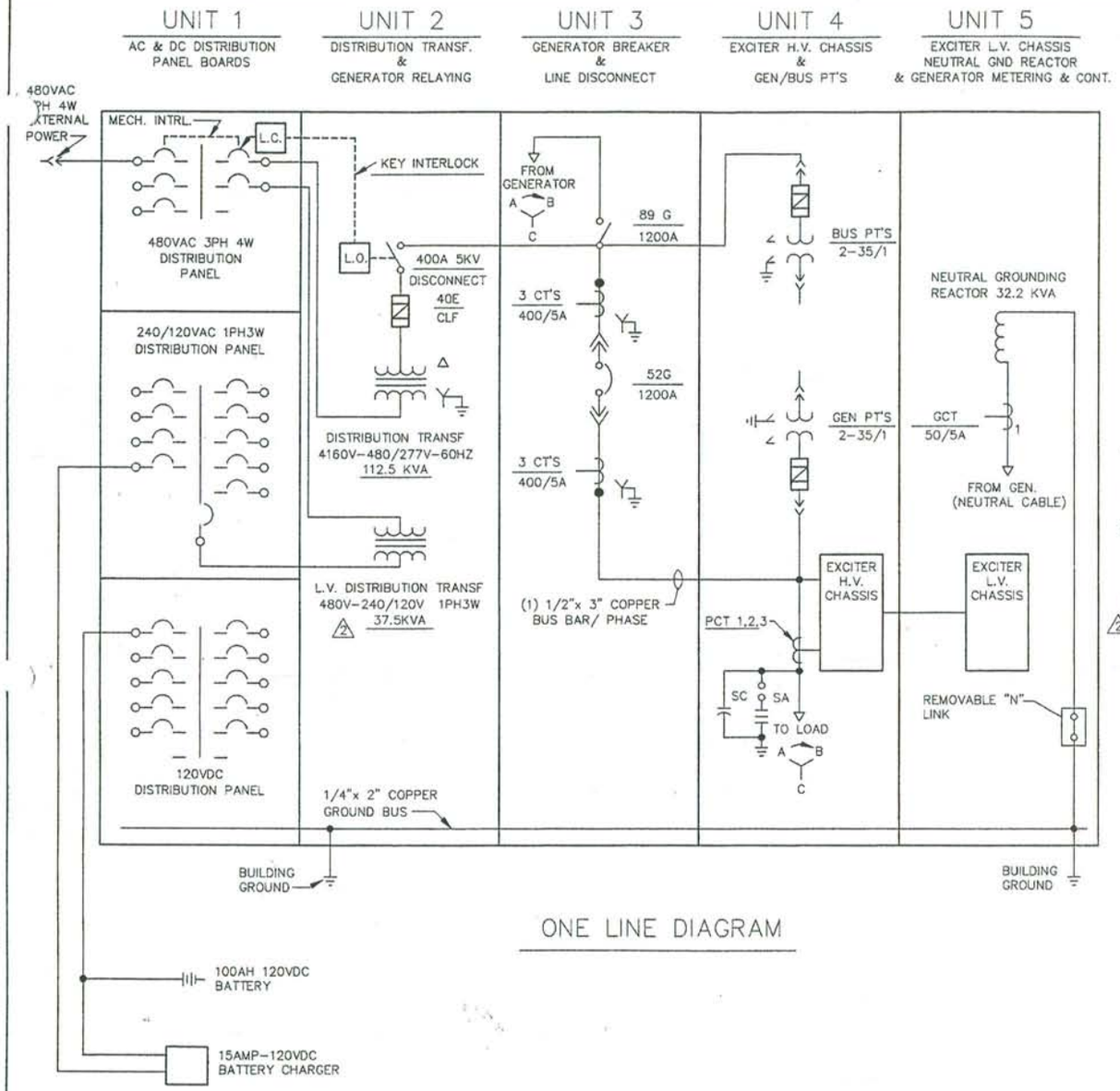
		DATE
PREPARED		6/14 1983
CHECKED		6/14 1983
APPROVED		6/14 1983
FIRST USED	082598	
ORIGINAL		

WILLIAMS & LANE
ENERGY SYSTEMS CORP.
SAN LEANDRO, CALIFORNIA 94577

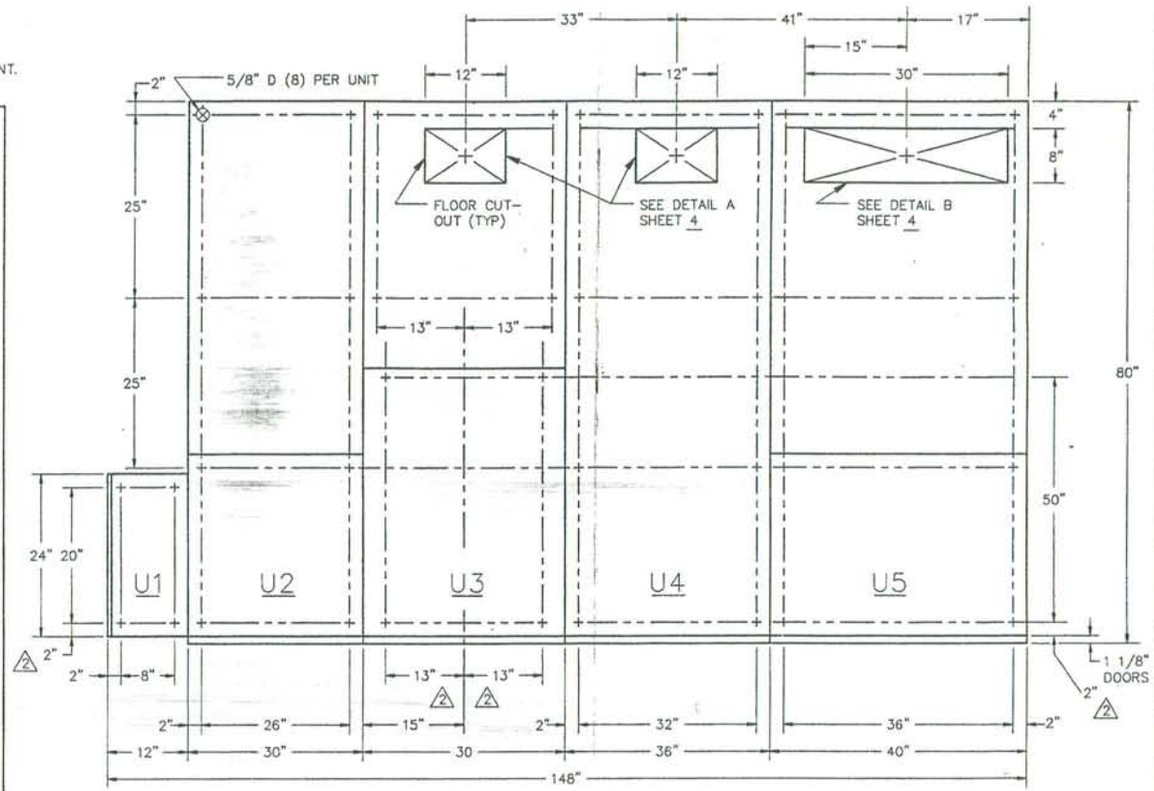
OUTLINE-2000KW
HOUSED GENERATOR

GROUP	DRAWING NO.	SIZE	REV.
901A	001201	4	6

SCALE NONE SHEET 2 OF 6



ONE LINE DIAGRAM



PLAN VIEW

REFER TO D1092001 SHT. 1 FOR NOTES & NOMENCLATURE

N62472-83-C-1621
C/N N62472-82-C-1663
FSCM 3N219

PARA 5110.3

CAD DWG FILE #WL37

NO.	REVISIONS	BY	DATE
C	REDRAWN WITH CHANGE. SEE NEESA DCN 93-19.		7-7-93
2	REV PER "AS BUILT"		5-8-84
1	REDRAWN		10-27-3

SWITCHGEAR ONELINE & PLAN VIEW

2000KW 4160V 60HZ POWER PLANT
SWITCHGEAR CONTROL UNIT
FOR
THE DEPARTMENT OF THE NAVY

CUSTOMER: WILLIAMS & LANE
P.O. NO.: 82598-002

RTE DELTA
STOCKTON, CALIFORNIA

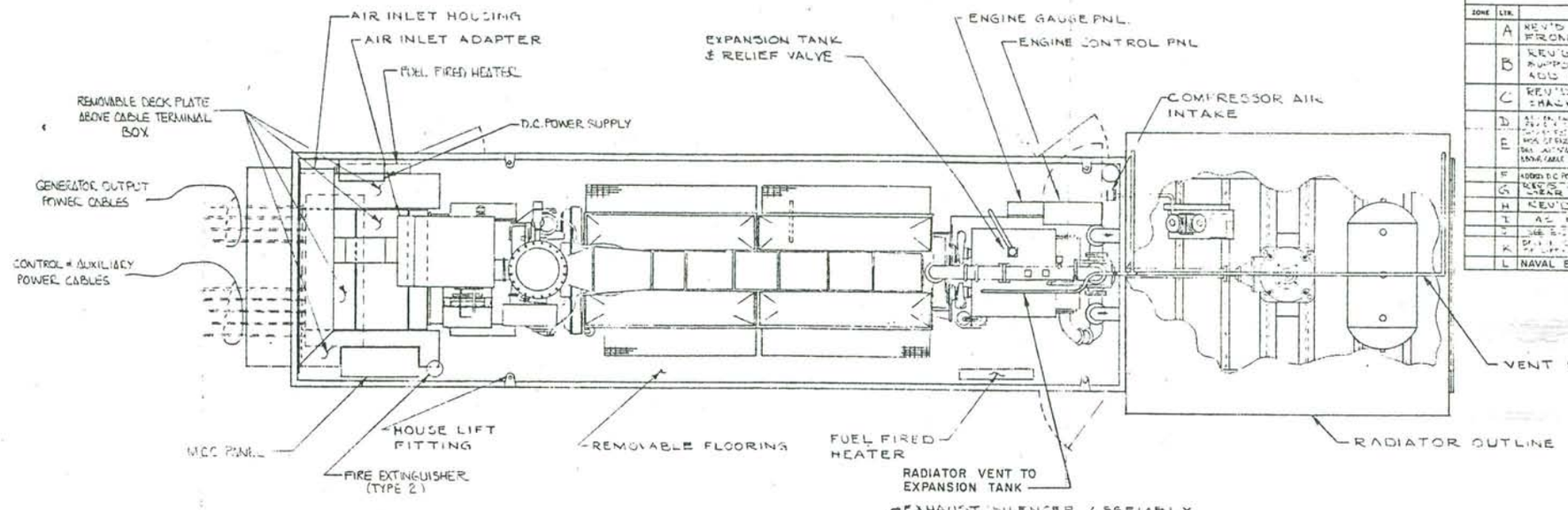
Post Office Box 1995
705 N. Carlton
Telephone (209) 941-4111
Stockton, California 95201

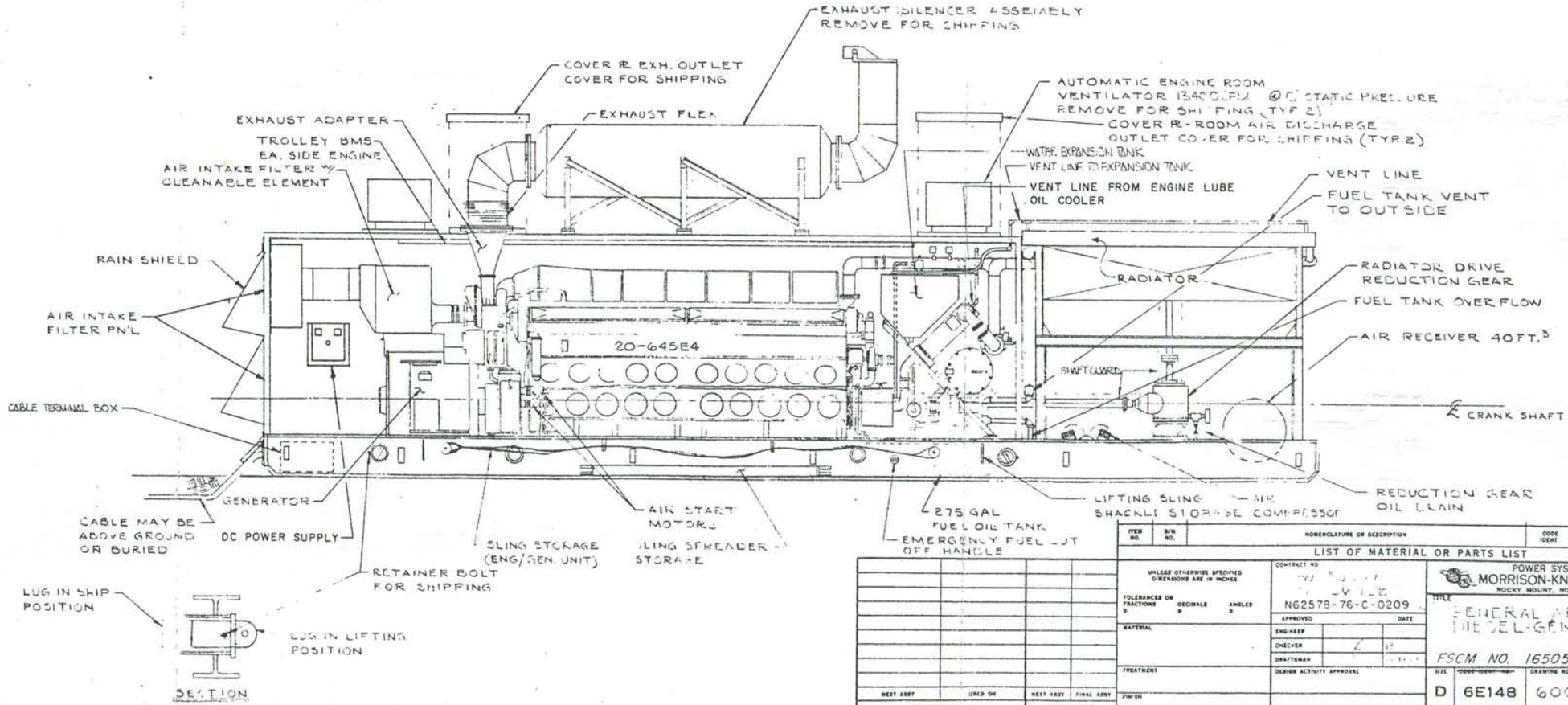
DESIGN:
DRAWN:
CHECK:

DWG. NO. D1092001
SHEET 3 OF

SCALE: NONE
DATE: 5/24/3

REVISIONS				
ZONE	LTR.	DESCRIPTION	DATE	APPROVED
	A	REV'D RADIATOR & FUEL PIPING FROM UNDER RADIATOR TO THUR	23NOV76	[illegible]
	B	REV'D SA. SIL. SUPPORT, RAD. SUPPORT, & PLAN VIEW OF RIGG. ADD FIRE EXTINGUISHER	5MAR77	[illegible]
	C	REV'D SLING, SPREADER BAR, & SHACKLE STORAGE	10JUN77	[illegible]
	D	[illegible]	6-17-77	THUSTON
	E	[illegible]	7-25-77	THUSTON
	F	ADDED D.C. POWER SUPPLY & SHAFT GUARDS	9-15-77	T.HUSTON
	G	REV'D [illegible] GEAR [illegible] GEAR	18NOV77	[illegible]
	H	REV'D TO AS BUILT	20DEC77	[illegible]
	I	AS BUILT	12DEC77	[illegible]
	J	[illegible]	[illegible]	THUSTON
	K	[illegible]	11 MAY 78	[illegible]
	L	NAVAL ENERGY & ENVIRONMENT DCN 80-6	80-7-1	[illegible]





ITEM NO.	B/M NO.	NOMENCLATURE OR DESCRIPTION	CODE IDENT	PART OR IDENTIFYING NO.	QTY. REQD.

LIST OF MATERIAL OR PARTS LIST

NEXT ASSY	USED ON	NEXT ASSY	FINAL ASSY
APPLICATION		QTY. REQD.	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

TOLERANCES ON FRACTIONS ± DECIMALS ± ANGLES ±

MATERIAL

TREATMENT

FINISH

CONTRACT NO. N62578-76-C-0209

APPROVED	DATE
ENGINEER	
CHECKER	
DRAFTSMAN	

DESIGN ACTIVITY APPROVAL

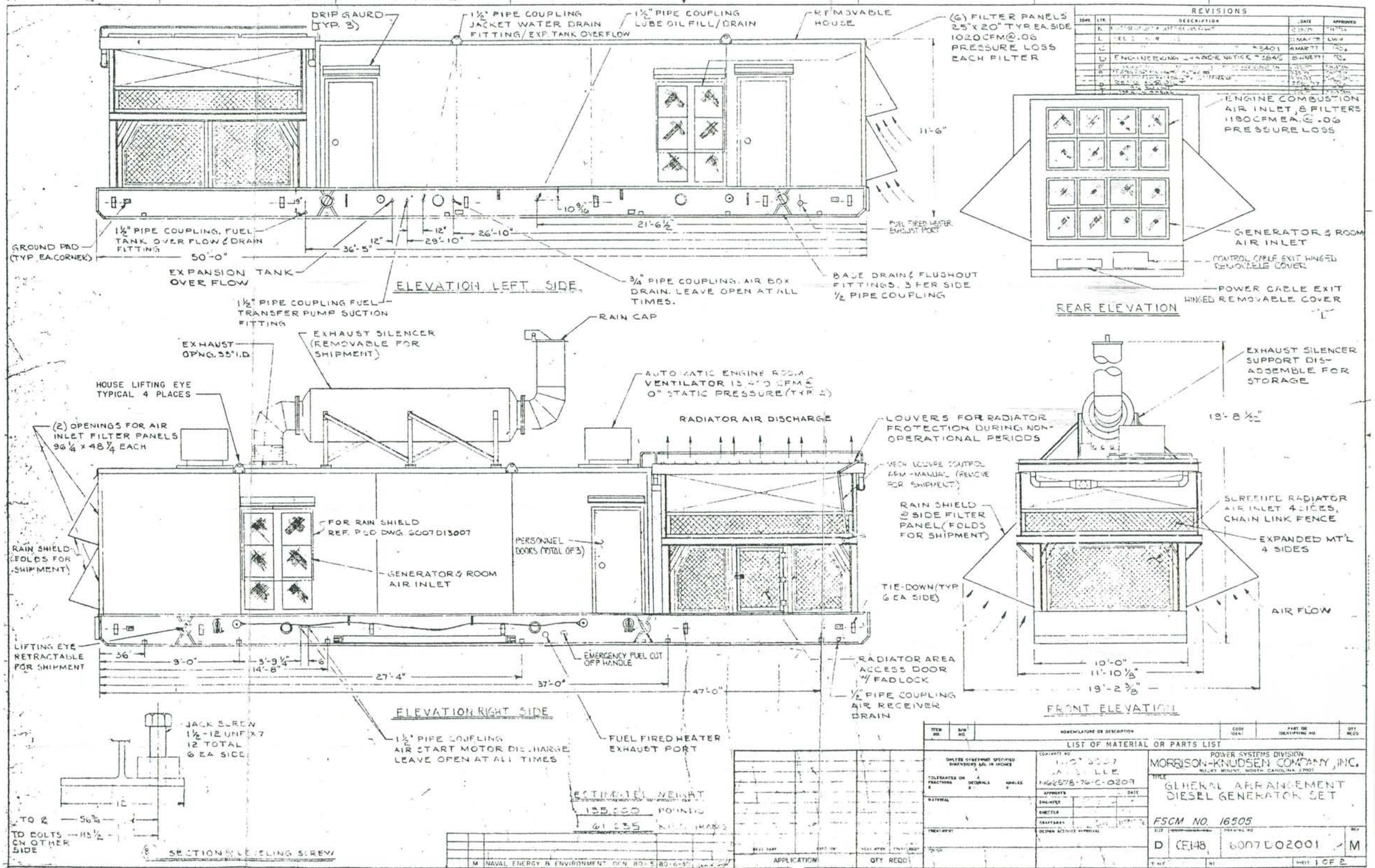
POWER SYSTEMS DIVISION
MORRISON-KNUDSEN COMPANY, INC.
ROCKY MOUNT, NORTH CAROLINA 27801

TITLE GENERAL ARRANGEMENT DIESEL-GENERATOR SET

FSCM NO. 16505

SIZE	CODE IDENT NO.	DRAWING NO.	REV.
D	6E148	6007 D02001	L

SCALE 3/8" = 1'-0" WT. SHEET 1 OF 2


DRIP GAURD (TYP. 3)
1½" PIPE COUPLING JACKET WATER DRAIN FITTING/EXP. TANK OVERFLOW
1½" PIPE COUPLING LUBE OIL FILL/DRAIN
REMOVABLE HOUSE
(6) FILTER PANELS 25"x20" TYP. EA. SIDE 1020CFM@.06 PRESSURE LOSS EACH FILTER
11'-6"
1½" PIPE COUPLING, FUEL TANK OVER FLOW & DRAIN FITTING
GROUND PAD (TYP. EA. CORNER)
50'-0"
EXPANSION TANK OVER FLOW
36'-5"
29'-10"
26'-10"
21'-6½"
10 9/16"
FUEL FIRED HEATER EXHAUST PORT
ELEVATION LEFT SIDE
3/4" PIPE COUPLING, AIR BOX DRAIN, LEAVE OPEN AT ALL TIMES.
BASE DRAIN & FLUSHOUT FITTINGS, 3 PER SIDE ½ PIPE COUPLING
1½" PIPE COUPLING FUEL TRANSFER PUMP SUCTION FITTING
ENGINE COMBUSTION AIR INLET, 8 FILTERS 1180CFM EA. @ .06 PRESSURE LOSS
GENERATOR & ROOM AIR INLET
CONTROL CABLE EXIT HINGED REMOVABLE COVER
POWER CABLE EXIT HINGED REMOVABLE COVER
REAR ELEVATION
RAIN CAP
EXHAUST SILENCER (REMOVABLE FOR SHIPMENT)
EXHAUST OPNG. 35" I.D.
HOUSE LIFTING EYE TYPICAL 4 PLACES
(2) OPENINGS FOR AIR INLET FILTER PANELS 96¼ x 48¼ EACH
AUTOMATIC ENGINE ROOM VENTILATOR 13,400 CFM @ 0" STATIC PRESSURE (TYP. 2)
RADIATOR AIR DISCHARGE
LOUVERS FOR RADIATOR PROTECTION DURING NON-OPERATIONAL PERIODS
MECH. LOUVRE CONTROL ARM - MANUAL (REMOVE FOR SHIPMENT)
FOR RAIN SHIELD REF. PLD DWG. 6007D13007
PERSONNEL DOORS (TOTAL OF 3)
GENERATOR & ROOM AIR INLET
RAIN SHIELD (FOLDS FOR SHIPMENT)
LIFTING EYE RETRACTABLE FOR SHIPMENT
36"
9'-0"
3'-9¼"
14'-8"
6
27'-4"
37'-0"
47'-0"
EMERGENCY FUEL CUT OFF HANDLE
RADIATOR AREA ACCESS DOOR W/ PADLOCK
½" PIPE COUPLING AIR RECEIVER DRAIN
ELEVATION RIGHT SIDE
1½" PIPE COUPLING AIR START MOTOR DISCHARGE LEAVE OPEN AT ALL TIMES
FUEL FIRED HEATER EXHAUST PORT
EXHAUST SILENCER SUPPORT DIS-ASSEMBLE FOR STORAGE
19'-8½"
RAIN SHIELD @ SIDE FILTER PANEL (FOLDS FOR SHIPMENT)
SCREENED RADIATOR AIR INLET 4 SIDES, CHAIN LINK FENCE
EXPANDED MT'L 4 SIDES
TIE-DOWN (TYP. 6 EA SIDE)
AIR FLOW
10'-0"
11'-10⅛"
19'-2⅜"
FRONT ELEVATION
JACK SCREW 1½-12 UNF X 7 12 TOTAL 6 EA SIDE
12
TO ℄ 56¾
TO BOLTS ON OTHER SIDE 43½
SECTION B LEVELING SCREW
ESTIMATED WEIGHT
125,000 POUNDS
61,235 KILOGRAMS
REVISIONS
LIST OF MATERIAL OR PARTS LIST
MORRISON-KNUDSEN COMPANY, INC.
POWER SYSTEMS DIVISION
MOUNT, NORTH CAROLINA
GENERAL ARRANGEMENT DIESEL GENERATOR SET
FSCM NO. 16505
D CE148 6007D02001 M
SHEET 1 OF 2
APPLICATION
QTY REQD
NAVAL ENERGY & ENVIRONMENT