

DEADWEIGHT SCALE					
MULTIPLY	TOTAL	DISPL.	NET DEADWT.	IN	IN
IN	IN	IN	IN	IN	IN
TONS	TONS	TONS	TONS	FEET	TONS F.W.
1000	1000	1000	1000	11	1000
800	800	800	800	10	800
600	600	600	600	9	600
400	400	400	400	8	400
200	200	200	200	7	200
100	100	100	100	6	100
50	50	50	50	5	50

CONDITION	Displacement	V.C.G.	L.C.G.
Lightship with no launches	488.95 LT. M.	12.04'	3.40'A
Lightship with 2 launches	513.70 LT. M.	12.32'	3.55'A
Lightship with 4 launches	537.01 LT. M.	12.60'	3.41'A



WELL THICKNESSES:  
 15'-0" 17'-0" 18'-0" 19'-0"  
 20'-0" 21'-0" 22'-0" 23'-0"  
 24'-0" 25'-0" 26'-0" 27'-0"  
 28'-0" 29'-0" 30'-0" 31'-0"

FUEL OIL (40.9 c.f./ton)									
COMPARTMENT	FRAMES	100% CAPACITY		EFFECT ON DRAFT		V.C.G.		L.C.G.	
		LONG	IMP.	OF FILLING TANKS	ABOVE	ABOUT			
		TONS	BALLONS	AST	BASE				
N°1 FUEL OIL TANK PORT	60-68	7.48	1300	-1.37' +4.04'	2.26'	48.86' F			
N°1 FUEL OIL TANK STBD.	60-68	7.48	1300	-1.37' +4.04'	2.26'	48.86' F			
N°2 FUEL OIL TANK PORT	47-60	17.67	4554	-1.23' +7.05'	3.22'	30.25' F			
N°2 FUEL OIL TANK STBD.	47-60	17.67	4554	-1.23' +7.05'	3.22'	30.25' F			
N°3 FUEL OIL TANK PORT	18-26	10.32	2228	+2.97' -0.50'	8.25'	10.18' F			
N°3 FUEL OIL TANK STBD.	18-26	10.32	2228	+2.97' -0.50'	8.25'	10.18' F			
N°4 FUEL OIL TANK PORT	10-24	10.32	2228	+2.97' -0.50'	8.25'	10.18' F			
N°4 FUEL OIL TANK STBD.	10-24	10.32	2228	+2.97' -0.50'	8.25'	10.18' F			
N°5 FUEL OIL TANK PORT	18-21	0.98	230	+0.17' -0.05'	17.10'	51.55'A			
N°5 FUEL OIL TANK STBD.	18-21	0.98	230	+0.17' -0.05'	17.10'	51.55'A			
N°6 FUEL OIL TANK PORT	47-44	0.40	103	+0.01' -0.05'	30.50'	10.50' F			
N°6 FUEL OIL TANK STBD.	47-44	0.40	103	+0.01' -0.05'	30.50'	10.50' F			
TOTAL FUEL OIL		77.84	18,507						

LUB OIL (42.5 c.f./ton)						
COMPARTMENT	FRAMES	100% CAPACITY	EFFECT ON DRAFT	V.C.G.	L.C.G.	
		LONG	IMP.	OF FILLING TANKS ABOVE	ABOUT	
		TONS	GALLONS	IN' FWD	IN' AFT	
LUB OIL STORAGE TANK, PORT	18-19	0.58	153	+0.19'	-0.06'	15.70' 35.85'A
LUB OIL STORAGE TANK, STBD.	18-19	0.58	153	+0.19'	-0.06'	15.70' 35.85'A
TOTAL LUB OIL		1.16	3.06			

FRESH WATER (36 c.f./ton)							
COMPARTMENT	FRAMES	100% CAPACITY		EFFECT ON DRAFT			
		LONG	IMP	OF FILLING TANKS ABOVE	V.C.G.	L.C.G.	
		TONS	BALLOONS	FND	BASE	BASE	
OUTBOARD F.W. TANK PORT	34-45	15.03	3370	+1.35'	+2.91'	2.21'	4.49' F
OUTBOARD F.W. TANK STBD.	34-45	15.03	3370	+1.35'	+2.91'	2.21'	4.49' F
INBOARD F.W. TANK PORT	34-45	14.22	3190	+1.35'	+2.48'	1.96'	3.75' F
INBOARD F.W. TANK STBD.	34-45	14.22	3190	+1.35'	+2.48'	1.96'	3.75' F
TOTAL FRESH WATER			59.95	13.444			

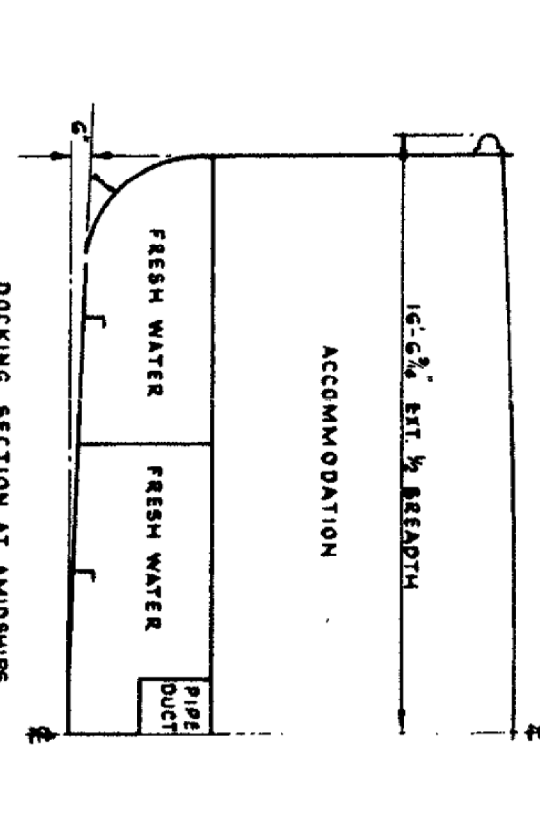
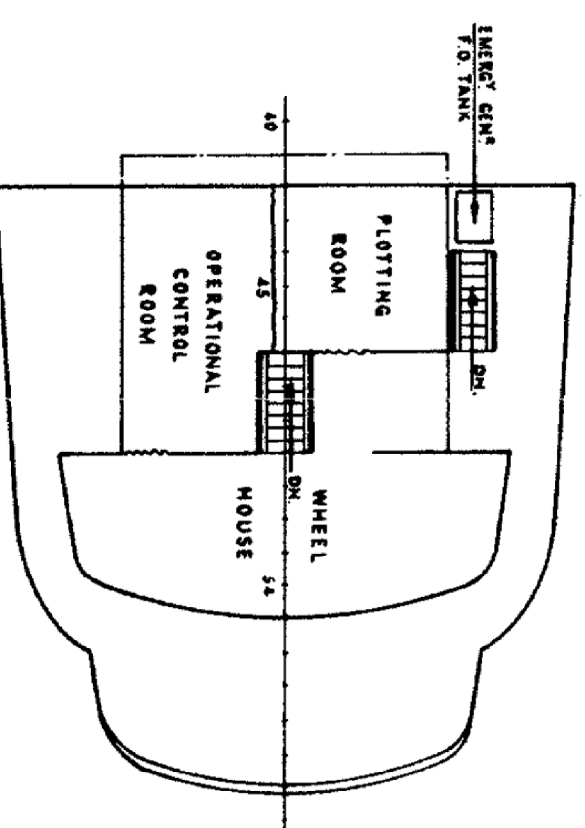
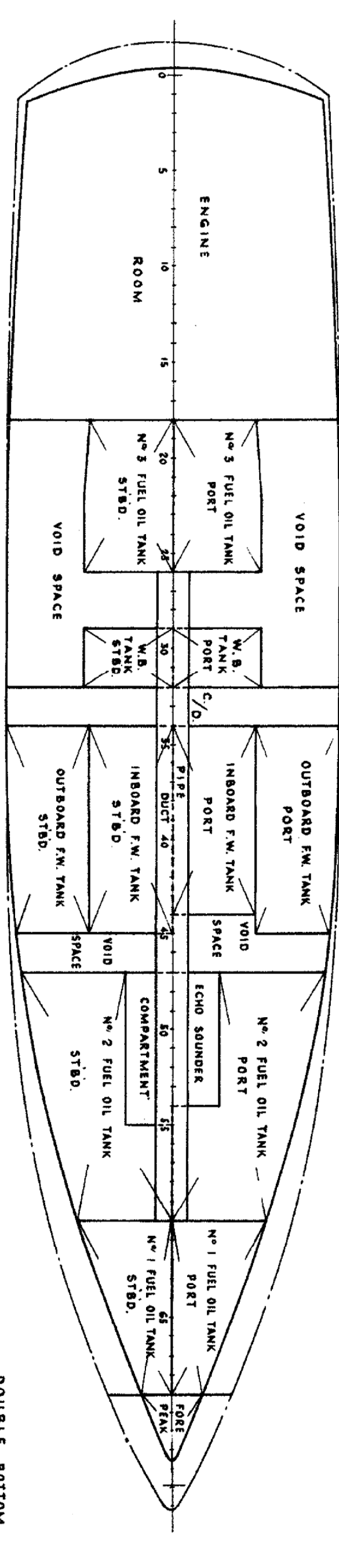
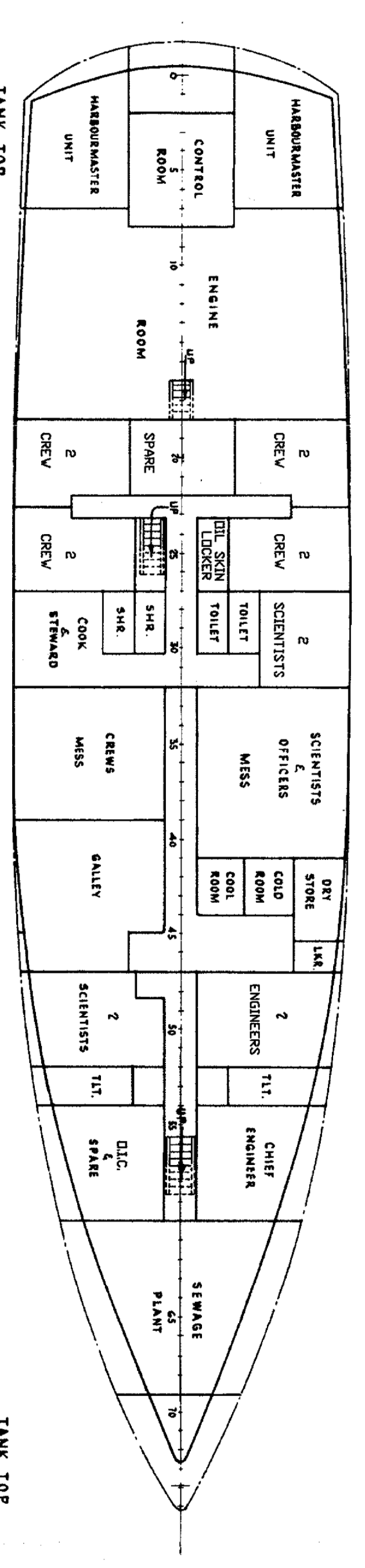
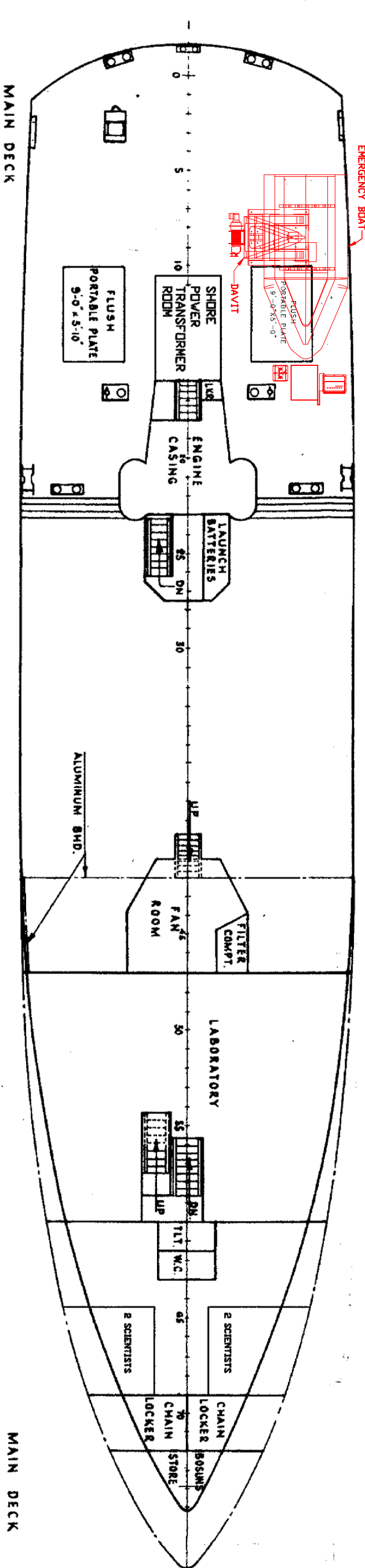
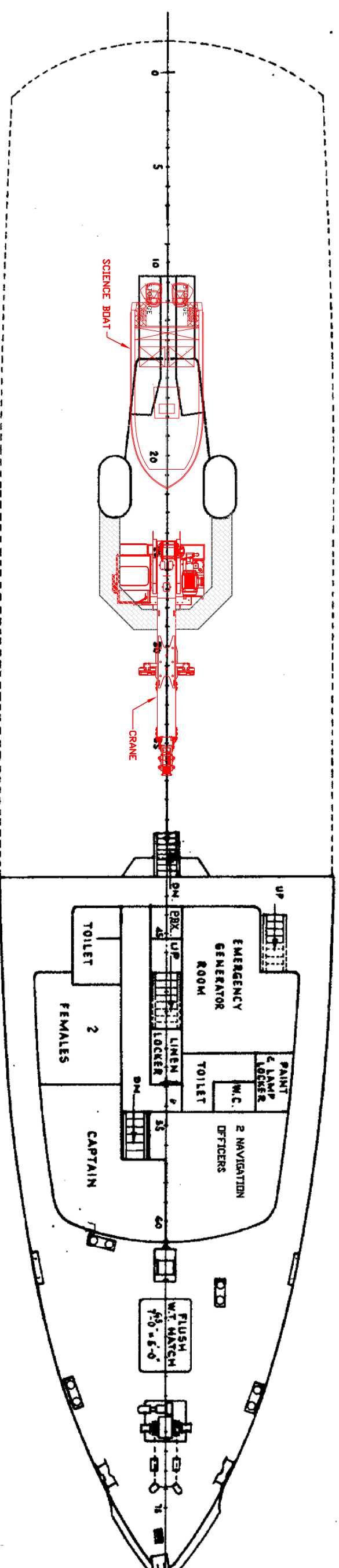
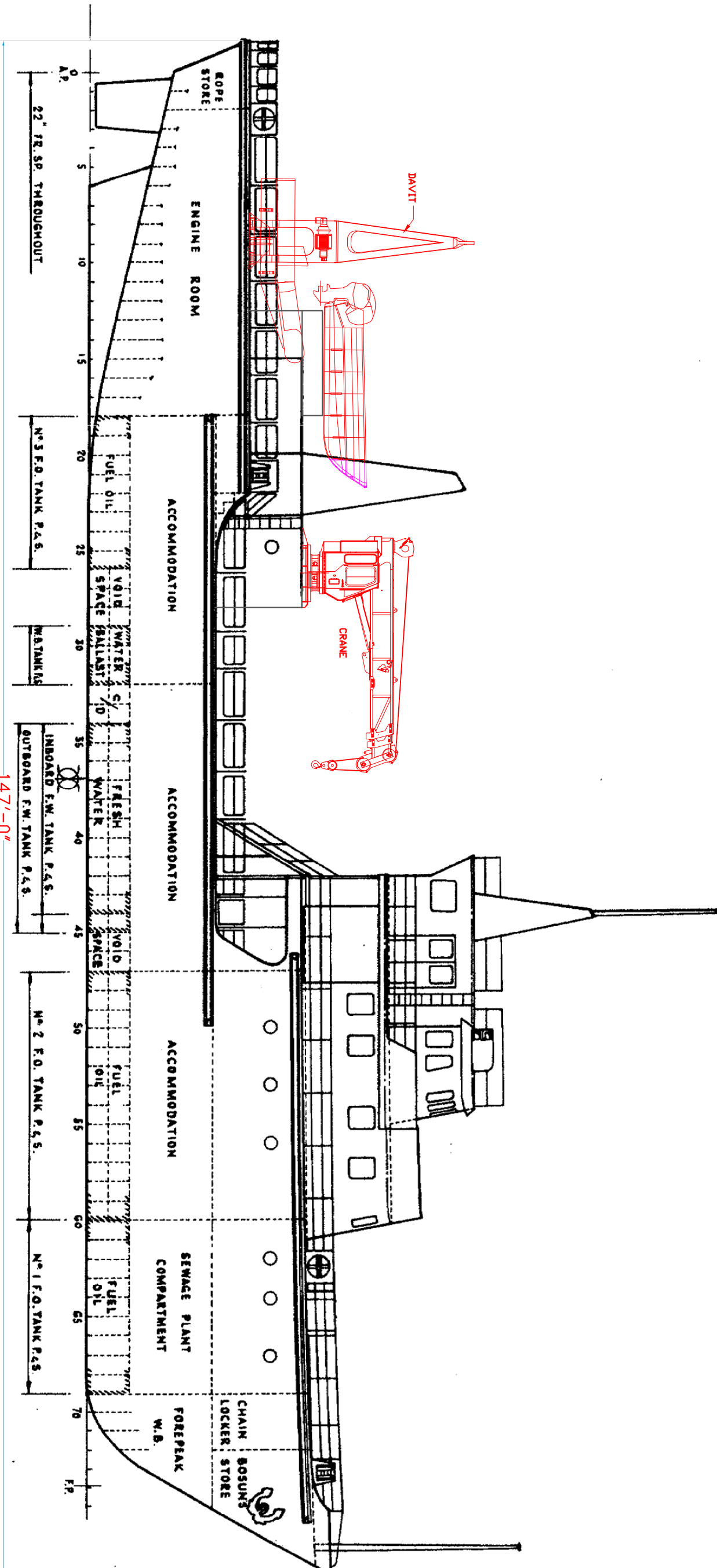
WATER BALLAST (36 cft/ton)									
COMPARTMENT	FRAMES	TDS. CAPACITY		EFFECT ON DRAFT		V.C.G.		L.C.G.	
		LONG	IMP.	OF FILLING TANKS	ABOVE	ABOUT	ABOUT		
WATER BALLAST TANK PORT	29-32	4.03	1037	+0.35'	-0.31'	1.95'	11.83'A		
WATER BALLAST TANK STBD.	29-32	4.03	1037	+0.35'	-0.31'	1.95'	11.83'A		
FOREPEAK	59-57H	11.61	2604	-3.08'	+7.46'	6.48'	62.31' F		
TOTAL WATER BALLAST		20.67	4678						

SHIPS SERVICE STORES			
STORE	FRAMES	VOLUME	
ENGINE STORE	51-54	350.24	
PAINT & LAMP STORE	51-54	150.24	
SURVEY & ELECTRONIC STORE	60-63	2510.24	
BOSUN'S STORE	72-87H	510.24	

PROVISION STORES			
STORE	FRAMES	VOLUME	
ENGINE STORE	41-45	310.24	
READY USE DRY STORE	45-47	280.24	
COLD ROOM	41-44	110.24	
COOL ROOM	41-44	110.24	

ALL TONS SHOWN ARE LONG TONS  
 OF 2240 POUNDS

THE PARTICULARS SHOWN ON THIS PLAN ARE GIVEN  
 IN GOOD FAITH BUT ARE NOT GUARANTEED.



**PRINCIPAL PARTICULARS:**  
 LENGTH OVERALL 147'-0"  
 LENGTH BETWEEN PERPENDICULARS 135'-0"  
 BREADTH MOULDED 32'-0"  
 DEPTH MOULDED 12'-0"  
 DRAFT MEAN MOULDED F.W. 8'-0"  
 GROSS TONNAGE 489  
 NET TONNAGE 147  
 CLASS: LLOYDS & 100 A1 & L.M.C. "FOR SERVICE IN THE GREAT LAKES & ST. LAWRENCE RIVER" STRENGTHENED FOR NAVIGATION IN ICE - CLASS I.

**PROPULSION MACHINERY:**  
 TWO CATERPILLAR C18 ACERT (EPA TIER2 COMMERCIAL) RATED 470 BHP @ 1800 RPM KEEL COOLED  
 TWO THRU-DRIVE HYDRAULIC AZIMUTH DRIVES MODEL TH4000 WITH SUITABLE FOR 1/2" DIA. SPECIAL STEEL STUD LINK CHAIN CABLE.  
 TWO MODOUL CAPTAIN: SWAN SERIES MC 548, HYDRAULIC, EACH CAPABLE OF A LINE PULL OF 2400 LBS. AT 60 F.P.M.  
 TWO MODOUL WINCHES: SWAN SERIES MW 488, HYDRAULIC, EACH CAPABLE OF A LINE PULL OF 2400 LBS. AT 120 F.P.M.  
 AFT CRANE: HIAS MODEL 110, ARTICULATED BOOM, HYDRAULIC CRANE CAPABLE OF LIFTING 1 LONG TON AT 17'-0" RADIIUS AT 25 F.P.M.  
 MAIN CRANE: ARVA PE-48H HYDRAULIC MARINE CRANE, CAPACITY 10000 POUNDS AT 30 FT. RADIIUS  
 SINGLE ARM DAVIT: ARVA AR5000 PIVOT ARM DAVIT MAXIMUM CAPACITY 5,500 POUNDS

**DECK EQUIPMENT:**  
 ANCHOR, WINDLASS: SWAN SERIES W318, ELECTRICALLY DRIVEN, SUITABLE FOR 1/2" DIA. SPECIAL STEEL STUD LINK CHAIN CABLE.  
 TWO MODOUL CAPTAIN: SWAN SERIES MC 548, HYDRAULIC, EACH CAPABLE OF A LINE PULL OF 2400 LBS. AT 60 F.P.M.  
 TWO MODOUL WINCHES: SWAN SERIES MW 488, HYDRAULIC, EACH CAPABLE OF A LINE PULL OF 2400 LBS. AT 120 F.P.M.  
 AFT CRANE: HIAS MODEL 110, ARTICULATED BOOM, HYDRAULIC CRANE CAPABLE OF LIFTING 1 LONG TON AT 17'-0" RADIIUS AT 25 F.P.M.  
 MAIN CRANE: ARVA PE-48H HYDRAULIC MARINE CRANE, CAPACITY 10000 POUNDS AT 30 FT. RADIIUS  
 SINGLE ARM DAVIT: ARVA AR5000 PIVOT ARM DAVIT MAXIMUM CAPACITY 5,500 POUNDS

**CAPACITY PLAN**  
 GREAT LAKES SURVEY VESSEL

**C.S.S. "LIMNOS"**  
 PORT WELER DRY DOCKS LIMITED, ST. CATHARINES  
 HULL N° 47  
 SCALE: 3/8"=1'-0"  
 JUNE/2010  
 HEDDLE MARINE SERVICE INC.  
 (ISO 9001 : 2008 - CERTIFIED)  
 DWG. N° 47-H-504