

APPENDIX B – HYRDOMECHANICS

APPENDIX B.1 INTACT STABILITY RESULTS

Transit-Ballast Condition

Tank fillment

Floating Status

Draft FP	4.497 m	Heel	0.01 deg.	GM(Solid)	12.947 m
Draft MS	4.504 m	Equil	Yes	F/S Corr.	0.549 m
Draft AP	4.511 m	Wind	0.0 kn	GM(Fluid)	12.398 m
Trim	0.01/144.80	Wave	No	KMT	21.478 m
LCG	79.586f m	VCG	8.530 m	TPcm	43.99

Loading Summary

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
Light Ship	5 000.00	78.890f	0.000	7.230
Deadweight	12 992.71	79.854f	0.002s	9.031
Displacement	17 992.71	79.586f	0.002s	8.530

Fixed Weight Status

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
LIGHT SHIP	5 000.00	78.890f	0.000	7.230u
CRANE ONE	60.00	57.600f	11.000p	20.100u
CRANE TWO	60.00	92.000f	11.000s	20.100u
CREW AND EFFECTS	15.00	134.000f	0.000	22.300u
DRILLFLOOR	40.00	68.000f	0.000	15.200u
FREEFALL AFT	50.00	5.500f	7.200s	22.300u
FREEFALL FORE PORT - 1	50.00	148.000f	10.500p	25.300u
FREEFALL FORE PORT - 2	50.00	120.800f	10.500p	25.300u
FREEFALL FORE STB - 1	50.00	148.000f	10.500s	25.300u
FREEFALL FORE STB - 2	50.00	120.800f	10.500s	25.300u
GANTRY CRANE	150.00	68.000f	0.000	20.000u
HELIDECK	110.00	141.600f	0.000	31.000u
HP FLARE KO SKID	5.90	8.600f	12.400p	16.600u
LP FLARE KO SKID	3.60	10.600f	12.400p	16.600u
MACHINERY AFT	927.00	19.900f	0.300s	9.600u
MACHINERY FOR	36.00	131.600f	1.500s	7.800u
MOB BOAT	5.00	10.900f	14.500s	16.300u
MOORING - AFT - P	60.00	2.500f	13.500p	16.600u
MOORING - AFT - STB	60.00	2.500f	13.500s	16.600u
MOORING - FORE - P	60.00	147.300f	13.500p	16.600u
MOORING - FORE - STB	60.00	147.300f	13.500s	16.600u
OFFLOADING	90.00	7.000f	3.500p	22.100u
OUTFITTING	1 300.00	76.500f	0.000	14.000u
PAINT STORE	0.50	147.500f	0.000	13.600u
PROCESSING PLANT	333.84	29.900f	0.000	21.600u
RISER TRANSPORT RAIL	5.00	53.900f	0.000	18.900u
ROV	5.00	107.000f	12.100p	16.600u
STORES	150.00	134.400f	0.000	12.500u
SUPERSTRUCTURE	340.00	134.400f	0.000	22.300u

VOITH 1A	93.50	19.500f	6.000p	1.500u
VOITH 1F	93.50	128.400f	5.500p	1.000u
VOITH 2A	93.50	9.700f	0.000	3.700u
VOITH 2F	93.50	138.300f	0.000	1.000u
VOITH 3A	93.50	19.500f	6.000s	1.500u
VOITH 3F	93.50	128.400f	5.500s	1.000u
Total Fixed:	9 687.84	74.390f	0.028s	10.677u

Tank Status

SALT WATER (SpGr 1.025)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
BW_APSD1P.P	98.00%	256.11	7.467f	11.862p	8.780	0.970
BW_APSD1S.S	60.00%	156.80	7.575f	11.600s	7.905	0.970
BW_APSD2P.P	85.00%	191.20	19.726f	14.328p	7.526	0.970
BW_APSD2S.S	85.00%	191.20	19.726f	14.328s	7.526	0.970
BW_FPSD1P.P	98.00%	283.64	128.145f	13.644p	6.800	0.970
BW_FPSD1S.S	98.00%	283.64	128.145f	13.644s	6.800	0.970
BW_FPSD2P.P	98.00%	376.89	139.668f	10.630p	6.915	0.970
BW_FPSD2S.S	98.00%	376.89	139.668f	10.631s	6.915	0.970
BW_MPSPD.P	98.00%	201.53	68.002f	14.781p	5.493	0.970
BW_MPSPD.S	90.00%	185.08	68.003f	14.779s	5.061	0.970
BW_TKDB7P.P	25.00%	96.77	115.543f	6.670p	0.312	0.970
BW_TKDB7S.S	25.00%	96.77	115.543f	6.676s	0.312	0.970
BW_TKSD1P.P	90.00%	246.13	32.828f	14.724p	5.174	0.970
BW_TKSD1S.S	90.00%	246.13	32.828f	14.724s	5.174	0.970
BW_TKSD2P.P	98.00%	294.36	44.422f	14.753p	5.547	0.970
BW_TKSD2S.S	98.00%	294.36	44.422f	14.753s	5.547	0.970
BW_TKSD3P.P	98.00%	299.51	56.413f	14.771p	5.512	0.970
BW_TKSD3S.S	98.00%	299.51	56.413f	14.771s	5.512	0.970
BW_TKSD4P.P	90.00%	265.52	79.572f	14.726p	5.181	0.970
BW_TKSD4S.S	90.00%	265.52	79.572f	14.726s	5.181	0.970
BW_TKSD5P.P	98.00%	287.16	91.596f	14.724p	5.622	0.970
BW_TKSD5S.S	98.00%	287.16	91.596f	14.724s	5.622	0.970
BW_TKSD6P.P	98.00%	283.86	103.577f	14.715p	5.648	0.970
BW_TKSD6S.S	98.00%	283.86	103.577f	14.715s	5.648	0.970
BW_TKSD7P.P	98.00%	266.98	115.478f	14.664p	5.778	0.970
BW_TKSD7S.S	98.00%	266.98	115.478f	14.664s	5.778	0.970
FOREPEAK.C	98.00%	997.52	147.754f	0.000	6.595	0.970
Subtotals:	38.78%	7 581.06	89.181f	0.193p	6.003	

FUEL OIL (SpGr 0.870)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
BUNKER_1.C	50.00%	131.77	28.800f	0.000	5.300	0.850
BUNKER_2.S	50.00%	120.78	28.800f	9.200s	5.300	0.850
BUNKER_3.P	50.00%	120.78	28.800f	9.200p	5.300	0.850
Subtotals:	1.92%	373.34	28.800f	0.000	5.300	

FRESH WATER (SpGr 1.000)

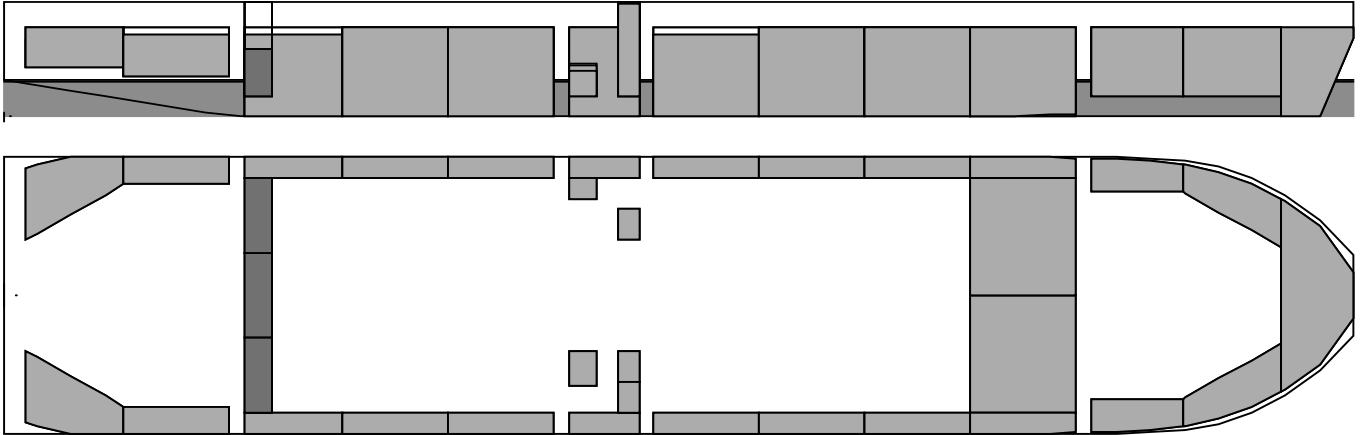
Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
BLACK_W.P	98.00%	22.88	65.600f	12.400p	3.968	0.950
FRESH_W1.S	98.00%	93.31	70.800f	8.200s	8.084	0.950
FRESH_W2.S	98.00%	93.31	70.800f	11.800s	8.084	0.950
FRESH_W3.P	98.00%	93.31	70.800f	8.200p	8.084	0.950
GREY_W.S	98.00%	47.67	65.600f	8.400s	4.360	0.950
Subtotals:	47.68%	350.47	69.753f	3.475s	7.309	

All Tanks

	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
Totals:		8 304.87	85.646f	0.029p	6.026	

Displacer Status

Item	Status	Spgr	Displ (MT)	LCB (m)	TCB (m)	VCB (m)	Eff /Perm
HULL	Intact	1.025	17 992.71	79.585f	0.002s	2.349	1.000
SubTotals:			17 992.71	79.585f	0.002s	2.349	



Fluid Legend

Fluid Name	Legend	Weight (MT)	Load%
SALT WATER		7 581.06	38.78%
FUEL OIL		373.34	1.92%
FRESH WATER		350.47	47.68%

Righting Arms vs Heel Angle

Heel Angle (deg)	Trim Angle (deg)	Origin Depth (m)	Righting Arm (m)	Area (m-Rad)	Flood Pt Height (m)	Notes
0.00	0.01a	4.511	-0.001	0.000	9.501 (1)	
0.01s	0.01a	4.511	0.000	0.000	9.500 (1)	Equil
2.00s	0.00a	4.505	0.433	0.008	9.251 (1)	
4.00s	0.00f	4.485	0.873	0.030	8.989 (1)	
6.00s	0.01f	4.451	1.319	0.069	8.717 (1)	
8.00s	0.02f	4.405	1.772	0.122	8.434 (1)	
10.00s	0.04f	4.345	2.231	0.192	8.142 (1)	
12.00s	0.06f	4.272	2.696	0.278	7.840 (1)	
14.00s	0.09f	4.181	3.161	0.381	7.531 (1)	
16.00s	0.11f	4.071	3.615	0.499	7.218 (1)	
18.00s	0.15f	3.932	4.019	0.632	6.911 (1)	
20.00s	0.19f	3.753	4.350	0.778	6.620 (1)	
22.00s	0.23f	3.537	4.605	0.935	6.344 (1)	
24.00s	0.27f	3.290	4.806	1.099	6.082 (1)	
26.00s	0.32f	3.016	4.961	1.269	5.834 (1)	
28.00s	0.36f	2.717	5.080	1.445	5.599 (1)	
30.00s	0.41f	2.394	5.165	1.624	5.375 (1)	

32.00s	0.45f	2.050	5.223	1.805	5.163 (1)	
34.00s	0.50f	1.687	5.256	1.988	4.961 (1)	
35.40s	0.53f	1.421	5.264	2.116	4.822 (1)	MaxRa
36.00s	0.55f	1.303	5.262	2.172	4.763 (1)	
38.00s	0.60f	0.903	5.235	2.355	4.562 (1)	
40.00s	0.66f	0.494	5.172	2.537	4.355 (1)	
42.00s	0.71f	0.083	5.076	2.716	4.143 (1)	
44.00s	0.77f	-0.327	4.950	2.891	3.928 (1)	
46.00s	0.82f	-0.737	4.799	3.061	3.707 (1)	
48.00s	0.87f	-1.146	4.626	3.225	3.483 (1)	
50.00s	0.92f	-1.553	4.433	3.383	3.255 (1)	
52.00s	0.97f	-1.959	4.222	3.534	3.023 (1)	
54.00s	1.02f	-2.363	3.996	3.678	2.787 (1)	
56.00s	1.07f	-2.763	3.757	3.813	2.547 (1)	
58.00s	1.12f	-3.159	3.507	3.940	2.305 (1)	
60.00s	1.16f	-3.551	3.246	4.058	2.061 (1)	

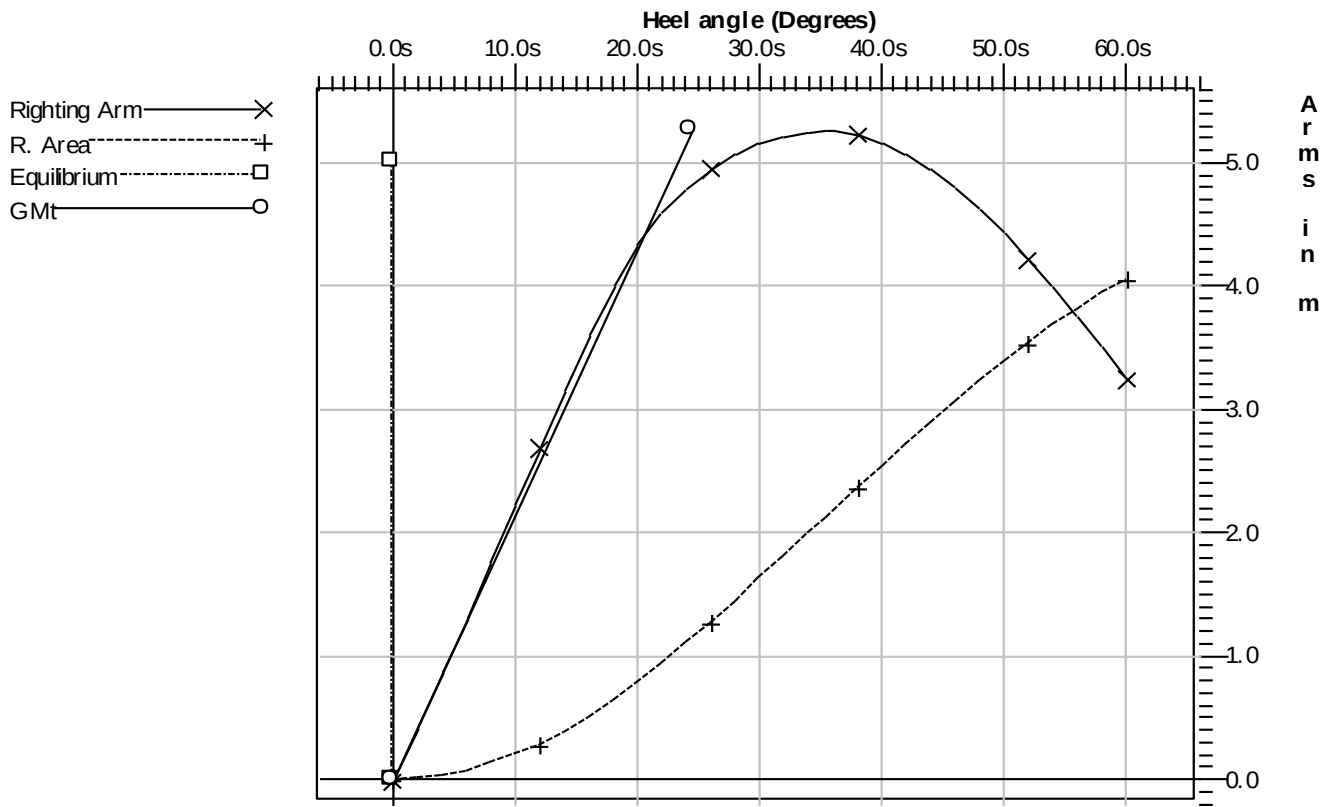
Unprotected Flood Point

Name	L,T,V (m)	Height (m)
(1) Opening No1 Stb	120.000f, 7.000s, 14.000	9.501

IMO A.167

Limit	Min/Max	Actual	Margin	Pass
(1) Area from 0.00 deg to 30.00	>0.0550 m-R	1.624	1.569	Yes
(2) Area from 0.00 deg to 40.00 or Flood	>0.0900 m-R	2.537	2.447	Yes
(3) Area from 30.00 deg to 40.00 or Flood	>0.0300 m-R	0.913	0.883	Yes
(4) Righting Arm at 30.00 deg or MaxRA	>0.200 m	5.264	5.064	Yes
(5) Angle from 0.00 deg to MaxRA	>25.00 deg	35.40	10.40	Yes
(6) GM at Equilibrium	>0.150 m	12.398	12.248	Yes

Righting Arms vs. Heel



DP-SSR Installation Condition

Tank fillment

Floating Status

Draft FP	5.489 m	Heel	zero	GM(Solid)	11.335 m
Draft MS	5.491 m	Equil	Yes	F/S Corr.	1.703 m
Draft AP	5.493 m	Wind	0.0 kn	GM(Fluid)	9.632 m
Trim	0.00/144.80	Wave	No	KMT	18.662 m
LCG	78.851f m	VCG	7.327 m	TPcm	44.93

Loading Summary

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
Light Ship	5 000.00	78.290f	0.000	7.230
Deadweight	17 383.98	79.013f	0.000	7.355
Displacement	22 383.98	78.851f	0.000	7.327

Fixed Weight Status

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
LIGHT SHIP	5 000.00	78.290f	0.000	7.230u
CRANE ONE	60.00	57.600f	11.000p	20.100u
CRANE TWO	60.00	92.000f	11.000s	20.100u
CREW AND EFFECTS	15.00	134.000f	0.000	22.300u
DRILLFLOOR	40.00	68.000f	0.000	15.200u
FREEFALL AFT	50.00	5.500f	7.200s	22.300u
FREEFALL FORE PORT - 1	50.00	148.000f	10.500p	25.300u
FREEFALL FORE PORT - 2	50.00	120.800f	10.500p	25.300u
FREEFALL FORE STB - 1	50.00	148.000f	10.500s	25.300u
FREEFALL FORE STB - 2	50.00	120.800f	10.500s	25.300u
GANTRY CRANE	150.00	68.000f	0.000	20.000u
HELIDECK	110.00	141.600f	0.000	31.000u
HP FLARE KO SKID	5.90	8.600f	12.400p	16.600u
LP FLARE KO SKID	3.60	10.600f	12.400p	16.600u
MACHINERY AFT	927.00	19.900f	0.300s	9.600u
MACHINERY FOR	36.00	131.600f	1.500s	7.800u
MOB BOAT	5.00	10.900f	14.500s	16.300u
MOORING - AFT - P	60.00	2.500f	13.500p	16.600u
MOORING - AFT - STB	60.00	2.500f	13.500s	16.600u
MOORING - FORE - P	60.00	147.300f	13.500p	16.600u
MOORING - FORE - STB	60.00	147.300f	13.500s	16.600u
OFFLOADING	90.00	7.000f	3.500p	22.100u
OUTFITTING	1 300.00	76.500f	0.000	14.000u
PAINT STORE	0.50	147.500f	0.000	13.600u
PROCESSING PLANT	333.84	29.900f	0.000	21.600u
RISER	48.00	53.900f	8.600s	18.300u
RISER ASSEMBLY CONTAINER (OPEN TOP FOR RISER JOINTS)	10.00	53.900f	6.100s	18.300u
RISER ASSEMBLY CONTAINER (OPEN TOP FOR RISER JOINTS)2	10.00	53.900f	8.600s	18.300u
RISER ASSEMBLY CONTAINER (WELL HEAD TOOLS ETC.)	5.00	43.800f	9.800p	18.300u
RISER ASSEMBLY	5.00	43.800f	7.400p	18.300u

CONTAINER (WELL HEAD TOOLS ETC.)2				
RISER ASSEMBLY CONTAINER (WELL HEAD TOOLS ETC.)3	5.00	50.800f	9.800p	18.300u
RISER ASSEMBLY CONTAINER (WELL HEAD TOOLS ETC.)4	5.00	50.800f	7.400p	18.300u
RISER BUOYANCY MODULE	10.00	64.600f	10.100s	20.100u
RISER BUOYANCY MODULE2	10.00	70.800f	10.100s	20.100u
RISER TORQUE TONG	3.00	42.000f	7.400s	19.000u
RISER TRANSPORT RAIL	48.00	53.900f	6.100s	18.300u
ROV	5.00	107.000f	12.100p	16.600u
SEAFLOOR ISOLATION DEVICE	25.00	43.800f	3.600p	19.000u
STORES	150.00	134.400f	0.000	12.500u
SUPERSTRUCTURE	340.00	134.400f	0.000	22.300u
UMBILICAL REELS	40.00	42.300f	1.500s	19.100u
UMBILICAL REELS2	40.00	42.300f	3.900s	19.100u
VOITH 1A	93.50	19.500f	6.000p	1.500u
VOITH 1F	93.50	128.400f	5.500p	1.000u
VOITH 2A	93.50	9.700f	0.000	3.700u
VOITH 2F	93.50	138.300f	0.000	1.000u
VOITH 3A	93.50	19.500f	6.000s	1.500u
VOITH 3F	93.50	128.400f	5.500s	1.000u
Total Fixed:	9 946.84	73.448f	0.131s	10.888u

Tank Status

SALT WATER (SpGr 1.025)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
AFTPEAK.C	10.00%	30.76	1.344f	0.000	5.247	0.970
BW_APSD1P.P	98.00%	256.11	7.467f	11.862p	8.780	0.970
BW_APSD1S.S	98.00%	256.11	7.467f	11.862s	8.780	0.970
BW_APSD2P.P	90.00%	202.45	19.718f	14.331p	7.678	0.970
BW_APSD2S.S	80.00%	179.96	19.734f	14.325s	7.375	0.970
BW_FPSD1P.P	98.00%	283.64	128.145f	13.644p	6.800	0.970
BW_FPSD1S.S	98.00%	283.64	128.145f	13.644s	6.800	0.970
BW_FPSD2P.P	98.00%	376.89	139.668f	10.630p	6.915	0.970
BW_FPSD2S.S	98.00%	376.89	139.668f	10.630s	6.915	0.970
BW_MPDBP.P	30.00%	41.23	68.000f	10.000p	0.360	0.970
BW_MPDBS.S	30.00%	41.23	68.000f	10.000s	0.360	0.970
BW_MPSPD.P	98.00%	201.53	68.002f	14.781p	5.493	0.970
BW_MPSPDS.S	98.00%	201.53	68.002f	14.781s	5.493	0.970
BW_TKDB1P.P	50.00%	181.71	32.800f	6.799p	0.600	0.970
BW_TKDB2P.P	90.00%	350.48	44.400f	6.800p	1.080	0.970
BW_TKDB2S.S	90.00%	350.48	44.400f	6.800s	1.080	0.970
BW_TKDB3P.P	40.00%	155.77	56.400f	6.800p	0.480	0.970
BW_TKDB3S.S	40.00%	155.77	56.400f	6.800s	0.480	0.970
BW_TKDB4P.P	95.00%	369.92	79.600f	6.800p	1.140	0.970
BW_TKDB4S.S	62.00%	241.42	79.600f	6.800s	0.744	0.970
BW_TKDB5P.P	98.00%	381.59	91.600f	6.800p	1.176	0.970
BW_TKDB5S.S	98.00%	381.59	91.600f	6.800s	1.176	0.970
BW_TKDB6P.P	98.00%	381.49	103.599f	6.798p	1.176	0.970
BW_TKDB6S.S	98.00%	381.49	103.599f	6.798s	1.176	0.970
BW_TKDB7P.P	98.00%	379.33	115.586f	6.768p	1.183	0.970
BW_TKDB7S.S	98.00%	379.33	115.586f	6.768s	1.183	0.970

BW_TKSD1P.P	98.00%	268.01	32.826f	14.728p	5.599	0.970
BW_TKSD1S.S	98.00%	268.01	32.826f	14.728s	5.599	0.970
BW_TKSD2P.P	90.00%	270.33	44.423f	14.750p	5.119	0.970
BW_TKSD2S.S	90.00%	270.33	44.423f	14.750s	5.119	0.970
BW_TKSD3P.P	98.00%	299.51	56.413f	14.771p	5.512	0.970
BW_TKSD3S.S	98.00%	299.51	56.413f	14.771s	5.512	0.970
BW_TKSD4P.P	98.00%	289.12	79.574f	14.731p	5.605	0.970
BW_TKSD4S.S	96.00%	283.22	79.573f	14.730s	5.499	0.970
BW_TKSD5P.P	98.00%	287.16	91.596f	14.724p	5.622	0.970
BW_TKSD5S.S	98.00%	287.16	91.596f	14.724s	5.622	0.970
BW_TKSD6P.P	98.00%	283.86	103.577f	14.715p	5.648	0.970
BW_TKSD6S.S	98.00%	283.86	103.577f	14.715s	5.648	0.970
BW_TKSD7P.P	98.00%	266.98	115.478f	14.664p	5.778	0.970
BW_TKSD7S.S	98.00%	266.98	115.478f	14.664s	5.778	0.970
FOREPEAK.C	95.00%	966.98	147.744f	0.000	6.449	0.970
Subtotals:	38.52%	11 713.34	85.308f	0.215p	4.368	

FUEL OIL (SpGr 0.870)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
BUNKER 1.C	50.00%	131.77	28.800f	0.000	5.300	0.850
BUNKER 2.S	50.00%	120.78	28.800f	9.200s	5.300	0.850
BUNKER 3.P	50.00%	120.78	28.800f	9.200p	5.300	0.850
Subtotals:	1.92%	373.34	28.800f	0.000	5.300	

FRESH WATER (SpGr 1.000)

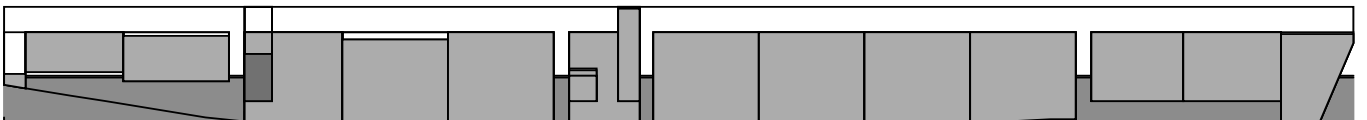
Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
BLACK_W.P	98.00%	22.88	65.600f	12.400p	3.968	0.950
FRESH_W1.S	98.00%	93.31	70.800f	8.200s	8.084	0.950
FRESH_W2.S	98.00%	93.31	70.800f	11.800s	8.084	0.950
FRESH_W3.P	98.00%	93.31	70.800f	8.200p	8.084	0.950
GREY_W.S	98.00%	47.67	65.600f	8.400s	4.360	0.950
Subtotals:	47.68%	350.47	69.753f	3.475s	7.309	

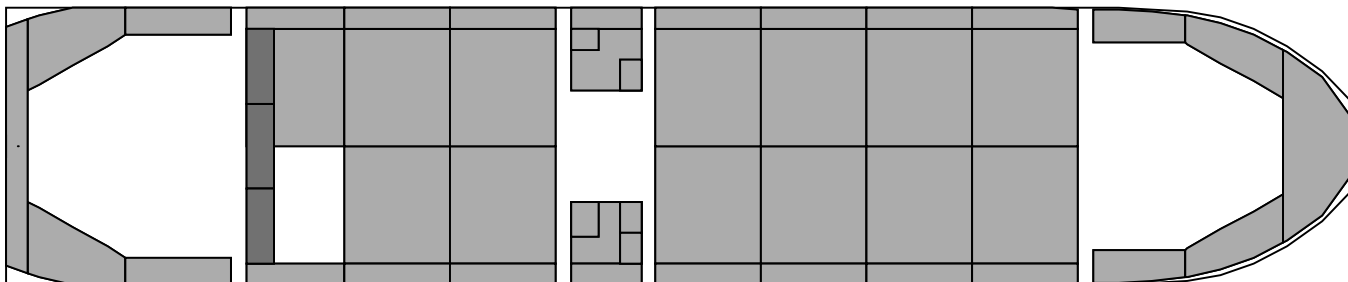
All Tanks

	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
Totals:		12 437.15	83.173f	0.105p	4.479	

Displacer Status

Item	Status	Spgr	Displ (MT)	LCB (m)	TCB (m)	VCB (m)	Eff /Perm
HULL	Intact	1.025	22 384.46	78.851f	0.000	2.870	1.000
SubTotals:			22 384.46	78.851f	0.000	2.870	





Fluid Legend

Fluid Name	Legend	Weight (MT)	Load%
SALT WATER		11 713.34	38.52%
FUEL OIL		373.34	1.92%
FRESH WATER		350.47	47.68%

Righting Arms vs Heel Angle

Heel Angle (deg)	Trim Angle (deg)	Origin Depth (m)	Righting Arm (m)	Area (m-Rad)	Flood Pt Height (m)	Notes
0.00	0.00a	5.493	0.000	0.000	8.511 (1)	Equil
2.00s	0.00	5.486	0.351	0.006	8.261 (1)	
4.00s	0.00f	5.466	0.720	0.025	8.002 (1)	
6.00s	0.01f	5.433	1.096	0.056	7.733 (1)	
8.00s	0.02f	5.387	1.477	0.101	7.454 (1)	
10.00s	0.04f	5.328	1.868	0.160	7.167 (1)	
12.00s	0.05f	5.254	2.268	0.232	6.871 (1)	
14.00s	0.07f	5.167	2.679	0.318	6.567 (1)	
16.00s	0.10f	5.065	3.099	0.419	6.256 (1)	
18.00s	0.13f	4.945	3.519	0.535	5.941 (1)	
20.00s	0.16f	4.804	3.929	0.665	5.626 (1)	
22.00s	0.19f	4.631	4.292	0.808	5.321 (1)	
24.00s	0.23f	4.422	4.599	0.963	5.032 (1)	
26.00s	0.27f	4.182	4.859	1.128	4.759 (1)	
28.00s	0.32f	3.913	5.082	1.302	4.500 (1)	
30.00s	0.36f	3.618	5.268	1.483	4.255 (1)	
32.00s	0.41f	3.298	5.408	1.669	4.011 (1)	
34.00s	0.46f	2.968	5.492	1.859	3.763 (1)	
36.00s	0.51f	2.633	5.527	2.052	3.513 (1)	
36.60s	0.52f	2.532	5.529	2.109	3.437 (1)	MaxRa
38.00s	0.56f	2.295	5.520	2.245	3.259 (1)	
40.00s	0.61f	1.955	5.477	2.437	3.002 (1)	
42.00s	0.65f	1.610	5.405	2.627	2.742 (1)	
44.00s	0.70f	1.264	5.307	2.814	2.480 (1)	
46.00s	0.74f	0.915	5.187	2.997	2.215 (1)	
48.00s	0.79f	0.566	5.047	3.175	1.948 (1)	
50.00s	0.83f	0.216	4.891	3.349	1.678 (1)	
52.00s	0.87f	-0.134	4.718	3.517	1.407 (1)	
54.00s	0.91f	-0.484	4.531	3.678	1.135 (1)	
56.00s	0.95f	-0.833	4.332	3.833	0.860 (1)	
58.00s	0.99f	-1.182	4.122	3.980	0.585 (1)	
60.00s	1.03f	-1.530	3.902	4.120	0.310 (1)	

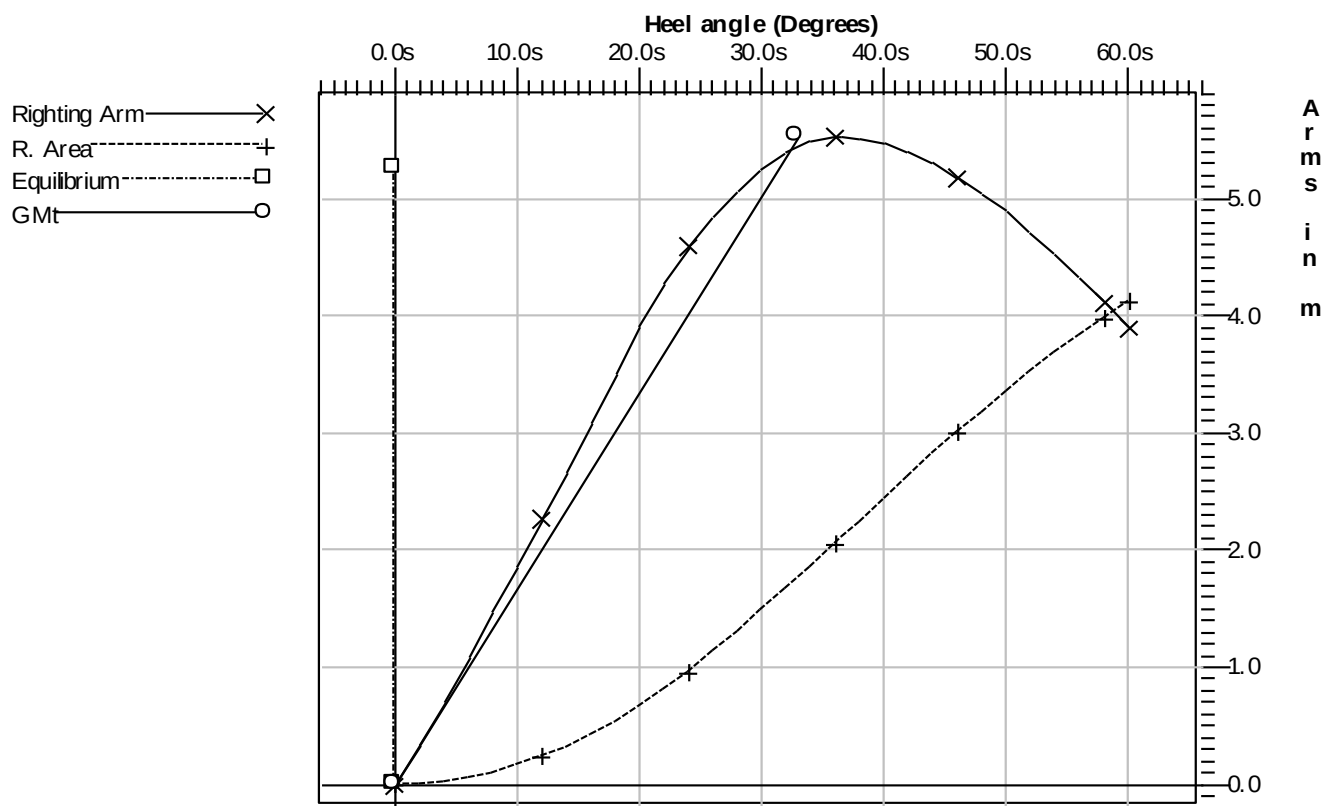
Unprotected Flood Point

Name	L,T,V (m)	Height (m)
(1) Opening No1 Stb	120.000f, 7.000s, 14.000	8.511

IMO A.167

Limit	Min/Max	Actual	Margin	Pass
(1) Area from 0.00 deg to 30.00	>0.0550 m-R	1.483	1.428	Yes
(2) Area from 0.00 deg to 40.00 or Flood	>0.0900 m-R	2.437	2.347	Yes
(3) Area from 30.00 deg to 40.00 or Flood	>0.0300 m-R	0.954	0.924	Yes
(4) Righting Arm at 30.00 deg or MaxRA	>0.200 m	5.529	5.329	Yes
(5) Angle from 0.00 deg to MaxRA	>25.00 deg	36.60	11.60	Yes
(6) GM at Equilibrium	>0.150 m	9.632	9.482	Yes

Righting Arms vs. Heel



DP-Drilling Condition

Tank fillment

Floating Status

Draft FP	5.587 m	Heel	0.01 deg.	GM(Solid)	10.364 m
Draft MS	5.588 m	Equil	Yes	F/S Corr.	1.345 m
Draft AP	5.588 m	Wind	0.0 kn	GM(Fluid)	9.019 m
Trim	0.00/152.20	Wave	No	KMT	18.448 m
LCG	78.791f m	VCG	8.084 m	TPcm	45.00

Loading Summary

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
Light Ship	5 000.00	78.290f	0.000	7.230
Deadweight	17 820.82	78.932f	0.002p	8.324
Displacement	22 820.82	78.791f	0.001p	8.084

Fixed Weight Status

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
LIGHT SHIP	5 000.00	78.290f	0.000	7.230u
ACTIVE MUD TANKS	5.00	43.800f	3.600p	18.900u
ACTIVE MUD TANKS2	5.00	43.800f	1.200p	18.900u
ACTIVE MUD TANKS3	5.00	43.800f	1.200s	18.900u
ACTIVE MUD TANKS4	5.00	43.800f	3.700s	18.900u
BASE OIL TANK	5.00	50.800f	3.600p	18.900u
BRINE TANK	5.00	65.000f	9.900s	18.900u
CEMENT SYSTEM	10.00	50.800f	6.100s	21.500u
CEMENT SYSTEM2	10.00	50.800f	8.600s	21.500u
CEMENT SYSTEM3	10.00	50.800f	11.000s	21.500u
CHEMICAL TANK	5.00	43.800f	7.400s	18.900u
CHEMICALS CONTAINER	5.00	50.800f	3.700s	18.900u
CHEMICALS CONTAINER2	5.00	50.800f	3.700s	21.500u
COILED TUBING ASSEMBLY DRIVE	40.00	89.800f	0.000	17.100u
COILED TUBING EQUIPMENT	30.00	87.800f	8.600p	16.100u
COILED TUBING REEL	90.00	89.800f	0.000	17.100u
COMPLETION FLUID TANK	5.00	65.000f	9.900s	21.500u
CRANE ONE	60.00	57.600f	11.000p	20.100u
CRANE TWO	60.00	92.000f	11.000s	20.100u
CREW AND EFFECTS	15.00	134.000f	0.000	22.300u
DRILLFLOOR	40.00	68.000f	0.000	15.200u
DRY BULK	10.00	50.800f	6.100s	18.900u
DRY BULK 3	10.00	50.800f	11.000s	18.900u
DRY BULK2	10.00	50.800f	8.600s	18.900u
FREEFALL AFT	50.00	5.500f	7.200s	22.300u
FREEFALL FORE PORT - 1	50.00	148.000f	10.500p	25.300u
FREEFALL FORE PORT - 2	50.00	120.800f	10.500p	25.300u
FREEFALL FORE STB - 1	50.00	148.000f	10.500s	25.300u
FREEFALL FORE STB - 2	50.00	120.800f	10.500s	25.300u
GANTRY CRANE	150.00	68.000f	0.000	20.000u
HELIDECK	110.00	141.600f	0.000	31.000u
HP FLARE KO SKID	5.90	8.600f	12.400p	16.600u
LP FLARE KO SKID	3.60	10.600f	12.400p	16.600u
MACHINERY AFT	927.00	19.900f	0.300s	9.600u

MACHINERY FOR	36.00	131.600f	1.500s	7.800u
MOB BOAT	5.00	10.900f	14.500s	16.300u
MOORING - AFT - P	60.00	2.500f	13.500p	16.600u
MOORING - AFT - STB	60.00	2.500f	13.500s	16.600u
MOORING - FORE - P	60.00	147.300f	13.500p	16.600u
MOORING - FORE - STB	60.00	147.300f	13.500s	16.600u
MUD LABORATORY CONTAINER	5.00	43.800f	9.900s	18.900u
MUD PUMP	10.00	50.800f	9.800p	18.900u
MUD PUMP2	10.00	50.800f	7.400p	18.900u
MUD SHALE SHAKER	5.00	43.800f	9.800p	21.500u
MUD SHALE SHAKER2	5.00	43.800f	7.400p	21.500u
OFFLOADING	90.00	7.000f	3.500p	22.100u
OUTFITTING	1 300.00	76.500f	0.000	14.000u
PAINT STORE	0.50	147.500f	0.000	13.600u
PROCESSING PLANT	333.84	29.900f	0.000	21.600u
RISER TRANSPORT RAIL	5.00	53.900f	0.000	18.900u
ROV	5.00	107.000f	12.100p	16.600u
SAND TRAP	5.00	43.800f	9.800p	18.900u
SAND TRAP2	5.00	43.800f	7.400p	18.900u
STORES	150.00	134.400f	0.000	12.500u
SUPERSTRUCTURE	340.00	134.400f	0.000	22.300u
WIRE LINE UNIT	10.00	121.000f	1.200p	15.900u
WIRE LINE UNIT2	5.00	121.000f	1.200s	15.900u
VOITH 1A	93.50	19.500f	6.000p	1.500u
VOITH 1F	93.50	128.400f	5.500p	1.000u
VOITH 2A	93.50	9.700f	0.000	3.700u
VOITH 2F	93.50	138.300f	0.000	1.000u
VOITH 3A	93.50	19.500f	6.000s	1.500u
VOITH 3F	93.50	128.400f	5.500s	1.000u
Total Fixed:	10 017.84	74.015f	0.038s	10.925u

Tank Status

SALT WATER (SpGr 1.025)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
BW_APSD1P.P	98.00%	256.11	7.467f	11.862p	8.780	0.970
BW_APSD1S.S	98.00%	256.11	7.467f	11.862s	8.780	0.970
BW_APSD2P.P	98.00%	220.44	19.708f	14.335p	7.920	0.970
BW_APSD2S.S	98.00%	220.44	19.708f	14.335s	7.920	0.970
BW_FPSD1P.P	98.00%	283.64	128.145f	13.644p	6.800	0.970
BW_FPSD1S.S	98.00%	283.64	128.145f	13.644s	6.800	0.970
BW_FPSD2P.P	98.00%	376.89	139.668f	10.630p	6.915	0.970
BW_FPSD2S.S	98.00%	376.89	139.668f	10.630s	6.915	0.970
BW_MPDBP.P	98.00%	134.70	68.000f	10.000p	1.176	0.970
BW_MPSPD.P	98.00%	201.53	68.003f	14.781p	5.493	0.970
BW_MPSPD.S	98.00%	201.53	68.003f	14.781s	5.493	0.970
BW_TKDB3P.P	70.00%	272.60	56.400f	6.801p	0.840	0.970
BW_TKDB3S.S	70.00%	272.60	56.400f	6.799s	0.840	0.970
BW_TKDB4P.P	98.00%	381.61	79.600f	6.801p	1.176	0.970
BW_TKDB4S.S	10.00%	38.94	79.598f	6.790s	0.120	0.970
BW_TKDB5P.P	98.00%	381.59	91.600f	6.801p	1.176	0.970
BW_TKDB5S.S	98.00%	381.59	91.600f	6.799s	1.176	0.970
BW_TKDB6P.P	98.00%	381.49	103.599f	6.799p	1.176	0.970
BW_TKDB6S.S	98.00%	381.49	103.599f	6.797s	1.176	0.970
BW_TKDB7P.P	98.00%	379.33	115.586f	6.769p	1.183	0.970
BW_TKDB7S.S	98.00%	379.33	115.586f	6.767s	1.183	0.970
BW_TKSD1P.P	98.00%	268.01	32.827f	14.728p	5.599	0.970

BW_TKSD1S.S	98.00%	268.01	32.827f	14.728s	5.599	0.970
BW_TKSD2P.P	98.00%	294.36	44.422f	14.753p	5.547	0.970
BW_TKSD2S.S	98.00%	294.36	44.422f	14.753s	5.547	0.970
BW_TKSD3P.P	98.00%	299.51	56.413f	14.771p	5.512	0.970
BW_TKSD3S.S	98.00%	299.51	56.413f	14.771s	5.512	0.970
BW_TKSD4P.P	98.00%	289.12	79.574f	14.731p	5.605	0.970
BW_TKSD4S.S	85.00%	250.77	79.570f	14.722s	4.914	0.970
BW_TKSD5P.P	98.00%	287.16	91.596f	14.724p	5.622	0.970
BW_TKSD5S.S	98.00%	287.16	91.596f	14.724s	5.622	0.970
BW_TKSD6P.P	98.00%	283.86	103.577f	14.715p	5.648	0.970
BW_TKSD6S.S	98.00%	283.86	103.577f	14.715s	5.648	0.970
BW_TKSD7P.P	98.00%	266.98	115.478f	14.664p	5.778	0.970
BW_TKSD7S.S	98.00%	266.98	115.478f	14.664s	5.778	0.970
FOREPEAK.C	98.00%	997.52	147.755f	0.000	6.595	0.970
Subtotals:	36.17%	10 999.63	88.083f	0.386p	4.687	

FUEL OIL (SpGr 0.870)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
BUNKER_1.C	50.00%	131.77	28.800f	0.000	5.300	0.850
BUNKER_2.S	50.00%	120.78	28.800f	9.200s	5.300	0.850
BUNKER_3.P	50.00%	120.78	28.800f	9.200p	5.300	0.850
Subtotals:	1.92%	373.34	28.800f	0.000	5.300	

CH (SpGr 1.200)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
CHEMICAL_C1.S	98.00%	44.64	50.850f	3.650s	18.884	0.950
CHEMICAL_C2.S	98.00%	44.63	50.850f	3.650s	21.504	0.950
CHEMICAL_TK.S	98.00%	44.64	43.850f	7.450s	18.884	0.950
Subtotals:	98.00%	133.91	48.516f	4.917s	19.757	

BO (SpGr 0.800)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
BASEOIL_TK.P	98.00%	29.76	50.850f	3.650p	18.884	0.950
Subtotals:	98.00%	29.76	50.850f	3.650p	18.884	

BR (SpGr 1.438)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
BRINE_TK.S	98.00%	51.35	64.950f	9.900s	18.884	0.950
Subtotals:	98.00%	51.35	64.950f	9.900s	18.884	

CO (SpGr 1.500)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
COMPLETE_TK.S	98.00%	53.56	64.950f	9.900s	21.504	0.950
Subtotals:	98.00%	53.56	64.950f	9.900s	21.504	

DB1 (SpGr 1.500)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
DRYBULK_1.S	98.00%	53.57	50.850f	6.100s	18.884	0.950
Subtotals:	98.00%	53.57	50.850f	6.100s	18.884	

DB2 (SpGr 2.400)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
DRYBULK_2.S	98.00%	89.28	50.850f	8.550s	18.884	0.950

Subtotals:	98.00%	89.28	50.850f	8.550s	18.884	
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DB3 (SpGr 0.900)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
DRYBULK_3.S	98.00%	32.14	50.850f	11.000s	18.884	0.950
Subtotals:	98.00%	32.14	50.850f	11.000s	18.884	

MU (SpGr 1.300)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
RE_MUD1.P	98.00%	179.73	45.300f	7.500p	16.217	0.950
RE_MUD2.P	98.00%	179.73	45.300f	2.500p	16.217	0.950
Subtotals:	98.00%	359.47	45.300f	5.000p	16.217	

FRESH WATER (SpGr 1.000)

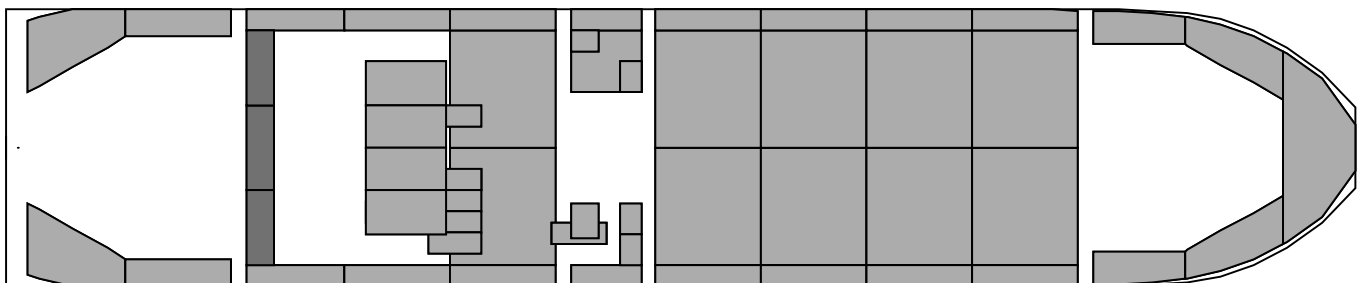
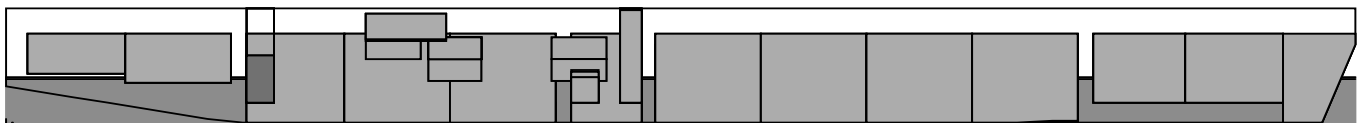
Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
BLACK_W.P	98.00%	22.88	65.600f	12.400p	3.968	0.950
DRILL_W1.S	98.00%	138.26	45.300f	2.500s	16.217	0.950
DRILL_W2.S	98.00%	138.26	45.300f	7.500s	16.217	0.950
FRESH_W1.S	98.00%	93.31	70.800f	8.200s	8.084	0.950
FRESH_W2.S	98.00%	93.31	70.800f	11.800s	8.084	0.950
FRESH_W3.P	98.00%	93.31	70.800f	8.200p	8.084	0.950
GREY_W.S	98.00%	47.67	65.600f	8.400s	4.360	0.950
Subtotals:	85.30%	626.99	58.969f	4.147s	11.238	

All Tanks

	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
Totals:		12 802.99	82.528f	0.032p	5.861	

Displacer Status

Item	Status	Spgr	Displ (MT)	LCB (m)	TCB (m)	VCB (m)	Eff /Perm
HULL	Intact	1.025	22 820.82	78.791f	0.002p	2.922	1.000
SubTotals:			22 820.82	78.791f	0.002p	2.922	



Fluid Legend

Fluid Name	Legend	Weight (MT)	Load%
SALT WATER		10 999.63	36.17%

FUEL OIL		373.34	1.92%
CH		133.91	98.00%
BO		29.76	98.00%
BR		51.35	98.00%
CO		53.56	98.00%
DB1		53.57	98.00%
DB2		89.28	98.00%
DB3		32.14	98.00%
MU		359.47	98.00%
FRESH WATER		626.99	85.30%

Righting Arms vs Heel Angle

Heel Angle (deg)	Trim Angle (deg)	Origin Depth (m)	Righting Arm (m)	Area (m-Rad)	Flood Pt Height (m)	Notes
0.00	0.00	5.588	-0.001	0.000	8.413 (1)	
0.01p	0.00	5.588	0.000	0.000	8.413 (1)	Equil
2.00p	0.00f	5.582	0.331	0.006	8.652 (1)	
4.00p	0.01f	5.562	0.680	0.023	8.880 (1)	
6.00p	0.01f	5.529	1.035	0.053	9.098 (1)	
8.00p	0.02f	5.482	1.396	0.096	9.305 (1)	
10.00p	0.04f	5.422	1.764	0.151	9.501 (1)	
12.00p	0.06f	5.349	2.141	0.219	9.685 (1)	
14.00p	0.08f	5.262	2.526	0.300	9.858 (1)	
16.00p	0.10f	5.160	2.917	0.395	10.020 (1)	
18.00p	0.13f	5.041	3.311	0.504	10.173 (1)	
20.00p	0.16f	4.902	3.696	0.626	10.320 (1)	
22.00p	0.19f	4.732	4.042	0.761	10.469 (1)	
24.00p	0.23f	4.527	4.333	0.908	10.627 (1)	
26.00p	0.27f	4.290	4.576	1.063	10.794 (1)	
28.00p	0.31f	4.024	4.782	1.227	10.968 (1)	
30.00p	0.36f	3.731	4.949	1.397	11.147 (1)	
32.00p	0.41f	3.415	5.065	1.571	11.317 (1)	
34.00p	0.46f	3.092	5.124	1.749	11.474 (1)	
35.49p	0.49f	2.849	5.136	1.883	11.581 (1)	MaxRa
36.00p	0.51f	2.765	5.134	1.928	11.617 (1)	
38.00p	0.55f	2.434	5.105	2.107	11.748 (1)	
40.00p	0.60f	2.099	5.040	2.284	11.867 (1)	
42.00p	0.65f	1.761	4.946	2.459	11.971 (1)	
44.00p	0.69f	1.421	4.827	2.629	12.061 (1)	
46.00p	0.74f	1.079	4.687	2.795	12.137 (1)	
48.00p	0.78f	0.736	4.529	2.956	12.198 (1)	
50.00p	0.82f	0.392	4.354	3.111	12.245 (1)	
52.00p	0.86f	0.048	4.164	3.260	12.277 (1)	
54.00p	0.90f	-0.297	3.960	3.402	12.295 (1)	
56.00p	0.94f	-0.641	3.745	3.536	12.297 (1)	
58.00p	0.98f	-0.985	3.520	3.663	12.284 (1)	
60.00p	1.02f	-1.328	3.285	3.782	12.257 (1)	

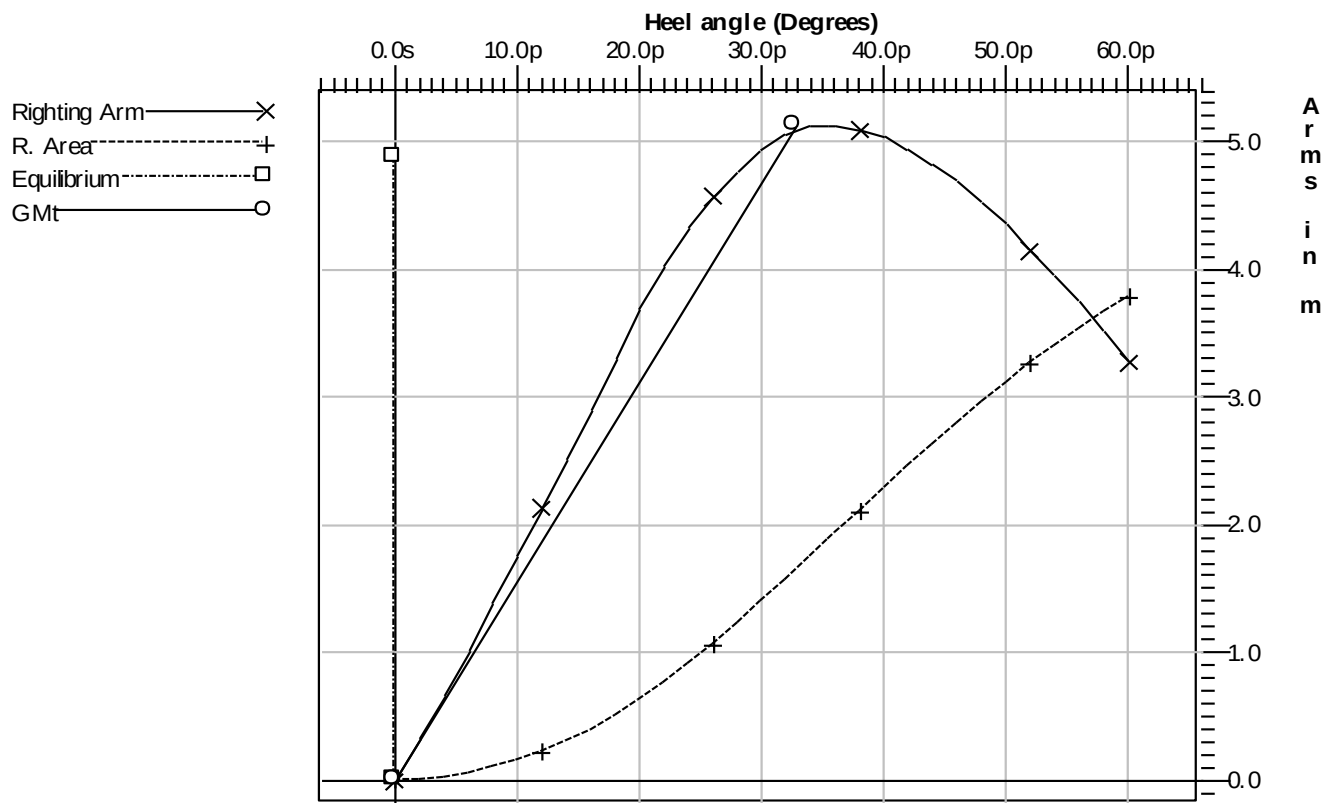
Unprotected Flood Point

Name	L,T,V (m)	Height (m)
(1) Opening No1 Stb	120.000f, 7.000s, 14.000	8.413

IMO A.167

Limit	Min/Max	Actual	Margin	Pass
(1) Area from 0.00 deg to 30.00	>0.0550 m-R	1.397	1.342	Yes
(2) Area from 0.00 deg to 40.00 or Flood	>0.0900 m-R	2.284	2.194	Yes
(3) Area from 30.00 deg to 40.00 or Flood	>0.0300 m-R	0.888	0.858	Yes
(4) Righting Arm at 30.00 deg or MaxRA	>0.200 m	5.136	4.936	Yes
(5) Angle from 0.00 deg to MaxRA	>25.00 deg	35.49	10.49	Yes
(6) GM at Equilibrium	>0.500 m	9.019	8.519	Yes

Righting Arms vs. Heel



%100 Load Condition

Tank fillment

Floating Status

Draft FP	8.994 m	Heel	zero	GM(Solid)	6.671 m
Draft MS	9.004 m	Equil	Yes	F/S Corr.	1.312 m
Draft AP	9.014 m	Wind	0.0 kn	GM(Fluid)	5.359 m
Trim	0.02/144.80	Wave	No	KMT	14.571 m
LCG	77.025f m	VCG	7.900 m	TPcm	46.83

Loading Summary

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
Light Ship	5 000.00	78.290f	0.000	7.230
Deadweight	33 554.14	76.836f	0.000	8.000
Displacement	38 554.14	77.025f	0.000	7.900

Fixed Weight Status

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
LIGHT SHIP	5 000.00	78.290f	0.000	7.230u
CRANE ONE	60.00	57.600f	11.000p	20.100u
CRANE TWO	60.00	92.000f	11.000s	20.100u
CREW AND EFFECTS	15.00	134.000f	0.000	22.300u
DRILLFLOOR	40.00	68.000f	0.000	15.200u
FREEFALL AFT	50.00	5.500f	7.200s	22.300u
FREEFALL FORE PORT - 1	50.00	148.000f	10.500p	25.300u
FREEFALL FORE PORT - 2	50.00	120.800f	10.500p	25.300u
FREEFALL FORE STB - 1	50.00	148.000f	10.500s	25.300u
FREEFALL FORE STB - 2	50.00	120.800f	10.500s	25.300u
GANTRY CRANE	150.00	68.000f	0.000	20.000u
HELIDECK	110.00	141.600f	0.000	31.000u
HP FLARE KO SKID	5.90	8.600f	12.400p	16.600u
LP FLARE KO SKID	3.60	10.600f	12.400p	16.600u
MACHINERY AFT	927.00	19.900f	0.300s	9.600u
MACHINERY FOR	36.00	131.600f	1.500s	7.800u
MOB BOAT	5.00	10.900f	14.500s	16.300u
MOORING - AFT - P	60.00	2.500f	13.500p	16.600u
MOORING - AFT - STB	60.00	2.500f	13.500s	16.600u
MOORING - FORE - P	60.00	147.300f	13.500p	16.600u
MOORING - FORE - STB	60.00	147.300f	13.500s	16.600u
OFFLOADING	90.00	7.000f	3.500p	22.100u
OUTFITTING	1 300.00	76.500f	0.000	14.000u
PAINT STORE	0.50	147.500f	0.000	13.600u
PROCESSING PLANT	333.84	29.900f	0.000	21.600u
RISER TRANSPORT RAIL	5.00	53.900f	0.000	18.900u
ROV	5.00	107.000f	12.100p	16.600u
STORES	150.00	134.400f	0.000	12.500u
SUPERSTRUCTURE	340.00	134.400f	0.000	22.300u
VOITH 1A	93.50	19.500f	6.000p	1.500u
VOITH 1F	93.50	128.400f	5.500p	1.000u
VOITH 2A	93.50	9.700f	0.000	3.700u
VOITH 2F	93.50	138.300f	0.000	1.000u
VOITH 3A	93.50	19.500f	6.000s	1.500u
VOITH 3F	93.50	128.400f	5.500s	1.000u
Total Fixed:	9 687.84	74.081f	0.028s	10.677u

Tank Status

SALT WATER (SpGr 1.025)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
AFTPEAK.C	40.00%	123.05	1.273f	0.000	6.600	0.970
BW_APSD1P.P	98.00%	256.11	7.467f	11.862p	8.780	0.970
BW_APSD1S.S	98.00%	256.11	7.467f	11.862s	8.780	0.970
BW_APSD2P.P	98.00%	220.44	19.708f	14.335p	7.920	0.970
BW_APSD2S.S	98.00%	220.44	19.708f	14.335s	7.920	0.970
BW_FPSD1P.P	98.00%	283.64	128.145f	13.644p	6.800	0.970
BW_FPSD1S.S	98.00%	283.64	128.145f	13.644s	6.800	0.970
BW_FPSD2P.P	98.00%	376.89	139.668f	10.630p	6.915	0.970
BW_FPSD2S.S	98.00%	376.89	139.668f	10.630s	6.915	0.970
BW_MPSPDP.P	98.00%	201.53	68.002f	14.781p	5.493	0.970
BW_MPSPDS.S	98.00%	201.53	68.002f	14.781s	5.493	0.970
BW_TKDB4P.P	95.00%	369.92	79.599f	6.800p	1.140	0.970
BW_TKDB4S.S	85.00%	330.98	79.599f	6.800s	1.020	0.970
BW_TKDB5P.P	50.00%	194.69	91.599f	6.799p	0.600	0.970
BW_TKDB5S.S	50.00%	194.69	91.599f	6.799s	0.600	0.970
BW_TKDB6P.P	98.00%	381.49	103.599f	6.798p	1.176	0.970
BW_TKDB6S.S	98.00%	381.49	103.599f	6.798s	1.176	0.970
BW_TKDB7P.P	98.00%	379.33	115.585f	6.768p	1.183	0.970
BW_TKDB7S.S	98.00%	379.33	115.585f	6.768s	1.183	0.970
BW_TKSD1P.P	98.00%	268.01	32.826f	14.728p	5.599	0.970
BW_TKSD1S.S	98.00%	268.01	32.826f	14.728s	5.599	0.970
BW_TKSD2P.P	98.00%	294.36	44.422f	14.753p	5.547	0.970
BW_TKSD2S.S	98.00%	294.36	44.422f	14.753s	5.547	0.970
BW_TKSD3P.P	98.00%	299.51	56.413f	14.771p	5.512	0.970
BW_TKSD3S.S	95.00%	290.34	56.414f	14.770s	5.351	0.970
BW_TKSD4P.P	98.00%	289.12	79.574f	14.731p	5.605	0.970
BW_TKSD4S.S	98.00%	289.12	79.574f	14.731s	5.605	0.970
BW_TKSD5P.P	98.00%	287.16	91.596f	14.724p	5.622	0.970
BW_TKSD5S.S	98.00%	287.16	91.596f	14.724s	5.622	0.970
BW_TKSD6P.P	98.00%	283.86	103.577f	14.715p	5.648	0.970
BW_TKSD6S.S	98.00%	283.86	103.577f	14.715s	5.648	0.970
BW_TKSD7P.P	98.00%	266.98	115.478f	14.664p	5.778	0.970
BW_TKSD7S.S	98.00%	266.98	115.478f	14.664s	5.778	0.970
FOREPEAK.C	20.00%	203.58	147.030f	0.000	2.103	0.970
Subtotals:	31.52%	9 584.59	83.705f	0.042p	4.751	

FUEL OIL (SpGr 0.870)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
BUNKER_1.C	98.00%	258.26	28.800f	0.000	8.084	0.850
BUNKER_2.S	98.00%	236.74	28.800f	9.200s	8.084	0.850
BUNKER_3.P	98.00%	236.74	28.800f	9.200p	8.084	0.850
CARGO_1P.P	98.00%	914.62	34.400f	6.800p	8.084	0.850
CARGO_1S.S	98.00%	914.62	34.400f	6.800s	8.084	0.850
CARGO_2P.P	98.00%	1 371.96	44.400f	6.800p	8.084	0.850
CARGO_2S.S	98.00%	1 371.96	44.400f	6.800s	8.084	0.850
CARGO_3P.P	98.00%	1 371.96	56.400f	6.800p	8.084	0.850
CARGO_3S.S	98.00%	1 371.96	56.400f	6.800s	8.084	0.850
CARGO_4P.P	98.00%	1 371.96	79.600f	6.800p	8.084	0.850
CARGO_4S.S	98.00%	1 371.96	79.600f	6.800s	8.084	0.850
CARGO_5P.P	98.00%	1 371.96	91.600f	6.800p	8.084	0.850
CARGO_5S.S	98.00%	1 371.96	91.600f	6.800s	8.084	0.850
CARGO_6P.P	98.00%	1 371.96	103.600f	6.800p	8.084	0.850

CARGO_6S.S	98.00%	1 371.96	103.600f	6.800s	8.084	0.850
CARGO_7P.P	98.00%	1 371.97	115.600f	6.800p	8.084	0.850
CARGO_7S.S	98.00%	1 371.97	115.600f	6.800s	8.084	0.850
Subtotals:	98.00%	19 024.55	75.261f	0.000	8.084	

FRESH WATER (SpGr 1.000)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
BLACK_W.P	98.00%	22.88	65.600f	12.400p	3.968	0.950
FRESH_W1.S	98.00%	93.31	70.800f	8.200s	8.084	0.950
FRESH_W3.P	98.00%	93.31	70.800f	8.200p	8.084	0.950
GREY_W.S	98.00%	47.67	65.600f	8.400s	4.360	0.950
Subtotals:	34.99%	257.16	69.374f	0.454s	7.028	

All Tanks

	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
Totals:		28 866.30	78.013f	0.010p	6.968	

Displacer Status

Item	Status	Spgr	Displ (MT)	LCB (m)	TCB (m)	VCB (m)	Eff /Perm
HULL	Intact	1.025	38 553.96	77.024f	0.000	4.715	1.000
SubTotals:			38 553.96	77.024f	0.000	4.715	



Fluid Legend

Fluid Name	Legend	Weight (MT)	Load%
SALT WATER		9 584.59	31.52%
FUEL OIL		19 024.55	98.00%
FRESH WATER		257.16	34.99%

Righting Arms vs Heel Angle

Heel Angle (deg)	Trim Angle (deg)	Origin Depth (m)	Righting Arm (m)	Area (m-Rad)	Flood Pt Height (m)	Notes
0.00	0.01a	9.014	0.000	0.000	5.003 (1)	Equil
2.00s	0.01a	9.007	0.193	0.003	4.756 (1)	
4.00s	0.01a	8.985	0.403	0.014	4.503 (1)	
6.00s	0.00a	8.950	0.622	0.032	4.245 (1)	

8.00s	0.00f	8.900	0.848	0.057	3.983 (1)	
10.00s	0.01f	8.836	1.078	0.091	3.716 (1)	
12.00s	0.02f	8.757	1.314	0.133	3.445 (1)	
14.00s	0.03f	8.665	1.558	0.183	3.170 (1)	
16.00s	0.04f	8.559	1.809	0.241	2.893 (1)	
18.00s	0.05f	8.441	2.067	0.309	2.609 (1)	
20.00s	0.06f	8.331	2.293	0.385	2.307 (1)	
22.00s	0.07f	8.243	2.476	0.469	1.976 (1)	
24.00s	0.07f	8.170	2.623	0.557	1.622 (1)	
26.00s	0.08f	8.111	2.741	0.651	1.244 (1)	
28.00s	0.08f	8.060	2.841	0.749	0.846 (1)	
30.00s	0.09f	8.014	2.910	0.849	0.432 (1)	
32.00s	0.09f	7.970	2.955	0.951	0.000 (1)	FldPt
32.00s	0.09f	7.970	2.955	0.951	-0.001 (1)	
34.00s	0.10f	7.919	2.977	1.055	-0.438 (1)	
34.65s	0.10f	7.902	2.978	1.089	-0.582 (1)	MaxRa
36.00s	0.11f	7.863	2.973	1.159	-0.882 (1)	
38.00s	0.12f	7.797	2.947	1.262	-1.325 (1)	
40.00s	0.13f	7.722	2.901	1.364	-1.769 (1)	
42.00s	0.14f	7.637	2.838	1.465	-2.213 (1)	
44.00s	0.15f	7.544	2.761	1.562	-2.655 (1)	
46.00s	0.16f	7.440	2.672	1.657	-3.095 (1)	
48.00s	0.18f	7.327	2.572	1.749	-3.532 (1)	
50.00s	0.19f	7.205	2.462	1.837	-3.966 (1)	
52.00s	0.20f	7.074	2.344	1.920	-4.395 (1)	
54.00s	0.22f	6.934	2.219	2.000	-4.820 (1)	
56.00s	0.23f	6.785	2.087	2.075	-5.240 (1)	
58.00s	0.24f	6.627	1.949	2.146	-5.653 (1)	
60.00s	0.26f	6.462	1.805	2.211	-6.060 (1)	

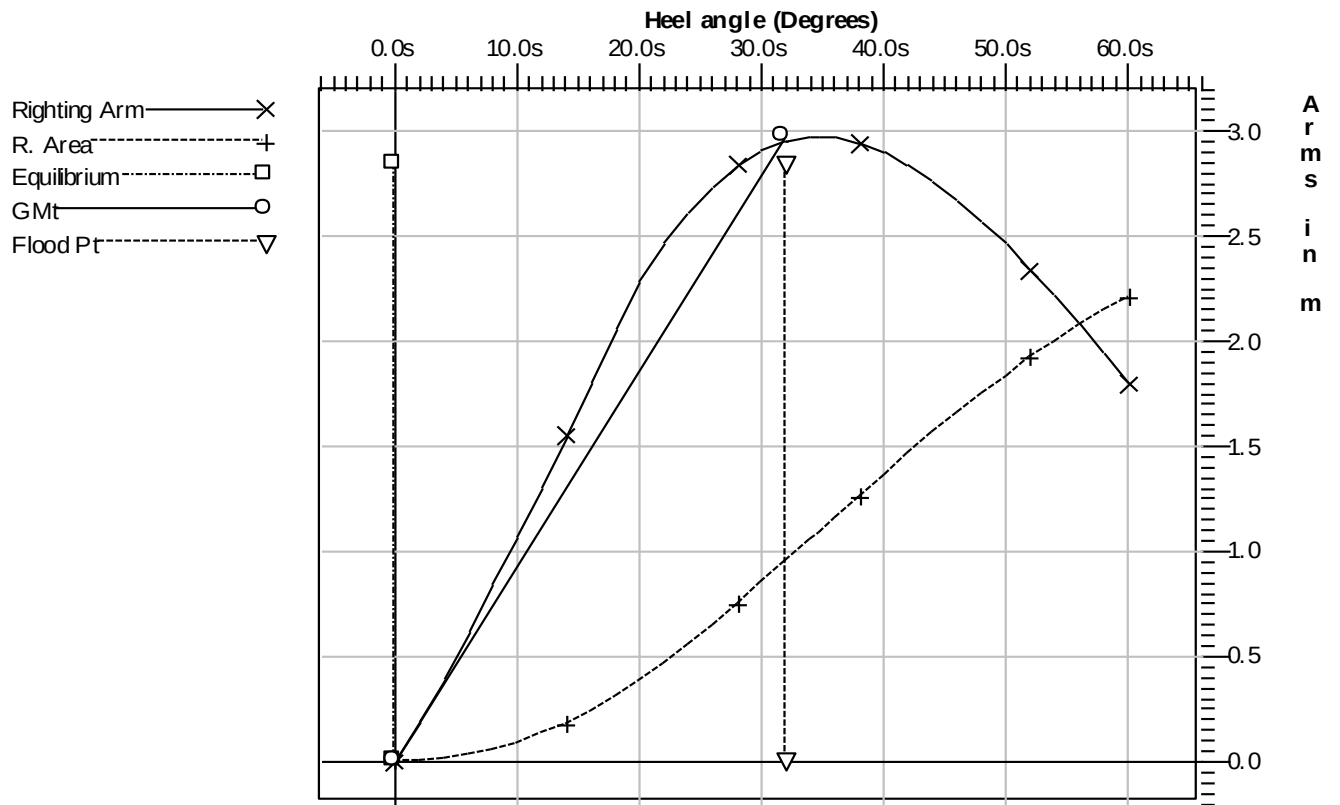
Unprotected Flood Point

Name	L,T,V (m)	Height (m)
(1) Opening No1 Stb	120.000f, 7.000s, 14.000	5.003

IMO A.167

Limit	Min/Max	Actual	Margin	Pass
(1) Area from 0.00 deg to 30.00	>0.0550 m-R	0.849	0.794	Yes
(2) Area from 0.00 deg to 40.00 or Flood	>0.0900 m-R	0.951	0.861	Yes
(3) Area from 30.00 deg to 40.00 or Flood	>0.0300 m-R	0.102	0.072	Yes
(4) Righting Arm at 30.00 deg or MaxRA	>0.200 m	2.978	2.778	Yes
(5) Angle from 0.00 deg to MaxRA	>25.00 deg	34.65	9.65	Yes
(6) GM at Equilibrium	>0.150 m	5.359	5.209	Yes

Righting Arms vs. Heel



%20 Load Condition

Tank fillment

Floating Status

Draft FP	6.321 m	Heel	zero	GM(Solid)	10.386 m
Draft MS	6.318 m	Equil	Yes	F/S Corr.	2.295 m
Draft AP	6.315 m	Wind	0.0 kn	GM(Fluid)	8.090 m
Trim	0.00/144.80	Wave	No	KMT	17.116 m
LCG	78.332f m	VCG	6.730 m	TPcm	45.53

Loading Summary

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
Light Ship	5 000.00	78.290f	0.000	7.230
Deadweight	21 126.67	78.343f	0.000	6.612
Displacement	26 126.67	78.332f	0.000	6.730

Fixed Weight Status

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
LIGHT SHIP	5 000.00	78.290f	0.000	7.230u
CRANE ONE	60.00	57.600f	11.000p	20.100u
CRANE TWO	60.00	92.000f	11.000s	20.100u
CREW AND EFFECTS	15.00	134.000f	0.000	22.300u
DRILLFLOOR	40.00	68.000f	0.000	15.200u
FREEFALL AFT	50.00	5.500f	7.200s	22.300u
FREEFALL FORE PORT - 1	50.00	148.000f	10.500p	25.300u
FREEFALL FORE PORT - 2	50.00	120.800f	10.500p	25.300u
FREEFALL FORE STB - 1	50.00	148.000f	10.500s	25.300u
FREEFALL FORE STB - 2	50.00	120.800f	10.500s	25.300u
GANTRY CRANE	150.00	68.000f	0.000	20.000u
HELIDECK	110.00	141.600f	0.000	31.000u
HP FLARE KO SKID	5.90	8.600f	12.400p	16.600u
LP FLARE KO SKID	3.60	10.600f	12.400p	16.600u
MACHINERY AFT	927.00	19.900f	0.300s	9.600u
MACHINERY FOR	36.00	131.600f	1.500s	7.800u
MOB BOAT	5.00	10.900f	14.500s	16.300u
MOORING - AFT - P	60.00	2.500f	13.500p	16.600u
MOORING - AFT - STB	60.00	2.500f	13.500s	16.600u
MOORING - FORE - P	60.00	147.300f	13.500p	16.600u
MOORING - FORE - STB	60.00	147.300f	13.500s	16.600u
OFFLOADING	90.00	7.000f	3.500p	22.100u
OUTFITTING	1 300.00	76.500f	0.000	14.000u
PAINT STORE	0.50	147.500f	0.000	13.600u
PROCESSING PLANT	333.84	29.900f	0.000	21.600u
RISER TRANSPORT RAIL	5.00	53.900f	0.000	18.900u
ROV	5.00	107.000f	12.100p	16.600u
STORES	150.00	134.400f	0.000	12.500u
SUPERSTRUCTURE	340.00	134.400f	0.000	22.300u
VOITH 1A	93.50	19.500f	6.000p	1.500u
VOITH 1F	93.50	128.400f	5.500p	1.000u
VOITH 2A	93.50	9.700f	0.000	3.700u
VOITH 2F	93.50	138.300f	0.000	1.000u
VOITH 3A	93.50	19.500f	6.000s	1.500u
VOITH 3F	93.50	128.400f	5.500s	1.000u
Total Fixed:	9 687.84	74.081f	0.028s	10.677u

Tank Status

SALT WATER (SpGr 1.025)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
BW_APSD1P.P	98.00%	256.11	7.467f	11.862p	8.780	0.970
BW_APSD1S.S	98.00%	256.11	7.467f	11.862s	8.780	0.970
BW_APSD2P.P	98.00%	220.44	19.708f	14.335p	7.920	0.970
BW_APSD2S.S	98.00%	220.44	19.708f	14.335s	7.920	0.970
BW_FPSD1P.P	98.00%	283.64	128.145f	13.644p	6.800	0.970
BW_FPSD1S.S	98.00%	283.64	128.145f	13.644s	6.800	0.970
BW_FPSD2P.P	98.00%	376.89	139.668f	10.630p	6.915	0.970
BW_FPSD2S.S	98.00%	376.89	139.668f	10.630s	6.915	0.970
BW_MPDBP.P	50.00%	68.72	68.000f	10.000p	0.600	0.970
BW_MPDBS.S	50.00%	68.72	68.000f	10.000s	0.600	0.970
BW_MPSPDP.P	98.00%	201.53	68.003f	14.781p	5.493	0.970
BW_MPSPDS.S	98.00%	201.53	68.003f	14.781s	5.493	0.970
BW_TKDB2P.P	60.00%	233.65	44.400f	6.800p	0.720	0.970
BW_TKDB2S.S	60.00%	233.65	44.400f	6.800s	0.720	0.970
BW_TKDB3P.P	75.00%	292.07	56.400f	6.800p	0.900	0.970
BW_TKDB3S.S	70.00%	272.60	56.400f	6.800s	0.840	0.970
BW_TKDB4P.P	95.00%	369.92	79.600f	6.800p	1.140	0.970
BW_TKDB4S.S	90.00%	350.45	79.600f	6.800s	1.080	0.970
BW_TKDB5P.P	98.00%	381.59	91.600f	6.800p	1.176	0.970
BW_TKDB5S.S	98.00%	381.59	91.600f	6.800s	1.176	0.970
BW_TKDB6P.P	98.00%	381.49	103.599f	6.798p	1.176	0.970
BW_TKDB6S.S	98.00%	381.49	103.599f	6.798s	1.176	0.970
BW_TKDB7P.P	98.00%	379.33	115.586f	6.768p	1.183	0.970
BW_TKDB7S.S	98.00%	379.33	115.586f	6.768s	1.183	0.970
BW_TKSD1P.P	98.00%	268.01	32.827f	14.728p	5.599	0.970
BW_TKSD1S.S	98.00%	268.01	32.827f	14.728s	5.599	0.970
BW_TKSD2P.P	98.00%	294.36	44.422f	14.753p	5.547	0.970
BW_TKSD2S.S	98.00%	294.36	44.422f	14.753s	5.547	0.970
BW_TKSD3P.P	98.00%	299.51	56.413f	14.771p	5.512	0.970
BW_TKSD3S.S	98.00%	299.51	56.413f	14.771s	5.512	0.970
BW_TKSD4P.P	98.00%	289.12	79.574f	14.731p	5.605	0.970
BW_TKSD4S.S	95.00%	280.27	79.573f	14.729s	5.446	0.970
BW_TKSD5P.P	98.00%	287.16	91.596f	14.724p	5.622	0.970
BW_TKSD5S.S	98.00%	287.16	91.596f	14.724s	5.622	0.970
BW_TKSD6P.P	98.00%	283.86	103.577f	14.715p	5.648	0.970
BW_TKSD6S.S	98.00%	283.86	103.577f	14.715s	5.648	0.970
BW_TKSD7P.P	98.00%	266.98	115.478f	14.664p	5.778	0.970
BW_TKSD7S.S	98.00%	266.98	115.478f	14.664s	5.778	0.970
FOREPEAK.C	88.00%	895.74	147.726f	0.000	6.099	0.970
Subtotals:	38.53%	11 716.70	85.524f	0.034p	4.385	

FUEL OIL (SpGr 0.870)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
BUNKER_1.C	98.00%	258.26	28.800f	0.000	8.084	0.850
BUNKER_2.S	98.00%	236.74	28.800f	9.200s	8.084	0.850
BUNKER_3.P	98.00%	236.74	28.800f	9.200p	8.084	0.850
CARGO_1P.P	20.00%	186.66	34.400f	6.800p	3.560	0.850
CARGO_1S.S	20.00%	186.66	34.400f	6.800s	3.560	0.850
CARGO_2P.P	20.00%	279.99	44.400f	6.800p	3.560	0.850
CARGO_2S.S	20.00%	279.99	44.400f	6.800s	3.560	0.850
CARGO_3P.P	20.00%	279.99	56.400f	6.800p	3.560	0.850
CARGO_3S.S	20.00%	279.99	56.400f	6.800s	3.560	0.850

CARGO_4P.P	20.00%	279.99	79.600f	6.800p	3.560	0.850
CARGO_4S.S	20.00%	279.99	79.600f	6.800s	3.560	0.850
CARGO_5P.P	20.00%	279.99	91.600f	6.800p	3.560	0.850
CARGO_5S.S	20.00%	279.99	91.600f	6.800s	3.560	0.850
CARGO_6P.P	20.00%	279.99	103.600f	6.800p	3.560	0.850
CARGO_6S.S	20.00%	279.99	103.600f	6.800s	3.560	0.850
CARGO_7P.P	20.00%	279.99	115.600f	6.800p	3.560	0.850
CARGO_7S.S	20.00%	279.99	115.600f	6.800s	3.560	0.850
Subtotals:	23.00%	4 464.96	69.201f	0.000	4.301	

FRESH WATER (SpGr 1.000)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
BLACK_W.P	98.00%	22.88	65.600f	12.400p	3.968	0.950
FRESH_W1.S	98.00%	93.31	70.800f	8.200s	8.084	0.950
FRESH_W3.P	98.00%	93.31	70.800f	8.200p	8.084	0.950
GREY_W.S	98.00%	47.67	65.600f	8.400s	4.360	0.950
Subtotals:	34.99%	257.16	69.374f	0.454s	7.028	

All Tanks

	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
Totals:		16 438.83	80.838f	0.017p	4.404	

Displacer Status

Item	Status	Spgr	Displ (MT)	LCB (m)	TCB (m)	VCB (m)	Eff /Perm
HULL	Intact	1.025	26 126.66	78.333f	0.000	3.306	1.000
SubTotals:			26 126.66	78.333f	0.000	3.306	



Fluid Legend

Fluid Name	Legend	Weight (MT)	Load%
SALT WATER		11 716.70	38.53%
FUEL OIL		4 464.96	23.00%
FRESH WATER		257.16	34.99%

Righting Arms vs Heel Angle

Heel Angle (deg)	Trim Angle (deg)	Origin Depth (m)	Righting Arm (m)	Area (m-Rad)	Flood Pt Height	Notes
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					(m)	
0.00	0.00f	6.315	0.000	0.000	7.680 (1)	Equil
2.00s	0.00f	6.308	0.296	0.005	7.431 (1)	
4.00s	0.01f	6.287	0.603	0.021	7.173 (1)	
6.00s	0.02f	6.254	0.916	0.047	6.906 (1)	
8.00s	0.02f	6.206	1.234	0.085	6.631 (1)	
10.00s	0.04f	6.145	1.561	0.134	6.348 (1)	
12.00s	0.05f	6.070	1.896	0.194	6.058 (1)	
14.00s	0.07f	5.983	2.239	0.266	5.761 (1)	
16.00s	0.09f	5.882	2.590	0.350	5.457 (1)	
18.00s	0.11f	5.767	2.950	0.447	5.148 (1)	
20.00s	0.14f	5.636	3.315	0.556	4.835 (1)	
22.00s	0.17f	5.484	3.681	0.678	4.521 (1)	
24.00s	0.20f	5.306	4.027	0.813	4.215 (1)	
26.00s	0.24f	5.093	4.331	0.959	3.924 (1)	
28.00s	0.28f	4.850	4.587	1.115	3.640 (1)	
30.00s	0.32f	4.593	4.768	1.278	3.354 (1)	
32.00s	0.37f	4.332	4.887	1.447	3.065 (1)	
34.00s	0.41f	4.066	4.954	1.619	2.772 (1)	
36.00s	0.44f	3.864	4.980	1.792	2.477 (1)	
36.39s	0.46f	3.742	4.981	1.826	2.419 (1)	MaxRa
38.00s	0.49f	3.519	4.971	1.966	2.179 (1)	
40.00s	0.53f	3.239	4.931	2.139	1.878 (1)	
42.00s	0.57f	2.954	4.866	2.310	1.577 (1)	
44.00s	0.61f	2.665	4.779	2.478	1.275 (1)	
46.00s	0.64f	2.373	4.672	2.643	0.971 (1)	
48.00s	0.68f	2.077	4.547	2.804	0.666 (1)	
50.00s	0.72f	1.778	4.408	2.960	0.361 (1)	
52.00s	0.75f	1.477	4.254	3.111	0.055 (1)	
52.36s	0.76f	1.422	4.225	3.138	0.000 (1)	FldPt
54.00s	0.78f	1.175	4.088	3.257	-0.250 (1)	
56.00s	0.82f	0.871	3.909	3.397	-0.555 (1)	
58.00s	0.85f	0.566	3.722	3.530	-0.859 (1)	
60.00s	0.88f	0.261	3.523	3.656	-1.161 (1)	

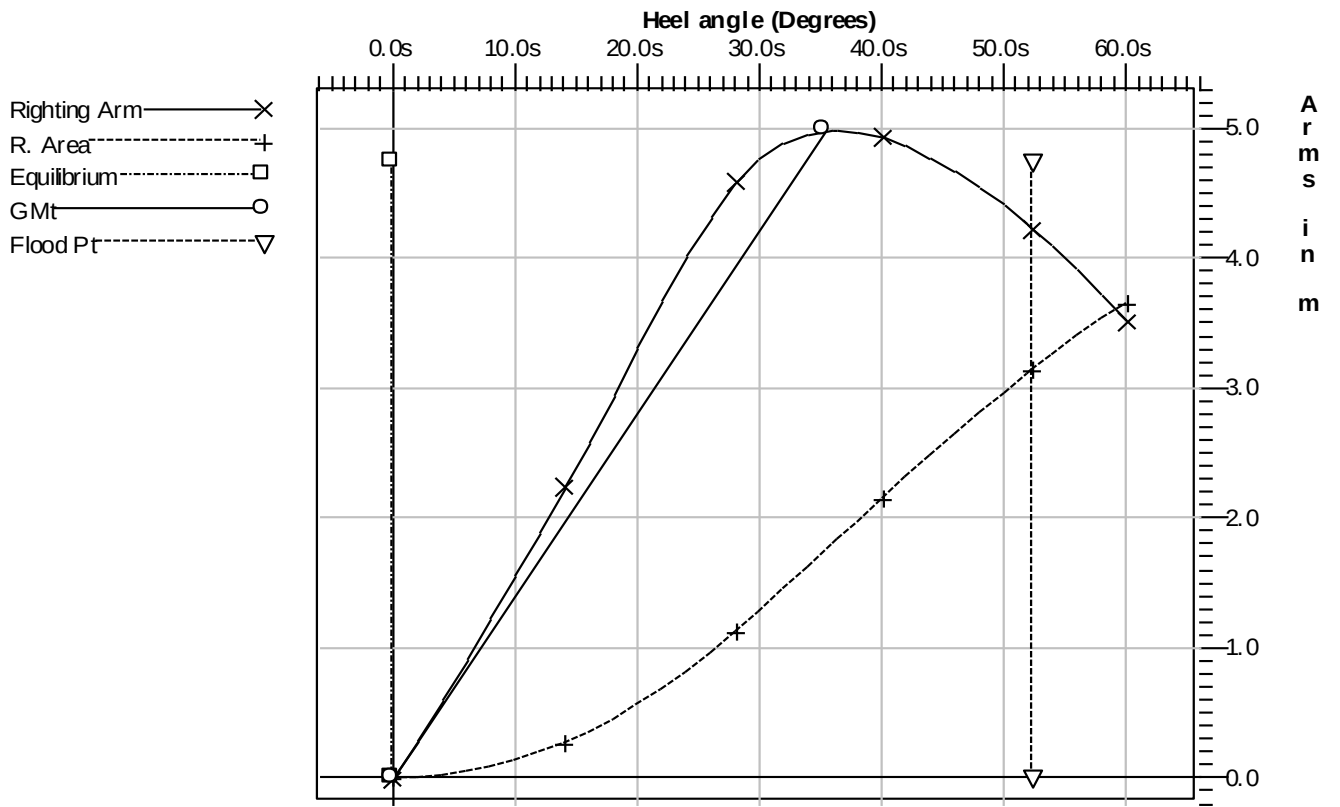
Unprotected Flood Point

Name	L,T,V (m)	Height (m)
(1) Opening No1 Stb	120.000f, 7.000s, 14.000	7.680

IMO A.167

Limit	Min/Max	Actual	Margin	Pass
(1) Area from 0.00 deg to 30.00	>0.0550 m-R	1.278	1.223	Yes
(2) Area from 0.00 deg to 40.00 or Flood	>0.0900 m-R	2.139	2.049	Yes
(3) Area from 30.00 deg to 40.00 or Flood	>0.0300 m-R	0.860	0.830	Yes
(4) Righting Arm at 30.00 deg or MaxRA	>0.200 m	4.981	4.781	Yes
(5) Angle from 0.00 deg to MaxRA	>25.00 deg	36.39	11.39	Yes
(6) GM at Equilibrium	>0.150 m	8.090	7.940	Yes

Righting Arms vs. Heel



%50 Load Condition

Tank fillment

Floating Status

Draft FP	7.565 m	Heel	zero	GM(Solid)	8.905 m
Draft MS	7.576 m	Equil	Yes	F/S Corr.	1.987 m
Draft AP	7.586 m	Wind	0.0 kn	GM(Fluid)	6.918 m
Trim	0.02/144.80	Wave	No	KMT	15.588 m
LCG	77.604f m	VCG	6.683 m	TPcm	46.25

Loading Summary

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
Light Ship	5 000.00	78.890f	0.000	7.230
Deadweight	26 901.13	77.365f	0.000	6.582
Displacement	31 901.13	77.604f	0.000	6.683

Fixed Weight Status

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
LIGHT SHIP	5 000.00	78.890f	0.000	7.230u
CRANE ONE	60.00	57.600f	11.000p	20.100u
CRANE TWO	60.00	92.000f	11.000s	20.100u
CREW AND EFFECTS	15.00	134.000f	0.000	22.300u
DRILLFLOOR	40.00	68.000f	0.000	15.200u
FREEFALL AFT	50.00	5.500f	7.200s	22.300u
FREEFALL FORE PORT - 1	50.00	148.000f	10.500p	25.300u
FREEFALL FORE PORT - 2	50.00	120.800f	10.500p	25.300u
FREEFALL FORE STB - 1	50.00	148.000f	10.500s	25.300u
FREEFALL FORE STB - 2	50.00	120.800f	10.500s	25.300u
GANTRY CRANE	150.00	68.000f	0.000	20.000u
HELIDECK	110.00	141.600f	0.000	31.000u
HP FLARE KO SKID	5.90	8.600f	12.400p	16.600u
LP FLARE KO SKID	3.60	10.600f	12.400p	16.600u
MACHINERY AFT	927.00	19.900f	0.300s	9.600u
MACHINERY FOR	36.00	131.600f	1.500s	7.800u
MOB BOAT	5.00	10.900f	14.500s	16.300u
MOORING - AFT - P	60.00	2.500f	13.500p	16.600u
MOORING - AFT - STB	60.00	2.500f	13.500s	16.600u
MOORING - FORE - P	60.00	147.300f	13.500p	16.600u
MOORING - FORE - STB	60.00	147.300f	13.500s	16.600u
OFFLOADING	90.00	7.000f	3.500p	22.100u
OUTFITTING	1 300.00	76.500f	0.000	14.000u
PAINT STORE	0.50	147.500f	0.000	13.600u
PROCESSING PLANT	333.84	29.900f	0.000	21.600u
RISER TRANSPORT RAIL	5.00	53.900f	0.000	18.900u
ROV	5.00	107.000f	12.100p	16.600u
STORES	150.00	134.400f	0.000	12.500u
SUPERSTRUCTURE	340.00	134.400f	0.000	22.300u
VOITH 1A	93.50	19.500f	6.000p	1.500u
VOITH 1F	93.50	128.400f	5.500p	1.000u
VOITH 2A	93.50	9.700f	0.000	3.700u
VOITH 2F	93.50	138.300f	0.000	1.000u
VOITH 3A	93.50	19.500f	6.000s	1.500u
VOITH 3F	93.50	128.400f	5.500s	1.000u
Total Fixed:	9 687.84	74.390f	0.028s	10.677u

Tank Status

SALT WATER (SpGr 1.025)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
AFTPEAK.C	70.00%	215.33	1.249f	0.000	7.551	0.970
BW_APSD1P.P	98.00%	256.11	7.467f	11.862p	8.780	0.970
BW_APSD1S.S	98.00%	256.11	7.467f	11.862s	8.780	0.970
BW_APSD2P.P	98.00%	220.44	19.708f	14.335p	7.920	0.970
BW_APSD2S.S	98.00%	220.44	19.708f	14.335s	7.920	0.970
BW_FPSD1P.P	98.00%	283.64	128.145f	13.644p	6.800	0.970
BW_FPSD1S.S	98.00%	283.64	128.145f	13.644s	6.800	0.970
BW_FPSD2P.P	98.00%	376.89	139.668f	10.630p	6.915	0.970
BW_FPSD2S.S	98.00%	376.89	139.668f	10.630s	6.915	0.970
BW_MPDBP.P	50.00%	68.72	67.999f	10.000p	0.600	0.970
BW_MPDBS.S	50.00%	68.72	67.999f	10.000s	0.600	0.970
BW_MPSPDP.P	98.00%	201.53	68.002f	14.781p	5.493	0.970
BW_MPSPDS.S	98.00%	201.53	68.002f	14.781s	5.493	0.970
BW_TKDB2P.P	60.00%	233.65	44.399f	6.800p	0.720	0.970
BW_TKDB2S.S	60.00%	233.65	44.399f	6.800s	0.720	0.970
BW_TKDB3P.P	75.00%	292.07	56.399f	6.800p	0.900	0.970
BW_TKDB3S.S	70.00%	272.60	56.399f	6.800s	0.840	0.970
BW_TKDB4P.P	95.00%	369.92	79.599f	6.800p	1.140	0.970
BW_TKDB4S.S	90.00%	350.45	79.599f	6.800s	1.080	0.970
BW_TKDB5P.P	98.00%	381.59	91.599f	6.800p	1.176	0.970
BW_TKDB5S.S	98.00%	381.59	91.599f	6.800s	1.176	0.970
BW_TKDB6P.P	98.00%	381.49	103.598f	6.798p	1.176	0.970
BW_TKDB6S.S	98.00%	381.49	103.598f	6.798s	1.176	0.970
BW_TKDB7P.P	98.00%	379.33	115.585f	6.768p	1.183	0.970
BW_TKDB7S.S	98.00%	379.33	115.585f	6.768s	1.183	0.970
BW_TKSD1P.P	98.00%	268.01	32.826f	14.728p	5.599	0.970
BW_TKSD1S.S	98.00%	268.01	32.826f	14.728s	5.599	0.970
BW_TKSD2P.P	98.00%	294.36	44.422f	14.753p	5.547	0.970
BW_TKSD2S.S	98.00%	294.36	44.421f	14.753s	5.547	0.970
BW_TKSD3P.P	98.00%	299.51	56.413f	14.771p	5.512	0.970
BW_TKSD3S.S	98.00%	299.51	56.413f	14.771s	5.512	0.970
BW_TKSD4P.P	98.00%	289.12	79.574f	14.731p	5.605	0.970
BW_TKSD4S.S	95.00%	280.27	79.573f	14.729s	5.446	0.970
BW_TKSD5P.P	98.00%	287.16	91.596f	14.724p	5.622	0.970
BW_TKSD5S.S	98.00%	287.16	91.596f	14.724s	5.622	0.970
BW_TKSD6P.P	98.00%	283.86	103.577f	14.715p	5.648	0.970
BW_TKSD6S.S	98.00%	283.86	103.577f	14.715s	5.648	0.970
BW_TKSD7P.P	98.00%	266.98	115.478f	14.664p	5.778	0.970
BW_TKSD7S.S	98.00%	266.98	115.478f	14.664s	5.778	0.970
FOREPEAK.C	84.00%	855.02	147.719f	0.000	5.893	0.970
Subtotals:	39.10%	11 891.32	83.784f	0.033p	4.421	

FUEL OIL (SpGr 0.870)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
BUNKER_1.C	98.00%	258.26	28.800f	0.000	8.084	0.850
BUNKER_2.S	98.00%	236.74	28.800f	9.200s	8.084	0.850
BUNKER_3.P	98.00%	236.74	28.800f	9.200p	8.084	0.850
CARGO_1P.P	50.00%	466.64	34.400f	6.800p	5.300	0.850
CARGO_1S.S	50.00%	466.64	34.400f	6.800s	5.300	0.850
CARGO_2P.P	50.00%	699.98	44.400f	6.800p	5.300	0.850
CARGO_2S.S	50.00%	699.98	44.400f	6.800s	5.300	0.850
CARGO_3P.P	50.00%	699.98	56.400f	6.800p	5.300	0.850

CARGO_3S.S	50.00%	699.98	56.400f	6.800s	5.300	0.850
CARGO_4P.P	50.00%	699.98	79.600f	6.800p	5.300	0.850
CARGO_4S.S	50.00%	699.98	79.600f	6.800s	5.300	0.850
CARGO_5P.P	50.00%	699.98	91.600f	6.800p	5.300	0.850
CARGO_5S.S	50.00%	699.98	91.600f	6.800s	5.300	0.850
CARGO_6P.P	50.00%	699.98	103.600f	6.800p	5.300	0.850
CARGO_6S.S	50.00%	699.98	103.600f	6.800s	5.300	0.850
CARGO_7P.P	50.00%	699.98	115.600f	6.800p	5.300	0.850
CARGO_7S.S	50.00%	699.98	115.600f	6.800s	5.300	0.850
Subtotals:	51.85%	10 064.80	73.607f	0.000	5.502	

FRESH WATER (SpGr 1.000)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
BLACK_W.P	98.00%	22.88	65.600f	12.400p	3.968	0.950
FRESH_W1.S	98.00%	93.31	70.800f	8.200s	8.084	0.950
FRESH_W3.P	98.00%	93.31	70.800f	8.200p	8.084	0.950
GREY_W.S	98.00%	47.67	65.600f	8.400s	4.360	0.950
Subtotals:	34.99%	257.16	69.374f	0.454s	7.028	

All Tanks

	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
Totals:		22 213.29	79.006f	0.013p	4.941	

Displacer Status

Item	Status	Spgr	Displ (MT)	LCB (m)	TCB (m)	VCB (m)	Eff /Perm
HULL	Intact	1.025	31 901.12	77.605f	0.000	3.967	1.000
SubTotals:			31 901.12	77.605f	0.000	3.967	



Fluid Legend

Fluid Name	Legend	Weight (MT)	Load%
SALT WATER		11 891.32	39.10%
FUEL OIL		10 064.80	51.85%
FRESH WATER		257.16	34.99%

Righting Arms vs Heel Angle

Heel Angle	Trim Angle	Origin Depth	Righting Arm	Area	Flood Pt	Notes
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(deg)	(deg)	(m)	(m)	(m-Rad)	Height (m)	
0.00	0.01a	7.586	0.000	0.000	6.431 (1)	Equil
2.00s	0.01a	7.579	0.252	0.004	6.183 (1)	
4.00s	0.00a	7.558	0.515	0.018	5.928 (1)	
6.00s	0.00f	7.523	0.781	0.040	5.665 (1)	
8.00s	0.01f	7.474	1.053	0.072	5.396 (1)	
10.00s	0.02f	7.412	1.332	0.114	5.121 (1)	
12.00s	0.03f	7.336	1.618	0.165	4.839 (1)	
14.00s	0.04f	7.246	1.912	0.227	4.553 (1)	
16.00s	0.06f	7.144	2.214	0.299	4.259 (1)	
18.00s	0.08f	7.028	2.525	0.382	3.963 (1)	
20.00s	0.10f	6.899	2.845	0.475	3.663 (1)	
22.00s	0.12f	6.757	3.174	0.581	3.359 (1)	
24.00s	0.14f	6.603	3.487	0.697	3.044 (1)	
26.00s	0.17f	6.458	3.741	0.823	2.709 (1)	
28.00s	0.19f	6.315	3.937	0.957	2.360 (1)	
30.00s	0.22f	6.166	4.064	1.097	2.006 (1)	
32.00s	0.24f	6.009	4.136	1.240	1.649 (1)	
34.00s	0.27f	5.845	4.163	1.385	1.289 (1)	
34.41s	0.27f	5.811	4.164	1.415	1.214 (1)	MaxRa
36.00s	0.29f	5.675	4.153	1.530	0.927 (1)	
38.00s	0.32f	5.498	4.111	1.675	0.563 (1)	
40.00s	0.34f	5.314	4.038	1.817	0.198 (1)	
41.08s	0.35f	5.213	3.987	1.893	-0.001 (1)	FldPt
42.00s	0.36f	5.125	3.941	1.956	-0.168 (1)	
44.00s	0.39f	4.928	3.834	2.092	-0.533 (1)	
46.00s	0.41f	4.724	3.716	2.224	-0.901 (1)	
48.00s	0.44f	4.513	3.588	2.351	-1.269 (1)	
50.00s	0.47f	4.297	3.452	2.474	-1.635 (1)	
52.00s	0.49f	4.076	3.307	2.592	-2.000 (1)	
54.00s	0.52f	3.850	3.154	2.705	-2.363 (1)	
56.00s	0.54f	3.619	2.995	2.812	-2.723 (1)	
58.00s	0.56f	3.384	2.829	2.914	-3.081 (1)	
60.00s	0.59f	3.144	2.658	3.010	-3.434 (1)	

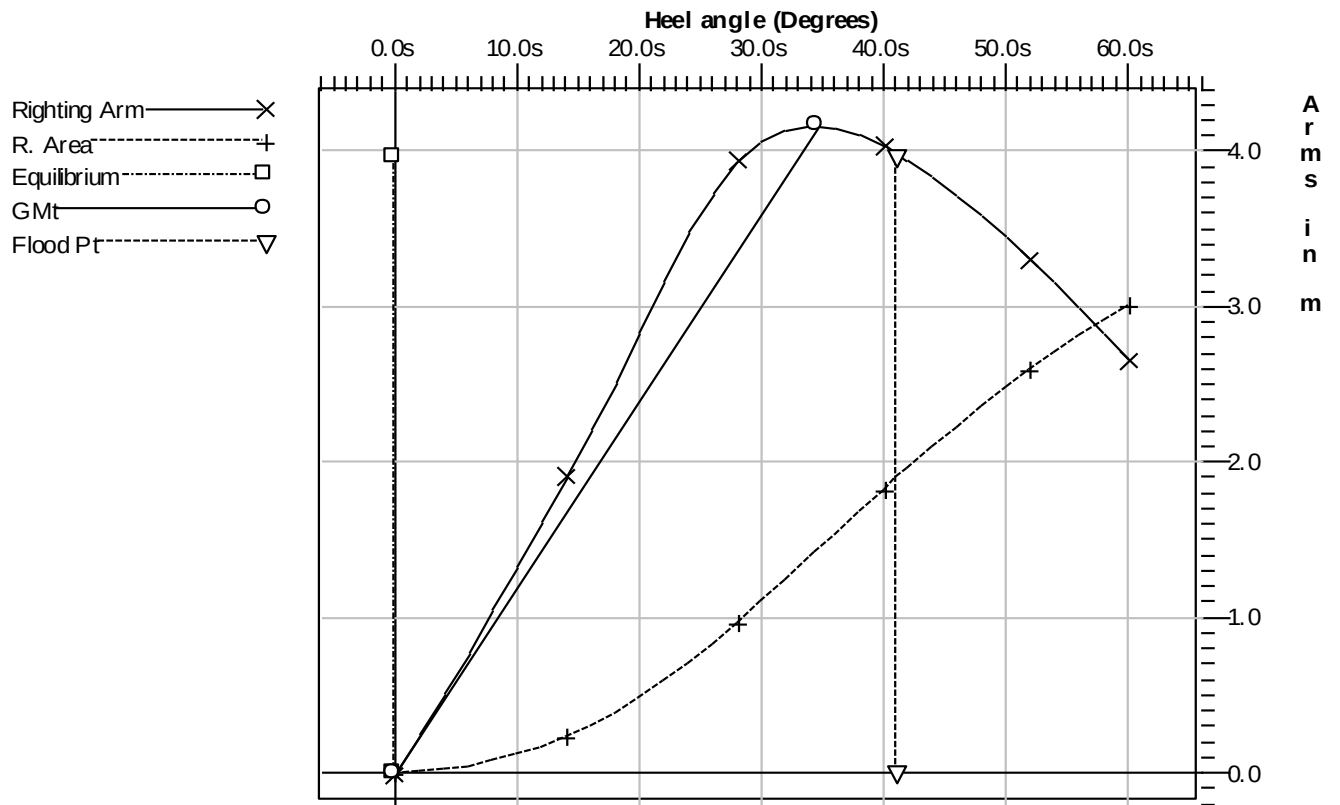
Unprotected Flood Point

Name	L,T,V (m)	Height (m)
(1) Opening No1 Stb	120.000f, 7.000s, 14.000	6.431

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Limit	Min/Max	Actual	Margin	Pass
(1) Area from 0.00 deg to 30.00	>0.0550 m-R	1.097	1.042	Yes
(2) Area from 0.00 deg to 40.00 or Flood	>0.0900 m-R	1.817	1.727	Yes
(3) Area from 30.00 deg to 40.00 or Flood	>0.0300 m-R	0.720	0.690	Yes
(4) Righting Arm at 30.00 deg or MaxRA	>0.200 m	4.164	3.964	Yes
(5) Angle from 0.00 deg to MaxRA	>25.00 deg	34.41	9.41	Yes
(6) GM at Equilibrium	>0.150 m	6.918	6.768	Yes

Righting Arms vs. Heel



APPENDIX B.2 DAMAGE STABILITY

Table B 1: Extent of damage to be considered in damage stability calculations, based on a rule length of L_r of 149 and breadth of 32 m

		Bottom Damage	Side Damage	Supplementary bottom damage
Vertical extent	Rule	The lesser of $\frac{B}{15}$ and 6m.	From the moulded line of bottom plating at centerline, upwards without limit.	Breach of outer hull
	Actual [m]	2.13	14	-
Transverse extent	Rule	The lesser of $\frac{B}{6}$ and 10m	The lesser of $\frac{B}{5}$ and 11.5m.	$B/3$
	Actual [m]	5.33	6.40	10.67
Longitudinal extent	Rule	The lesser of $\frac{1}{3}L_r^{\frac{2}{3}}$ and: 14.5m within 0.3L from FPP, 5m elsewhere	The lesser of $\frac{1}{3}L_r^{\frac{2}{3}}$ and 14.5m.	$0.4L_r$ from FPP
	Actual [m]	9.37 within $0.3L_r$ from FPP, 5m elsewhere	9.37	59.6 from FPP

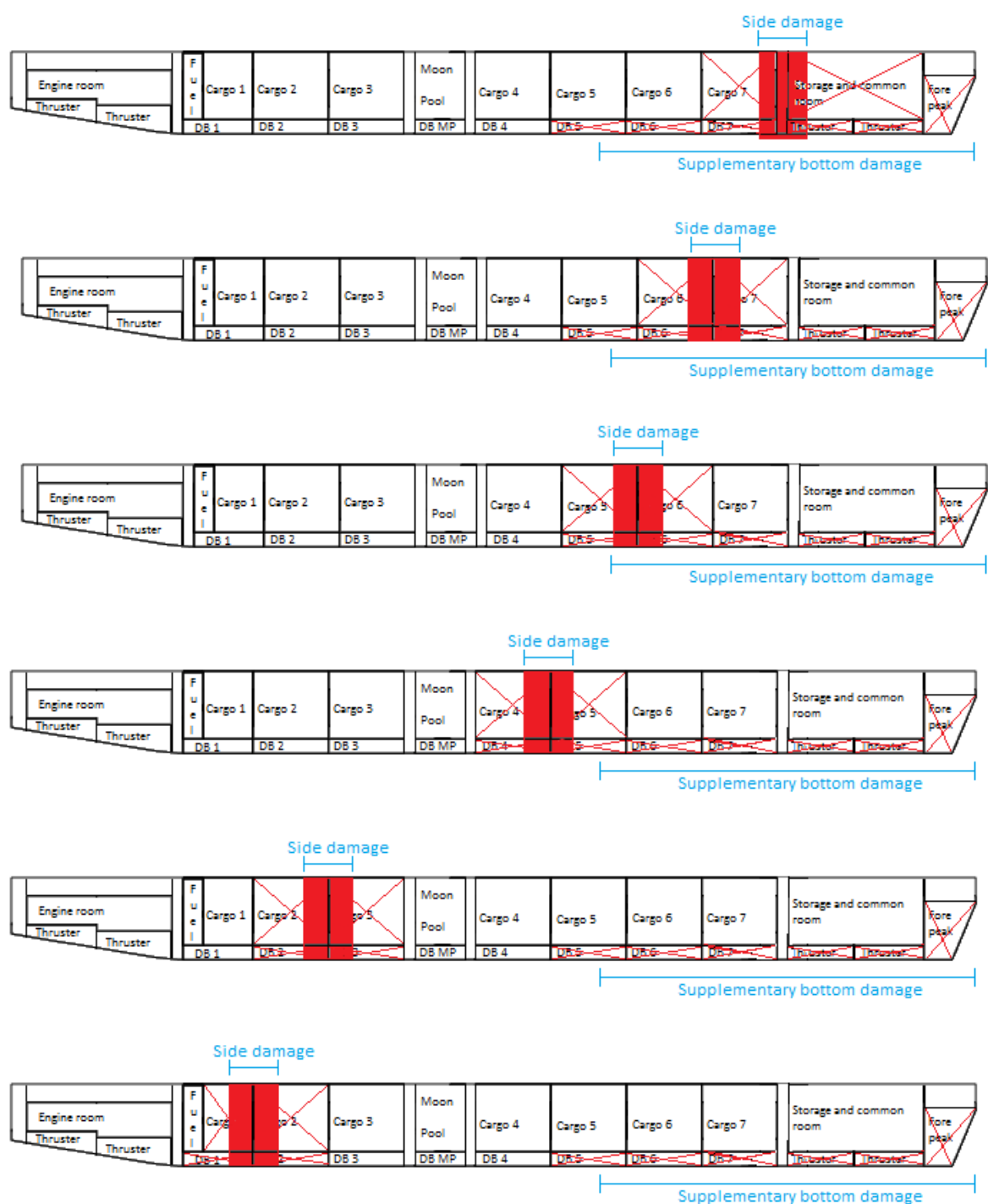


Figure B 1: Critical damage conditions

APPENDIX B.3 SEAKEEPING – MAXIMUM MOTIONS

Table B 2: Maximum motion amplitudes for different operations

DRILLING OPERATION		Heading				
		120	150	180	210	240
Heave Motion	[m]	6.41	5.56	5.14	5.56	6.41
Roll Motion	[deg]	4.45	2.50	2.52	2.50	2.98
Pitch Motion	[deg]	3.14	4.15	4.45	4.15	3.14
Z-Acc Bridge	[m/s ²]	2.19	1.58	1.62	1.58	2.19
X-Acc Top gantry crane	[m/s ²]	0.54	0.38	0.27	0.38	0.54
Y-Acc Top gantry crane	[m/s ²]	4.55	1.54	0.82	1.54	4.55
Z-Acc Top gantry crane	[m/s ²]	0.88	0.56	0.48	0.56	0.88
X-Acc Helideck	[m/s ²]	0.54	0.38	0.27	0.38	0.54
Y-Acc Helideck	[m/s ²]	4.28	1.78	0.99	1.78	4.28
Z-Acc Helideck	[m/s ²]	2.52	1.84	1.88	1.84	2.52
SSR INSTALLATION OPERATION		Heading				
		120	150	180	210	240
Heave Motion	[m]	2.30	1.33	1.21	1.33	2.30
Roll Motion	[deg]	8.43	3.77	2.08	3.77	8.43
Pitch Motion	[deg]	3.46	2.44	2.00	2.44	3.46
Z-Acc Bridge	[m/s ²]	3.00	1.00	0.45	1.00	3.00
X-Acc Top gantry crane	[m/s ²]	4.97	3.19	2.68	3.19	4.97
Y-Acc Top gantry crane	[m/s ²]	2.86	1.58	1.21	1.58	2.86
Z-Acc Top gantry crane	[m/s ²]	0.50	0.45	0.41	0.45	0.50
X-Acc Helideck	[m/s ²]	0.49	0.44	0.41	0.44	0.49
Y-Acc Helideck	[m/s ²]	3.31	1.59	0.77	1.59	3.31
Z-Acc Helideck	[m/s ²]	4.79	2.39	1.24	2.39	4.79
TRANSIT CONDITION		Heading				
		120	150	180	210	240
Heave Motion	[m]	5.81	4.30	3.60	4.30	5.81
Roll Motion	[deg]	1.52	6.76	3.32	6.76	1.52
Pitch Motion	[deg]	0.15	0.16	0.17	0.16	0.15
Z-Acc Bridge	[m/s ²]	1.31	0.44	0.31	0.44	1.31
X-Acc Top gantry crane	[m/s ²]	0.41	0.46	0.54	0.46	0.41
Y-Acc Top gantry crane	[m/s ²]	3.59	1.15	0.38	1.15	3.59
Z-Acc Top gantry crane	[m/s ²]	1.23	0.43	0.30	0.43	1.23
X-Acc Helideck	[m/s ²]	0.41	0.46	0.54	0.46	0.41
Y-Acc Helideck	[m/s ²]	5.40	1.49	0.41	1.49	5.40
Z-Acc Helideck	[m/s ²]	1.33	0.44	0.31	0.44	1.33
FULL LOAD CONDITION		Heading				
		120	150	180	210	240
Heave Motion	[m]	7.68	6.49	5.91	6.49	7.68
Roll Motion	[deg]	4.75	2.38	1.29	2.38	4.75
Pitch Motion	[deg]	3.53	4.74	5.08	4.74	3.53
Z-Acc Bridge	[m/s ²]	1.90	1.88	1.83	1.88	1.90
X-Acc Top gantry crane	[m/s ²]	3.03	3.19	3.17	3.19	3.03
Y-Acc Top gantry crane	[m/s ²]	1.43	0.50	0.24	0.50	1.43
Z-Acc Top gantry crane	[m/s ²]	0.61	0.44	0.38	0.44	0.61
X-Acc Helideck	[m/s ²]	0.30	0.32	0.32	0.32	0.30
Y-Acc Helideck	[m/s ²]	1.89	0.92	0.37	0.92	1.89
Z-Acc Helideck	[m/s ²]	2.03	2.07	2.04	2.07	2.03

