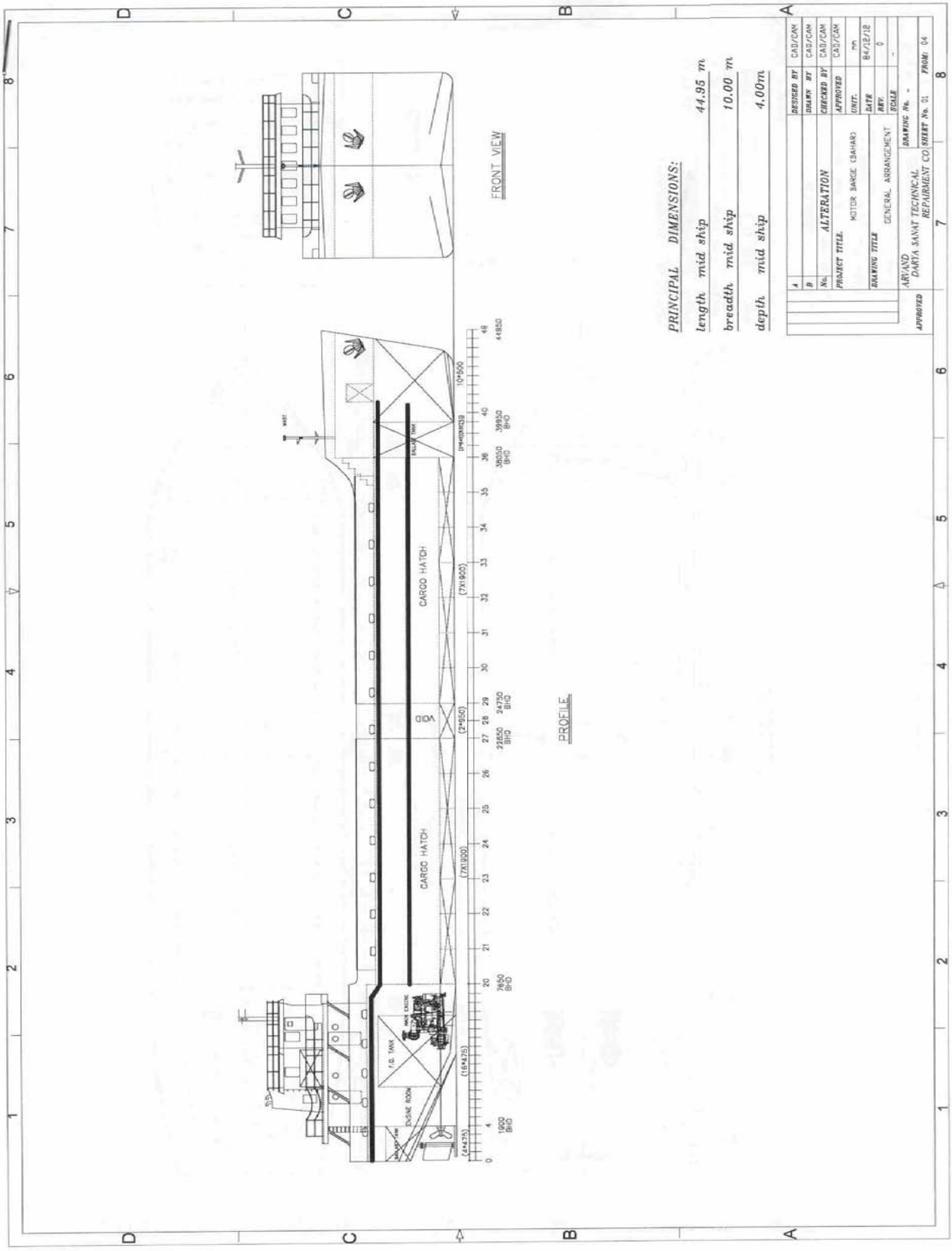
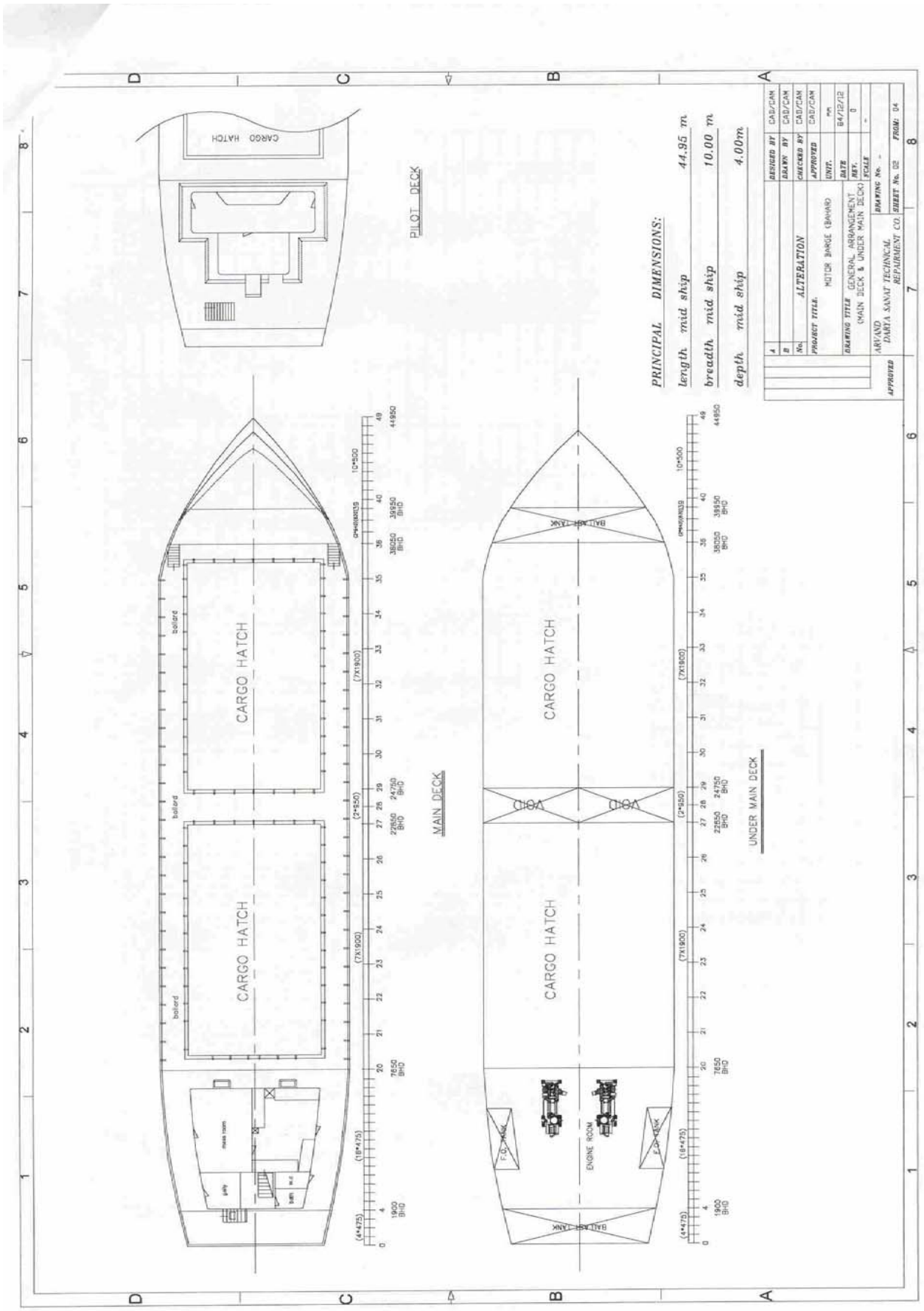
STABILITY INFORMATION

Autoship education



Autoship education



Remarks:

A.P.	:	Aft Perpendicular
AFT	:	After
B	:	Breadth of Ship
B.L.	:	Base Line
CB	:	Block Coefficient
CL	:	Centre Line
CM	:	Midship Area Coefficient
CP	:	Prismatic coefficient
CW	:	Water Plane Coefficient
D	:	Draught (draft)
F.P.	:	Fore Perpendicular
FORE	:	Forward
GM	:	Transverse Metacenter Height
G'M	:	Con. Transverse Metacenter Height due to Free Surface Effect
GZ	:	Righting Arm
IMO	:	International Maritime Organization
KG	:	Vertical Centre of Gravity above Keel
KML	:	Longitudinal Metacenter Height above Keel
KMT	:	Transverse Metacenter Height above Keel

Autoship education

KN	:	Displacement Lever about Base Line at Centre
L.C.B.	:	Longitudinal Center of Buoyancy from Lpp/2 (“-“ means after Midship)
L.C.F.	:	Longitudinal Center of Floatation from Lpp/2 (“-“ means after Midship)
L.C.G.	:	Longitudinal Center of Gravity from Lpp/2 (“-“ means after Midship)
L.O.A.	:	Length Overall
LPP	:	Length between Perpendiculars (L.B.P.)
LR.	:	Lloyd’s Register of Shipping
M.C.T.C	:	Moment to Change Trim one Centimeter
MLD	:	Moulded
P	:	Port Side of Ship
SB	:	Starboard Side of Ship
T	:	Trim (“-“ means Trim by the Stern)
T.P.C.	:	Ton per one Centimeter Immersion.)
V	:	Angle of Heel (Deg.)
V. C. G.	:	Vertical Centre of Gravity above Base Line
WL	:	Water line
W.P.	:	Water Plan.
ρ	:	Specific Gravity of Sea Water (Tonnes/M3)
Δ	:	Displacement (Tonnes)

Hull Form Coefficients:

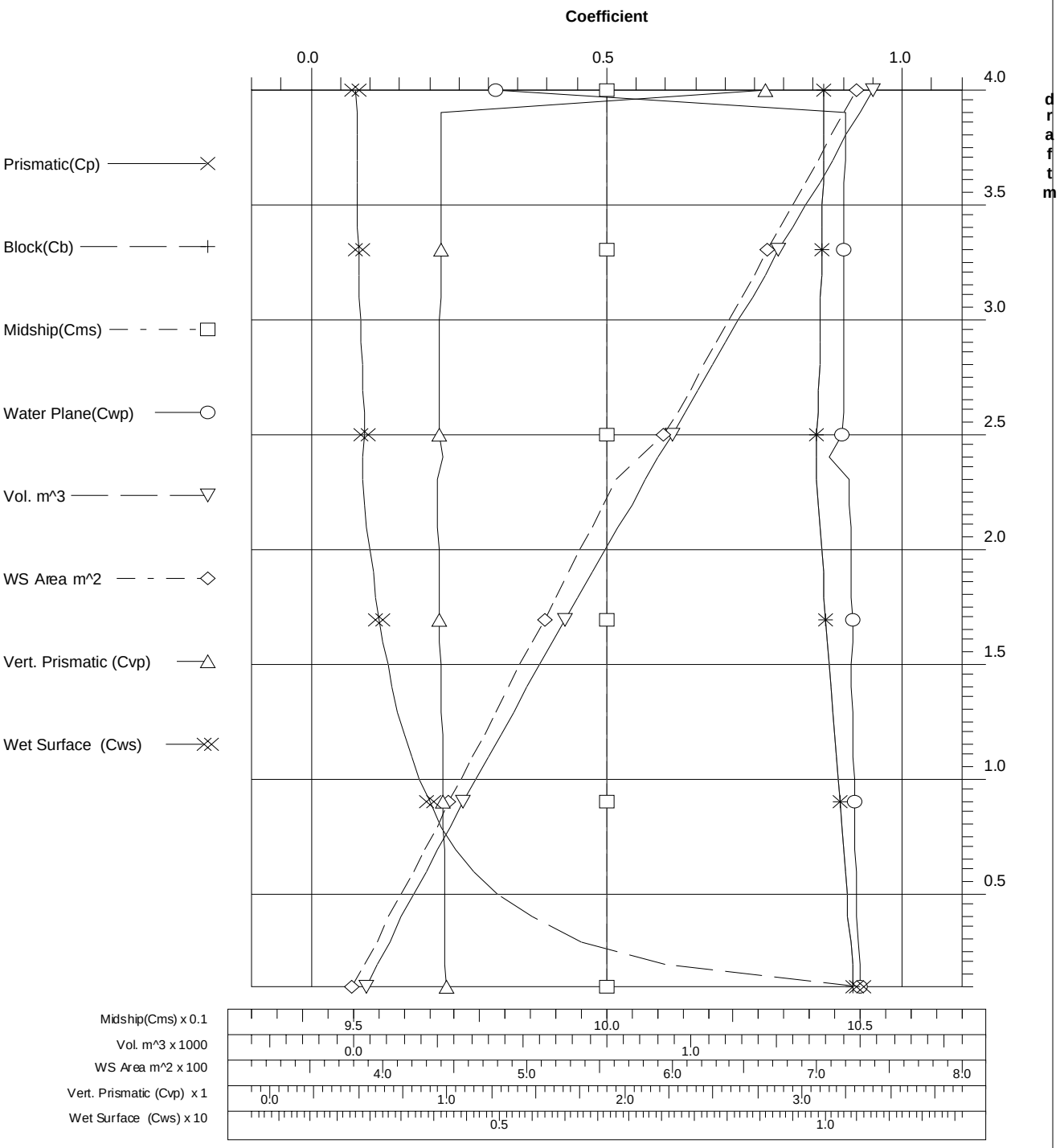
Hull Form Coefficients (with appendages)
Baseline Draft: 1.000
Trim: zero
Heel: zero

Draft	Volume	Coefficients						WS Area
m	m^3	Cp	Cb	Cms	Cwp	Cvp	Cws	m^2
0.100	34.42	0.915	0.915	1.000	0.927	0.986	10.521	378.59
0.200	69.49	0.915	0.915	1.000	0.927	0.986	7.546	387.71
0.300	104.86	0.911	0.911	1.000	0.925	0.985	6.242	395.91
0.400	140.48	0.907	0.907	1.000	0.922	0.984	5.477	404.03
0.500	176.32	0.904	0.904	1.000	0.921	0.982	4.971	412.27
0.600	212.40	0.901	0.901	1.000	0.920	0.980	4.604	420.50
0.700	248.71	0.898	0.898	1.000	0.919	0.978	4.323	428.73
0.800	285.26	0.895	0.895	1.000	0.919	0.975	4.100	436.97
0.900	322.04	0.892	0.892	1.000	0.918	0.973	3.918	445.20
1.000	359.06	0.890	0.890	1.000	0.917	0.970	3.766	453.43
1.100	396.32	0.887	0.887	1.000	0.916	0.968	3.638	461.67
1.200	433.81	0.884	0.884	1.000	0.915	0.966	3.527	469.90
1.300	471.53	0.881	0.881	1.000	0.914	0.964	3.431	478.13
1.400	509.50	0.878	0.878	1.000	0.912	0.962	3.347	486.36
1.500	547.71	0.875	0.875	1.000	0.911	0.960	3.272	494.60
1.600	586.15	0.872	0.872	1.000	0.914	0.954	3.205	502.83
1.700	624.83	0.870	0.870	1.000	0.913	0.952	3.145	511.06
1.800	663.75	0.867	0.867	1.000	0.913	0.950	3.090	519.30
1.900	702.91	0.864	0.864	1.000	0.912	0.948	3.041	527.53
2.000	742.31	0.861	0.861	1.000	0.911	0.945	2.996	535.76
2.100	781.95	0.859	0.859	1.000	0.910	0.943	2.955	544.00
2.200	821.84	0.856	0.856	1.000	0.910	0.941	2.916	552.23
2.300	861.96	0.854	0.854	1.000	0.909	0.939	2.881	560.46
2.400	900.28	0.854	0.854	1.000	0.876	0.974	2.899	576.71
2.500	939.25	0.854	0.854	1.000	0.896	0.953	2.922	593.86
2.600	978.74	0.856	0.856	1.000	0.899	0.952	2.908	603.48
2.700	1 018.33	0.857	0.857	1.000	0.899	0.952	2.892	612.37
2.800	1 057.96	0.858	0.858	1.000	0.900	0.953	2.878	621.25
2.900	1 097.64	0.859	0.859	1.000	0.900	0.954	2.865	630.07
3.000	1 137.34	0.860	0.860	1.000	0.900	0.955	2.853	638.89
3.100	1 177.07	0.861	0.861	1.000	0.900	0.956	2.842	647.70
3.200	1 216.83	0.861	0.861	1.000	0.900	0.957	2.833	656.51
3.300	1 256.62	0.862	0.862	1.000	0.901	0.957	2.824	665.32
3.400	1 296.43	0.863	0.863	1.000	0.901	0.958	2.816	674.14
3.500	1 336.28	0.863	0.863	1.000	0.901	0.958	2.809	682.95
3.600	1 376.15	0.864	0.864	1.000	0.901	0.959	2.803	691.76
3.700	1 416.05	0.864	0.864	1.000	0.901	0.960	2.798	700.58
3.800	1 455.98	0.865	0.865	1.000	0.901	0.960	2.793	709.39
3.900	1 495.94	0.865	0.865	1.000	0.901	0.960	2.789	718.20
4.000	1 535.89	0.866	0.866	1.000	0.310	2.792	2.786	727.01

Note: Coefficients calculated based on waterline length at given draft

Autoship education

Curves of Form (with appendages)



Hydrostatic Properties:

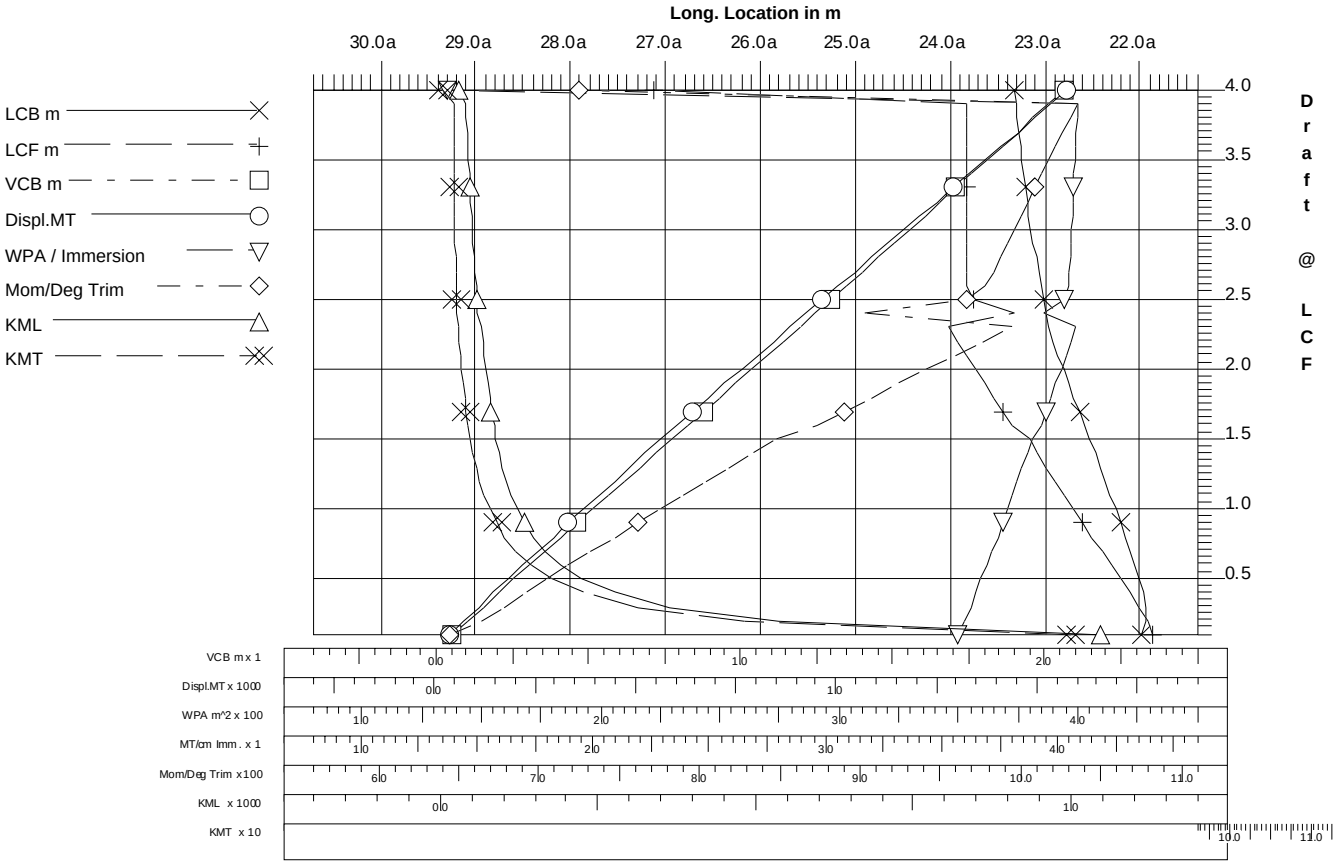
Draft is from Baseline.
No Trim, No heel, VCG = 0.000

LCF Draft (m)	Displ (MT)	LCB (m)	VCB (m)	LCF (m)	TPcm (MT/cm)	MTcm (MT-m /deg)	KML (m)	KMT (m)
0.100	35.281	21.994a	0.051	21.879a	3.58	643.31	1 044.622	80.171
0.200	71.229	21.945a	0.101	21.921a	3.61	663.64	533.769	40.023
0.300	107.483	21.954a	0.152	22.021a	3.64	677.63	361.187	26.750
0.400	143.993	21.984a	0.202	22.120a	3.66	691.29	275.041	20.156
0.500	180.732	22.025a	0.253	22.218a	3.68	704.34	223.268	16.219
0.600	217.712	22.071a	0.304	22.314a	3.70	717.45	188.794	13.612
0.700	254.932	22.119a	0.355	22.408a	3.72	730.61	164.187	11.764
0.800	292.393	22.169a	0.406	22.522a	3.75	746.39	146.243	10.416
0.900	330.095	22.220a	0.458	22.618a	3.77	760.35	131.964	9.360
1.000	368.039	22.272a	0.509	22.714a	3.79	774.47	120.556	8.525
1.100	406.225	22.325a	0.561	22.808a	3.81	788.74	111.235	7.851
1.200	444.654	22.378a	0.613	22.902a	3.84	803.15	103.480	7.297
1.300	483.326	22.432a	0.665	22.995a	3.86	817.73	96.928	6.836
1.400	522.241	22.486a	0.717	23.087a	3.88	832.47	91.322	6.448
1.500	561.401	22.540a	0.769	23.178a	3.90	847.37	86.473	6.119
1.600	600.805	22.595a	0.821	23.349a	3.94	872.79	83.225	5.884
1.700	640.454	22.650a	0.874	23.449a	3.96	889.36	79.555	5.643
1.800	680.348	22.705a	0.927	23.548a	3.98	906.17	76.306	5.435
1.900	720.488	22.760a	0.979	23.646a	4.00	923.25	73.413	5.254
2.000	760.874	22.816a	1.032	23.745a	4.02	940.59	70.822	5.096
2.100	801.506	22.872a	1.086	23.843a	4.05	958.19	68.489	4.959
2.200	842.386	22.928a	1.139	23.941a	4.07	976.06	66.381	4.839
2.300	883.513	22.984a	1.192	24.039a	4.09	994.20	64.467	4.734
2.400	922.796	22.995a	1.244	23.337a	3.95	902.08	56.004	4.458
2.500	962.737	23.018a	1.295	23.775a	4.04	965.58	57.459	4.464
2.600	1003.215	23.050a	1.347	23.831a	4.05	976.98	55.792	4.405
2.700	1043.792	23.080a	1.398	23.840a	4.06	982.15	53.907	4.343
2.800	1084.418	23.108a	1.449	23.849a	4.06	987.40	52.165	4.289
2.900	1125.086	23.135a	1.500	23.849a	4.07	991.44	50.485	4.240
3.000	1165.782	23.159a	1.551	23.848a	4.07	995.43	48.918	4.198
3.100	1206.506	23.182a	1.602	23.846a	4.07	999.50	47.460	4.161
3.200	1247.259	23.203a	1.653	23.845a	4.07	1003.65	46.100	4.131
3.300	1288.041	23.223a	1.704	23.843a	4.08	1007.89	44.829	4.105
3.400	1328.851	23.242a	1.755	23.841a	4.08	1012.21	43.639	4.084
3.500	1369.691	23.259a	1.806	23.840a	4.08	1016.62	42.522	4.068
3.600	1410.559	23.276a	1.857	23.838a	4.09	1021.10	41.472	4.055
3.700	1451.457	23.291a	1.908	23.836a	4.09	1025.67	40.484	4.046
3.800	1492.385	23.306a	1.959	23.834a	4.09	1030.33	39.552	4.040
3.900	1533.343	23.319a	2.010	23.832a	4.09	1035.07	38.673	4.037
4.000	1574.300	23.332a	2.061	27.137a	1.38	723.96	26.345	2.615

Water Specific Gravity = 1.025 kg/L.

Autoship education

Hydrostatic Properties at Trim = 0.00, Heel = 0.00



Section Area Data:

Autoship education

Hull Section Data (with appendages) No Trim, No heel

Location (m)	Draft (m)	Area (m^2)	WL Width (m)	Girth (m)
1.875a	0.100	0.014	0.278	0.316
2.816a	0.100	0.120	1.899	1.923
3.756a	0.100	0.317	4.342	4.381
4.697a	0.100	0.495	5.942	6.023
5.637a	0.100	0.668	7.248	7.379
6.578a	0.100	0.841	8.553	8.735
7.518a	0.100	0.933	9.325	9.525
8.459a	0.100	0.982	9.820	10.020
9.399a	0.100	1.000	10.000	10.200
10.340a	0.100	1.000	10.000	10.200
11.280a	0.100	1.000	10.000	10.200
12.221a	0.100	1.000	10.000	10.200
13.162a	0.100	1.000	10.000	10.200
14.102a	0.100	1.000	10.000	10.200
15.043a	0.100	1.000	10.000	10.200
15.983a	0.100	1.000	10.000	10.200
16.924a	0.100	1.000	10.000	10.200
17.864a	0.100	1.000	10.000	10.200
18.805a	0.100	1.000	10.000	10.200
19.745a	0.100	1.000	10.000	10.200
20.686a	0.100	1.000	10.000	10.200
21.626a	0.100	1.000	10.000	10.200
22.567a	0.100	1.000	10.000	10.200
23.508a	0.100	1.000	10.000	10.200
24.448a	0.100	1.000	10.000	10.200
25.389a	0.100	1.000	10.000	10.200
26.329a	0.100	1.000	10.000	10.200
27.270a	0.100	1.000	10.000	10.200
28.210a	0.100	1.000	10.000	10.200
29.151a	0.100	1.000	10.000	10.200
30.091a	0.100	1.000	10.000	10.200
31.032a	0.100	1.000	10.000	10.200
31.972a	0.100	1.000	10.000	10.200
32.913a	0.100	1.000	10.000	10.200
33.854a	0.100	1.000	10.000	10.200
34.794a	0.100	1.000	10.000	10.200
35.735a	0.100	0.999	9.993	10.193
36.675a	0.100	0.997	9.973	10.173
37.616a	0.100	0.986	9.870	10.048
38.556a	0.100	0.932	9.418	9.522
39.497a	0.100	0.813	8.381	8.416

Volume = 34.42m^3 LCG = 21.994a

Hull Section Data (with appendages) No Trim, No heel

Autoship education

Location (m)	Draft (m)	Area (m^2)	WL Width (m)	Girth (m)
1.500a	0.400	0.000	0.000	0.000
2.468a	0.400	0.613	2.071	2.446
3.437a	0.400	1.410	3.962	4.461
4.405a	0.400	2.116	5.605	6.211
5.374a	0.400	2.692	6.923	7.604
6.342a	0.400	3.268	8.241	8.997
7.310a	0.400	3.686	9.216	10.016
8.279a	0.400	3.890	9.726	10.526
9.247a	0.400	4.000	10.000	10.800
10.216a	0.400	4.000	10.000	10.800
11.184a	0.400	4.000	10.000	10.800
12.153a	0.400	4.000	10.000	10.800
13.121a	0.400	4.000	10.000	10.800
14.089a	0.400	4.000	10.000	10.800
15.058a	0.400	4.000	10.000	10.800
16.026a	0.400	4.000	10.000	10.800
16.995a	0.400	4.000	10.000	10.800
17.963a	0.400	4.000	10.000	10.800
18.932a	0.400	4.000	10.000	10.800
19.900a	0.400	4.000	10.000	10.800
20.868a	0.400	4.000	10.000	10.800
21.837a	0.400	4.000	10.000	10.800
22.805a	0.400	4.000	10.000	10.800
23.774a	0.400	4.000	10.000	10.800
24.742a	0.400	4.000	10.000	10.800
25.711a	0.400	4.000	10.000	10.800
26.679a	0.400	4.000	10.000	10.800
27.647a	0.400	4.000	10.000	10.800
28.616a	0.400	4.000	10.000	10.800
29.584a	0.400	4.000	10.000	10.800
30.553a	0.400	4.000	10.000	10.800
31.521a	0.400	4.000	10.000	10.800
32.490a	0.400	4.000	10.000	10.800
33.458a	0.400	4.000	10.000	10.800
34.426a	0.400	4.000	10.000	10.800
35.395a	0.400	4.000	10.000	10.800
36.363a	0.400	3.992	9.980	10.780
37.332a	0.400	3.980	9.951	10.749
38.300a	0.400	3.863	9.676	10.390
39.269a	0.400	3.505	8.954	9.413
40.237a	0.400	2.908	7.428	7.808

Volume = 140.48m^3 LCG = 21.984a

Hull Section Data (with appendages) No Trim, No heel

Autoship education

Location (m)	Draft (m)	Area (m^2)	WL Width (m)	Girth (m)
1.425a	0.700	0.017	0.114	0.567
2.414a	0.700	1.171	2.054	2.928
3.403a	0.700	2.563	3.974	4.996
4.392a	0.700	3.791	5.637	6.794
5.380a	0.700	4.780	6.963	8.215
6.369a	0.700	5.769	8.289	9.637
7.358a	0.700	6.469	9.241	10.641
8.347a	0.700	6.833	9.761	11.161
9.336a	0.700	7.000	10.000	11.400
10.324a	0.700	7.000	10.000	11.400
11.313a	0.700	7.000	10.000	11.400
12.302a	0.700	7.000	10.000	11.400
13.291a	0.700	7.000	10.000	11.400
14.280a	0.700	7.000	10.000	11.400
15.268a	0.700	7.000	10.000	11.400
16.257a	0.700	7.000	10.000	11.400
17.246a	0.700	7.000	10.000	11.400
18.235a	0.700	7.000	10.000	11.400
19.224a	0.700	7.000	10.000	11.400
20.212a	0.700	7.000	10.000	11.400
21.201a	0.700	7.000	10.000	11.400
22.190a	0.700	7.000	10.000	11.400
23.179a	0.700	7.000	10.000	11.400
24.168a	0.700	7.000	10.000	11.400
25.156a	0.700	7.000	10.000	11.400
26.145a	0.700	7.000	10.000	11.400
27.134a	0.700	7.000	10.000	11.400
28.123a	0.700	7.000	10.000	11.400
29.112a	0.700	7.000	10.000	11.400
30.100a	0.700	7.000	10.000	11.400
31.089a	0.700	7.000	10.000	11.400
32.078a	0.700	7.000	10.000	11.400
33.067a	0.700	7.000	10.000	11.400
34.056a	0.700	7.000	10.000	11.400
35.044a	0.700	7.000	10.000	11.400
36.033a	0.700	6.991	9.987	11.387
37.022a	0.700	6.976	9.966	11.366
38.011a	0.700	6.832	9.771	11.107
39.000a	0.700	6.361	9.185	10.293
39.988a	0.700	5.410	7.839	8.743
40.977a	0.700	4.332	6.277	7.000

Volume = 248.71m^3 LCG = 22.119a

Hull Section Data (with appendages) No Trim, No heel

Autoship education

Location (m)	Draft (m)	Area (m^2)	WL Width (m)	Girth (m)
1.351a	1.000	0.063	0.210	1.042
2.360a	1.000	1.687	2.042	3.411
3.369a	1.000	3.700	3.988	5.532
4.378a	1.000	5.471	5.670	7.377
5.387a	1.000	6.883	7.002	8.827
6.396a	1.000	8.295	8.335	10.277
7.406a	1.000	9.266	9.266	11.266
8.415a	1.000	9.797	9.797	11.797
9.424a	1.000	10.000	10.000	12.000
10.433a	1.000	10.000	10.000	12.000
11.442a	1.000	10.000	10.000	12.000
12.452a	1.000	10.000	10.000	12.000
13.461a	1.000	10.000	10.000	12.000
14.470a	1.000	10.000	10.000	12.000
15.479a	1.000	10.000	10.000	12.000
16.488a	1.000	10.000	10.000	12.000
17.497a	1.000	10.000	10.000	12.000
18.507a	1.000	10.000	10.000	12.000
19.516a	1.000	10.000	10.000	12.000
20.525a	1.000	10.000	10.000	12.000
21.534a	1.000	10.000	10.000	12.000
22.543a	1.000	10.000	10.000	12.000
23.552a	1.000	10.000	10.000	12.000
24.562a	1.000	10.000	10.000	12.000
25.571a	1.000	10.000	10.000	12.000
26.580a	1.000	10.000	10.000	12.000
27.589a	1.000	10.000	10.000	12.000
28.598a	1.000	10.000	10.000	12.000
29.607a	1.000	10.000	10.000	12.000
30.617a	1.000	10.000	10.000	12.000
31.626a	1.000	10.000	10.000	12.000
32.635a	1.000	10.000	10.000	12.000
33.644a	1.000	10.000	10.000	12.000
34.653a	1.000	10.000	10.000	12.000
35.662a	1.000	9.994	9.994	11.994
36.672a	1.000	9.973	9.973	11.973
37.681a	1.000	9.855	9.863	11.824
38.690a	1.000	9.365	9.421	11.202
39.699a	1.000	8.217	8.316	9.806
40.708a	1.000	6.638	6.718	7.921
41.717a	1.000	5.059	5.120	6.037

Volume = 359.06m^3 LCG = 22.272a

Hull Section Data (with appendages) No Trim, No heel

Autoship education

Location (m)	Draft (m)	Area (m^2)	WL Width (m)	Girth (m)
1.276a	1.300	0.129	0.287	1.426
2.306a	1.300	2.163	2.036	3.895
3.335a	1.300	4.823	4.005	6.068
4.365a	1.300	7.155	5.702	7.960
5.394a	1.300	9.001	7.041	9.438
6.424a	1.300	10.846	8.381	10.916
7.453a	1.300	12.079	9.291	11.891
8.483a	1.300	12.783	9.833	12.433
9.512a	1.300	13.000	10.000	12.600
10.542a	1.300	13.000	10.000	12.600
11.571a	1.300	13.000	10.000	12.600
12.601a	1.300	13.000	10.000	12.600
13.631a	1.300	13.000	10.000	12.600
14.660a	1.300	13.000	10.000	12.600
15.690a	1.300	13.000	10.000	12.600
16.719a	1.300	13.000	10.000	12.600
17.749a	1.300	13.000	10.000	12.600
18.778a	1.300	13.000	10.000	12.600
19.808a	1.300	13.000	10.000	12.600
20.837a	1.300	13.000	10.000	12.600
21.867a	1.300	13.000	10.000	12.600
22.896a	1.300	13.000	10.000	12.600
23.926a	1.300	13.000	10.000	12.600
24.956a	1.300	13.000	10.000	12.600
25.985a	1.300	13.000	10.000	12.600
27.015a	1.300	13.000	10.000	12.600
28.044a	1.300	13.000	10.000	12.600
29.074a	1.300	13.000	10.000	12.600
30.103a	1.300	13.000	10.000	12.600
31.133a	1.300	13.000	10.000	12.600
32.162a	1.300	13.000	10.000	12.600
33.192a	1.300	13.000	10.000	12.600
34.221a	1.300	13.000	10.000	12.600
35.251a	1.300	13.000	10.000	12.600
36.280a	1.300	12.976	9.982	12.582
37.310a	1.300	12.945	9.958	12.557
38.340a	1.300	12.545	9.678	12.151
39.369a	1.300	11.389	8.861	11.010
40.399a	1.300	9.288	7.226	8.979
41.428a	1.300	7.187	5.592	6.948
42.458a	1.300	5.086	3.957	4.917

Volume = 471.53m^3 LCG = 22.432a

Hull Section Data (with appendages) No Trim, No heel

Autoship education

Location (m)	Draft (m)	Area (m^2)	WL Width (m)	Girth (m)
1.201a	1.600	0.208	0.346	1.719
2.251a	1.600	2.602	2.034	4.380
3.301a	1.600	5.932	4.024	6.604
4.351a	1.600	8.844	5.736	8.543
5.401a	1.600	11.133	7.080	10.049
6.451a	1.600	13.421	8.425	11.556
7.501a	1.600	14.906	9.316	12.516
8.551a	1.600	15.790	9.869	13.069
9.601a	1.600	16.000	10.000	13.200
10.651a	1.600	16.000	10.000	13.200
11.701a	1.600	16.000	10.000	13.200
12.750a	1.600	16.000	10.000	13.200
13.800a	1.600	16.000	10.000	13.200
14.850a	1.600	16.000	10.000	13.200
15.900a	1.600	16.000	10.000	13.200
16.950a	1.600	16.000	10.000	13.200
18.000a	1.600	16.000	10.000	13.200
19.050a	1.600	16.000	10.000	13.200
20.100a	1.600	16.000	10.000	13.200
21.150a	1.600	16.000	10.000	13.200
22.200a	1.600	16.000	10.000	13.200
23.250a	1.600	16.000	10.000	13.200
24.300a	1.600	16.000	10.000	13.200
25.349a	1.600	16.000	10.000	13.200
26.399a	1.600	16.000	10.000	13.200
27.449a	1.600	16.000	10.000	13.200
28.499a	1.600	16.000	10.000	13.200
29.549a	1.600	16.000	10.000	13.200
30.599a	1.600	16.000	10.000	13.200
31.649a	1.600	16.000	10.000	13.200
32.699a	1.600	16.000	10.000	13.200
33.749a	1.600	16.000	10.000	13.200
34.799a	1.600	16.000	10.000	13.200
35.849a	1.600	15.985	9.991	13.191
36.898a	1.600	15.950	9.969	13.169
37.948a	1.600	15.662	9.807	12.929
38.998a	1.600	14.654	9.242	12.096
40.048a	1.600	12.340	7.802	10.186
41.098a	1.600	9.697	6.131	8.005
42.148a	1.600	7.054	4.460	5.823
43.198a	1.600	4.411	2.789	3.641

Volume = 586.15m^3 LCG = 22.595a

Hull Section Data (with appendages) No Trim, No heel

Autoship education

Location (m)	Draft (m)	Area (m^2)	WL Width (m)	Girth (m)
1.127a	1.900	0.290	0.386	1.920
2.197a	1.900	3.005	2.038	4.867
3.267a	1.900	7.029	4.045	7.141
4.338a	1.900	10.538	5.770	9.126
5.408a	1.900	13.279	7.119	10.661
6.478a	1.900	16.020	8.468	12.195
7.548a	1.900	17.749	9.341	13.141
8.619a	1.900	18.819	9.905	13.705
9.689a	1.900	19.000	10.000	13.800
10.759a	1.900	19.000	10.000	13.800
11.830a	1.900	19.000	10.000	13.800
12.900a	1.900	19.000	10.000	13.800
13.970a	1.900	19.000	10.000	13.800
15.040a	1.900	19.000	10.000	13.800
16.111a	1.900	19.000	10.000	13.800
17.181a	1.900	19.000	10.000	13.800
18.251a	1.900	19.000	10.000	13.800
19.322a	1.900	19.000	10.000	13.800
20.392a	1.900	19.000	10.000	13.800
21.462a	1.900	19.000	10.000	13.800
22.532a	1.900	19.000	10.000	13.800
23.603a	1.900	19.000	10.000	13.800
24.673a	1.900	19.000	10.000	13.800
25.743a	1.900	19.000	10.000	13.800
26.814a	1.900	19.000	10.000	13.800
27.884a	1.900	19.000	10.000	13.800
28.954a	1.900	19.000	10.000	13.800
30.024a	1.900	19.000	10.000	13.800
31.095a	1.900	19.000	10.000	13.800
32.165a	1.900	19.000	10.000	13.800
33.235a	1.900	19.000	10.000	13.800
34.306a	1.900	19.000	10.000	13.800
35.376a	1.900	19.000	10.000	13.800
36.446a	1.900	18.958	9.978	13.778
37.516a	1.900	18.818	9.911	13.683
38.587a	1.900	18.010	9.535	13.106
39.657a	1.900	15.855	8.445	11.557
40.727a	1.900	12.649	6.737	9.220
41.798a	1.900	9.443	5.029	6.883
42.868a	1.900	6.237	3.322	4.546
43.938a	1.900	3.031	1.614	2.209

Volume = 702.91m^3 LCG = 22.760a

Hull Section Data (with appendages) No Trim, No heel

Autoship education

Location (m)	Draft (m)	Area (m^2)	WL Width (m)	Girth (m)
1.052a	2.200	0.368	0.408	2.030
2.143a	2.200	3.376	2.048	5.354
3.233a	2.200	8.115	4.068	7.677
4.324a	2.200	12.237	5.804	9.709
5.415a	2.200	15.439	7.157	11.272
6.505a	2.200	18.642	8.511	12.835
7.596a	2.200	20.606	9.366	13.766
8.687a	2.200	21.869	9.940	14.340
9.777a	2.200	22.000	10.000	14.400
10.868a	2.200	22.000	10.000	14.400
11.959a	2.200	22.000	10.000	14.400
13.049a	2.200	22.000	10.000	14.400
14.140a	2.200	22.000	10.000	14.400
15.231a	2.200	22.000	10.000	14.400
16.321a	2.200	22.000	10.000	14.400
17.412a	2.200	22.000	10.000	14.400
18.503a	2.200	22.000	10.000	14.400
19.593a	2.200	22.000	10.000	14.400
20.684a	2.200	22.000	10.000	14.400
21.775a	2.200	22.000	10.000	14.400
22.865a	2.200	22.000	10.000	14.400
23.956a	2.200	22.000	10.000	14.400
25.047a	2.200	22.000	10.000	14.400
26.137a	2.200	22.000	10.000	14.400
27.228a	2.200	22.000	10.000	14.400
28.319a	2.200	22.000	10.000	14.400
29.409a	2.200	22.000	10.000	14.400
30.500a	2.200	22.000	10.000	14.400
31.591a	2.200	22.000	10.000	14.400
32.681a	2.200	22.000	10.000	14.400
33.772a	2.200	22.000	10.000	14.400
34.863a	2.200	22.000	10.000	14.400
35.953a	2.200	21.974	9.988	14.388
37.044a	2.200	21.924	9.966	14.366
38.135a	2.200	21.446	9.780	14.063
39.225a	2.200	19.846	9.132	13.071
40.316a	2.200	16.103	7.411	10.607
41.406a	2.200	12.313	5.667	8.110
42.497a	2.200	8.523	3.923	5.614
43.588a	2.200	4.734	2.179	3.118
44.678a	2.200	0.944	0.434	0.622

Volume = 821.84m^3 LCG = 22.928a

Hull Section Data (with appendages) No Trim, No heel

Autoship education

Location (m)	Draft (m)	Area (m^2)	WL Width (m)	Girth (m)
0.978a	2.500	0.433	0.412	2.048
2.077a	2.500	3.653	2.038	5.815
3.176a	2.500	9.081	4.053	8.167
4.275a	2.500	13.825	5.796	10.242
5.375a	2.500	17.459	7.138	11.816
6.474a	2.500	21.092	8.480	13.390
7.573a	2.500	23.386	9.354	14.354
8.673a	2.500	24.832	9.933	14.933
9.772a	2.500	25.000	10.000	15.000
10.871a	2.500	25.000	10.000	15.000
11.971a	2.500	25.000	10.000	15.000
13.070a	2.500	25.000	10.000	15.000
14.169a	2.500	25.000	10.000	15.000
15.269a	2.500	25.000	10.000	15.000
16.368a	2.500	25.000	10.000	15.000
17.467a	2.500	25.000	10.000	15.000
18.567a	2.500	25.000	10.000	15.000
19.666a	2.500	25.000	10.000	15.000
20.765a	2.500	25.000	10.000	15.000
21.864a	2.500	25.000	10.000	15.000
22.964a	2.500	25.000	10.000	15.000
24.063a	2.500	25.000	10.000	15.000
25.162a	2.500	25.000	10.000	15.000
26.262a	2.500	25.000	10.000	15.000
27.361a	2.500	25.000	10.000	15.000
28.460a	2.500	25.000	10.000	15.000
29.560a	2.500	25.000	10.000	15.000
30.659a	2.500	25.000	10.000	15.000
31.758a	2.500	25.000	10.000	15.000
32.858a	2.500	25.000	10.000	15.000
33.957a	2.500	25.000	10.000	15.000
35.056a	2.500	25.000	10.000	15.000
36.156a	2.500	24.960	9.984	14.984
37.255a	2.500	24.903	9.961	14.961
38.354a	2.500	24.158	9.711	14.537
39.454a	2.500	21.760	9.023	13.371
40.553a	2.500	17.520	8.401	11.882
41.652a	2.500	13.280	7.779	10.393
42.751a	2.500	9.041	7.158	8.904
43.851a	2.500	4.801	6.536	7.415
44.950a	2.500	0.562	5.914	5.926

Volume = 939.25m^3 LCG = 23.018a

Hull Section Data (with appendages) No Trim, No heel

Autoship education

Location (m)	Draft (m)	Area (m^2)	WL Width (m)	Girth (m)
0.903a	2.800	0.477	0.397	1.975
2.004a	2.800	3.848	2.022	6.262
3.105a	2.800	9.944	4.020	8.629
4.206a	2.800	15.319	5.766	10.746
5.308a	2.800	19.358	7.088	12.321
6.409a	2.800	23.398	8.410	13.897
7.510a	2.800	26.099	9.321	14.921
8.611a	2.800	27.722	9.901	15.501
9.712a	2.800	28.000	10.000	15.600
10.813a	2.800	28.000	10.000	15.600
11.915a	2.800	28.000	10.000	15.600
13.016a	2.800	28.000	10.000	15.600
14.117a	2.800	28.000	10.000	15.600
15.218a	2.800	28.000	10.000	15.600
16.319a	2.800	28.000	10.000	15.600
17.421a	2.800	28.000	10.000	15.600
18.522a	2.800	28.000	10.000	15.600
19.623a	2.800	28.000	10.000	15.600
20.724a	2.800	28.000	10.000	15.600
21.825a	2.800	28.000	10.000	15.600
22.926a	2.800	28.000	10.000	15.600
24.028a	2.800	28.000	10.000	15.600
25.129a	2.800	28.000	10.000	15.600
26.230a	2.800	28.000	10.000	15.600
27.331a	2.800	28.000	10.000	15.600
28.432a	2.800	28.000	10.000	15.600
29.534a	2.800	28.000	10.000	15.600
30.635a	2.800	28.000	10.000	15.600
31.736a	2.800	28.000	10.000	15.600
32.837a	2.800	28.000	10.000	15.600
33.938a	2.800	28.000	10.000	15.600
35.039a	2.800	28.000	10.000	15.600
36.141a	2.800	27.956	9.984	15.584
37.242a	2.800	27.892	9.961	15.561
38.343a	2.800	27.095	9.728	15.149
39.444a	2.800	24.512	9.072	13.995
40.545a	2.800	20.103	8.573	12.570
41.647a	2.800	15.695	8.074	11.145
42.748a	2.800	11.286	7.575	9.719
43.849a	2.800	6.877	7.076	8.294
44.950a	2.800	2.469	6.577	6.869

Volume = 1057.96m^3 LCG = 23.108a

Hull Section Data (with appendages) No Trim, No heel

Autoship education

Location (m)	Draft (m)	Area (m^2)	WL Width (m)	Girth (m)
0.828a	3.100	0.492	0.365	1.810
1.931a	3.100	4.043	2.004	6.681
3.034a	3.100	10.762	3.991	9.092
4.137a	3.100	16.779	5.738	11.249
5.240a	3.100	21.219	7.041	12.827
6.343a	3.100	25.660	8.343	14.404
7.447a	3.100	28.792	9.288	15.488
8.550a	3.100	30.591	9.868	16.068
9.653a	3.100	31.000	10.000	16.200
10.756a	3.100	31.000	10.000	16.200
11.859a	3.100	31.000	10.000	16.200
12.962a	3.100	31.000	10.000	16.200
14.065a	3.100	31.000	10.000	16.200
15.168a	3.100	31.000	10.000	16.200
16.271a	3.100	31.000	10.000	16.200
17.374a	3.100	31.000	10.000	16.200
18.477a	3.100	31.000	10.000	16.200
19.580a	3.100	31.000	10.000	16.200
20.683a	3.100	31.000	10.000	16.200
21.786a	3.100	31.000	10.000	16.200
22.889a	3.100	31.000	10.000	16.200
23.992a	3.100	31.000	10.000	16.200
25.095a	3.100	31.000	10.000	16.200
26.198a	3.100	31.000	10.000	16.200
27.301a	3.100	31.000	10.000	16.200
28.404a	3.100	31.000	10.000	16.200
29.507a	3.100	31.000	10.000	16.200
30.610a	3.100	31.000	10.000	16.200
31.714a	3.100	31.000	10.000	16.200
32.817a	3.100	31.000	10.000	16.200
33.920a	3.100	31.000	10.000	16.200
35.023a	3.100	31.000	10.000	16.200
36.126a	3.100	30.953	9.985	16.185
37.229a	3.100	30.881	9.962	16.162
38.332a	3.100	30.039	9.746	15.760
39.435a	3.100	27.276	9.101	14.608
40.538a	3.100	22.713	8.619	13.183
41.641a	3.100	18.149	8.136	11.757
42.744a	3.100	13.586	7.653	10.331
43.847a	3.100	9.023	7.170	8.905
44.950a	3.100	4.459	6.687	7.480

Volume = 1177.07m^3 LCG = 23.182a

Hull Section Data (with appendages) No Trim, No heel

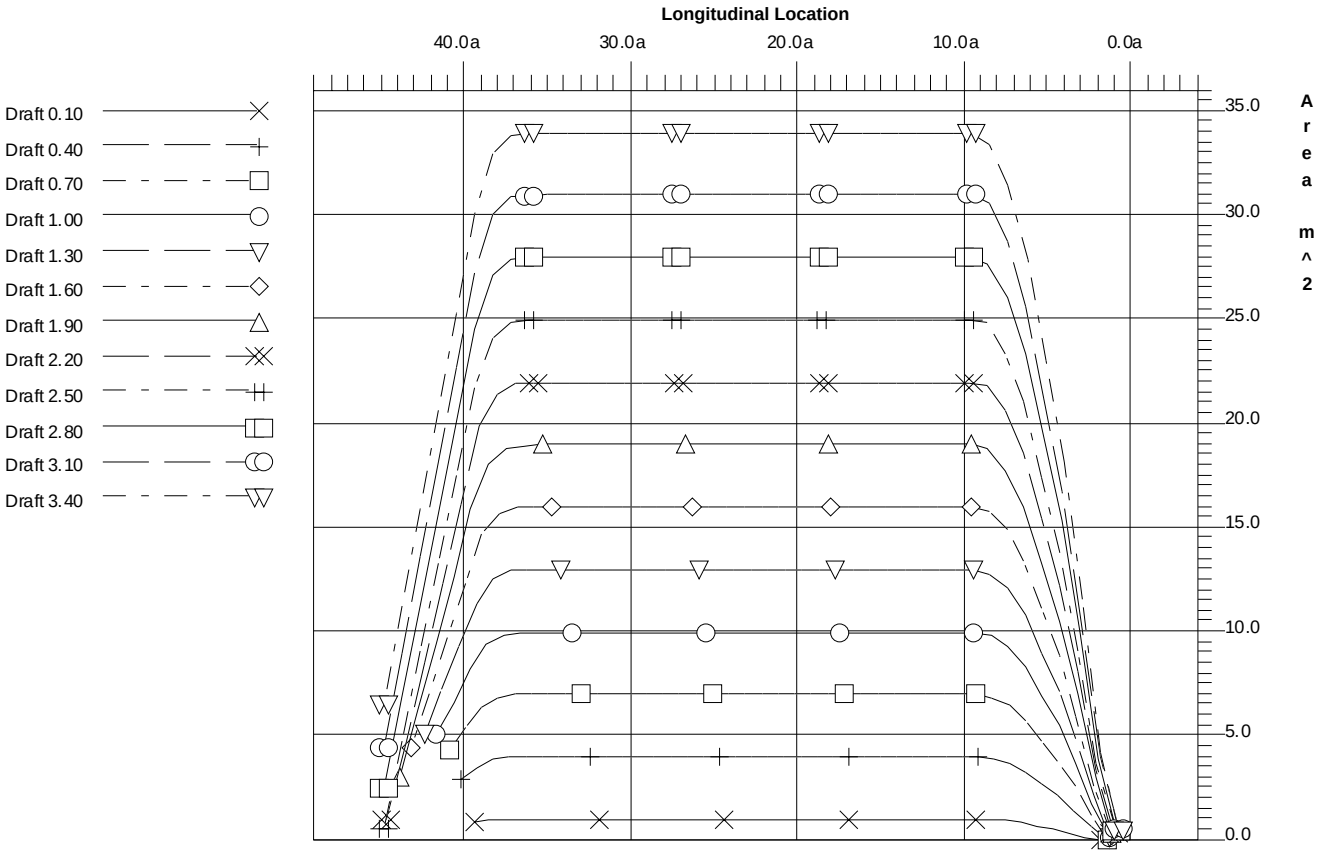
Autoship education

Location (m)	Draft (m)	Area (m^2)	WL Width (m)	Girth (m)
0.754a	3.400	0.470	0.315	1.555
1.859a	3.400	4.189	1.984	7.098
2.963a	3.400	11.537	3.967	9.555
4.068a	3.400	18.207	5.714	11.753
5.173a	3.400	23.043	6.996	13.332
6.278a	3.400	27.878	8.278	14.911
7.383a	3.400	31.465	9.254	16.054
8.488a	3.400	33.442	9.836	16.636
9.593a	3.400	34.000	10.000	16.800
10.698a	3.400	34.000	10.000	16.800
11.803a	3.400	34.000	10.000	16.800
12.908a	3.400	34.000	10.000	16.800
14.013a	3.400	34.000	10.000	16.800
15.117a	3.400	34.000	10.000	16.800
16.222a	3.400	34.000	10.000	16.800
17.327a	3.400	34.000	10.000	16.800
18.432a	3.400	34.000	10.000	16.800
19.537a	3.400	34.000	10.000	16.800
20.642a	3.400	34.000	10.000	16.800
21.747a	3.400	34.000	10.000	16.800
22.852a	3.400	34.000	10.000	16.800
23.957a	3.400	34.000	10.000	16.800
25.062a	3.400	34.000	10.000	16.800
26.167a	3.400	34.000	10.000	16.800
27.271a	3.400	34.000	10.000	16.800
28.376a	3.400	34.000	10.000	16.800
29.481a	3.400	34.000	10.000	16.800
30.586a	3.400	34.000	10.000	16.800
31.691a	3.400	34.000	10.000	16.800
32.796a	3.400	34.000	10.000	16.800
33.901a	3.400	34.000	10.000	16.800
35.006a	3.400	34.000	10.000	16.800
36.111a	3.400	33.949	9.985	16.785
37.216a	3.400	33.871	9.962	16.762
38.321a	3.400	32.991	9.763	16.371
39.426a	3.400	30.050	9.130	15.221
40.530a	3.400	25.336	8.662	13.794
41.635a	3.400	20.622	8.194	12.368
42.740a	3.400	15.908	7.726	10.942
43.845a	3.400	11.195	7.258	9.515
44.950a	3.400	6.481	6.790	8.089

Volume = 1296.43m^3 LCG = 23.242a

Autoship education

Section Area Curves (with appendages)



Cross Curves of Stability:

Righting Arms(heel) for VCG = 2.00
Trim aft 0.36 deg. at heel = 0 (RA Trim = 0)

Autoship education

Displ (MT)	5.000s	10.000s	15.000s	20.000s	25.000s	30.000s
162.274	1.428s	2.230s	2.505s	2.592s	2.583s	2.510s
199.176	1.150s	1.993s	2.322s	2.446s	2.470s	2.426s
236.308	0.954s	1.780s	2.157s	2.315s	2.368s	2.351s
273.625	0.814s	1.587s	2.007s	2.197s	2.276s	2.282s
311.233	0.710s	1.410s	1.869s	2.087s	2.191s	2.219s
349.086	0.630s	1.254s	1.740s	1.985s	2.112s	2.160s
387.184	0.568s	1.124s	1.620s	1.890s	2.039s	2.105s
425.527	0.519s	1.019s	1.507s	1.801s	1.970s	2.054s
464.115	0.479s	0.934s	1.400s	1.717s	1.905s	2.002s
502.951	0.447s	0.863s	1.299s	1.637s	1.838s	1.952s
542.033	0.421s	0.805s	1.207s	1.561s	1.773s	1.903s
581.141	0.400s	0.757s	1.130s	1.486s	1.711s	1.851s
620.690	0.383s	0.717s	1.065s	1.409s	1.651s	1.794s
660.486	0.370s	0.683s	1.006s	1.334s	1.593s	1.734s
700.528	0.360s	0.654s	0.948s	1.261s	1.533s	1.671s
740.817	0.352s	0.626s	0.897s	1.195s	1.470s	1.605s
781.337	0.346s	0.591s	0.851s	1.136s	1.404s	1.537s
822.128	0.325s	0.558s	0.811s	1.084s	1.336s	1.467s
863.598	0.284s	0.528s	0.774s	1.036s	1.265s	1.394s
902.257	0.269s	0.506s	0.745s	0.993s	1.197s	1.325s
942.354	0.255s	0.485s	0.718s	0.950s	1.129s	1.251s
982.806	0.241s	0.467s	0.694s	0.907s	1.063s	1.176s
1023.386	0.229s	0.451s	0.673s	0.864s	1.000s	1.099s
1064.010	0.219s	0.437s	0.651s	0.820s	0.938s	1.023s
1104.663	0.211s	0.423s	0.628s	0.776s	0.877s	0.950s
1145.344	0.204s	0.411s	0.603s	0.732s	0.818s	0.880s
1186.053	0.199s	0.401s	0.574s	0.686s	0.759s	0.811s
1226.791	0.195s	0.391s	0.543s	0.639s	0.701s	0.746s
1267.556	0.191s	0.379s	0.510s	0.590s	0.643s	0.682s
1308.351	0.188s	0.362s	0.473s	0.540s	0.585s	0.619s
1349.175	0.186s	0.342s	0.434s	0.489s	0.528s	0.557s
1390.028	0.183s	0.316s	0.391s	0.437s	0.471s	0.496s

Displ (MT)	35.000s	40.000s	45.000s	50.000s	55.000s	60.000s
162.274	2.394s	2.246s	2.075s	1.888s	1.694s	1.504s
199.176	2.337s	2.216s	2.071s	1.911s	1.741s	1.551s
236.308	2.286s	2.189s	2.068s	1.930s	1.769s	1.574s
273.625	2.240s	2.164s	2.064s	1.939s	1.775s	1.580s
311.233	2.198s	2.142s	2.057s	1.930s	1.766s	1.573s
349.086	2.158s	2.120s	2.039s	1.912s	1.749s	1.560s
387.184	2.121s	2.095s	2.013s	1.887s	1.728s	1.545s
425.527	2.085s	2.060s	1.978s	1.855s	1.701s	1.524s
464.115	2.045s	2.018s	1.938s	1.819s	1.672s	1.502s
502.951	1.999s	1.972s	1.894s	1.780s	1.639s	1.475s
542.033	1.948s	1.922s	1.847s	1.738s	1.604s	1.443s
581.141	1.894s	1.869s	1.798s	1.696s	1.564s	1.408s
620.690	1.836s	1.813s	1.747s	1.649s	1.521s	1.372s
660.486	1.776s	1.756s	1.694s	1.598s	1.476s	1.334s
700.528	1.713s	1.696s	1.638s	1.546s	1.429s	1.294s
740.817	1.648s	1.634s	1.579s	1.492s	1.381s	1.252s
781.337	1.581s	1.569s	1.518s	1.436s	1.332s	1.208s
822.128	1.512s	1.503s	1.455s	1.379s	1.281s	1.163s
863.598	1.440s	1.434s	1.391s	1.320s	1.228s	1.118s
902.257	1.371s	1.369s	1.330s	1.265s	1.179s	1.075s
942.354	1.300s	1.300s	1.266s	1.207s	1.126s	1.029s

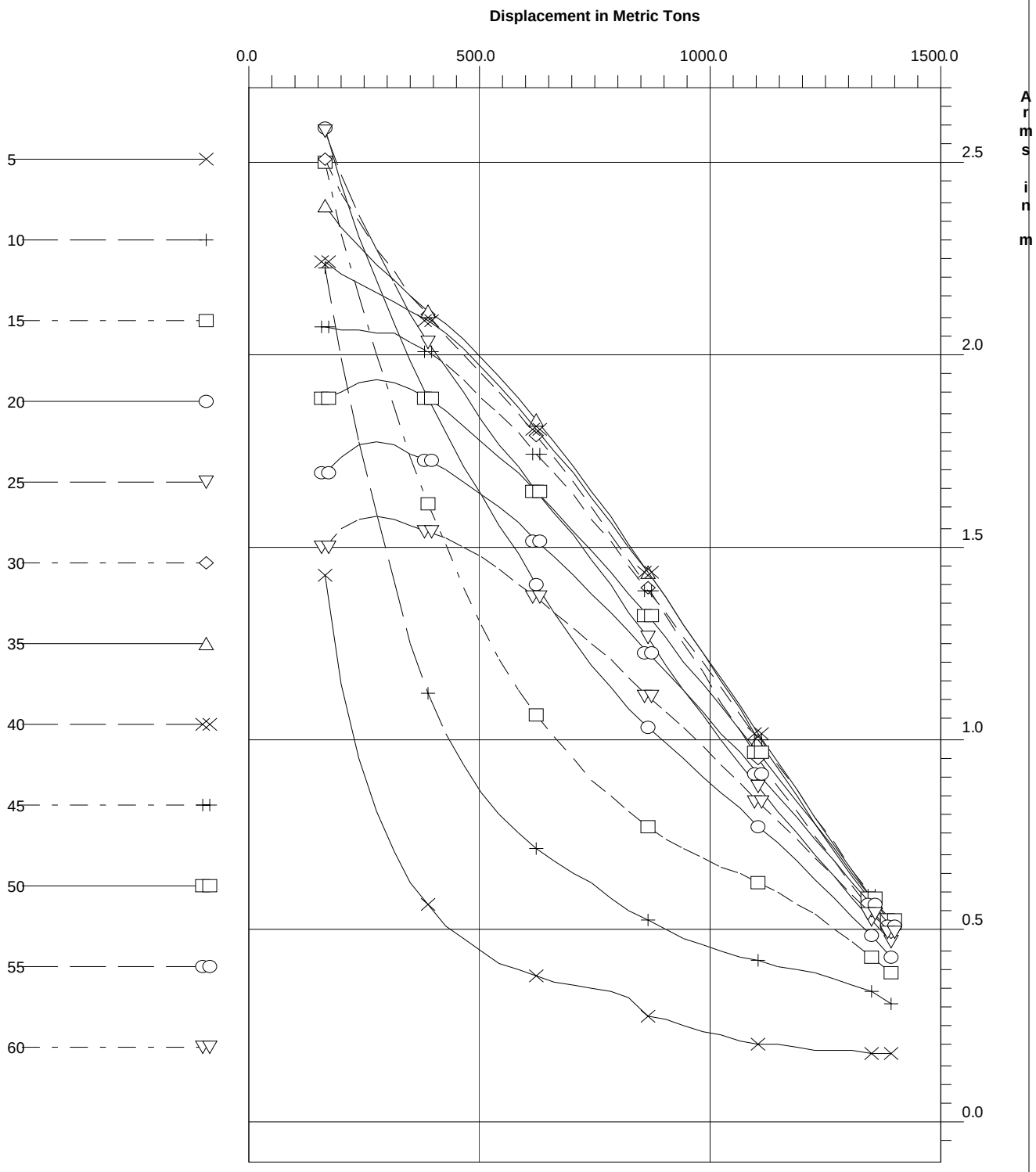
Autoship education

982.806	1.227s	1.230s	1.201s	1.147s	1.073s	0.983s
1023.386	1.153s	1.160s	1.135s	1.087s	1.019s	0.936s
1064.010	1.078s	1.089s	1.069s	1.026s	0.965s	0.889s
1104.663	1.002s	1.017s	1.003s	0.965s	0.910s	0.841s
1145.344	0.926s	0.945s	0.935s	0.903s	0.855s	0.793s
1186.053	0.851s	0.872s	0.867s	0.842s	0.799s	0.744s
1226.791	0.779s	0.800s	0.799s	0.779s	0.744s	0.695s
1267.556	0.709s	0.728s	0.731s	0.717s	0.687s	0.646s
1308.351	0.642s	0.659s	0.663s	0.653s	0.631s	0.597s
1349.175	0.577s	0.591s	0.597s	0.591s	0.574s	0.548s
1390.028	0.514s	0.526s	0.533s	0.531s	0.518s	0.499s

Water Specific Gravity = 1.025 kg/L.

Autoship education

Cross Curves



Tank Capacity Data:

Tank Capacities for BALLAST TANK1 containing WATER BALLAST (1.025)

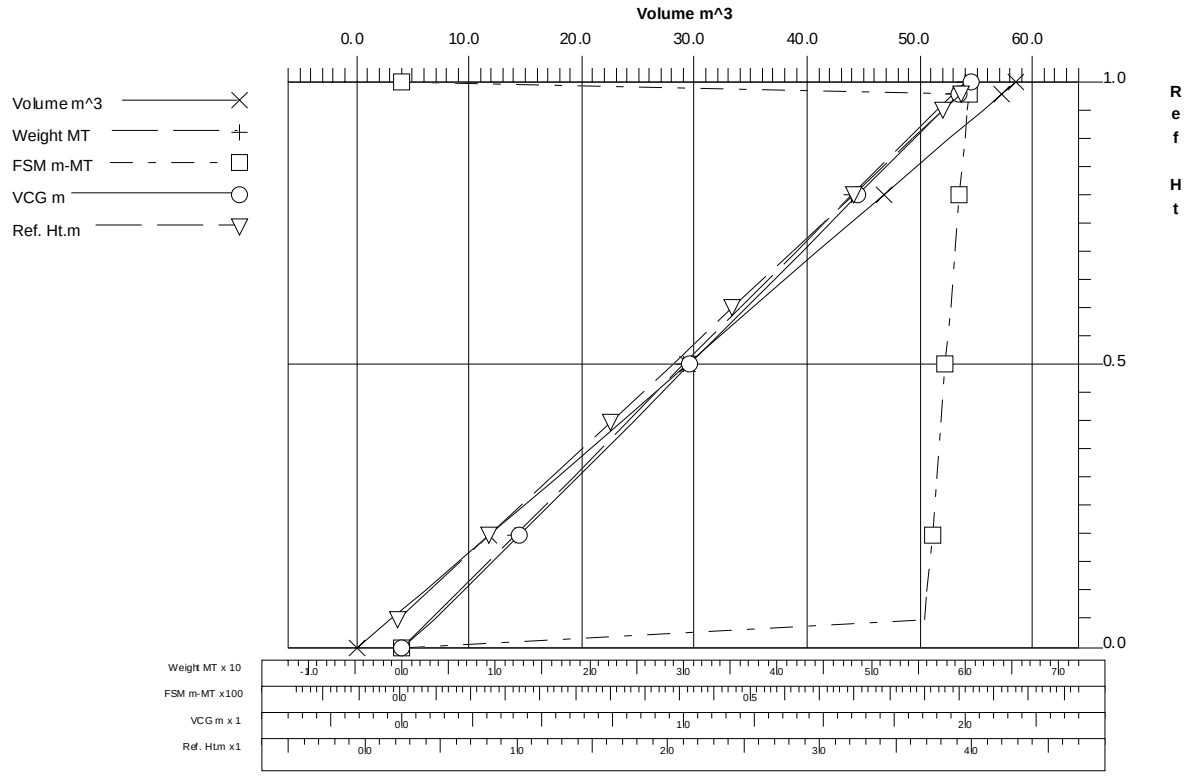
No Trim, No Heel

Ref Ht (m)	Load (%)	Volume (m^3)	Weight (MT)	Lcg (m)	Tcg (m)	Vcg (m)	Fsm (m-MT)
	0.00%	0.00	0.00				
0.21	5.00%	2.92	2.99	6.017a	0.000	0.109	74.98
0.41	10.00%	5.82	5.97	6.010a	0.000	0.210	75.31
0.82	20.00%	11.66	11.95	6.006a	0.000	0.412	75.96
1.22	30.00%	17.52	17.96	6.005a	0.000	0.615	76.61
1.62	40.00%	23.35	23.93	6.003a	0.000	0.816	77.27
2.02	50.00%	29.20	29.93	6.002a	0.000	1.017	77.94
2.42	60.00%	35.02	35.90	6.002a	0.000	1.217	78.60
2.82	70.00%	40.88	41.90	6.001a	0.000	1.418	79.27
3.21	80.00%	46.69	47.86	6.000a	0.000	1.617	79.94
3.61	90.00%	52.55	53.86	6.000a	0.000	1.816	80.62
3.80	95.00%	55.47	56.85	5.999a	0.000	1.916	80.96
3.92	98.00%	57.21	58.64	5.999a	0.000	1.975	81.17
	100.00%	58.37	59.83	5.999a	0.000	2.015	

Reference Point

Part	Long.(m)	Trans.(m)	Vert.(m)
BALLAST TANK1	0.000	0.000	0.000

Tank Characteristics



Autoship education

Tank Capacities for F.O.TANK.P containing FUEL OIL (0.870)

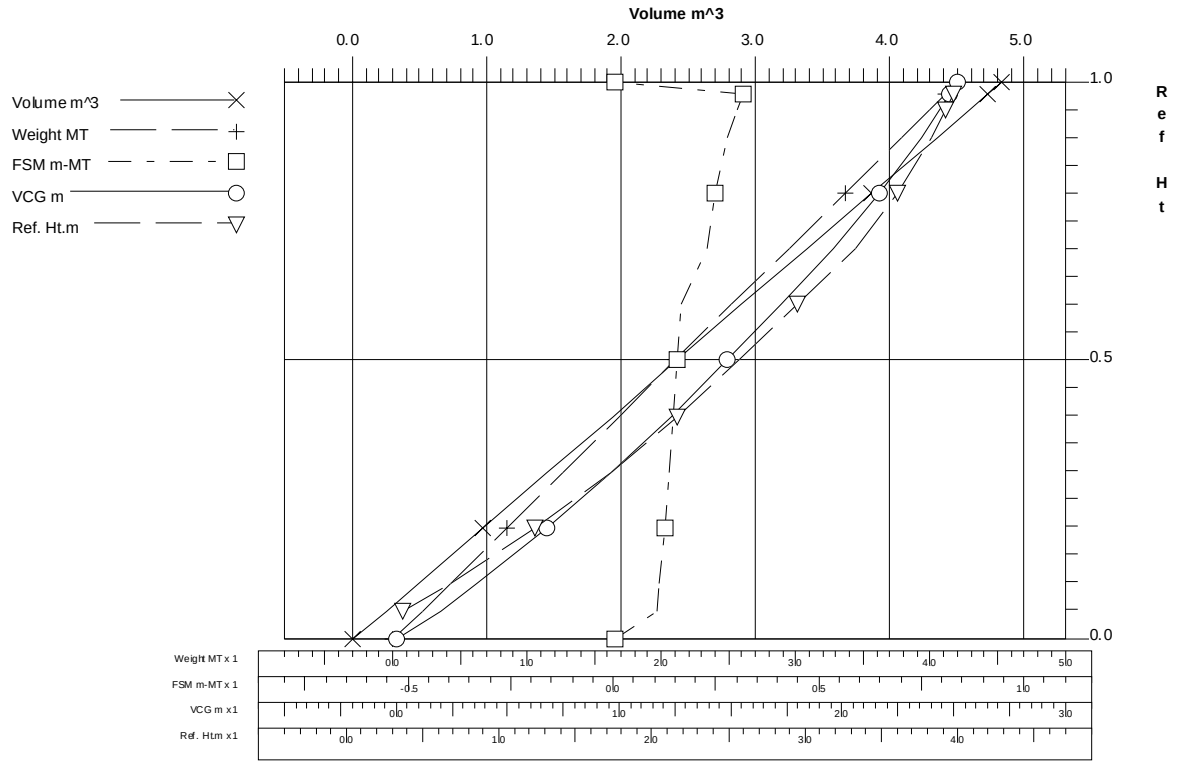
No Trim, No Heel

Ref Ht (m)	Load (%)	Volume (m^3)	Weight (MT)	Lcg (m)	Tcg (m)	Vcg (m)	Fsm (m-MT)
	0.00%	0.00	0.00				
0.36	5.00%	0.24	0.21	38.974a	3.860p	0.192	0.10
0.68	10.00%	0.48	0.42	38.987a	3.870p	0.361	0.11
1.23	20.00%	0.96	0.84	39.011a	3.865p	0.674	0.12
1.72	30.00%	1.44	1.26	39.032a	3.852p	0.961	0.13
2.16	40.00%	1.93	1.68	39.052a	3.836p	1.231	0.14
2.57	50.00%	2.41	2.10	39.070a	3.818p	1.483	0.15
2.94	60.00%	2.89	2.52	39.087a	3.799p	1.721	0.16
3.33	70.00%	3.38	2.94	39.108a	3.801p	1.956	0.23
3.60	80.00%	3.85	3.35	39.166a	3.801p	2.164	0.25
3.82	90.00%	4.34	3.77	39.230a	3.802p	2.348	0.27
3.91	95.00%	4.58	3.98	39.261a	3.804p	2.432	0.30
3.97	98.00%	4.72	4.11	39.278a	3.806p	2.480	0.31
	100.00%	4.82	4.19	39.290a	3.807p	2.512	

Reference Point

Part	Long.(m)	Trans.(m)	Vert.(m)
F.O.TANK.P	0.000	0.000	0.000

Tank Characteristics



Tank Capacities for F.O.TANK.S containing FUEL OIL (0.870)

No Trim, No Heel

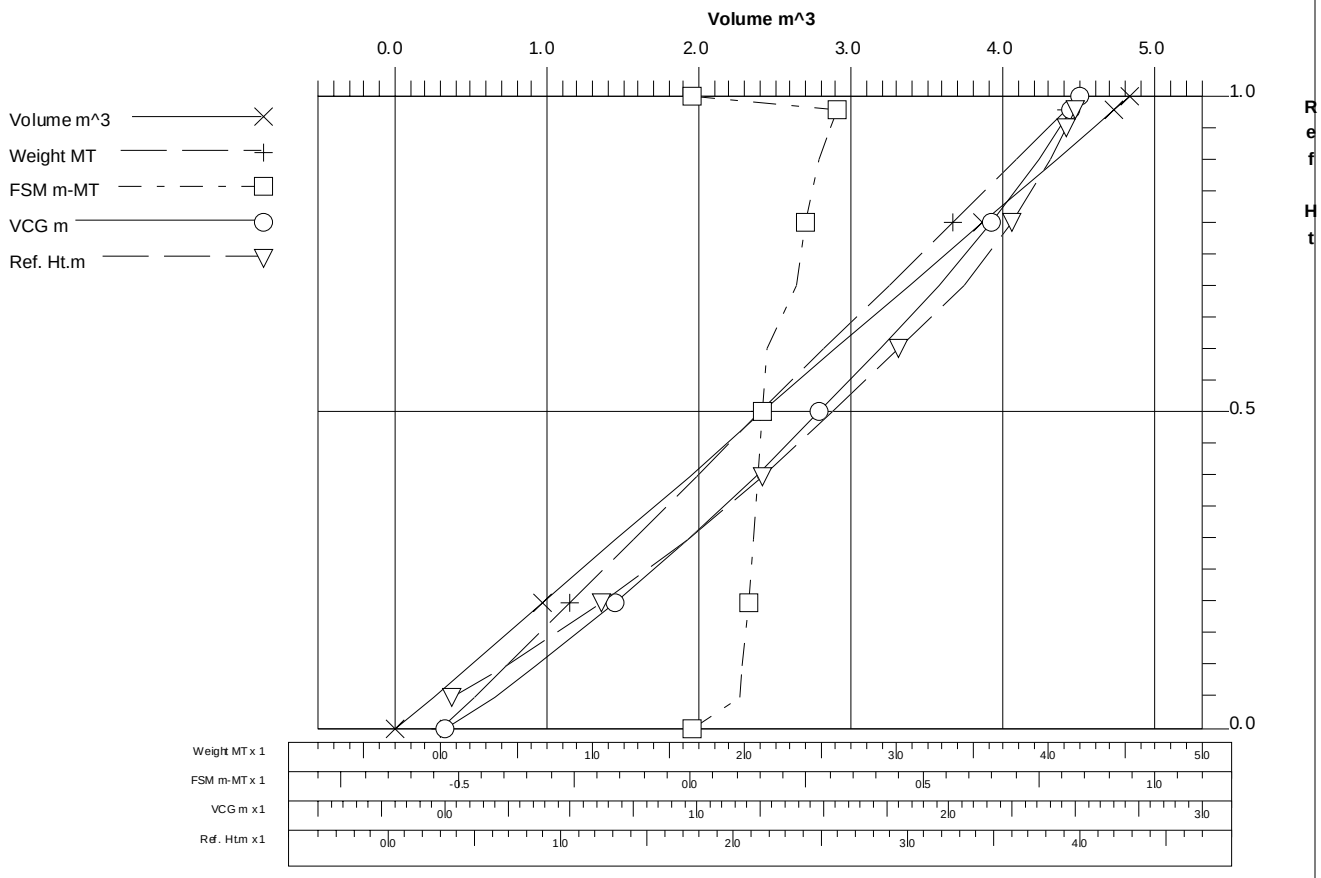
Autoship education

Ref Ht (m)	Load (%)	Volume (m^3)	Weight (MT)	Lcg (m)	Tcg (m)	Vcg (m)	Fsm (m-MT)
	0.00%	0.00	0.00				
0.36	5.00%	0.24	0.21	38.974a	3.860s	0.192	0.10
0.68	10.00%	0.48	0.42	38.987a	3.870s	0.361	0.11
1.23	20.00%	0.96	0.84	39.011a	3.865s	0.674	0.12
1.72	30.00%	1.44	1.26	39.032a	3.852s	0.961	0.13
2.16	40.00%	1.93	1.68	39.052a	3.836s	1.231	0.14
2.57	50.00%	2.41	2.10	39.070a	3.818s	1.483	0.15
2.94	60.00%	2.89	2.52	39.087a	3.799s	1.721	0.16
3.33	70.00%	3.38	2.94	39.108a	3.801s	1.956	0.23
3.60	80.00%	3.85	3.35	39.166a	3.801s	2.164	0.25
3.82	90.00%	4.34	3.77	39.230a	3.802s	2.348	0.27
3.91	95.00%	4.58	3.98	39.261a	3.804s	2.432	0.30
3.97	98.00%	4.72	4.11	39.278a	3.806s	2.480	0.31
	100.00%	4.82	4.19	39.290a	3.807s	2.512	

Reference Point

Part	Long.(m)	Trans.(m)	Vert.(m)
F.O.TANK.S	0.000	0.000	0.000

Tank Characteristics



Tank Capacities for BALLAST TANK2 containing WATER BALLAST (1.025)

No Trim, No Heel

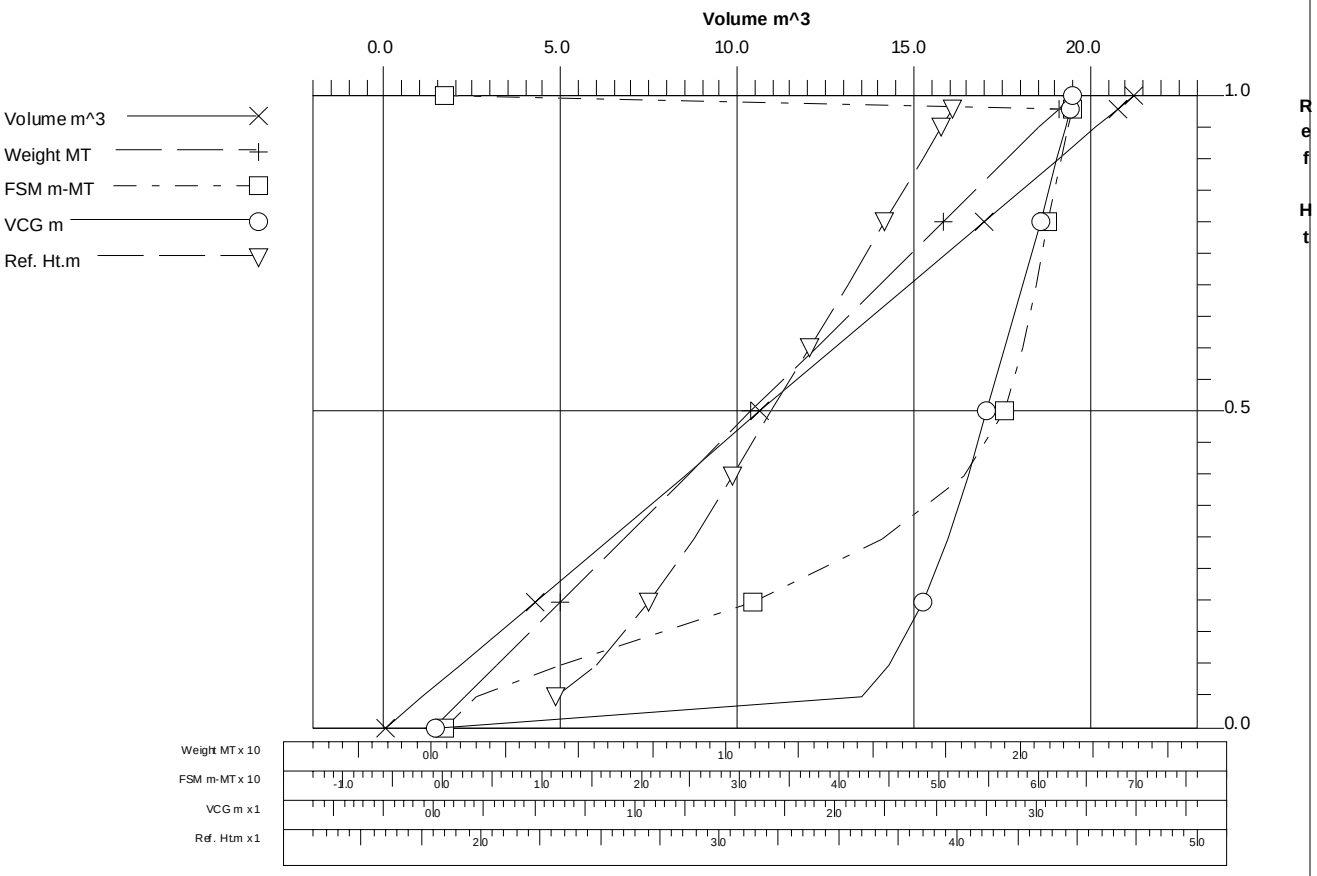
Autoship education

Ref Ht (m)	Load (%)	Volume (m^3)	Weight (MT)	Lcg (m)	Tcg (m)	Vcg (m)	Fsm (m-MT)
	0.00%	0.00	0.00				
2.31	5.00%	1.06	1.09	43.628a	0.000	2.132	3.22
2.48	10.00%	2.11	2.17	43.789a	0.000	2.266	11.82
2.70	20.00%	4.23	4.34	43.919a	0.000	2.431	31.16
2.89	30.00%	6.35	6.50	43.957a	0.000	2.552	44.17
3.05	40.00%	8.47	8.68	43.970a	0.000	2.657	52.34
3.22	50.00%	10.59	10.85	43.974a	0.000	2.752	56.61
3.38	60.00%	12.70	13.02	43.976a	0.000	2.843	58.30
3.53	70.00%	14.82	15.19	43.977a	0.000	2.930	59.64
3.69	80.00%	16.94	17.36	43.978a	0.000	3.016	60.98
3.85	90.00%	19.06	19.53	43.979a	0.000	3.099	62.34
3.92	95.00%	20.12	20.62	43.979a	0.000	3.141	63.02
3.97	98.00%	20.76	21.28	43.979a	0.000	3.165	63.43
	100.00%	21.17	21.70	43.979a	0.000	3.181	

Reference Point

Part	Long.(m)	Trans.(m)	Vert.(m)
BALLAST TANK2	0.000	0.000	0.000

Tank Characteristics



KG Limit Curve:

Autoship education

Maximum VCG vs. Displacement

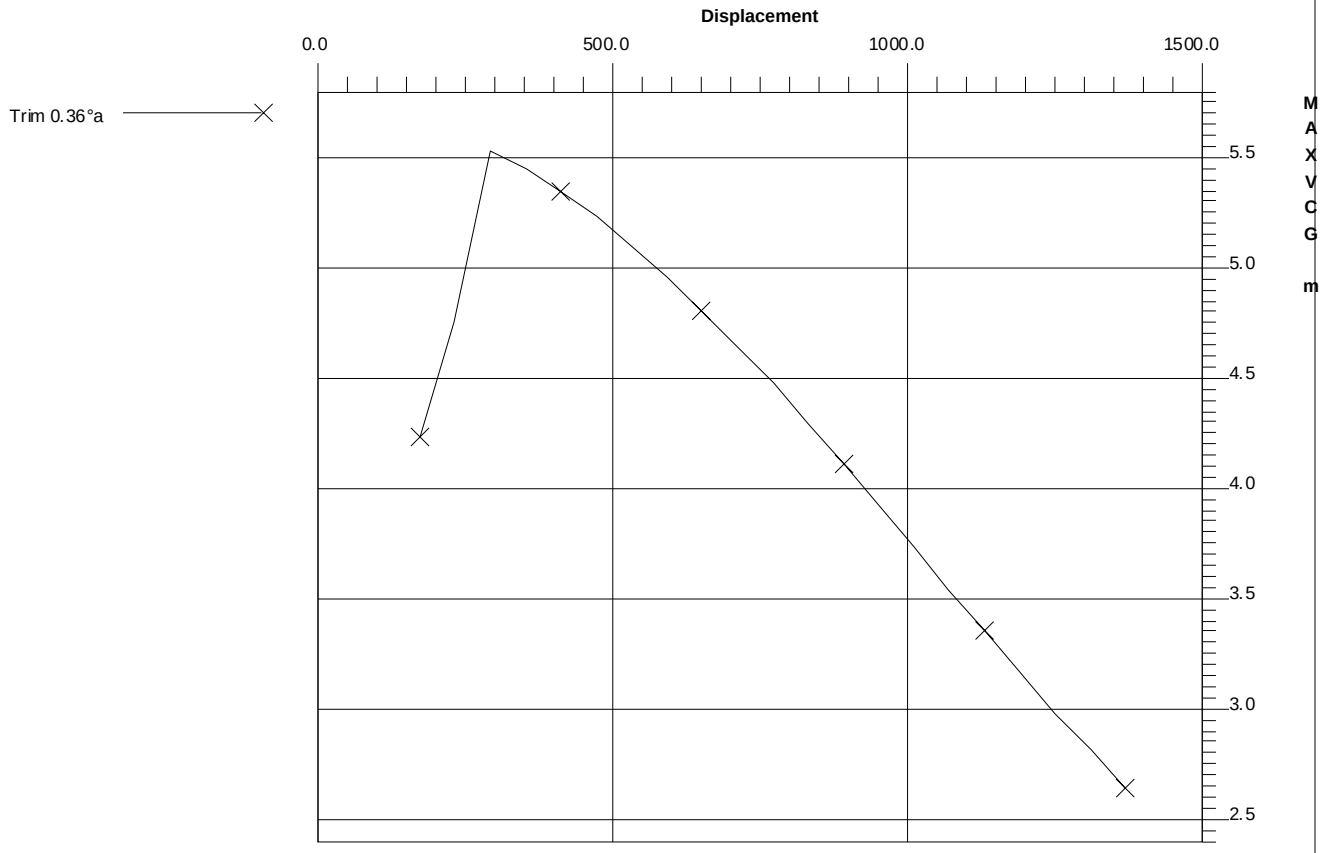
Trim = aft 0.36 deg. at zero heel (Trim righting arm held at zero)

Intact Displ (MT)	Intact Draft At MS (m)	Max.VCG (m)	Limit 1	Limit 2	Limit 3	Limit 4	Limit 5	Limit 6
170.0	0.47	4.234	1337.6%	991.2%	538.1%	587.1%	0.0°	8590.2%
230.0	0.63	4.763	967.0%	689.0%	310.8%	390.4%	0.0°	5382.9%
290.0	0.79	5.533	593.3%	360.8%	11.4%	143.3%	0.0°	3237.7%
350.0	0.95	5.454	460.3%	275.8%	0.0%	115.3%	1.3°	2221.0%
410.0	1.11	5.350	361.6%	215.4%	0.0%	99.2%	2.7°	1548.3%
470.0	1.26	5.234	287.4%	170.1%	0.0%	88.2%	3.8°	1085.5%
530.0	1.41	5.106	229.2%	134.5%	0.0%	82.3%	5.5°	763.8%
590.0	1.57	4.965	187.3%	108.9%	0.1%	77.6%	6.9°	578.5%
650.0	1.72	4.811	157.5%	90.7%	0.0%	71.7%	8.8°	435.4%
710.0	1.87	4.649	135.3%	77.2%	0.0%	65.4%	10.0°	348.0%
770.0	2.01	4.479	118.4%	66.7%	0.1%	58.4%	10.0°	303.6%
830.0	2.16	4.302	102.0%	56.8%	0.0%	51.1%	10.1°	293.7%
890.0	2.31	4.120	89.8%	49.3%	0.0%	43.4%	10.6°	205.7%
950.0	2.46	3.933	85.3%	46.6%	0.1%	35.4%	10.0°	284.1%
1 010.0	2.61	3.742	85.2%	46.5%	0.0%	26.8%	7.9°	339.7%
1 070.0	2.76	3.548	87.9%	48.1%	0.0%	19.0%	6.1°	408.7%
1 130.0	2.90	3.356	91.4%	50.3%	0.0%	13.7%	5.0°	487.3%
1 190.0	3.05	3.168	94.7%	52.3%	0.0%	10.4%	3.8°	573.1%
1 250.0	3.20	2.987	95.5%	52.8%	0.0%	7.7%	3.1°	662.8%
1 310.0	3.35	2.815	92.4%	50.9%	0.1%	4.3%	2.2°	754.0%
1 370.0	3.49	2.649	85.1%	46.5%	0.0%	0.6%	1.6°	846.9%

Limit Report

Limit	**Min/Max**
(1) Area from 0.00 deg to 30.00 or Flood	>0.0550 m-R
(2) Area from 0.00 deg to 40.00 or Flood	>0.0900 m-R
(3) Area from 30.00 deg to 40.00 or Flood	>0.0300 m-R
(4) Righting Arm at 30.00 deg or MaxRA	>0.200 m
(5) Absolute Angle at MaxRA	>15.00 deg
(6) GM Upright	>0.150 m

Max. VCG vs. Displacement



Loading Condition No.1(light Weight):

Hull Data (with appendages)

Autoship education

Baseline Draft: 0.331 at Origin
Trim: aft 0.36 deg.
Heel: zero

DIMENSIONS
Length Overall: 44.950 m LWL: 39.124 m Beam: 10.000 m BWL: 10.000 m
Volume: 165.892 m^3 Displacement: 170.040 MT

COEFFICIENTS
Prismatic: 0.755 Block: 0.734 Midship: 0.973 Waterplane: 0.922

RATIOS
Length/Beam: 4.495 Displacement/length: 79.132 Beam/Depth: 17.314
MT/ cm Immersion: 3.697

AREAS
Waterplane: 360.692 m^2 Wetted Surface: 408.854 m^2
Under Water Lateral Plane: 18.884 m^2 Above Water Lateral Plane: 167.913 m^2

CENTROIDS (Meters)
Buoyancy: LCB = 23.511 aft TCB =0.000 stbd VCB = 0.241
Flotation: LCF = 22.317 aft
Under Water LP: 23.763 aft of Origin, 0.242 below waterline.
Above Water LP: 20.946 aft of Origin, 2.092 above waterline.

Note: Coefficients calculated based on waterline length at given draft

Floating Status

Draft FP	0.331m	Heel	zero	GM(Solid)	15.265m

Autoship education

Draft MS	0.472m	Equil	Yes	F/S Corr	0.000m
Draft AP	0.613m	Wind	0.0 kn	GM(Fluid)	15.265m
Trim	aft 0.36 deg.	Wave	No	KMT	17.265 m
LCG	23.500a	VCG	2.000 m	TPcm	3.70

Loading Summary

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
Light Ship	170.00	23.500a	0.000	2.000
Displacement	170.00	23.500a	0.000	2.000

Fixed Weight Status

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
LIGHT SHIP	170.00	23.500a	0.000	2.000
Total Weight	**170.00**	**23.500a**	**0.000**	**2.000**

Displacer Status

Item	Status	Spgr	Displ (MT)	LCB (m)	TCB (m)	VCB (m)	Eff /Perm
HULL	Intact	1.025	170.04	23.511a	0.000	0.241	1.000
SubTotals:			**170.04**	**23.511a**	**0.000**	**0.241**	

Righting Arms vs Heel Angle

Heel Angle (deg)	Trim Angle (deg)	Origin Depth (m)	Righting Arm	Area (m-Rad)

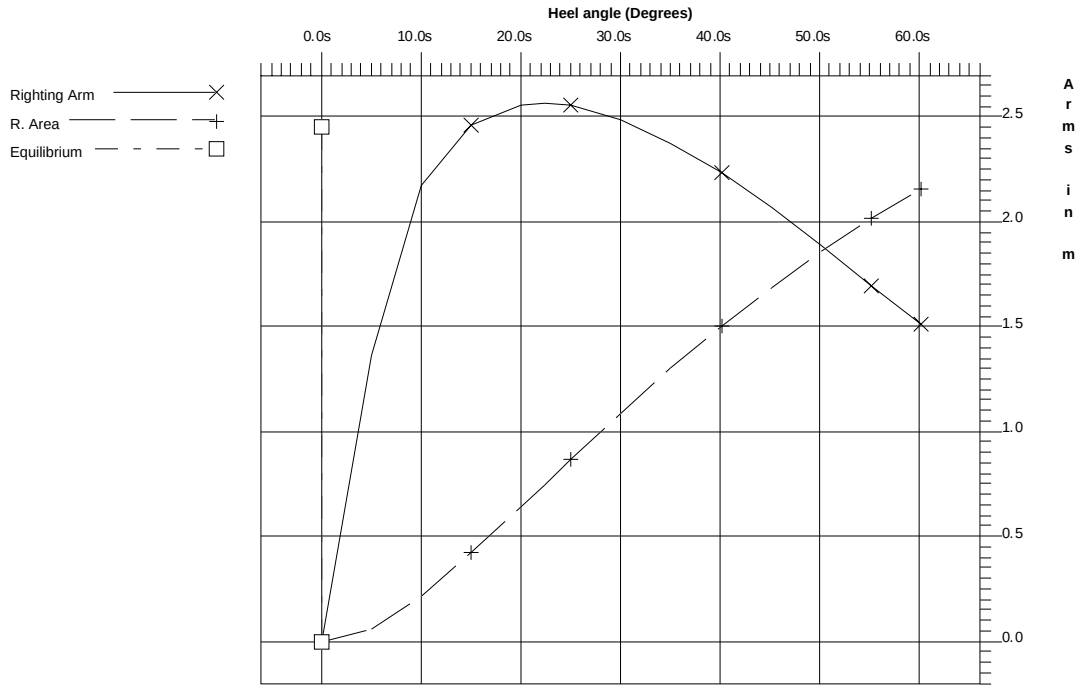
Autoship education

			(m)	
0.00	0.36a	0.331	0.000	0.000
5.00s	0.32a	0.340	1.363	0.059
10.00s	0.34a	0.263	2.178	0.218
15.00s	0.32a	0.110	2.465	0.424
20.00s	0.30a	-0.085	2.560	0.645
22.32s	0.29a	-0.188	2.567	0.749
25.00s	0.27a	-0.313	2.558	0.869
30.00s	0.24a	-0.560	2.491	1.090
35.00s	0.21a	-0.827	2.381	1.303
40.00s	0.18a	-1.107	2.240	1.505
45.00s	0.16a	-1.400	2.074	1.693
50.00s	0.14a	-1.701	1.893	1.866
55.00s	0.13a	-2.008	1.703	2.023
60.00s	0.11a	-2.309	1.517	2.164

Limit Report

Limit	Min/Max	Actual	Margin	Pass
(1) Area from 0.00 deg to 30.00 or Flood	>0.0550 m-R	1.090	1.035	Yes
(2) Area from 0.00 deg to 40.00 or Flood	>0.0900 m-R	1.505	1.415	Yes
(3) Area from 30.00 deg to 40.00 or Flood	>0.0300 m-R	0.415	0.385	Yes
(4) Righting Arm at 30.00 deg or MaxRA	>0.200 m	2.491	2.291	Yes
(5) Absolute Angle at MaxRA	>15.00 deg	22.32	7.32	Yes
(6) GM Upright	>0.150 m		<large>	Yes

Righting Arms vs. Heel



Condition No.2(Full Load- Departure):

Hull Data (with appendages)

Autoship education

Baseline Draft: 3.332 at Origin
Trim: aft 0.11 deg.
Heel: zero

DIMENSIONS
Length Overall: 44.950 m LWL: 44.180 m Beam: 10.000 m BWL: 10.000 m
Volume: 1287.818 m^3 Displacement: 1320.021 MT

COEFFICIENTS
Prismatic: 0.857 Block: 0.855 Midship: 0.997 Waterplane: 0.901

RATIOS
Length/Beam: 4.495 Displacement/length: 426.603 Beam/Depth: 2.934
MT/ cm Immersion: 4.079

AREAS
Waterplane: 397.992 m^2 Wetted Surface: 677.703 m^2
Under Water Lateral Plane: 141.525 m^2 Above Water Lateral Plane: 45.273 m^2

CENTROIDS (Meters)
Buoyancy: LCB = 23.320 aft TCB =0.000 stbd VCB = 1.744
Flotation: LCF = 23.847 aft
Under Water LP: 22.186 aft of Origin, 1.632 below waterline.
Above Water LP: 18.206 aft of Origin, 0.752 above waterline.

Note: Coefficients calculated based on waterline length at given draft

Floating Status

Draft FP	3.332m	Heel	zero	GM(Solid)	2.066m
Draft MS	3.376m	Equil	Yes	F/S Corr	0.000m
Draft AP	3.419m	Wind	0.0 kn	GM(Fluid)	2.066m

Autoship education

Trim	aft 0.11 deg.	Wave	No	KMT	4.089 m
LCG	23.320a	VCG	2.023 m	TPcm	4.08

Loading Summary

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
Light Ship	170.00	23.500a	0.000	2.000
Deadweight	1 150.09	23.293a	0.000	2.026
Displacement	1 320.09	23.320a	0.000	2.023

Fixed Weight Status

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
LIGHT SHIP	170.00	23.500a	0.000	2.000
Added Weight 01	450.00	13.500a	0.000	2.000
Added Weight 02	670.00	29.000a	0.000	2.000
Total Fixed	**1 290.00**	**22.868a**	**0.000**	**2.000**

Tank Status

WATER BALLAST (SpGr 1.025)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
BALLAST TANK2	100.00%	21.70	43.979a	0.000	3.181	0.985
Subtotals:	**26.62%**	**21.70**	**43.979a**	**0.000**	**3.181**	

FUEL OIL (SpGr 0.870)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
F.O.TANK.S	100.00%	4.19	39.290a	3.807s	2.512	0.985
F.O.TANK.P	100.00%	4.19	39.290a	3.807p	2.512	0.985
Subtotals:	**100.00%**	**8.39**	**39.290a**	**0.000**	**2.512**	

All Tanks

	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
Totals:		**30.09**	**42.672a**	**0.000**	**2.995**	

Displacer Status

Item	Status	Spgr	Displ (MT)	LCB (m)	TCB (m)	VCB (m)	Eff /Perm
HULL	**Intact**	**1.025**	**1 320.02**	**23.320a**	**0.000**	**1.744**	**1.000**
SubTotals:			**1 320.02**	**23.320a**	**0.000**	**1.744**	

Righting Arms vs Heel Angle

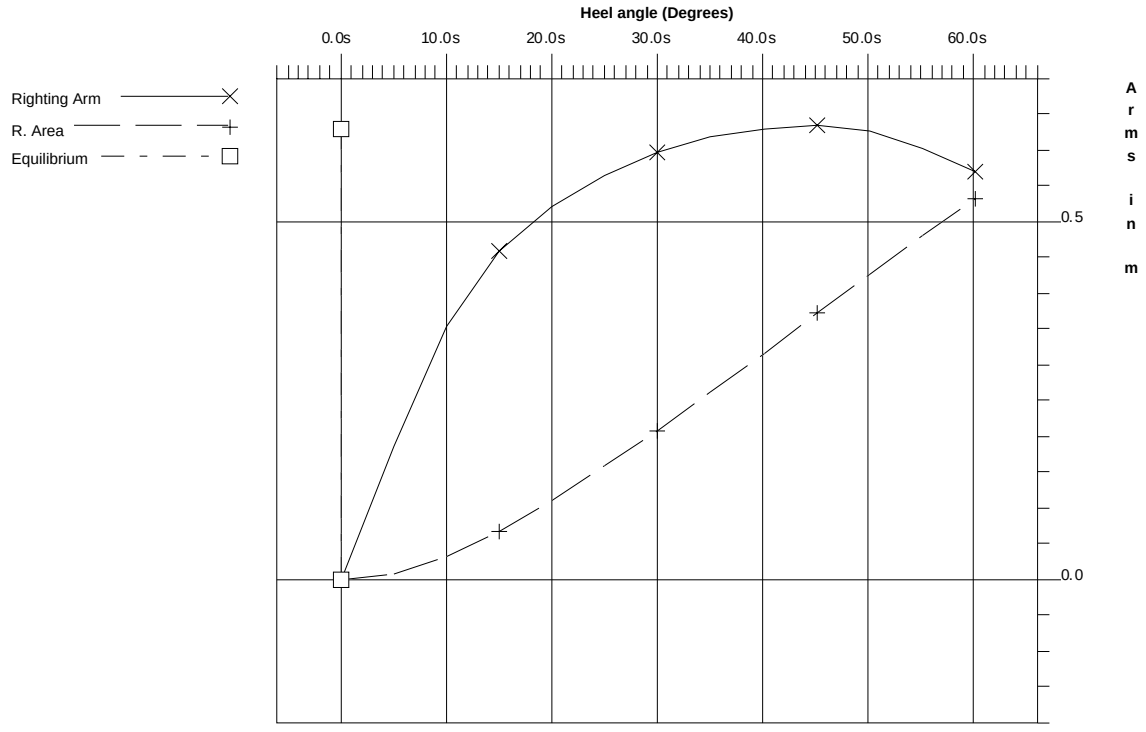
Heel Angle (deg)	Trim Angle (deg)	Origin Depth (m)	Righting Arm (m)	Area (m-Rad)
0.00	**0.11a**	**3.332**	**0.000**	**0.000**
5.00s	**0.11a**	**3.319**	**0.186**	**0.008**
10.00s	**0.10a**	**3.299**	**0.354**	**0.032**

15.00s	0.06a	3.321	0.458	0.068
20.00s	0.09a	3.333	0.523	0.111
25.00s	0.20a	3.319	0.566	0.158
30.00s	0.35a	3.283	0.597	0.209
35.00s	0.54a	3.235	0.618	0.262
40.00s	0.73a	3.182	0.631	0.317
45.00s	0.92a	3.119	0.635	0.372
50.00s	1.13a	3.034	0.626	0.427
55.00s	1.35a	2.921	0.604	0.481
60.00s	1.57a	2.784	0.571	0.532

Limit Report

Limit	Min/Max	Actual	Margin	Pass
(1) Area from 0.00 deg to 30.00 or Flood	>0.0550 m-R	0.209	0.154	Yes
(2) Area from 0.00 deg to 40.00 or Flood	>0.0900 m-R	0.317	0.227	Yes
(3) Area from 30.00 deg to 40.00 or Flood	>0.0300 m-R	0.108	0.078	Yes
(4) Righting Arm at 30.00 deg or MaxRA	>0.200 m	0.635	0.435	Yes
(5) Absolute Angle at MaxRA	>15.00 deg	45.00	30.00	Yes
(6) GM Upright	>0.150 m	2.066	1.916	Yes

Righting Arms vs. Heel



Loading Condition No.3 :

Hull Data (with appendages)

Baseline Draft: 2.230 at Origin

Autoship education

Trim: aft 0.28 deg.
Heel: zero

DIMENSIONS
Length Overall: 44.950 m LWL: 43.907 m Beam: 10.000 m BWL: 10.000 m
Volume: 878.078 m^3 Displacement: 900.035 MT

COEFFICIENTS
Prismatic: 0.833 Block: 0.827 Midship: 0.992 Waterplane: 0.886

RATIOS
Length/Beam: 4.495 Displacement/length: 296.340 Beam/Depth: 4.133
MT/ cm Immersion: 3.987

AREAS
Waterplane: 389.017 m^2 Wetted Surface: 574.806 m^2
Under Water Lateral Plane: 95.990 m^2 Above Water Lateral Plane: 90.807 m^2

CENTROIDS (Meters)
Buoyancy: LCB = 23.256 aft TCB =0.000 stbd VCB = 1.216
Flotation: LCF = 23.559 aft
Under Water LP: 22.027 aft of Origin, 1.121 below waterline.
Above Water LP: 20.384 aft of Origin, 1.164 above waterline.

Note: Coefficients calculated based on waterline length at given draft

Floating Status

Draft FP	2.230m	Heel	zero	GM(Solid)	2.515m
Draft MS	2.338m	Equil	Yes	F/S Corr	0.000m
Draft AP	2.447m	Wind	0.0 kn	GM(Fluid)	2.515m
Trim	aft 0.28 deg.	Wave	No	KMT	4.548 m
LCG	23.252a	VCG	2.033 m	TPcm	3.99

Autoship education

Loading Summary

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
Light Ship	170.00	23.500a	0.000	2.000
Deadweight	730.09	23.194a	0.000	2.041
Displacement	900.09	23.252a	0.000	2.033

Fixed Weight Status

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
LIGHT SHIP	170.00	23.500a	0.000	2.000
Added Weight 01	300.00	13.500a	0.000	2.000
Added Weight 02	400.00	29.000a	0.000	2.000
Total Fixed	**870.00**	**22.580a**	**0.000**	**2.000**

Tank Status

WATER BALLAST (SpGr 1.025)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
BALLAST TANK2	100.00%	21.70	43.979a	0.000	3.181	0.985
Subtotals:	**26.62%**	**21.70**	**43.979a**	**0.000**	**3.181**	

FUEL OIL (SpGr 0.870)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
F.O.TANK.S	100.00%	4.19	39.290a	3.807s	2.512	0.985
F.O.TANK.P	100.00%	4.19	39.290a	3.807p	2.512	0.985
Subtotals:	**100.00%**	**8.39**	**39.290a**	**0.000**	**2.512**	

All Tanks

	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
Totals:		**30.09**	**42.672a**	**0.000**	**2.995**	

Displacer Status

Item	Status	Spgr	Displ (MT)	LCB (m)	TCB (m)	VCB (m)	Eff /Perm
HULL	**Intact**	**1.025**	**900.03**	**23.256a**	**0.000**	**1.216**	**1.000**
SubTotals:			**900.03**	**23.256a**	**0.000**	**1.216**	

Righting Arms vs Heel Angle

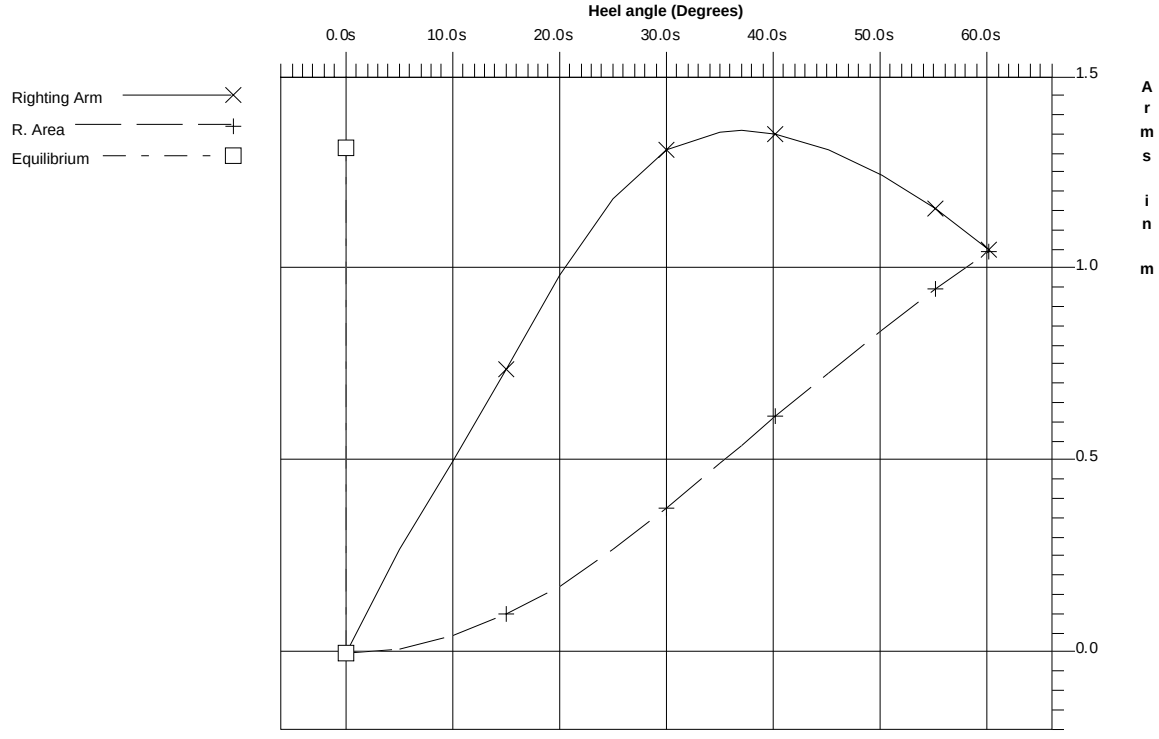
Heel Angle (deg)	Trim Angle (deg)	Origin Depth (m)	Righting Arm (m)	Area (m-Rad)
0.00	**0.28a**	**2.230**	**0.000**	**0.000**
5.00s	**0.26a**	**2.227**	**0.268**	**0.012**
10.00s	**0.22a**	**2.211**	**0.502**	**0.046**
15.00s	**0.19a**	**2.177**	**0.738**	**0.100**
20.00s	**0.15a**	**2.129**	**0.984**	**0.175**

25.00s	0.09a	2.102	1.186	0.270
30.00s	0.06a	2.069	1.312	0.379
35.00s	0.06a	1.999	1.357	0.496
36.94s	0.07a	1.961	1.360	0.542
40.00s	0.10a	1.892	1.352	0.615
45.00s	0.16a	1.762	1.311	0.731
50.00s	0.23a	1.608	1.245	0.843
55.00s	0.32a	1.436	1.156	0.948
60.00s	0.41a	1.247	1.050	1.044

Limit Report

Limit	Min/Max	Actual	Margin	Pass
(1) Area from 0.00 deg to 30.00 or Flood	>0.0550 m-R	0.379	0.324	Yes
(2) Area from 0.00 deg to 40.00 or Flood	>0.0900 m-R	0.615	0.525	Yes
(3) Area from 30.00 deg to 40.00 or Flood	>0.0300 m-R	0.236	0.206	Yes
(4) Righting Arm at 30.00 deg or MaxRA	>0.200 m	1.360	1.160	Yes
(5) Absolute Angle at MaxRA	>15.00 deg	36.94	21.94	Yes
(6) GM Upright	>0.150 m	2.515	2.365	Yes

Righting Arms vs. Heel



Loading Condition No.4

Hull Data (with appendages)

Baseline Draft: 0.566 at Origin
Trim: aft 0.25 deg.
Heel: zero

Autoship education

DIMENSIONS
Length Overall: 44.950 m LWL: 39.635 m Beam: 10.000 m BWL: 10.000 m
Volume: 235.938 m^3 Displacement: 241.838 MT

COEFFICIENTS
Prismatic: 0.820 Block: 0.806 Midship: 0.984 Waterplane: 0.919

RATIOS
Length/Beam: 4.495 Displacement/length: 108.247 Beam/Depth: 13.544
MT/ cm Immersion: 3.732

AREAS
Waterplane: 364.096 m^2 Wetted Surface: 425.340 m^2
Under Water Lateral Plane: 26.842 m^2 Above Water Lateral Plane: 159.956 m^2

CENTROIDS (Meters)
Buoyancy: LCB = 22.862 aft TCB =0.000 stbd VCB = 0.338
Flotation: LCF = 22.461 aft
Under Water LP: 22.744 aft of Origin, 0.333 below waterline.
Above Water LP: 20.973 aft of Origin, 1.992 above waterline.

Note: Coefficients calculated based on waterline length at given draft

Floating Status

Draft FP	0.566m	Heel	zero	GM(Solid)	10.359m
Draft MS	0.665m	Equil	Yes	F/S Corr	0.328m
Draft AP	0.763m	Wind	0.0 kn	GM(Fluid)	10.032m
Trim	aft 0.25 deg.	Wave	No	KMT	12.382 m
LCG	22.854a	VCG	2.023 m	TPcm	3.73

Loading Summary

Autoship education

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
Light Ship	170.00	23.500a	0.000	2.000
Deadweight	71.99	21.330a	0.000	2.077
Displacement	241.99	22.854a	0.000	2.023

Fixed Weight Status

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
LIGHT SHIP	170.00	23.500a	0.000	2.000
Total Fixed	**170.00**	**23.500a**	**0.000**	**2.000**

Tank Status

WATER BALLAST (SpGr 1.025)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
BALLAST TANK1	70.03%	41.90	6.001a	0.000	1.418	0.985
BALLAST TANK2	100.00%	21.70	43.979a	0.000	3.181	0.985
Subtotals:	**78.01%**	**63.60**	**18.961a**	**0.000**	**2.020**	

FUEL OIL (SpGr 0.870)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
F.O.TANK.S	100.00%	4.19	39.290a	3.807s	2.512	0.985
F.O.TANK.P	100.00%	4.19	39.290a	3.807p	2.512	0.985
Subtotals:	**100.00%**	**8.39**	**39.290a**	**0.000**	**2.512**	

All Tanks

	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
Totals:		**71.99**	**21.330a**	**0.000**	**2.077**	

Displacer Status

Item	Status	Spgr	Displ (MT)	LCB (m)	TCB (m)	VCB (m)	Eff /Perm
HULL	**Intact**	**1.025**	**241.84**	**22.862a**	**0.000**	**0.338**	**1.000**
SubTotals:			**241.84**	**22.862a**	**0.000**	**0.338**	

Righting Arms vs Heel Angle

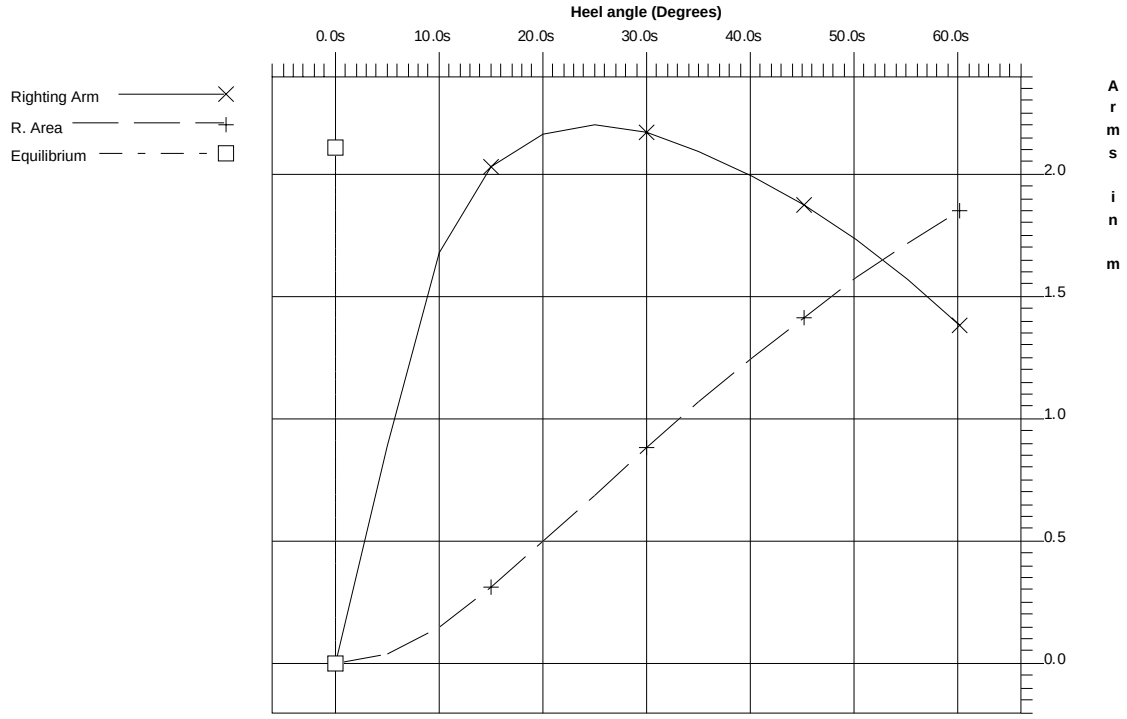
Heel Angle (deg)	Trim Angle (deg)	Origin Depth (m)	Righting Arm (m)	Area (m-Rad)
0.00	**0.25a**	**0.566**	**0.000**	**0.000**
5.00s	**0.20a**	**0.579**	**0.890**	**0.039**
10.00s	**0.16a**	**0.567**	**1.685**	**0.152**
15.00s	**0.10a**	**0.480**	**2.033**	**0.317**
20.00s	**0.03a**	**0.340**	**2.167**	**0.502**

25.00s	0.04f	0.162	2.202	0.693
30.00s	0.12f	-0.047	2.172	0.885
35.00s	0.19f	-0.283	2.099	1.072
40.00s	0.24f	-0.541	1.996	1.250
45.00s	0.29f	-0.817	1.873	1.419
50.00s	0.33f	-1.108	1.737	1.577
55.00s	0.38f	-1.397	1.575	1.722
60.00s	0.42f	-1.679	1.384	1.851

Limit Report

Limit	Min/Max	Actual	Margin	Pass
(1) Area from 0.00 deg to 30.00 or Flood	>0.0550 m-R	0.885	0.830	Yes
(2) Area from 0.00 deg to 40.00 or Flood	>0.0900 m-R	1.250	1.160	Yes
(3) Area from 30.00 deg to 40.00 or Flood	>0.0300 m-R	0.366	0.336	Yes
(4) Righting Arm at 30.00 deg or MaxRA	>0.200 m	2.172	1.972	Yes
(5) Absolute Angle at MaxRA	>15.00 deg	25.00	10.00	Yes
(6) GM Upright	>0.150 m	10.032	9.882	Yes

Righting Arms vs. Heel



Loading Condition No.5(Arrived):

Hull Data (with appendages)

Baseline Draft: 3.364 at Origin
Trim: 0.01 deg.
Heel: zero

Autoship education

DIMENSIONS
Length Overall: 44.950 m LWL: 44.187 m Beam: 10.000 m BWL: 10.000 m
Volume: 1280.461 m^3 Displacement: 1312.479 MT

COEFFICIENTS
Prismatic: 0.862 Block: 0.862 Midship: 1.000 Waterplane: 0.901

RATIOS
Length/Beam: 4.495 Displacement/length: 423.949 Beam/Depth: 2.973
MT/ cm Immersion: 4.079

AREAS
Waterplane: 397.954 m^2 Wetted Surface: 675.805 m^2
Under Water Lateral Plane: 140.790 m^2 Above Water Lateral Plane: 46.007 m^2

CENTROIDS (Meters)
Buoyancy: LCB = 23.227 aft TCB =0.000 stbd VCB = 1.735
Flotation: LCF = 23.842 aft
Under Water LP: 22.072 aft of Origin, 1.625 below waterline.
Above Water LP: 18.598 aft of Origin, 0.747 above waterline.

Note: Coefficients calculated based on waterline length at given draft

Floating Status

Draft FP	3.364m	Heel	zero	GM(Solid)	2.074m
Draft MS	3.360m	Equil	Yes	F/S Corr	0.000m
Draft AP	3.356m	Wind	0.0 kn	GM(Fluid)	2.074m
Trim	0.01 deg.	Wave	No	KMT	4.092 m
LCG	23.228a	VCG	2.018 m	TPcm	4.08

Loading Summary

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
Light Ship	170.00	23.500a	0.000	2.000

Autoship education

Deadweight	1 142.54	23.187a	0.000	2.021
Displacement	1 312.54	23.228a	0.000	2.018

Fixed Weight Status

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
LIGHT SHIP	170.00	23.500a	0.000	2.000
Added Weight 01	450.00	13.500a	0.000	2.000
Added Weight 02	670.00	29.000a	0.000	2.000
Total Fixed	**1 290.00**	**22.868a**	**0.000**	**2.000**

Tank Status

WATER BALLAST (SpGr 1.025)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
BALLAST TANK2	100.00%	21.70	43.979a	0.000	3.181	0.985
Subtotals:	**26.62%**	**21.70**	**43.979a**	**0.000**	**3.181**	

FUEL OIL (SpGr 0.870)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
F.O.TANK.S	9.96%	0.42	38.987a	3.870s	0.359	0.985
F.O.TANK.P	9.96%	0.42	38.987a	3.870p	0.359	0.985
Subtotals:	**9.96%**	**0.84**	**38.987a**	**0.000**	**0.359**	

All Tanks

	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Perm
Totals:		**22.54**	**43.794a**	**0.000**	**3.077**	

Displacer Status

Item	Status	Spgr	Displ (MT)	LCB (m)	TCB (m)	VCB (m)	Eff /Perm
HULL	**Intact**	**1.025**	**1 312.48**	**23.227a**	**0.000**	**1.735**	**1.000**
SubTotals:			**1 312.48**	**23.227a**	**0.000**	**1.735**	

Righting Arms vs Heel Angle

Heel Angle (deg)	Trim Angle (deg)	Origin Depth (m)	Righting Arm (m)	Area (m-Rad)
0.00	**0.01f**	**3.364**	**0.000**	**0.000**
5.00s	**0.01f**	**3.351**	**0.187**	**0.008**
10.00s	**0.02f**	**3.331**	**0.359**	**0.032**
15.00s	**0.07f**	**3.354**	**0.467**	**0.069**
20.00s	**0.06f**	**3.370**	**0.536**	**0.113**
25.00s	**0.03a**	**3.359**	**0.581**	**0.161**
30.00s	**0.17a**	**3.326**	**0.614**	**0.214**
35.00s	**0.34a**	**3.280**	**0.636**	**0.268**
40.00s	**0.52a**	**3.228**	**0.649**	**0.324**
45.00s	**0.71a**	**3.169**	**0.654**	**0.381**

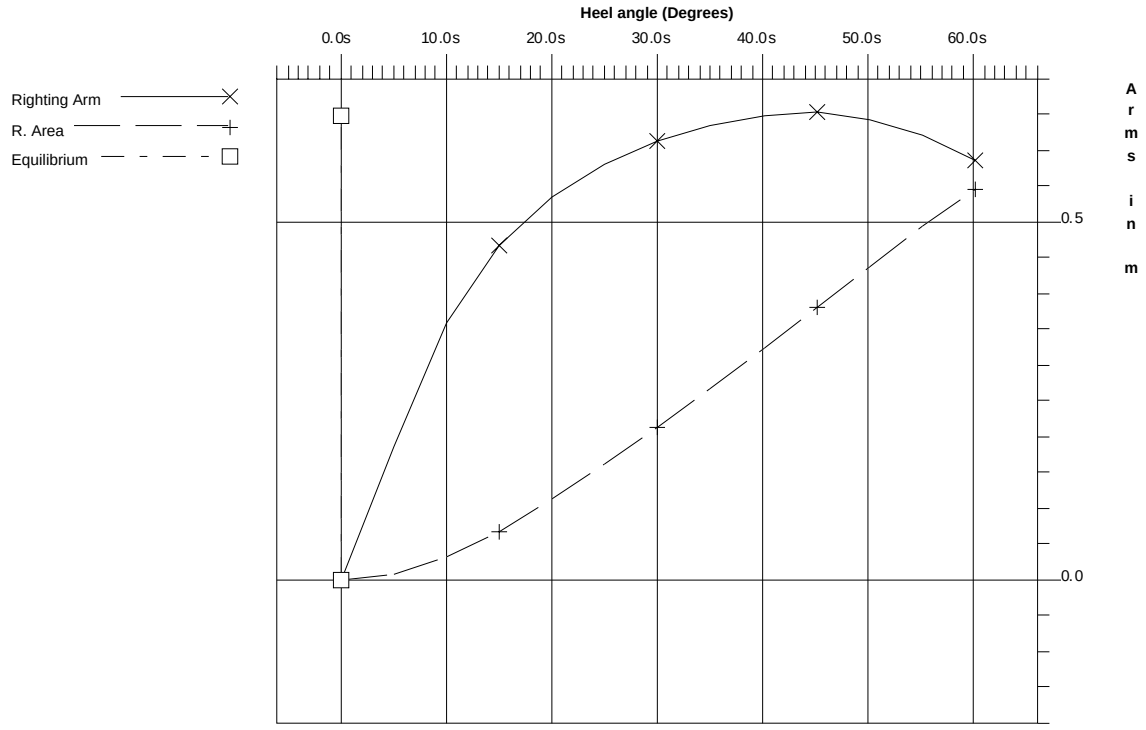
Autoship education

50.00s	0.91a	3.087	0.645	0.438
55.00s	1.12a	2.977	0.621	0.493
60.00s	1.32a	2.843	0.587	0.546

Limit Report

Limit	Min/Max	Actual	Margin	Pass
(1) Area from 0.00 deg to 30.00 or Flood	>0.0550 m-R	0.214	0.159	Yes
(2) Area from 0.00 deg to 40.00 or Flood	>0.0900 m-R	0.324	0.234	Yes
(3) Area from 30.00 deg to 40.00 or Flood	>0.0300 m-R	0.111	0.081	Yes
(4) Righting Arm at 30.00 deg or MaxRA	>0.200 m	0.654	0.454	Yes
(5) Absolute Angle at MaxRA	>15.00 deg	45.00	30.00	Yes
(6) GM Upright	>0.150 m	2.074	1.924	Yes

Righting Arms vs. Heel



End Page

Remarks:

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

Autoship education