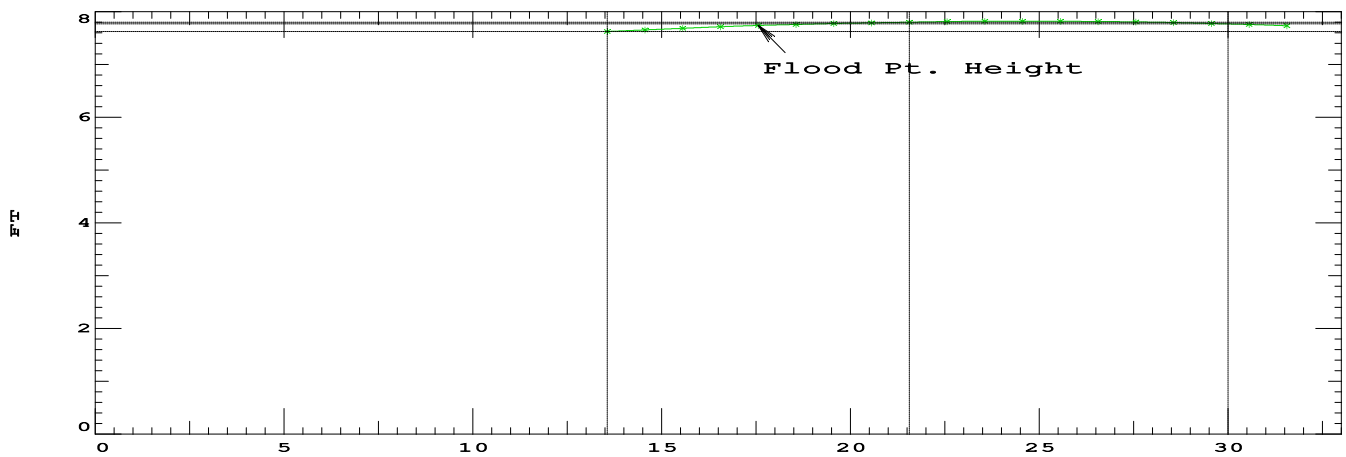
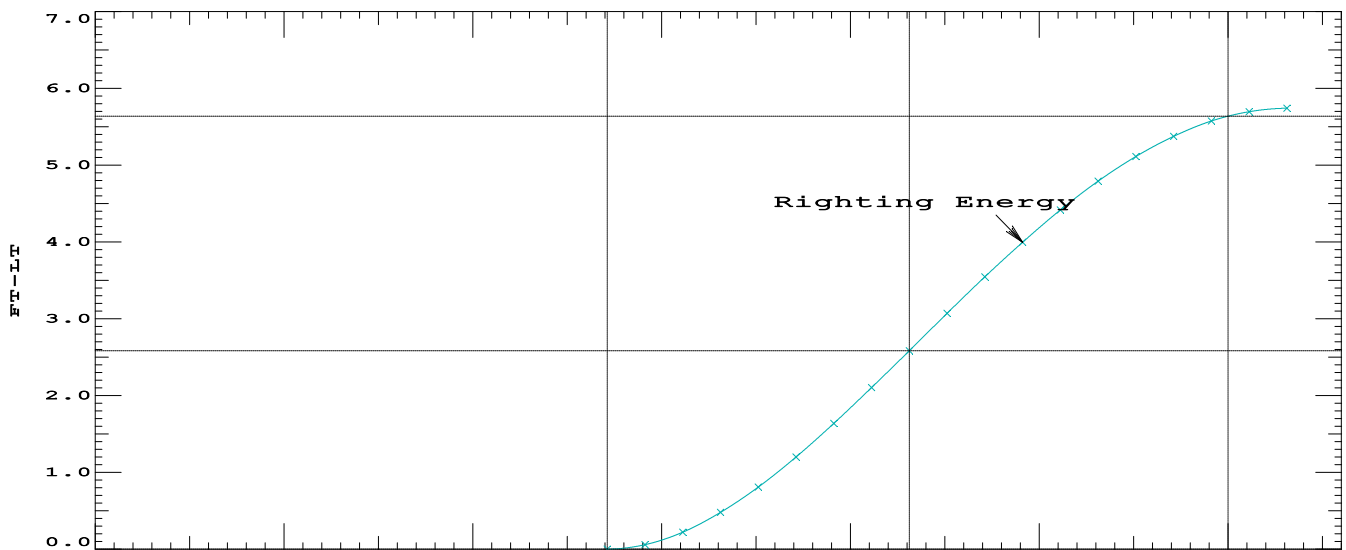
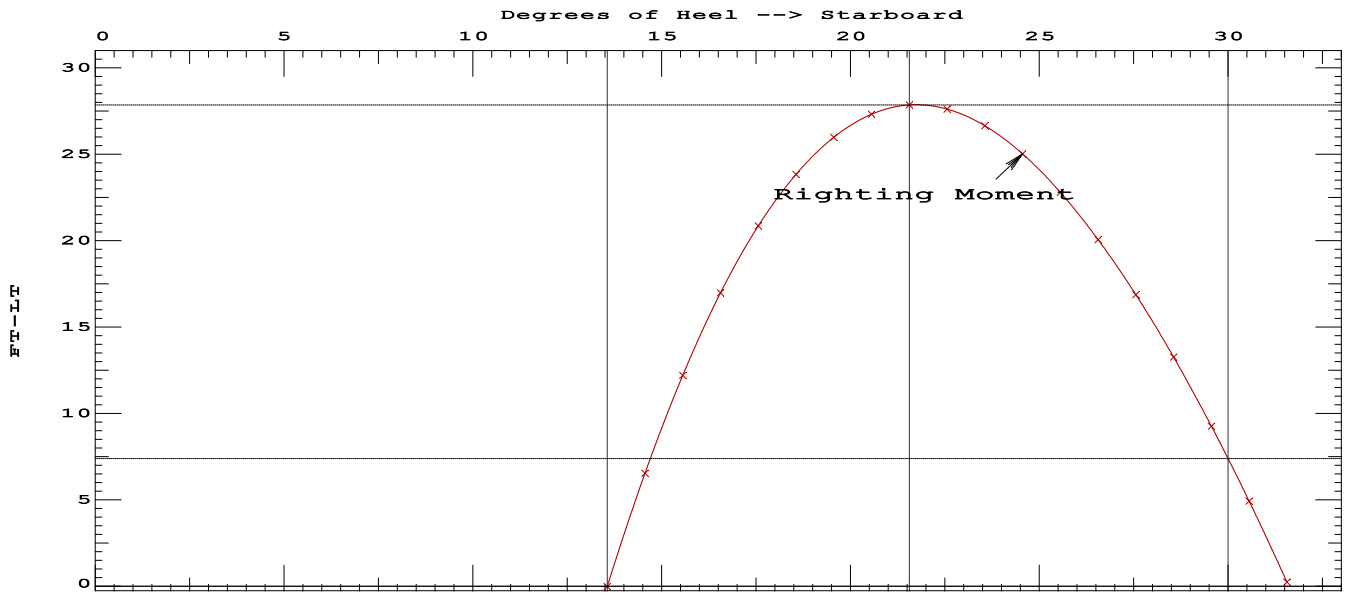


ADD WATER ON DECK
BEFORE SOLVING FOR WATER ON DECK

WEIGHT and DISPLACEMENT STATUS							
Baseline draft: 9.062 @ Origin							
Trim: Aft 0.36 deg., Heel: Stbd 0.19 deg.							
Part			Weight(LT)	LCG	TCG	VCG	
LIGHT SHIP			181.77	38.69a	0.00	10.55	
4 CREW			0.33	36.50a	0.00	14.50	
CONSUMABLES			0.20	19.25a	0.00	14.93	
SPARE PARTS			1.25	14.00a	0.00	8.50	
ICE IN HOLD			10.63	47.75a	0.00	6.99	
CATCH IN HOLD			24.55	23.58a	0.00	7.37	
PARAVANES UP			-1.99	34.50a	0.00	37.50	
PARAVANES DOWN			1.99	34.50a	0.00	23.50	
LARGER TRAWLER DOORS			0.98	67.03a	0.00	15.70	
Total Fixed			219.71	37.40a	0.00	9.92	
	Load	SpGr	Weight(LT)	LCG	TCG	VCG	RefHt
FW	0.500	1.000	3.03	0.33a	0.01s	9.01	-11.04
FOS	0.500	0.870	11.63	30.38a	7.70s	4.85	-7.19
FOP	0.500	0.870	11.63	30.38a	7.70p	4.85	-7.24
HOT	0.500	0.947	0.27	40.59a	4.90s	6.43	-7.94
LAZ	0.050	1.025	1.56	66.86a	0.13s	6.20	-6.21
DECK	0.030	1.025	4.23	79.68a	0.62s	13.02	0.00
Total Tanks			32.36	35.87a	0.13s	6.39	
Total Weight			252.06	37.21a	0.02s	9.46	
HULL	1.025		Displ(LT)	LCB	TCB	VCB	
			247.83	36.50a	0.02s	5.82	-9.06
WEIGHT EXCESS:			4.23				
DECK	Spilling at:		LRP	TRP	VRP		
			40.00a	9.75p	12.50		
Distances in FEET.							

AFTER SOLVING FOR WATER ON DECK

WEIGHT and DISPLACEMENT STATUS							
Baseline draft: 8.827 @ Origin							
Trim: Aft 1.06 deg., Heel: Stbd 13.56 deg.							
Part			Weight(LT)	LCG	TCG	VCG	
LIGHT SHIP			181.77	38.69a	0.00	10.55	
4 CREW			0.33	36.50a	0.00	14.50	
CONSUMABLES			0.20	19.25a	0.00	14.93	
SPARE PARTS			1.25	14.00a	0.00	8.50	
ICE IN HOLD			10.63	47.75a	0.00	6.99	
CATCH IN HOLD			24.55	23.58a	0.00	7.37	
PARAVANES UP			-1.99	34.50a	0.00	37.50	
PARAVANES DOWN			1.99	34.50a	0.00	23.50	
LARGER TRAWLER DOORS			0.98	67.03a	0.00	15.70	
Total Fixed			219.71	37.40a	0.00	9.92	
	Load	SpGr	Weight(LT)	LCG	TCG	VCG	RefHt
FW	0.500	1.000	3.03	0.35a	0.42s	9.06	-10.67
FOS	0.500	0.870	11.63	30.59a	7.79s	4.87	-4.75
FOP	0.500	0.870	11.63	30.44a	7.62p	4.86	-8.51
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ADD WATER ON DECK
BEFORE SOLVING FOR WATER ON DECK

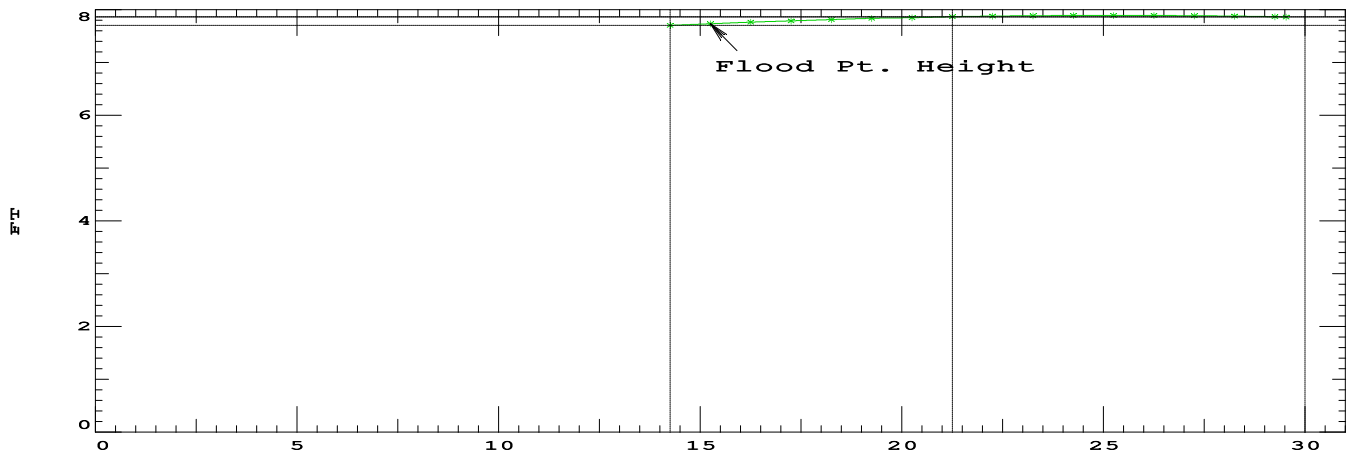
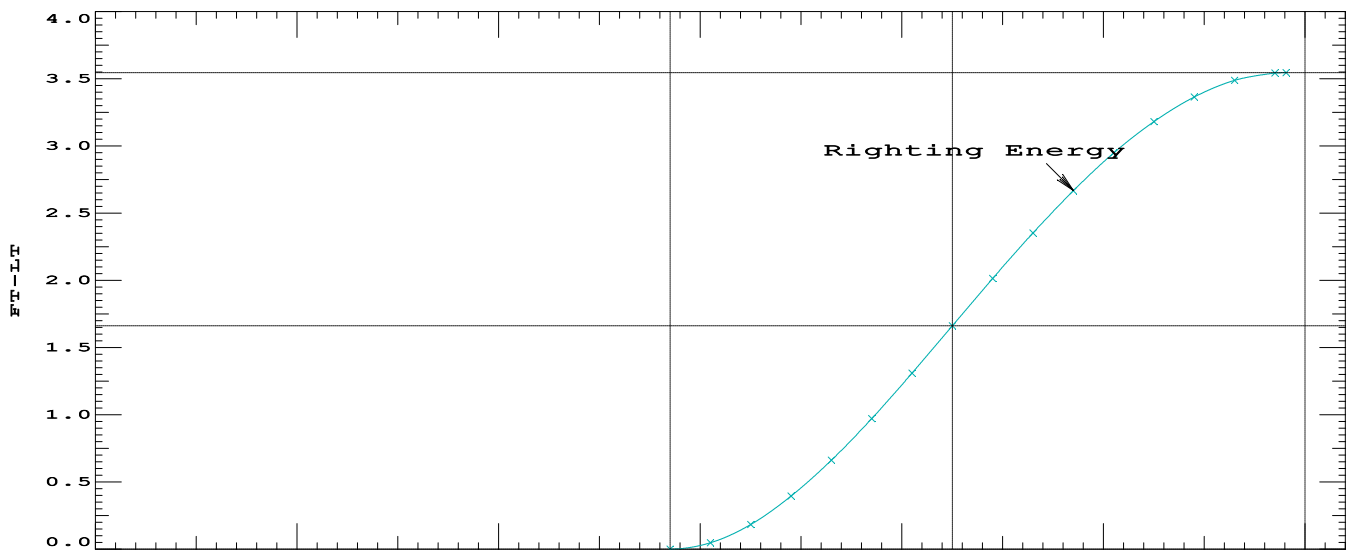
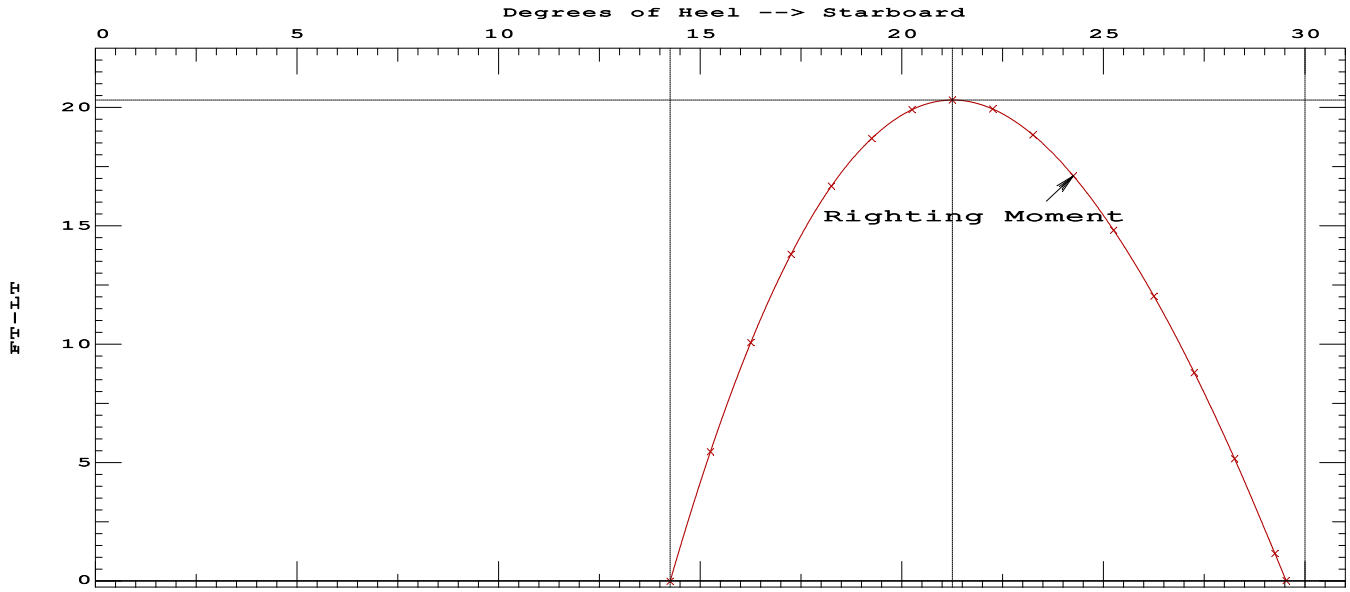
WEIGHT and DISPLACEMENT STATUS							
Baseline draft: 8.988 @ Origin							
Trim: Aft 0.52 deg., Heel: Stbd 0.21 deg.							
Part			Weight(LT)	LCG	TCG	VCG	
LIGHT SHIP			181.77	38.69a	0.00	10.55	
4 CREW			0.33	36.50a	0.00	14.50	
CONSUMABLES			0.20	19.25a	0.00	14.93	
SPARE PARTS			1.25	14.00a	0.00	8.50	
ICE IN HOLD			10.63	47.75a	0.00	6.99	
CATCH IN HOLD			24.55	23.58a	0.00	7.37	
PARAVANES UP			-1.99	34.50a	0.00	37.50	
PARAVANES DOWN			1.99	34.50a	0.00	23.50	
LARGER TRAWLER DOORS			0.98	67.03a	0.00	15.70	
Total Fixed			219.71	37.40a	0.00	9.92	
	Load	SpGr	Weight(LT)	LCG	TCG	VCG	RefHt
FW	0.500	1.000	3.03	0.33a	0.01s	9.01	-11.04
FOS	0.500	0.870	11.63	30.41a	7.70s	4.85	-7.10
FOP	0.500	0.870	11.63	30.41a	7.70p	4.85	-7.16
HOT	0.500	0.947	0.27	40.59a	4.90s	6.43	-7.82
LAZ	0.100	1.025	3.12	67.57a	0.10s	6.55	-6.51
DECK	0.034	1.025	4.81	77.98a	0.58s	12.98	0.00
Total Tanks			34.50	37.85a	0.13s	6.52	
Total Weight			254.20	37.47a	0.02s	9.46	
HULL	1.025		Displ(LT)	LCB	TCB	VCB	
			249.39	36.72a	0.02s	5.85	-8.99
WEIGHT EXCESS:			4.81				
DECK	Spilling at:		LRP	TRP	VRP		
			40.00a	9.75p	12.50		
Distances in FEET.							

AFTER SOLVING FOR WATER ON DECK

WEIGHT and DISPLACEMENT STATUS							
Baseline draft: 8.755 @ Origin							
Trim: Aft 1.20 deg., Heel: Stbd 14.25 deg.							
Part			Weight(LT)	LCG	TCG	VCG	
LIGHT SHIP			181.77	38.69a	0.00	10.55	
4 CREW			0.33	36.50a	0.00	14.50	
CONSUMABLES			0.20	19.25a	0.00	14.93	
SPARE PARTS			1.25	14.00a	0.00	8.50	
ICE IN HOLD			10.63	47.75a	0.00	6.99	
CATCH IN HOLD			24.55	23.58a	0.00	7.37	
PARAVANES UP			-1.99	34.50a	0.00	37.50	
PARAVANES DOWN			1.99	34.50a	0.00	23.50	
LARGER TRAWLER DOORS			0.98	67.03a	0.00	15.70	
Total Fixed			219.71	37.40a	0.00	9.92	
	Load	SpGr	Weight(LT)	LCG	TCG	VCG	RefHt
FW	0.500	1.000	3.03	0.36a	0.44s	9.06	-10.64
FOS	0.500	0.870	11.63	30.62a	7.80s	4.87	-4.56
FOP	0.500	0.870	11.63	30.46a	7.61p	4.86	-8.51
continued next page							

STATUS, continued							
Part	Load	SpGr	Weight(LT)	LCG	TCG	VCG	RefHt
HOT	0.500	0.947	0.27	40.59a	4.92s	6.43	-5.90
LAZ	0.100	1.025	3.12	68.31a	5.05s	7.08	-4.95
DECK	0.081	1.025	11.47	53.79a	7.34s	13.21	0.00
Total Tanks			41.15	37.73a	2.55s	7.68	
Total Weight			260.86	37.46a	0.40s	9.56	
			Displ(LT)	LCB	TCB	VCB	
HULL		1.025	260.86	37.53a	1.26s	6.17	-8.48
Righting Arms:				0.00	0.00s		
				LRP	TRP	VRP	
DECK	Spilling at:			60.00a	9.75s	14.80	
Distances in FEET.							

RIGHTING ARMS vs HEEL ANGLE							
Fixed CG: LCG = 37.40a TCG = 0.00 VCG = 9.92							
Origin Depth	Degrees of Trim	Degrees of Heel	Displacement Weight(LT)	Righting Arms in Trim	Righting Arms in Heel	Area	Flood Pt Height
8.484	1.20a	14.25s	260.86	0.00	0.000	0.00	3.14 (5)
8.461	1.16a	15.25s	260.30	0.00	0.021	0.01	7.74 (3)
8.436	1.13a	16.25s	259.80	0.00	0.039	0.04	7.76 (3)
8.407	1.11a	17.25s	259.34	0.00	0.053	0.09	7.79 (3)
8.376	1.09a	18.25s	258.93	0.00	0.064	0.15	7.81 (3)
8.342	1.08a	19.25s	258.54	0.00	0.072	0.21	7.83 (3)
8.306	1.07a	20.25s	258.19	0.00	0.077	0.29	7.85 (3)
8.266	1.06a	21.25s	257.85	0.00	0.079	0.37	7.87 (3)
8.224	1.06a	22.25s	257.54	0.00	0.077	0.45	7.88 (3)
8.180	1.06a	23.25s	257.24	0.00	0.073	0.52	7.89 (3)
8.133	1.07a	24.25s	256.96	0.00	0.067	0.59	7.89 (3)
8.085	1.08a	25.25s	256.69	0.00	0.058	0.65	7.89 (3)
8.034	1.09a	26.25s	256.43	0.00	0.047	0.70	7.89 (3)
7.983	1.11a	27.25s	256.19	0.00	0.034	0.75	7.89 (3)
7.930	1.12a	28.25s	255.95	0.00	0.020	0.77	7.88 (3)
7.875	1.14a	29.25s	255.71	0.00	0.005	0.79	7.86 (3)
7.860	1.14a	29.53s	255.65	0.00	0.000	0.79	7.86 (3)
Distances in FEET.			Specific Gravity = 1.025.			Area in Ft-Deg.	
<p>Note: The Center of Gravity shown above is for the Fixed Weight of 219.71 LT. As the tank load centers shift with heel and trim, the total Center of Gravity varies. The righting arms shown above include the effect of the C.G. variation.</p>							
Critical Points				LCP	TCP	VCP	
(3)	BLOWER VENT PORT			FLOOD	7.50a	4.40p	15.75
(5)	LAZ HATCH AFT			TIGHT	73.00a	1.00	13.82



ADD WATER ON DECK
BEFORE SOLVING FOR WATER ON DECK

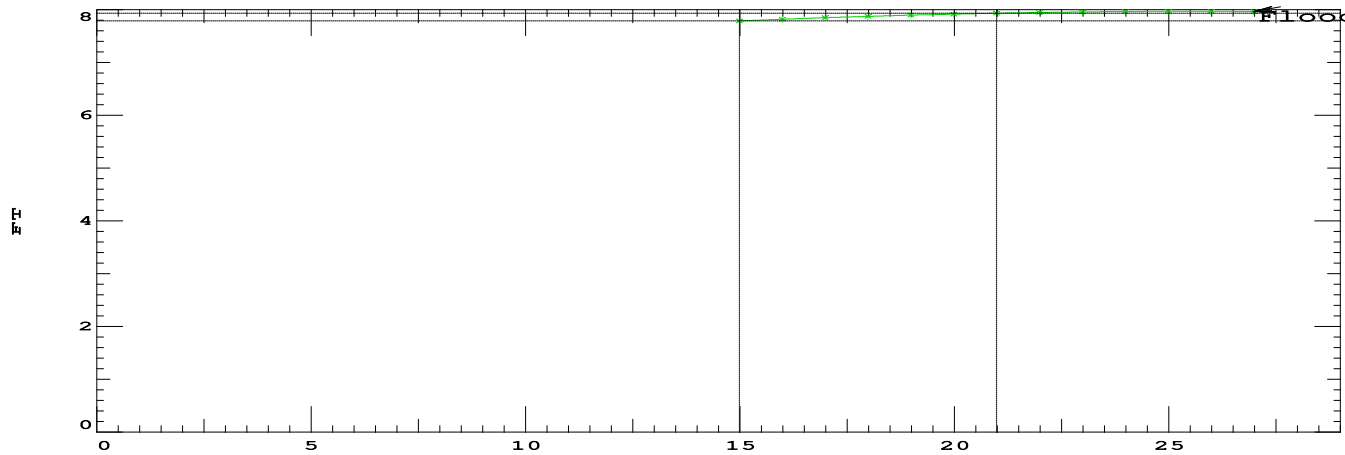
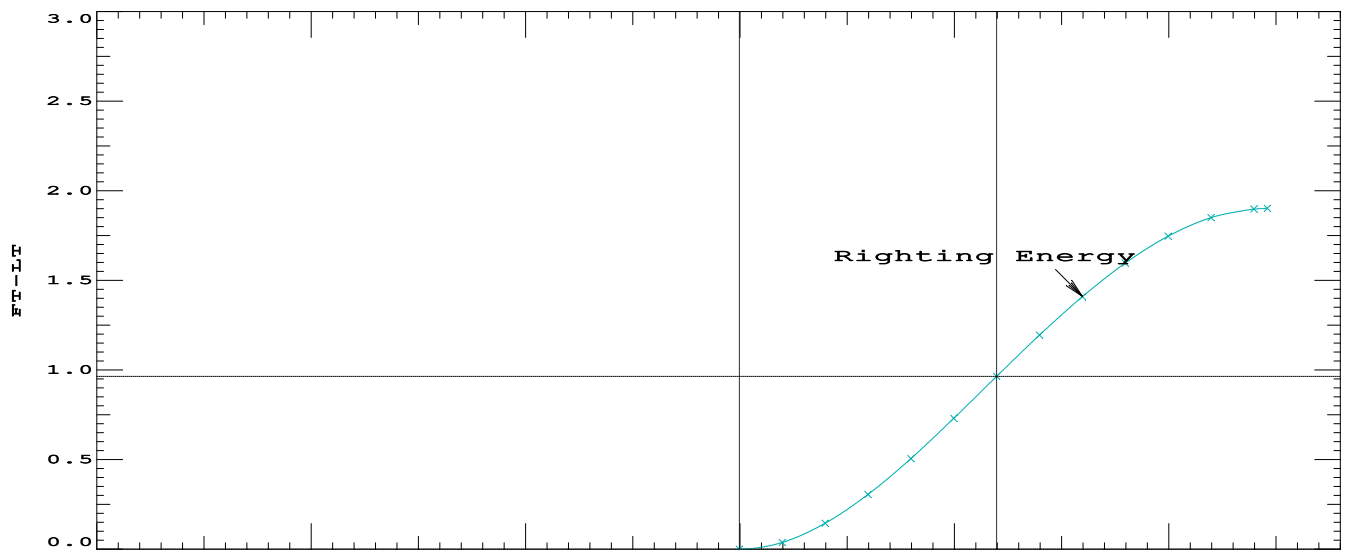
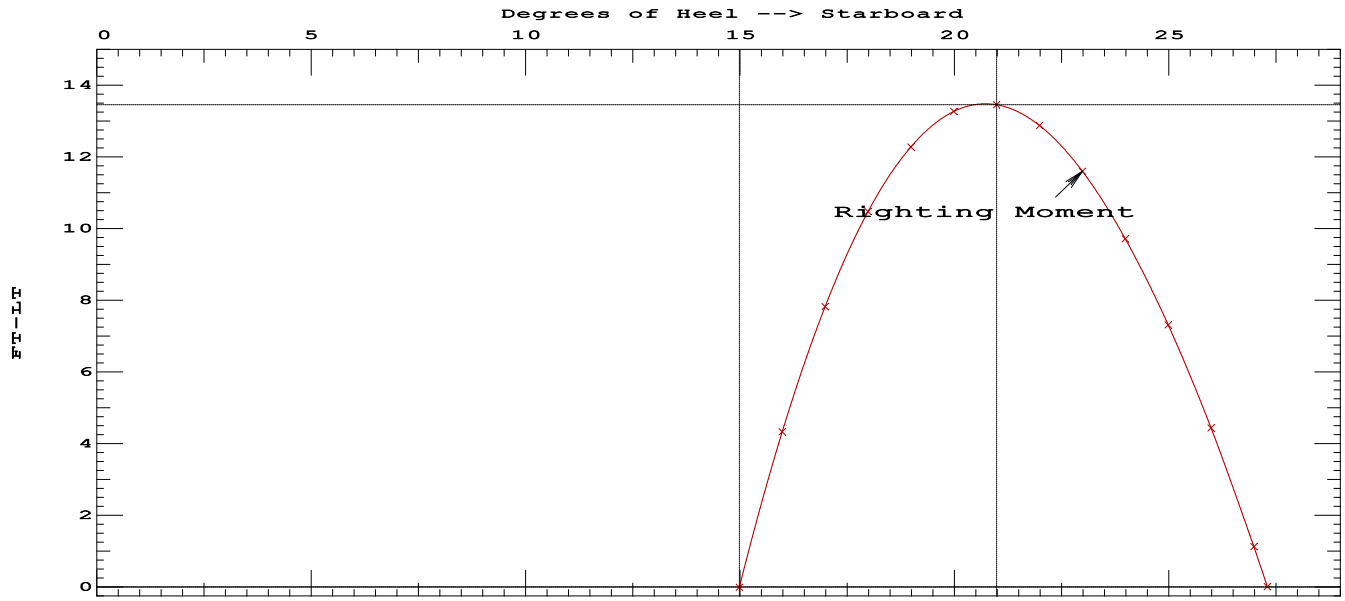
WEIGHT and DISPLACEMENT STATUS							
Baseline draft: 8.911 @ Origin							
Trim: Aft 0.68 deg., Heel: Stbd 0.22 deg.							
Part			Weight(LT)	LCG	TCG	VCG	
LIGHT SHIP			181.77	38.69a	0.00	10.55	
4 CREW			0.33	36.50a	0.00	14.50	
CONSUMABLES			0.20	19.25a	0.00	14.93	
SPARE PARTS			1.25	14.00a	0.00	8.50	
ICE IN HOLD			10.63	47.75a	0.00	6.99	
CATCH IN HOLD			24.55	23.58a	0.00	7.37	
PARAVANES UP			-1.99	34.50a	0.00	37.50	
PARAVANES DOWN			1.99	34.50a	0.00	23.50	
LARGER TRAWLER DOORS			0.98	67.03a	0.00	15.70	
Total Fixed			219.71	37.40a	0.00	9.92	
	Load	SpGr	Weight(LT)	LCG	TCG	VCG	RefHt
FW	0.500	1.000	3.03	0.34a	0.01s	9.01	-11.04
FOS	0.500	0.870	11.63	30.44a	7.70s	4.85	-7.01
FOP	0.500	0.870	11.63	30.44a	7.70p	4.85	-7.07
HOT	0.500	0.947	0.27	40.59a	4.90s	6.43	-7.70
LAZ	0.150	1.025	4.68	68.10a	0.09s	6.81	-6.70
DECK	0.038	1.025	5.40	76.67a	0.55s	12.96	0.00
Total Tanks			36.64	39.65a	0.13s	6.65	
Total Weight			256.34	37.73a	0.02s	9.45	
HULL			Displ(LT)	LCB	TCB	VCB	
	1.025		250.95	36.93a	0.02s	5.87	-8.91
WEIGHT EXCESS:			5.40				
DECK	Spilling at:			LRP	TRP	VRP	
				40.00a	9.75p	12.50	
Distances in FEET.							

AFTER SOLVING FOR WATER ON DECK

WEIGHT and DISPLACEMENT STATUS							
Baseline draft: 8.679 @ Origin							
Trim: Aft 1.35 deg., Heel: Stbd 14.98 deg.							
Part			Weight(LT)	LCG	TCG	VCG	
LIGHT SHIP			181.77	38.69a	0.00	10.55	
4 CREW			0.33	36.50a	0.00	14.50	
CONSUMABLES			0.20	19.25a	0.00	14.93	
SPARE PARTS			1.25	14.00a	0.00	8.50	
ICE IN HOLD			10.63	47.75a	0.00	6.99	
CATCH IN HOLD			24.55	23.58a	0.00	7.37	
PARAVANES UP			-1.99	34.50a	0.00	37.50	
PARAVANES DOWN			1.99	34.50a	0.00	23.50	
LARGER TRAWLER DOORS			0.98	67.03a	0.00	15.70	
Total Fixed			219.71	37.40a	0.00	9.92	
	Load	SpGr	Weight(LT)	LCG	TCG	VCG	RefHt
FW	0.500	1.000	3.03	0.36a	0.47s	9.07	-10.59
FOS	0.500	0.870	11.63	30.65a	7.81s	4.87	-4.36
FOP	0.500	0.870	11.63	30.48a	7.61p	4.87	-8.50
continued next page							

STATUS, continued							
Part	Load	SpGr	Weight(LT)	LCG	TCG	VCG	RefHt
HOT	0.500	0.947	0.27	40.59a	4.92s	6.44	-5.70
LAZ	0.150	1.025	4.68	68.71a	4.66s	7.34	-5.20
DECK	0.077	1.025	10.86	53.68a	7.40s	13.18	0.00
Total Tanks			42.10	38.67a	2.55s	7.60	
Total Weight			261.81	37.61a	0.41s	9.54	
			Displ(LT)	LCB	TCB	VCB	
HULL		1.025	261.81	37.69a	1.30s	6.20	-8.38
Righting Arms:				0.00	0.00s		
				LRP	TRP	VRP	
DECK	Spilling at:			60.00a	9.75s	14.80	
Distances in FEET.							

RIGHTING ARMS vs HEEL ANGLE							
Fixed CG: LCG = 37.40a TCG = 0.00 VCG = 9.92							
Origin Depth	Degrees of Trim	Degrees of Heel	Displacement Weight(LT)	Righting Arms in Trim	Righting Arms in Heel	Area	Flood Pt Height
8.382	1.35a	14.98s	261.81	0.00	0.000	0.00	2.99 (5)
8.356	1.32a	15.98s	261.29	0.00	0.017	0.01	7.82 (3)
8.327	1.30a	16.98s	260.82	0.00	0.030	0.03	7.85 (3)
8.295	1.28a	17.98s	260.39	0.00	0.040	0.07	7.87 (3)
8.260	1.27a	18.98s	260.00	0.00	0.047	0.11	7.89 (3)
8.222	1.27a	19.98s	259.63	0.00	0.051	0.16	7.91 (3)
8.181	1.27a	20.98s	259.29	0.00	0.052	0.21	7.93 (3)
8.137	1.27a	21.98s	258.96	0.00	0.050	0.26	7.94 (3)
8.090	1.28a	22.98s	258.66	0.00	0.045	0.31	7.96 (3)
8.042	1.29a	23.98s	258.36	0.00	0.038	0.35	7.96 (3)
7.991	1.30a	24.98s	258.08	0.00	0.028	0.38	7.97 (3)
7.939	1.32a	25.98s	257.82	0.00	0.017	0.41	7.97 (3)
7.886	1.34a	26.98s	257.56	0.00	0.004	0.42	7.97 (3)
7.869	1.34a	27.30s	257.48	0.00	0.000	0.42	7.96 (3)
Distances in FEET.			Specific Gravity = 1.025.			Area in Ft-Deg.	
<p>Note: The Center of Gravity shown above is for the Fixed Weight of 219.71 LT. As the tank load centers shift with heel and trim, the total Center of Gravity varies. The righting arms shown above include the effect of the C.G. variation.</p>							
Critical Points				LCP	TCP	VCP	
(3)	BLOWER VENT PORT			FLOOD	7.50a	4.40p	15.75
(5)	LAZ HATCH AFT			TIGHT	73.00a	1.00	13.82



ADD WATER ON DECK
BEFORE SOLVING FOR WATER ON DECK

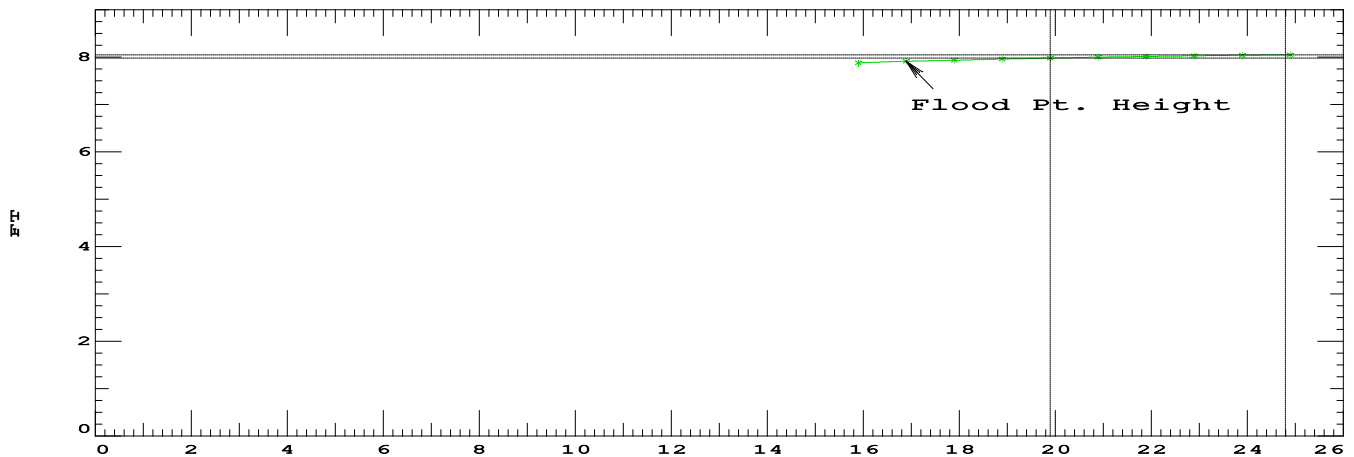
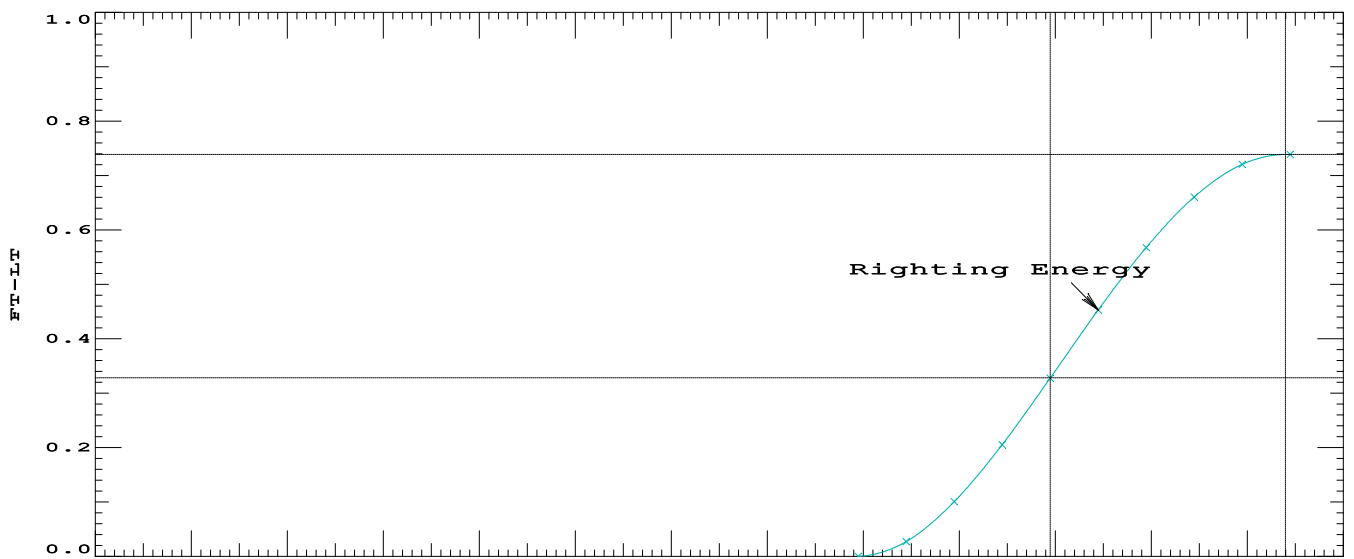
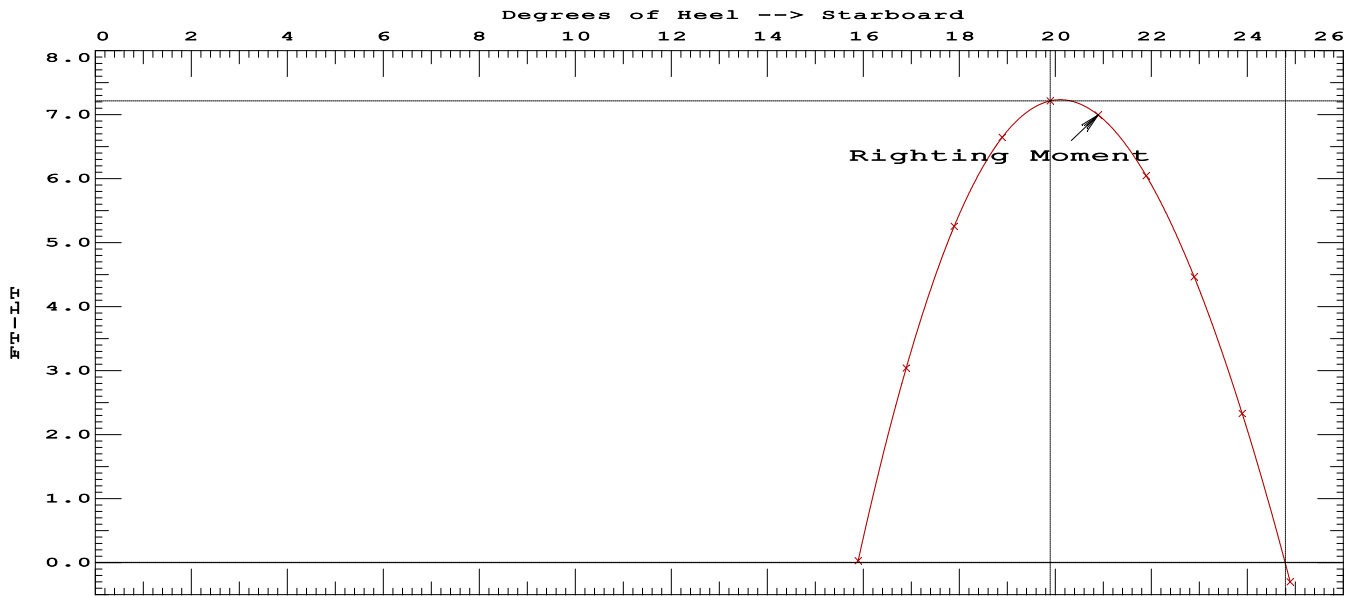
WEIGHT and DISPLACEMENT STATUS							
Baseline draft: 8.830 @ Origin							
Trim: Aft 0.86 deg., Heel: Stbd 0.23 deg.							
Part			Weight(LT)	LCG	TCG	VCG	
LIGHT SHIP			181.77	38.69a	0.00	10.55	
4 CREW			0.33	36.50a	0.00	14.50	
CONSUMABLES			0.20	19.25a	0.00	14.93	
SPARE PARTS			1.25	14.00a	0.00	8.50	
ICE IN HOLD			10.63	47.75a	0.00	6.99	
CATCH IN HOLD			24.55	23.58a	0.00	7.37	
PARAVANES UP			-1.99	34.50a	0.00	37.50	
PARAVANES DOWN			1.99	34.50a	0.00	23.50	
LARGER TRAWLER DOORS			0.98	67.03a	0.00	15.70	
Total Fixed			219.71	37.40a	0.00	9.92	
	Load	SpGr	Weight(LT)	LCG	TCG	VCG	RefHt
FW	0.500	1.000	3.03	0.34a	0.01s	9.01	-11.04
FOS	0.500	0.870	11.63	30.47a	7.70s	4.85	-6.92
FOP	0.500	0.870	11.63	30.47a	7.70p	4.85	-6.98
HOT	0.500	0.947	0.27	40.59a	4.90s	6.43	-7.58
LAZ	0.200	1.025	6.24	68.50a	0.08s	7.04	-6.83
DECK	0.042	1.025	6.03	75.47a	0.53s	12.96	0.00
Total Tanks			38.83	41.29a	0.13s	6.80	
Total Weight			258.54	37.99a	0.02s	9.45	
			Displ(LT)	LCB	TCB	VCB	
HULL	1.025		252.51	37.15a	0.02s	5.90	-8.83
WEIGHT EXCESS:			6.02				
				LRP	TRP	VRP	
DECK	Spilling at:			40.00a	9.75p	12.50	
Distances in FEET.							

AFTER SOLVING FOR WATER ON DECK

WEIGHT and DISPLACEMENT STATUS							
Baseline draft: 8.602 @ Origin							
Trim: Aft 1.51 deg., Heel: Stbd 15.89 deg.							
Part			Weight(LT)	LCG	TCG	VCG	
LIGHT SHIP			181.77	38.69a	0.00	10.55	
4 CREW			0.33	36.50a	0.00	14.50	
CONSUMABLES			0.20	19.25a	0.00	14.93	
SPARE PARTS			1.25	14.00a	0.00	8.50	
ICE IN HOLD			10.63	47.75a	0.00	6.99	
CATCH IN HOLD			24.55	23.58a	0.00	7.37	
PARAVANES UP			-1.99	34.50a	0.00	37.50	
PARAVANES DOWN			1.99	34.50a	0.00	23.50	
LARGER TRAWLER DOORS			0.98	67.03a	0.00	15.70	
Total Fixed			219.71	37.40a	0.00	9.92	
	Load	SpGr	Weight(LT)	LCG	TCG	VCG	RefHt
FW	0.500	1.000	3.03	0.36a	0.50s	9.08	-10.54
FOS	0.500	0.870	11.63	30.69a	7.82s	4.87	-4.12
FOP	0.500	0.870	11.63	30.51a	7.61p	4.87	-8.51
continued next page							

STATUS, continued							
Part	Load	SpGr	Weight(LT)	LCG	TCG	VCG	RefHt
HOT	0.500	0.947	0.27	40.59a	4.92s	6.44	-5.48
LAZ	0.200	1.025	6.24	68.96a	4.38s	7.57	-5.38
DECK	0.072	1.025	10.19	53.55a	7.49s	13.14	0.00
Total Tanks			42.99	39.54a	2.53s	7.53	
Total Weight			262.70	37.75a	0.41s	9.53	
			Displ(LT)	LCB	TCB	VCB	
HULL		1.025	262.70	37.84a	1.35s	6.23	-8.27
Righting Arms:				0.00	0.00s		
				LRP	TRP	VRP	
DECK	Spilling at:			60.00a	9.75s	14.80	
Distances in FEET.							

RIGHTING ARMS vs HEEL ANGLE							
Fixed CG: LCG = 37.40a TCG = 0.00 VCG = 9.92							
Origin Depth	Degrees of Trim	Degrees of Heel	Displacement Weight(LT)	Righting Arms in Trim	Righting Arms in Heel	Area	Flood Pt Height
8.269	1.51a	15.89s	262.67	0.00	0.000	0.00	2.83 (5)
8.240	1.49a	16.89s	262.22	0.00	0.012	0.01	7.91 (3)
8.206	1.48a	17.89s	261.78	0.00	0.020	0.02	7.94 (3)
8.169	1.47a	18.89s	261.38	0.00	0.025	0.04	7.96 (3)
8.129	1.47a	19.89s	261.01	0.00	0.028	0.07	7.98 (3)
8.086	1.47a	20.89s	260.66	0.00	0.027	0.10	8.00 (3)
8.040	1.48a	21.89s	260.32	0.00	0.023	0.12	8.02 (3)
7.991	1.50a	22.89s	260.01	0.00	0.017	0.14	8.03 (3)
7.941	1.51a	23.89s	259.71	0.00	0.009	0.16	8.04 (3)
7.888	1.53a	24.89s	259.43	0.00	-0.001	0.16	8.04 (3)
Distances in FEET.			Specific Gravity = 1.025.			Area in Ft-Deg.	
<p>Note: The Center of Gravity shown above is for the Fixed Weight of 219.71 LT. As the tank load centers shift with heel and trim, the total Center of Gravity varies. The righting arms shown above include the effect of the C.G. variation.</p>							
Critical Points				LCP	TCP	VCP	
(3)	BLOWER VENT PORT			FLOOD	7.50a	4.40p	15.75
(5)	LAZ HATCH AFT			TIGHT	73.00a	1.00	13.82



ADD WATER ON DECK
BEFORE SOLVING FOR WATER ON DECK

WEIGHT and DISPLACEMENT STATUS							
Baseline draft: 8.747 @ Origin							
Trim: Aft 1.03 deg., Heel: Stbd 0.24 deg.							
Part			Weight(LT)	LCG	TCG	VCG	
LIGHT SHIP			181.77	38.69a	0.00	10.55	
4 CREW			0.33	36.50a	0.00	14.50	
CONSUMABLES			0.20	19.25a	0.00	14.93	
SPARE PARTS			1.25	14.00a	0.00	8.50	
ICE IN HOLD			10.63	47.75a	0.00	6.99	
CATCH IN HOLD			24.55	23.58a	0.00	7.37	
PARAVANES UP			-1.99	34.50a	0.00	37.50	
PARAVANES DOWN			1.99	34.50a	0.00	23.50	
LARGER TRAWLER DOORS			0.98	67.03a	0.00	15.70	
Total Fixed			219.71	37.40a	0.00	9.92	
	Load	SpGr	Weight(LT)	LCG	TCG	VCG	RefHt
FW	0.500	1.000	3.03	0.34a	0.01s	9.01	-11.04
FOS	0.500	0.870	11.63	30.50a	7.70s	4.85	-6.83
FOP	0.500	0.870	11.63	30.50a	7.70p	4.85	-6.89
HOT	0.500	0.947	0.27	40.59a	4.90s	6.43	-7.45
LAZ	0.250	1.025	7.80	68.79a	0.07s	7.23	-6.93
DECK	0.047	1.025	6.64	74.48a	0.48s	12.95	0.00
Total Tanks			41.00	42.75a	0.12s	6.94	
Total Weight			260.71	38.25a	0.02s	9.45	
HULL			Displ(LT)	LCB	TCB	VCB	
	1.025		254.07	37.36a	0.02s	5.92	-8.75
WEIGHT EXCESS:			6.64				
DECK	Spilling at:			LRP	TRP	VRP	
				40.00a	9.75p	12.50	
Distances in FEET.							

AFTER SOLVING FOR WATER ON DECK

WEIGHT and DISPLACEMENT STATUS							
Baseline draft: 8.526 @ Origin							
Trim: Aft 1.68 deg., Heel: Stbd 17.51 deg.							
Part			Weight(LT)	LCG	TCG	VCG	
LIGHT SHIP			181.77	38.69a	0.00	10.55	
4 CREW			0.33	36.50a	0.00	14.50	
CONSUMABLES			0.20	19.25a	0.00	14.93	
SPARE PARTS			1.25	14.00a	0.00	8.50	
ICE IN HOLD			10.63	47.75a	0.00	6.99	
CATCH IN HOLD			24.55	23.58a	0.00	7.37	
PARAVANES UP			-1.99	34.50a	0.00	37.50	
PARAVANES DOWN			1.99	34.50a	0.00	23.50	
LARGER TRAWLER DOORS			0.98	67.03a	0.00	15.70	
Total Fixed			219.71	37.40a	0.00	9.92	
	Load	SpGr	Weight(LT)	LCG	TCG	VCG	RefHt
FW	0.500	1.000	3.03	0.37a	0.55s	9.09	-10.43
FOS	0.500	0.870	11.63	30.73a	7.83s	4.88	-3.76
FOP	0.500	0.870	11.63	30.53a	7.60p	4.87	-8.58
continued next page							

STATUS, continued							
Part	Load	SpGr	Weight(LT)	LCG	TCG	VCG	RefHt
HOT	0.500	0.947	0.27	40.59a	4.92s	6.44	-5.16
LAZ	0.250	1.025	7.80	69.14a	4.26s	7.82	-5.45
DECK	0.065	1.025	9.24	53.25a	7.64s	13.10	0.00
Total Tanks			43.60	40.27a	2.51s	7.45	
Total Weight			263.31	37.88a	0.42s	9.51	
			Displ(LT)	LCB	TCB	VCB	
HULL		1.025	263.32	37.98a	1.44s	6.27	-8.13
Righting Arms:				0.00	0.00s		
				LRP	TRP	VRP	
DECK	Spilling at:			60.00a	9.75s	14.80	
Distances in FEET.							

RIGHTING ARMS vs HEEL ANGLE							
Fixed CG: LCG = 37.40a TCG = 0.00 VCG = 9.92							
Origin Depth	Degrees of Trim	Degrees of Heel	Displacement Weight(LT)	Righting Arms in Trim	Righting Arms in Heel	Area	Flood Pt Height
8.126	1.68a	17.51s	263.31	0.00	0.000	0.00	2.62 (5)
8.089	1.67a	18.51s	262.89	0.00	0.004	0.00	8.02 (3)
8.047	1.67a	19.51s	262.50	0.00	0.006	0.01	8.04 (3)
8.003	1.68a	20.51s	262.13	0.00	0.004	0.01	8.06 (3)
7.955	1.69a	21.51s	261.79	0.00	0.000	0.01	2.38 (5)
7.906	1.71a	22.51s	261.46	0.00	-0.007	0.01	8.10 (3)
7.854	1.73a	23.51s	261.16	0.00	-0.016	-0.00	8.11 (3)
7.800	1.75a	24.51s	260.86	0.00	-0.026	-0.02	8.12 (3)
7.745	1.78a	25.51s	260.58	0.00	-0.038	-0.05	8.12 (3)
7.688	1.80a	26.51s	260.31	0.00	-0.052	-0.10	8.13 (3)
7.630	1.83a	27.51s	260.05	0.00	-0.068	-0.16	8.12 (3)
7.570	1.86a	28.51s	259.80	0.00	-0.084	-0.24	8.12 (3)
7.508	1.89a	29.51s	259.55	0.00	-0.102	-0.33	8.11 (3)
7.447	1.91a	30.51s	259.32	0.00	-0.121	-0.44	8.10 (3)
7.383	1.94a	31.51s	259.08	0.00	-0.141	-0.57	8.08 (3)
7.318	1.98a	32.51s	258.85	0.00	-0.162	-0.72	8.06 (3)
7.252	2.01a	33.51s	258.63	0.00	-0.184	-0.90	8.04 (3)
7.185	2.04a	34.51s	258.41	0.00	-0.207	-1.09	8.01 (3)
7.118	2.07a	35.51s	258.21	0.00	-0.230	-1.31	7.98 (3)
7.051	2.10a	36.51s	258.01	0.00	-0.254	-1.55	7.94 (3)
6.983	2.12a	37.51s	257.82	0.00	-0.279	-1.82	7.90 (3)
6.914	2.15a	38.51s	257.64	0.00	-0.305	-2.11	7.86 (3)
6.846	2.18a	39.51s	257.48	0.00	-0.332	-2.43	7.81 (3)
6.778	2.20a	40.51s	257.32	0.00	-0.359	-2.78	7.76 (3)
6.708	2.22a	41.51s	257.16	0.00	-0.387	-3.15	7.70 (3)
6.638	2.24a	42.51s	257.02	0.00	-0.417	-3.55	7.64 (3)
6.631	2.25a	42.59s	257.00	0.00	-0.420	-3.59	-0.00 (5)
6.565	2.27a	43.51s	256.88	0.00	-0.448	-3.98	7.58 (3)
6.491	2.29a	44.51s	256.75	0.00	-0.480	-4.45	7.51 (3)
6.415	2.31a	45.51s	256.62	0.00	-0.514	-4.94	7.45 (3)
6.337	2.33a	46.51s	256.50	0.00	-0.548	-5.48	7.38 (3)
6.258	2.35a	47.51s	256.39	0.00	-0.584	-6.04	7.31 (3)
6.177	2.37a	48.51s	256.28	0.00	-0.620	-6.64	7.23 (3)
6.095	2.39a	49.51s	256.17	0.00	-0.657	-7.28	7.15 (3)
6.012	2.41a	50.51s	256.07	0.00	-0.696	-7.96	7.07 (3)
5.926	2.43a	51.51s	255.98	0.00	-0.735	-8.67	6.99 (3)

Very little righting energy

5.839	2.45a	52.51s	255.89	0.00	-0.774	-9.43	6.91 (3)
5.751	2.47a	53.51s	255.80	0.00	-0.815	-10.22	6.82 (3)
5.660	2.49a	54.51s	255.72	0.00	-0.856	-11.06	6.73 (3)
5.568	2.51a	55.51s	255.64	0.00	-0.897	-11.93	6.64 (3)
5.475	2.52a	56.51s	255.56	0.00	-0.939	-12.85	6.54 (3)
5.381	2.54a	57.51s	255.49	0.00	-0.982	-13.81	6.45 (3)

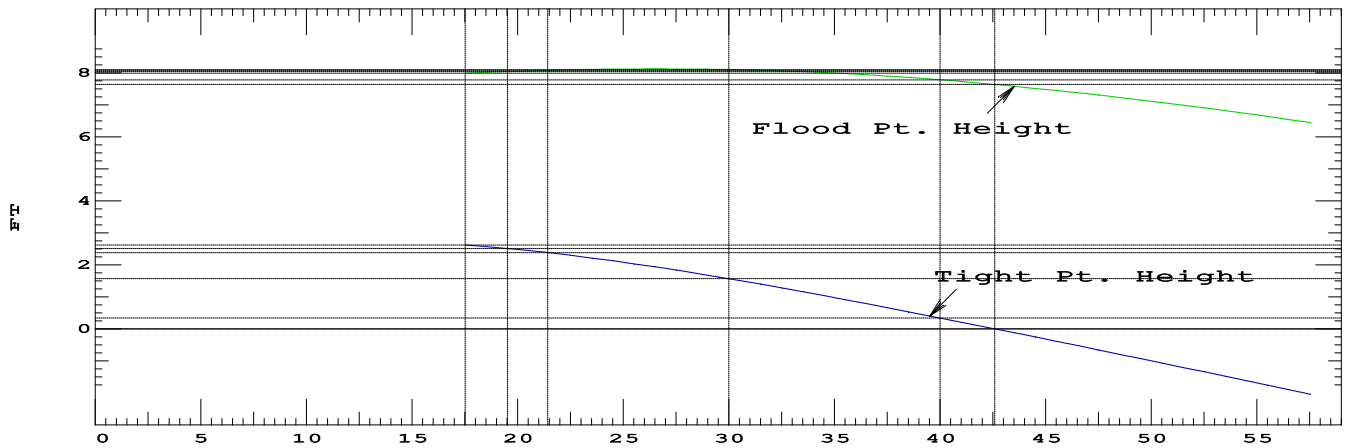
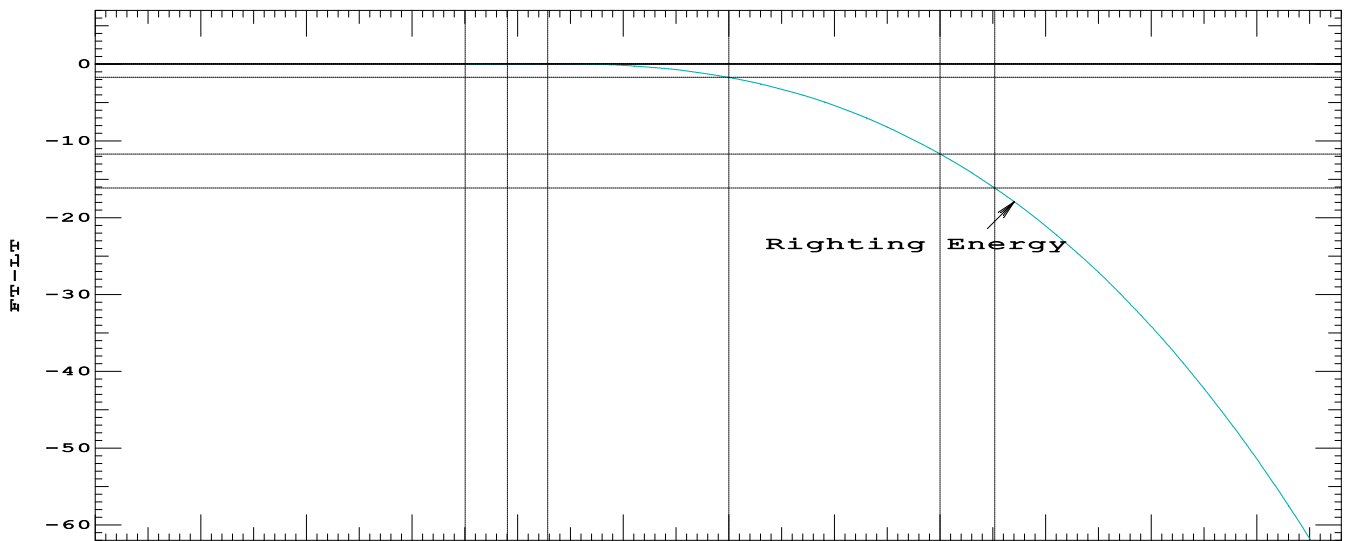
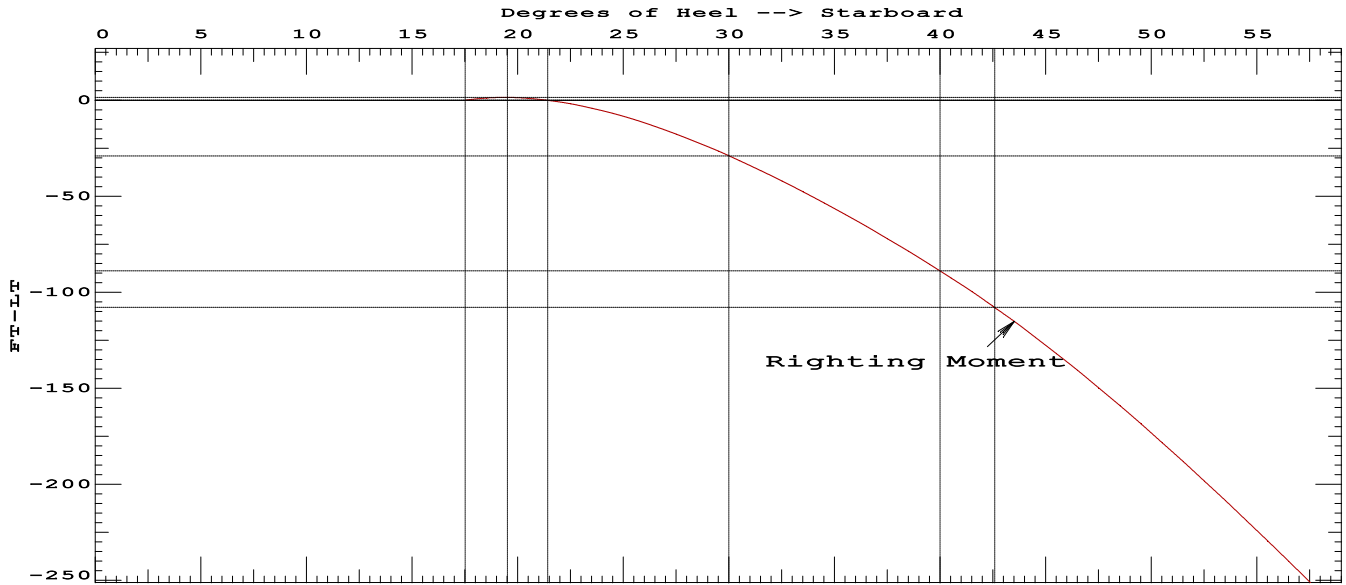
Distances in FEET.

Specific Gravity = 1.025.

Area in Ft-Deg.

Note: The Center of Gravity shown above is for the Fixed Weight of 219.71 LT. As the tank load centers shift with heel and trim, the total Center of Gravity varies. The righting arms shown above include the effect of the C.G. variation.

Critical Points			LCP	TCP	VCP
(3)	BLOWER VENT PORT	FLOOD	7.50a	4.40p	15.75
(5)	LAZ HATCH AFT	TIGHT	73.00a	1.00	13.82



LC5: TIME OF INCIDENT WITH LAZ 30% FLOODED

HYDROSTATIC PROPERTIES								
Trim: Aft 1.21 deg.,			Heel: Stbd 0.23 deg.,			VCG = 9.35		
LCF Draft	Displacement Weight(LT)	Buoyancy-Ctr. LCB	VCB	Weight/Inch	LCF	Moment/Deg trim	GML	GMT
9.497	255.61	37.57a	5.95	3.40	39.46a	267.90	60.0	1.25
Distances in FEET. Draft is from Baseline.				Specific Gravity = 1.025.			Moment in Ft-LT. True Free Surface included.	

WEIGHT and DISPLACEMENT STATUS							
Baseline draft: 8.662 @ Origin							
Trim: Aft 1.21 deg.,				Heel: Stbd 0.23 deg.			
Part	Weight(LT)	LCG	TCG	VCG	Load	SpGr	FSM
LIGHT SHIP	181.77	38.69a	0.00	10.55			
4 CREW	0.33	36.50a	0.00	14.50			
CONSUMABLES	0.20	19.25a	0.00	14.93			
SPARE PARTS	1.25	14.00a	0.00	8.50			
ICE IN HOLD	10.63	47.75a	0.00	6.99			
CATCH IN HOLD	24.55	23.58a	0.00	7.37			
PARAVANES UP	-1.99	34.50a	0.00	37.50			
PARAVANES DOWN	1.99	34.50a	0.00	23.50			
LARGER TRAWLER DOORS	0.98	67.03a	0.00	15.70			
Total Fixed	219.71	37.40a	0.00	9.92			
	Weight(LT)	LCG	TCG	VCG	Load	SpGr	FSM
FW	3.03	0.35a	0.01s	9.01	0.500	1.000	5.2
FOS	11.63	30.53a	7.71s	4.85	0.500	0.870	4.3
FOP	11.63	30.53a	7.70p	4.85	0.500	0.870	4.2
HOT	0.27	40.59a	4.90s	6.43	0.500	0.947	0.0
LAZ	9.36	69.00a	0.06s	7.42	0.300	1.025	139.2
Total Tanks	35.92	38.09a	0.05s	5.88			152.9
Total Weight	255.63	37.50a	0.01s	9.35			
HULL	Displ(LT)	LCB	TCB	VCB	RefHt		
	255.61	37.57a	0.02s	5.95	-8.66		
Righting Arms:		0.00	0.00s				
Distances in FEET.				Moments in Ft-LT.			

FREEBOARD STATUS	
Baseline draft: 8.662 @ Origin	
Trim: Aft 1.21 deg.,	Heel: Stbd 0.23 deg.
Least freeboard is 1.95 Ft located at 43.98a	

ADD WATER ON DECK
BEFORE SOLVING FOR WATER ON DECK

WEIGHT and DISPLACEMENT STATUS							
Baseline draft: 8.662 @ Origin							
Trim: Aft 1.21 deg., Heel: Stbd 0.23 deg.							
Part			Weight(LT)	LCG	TCG	VCG	
LIGHT SHIP			181.77	38.69a	0.00	10.55	
4 CREW			0.33	36.50a	0.00	14.50	
CONSUMABLES			0.20	19.25a	0.00	14.93	
SPARE PARTS			1.25	14.00a	0.00	8.50	
ICE IN HOLD			10.63	47.75a	0.00	6.99	
CATCH IN HOLD			24.55	23.58a	0.00	7.37	
PARAVANES UP			-1.99	34.50a	0.00	37.50	
PARAVANES DOWN			1.99	34.50a	0.00	23.50	
LARGER TRAWLER DOORS			0.98	67.03a	0.00	15.70	
Total Fixed			219.71	37.40a	0.00	9.92	
	Load	SpGr	Weight(LT)	LCG	TCG	VCG	RefHt
FW	0.500	1.000	3.03	0.35a	0.01s	9.01	-11.04
FOS	0.500	0.870	11.63	30.53a	7.71s	4.85	-6.73
FOP	0.500	0.870	11.63	30.53a	7.70p	4.85	-6.80
HOT	0.500	0.947	0.27	40.59a	4.90s	6.43	-7.32
LAZ	0.300	1.025	9.36	69.00a	0.06s	7.42	-7.02
DECK	0.052	1.025	7.32	73.15a	0.40s	12.95	0.00
Total Tanks			43.24	44.02a	0.11s	7.08	
Total Weight			262.95	38.49a	0.02s	9.45	
HULL			Displ(LT)	LCB	TCB	VCB	
	1.025		255.61	37.57a	0.02s	5.95	-8.66
WEIGHT EXCESS:			7.34				
DECK	Spilling at:			LRP	TRP	VRP	
				40.00a	9.75p	12.50	
Distances in FEET.							

AFTER SOLVING FOR WATER ON DECK

WEIGHT and DISPLACEMENT STATUS							
Origin Depth: -6.596							
Trim: Aft 4.25 deg., Heel: Stbd 179.86 deg. Capsize							
Part			Weight(LT)	LCG	TCG	VCG	
LIGHT SHIP			181.77	38.69a	0.00	10.55	
4 CREW			0.33	36.50a	0.00	14.50	
CONSUMABLES			0.20	19.25a	0.00	14.93	
SPARE PARTS			1.25	14.00a	0.00	8.50	
ICE IN HOLD			10.63	47.75a	0.00	6.99	
CATCH IN HOLD			24.55	23.58a	0.00	7.37	
PARAVANES UP			-1.99	34.50a	0.00	37.50	
PARAVANES DOWN			1.99	34.50a	0.00	23.50	
LARGER TRAWLER DOORS			0.98	67.03a	0.00	15.70	
Total Fixed			219.71	37.40a	0.00	9.92	
	Load	SpGr	Weight(LT)	LCG	TCG	VCG	RefHt
FW	0.500	1.000	3.03	0.89f	0.00s	12.22	10.98
FOS	0.500	0.870	11.63	30.45a	8.26s	9.54	9.62
FOP	0.500	0.870	11.63	30.45a	8.26p	9.54	9.58
continued next page							

STATUS, continued							
Part	Load	SpGr	Weight(LT)	LCG	TCG	VCG	RefHt
HOT	0.500	0.947	0.27	40.59a	4.90s	9.98	11.20
LAZ	0.300	1.025	9.37	70.07a	0.04s	12.03	16.12
DECK	0.287	1.025	40.65	55.07a	0.04s	18.00	0.00
Total Tanks			76.57	47.16a	0.05s	14.44	
Total Weight			296.28	39.93a	0.01s	11.09	
			Displ(LT)	LCB	TCB	VCB	
HULL		1.025	296.26	39.73a	0.01s	8.39	6.60
Righting Arms:				0.00	0.00s		
				LRP	TRP	VRP	
DECK	Spilling at:			69.00a	9.75s	15.75	
Distances in FEET.							

RIGHTING ARMS vs HEEL ANGLE							
Fixed CG: LCG = 37.40a TCG = 0.00 VCG = 9.92							
Origin Depth	Degrees of Trim	Degrees of Heel	Displacement Weight(LT)	Righting Arms in Trim	Righting Arms in Heel	Area	Flood Pt Height
-6.596	4.25a	179.86s	296.26	0.00	0.000	0.00	-12.60 (5)
-6.475	3.97a	180.86s	295.70	0.00	0.032	0.02	-9.82 (3)
-6.302	3.58a	181.86s	294.95	0.00	0.063	0.06	-10.02 (3)
-6.130	3.20a	182.86s	294.14	0.00	0.094	0.14	-10.21 (3)
-5.961	2.83a	183.86s	293.23	0.00	0.126	0.25	-10.40 (3)
-5.794	2.48a	184.86s	292.25	0.00	0.159	0.39	-10.58 (3)
-5.630	2.13a	185.86s	291.18	0.00	0.191	0.57	-10.75 (3)
-5.469	1.80a	186.86s	290.03	0.00	0.225	0.78	-10.92 (3)
-5.312	1.48a	187.86s	288.82	0.00	0.258	1.02	-11.08 (3)
-5.158	1.18a	188.86s	287.56	0.00	0.293	1.29	-11.23 (3)
-5.008	0.89a	189.86s	286.30	0.00	0.332	1.61	-11.38 (3)
-4.875	0.64a	190.86s	285.07	0.00	0.380	1.96	-11.50 (3)
-4.763	0.44a	191.86s	283.88	0.00	0.438	2.37	-11.61 (3)
-4.664	0.28a	192.86s	282.75	0.00	0.502	2.84	-11.71 (3)
-4.582	0.14a	193.86s	281.62	0.00	0.571	3.38	-11.78 (3)
-4.506	0.03a	194.86s	280.57	0.00	0.643	3.98	-11.85 (3)
-4.437	0.05f	195.86s	279.57	0.00	0.717	4.66	-11.91 (3)
-4.374	0.12f	196.86s	278.62	0.00	0.793	5.42	-11.96 (3)
-4.314	0.18f	197.86s	277.71	0.00	0.871	6.25	-12.00 (3)
-4.257	0.22f	198.86s	276.85	0.00	0.949	7.16	-12.04 (3)
-4.200	0.25f	199.86s	276.04	0.00	1.027	8.15	-12.08 (3)
-4.147	0.26f	200.86s	275.25	0.00	1.106	9.22	-12.10 (3)
-4.095	0.27f	201.86s	274.49	0.00	1.184	10.36	-12.12 (3)
-4.042	0.27f	202.86s	273.77	0.00	1.261	11.58	-12.14 (3)
-3.988	0.27f	203.86s	273.08	0.00	1.337	12.88	-12.16 (3)
-3.933	0.26f	204.86s	272.43	0.00	1.413	14.26	-12.17 (3)
-3.877	0.24f	205.86s	271.80	0.00	1.487	15.71	-12.18 (3)
-3.818	0.22f	206.86s	271.20	0.00	1.561	17.23	-12.19 (3)
-3.759	0.20f	207.86s	270.61	0.00	1.634	18.83	-12.20 (3)
-3.697	0.17f	208.86s	270.05	0.00	1.706	20.50	-12.20 (3)
-3.633	0.14f	209.86s	269.51	0.00	1.777	22.24	-12.20 (3)
-3.567	0.11f	210.86s	268.98	0.00	1.847	24.05	-12.20 (3)
-3.498	0.08f	211.86s	268.47	0.00	1.916	25.93	-12.19 (3)
-3.428	0.04f	212.86s	267.97	0.00	1.984	27.88	-12.18 (3)
-3.354	0.00	213.86s	267.49	0.00	2.051	29.90	-12.18 (3)
-3.279	0.04a	214.86s	267.02	0.00	2.117	31.99	-12.16 (3)

-3.204	0.09a	215.86s	266.56	0.00	2.180	34.13	-12.15 (3)
-3.127	0.13a	216.86s	266.11	0.00	2.241	36.34	-12.13 (3)
-3.050	0.18a	217.86s	265.66	0.00	2.299	38.61	-12.11 (3)
-2.973	0.23a	218.86s	265.22	0.00	2.355	40.94	-12.08 (3)
-2.895	0.28a	219.86s	264.79	0.00	2.408	43.32	-12.05 (3)

Distances in FEET.

Specific Gravity = 1.025.

Area in Ft-Deg.

Note: The Center of Gravity shown above is for the Fixed Weight of 219.71 LT. As the tank load centers shift with heel and trim, the total Center of Gravity varies. The righting arms shown above include the effect of the C.G. variation.

Critical Points			LCP	TCP	VCP
(3)	BLOWER VENT PORT	FLOOD	7.50a	4.40p	15.75
(5)	LAZ HATCH AFT	TIGHT	73.00a	1.00	13.82

Capsized

