

STABILITETSBOOK

FÖR

Räddningskryssaren:

- Märta Collin Reg.bet. SHFL
- Elsa Johansson Reg.bet. SDUG
- Sparbanken Tanum Reg.bet. SGZO
- Odd Fellow Reg.bet. SGZN



CORIOLIS AB
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Datum: 2010-04-20

	TRANSPORT STYRELSEN Gothenburg Maritime Inspectorate Office
GODKÄND/APPROVED	
Med avseende på/With respect to	
<u>STABILITET</u>	
Under förutsättning att givna anmärkningar iakttagas Upon condition that the remarks made are observed	
Name.....	<u>Han Z</u>
Date.....	<u>9/9-10</u> Dnr..... <u>TSJ 2009-5038</u>

Coriolis Utvecklings AB
Snäcksalsvägen 4
417 29 Göteborg

ODD FELLOW reg. bet. S G Z N - Stabilitetsdokument

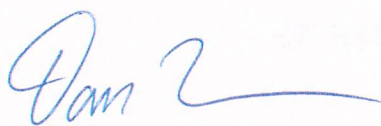
Bifogat en (1) kopia av inskickad stabilitetsbok mottagen 2010-04-19.

Följande handling har vid granskning godkänts
”Stabilitesbok SGZN datum 2010-04-20”

Tidigare inskickad stabilitetsbok makuleras. Anledningen till detta är att vid granskning fann inspektionen att fartygets skrovform, främst mallat djup ej var korrekt. Detta resulterade i ett felaktigt lättviktsdeplacement eftersom djupgåendet mättes utifrån fribordsmätningar.

Mottog per e-post den 23 juni 2010 anteckningar på krängsprovet på Märta Collin som utfördes den 22 juni 2010. Dessa anteckningar makuleras eftersom fullständig krängningsrapport är bifogad i stabilitetsboken.

En notering. I ditt följebrev informerar du att det är bifogat fem (5) handlingar. Vi har mottagit åtta (8) och skickar tillbaka fyra (4).



Dan Jonsson
Förste Fartygsinspektör
IOG

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 - Kondition 4: Avgång; 98% bunker & förråd, 4 mans besättning + 12 passagerare, Fribordskond.
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1. HUVUDDATA

ALLMÄNT:

Denna Stabilitetsbok redovisar stabilitetsegenskaperna för de fyra systerfartygen:

- R/K Märta Collin Reg.bet. SHFL
- R/K Elsa Johansson Reg.bet. SDUG
- R/K Sparbanken Tanum Reg.bet. SGZO
- R/K Odd Fellow Reg.bet. SGZN

Fartygen skiljer sig i det avseendet att Centertanken för diesel (bunker) är olika stor:

- Märta Collin och Elsa Johanssons Centertank rymmer 1480 liter
- Sparbanken Tanums Centertank rymmer 1050 liter
- Odd Fellows Centertank rymmer 830 liter.

Stabilitetsboken är beräknad med tankvolym 1480 liter (Märta Collin & Elsa Johansson) men extra lastkonditioner har lagts till för Odd Fellow som representerar ytterligheten åt andra hållet. Sparbanken Tanum får anses ligga inom dessa två ytterligheter.

Elsa Johansson har en "rescue runner" på akterdäck. Vikt ca.250 kg. Denna tilläggs vikt har lagts till i samtliga lastkonditioner (dvs. för samtliga "sysstrar") för att visa att "rescue runner" kan bäras av samtliga båtar.

BYGGNADSVARV: Swedeship Composite AB - Hunnebostrand

ÄGARE: SSRS - Sjöräddningssällskapet

HUVUDDIMENSIONER:

Längd över allt:	14,99 m
Längd mellan PP:	13,00 m
Bredd mallad:	4.84 m
Djup mallat:	2.85 m

KOORDINATSYSTEM, BASLINJE ETC.:

Se ritning 100-1 utg.B samt SIKOB geometri-fil COLLINZY.DAT i Appendix A.

Långskepps referens ($X=0$) är 678 mm akter om AP, där AP = Centrum av hjärtstocken. X-axeln pekar förut.

Tvårskepps referens ($Y=0$) är CL. Y-axeln pekar åt SB.

Vertikal referens ($Z=0$) är BL. Z-axeln pekar uppåt

Akterligt trim är positivt (+). Förligt trim är negativt (-).

Alla djupgåenden är relaterade till Baslinjen och LPP/2 (= 7.178m för om $X=0$).

2. HANLEDNING VID BERÄKNING AV TRIM OCH STABILITET

2.1 TRIM

2.1.1 Allmänt

Ett fartygs trim, skillnaden mellan djupgåendet för och akter, uppstår genom att fartygets viktstyngdpunkt (LCG) inte sammanfaller med displacementstyngdpunkten (LCB) på jämn köl i längskeppsled för samma displacement.

2.1.2 Beräkningsgång

Vid beräkning av fartygets trim bestäms först viktstyngdpunktens läge. Aktuella hävarmar och vikter fås ur tabeller över kapacitet och tyngdpunktskoordinater för lätt fartyg, lastutrymmen och bunkertankar. Viktstyngdpunkten från L/2 erhålls genom dels summering av alla ingående delvikter (w) och dels summering av alla delvikters moment kring L/2 (w*x) med avseende på sina tecken. Därvid beaktas att vikter placerade för om L/2 är positiva och vikter placerade akter om L/2 är negativa.

$$LCG = \frac{\sum(w*x)}{\sum w}$$

Viktstyngdpunkten över köl (VCG) erhålls genom summering av alla delvikters moment över baslinjen (w*y).

$$VCG = \frac{\sum(w*y)}{\sum w}$$

Displacementstyngdpunkten från L/2 erhålls ur hydrostatiska data för fartyget på jämn köl. Avståndet mellan den så erhållna displacementstyngdpunkten (LCB) och fartygets viktstyngdpunkt (LCG) kallas för trimmande hävarm (h). Vid negativt värde har fartyget akterligt trim och vid positivt värde förligt trim.

Långskeppsmetacentrum (KML) erhålls ur hydrostatiska data för fartyget på jämn köl. KML ger genom subtraktion med VCG långskeppsmetacentrumhöjden (GML).

Totala trimmet (t) bestäms genom sambandet $t = L*h/GML$.

Trimmet uppdelning för och akter är beroende av flytcentrums (LCF) läge med avseende på L/2. LCF's läge erhålls från hydrostatiska data. Vid överslagsberäkningar antas flytcentrum ligga på L/2 och då erhålls.

Djupgående akter (da) $da = d + t/2$

Djupgående för (df) $df = d - t/2$

2.2 TVÄRSKEPPSSTABILITET

2.2.1 Allmänt

När fartyget ligger i upprätt läge ligger viktstyngdpunkten (G) och displacementstyngdpunkten (B) på samma vertikala linje i centerlinjeplanet, och momentet av tyngdkraft och flytkraft är således noll. Då fartyget kränger, ligger (G) och (B) ej på samma vertikala linje, varför tyngdkraft och flytkraft ger upphov till ett rätande moment. För att fartyget ej skall öka sin slagsida måste rätande momentet vara minst lika stort som det på fartyget verkande krängande momentet.

Vid små krängningsvinklar kallas skärningspunkten mellan lodlinjen genom (B) och centerlinjen genom (G) för metacentrum och tecknas (M). Avståndet (GM) kallas metacenterhöjd och är ett mått på fartygets initialstabilitet. Vid stora krängningsvinklar går uppdriftslinjen genom (B) inte längre genom (M) utan skärningspunkten rör sig utefter fartygets centerlinje. Skärningspunkten kallas virtuellt metacentrum och betecknas (M').

Det horisontella avståndet (GZ) kallas rätande hävarm. Om (M) ligger under (G) (negativ metacenterhöjd) får fartyget en permanent slagsida, i sämsta fall kantrar det.

Observera att slagsida beroende på negativ metacenterhöjd aldrig får korrigeras genom tömning av botten tankar, ty då ökar den negativa metacenterhöjden.

Avståndet (KM) och (KM') beror av djupgåendet, (KG) beror på placering av last, bunker, färskvatten, förråd etc.

2.2.2 Beräkningsgång

(KG) kan beräknas genom momenträkning kring baslinjen (K).

$$(KG) = VCG = \frac{\sum(w \cdot y)}{\sum w} \quad (\text{Se avsnitt 1.2 ovan})$$

Aktuella vikter och tyngdpunktslägen fås ur tabeller över kapacitet, och tyngdpunktskoordinater för lätt fartyg, lastutrymmen, och bunkertankar.

Ur hydrostatiska data erhålls tvärskeppsmetacentrums läge över baslinjen (KM).

$$\text{Metacenterhöjden } (GM) = (KM) - (KG)$$

Förekommer fria vätskeytor i tankarna skall (GM) reduceras.

$$\text{Reduktion } (GG') = \frac{\text{summa moment av fria vätskeytor}}{\text{viktsdisplacement}}$$

$$\text{Då erhålls } (G'M) = (GM) - (GG').$$

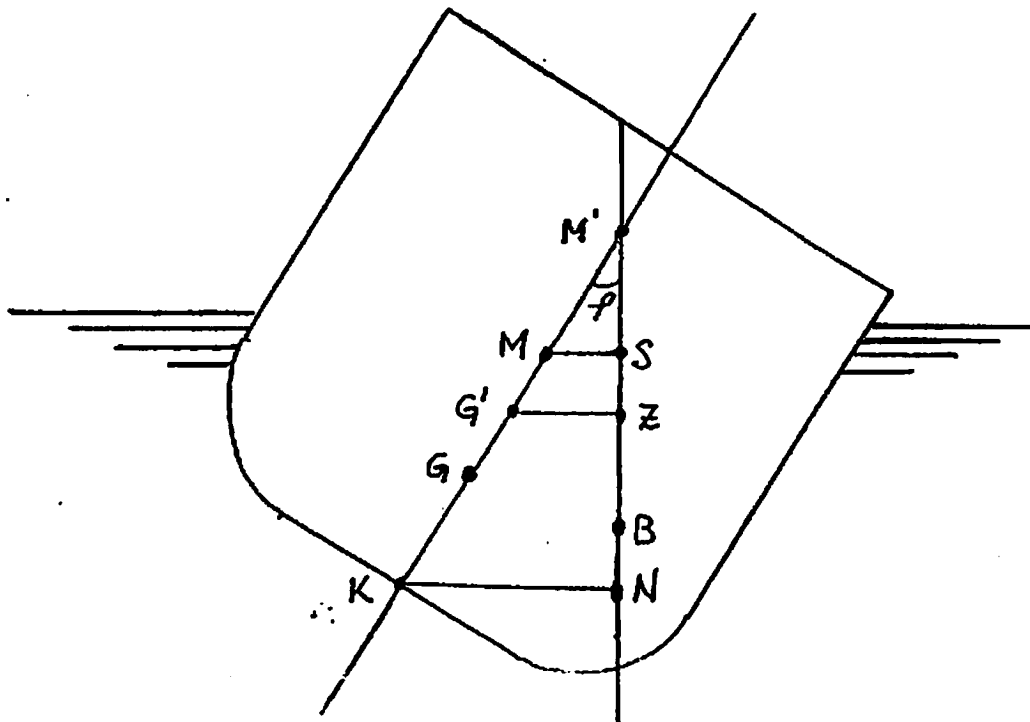
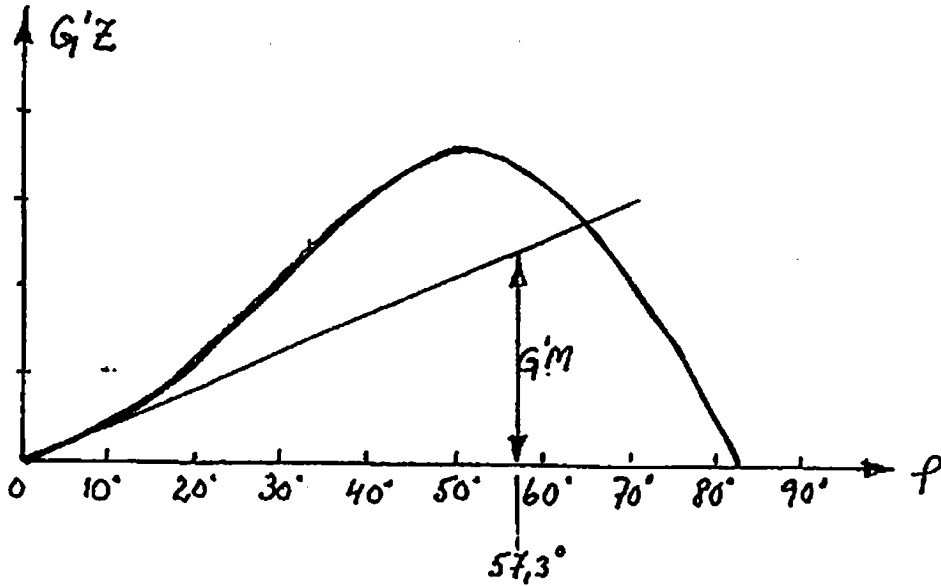
Den rätande hävarmen erhålls sedan som:

Alt 1.

$$G'Z = MS + G'M \cdot \sin \rho$$

Alt 2.

$$G'Z = KN - KG' \cdot \sin \rho$$



Ur $G'Z$ -kurvorna erhålls bl.a den maximala rätande hävarmen, vinkeln vid vilken denna uppträder samt stabilitetsvidden.

3. ALLMÄNNA RÅD AVSEENDE FARTYGETS STABILITET

3.1 Allmänt

Att fartyget uppfyller de allmänna stabilitetskriterierna och har godkända stabilitetshandlingar ombord är ingen garanti för att fartyget oberoende av omständigheterna inte kan kapsejsa och sjunka. Inte heller befriar det fartygets befälhavare från någon av hans skyldigheter i samband med lastning och framförande av fartyget. Befälhavaren skall hantera sitt fartyg med gott omdöme och gott sjömannskap med avseende på väderlekssituation, väderleksutsikter och geografiska förhållanden mm. och vidta lämpliga åtgärder avseende kurs och fart med hänsyn till rådande omständigheter.

Fartyget skall lastas och barlastas på sådant sätt att kraven på stabilitet, bärlighet och styrka uppfylls under hela resan.

Innan resan påbörjas skall åtgärder för att förhindra lastförskjutning vidtas. Nödvändig trimning skall utföras och i förekommande fall skall lasten surras.

I stabilitetsboken ingår stabilitetsinformation om ett antal för fartyget typiska lastfall och ytterligare information, som gör det möjligt för fartygets befälhavare att beräkna fartygets stabilitetsegenskaper i alla tänkbara lastkonditioner.

3.2 Anvisningar

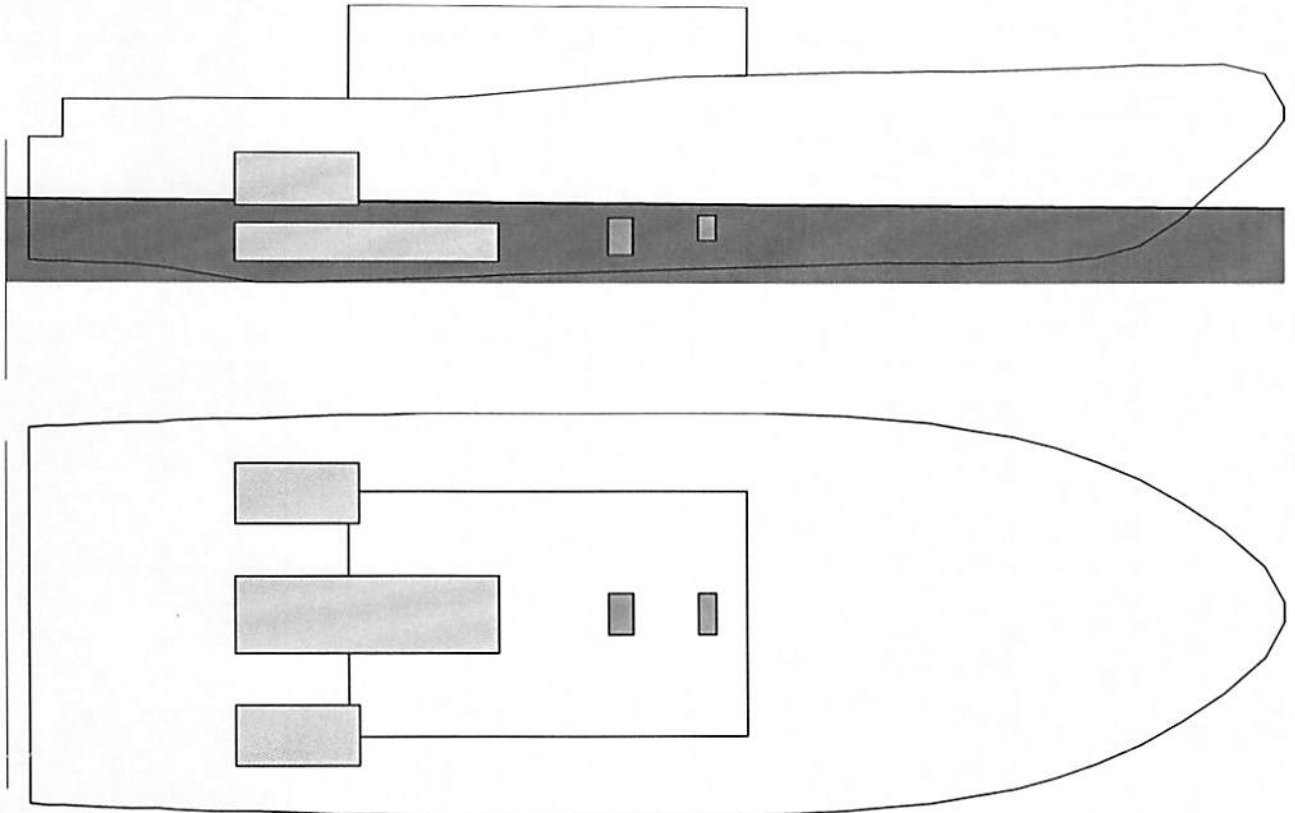
Fartyget är en räddningskryssare som utför räddningsuppdrag och där besättningen förutsätts vara väl förberedda för sin uppgift – både vad gäller utbildning och erfarenhet. Med detta i betraktande kan den bogserkrok som finns ombord vara ett bra hjälpmedel då en haverist skall släpas eller bärgas. Bogserkroken skall dock användas med försiktighet och stort omdöme. Fartygets lätta konstruktion, i kombination med den stora motorkraften, gör att draget i bogserkroken också kan äventyra fartygets stabilitet. Sneddrag i kroken skall absolut undvikas.

Max antal passagerare, utöver nödvändig besättning, kommer att vara 12 passagerare.



Lastkondition 4 utgör fartygets fribordskondition (max nedlastning).

4. TANKPLAN

Tankplan, samtliga tankar fyllda 100%.



Fluid Legend

Fluid Name	Legend	Weight (MT)	Load%
DIESEL OIL		2.83	100.00%
FRESH WATER		.13	100.00%

Tank Status

DIESEL OIL (SpGr 0.870)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Volume (ltrs.)	FSM
DIESEL.C	100.00%	1.30	4.301f	0.000	0.342	1 499.6	
DIESEL.P	100.00%	0.76	3.468f	1.445p	1.310	874.2	
DIESEL.S	100.00%	0.76	3.468f	1.445s	1.310	874.2	
Subtotals:	100.00%	2.83	3.853f	0.000	0.863	3 247.9	

FRESH WATER (SpGr 1.000)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Volume (ltrs.)	FSM
FÄRSKVATTEN.C	100.00%	0.09	7.338f	0.000	0.411	89.1	
SEPTIC.C	100.00%	0.04	8.353f	0.000	0.551	39.6	
Subtotals:	100.00%	0.13	7.650f	0.000	0.454	128.6	

All Tanks

	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Volume (ltrs.)	FSM
Totals:	100.00%	2.95	4.018f	0.000	0.845	3 376.6	

Tank Capacities for DIESEL.C containing DIESEL OIL (0.870)

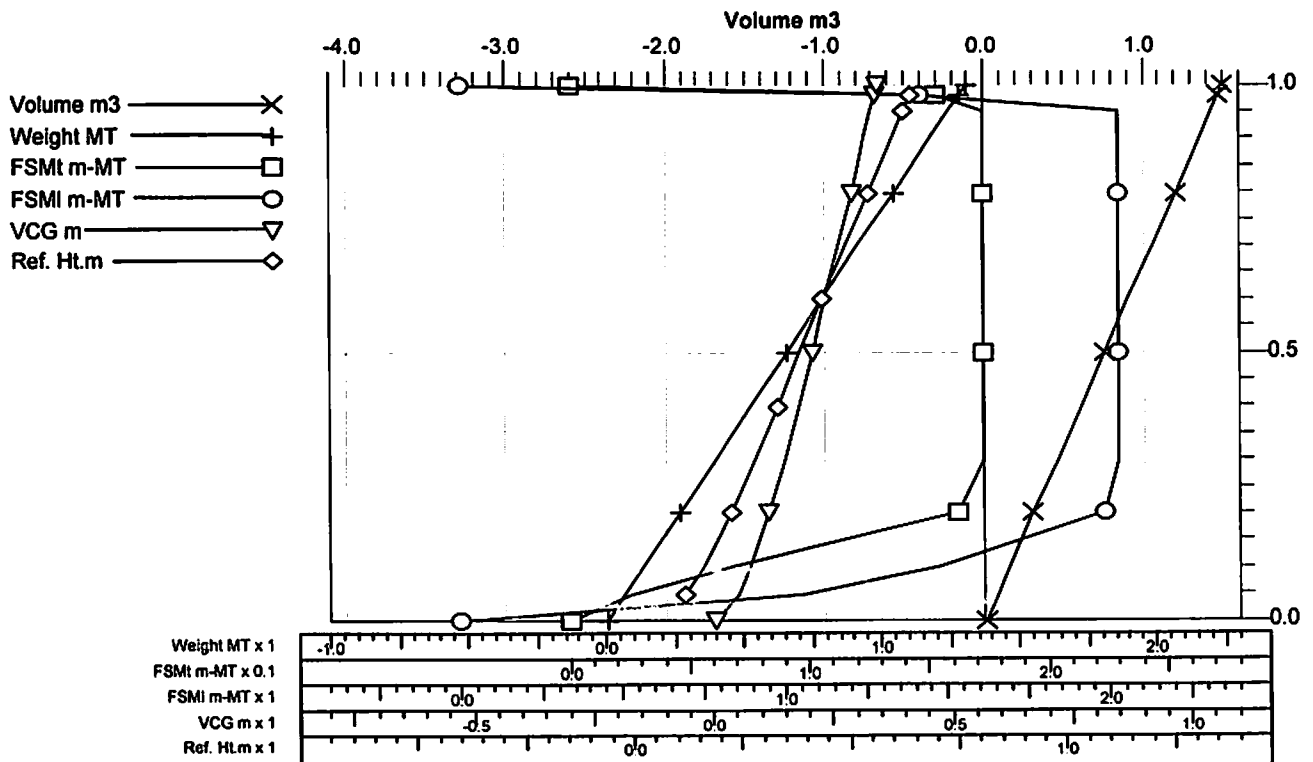
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Ref Ht (m)	Load (%)	Volume (m ³)	Weight (MT)	Lcg (m)	Tcg (m)	Vcg (m)	FSMt (MT-m)	FSMI (MT-m)
	0.00%	0.00	0.00					
0.12	5.00%	0.08	0.07	4.156f	0.000	0.049	0.03	1.06
0.16	10.00%	0.15	0.13	4.194f	0.000	0.076	0.07	1.47
0.22	20.00%	0.30	0.26	4.226f	0.000	0.116	0.16	1.98
0.28	30.00%	0.45	0.39	4.251f	0.000	0.148	0.17	2.02
0.33	40.00%	0.60	0.52	4.264f	0.000	0.177	0.17	2.02
0.38	50.00%	0.75	0.65	4.272f	0.000	0.206	0.17	2.02
0.44	60.00%	0.90	0.78	4.277f	0.000	0.233	0.17	2.02
0.49	70.00%	1.05	0.91	4.281f	0.000	0.261	0.17	2.02
0.54	80.00%	1.20	1.04	4.284f	0.000	0.288	0.17	2.02
0.60	90.00%	1.35	1.17	4.286f	0.000	0.315	0.17	2.02
0.62	95.00%	1.42	1.24	4.287f	0.000	0.329	0.17	2.02
0.64	98.00%	1.47	1.28	4.288f	0.000	0.337	0.15	1.41
	100.00%	1.50	1.30	4.301f	0.000	0.342		

Reference Point

Part	Long.(m)	Trans.(m)	Vert.(m)
DIESEL.C	0.000	0.000	0.000

Tank Characteristics



Tank Capacities for DIESEL.P containing DIESEL OIL (0.870)

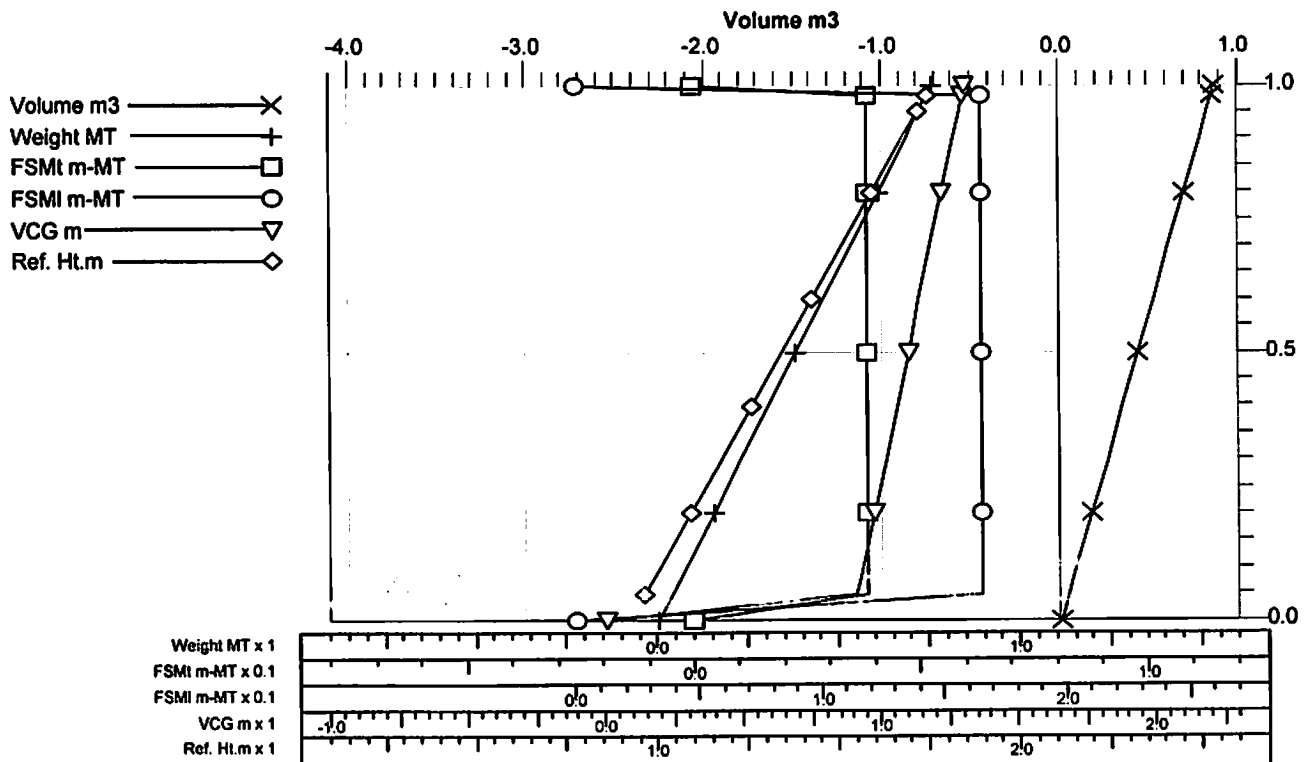
Trim: aft 0.112/13.000, No Heel

Ref Ht (m)	Load (%)	Volume (m ³)	Weight (MT)	Lcg (m)	Tcg (m)	Vcg (m)	FSMt (MT-m)	FSMI (MT-m)
	0.00%	0.00	0.00					
0.96	5.00%	0.04	0.04	3.431f	1.445p	0.911	0.04	0.17
1.00	10.00%	0.09	0.08	3.449f	1.445p	0.932	0.04	0.17
1.09	20.00%	0.17	0.15	3.459f	1.445p	0.974	0.04	0.17
1.17	30.00%	0.26	0.23	3.462f	1.445p	1.016	0.04	0.17
1.26	40.00%	0.35	0.30	3.463f	1.445p	1.058	0.04	0.17
1.34	50.00%	0.44	0.38	3.464f	1.445p	1.100	0.04	0.17
1.42	60.00%	0.52	0.46	3.465f	1.445p	1.142	0.04	0.17
1.51	70.00%	0.61	0.53	3.465f	1.445p	1.184	0.04	0.17
1.59	80.00%	0.70	0.61	3.466f	1.445p	1.226	0.04	0.17
1.68	90.00%	0.79	0.68	3.466f	1.445p	1.268	0.04	0.17
1.72	95.00%	0.83	0.72	3.466f	1.445p	1.289	0.04	0.17
1.74	98.00%	0.86	0.75	3.466f	1.445p	1.302	0.04	0.17
	100.00%	0.87	0.76	3.468f	1.445p	1.310		

Reference Point

Part	Long.(m)	Trans.(m)	Vert.(m)
DIESEL.P	0.000	0.000	0.000

Tank Characteristics



Tank Capacities for DIESEL.S containing DIESEL OIL (0.870)

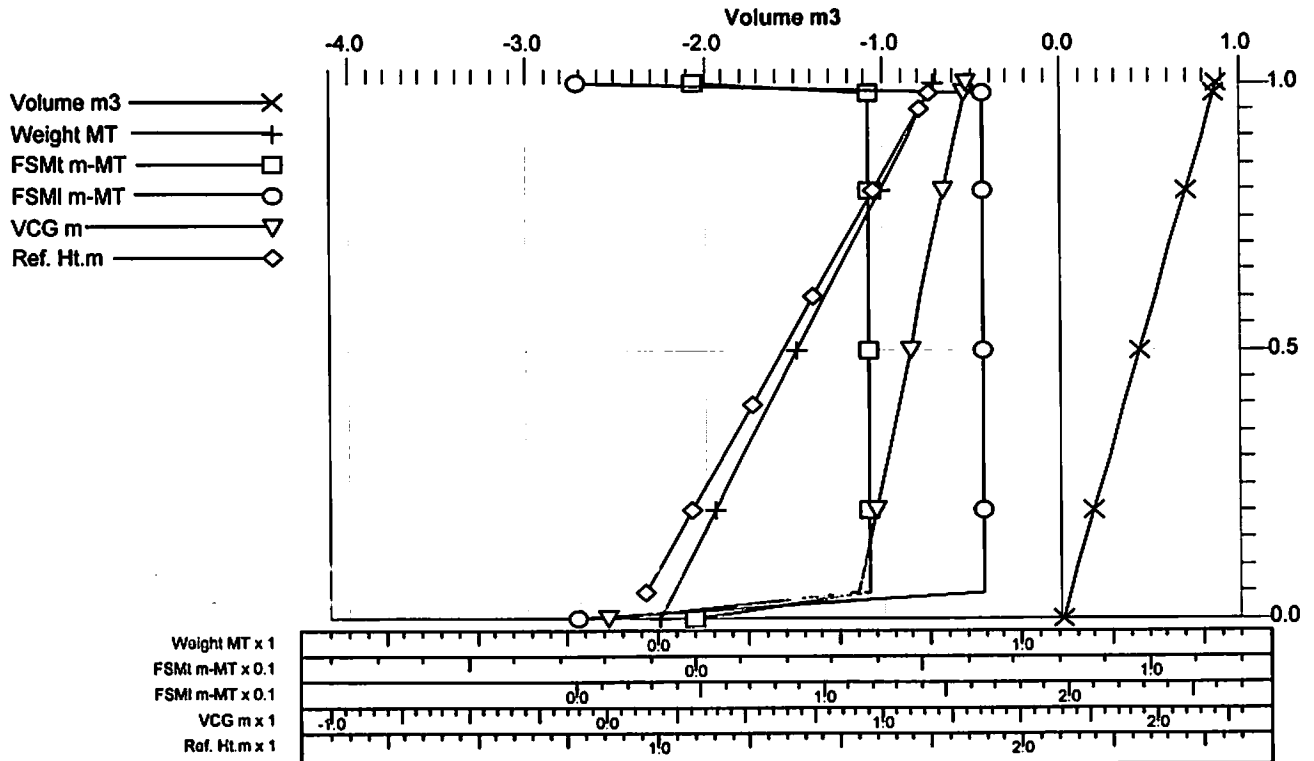
Trim: aft 0.112/13.000, No Heel

Ref Ht (m)	Load (%)	Volume (m ³)	Weight (MT)	Lcg (m)	Tcg (m)	Vcg (m)	FSMt (MT-m)	FSMI (MT-m)
	0.00%	0.00	0.00					
0.96	5.00%	0.04	0.04	3.431f	1.445s	0.911	0.04	0.17
1.00	10.00%	0.09	0.08	3.449f	1.445s	0.932	0.04	0.17
1.09	20.00%	0.17	0.15	3.459f	1.445s	0.974	0.04	0.17
1.17	30.00%	0.26	0.23	3.462f	1.445s	1.016	0.04	0.17
1.26	40.00%	0.35	0.30	3.463f	1.445s	1.058	0.04	0.17
1.34	50.00%	0.44	0.38	3.464f	1.445s	1.100	0.04	0.17
1.42	60.00%	0.52	0.46	3.465f	1.445s	1.142	0.04	0.17
1.51	70.00%	0.61	0.53	3.465f	1.445s	1.184	0.04	0.17
1.59	80.00%	0.70	0.61	3.466f	1.445s	1.226	0.04	0.17
1.68	90.00%	0.79	0.68	3.466f	1.445s	1.268	0.04	0.17
1.72	95.00%	0.83	0.72	3.466f	1.445s	1.289	0.04	0.17
1.74	98.00%	0.86	0.75	3.466f	1.445s	1.302	0.04	0.17
	100.00%	0.87	0.76	3.468f	1.445s	1.310		

Reference Point

Part	Long.(m)	Trans.(m)	Vert.(m)
DIESEL.S	0.000	0.000	0.000

Tank Characteristics



Tank Capacities for FÄRSKVATTEN.C containing FRESH WATER (1.000)

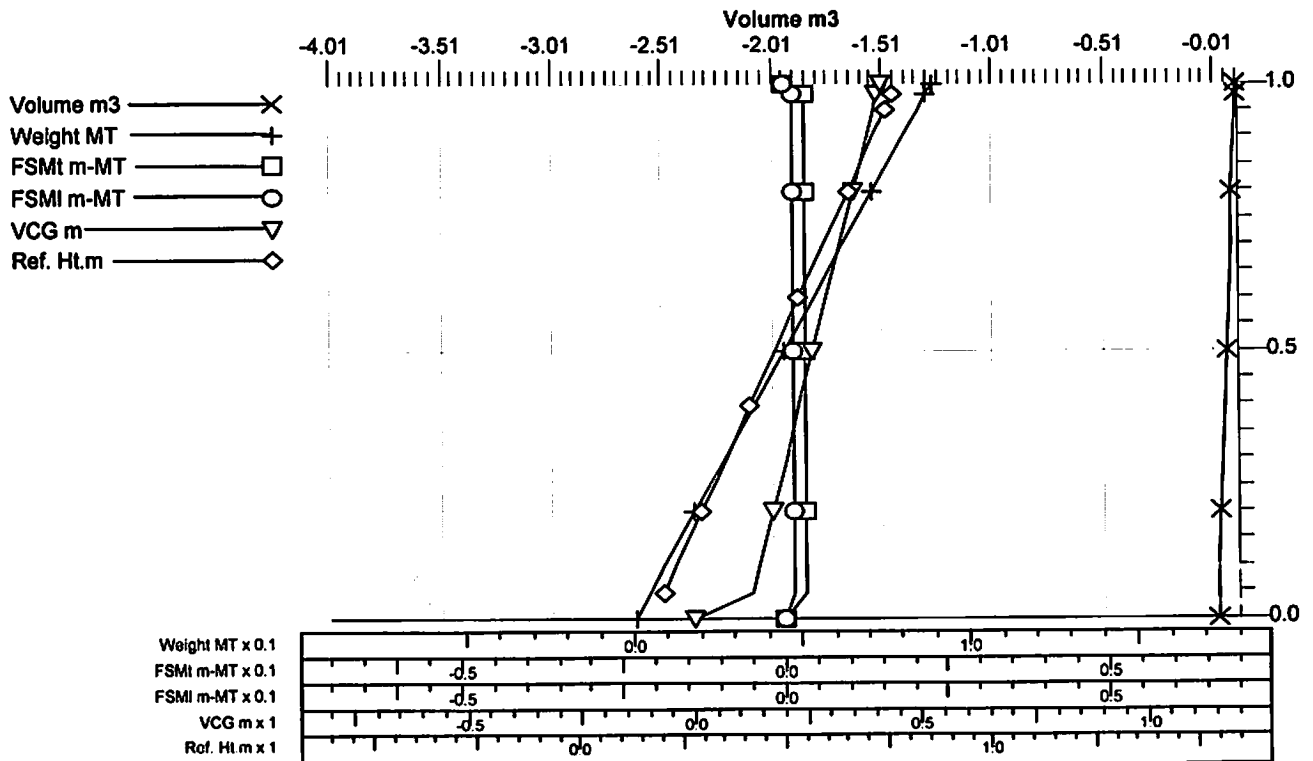
Trim: aft 0.112/13.000, No Heel

Ref Ht (m)	Load (%)	Volume (m ³)	Weight (MT)	Lcg (m)	Tcg (m)	Vcg (m)	FSMt (MT-m)	FSMI (MT-m)
	0.00%	0.00	0.00					
0.20	5.00%	0.00	0.00	7.336f	0.000	0.126	0.00	0.00
0.23	10.00%	0.01	0.01	7.337f	0.000	0.141	0.00	0.00
0.29	20.00%	0.02	0.02	7.338f	0.000	0.171	0.00	0.00
0.35	30.00%	0.03	0.03	7.338f	0.000	0.201	0.00	0.00
0.41	40.00%	0.04	0.04	7.338f	0.000	0.231	0.00	0.00
0.47	50.00%	0.04	0.04	7.338f	0.000	0.261	0.00	0.00
0.53	60.00%	0.05	0.05	7.338f	0.000	0.291	0.00	0.00
0.59	70.00%	0.06	0.06	7.338f	0.000	0.321	0.00	0.00
0.65	80.00%	0.07	0.07	7.338f	0.000	0.351	0.00	0.00
0.71	90.00%	0.08	0.08	7.338f	0.000	0.381	0.00	0.00
0.74	95.00%	0.08	0.08	7.338f	0.000	0.396	0.00	0.00
0.76	98.00%	0.09	0.09	7.338f	0.000	0.405	0.00	0.00
	100.00%	0.09	0.09	7.338f	0.000	0.411		

Reference Point

Part	Long.(m)	Trans.(m)	Vert.(m)
FÄRSKVATTEN.C	0.000	0.000	0.000

Tank Characteristics



Tank Capacities for SEPTIC.C containing FRESH WATER (1.000)

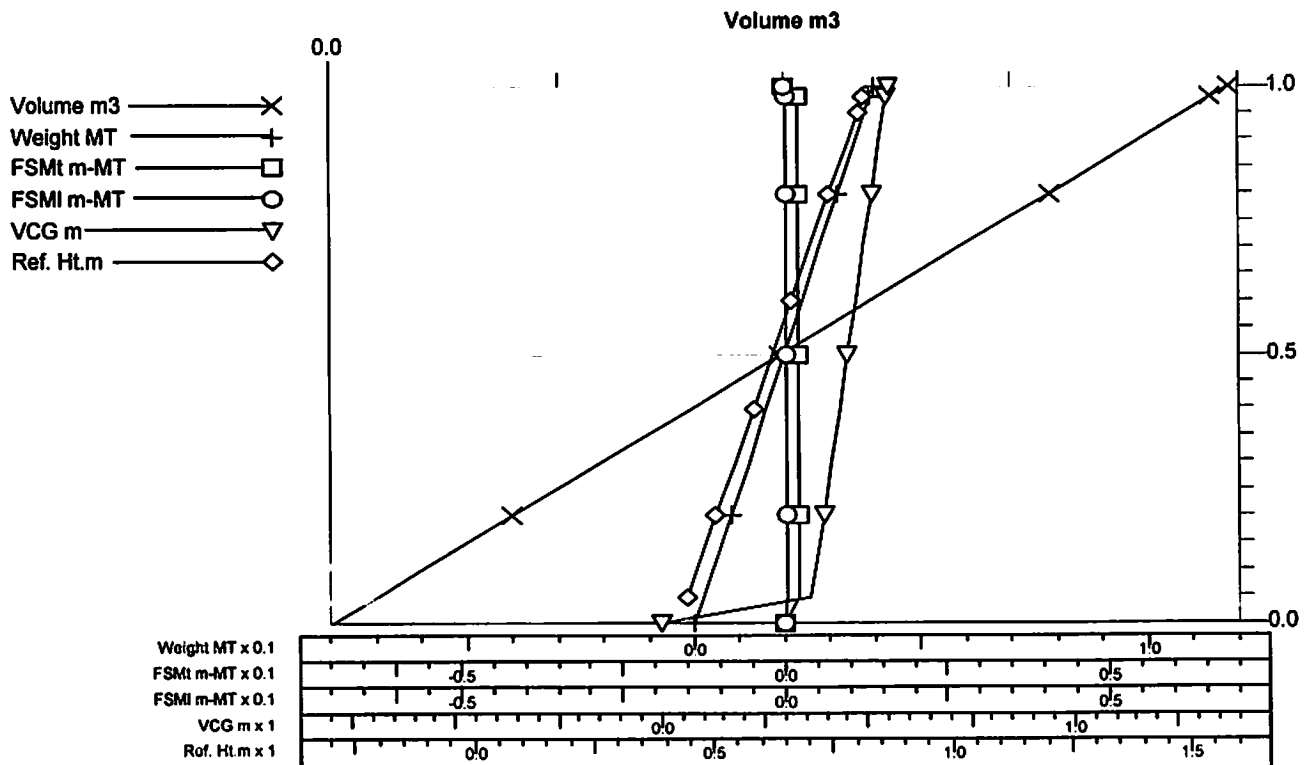
Trim: aft 0.112/13.000, No Heel

Ref Ht (m)	Load (%)	Volume (m ³)	Weight (MT)	Lcg (m)	Tcg (m)	Vcg (m)	FSMt (MT-m)	FSMI (MT-m)
	0.00%	0.00	0.00					
0.44	5.00%	0.00	0.00	8.352f	0.000	0.361	0.00	0.00
0.46	10.00%	0.00	0.00	8.352f	0.000	0.371	0.00	0.00
0.50	20.00%	0.01	0.01	8.353f	0.000	0.391	0.00	0.00
0.54	30.00%	0.01	0.01	8.353f	0.000	0.411	0.00	0.00
0.58	40.00%	0.02	0.02	8.353f	0.000	0.431	0.00	0.00
0.62	50.00%	0.02	0.02	8.353f	0.000	0.451	0.00	0.00
0.66	60.00%	0.02	0.02	8.353f	0.000	0.471	0.00	0.00
0.70	70.00%	0.03	0.03	8.353f	0.000	0.491	0.00	0.00
0.74	80.00%	0.03	0.03	8.353f	0.000	0.511	0.00	0.00
0.78	90.00%	0.04	0.04	8.353f	0.000	0.531	0.00	0.00
0.80	95.00%	0.04	0.04	8.353f	0.000	0.541	0.00	0.00
0.82	98.00%	0.04	0.04	8.353f	0.000	0.547	0.00	0.00
	100.00%	0.04	0.04	8.353f	0.000	0.551		

Reference Point

Part	Long.(m)	Trans.(m)	Vert.(m)
SEPTIC.C	0.000	0.000	0.000

Tank Characteristics



5. DATA FÖR LÄTT FARTYG

Krängningsprov utfördes 2009-06-22.

Krängningsrapport återfinns i Appendix B. i denna Stabilitetsbok

Följande värden för Lätt Fartyg erhöles:

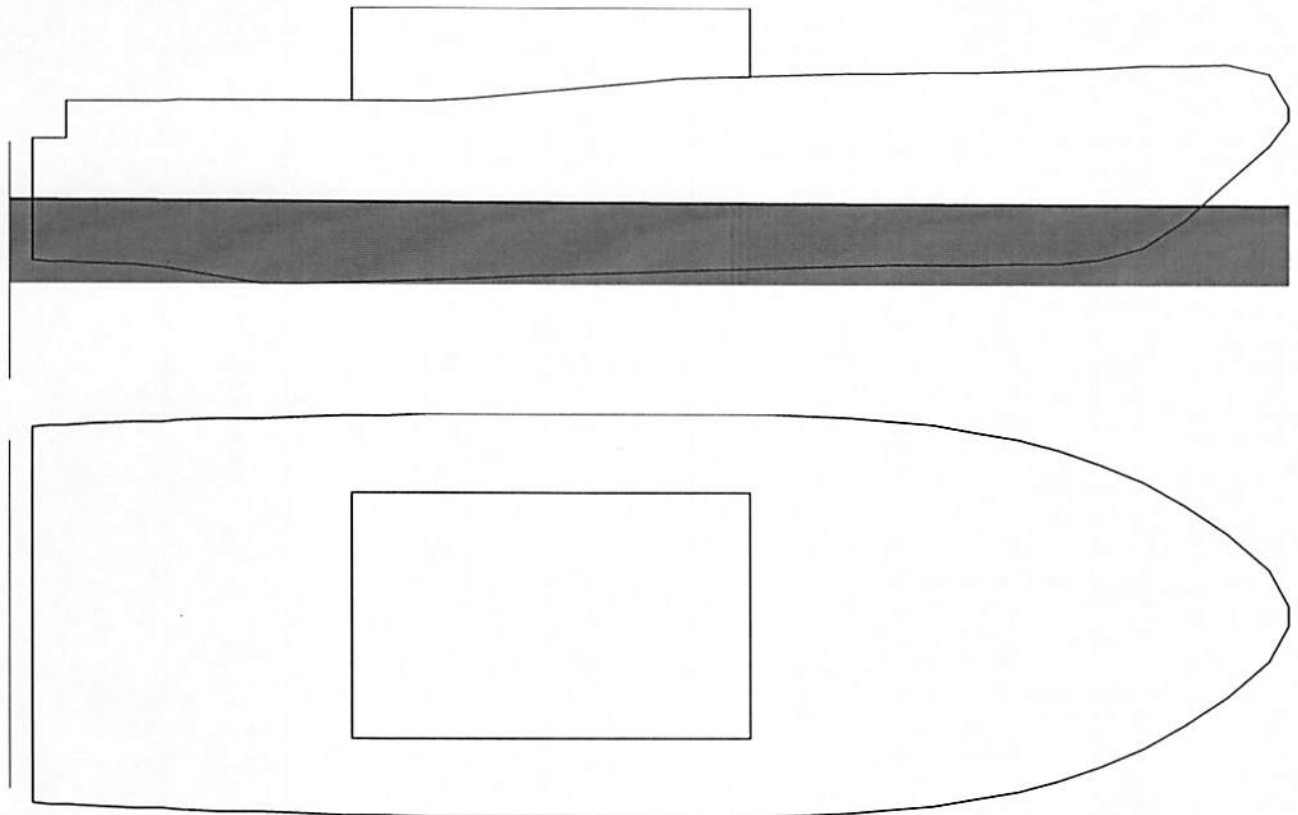
Displacement: 23.715 T
VCG: 1.920 m. över BL
LCG: 6.122 m. för om AP

6. HYDROSTATISKA DATA FÖR KRÄNGNINGSKONDITIONEN

Hydrostatincl. Märta Collin.
Beräkning av hydrostatiska data för krängningsprovet.

Floating Status

Draft FP	0.956 m	Heel	zero	GM(Solid)	3.319 m
Draft MS	0.977 m	Equil	No	F/S Corr.	0.000 m
Draft AP	0.998 m	Wind	Off	GM(Fluid)	3.319 m
Trim	aft 0.042/13.000	Wave	No	KMt	3.319 m
LCG	6.014f m	VCG	0.000 m	TPcm	0.52
Displacement	27.30 MT	WaterSpgr	1.007		



Displacer Status

Item	Status	Spgr	Displ (MT)	LCB (m)	TCB (m)	VCB (m)	Eff /Perm
HULL.C	Intact	1.007	27.30	6.016f	0.000	0.653	1.000
SubTotals:			27.30	6.016f	0.000	0.653	

Spec.grav. of seawater at incl. test: 1.007 kg /dm³

7. MAX VCG-kurvor

*** MAXIMUM VCG vs DISPLACEMENT - Märta Collin ***

Intakt stabilitet - Sjöfs 2006:1 Bilaga 4, Allmänna stabilitetskriterier.

Maximum VCG vs. Displacement

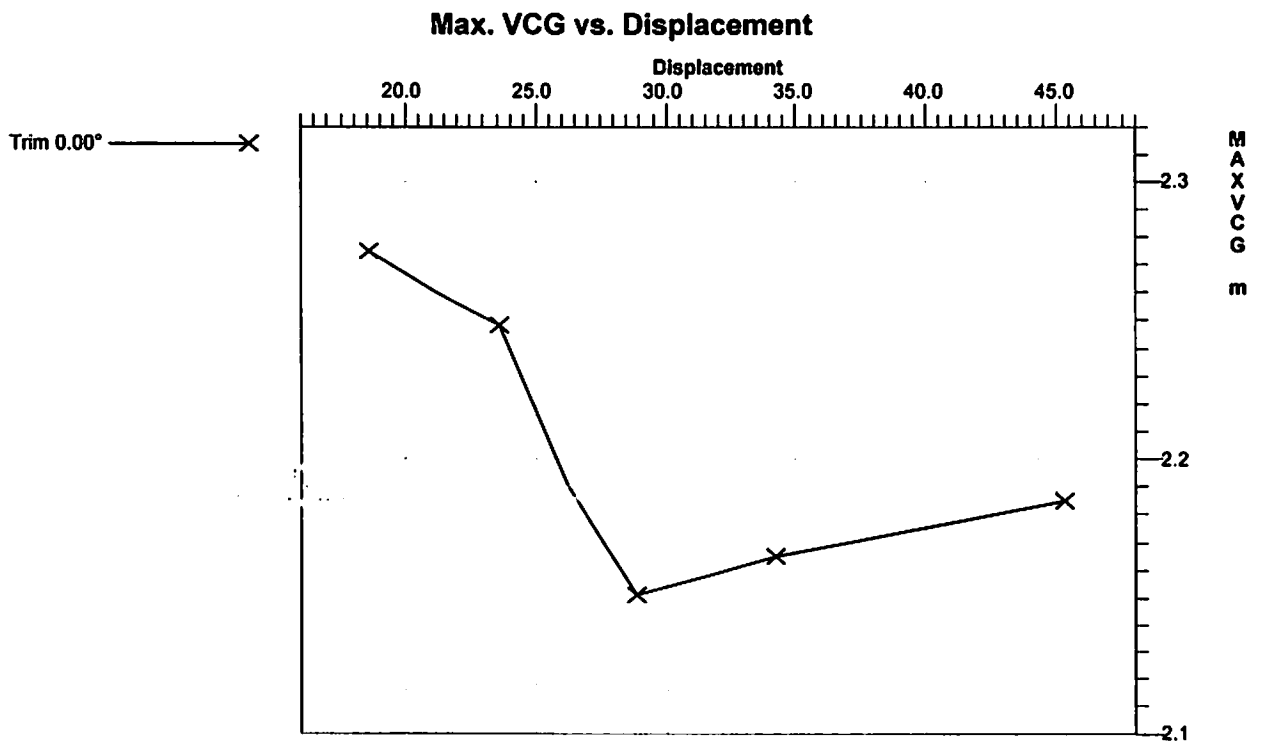
Trim = zero at zero heel (Trim righting arm held at zero)

Intact Displ (MT)	Intact Draft At -7.178 (m)	Max.VCG (m)	Limit 1	Limit 2	Limit 3	Limit 4	Limit 5	Limit 6
18.6	0.80	2.275	56.3%	35.0%	18.6%	0.0%	25.8°	981.8%
21.1	0.85	2.260	59.5%	36.2%	16.1%	0.0%	26.6°	914.0%
23.6	0.90	2.249	60.0%	35.8%	14.2%	0.0%	27.2°	801.8%
26.2	0.95	*2.191	69.8%	46.6%	28.7%	12.0%	2.1°	717.0%
28.8	1.00	2.151	74.5%	52.7%	38.1%	20.1%	0.0°	641.9%
31.5	1.05	2.158	67.2%	46.4%	32.6%	16.7%	0.0°	552.3%
34.2	1.10	2.166	59.3%	39.8%	27.3%	13.1%	0.0°	479.4%
45.3	1.30	*2.185	27.7%	14.2%	8.5%	0.2%	2.5°	294.6%

Notes : MaxVcg marked with * means that this vcg is the nearest maxvcg data Autohydro can find. There is no exact solution. Please use ra /lim command to verify the result.

INTAKT STABILITET - SJÖFS 2006 1 BILAGA 4, ALLMÄNNA STABILITETSKRITERIER.

Limit	Min/Max
(1) Area from 0.00 deg to 30.00	>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	>0.200 m
(5) Absolute Angle at MaxRA	>25.00 deg
(6) GM Upright	>0.150 m



Maximum VCG vs. Displacement

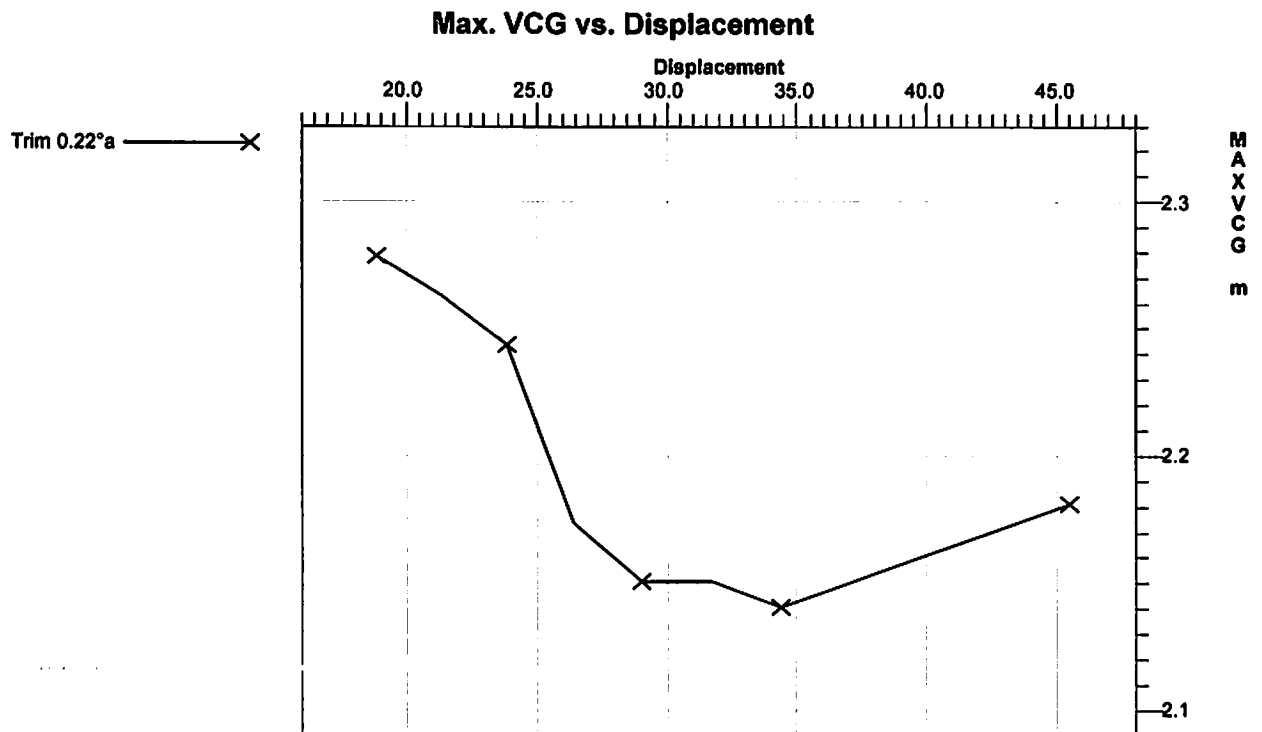
Trim = aft 0.050/13.000 at zero heel (Trim righting arm held at zero)

Intact Displ (MT)	Intact Draft At -7.178 (m)	Max.VCG (m)	Limit 1	Limit 2	Limit 3	Limit 4	Limit 5	Limit 6
18.8	0.80	2.279	58.0%	35.8%	17.7%	0.0%	25.5°	948.6%
21.3	0.85	2.263	60.5%	36.5%	15.4%	0.0%	26.6°	881.8%
23.8	0.90	*2.244	62.1%	37.8%	16.2%	2.0%	26.9°	783.7%
26.4	0.95	*2.174	74.4%	51.4%	34.5%	16.8%	1.3°	715.8%
29.0	1.00	2.151	74.7%	52.8%	38.2%	20.5%	0.0°	630.9%
31.7	1.05	2.151	68.7%	48.0%	34.9%	18.7%	0.0°	550.2%
34.4	1.10	2.141	64.7%	45.7%	35.2%	19.3%	0.0°	488.9%
45.4	1.30	2.182	27.3%	14.0%	8.6%	0.0%	2.9°	293.5%

Notes : MaxVcg marked with * means that this vcg is the nearest maxvkg data Autohydro can find. There is no exact solution. Please use ra /lim command to verify the result.

INTAKT STABILITET - SJÖFS 2006 1 BILAGA 4, ALLMÄNNA STABILITETSKRITERIER.

Limit	Min/Max
(1) Area from 0.00 deg to 30.00	>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	>0.200 m
(5) Absolute Angle at MaxRA	>25.00 deg
(6) GM Upright	>0.150 m



Maximum VCG vs. Displacement

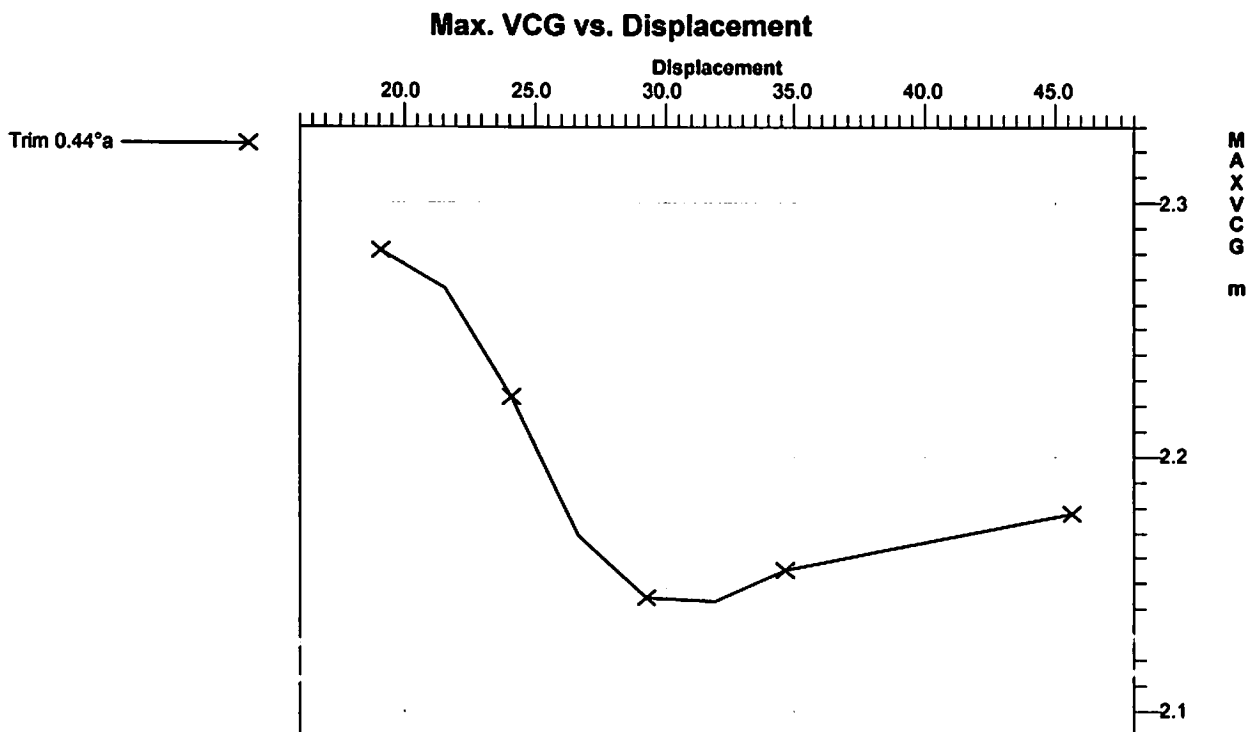
Trim = aft 0.100/13.000 at zero heel (Trim righting arm held at zero)

Intact Displ (MT)	Intact Draft At -7.178 (m)	Max.VCG (m)	Limit 1	Limit 2	Limit 3	Limit 4	Limit 5	Limit 6
19.1	0.80	2.282	59.4%	36.4%	16.9%	0.0%	25.2°	916.8%
21.5	0.85	2.266	61.2%	36.8%	14.7%	0.0%	26.3°	851.1%
24.0	0.90	*2.224	67.6%	43.4%	22.9%	7.5%	26.7°	775.5%
26.6	0.95	*2.169	75.7%	52.7%	36.0%	18.4%	1.3°	703.1%
29.2	1.00	2.145	76.2%	54.5%	40.4%	22.6%	0.0°	627.1%
31.9	1.05	2.143	70.2%	49.8%	37.3%	20.8%	0.0°	546.5%
34.6	1.10	2.156	60.5%	41.4%	29.9%	15.6%	0.0°	473.6%
45.6	1.30	2.178	26.6%	13.5%	8.4%	0.0%	3.3°	292.0%

Notes : MaxVcg marked with * means that this vcg is the nearest maxvkg data Autohydro can find. There is no exact solution. Please use ra /lim command to verify the result.

INTAKT STABILITET - SJÖFS 2006 1 BILAGA 4, ALLMÄNNA STABILITETSKRITERIER.

Limit	Min/Max
(1) Area from 0.00 deg to 30.00	>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	>0.200 m
(5) Absolute Angle at MaxRA	>25.00 deg
(6) GM Upright	>0.150 m



Maximum VCG vs. Displacement

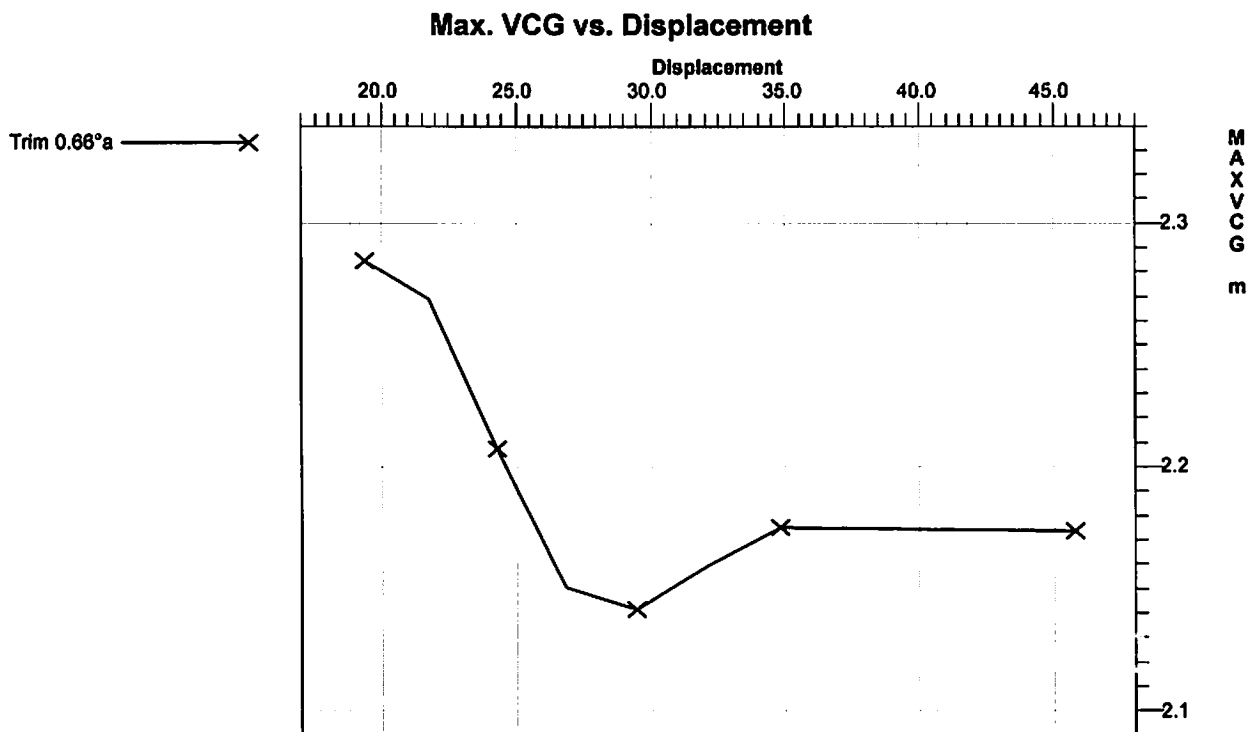
Trim = aft 0.150/13.000 at zero heel (Trim righting arm held at zero)

Intact Displ (MT)	Intact Draft At -7.178 (m)	Max.VCG (m)	Limit 1	Limit 2	Limit 3	Limit 4	Limit 5	Limit 6
19.3	0.80	2.285	60.6%	36.9%	16.1%	0.0%	25.0°	886.0%
21.8	0.85	2.269	61.6%	36.8%	14.0%	0.0%	25.9°	821.2%
24.3	0.90	*2.208	71.8%	47.7%	28.1%	11.9%	4.2°	767.5%
26.8	0.95	2.151	80.5%	57.8%	42.4%	23.7%	0.0°	704.4%
29.4	1.00	2.142	76.6%	55.0%	41.3%	23.6%	0.0°	616.8%
32.1	1.05	2.160	65.6%	45.0%	31.5%	16.7%	0.0°	528.7%
34.8	1.10	2.175	54.9%	35.6%	22.9%	10.5%	0.0°	453.4%
45.8	1.30	2.174	26.0%	13.1%	8.2%	0.0%	3.8°	290.5%

Notes : MaxVcg marked with * means that this vcg is the nearest maxvcg data Autohydro can find. There is no exact solution. Please use ra /lim command to verify the result.

INTAKT STABILITET - SJÖFS 2006 1 BILAGA 4, ALLMÄNNA STABILITETSKRITERIER.

Limit	Min/Max
(1) Area from 0.00 deg to 30.00	>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	>0.200 m
(5) Absolute Angle at MaxRA	>25.00 deg
(6) GM Upright	>0.150 m



Maximum VCG vs. Displacement

Trim = aft 0.200/13.000 at zero heel (Trim righting arm held at zero)

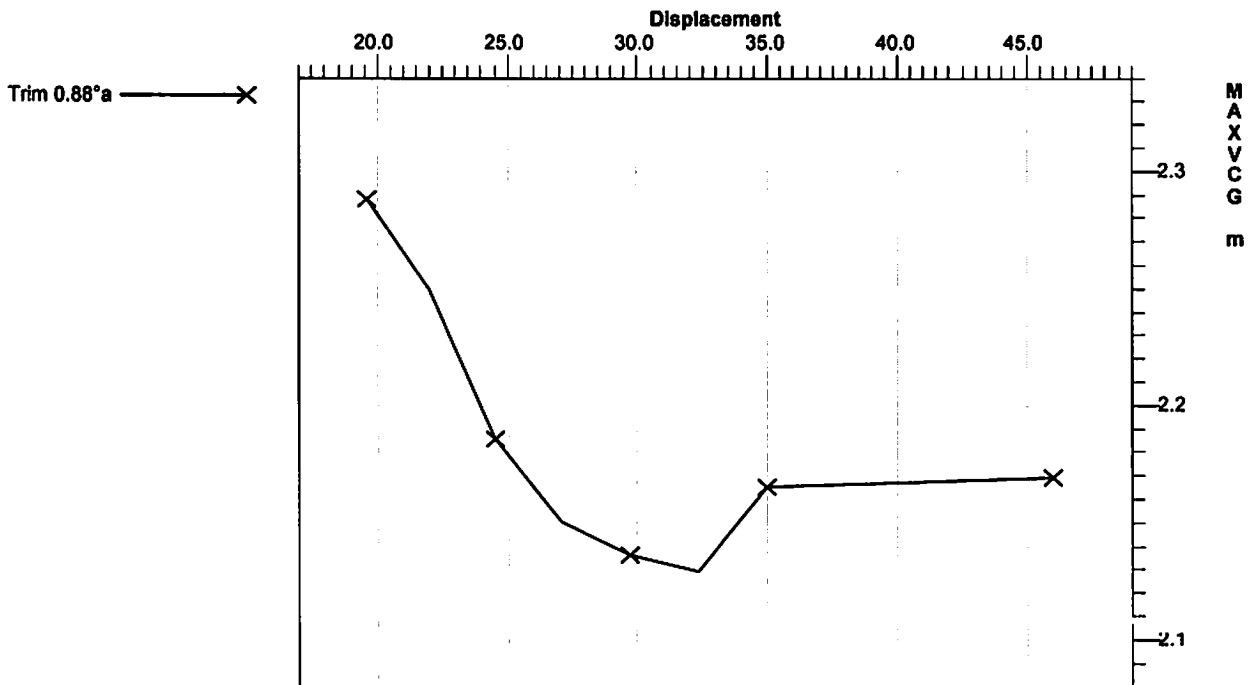
Intact Displ (MT)	Intact Draft At -7.178 (m)	Max.VCG (m)	Limit 1	Limit 2	Limit 3	Limit 4	Limit 5	Limit 6
19.6	0.80	2.288	61.6%	37.2%	15.3%	0.0%	25.0°	857.3%
22.0	0.85	*2.251	67.0%	42.2%	20.3%	5.3%	5.7°	808.2%
24.5	0.90	*2.186	77.6%	53.8%	35.7%	18.1%	2.4°	759.9%
27.0	0.95	2.151	80.5%	57.7%	42.4%	24.1%	0.0°	686.8%
29.6	1.00	2.137	77.4%	56.0%	42.7%	25.0%	0.0°	611.3%
32.3	1.05	2.130	72.1%	52.2%	41.1%	24.1%	0.0°	539.9%
35.0	1.10	2.166	56.1%	37.2%	25.5%	12.6%	0.0°	454.3%
46.0	1.30	2.170	25.4%	12.6%	8.0%	0.0%	3.9°	288.8%

Notes : MaxVcg marked with * means that this vcg is the nearest maxvkg data Autohydro can find. There is no exact solution. Please use ra /lim command to verify the result.

INTAKT STABILITET - SJÖFS 2006 1 BILAGA 4, ALLMÄNNA STABILITETSKRITERIER.

Limit	Min/Max
(1) Area from 0.00 deg to 30.00	>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	>0.200 m
(5) Absolute Angle at MaxRA	>25.00 deg
(6) GM Upright	>0.150 m

Max. VCG vs. Displacement



Maximum VCG vs. Displacement

Trim = aft 0.300/13.000 at zero heel (Trim righting arm held at zero)

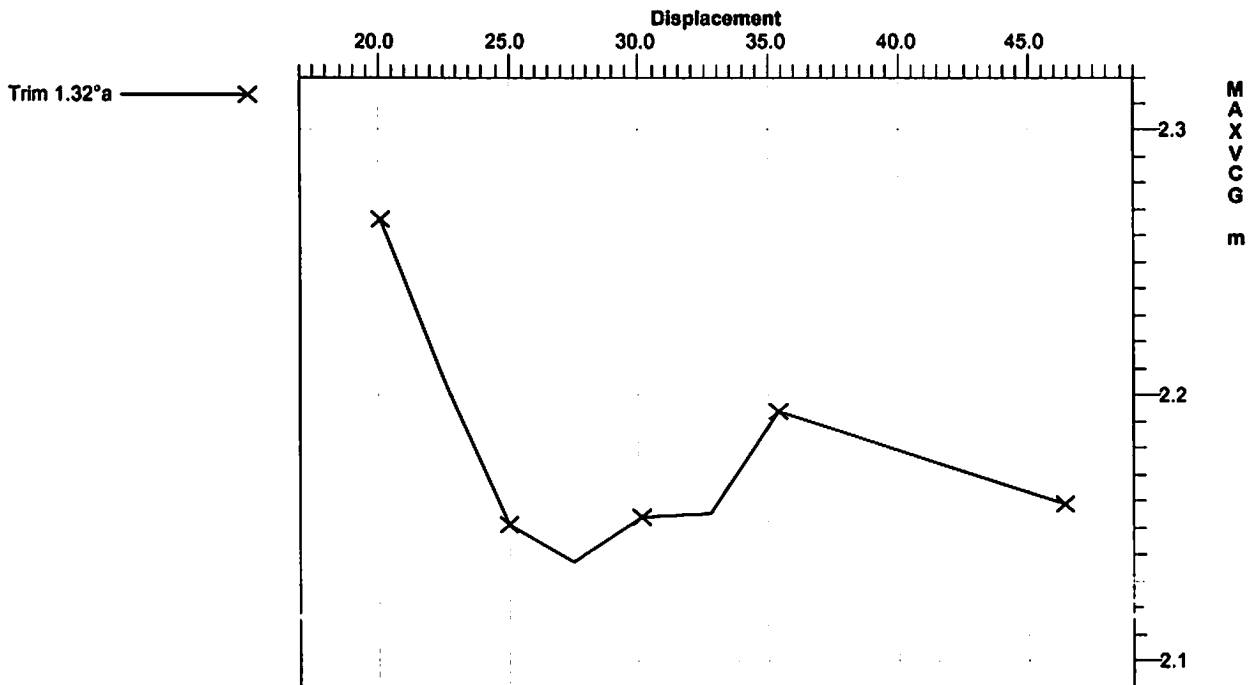
Intact Displ (MT)	Intact Draft At -7.178 (m)	Max.VCG (m)	Limit 1	Limit 2	Limit 3	Limit 4	Limit 5	Limit 6
20.1	0.80	*2.267	69.2%	44.4%	22.9%	6.9%	5.0°	820.3%
22.5	0.85	*2.207	78.6%	54.2%	35.1%	17.5%	3.6°	789.3%
25.0	0.90	2.151	86.5%	63.2%	47.5%	28.0%	0.0°	746.1%
27.5	0.95	2.138	83.2%	60.9%	46.7%	28.2%	0.0°	670.4%
30.1	1.00	2.154	71.9%	50.6%	36.4%	20.9%	0.0°	577.6%
32.7	1.05	2.155	64.3%	44.4%	32.0%	17.7%	0.0°	509.0%
35.4	1.10	2.194	47.1%	28.3%	15.2%	5.2%	0.0°	423.6%
46.3	1.30	2.159	24.4%	11.9%	7.7%	0.0%	3.8°	286.2%

Notes : MaxVcg marked with * means that this vcg is the nearest maxvkg data Autohydro can find. There is no exact solution. Please use ra /lim command to verify the result.

INTAKT STABILITET - SJÖFS 2006 1 BILAGA 4, ALLMÄNNA STABILITETSKRITERIER.

Limit	Min/Max
(1) Area from 0.00 deg to 30.00	>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	>0.200 m
(5) Absolute Angle at MaxRA	>25.00 deg
(6) GM Upright	>0.150 m

Max. VCG vs. Displacement



Maximum VCG vs. Displacement

Trim = aft 0.500/13.000 at zero heel (Trim righting arm held at zero)

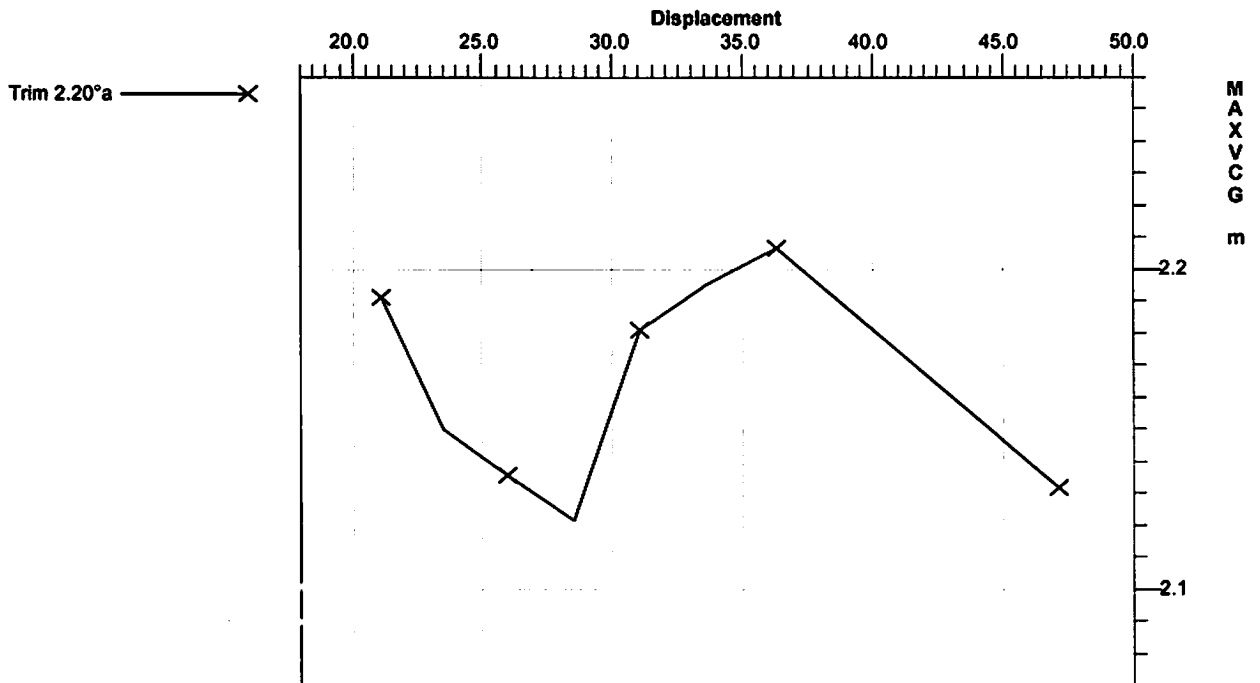
Intact Displ (MT)	Intact Draft At -7.178 (m)	Max.VCG (m)	Limit 1	Limit 2	Limit 3	Limit 4	Limit 5	Limit 6
21.1	0.80	*2.191	89.1%	64.8%	47.7%	28.0%	1.3°	780.2%
23.5	0.85	2.150	92.5%	68.9%	53.9%	33.8%	0.0°	742.3%
25.9	0.90	2.136	88.5%	65.8%	52.0%	33.0%	0.0°	682.5%
28.4	0.95	2.122	84.0%	62.7%	50.8%	32.5%	0.0°	627.4%
31.0	1.00	2.181	61.3%	40.5%	25.8%	13.8%	0.0°	519.6%
33.6	1.05	2.195	49.4%	30.1%	16.3%	6.7%	0.0°	450.7%
36.2	1.10	2.207	38.1%	20.2%	7.6%	0.0%	0.0°	390.9%
47.1	1.30	2.132	22.7%	10.8%	7.3%	0.0%	3.5°	284.2%

Notes : MaxVcg marked with * means that this vcg is the nearest maxvkg data Autohydro can find. There is no exact solution. Please use ra /lim command to verify the result.

INTAKT STABILITET - SJÖFS 2006 1 BILAGA 4, ALLMÄNNA STABILITETSKRITERIER.

Limit	Min/Max
(1) Area from 0.00 deg to 30.00	>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	>0.200 m
(5) Absolute Angle at MaxRA	>25.00 deg
(6) GM Upright	>0.150 m

Max. VCG vs. Displacement



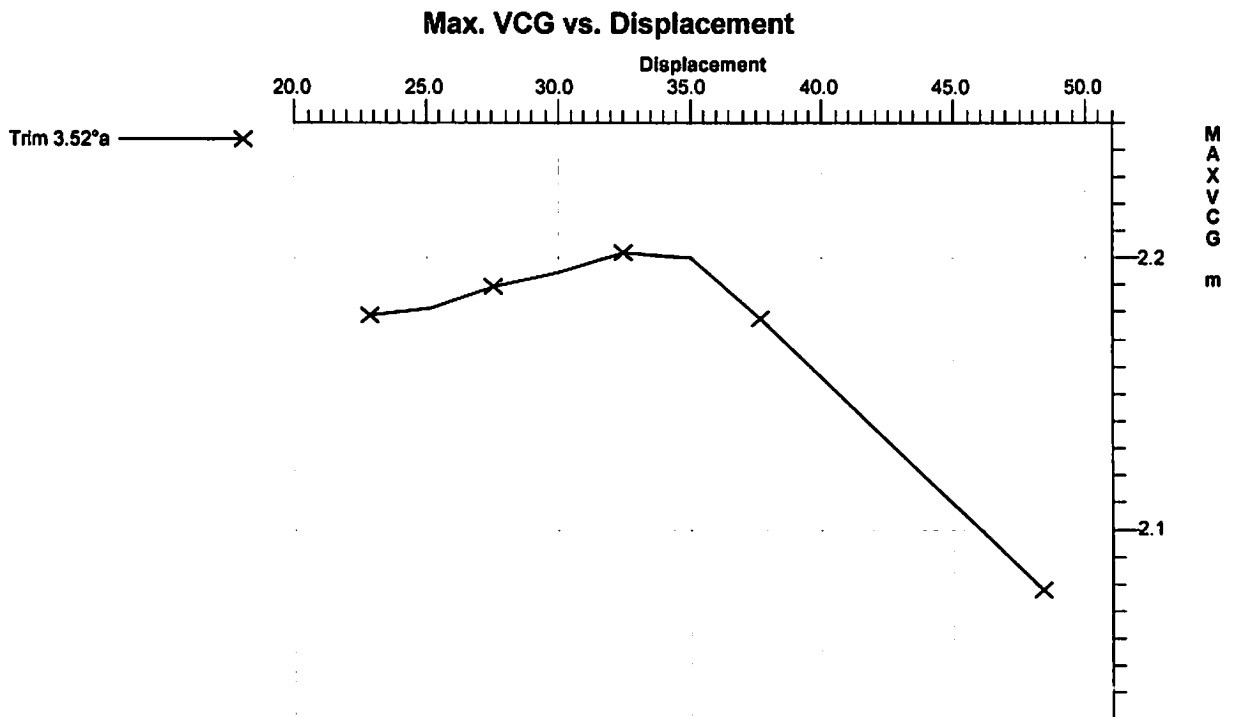
Maximum VCG vs. Displacement

Trim = aft 0.800/13.000 at zero heel (Trim righting arm held at zero)

Intact Displ (MT)	Intact Draft At -7.178 (m)	Max.VCG (m)	Limit 1	Limit 2	Limit 3	Limit 4	Limit 5	Limit 6
22.8	0.80	2.179	87.9%	64.3%	48.4%	32.0%	0.0°	670.9%
25.1	0.85	2.182	78.5%	55.7%	39.8%	25.6%	0.0°	614.0%
27.5	0.90	2.190	67.3%	45.6%	30.2%	18.3%	0.0°	557.4%
30.0	0.95	2.195	56.8%	36.4%	21.9%	11.9%	0.0°	505.2%
32.5	1.00	2.202	45.6%	26.7%	13.1%	4.8%	0.0°	448.9%
35.0	1.05	2.200	36.8%	19.3%	7.2%	0.0%	0.5°	402.2%
37.6	1.10	2.178	32.9%	17.0%	7.4%	0.0%	2.0°	371.9%
48.3	1.30	2.078	20.9%	9.7%	7.4%	0.0%	3.8°	289.8%

INTAKT STABILITET - SJÖFS 2006 1 BILAGA 4, ALLMÄNNA STABILITETSKRITERIER.

Limit	Min/Max
(1) Area from 0.00 deg to 30.00	>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	>0.200 m
(5) Absolute Angle at MaxRA	>25.00 deg
(6) GM Upright	>0.150 m



Maximum VCG vs. Displacement

Trim = fwd 0.050/13.000 at zero heel (Trim righting arm held at zero)

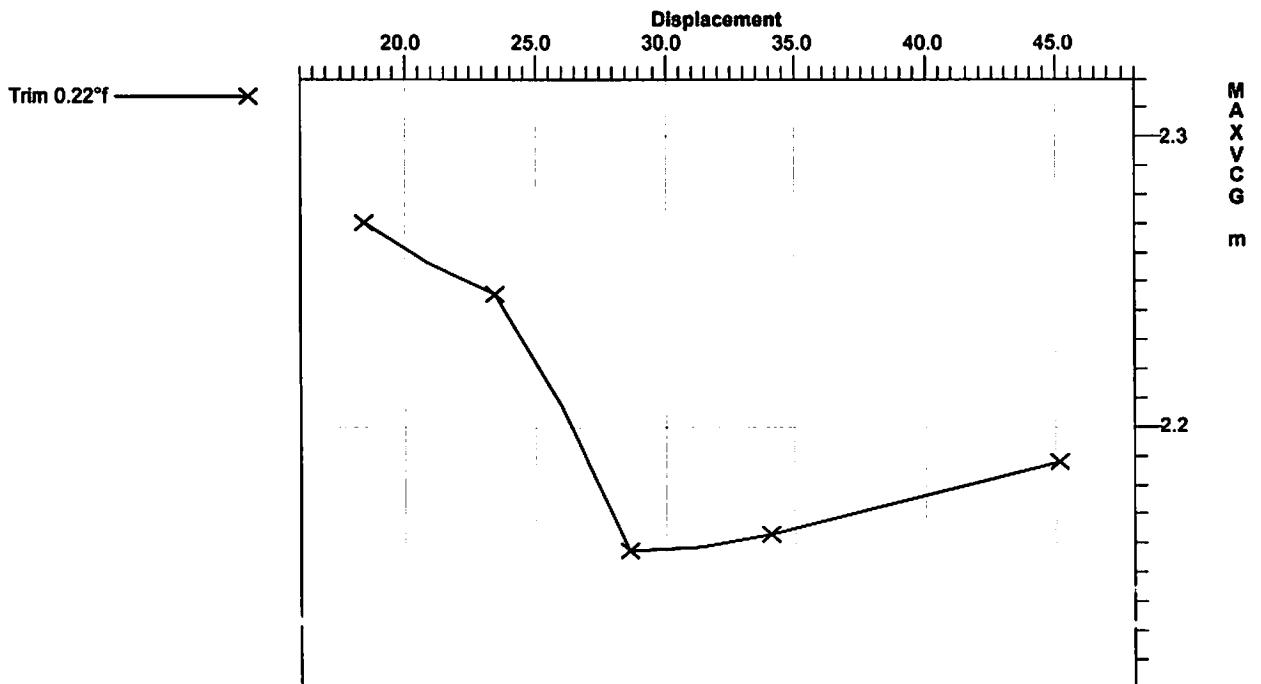
Intact Displ (MT)	Intact Draft At -7.178 (m)	Max.VCG (m)	Limit 1	Limit 2	Limit 3	Limit 4	Limit 5	Limit 6
18.4	0.80	2.271	54.3%	34.1%	19.5%	0.0%	25.5°	1014.6%
20.9	0.85	2.257	58.3%	35.7%	16.8%	0.0%	27.2°	949.6%
23.4	0.90	2.246	59.4%	35.6%	14.8%	0.0%	27.4°	823.7%
26.0	0.95	*2.208	65.3%	42.1%	23.2%	7.5%	27.2°	721.5%
28.6	1.00	2.158	72.7%	50.8%	35.9%	18.1%	0.0°	646.2%
31.3	1.05	2.159	67.2%	46.4%	32.5%	16.3%	0.0°	560.7%
34.0	1.10	2.164	60.3%	40.7%	28.3%	13.7%	0.0°	487.1%
45.1	1.30	2.188	28.7%	15.0%	9.0%	0.0%	2.2°	297.5%

Notes : MaxVcg marked with * means that this vcg is the nearest maxvkg data Autohydro can find. There is no exact solution. Please use ra /lim command to verify the result.

INTAKT STABILITET - SJÖFS 2006 1 BILAGA 4, ALLMÄNNA STABILITETSKRITERIER.

Limit	Min/Max
(1) Area from 0.00 deg to 30.00	>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	>0.200 m
(5) Absolute Angle at MaxRA	>25.00 deg
(6) GM Upright	>0.150 m

Max. VCG vs. Displacement



Maximum VCG vs. Displacement

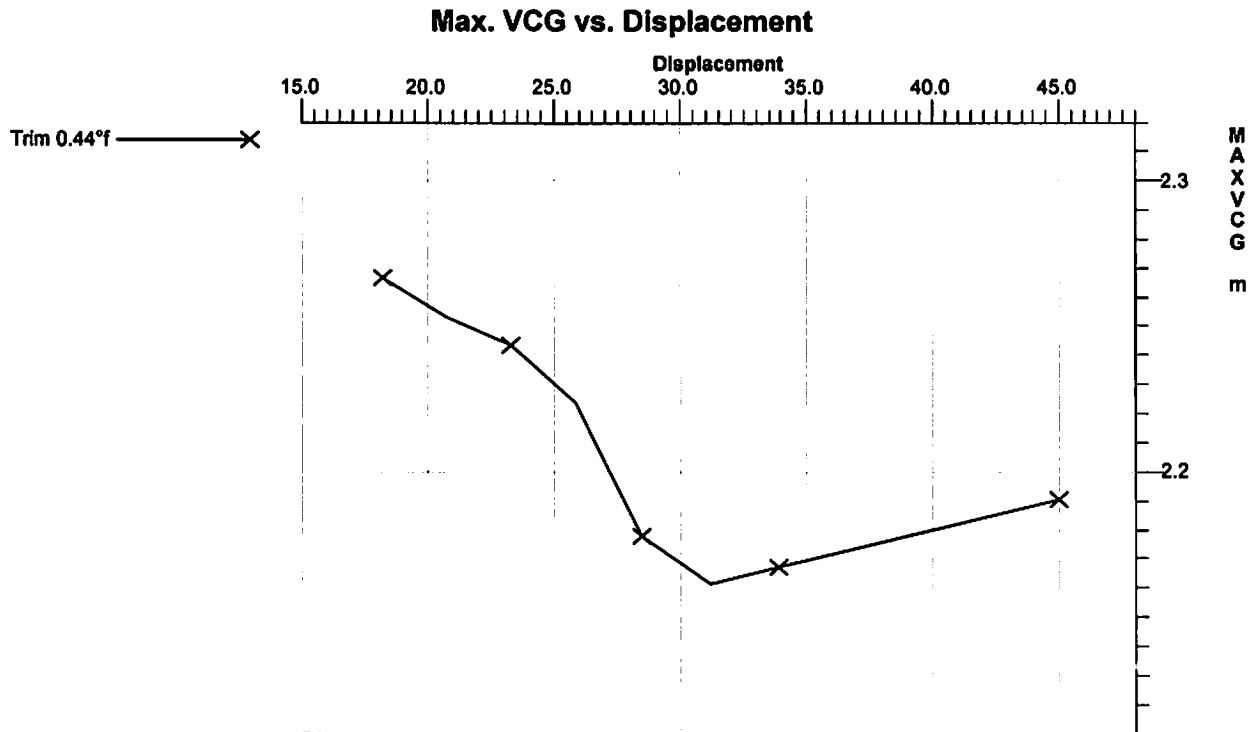
Trim = fwd 0.100/13.000 at zero heel (Trim righting arm held at zero)

Intact Displ (MT)	Intact Draft At -7.178 (m)	Max.VCG (m)	Limit 1	Limit 2	Limit 3	Limit 4	Limit 5	Limit 6
18.1	0.80	2.267	51.9%	33.0%	20.5%	0.0%	26.1°	1040.1%
20.6	0.85	2.254	56.8%	35.0%	17.5%	0.0%	27.4°	991.7%
23.2	0.90	2.244	58.5%	35.3%	15.3%	0.0%	27.7°	845.7%
25.8	0.95	*2.224	60.3%	37.0%	17.1%	2.6%	3.7°	720.8%
28.4	1.00	*2.178	67.3%	45.2%	28.9%	12.4%	1.0°	643.3%
31.1	1.05	2.162	66.6%	45.7%	31.8%	15.4%	0.0°	566.5%
33.8	1.10	2.167	59.8%	40.1%	27.4%	12.7%	0.0°	491.8%
44.9	1.30	2.191	29.4%	15.5%	9.3%	0.0%	2.0°	300.2%

Notes : MaxVcg marked with * means that this vcg is the nearest maxvkg data Autohydro can find. There is no exact solution. Please use ra /lim command to verify the result.

INTAKT STABILITET - SJÖFS 2006 1 BILAGA 4, ALLMÄNNA STABILITETSKRITERIER.

Limit	Min/Max
(1) Area from 0.00 deg to 30.00	>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	>0.200 m
(5) Absolute Angle at MaxRA	>25.00 deg
(6) GM Upright	>0.150 m



Maximum VCG vs. Displacement

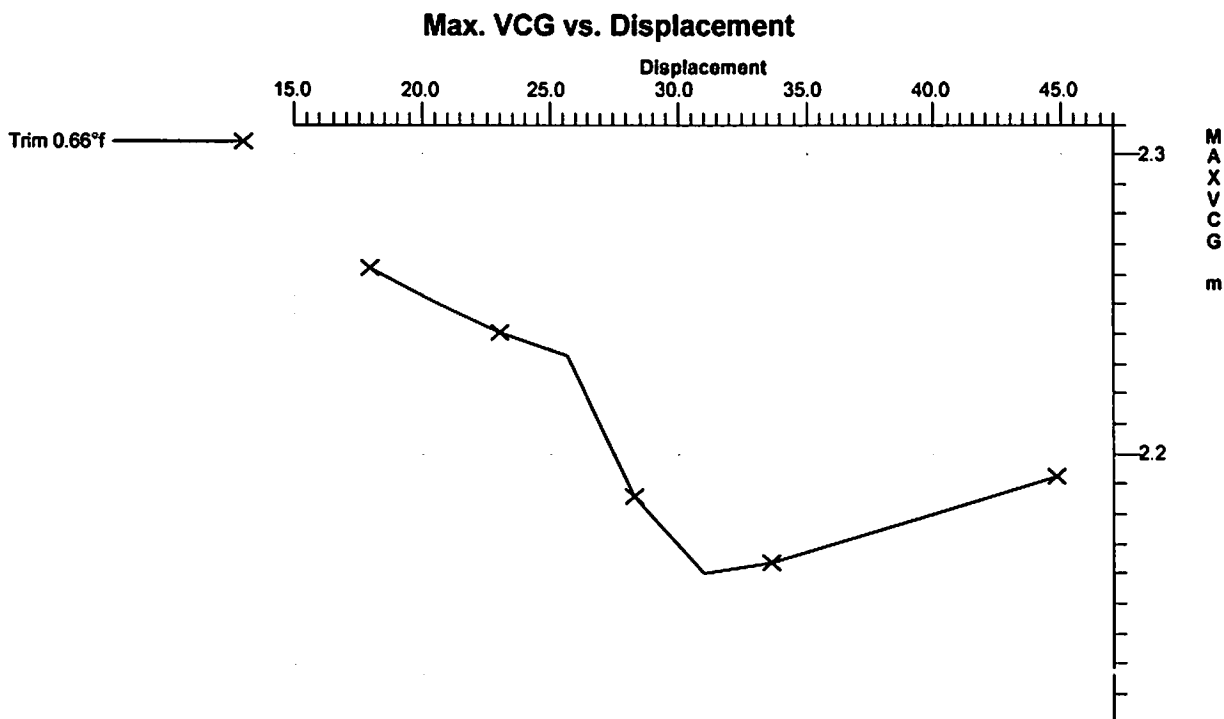
Trim = fwd 0.150/13.000 at zero heel (Trim righting arm held at zero)

Intact Displ (MT)	Intact Draft At -7.178 (m)	Max.VCG (m)	Limit 1	Limit 2	Limit 3	Limit 4	Limit 5	Limit 6
17.9	0.80	2.263	49.2%	31.7%	21.6%	0.0%	26.5°	1049.9%
20.4	0.85	2.251	55.1%	34.2%	18.2%	0.0%	27.6°	1041.4%
23.0	0.90	2.241	57.4%	34.8%	15.8%	0.0%	28.0°	868.6%
25.6	0.95	2.233	57.3%	34.2%	14.1%	0.0%	27.6°	729.0%
28.3	1.00	*2.186	64.9%	42.9%	26.2%	10.1%	1.0°	649.1%
30.9	1.05	2.161	66.7%	45.9%	32.2%	15.4%	0.0°	576.0%
33.6	1.10	2.164	60.8%	41.2%	28.6%	13.3%	0.0°	501.1%
44.8	1.30	2.193	30.1%	16.0%	9.6%	0.0%	1.8°	303.5%

Notes : MaxVcg marked with * means that this vcg is the nearest maxvkg data Autohydro can find. There is no exact solution. Please use ra /lim command to verify the result.

INTAKT STABILITET - SJÖFS 2006 1 BILAGA 4, ALLMÄNNA STABILITETSKRITERIER.

Limit	Min/Max
(1) Area from 0.00 deg to 30.00	>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	>0.200 m
(5) Absolute Angle at MaxRA	>25.00 deg
(6) GM Upright	>0.150 m



Maximum VCG vs. Displacement

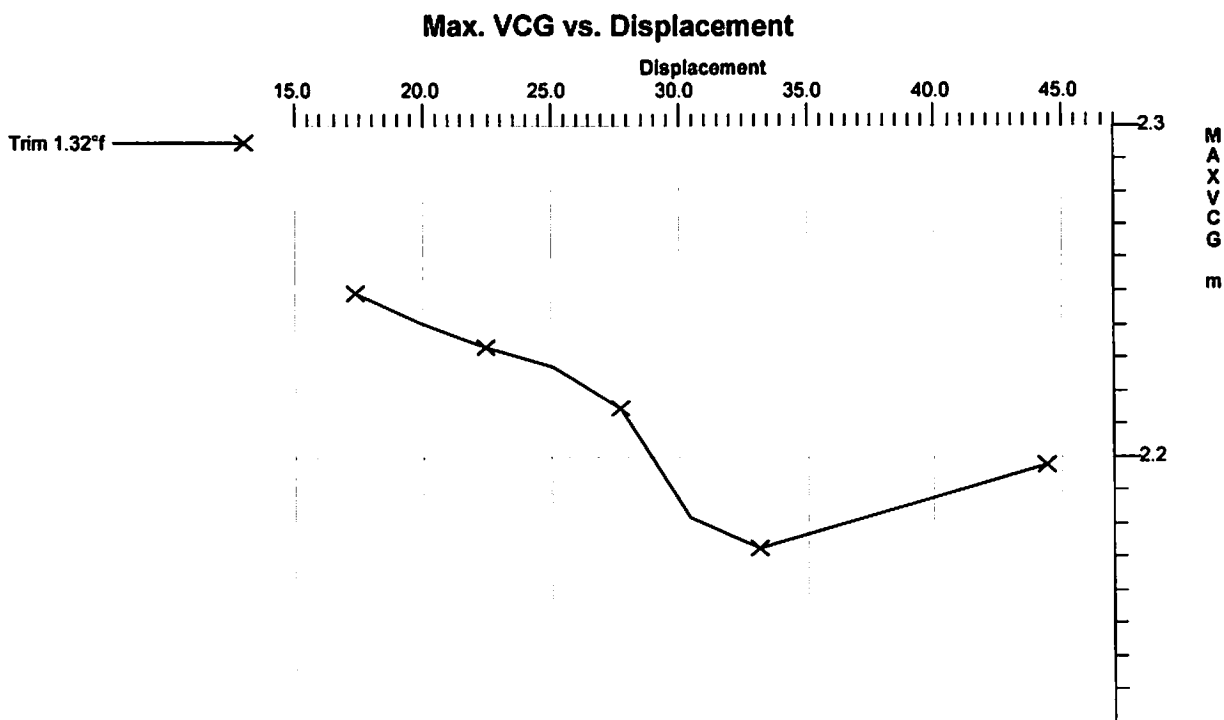
Trim = fwd 0.300/13.000 at zero heel (Trim righting arm held at zero)

Intact Displ (MT)	Intact Draft At -7.178 (m)	Max.VCG (m)	Limit 1	Limit 2	Limit 3	Limit 4	Limit 5	Limit 6
17.3	0.80	2.250	39.8%	26.9%	24.5%	0.0%	27.1°	806.8%
19.8	0.85	2.241	47.9%	30.6%	20.6%	0.0%	27.9°	1181.7%
22.4	0.90	2.234	52.7%	32.5%	17.6%	0.0%	30.0°	946.4%
25.1	0.95	2.228	54.4%	32.9%	15.6%	0.0%	27.8°	771.5%
27.7	1.00	*2.215	55.6%	33.9%	16.4%	1.7%	1.2°	660.6%
30.4	1.05	2.182	60.5%	39.8%	25.1%	9.1%	0.0°	588.9%
33.1	1.10	2.173	58.7%	39.0%	26.2%	10.6%	0.0°	519.5%
44.3	1.30	2.198	32.3%	17.6%	10.3%	0.0%	1.2°	315.6%

Notes : MaxVcg marked with * means that this vcg is the nearest maxvkg data Autohydro can find. There is no exact solution. Please use ra /lim command to verify the result.

INTAKT STABILITET - SJÖFS 2006 1 BILAGA 4, ALLMÄNNA STABILITETSKRITERIER.

Limit	Min/Max
(1) Area from 0.00 deg to 30.00	>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	>0.200 m
(5) Absolute Angle at MaxRA	>25.00 deg
(6) GM Upright	>0.150 m



8. LASTKONDITIONER

Märta Collin

*** Kondition - 1 : Lätt fartyg, (ej sjögående) ***

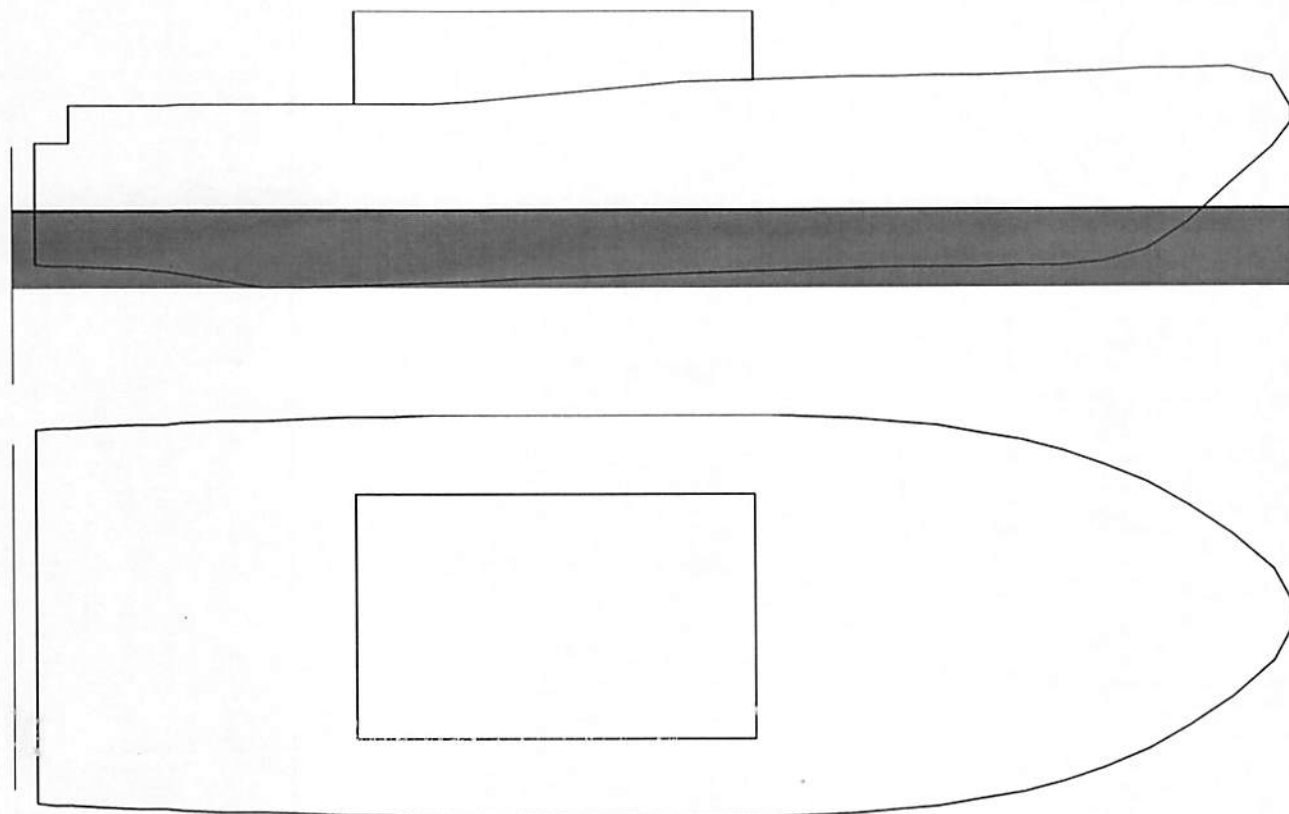
Intakt stabilitet - Sjöfs 2006:1 Bilaga 4, Allmänna stabilitetskriterier.

Floating Status

Draft FP	0.914 m	Heel	zero	GM(Solid)	1.678 m
Draft MS	0.904 m	Equil	Yes	F/S Corr.	0.000 m
Draft AP	0.893 m	Wind	Off	GM(Fluid)	1.678 m
Trim	fwd 0.021/13.000	Wave	No	KMt	3.598 m
LCG	6.122f m	VCG	1.920 m	TPcm	0.51
Displacement	23.72 MT	WaterSpgr	1.025		

Loading Summary

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
Light Ship	23.72	6.122f	0.000	1.920
Displacement	23.72	6.122f	0.000	1.920



Fixed Weight Status

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
LIGHT SHIP	23.72	6.122f	0.000	1.920u
Total Weight:	23.72	6.122f	0.000	1.920u

Tank Status

DIESEL OIL (SpGr 0.870)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	FSM
DIESEL.C	<empty>					
DIESEL.P	<empty>					
DIESEL.S	<empty>					

FRESH WATER (SpGr 1.000)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	FSM
FÄRSKVATTEN.C	<empty>					
SEPTIC.C	<empty>					

All Tanks

	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	FSM

Displacer Status

Item	Status	Spgr	Displ (MT)	LCB (m)	TCB (m)	VCB (m)	Eff /Perm
HULL.C	Intact	1.025	23.72	6.124f	0.000	0.603	1.000
SubTotals:			23.72	6.124f	0.000	0.603	

Unprotected Flood Points

Name	L,T,V (m)	Height (m)
(1) maskinrumsvent BB	3.578f, 1.500p, 3.180	2.282
(2) maskinrumsvent SB	3.578f, 1.500s, 3.180	2.282
(3) tilluft maskin BB	4.078f, 1.160p, 4.947	4.048
(4) tilluft maskin SB	4.078f, 1.160s, 4.947	4.048

Sjöfs 2006:1, Bilaga 4, Allmänna Stabilitetskriterier.
Intervallet från 0 till 180 grader av GZ - kurvan.

Righting Arms vs Heel Angle

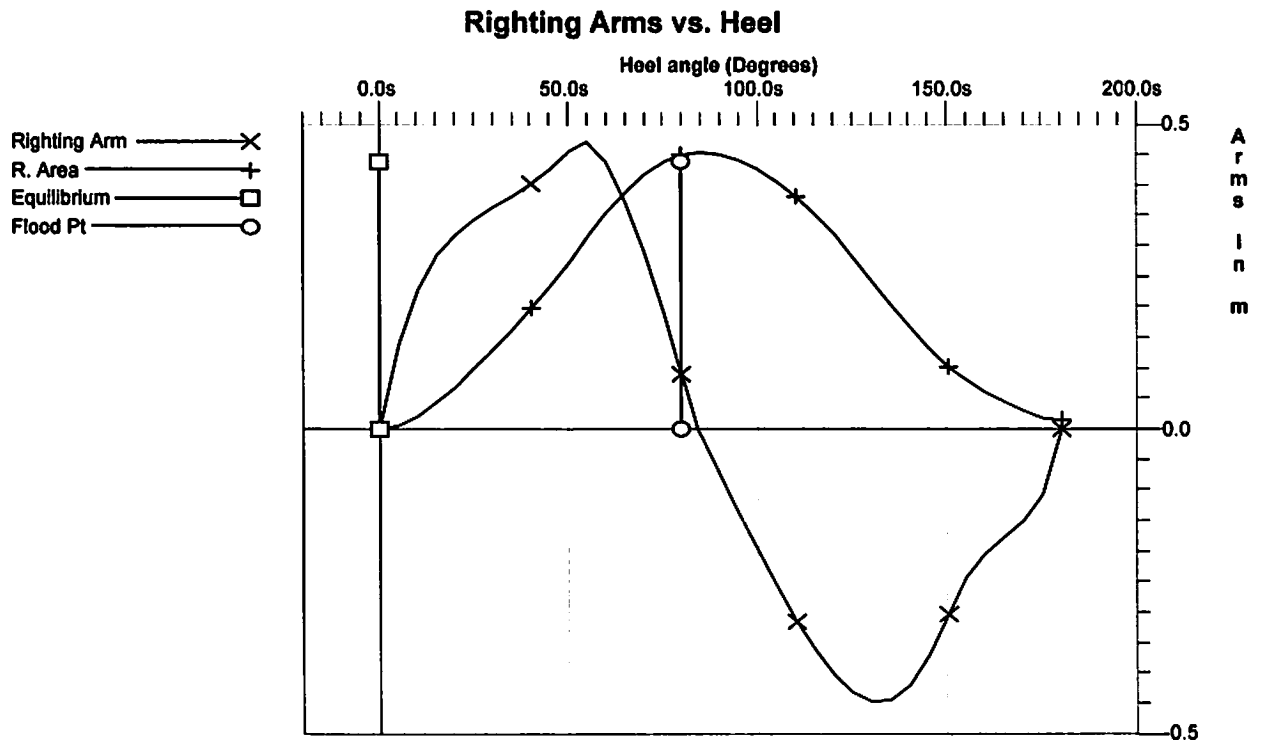
Heel Angle (deg)	Trim Angle (deg)	Origin Depth (m)	Righting Arm (m)	Area (m-Rad)	Flood Pt Height (m)	Notes
0.00	0.09f	0.892	0.000	0.000	2.282 (1)	Equil
5.00s	0.06f	0.887	0.139	0.006	2.146 (2)	
10.00s	0.07f	0.853	0.230	0.022	2.014 (2)	
15.00s	0.16f	0.788	0.287	0.045	1.886 (2)	
20.00s	0.31f	0.695	0.319	0.072	1.761 (2)	
25.00s	0.43f	0.589	0.343	0.101	1.632 (2)	
30.00s	0.53f	0.473	0.363	0.132	1.498 (2)	
35.00s	0.61f	0.348	0.384	0.164	1.359 (2)	
40.00s	0.65f	0.215	0.404	0.199	1.216 (2)	
45.00s	0.66f	0.076	0.428	0.235	1.070 (2)	
50.00s	0.64f	-0.067	0.459	0.274	0.922 (2)	
55.00s	0.52f	-0.205	0.474	0.314	0.767 (2)	
60.00s	0.28f	-0.338	0.440	0.355	0.611 (2)	
65.00s	0.03a	-0.469	0.375	0.390	0.455 (2)	
70.00s	0.36a	-0.598	0.290	0.420	0.299 (2)	
75.00s	0.73a	-0.723	0.191	0.441	0.143 (2)	
79.63s	1.08a	-0.836	0.091	0.452	0.000 (2)	FldPt
80.00s	1.10a	-0.845	0.083	0.453	-0.011 (2)	
84.12s	1.38a	-0.950	0.000	0.456	-0.129 (2)	RaZero
85.00s	1.43a	-0.976	-0.014	0.455	-0.152 (2)	
90.00s	1.74a	-1.120	-0.075	0.451	-0.270 (2)	
95.00s	2.08a	-1.255	-0.135	0.442	-0.385 (2)	
100.00s	2.42a	-1.380	-0.197	0.428	-0.496 (2)	
105.00s	2.77a	-1.495	-0.257	0.408	-0.706 (4)	
110.00s	3.12a	-1.599	-0.313	0.383	-0.958 (4)	
115.00s	3.46a	-1.690	-0.362	0.354	-1.200 (4)	
120.00s	3.80a	-1.768	-0.403	0.320	-1.432 (4)	
125.00s	4.15a	-1.834	-0.431	0.284	-1.649 (4)	
130.00s	4.49a	-1.886	-0.445	0.245	-1.850 (4)	
135.00s	4.82a	-1.929	-0.442	0.206	-2.031 (4)	
140.00s	5.10a	-1.969	-0.419	0.169	-2.186 (4)	
145.00s	5.32a	-2.007	-0.369	0.134	-2.313 (4)	
150.00s	5.54a	-2.035	-0.301	0.105	-2.413 (4)	
155.00s	5.77a	-2.045	-0.243	0.081	-2.493 (4)	
160.00s	5.96a	-2.043	-0.203	0.062	-2.552 (4)	
165.00s	6.07a	-2.031	-0.175	0.045	-2.588 (4)	
170.00s	6.04a	-2.020	-0.148	0.031	-2.596 (4)	
175.00s	5.63a	-2.043	-0.105	0.020	-2.562 (4)	
180.00s	5.19a	-2.077	0.000	0.015	-2.480 (3)	RaZero

Unprotected Flood Points

Name	L,T,V (m)	Height (m)
(1) maskinrumsvent BB	3.578f, 1.500p, 3.180	2.282
(2) maskinrumsvent SB	3.578f, 1.500s, 3.180	2.146
(3) tilluft maskin BB	4.078f, 1.160p, 4.947	-2.480
(4) tilluft maskin SB	4.078f, 1.160s, 4.947	-0.706

INTAKT STABILITET - SJÖFS 2006 1, BILAGA 4, ALLMÄNNA STABILITETSKRITERIER.

Limit	Min/Max	Actual	Margin	Pass
(1) Area from 0.00 deg to 30.00	>0.0550 m-R	0.132	0.077	Yes
(2) Area from 0.00 deg to 40.00 or Flood	>0.0900 m-R	0.199	0.109	Yes
(3) Area from 30.00 deg to 40.00 or Flood	>0.0300 m-R	0.067	0.037	Yes
(4) Righting Arm at 30.00 deg	>0.200 m	0.363	0.163	Yes
(5) Absolute Angle at MaxRA	>25.00 deg	55.00	30.00	Yes
(6) GM Upright	>0.150 m	1.678	1.528	Yes



Märta Collin

*** Kondition - 2 : 100% (98%) Bunker och förråd ***

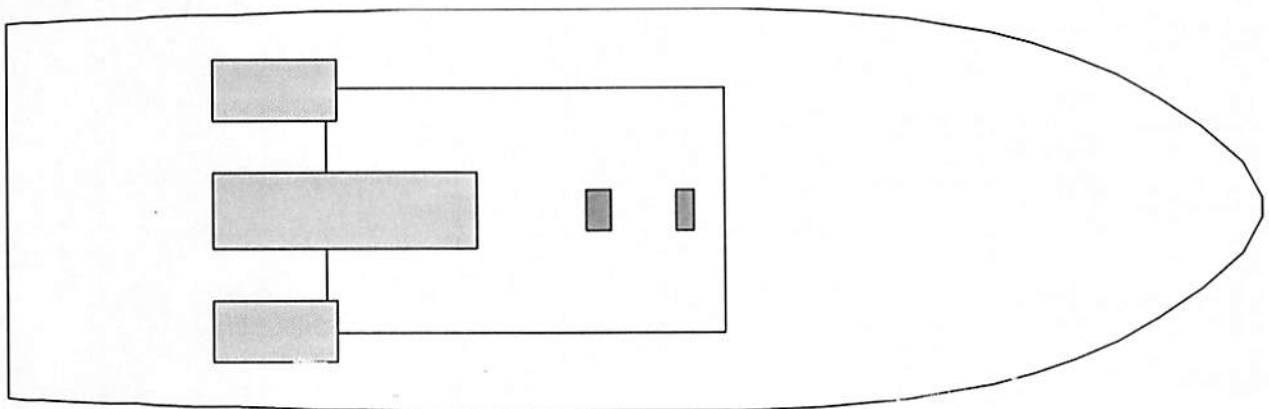
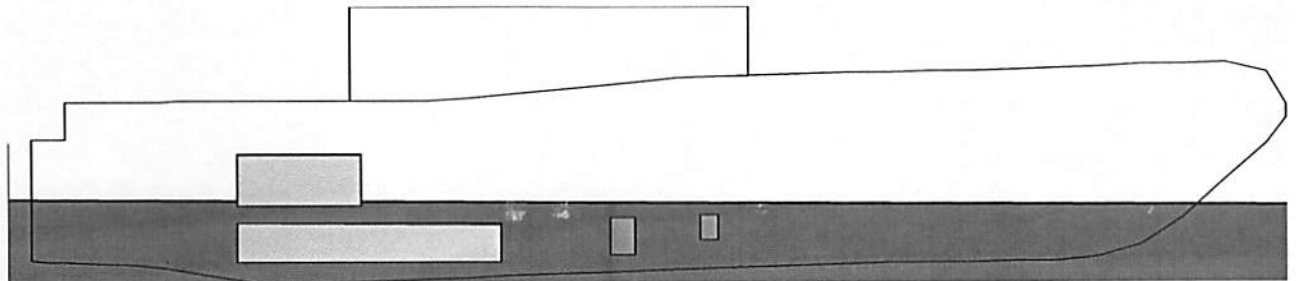
Intakt stabilitet - Sjöfs 2006:1 Bilaga 4, Allmänna stabilitetskriterier.

Floating Status

Draft FP	0.911 m	Heel	zero	GM(Solid)	1.498 m
Draft MS	0.960 m	Equil	Yes	F/S Corr.	0.009 m
Draft AP	1.009 m	Wind	Off	GM(Fluid)	1.489 m
Trim	aft 0.098/13.000	Wave	No	KMt	3.347 m
LCG	5.918f m	VCG	1.849 m	TPcm	0.52
Displacement	27.11 MT	WaterSpgr	1.025		

Loading Summary

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
Light Ship	23.72	6.122f	0.000	1.920
Deadweight	3.40	4.493f	0.000	1.351
Displacement	27.11	5.918f	0.000	1.849



Fluid Legend

Fluid Name	Legend	Weight (MT)	Load%
DIESEL OIL		2.77	98.00%
FRESH WATER		.13	98.00%

Fixed Weight Status

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
LIGHT SHIP	23.72	6.122f	0.000	1.920u
4 BESÄTTNINGMÄN PÅ FLYBRIDGE	0.30	5.678f	0.000	5.730u
FÖRRÅD	0.20	9.678f	0.000	2.200u
Total Fixed:	24.22	6.146f	0.000	1.970u

Tank Status

DIESEL OIL (SpGr 0.870)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Volume (m³)	FSM (MT-m)
DIESEL.C	98.00%	1.28	4.289f	0.000	0.337	1.5	0.16
DIESEL.P	98.00%	0.75	3.466f	1.445p	1.302	0.9	0.04
DIESEL.S	98.00%	0.75	3.466f	1.445s	1.302	0.9	0.04
Subtotals:	98.00%	2.77	3.846f	0.000	0.856	3.2	0.24

FRESH WATER (SpGr 1.000)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Volume (m³)	FSM (MT-m)
FÄRSKVATTEN.C	98.00%	0.09	7.338f	0.000	0.405	0.1	0.00
SEPTIC.C	98.00%	0.04	8.353f	0.000	0.547	0.0	0.00
Subtotals:	98.00%	0.13	7.650f	0.000	0.449	0.1	0.01

All Tanks

	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Volume (m³)	FSM (MT-m)
Totals:	98.00%	2.90	4.012f	0.000	0.838	3.3	0.24

Displacer Status

Item	Status	Spgr	Displ (MT)	LCB (m)	TCB (m)	VCB (m)	Eff /Perm
HULL.C	Intact	1.025	27.11	5.909f	0.000	0.645	1.000
SubTotals:			27.11	5.909f	0.000	0.645	

Unprotected Flood Points

Name	L,T,V (m)	Height (m)
(1) maskinrumsvent BB	3.578f, 1.500p, 3.180	2.193
(2) maskinrumsvent SB	3.578f, 1.500s, 3.180	2.193
(3) tilluft maskin BB	4.078f, 1.160p, 4.947	3.964
(4) tilluft maskin SB	4.078f, 1.160s, 4.947	3.964

Sjöfs 2006:1, Bilaga 4, Allmänna Stabilitetskriterier.

Righting Arms vs Heel Angle

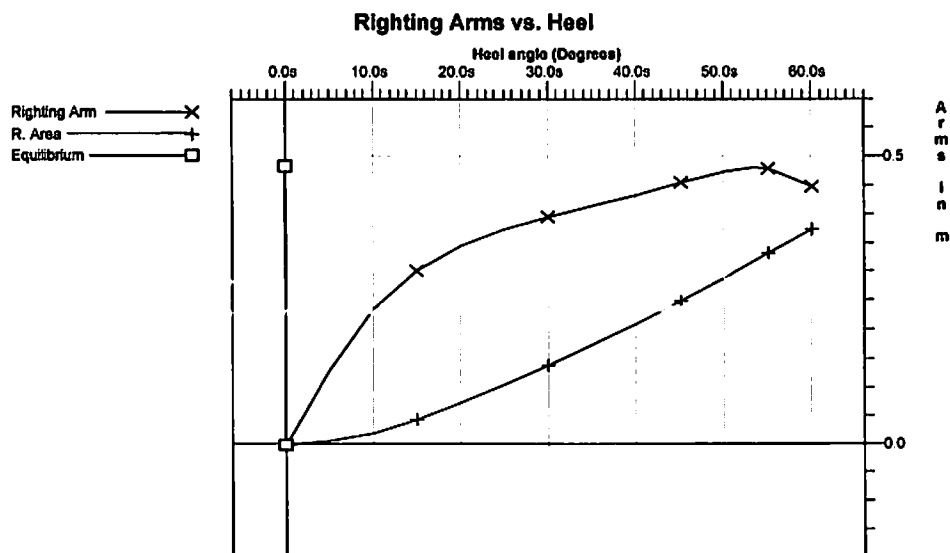
Heel Angle (deg)	Trim Angle (deg)	Origin Depth (m)	Righting Arm (m)	Area (m-Rad)	Flood Pt Height (m)	Notes
0.00	0.43a	1.014	0.000	0.000	2.193 (1)	Equil
5.00s	0.46a	1.009	0.128	0.006	2.057 (2)	
10.00s	0.51a	0.987	0.234	0.022	1.916 (2)	
15.00s	0.48a	0.932	0.302	0.045	1.781 (2)	
20.00s	0.41a	0.853	0.346	0.074	1.648 (2)	
25.00s	0.31a	0.750	0.374	0.105	1.517 (2)	
30.00s	0.22a	0.636	0.396	0.139	1.382 (2)	
35.00s	0.16a	0.513	0.416	0.174	1.242 (2)	
40.00s	0.14a	0.384	0.435	0.211	1.097 (2)	
45.00s	0.15a	0.248	0.457	0.250	0.950 (2)	
50.00s	0.23a	0.114	0.475	0.291	0.795 (2)	
53.41s	0.37a	0.031	0.482	0.319	0.683 (2)	MaxRa
55.00s	0.46a	-0.005	0.480	0.333	0.629 (2)	
60.00s	0.83a	-0.114	0.449	0.374	0.457 (2)	

Unprotected Flood Points

Name	L,T,V (m)	Height (m)
(1) maskinrumsvent BB	3.578f, 1.500p, 3.180	2.193
(2) maskinrumsvent SB	3.578f, 1.500s, 3.180	2.057

INTAKT STABILITET - SJÖFS 2006 1, BILAGA 4, ALLMÄNNA STABILITETSKRITERIER.

Limit	Min/Max	Actual	Margin	Pass
(1) Area from 0.00 deg to 30.00	>0.0550 m-R	0.139	0.084	Yes
(2) Area from 0.00 deg to 40.00 or Flood	>0.0900 m-R	0.211	0.121	Yes
(3) Area from 30.00 deg to 40.00 or Flood	>0.0300 m-R	0.073	0.043	Yes
(4) Righting Arm at 30.00 deg	>0.200 m	0.396	0.196	Yes
(5) Absolute Angle at MaxRA	>25.00 deg	53.41	28.41	Yes
(6) GM Upright	>0.150 m	1.489	1.339	Yes



Märta Collin

*** Kondition - 3 : 10% Bunker och förråd ***

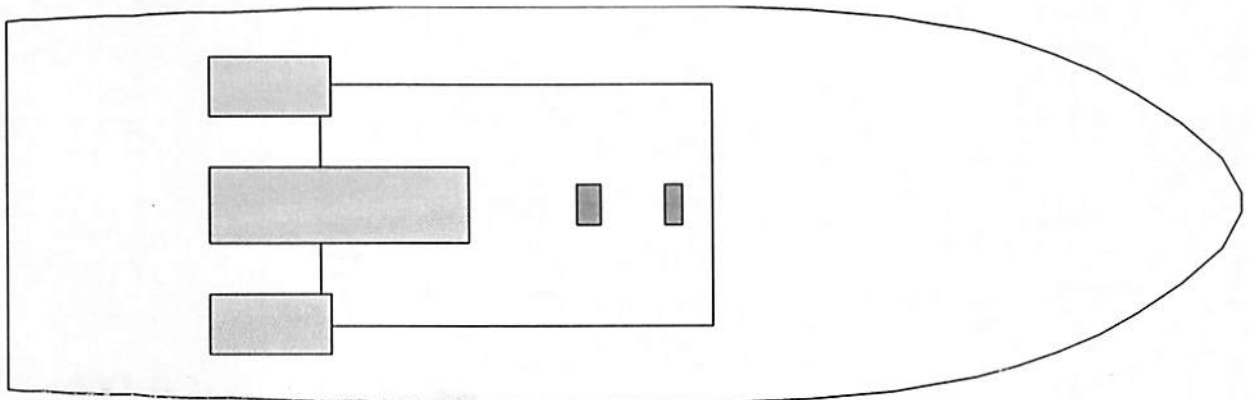
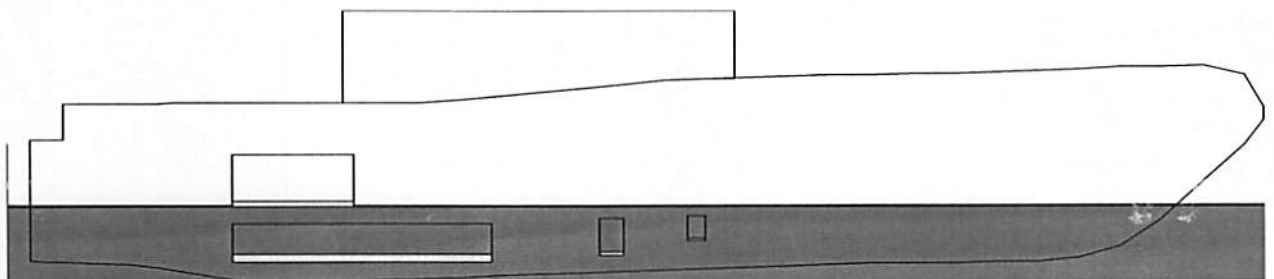
Intakt stabilitet - Sjöfs 2006:1 Bilaga 4, Allmänna stabilitetskriterier.

Floating Status



Draft FP	0.917 m	Heel	zero	GM(Solid)	1.600 m
Draft MS	0.914 m	Equil	Yes	F/S Corr.	0.006 m
Draft AP	0.911 m	Wind	Off	GM(Fluid)	1.594 m
Trim	0.006/13.000	Wave	No	KMt	3.551 m
LCG	6.094f m	VCG	1.950 m	TPcm	0.52
Displacement	24.33 MT	WaterSpgr	1.025		

Loading Summary

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
Light Ship	23.72	6.122f	0.000	1.920
Deadweight	0.62	5.010f	0.000	3.115
Displacement	24.33	6.094f	0.000	1.950



Fluid Legend

Fluid Name	Legend	Weight (MT)	Load%
DIESEL OIL		.28	10.00%
FRESH WATER		.01	10.00%

Fixed Weight Status

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
LIGHT SHIP	23.72	6.122f	0.000	1.920u
4 BESÄTTNINGMÄN PA FLYBRIDGE	0.30	5.678f	0.000	5.730u
FÖRRÄD	0.02	9.678f	0.000	2.200u
Total Fixed:	24.04	6.119f	0.000	1.968u

Tank Status

DIESEL OIL (SpGr 0.870)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Volume (m³)	FSM (MT-m)
DIESEL.C	10.00%	0.13	4.297f	0.000	0.076	0.1	0.07
DIESEL.P	10.00%	0.08	3.469f	1.445p	0.932	0.1	0.04
DIESEL.S	10.00%	0.08	3.469f	1.445s	0.932	0.1	0.04
Subtotals:	10.00%	0.28	3.851f	0.000	0.537	0.3	0.14

FRESH WATER (SpGr 1.000)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Volume (m³)	FSM (MT-m)
FÄRSKVATTEN.C	10.00%	0.01	7.338f	0.000	0.141	0.0	0.00
SEPTIC.C	<empty>						
Subtotals:	10.00%	0.01	7.650f	0.000	0.212	0.0	0.01

All Tanks

	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Volume (m³)	FSM (MT-m)
Totals:	10.00%	0.30	4.017f	0.000	0.522	0.3	0.15

Displacer Status

Item	Status	Spgr	Displ (MT)	LCB (m)	TCB (m)	VCB (m)	Eff /Perm
HULL.C	Intact	1.025	24.33	6.095f	0.000	0.611	1.000
SubTotals:			24.33	6.095f	0.000	0.611	

Unprotected Flood Points

Name	L,T,V (m)	Height (m)
(1) maskinrumsvent BB	3.578f, 1.500p, 3.180	2.267
(2) maskinrumsvent SB	3.578f, 1.500s, 3.180	2.267
(3) tilluft maskin BB	4.078f, 1.160p, 4.947	4.034
(4) tilluft maskin SB	4.078f, 1.160s, 4.947	4.034

Sjöfs 2006:1, Bilaga 4, Allmänna Stabilitetskriterier.

Righting Arms vs Heel Angle

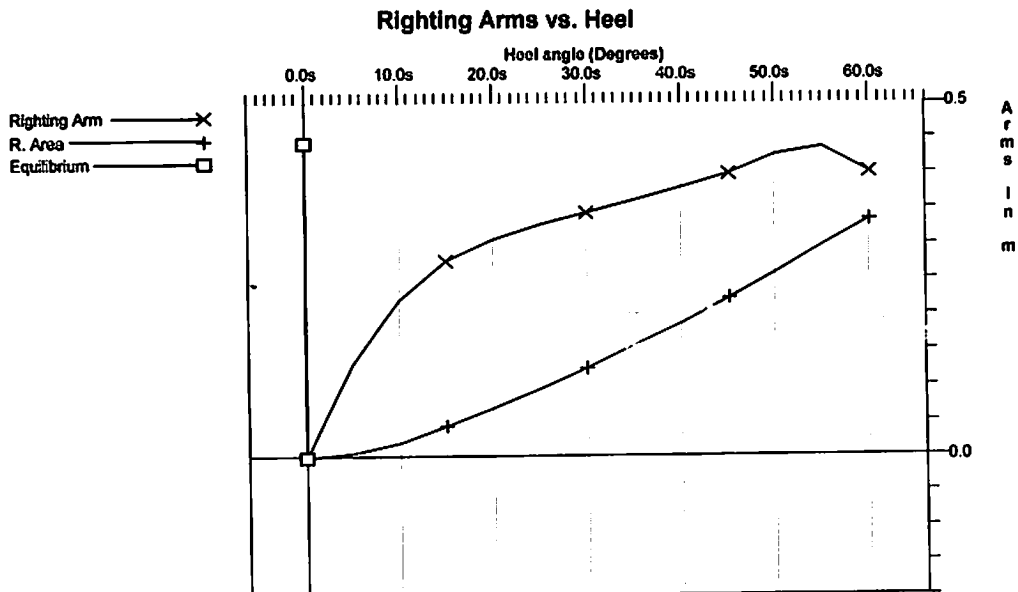
Heel Angle (deg)	Trim Angle (deg)	Origin Depth (m)	Righting Arm (m)	Area (m-Rad)	Flood Pt Height (m)	Notes
0.00	0.03f	0.911	0.000	0.000	2.267 (1)	Equil
5.00s	0.01a	0.907	0.133	0.006	2.131 (2)	
10.00s	0.02f	0.874	0.222	0.022	1.997 (2)	
15.00s	0.07f	0.811	0.278	0.044	1.868 (2)	
20.00s	0.21f	0.720	0.307	0.069	1.742 (2)	
25.00s	0.33f	0.614	0.328	0.097	1.613 (2)	
30.00s	0.43f	0.499	0.345	0.127	1.478 (2)	
35.00s	0.50f	0.374	0.362	0.157	1.339 (2)	
40.00s	0.54f	0.241	0.379	0.190	1.197 (2)	
45.00s	0.55f	0.103	0.399	0.224	1.050 (2)	
50.00s	0.53f	-0.039	0.426	0.260	0.901 (2)	
55.00s	0.38f	-0.172	0.438	0.297	0.744 (2)	
60.00s	0.12f	-0.302	0.402	0.334	0.585 (2)	

Unprotected Flood Points

Name	L,T,V (m)	Height (m)
(1) maskinrumsvent BB	3.578f, 1.500p, 3.180	2.267
(2) maskinrumsvent SB	3.578f, 1.500s, 3.180	2.131

INTAKT STABILITET - SJÖFS 2006 1, BILAGA 4, ALLMÄNNA STABILITETSKRITERIER.

Limit	Min/Max	Actual	Margin	Pass
(1) Area from 0.00 deg to 30.00	>0.0550 m-R	0.127	0.072	Yes
(2) Area from 0.00 deg to 40.00 or Flood	>0.0900 m-R	0.190	0.100	Yes
(3) Area from 30.00 deg to 40.00 or Flood	>0.0300 m-R	0.063	0.033	Yes
(4) Righting Arm at 30.00 deg	>0.200 m	0.345	0.145	Yes
(5) Absolute Angle at MaxRA	>25.00 deg	55.00	30.00	Yes
(6) GM Upright	>0.150 m	1.594	1.444	Yes



Märta Collin

*** Kondition - 4 : 100% (98%) Bunker och förråd + 12 passagerare, FRIBORDSKONDITION ***

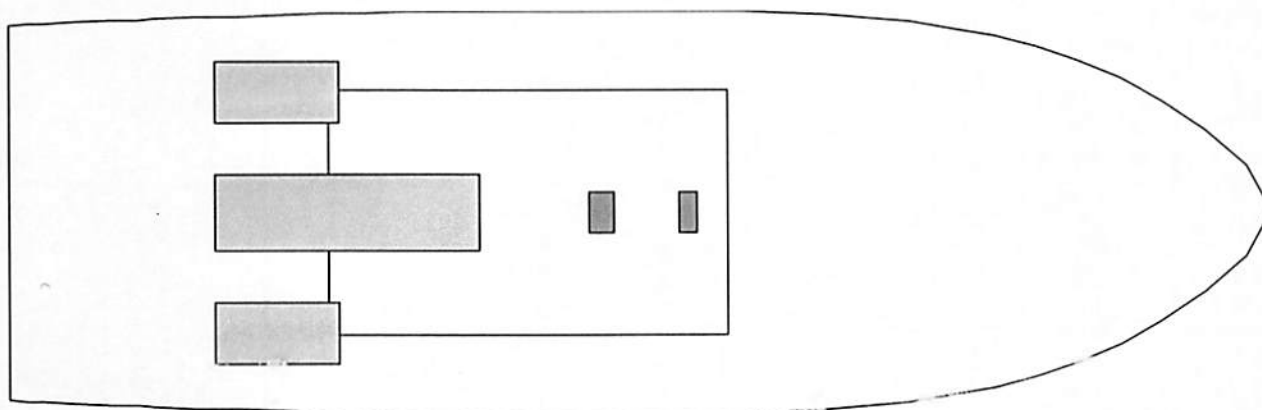
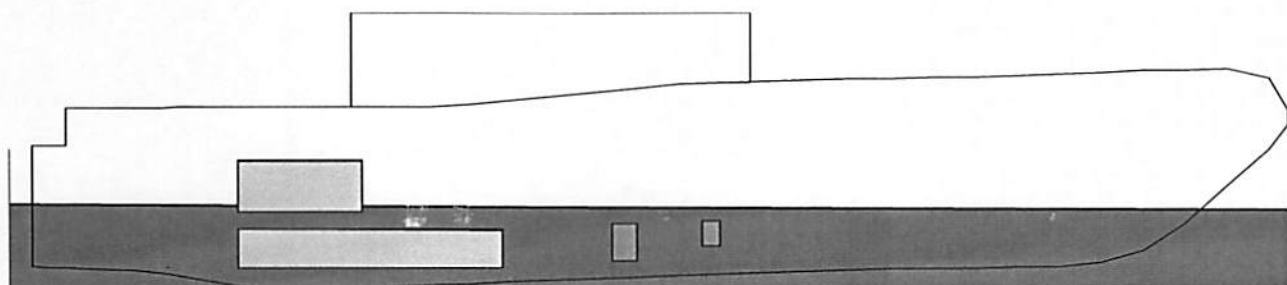
Intakt stabilitet - Sjöfs 2006:1 Bilaga 4, Allmänna stabilitetskriterier.

Floating Status



Draft FP	0.934 m	Heel	zero	GM(Solid)	1.389 m
Draft MS	0.978 m	Equil	Yes	F/S Corr.	0.009 m
Draft AP	1.022 m	Wind	Off	GM(Fluid)	1.380 m
Trim	aft 0.088/13.000	Wave	No	KMt	3.297 m
LCG	5.942f m	VCG	1.908 m	TPcm	0.52
Displacement	28.01 MT	WaterSpgr	1.025		

Loading Summary

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
Light Ship	23.72	6.122f	0.000	1.920
Deadweight	4.30	4.951f	0.000	1.843
Displacement	28.01	5.942f	0.000	1.908



Fluid Legend

Fluid Name	Legend	Weight (MT)	Load%
DIESEL OIL		2.77	98.00%
FRESH WATER		.13	98.00%

Fixed Weight Status

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
LIGHT SHIP	23.72	6.122f	0.000	1.920u
12 PASSAGERARE PÅ HUVUDDÄCK	0.90	6.678f	0.000	3.700u
4 BESÄTTNINGMÄN PÅ FLYBRIDGE	0.30	5.678f	0.000	5.730u
FÖRRÄD	0.20	9.678f	0.000	2.200u
Total Fixed:	25.12	6.165f	0.000	2.032u

Tank Status

DIESEL OIL (SpGr 0.870)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Volume (m ³)	FSM (MT-m)
DIESEL.C	98.00%	1.28	4.290f	0.000	0.337	1.5	0.17
DIESEL.P	98.00%	0.75	3.467f	1.445p	1.302	0.9	0.04
DIESEL.S	98.00%	0.75	3.467f	1.445s	1.302	0.9	0.04
Subtotals:	98.00%	2.77	3.847f	0.000	0.856	3.2	0.25

FRESH WATER (SpGr 1.000)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Volume (m ³)	FSM (MT-m)
FÄRSKVATTEN.C	98.00%	0.09	7.338f	0.000	0.405	0.1	0.00
SEPTIC.C	98.00%	0.04	8.353f	0.000	0.547	0.0	0.00
Subtotals:	98.00%	0.13	7.650f	0.000	0.449	0.1	0.01

All Tanks

	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Volume (m ³)	FSM (MT-m)
Totals:	98.00%	2.90	4.012f	0.000	0.838	3.3	0.25

Displacer Status

Item	Status	Spgr	Displ (MT)	LCB (m)	TCB (m)	VCB (m)	Eff /Perm
HULL.C	Intact	1.025	28.01	5.934f	0.000	0.656	1.000
SubTotals:			28.01	5.934f	0.000	0.656	

Unprotected Flood Points

Name	L,T,V (m)	Height (m)
(1) maskinrumsvent BB	3.578f, 1.500p, 3.180	2.178
(2) maskinrumsvent SB	3.578f, 1.500s, 3.180	2.178
(3) tilluft maskin BB	4.078f, 1.160p, 4.947	3.948
(4) tilluft maskin SB	4.078f, 1.160s, 4.947	3.948

Righting Arms vs Heel Angle

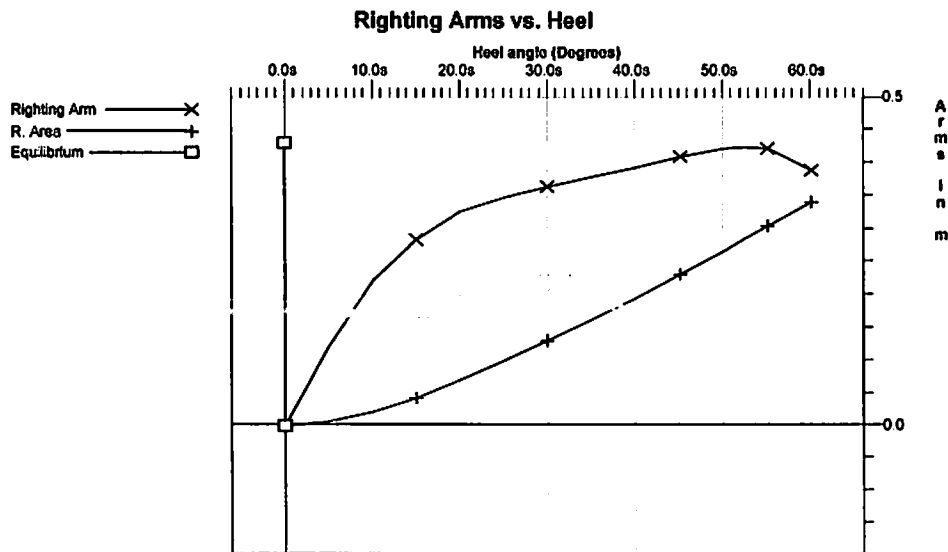
Heel Angle (deg)	Trim Angle (deg)	Origin Depth (m)	Righting Arm (m)	Area (m-Rad)	Flood Pt Height (m)	Notes
0.00	0.39a	1.026	0.000	0.000	2.178 (1)	Equil
5.00s	0.41a	1.021	0.120	0.005	2.041 (2)	
10.00s	0.46a	1.000	0.220	0.020	1.900 (2)	
15.00s	0.45a	0.948	0.284	0.042	1.764 (2)	
20.00s	0.39a	0.870	0.325	0.069	1.629 (2)	
25.00s	0.29a	0.769	0.347	0.099	1.498 (2)	
30.00s	0.21a	0.655	0.364	0.130	1.362 (2)	
35.00s	0.15a	0.533	0.379	0.162	1.222 (2)	
40.00s	0.14a	0.404	0.394	0.196	1.077 (2)	
45.00s	0.16a	0.269	0.410	0.231	0.929 (2)	
50.00s	0.25a	0.137	0.422	0.267	0.773 (2)	
52.39s	0.34a	0.079	0.425	0.285	0.695 (2)	MaxRa
55.00s	0.48a	0.019	0.421	0.304	0.606 (2)	
60.00s	0.85a	-0.088	0.389	0.340	0.432 (2)	

Unprotected Flood Points

Name	L,T,V (m)	Height (m)
(1) maskinrumsvent BB	3.578f, 1.500p, 3.180	2.178
(2) maskinrumsvent SB	3.578f, 1.500s, 3.180	2.041

INTAKT STABILITET - SJÖFS 2006 1, BILAGA 4, ALLMÄNNA STABILITETSKRITERIER.

Limit	Min/Max	Actual	Margin	Pass
(1) Area from 0.00 deg to 30.00	>0.0550 m-R	0.130	0.075	Yes
(2) Area from 0.00 deg to 40.00 or Flood	>0.0900 m-R	0.196	0.106	Yes
(3) Area from 30.00 deg to 40.00 or Flood	>0.0300 m-R	0.066	0.036	Yes
(4) Righting Arm at 30.00 deg	>0.200 m	0.364	0.164	Yes
(5) Absolute Angle at MaxRA	>25.00 deg	52.39	27.39	Yes
(6) GM Upright	>0.150 m	1.380	1.230	Yes



NEDISNING

Inverkan av is - Sjöfs 2006:1, Bilaga 9, regel 12, (endast för information).

Hull Data (with appendages)

Baseline Draft: 0.934 at 13.678f, 1.022 at 0.678f

Trim: aft 0.088/13.000

Heel: zero

DIMENSIONS

Length Overall: 14.955 m LBP: 13.000 m Beam: 4.810 m BWL: 4.511 m

Volume: 27.327 m³ Displacement: 28.010 MT

COEFFICIENTS

Prismatic: 0.784 Block: 0.346 Midship: 0.442 Waterplane: 0.870

RATIOS

Length/Beam: 3.109 Displacement/length: 355.310 Beam/Depth: 3.576

MT/ cm Immersion: 0.523

AREAS

Waterplane: 51.027 m² Wetted Surface: 65.743 m²

Under Water Lateral Plane: 14.836 m² Above Water Lateral Plane: 33.280 m²

CENTROIDS (Meters)

Buoyancy: LCB = 5.934 fwd TCB = 0.000 port VCB = 0.656

Flotation: LCF = 6.153 fwd

Under Water LP: 6.687 fwd of Origin, 0.553 below waterline.

Above Water LP: 7.840 fwd of Origin, 1.239 above waterline.

Note: Coefficients calculated based on length of 13.000 m

Fixed Weight Status

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
LIGHT SHIP	23.72	6.122f	0.000	1.920u
12 PASSAGERARE PÅ HUVUDDÄCK	0.90	6.678f	0.000	3.700u
4 BESÄTTNINGMÄN PÅ FLYBRIDGE	0.30	5.678f	0.000	5.730u
FÖRRÄD	0.20	9.678f	0.000	2.200u
IS PÅ BADBRYGGA	0.13	0.222a	0.000	1.690u
IS PÅ FLY-BRIDGEDÄCK	0.62	6.178f	0.000	4.800u
IS PÅ FRIBORD OCH UNDERDEL HYTT	0.58	7.840f	0.000	2.217u
IS PÅ FÖRDÄCK	0.46	11.678f	0.000	3.090u
IS PÅ NEDRE AKTERDÄCK	0.20	1.038f	0.000	1.960u
IS PÅ SKARNDÄCK	0.24	7.128f	0.000	2.830u
IS PÅ ÖVERDEL HYTT	0.18	6.178f	0.000	5.000u
IS PÅ ÖVRE AKTERDÄCK	0.30	2.978f	0.000	2.590u
Total Fixed:	27.83	6.198f	0.000	2.145u

Displacer Status

Item	Status	Spgr	Displ (MT)	LCB (m)	TCB (m)	VCB (m)	Eff /Perm
HULL.C	Intact	1.025	30.73	5.985f	0.000	0.687	1.000
SubTotals:			30.73	5.985f	0.000	0.687	

Inverkan av is, GZ - kurvan med de Allmänna Stabilitetskriterierna, (endast för information).

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	0.31a	1.070	0.000	0.000	2.130 (1)	Equil
5.00s	0.33a	1.064	0.100	0.004	1.993 (2)	
10.00s	0.38a	1.046	0.191	0.017	1.849 (2)	
15.00s	0.40a	0.999	0.247	0.036	1.709 (2)	
20.00s	0.37a	0.927	0.280	0.060	1.572 (2)	
25.00s	0.30a	0.830	0.296	0.085	1.437 (2)	
30.00s	0.24a	0.718	0.303	0.111	1.300 (2)	
35.00s	0.21a	0.599	0.307	0.138	1.159 (2)	
40.00s	0.21a	0.472	0.312	0.165	1.013 (2)	
45.00s	0.26a	0.340	0.316	0.192	0.864 (2)	
50.00s	0.40a	0.216	0.312	0.220	0.704 (2)	
55.00s	0.63a	0.101	0.298	0.246	0.534 (2)	
60.00s	0.99a	-0.001	0.261	0.271	0.354 (2)	

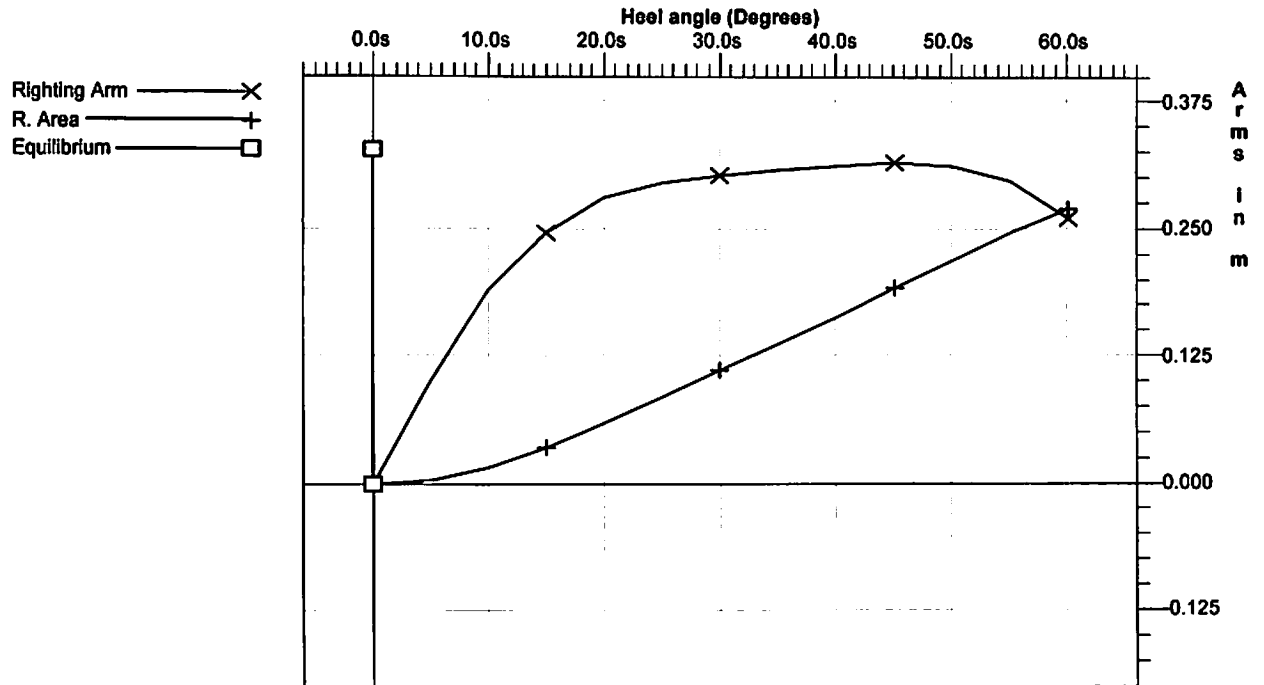
Unprotected Flood Points

Name	L,T,V (m)	Height (m)
(1) maskinrumsvent BB	3.578f, 1.500p, 3.180	2.130
(2) maskinrumsvent SB	3.578f, 1.500s, 3.180	1.993

INVERKAN AV IS - SJÖFS 2006 1, BILAGA 4, ALLMÄNNA STABILITETSKRITERIER, (ENDAST FÖR INFORMATION).

Limit	Min/Max	Actual	Margin	Pass
(1) Area from 0.00 deg to 30.00	>0.0550 m-R	0.111	0.056	Yes
(2) Area from 0.00 deg to 40.00 or Flood	>0.0900 m-R	0.165	0.075	Yes
(3) Area from 30.00 deg to 40.00 or Flood	>0.0300 m-R	0.054	0.024	Yes
(4) Righting Arm at 30.00 deg	>0.200 m	0.303	0.103	Yes
(5) Absolute Angle at MaxRA	>25.00 deg	45.00	20.00	Yes
(6) GM Upright	>0.150 m	1.135	0.985	Yes

Righting Arms vs. Heel



Märta Collin

*** Kondition - 5 : 10% Bunker och förråd + 12 passagerare ***

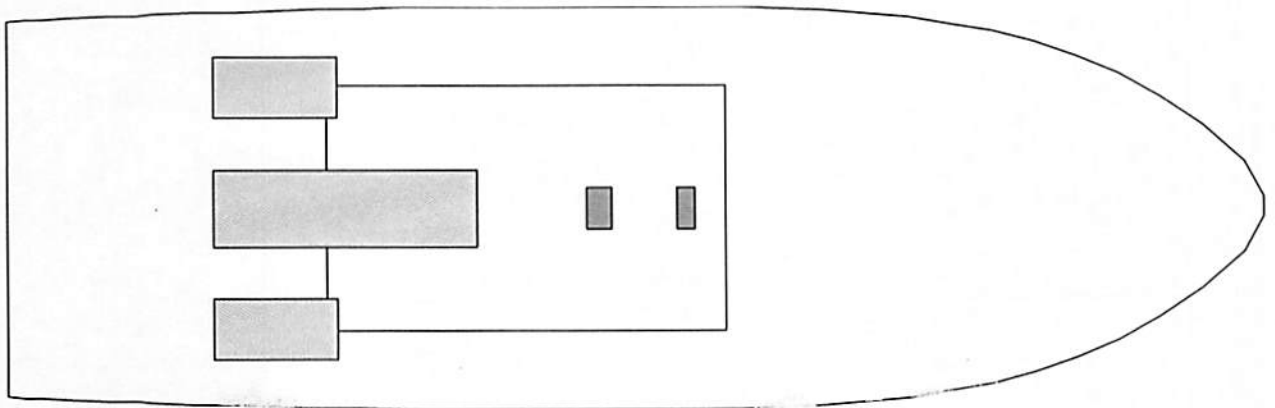
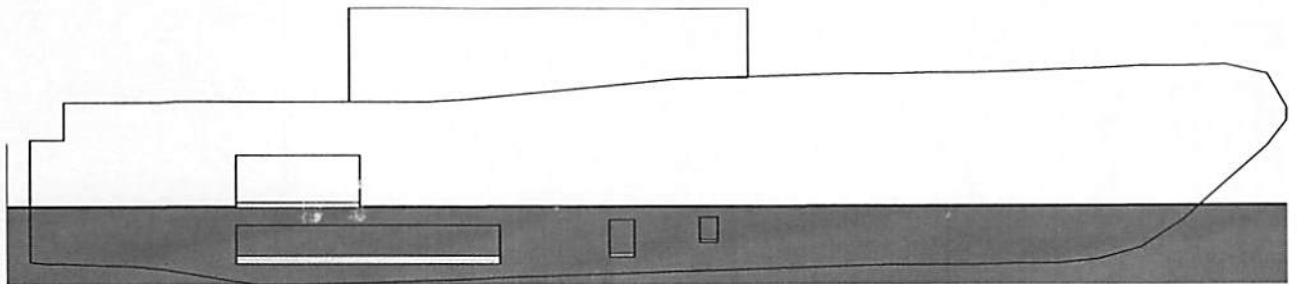
Intakt stabilitet - Sjöfs 2006:1 Bilaga 4, Allmänna stabilitetskriterier.

Floating Status



Draft FP	0.941 m	Heel	zero	GM(Solid)	1.474 m
Draft MS	0.933 m	Equil	Yes	F/S Corr.	0.006 m
Draft AP	0.924 m	Wind	Off	GM(Fluid)	1.468 m
Trim	fwd 0.016/13.000	Wave	No	KMt	3.486 m
LCG	6.115f m	VCG	2.013 m	TPcm	0.52
Displacement	25.23 MT	WaterSpgr	1.025		

Loading Summary

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
Light Ship	23.72	6.122f	0.000	1.920
Deadweight	1.52	6.002f	0.000	3.463
Displacement	25.23	6.115f	0.000	2.013



Fluid Legend

Fluid Name	Legend	Weight (MT)	Load%
DIESEL OIL		.28	10.00%
FRESH WATER		.01	10.00%

Fixed Weight Status

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
LIGHT SHIP	23.72	6.122f	0.000	1.920u
12 PASSAGERARE PÅ HUVUDDÄCK	0.90	6.678f	0.000	3.700u
4 BESÄTTNINGMÄN PÅ FLYBRIDGE	0.30	5.678f	0.000	5.730u
FÖRRÄD	0.02	9.678f	0.000	2.200u
Total Fixed:	24.94	6.140f	0.000	2.030u

Tank Status

DIESEL OIL (SpGr 0.870)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Volume (m³)	FSM (MT-m)
DIESEL.C	10.00%	0.13	4.306f	0.000	0.076	0.1	0.07
DIESEL.P	10.00%	0.08	3.471f	1.445p	0.932	0.1	0.04
DIESEL.S	10.00%	0.08	3.471f	1.445s	0.932	0.1	0.04
Subtotals:	10.00%	0.28	3.856f	0.000	0.537	0.3	0.14

FRESH WATER (SpGr 1.000)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Volume (m³)	FSM (MT-m)
FÄRSKVATTEN.C	10.00%	0.01	7.338f	0.000	0.141	0.0	0.00
SEPTIC.C	<empty>						
Subtotals:	10.00%	0.01	7.650f	0.000	0.212	0.0	0.01

All Tanks

	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Volume (m³)	FSM (MT-m)
Totals:	10.00%	0.30	4.021f	0.000	0.522	0.3	0.15

Displacer Status

Item	Status	Spgr	Displ (MT)	LCB (m)	TCB (m)	VCB (m)	Eff /Perm
HULL.C	Intact	1.025	25.23	6.117f	0.000	0.622	1.000
SubTotals:			25.23	6.117f	0.000	0.622	

Unprotected Flood Points

Name	L,T,V (m)	Height (m)
(1) maskinrumsvent BB	3.578f, 1.500p, 3.180	2.252
(2) maskinrumsvent SB	3.578i, 1.500s, 3.180	2.252
(3) tilluft maskin BB	4.073f, 1.160p, 4.947	4.018
(4) tilluft maskin SB	4.078f, 1.160s, 4.947	4.018

Sjöfs 2006:1, Bilaga 4, Allmänna Stabilitetskriterier.

Righting Arms vs Heel Angle

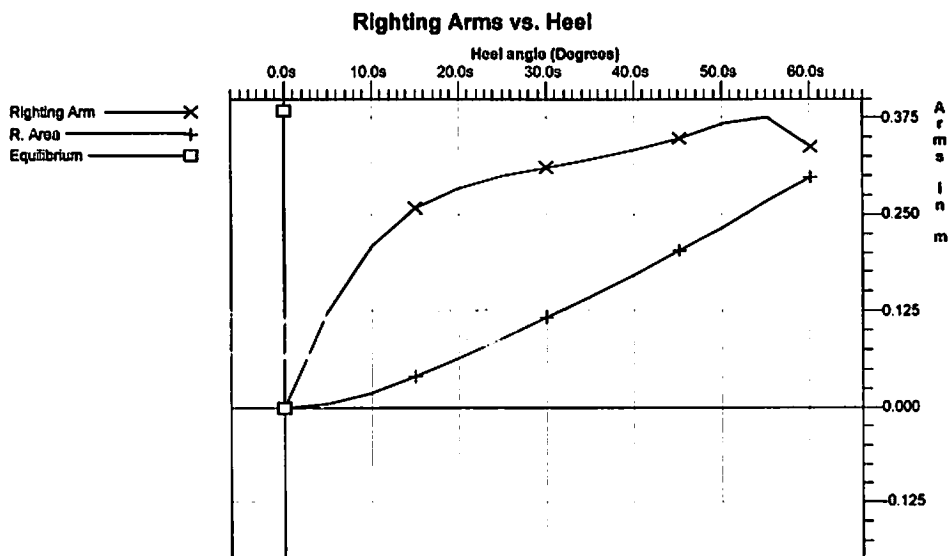
Heel Angle (deg)	Trim Angle (deg)	Origin Depth (m)	Righting Arm (m)	Area (m-Rad)	Flood Pt Height (m)	Notes
0.00	0.07f	0.924	0.000	0.000	2.252 (1)	Equil
5.00s	0.04f	0.919	0.124	0.005	2.115 (2)	
10.00s	0.03f	0.889	0.209	0.020	1.980 (2)	
15.00s	0.10f	0.827	0.260	0.041	1.850 (2)	
20.00s	0.23f	0.738	0.285	0.065	1.723 (2)	
25.00s	0.35f	0.633	0.300	0.091	1.593 (2)	
30.00s	0.44f	0.518	0.312	0.117	1.458 (2)	
35.00s	0.51f	0.393	0.323	0.145	1.319 (2)	
40.00s	0.54f	0.262	0.335	0.174	1.176 (2)	
45.00s	0.55f	0.124	0.350	0.204	1.030 (2)	
50.00s	0.51f	-0.017	0.370	0.235	0.880 (2)	
55.00s	0.35f	-0.147	0.377	0.268	0.720 (2)	
60.00s	0.09f	-0.274	0.340	0.299	0.560 (2)	

Unprotected Flood Points

Name	L,T,V (m)	Height (m)
(1) maskinrumsvent BB	3.578f, 1.500p, 3.180	2.252
(2) maskinrumsvent SB	3.578f, 1.500s, 3.180	2.115

INTAKT STABILITET - SJÖFS 2006 1, BILAGA 4, ALLMÄNNA STABILITETSKRITERIER.

Limit	Min/Max	Actual	Margin	Pass
(1) Area from 0.00 deg to 30.00	>0.0550 m-R	0.117	0.062	Yes
(2) Area from 0.00 deg to 40.00 or Flood	>0.0900 m-R	0.174	0.084	Yes
(3) Area from 30.00 deg to 40.00 or Flood	>0.0300 m-R	0.056	0.026	Yes
(4) Righting Arm at 30.00 deg	>0.200 m	0.312	0.112	Yes
(5) Absolute Angle at MaxRA	>25.00 deg	55.00	30.00	Yes
(6) GM Upright	>0.150 m	1.468	1.318	Yes



NEDISNING

Inverkan av is - Sjöfs 2006:1, Bilaga 9, regel 12, (endast för information).

Hull Data (with appendages)

Baseline Draft: 0.941 at 13.678f, 0.924 at 0.678f

Trim: fwd 0.016/13.000

Heel: zero

DIMENSIONS

Length Overall: 14.955 m LBP: 13.000 m Beam: 4.810 m BWL: 4.470 m

Volume: 24.615 m³ Displacement: 25.230 MT

COEFFICIENTS

Prismatic: 0.844 Block: 0.334 Midship: 0.396 Waterplane: 0.872

RATIOS

Length/Beam: 3.109 Displacement/length: 320.045 Beam/Depth: 3.798

MT/ cm Immersion: 0.519

AREAS

Waterplane: 50.653 m² Wetted Surface: 63.975 m²

Under Water Lateral Plane: 14.215 m² Above Water Lateral Plane: 33.901 m²

CENTROIDS (Meters)

Buoyancy: LCB = 6.117 fwd TCB = 0.000 port VCB = 0.622

Flotation: LCF = 6.159 fwd

Under Water LP: 6.793 fwd of Origin, 0.527 below waterline.

Above Water LP: 7.794 fwd of Origin, 1.256 above waterline.

Note: Coefficients calculated based on length of 13.000 m

Fixed Weight Status

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
LIGHT SHIP	23.72	6.122f	0.000	1.920u
12 PASSAGERARE PÅ HUVUDDÄCK	0.90	6.678f	0.000	3.700u
4 BESÄTTNINGMÄN PÅ FLYBRIDGE	0.30	5.678f	0.000	5.730u
FÖRRÅD	0.02	9.678f	0.000	2.200u
IS PÅ BADBRYGGA	0.13	0.222a	0.000	1.690u
IS PÅ FLY-BRIDGEDÄCK	0.62	6.178f	0.000	4.800u
IS PÅ FRIBORD OCH UNDERDEL HYTT	0.59	7.794f	0.000	2.189u
IS PÅ FÖRDÄCK	0.46	11.678f	0.000	3.090u
IS PÅ NEDRE AKTERDÄCK	0.20	1.038f	0.000	1.960u
IS PÅ SKARNDÄCK	0.24	7.128f	0.000	2.830u
IS PÅ ÖVERDEL HYTT	0.18	6.178f	0.000	5.000u
IS PÅ ÖVRE AKTERDÄCK	0.30	2.978f	0.000	2.590u
Total Fixed:	27.66	6.175f	0.000	2.144u

Displacer Status

Item	Status	Spgr	Displ (MT)	LCB (m)	TCB (m)	VCB (m)	Eff /Perm
HULL.C	Intact	1.025	27.96	6.156f	0.000	0.655	1.000
SubTotals:			27.96	6.156f	0.000	0.655	

Inverkan av is, GZ - kurvan med de Allmänna Stabilitetskriterierna, (endast för information).

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	0.15f	0.967	0.000	0.000	2.203 (1)	Equil
5.00s	0.13f	0.962	0.103	0.005	2.067 (2)	
10.00s	0.10f	0.938	0.182	0.017	1.927 (2)	
15.00s	0.14f	0.882	0.225	0.035	1.793 (2)	
20.00s	0.23f	0.799	0.244	0.056	1.662 (2)	
25.00s	0.31f	0.723	0.250	0.077	1.531 (2)	
30.00s	0.39f	0.612	0.251	0.099	1.395 (2)	
31.19s	0.42f	0.554	0.251	0.105	1.363 (2)	MaxRa
35.00s	0.45f	0.460	0.251	0.121	1.256 (2)	
40.00s	0.47f	0.330	0.251	0.143	1.112 (2)	
45.00s	0.46f	0.194	0.255	0.165	0.965 (2)	
50.00s	0.38f	0.059	0.258	0.188	0.812 (2)	
50.97s	0.35f	0.034	0.259	0.192	0.781 (2)	MaxRa
55.00s	0.19f	-0.064	0.252	0.210	0.647 (2)	
60.00s	0.09a	-0.182	0.213	0.231	0.478 (2)	

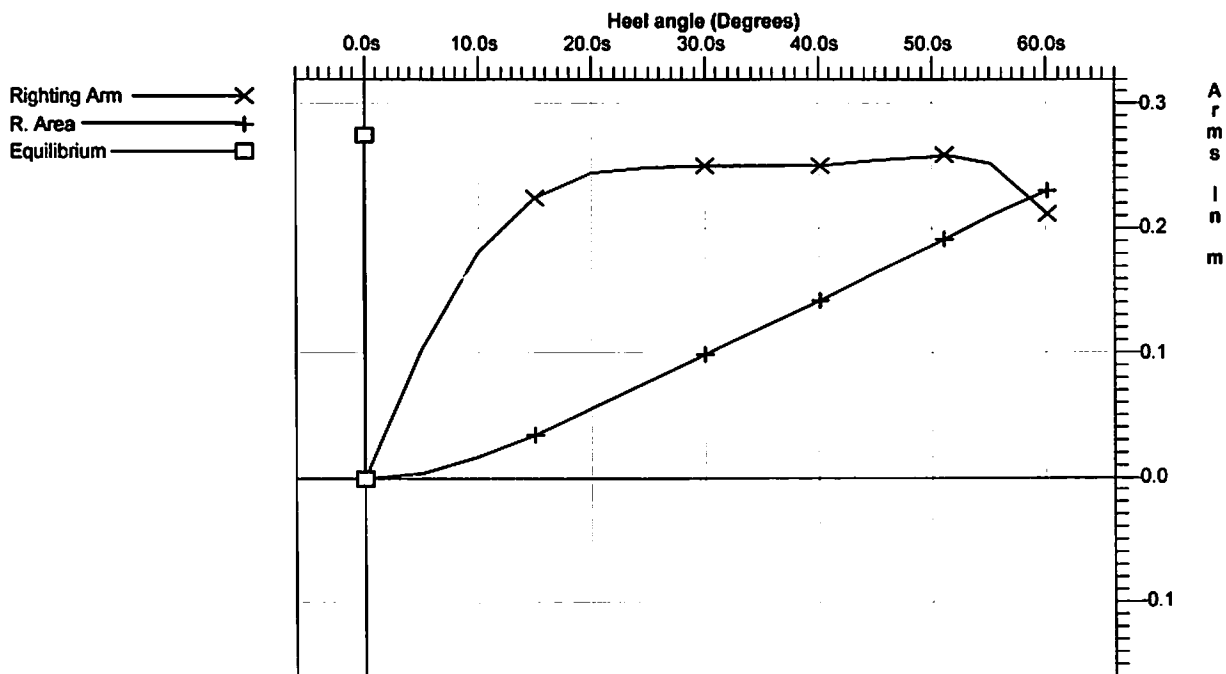
Unprotected Flood Points

Name	L,T,V (m)	Height (m)
(1) maskinrumsvent BB	3.578f, 1.500p, 3.180	2.203
(2) maskinrumsvent SB	3.578f, 1.500s, 3.180	2.067

INVERKAN AV IS - SJÖFS 2006 1, BILAGA 4, ALLMÄNNA STABILITETSKRITERIER, (ENDAST FÖR INFORMATION).

Limit	Min/Max	Actual	Margin	Pass
(1) Area from 0.00 deg to 30.00	>0.0550 m-R	0.099	0.044	Yes
(2) Area from 0.00 deg to 40.00 or Flood	>0.0900 m-R	0.143	0.053	Yes
(3) Area from 30.00 deg to 40.00 or Flood	>0.0300 m-R	0.044	0.014	Yes
(4) Righting Arm at 30.00 deg	>0.200 m	0.251	0.051	Yes
(5) Absolute Angle at MaxRA	>25.00 deg	50.97	25.97	Yes
(6) GM Upright	>0.150 m	1.184	1.034	Yes

Righting Arms vs. Heel



9. EXTRA LASTKONDITIONER – "Odd Fellow"

Odd Fellow

*** Kondition - 6 : 100% (98%) Bunker och förråd + 12 passagerare, FRIBORDSKONDITION ***

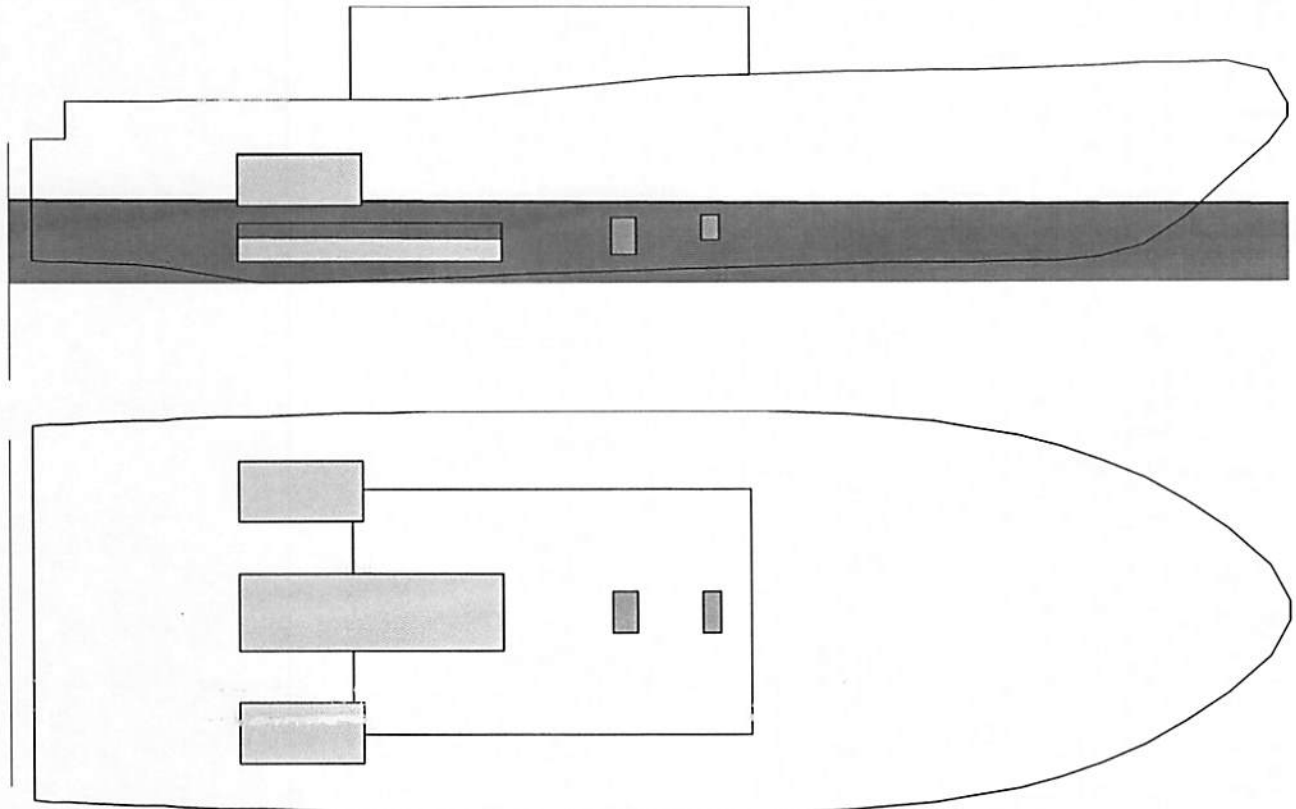
Intakt stabilitet - Sjöfs 2006:1 Bilaga 4, Allmänna stabilitetskriterier.

Floating Status



Draft FP	0.936 m	Heel	zero	GM(Solid)	1.395 m
Draft MS	0.969 m	Equil	Yes	F/S Corr.	0.009 m
Draft AP	1.002 m	Wind	Off	GM(Fluid)	1.385 m
Trim	aft 0.067/13.000	Wave	No	KMt	3.331 m
LCG	5.975f m	VCG	1.937 m	TPcm	0.52
Displacement	27.46 MT	WaterSpgr	1.025		

Loading Summary

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
Light Ship	23.72	6.122f	0.000	1.920
Deadweight	3.75	5.047f	0.000	2.041
Displacement	27.46	5.975f	0.000	1.937



Fluid Legend

Fluid Name	Legend	Weight (MT)	Load%
DIESEL OIL		2.22	78.61%
FRESH WATER		.13	98.00%

Fixed Weight Status

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
LIGHT SHIP	23.72	6.122f	0.000	1.920u
12 PASSAGERARE PÅ HUVUDDÄCK	0.90	6.678f	0.000	3.700u
4 BESÄTTNINGMÄN PÅ FLYBRIDGE	0.30	5.678f	0.000	5.730u
FÖRRÅD	0.20	9.678f	0.000	2.200u
Total Fixed:	25.12	6.165f	0.000	2.032u

Tank Status

DIESEL OIL (SpGr 0.870)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Volume (m ³)	FSM (MT-m)
DIESEL.C (motsv 100% = 830 ltr.)	56.00%	0.73	4.285f	0.000	0.222	0.8	0.17
DIESEL.P	98.00%	0.75	3.467f	1.445p	1.302	0.9	0.04
DIESEL.S	98.00%	0.75	3.467f	1.445s	1.302	0.9	0.04
Subtotals:	78.61%	2.22	3.736f	0.000	0.947	2.6	0.25

FRESH WATER (SpGr 1.000)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Volume (m ³)	FSM (MT-m)
FÄRSKVATTEN.C	98.00%	0.09	7.338f	0.000	0.405	0.1	0.00
SEPTIC.C	98.00%	0.04	8.353f	0.000	0.547	0.0	0.00
Subtotals:	98.00%	0.13	7.650f	0.000	0.449	0.1	0.01

All Tanks

	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Volume (m ³)	FSM (MT-m)
Totals:	79.45%	2.35	3.946f	0.000	0.920	2.7	0.25

Displacer Status

Item	Status	Spgr	Displ (MT)	LCB (m)	TCB (m)	VCB (m)	Eff /Perm
HULL.C	Intact	1.025	27.46	5.969f	0.000	0.649	1.000
SubTotals:			27.46	5.969f	0.000	0.649	

Unprotected Flood Points

Name	L,T,V (m)	Height (m)
(1) maskinrumsvent BB	3.578f, 1.500p, 3.180	2.193
(2) maskinrumsvent SB	3.578f, 1.500s, 3.180	2.193
(3) tilluft maskin BB	4.078f, 1.160p, 4.947	3.962
(4) tilluft maskin SB	4.078f, 1.160s, 4.947	3.962

Sjöfs 2006:1, Bilaga 4, Allmänna Stabilitetskriterier.

Righting Arms vs Heel Angle

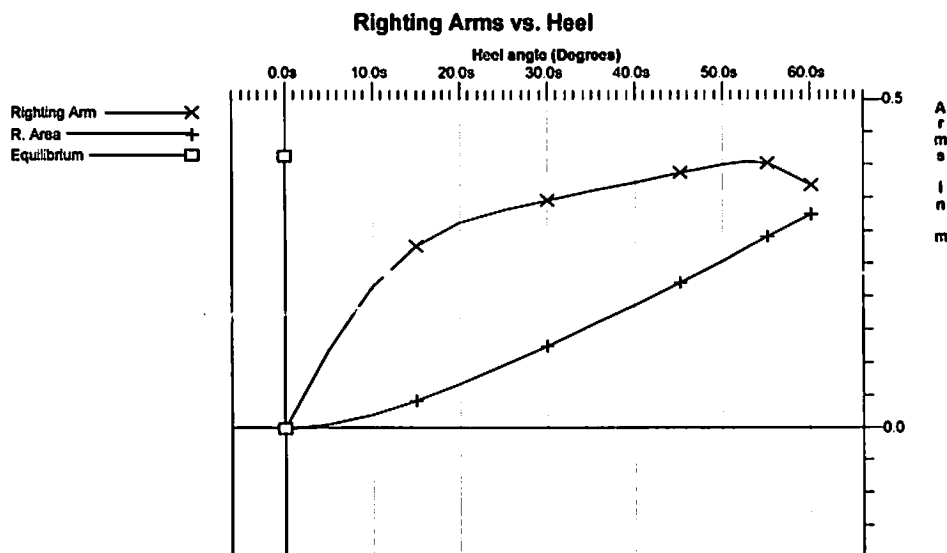
Heel Angle (deg)	Trim Angle (deg)	Origin Depth (m)	Righting Arm (m)	Area (m-Rad)	Flood Pt Height (m)	Notes
0.00	0.29a	1.006	0.000	0.000	2.193 (1)	Equil
5.00s	0.32a	1.001	0.120	0.005	2.056 (2)	
10.00s	0.37a	0.979	0.217	0.020	1.915 (2)	
15.00s	0.34a	0.924	0.276	0.042	1.781 (2)	
20.00s	0.27a	0.844	0.313	0.068	1.648 (2)	
25.00s	0.16a	0.742	0.332	0.096	1.516 (2)	
30.00s	0.08a	0.628	0.347	0.126	1.381 (2)	
35.00s	0.02a	0.505	0.360	0.157	1.241 (2)	
40.00s	0.00a	0.375	0.374	0.189	1.097 (2)	
45.00s	0.01a	0.239	0.389	0.222	0.950 (2)	
50.00s	0.10a	0.106	0.402	0.256	0.795 (2)	
52.70s	0.19a	0.039	0.406	0.276	0.707 (2)	MaxRa
55.00s	0.32a	-0.014	0.403	0.292	0.629 (2)	
60.00s	0.67a	-0.125	0.369	0.326	0.457 (2)	

Unprotected Flood Points

Name	L,T,V (m)	Height (m)
(1) maskinrumsvent BB	3.578f, 1.500p, 3.180	2.193
(2) maskinrumsvent SB	3.578f, 1.500s, 3.180	2.056

INTAKT STABILITET - SJÖFS 2006 1, BILAGA 4, ALLMÄNNA STABILITETSKRITERIER.

Limit	Min/Max	Actual	Margin	Pass
(1) Area from 0.00 deg to 30.00	>0.0550 m-R	0.126	0.071	Yes
(2) Area from 0.00 deg to 40.00 or Flood	>0.0900 m-R	0.189	0.099	Yes
(3) Area from 30.00 deg to 40.00 or Flood	>0.0300 m-R	0.063	0.033	Yes
(4) Righting Arm at 30.00 deg	>0.200 m	0.347	0.147	Yes
(5) Absolute Angle at MaxRA	>25.00 deg	52.70	27.70	Yes
(6) GM Upright	>0.150 m	1.385	1.235	Yes



NEDISNING

Inverkan av is - Sjöfs 2006:1, Bilaga 9, regel 12, (endast för information).

Hull Data (with appendages)

Baseline Draft: 0.936 at 13.678f, 1.002 at 0.678f

Trim: aft 0.067/13.000

Heel: zero

DIMENSIONS

Length Overall: 14.955 m LBP: 13.000 m Beam: 4.810 m BWL: 4.502 m

Volume: 26.792 m³ Displacement: 27.462 MT

COEFFICIENTS

Prismatic: 0.794 Block: 0.344 Midship: 0.433 Waterplane: 0.871

RATIOS

Length/Beam: 3.109 Displacement/length: 348.359 Beam/Depth: 3.618

MT/ cm Immersion: 0.522

AREAS

Waterplane: 50.957 m² Wetted Surface: 65.400 m²

Under Water Lateral Plane: 14.715 m² Above Water Lateral Plane: 33.401 m²

CENTROIDS (Meters)

Buoyancy: LCB = 5.969 fwd TCB = 0.000 port VCB = 0.649

Flotation: LCF = 6.155 fwd

Under Water LP: 6.708 fwd of Origin, 0.547 below waterline.

Above Water LP: 7.831 fwd of Origin, 1.242 above waterline.

Note: Coefficients calculated based on length of 13.000 m

Fixed Weight Status

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
LIGHT SHIP	23.72	6.122f	0.000	1.920u
12 PASSAGERARE PÅ HUVUDDÄCK	0.90	6.678f	0.000	3.700u
4 BESÄTTNINGMÄN PÅ FLYBRIDGE	0.30	5.678f	0.000	5.730u
FÖRRÅD	0.20	9.678f	0.000	2.200u
IS PÅ BADBRYGGA	0.13	0.222a	0.000	1.690u
IS PÅ FLY-BRIDGEDÄCK	0.62	6.178f	0.000	4.800u
IS PÅ FRIBORD OCH UNDERDEL HYTT	0.58	7.840f	0.000	2.217u
IS PÅ FÖRDÄCK	0.46	11.678f	0.000	3.090u
IS PÅ NEDRE AKTERDÄCK	0.20	1.038f	0.000	1.960u
IS PÅ SKARNDÄCK	0.24	7.128f	0.000	2.830u
IS PÅ ÖVERDEL HYTT	0.18	6.178f	0.000	5.000u
IS PÅ ÖVRE AKTERDÄCK	0.30	2.978f	0.000	2.590u
Total Fixed:	27.83	6.198f	0.000	2.145u

Displacer Status

Item	Status	Spgr	Displ (MT)	LCB (m)	TCB (m)	VCB (m)	Eff /Perm
HULL.C	Intact	1.025	30.18	6.018f	0.000	0.681	1.000
SubTotals:			30.18	6.018f	0.000	0.681	

Inverkan av is, GZ - kurvan med de Allmänna Stabilitetskriterierna, (endast för information).

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	0.22a	1.049	0.000	0.000	2.145 (1)	Equil
5.00s	0.23a	1.044	0.100	0.004	2.008 (2)	
10.00s	0.29a	1.025	0.187	0.017	1.864 (2)	
15.00s	0.29a	0.976	0.240	0.036	1.726 (2)	
20.00s	0.26a	0.902	0.270	0.058	1.589 (2)	
25.00s	0.17a	0.803	0.282	0.083	1.456 (2)	
30.00s	0.11a	0.691	0.287	0.107	1.319 (2)	
35.00s	0.07a	0.571	0.289	0.133	1.178 (2)	
40.00s	0.07a	0.443	0.292	0.158	1.033 (2)	
45.00s	0.11a	0.310	0.296	0.134	0.884 (2)	
50.00s	0.24a	0.184	0.293	0.209	0.726 (2)	
55.00s	0.46a	0.067	0.280	0.234	0.557 (2)	
60.00s	0.81a	-0.037	0.242	0.257	0.379 (2)	

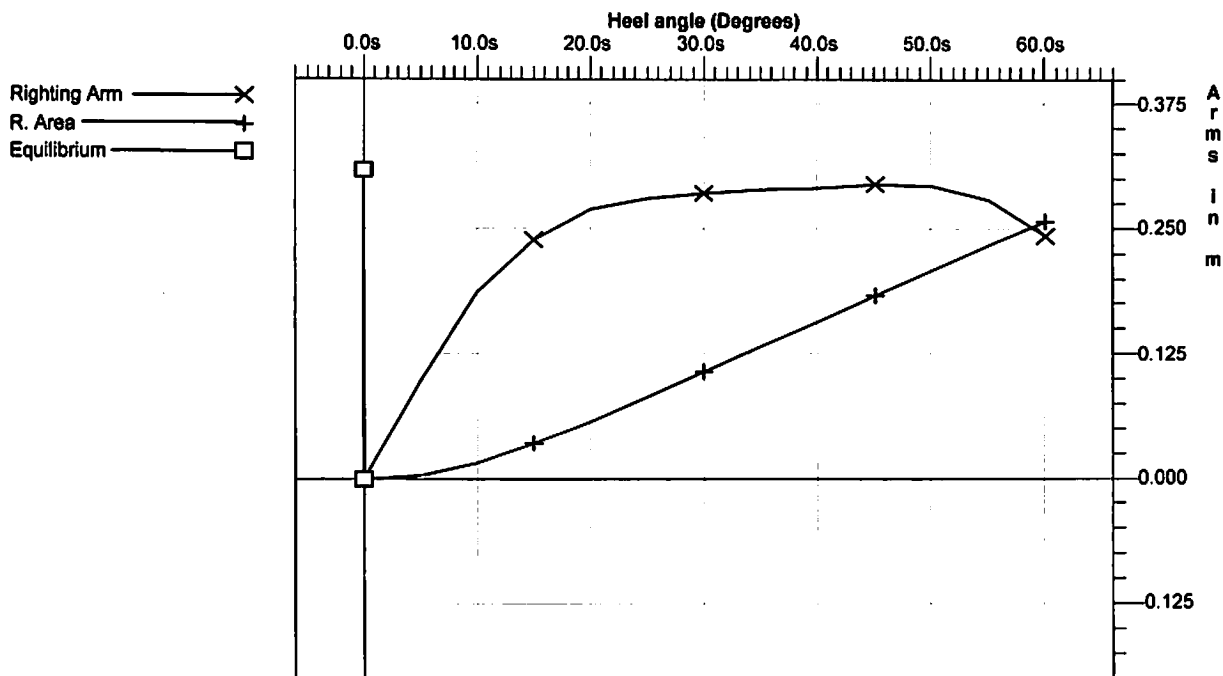
Unprotected Flood Points

Name	L,T,V (m)	Height (m)
(1) maskinrumsvent BB	3.578f, 1.500p, 3.180	2.145
(2) maskinrumsvent SB	3.578f, 1.500s, 3.180	2.008

INVERKAN AV IS - SJÖFS 2006 1, BILAGA 4, ALLMÄNNA STABILITETSKRITERIER, (ENDAST FÖR INFORMATION).

Limit	Min/Max	Actual	Margin	Pass
(1) Area from 0.00 deg to 30.00	>0.0550 m-R	0.107	0.052	Yes
(2) Area from 0.00 deg to 40.00 or Flood	>0.0900 m-R	0.158	0.068	Yes
(3) Area from 30.00 deg to 40.00 or Flood	>0.0300 m-R	0.051	0.021	Yes
(4) Righting Arm at 30.00 deg	>0.200 m	0.287	0.087	Yes
(5) Absolute Angle at MaxRA	>25.00 deg	45.00	20.00	Yes
(6) GM Upright	>0.150 m	1.134	0.984	Yes

Righting Arms vs. Heel



Odd Fellow

*** Kondition - 7 : 10% Bunker och förråd + 12 passagerare ***

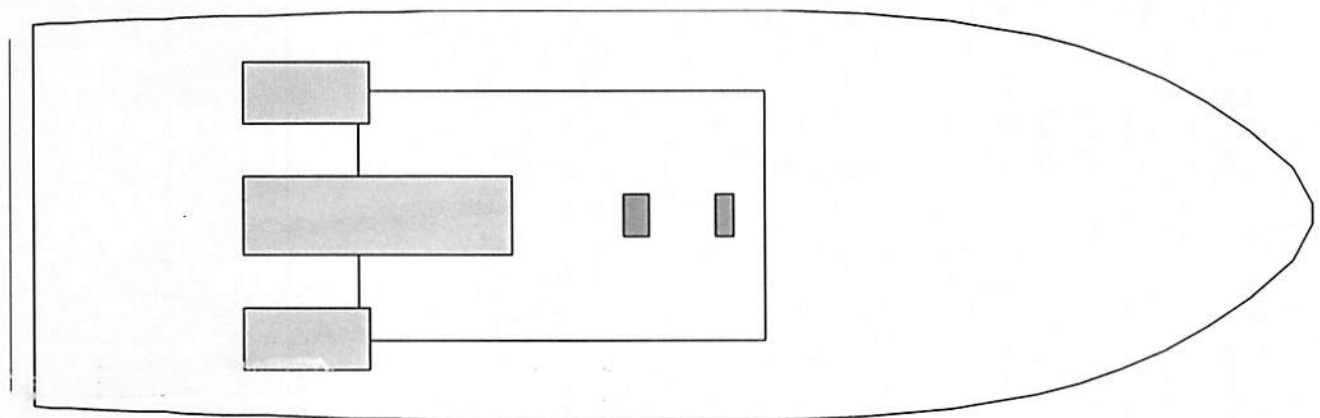
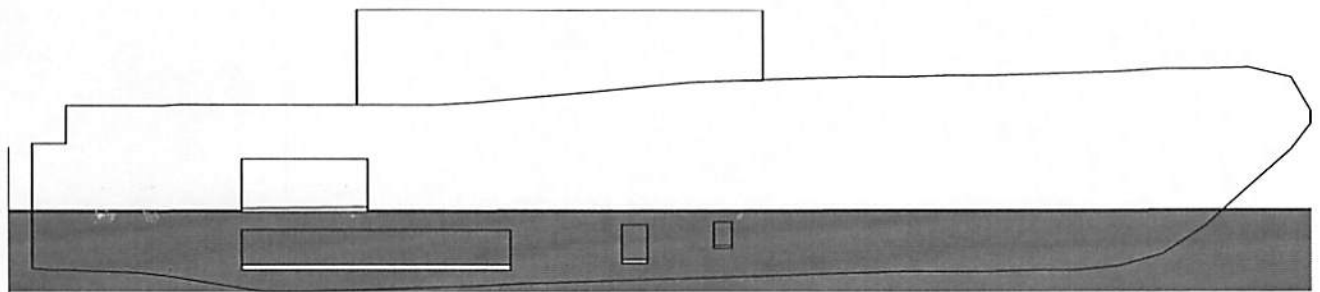
Intakt stabilitet - Sjöfs 2006:1 Bilaga 4, Allmänna stabilitetskriterier.

Floating Status



Draft FP	0.941 m	Heel	zero	GM(Solid)	1.474 m
Draft MS	0.932 m	Equil	Yes	F/S Corr.	0.004 m
Draft AP	0.922 m	Wind	Off	GM(Fluid)	1.469 m
Trim	fwd 0.018/13.000	Wave	No	KMt	3.491 m
LCG	6.119f m	VCG	2.017 m	TPcm	0.52
Displacement	25.17 MT	WaterSpgr	1.025		

Loading Summary

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
Light Ship	23.72	6.122f	0.000	1.920
Deadweight	1.46	6.069f	0.000	3.595
Displacement	25.17	6.119f	0.000	2.017



Fluid Legend

Fluid Name	Legend	Weight (MT)	Load%
DIESEL OIL		.23	7.97%
FRESH WATER		.01	10.00%

Fixed Weight Status

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
LIGHT SHIP	23.72	6.122f	0.000	1.920u
12 PASSAGERARE PÅ HUVUDDÄCK	0.90	6.678f	0.000	3.700u
4 BESÄTTNINGMÄN PÅ FLYBRIDGE	0.30	5.678f	0.000	5.730u
FÖRRÄD	0.02	9.678f	0.000	2.200u
Total Fixed:	24.94	6.140f	0.000	2.030u

Tank Status

DIESEL OIL (SpGr 0.870)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Volume (m ³)	FSM (MT-m)
DIESEL.C (motsv 10% = 83 ltr.)	5.60%	0.07	4.317f	0.000	0.052	0.1	0.03
DIESEL.P	10.00%	0.08	3.471f	1.445p	0.932	0.1	0.04
DIESEL.S	10.00%	0.08	3.471f	1.445s	0.932	0.1	0.04
Subtotals:	7.97%	0.23	3.746f	0.000	0.646	0.3	0.10

FRESH WATER (SpGr 1.000)

Tank Name	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Volume (m ³)	FSM (MT-m)
FÄRSKVATTEN.C	10.00%	0.01	7.338f	0.000	0.141	0.0	0.00
SEPTIC.C	<empty>						
Subtotals:	10.00%	0.01	7.650f	0.000	0.212	0.0	0.01

All Tanks

	Load (%)	Weight (MT)	LCG (m)	TCG (m)	VCG (m)	Volume (m ³)	FSM (MT-m)
Totals:	8.06%	0.24	3.957f	0.000	0.623	0.3	0.11

Displacer Status

Item	Status	Spgr	Displ (MT)	LCB (m)	TCB (m)	VCB (m)	Eff /Perm
HULL.C	Intact	1.025	25.17	6.121f	0.000	0.621	1.000
SubTotals:			25.17	6.121f	0.000	0.621	

Unprotected Flood Points

Name	L,T,V (m)	Height (m)
(1) maskinrumsvent BB	3.578f, 1.500p, 3.180	2.254
(2) maskinrumsvent SB	3.578f, 1.500s, 3.180	2.254
(3) tilluft maskin BB	4.078f, 1.160p, 4.947	4.020
(4) tilluft maskin SB	4.078f, 1.160s, 4.947	4.020

Sjöfs 2006:1, Bilaga 4, Allmänna Stabilitetskriterier.

Righting Arms vs Heel Angle

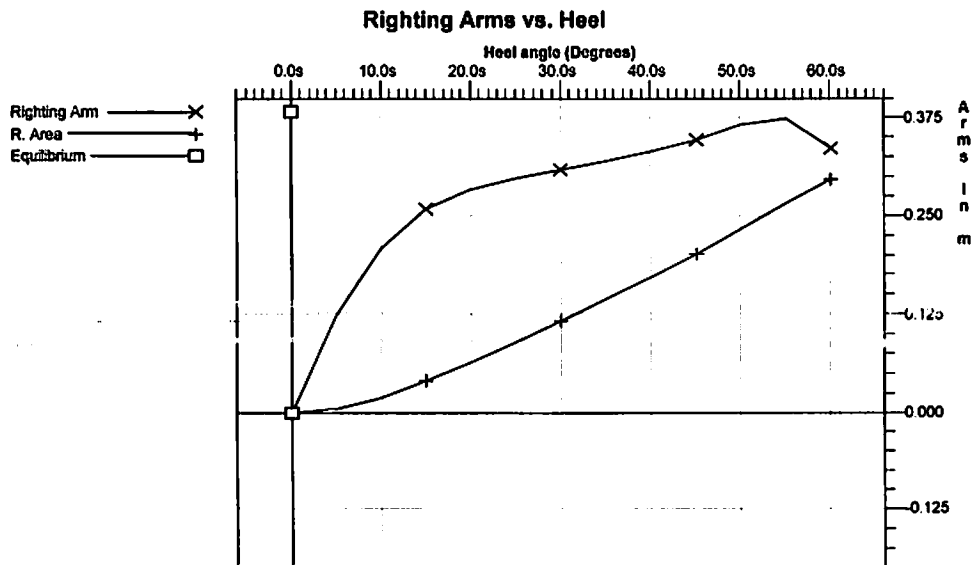
Heel Angle (deg)	Trim Angle (deg)	Origin Depth (m)	Righting Arm (m)	Area (m-Rad)	Flood Pt Height (m)	Notes
0.00	0.08f	0.921	0.000	0.000	2.254 (1)	Equil
5.00s	0.05f	0.917	0.124	0.005	2.117 (2)	
10.00s	0.04f	0.887	0.209	0.020	1.982 (2)	
15.00s	0.11f	0.825	0.259	0.041	1.852 (2)	
20.00s	0.24f	0.735	0.284	0.065	1.725 (2)	
25.00s	0.36f	0.630	0.299	0.090	1.595 (2)	
30.00s	0.45f	0.515	0.310	0.117	1.460 (2)	
35.00s	0.52f	0.391	0.321	0.144	1.321 (2)	
40.00s	0.56f	0.259	0.333	0.173	1.178 (2)	
45.00s	0.56f	0.121	0.348	0.203	1.032 (2)	
50.00s	0.52f	-0.020	0.367	0.234	0.882 (2)	
55.00s	0.37f	-0.151	0.375	0.266	0.723 (2)	
60.00s	0.11f	-0.278	0.337	0.298	0.562 (2)	

Unprotected Flood Points

Name	L,T,V (m)	Height (m)
(1) maskinrumsvent BB	3.578f, 1.500p, 3.180	2.254
(2) maskinrumsvent SB	3.578f, 1.500s, 3.180	2.117

INTAKT STABILITET - SJÖFS 2006 1, BILAGA 4, ALLMÄNNA STABILITETSKRITERIER.

Limit	Min/Max	Actual	Margin	Pass
(1) Area from 0.00 deg to 30.00	>0.0550 m-R	0.117	0.062	Yes
(2) Area from 0.00 deg to 40.00 or Flood	>0.0900 m-R	0.173	0.083	Yes
(3) Area from 30.00 deg to 40.00 or Flood	>0.0300 m-R	0.056	0.026	Yes
(4) Righting Arm at 30.00 deg	>0.200 m	0.310	0.110	Yes
(5) Absolute Angle at MaxRA	>25.00 deg	55.00	30.00	Yes
(6) GM Upright	>0.150 m	1.469	1.319	Yes



NEDISNING

Inverkan av Is - Sjöfs 2006:1, Bilaga 9, regel 12, (endast för information).

Hull Data (with appendages)

Baseline Draft: 0.941 at 13.678f, 0.922 at 0.678f

Trim: fwd 0.018/13.000

Heel: zero

DIMENSIONS

Length Overall: 14.955 m LBP: 13.000 m Beam: 4.810 m BWL: 4.469 m

Volume: 24.559 m³ Displacement: 25.173 MT

COEFFICIENTS

Prismatic: 0.845 Block: 0.334 Midship: 0.395 Waterplane: 0.872

RATIOS

Length/Beam: 3.109 Displacement/length: 319.319 Beam/Depth: 3.803

MT/ cm Immersion: 0.519

AREAS

Waterplane: 50.644 m² Wetted Surface: 63.937 m²

Under Water Lateral Plane: 14.203 m² Above Water Lateral Plane: 33.913 m²

CENTROIDS (Meters)

Buoyancy: LCB = 6.121 fwd TCB = 0.000 port VCB = 0.621

Flotation: LCF = 6.159 fwd

Under Water LP: 6.796 fwd of Origin, 0.526 below waterline.

Above Water LP: 7.793 fwd of Origin, 1.256 above waterline.

Note: Coefficients calculated based on length of 13.000 m

Fixed Weight Status

Item	Weight (MT)	LCG (m)	TCG (m)	VCG (m)
LIGHT SHIP	23.72	6.122f	0.000	1.920u
12 PASSAGERARE PÅ HUVUDDÄCK	0.90	6.678f	0.000	3.700u
4 BESÄTTNINGMÅN PÅ FLYBRIDGE	0.30	5.678f	0.000	5.730u
FÖRRÅD	0.02	9.678f	0.000	2.200u
IS PÅ BADBRYGGA	0.13	0.222a	0.000	1.690u
IS PÅ FLY-BRIDGEDÄCK	0.62	6.178f	0.000	4.800u
IS PÅ FRIBORD OCH UNDERDEL HYTT	0.59	7.794f	0.000	2.189u
IS PÅ FÖRDÄCK	0.46	11.678f	0.000	3.090u
IS PÅ NEDRE AKTERDÄCK	0.20	1.038f	0.000	1.960u
IS PÅ SKARNDÄCK	0.24	7.128f	0.000	2.830u
IS PÅ ÖVERDEL HYTT	0.18	6.178f	0.000	5.000u
IS PÅ ÖVRE AKTERDÄCK	0.30	2.978f	0.000	2.590u
Total Fixed:	27.66	6.175f	0.000	2.144u

Displacer Status

Item	Status	Spgr	Displ (MT)	LCB (m)	TCB (m)	VCB (m)	Eff /Perm
HULL.C	Intact	1.025	27.90	6.160f	0.000	0.654	1.000
SubTotals:			27.90	6.160f	0.000	0.654	

Inverkan av is, GZ - kurvan med de Allmänna Stabilitetskriterierna, (endast för information).

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	0.16f	0.965	0.000	0.000	2.205 (1)	Equil
5.00s	0.14f	0.960	0.103	0.005	2.068 (2)	
10.00s	0.11f	0.936	0.182	0.017	1.928 (2)	
15.00s	0.15f	0.879	0.224	0.035	1.795 (2)	
20.00s	0.24f	0.796	0.243	0.056	1.664 (2)	
25.00s	0.32f	0.721	0.248	0.077	1.533 (2)	
30.00s	0.40f	0.610	0.249	0.099	1.397 (2)	
35.00s	0.47f	0.457	0.249	0.121	1.256 (2)	
40.00s	0.49f	0.327	0.249	0.142	1.114 (2)	
45.00s	0.47f	0.191	0.253	0.164	0.967 (2)	
50.00s	0.39f	0.056	0.256	0.187	0.815 (2)	
51.03s	0.36f	0.029	0.257	0.191	0.782 (2)	MaxRa
55.00s	0.21f	-0.068	0.250	0.209	0.650 (2)	
60.00s	0.07a	-0.186	0.211	0.229	0.481 (2)	

Unprotected Flood Points

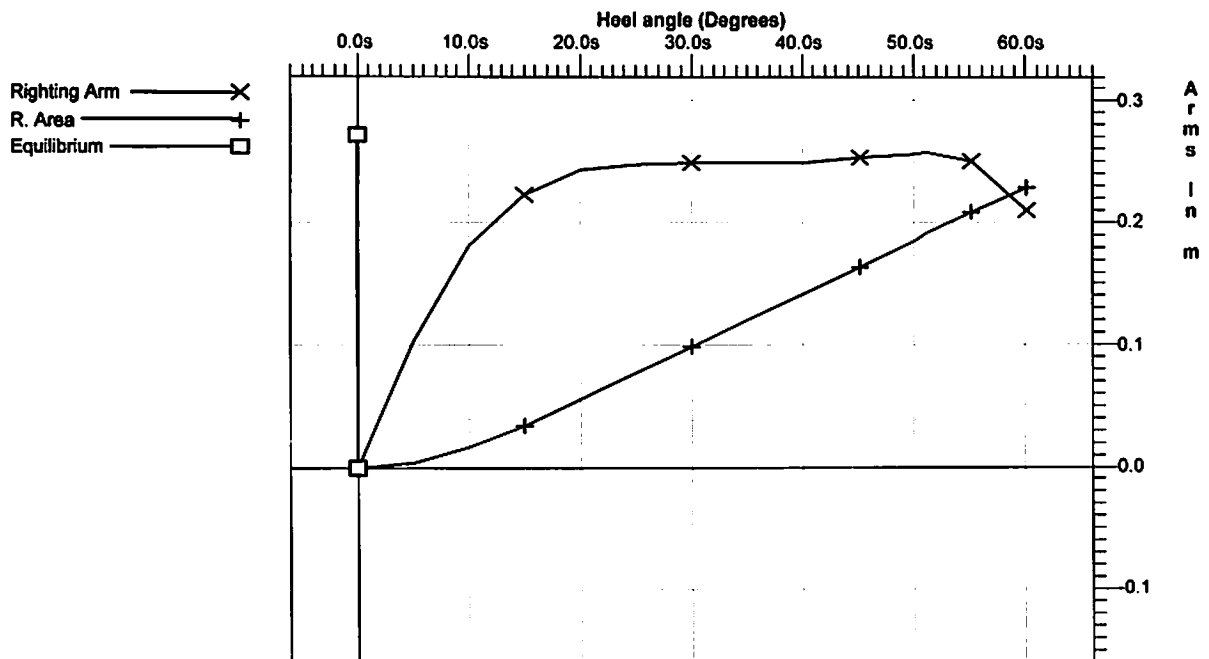
Name	L,T,V (m)	Height (m)
(1) maskinrumsvent BB	3.578f, 1.500p, 3.180	2.205

(2) maskinrumsvent SB	3.578f, 1.500s, 3.180	2.068
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INVERKAN AV IS - SJÖFS 2006 1, BILAGA 4, ALLMÄNNA STABILITETSKRITERIER, (ENDAST FÖR INFORMATION).

Limit	Min/Max	Actual	Margin	Pass
(1) Area from 0.00 deg to 30.00	>0.0550 m-R	0.099	0.044	Yes
(2) Area from 0.00 deg to 40.00 or Flood	>0.0900 m-R	0.142	0.052	Yes
(3) Area from 30.00 deg to 40.00 or Flood	>0.0300 m-R	0.043	0.013	Yes
(4) Righting Arm at 30.00 deg	>0.200 m	0.249	0.049	Yes
(5) Absolute Angle at MaxRA	>25.00 deg	51.03	26.03	Yes
(6) GM Upright	>0.150 m	1.184	1.034	Yes

Righting Arms vs. Heel



10. HYDROSTATISKA DATA

Hydrostatic Properties

Draft is from Baseline.

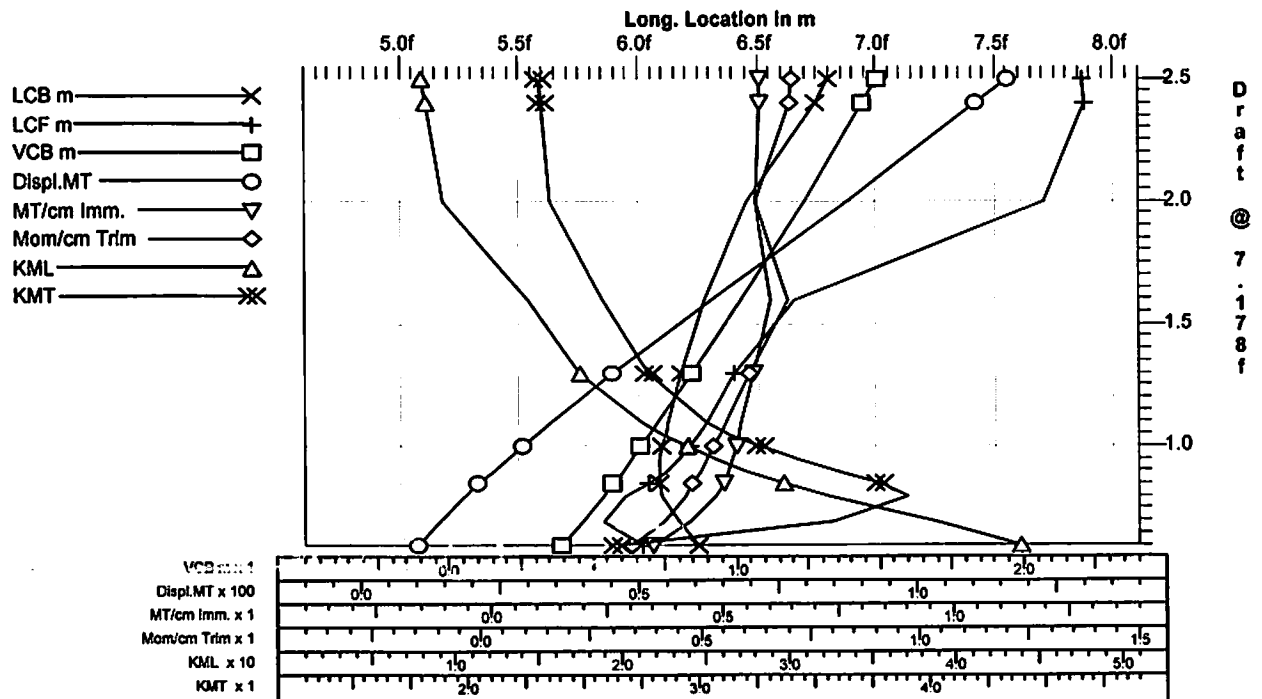
No Trim, No heel, VCG = 0.000

Draft at 7.178f (m)	Displ (MT)	LCB (m)	VCB (m)	LCF (m)	TPcm (MT/cm)	MTcm (MT-m/cm)	KML (m)	KMT (m)
0.600	10.117	6.252f	0.391	6.015f	0.350	0.342	43.941	2.642
0.700	13.997	6.165f	0.463	5.848f	0.428	0.418	38.829	3.576
0.800	18.604	6.093f	0.535	5.946f	0.486	0.464	32.396	3.898
0.850	21.076	6.081f	0.569	6.039f	0.502	0.482	29.707	3.781
0.900	23.617	6.081f	0.602	6.115f	0.513	0.500	27.521	3.601
0.950	26.205	6.087f	0.634	6.167f	0.521	0.516	25.603	3.417
1.000	28.830	6.097f	0.665	6.210f	0.528	0.531	23.936	3.264
1.050	31.489	6.108f	0.695	6.243f	0.535	0.544	22.452	3.137
1.100	34.181	6.121f	0.725	6.283f	0.542	0.559	21.255	3.035
1.300	45.275	6.177f	0.842	6.405f	0.567	0.610	17.523	2.778
1.600	62.858	6.274f	1.013	6.653f	0.603	0.698	14.439	2.585
2.000	87.447	6.454f	1.234	7.702f	0.573	0.625	9.296	2.354
2.400	110.696	6.742f	1.438	7.877f	0.582	0.702	8.244	2.318
2.500	116.504	6.799f	1.488	7.869f	0.579	0.708	7.903	2.314

Water Specific Gravity = 1.025.

Trim is per 13.00m

Hydrostatic Properties at zero, Heel = 0.00



Hydrostatic Properties

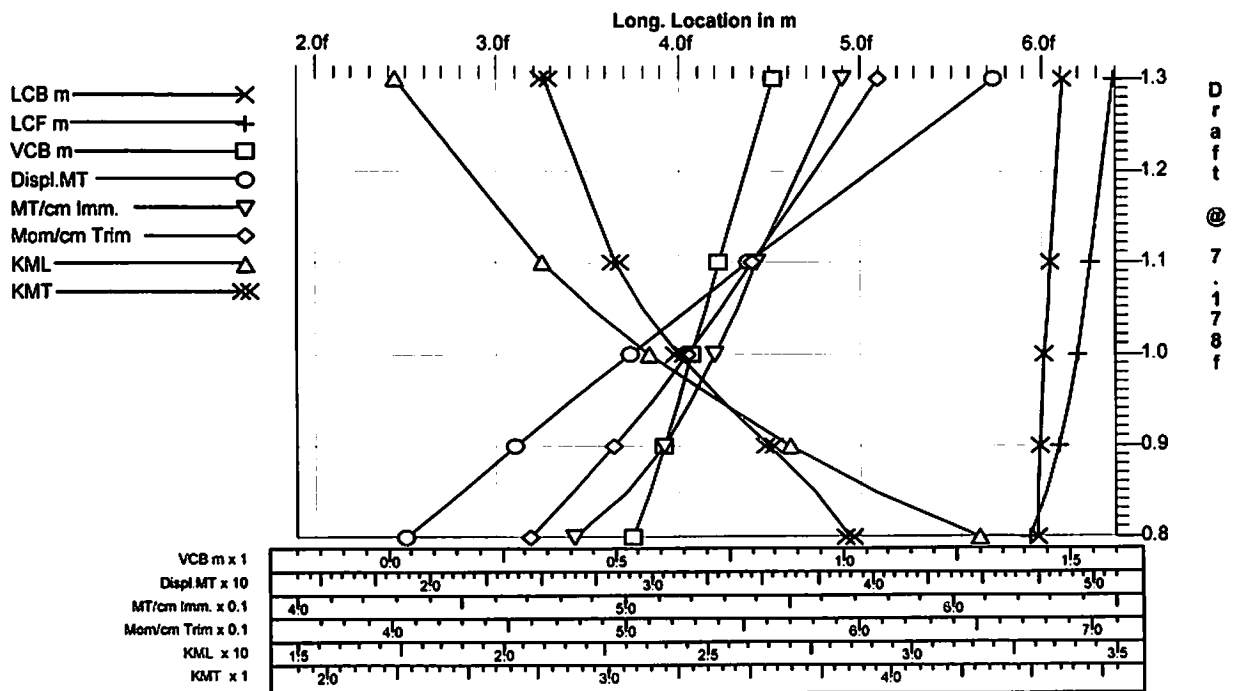
Draft is from Baseline.

Trim: aft 0.050/13.000, No heel, VCG = 0.000

Draft at 7.178f (m)	Displ (MT)	LCB (m)	VCB (m)	LCF (m)	TPcm (MT/cm)	MTcm (MT-m/cm)	KML (m)	KMT (m)
0.800	18.837	5.971f	0.538	5.921f	0.484	0.459	31.659	3.851
0.850	21.299	5.970f	0.572	6.013f	0.500	0.477	29.122	3.736
0.900	23.830	5.979f	0.605	6.089f	0.512	0.496	27.032	3.569
0.950	26.410	5.993f	0.636	6.146f	0.520	0.512	25.217	3.398
1.000	29.029	6.009f	0.667	6.188f	0.527	0.527	23.586	3.248
1.050	31.683	6.026f	0.698	6.229f	0.534	0.541	22.211	3.126
1.100	34.370	6.043f	0.727	6.261f	0.540	0.554	20.966	3.024
1.300	45.444	6.113f	0.844	6.390f	0.566	0.608	17.390	2.772

Water Specific Gravity = 1.025.
Trim is per 13.00m

Hydrostatic Properties at aft 0.050/13.000, Heel = 0.00



Hydrostatic Properties

Draft is from Baseline.

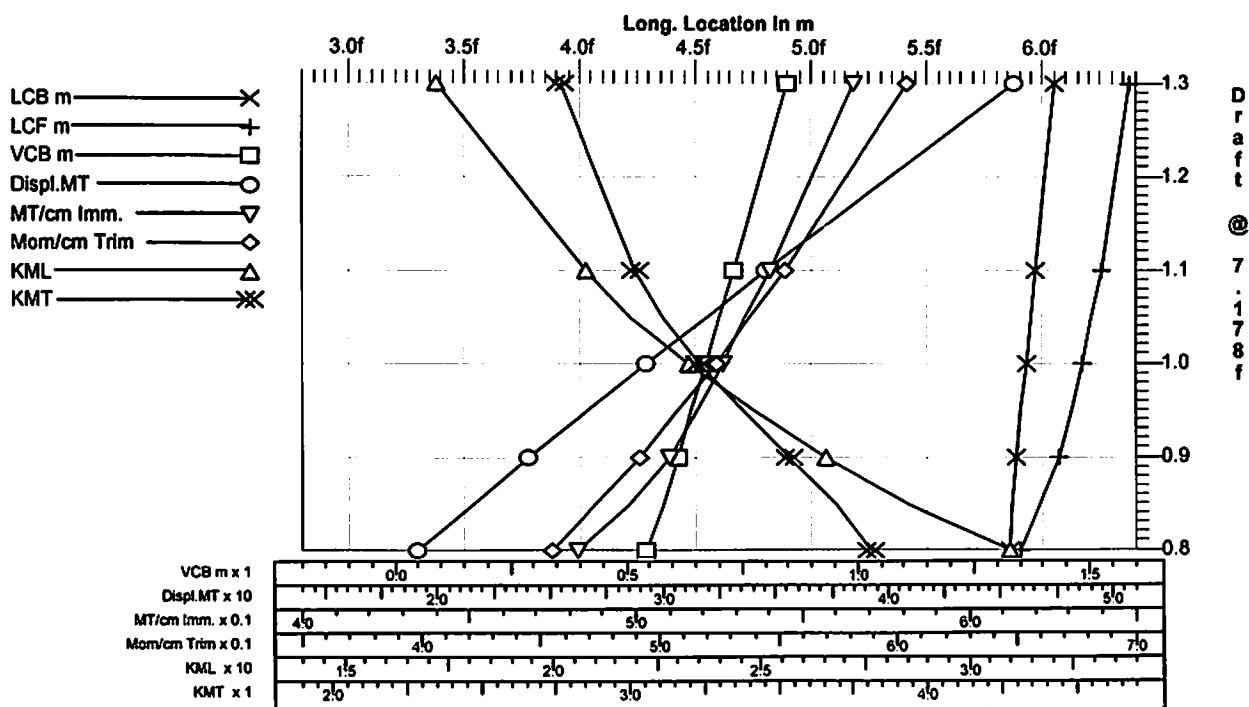
Trim: aft 0.100/13.000, No heel, VCG = 0.000

Draft at 7.178f (m)	Displ (MT)	LCB (m)	VCB (m)	LCF (m)	TPcm (MT/cm)	MTcm (MT-m/cm)	KML (m)	KMT (m)
0.800	19.073	5.853f	0.542	5.896f	0.482	0.454	30.950	3.807
0.850	21.525	5.863f	0.576	5.986f	0.498	0.473	28.545	3.693
0.900	24.047	5.880f	0.608	6.063f	0.510	0.491	26.544	3.537
0.950	26.619	5.901f	0.639	6.122f	0.519	0.508	24.800	3.375
1.000	29.232	5.923f	0.670	6.171f	0.526	0.524	23.284	3.235
1.050	31.880	5.945f	0.700	6.206f	0.533	0.537	21.891	3.113
1.100	34.562	5.967f	0.730	6.248f	0.540	0.552	20.770	3.016
1.300	45.616	6.051f	0.846	6.370f	0.565	0.604	17.212	2.766

Water Specific Gravity = 1.025.

Trim is per 13.00m

Hydrostatic Properties at aft 0.100/13.000, Heel = 0.00



Hydrostatic Properties

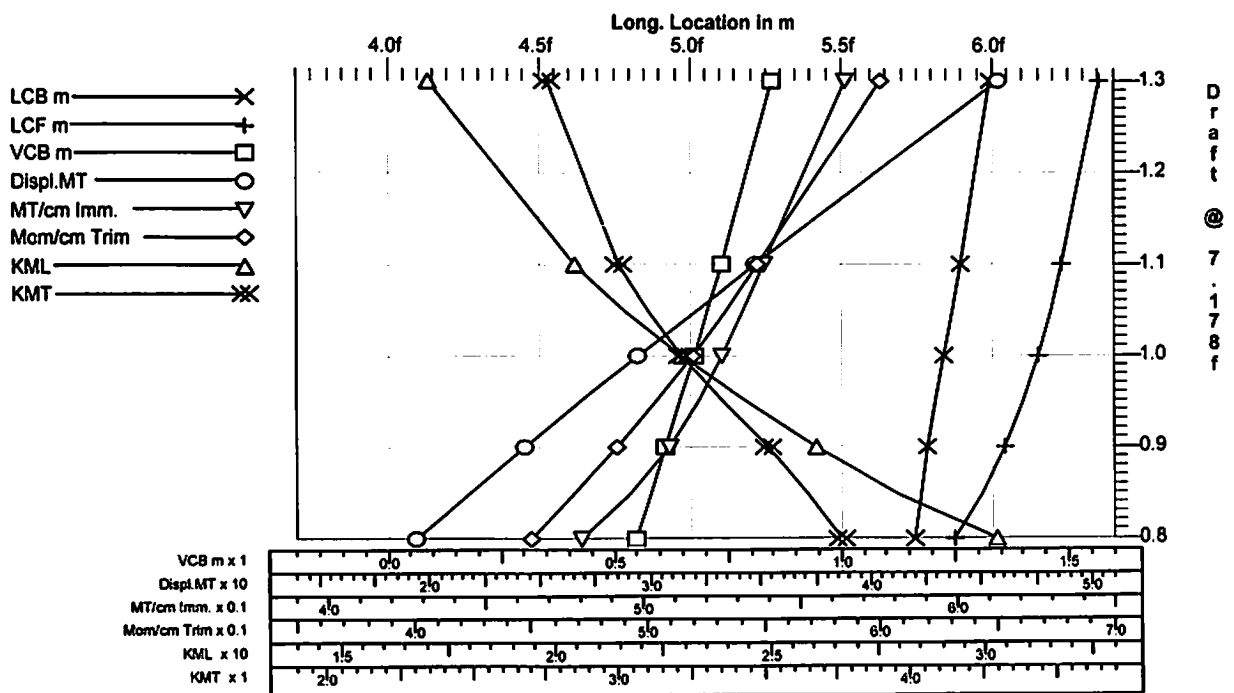
Draft is from Baseline.

Trim: aft 0.150/13.000, No heel, VCG = 0.000

Draft at 7.178f (m)	Displ (MT)	LCB (m)	VCB (m)	LCF (m)	TPcm (MT/cm)	MTcm (MT-m/cm)	KML (m)	KMT (m)
0.800	19.314	5.738f	0.547	5.870f	0.480	0.450	30.258	3.764
0.850	21.756	5.758f	0.580	5.960f	0.496	0.468	27.975	3.651
0.900	24.268	5.783f	0.612	6.039f	0.508	0.487	26.077	3.510
0.950	26.832	5.811f	0.643	6.101f	0.517	0.504	24.424	3.357
1.000	29.438	5.839f	0.673	6.146f	0.525	0.519	22.923	3.217
1.050	32.081	5.866f	0.703	6.190f	0.532	0.534	21.639	3.103
1.100	34.758	5.893f	0.733	6.225f	0.539	0.547	20.476	3.005
1.300	45.793	5.990f	0.848	6.353f	0.564	0.600	17.044	2.760

Water Specific Gravity = 1.025.
Trim is per 13.00m

Hydrostatic Properties at aft 0.150/13.000, Heel = 0.00



Hydrostatic Properties

Draft is from Baseline.

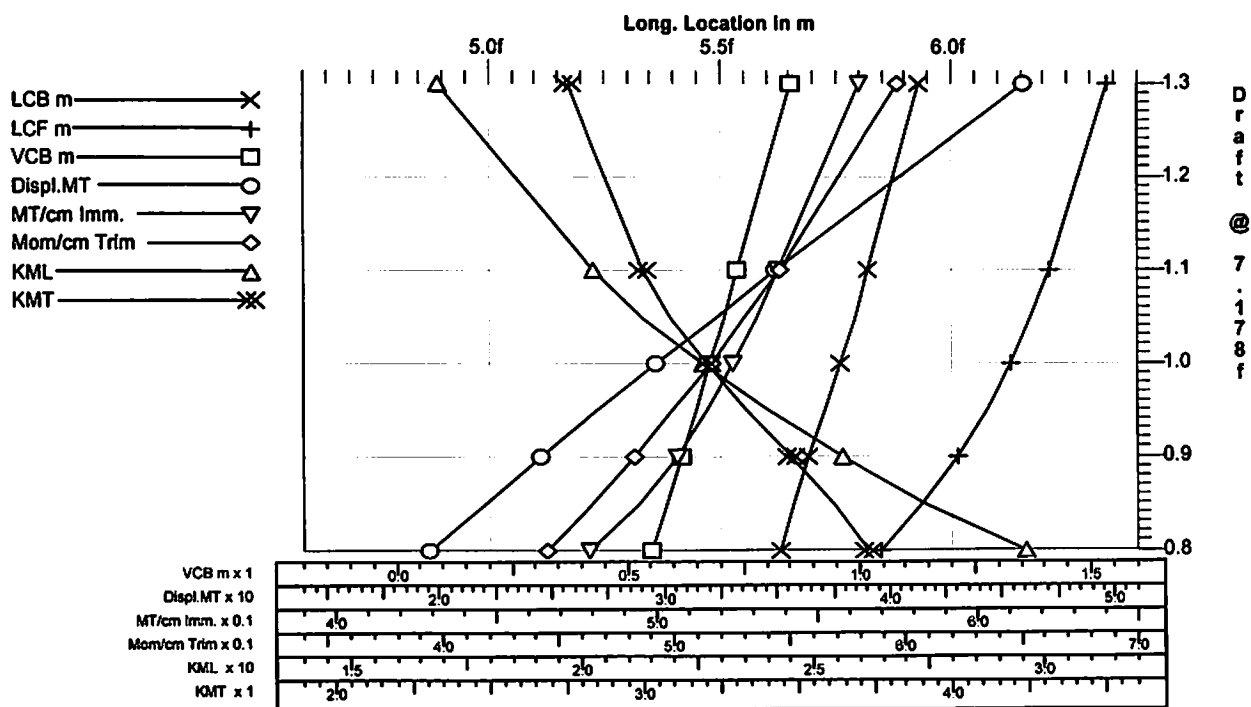
Trim: aft 0.200/13.000, No heel, VCG = 0.000

Draft at 7.178f (m)	Displ (MT)	LCB (m)	VCB (m)	LCF (m)	TPcm (MT/cm)	MTcm (MT-m/cm)	KML (m)	KMT (m)
0.800	19.558	5.628f	0.552	5.843f	0.479	0.445	29.572	3.724
0.850	21.991	5.657f	0.584	5.934f	0.494	0.464	27.416	3.613
0.900	24.493	5.689f	0.616	6.012f	0.506	0.482	25.597	3.476
0.950	27.049	5.723f	0.647	6.074f	0.516	0.500	24.004	3.331
1.000	29.648	5.756f	0.677	6.127f	0.524	0.516	22.611	3.204
1.050	32.285	5.788f	0.707	6.168f	0.531	0.530	21.339	3.090
1.100	34.957	5.819f	0.736	6.210f	0.538	0.545	20.268	2.998
1.300	45.973	5.929f	0.851	6.336f	0.563	0.597	16.867	2.753

Water Specific Gravity = 1.025.

Trim is per 13.00m

Hydrostatic Properties at aft 0.200/13.000, Heel = 0.00



Hydrostatic Properties

Draft is from Baseline.

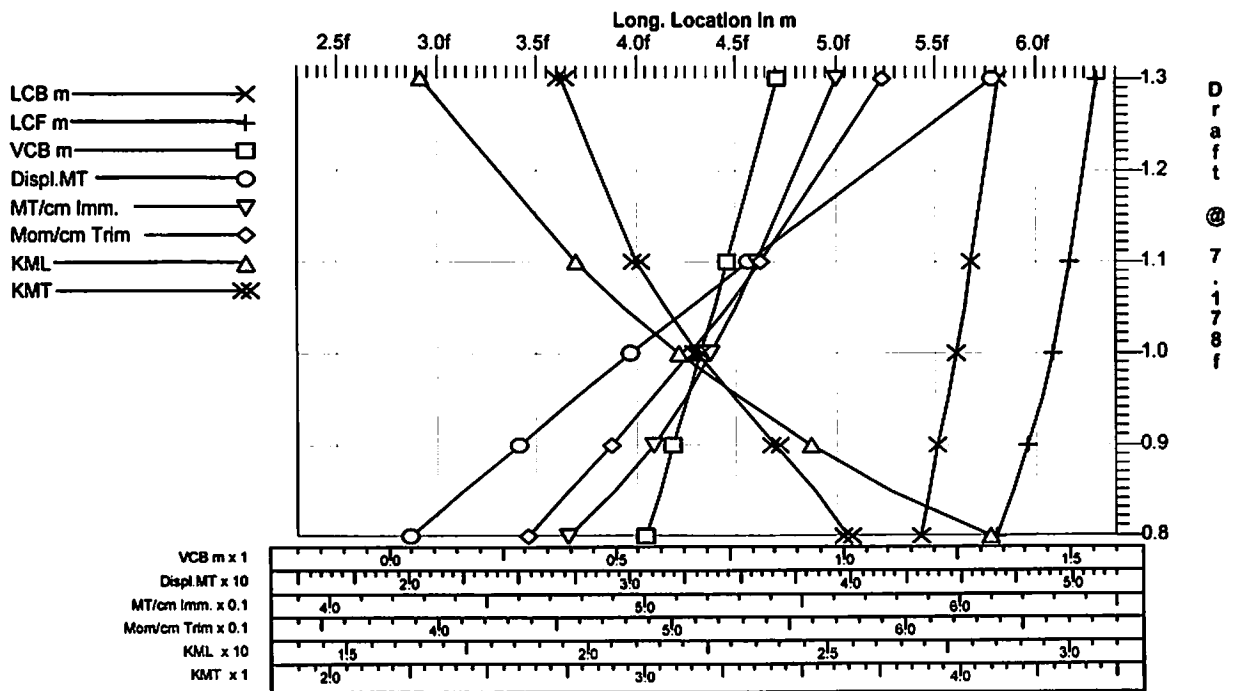
Trim: aft 0.300/13.000, No heel, VCG = 0.000

Draft at 7.178f (m)	Displ (MT)	LCB (m)	VCB (m)	LCF (m)	TPcm (MT/cm)	MTcm (MT-m/cm)	KML (m)	KMT (m)
0.800	20.056	5.416f	0.562	5.796f	0.476	0.438	28.372	3.647
0.850	22.474	5.463f	0.594	5.881f	0.490	0.455	26.316	3.541
0.900	24.957	5.508f	0.625	5.961f	0.503	0.474	24.672	3.420
0.950	27.496	5.553f	0.655	6.029f	0.513	0.492	23.237	3.293
1.000	30.080	5.597f	0.685	6.082f	0.521	0.508	21.934	3.171
1.050	32.705	5.638f	0.714	6.130f	0.529	0.523	20.799	3.069
1.100	35.366	5.676f	0.743	6.170f	0.536	0.538	19.764	2.979
1.300	46.341	5.810f	0.857	6.309f	0.561	0.590	16.560	2.738

Water Specific Gravity = 1.025.

Trim is per 13.00m

Hydrostatic Properties at aft 0.300/13.000, Heel = 0.00



Hydrostatic Properties

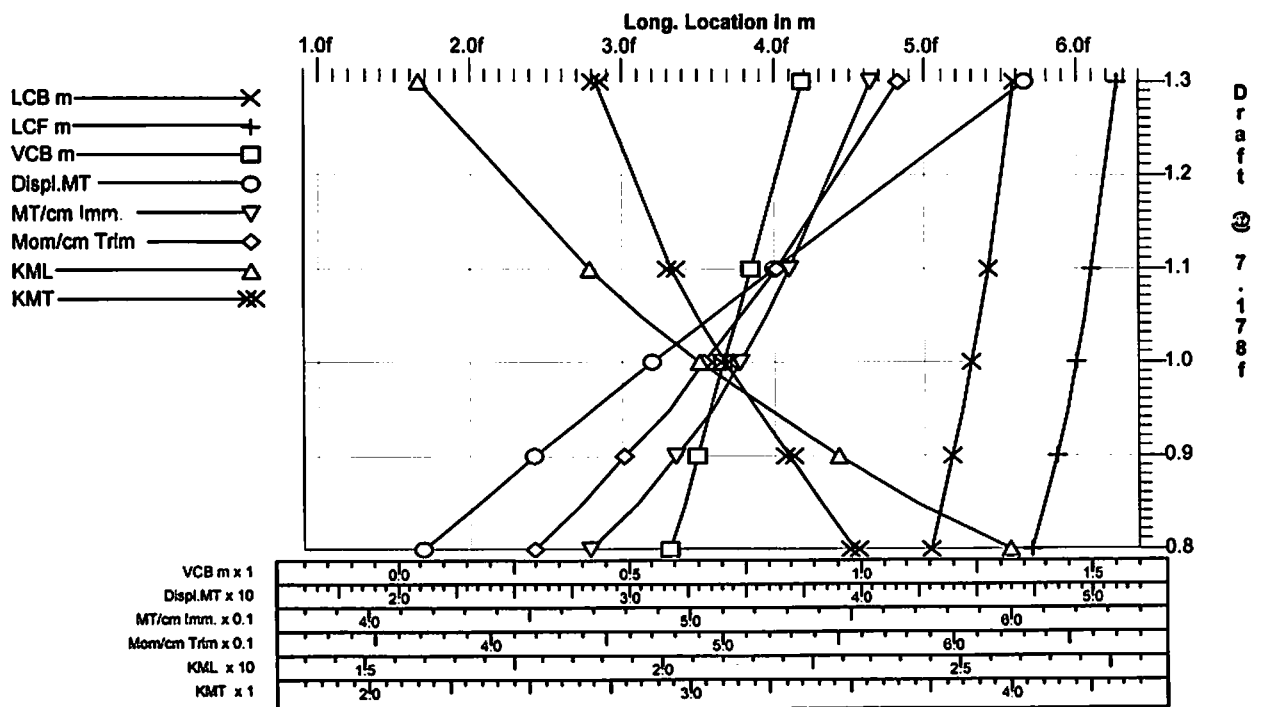
Draft is from Baseline.

Trim: aft 0.500/13.000, No heel, VCG = 0.000

Draft at 7.178f (m)	Displ (MT)	LCB (m)	VCB (m)	LCF (m)	TPcm (MT/cm)	MTcm (MT-m/cm)	KML (m)	KMT (m)
0.800	21.099	5.035f	0.588	5.686f	0.469	0.420	25.834	3.512
0.850	23.481	5.106f	0.618	5.779f	0.483	0.439	24.299	3.413
0.900	25.930	5.174f	0.647	5.862f	0.496	0.458	22.960	3.309
0.950	28.438	5.239f	0.676	5.938f	0.507	0.477	21.795	3.212
1.000	30.992	5.298f	0.705	5.991f	0.516	0.492	20.632	3.110
1.050	33.590	5.354f	0.733	6.044f	0.524	0.508	19.660	3.021
1.100	36.228	5.406f	0.761	6.089f	0.531	0.524	18.775	2.943
1.300	47.112	5.584f	0.872	6.250f	0.556	0.577	15.902	2.708

Water Specific Gravity = 1.025.
Trim is per 13.00m

Hydrostatic Properties at aft 0.500/13.000, Heel = 0.00



Hydrostatic Properties

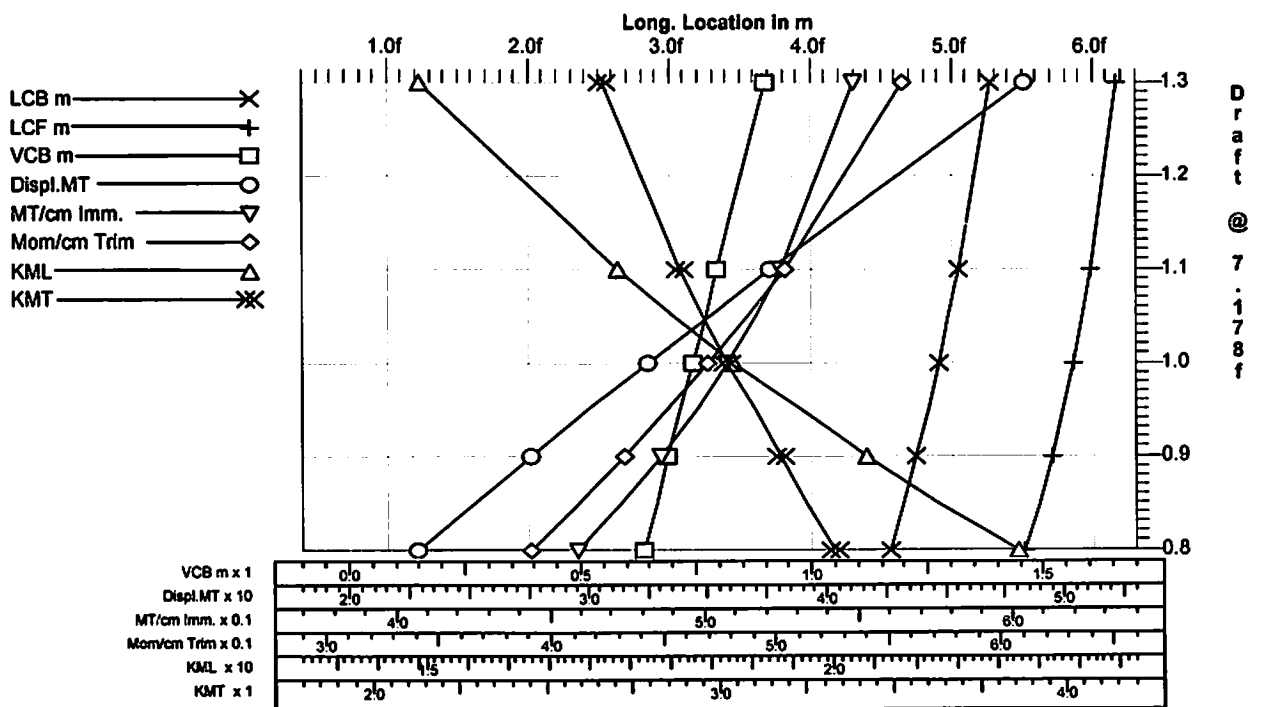
Draft is from Baseline.

Trim: aft 0.800/13.000, No heel, VCG = 0.000

Draft at 7.178f (m)	Displ (MT)	LCB (m)	VCB (m)	LCF (m)	TPcm (MT/cm)	MTcm (MT-m/cm)	KML (m)	KMT (m)
0.800	22.789	4.559f	0.636	5.511f	0.459	0.391	22.248	3.333
0.850	25.115	4.652f	0.662	5.613f	0.473	0.412	21.295	3.251
0.900	27.509	4.740f	0.689	5.704f	0.486	0.433	20.408	3.174
0.950	29.963	4.822f	0.716	5.785f	0.498	0.452	19.572	3.101
1.000	32.471	4.899f	0.742	5.856f	0.507	0.470	18.785	3.024
1.050	35.027	4.972f	0.769	5.920f	0.516	0.487	18.052	2.952
1.100	37.626	5.040f	0.795	5.980f	0.524	0.504	17.368	2.885
1.300	48.347	5.270f	0.900	6.166f	0.548	0.556	14.925	2.662

Water Specific Gravity = 1.025.
Trim is per 13.00m

Hydrostatic Properties at aft 0.800/13.000, Heel = 0.00



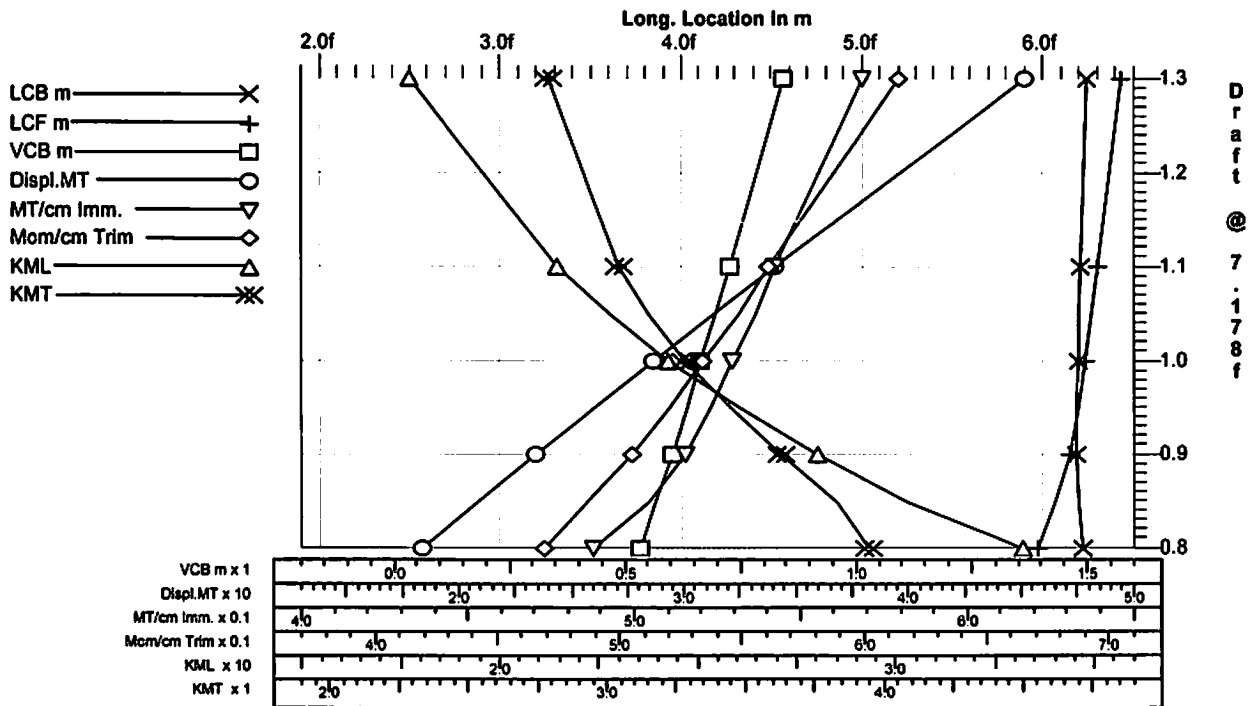
Hydrostatic Properties

Draft is from Baseline.
Trim: fwd 0.050/13.000, No heel, VCG = 0.000

Draft at 7.178f (m)	Displ (MT)	LCB (m)	VCB (m)	LCF (m)	TPcm (MT/cm)	MTcm (MT-m/cm)	KML (m)	KMT (m)
0.800	18.375	6.219f	0.532	5.968f	0.488	0.469	33.171	3.943
0.850	20.857	6.195f	0.566	6.065f	0.504	0.486	30.304	3.832
0.900	23.409	6.186f	0.599	6.140f	0.515	0.504	28.013	3.632
0.950	26.004	6.184f	0.632	6.192f	0.523	0.521	26.032	3.440
1.000	28.635	6.186f	0.663	6.227f	0.529	0.534	24.239	3.277
1.050	31.299	6.192f	0.693	6.266f	0.536	0.548	22.773	3.150
1.100	33.996	6.199f	0.723	6.296f	0.542	0.561	21.442	3.044
1.300	45.107	6.240f	0.840	6.424f	0.568	0.614	17.702	2.785

Water Specific Gravity = 1.025.
Trim is per 13.00m

Hydrostatic Properties at fwd 0.050/13.000, Heel = 0.00



Hydrostatic Properties

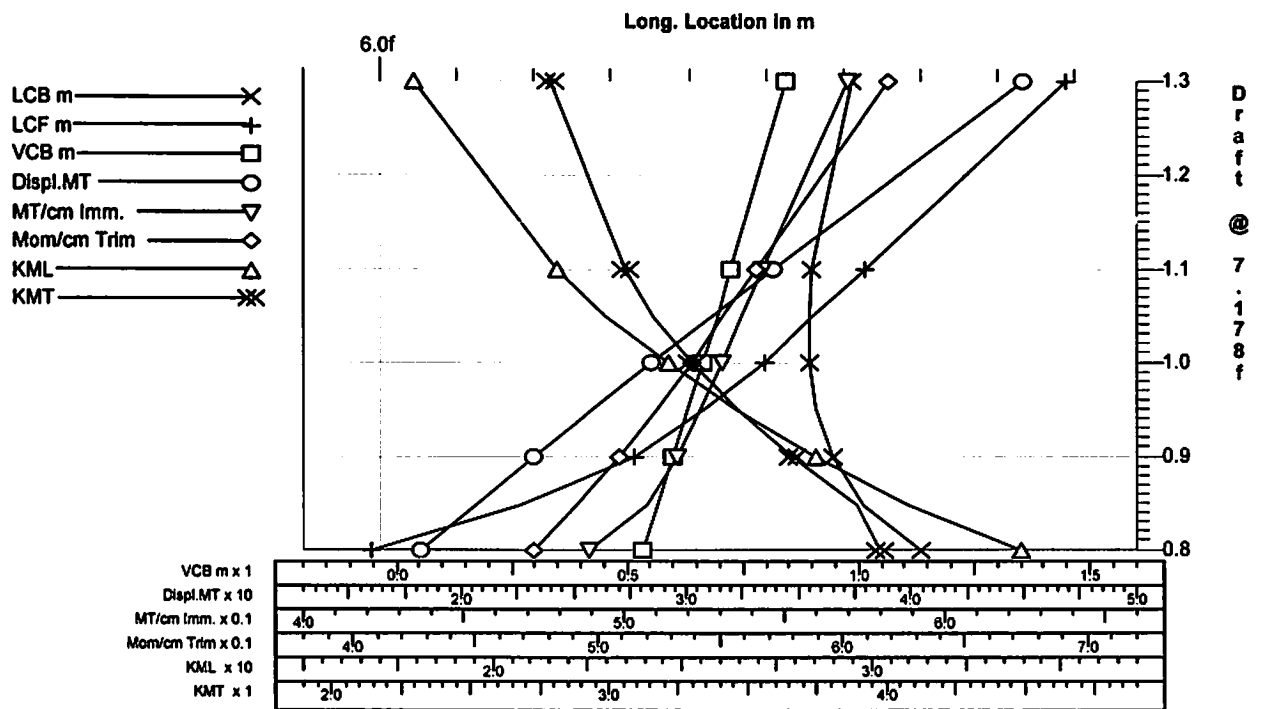
Draft is from Baseline.

Trim: fwd 0.100/13.000, No heel, VCG = 0.000

Draft at 7.178f (m)	Displ (MT)	LCB (m)	VCB (m)	LCF (m)	TPcm (MT/cm)	MTcm (MT-m/cm)	KML (m)	KMT (m)
0.800	18.150	6.350f	0.529	5.993f	0.489	0.474	33.945	3.977
0.850	20.643	6.312f	0.564	6.091f	0.507	0.491	30.926	3.892
0.900	23.205	6.293f	0.598	6.164f	0.517	0.509	28.506	3.662
0.950	25.807	6.282f	0.630	6.209f	0.524	0.524	26.393	3.456
1.000	28.443	6.278f	0.661	6.248f	0.530	0.538	24.592	3.294
1.050	31.113	6.277f	0.692	6.279f	0.537	0.551	23.003	3.161
1.100	33.814	6.279f	0.722	6.314f	0.543	0.564	21.691	3.055
1.300	44.944	6.305f	0.839	6.443f	0.570	0.618	17.882	2.791

Water Specific Gravity = 1.025.
Trim is per 13.00m

Hydrostatic Properties at fwd 0.100/13.000, Heel = 0.00



Hydrostatic Properties

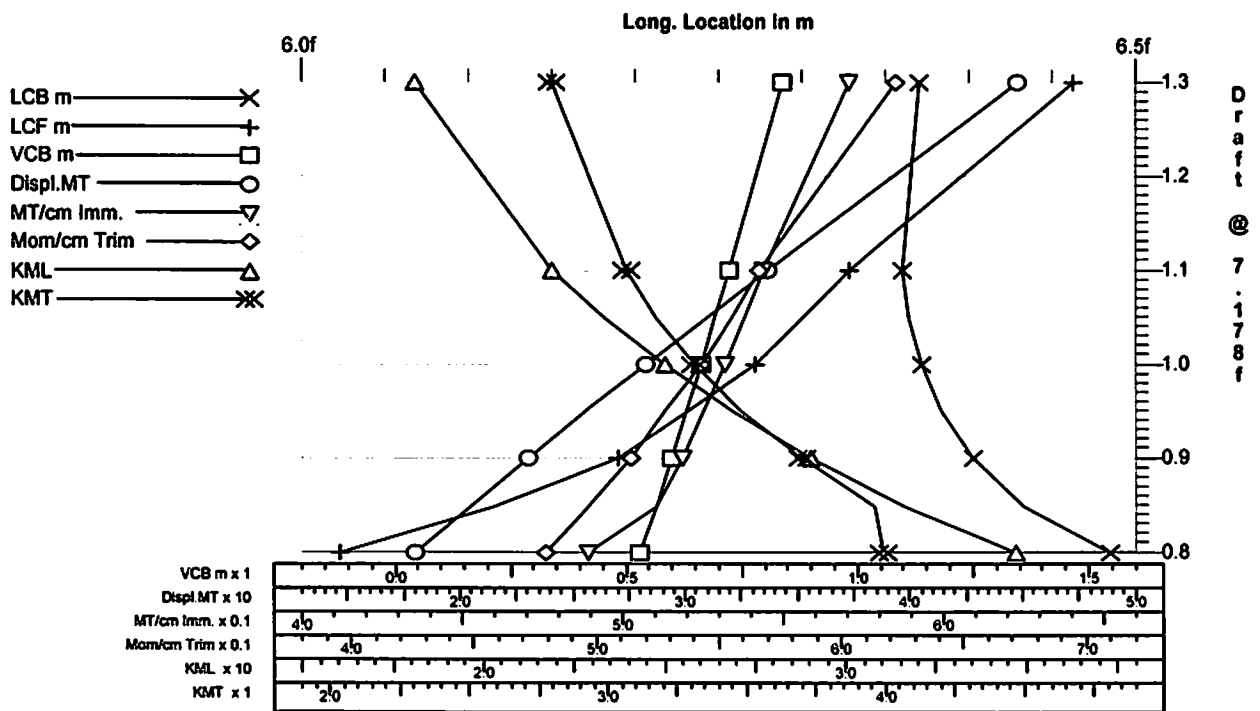
Draft is from Baseline.

Trim: fwd 0.150/13.000, No heel, VCG = 0.000

Draft at 7.178f (m)	Displ (MT)	LCB (m)	VCB (m)	LCF (m)	TPcm (MT/cm)	MTcm (MT-m/cm)	KML (m)	KMT (m)
0.800	17.929	6.485f	0.527	6.022f	0.489	0.479	34.703	3.987
0.850	20.432	6.433f	0.562	6.115f	0.510	0.497	31.596	3.963
0.900	23.005	6.402f	0.596	6.190f	0.518	0.514	29.019	3.694
0.950	25.614	6.383f	0.628	6.231f	0.525	0.528	26.804	3.477
1.000	28.255	6.371f	0.660	6.271f	0.532	0.543	24.971	3.310
1.050	30.930	6.364f	0.691	6.300f	0.538	0.555	23.316	3.174
1.100	33.636	6.360f	0.721	6.328f	0.544	0.566	21.892	3.065
1.300	44.784	6.370f	0.838	6.463f	0.571	0.622	18.065	2.798

Water Specific Gravity = 1.025.
Trim is per 13.00m

Hydrostatic Properties at fwd 0.150/13.000, Heel = 0.00



Hydrostatic Properties

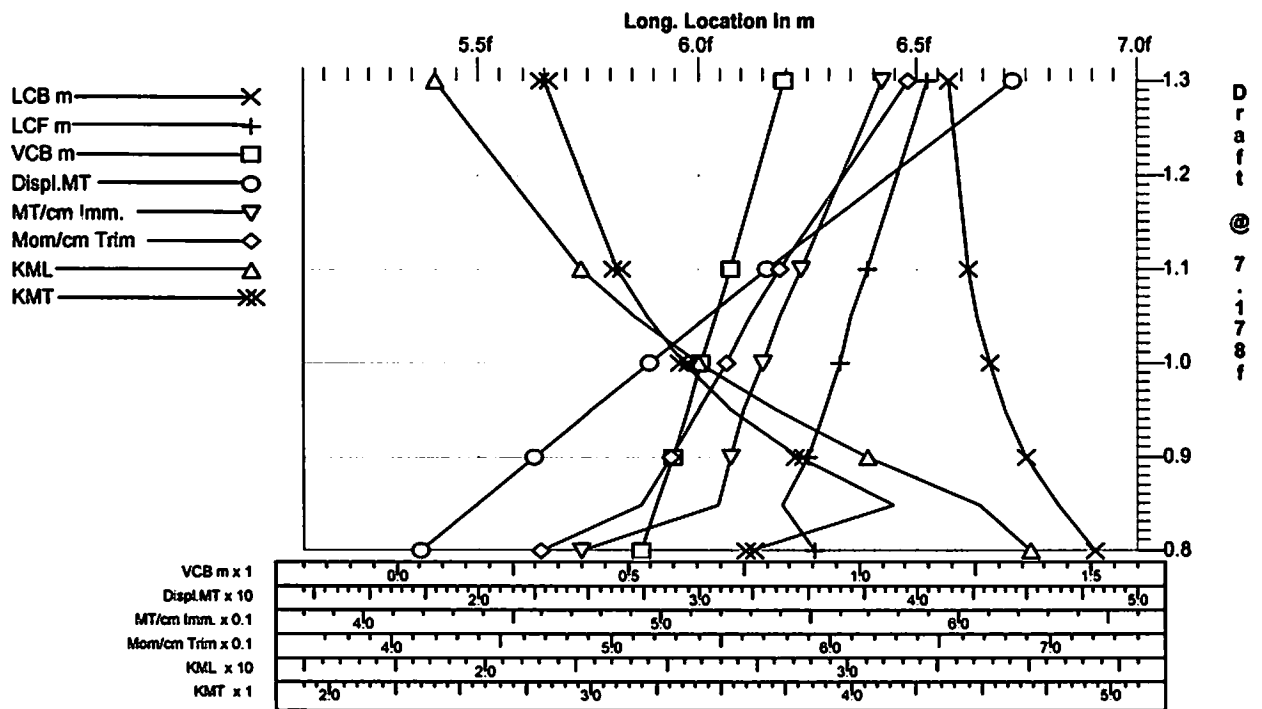
Draft is from Baseline.

Trim: fwd 0.300/13.000, No heel, VCG = 0.000

Draft at 7.178f (m)	Displ (MT)	LCB (m)	VCB (m)	LCF (m)	TPcm (MT/cm)	MTcm (MT-m/cm)	KML (m)	KMT (m)
0.800	17.341	6.902f	0.526	6.260f	0.473	0.468	35.046	3.610
0.850	19.821	6.817f	0.561	6.189f	0.519	0.513	33.637	4.163
0.900	22.430	6.748f	0.595	6.246f	0.523	0.528	30.567	3.803
0.950	25.057	6.698f	0.627	6.289f	0.528	0.540	27.995	3.535
1.000	27.713	6.661f	0.659	6.321f	0.534	0.552	25.896	3.357
1.050	30.400	6.633f	0.689	6.348f	0.540	0.563	24.085	3.215
1.100	33.120	6.612f	0.720	6.383f	0.547	0.577	22.649	3.102
1.300	44.330	6.572f	0.837	6.523f	0.574	0.635	18.624	2.821

Water Specific Gravity = 1.025.
Trim is per 13.00m

Hydrostatic Properties at fwd 0.300/13.000, Heel = 0.00



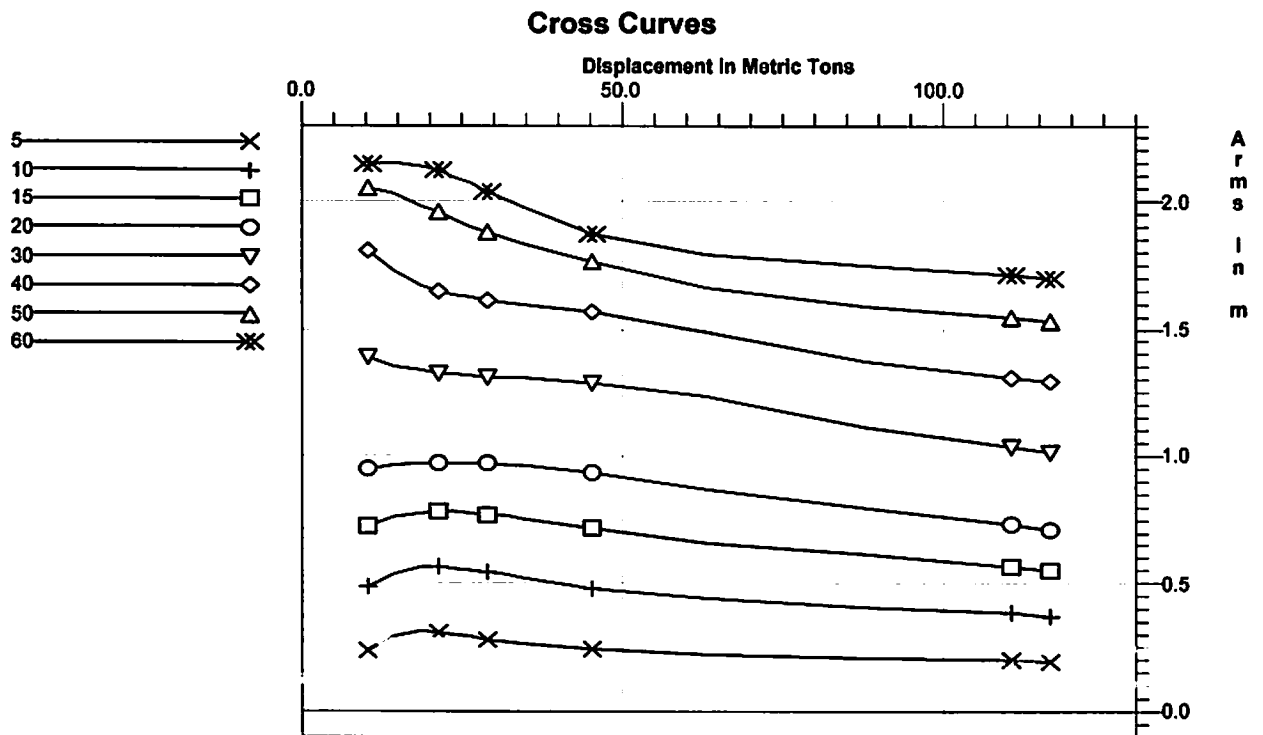
11. PANTOKARENER (CROSS CURVES)

Cross Curves of Stability

Righting Arms(heel) for VCG = 0.00
Trim zero at heel = 0 (RA Trim = 0)

Displ (MT)	5.000s	10.000s	15.000s	20.000s	30.000s	40.000s	50.000s	60.000s
10.117	0.241s	0.491s	0.729s	0.955s	1.391s	1.808s	2.057s	2.151s
13.997	0.297s	0.545s	0.762s	0.967s	1.358s	1.728s	2.031s	2.158s
18.604	0.315s	0.568s	0.780s	0.975s	1.338s	1.673s	1.986s	2.144s
21.076	0.313s	0.567s	0.784s	0.977s	1.330s	1.654s	1.960s	2.125s
23.617	0.306s	0.564s	0.785s	0.977s	1.325s	1.639s	1.930s	2.101s
26.205	0.296s	0.558s	0.781s	0.976s	1.320s	1.628s	1.905s	2.073s
28.830	0.285s	0.550s	0.775s	0.974s	1.316s	1.618s	1.881s	2.044s
31.489	0.275s	0.540s	0.769s	0.970s	1.313s	1.610s	1.858s	2.012s
34.181	0.266s	0.529s	0.761s	0.964s	1.309s	1.603s	1.838s	1.980s
45.275	0.242s	0.484s	0.723s	0.936s	1.293s	1.571s	1.763s	1.874s
62.858	0.225s	0.449s	0.665s	0.876s	1.240s	1.495s	1.669s	1.798s
87.447	0.208s	0.415s	0.618s	0.802s	1.121s	1.381s	1.596s	1.755s
110.696	0.202s	0.391s	0.569s	0.735s	1.038s	1.314s	1.549s	1.713s
116.504	0.195s	0.379s	0.553s	0.716s	1.020s	1.301s	1.533s	1.701s

Water Specific Gravity = 1.025.

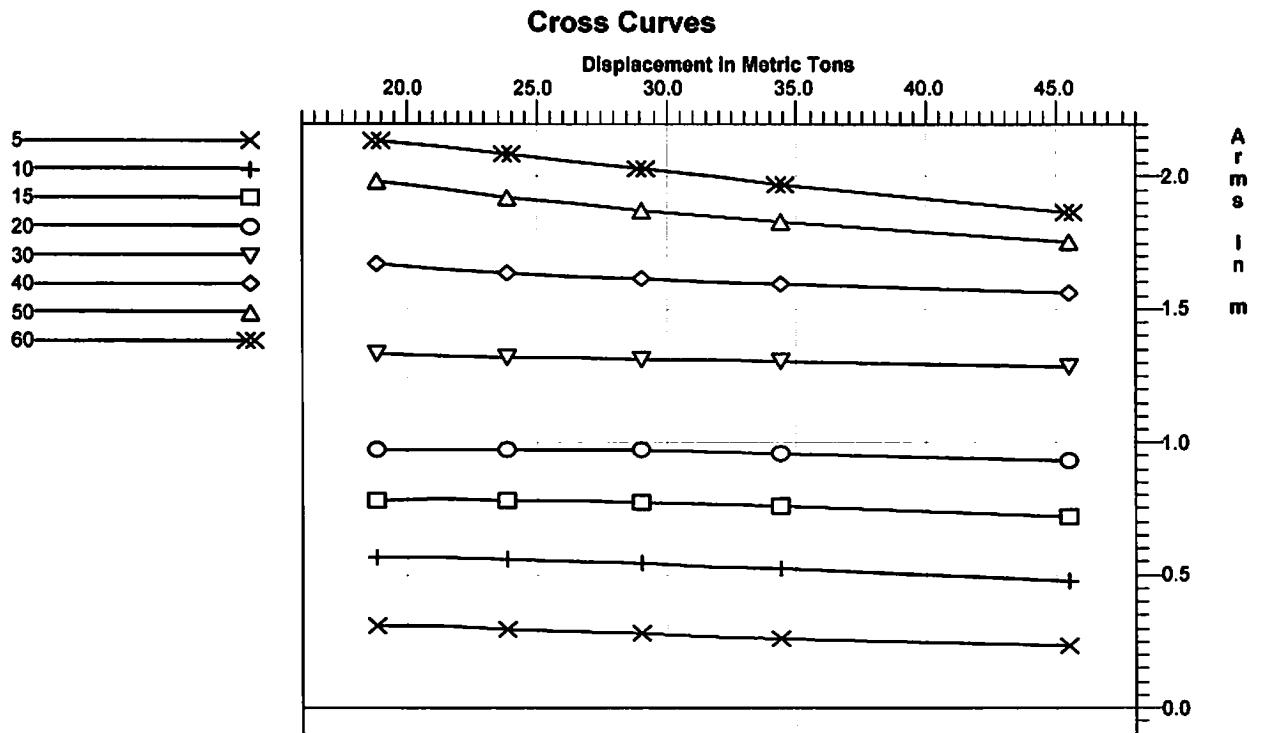


Cross Curves of Stability

Righting Arms(heel) for VCG = 0.00
 Trim aft 0.050/13.000 at heel = 0 (RA Trim = 0)

Displ (MT)	5.000s	10.000s	15.000s	20.000s	30.000s	40.000s	50.000s	60.000s
18.837	0.315s	0.570s	0.785s	0.979s	1.340s	1.672s	1.983s	2.138s
21.299	0.312s	0.569s	0.788s	0.980s	1.332s	1.654s	1.955s	2.118s
23.830	0.304s	0.564s	0.787s	0.980s	1.326s	1.639s	1.927s	2.093s
26.410	0.294s	0.558s	0.782s	0.978s	1.321s	1.627s	1.901s	2.065s
29.029	0.283s	0.549s	0.775s	0.975s	1.317s	1.617s	1.877s	2.035s
31.683	0.273s	0.539s	0.768s	0.970s	1.313s	1.609s	1.855s	2.004s
34.370	0.265s	0.527s	0.760s	0.964s	1.309s	1.602s	1.833s	1.972s
45.444	0.242s	0.483s	0.721s	0.934s	1.291s	1.568s	1.758s	1.869s

Water Specific Gravity = 1.025.

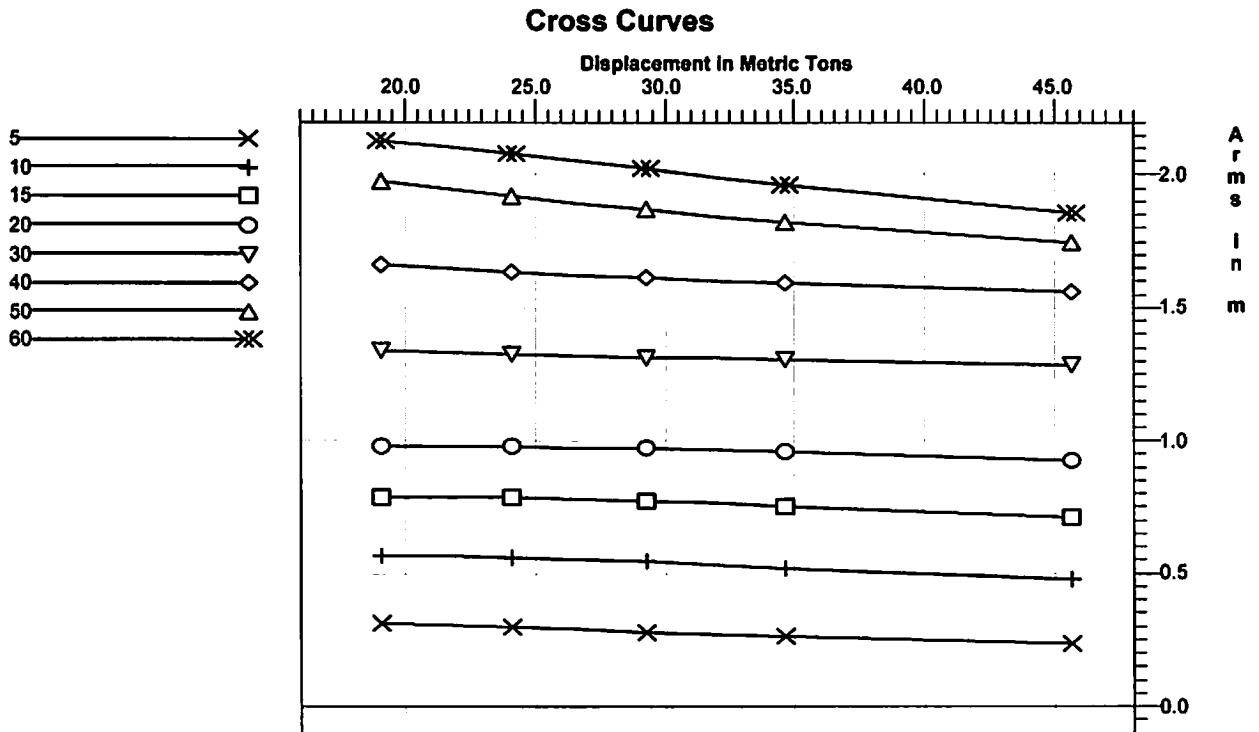


Cross Curves of Stability

Righting Arms(heel) for VCG = 0.00
 Trim aft 0.100/13.000 at heel = 0 (RA Trim = 0)

Displ (MT)	5.000s	10.000s	15.000s	20.000s	30.000s	40.000s	50.000s	60.000s
19.073	0.315s	0.572s	0.789s	0.983s	1.341s	1.671s	1.980s	2.131s
21.525	0.311s	0.570s	0.791s	0.983s	1.334s	1.653s	1.952s	2.109s
24.047	0.302s	0.564s	0.788s	0.982s	1.327s	1.638s	1.922s	2.084s
26.619	0.292s	0.557s	0.782s	0.980s	1.322s	1.626s	1.896s	2.056s
29.232	0.282s	0.548s	0.775s	0.976s	1.317s	1.616s	1.873s	2.026s
31.880	0.272s	0.537s	0.768s	0.970s	1.313s	1.608s	1.850s	1.995s
34.562	0.264s	0.525s	0.759s	0.963s	1.309s	1.601s	1.829s	1.964s
45.616	0.241s	0.481s	0.718s	0.932s	1.289s	1.564s	1.753s	1.864s

Water Specific Gravity = 1.025.

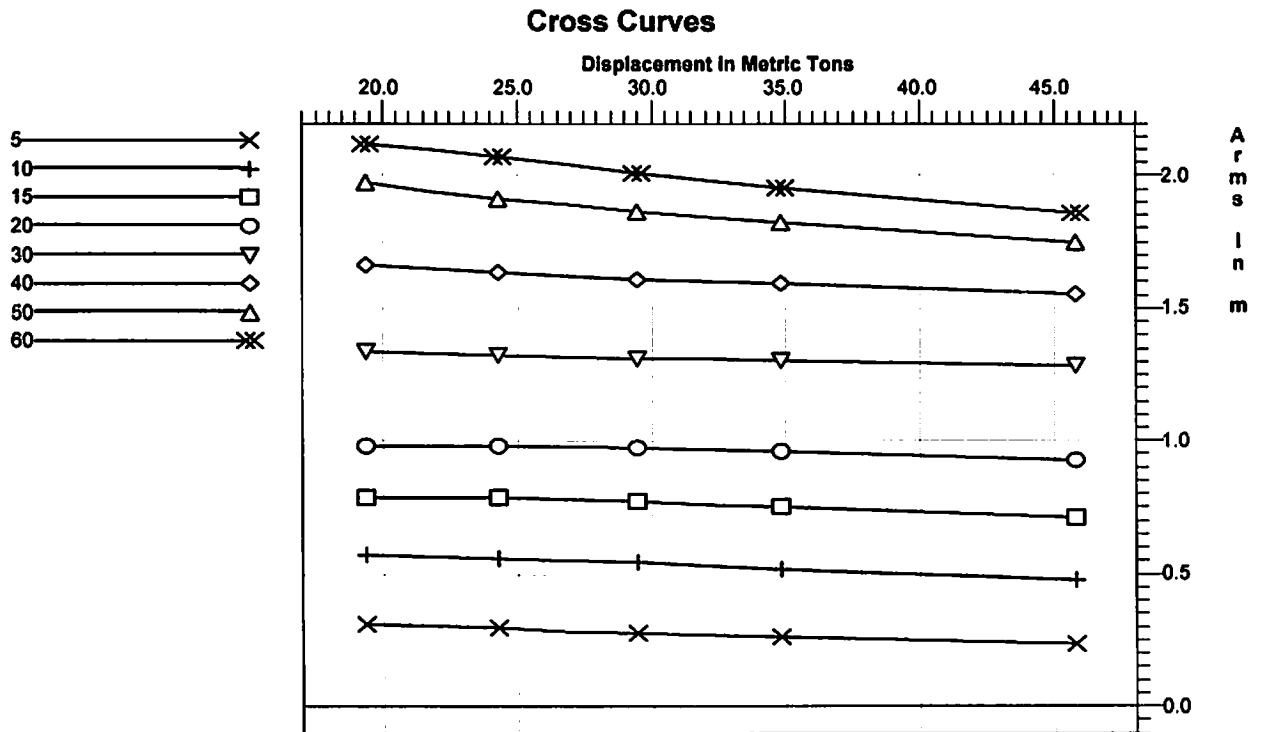


Cross Curves of Stability

Righting Arms(heel) for VCG = 0.00
Trim aft 0.150/13.000 at heel = 0 (RA Trim = 0)

Displ (MT)	5.000s	10.000s	15.000s	20.000s	30.000s	40.000s	50.000s	60.000s
19.314	0.315s	0.573s	0.793s	0.987s	1.343s	1.671s	1.976s	2.123s
21.756	0.309s	0.570s	0.793s	0.986s	1.335s	1.652s	1.947s	2.100s
24.268	0.300s	0.564s	0.789s	0.984s	1.328s	1.637s	1.918s	2.074s
26.832	0.290s	0.556s	0.782s	0.982s	1.323s	1.625s	1.894s	2.046s
29.438	0.280s	0.546s	0.775s	0.976s	1.318s	1.615s	1.868s	2.017s
32.081	0.271s	0.535s	0.767s	0.970s	1.313s	1.607s	1.846s	1.986s
34.758	0.263s	0.523s	0.758s	0.963s	1.309s	1.599s	1.825s	1.955s
45.793	0.240s	0.480s	0.716s	0.930s	1.288s	1.561s	1.748s	1.859s

Water Specific Gravity = 1.025.

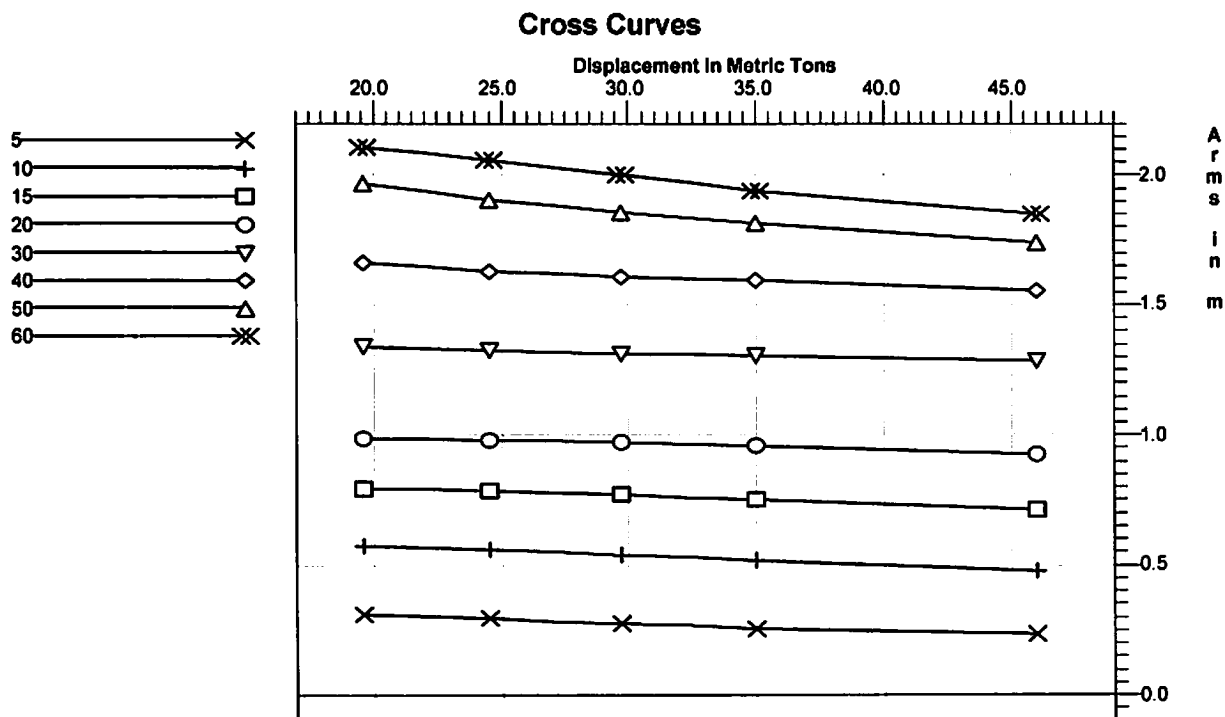


Cross Curves of Stability

Righting Arms(heel) for VCG = 0.00
 Trim aft 0.200/13.000 at heel = 0 (RA Trim = 0)

Displ (MT)	5.000s	10.000s	15.000s	20.000s	30.000s	40.000s	50.000s	60.000s
19.558	0.313s	0.575s	0.797s	0.990s	1.345s	1.670s	1.972s	2.113s
21.991	0.307s	0.570s	0.795s	0.989s	1.336s	1.651s	1.941s	2.090s
24.493	0.298s	0.564s	0.789s	0.986s	1.329s	1.637s	1.913s	2.064s
27.049	0.288s	0.555s	0.782s	0.983s	1.324s	1.624s	1.887s	2.036s
29.648	0.279s	0.544s	0.774s	0.976s	1.318s	1.614s	1.864s	2.006s
32.285	0.270s	0.533s	0.766s	0.969s	1.313s	1.606s	1.841s	1.976s
34.957	0.262s	0.521s	0.756s	0.962s	1.308s	1.598s	1.820s	1.947s
45.973	0.240s	0.479s	0.714s	0.927s	1.285s	1.557s	1.742s	1.853s

Water Specific Gravity = 1.025.

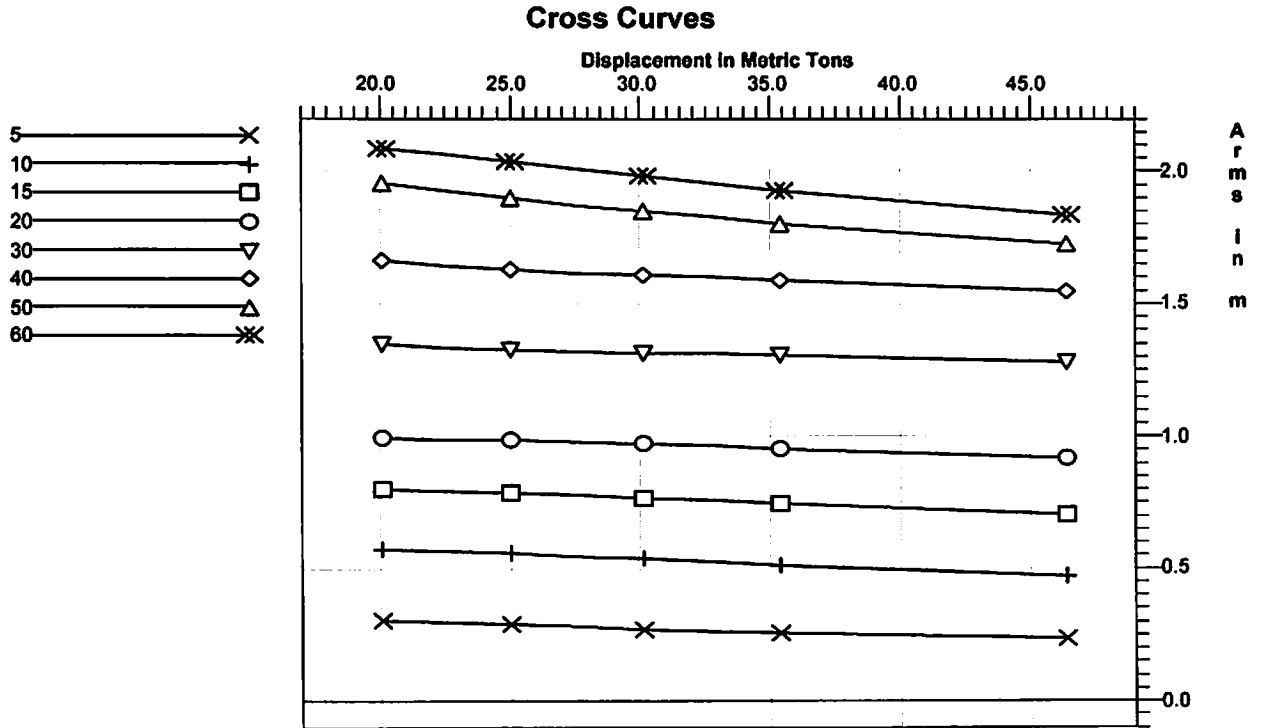


Cross Curves of Stability

Righting Arms(heel) for VCG = 0.00
Trim aft 0.300/13.000 at heel = 0 (RA Trim = 0)

Displ (MT)	5.000s	10.000s	15.000s	20.000s	30.000s	40.000s	50.000s	60.000s
20.056	0.310s	0.576s	0.802s	0.996s	1.347s	1.668s	1.957s	2.092s
22.474	0.302s	0.570s	0.797s	0.994s	1.339s	1.650s	1.929s	2.068s
24.957	0.294s	0.561s	0.790s	0.990s	1.331s	1.634s	1.901s	2.042s
27.496	0.285s	0.551s	0.782s	0.983s	1.325s	1.622s	1.876s	2.014s
30.080	0.276s	0.540s	0.773s	0.976s	1.319s	1.612s	1.853s	1.985s
32.705	0.268s	0.528s	0.763s	0.968s	1.313s	1.603s	1.832s	1.957s
35.366	0.260s	0.516s	0.753s	0.960s	1.307s	1.593s	1.809s	1.929s
46.341	0.239s	0.476s	0.709s	0.922s	1.280s	1.549s	1.731s	1.842s

Water Specific Gravity = 1.025.

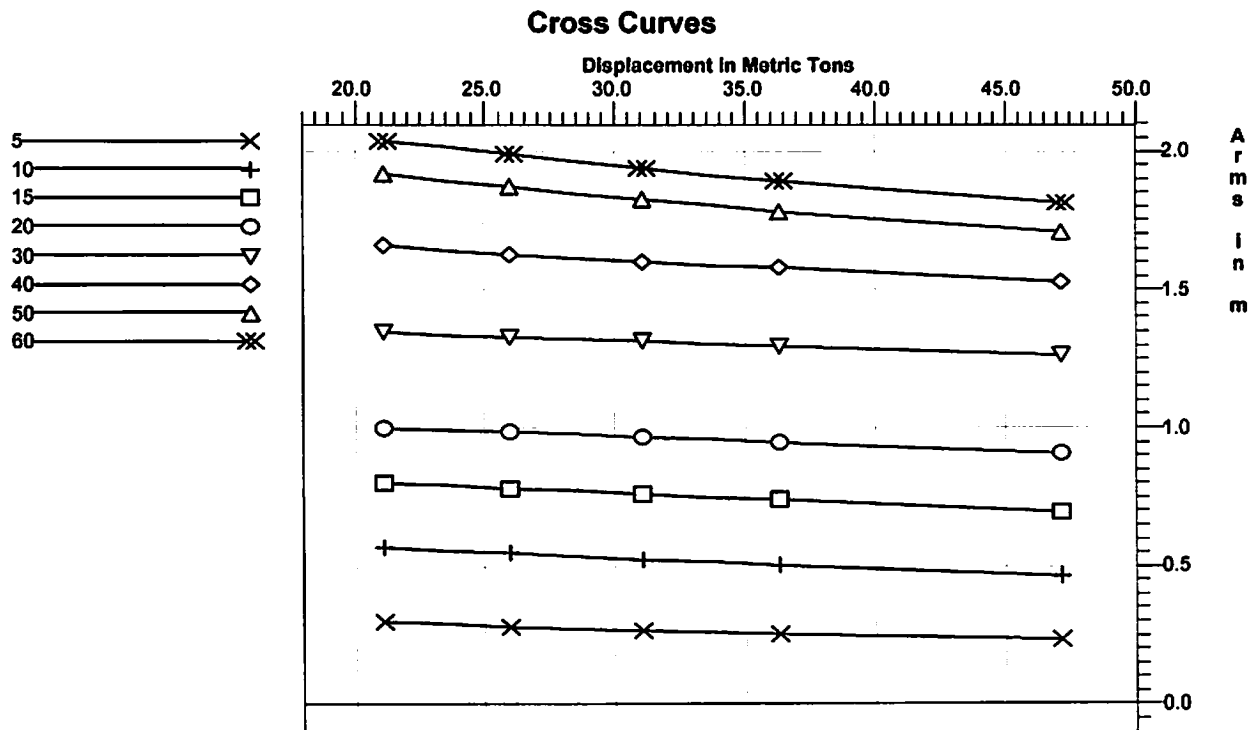


Cross Curves of Stability

Righting Arms(heel) for VCG = 0.00
Trim aft 0.500/13.000 at heel = 0 (RA Trim = 0)

Displ (MT)	5.000s	10.000s	15.000s	20.000s	30.000s	40.000s	50.000s	60.000s
21.099	0.301s	0.573s	0.804s	1.006s	1.351s	1.661s	1.923s	2.042s
23.481	0.294s	0.564s	0.796s	0.999s	1.342s	1.644s	1.897s	2.018s
25.930	0.286s	0.553s	0.787s	0.991s	1.333s	1.629s	1.873s	1.993s
28.438	0.278s	0.542s	0.777s	0.982s	1.325s	1.617s	1.849s	1.967s
30.992	0.270s	0.530s	0.766s	0.973s	1.317s	1.605s	1.828s	1.941s
33.590	0.263s	0.519s	0.755s	0.963s	1.310s	1.593s	1.806s	1.916s
36.228	0.257s	0.508s	0.744s	0.953s	1.303s	1.581s	1.785s	1.892s
47.112	0.236s	0.471s	0.698s	0.908s	1.267s	1.531s	1.710s	1.818s

Water Specific Gravity = 1.025.

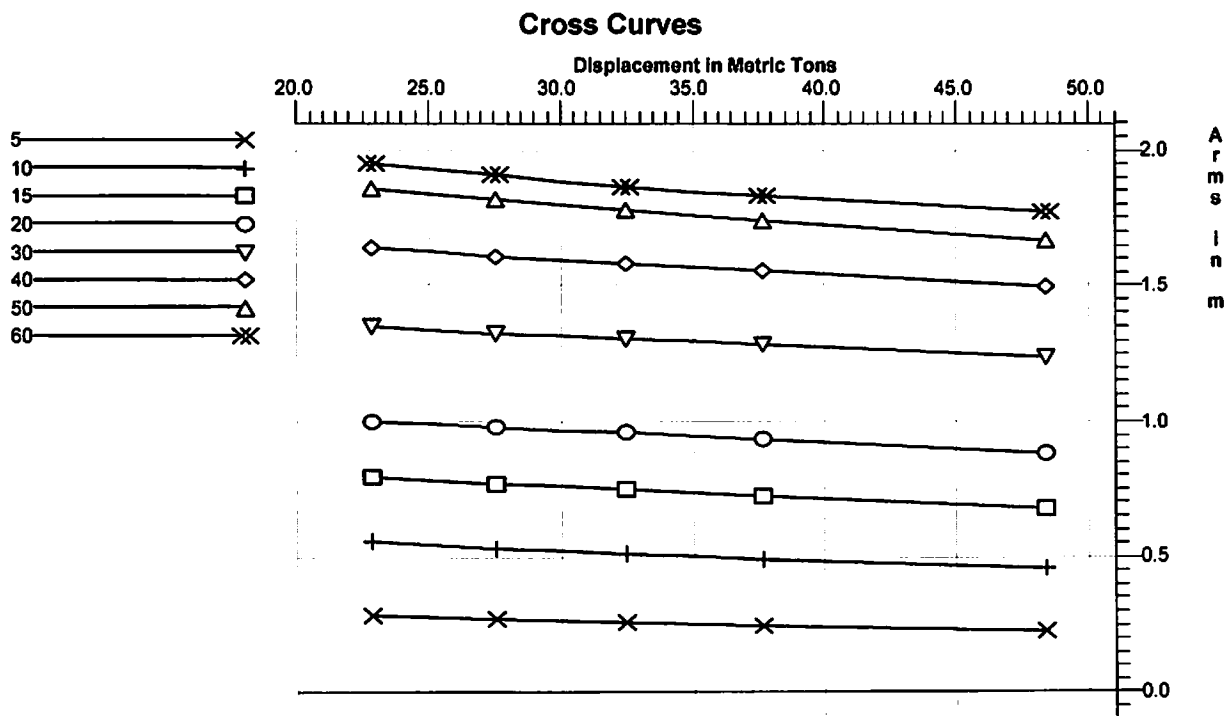


Cross Curves of Stability

Righting Arms(heel) for VCG = 0.00
Trim aft 0.800/13.000 at heel = 0 (RA Trim = 0)

Displ (MT)	5.000s	10.000s	15.000s	20.000s	30.000s	40.000s	50.000s	60.000s
22.789	0.288s	0.558s	0.798s	1.005s	1.351s	1.644s	1.863s	1.955s
25.115	0.281s	0.547s	0.787s	0.995s	1.340s	1.629s	1.842s	1.933s
27.509	0.275s	0.537s	0.775s	0.984s	1.329s	1.614s	1.820s	1.912s
29.963	0.269s	0.526s	0.763s	0.973s	1.319s	1.600s	1.800s	1.891s
32.471	0.262s	0.515s	0.751s	0.961s	1.309s	1.586s	1.780s	1.870s
35.027	0.256s	0.505s	0.739s	0.949s	1.299s	1.572s	1.761s	1.851s
37.626	0.251s	0.496s	0.727s	0.936s	1.288s	1.558s	1.742s	1.833s
48.347	0.232s	0.461s	0.680s	0.885s	1.241s	1.497s	1.673s	1.779s

Water Specific Gravity = 1.025.

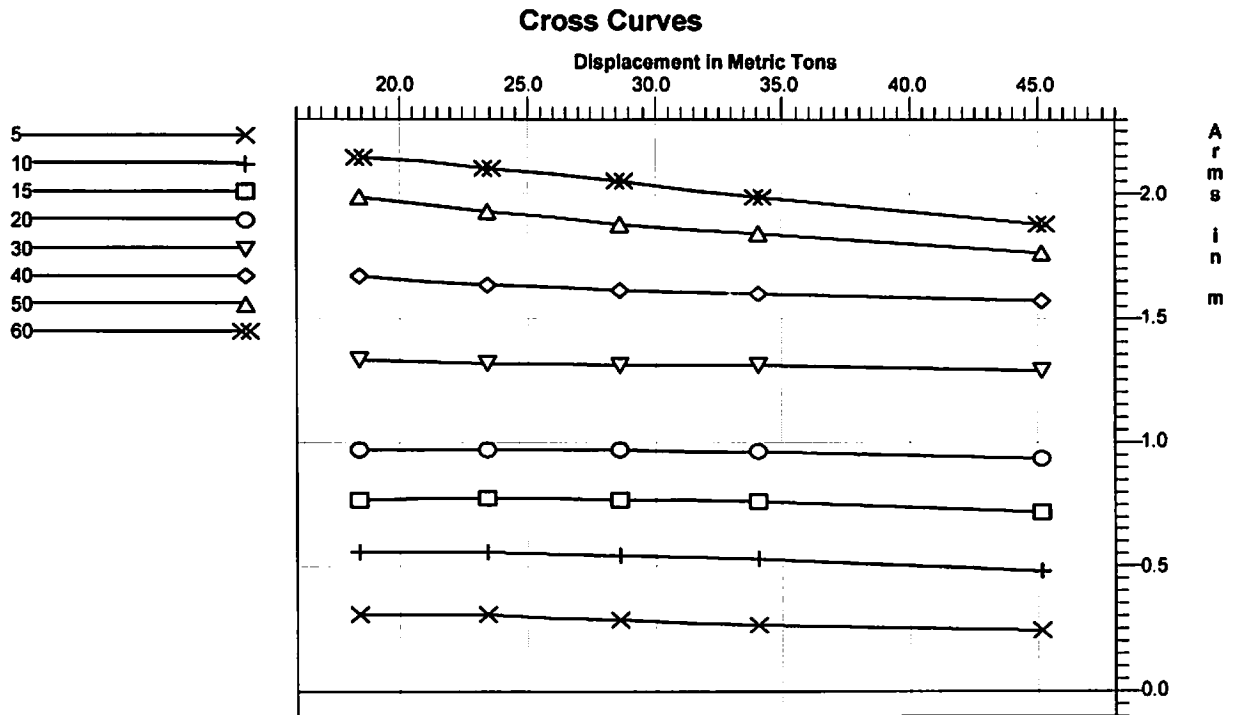


Cross Curves of Stability

Righting Arms(heel) for VCG = 0.00
 Trim fwd 0.050/13.000 at heel = 0 (RA Trim = 0)

Displ (MT)	5.000s	10.000s	15.000s	20.000s	30.000s	40.000s	50.000s	60.000s
18.375	0.313s	0.565s	0.775s	0.971s	1.336s	1.673s	1.987s	2.149s
20.857	0.313s	0.566s	0.780s	0.973s	1.329s	1.654s	1.960s	2.132s
23.409	0.307s	0.563s	0.782s	0.974s	1.323s	1.640s	1.933s	2.109s
26.004	0.298s	0.558s	0.780s	0.974s	1.319s	1.628s	1.908s	2.081s
28.635	0.286s	0.550s	0.775s	0.972s	1.315s	1.619s	1.884s	2.052s
31.299	0.276s	0.541s	0.769s	0.970s	1.312s	1.611s	1.863s	2.020s
33.996	0.266s	0.531s	0.762s	0.964s	1.309s	1.604s	1.843s	1.987s
45.107	0.243s	0.486s	0.725s	0.938s	1.294s	1.574s	1.768s	1.879s

Water Specific Gravity = 1.025.

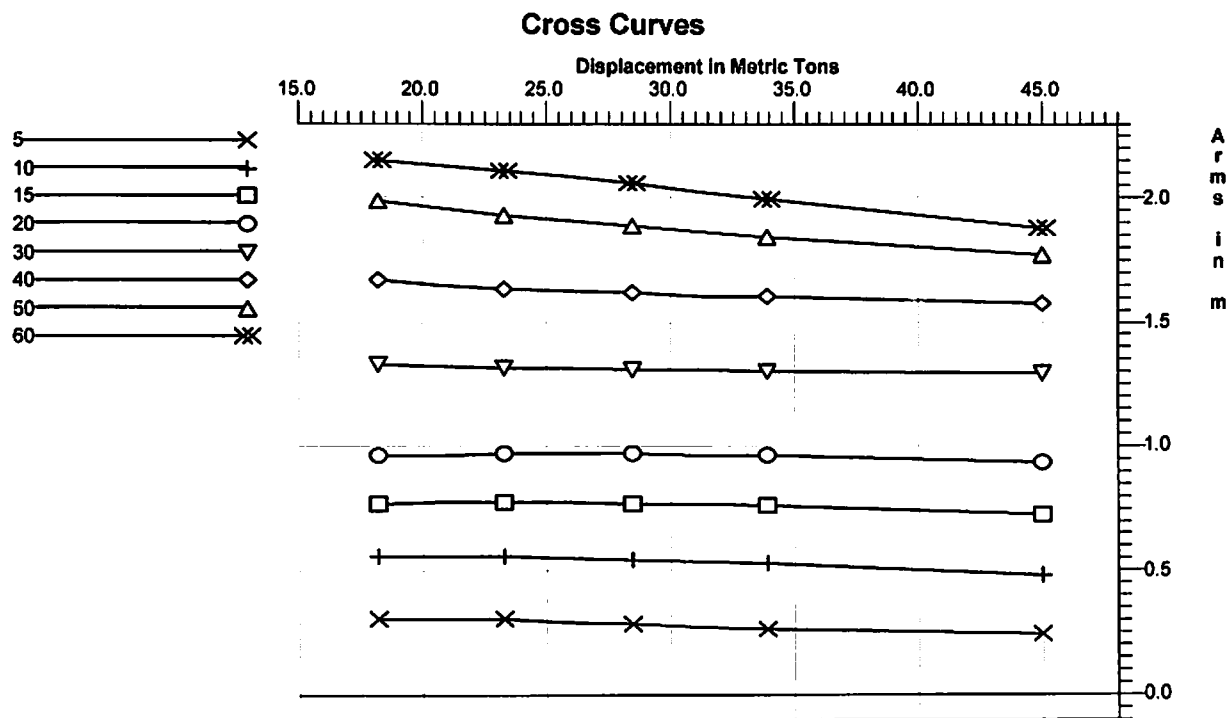


Cross Curves of Stability

Righting Arms(heel) for VCG = 0.00
 Trim fwd 0.100/13.000 at heel = 0 (RA Trim = 0)

Displ (MT)	5.000s	10.000s	15.000s	20.000s	30.000s	40.000s	50.000s	60.000s
18.150	0.311s	0.560s	0.770s	0.966s	1.334s	1.674s	1.988s	2.153s
20.643	0.313s	0.564s	0.776s	0.970s	1.327s	1.655s	1.961s	2.138s
23.205	0.308s	0.562s	0.779s	0.971s	1.322s	1.640s	1.935s	2.115s
25.807	0.299s	0.557s	0.779s	0.972s	1.318s	1.629s	1.910s	2.088s
28.443	0.288s	0.551s	0.774s	0.971s	1.314s	1.619s	1.888s	2.059s
31.113	0.277s	0.542s	0.769s	0.969s	1.312s	1.611s	1.868s	2.028s
33.814	0.267s	0.532s	0.762s	0.965s	1.309s	1.605s	1.848s	1.995s
44.944	0.244s	0.487s	0.727s	0.940s	1.296s	1.577s	1.773s	1.884s

Water Specific Gravity = 1.025.

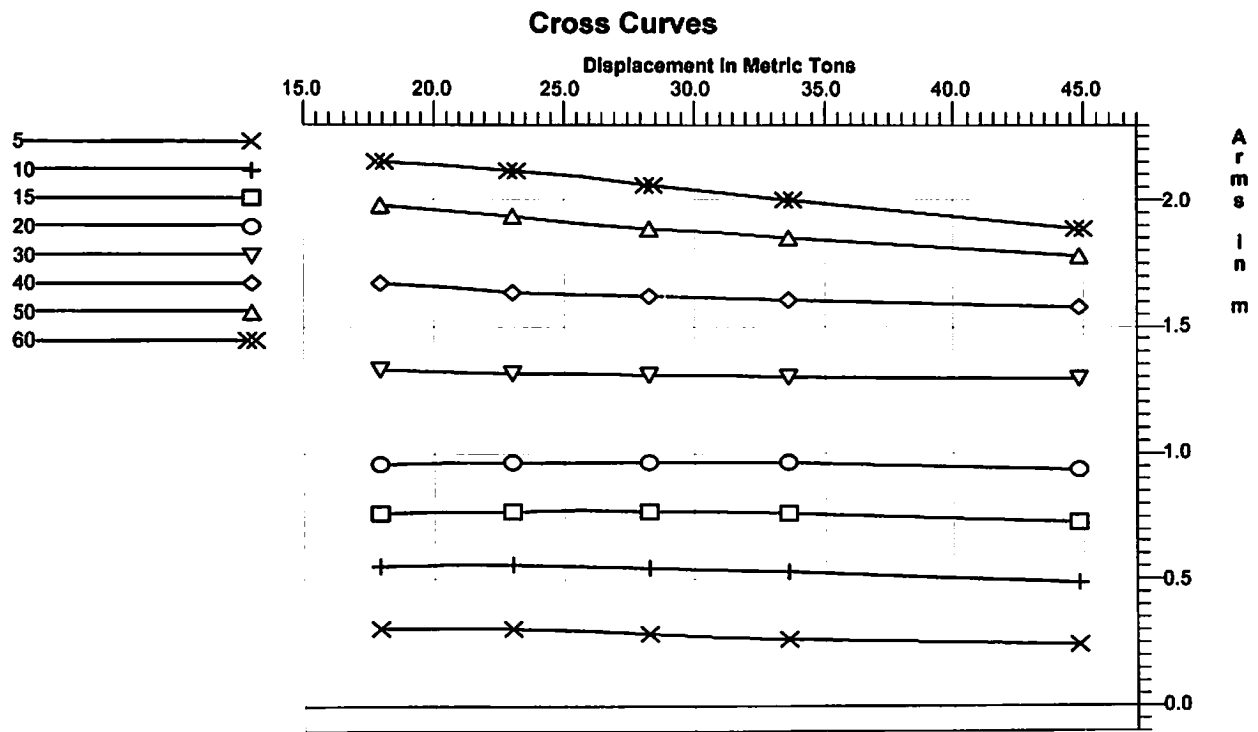


Cross Curves of Stability

Righting Arms(heel) for VCG = 0.00
Trim fwd 0.150/13.000 at heel = 0 (RA Trim = 0)

Displ (MT)	5.000s	10.000s	15.000s	20.000s	30.000s	40.000s	50.000s	60.000s
17.929	0.309s	0.554s	0.765s	0.962s	1.332s	1.675s	1.986s	2.156s
20.432	0.312s	0.561s	0.772s	0.966s	1.326s	1.655s	1.962s	2.142s
23.005	0.309s	0.560s	0.776s	0.968s	1.321s	1.640s	1.937s	2.121s
25.614	0.301s	0.557s	0.777s	0.969s	1.317s	1.629s	1.913s	2.095s
28.255	0.290s	0.551s	0.774s	0.969s	1.314s	1.620s	1.892s	2.065s
30.930	0.278s	0.543s	0.769s	0.968s	1.311s	1.612s	1.872s	2.035s
33.636	0.268s	0.534s	0.762s	0.965s	1.309s	1.606s	1.852s	2.002s
44.784	0.244s	0.489s	0.729s	0.941s	1.297s	1.580s	1.778s	1.888s

Water Specific Gravity = 1.025.

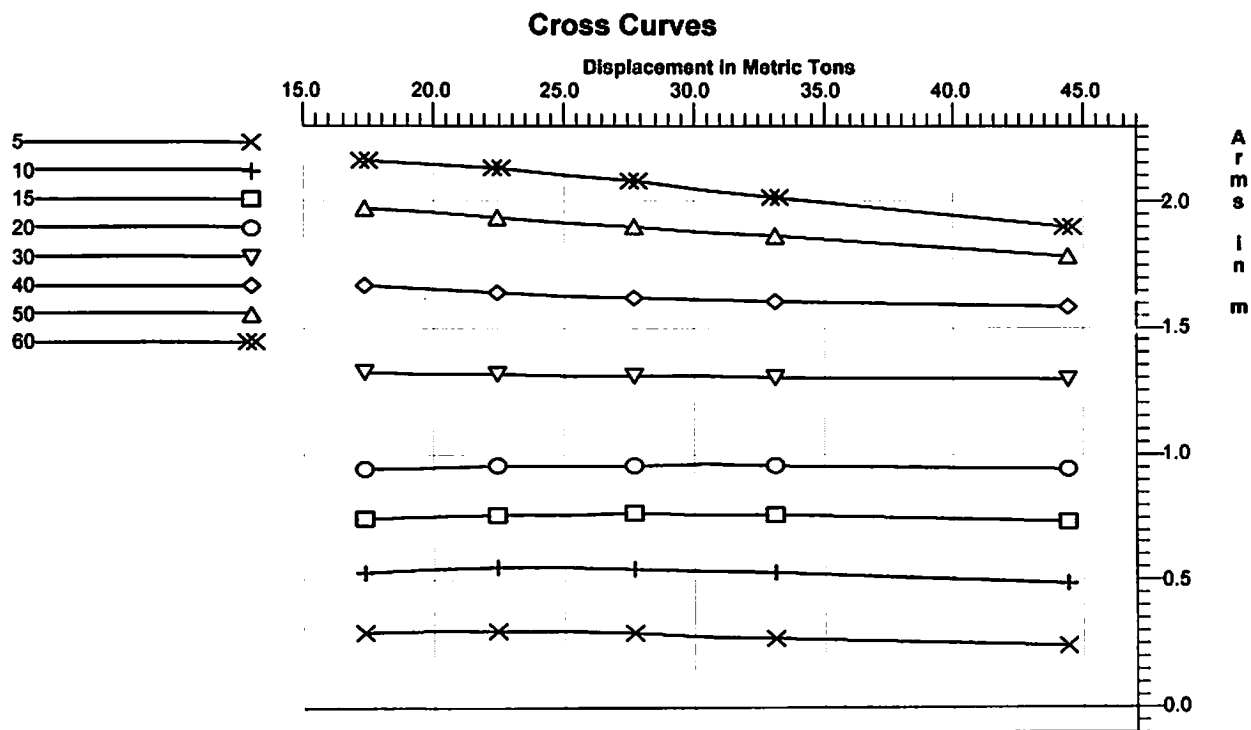


Cross Curves of Stability

Righting Arms(heel) for VCG = 0.00
 Trim fwd 0.300/13.000 at heel = 0 (RA Trim = 0)

Displ (MT)	5.000s	10.000s	15.000s	20.000s	30.000s	40.000s	50.000s	60.000s
17.341	0.298s	0.536s	0.747s	0.946s	1.325s	1.675s	1.976s	2.160s
19.821	0.306s	0.548s	0.757s	0.953s	1.320s	1.656s	1.959s	2.149s
22.430	0.307s	0.553s	0.764s	0.958s	1.317s	1.641s	1.940s	2.132s
25.057	0.302s	0.553s	0.767s	0.961s	1.314s	1.629s	1.921s	2.109s
27.713	0.294s	0.549s	0.769s	0.963s	1.311s	1.621s	1.902s	2.082s
30.400	0.282s	0.543s	0.767s	0.963s	1.309s	1.614s	1.883s	2.051s
33.120	0.271s	0.536s	0.762s	0.962s	1.307s	1.608s	1.864s	2.019s
44.330	0.247s	0.494s	0.734s	0.944s	1.299s	1.588s	1.790s	1.902s

Water Specific Gravity = 1.025.





APPENDIX A. GEOMETRIBESKRIVNING

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APPENDIX A - Geometridata R/K Märta Collin

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\$\$\$ Input from GEODOS Surveying System

\$\$\$ Geodos fil: COLLINZY.ODB

\$\$\$ Sikob fil: COLLINZY.DAT

\$\$\$ Fartyg : FARTYG

\$\$\$ Date:time : 100303:1037

 \$\$\$

\$\$\$

MARTA COLLIN

FARTYG

\$\$\$

\$\$\$ lpp bmould dmould lpp2f0 maxyz keelth shelth

\$\$\$

1 14.870 4.984 3.531 7.435 2.492 0.000 0.000

\$\$\$

\$\$\$ Limit frames for spacing

1

\$\$\$ Spacing

1.0 1.0

\$\$\$

\$\$\$ part Frame Dx type z0

\$\$\$ Line: CL1

1.	0.000	0.435	2.	2.592
1.	0.000	0.363	2.	2.012
1.	0.000	0.312	2.	1.507
1.	0.000	0.278	2.	0.024
1.	0.000	0.135	2.	0.002
1.	0.000	1.360	2.	-0.017
1.	0.000	1.387	2.	-0.017
1.	0.000	1.971	2.	-0.122
1.	0.000	3.006	2.	-0.340
1.	0.000	3.867	2.	-0.327
1.	0.000	4.625	2.	-0.287
1.	0.000	5.656	2.	-0.239
1.	0.000	6.408	2.	-0.200
1.	0.000	7.408	2.	-0.152
1.	0.000	8.421	2.	-0.103
1.	0.000	9.042	2.	-0.075
1.	0.000	9.438	2.	-0.054
1.	0.000	10.002	2.	-0.032
1.	0.000	11.336	2.	-0.015
1.	0.000	12.164	2.	0.000

1.	0.000	12.680	2.	0.014
1.	0.000	13.070	2.	0.072
1.	0.000	13.432	2.	0.216
1.	0.000	13.708	2.	0.399
1.	0.000	13.919	2.	0.595
1.	0.000	14.111	2.	0.816
1.	0.000	14.314	2.	1.082
1.	0.000	14.545	2.	1.352
1.	0.000	14.832	2.	1.687
1.	0.000	15.131	2.	2.042
1.	0.000	15.233	2.	2.292
1.	0.000	15.233	2.	2.502
1.	0.000	14.933	2.	3.191

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\$\$\$ MIDSHIP SECTION

1

\$\$\$ APPENDIX AND SORT ORDER

0 1

1

\$\$\$ Line Frame Dx y z Int Radius Camber

\$\$\$ Line: DE1

1.0	0.000	0.439	0.008	2.604	0	.000	1.000
1.0	0.000	0.451	0.794	2.599	0	.000	1.000
1.0	0.000	0.479	1.532	2.567	0	.000	1.000
1.0	0.000	0.503	2.018	2.554	0	.000	1.000
1.0	0.000	0.551	2.113	2.551	0	.000	1.000
1.0	0.000	0.611	2.149	2.548	0	.000	1.000
1.0	0.000	1.476	2.218	2.557	0	.000	1.000
1.0	0.000	2.021	2.238	2.579	0	.000	1.000
1.0	0.000	3.009	2.273	2.583	0	.000	1.000
1.0	0.000	4.036	2.314	2.577	0	.000	1.000
1.0	0.000	5.250	2.359	2.583	0	.000	1.000
1.0	0.000	6.133	2.355	2.701	0	.000	1.000
1.0	0.000	7.005	2.346	2.824	0	.000	1.000
1.0	0.000	8.003	2.351	2.941	0	.000	1.000
1.0	0.000	8.973	2.330	2.984	0	.000	1.000
1.0	0.000	10.049	2.270	3.024	0	.000	1.000
1.0	0.000	10.986	2.179	3.052	0	.000	1.000
1.0	0.000	11.657	2.060	3.065	0	.000	1.000
1.0	0.000	12.067	1.953	3.087	0	.000	1.000
1.0	0.000	12.842	1.710	3.111	0	.000	1.000
1.0	0.000	13.416	1.421	3.149	0	.000	1.000
1.0	0.000	13.961	1.140	3.153	0	.000	1.000
1.0	0.000	14.355	0.842	3.166	0	.000	1.000
1.0	0.000	14.598	0.620	3.181	0	.000	1.000
1.0	0.000	14.731	0.497	3.176	0	.000	1.000
1.0	0.000	14.845	0.334	3.176	0	.000	1.000
1.0	0.000	14.898	0.195	3.180	0	.000	1.000
1.0	0.000	14.933	0.030	3.191	0	.000	1.000

\$\$\$ Line Frame Dx y z Int
\$\$\$ Line: KN1

1.0	0.000	0.135	-0.001	0.002	0
1.0	0.000	1.360	-0.026	-0.017	0
1.0	0.000	1.387	0.008	-0.017	0
1.0	0.000	1.971	-0.009	-0.122	0
1.0	0.000	3.006	0.006	-0.340	0
1.0	0.000	3.867	0.021	-0.327	0
1.0	0.000	4.625	0.027	-0.287	0
1.0	0.000	5.656	0.023	-0.239	0
1.0	0.000	6.408	0.023	-0.200	0
1.0	0.000	7.408	0.025	-0.152	0
1.0	0.000	7.444	0.029	-0.143	0
1.0	0.000	8.421	0.020	-0.103	0
1.0	0.000	9.042	0.019	-0.075	0
1.0	0.000	9.438	0.023	-0.054	0
1.0	0.000	10.002	0.025	-0.032	0
1.0	0.000	11.336	0.002	-0.015	0
1.0	0.000	12.164	0.017	0.000	0
1.0	0.000	12.680	0.006	0.014	0
1.0	0.000	13.070	0.010	0.072	0
1.0	0.000	13.432	0.002	0.216	0
1.0	0.000	13.708	0.002	0.399	0
1.0	0.000	13.919	0.005	0.595	0
1.0	0.000	14.111	0.002	0.816	0
1.0	0.000	14.314	0.012	1.082	0
1.0	0.000	14.545	0.004	1.352	0
1.0	0.000	14.832	0.002	1.687	0
1.0	0.000	15.233	0.088	2.292	0

\$\$\$ Line: KN2

2.0	0.000	1.405	0.002	-0.014	0
2.0	0.000	2.302	0.031	-0.010	0
2.0	0.000	3.474	0.035	-0.014	0
2.0	0.000	4.249	0.036	-0.013	0
2.0	0.000	5.183	0.037	-0.012	0
2.0	0.000	6.202	0.037	-0.017	0
2.0	0.000	7.390	0.037	-0.019	0
2.0	0.000	7.502	0.046	-0.015	0
2.0	0.000	8.384	0.042	-0.021	0
2.0	0.000	9.146	0.044	-0.021	0
2.0	0.000	9.841	0.031	-0.036	0

\$\$\$ Line: KN3

3.0	0.000	0.327	0.490	0.197	0
3.0	0.000	1.168	0.458	0.180	0
3.0	0.000	1.980	0.431	0.164	0
3.0	0.000	2.995	0.403	0.150	0
3.0	0.000	3.551	0.379	0.136	0
3.0	0.000	4.212	0.396	0.153	0

\$\$\$ Line: KN5

5.0	0.000	0.372	1.317	0.506	0
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5.0	0.000	1.085	1.288	0.502	0
5.0	0.000	1.880	1.260	0.508	0
5.0	0.000	2.632	1.235	0.509	0
5.0	0.000	3.274	1.244	0.518	0
5.0	0.000	3.991	1.147	0.503	0
\$\$\$ Line: KN7					
7.0	0.000	0.407	2.186	0.693	0
7.0	0.000	1.214	2.204	0.716	0
7.0	0.000	2.136	2.208	0.732	0
7.0	0.000	2.989	2.215	0.753	0
7.0	0.000	3.978	2.220	0.775	0
7.0	0.000	4.876	2.226	0.797	0
7.0	0.000	5.513	2.218	0.809	0
7.0	0.000	6.296	2.197	0.826	0
7.0	0.000	6.989	2.162	0.839	0
7.0	0.000	7.773	2.112	0.853	0
7.0	0.000	8.401	2.048	0.866	0
7.0	0.000	8.654	2.021	0.868	0
7.0	0.000	9.374	1.927	0.893	0
7.0	0.000	10.178	1.783	0.924	0
7.0	0.000	11.107	1.563	0.970	0
7.0	0.000	12.145	1.255	1.031	0
7.0	0.000	12.878	0.969	1.084	0
7.0	0.000	13.549	0.625	1.150	0
7.0	0.000	14.216	0.193	1.238	0
\$\$\$ Line: KN8					
8.0	0.000	0.438	2.155	0.782	0
8.0	0.000	1.148	2.174	0.803	0
8.0	0.000	1.843	2.185	0.814	0
8.0	0.000	2.630	2.198	0.827	0
8.0	0.000	3.260	2.204	0.839	0
8.0	0.000	4.356	2.215	0.861	0
8.0	0.000	5.550	2.216	0.879	0
8.0	0.000	6.529	2.181	0.901	0
8.0	0.000	7.575	2.116	0.926	0
8.0	0.000	8.464	2.037	0.947	0
8.0	0.000	8.523	2.038	0.950	0
8.0	0.000	9.462	1.914	0.968	0
8.0	0.000	10.191	1.778	0.998	0
8.0	0.000	11.123	1.562	1.044	0
8.0	0.000	12.106	1.264	1.102	0
8.0	0.000	12.970	0.908	1.161	0
8.0	0.000	13.641	0.574	1.210	0
8.0	0.000	14.220	0.191	1.242	0
8.0	0.000	14.462	0.003	1.257	0
\$\$\$ Line: KN10					
10.0	0.000	0.408	2.240	1.344	0
10.0	0.000	1.583	2.297	1.357	0
10.0	0.000	2.521	2.338	1.377	0
10.0	0.000	3.489	2.363	1.396	0

10.0	0.000	4.541	2.388	1.425	0
10.0	0.000	5.398	2.404	1.462	0
10.0	0.000	6.469	2.402	1.526	0
10.0	0.000	7.666	2.406	1.637	0
10.0	0.000	8.592	2.404	1.737	0
10.0	0.000	9.127	2.397	1.791	0
10.0	0.000	10.134	2.354	1.890	0
10.0	0.000	11.008	2.279	1.999	0
10.0	0.000	11.946	2.121	2.099	0
10.0	0.000	12.662	1.938	2.153	0
10.0	0.000	13.503	1.600	2.206	0
10.0	0.000	14.226	1.180	2.241	0
10.0	0.000	14.799	0.750	2.266	0
10.0	0.000	15.120	0.414	2.283	0
10.0	0.000	15.191	0.264	2.289	0
10.0	0.000	15.233	0.088	2.292	0
\$\$\$ Line: KN11					
11.0	0.000	0.440	2.248	1.547	0
11.0	0.000	2.139	2.312	1.573	0
11.0	0.000	4.091	2.378	1.609	0
11.0	0.000	5.371	2.398	1.661	0
11.0	0.000	6.341	2.400	1.728	0
11.0	0.000	7.565	2.404	1.842	0
11.0	0.000	8.659	2.400	1.947	0
11.0	0.000	9.127	2.397	2.001	0
11.0	0.000	10.134	2.354	2.100	0
11.0	0.000	11.008	2.279	2.209	0
11.0	0.000	11.946	2.121	2.309	0
11.0	0.000	12.662	1.938	2.363	0
11.0	0.000	13.503	1.600	2.416	0
11.0	0.000	14.226	1.180	2.451	0
11.0	0.000	14.799	0.750	2.476	0
11.0	0.000	15.120	0.414	2.493	0
11.0	0.000	15.191	0.264	2.499	0
11.0	0.000	15.233	0.112	2.502	0
\$\$\$ Line: KN20					
20.0	0.000	6.495	2.086	0.811	0
20.0	0.000	7.333	2.033	0.826	0
20.0	0.000	8.226	1.956	0.846	0
20.0	0.000	9.294	1.835	0.875	0
20.0	0.000	9.993	1.723	0.905	0
20.0	0.000	10.829	1.557	0.947	0
20.0	0.000	11.576	1.368	0.990	0
20.0	0.000	12.298	1.122	1.037	0
20.0	0.000	13.105	0.794	1.104	0
20.0	0.000	13.709	0.501	1.168	0
20.0	0.000	14.225	0.185	1.237	0
\$\$\$ Line Frame Dx y z Int					
\$\$\$ Line: WL4					
4.1	0.000	0.262	0.992	0.527	0

4.1	0.000	0.634	0.989	0.542	0
4.1	0.000	1.135	0.970	0.549	0
4.1	0.000	2.274	0.961	0.545	0
4.1	0.000	3.129	0.898	0.489	0
4.1	0.000	4.050	0.951	0.447	0
4.1	0.000	4.866	1.024	0.455	0
4.1	0.000	5.756	0.974	0.420	0
4.1	0.000	7.319	0.949	0.405	0
4.1	0.000	8.215	0.939	0.400	0
4.1	0.000	9.606	0.974	0.470	0
4.1	0.000	10.760	0.991	0.562	0
4.1	0.000	11.686	0.840	0.581	0
4.1	0.000	12.692	0.538	0.552	0
4.1	0.000	13.393	0.256	0.526	0
4.1	0.000	13.845	0.005	0.520	0
\$\$\$ Line: WL6					
6.1	0.000	0.390	1.725	0.610	0
6.1	0.000	0.963	1.675	0.613	0
6.1	0.000	1.819	1.627	0.616	0
6.1	0.000	2.607	1.586	0.610	0
6.1	0.000	3.328	1.591	0.622	0
6.1	0.000	4.033	1.607	0.634	0
6.1	0.000	4.657	1.638	0.651	0
6.1	0.000	5.642	1.600	0.653	0
6.1	0.000	6.956	1.633	0.675	0
6.1	0.000	8.150	1.603	0.699	0
6.1	0.000	9.001	1.496	0.695	0
6.1	0.000	10.119	1.313	0.695	0
\$\$\$ Line: WL9					
9.1	0.000	9.002	2.186	1.370	0
9.1	0.000	10.122	2.060	1.428	0
9.1	0.000	11.178	1.862	1.484	0
9.1	0.000	12.332	1.550	1.575	0
9.1	0.000	13.307	1.148	1.651	0
9.1	0.000	14.104	0.672	1.709	0
9.1	0.000	14.513	0.391	1.751	0
9.1	0.000	14.828	0.079	1.783	0
\$\$\$ camber no u v H					
\$\$\$ Line: CR1					
1.	7.000	.100			



APPENDIX B. KRÄNGNINGSRAPPORT 2009-06-22

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KRÄNGNINGSVIKTER

Vikt nr.	Vikt i tonnes	Material	Kommentar
1	0.777	Blyvikter i gemensam rack	Verifierad i Volvo Penta's kran med våg

FÖRFLYTTNING AV KRÄNGNINGSVIKTER

FÖRFLYTT NR.	RIKTNING (MARKERA MED PILAR)			VIKT NR.
	BB	C/L	SB	
1				1
2				1
3				1
4				1
5				1
6				1
7				1
8				1
9				1
FÖRFLYTTN.VID KRÄNGNING SB (fr. CL)			1860	mm.
FÖRFLYTTN.VID KRÄNGNING BB (fr. CL)			1843	mm.

KRÄNGNINGSRAPPORT.xlsx

RESULTAT FRÅN KRÄNGNINGSPROV

Fartygets namn: R/K "Märta Collin"

Datum: 2009-06-22

Förflyttning av vikter mot SB ger positiv a & d
Förflyttning av vikter mot BB ger negativ a & d
** = Minimum 4 decimaler efter kommatecknet

Displacement under provet: 27.3 Tonnes

Pendellängd (L): 4095 mm Antal krängningar: 9

1	2	3	4	5						
Förflyttning Nr.	Vikt, W Ton a' 1000 kg.	Arm +/- d (m)	Förflyttning moment (2) x (3)	Totalt moment Sum (4)	Enkelv. pendel- utslag +/- a (mm)	Tot. pendel- utslag Sum (5)	Tan β = a/L **	GM (m) {(2)x(3) x L} / {Depl.x a}	Kommentar	
1	0.777	-1.843	-1.432	-1.432	-148	-148	-0.0361	1.4514		
2	0.777	3.703	2.877	1.445	297	149	0.0725	1.4531		
3	0.777	-1.860	-1.445	0.000	-148	1	-0.0361	1.4648		
4	0.777	1.860	1.445	1.445	149	150	0.0364	1.4549		
5	0.777	-3.703	-2.877	-1.432	-298	-148	-0.0728	1.4483		
6	0.777	1.843	1.432	0.000	149	1	0.0364	1.4416		
7	0.777	-1.843	-1.432	-1.432	-150	-149	-0.0366	1.4320		
8	0.777	3.703	2.877	1.445	298	149	0.0728	1.4483		
9	0.777	-1.860	-1.445	0.000	-149	0	-0.0364	1.4549		

Medelvärde för GM: 1.450

KM (ur Hydrostater): 3.349

KG (okorrigerat) = KM - GM : 1.869

AVGÅENDE TANKAR

Tank nr.	Innehåll	Pejling %	Volym m3	Densitet, μ tonnes/m3	Vikt tonnes	VCG m	V.Moment tonnes x m	LCG m	L.Moment tonnes x m	i (trögh.mom.) m4	i x μ t x m
1	Dieseltank C	90.0%	1.334	0.870	1.160	0.315	0.366	4.295	4.984		0.170
2	Dieseltank P	94.3%	0.824	0.870	0.717	1.286	0.922	3.467	2.485		0.040
3	Dieseltank S	94.3%	0.824	0.870	0.717	1.286	0.922	3.467	2.485		0.040
3	Färskvattentank C	100.0%	0.089	1.000	0.089	0.411	0.037	7.338	0.654		0.000
			3.071		2.683	0.837	2.246	3.954	10.608		0.250

Korrektion för fria västskeytor:

$$GG' = \text{Sum} (\mu \times i) / \text{Displacementet} =$$

$$= 0.25 / 27.30 = 0.009$$



APPENDIX C. GENERALARRANGEMANG

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