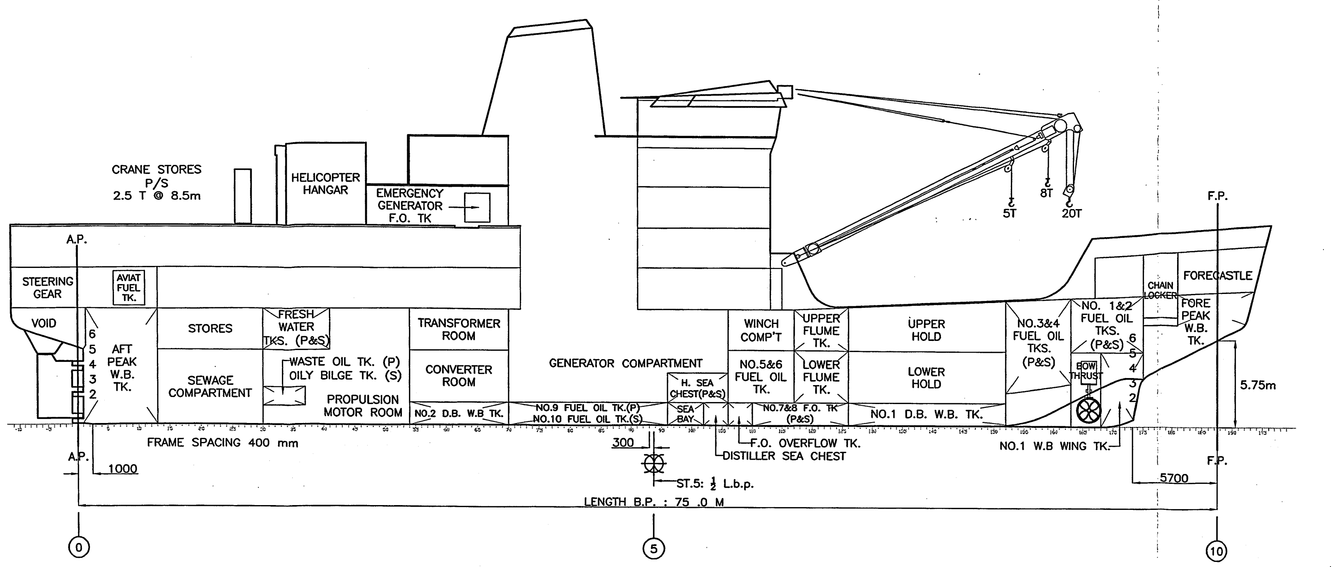
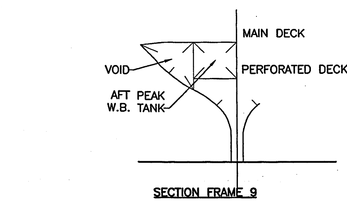
Fisheries and Oceans Coast Guard | Pêches et Océans Garde côtière





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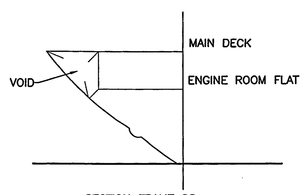

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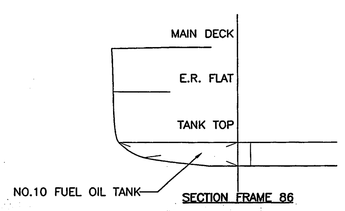

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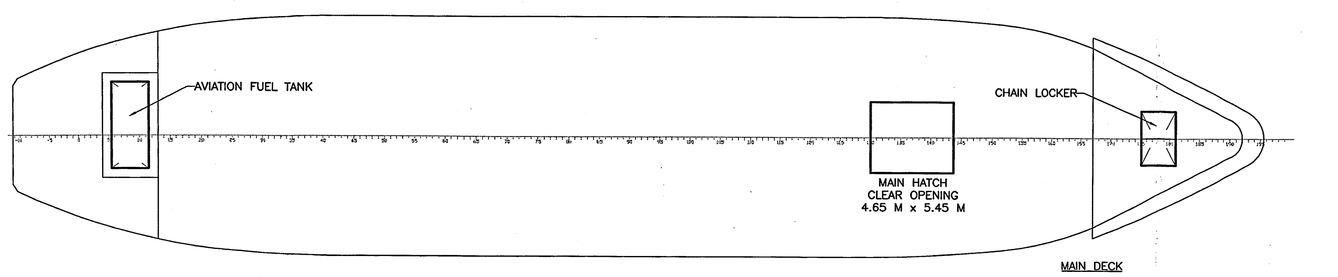
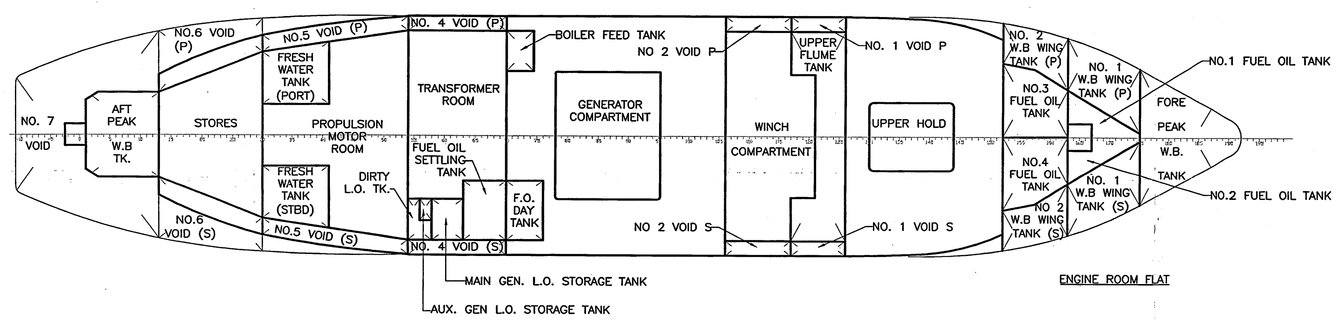
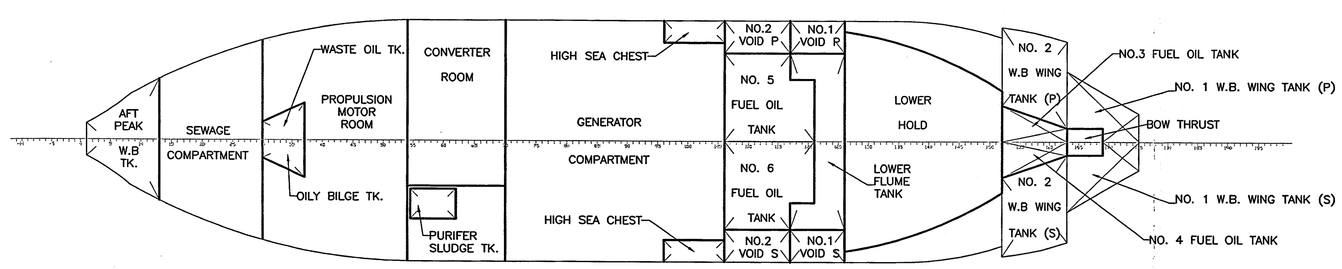


MAIN DECK



ENGINE ROOM FLAT



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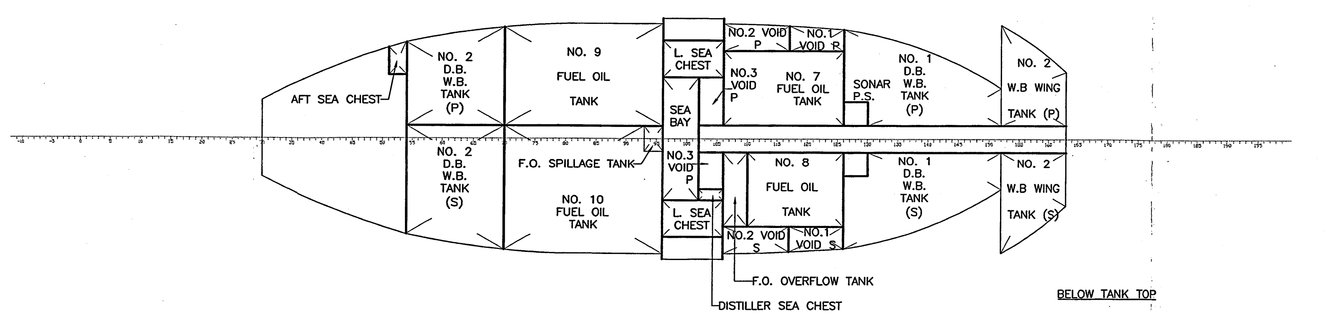
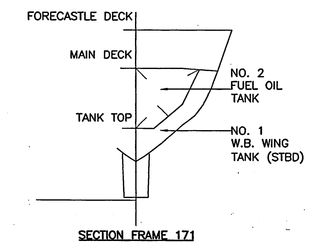


BELOW TANK TOP



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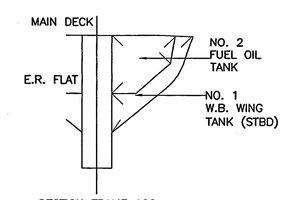

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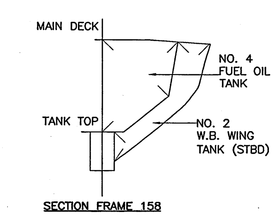

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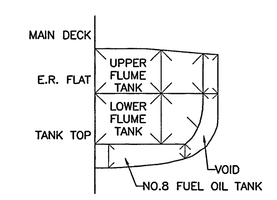

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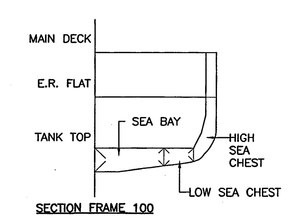


SECTION FRAME 100

HOLD CAPACITIES

COMPARTMENT	FRAMES	GRAIN CAPACITY m³	BALE CAPACITY m³	VCG ABOVE BASE meters	LCG FROM STN 5 meters
UPPER HOLD	126–152	566.4	546.5	6.600	18.099 F
LOWER HOLD	126–152	491.0	463.8	3.247	17.777 F
TOTAL INCL. HATCH		1057.4	1010.3	5.043	17.950 F

FUEL OIL CAPACITIES

SPECIFIC GRAVITY = 0.85

COMPARTMENT	FRAMES	100% CAPACITY m³	98% OR OVERFLOW CAPACITY m³	98% OR OVERFLOW CAPACITY t	VCG ABOVE BASE meters	LCG FROM STN 5 meters	FREE SURFACE MOMENT t.m
NO.1 FUEL OIL TANK PORT	163–175	54.8	46.1	39.2	6.743	29.947 F	24.20
NO.2 FUEL OIL TANK STBD	163–175	56.9	47.6	40.5	6.767	29.946 F	27.83
NO.3 FUEL OIL TANK PORT	152–163	108.6	98.3	83.6	5.697	25.320 F	68.00
NO.4 FUEL OIL TANK STBD	152–163	113.4	103.0	87.6	5.760	25.328 F	68.00
NO.5 FUEL OIL TANK PORT	106–121	119.5	101.9	86.6	2.958	7.674 F	120.66
NO.6 FUEL OIL TANK STBD	106–121	119.5	101.9	86.6	2.958	7.674 F	120.66
NO.7 FUEL OIL TANK PORT	106–126	52.0	50.9	43.3	0.819	8.898 F	70.83
NO.8 FUEL OIL TANK STBD	110–126	41.6	40.8	34.4	0.815	9.698 F	56.67
NO.9 FUEL OIL TANK PORT	70–96	81.5	80.0	67.7	0.854	4.261 A	228.93
NO.10 FUEL OIL TANK STBD	70–96	104.5	102.4	86.8	0.828	4.402 A	426.81
FUEL OIL DAY TANK STBD	70–76	28.7	25.4	21.6	6.201	8.300 A	10.88
FUEL OIL SETTLING TANK	63–70	33.5	29.6	25.1	6.196	10.900 A	12.69
FUEL OIL OVERFLOW TANK	106–110	10.4	10.2	8.7	0.821	5.700 F	14.17
FUEL OIL SPILLAGE TANK	93–96	3.0	2.9	2.5	0.739	0.300 F	0.42
EMERGENCY GENERATOR FUEL OIL TANK	64–68	1.1	1.1	0.9	14.358	11.100 A	0.01
TOTAL FUEL OIL TANKS (98%)		929.2	842.1	715.2			

FLUME TANK CAPACITIES

SPECIFIC GRAVITY = 0.85

COMPARTMENT	FRAMES	100% CAPACITY m³	98% OR OVERFLOW CAPACITY t	WORKING CAPACITY t	VCG ABOVE BASE meters	LCG FROM STN 5 meters	FREE SURFACE MOMENT t.m
UPPER FLUME TANK	117–126	111.7	79.1	49.6	5.650	11.474 F	771.19
LOWER FLUME TANK	117–126	113.0	94.1	43.8	2.325	11.523 F	658.85
TOTAL		224.7	173.2	93.4			

LUBE OIL CAPACITIES

SPECIFIC GRAVITY = 0.80

COMPARTMENT	FRAMES	100% CAPACITY m³	98% CAPACITY t	VCG ABOVE BASE meters	LCG FROM STN 5 meters	FREE SURFACE MOMENT t.m
MAIN GEN. LUBE OIL TANK	58–63	16.6	12.6	6.296	13.300 A	2.77
AUX. GEN. LUBE OIL TANK	56–58	3.6	2.7	6.271	14.700 A	0.18
DIRTY LUBE OIL TANK	54–58	9.7	7.3	6.290	15.250 A	1.52
TOTAL LUB. OIL		29.9	22.6			

WATER BALLAST CAPACITIES

COMPARTMENT	FRAMES	100% CAPACITY m³	FRESH WATER t	SALT WATER t	VCG ABOVE BASE meters	LCG FROM STN 5 meters	FREE SURFACE mox MOMENT t.m SW
FORE PEAK TANK	175–STEM	84.0	84.0	86.1	7.057	35.033 F	130.48
NO.1 W.B. WING TANK PORT	163–175	41.3	41.3	42.3	5.556	29.943 F	16.18
NO.1 W.B. WING TANK STBD	163–175	41.3	41.3	42.3	5.556	29.943 F	16.18
NO.2 W.B. WING TANK PORT	152–163	55.1	54.0	55.3	4.403	25.413 F	18.50
NO.2 W.B. WING TANK STBD	152–163	55.1	54.0	55.3	4.403	25.413 F	18.50
NO.1 D.B. W.B. TANK PORT	126–152	50.8	50.8	52.1	0.881	17.501 F	122.23
NO.1 D.B. W.B. TANK STBD	126–152	50.8	50.8	52.1	0.881	17.501 F	122.23
NO.1 D.B. W.B. TANK STBD	126–152	50.8	50.8	52.1	0.881	17.501 F	122.23
NO.2 D.B. W.B. TANK PORT	54–70	43.5	43.5	44.6	0.872	12.541 A	127.93
NO.2 D.B. W.B. TANK STBD	54–70	59.5	59.5	61.0	0.839	12.584 A	262.98
AFT PEAK TANK	1–13	111.4	111.4	114.2	5.534	34.538 A	72.00
TOTAL WATER BALLAST			590.6	605.4			

FRESH WATER CAPACITIES

COMPARTMENT	FRAMES	100% CAPACITY m³	OVERFLOW CAPACITY t	VCG ABOVE BASE meters	LCG FROM STN 5 meters	FREE SURFACE MOMENT t.m
FRESH WATER TANK PORT	30–41	52.1	50.1	6.316	23.240 A	22.40
FRESH WATER TANK STBD	30–41	52.1	50.1	6.316	23.240 A	22.40
BOILER FEED TANK PORT	70–75	14.9	14.4	6.316	8.600 A	3.12
TOTAL FRESH WATER (100%)			114.6			

MISCELLANEOUS TANKS

COMPARTMENT	FRAMES	100% CAPACITY m³	SPECIFIC GRAVITY	98% CAPACITY t	VCG ABOVE BASE meters	LCG FROM STN 5 meters	FREE SURFACE MOMENT t.m
AVIATION FUEL TANK	3–12	22.8	0.79	17.7	9.268	34.166 A	30.83
WASTE OIL TANK PORT	30–37	4.9	0.85	4.1	1.915	23.866 A	1.17
OILY BILGE TANK STBD.	30–37	4.9	0.85	4.1	1.915	23.866 A	1.17
PURIFIER SLUDGE TANK	55–64	2.5	0.85	2.0	1.792	13.597 A	1.29

EXPANSION SYSTEM AND OBSERVATION TANKS

WEIGHTS AT WORKING LEVEL INCLUDED IN LIGHTSHIP WEIGHT

COMPARTMENT	FRAMES	100% CAPACITY m³	COMPARTMENT	FRAMES	100% CAPACITY m³
AIRCOND. EXPANSION TANK	69–71	0.24	SEWAGE TRANSFER TANK	102–105	1.98
CENTR. COOLING EXPANSION TANK	79–81	1.54	VACUUM SEWAGE UNIT	92–94	1.50
BEARING L.O. TANK	36–37	0.23	WASH TANK	15–16	0.09
E.R. SERVICE TANK AFT	36–37	0.23	MINUJECT ASSEMBLY	96–97	1.46
E.R. SERVICE TANKS FOR'D	55–58	0.46	HOTWELL TK	71–75	0.83
RESERVE OIL TANK	_5–_8	0.90	BOILER OBSERVATION TANK	72–74	0.35
HOT AND COLD F.W. MODULE	37–41	2.60	SEA BAY	96–102	27.52
EQUALIZATION TANK	102–105	0.06	SEA CHEST P & S	51–53/96–106	43.08

VOID COMPARTMENTS

COMPARTMENT	FRAMES	100% CAPACITY m³	VCG ABOVE BASE meters	LCG FROM STN 5 meters	FREE SURFACE mox MOMENT t.m SW
NO. 1 VOID P OR S	117–126	30.1	3.969	11.081F	1.44
NO. 2 VOID P OR S	106–117	38.3	3.836	7.089F	2.28
NO. 3 VOID P	102–106	7.2	0.805	4.1F	4.91
NO. 3 VOID S	102–106	5.4	0.791	4.1F	2.01
NO. 4 VOID P OR S	54–70	19.1	6.375	12.699A	0.54
NO. 5 VOID P OR S	30–54	43.5	6.459	21.126A	5.15
NO. 6 VOID P OR S	13–30	55.7	6.458	29.190A	30.35
NO. 7 VOID CL	–12–13	142.6	6.834	36.862A	1181.64

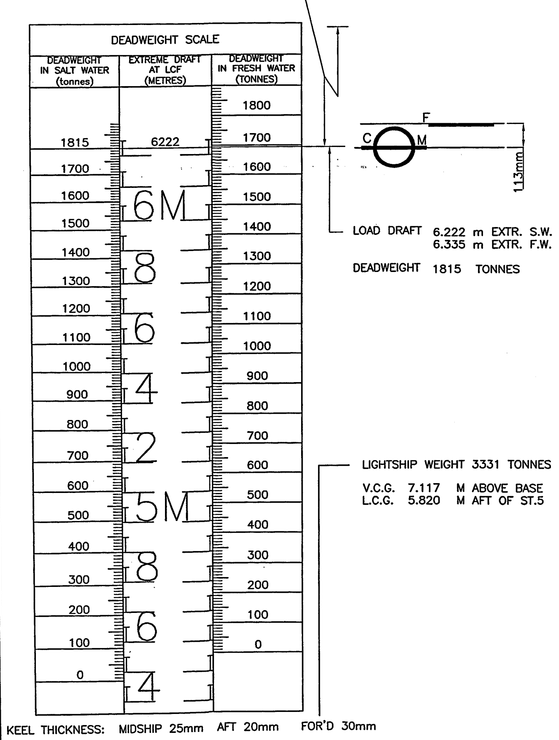
PARTICULARS

LENGHT OVERALL : 83.0 m
LENGHT B.P. : 75.0 m
BREADTH : 16.2 m
DEPTH (MAIN DECK): 7.90 m
DESIGN DRAUGHT : 5.75 m
LOAD DRAUGHT : 6.08 m MLD.
6.11 m EXTR.

OFFICAL NUMBER : 808715
GROSS TONNAGE : 3853.56
NET TONNAGE : 1528.46
CALL SIGN : CGAH
PORT OF REGISTRY : OTTAWA

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED

ASSIGNMENT ALL SEASON FREEBOARD 1679mm



LOAD DRAFT 6.222 m EXTR. S.W.
6.335 m EXTR. F.W.

DEADWEIGHT 1815 TONNES

LIGHTSHIP WEIGHT 3331 TONNES

V.C.G. 7.117 M ABOVE BASE
L.C.G. 5.820 M AFT OF ST.5

KEEL THICKNESS: MIDSHIP 25mm AFT 20mm FOR'D 30mm

DEADWEIGHT SHOWN INCLUDES: FUEL OIL, LUB OIL, WATER BALLAST, FRESH WATER CREW AND EFFECTS AND PROVISIONS TO OBTAIN CARGO DEADWEIGHT, THE WEIGHT OF THESE ITEMS MUST BE DEDUCTED.

LIGHTSHIP WEIGHT SHOWN INCLUDES: FLUID IN EXPANSION, SYSTEM AND OBSERVATION TANKS. SEA BAY AND SEA CHESTS AT WORKING LEVEL

BUT EXCLUDEDS: FUEL OIL, LUB OIL, WATER BALLAST, FRESH WATER, CREW AND EFFECTS AND PROVISIONS.

PROJECT TYPE 1100 ICEBREAKER

no.	eco no.	revision	date	by	approved
B		REDRAWN TO CAD	08/20/02	R.R.B	
no	eco no	revision	date	por	approuvé

C.C.G.S ANN HARVEY

CAPACITY PLAN

date – date	drawn – dessine	checked – verifie	designed – dessiné par	approved approuvé
AUG/20/02	R. R. BURTON			
scale – echelle 1:200	project no. – projet no.	drawing no. – no du dessin A0 72–405		sheet feuille 1/1