

# TABLE FOR FREE SURFACE CORRECTION AND TANK CAPACITIES

C4-5-1a

TANK	FRAMES	TANK CAPACITY		FREE SURFACE CORRECTION		V.C.G.	L.C.G. F.P.
		97% F.O. TONS	100% S.W. TONS	COL A	COL B		
D.B.1	14-24	48.2	52.8	106	67	4.5	39.9
D.B.1A	24-36	81.9	89.8	464	204	4.8	64.9
D.B.2	36-57	71.2	78.1	428	158	2.7	106.6
	36-57	71.2	78.1	428	158	2.7	106.6
D.B.3	57-82	227.6	249.5	3772	944	2.5	161.6
	57-82	55.6	61.0	300	120	3.0	169.2
	57-82	55.6	61.0	300	120	3.0	169.2
D.B.4	82-106	224.1	245.7	3626	943	2.5	222.0
	82-106	128.1	140.5	1138	364	2.6	223.8
	82-106	128.1	140.5	1138	364	2.6	223.8
D.B.5	106-127	196.2	215.1	3173	825	2.5	278.3
	106-134	178.0	195.2	2048	676	2.6	288.3
	106-134	180.0	197.4	2048	676	2.6	288.3
D.B.6	134-160	242.3	265.7	3928	1021	2.5	354.4
	134-160	67.0	95.4	615	221	2.8	348.2
	134-160	67.0	95.4	615	221	2.8	348.2
D.B.7	160-184	94.6	103.7	768	269	2.7	412.4
	160-184	94.6	103.7	768	269	2.7	412.4
D.T.1	14-24	125.3	137.4	134	130	16.5	40.3
D.T.1A	24-36	257.6	282.5	945	680	16.8	65.1
D.T.2	106-113	100.7		20	20	19.1	260.8
	106-113	100.7		20	20	19.1	260.8
D.T.3	113-119	86.1		17	17	19.1	277.0
	113-119	86.1		17	17	19.1	277.0
D.T.6	160-172	201.2	220.7	1242	634	11.4	401.2
	160-172	201.2	220.7	1242	634	11.4	401.2
D.T.7	172-184	128.8	141.2	618	358	11.7	430.7
	172-184	128.8	141.2	618	358	11.7	430.7
D.T.8	184-190	50.5	55.4	68	58	9.6	454.0
	184-190	50.5	55.4	68	58	9.6	454.0

TANK	FRAMES	TANK CAPACITY		F.S. CORR. COL C	V.C.G.	L.C.G. F.P.
		100% F.W. TONS	100% S.W. TONS			
FORE PEAK	1	STEM-14	110.8		11.7	17.1
AFT PEAK	1	204-218	93.0		24.9	506.8
D.T.4	P/S	120-127	123.7	5575	21.3	296.0
D.T.5	P/S	127-133	108.4	4789	20.9	312.0
DIST. WATER	1	106-109	24.9	59	39.5	2558

**NOTES:**

FUEL OIL AT 37.23 CU.FT./TON-97% FULL  
 FRESH WATER AT 36.0 CU. FT./TON-100% FULL  
 SALT WATER AT 35.0 CU. FT./TON-100% FULL

**FREE SURFACE CORRECTION PROCEDURE**

ADD QUANTITY IN COLUMN A FOR TANKS SLACK  
 ADD QUANTITY IN COLUMN B FOR TANKS 97% FULL  
 ADD QUANTITY IN COLUMN C FOR F.W. TANKS  
 IF ANY TANK IS EMPTY, OR PRESSED UP WITH WATER, USE ZERO FOR THAT TANK.

DIVIDE SUM TOTAL BY THE SHIP DISPLACEMENT IN TONS TO OBTAIN FREE SURFACE CORRECTION IN FEET.