

? 12'-0" 12'-3" is correct there is a slight error in this calculation

NAME "CAIRNGORM"

MOULDED DIMENSIONS 141'-6" x 26'-0" x 12'-3"

MLD. DISPLACEMENT AT 85% D<sub>m</sub>

BLOCK COEFFICIENT FOR USE WITH TABLE 727'

DEPTH FOR FREEBOARD.

MLD. DEPTH = 12.00

STRINGER = 0.04

SHEATHING IN WELLS:  $T(\frac{L-S}{L}) =$

D = 12.04

ROUND OF BEAM.

STANDARD = 6.24

SHIP = 7.00

DIFFERENCE = .76

RESTRICTED TO

ALLOWANCE =  $\frac{\text{DIFFERENCE}}{4} \times (1 - \frac{E}{L}) = \frac{.76}{4} \times .28 = -.05$

SUPERSTRUCTURES.

	LENGTH	ALLOWED	HEIGHT	CORRECTED FOR HEIGHT	EFFECTIVE LENGTH
POOP ENCLOSED					
" OVERHANG					
R.Q.D ENCLOSED	70.5	70.5	4.33	70.5	70.50
" OVERHANG					
BRIDGE ENCLOSED	8.75	8.75	7.0	8.75	8.75
" OVERHANG AFT					
" " FORD					
F.C.L. ENCLOSED	17.69	17.69	6.5	17.69	21.85
" OVERHANG	8.31	4.16		4.16	
TRUNKS					

101.10

% COVERED = .7146 CORRESPONDING % TABLE = 66.70%

CORRECTED FOR LENGTH OF BRIDGE IF REQUIRED =

ALLOWANCE = 17.15 x .6670 = -11.44

SHEER.

STATION	ACTUAL SHEER	STANDARD SHEER	ALLOWED SHEER	S. M.	PRODUCTS
A.P. 1	27.0	24.15	24.15	1	24.15
2	15.0	13.28	13.28	4	53.12
3	7.1	6.28	6.28	2	12.56
4	1.9	1.69	1.69	4	6.76
5	3.25		3.25	4	13.00
6	12.05		12.05	2	24.10
7	25.5	26.6	25.5	4	102.00
F.P.	45.0	48.3	45.0	1	45.00

MEAN EFFECTIVE SHEER = 11.70

STANDARD SHEER = .05L + 5 = 12.08

DIFFERENCE (D<sub>f</sub>) = .38

ALLOWANCE = D<sub>f</sub> x (.75 -  $\frac{E}{2L}$ ) = .38 (.75 - .357) = +.15

IF RESTRICTED ON ACCOUNT OF POSITION OF BRIDGE:

CORRECTION FOR LENGTH.

(A) SHIPS WITHOUT SUPERSTRUCTURES OR WITH DETACHED SUPERSTRUCTURES, D >  $\frac{L}{15}$

$(D - \frac{L}{15}) \times R = (12.04 - 9.43) 1.088 = +2.84$

(B) SHIPS WITH COMPLETE SUPERSTRUCTURES

D >  $\frac{L}{15}$ ,  $(D - \frac{L}{15}) \times R =$

D <  $\frac{L}{15}$ ,  $(\frac{L}{15} - D) \times \frac{2}{3} R$

IF RESTRICTED BY HEIGHT OF SUPERSTRUCTURES

TABLE FREEBOARD = 13.72

CORRECTED FOR BLOCK COEFF:  $\times \frac{727 + .68}{1.36} = 14.19$

CORRECTION FOR LENGTH

" SHEER 11.44

" SUPERSTRUCTURES .05

" ROUND OF BEAM

" THICKNESS OF DECK

SUMMER FREEBOARD 0' 5 3/4

WINTER FREEBOARD 0' 8 1/2

1900 P&S S 5 1/2 W 7

Difference S + 7 1/4 W + 1 1/2 + 1 3/4

5.69

2.89

8.58

Should be 6 8 3/4 for 12'-3" mld. depth.



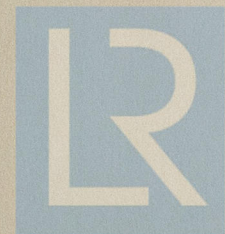
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