

Burntisland S.B. Co. Ltd. N° 238.

Figures are approximate only.

	TONS	V.C.G.	MOMENT.
Estimated Lightweight } crew and Effects. stores }	3,400	22.0	74,800
	-	-	-
Oil Fuel in N°s 2, 3, 5 and 6 D.B. tanks	1,100	3.0	3,300
Feed Water in N° 4 D.B. tanks.	30	3.0	90
Water Ballast in N° 1 D.B. tanks.	160	3.0	480
" " " Fore Peak	70	15.0.	1050
" " " Aft Peak.	340	25.0.	8500

$\Delta =$ 5,100 17.3 88,220

Mean draught S.W = 11 ft.

K.M = 28.5 ft

K.G = 17.3 ft

G.M = 11.2 ft.

N° 3 hold flooded to 2 ft below tunnel top.

$\Delta =$ 370 7.0 2,590
5470 16.6 90,810

Mean draught. S.W = 11'8"

K.M = 26.0 ft (corrected for free surface)

K.G = 16.6 ft

9.4 ft.

Correction for free surface $B.M = \frac{I}{V}$ $I = B.M \times V$

$$= 20 \times 5470 \times 35$$

$$= 3,830,000 \text{ ft}^4$$

$$\text{Deduction for free surface} = 3,830,000 - \frac{2 \times 58 \times 22^3}{12} = 3,710,000$$

$$B.M = \frac{3,710,000}{5470 \times 35} = 19.3 \text{ ft.}$$

N° 3 hold flooded to 1 ft above tunnel top.

K.M. = 23.00 ft (corrected for free surface).

K.G. = 16.4 ft

G.M = 6.6 ft.

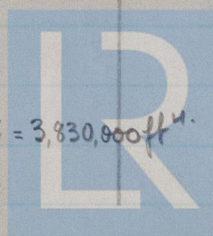
$$I = 19 \times 5750 \times 35 = 3,830,000 \text{ ft}^4.$$

$$\text{Deduction for free surface} = \frac{58 \times 50^3}{12} = 3,225,000 \text{ ft}^3.$$

$$B.M = 16.0 \text{ ft.}$$

650 8.0 5200

5750 16.4 93,420



© 2019
Lloyd's Register
Foundation

W154-0180

over

Nº3 hold flooded to 1 foot above tunnel top
feed tank slack and Nº3 D.B. oil fuel tank slack

Deduction for free surface.

$$\begin{array}{lcl} \text{Water in Nº3 hold.} & = & \frac{58 \times 50^3}{12} = 606,000 \\ \text{" " feed tanks} & = & \frac{5 \times 24^3 \times 2}{12} = 11,500. \\ \text{" " Nº3 D.B.} & = & \frac{78 \times 25^3 \times 2}{12} = \underline{204,000} \\ & & 820,500 \end{array}$$

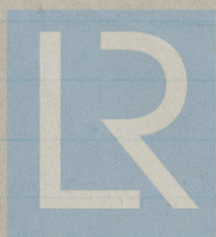
$$\begin{aligned} \text{Total I} &= 3,830,000 - 820,500 \\ &= 3,009,500 \end{aligned}$$

$$\text{B.M} = \underline{14.9 \text{ feet.}}$$

$$\text{K.M} = 21.9 \text{ feet.}$$

$$\text{K.G} = \underline{16.4} \text{ "}$$

$$\text{G.M} = \underline{\underline{5.5}} \text{ "}$$



© 2019

Lloyd's Register
Foundation