No. in R.B. Name Gross tons

TABLE OF FREQUENCY - VIBRATIONS WITH ONE NODE

MAIN ENGINE: D.E. 550-VTBF-110

No. of Cylinders: 5 — 2 Stroke - Single Acting, Solid Injection

Revs. per Min.: 170 — Cylinder Bore: 500 mm

IHP: 3250 — Piston Stroke: 1100 mm

BHP: 2900 — Firing Order: 1-4-3-2-5

Mean indic. Press.: 8.0 Kg/cm^2 — Maximum Pressure: 55 Kg/cm^2

d_o = cm. $i_o = \frac{\pi}{32} d_o^4$ = cm^4 — Modulus of Rigidity G = 843000 Kg/cm^2

Diam. of Propeller: 3660 mm. No. of Blades: 4 Shafting Drawing: Werf "De Noord" 665-11011, corr

Propeller of Nikalium-Bronze — WD^2 includes 25% added for Entrained Water.

Frequency of Vibrations: n_e = 570 ~/Min. ω_e^2 = 3570 sec^{-2}

MASSES	WD^2 Kgm^2	$\triangle$ Radians	TORQUE T $2{,}55 \cdot WD^2 \cdot \triangle \cdot \omega_e^2$ Kgcm	$\sum$ TORQUE Kgcm	STIFFNESS $C = \frac{i_o \cdot G}{L_{red}}$ Kgcm/Rad.	TWIST $\triangle' = \sum T/C$ Radians
Cylinder 1	5890	1,0000	10^7 x 5.36	10^7 x 5.36	10^7 x 256	.0209
- 2	5890	.9791	5,25	10,61	256	.0414
- 3	4470	.9377	3.82	14.43	256	.0563
- 4	5890	.8814	4.73	19.16	256	.0747
- 5	5890	.8067	4.33	23.49	307	.0766
Chain	440	.7301	.29	23.78	163.6	.1451
Turning Wheel	6600	.5850	3.52	27.30	10.12	2.6983
Propeller	14150	-2.1133	-27.22			

LLOYD's REGISTER OF SHIPPING
St. Kongensgade 49,1
Copenhagen K.
24 AUG. 1960

See letter dtd 28/7/60

Result of Vector Summation:

Order: 3 4 5

Sum : .24 .05 4.60

Barred Speed Range: 105 - 124 RPM

CPN. 1ST ENTRY REPORT NO. 18712.

"BRITA DAN" Bijkers 163-164-165

AKTIESELSKABET
BURMEISTER & WAIN's
MASKIN- & SKIBSBYGGERI

Beregnet 24-5-60 SN Jensen

Efterset 27-5-60

TEGN. No. 16D2817

R1775

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004866-004872-0052

If ... thick ... round eyeholes ... Are dowel pins fitted: ... Crankshaft material Journals SM-Steel ... Approved ... kg/mm²

Webs SM-Steel ... Tensile strength ...