

REPORT ON STEAM TURBINE MACHINERY.

AUXILIARY

No. 9412

Received at London Office 3 APR 1950

2nd March, 1950 When handed in at Local Office 2nd March, 1950. Port of PHILADELPHIA, PA.  
Survey held at Essington, Pa. Date, First Survey 25th Feb., 1949 Last Survey 26th Jan., 1950.  
Book on the S.S. "SOVAC COMET" (Number of Visits five)  
Tons { Gross 17597.94  
Net -  
at Chester, Pa. By whom built SunSB & DD Co. Yard No. 574 When built 1949-50  
s made at Essington, Pa. By whom made Westinghouse E. & M. Co. Engine No. 5A1124-58 When made 1949  
made at Barberton, Ohio By whom made Babcock & Wilcox Co. Boiler No. MB-4342 When made "  
Horse Power at Full Power 12,500 Owners Tankers Navigation Corp. Port belonging to Panama  
Horse Power as per Rule 3096 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes  
for which Vessel is intended Foreign

AM TURBINE ENGINES, &c.—Description of Engines Two turbo driven 300 K.W. generating sets.

Ahead 1 Turbines 1 single reduction geared } to 1 propelling shafts. No. of primary pinions to each set of reduction gearing 1  
Astern D.C. Generator phase periods per second } rated 300 Kilowatts 240 Volts at 1200 revolutions per minute;  
coupled to { Direct Current Generator  
Y pling power for driving Ship's Electrical Gear  
INEE Kilowatts Volts at revolutions per minute. Direct coupled, single or double reduction geared to propelling shafts.

BINE DING.	H. P.			I. P.			L. P.			ASTERN.		
	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.
EXPANSION	.933	25.496										
,25,	1.400	25.745										
"	1.820	25.939										
"												
ep.1												
"												
Sep												
0.19												
"												
,195												
"												
"												

Horse Power at each turbine { H.P. 300 KW  
I.P. Revolutions per minute, at full power, of each Turbine Shaft  
L.P. 5930 1st reduction wheel 1200

Shaft diameter at journals { H.P. 2 1/2" Pitch Circle { 1st pinion 5.063" 1st reduction wheel 25.009" Width of { 1st reduction wheel 6.000"  
I.P. Diameter { 2nd pinion main wheel Face { main wheel  
L.P.

ce between centres of pinion and wheel faces and the centre of the adjacent bearings { 1st pinion 5.594" 1st reduction wheel  
2nd pinion main wheel 5.594"

le Pinion { 1st Pinion Shafts, diameter at bearings External 1st { 2.495" 2nd { diameter at bottom of pinion teeth { 1st 4.833"  
diameter { 2nd Internal 2nd {

Shafts, diameter at bearings { 1st 3.990" diameter at wheel shroud, { 1st 25.209" Generator Shaft, diameter at bearings 3.990"  
main main Propelling Motor Shaft, diameter at bearings

mediate Shafts, diameter as per rule Thrust Shaft, diameter at collars as per rule Tube Shaft, diameter as per rule  
as fitted as fitted

Hul Shaft, diameter as per rule Is the { tube { shaft fitted with a continuous liner { Bronze Liners, thickness in way of bushes as per rule  
as fitted as fitted screw as fitted

ess between bushes as per rule Is the after end of the liner made watertight in the propeller boss If the liner is in more than one length are the junctions  
as fitted

fusion through the whole thickness of the liner If the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a  
material insoluble in water and non-corrosive If two liners are fitted, is the shaft lapped or protected between the liners Is an approved Oil Gland

appliance fitted at the after end of the tube shaft Length of Bearing in Stern Bush next to and supporting propeller

ller, diameter Pitch No. of Blades State whether Moveable Total Developed Surface square feet.

gle Screw, are arrangements made so that steam can be led direct to the L.P. Turbine Can the H.P. or I.P. Turbine exhaust direct to the

user No. of Turbines fitted with astern wheels Feed Pumps { No. and size  
How driven

s connected to the Main Bilge Line { No. and size  
How driven

t Pumps, No. and size Lubricating Oil Pumps, including Spare Pump, No. and size

o independent means arranged for circulating water through the Oil Cooler Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

, No. and size:—In Engine and Boiler Room

lds, &c.

Water Circulating Pump Direct Bilge Suctions, No. and size Independent Power Pump Direct Suctions to the Engine Room

No. and size Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes

e Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges

Sea Connections fitted direct on the skin of the ship Are they fitted with Valves or Cocks

ey fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Are the Overboard Discharges above or below the deep water line

ey each fitted with a Discharge Valve always accessible on the plating of the vessel Are the Blow Off Cocks fitted with a spigot and brass covering plate

pipes pass through the bunkers How are they protected

pipes pass through the deep tanks Have they been tested as per rule

Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

arrangement of valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one

rtment to another Is the Shaft Tunnel watertight Is it fitted with a watertight door worked from



BOILERS, &c.— (Letter for record ) Total Heating Surface of Boilers

Is Forced Draft fitted No. and Description of Boilers Working Pressure

Is a Report on Main Boilers now forwarded?

Is { a Donkey } Boiler fitted? If so, is a report now forwarded?  
an Auxiliary

Plans. Are approved plans forwarded herewith for Shafting Main Boilers Auxiliary Boilers Donkey Boilers  
(If not state date of approval)

Superheaters General Pumping Arrangements Oil Fuel Burning Arrangements

Spare Gear. State the articles supplied: Rule Requirements.

The foregoing is a correct description,

Dates of Survey while building { During progress of work in shops - - } 25th Feb., 26th Feb., 3rd March, 1949  
{ During erection on board vessel - - - } 23rd and 26th January, 1950.  
Total No. of visits Five

Dates of Examination of principal parts—Casings 26 Feb., 1949 Rotors 26th Feb., 1949 Blading 26th Feb., 1949 Gearing 26 Feb.

Wheel shaft Thrust shaft Intermediate shafts Tube shaft Screw shaft

Propeller Stern tube Engine and boiler seatings Engine holding down bolts

Completion of pumping arrangements Boilers fixed Engines tried under steam

Main boiler safety valves adjusted Thickness of adjusting washers

Rotor shaft, Material and tensile strength O.H. Steel Identification Mark

Flexible Pinion Shaft, Material and tensile strength Identification Mark

Pinion shaft, Material and tensile strength O.H. Steel Identification Mark

1st Reduction Wheel Shaft, Material and tensile strength Identification Mark

Wheel shaft, Material Identification Mark Thrust shaft, Material Identification Mark

Intermediate shafts, Material Identification Marks Tube shaft, Material Identification Marks

Screw shaft, Material Identification Marks Steam Pipes, Material Test pressure

Date of test Is an installation fitted for burning oil fuel

Is the flash point of the oil to be used over 150°F. Have the requirements of the Rules for the use of oil as fuel been complied with

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo If so, have the requirements of the Rules been complied with

Is this machinery a duplicate of a previous case yes If so, state name of vessel S.S. "SOVAC PEGASUS" - Hulls

General Remarks (State quality of workmanship, opinions as to class, &c. These turbines were built under the Survey of  
are A.B.S. and war surplus stock modified to suit the steam conditions of the vessel, in accordance  
with the approved plans. They have been satisfactorily installed on board the vessel, tried  
under full power and found satisfactory. Megger tests and high potential tests were carried out  
and found to be within the requirements of the A.I.E.E.

The amount of Entry Fee ... £ : When applied for,  
Special ... £ See 2 Feb. 1950  
other : per F.A.G.  
Donkey Boiler Fee ... £ Rpt. 4a : When received,  
Travelling Expenses (if any) £ : 19

Committee's Minute NEW YORK MAR 15 1950

Assigned See First Entry Report attached.



© 2020

Lloyd's Register  
Foundation