

# REPORT of SURVEY for REPAIRS, &c.

Date of writing Report July 8th, 1933. When handed in at Local Office July 8, 1933. Port of Newport News, Va.,

No. in Reg. Book. Survey held at Newport News, Va. Date, First Survey May 2nd Last Survey May 3rd, 1933. (No. of Visits 2)

50683 on the ~~Wood Iron or Steel~~ S/S "CHARLES PRATT"

23355

TONNAGE: Built at Newport News, Va. By whom N.N.S.B. & DD. Co. When 1916 3  
GROSS 8983 Owners Standard Shipping Company. Owners' Address  
UNDER DK. 7159 Managers Port belonging to Wilmington, Del.  
NET 5644

**RETAIN**

Surveyed Afloat or in Dry Dock? Yes Name of Dock N.N.S.B. & DD. Co. Destined Voyage

WB=CellDBorDBa feet; uE&B feet; f feet }  
total capacity tons. FPT tons; APT tons; MT feet tons. }

Particulars of Classification (which must be inserted precisely as in Register Book & Supplements).

N.B.—All alterations in the existing records should be underlined.  
If the Vessel has Water Ballast Tanks, state whether the manhole covers have been removed, and the insides of the tanks examined. Also state the amount of deterioration (if any) found in the thicknesses of the floors, framing, girders, and of the inner bottom plating, especially in the boiler space.

Last Report, No. 34408 Port N.Y.K

CHARACTER for Special Survey, Date of last Survey and of Periodical Surveys.	Years Assigned and expired.	Machinery and Boiler Surveys (including date of N.B., if any).
*100-A-1 6.32		*LMC. 8.28
"Shelter deck with freeboard"		B.S. 2.33
ss.N.Yk.No.3-8,28		T.S. (CL) 8.2.33
		P.11.32
Carrying Pet. in bulk; fitted for oil fuel 3.16 F.P. above 150oF.		

(Periodical Surveys, when held, must be reported in detail and seriatim in the terms of the Rules. State clearly the cause of Repairs, if any, and, in detail, the nature and extent of Examinations and subsequent repairs. Repairs on account of Damage (the cause of which must be stated) should be separated from Repairs due to other causes; and besides being detailed in the body of the report, should be summarised in the form shown below. Whenever the replacement of Anchors or Chains is reported, the particulars should be clearly stated in the space provided on the back of this form. State also the dates and initials of any letters respecting this case. 19/6/33

In damage cases where the Surveyor has not made a special damage report he is required to state whether he offered his services for this purpose and to whom and why they were declined.

Society's Freeboard (if assigned) as painted on Ship and now verified ft. ins.

Was a damage report made by anyone else? If so, by whom? 2nd No. partly held

### REPAIRS, OR EXAMINATION AS PER RULE, FOR

This vessel was placed on dry dock on May 2nd, 1933, for the purpose of examination as a result of reported fractured bottom shell plating. Upon examination, it was found in way of No. 7 main cargo tank starboard, that the bottom shell plating in the following strakes "C", "D", "E", "F" & "G" and "A" & "B" on the port side were cracked through. Some of the cracks were through the butt joints and some of them through the solid plate. In consequence of this, a number of tensile and bend tests were cut from the fractured plates and from plates in other parts of the structure. These plates were machined in order to get clear of the corroded surface. In way of the fracture, one plate gave a Yield point of 34100 Lbs. and an ultimate tensile of 61400 Lbs. with an elongation of 29.25%. Another plate in way of the fractures gave a Yield point of 34200 Lbs., an ultimate tensile of 63700 Lbs., and an elongation of 27.25%.

SUMMARY OF DAMAGE REPAIRS	Shell Plates.	Frames.	R. Frames.	Floors.	Beams.	Str. Plates.	Dk. Plates.	Other Items:—
Renewed								
Removed and Faired or Repaired								
Faired or Repaired in place								

### PRESENT CONDITION OF THE

Decks	State if Tanks have been examined inside	Dblg. Plates under Sounding Pipes	Copper, or Y.M. of Wood Vessels (State if on Felt). When put on, Month Year
Caulking of Decks	State if Tanks now tested	Engine Room Skylights	Boats
Coamings	Bulkheads	Coal Bunkers, Open'gs, Lids, &c.	Masts, Yards, &c.
Beams & Fastenings	Ceiling	Scuppers	Condition, how ascertained (State if wedges removed)
Outside Plating	Cement or Asphalt (State which)	Cargo Hatchways	Sails
Breasthooks	Rudder	Hatches	Equipment letter
Transoms	Steering gear and its connections	Planking of Wood Vessels	Anchors, No. of
Frames	Windlass	Caulking ditto	Cables (State if now ranged)
Reverse Frames	Have Pumps now been examined and found efficient?	Treenails ditto	" length size (on board)
Longitudinals	Have Sluice Valves now been examined and found efficient?	Breasthooks & Stemson ditto	" Rule length size
Transverses	Have Watertight Doors now been examined and found efficient?	Transoms, Pointers, & Crutches ditto	Hawser & Warps
Floors	Have Ventilators and their Coamings been examined and found efficient?	Timbers of Frame at openings ditto	Standing and Running Rigging
Keelsons		Ditto ditto at other places ditto	
Stringers		Stringers, Clamps & Shelves ditto	
Inner Bottom Plating		Salting ditto (State if examined.)	

### General Observations, Opinion as to Class, Recommendation, &c.:

State clearly whether any and, if so, what alteration is suggested to be made in the existing classification and notification of the vessel in the Register Book consequent upon this survey, thus, for example:—"to remain as now-classed in the Register Book without fresh record of Survey," "to remain as classed and to have record of survey 1,24," or "to remain as classed and to have record of survey, 1,24, and the notations of ss No. 1-24 and ptND24, &c."

The foregoing is forwarded for the information of the Committee.

10m.11.30.—Transfer Ink. (The Surveyors are requested not to write on or below the space for Committee's Minute.)

Survey Fee (per Section 29)	£	Fees applied for,
Special Damage or Repair Fee (if any) (per Sec. 29)	£	19
Travelling Expenses (if chargeable)	£	Received by me,
Second Surveyor's Fee (if any)	£	19

*J. Hudson*  
Surveyor to Lloyd's Register of Shipping.

Committee's Minute  
Character Assigned *Deferred*

Lloyd's Register Foundation

RETAIN

S/S "CHARLES PRATT"

The whole of the results obtained are well within the Society's limits for mild steel. A summary of the whole of the tests show that the average Yield point was 32150 Lbs. per square inch. The ultimate tensile 61360 Lbs. and an elongation of 25%, and all bend tests to 180° were made without fracture. The fractures were silky in appearance and in the majority of cases the specimens broke with a good cup fracture. The interior surfaces of the bottom shell plating was found to be in some cases uniformly corroded, "pitted" in places and unevenly corroded.

The original of some of these plates viz; .72 were found to be wasted to .64 and .70 and owing to the "pitting" in places these thicknesses were still further reduced. It was considered that, these thicknesses in a general way were not unreasonably low and were such as would be passed by the Society's Surveyors.

On completion of taking the necessary tests, the vessel was undocked, pending the Owners decision as to the extent of the repairs they would carry out.

It is understood that this vessel has shown a tendency to fracture the bottom shell plating and apparently this tendency has lately increased.

The Owners decided to renew practically the whole of the shell plating in way of the deep tanks and main cargo tanks (approximately 130 odd plates). Also to renew all the <sup>shell</sup> angle attachments to bulkheads, transverses and the fitting of back bars at the ends of the longitudinals. They further decided to fit partial bulkheads in the midship tanks (Nos. 5, 6 & 7) efficiently connected to the bottom of the expansion tanks and connect to the built up floor immediately in line at the bottom. A similar arrangement, but not so extensive is being carried out in the remainder of the main cargo tanks. The Owners decision is in my opinion a prudent one, and is necessary under the special circumstances, as American Tankers are not required to have freeboard Coastwise and are occasionally subjected to heavy loads, which requires that the bottom plating be in first class condition. A copy of the approved plan showing the details of new construction to be fitted in Nos. 5, 6 & 7 main cargo tanks, and the similar arrangements that are to be fitted in the remainder of the main cargo tanks is enclosed herewith.

The outstanding items to complete the Special survey on the hull & machinery are now being dealt with, and the major repair of the bottom shell plating is well under way at this time.

when tested and independent.

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS PAGE

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