

## REPORT OF SURVEY FOR REPAIRS, &amp;c.

Date of writing Report 29.8.1940 When handed in at Local Office 29.8.1940 Port of Middlesbrough  
No. in Survey held at MIDDLESBROUGH. Date, First Survey 18th June. Last Survey 15th Aug. 1940.  
Reg. Book. on the Wood, Iron or Steel SS. "EMPIRE ENDURANCE" ex "ALSTER"

TONNAGE:— Built at HAMBURG By whom DEUTSCHE SCHIFF NACHF. WERK. When 1928 MONTH 2  
GROSS 8570 Owners THE MINISTRY OF SHIPPING. Owners' Address  
UNDER DK 7768 Managers THE BOOTH STEAMSHIP CO. LTD. Port belonging to MIDDLESBROUGH.  
NET 5353

Surveyed Afloat and in Dry Dock? 100 Name of Dock Smiths Dock. Destined Voyage  
Cell DBor DBa 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.

Last Report, No. Port

(Periodical Surveys, when held, must be reported in detail and serially in the terms of the Rules and items remaining to complete the Surveys should be summarised. 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.)

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 5' 9 1/2"

Was a damage report made by anyone else? if so, by whom?

REPAIRS, OR EXAMINATION AS PER RULE, FOR Classification and Damage.

The vessel was placed in dry dock, bottom under and stern frame, cleaned, examined and coated.

On account of damage stated to have been caused through collision and striking a quay the following repairs were effected.

NO. 1 DAMAGE (STRIKING QUAY) PLATES, NUMBERED FROM FORD. all on PORT SIDE

Sheel plate 55 Port side, found indented, was removed, faired and replaced

" " H4 " " " slightly " was faired in place.

" " H5 " " " fractured and indented, was removed.

" " J5 " " " badly indented, was removed.

5 Main frames, in way of the above found at foundation were cropped, removed faired and replaced (P.T.O.)

SUMMARY OF DAMAGE REPAIRS:—	Shell Plates.	Frames.	R. Frames.	Floors and Bracket Floors	Beams.	Inner Bottom Plates.	Dk. Plates.	Other Items:—
Renewed	9	1						please see report
Removed and Faired or Repaired	4	33			3		1	
Faired or Repaired in place	5				5		2	

## PRESENT CONDITION OF THE

Decks	good	Bulkheads	good	Engine Room Skylights	good	Copper, or Y.M. (State if on Felt.)	
Caulking of Decks	good	Ceiling	good	Coal Bunkers, Openings, Covers, &c.	good	When fitted, Month	Year
Coamings	good	Cement & Asphalt	good	Oil Bunkers	good	Boats	good
Beams & Fastenings	good	Rudder	good	Scuppers	good	Masts, Yards, &c.	good
Outside Plating	good	Steering gear and its connections	good	Cargo Hatchways	good	Condition, how ascertained (State if wedges removed.)	good by exam.
" " in way of sidelights	good	Windlass	good	Hatches	good	Equipment letter	ft
Frames	good	Have pumps been examined and found efficient?	yes	Planking		Anchors, No. of	28 15
Reverse Frames	good	Have Sluice Valves been examined and found efficient?	how fitted	Caulking		Cables (State if now ranged)	yes
Longitudinals	good	Have Watertight Doors been examined and found efficient?	yes	Treenails		" length 270 fms, mean diamr. 2 1/16"	2 1/16"
Transverses	good	Have Ventilators and their Coamings been examined and found efficient?	yes	Breasthooks & Stemson		" Rule length 300 fms, mean diamr. 2 1/16"	2 1/16"
Floors	good	Air and Sounding Pipes	good	Transoms, Pointers & Crutches		Chain Lockers	good
Keelsons	good	Doubling Plates under Sounding Pipes	good	Timbers of Frame at openings		Hawsers & Warps	good
Stringers	good			" " at other places		Standing and Running Rigging	good
Inner Bottom Plating	good			Stringers, Clamps & Shelves		Sails	good
Have the Tanks been examined internally?	yes			Salting (State if examined.)			
Have the Tanks been tested?	yes						

## General Observations, Opinion as to Class, Recommendation, &amp;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 classed in the Register Book without fresh record of Survey," "to remain as classed and to have record of survey, 1,38," or "to remain as classed and to have record of survey, 1,38, and the notations of ss No. 1-38."

This vessel is now in good and efficient condition, and eligible in our opinion to be classed 100A1, with record of Survey 8,40 and notation of ss. No 38,40, subject to the chain cables being renewed within 12 months from 8,40.

Survey Fee (per Section 20) see letter 5/6/40.		Fees applied for,	
Special Damage or Repair Fee (if any) (per Sec. 20)	£	Received by me,	10
Travelling Expenses (if chargeable)	£		10
Second Surveyor's Fee (if any)	£		

Committee's Minute

Character Assigned

TUE. 10 SEP 1940

Surveyor to Lloyd's Register of Shipping.



Lloyd's Register Foundation







30 fathoms of chain cable. The chain cable on board was recommended to be renewed within 12 months on account of the results of the tests carried out at the Proving House and forwarded with our letter of the 29th July 1940.

The closing appliances on the bulkheads at the after end of the bridge will be altered to class 1 at the first opportunity hatchway coamings increased to 9" at the end of the present emergency.

There were some minor indents on the shell plating on the following plates which were noted for reference but need not be dealt with, as the plates are efficient and in good condition, and the indents so slight that they do not affect the vessel's seaworthiness.

Port Side - No 406 plate from fore in the 2nd stroke below chert.

No 4 plate from aft at the upper edge in the 1st.

Starboard - No 5 " " fore in the 1st stroke below chert.

To be noted in the S.R.L. An anchor and 30 fathoms of chain cable to be supplied, the class 2 closing appliances in the bulkheads at the after end of the bridge to be replaced by class 1 closing appliances or the hatchway coamings on the foreboard deck (upper deck) to be increased to 9", at the end of the present emergency period.

See 764  
14740

The results of the tests carried out at the Proving House and forwarded with our letter of the 29th July 1940. The closing appliances on the bulkheads at the after end of the bridge will be altered to class 1 at the first opportunity hatchway coamings increased to 9" at the end of the present emergency. There were some minor indents on the shell plating on the following plates which were noted for reference but need not be dealt with, as the plates are efficient and in good condition, and the indents so slight that they do not affect the vessel's seaworthiness. Port Side - No 406 plate from fore in the 2nd stroke below chert. No 4 plate from aft at the upper edge in the 1st. Starboard - No 5 " " fore in the 1st stroke below chert. To be noted in the S.R.L. An anchor and 30 fathoms of chain cable to be supplied, the class 2 closing appliances in the bulkheads at the after end of the bridge to be replaced by class 1 closing appliances or the hatchway coamings on the foreboard deck (upper deck) to be increased to 9", at the end of the present emergency period.

NOTE: It was not considered necessary to test the shell plating as the results of the tests carried out at the Proving House and forwarded with our letter of the 29th July 1940. The closing appliances on the bulkheads at the after end of the bridge will be altered to class 1 at the first opportunity hatchway coamings increased to 9" at the end of the present emergency. There were some minor indents on the shell plating on the following plates which were noted for reference but need not be dealt with, as the plates are efficient and in good condition, and the indents so slight that they do not affect the vessel's seaworthiness. Port Side - No 406 plate from fore in the 2nd stroke below chert. No 4 plate from aft at the upper edge in the 1st. Starboard - No 5 " " fore in the 1st stroke below chert. To be noted in the S.R.L. An anchor and 30 fathoms of chain cable to be supplied, the class 2 closing appliances in the bulkheads at the after end of the bridge to be replaced by class 1 closing appliances or the hatchway coamings on the foreboard deck (upper deck) to be increased to 9", at the end of the present emergency period.

s.s. "EMPIRE ENDURANCE" ex s.s. "ALSTER"

The approximate extent of the damages to the shell plating due to collision (No. 3 damage) and striking a quay (Nos. 1 and 2 Damages) is shown on the sketches overleaf.

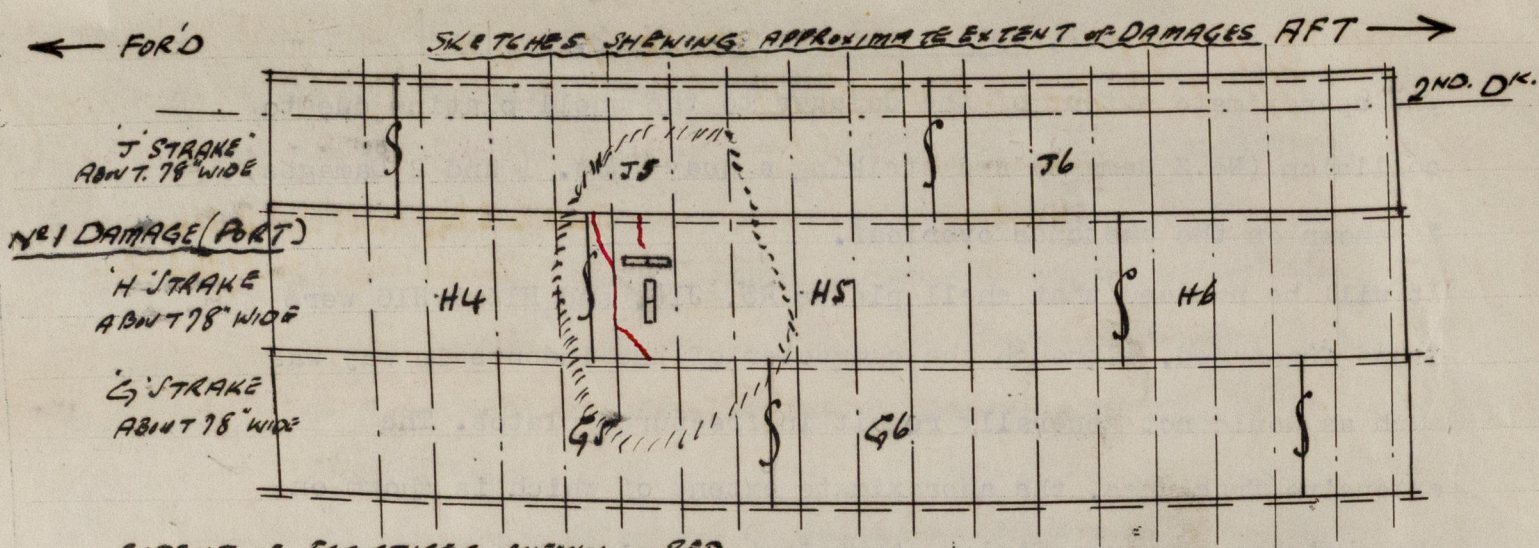
It will be noticed that shell plates H5, J16, and H15 & H16 were found fractured, although the character of the indents in way was such as would not generally result in fractured plates. The extensive fractures, the approximate extent of which is shown on the sketches, in our opinion started at the rivet holes. There were also some minor fractures which had definitely started at rivet holes.

The results of tests, shown on the attached sheet, taken on standard test pieces cut from in way and clear of the fractures on the condemned plates, as shown on the sketches, both for tensile and bend were found to be satisfactory. In addition, the attached analysis, was made of the steel. The nitrogen content which was also estimated confirms that the steel is not of "Thomas" origin; the silicon content indicates that it is "Rimmed" steel.

JM LR

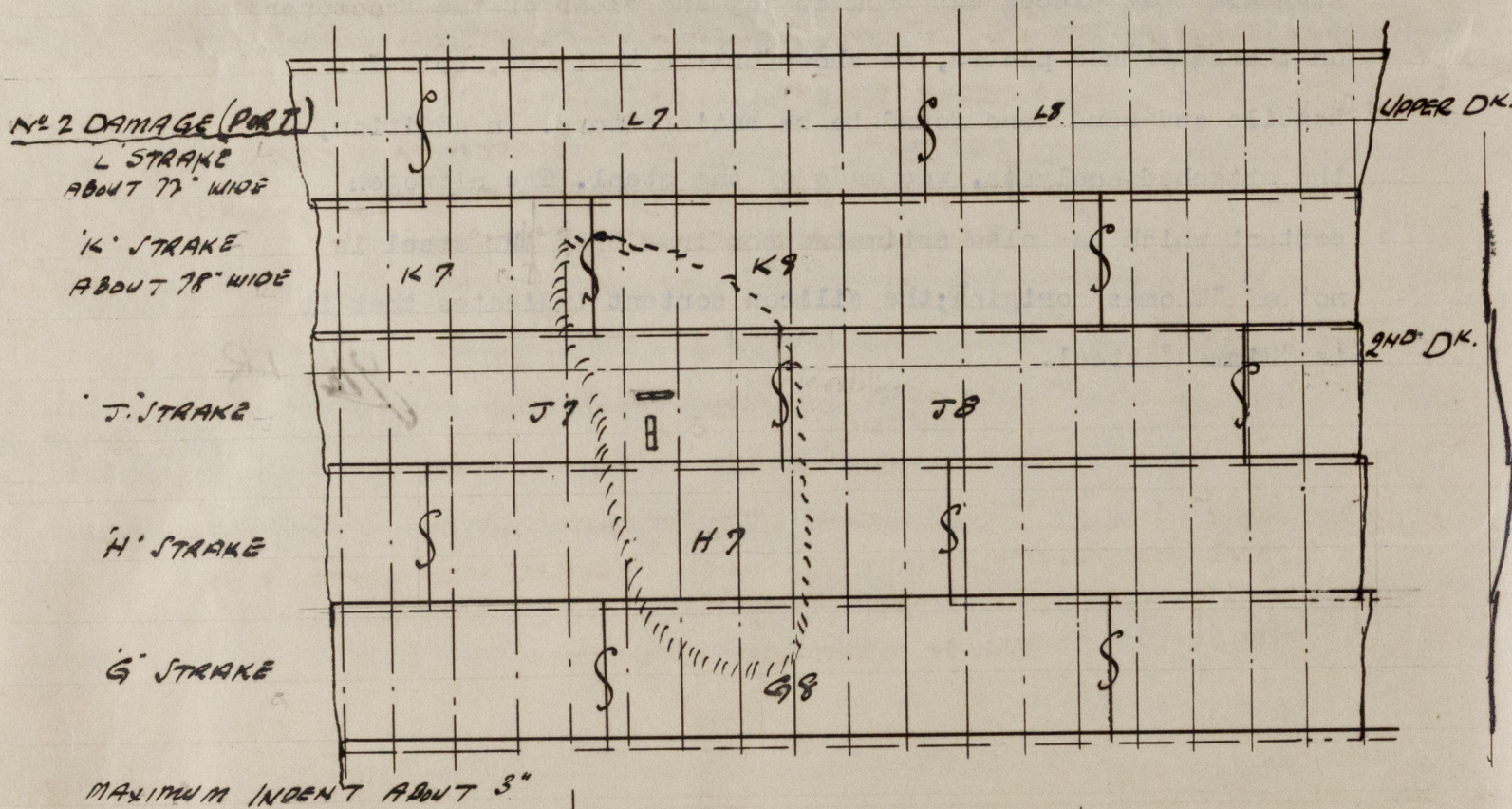


# EMPIRE ENDURANCE Ex ALSTER

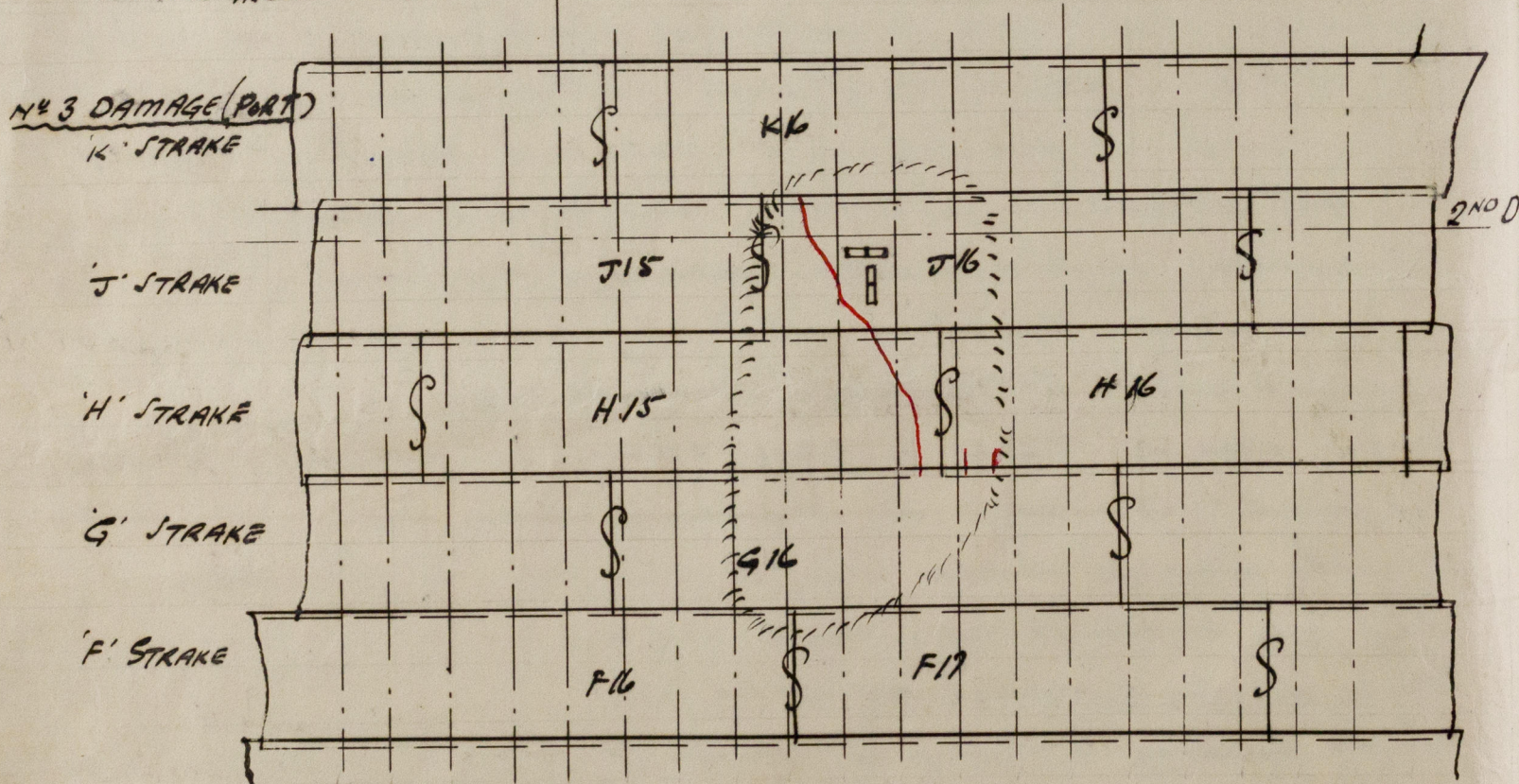


EXTENT OF FRACTURES SHOWN IN RED.  
MAXIMUM INDENT ABOUT 4" CLEAR OF FRACTURES.

TEST PIECES ARE SHOWN TRUE



MAXIMUM INDENT ABOUT 3"



EXTENT OF FRACTURES SHOWN IN RED.

MAXIMUM INDENT ABOUT 5" IN WAY OF FRACTURES



© 2021

Lloyd's Register  
Foundation