

Trieste,

12th July 1927.

M. Costantini and L. Stuperich,

B

E. H. Greenham Esq., Lloyd's Agent at Trieste, and with the consent of the Builders, attend on the 19th April 1927 and subsequent dates on board the S.S. "ARARANGUA", Yard No. 175, as she lay at the fitting out berth of the Builders' Yard, Messrs. Cantiere Navale Triestino, Monfalcone, to ascertain the nature and extent of the damage through fire stated to have broken out on the 19th April 1927 in Hold No. 3, then partly insulated.

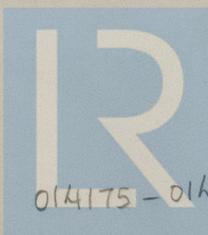
The above survey has been held in conjunction with Mr. C. F. SMITH, representing the London Salvage Association.

Upon examination the insulation in the central compartment of No. 3 hold (meat store) was found completely burnt and that on the wing compartments (fruit stores) badly damaged by fire and water.

The boundary bulkheads to the above spaces, the trunked hatch to No. 3 hold, and the whole of the vessel's structure in proximity of the trunk were found more or less damaged.

In detail the damage was as follows and the accompanying recommendations were made:-

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FIND.RECOMMENDED.

WATERTIGHT BULKHEAD AT FRAME 86.

a) Hold.

2 coaming plates slightly buckled.	To be faired in place.
12 vertical plates badly buckled.	To be renewed.
2 vertical plates buckled.	To be removed, faired and replaced.
2 vertical plates slightly buckled.	To be faired in place.
11 Bulb angle stiffeners bent.	To be removed, faired and replaced.

b) Tween deck.

2 vertical plates buckled.	To be removed, faired and replaced.
2 vertical plates slightly buckled.	To be faired in place.

TRANSVERSE BULKHEAD AT FRAME 94.

2 coaming plates and 12 vertical plates badly buckled.	To be renewed.
10 Bulb angle stiffeners bent.	To be removed, faired and replaced.

LONGITUDINAL BULKHEADS BETWEEN FRAMES 86 - 94.
PORT AND STARBOARD.

2 coaming plates and 16 vertical plates badly buckled.	To be renewed.
14 Bulb angle stiffeners bent.	To be removed, faired and replaced.

LONGITUDINAL CENTRE LINE BULKHEAD BETWEEN
FRAMES 94 - 99.

Coaming plate and 5 vertical plates badly buckled.	To be renewed.
4 Bulb angle stiffeners bent.	To be removed, faired and replaced.

WATERTIGHT BULKHEAD AT FRAME 99.

2 coaming plates slightly buckled.	To be faired in place.
6 vertical plates buckled.	To be removed, faired and replaced.
6 Bulb angle stiffeners bent.	To be removed, faired and replaced.



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FOUND.RECOMMENDED.

SECOND DECK.

L.B. Plates numbered from frame 86 and lettered from Centre line of Ship.-

Deck plates A1, B1, C1 port and starboard and D1 port badly buckled.

To be renewed.

Plate D 2 port and plate E2 starboard buckled.

To be removed, faired and replaced.

Plates C2 & E2 port slightly buckled.

To be faired in place.

Doubling at port forward corner of No. 3 hatch buckled.

To be renewed of increased size.

Beams at frames 87, 88, 89, 90, 91 badly distorted.

To be cropped and partly renewed.

Half beams at frames 92 & 93 port and starboard distorted.

To be removed, faired and replaced.

Deck girders (3 off) between frames 86 - 91 badly distorted.

To be renewed.

UPPER DECK.

L.B. Plates marked as before.

Plates A1 port and starboard badly buckled.

To be renewed.

Plate B1 starboard buckled.

To be removed, faired and replaced.

Beams at frames 87, 88, 89, 90, 91, 92, 93 slightly distorted.

To be faired in place.

Starboard deck girder between frames 86 - 93 distorted.

To be removed, faired and replaced.

About 400 square feet of pine sheathing damaged.

To be renewed.

PROMENADE DECK.

L.B. Plates marked as before.

Plates A2 at centre and B2 port and starboard badly buckled.

To be renewed.

Plate C2 starboard buckled.

To be cropped and partly renewed.

Plate C2 port slightly buckled.

To be faired in place.

Deck beam at frame 93 slightly distorted.

To be faired in place.

About 250 square feet of pine sheathing damaged.

To be renewed.



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BOAT DECK.

N.B. Plates marked as before.

Plate A2 at centre and B2 & C1 port and starboard, and D2 port badly buckled.

To be renewed.

Plates A3 & D2 starboard buckled.

To be removed, faired and replaced.

About 90 square feet of teak sheathing badly damaged.

To be renewed.

About 200 square feet of teak sheathing to be removed and replaced to deal with steel plates.

TRUNKED HATCH No.3

a) Between second and Upper Decks.

30 plates badly buckled.

To be renewed.

25 stiffeners bent.

To be removed, faired and replaced.

b) Between Upper and Promenade Deck.

24 vertical plates and 4 coaming plates badly buckled.

To be renewed.

20 stiffeners bent.

To be removed, faired and replaced.

c) Between Promenade and Boat Deck.

24 vertical plates and 4 coaming plates badly buckled.

To be renewed.

20 stiffeners bent.

To be removed, faired and replaced.

No.3 HATCH COAMING ON BOAT DECK.

End coamings badly distorted.

To be renewed.

Side coamings buckled.

To be removed, faired and replaced.

Hatch shifting beams badly distorted.

To be renewed.

AIR TRUNK TO GALLEY.

One plate buckled.

To be removed, faired and replaced.

One plate slightly buckled.

To be faired in place.

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FOUND.RECOMMENDED.LONGITUDINAL BULKHEAD IN UPPER TWENTH DECK
BETWEEN FRAMES 86 - 91.

plates with flange stiffeners
backled.

To be removed, faired and
replaced.

MUSIC ROOM.

one plate on end bulkhead
badly buckled.

To be renewed.

two plates on end bulkhead
slightly buckled.

To be faired in place.

OFFICERS ACCOMMODATION IN DECKHOUSE ABOVE
MUSIC ROOM.

plates on end bulkhead and
curtain plates buckled.

To be removed, faired and
replaced.

INSULATION.

(a) HOLD. Subdivided into a meat chamber at centre and 2 fruit
chambers abreast and extending round fore part of central
meat chamber.

The insulation in the above spaces consists of:-

- 1) Floors, $\frac{1}{2}$ " Bitumastic on tank top, 2" air space, 2" T. & G.
larch ceiling. Galvanized sheet iron. 7" cork slabs
bedded in Bitumastic. 1" T. & G. pine sheathing, Sheet
lead.
- 2) On Bulkhead No. 86. 2" air space, 1" T. & G. larch inner
lining, 9" cork slabs, 1" T. & G. outer lining.
- 3) On Bulkhead No. 99. 10" cork slabs, 1" T. & G. outer lining.
- 4) Divisional bulkhead between meat and fruit chamber. 10" cork
slabs on stiffened side and 6" cork slabs on opposite side
with 1" T. & G. outer lining.
- 5) Sides. 9" cork slabs and 1" T. & G. outer lining.
- 6) Overheading. $8\frac{1}{2}$ " granulated cork and $\frac{3}{4}$ " T. & G. and $\frac{7}{8}$ " T.
& G. outer linings.

The meat chamber was complete in every detail,
except the fitting of the brine grids.

It is stated that a considerable amount of the
cork slabs and timber intended to be worked into the fruit chambers
was stored there, also the insulated bilge and manhole plugs for all
three compartments. The two insulated doors giving access to the
meat chamber were also in place.

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In the two fruit chambers all grounds were in place.

The floor was completed except for the fitting of the sheet lead and the cork slabs on the sides were in place for a height of about 4 ft. all round the chambers. The insulated door between the starboard fruit chamber and the motor space was in place.

The whole of the insulation and materials in the two fruit chambers was found destroyed by fire and all the insulating material and timber in the fruit chambers badly damaged by fire and water.

It was therefore recommended that the insulation in the above three spaces be completely renewed, the iron fittings being removed, re-galvanized and re-fitted.

TWEEN DECKS: Refrigerated compartments for stores intended for ship's own use, consisting of:-

- 1) Ante chamber,
- 2) Milk and butter chamber,
- 3) Fish chamber,
- 4) Beer and Vegetables chamber,
- 5) Meat chamber.

The grounds in way of the above chambers were all in place also the pitch pine frame work of the partitions and the insulated doors. All the above material was found to be extensively damaged by fire and water and it was recommended to have it completely renewed, the iron fittings being removed, re-galvanized and replaced.

For damage to Yard's property see separate list submitted direct to Underwriters' Surveyor.

MACHINERY.

4 valve boxes for steam heating coils of forward bulkhead; 4 valve boxes for oil fuel and ballast suction and 7 valves connected to these valves to be removed from bulkhead No. 89, taken to shop, adjusted, re-ground, tested and refitted on ship with new packing.

25 air bottles and clips to be disconnected from bulkhead No. 89, air bottles to be tested hydraulically and re-erected after repairing the bulkhead.

12.LUG.1927

E.S. "ARARANGUA"

(7)

4 tank and bilge suction pipes passing through the insulated holds to be dismantled and re-erected with new packing.

Watertight door with its working gear to be examined and, after the repairing of the bulkhead, its working condition to be tried.

The electric motors driving the refrigerating machinery to be taken to workshop and the insulation tested.

Motor No.138606 was found in order.

The insulation of motors Nos.49120, 138616, 138617 and 138614 was found defective and it was recommended to remove the field coils and armatures, to repair the damaged insulation and field coils and armatures to be re-varnished after drying in the oven.

Commutators and rusted brush holders to be polished, motors to be re-assembled and re-tested.

In order to carry out the necessary repairs to the steelwork and insulation it has been also found necessary to remove and afterwards replace the following pipes and fittings passing through the refrigerating chambers :-

- 8 pipes,
- 4 sounding pipes,
- 4 air pipes,
- 10 pipes in small chambers,
- 25 scappers, pipes and passages for bath and W.C.,
- 4 collector pipes with attachment for bath and W.C. in way of small chambers,
- 4 Clayton pipes with new screw and packing,
- 6 storm valves and pipes for W.C.

Various other piping such as :- sanitary, refrigerating, passage pipes and other obstructions.

Fee	Lire	2250.-
Expenses	"	300.-
	Lire	<u>2550.-</u>

J. P. Garcia
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