

WITH THE COMPLIMENTS OF THE CUNARD STEAM-SHIP COMPANY LIMITED.

FACTS ABOUT THE "QUEEN ELIZABETH'S"  
ANNUAL OVERHAUL.

The "QUEEN ELIZABETH" will be in Southampton for seven weeks, between December 22nd and February 11th.

She will spend 29 days in the King George V Dry Dock, between December 23rd and January 21st.

OPERATIONS IN DRY DOCK:

The underwater parts of the hull, covering an area of more than 15,000 square yards, are scaled and painted with three coats of special composition. The total weight of paint thus used is 8 tons.

The three 16 ton anchors and their chain cable, 990 feet in length and totalling 300 tons in weight are ranged on the dock floor. Each 2 cwt. link of the anchor cable is tested and painted and the anchors themselves are scaled and painted.

The four 32-ton propellers are examined and tackle is rigged for their removal as necessary, also for the withdrawal of a tailshaft, each of which weigh 37 tons. Generally one shaft is withdrawn each year for survey and rewooding with lignum vitae of the stern tube bush.

On those propellers which are not removed, the streamlined cone is taken off and the huge nut which secures the propeller to the shaft is tested for tightness.

Staging is also assembled around the 140-ton rudder from which it is scaled and painted. The rudder, so large that it is inspected internally, through a door in the side, is subjected to an air pressure test to ensure that there are no leaks in the structure.

Whilst the ship is 'dry' in the dock all the essential services are maintained - a series of water-pipes links the ship with the shore, providing supplies for the generator condensers and for the fire and sprinkler systems.

OPERATIONS ABOARD THE SHIP:

The 26 power driven lifeboats are taken off the davits and those which are to be given major surveys are put in the water and towed to Messrs. Thornycroft's works at Northam. Here all their equipment is removed, the buoyancy, drinking water, provision and fuel tanks are tested and their 18 H.P. diesel engines are opened up.

By the end of the second week of the overhaul as many as 3,500 pieces of furniture are landed for survey. 250 workmen are engaged in workshops ashore on this task.

Altogether 120,000 pieces of linen, plus 8,000 blankets are landed for laundry and stocktaking.

The public rooms, all 37 of them, and hundreds of staterooms are stripped of their carpets and curtains which are taken to a central store on board. Here 13,000 curtains, bedspreads and loose covers, 2,500 stateroom carpets and 60 public room carpets are sorted and checked before being sent ashore for cleaning.

Checking and stocktaking on an enormous scale occurs when 54,000 pieces of china and earthenware, including 8,500 cups, 7,000 saucers and 21,000 plates are counted, together with 26,000 pieces of glassware and 40,000 pieces of plate, that includes 10,500 knives, 10,000 forks and 6,750 spoons.

Altogether 600 men of a variety of trades connected with furnishing are engaged in the overhaul of the passenger accommodation. Paquetry floors are examined; thousands of square feet of rare veneers are polished; decorative metal work is repolished, hundreds of mirrors and decorative glass fittings are polished and re-silvered; hide-covered bulkheads, furniture and table tops are renovated and revived. Specialists examine thousands of tiles in the swimming pools; there are hundreds of square yards of deck covering to be examined and renewed where needed; equipment in the barbers shops and beauty parlours is gone over by experts. Then there are the minor things, numerous but important - thousands of stair treads, door springs, hand rails, bed fittings, carpet fixings - all come in for careful scrutiny.

The 160,000 H.P. main propelling machinery is opened up for survey. The 257,000 blades of the main turbines are examined; the main and auxiliary steam pipes are hydraulically tested to twice their working pressure - over 800 lbs per square inch in the case of the main pipes. No less than 70 pumps are opened up; 30 tanks for oil and water are cleaned and surveyed; the 12 enormous watertube boilers containing more than 160,000 tubes are cleaned externally section by section and then all the combustion spaces, from funnel top to furnace, are washed down with hot fresh water. When this is completed and dried out the brickwork in the furnaces is renewed as needed. During the "QUEEN ELIZABETH'S" present overhaul, to effect greater flexibility in bunkering, modifications are being made to the fuel tanks. Some tanks which were formally used for water are being converted to carry additional oil-fuel.

The entire electrical installation producing 8,800 kilowatts, - sufficient to light a town the size of Canterbury which has nearly 30,000 inhabitants - is surveyed throughout. Some 650 electric motors, ranging in H.P. from a quarter to 360 and totalling about 16,500 H.P., are examined.

700 electric clocks and 680 telephones are tested and the 35 passenger and good lifts are overhauled. In addition there are 30,000 electric lamps in the ship to test.

Miles of ventilation trunking are "swept" with giant vacuum cleaners.

In the kitchens, dish and glass washing machines, silver burnishing machines, mixers, slicers, grinders, potato peelers, stoves, ovens and cold boxes are examined. Grills are rebricked, soup and vegetable boilers, bakers ovens, dough mixing machines, ice cream machines are opened up and serviced.

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