

# RENEWING QM2

## A look at the work done during Queen Mary 2's 2008 Refit

by  
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On October 23, 2008, Queen Mary 2 entered drydock Elbe 17 at the Blohm + Voss Repair facilities in Hamburg, Germany for a refit. The drydocking lasted until November 13, 2008, during which time a massive amount of work was done on the ship.

The rigors and strains put upon a ship by near constant operation, the corrosive effects of the sea as well as the wear and tear placed upon a ship by the comings and goings of thousands of passengers and crew require that ships be taken out of the water periodically for overhaul and maintenance. "When I first started in Canberra, there would be a refit every year of three to four weeks and you could do a lot of this work then," recalls Trevor Lane, Staff Captain of QM2. "These days everything is so expensive and so competitive that the ships have to be kept running." Consequently, more maintenance work is done while the ships are in service and refits are shorter and further apart.

Because QM2 is one of the largest ships in the world, there are only a few drydocks that can accommodate her. Elbe 17 was built prior to World War II to accommodate the Bismark and other even larger German battleships that were never built. Still, "it is quite a tight fit. There is not much room."

"The issue with getting a ship into a drydock is getting it over the sill." Like a doorway in a house, the

gates to a drydock rest upon a sill that is higher than the bottom of the river outside of the drydock. If the ship's draft is more than the depth of the sill, the ship will run aground on the sill. Since QM2 is a relatively deep draft ship, steps had to be taken to enable her to enter the drydock.

First, the voyage to Germany had to be conducted so that the ship arrived "in Hamburg with the minimum amount of fuel onboard [and the] minimum amount of fresh water so as to make the ship as light as possible." In addition, QM2 had to enter the drydock when the tide in the river was at its highest. Even with these steps, "we only had just under a meter to get it clear at the sill."

Once the bow of the ship was into the drydock, cables were attached to the ship from cranes mounted on railroad tracks on either side of the drydock. The cranes then eased the ship into the drydock so that she was centered over the blocks that would bear the weight of the ship once the water was pumped out of the drydock.

Often when a ship is in a drydock, the engines are turned off and what little electricity and heat there is comes from the shore. As a result, the officers and crew living onboard "would have been lucky to have gotten a hot shower, to have always gotten a hot meal, and to have the electricity on for much of the time."

In this refit, "we ran the diesels and gas tur-



bines alternately and just occasionally took power from the shore." QM2 did take fresh water and cooling water for the engines from shore as well as steam to heat water and to heat the ship. However, life for those onboard was much better as all of the ship's services continued to function.

Approximately 700 crew members stayed on during the three week refit. For many, this meant doing tasks different than those they do while the ship is in service. "For example, I had 20 hotel staff painting balconies. We painted 500 - - I mean from preparation, priming to full painting. We used part of the crew for keeping the ship clean. When you have workmen on the ship, their priority is to do their job and someone else can take care of the mess. If you are not careful, that somebody-else-can-take-care-of-it business takes over the entire ship. So, you need a lot of staff to keep the ship clean."

Still, during the refit, the interior public spaces of the ship scarcely resembled that of a luxury liner. Furniture was moved and carpet was taken up for re-carpeting and so that work could be done on the sub-decking. Of course, it all had to be put back in place before the ship returned to service.

#### *Nautical Work*

**A** centerpiece of the refit was maintenance of the ship's propulsion systems. This included a partial disassembly of and major overhaul of the four propulsion pods that drive the ship through the water. Also, there was routine maintenance and inspection of the three bow thrusters used in maneuvering the ship in port. Along the same lines, there was routine maintenance of the ship's four stabilizers.

The hull received 35,000 liters of paint. Before applying the paint, a large machine moved along the hull stripping off the old paint using high pressure water. The machine sucked away the old paint along with the used water. Because this process created so



*Above: An awning was added to the Deck 8 Terrace that will enable the Todd English Restaurant to offer al fresco dining.*

*Below: The Chat Room was extensively refurbished.*



much heat, the bare steel of the ship that was exposed by the machine was dry as soon as the machine moved along.

As noted earlier, 500 of the approximately 1,000 balconies on the ship were painted. (The remaining balconies are to be painted while the ship is in service). "They also replaced all of the cable trays for the flame



detectors on the balconies."

"There is quite a lot of work after a ship is five years old [due to] statutory requirements - - cleaning all the vents, testing of the firefighting systems." Sea valves were overhauled. Fuel, fresh water, grey water and black water tanks were cleaned and inspected. "We recoated one of the fresh water tanks."

QM2's 17 lifeboats were removed during the refit. Schat-Harding, their manufacturer, "took one of the parking lots and just filled it with the ship's lifeboats so they could be worked on for three weeks. When the lifeboats are in service in the tender ports, they take a fair amount of wear and tear and they addressed all of that."

The bridge was not overlooked either. "We have all new radars here on the bridge, an upgraded radar system - - new 'Sharp-eye' radar, which is one of the state of the art military-type radars."

### *Public Spaces*

**T**he most noticeable change to the interior public spaces is the refurbishment of the Chart Room bar. The room has a new color scheme reflected in new carpet, drapes and furniture. The room also has a new layout. As it was, the room had a wide expanse running down the middle between the tables that lined the windows and the tables that were next to the opposite wall. Under the new arrangement, the room no longer has this corridor-like look.

Five years of dancing feet and almost nightly receptions had worn down the large wooden dance floor in the Queens Room. Accordingly, the dance floor has been refurbished.

Carpets were replaced in some of the corridors and French polishing and upholstery work were done in the Britannia Restaurant, the Royal Court Theatre and in the Canyon Ranch SpaClub.

A new internet system with increased bandwidth was installed. It is operated by Maritime Telecommunications Network which also operates the internet systems on Ruby Princess and Carnival Splendor, both of which debuted in 2008. The system gives guests wireless access for their laptops in their staterooms and in certain public areas. It also improves the connection from the public computers in the ship's internet café Connexions. The in-cabin e-mail system connected to the television that had been on QM2 has been discontinued.

Guests can also now use their cellphones while at sea. Guests who have devices capable of inter-



*Above: Staff Captain Trevor Lane.*

national roaming and international roaming agreements with their service providers will be able to use their phones except in the dining rooms, the Royal Court Theatre, Illuminations and the Queens Room.

Outdoors the most apparent change is the addition of an awning at the forward end of the Eight Deck terrace. The awning will allow the Todd English Restaurant to offer al fresco dining.

The nearby Terrace Bar has been refurbished. New woodwork has been installed around the bar. The Regatta Bar on top of the ship Deck 13 had a similar refurbishment.

The teak decking on Deck 13 was redone during the refit. "What happens is that as you keep cleaning the deck, the teak wears down and then the caulking stands proud of each plank. As the teak wears down, the depth of the seam becomes less and it is more difficult to hold the caulking in there. As the deck chairs get dragged across the caulking, it pulls it out. So, you have to re-seam them - - you have to cut the seam again. We did the whole of Deck 13, which was quite a challenge when you think it was November in Hamburg."