

**INSIDE VIEW:**

# LOOKING AHEAD

## A conversation with Stephen Payne Part III

by

**Richard H. Wagner**

Since completing Queen Mary 2, Stephen Payne has not stood still. He was one of the lead designers for Seabourn's most recent class of ships -- Seabourn Quest, Seabourn Odyssey and Seabourn Sojourn. Now an independent consultant, he continues to do work for Carnival Corporation while also remaining a keen observer of the industry. I asked him for some thoughts about the future of his greatest ship and passenger ships in general.

### *QM2 Going Forward*

"From a structural point of view, she has been designed to last at least 40 years without having to do any big structural repairs. The whole idea was that she should sail off for 40 years without major repairs."

During the course of her nearly 40 year career, QE2 changed considerably with various structures (penthouses, magrodome, etc) being added and some-

times removed in response to perceived market changes. Does Queen Mary 2 have the ability to make such structural changes?

"With the commercial pressures on this ship to maximize everything because of the extra cost of building it, I took it to what I felt was the absolute limit. To add things on now would be very difficult. She has a tremendous reserve of stability and everything else. But for the places that she has to get to, like [going up the Mersey to Liverpool] or going up the Elbe to Hamburg, you cannot add much more to the ship before that becomes compromised. I am sure that in 20 years or whatever, they may try and add but they have to be very careful about what they do because it was designed to almost the limit right from the outset."

Nonetheless, Payne believes that QM2 can remain competitive and adapt to changing market demands by evolving her programming and incorporat-

ing new technologies as they emerge. "As was said, you can't physically add too much more to the structure. [But] the passengers that come on here at the moment are not demanding the rock climbing wall and things like that. They [want the] more the educational type thing like the lectures. I think as has been done since the ship was built - - they've [added] the wi-fi loop going around so you can log on with your computer anywhere - - it will be an expansion of things like that on here."

Specialty restaurants are a feature that are consistent with QM2's image and clientele. Indeed, QM2 already has the Todd English restaurant. But with so many cruise ships already having more than one specialty restaurant could QM2 accommodate another? "Only if you took something else out. I think the obvious place to do something like that would be the Winter Garden."

#### *Passenger ships today and tomorrow*

The major cruise lines have deployed ships to places far from the calm waters of the Caribbean. For the most part, they have used cruise ships from their existing fleets to do this. However, now the lines are building a new generation of ships, which may well be called upon to sail in all types of weather.. There is evidence that in designing these ships the designers are learning from the ocean liners.

"The modern ships are starting to move the center of buoyancy from aft to further forward. The liners had everything central and when the cruise ships came out they moved the machinery aft so the funnel went aft. We have now discovered that was a retrograde step for efficiency. The hull is much more efficient if you keep the weight in the middle. QM2 has most of the weight in the middle. So there is a move to push things back and go back toward a more liner type hull."

Still, the potential for another company to build another true transatlantic liner like QM2 appears limited. "I think only somebody like Royal Caribbean could do that because of the huge investment and that kind of thing. It costs at least 10 percent [more] to actually design the ship. So to have a one off is a very high premium and it is only somebody like Royal Caribbean that could do that."

While Payne's success clearly owes a debt to what he has learned the past, he is also a forward thinker. Accordingly, one of his current interests is exploring new forms of propulsion for passenger ships. "Certainly, we cannot keep using fossil fuel like we are. So we are looking at fuel cells and even looking at the potential for nuclear power sometime in the future like the old Savannah and several of the other ships. If sud-



*Mr. Payne lecturing on QM2*

denly the price of oil would quadruple then all of these ships would become unviable. And the only way would be to start running them on small nuclear plants. 15 or 20 years, it might be a viable option."