INSIDE VIEW:

FOLLOWING A DREAM

A conversation with Stephen Payne, designer of Queen Mary 2 Part I

by

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Stephen Payne's career is an example of what can happen if one follows a dream even through adversity and the criticism of others.

Payne's has had a life long fascination with passenger ships. "My own interest in ships began way back in 1967 when I was seven years old. I came home from school and switched on the television and there was the BBC television program called 'Blue Peter,' the longest running children's television program in the world. Twice a week the program showcased events with live outside broadcasts and various articles in the studio. But that particular day, the presenter was describing what it was like to travel on the old Queen Elizabeth. He joined the ship in Cherbourg and crossed the English Channel to Southampton. Although in those days, back in 1967, we only had grainy black and white television, I sat enthralled looking at the rooms of that great liner and how it worked. And I thought then wouldn't it be great to grow up and design and build such like the Queen Elizabeth."

A short time later, Payne was able to actually go aboard one of the great ships during a family holiday. "In June 1969, we traveled down to Bournemouth and we took a coach trip to Southampton docks. There in the docks was the brand new Queen Elizabeth 2, only one month into her illustrious career. In those days, before all the security that we now have, they would allow coach parties to visit the ship and as a family we walked around. We went up to the top deck and there steaming into Southampton on one of her last trips was none other than the SS United States, the fastest passenger ship ever built. That only instilled further my interest in great ships."

Payne wrote to the various shipping lines and through that he learnt that in 1972, the SS France would soon be taken out of service. He was able to persuade his father to take him to Cherbourg so that they could take the France from there back to Southampton. This experience again confirmed his desire to build great ships.

Another incident that left a deep impression on Payne was watching the fire that destroyed the old Queen Elizabeth, again on the Blue Peter television program. "Blue Peter every year published a Blue Peter annual and the 1972 edition, which I received for Christmas of that year, had an article all about the

Queen Elizabeth. Largely it was a very good article. But the very last paragraph really struck a sour note to me because it said: 'It is a sad moment for everybody who loves great ships because the Queen Elizabeth is the last of a great age, a superliner, and nothing like her will ever be built again.' As a young lad of 12 who aspired one day to design and build such great ships as the Queen Elizabeth to be suddenly told that there would never be another one was rather a big blow."

Mr. Payne on Queen Mary 2

"But is just happened that at school at the time, we were learning how to write letters and my English teacher said the most important letter that you can learn to write is a letter of complaint. So for homework, we were charged with writing such a letter. I wrote to Blue Peter telling it that when I grew up I was going to design and build a great ship that would rival the Queen Elizabeth and that they better be ready to retract their statement in the Blue Peter Annual."

"By return, I received this letter from the editor of the program and she said that she and the presenters had all enjoyed reading my letter and the ideas that I put forward for my great ship that I would build sometime in the future but that I should not be disappointed if it were never built. I was expecting to receive Blue Peter's highest honor, a gold Blue Peter badge. The program gave out blue, silver and gold. The badge you got was really dependent on how special the program thought your idea or letter was. I was mortified when I only received the blue badge."

Nonetheless, Payne continued on through school determined to become a naval architect someday. However, more cold water was thrown on his dream when it came time to go to university. The "senior school masters and career advisers said: 'Don't do naval architecture, don't become an engineer, because you will never get a job. Do something where you are certain to get a job. Go and do chemistry,' which was my other big interest at the time. Never having had anyone in my family go to university before, you are really dependent on the advice that you are given. So I started at Imperial College in London doing a degree in chemistry."

One year into this course of study, Payne had an encounter that would once again change his direction and, as it turns out, maritime history. "I met my former physics master, Justin Johnson, a much younger teacher. He said: 'You were very badly advised. You should change and do the naval architecture. You have that dream and you should really try and follow that dream.' With Johnson's help, Payne was able to get the funds that he needed to complete a degree in ship science at the University of Southampton.

After qualifying as a naval architect, Payne wrote to the various passenger ship lines seeking a position. While some expressed interest, none were hiring at the time. So Payne went to work for Marconi Radar, which was pursuing various projects for the Royal Navy Auxiliary. Thus, it looked like Payne's career would involve working with ships but not designing passenger ships like he had always dreamed.

"Suddenly out of the blue, one of the companies that I had written to wrote back and said 'We are the naval architects for Carnival, based in London. We have a position vacant for a junior naval architect. Would you like to come and have a look at us?' I got the job and that started my involvement with the Carnival ships. That was January 1985."

"Throughout those early years, I was involved with ships like the Holiday and the Fantasy class right from the very beginning. But I was always conscious that they were cruise ships and not proper liners. I wrote a number of papers for the Royal Institute of Naval Architects comparing the difference between the modern day cruise ships and the old liners of the past."

"I became project manager and lead designer for the new Rotterdam; it was Holland America's flagship. That was in the mid-1990s. A tremendous project because my favorite ship was always the old Rotterdam and I wanted to ensure that the new one had

some of the character of and feel of the old one."

Meanwhile, Cunard Line was going through some difficult times. From 1840 until 1971, Cunard had been an independent company. In 1971, it was purchased by the Trafalgar House Group, which was mostly involved in engineering. Then, in 1995, Trafalgar House was acquired by the Kvaerner Group, a Scandinavian engineering powerhouse. Although its interests included building passenger ships, Kvaerner had no interest in operating them and it made clear that Cunard was up for sale. Finding a buyer, however, for the small, aging fleet was proving difficult, however and people wondered hoe long the venerable line would be allowed to keep going.

Concerned about the ship's future, Payne contacted a ship building acquaintance at Kvaerner and arranged to give a series of lectures onboard QE2. Unbeknownst to Payne, his colleagues at Carnival Corporation were also having discussions with people from Kvaerner. "It was during that crossing of the Atlantic on QE2 that it was announced that Carnival had bought the ship, that they were planning a new transatlantic liner and they were awaiting my return back to Southampton so that I could start work on it. It was a huge shock and surprise."

"It was Micky Arison, the Chairman of Carnival Corporation who had the idea first to buy Cunard and then to finance the building of a new great ship. It was Micky who gave me the task of designing Queen Mary 2."

"After two years of developing the design for this ship, I took it to five different European shipyards and we honed it down to two - - Harland and Wolff in Belfast and the French yard Chantlier d'Atlantique. After careful analysis of the building time, the build process and the cost, we decided at the end of the day, the French yard would probably produce us the best result. On 6 November 2001, the contract was given to the French shipyard, the yard that had built the Normandie and latterly the France that was built in 1962."

"A little after a year of planning with the shipyard, doing model tests and the like we were ready to start cutting the first piece of steel on the 16th of January 2002. Various other pieces were cut and joined together into panels and sections. Then these sections are built together under cover into 600 ton blocks. They are pre-outfitted with some piping and cabling. We put the blocks together in a building dock in a drydock starting on the Fourth of July. The ship actually floated less than six months later for the first time. She was structurally complete with over 50,000 tons of steel in less than a year from the time that we first began actually putting the ship together."

Queen Mary 2 became the largest and longest ocean liner (as opposed to cruise ship) ever built. "She is more than three and a half football pitches long, 1,132 feet in the old units, and the beam, she is very wide at 41 meters on the waterline. The draft of 10 meters or 32 feet is in fact the same as the QE2 and a critical dimension is the air draft - - the distance from the waterline to the highest point on the ship and that is just over 203 feet. If you were to take the ship and put her on the bathroom scale, she would weigh 73,000 tons. We have four huge diesel engines, the size of double decker buses and two gas turbines. We have enough power on this ship to power the whole of Southampton and the surrounding area - - nearly 120 megawatts in total power. She can carry just over 2,800 passengers with a crew of 1,300. The gross tonnage - - nothing to do with weight, it is a measure of volume inside the ship - - is 150,000 gross tons. It means that she is three times the volume of the Titanic or twice the volume of the previous queens. She cost near $780 million - - a huge investment in a new transatlantic liner."

Payne emphasizes that building Queen Mary 2 was very much a team effort involving his colleagues at Carnival, the shipyard and the suppliers. "We all worked together for the common good, for the ship, ensuring that all the problems were resolved in a timely manner. Certainly there were huge problems to overcome in designing this ship. After all she is a prototype but she was delivered on time, under budget and ready to enter service, which for a prototype ship this size is a near miracle."

Finally in January 2004, Her Majesty Queen Elizabeth II named the ship in a ceremony in Southampton. "One of the saddest things is that Justin, the physics teacher who coerced me to change from being a chemist to doing the naval architecture that I had always aspired to do, died just two months before this ship entered service from prostate cancer. So hidden behind one of the bulkheads on this ship is his obituary which says quite clearly that this ship only exists because he persuaded me to come do the naval architecture. So this ship is really a legacy of that great teacher that helped me early in my career."

For his work on Queen Mary 2, Her Majesty awarded Payne the OBE (Order of the British Empire, a few months later. "There are several levels of the OBE and mine is the middle one. There is MBE, OBE and CBE and then there is 'sir,' all the different levels of knighthood. So OBE is the middle one. I am very pleased about that."

Payne is also pleased about another more long awaited award. "Blue Peter came onboard on the maiden voyage and gave me my gold Blue Peter badge."