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Independence & Oasis of the Seas Special

When size matters

INTERVIEW **56**

Royal Caribbean International Senior Vice President of Hotel Operations Lisa Bauer describes the challenges of moving from sales to running the hotel division.

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Merima of Finland is one of the turn-key suppliers for the outfitting of Royal Caribbean's successful Voyager-, Freedom- and Oasis-class ships, among others.

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With the launch of Independence of the Seas this year, Royal Caribbean International has conquered European waters with the largest cruise ship ever built. At 154,407 gross tons and with a maximum capacity of 4,328 passengers, the Independence and her virtually identical sister ships Freedom of the Seas and Liberty of the Seas will only hold their world-record titles until the fall of next year.

With the introduction of the Oasis of the Seas in December 2009 and Allure of the Seas a year later, Royal Caribbean will again capitalize on the "wow" effect, which made the Voyager-class so successful just 10 years earlier. But it's too early to predict whether the 225,000 gross ton Oasis-class will ever grow to as many units as the Voyager and Freedom classes, which together consist of eight vessels.

And it seems that the end of building Freedom-class ships in Aker Yards' Turku shipyard may not have concluded after all, as Royal Caribbean holds a letter of intent to build yet another similar vessel.

Lisa Bauer

oversees a cast of thousands

For half a decade, Lisa Bauer led a sales force that encouraged travel agents and their cruise clients to "Get Out There." Now she's Royal Caribbean's Senior Vice President of Hotel Operations, a position overseeing guest services on 21 ships and managing 33,000 employees. She couldn't be more thrilled, exclaiming: "It's the best job in the world."

By M.T. Schwartzman

Many people weren't sure what to think when Royal Caribbean International announced that its Senior Vice President of Sales would take over the position of leading the company's hotel operations. "When I was first asked to come over here, I had so many travel agents call and say: Why does a cruise line need a Senior Vice President of Hotel Operations?" Bauer recalls. "The reason is, essentially it's a floating hotel," she succinctly explains. "So what we have under hotel operations is anything that impacts the guests."

That includes every aspect of shipboard life from cuisine to entertainment, Bauer points out. "It's 21 casinos. It's 21 shopping areas. It's all of our dining venues and bars. It's all of our guest services - that's housekeeping and everything that would impact the customer," she says. "It's four key areas: General hotel operations, food and beverage, onboard revenue and all of our entertainment. So that's everything from lounge entertainment to our ice shows and our parades on the Royal Promenade. All of that is framed within hotel operations," she sums up. ▶

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And while her expertise was presumably in sales, Bauer says her previous role allowed her to dive right into her new responsibilities. "I was Senior Vice President of Sales for a little over five years," she says, during which time Bauer helped develop RCI's successful "ETDBW - Easy To Do Business With" initiative. So, hotel operations was the next logical move, she says. "It was like somebody flipped a switch, and I went into it immediately. I sold the product for five years, so basically I knew everything that was happening on board relative to the product. So it was a fairly seamless transition."

Helping her adjust were what Bauer calls "a great team" of dedicated individuals both in the executive offices and frontline divisions of the company. "Each of those [hotel] functions has a vice president that oversees them. Then of course the shipboard teams do the job of delivering the product," she stresses. "All of those things that are part of hotel operations are essentially the brand," she notes, explaining the synergy between sales and hotel operations that might not be obvious at first glance.

Freedom and flexibility lead the trends

Not only did Bauer take over the hotel operations for a fleet of 21 ships, but one that is growing on an unprecedented scale and, in the course of its transformation, changing the face of cruising. "Probably the biggest thing our guests are looking for is more freedom and flexibility to create their own vacation," she says. "The perfect example is that some of our guests, particularly in the age group between 31 and 40, they weren't coming to the dining room as much. Those folks didn't want to come eat at 6:30 or 8:30 when we were serving early and late seating, so they were going to the Windjammer or to the specialty restaurants. As a brand, we had to ask ourselves, how do we get them back in the dining room? So, one of the initiatives that the food and beverage folks came up with was 'MyTime Dining.' The guests could say 'I want to come to the dining room at 6:15' or 'I want to come to the dining room at 7 o'clock.' So they have the flexibility if they want it, and for those who want traditional dining we have that too," she says.

The program has been a resounding success, Bauer reports. "Since we introduced 'My Time Dining,' those guests are coming back into the dining room, and they're rating us higher than the rest of the population, and they're spending more on wine," she says with a laugh. "So it's a wonderful thing. That's one good example of the trends."

Of course, these shipboard trends present themselves not just in dining choices but in activities and overall lifestyle. "It's about offering enough choices," Bauer continues. "So if somebody wants to go on the FlowRider or

climb a rock wall, that's great, but if they just want to lay in a hammock and read a book, there's that option as well. It's about allowing the guest the personalization and allowing them to have the vacation that's giving them the choice in what they want to do."

Yet while the ships are undeniably getting larger with each new series of newbuildings, Bauer says that it would be a misconception to equate size with crowds. "We want to make sure there isn't the misperception that as the ships get bigger, there are more lines. Freedom and Liberty are the largest ships at sea, but when you're onboard you don't feel like there are a lot of people. That's the way the ships were designed. As the ships get larger, they get so much more technologically advanced," she notes. "For example, the elevators are programmed differently. So, all of this is taken into account. We do all kinds of time-and-motion studies to make sure we're maximizing the guest experience."

Putting the "International" in Royal Caribbean

As Royal Caribbean's fleet has grown, so have its deployments and source markets, which in turn has led to some controversy among the brand's core North American customers. Some have objected to what the line terms "immersion cruises," which are departures that are sourced primarily from non-English-speaking markets, and a number of these passengers have vented their displeasure on web-based discussion boards, like those found at cruise-critic.com.

However, Bauer makes no apologies for this evolution - Royal Caribbean is a global brand and as such it offers an onboard cruise product for everyone, she says. "We have put the 'International' into Royal Caribbean International in a big way," she says proudly, adding that the line has clear guidelines for how and when it accommodates non-English-speaking groups of passengers. "When more than 80 percent of the folks onboard are from the local culture, that's where we define it as an immersion cruise," she explains. "We still have our core product, but our announcements first they'll be in the local language, and then they'll be in English. We might have different beer on board. We might have local entertainment," she explains.

However, to avoid dissatisfaction, the line must communicate this difference clearly and effectively, Bauer adds. "For those immersion-type cruises, where the local guest mix is 80 percent dominant, we have to make sure our guests from English-speaking areas know that these are immersion cruises," she concedes. On the other hand, she continues, "When you have a ship like Liberty that's sailing in the Caribbean, those are globally sourced prod-

Portofino is one of the many restaurants onboard Independence of the Seas.





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ucts. There's not one dominant nationality. For those we have international ambassadors with five language capabilities. So there's a real difference between those immersion cruises and our globally sourced products," she notes.

Furthermore, the line has designated no more than a fifth of its fleet as designated immersion ships, Bauer reports. "Those immersion cruises are contained going forward to just four ships," she says. "The cruises that are definitely immersion are Splendour out of Sao Paolo, Legend out of Shanghai and Singapore, Enchantment out of Colon, and Vision when she gets to South America in late 2009." What's more, Bauer says, English-speaking guests are still welcome aboard these immersion cruises, and as long as people know what to expect, it shouldn't be a problem. "The reason we're distinguishing them that way is so in advance our guests understand it's the core product that's been enhanced to reflect the local culture and that English is not the first language onboard. Our guests enjoy the fact that it's such a diverse cruise."

Happy crew is a loyal crew

With two Oasis-class (Genesis) ships under construction, the first of which will be named ms Oasis of the Seas, the prospects of crewing and an industry-wide shortage of qualified crew members is another task that Bauer must contend with. "The ability to recruit and train is a big issue," Bauer acknowledges, "but our focus is on employee satisfaction and retention. We have exceptionally high retention rates," she says. "That's the biggest part of our strategy."

To augment its loyal crew members, who represent 112 different nationalities, Royal Caribbean must compete with other lines for new employees, of course, and the line follows its own approach in that regard. "We recruit all over the world, but we recruit people that have a fire in their belly for taking care of the guests and that have that customer-service ethic, and we feel that we can train for the more technical skills," Bauer says. The numbers themselves are staggering when one considers the complement of crew needed for just one Genesis-class ship: "2,114 was the last number we've been working from," Bauer reveals. "That's larger than most ships. To compare that with Freedom, it's around 1,450."

Preparing for Oasis of the Seas takes up much, if not all, of Bauer's work days. "There are several meetings every day right now that are focused on operational readiness for Oasis, so I'm very involved," she says. "Working with our team, we say what are going to be the new 'wow' experiences, the phenomenal aspects that we will have onboard, and our challenges from a culinary and entertainment standpoint are - we're going to be doing things that are unheard of, so how do we operate that?" she asks rhetorically.

"We have an entire team of people that are doing nothing other than making sure that Oasis of the Seas is as fantastic a delivery as what we just did with ms Independence of the Seas. We have a dedicated hotel start-up team, with the Hotel Director, the Food and Beverage Director, the Cruise Director - we take delivery of Oasis in November of 2009, that we're ready to operate her like we've always had her."

Grandiose thinking leads to transformation

Bauer agrees that the unprecedented amount of space offered by Oasis, which will register 220,000 gross tons, allows Royal Caribbean to indulge in some grandiose thinking and conceptualizing. "The way I would frame it, we revolutionized the industry when we brought out Voyager of the Seas, and when Oasis comes out this will be even more of a magnitude than what Voyager was." However, she stresses, it isn't now and never has been



Lisa Bauer with Hotel Manager Reimund Gschaideer onboard the Independence.

"We never look at it as we need to have a ship [Oasis] this size. We say, these are the things that we need to deliver, and then we ask how much space do we need? So it's never about the size, it's about the choice."

- Lisa Bauer -

about building the biggest cruise ships at sea. "We never look at it as we need to have a ship this size. We say, these are the things that we need to deliver, and then we ask how much space do we need? So it's never about the size, it's about the choice," she explains.

While she concedes that Royal Caribbean keeps a watch on other cruise lines, it's not what drives the line's innovations. "We have to be aware of what's going on in the industry from a competitive point of view," she says, acknowledging for example, Norwegian Cruise Line's announcement of its New Wave staterooms with curved walls and LED lighting. "I think that everybody is trying to set themselves apart and do some things differently, and that was NCL's way of trying to innovate," she says. On the other hand, she reminds us, it takes a great deal of lead time to design and build a ship. "The physical plans of what's on Oasis have been done for a very long time," Bauer notes, adding that as far as construction goes, "She's about 40 percent complete."

Royal Caribbean, she continues, has shown it would prefer to lead than to follow. "We focus on transformation: What can we do that nobody else can do? Among the latest example of this are the various "neighborhoods" that will be featured aboard Oasis of the Seas, such as the open-air Central Park. "What's most important to us is what's most important to the guests. We do a tremendous amount of market research and look at our guest comments. We know that what is most important to our guests is a friendly staff, good food, a range of activities - so that's what fuels our passion for product innovations. And we measure ourselves every week with ratings from the guests," she says.

"We learn from our guests," she continues. "If we see our ratings going up, we know the guests like what we're doing. So while it's important to look at what other cruise lines are doing, we are above all about the customer. The voice of the customer is a very powerful thing. They ultimately will tell us if they're willing to pay for what we're offering," she very rightly concludes. ■

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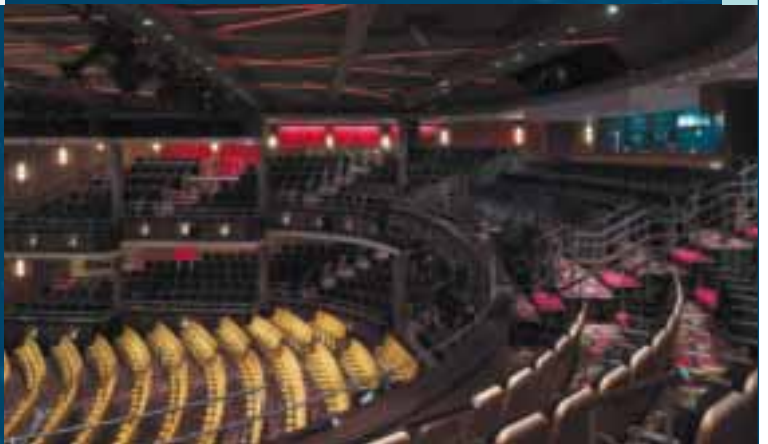
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Behind the scenes

on the world's largest cruise ship

Cruise Business Review correspondent **ANDERS JOHANNESSEN** caught up with some of the key crew members from the bridge, engine room and the galley on board Royal Caribbean International's new Independence of the Seas during the ship's inaugural festivities.

At 154,407 gross tons, Independence of the Seas is like an oceangoing city. She is certified to carry 4,375 passengers and 1,365 crew members, so it goes without saying that Captain **Teo Strazcic** has a big responsibility on his hands. Strazcic, who was born into a seafaring family in Dubrovnik and always knew he wanted to go to sea, has been with Royal Caribbean since 1997. He served on Sovereign- and Vision-class vessels before being appointed master of Independence of the Seas this spring.

Strazcic is quite relaxed about the fact that Independence is twice the size of his previous commands. "This ship handles beautifully," he says. In fact, the world's largest cruise ship is extremely maneuverable. She can rotate through 360 degrees in less than five minutes, a testament to the power of her four bow thrusters and three Azipod propulsion pods.

During simulator training, Captain Strazcic has successfully docked the Freedom-class vessels in cross winds of 45 knots, but in real life would not risk bringing Independence of the Seas into port in wind speeds exceeding 35 knots. "My number one responsibility is the safety of the passengers and crew and the ship itself," Strazcic says. "If weather conditions jeopardize docking the vessel safely, I skip the port of call," he adds. "Passengers tend to be unhappy about such decisions, but when they take a look at the weather outside, they usually understand."

Successful start-up

Independence of the Seas' Chief Engineer **Ståle Johan Ludviksen**, a Norwegian, is a Royal Caribbean veteran of 28 years and has served on many of the company's ships, most recently ms Liberty of the Seas. Thus, he was well prepared to act as inspector during the final outfitting stages of Independence of the Seas at the yard in Turku and to bring the ship into service. "The entire start-up has been largely trouble free," the Chief Engineer is pleased to report.



Captain Teo Strazcic

Photo credit: Anders Johannessen

According to Ludviksen, the engine room layout and machinery on the Freedom-class vessels is identical to the somewhat smaller Voyager-class, with the exception that the engine-room spaces on Independence of the Seas and her sisters encompass one additional fire zone. Also, the larger vessels have more powerful air-conditioning chiller units to handle the additional load. As on the previous Freedom-class ships, the diesel-electric machinery installation consists of six Wärtsilä 12V46C engines with a total power of 75,600 kW (103,000 bhp).

The generators and propulsion pods have again been supplied by ABB and the bow thrusters by Rolls-Royce. Notably, however, Independence of the Seas is fitted with a pair of stabilizers manufactured by B+V Industrietechnik, which is a first for this class. Also for the first time on a Freedom-class ship, water in all swimming pools is heated.



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“Because of the longer hull, the speed and fuel consumption of the Freedom-class is slightly better than the Voyager-class,” adds Ludviksen. During sea trials, Independence of the Seas reached a maximum speed of 24.2 knots.

Catering to different tastes


On Independence of the Seas, having too many cooks in the kitchen would not necessarily be a bad thing. Up to 5,740 persons have to be fed for breakfast, lunch and dinner, which means up to 18,000 meals have to be served each day. In total, there are nine different dining outlets on board for passengers, all served by a main galley located over three decks aft of the main dining room. The statistics are staggering: For instance, 30,000 kilograms of vegetables and 30,000 kilograms of fruit are consumed each week, as well as 90,000 eggs. The galley staff numbers 160 and work goes on 24 hours a day.

According to executive sous chef Sakeesh Panneerselvan, who hails from India, there is a lot of pressure on both the cooks and the waiters, because if one is late in serving the first sitting in the dining room, it will automatically affect the second sitting. Each dinner in the main dining room on Independence of the Seas consists of five different courses, and a different menu is featured every night. They are changed once every six months. “When the ship relocates from Europe to the United States this fall, we will have to change the menus,” explains Panneerselvan, “because the Europeans and Americans have quite different tastes.” ■





Chief Engineer Ståle Johan Ludviksen





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Independence put to the kid test

Increasingly, the cruise industry wants to attract families with children, so Cruise Business Review has sent **ANN-MARIE GORSCHELNIK**, now age 13, with her master-mariner father to investigate how various cruise products appeal to youngsters. She has taken five cruises so far, including one on the Disney Wonder and another on the Pride of Hawaii. This time she reports on how she found Royal Caribbean International's Independence of the Seas, which she visited on 10 April prior to the ship's departure for Southampton in the UK, from where it sailed on its maiden voyage later that month.

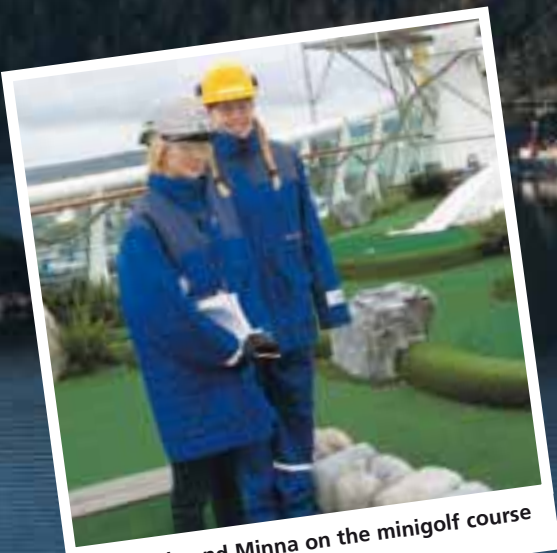
**By Ann-Marie Gorschelnic,
translation Kari Reinikainen**

I could not imagine what to expect: I could not think that the sequence of sights that would open in front of my eyes would be so fine! **Minna (Herrala, our guide)** took us around the ship, and I must admit that I was a bit worried about what she might be like. That is, if she'd just be content to say 'well, here's this place and there's that.' However, it turned out that Minna was truly nice, and that is why I thought to mention her here. Many thanks to her!

The Cinema & Conference Center was the first place that we visited. I often pay attention to colours and here they were as they should be. The Cinema was a little bit on the small side, but on the other hand that is probably not a major problem because there are so many other

things to do on the ship as well. For a moment, I looked at it and let my eyes measure it. I decided that I liked it; not knowing exactly why, but it certainly did have something that I liked. And then a little sidestep: I really liked the stairs, the light ones that divide it up. They were truly great!

And then it was on to the theatre. Gosh! I must admit that its size made it quite a sight! With a 'Wow!', I wondered if it is bigger than the biggest theatre in Finland? It was really well designed: I liked the colours and the décor, but the seats could have been either green or red. Now they were sort of brown, light brown. Well, that is my opinion anyway; I'd say that with either of those colours, it would have been nicer still. I looked around and thought that the number of seats is enormous, and at the same time Minna mentioned that the theatre holds 1,333 persons. That is a huge number of people, no doubt! Anyway, off we go!



Ann-Marie and Minna on the minigolf course



Forward atrium

Photo Credit: Royal Caribbean International

Next we had a look at the ice skating rink. I had thought it would be bigger, but then I said to myself, hold on, we're on a ship, after which it started to look like a fairly large space after all. You can come to skate here during the day, and in the evenings, there are some shows. I'd think that the shows must be pretty cool, because ice shows often are. Quite a lot to digest, no doubt! If you don't want to watch the shows here, you can do so on the TV in your own cabin. Still, there are quite a lot of seats, 946 to be exact. I'd like to give skating a try - and I liked the colours of the walls - blue-ish they were.

The karaoke bar was next. This room I liked an awful lot: That is I like singing myself an awful lot. Now, this would be my place on board the ship! There's a box where you can sing a little bit hidden away from the crowd, if you like. Your voice will be heard outside it, and there's a big screen where you can see the lyrics of the song you are singing. By the way, they had some smaller screens there as well. The colours were fresh and bright - green, blue, red and orange.

◆ Children's facilities galore

Independence of the Seas provides activity areas with something on board for children in every age group. These we saw next:

◆ 3 to 5 year olds

The blue colour suits kids well, and there was enough space and all kinds of sizes and shapes. I liked those little stairs, on top of which there was a section of a ship. You



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Children's areas

could creep into it. It was kind of funny, but I can't say too much about it, because

I'm not a child any more. Still, I'd say that they will have a good time here.

◆ 6 to 8 year olds

This looked pretty much like the previous area, but it was designed for slightly older kids. It had a dance floor, which was truly good. The colours - red and blue mainly - were cool, and it was big enough for kids of that age. There were enough spaces where to sit and enough room to play. I liked the cheerful pictures of fish quite a lot.

◆ 9 to 11 year olds

The room for this age group was really good in my opinion. It was not quite finished yet, so it was a bit hard to say what exactly will be there. Still, what had been done so far looked good, and the colours this time were light blue and various shades of brown that crowned it all, while "extensions" in the walls were truly great! Again, there were enough seats.

These areas for kids seem to be very well designed! And, there's a small outer deck reserved for them as well, where they can play. That was a good idea, so they don't need to hang on to their parents, who can be left in peace as well if they want.

◆ Disco

As soon as we had entered the disco, I noticed the bar that was really smashing! Many pluses for that! If you looked down below the bar-table level, you could see characters in Manga-style, you know those Japanese comic strip characters. They had been used above the bar as well: The pictures were of a girl that had raised her left hand in front of her face. If you looked down, you could see the whole picture, but above the bar you could only see a different part of her face in each picture. The colours changed when your eyes moved from one picture to another. I liked the colours a lot - red, yellow and brown mostly - and those "moving" figures on the walls as well. You could go outside too, where they had a really nice floor and lots of seats. A good place to hang around this! I also liked the circular windows. I bet the music system is of top quality and high tech! Great!

Next it was on to a recreation area. The walls were of a depressing colour, sort of brown. I would have preferred some light colours. Still, they had placed pictures nicely on the walls. Benches had been scattered here and there, which was pretty good. A good place for those that have gotten sunburned! You can cool off a little bit, if that's what you need to do.

The games room for youngsters was next. Now, this must be a dream of boys, I'm sure! Your cabin key does the job of money, but you can also use coins. Parents can set a spending limit, either say one hour or the whole day. Lots of games of different kinds and gadgets! The blue walls and decorative items on them brought to mind a fantasy world.



Ben & Jerry's ice cream bar

◆ Johnny Rockets

The sight was such good fun that I had to smile! A brilliant idea, I could not have expected anything like this at all! The interior and colours were just great; the shape of the benches looked really good! There was a lot of red and white here and the benches were like seats on a train, you had two people sitting on each side of a table that is in the middle. Red chairs with a thick backrest and thick seats lined the bar. You can sit outside and have your meal there as well. Many pluses for an idea like this!

◆ Flowrider

This I had thought would be bigger, but as you know pictures of things often give you a wrong idea. I'd really love to give it a try as I've surfed once myself, and that was really cool. I must admit that it was quite difficult, but it would be nice to compare that experience with



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the Flowrider. Still, I'm sure that there will be quite a crowd here when all the people keen to give it a try turn up! A fine thing, I must say!

◆ Minigolf

This was my number one spot on the ship without a doubt! What I liked most about it was the fact that it looked like a "real" golf course, as the colours were natural and so were the stones and tops of grass as well. The colours in particular made this a really cool place! I'm sure I'd spend time every day here, the best spot on the ship is all I can say; I cannot find other words. Nothing negative to say about it at all!

◆ Basketball court

Now, at least this is big enough – you can have a game with enough players. Nets on the sides are good so that the ball cannot fly away: It could be a bit disturbing if they rolled around in places where they should not do that.



Royal Suite

◆ Rock-climbing wall

Wow, my first thought was how come so many fine things can be put on a single ship? Now, the rock climbing wall was huge! Well, you won't run out of things to do on this ship! Spots for feet and hands in different colours looked good against the grey wall.

◆ Kids' pools

At least the kids' pools are large enough, and yet they are not too deep. That is good, so that there shouldn't be accidents. Statues of some sort of guys in different positions, with lots of yellow, blue, red and pink in the paddling pool, were just great; they had been placed there well and were of good design. The bright mixture of colours made it nice and such a colour scheme suits the Caribbean.

◆ Sports pool

The two long ones could be a bit longer and wider. Well, at least they are deep enough for users of that age. I'd like to use them myself because I like swimming anyway. It's good to have enough pools.

◆ Adult pools

This was a cool and casual place for grown ups, which is great. The pools are deep enough, and they are well designed. The decoration of them was truly well done. The best detail was the Jacuzzis that had slight extensions on each side.

◆ Accommodations and restaurants Royal Suite

Jeezz...you should have seen my face when I stepped in! It was just enormous, and even the balcony was just huge! There was a Jacuzzi on the balcony and another one in the bathroom. A 32-inch LCD TV was just one of its cool details. My God, it was great! It would be just fantastic to live here during your cruise.

From here we went on to an A suite, which was smaller, but the décor gave it a very domestic feel. One thing that I took notice of was the fact that there were lots of mirrors. I just love mirrors and could not pass a single one of them without having a look!

◆ Standard cabin

Pretty cool as well, although smaller than the other cabins we had seen before. The design of the cabin was just a bull's eye, perfect! I noticed pictures on the walls – they depicted flowers – which I thought were really fine. The balcony had a cozy, domestic feel about it.

◆ Pizzeria

The interior is truly great, and the general impression of this place was... well, just that: impressive! I felt like I was at home when Minna and I stepped in. It would be really nice to spend your evening here. I bet the food is good; it must be, as the ship is so great. That said, I felt really hungry by now as I really did like this place!

◆ Royal Promenade

Well, this is truly smashing! I really liked the floor, and then there were all kinds of shops and so forth along the promenade. Lots of fine things! The casino looked pretty tempting, when I took a quick glance inside. You can see onto the promenade from cabins along the higher decks, which is pretty cool because you can watch what is going on along the promenade. By the way, many pluses for the cows in the sign of the ice-cream bar. I had to laugh, they were really cute!

Right then, that was it! To be honest, I cannot say anything negative about the ship, because I have never seen anything so grand before in my whole life. I'm sure that young people will have a good time on this ship, I don't have a slightest doubt over that! All that remains to be said is that I wish the best of luck to all cruises! ■

INDEPENDENCE OF THE SEAS

Selected turnkey suppliers

Cabin areas, main stairs	Orsap Oy
Cabin areas	Shippax Oy Ltd
Cabin balconies	Jukova Oy
Casino, photo gallery, concierge lounge, library	Jonmeri Oy
Conference area, Lido buffet	KSS Interior Oy
Dining room	TINO SANA S.r.l.
Elevators	Kone Elevators Ltd
Galley areas and pantries	Loipart Oy
Main stairs	NIT Naval Interior Team Oy Ltd
Night club and children area	Hermann's Project Design Oy
Shops	Huuhka Oy
Railings	Finn-Brass Oy
Spa and Solarium, crew cabin areas	Kaefer Eristystekniikka Oy
Theatre and secondary lounge	Merima Oy
Viking Crown Lounge	S.A. Svendsen Oy
Windows and windscreens	Pilkington Automotive Finland Oy



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“Dream works” in reality

Cruise Business Review looks at the activities and plans of Aker Yards shipbuilding, particularly the activities in Finland, where the yards are consistently producing some of the most remarkable cruise ships ever seen.

By Henrik Segercrantz

Juha Heikinheimo took over the responsibility of Aker Yards' Cruise & Ferries business a year ago, including all related activities at Aker Yards' three yards in Finland and two yards in France. Recent times have been, mildly speaking, very hectic for Aker Yards. In a move that took the market by surprise last October, South Korean shipbuilding major STX bought nearly 40% of Aker Yards, got a green light from the European Commission for the deal in May, and is now preparing for a mandatory offer for the entire shipyard group.

In June, news surfaced that the French state had agreed with STX to acquire a 9% share in Aker Yards France, assumingly aiming at a blocking 34% later, with the shares currently still held by Alstom. Last year, the yards in Finland faced difficulties in finding sufficient design and production capacity for their big orderbook, which was reflected in the production schedules of many ferries under construction as well as in the yards' financial results.

“We had serious difficulties in getting back to higher volumes at the yards in Finland, after having adjusted pro-

duction to the lower demand of the beginning of the decennium,” Heikinheimo told Cruise Business Review in an interview at Aker Yards' Helsinki shipyard in June. He noted that the situation was similar to operations in France. “The situation is now under control, and we are carefully considering every move,” he said, referring to decision making in taking on additional ship projects. The current situation in the world economy and the exchange rate of the U.S. dollar worries Heikinheimo, as does the increasing price of raw materials. “The price of steel has doubled in about a year, affecting not only us directly, but also our suppliers of machinery and systems. This is very worrying. Increasing oil prices affect our and also our clients' businesses, further increasing the pressure to find new ways of cost savings,” he said, noting as an example the current trend to operate vessels with lower cruising speeds. ▶

Photo credit: Jouni Saaristo/Aker Yards

Aker Yards creates cruise ship innovation

Oasis of the Seas
under construction in
Turku shipyard.



Photo credit: Royal Caribbean International



A growing business sector

Although there are many gloomy factors affecting the business today, Heikinheimo strongly believes in the future of cruise shipbuilding. "We have to remember that the leisure business is the biggest growing market in the world. The cruise sector is a small part of this, some one to one-and-a-half percent in North America and less in Europe. The fundamentals are there," he noted. "As a part of a growing sector, it is most probable your business will grow too. The cruise industry in Europe is growing in double-digit figures, and the expectations for growth in Asia are high."

"There are very interesting prototype series in our orderbook today. The Oasis of the Seas and her sister ship are in all aspects breathtaking," Heikinheimo pointed out. "Her size, naturally, and also the great number of new features will make this vessel a true destination in itself." These newbuildings are under construction at Aker Yards' Turku shipyard in Finland. "The F3 series of cruise ships, being built in France, will bring the fleet of NCL to a new level," he said. "These vessels will bring a number of new features to the market. They are big ships, and the double-occupancy passenger number to gross-ton ratio is very good. The vessels have a lot of cabins. In addition, we have MSC Cruises' entirely new series of big cruise ships, which are very energy-efficient with a reduced service speed," he said. "Common requirements for all these cruise ship newbuildings are the need for both environmental efficiency and energy efficiency," he noted.

The big orderbook has brought some challenges also for the shipbuilders in France, which are now being sorted out. In one effort to put things back on track, the production slot of one of the vessels for MSC Cruises was switched with that of a vessel for NCL. According to Heikinheimo, the operations in France, as well as in Finland, are now back in the mode of "business as usual."

Builders' market to grow

"There are currently four cruise ship owners covering 90% of the market and just three main cruise ship builders from Europe," Heikinheimo reflected. "There are few clients and few suppliers, and it cannot be a permanent state of order that all cruise ships are built in Europe. I can see a development in the not a too far future where fifteen cruise ships are built annually, instead of some ten vessels as currently. The capacity has to grow

somewhere. I think this will take place outside Europe. It is probable that cruise ships will be built in South Korea and again in Japan. Interest in this has been expressed in both of these countries," he said. He noted that cruise ship building is a difficult process, which is based on a big network of dedicated suppliers. In order to build these ships, process control is a very demanding task, which is not easily learned.



Juha Heikinheimo

"The restrictions of the Panama Canal will soon be gone," Heikinheimo said. "This will extend the size distribution of the cruise ships built in the future," he said. "The handy size is interesting when the European markets grow. They are relatively big vessels, but they still fit into many ports in Europe." Heikinheimo said there are two main factors affecting clients today; "First we have the U.S.-dollar-to-Euro ratio. Ship owners with dollar earnings have difficulties buying Euro vessels. The second is the increasing cost of energy, another factor which we shipbuilders have to consider in the design. Our orderbook is interesting but too short, but there are interesting projects on the market, in all size ranges," Heikinheimo noted.

"Aker Yards has become a more international group lately, with the board of directors now including a member also from Korea as well as from France. This is good," Heikinheimo said. "The cooperation between the Finnish and French shipbuilders has been very good and efficient, and I think that STX will act very rationally regarding the future operations of the Cruise & Ferries business area. In today's tough and increasing competition, I think it is very wise to work together with Korean STX, and the cooperation between Turku and St. Nazaire is also very important," Heikinheimo stressed. "We will have a good future if we can continue to work together as an international group without national protectionism. This will guarantee increased efficiency and good results," Heikinheimo concluded. ■



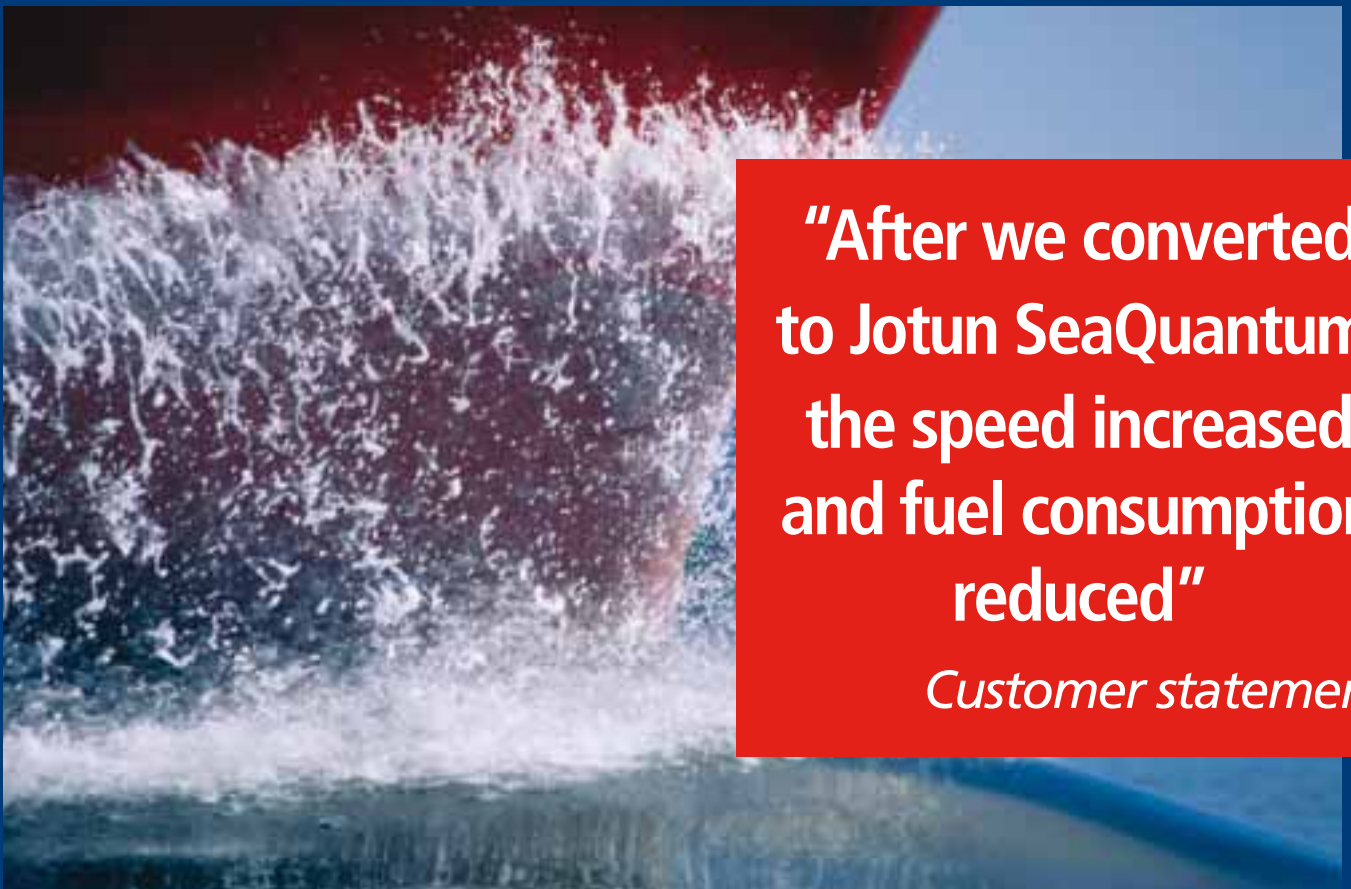
Photo credit: Royal Caribbean International

Oasis of the Seas will feature an outdoor amphitheater at the end of Boardwalk.



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Biggest shipbuilding project ever

Toivo Ilvonen is Project Manager of the newbuilding projects ms Oasis of the Seas and sister ship ms Allure of the Seas, both under construction at Aker Yards Turku shipyard. The vessels will be handed over to Royal Caribbean International in fall 2009 and 2010 respectively. The construction project of these 225,000 gross ton megasize ships is a huge undertaking, but Ilvonen seemed very relaxed when Cruise Business Review met him at the yard, perhaps thanks to his built-up experience from over 26 years. He was also in charge of the previous 154,407 gross ton Freedom-class series for the same owner, still the biggest cruise ships afloat. He took over the Oasis project in November of last year, some four months before the delivery of the ms Independence of the Seas, the third vessel in the Freedom-class. "The latest newbuilding project will, once again, become the world's most innovative entertainment center full of new things to experience," Ilvonen told Cruise Business Review. "Oasis of the Seas is 1.4 times bigger than Independence of the Seas, reflecting on all aspects of the shipbuilding project."

From the project manager's perspective, the challenge of creating a cruise ship like this starts with the design process, a very intensive time stretching over some one-and-a-half years. This work includes the technical and architectural design, and all needed schematic diagrams. The work is done by the yard and client in very close cooperation. Before this, the conceptual design of the vessel was done by the naval architecture department together with the client, long before the contract was signed. In the basic design phase, some 3,000 drawings are produced. Concurrently with designing the vessel's basic layout and diagrams, the detailed design and purchasing processes are initiated, after which the production and hull construction begins. The detailed design of the cruise ship is done using the shipyard's network of suppliers. In this process some 30,000 workshop drawings are produced.

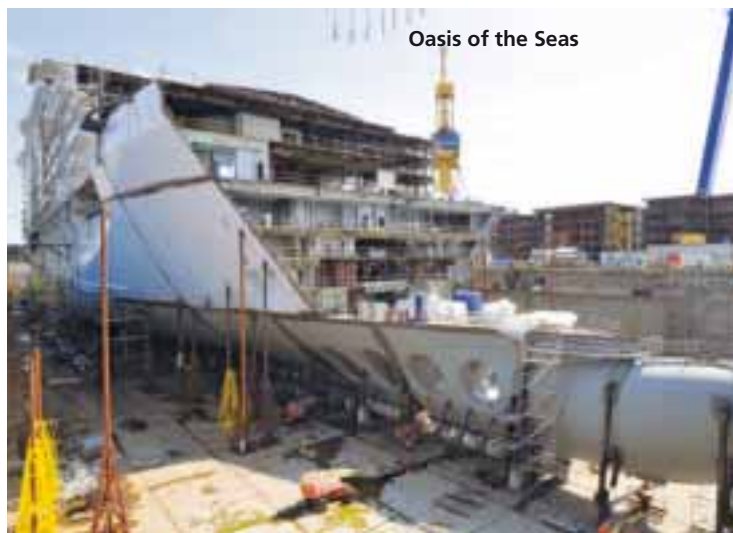
Currently, the Oasis of the Seas is being built in the huge drydock of Aker Yards Turku shipyard from some 180 grand blocks, the biggest weighing 600 tons, equalling the maximum capacity of the yard's gantry crane. When finished, the vessel will measure some 360 meters in length, will be 47 meters wide and some 70 meters high. The vast outfitting process begins with the grand blocks, where much of the piping, insulation and cable trays and ducts for air-conditioning are installed.

Outfitting continues in the newbuilding dock and when the vessel has been launched. Then follows the sea trials, after which the vessel is delivered.

Royal Caribbean International placed the order for the Oasis of the Seas, valued at more than €900 million, in February 2006. Production started in March 2007, and the keel laying took place in December 2007. At the end of this year, the vessel will be launched and delivery is scheduled for late fall 2009. At the time of the interview in June, some 50% of the hull was already in place. "The huge amount of construction work put into this project is hidden from the passengers, such as the hull and deck structure, machinery and cables and also, for example, the piping systems for water treatment," Ilvonen reflected.



Toivo Ilvonen



Oasis of the Seas

45,000 tasks when building Oasis of the Seas

"The process description is simple, but this vessel is several times more complex to design and build than the previous vessels," Ilvonen noted. "The biggest challenge of the project management task is to manage the right things." The design and construction process is tied together into a scheduled activity plan, with some 45,000 different activities listed. "The entire process is handled through strict project planning. The work is done in the right order with sufficient resources guaranteed. The project is on a set time schedule," Ilvonen pointed out. The reporting period of the construction processes is two weeks. Correcting measures are taken when and if needed. Still, he admitted that this project is a huge challenge for the yard as well as for the suppliers.

Aker Yards is very much dependent on its network of suppliers, with some 75% of the vessel outfitting work being designed and built through turn-key deliveries. In all, there will be a maximum number of 2,500 people working concurrently on the newbuilding project in the most intensive outfitting phase next fall. Some 1,500 of these are employed by the turn-key and system suppliers. There are altogether some 4,000 people at the yard, some of which are working on the second vessel in the series, the Allure of the Seas, due for delivery one year after the first vessel. In all, there are some 800 different ex-



Royal Suite balcony onboard Independence of the Seas

ternal suppliers in the project. The amount of designers was at most some 1,000, of which 150 were from the shipyard. Nearly 20 architectural firms have been hired for the project by the owner.

"The project management is in charge of the costs, time schedule and the quality," Ilvonen said. The project management for building the Oasis of the Seas consists of some 100 persons working in the line organisation at the different departments of the shipyard. These include, for example, the tasks of naval architecture, and the supervision of detailed design, purchasing, steel production, and the supervision of various external turn-key deliveries and the progress of the huge outfitting process. "I think the most demanding task in the Oasis project was the design phase. This is a huge prototype ship, and it was demanding to get all the design disciplines in place. Now this task is nearly done," Ilvonen said, before heading to his next scheduled meeting. ■

With these ships in production, where do we head next, Kai?

For those who have been part of the cruise industry for some time, Kai Levander does not need an introduction. For those who have just arrived, a short introduction is in place. **Kai Levander** is indeed one of the most influential persons in shaping this industry to what it is today. His innovative cruise ship design ideas have not remained as ideas only. They can be seen all over the existing cruise

ship fleet, and will be seen in the cruise ships not yet built, in years to come. He graduated as Naval Architect from the Helsinki University of Technology, back in 1967. Except for two years spent at Götaverken in Sweden, Levander has so far dedicated his working life to shipbuilding at the Finnish shipyards.

His career at the Wärtsilä Helsinki shipyard, now part of Aker Yards, started in August 1969, at the time that the ms Song of America was being built. Throughout the years, his ideas have shaped the cruise vessels and also the industry. He took part in the transition of the industry from operating passenger ships to the current cruise-ship era, and he has, naturally, also played a vital role in the creation of the next great project, the Oasis of the Seas vessels, currently being built by Aker Yards, Finland.

Levander heads the naval architecture function at Aker Yards Cruise & Ferries, covering the project design activities at Aker Yards Turku and Rauma in Finland as well as at Aker Yards in St. Nazaire in France, with in all some 100 persons employed. "Here in Turku, we have been occupied to 75% by the Oasis project for a long time," he told Cruise Business Review in an interview at the yard. "We started the project back in 2004," he said, recalling which year the first meetings on the project took place with Harri Kulovaara at Royal Caribbean International.

"At naval architecture, we work with a wide range of ▶



Kai Levander



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tasks. We are part of the sales and marketing organisation. We do R&D and sales projects, but also participate in the basic design after contract. In addition, we also have various other tasks, from assisting the project manager duties to the final commissioning of the vessels,” Levander described. In short, a successful sales project ends in a contract good for both parties. After the research and development tasks comes the concept design phase, ending in a general arrangement layout and a specification of the vessel.

After the contract is signed, basic design of the vessel takes over, including classification society and flag state approvals. “It is good to remember that just a small portion of the design work has been done when the contract is signed. It is very important that the project design work has been done properly,” Levander noted. “Another important part of the naval architecture department is to be competent in handling research and development. It does not evolve by itself. One has to work according to a strategic plan. In addition, R&D has a long lead time in the cruise business. A completely new concept may take some two, three years to create. A successful sales project takes a year to finish after that.”

“Ship owners ask us: What does this ship cost per passenger bed?” Levander continued. “Ship owners are aware of the fact that the price is dependent on the size or gross tonnage of the vessel. It is naturally important what a ship costs, but we think it is more important to ask, what does this ship earn? Think, for example, at the increasing number of balcony cabins onboard vessels of today or at the higher revenues achieved from innovative onboard activities.”

Among the innovations realized over the years is the all-outside cabin (AOC) cruise ship, first seen in the design of the ms Royal Princess, where all the passenger cabins face the sea and can thus be sold for a higher price. Another idea is the horizontal promenade, first introduced in the Baltic cruise ferry ms Silja Serenade, with not surprisingly, Harri Kulovaara in charge of the new-building on the customer’s side. Later, the idea for a horizontal promenade was applied to the Voyager-class and Freedom-class cruise ships at Royal Caribbean, and now on the Oasis-class ships. “With Harri Kulovaara, we have done many concept studies over the years,” Levander noted. Other ideas have included the Windstar sailing cruise ships and the ssc Radisson Diamond Swath cruise vessel design. Levander and his team of naval architects, much inspired by his enthusiasm, are also behind many of the main ideas of the Panamax cruise ships for Carnival Cruise Lines and Costa Cruises. When looking back at

“It is important what a ship costs, but we think it is more important to ask, what does this ship earn?”
– Kai Levander –

what’s been achieved, Levander said; “In fact, I think we have been quite successful in benefiting from the income-producing solutions in cruise ship design.”

As is typical for Levander, he does not spend much time dwelling on the past, as he continued; “Another important factor for a cruise ship is the passenger-per-crew ratio and keeping the onboard crew happy and service-minded. This question has been important and still is.”

Oasis designed on “equivalent safety” principle

“The cruise ship has to be safe and reliable,” Levander continued, “in the sense of being capable of staying in operation although some equipment needs repair, such as an engine.” Regarding the ship’s safety, he noted that regulations have been based on historical data and have had difficulties in keeping up with developments. “The IMO is working hard on this issue,” he said. The Oasis of the Seas is designed based on the “equivalent safety” principle, where the required safety of the vessel has been separately proven to the authorities by thorough safety calculations, analysis, simulations and other test procedures, instead of applying prescriptive regulations, which are based on existing designs. “In the event of a casualty, the safest place for the passengers is to stay onboard while the ship proceeds to port. This is the new IMO goal,” Levander pointed out. “From the Oasis of the Seas, we know now that a big ship is, in fact, safer than a small one.”

“The environment has been important already for a long time,” he noted. “As an example, in the 1970s double-hull protection was provided for the fuel tank areas. Today, the cruise operation must have a low carbon footprint. And this is not just for the ship. As there are more homeports than ever before, cruise lines today provide a much better opportunity for their guests to travel to the port of departure in a more energy-saving way than by flying.” Reflecting on the difference between cruise ships and cargo vessels, he noted that cargo vessels consume energy mainly while on route. Cruise ships have big energy consumers on the hotel side, like the air-conditioning system. “Thankfully, we have today diesel-electric machinery, which gives many opportunities for energy saving, both for propulsion and for the hotel load,” he said.

“All these factors affect the development process of a cruise ship,” Levander pointed out. He also mentioned the new regulations for the subdivision of the vessels through probabilistic calculations, which increase the possibilities to introduce new solutions that will improve safety in case of grounding or collision. “One problem with the growing size of the vessels is the need for big openings in bulkheads and decks. You really need thick steel plates in many places to compensate for these cut outs. The know-how in steel construction is extremely important for a shipyard building cruise ships.”

Canal expansion will change definition of Panamax

“The development of the cruise industry has been very rapid,” Levander continued. “A big issue for us is the

Contemporary cruise concept



Photo credit: Aker Yards

Panama Canal lock expansion plan, which will be completed in 2014. The Oasis of the Seas will still not fit into the new lock dimensions, but ships of the Freedom size will. "The new locks will allow for cruise ships 366 meters in length and 49 meters wide. Thus the size distribution of cruise ships will be reshuffled from the class definitions of earlier Panamax and post-Panamax cruise ship. There will be the megaships from around 200,000 gross tons and up, new Panamax vessels that Levander calls the contemporary size at around 120,000 gross tons to 150,000 gross tons, and the handy size ships from around 40,000 gross tons to about 60,000 gross tons. "There are many projects today in this size range. These vessels are bigger than cruise yachts, but definitely smaller than the old Panamax vessels." Levander noted. "The new Panamax vessels will receive six to seven balcony decks compared to the current five. The future of the market for megasize cruise ships will be seen when the Oasis of the Seas is in operation."

When the interview turned back to the issue of added value for the cruise ship operator, Levander noted, "If we have to provide a 10% improvement in the vessel's economy by whatever means available, the most efficient is to be able to raise the ticket price by that amount. The second best option is to reduce the sales costs and to find ways to reduce the need for special offers to the passengers." Other means he mentioned are to increase onboard revenues by introducing new services and attractions or to reduce the number of port calls in an itinerary by making the ship a destination unto itself.

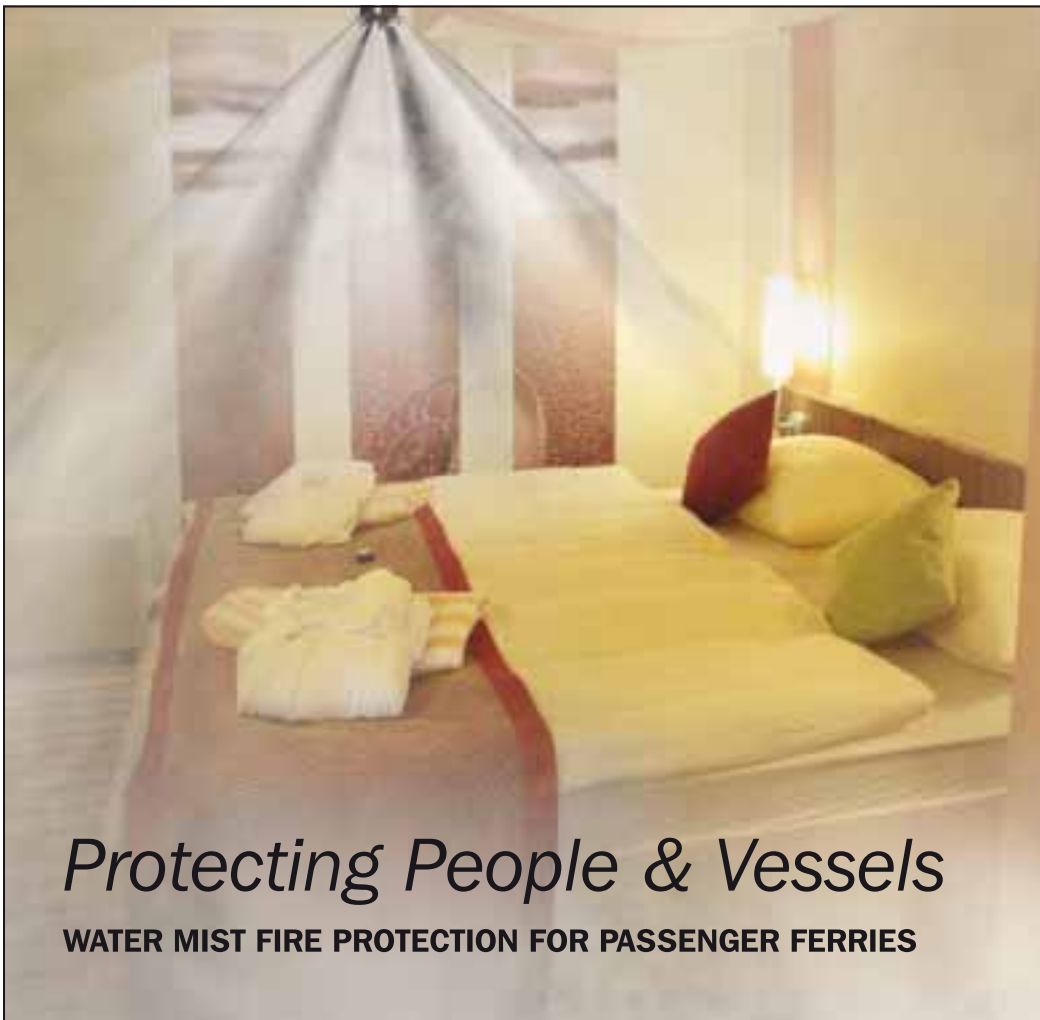
Levander also presented another way of looking at the cruise product, based on one of the hundreds of books he has read for inspiration, *What Consumers Really Want, Authenticity*. "As contrary to providing the customers with a primary product where budget pricing is most impor-



Kai Levander's naval architecture team at Aker Yards has developed a new version of sailing cruise ships, to reduce fuel cost and carbon footprint.

Photo credit: Aker Yards

tant, the cruise industry should provide their guests a unique experience. It is important that the unique experiences onboard are real, not fake," he said. As is typical for his way of searching for things to improve, he thinks shipbuilders still might have some work to do in this respect. But Kai Levander should not worry over this issue, as he will soon retire after almost 40 years serving the industry. Until then, it looks like Oasis of the Seas will definitely provide a great stage for real unique experiences for its customers! ■



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International Corporate Art

Vital to the commercial success of cruise ships

By Anders Johannessen

During a recent short seminar held on board Color Line's new fast ferry, the ms SuperSpeed 2, **Helene Haaland Mustad** of International Corporate Art discussed the importance of art and decoration as a prerequisite for the commercial success of passenger ships. Using the recently delivered cruise and fast ferries of Color Line as an example, Haaland Mustad explained that artwork can be used to strengthen a ship's image and architecture. Conscious use of art and design sends signals, or more specifically communicates what differentiates one vessel or brand from its competitors, generates positive attention among passengers, and provides crew members with a sense of ownership and belonging to the ship and the company.

A cruise vacation is considered an escape from everyday life and is expected to fulfill dreams of glamour and luxury. As Haaland Mustad pointed out, architecture, art and design combined form the framework for the passengers' cruise experience. Over the past 20 years, ship owners have embraced art as a means of enhancing the total cruise product. It is no longer a case of "art for art's sake." Today it plays an important role in the cruise lines' communications and marketing strategies. Companies specializing in art decorating and commissioning thus have an important role to play when new cruise ships are designed and built. International Corporate Art is one of the leaders in this field.

A global business

The origins of International Corporate Art can be traced back to 1988, when **Gro Nesjar Greve** founded Ny Kunstformidling, the first company specializing in art for the cruise industry. "I got involved with cruise ships because I knew **Petter Yran** of Yran & Storbraaten Architects," she recalled. "The first vessel I worked on was Royal Caribbean's Sovereign of the Seas, then the world's largest cruise ship." Twenty years later, International Corporate Art has grown into a global business with offices and representatives in Oslo, Miami, London, Antibes and Turku. The current company was created in 2004 through a merger between LCA Corporate Art and ArtLink Contract. To date, ICart - in all its incarnations - has undertaken art commissions for more than 110 cruise ships and ferries, as well as for 500 hotels and offices. Art historians, interior designers, decorators and craftsmen can be found among its 22

employees. Today, Gro Nesjar Greve is a partner in ICart Holding and head of the company's London office.

ICart's long list of references includes such clients as Royal Caribbean International, Celebrity Cruises, Crystal Cruises, Cunard Line, Norwegian Cruise Line, Oceania Cruises, Regent Seven Seas Cruises, Renaissance Cruises, Residensea, Seabourn Cruise Line, SeaDream Yacht Club and Silversea Cruises. As mentioned above, ICart recently completed the art commissioning for all four Color Line cruise and fast-ferry newbuildings, and previously was responsible for all five Hurtigruten ships built for Troms Fylkes Dampskibsselskap. "We have wide experience with the cruise industry, having been involved with everything from the biggest mass-market ships to the smallest, most luxurious yacht cruisers," as Nesjar Greve summed it up. "Because of this, we are in the fortunate position of having customers often contacting us first."



Gro Nesjar Greve

The largest art collection at sea

"When Sovereign of the Seas was delivered 20 years ago, art played a secondary role in cruise ship interior design," Nesjar Greve noted. "There were few specially commissioned artworks on board, and we mostly were concerned with selecting and purchasing prints." To illustrate this, there was about \$1 million worth of artwork on Royal Caribbean's ms Nordic Empress, while up to \$12 million has been spent on at least one of Royal Caribbean's later Voyager-class vessels. What's more, the artwork installations on today's cruise ships tend to play a more active role in the public areas as a whole than in the past. It can, for instance, be argued that the massive sculptures dominating Royal Caribbean's Centrumms are what makes these spaces into something special rather than just cavernous holes in the ships' interiors.

Royal Caribbean is ICart's longest-standing and biggest client. Over the past 10 years alone, the cruise line has spent about \$130 million on art for its newbuildings, resulting in a floating corporate collection

that can best be described as unique. "The RCI collection stands out not just because of its size, but because it has been custom-made by the very best Scandinavian and international artists," said Nesjar Greve. "The artists have been given a great degree of freedom in their work, and the budgets have accommodated this." For example, on the recently delivered ms Independence of the Seas – currently the world's largest cruise ship – there are 6,208 works of art by 104 artists from more than 20 countries, with a combined value of about \$8 million.

"The reason why Royal Caribbean decided to put such a great emphasis on art in the first place was that architects such as Njål Eide and Yran & Storbraaten – together with the Wilhelmssen family – were eager to showcase Scandinavian art and design on their ships," Nesjar Greve explained. Another reason was that RCI began building large series of identical ships in the 1990s, such as the six-unit Vision-class and five-unit Voyager-class. Art was seen as a means of differentiating the ships and giving them individual personalities. "We came up with specific themes for the artwork on each vessel, usually inspired by the name of the ship and the various public rooms. This is perhaps not so much visible to the passengers, but served as an important guideline to us," said Nesjar Greve.

Knowing the audience

"The choice and style of art are dependent on the particular cruise ship, its passengers and market segment," according to Nesjar Greve. "There is a big demographic difference between a small, expensive luxury yacht cruiser and a mass-market megaship." She pointed out that in putting together art collections, one has to be politically correct as well as attempt to break some



Photo credit: Anders Johannessen

Art onboard the SuperSpeed 2

boundaries at the same time. "It is important to keep in mind that a cruise ship is a very isolated environment where the passengers usually are surrounded by the art for a week or more," she added. "Passengers also are much more mindful of their surroundings than one tends to realize, so the art should therefore serve to stimulate their curiosity and interest."

ICart is currently involved in art commissioning projects for Royal Caribbean, Celebrity and Silversea's new-buildings. The biggest of these projects are the ms Oasis of the Seas and ms Allure of the Seas, and ICart has been involved with them for the past year and a half. Because of its scale, the art commissioning for Royal Caribbean's Oasis-class (Genesis) ships is handled by ICart's Miami office. "In the future, the project management for all Royal Caribbean and Celebrity new-buildings will be relocated to Miami because of its closer proximity to the cruise lines' own in-house architect teams," Nesjar Greve explained. ■



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Merima naval interiors

Artful and cost-effective

Photo credit: Jouni Saaristo/Aker Yards

By Tero Tuominen

Heikinlaakso is a small industrial area northeast of Helsinki, the capital of Finland. The place is well positioned near main highways and the new container port of Vuosaari. The buildings are meager, many covered with painted, corrugated iron.

Nothing would suggest that some of the world's most dazzling and luxurious cruise vessel turn-key interiors are manufactured here. From Heikinlaakso, Merima Ltd. ships up to 300,000 square meters of interiors every year to shipyards all around the world. Containers are loaded with prebuilt assemblies and components for lounges, piano bars, spas, restaurants and even main theaters for major cruise and passenger ships. The company specializes strictly in turn-key naval public interiors, both for newbuilt vessels and revitalization projects.

Merima was founded in 1987 by **Mauri Mäkiranta** and **Timo Nisonen**. Since then, the company has established a growing reputation in the shipbuilding industry. Their order base now includes projects for shipyards building cruise vessels for the most renowned brands, including Royal Caribbean International, Carnival Cruise Lines, and Costa Crociere. In ferry industry, Merima-built interiors can be found aboard the vessels of Brittany Ferries, Tallink Silja and Color Line.

One of Merima's most prestigious projects has been the modernization of the VIP quarters of former Russian president **Vladimir Putin's** yacht, the *ms Rossiya*. The customer for this refit was Severnaya Verf shipyard of St. Petersburg.

Combination of sea and land

"In this business, it is the price that matters," admits the President of Merima, Mauri Mäkiranta. "But for real success, you also have to be able always to meet your timetables – and at the same time be very flexible."

The idea for establishing a specialized company came in the 1980s, when both Mäkiranta and Nisonen worked for Wärtsilä Marine shipyard in Helsinki. There they had gained lots of experience from all sides of naval refurbishment. "We found out that a specialized company could produce naval interiors in a more cost-effective way than a large general shipyard," says Mäkiranta. "The fundamental idea with Merima was that with the company we had an opportunity to concentrate on what we knew best."

Both founders had a long expertise in vessel interiors, but only a limited knowledge of how to manage a company. As a first step, they attended an entrepreneur course to get the background for running a business. At the start, there was also a need for fairly sizable investments in production tools. A combination of the Finnish words for sea and land, *meri* and *maa*, were used to form the name of the new company.

During its early days, Merima also worked on landside projects such as hotel interiors. The company's founders soon found that their expertise brought much better value in the naval side of the business. The specific focus of Merima's work is the interior fitting of public areas for passenger vessels. They also have built some cabins, but that is not their main area of interest. "In cabins, the share of basic work is quite extensive. Merima is concentrating in special, more value-added projects," explains Mäkiranta.

New business model

In the Finnish shipyard industry, the real starting point for subcontracting ship interiors was the bankruptcy of Wärtsilä Marine yard in 1989. "In the new business model, only the hull of the vessel is built by the shipyard, whereas 80 percent of construction is outsourced. Merima was in a good position to be part of that change; in fact, we were driving it for our part. We had already gained good knowledge on difficult turn-key bidding, which is the cornerstone for doing successful business," Mäkiranta points out.

For their first order, Mäkiranta and Nisonen delivered a complete interior solution for a Soviet mothership of barge carriers built by Wärtsilä Marine in Turku. The first turn-key project for Merima came in 1989, while furnishing the executive suites of the *ms Fantasy* for Wärtsilä Marine. It was soon followed by another large order from Rauma Yards.

In 1992, Merima manufactured major turn-key interiors for the *ms Sally Albatros*. These included vast restaurant spaces, a night club, shopping areas and entrance facilities. In the next year, Merima delivered as a turn-key project the main theater and owners' suites for the *ms Sensation*, built by Kvaerner Masa-Yards. The customer was Carnival Cruise Lines.

Merima was also the major turn-key solution supplier for the Spirit-class and Voyager-class ships. These were built by Masa-Yards in Helsinki and Turku from 1997 through 2004. Both classes of vessels have approximately 4,500 square meters of Merima-delivered public interiors.

Merima moved to its current Heikinlaakso facilities in 1993. The company has 4,000 square meters of workshops and office area, but the business has been growing fast. At the moment, Merima has a construction site for new premises in a nearby location. When it is completed, the new building will almost double the production area.

Realizing the designers' vision

Ship interiors are in many ways unique structures. Merima has specialized in building one-time components or a limited series. Usually, there is no possibility for larger-scale series production. Would there have been a need for such, the company would use its extensive network of suppliers.

Delivery of a new prototype cruise vessel takes approximately up to three years from concept to launch. "Customers often want to wait until the last moment before ordering interior solutions. Naturally, they want to see what competitors are building," says Mäkiranta. "Usually interior designers' and architects' visions are very creative and artistic. You have to know how to industrialize the production of these visions. And most importantly, you have to know how to do it in a cost effective way."

Merima employs a team of production designers, who have the ability to turn vast ship interiors into more manageable components and modules. One requirement is that the parts have to fit in containers. What is more, they have to have such dimensions that the components surely fit through the available openings in the vessel hulls during the construction period. "This logistics challenge of moving interior fittings has often been forgotten during the ship design process," Mäkiranta says.

"Good knowledge of available materials is essential in our business," Mäkiranta points out. Salty and damp conditions onboard ships are still a major challenge when choosing materials – even for the interior elements. Tight regulations also rule how much fireload can be built in the ship structures. This means that metal is the preferred material for example in supporting frames. Other fireproofed materials are also important. But naturally, wood products and fiberglass also are used.

"Our supplier network for materials is global. You have to know what you can get and where. The next big issue is how to combine these different materials with differing strengths and workability," Mäkiranta explains regarding the finer points of cruise vessel interior production.

Refitting as a growth market

Merima Ltd. also maintains a Merima LCC office in Florida, established in 2003. It is mainly intended to support the firm's refurbishment business, which is clearly a growth area for the company. Every new large luxury cruise vessel is going to have several refits during its career. This market has lots of potential for an efficient revitalization specialist. The refitting business is about tight schedules and good production planning. Typically, for one project approximately 50 to 150 containers of elements are needed. The installation period onboard could be only two to six weeks.

Nowadays, about two-thirds of Merima's business still comes from Finnish shipyards. But that gives the company a nice competitive edge. At the moment, the orderbook for large cruise vessels is good in Finland. Mäkiranta believes that Merima currently is the third- or fourth-largest naval interior supplier in Europe. The company's market share is approximately 20% to 30%. The estimated turnover for 2008 will be 45 to €50 million. "At the moment, we have eight projects in production. In the bidding phase, there is about 100,000 square meters of interiors."

Merima has the capability to deliver all public space interiors to cruise vessels up to Panamax-size. But for Oasis-class sized ships, cooperation is needed with other companies. That brings more challenges when different operators are installing interior components at the shipyard.

Naturally, there have been some ups and downs for Merima. The slowdown of the shipbuilding industry during 2004-2005 of course affected the company. "We have not totally recovered from that as yet," admits Mäkiranta. During the interview, he repeatedly points out how important the whole Finnish shipbuilding industry cluster is. "When Masa-Yards was established after Wärtsilä's bankruptcy, all tables were wiped. Now we have healthy business practices and all actors have a strong intent to make this a flourishing business." A new question mark for the Finnish shipbuilding cluster is now the Korean conglomerate STX, which at the time of this interview had made an offer on Aker Yards.

Question for the future: Added value?

Professionals who manufacture naval interior components have to be multi-skilled. Unfortunately, there is no specific educational program available for them in Finland. "Luckily, Merima has a good reputation as a workplace. We have had no problems getting skilled people. In fact, many employees who left us for other opportunities have returned."

Currently the company employs about 120 full-time employees. On the shop floor, Merima has only about 50 people. But it always has about 300 to 400 people working on various projects in different shipyards. In

President Mauri Mäkiranta at the company loading area. Here the manufactured interior components are crated for shipping. Good packaging is a very important part of the turn-key interior fitting process. Possible damage during transportation to often unique modules could cause great expense and at worst, wreck the already tight timetables.



Photo credit: Tero Tuominen

addition to its own company personnel, the local workforce is utilized during installation phases.

Merima has acquired Lloyd's Register ISO9000 quality assurance. It covers all phases of production of prefabricated units. Mäkiranta admits that the market does not value ISO-standards very much. But it gives the company a great tool to keep up the quality control of the process from production design to installation.

"In the future, the starting point for the naval interior business is quite simple: How to offer even more value to the cruise customer? At the moment there are many futurologists outlining what passengers would like to experience during a cruise in the next five to ten years. Whatever the answer, we'll have to deliver it," Mäkiranta explains.

Probably, customers will ask for more "wow" effects and more activities during the cruise, more different restaurants and dining options, and of course – more entertainment. When designers have visualized their dreams, Merima will have many possibilities to utilize the company's know-how to build them in a cost-effective way. ■



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