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# J S O E

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# **Journal of Shipping and Ocean Engineering**

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# Journal of Shipping and Ocean Engineering

Volume 7, Number 4, July-Aug. 2017 (Serial Number 32)

## Contents

### Offshore Engineering

- 133 **Simplified Design Procedure of Monopile Foundation for Offshore Wind Turbine in Gujarat, India**  
*Ishwarya Srikanth, Satya Kiran Raju Alluri, Krishnaveni Balakrishnan, Mallavarapu Venkata Ramana Murthy and M. Arockiasamy*

### Maritime Education

- 153 **A Full Mission Simulator of the Ship's Automated Electric Power System for Training and Competence Testing of Marine Engineers**  
*Mykola Mukha*
- 161 **The Use of PBL (Problem-Based Learning) in Improving the Student Performance in Navigation 3 (Terrestrial and Coastal Navigation)**  
*Ma. Corazon S. Navallasca, 2/M Mario B. Dumaicos and 2/M Narciso F. Atanacio*

### Maritime Technology

- 168 **Port and Marine Structures Made of Sheet Piling with Staggered Toe**  
*Doubrovsky Michael, Kaluzhnaya Valentina, Adamchuk Nikolay, Khonelia Natela, Kaluzhniy Aleksey and Dubrovskaya Olga*
- 174 **New Concept Design for an Event Cruise Ship**  
*Silvia Piardi, Luca Mori, Matteo Attardo, Davide Cornetto and Stefano Vicari*





# New Concept Design for an Event Cruise Ship

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**Abstract:** This paper presents a new concept for the cruise ship, which has been developed from a thesis work discussed at the master's degree in Yacht and Cruise Vessel Design, at La Spezia, Italy. A typical cruise ship docked at port does not interact with the city, but remains a guest in transit. Why not then take on the challenge of designing a functional entity that transports events, culture and entertainment? The ship would then become an extension of the city, offering a different experience each time to suit the tastes of all the family. If a ship can be "inhabited", a city can be "inhabited on the water". The ship does not have a particularly residential facade but it has a multifunctional body.

**Key words:** Day cruising, event design, interior design.

## 1. Introduction

Our design work began by analysing the current cruise sector and how it has evolved in recent years. We analysed all aspects of mass-market cruises, luxury cruises and river cruises to help develop an innovative concept. Our initial analysis of mass-market and luxury cruises revealed that the principal aim of cruise companies is to make the customers feel at ease, looking after their primary needs (food, rest) and desires and trying to convert these into purchases. All of this is with the aim of pleasing and entertaining.

In this regard, modern cruises are very similar to shopping centres, places that meet the needs of various target customers, and where advertising is fundamental to attracting potential customers and trying to get them on board to try out new experiences. We then conducted some market research to help us develop the concept. It focused on mass-market and luxury cruises on one hand, and yachts and mega yachts on the other: the first two to find out what facilities are available on board, and the second two for form and aesthetics [1]. Future, recognisability, flexibility, comfort and exclusivity were the keywords that came out of the

market research and which were later used in putting together the concept for the project. The research also looked at other sectors, beyond naval and nautical, for ideas from contemporary architecture as identifying elements for the project which would be immediately [2] recognisable and have an aesthetic value in themselves, independent of the activities that take place inside, as you can see from Fig. 1.

We realized that the reasons behind the continuous development in the cruise tourism sector must be traced back to the versatility of that sector over the years in meeting the increasingly diverse and complex needs of their customers, satisfying them with a mix of attractions which motivate the client through: (1) an image of luxury and glamour, generally associated with holidays on large cruise ships, (2) accommodation on a par with superior and luxury hotels, particularly in terms of communal services, with standardized restaurants and no distinctions made based on expenditure, except for the layout and presentation of the cabins, (3) an "experiential" offer based on a mix of destinations, some within the categories of the great cities of art and political capitals, and others which are more obvious holiday destinations, (4) a combination of cruising and themed activities (cultural tourism, shopping, entertainment, etc.) which is made possible

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**Corresponding author:** Silvia Piardi, architect, full professor, research field: interior design.





**Fig. 1** External views.

by the geographical mix of destinations on a cruise itinerary, with on-land excursions and various other options available in the itinerary. This is all offered at a price level which is competitive with other all-inclusive forms of tourism [3-5].

## 2. Concept

After completing the market research, we moved on to the meta-design phase to identify the context of our ship and the target customers. Our target customer base is wide and diverse so as not to exclude anyone and to get a large slice of the potential market that might be attracted to the project: families with children, couples, groups of friends and older people, all attracted to living differently for a day and being able to customize the experience to their own liking. Attention to the customer and his wishes are at the center of the project and consequently on-board activities are centered on these: entertainment, relaxation, culture and all round wellness. Of course this all leads to high management and maintenance costs, raising the price range and attracting medium to high-income customers. We decided to borrow some aspects of the classic cruise, such as the communal areas and some of the attractions on board, and redesign and adapt them for our project. Seeing Figs. 2 and 3. the main difference is the absence of passenger cabins which provides more space for communal areas on board as, in our concept of the day vacation, no space is needed for overnight stays. The only cabins on the ship are for the crew who, of course, remain on board throughout the cruising period. To

compensate financially for the lack of cabins, the periods spent between ports must necessarily be kept short, avoiding dead periods and spending long periods docked in the port. The envisioned ship only makes a profit when it is docked in a port or natural harbor, i.e., when there are passengers on board who have booked the day, therefore it is essential to respect the points listed above. Moreover, the route the ship will take is limited by the fact that the ports must be close to populations which are interested in the activities on board.

The destinations will be a mix of coastal metropolitan cities (e.g., the ports of New York, Miami, Barcelona, Genoa) and interesting areas of countryside where passengers can board the ship in the harbor and then go out to sea to spend the day on board and get a different perspective where the sea is the center of attention. Keeping the target customer and type of cruise in mind, we focused on the activities which should be available on board. First of all, a preliminary study was carried out dividing the day into four parts to understand the customers' interests and requirements and so to meet their needs and demands. A range of activities were drawn up for morning, afternoon, evening and night, some of which are already available on common cruise ships while others are new ideas. For each activity, we identified the target customer, the age range, and the requirements in terms of elements, materials, requirements and performance. From this study, we were able to choose the final activities based on various considerations ranging from the financial to

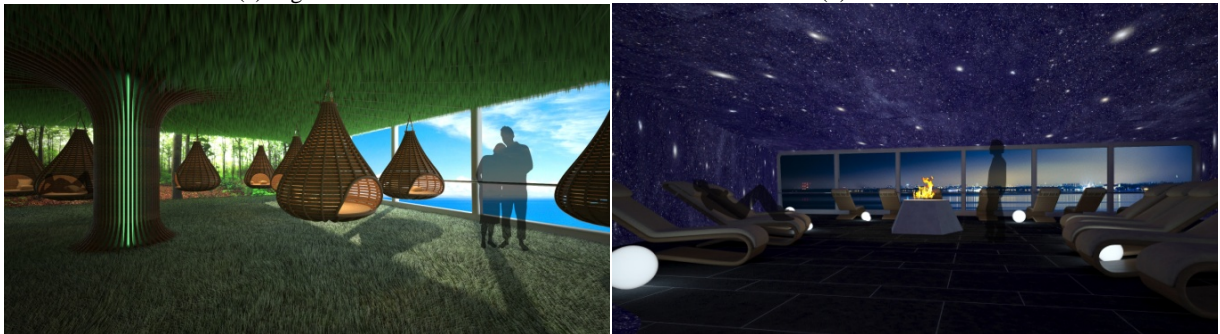


Fig. 2 Views of bar, restaurant, swimming pools.



(a) Light room

(b) Silence room



(c) Nature room

(d) Stars room

Fig. 3 Views of the four emotional rooms.



Fig. 4 Proposal of waiting rooms on the dock.



the functional. We tried not to have any areas that were dead at certain parts of the day, and to have areas that could accommodate different customers at the same time, or areas of various kinds that involved people with different interests. The activities were divided into four macro categories: services, culture, wellness and entertainment, four themed areas that intersect on the ship's decks to involve customers throughout the day. The services were designed as areas where there are bars, restaurants, reception, bathrooms and changing rooms. Culture includes areas for exhibitions and installations, a theatre, a multimedia room. For wellness, there are various outdoor sunbathing areas with swimming pools and hydro massage tubs, a spa, a gym, individual relaxation areas and a lounge with panoramic views. Of course, on board a cruise you also need entertainment areas, and indeed we have included areas for children's entertainment, a disco, a concert theatre and shops.

### 3. Design

The whole ship has been designed within the concept



Fig. 5 Internal views of exhibit.

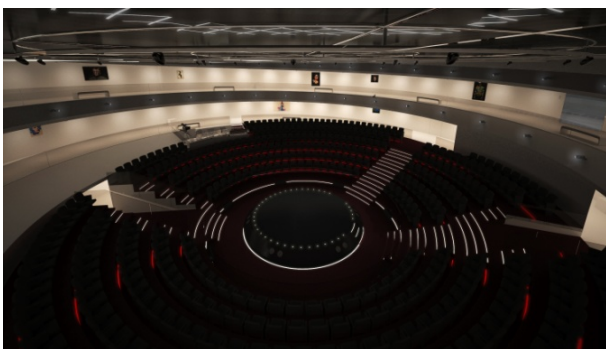
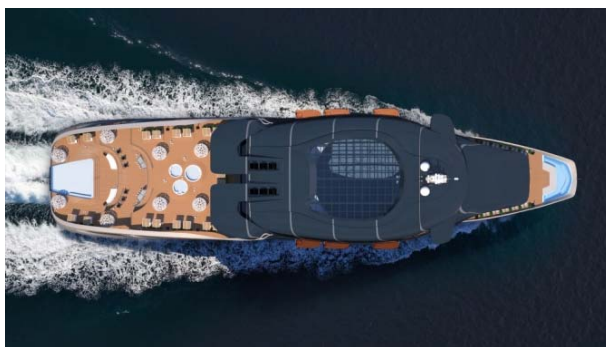


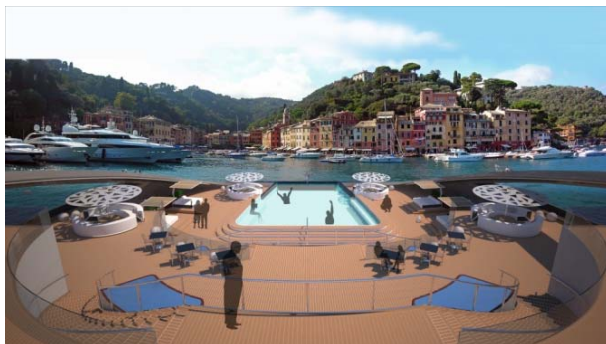
Fig. 6 Area of the theatre.

guidelines which have provided us with certain points of reference. The principle innovation compared to a classic cruise ship, the absence of cabins for overnight stays, has allowed us to have large internal spaces that can be used for the various activities selected, all of which are for public use, and to remove the private areas of the boat. The exterior has been designed with a contemporary aesthetic for two main reasons: the first was to look towards a new aesthetic concept for cruises which moves away from the traditional idea of a floating palace designed to carry the maximum number of people, the second was to make our project recognizable so, at first glance, it can be easily distinguished from the background of ships. We felt it was essential to make the design stand out, to arouse curiosity and astonishment in those seeing it for the first time and to make it well known and continually interesting for those who already know it [6, 7]. It has quite an aggressive shape with clean, angular lines and soft curves, and a number of aesthetic architectural and naval references which call to mind some elements of the cruise ship, some features from yachts, and others from contemporary architecture, the most obvious style influences being Zaha Hadid's fluidity and Norman Foster's high tech [8, 9]. The classic, very visible funnel of the cruise ship (e.g., Costa Crociere's yellow funnel) has disappeared to give way to a more "veiled" outlet which has a lesser impact on the already recognizable aesthetics of the boat. There is a clear intention to create a strong link between the ship and the external landscape with large openings, broad windows and spacious outdoor areas. The "transparency" of many areas is deliberate and has been made possible because of the lack of private areas which would have required more privacy. With a total length of 161 m and a maximum beam of 39.5 m, the ship has quite a low length/width ratio, this was to create large spaces on board and therefore comfort and space for all the passengers. Two Azipod ABB engines allow a maximum cruising speed of 20 knots and a maximum speed of 24 knots. Based on the attractions

and the space available, the maximum capacity is estimated at approximately 1,030 people, which includes 800 customers and visitors and 230 crews. Compared to normal cruises where the crew/passenger ratio is around 1/5, our concept has a ratio of around 1/4. This was a deliberate decision to ensure that customers receive more attention and more refined and exclusive service. As for the external paintwork, the superstructure is petrol blue while the rest of the hull is light metallic gray. This delineation was designed to visually separate the two parts. See the Figs. 1, 7(a-c) and 8.



(a)

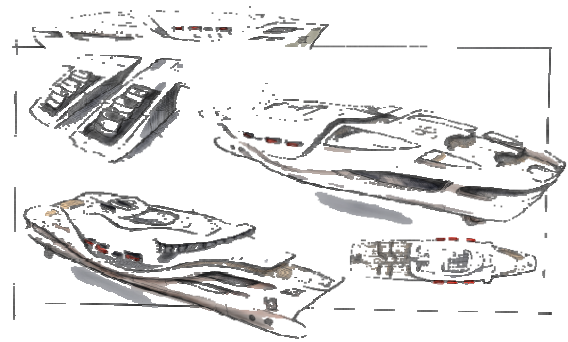


(b)



(c)

**Fig. 7** (a) (b) (c) External views.



**Fig. 8** Sketches.

## 4. Conclusions

In conclusions, our intention, right from the beginning, was to work within the cruise sector to find a new way of looking at and experiencing the cruise ship. We therefore set ourselves the objective of developing a concept to apply to a newly conceived ship, where a customer can have a different and unusual experience [10, 11]. The starting point was the cruise ship which, after appropriate modifications, becomes a “new” ship with innovative features which meet traditional requirements in a different way. Our idea was conceived as an alternative to the cruise holiday, a customizable fast holiday for people who want to enjoy a day of relaxation, wellness and culture on board without having to go away for a few days. It can be summed as a desire to create a new ship market which offers services in a different way and provides a new experience.

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