



## AIDA Cruises opens modernized Fleet Operations Center

September 2, 2024

### Hamburg's new High-Tech Control Center sets new standards for the cruise industry

On September 2, 2024, AIDA Cruises officially opened its fully modernized Fleet Operations Center (FOC) in Hamburg. The FOC is part of Carnival Maritime GmbH (CMG), which was established in 2015 as a maritime service unit for AIDA Cruises and Costa Cruises. The embedded FOC, which is available around the clock for cruise ships, plays a central role and serves as the first point of contact and support center.

With this significant investment, the most modern and innovative center of its kind in Germany has been created in the heart of Hamburg's HafenCity. During the ceremonial event, Felix Eichhorn, President of AIDA Cruises, and Keith Dowds, Executive Vice President of CMG, welcomed high-ranking representatives from politics and business, including Dieter Janecek, the Federal Government Coordinator for the Maritime Industry and Tourism in the Ministry of Economic Affairs and Climate Action, and Dr. Melanie Leonhard, Senator for Economy and Innovation of the Free and Hanseatic City of Hamburg.

Dr. Melanie Leonhard, Senator for Economics and Innovation: 'Hamburg is one of the most popular cruise destinations in Europe and is also an important hub for the maritime industry. The Fleet Operations Centre is therefore ideally located here in Hamburg. The modernization strengthens Hamburg as an international maritime competence center: many players from the cruise and cargo sectors are based in Hamburg and value the expertise as well as the lively and innovative environment that makes Hamburg an attractive international location for specialists. As an important control center, the FOC contributes to making cruises worldwide safer, efficient and sustainable.'

"Our Fleet Operations Center is unique of its kind in Germany. With our extensive investments in new hardware and state-of-the-art software tailored to our specific maritime needs, we are setting new standards in the cruise industry. The FOC team is available to our captains and officers around the clock, providing support with nautical and technical aspects," says Eichhorn. "At the same time, this is a clear investment and a strong commitment to Hamburg as an important international maritime competence center."

In the Hamburg FOC, all relevant data from 31 cruise ships is collected around the clock on over 250 square meters. This includes data from eleven AIDA ships as well as 20 other ships of Carnival Corporation's European cruise brands. The FOC uses fully digital ship monitoring technology to capture speed, weather, and navigation data, as well as various technical data from the ships' engine rooms, via satellites in near real-time. This enables the ship crews to better plan and optimize fuel and energy consumption, routes, water management, and various logistics processes in the more than 250 ports worldwide that AIDA Cruises visits with its cruise ships. As a result, fuel consumption and thus the ships' emissions are significantly reduced. A "Tactical Table," a kind of digital workbench equipped with software, as well as a modern ship simulator, help to present various scenarios and conduct individual training sessions.

The FOC sees itself as a partner and advisor to the captains and their nautical-technical management teams for all rapidly changing conditions at sea and in ports, 24/7. "The combination of our experienced colleagues and state-of-the-art technologies ensures that we provide our ships with the best possible support around the clock. In addition to supporting regular operations, we can also simulate port entries under unusual weather conditions or ensure the most efficient routing," adds Dowds. Despite the shoreside support, one thing is clear: the ultimate responsibility and decision-making authority for the ship always lies with the captain.

### Efficiency and Sustainability

The FOC's state-of-the-art, satellite-based, and near real-time monitoring system collects millions of data points from the ships daily, which are analyzed using digital algorithms. Based on this data, the course of the voyage can be adjusted if necessary to suit the current conditions in the sailing area and optimized for maximum travel and guest comfort. Digital analysis also allows for the identification of potential CO<sub>2</sub> emission reductions in fuel and energy consumption. Fuel savings from optimal engine operation are just one example of the efficiency gains that can be achieved.

A specially developed software helps to continuously improve environmental management in the interest of protecting sensitive marine ecosystems as effectively as possible. With a global digital environmental sea map installed on all ships, the FOC monitors more than 500 international and national environmental special zones, port regulations, and the company's own guidelines worldwide. "Compliance with environmental regulations is our top priority. The previous manual approach became increasingly complex and labor-intensive, especially as new regulations were introduced worldwide. With our proprietary software solution, these tasks are automated and optimized, allowing us to effectively address future challenges," says Eichhorn.

Technical control and analysis, combined with best-practice experiences, offer numerous approaches to developing innovative environmental and resource conservation projects — for example, in freshwater supply, wastewater treatment, and recycling and waste management.

### All Data at a Glance

The six-month modernization incorporated the experiences gathered since the first FOC was established by AIDA Cruises in 2012. Based on this, the entire hardware and software technology was upgraded and brought to the latest state of the art, in addition to spatial expansion. A striking feature is the 18-meter-wide and nearly 1.5-meter-high video wall, on which all relevant information such as weather, planned routes, radar images, protected zones, and current energy consumption can be displayed at the click of a mouse. The FOC team uses software and algorithms to evaluate thousands of sources and millions of data points from the cruise ships daily, analyze weather conditions, and provide recommendations for route optimization. The new "Tactical Table" and "Part Task Simulator" enable digital simulations for upcoming maneuvers or new routes. For example, a port entry in the condition of strong winds can be simulated. The ship simulator has 150 port entries in its program. The cruise ships' bridge can be added at any time. Live video footage of the actual weather conditions from the ports provides additional perspectives. The open concept design also promotes

collaboration between different departments, including technical, nautical, port, guest operations, and environmental teams.

#### **Around the Clock, 365 Days a Year**

At four operation desks, an international team of 12 nautically trained superintendents supports the smooth operation of the ships around the clock and 365 days a year. They analyze, support, provide additional information, offer assistance, and organize solutions for changing weather conditions. In this way, new conditions are recognized early, proactively addressed, and decisions made quickly.

To support the captains effectively and professionally on board, all members of the department have extensive nautical experience and have spent many years at sea themselves. Many of the employees hold a captain's license and also have certifications for various classes of cruise ships.

#### **Maritime Expertise Bundled in Hamburg**

The extensive expansion of the FOC represents a significant investment in Hamburg as a maritime center. Through Carnival Maritime, AIDA Cruises, together with Costa Cruises, has made comprehensive investments in the FOC modernization. In doing so, the cruise line is committing to Hamburg as one of the most important European maritime competence centers for the shipping industry. The investment not only secures and creates jobs but also attracts top international talent to Hamburg. At the same time, it strengthens the local Hamburg economy through close collaboration with partners specializing in maritime technologies and services.

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