



二號訓練駕駛台：由15台高清液晶顯示屏組成接合外景影像的船舶模擬器，提升海洋環境的仿真度，讓受訓者更有效學習。

Full Mission Bridge 2: An array of 15 high-resolution plasma display panels forms the simulator which stitches the panoramic images together to create a near real-life at-sea experience, making learning for trainees more effective.

## 引入先進科技 助客戶培訓人才

### Help Client Train Maritime Talents with Advanced and Integrated Technology

**機**電署致力協助客戶部門培訓海事專才，提升他們的技術及為保障海上安全做好準備。我們為海事處訓練中心引進先進的科技和設備，並透過更新全功能船舶模擬器和船隻航行監察服務模擬器，幫助客戶部門訓練同事熟習海港交通控制及管理，以至應付緊急海上交通情況，保障本港水域安全。

我們和海事處訓練中心攜手合作，把不同品牌的模擬器內多個軟件系統和硬件設備整合。此舉除了使模擬器更可靠穩定外，還能充分發揮它們的功能和效用，用以培訓本地和國際學員操

控不同種類的船隻，提升香港在海事訓練領域的國際地位。

更新後的全功能船舶模擬器軟件，可同時整合和支援三組模擬船舶，提供不同情境的互動模擬訓練。當中影像投影機使用的LED光源不但環保、省電，其工作壽命更可長達10萬小時，是以往所用燈泡的25至30倍，還可節省維修時間和成本，大大增強系統的可用性能。

我們亦應用融合技術，將船隻航行監察服務模擬器軟件與全功能船舶模擬器服務軟件連結起來，讓兩個不同功能的模

擬器能夠實時互動和協同操作，為使用者提供複雜的綜合海事模擬訓練。

海事處訓練中心整個系統的更換及升級服務由四個合約項目組成，當中影像投影及顯示系統項目在少於一年半的時間內完成技術研究、招標、安裝及測試等工序。客戶部門對新系統和設備非常滿意，更對團隊的合作精神和項目管理深表讚賞。

我們樂意為客戶提供創新技術方案，如有任何查詢，請致電3757 6027與高級工程師彭國強先生聯絡。

The EMSD is committed to assisting our client department in training maritime professionals to enhance their skills and preparing them for maintaining safety at sea. By introducing advanced technology and equipment to the Marine Department Training Centre and updating its Full Mission Ship Simulator and Vessel Traffic Services Simulator, we helped our client department train and acquaint their staff with knowledge about harbour traffic control and management and emergency handling to ensure safety in Hong Kong waters.

In collaboration with the Marine Department Training Centre, we integrated multiple software systems and hardware equipment within the simulators of different brands. The integrated technology not only makes the simulators more reliable and stable, but also gives full play to their functionalities and achieves the highest efficacy, enabling local and international trainees to learn to control different types of vessels. These integrated simulators

have elevated Hong Kong's international status in the field of maritime training.

The upgraded Full Mission Ship Simulator software can simultaneously integrate and support three training bridges to perform interactive simulation training in different scenarios. The LED light sources in the video projectors are environmentally friendly and power saving. They can last up to 100 000 hours, 25 to 30 times that of the conventional bulbs used in the past. They save time and cost in maintenance, greatly strengthening the usable capacity of the systems.

We also applied integration technology to link the software of the Vessel Traffic Services Simulator and Full Mission Ship Simulator together. These two simulators with different functionalities can interact in real time and work in co-ordination to provide users with complex and comprehensive scenario simulation training.

The replacement and upgrade exercise of the entire system at the Marine Department Training Centre consists of four contract projects, of which the video projection and display system project - encompassing procedures from technical study, tendering, installation to system testing - was completed in less than one and a half year. Our client department was very satisfied with the new system and equipment and greatly appreciated our team's collaboration spirit and project management quality.

We are happy to provide our clients with innovative technical solutions. For any enquiry, please contact Mr. Pang Kwok-keung, Senior Engineer, at 3757 6027.



一號訓練駕駛台：船舶模擬器透過軟件控制七台投影機，投射出210度視角的無縫接合外景影像，讓駕駛台的學員仿如在真實的海洋環境中駕駛。  
Full Mission Bridge 1: The seven projectors controlled by the simulator via its software project 210-degree seamless panoramic images, giving trainees at the bridge an immersive sailing experience.

為了令操控更加靈活，現今的超大型郵輪都裝設這些先進的推進器。海事處訓練中心與時並進，是目前香港唯一設有這種360度迴轉推進器的地方，方便學員掌握最新的船舶操控知識。

Modern mega cruise ships are all equipped with advanced azimuth thrusters for better manoeuvring. Keeping up with the times, the Marine Department Training Centre is currently the only place in Hong Kong where such kind of 360-degree propulsion system can be found. It allows trainees to acquire the latest knowledge about steering vessels.

