



Monitoring Systems for International Super-Yacht

The world class motor yacht Floridian, recently renamed Nomad, offers the height of luxury combined with state-of-the-art equipment and resources for long range ocean cruising and exploration.



It has several claims to international recognition. For instance, at 69m (228ft) long, 11.60m (38ft) in the beam and with a draft of 2.92m (9.5ft), it is in the top 100 largest yachts in the world. It is also the biggest aluminium hulled vessel of its kind.

Equipped with two 2,000 HP Caterpillar engines, the yacht cruises comfortably at 14 knots and has a range of 8,000 nautical miles. As well as being luxuriously accommodated throughout four deck levels, the vessel is equipped with advanced communication, control, monitoring, security, integrated electronics and entertainment systems.

The ship's resources ensure that passengers are able to maintain continual shore contact via satellite, high speed internet access and all other modern communications facilities. The Floridian has also been equipped to ensure the highest standards of safety and operational efficiency in all weathers and seafaring conditions.

To keep the crew informed of the status throughout the vessel, there is very extensive alarm monitoring covering all the ship's systems. This creates approximately 1800 channels of data presented on a suite of some 40 graphic displays on panel mounted work stations. These represent the system schematics and the machinery being monitored. Graphs and charts are also available for scrutiny.

Day and night monitoring covers many diverse aspects such as engine transmission, propulsion, fuel consumption, power supply and emergency generator, air conditioning, consumer hot water system, access points, security and fire systems. Data channels record the ship's navigation and provide essential data about air and sea temperatures and wind direction and speed. Every aspect of the ship's operational capabilities is fully covered by robust and accurate procedures for scrutiny and management.

For the passenger, the environment is spacious and comfortable, with antique furnishing and polished wood panelling. Behind the scenes and below decks, the vessel hums with the workings of the latest technology.

Expanding the Systems

The monitoring and communications facilities on board were provided by Servowatch Systems, a company based in both the UK and USA which has over 25 years in-house experience in designing and manufacturing sophisticated marine monitoring and control systems. Servowatch, part of the Thalest Group, supplies IPMS (Integrated Platform Management Systems) for both the commercial and military markets and for all types of vessel, ranging from aircraft carriers to super-tankers. They also specialise in mission critical systems supplied to high-speed vessels and designed for all-weather conditions.

The flexibility of Servowatch systems allows for the number of channels to be extended to many thousands, with multiple full colour graphic workstations and fully integrated control functions to manage the largest vessels. For a private motor yacht, the Floridian's monitoring system is very extensive and represents the top of the range in Servowatch solutions.

The system is also flexible and capable of integrating third party products. This was the case with the recent communications upgrade on the Floridian that involved the installation of six Eurotech VX-121P panel PCs with high brightness TFT displays at key locations on the vessel. These include the engine room, generator room, crew's mess and first and second engineers' quarters.





Steve McDonald, Contract Manager for Servowatch, explained that compact panel-mounted pc's and displays of this type, able to accommodate their network card PCI slot, were an ideal solution for a vessel, as even on a super-yacht like Floridian space can be at a premium.

"Eurotech supplied the 24V DC powered panel units for us to evaluate and we selected the equipment after a comprehensive assessment of its capabilities for this specific project. Criteria we set included performance, processing and screen resolution as well as a competitive pricing level. The company has been very helpful at all times in providing technical information, advice and support".

Steve McDonald, Contract Manager for Servowatch

Eurotech has operations worldwide and specialises in the design and production of embedded single board computers, application ready platforms and configurable systems for Transport, Medical, Defence, Energy and Industrial Engineering. Other recent maritime projects include the supply of a bespoke remote gateway (RGW) system for Blue Ocean Wireless to manage their dedicated mobile telephone network for the merchant marine sector.

Mainly intended for XP embedded applications, but also suitable for Windows XP PRO operating system, the Eurotech VX-121P features a colour TFT 12.1" (SVGA 800x600 pixels) display. The IP65 protected front panel and resistive touch screen guarantees durability and high calibration stability even in harsh environments such as the vessel's engine rooms.

"These rugged and compact devices are designed to operate in a variety of challenging environmental conditions and withstand impact and vibration while retaining total precision and reliability. We were delighted to contribute to this project, which was carried out to the highest standards of planning and implementation."

Tim Taberner, Sales Manager for Eurotech

Built by Oceanfast Shipyard in Australia and designed by Sam Sorgiovani, Floridian started life in 2002 named Aussie Rules and was originally owned by Australian golfing international Greg Norman. Later as a vessel for charter, the yacht carried up to 12 passengers and a 15 member crew in the most luxurious conditions. A 42ft custom sport-fisher and a range of other boats were available for fishing, diving and water sports and housed on the aft deck. Facilities also included a private cinema, spectacular observation lounge, swimming pool and gymnasium.

Now with its third change of name as Nomad, the vessel is under private ownership and remains in a class of its own and a subject of fascination for ocean motor yacht enthusiasts.

The VX range of Panel PCs are just some of the systems and solutions that Eurotech design and manufacture as part of its product offering for the Industrial, Medical, Energy, Transportation and Defence markets.

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