# Maritime Business Applications

## *Complete Solutions for the Maritime Industry*

*2014, October*
*Release date: 01/10/2014*

## PC Maritime ECDIS upgraded to meet revised VDR Standards

**PC Maritime has upgraded their ECDIS so that it meets the requirements of the new VDR Performance Standard (MSC.333 (90) which came into force on 1 July 2014. PC Maritime have completed this work and ensured that Navmaster ECDIS is compatible with all VDR units conforming to the new standards.**

From 1 July 2014 VDR installations must include the ability to capture ECDIS screenshots at least every 15 seconds. Furthermore the installations have to record the charts in use at least every 10 minutes and record all changes of chart. PC Maritime told us "Where a vessel is fitted with an ECDIS installation, the VDR should record the electronic signals of the ECDIS display in use at the time as the primary means of navigation. The recording method should be such that, on playback, it is possible to present a faithful replica of the entire ECDIS display that was on view at the time of recording, albeit within the limitations of any bandwidth compression techniques that are essential to the working of the VDR, and in addition the source of the chart data and the version used." PC Maritime offer in concert with HMC as their agent an Upgrade & Support Contract to customers who wish to maintain their Navmaster ECDIS up-to-date with regulations. Navmaster Upgrades are free to subscribers and can be sent directly to the ship via email. As one of the distributors and installers of PC Maritime we represent the best ECDIS developers in the industry. PC Maritime is a leading developer and supplier of type approved ECDIS software and hardware and is well-known for their quality and excellent technical support. PC Maritime can also deliver engine room simulators. We are proud to represent PC Maritime in The Netherlands. For more information please contact our office.

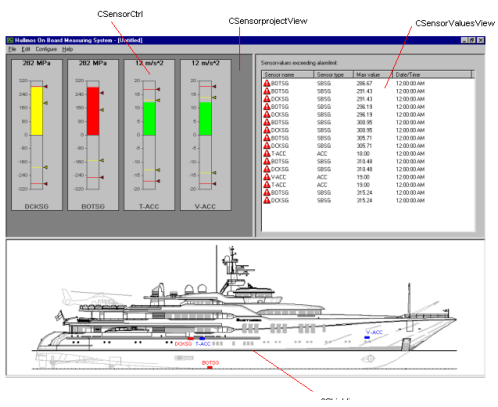
*"New ECDIS meets latest requirements of VDR Standards"*

PC MARITIME
MARINE SOFTWARE & ELECTRONIC CHARTS

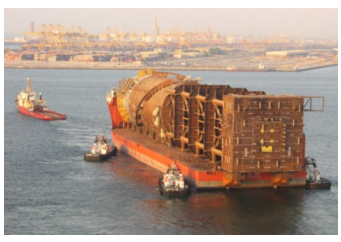
## HMC measures real-time motions and stresses forces of the hull

**HMC's Hull Monitoring System is a real time measuring device that monitors the on-board motions and stresses of the hull. The system helps the crew and the owner of the ship and/or cargo to gather data to reduce the risk of damages.**

The data which is made available directly on board in real-time, enables the captain to change his speed or heading to diminish motions and fatigue damage. The system can be used either as stand-alone monitoring system, or integrated in a complete bridge information system. Information which is displayed to the bridge includes structural strain and motions. Furthermore motion fluctuations, real time deflections and the translation of the stress and bending moment can be displayed. The monitoring has a MONHULL notation and supports the safety of vessel, cargo and crew. It can be connected with the VDR and acts as a recorder. If you have any questions please contact us at info@hmc.nl



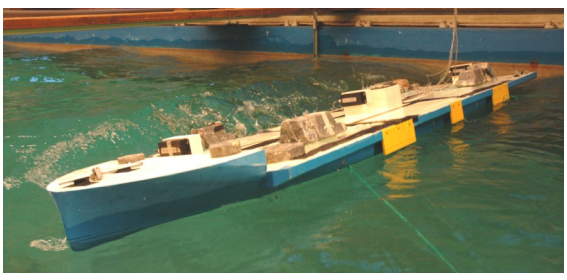

*"Reduces the risk of damaging your cargo and vessel"*



## HMC's research on wave slamming

**Since a couple of months HMC is doing research on non-linear aspects such as wave slamming and running up waves. Wave slamming occurs when a ship is subjected to forces due to the presence of ocean waves.**

For most of a ship's life, these forces (typically referred to as ordinary wave-induced loads) will be of low to moderate magnitude. However, when a ship travels at high speed in moderately high seas or when operating in heavy seas, these hydrodynamic forces, in conjunction with the ships own rigid-body motions. Induce heavy non linear forces on overhanging cargo or strange cross section type of vessel with outreaching sponsoons which are often not accounted for. For structures that have columns of a large size, such as semi-submersibles or gravity based platforms, it is also necessary to take into account local amplifications of the wave height along the platform's columns, a non-linear phenomenon known as run-up. A proper estimation of the wave run-up must go beyond the linear wave diffraction theory. Safety awareness and environmental care are the key to reliable operations. If you are interested in our research please visit our website or contact our office.



*"Safety awareness and environmental care are the key to reliable operations"*

## HMC can help you to save costs with the effective calculations

**Management Science is a combination of statistics, operation research and mathematics. Case studies have proved that cost savings could be obtained using these applications. The general conclusion is that variable costs can be reduced by as much as 20%.**

Transportation models play an important role in logistics and supply chain management for reducing cost and improving service. The goal is to find the most cost effective way to transport your cargo. Management Science represents a quantitative approach for solving problems in business. Management Science practitioners apply a rich toolbox of mathematical and computer techniques which helps to make a wide variety of decisions. Management Sciences combines relevant parameters to achieve an optimized result. An example is the most economic travel route for a transport ship to take: taking in consideration weather, current, fuel consumption and wind parameters. The downturn of the economy of the last years definitely has had an impact on the shipping and transport industry. A lot of shipping companies want to reduce their costs. With the right calculations companies can save a lot of costs in for instance crew management. After all, it's all about making the right choices at the right moments. If you want to discuss how Management Science can benefit your company, please contact our office at info@hmc.nl.


*"It's all about making the right choices"*



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