

Cargo Monitoring System for Airbus Transport

i2e Diffusion, previously called BEN MARINE, has been a contract for the supply of a new Cargo Monitoring system called SAFENAV III, for a RORO ship 5,200DWT built in Jinling shipyard China. Hull N° JLZ020401. This RORO is owned by Dreyfus and will be carrying parts of the new A380 Airbus plane.

The present version, SAFENAV III informs in real time on the dynamic loads applied to the Cargo and should be considered as a source of information dedicated to assist the Master in the decision on how to ride the ship without overloading her Cargo. The system's purpose will help in supervising and monitoring the ship's Cargo during the journey at sea. It will improve sailing at night, when the system of waves is not visible, or help the Master to adapt and optimise the route and speed to the present system of waves.

SAFENAV III will accurately help the crew to assess the real time accelerations on the ship's Cargo in order to limit the risks of damaging. SAFENAV III is composed of a main processing unit with a display and a recording device located in the wheel house and two accelerometers to measure X,Y,Z accelerations at the fore and at the aft of the ship.

The Processing unit displays and records relevant information on the Vertical (Z), Transversal (Y), Longitudinal (X) accelerations acting on the Cargo. The display device shows on three digital barographs a real time statistical processing of the data flowing from the transducers each showing the X, Y, Z acceleration level at specified points of the Cargo storage. The display mode is simple, intuitive and includes the operational limits. The Recording device allows a later on-shore exploitation by the owner. The data is stored on a floppy disc and the storage is transparent to the user. An RS422 output is available for interface to the VDR and Integrated Automation System. An RS 422 input is available for interface with the speed log. The Processing unit is located in the wheel house. It includes the processor, power supply, display devices and the storage devices. Two block transducers with each 3 axis highly sensitive accelerometers are adequately integrated to the ship's fore part and aft part structure.

<https://www.hydro-international.com/content/news/cargo-monitoring-system-for-airbus-transport>
