

HYDRONAV

VESSEL MANAGEMENT SYSTEM

Location : Singapore
Client : Dredging / Reclamation Contractor
Date : April 2001

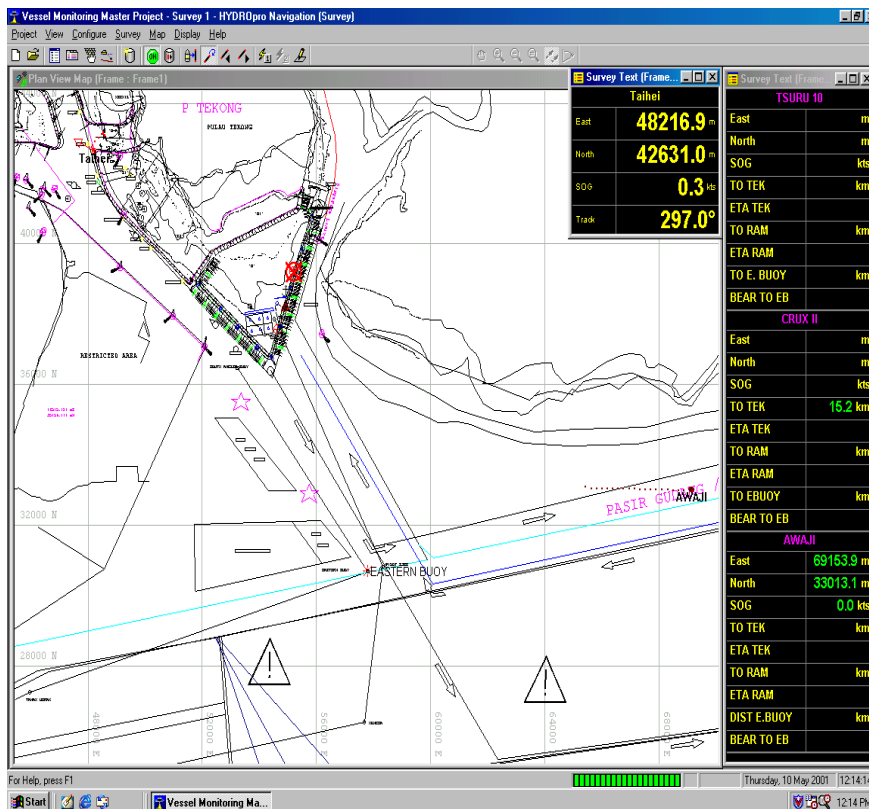
The Task: To provide a vessel management system for the contractor to monitor the precise location at any time of any vessels in its fleet

The Problem: The contractor has a fleet of vessels which travel between various sand sources in Indonesia and Malaysia and their designated dumping grounds at Jurong and Changi in Singapore.

The contractor requires to regularly make logistical decisions thought out the day on which barge should be redirected to which dump site due to changing circumstances.

Before the above decision can be made the contractor must know the precise location of all the vessels in the fleet and their status. Traditionally this has been done by voice radio between the dispatch center and the various vessels which is slow, time consuming and prone to errors and misunderstandings.

The Solution: One(1) central computer was chosen to run the TRIMBLE HYDROpro software version 2.00 software. The software would display a plan view map showing the precise location of every vessel in the fleet. The current location of each barge is updated on the plan view map at least once every 45 seconds. The name and ID of each vessel is also displayed with a historical trail indicating the recent movements of the vessel. Digital charts of the work areas and navigational features are also displayed in the background. The display is easily customised to meet the end users requirements.



Hardware Spread: The central monitoring station consists of the HYDROpro version 2.00 software installed on a Windows 2000 computer. A long range duplex UHF telemetry solution was chosen with an operational range of up to 40 kilometers and more which is type approved for operation in Singapore. The use of a repeater station will substantially extend the operational range.

The vessels were installed with TRIMBLE DSM212L DGPS receivers and a long range duplex UHF telemetry solution.

Results: The above solution enabled the contractor managers to make real time decisions on the spot based on the timely up to date graphical information displayed on the central monitoring computer screen of the entire vessel fleet. This has led to the more efficient and effective management of the vessel fleet which has boosted productivity. For further details please contact HYDRONAV SERVICES (S) PTE LTD of Singapore on phone (065) 6844 6866, fax (065) 6844 6366 or email sales@hydronav.com