



Traffic Information Module (TIM)

Information Sheet

AT A GLANCE

Hardware requirements

Client: Pentium PC
Server: Sun Workstation

System requirements

Client: Windows
Server: Solaris

Features

Radar, SatC, AIS Overlay
Official Raster charts

IMO: International Maritime Organisation www.imo.org

An international organisation to promote "maritime safety, efficiency of navigation and prevention and control of marine pollution from ships"

Ship reporting system (SRS):
Environment for recording ship movements

Universal AIS:
Automatic Identification System – technology to improve maritime safety by assisting navigation of ships, protection of the environment, and operation of Vessel Traffic Services

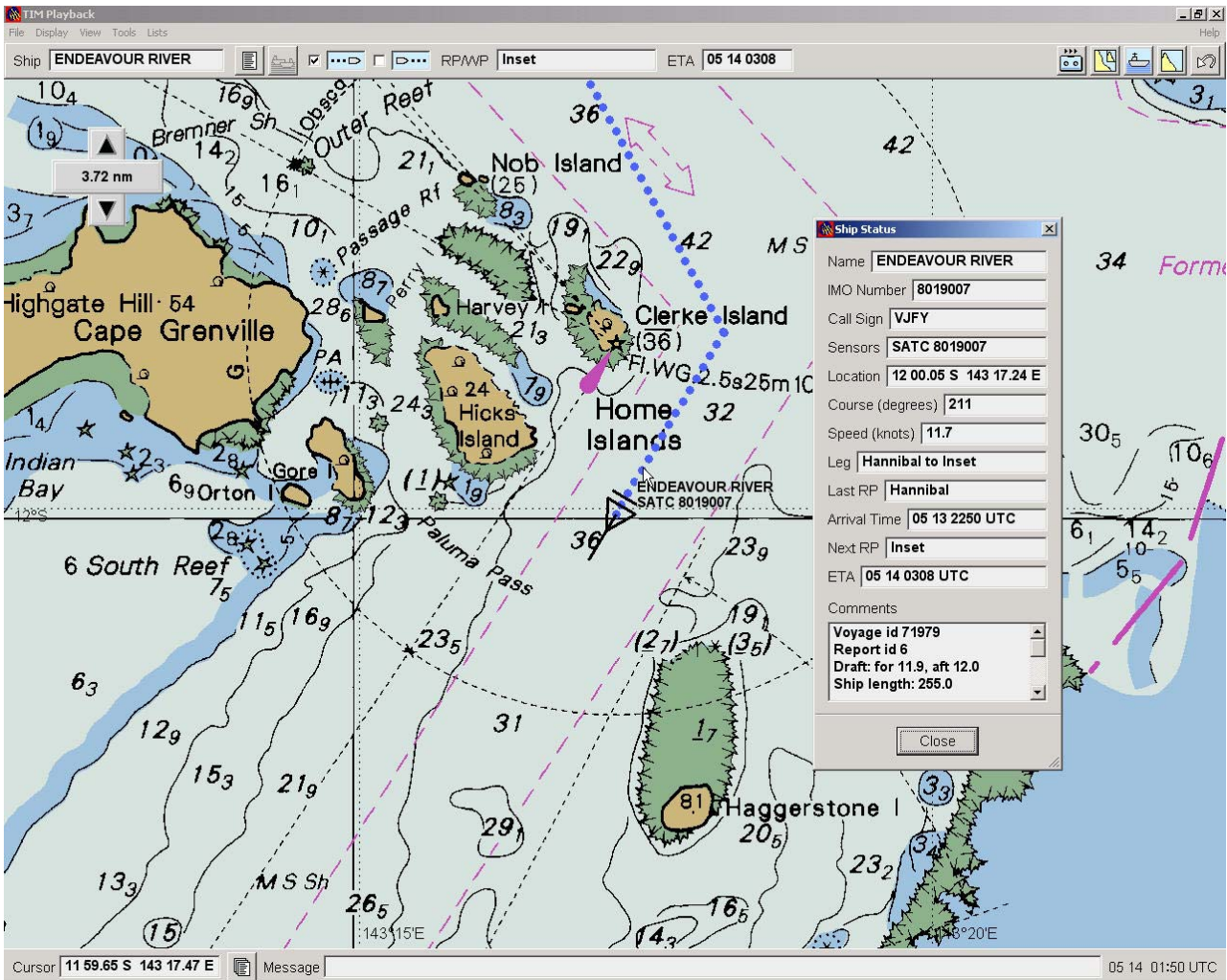
This product began in 1996 when HSA was awarded the contract to supply the Traffic Information Module (TIM) for the mandatory Ship Reporting System for the Torres Strait and Inner Route of the Great Barrier Reef (an initiative of the Queensland Transport and Australian Maritime Safety Authority). The TIM was first installed in December 1996 to coincide with the commencement of the IMO mandated SRS on 1 January 1997.

The TIM has evolved to a client/server technology using the Oracle RDBMS and HSA's proprietary graphical display software (originally developed as prototype ECDIS technology). The application consists of a multi-user database for recording ship movements in the SRS area (ships supply REEFREP reports via VHF) and a graphical display which is a comprehensive, dynamic surface picture of ship activity off the Queensland coast overlaid on a raster backdrop of official RAN charts. The graphics system also combines radar tracks in strategic areas and other identification/position (SatC/AIS) data.

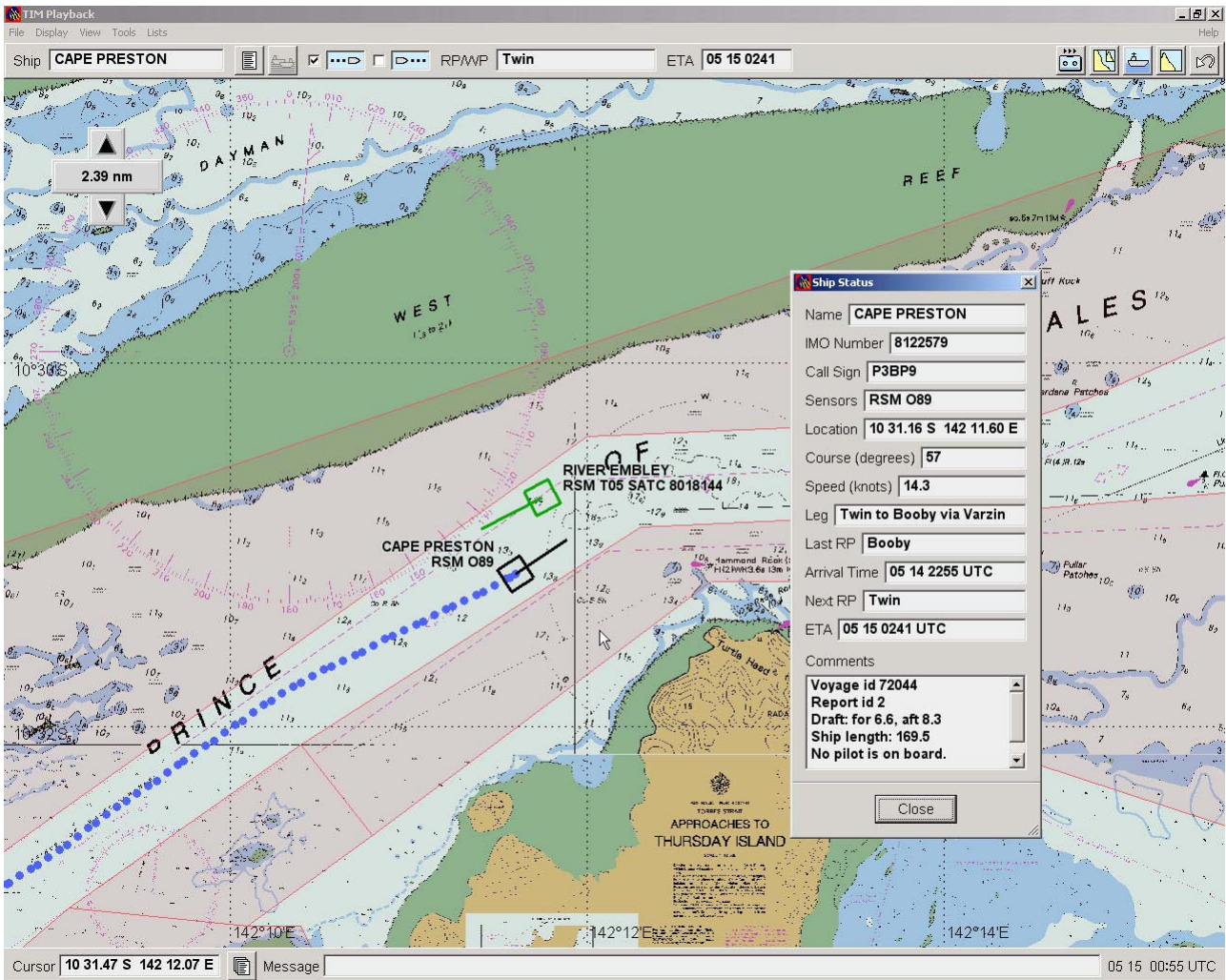
The TIM provides the focal point of the numerous integrated systems which form the SRS. As well as the database and graphical display capability described above the TIM features:

- numerous warning mechanisms to assist in safe and legal navigation
- predictions of other ships a reporting ship will encounter and dissemination of maritime safety information
- an interface to the AMSA's Rescue Coordination Centre (AUSREP system)
- remote access by authorised users to the graphical surface view of the SRS area

HSA provides on-going support and maintenance to the TIM. Enhancement releases are developed regularly in response to operator feedback and TIM's expanding role in monitoring the sea off Queensland coast.



An example of the TIM graphical display showing ships being tracked in real time off northern Queensland. In this case the vessel Endeavour River.



The Vessel Cape Preston changes course to starboard to pass the vessel River Embley travelling to the west in the Prince of Wales Channel, Torres Strait.

The red fill areas represent defined shallow area limits. If a vessel enters this area an alarm is raised at Reef Centre Operations at Hay Point (near Mackay, North Queensland). The vessel can be contacted if it continues to travel within this area.