



**RCM**marine

# IT and Machinery Monitoring



# What has Machinery Monitoring to do with I/T?



- Condition Monitoring Systems can collect a large volume of data
- I/T departments need to be fully involved with the management of this data and directing relevant data to appropriate personnel
- Fleet technical management needs to be alerted in the case of developing failures with cost or safety





## VOYAGER Overview



# Marine Strategy - exception based monitoring!



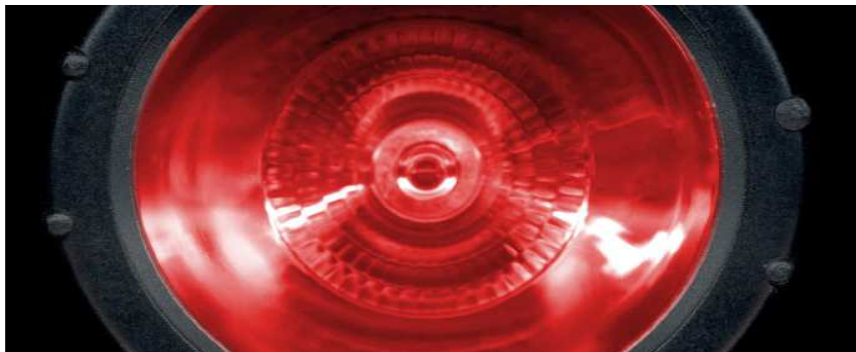
Objective:

*The ability to Plan Maintenance at convenient ports*



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# Challenges



**UMS Alarm provides 24/7 indication of the existence of a problem**



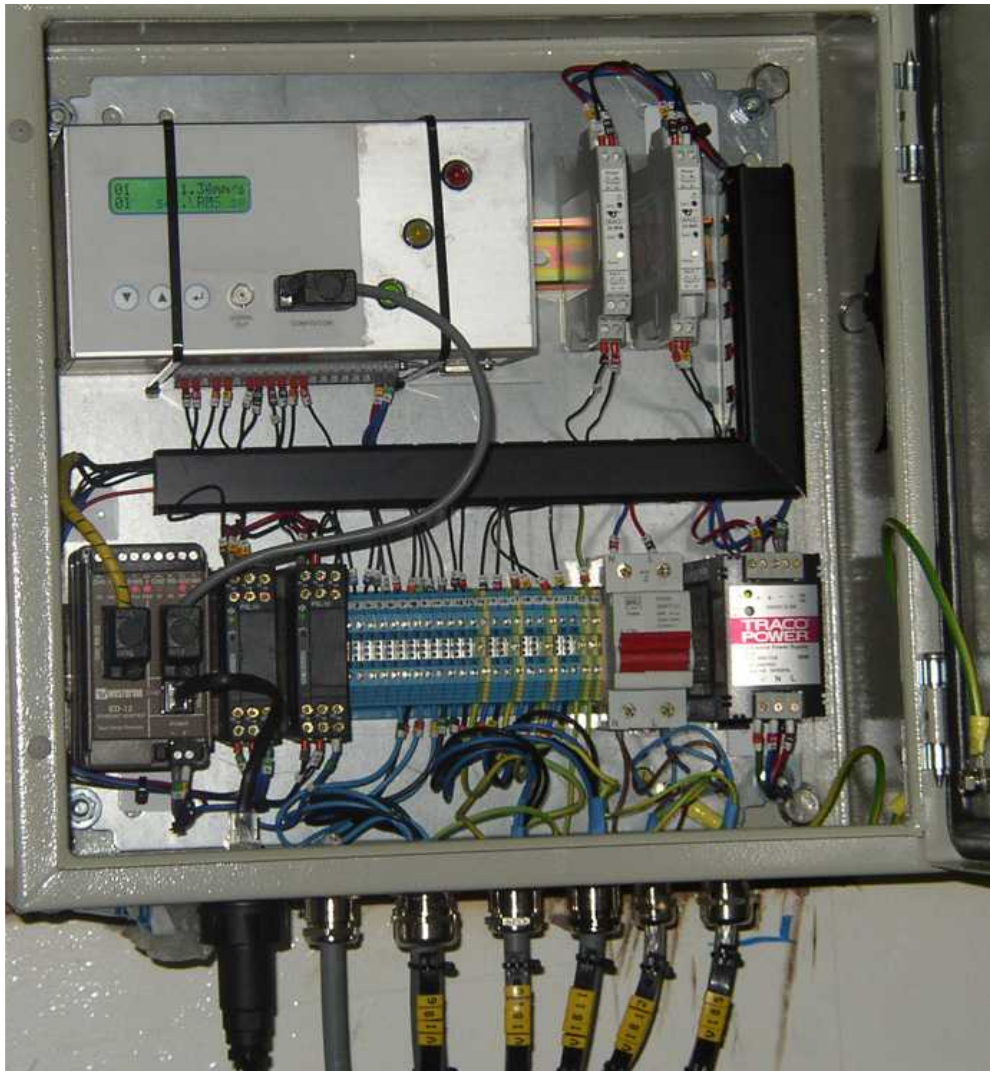
**Duty Engineer needs clear and unambiguous indication of the nature of the problem ....instantly**



**Fleet Technical Management  
*needs to be "in touch"*  
via a Remote Support Function**



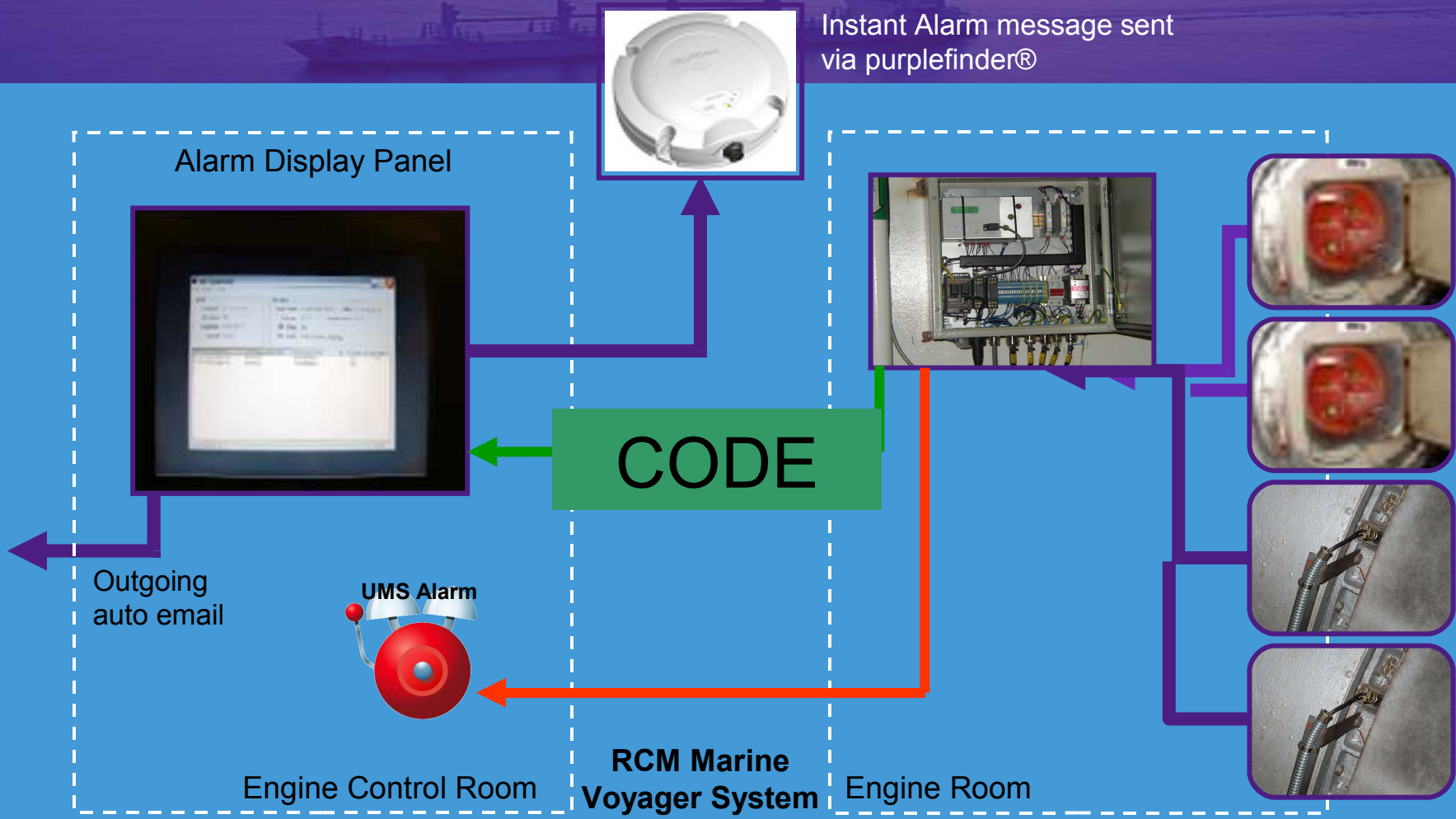
# The Hardware



Local Hardware /  
Firmware  
solution



# The RCM Voyager Solution



# RCM Web Based Management Reporting

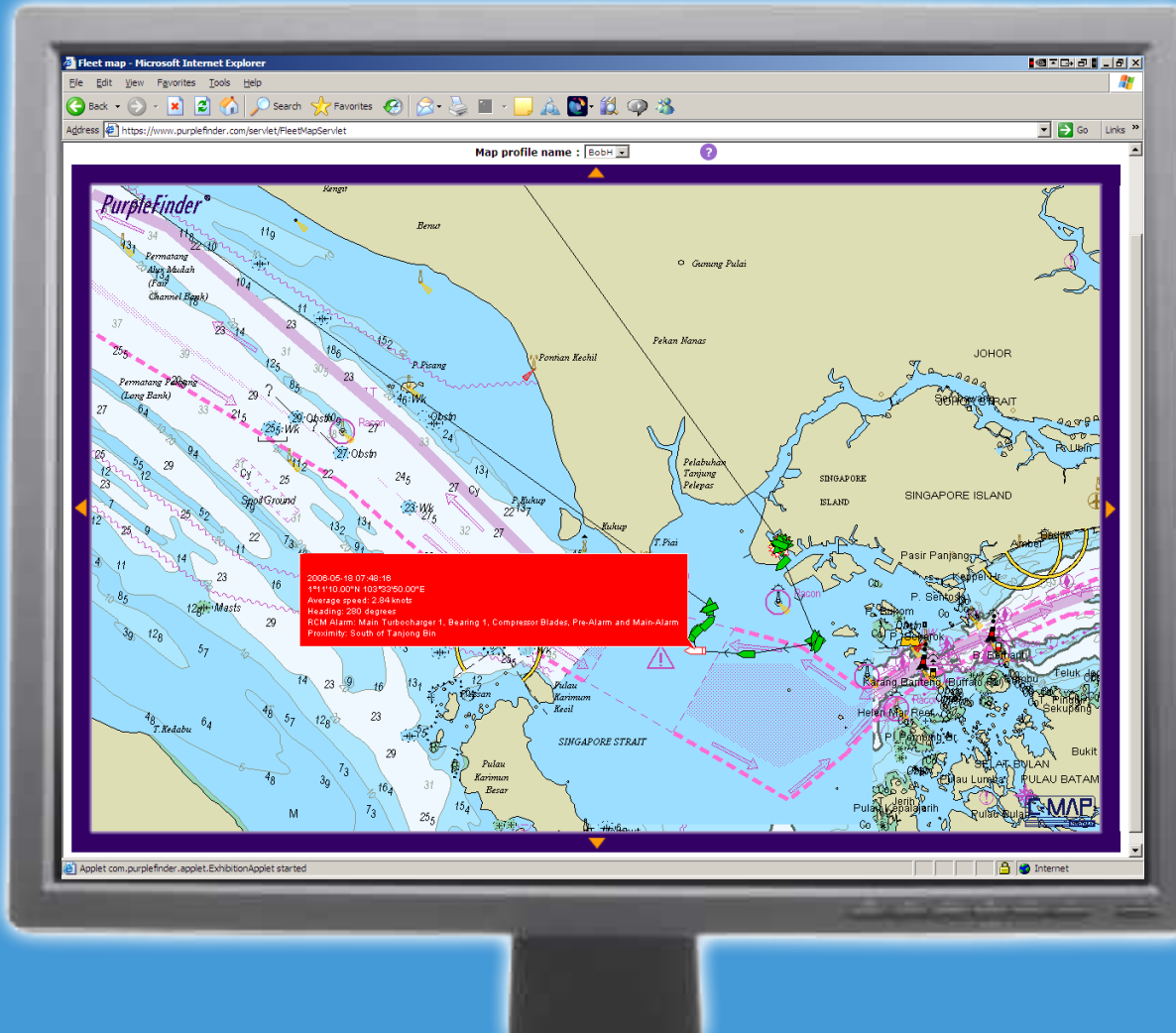
Powered by **purplefinder®**

Fleet management can see, for the first time ever, the same alarm and fault diagnosis as the duty engineer

The fault message and diagnosis can be forwarded automatically from purplefinder®, as required, by SMS and or email to fleet management.



# Web Based Management Reporting



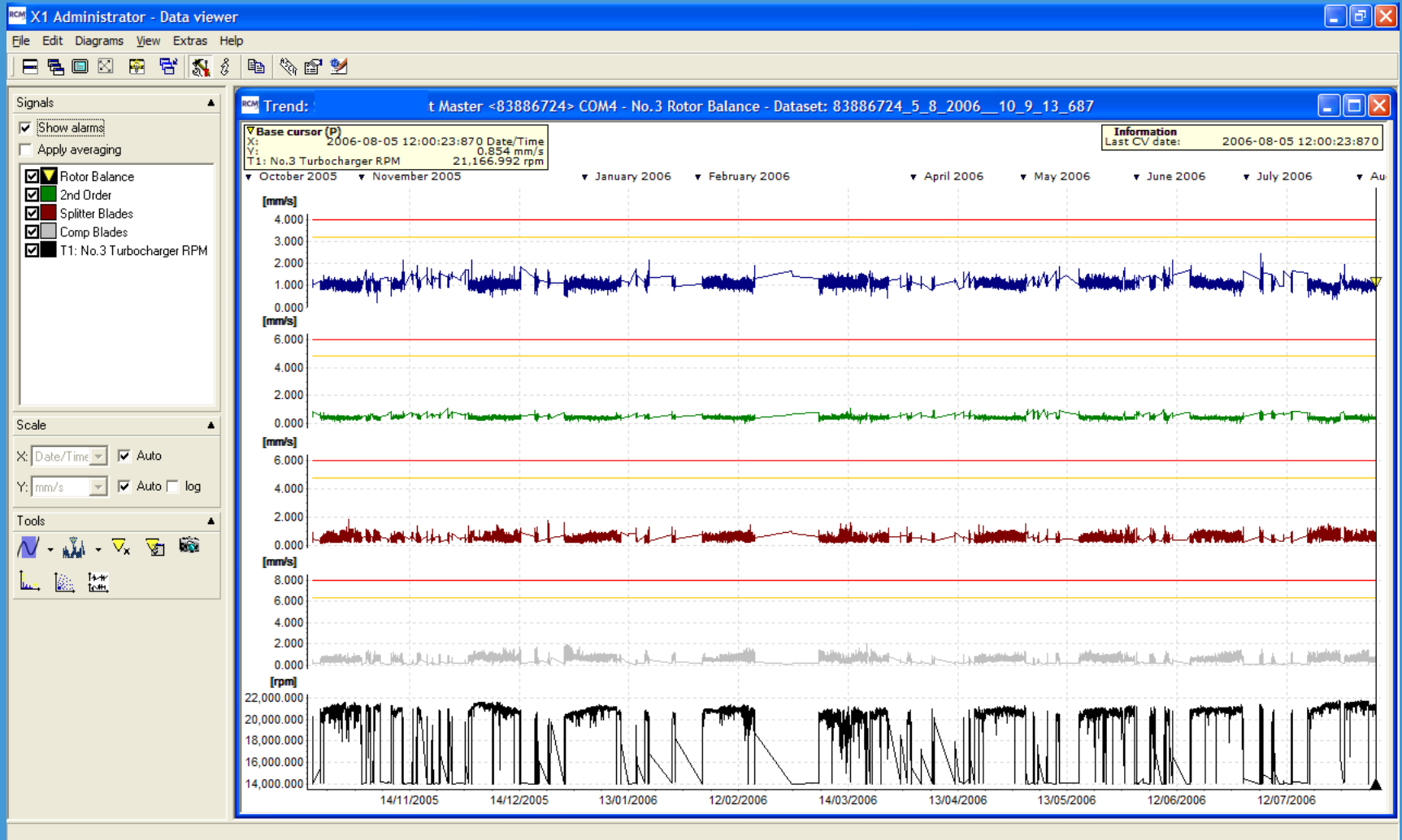


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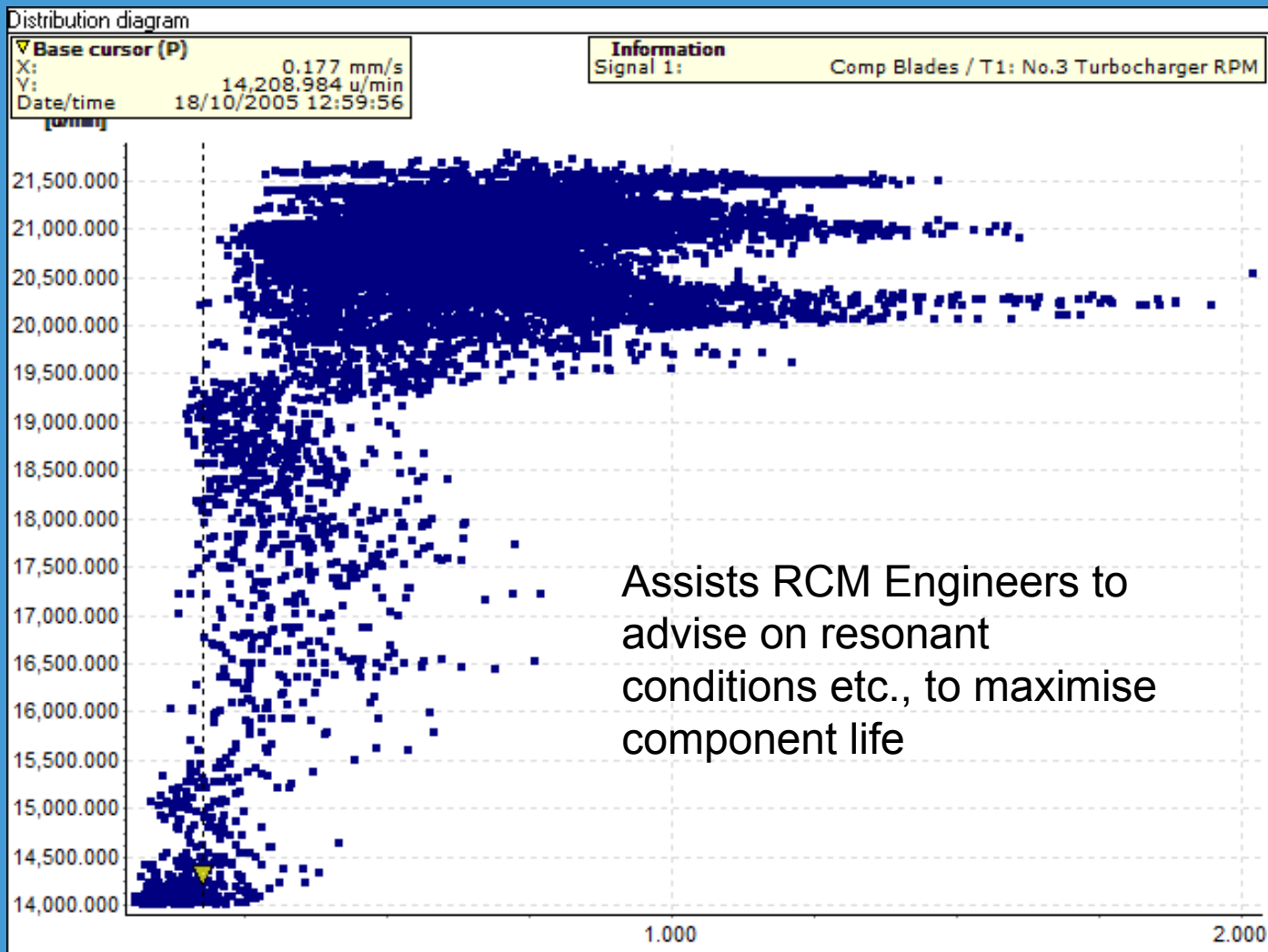
Product Range



# Re-assembled Trend History



# Statistical Post Processing





## MARINER Overview



# MARINER Software

- Simple 'Explorer' style tree structure is easy to use
- Measurement positions indicated by graphics

The screenshot displays the RCM Marine software interface. On the left, a tree view shows the ship's structure, including the PROPULSION section and the Pwd ENGINE ROOM. The D/A LO Purifier is selected, and its measurement points are listed: 1V, 2H, 2AX, 3V, 4FA, and 4AX. On the right, a photograph of the purifier is shown with yellow arrows pointing to these measurement points. The interface includes a menu bar, a toolbar, and a status bar at the bottom.

RCM Marine

File System RCM Mariner Planning Service Extras ?

M.V. RoRo Ferry

- PROPULSION
- Pwd ENGINE ROOM
  - Stbd 8 LO Purifier
  - Stbd 9 LO Purifier
  - Port 8 LO Purifier
  - Port 9 LO Purifier
  - D/A LO Purifier
    - 1V
    - 2H
    - 2AX
    - 3V
    - 4FA
    - 4AX
  - Port Fwd ME LO Pp
  - HFO Transfer Pp
  - MDO Transfer Pp
  - Stbd Fwd ME LO Pp
  - FO Service Pp No1
  - FO Service Pp No2
  - HFO Boost Pp No1
  - HFO Boost Pp No2
  - Ballast Pump
  - Main SW Pp Port
  - Main SW Pp Stbd
  - Port D/A
  - Stbd D/A
  - HT FW Pp Fwd
  - HT FW Pp Aft
  - Fuel Vv Pw Pp IB
  - Fuel Vv Pw Pp OB
  - LT FW Pp Port
  - LT FW Pp Stbd
- AFT ENGINE ROOM
- PURIFIER ROOM
- SHAFTING ROOM
- STEERING GEAR
- THRUSTERS

Name: D/A LO Purifier

Picture

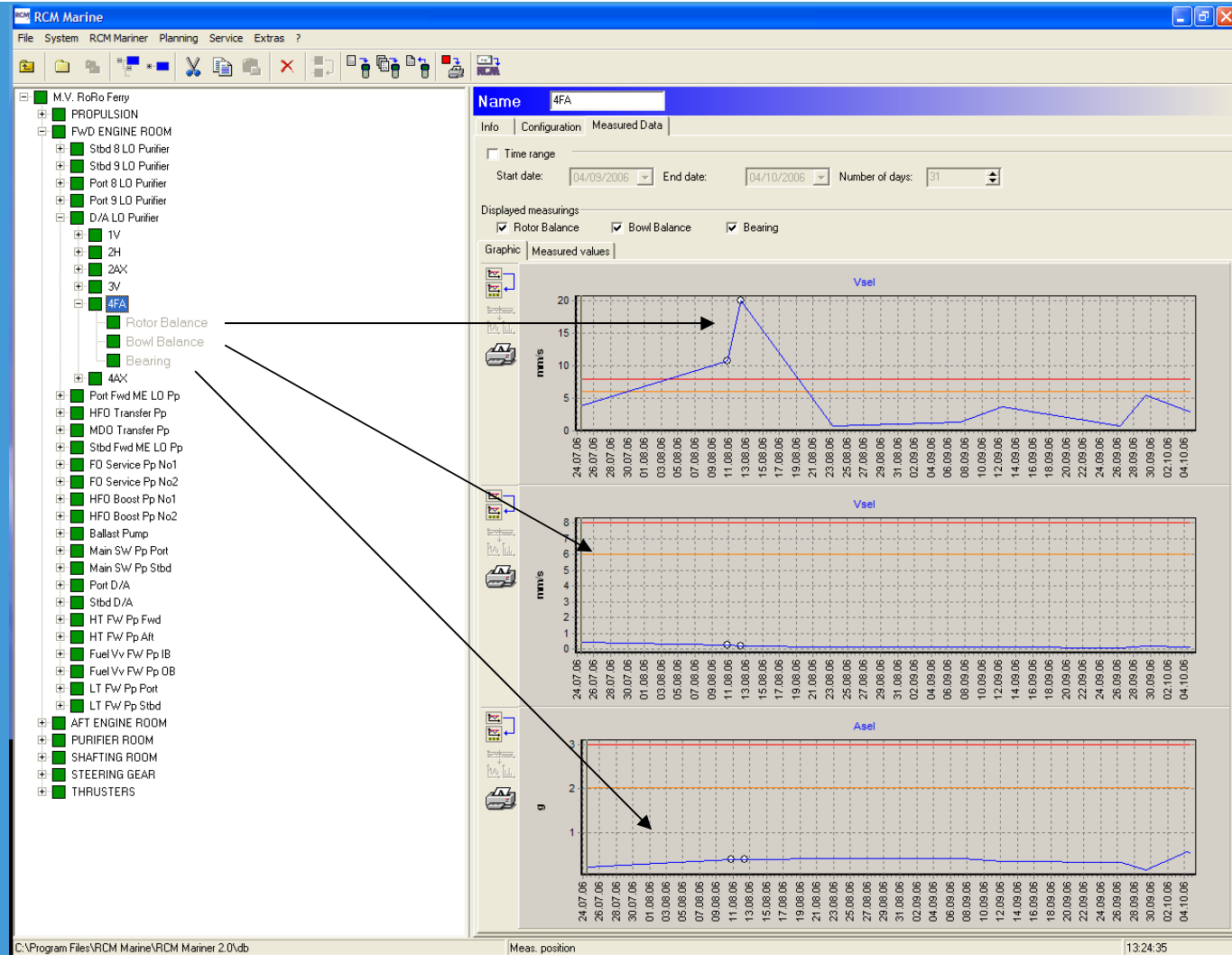
Comment

C:\Program Files\RCM Marine\RCM Mariner 2.0\vb Machine 13:18:53



# MARINER Software

- Indicated fault was 'Rotor Balance on low speed drive line
- Defect on centrifugal clutch found and rectified
- Bowl balance and Bearing condition were stable throughout



# MARINER Software



- Scope of supply includes data collector, software and vessel specific database for fixed price
- Fully functional link to Marine Software's MPM Planned Maintenance system available
- RCM Software is not licensed, therefore records can be maintained ashore using small data transfer files



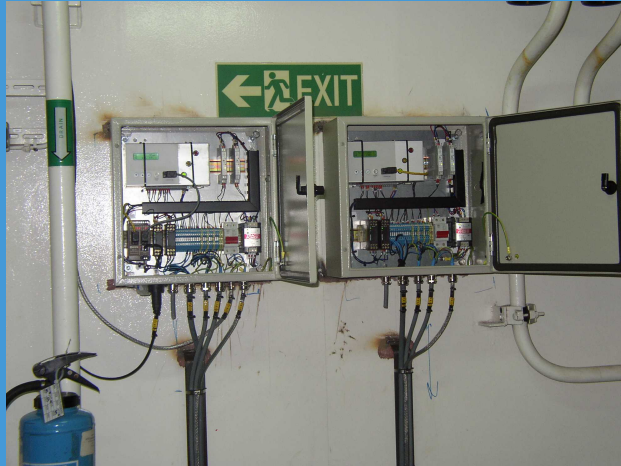


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Product Range



# Two Products



VOYAGER On-Line System



MARINER Portable System

