



RV Investigator – update

Toni Moate | Executive Director, Future Research Vessel Project

RV Investigator – a new era in marine and atmospheric research for Australian scientists



RV Investigator

Marine National Facility

- Funding announced - May 2009
- Request for Quotation - October 2009
- Request for Refined Offer – April 2010
- Contract Signed – January 2011
- Strike Steel Ceremony – January 2012
- Keel Laying Ceremony – May 2012
- Delivery – August 2014



RV Investigator

Marine National Facility

- Length – 93.9 metres
- Beam – 18.5 metres
- Draft – 6.9 metres
- Range – 10,000nm @ 12k
- Endurance – 60 days
- Operating zone – tropics to ice-edge
- Number of scientists and support staff – 40
- Number of crew – 20 inc. trainees
- Three diesel engines, two propulsion motors
- Retractable bow thruster – DP1
- Underwater radiated noise – DNV Silent R



RV Investigator - Business

Marine National Facility



What went well – ship build

Marine National Facility

- Governance – PSC and TAG
- Oversight in Singapore
- Scientific contribution
- Weekly connections
- Document control
- Joint safety program



What went well - other activities

Marine National Facility

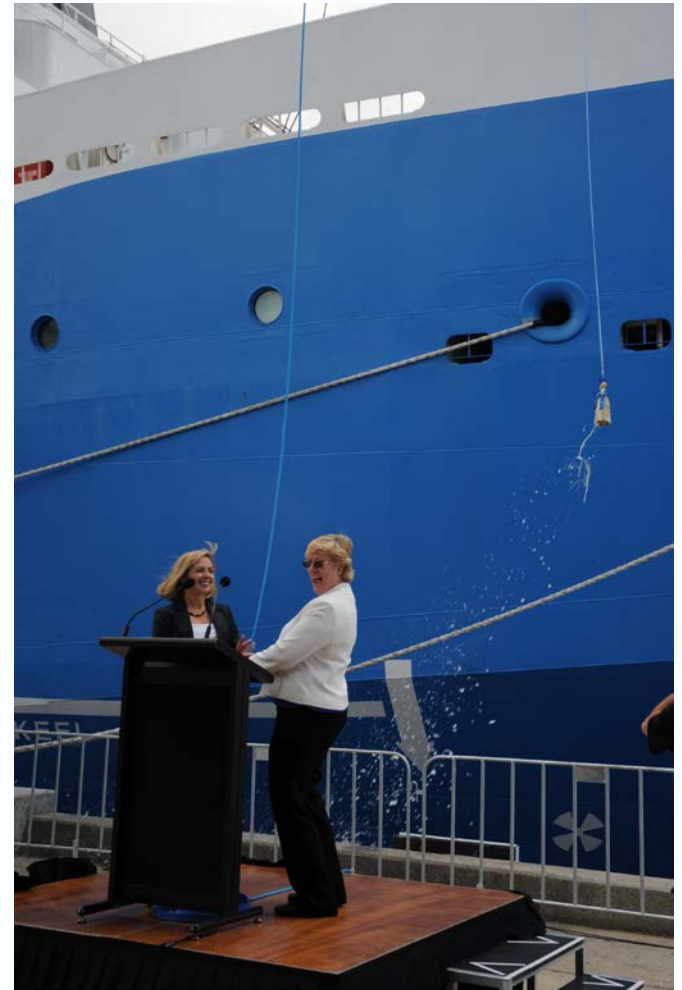
- Acquisition of scientific equipment
 - Prioritisation
 - Equipment champions
- Engagement of ship management company
- Decommissioning and sale of *Southern Surveyor*
- Commissioning and scientific verification



Communication

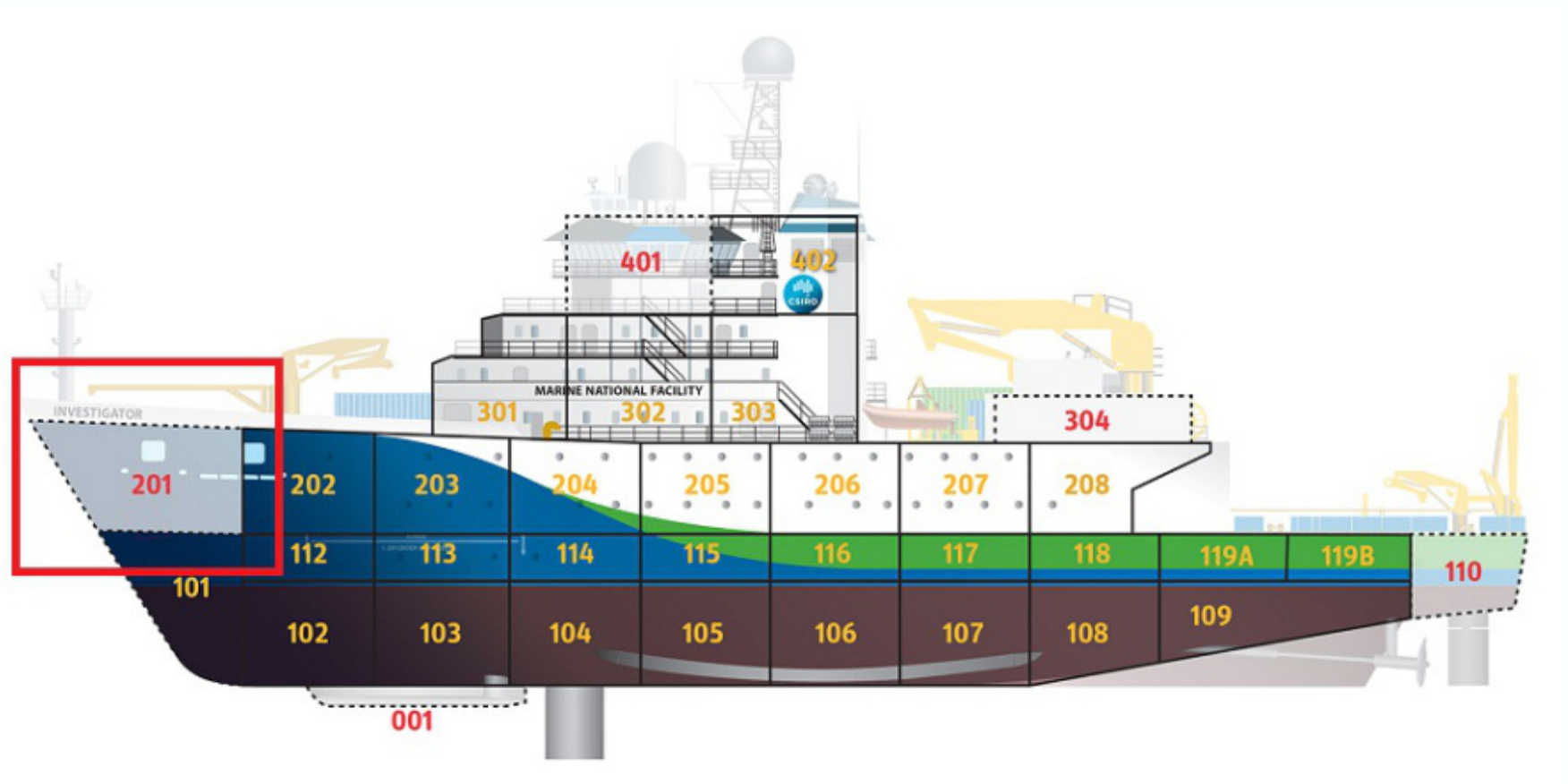
Marine National Facility

- FRV Blog
- Lego (and other merchandise)
- Marine community engagement
- Farewell to *Southern Surveyor*
- Welcome to *Investigator*
- Animations



RV Investigator - Communication

Marine National Facility



Business Model

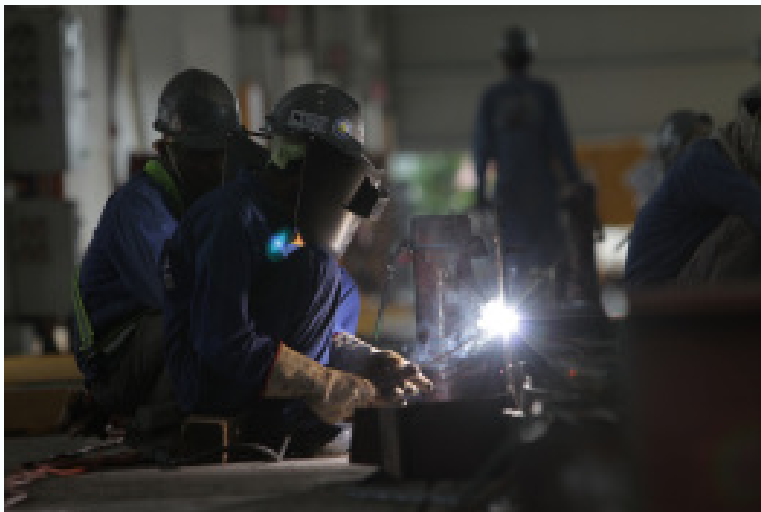
Marine National Facility

- Marine National Facility (established 1984, MNF SC)
- Ship designed for 300 days at sea
- Government funded 180 days per annum
- Formalise business model -
 - Tiers of users and pricing models
 - Rules of engagement
- Focus on National Benefit



RV Investigator - Technical

Marine National Facility



What went well ...

Marine National Facility

- Seakeeping and handling
- Fuel consumption
- Acoustic systems
- Winches
- Deck equipment (remote capability)
- Underwater radiated noise
- Accommodation



Improvements ...

Marine National Facility

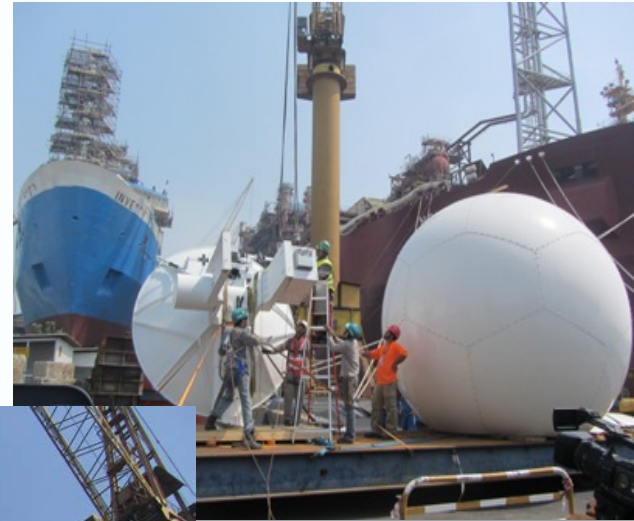
- Shore power
- CTD door
- Coring capability
- Hospital facility
- Lab drainage



Works in progress ...

Marine National Facility

- HVAC
- Weather radar
- Radiation safety (above bridge)
- Trawling



Our impact

Marine National Facility

OCEANOGRAPHY

Unravel decadal climate variability and fisheries interactions

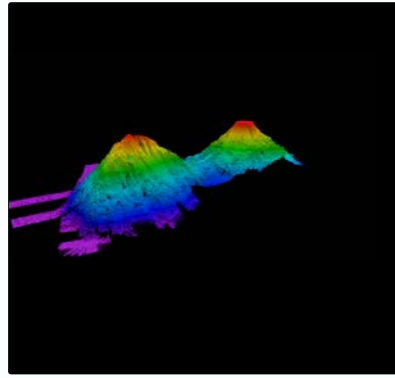
- Deep sea ocean observations



GEOSCIENCE

Discover submarine volcanoes, minerals and slip zones

- Advanced 3D sonars to 11,500m



BIOLOGICAL

Revolutionise fisheries science and management

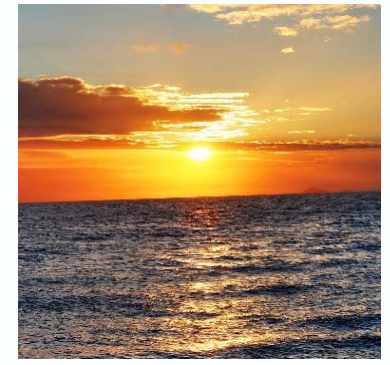
- Latest fish sonars to 3000m



ATMOSPHERIC

Quantify the ocean's role in global climate

- Weather radar
- Atmospheric sampling



For further information:

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