

RRS Discovery Replacement

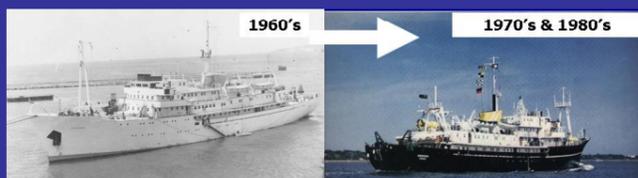
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Aim & Funding

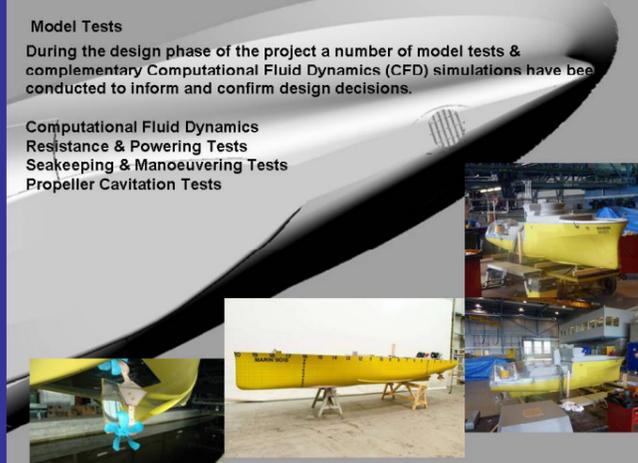
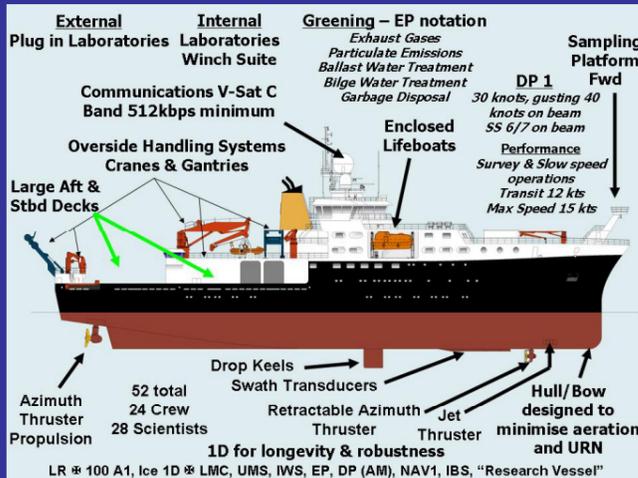
The project aim is to provide a multi-role oceanographic research vessel comprising state of the art facilities and capable of operating worldwide (tropics to ice edge) in support of leading edge multi-disciplinary research. The vessel will be primarily for deep ocean research but is also capable of conducting continental margin studies.

The new vessel will complement the RRS James Cook which was brought into service in March 2007. Lessons have been learnt from the James Cook Project which are being taken forward in the development of the Discovery replacement.

Funding for the project is being provided by NERC and a capital allocation of £48M from the Science Budget via the Large Facilities Capital Fund administered by the Department for Business, Innovation & Skills (BIS).



RRS DISCOVERY (existing)



RRS Discovery Replacement

Shipbuilder: Construcciones Navales P. Freire, S.A., Vigo, Spain
Contract placed 29th March 2010
Designer: Skipsteknisk AS, Norway

Science Programme commencement 2014
A new multi-role oceanographic vessel to be delivered Q2/Q3 2013
Before then technical familiarisation and configuration trials.

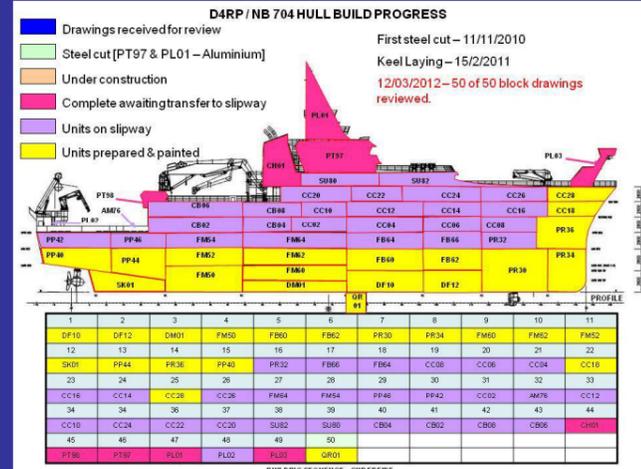
- ### Expected Outcome
- 50 days endurance (L 99.7m, B 18m, D 6.5m)
 - Scientific Transit Speed – 12 knots maximum
 - 24 Officers & Crew (includes 1 Training Berth)
 - 28 Scientists & Technicians
 - DP Capable (DP1) SS6/7
 - Multidisciplinary
 - Seismic capability
 - Multibeam(s) & Sub Bottom profiler
 - Minimal Ice Class – for hull life (Lloyds 1D)
 - Overside/overstern lifting – 20 tonnes (JC 30 tonnes)
 - Drop Keels
 - Low URN but not ICES209
 - Propulsion – 2 x Azimuthing Units Aft
Azimuthing Thruster Fwd, Manoeuvring Thruster Fwd
 - Oceanographic Winch Suite including Metal Free CTD Winch



RRS James Cook / Discovery Replacement Comparison

James Cook:
L 89.5m; B 18.6m; D 5.5 – 5.7m;
Displacement 5800 T

Discovery:
L 99.7m; B 18.0m; 6.5m;
Displacement 6075 T



- Main Suppliers @ 26/4/2011**
- Construcciones Navales Paulino Freire S.A. – Shipbuilder
 - Skipsteknisk AS – Designer
 - Classification Society Lloyd's Register & Regulator MCA
 - Integrated, power generation/propulsion package – Wärtsilä Finland Oy
 - Navigation & DP Equipment – Kongsberg Maritime
 - Scientific Hydrographic (Bathymetry) Equipment – Kongsberg Maritime
 - Scientific Winches and Overside Gantries – Rolls Royce Odim
 - Electrical Installation – Emenasa Montajes Navales S.A.
 - HVAC Systems – Aeron AS
 - Aft & Midship Cranes – Sormec Marine Cranes
 - Fwd Provision & Main Midship Cranes – Industrias Ferri S.A.
 - Container Laboratories – Merit Process Engineering Ltd
 - Structural Steel - Arcelor Mittel
 - Acoustics and Vibration consultant - DnV
 - EMC consultant – Applica AS

Future Timescales

- April 2012 Hull Launch
- 2012 Outfitting
- 2013 Equipment Run Up & Sea trials
- June 2013 Delivery to NERC
- June – Nov 2013 Commissioning, Familiarisation and Deep Water Trials Science Equipment
- End 2013 Available for Science Programmes

For further details on the project in general please refer to:
http://www.noc.soton.ac.uk/nmf/discovery_replacement_project/d4rpintroduction.html

