

# Brief overview of the NERC additions to National Marine Equipment Pool

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J. Scott

National Marine facilities, Sea Systems,  
NOC

# Intro

- NMF receives around £1M every financial year to maintain / improve the National Marine Equipment Pool (NMEP).
- This money is allocated to capital projects revolving around the programmed cruises of NMF research ships.
- This money can be also be used to purchase additional items for NMF to improve working facilities at base to increase equipment reliability

## Main items of equipment purchased in the last year

### 5T General Purpose deck winch



#### 5T GP winch:

- Romica Engineering Limited won the tender process to provide a General purpose deck winch.
- This winch has plc scrolling to adjust scroll movement for cables between 6mm and 18mm to allow increased flexibility of this winch.
- Winch can be used for various operations from: steel wire plankton nets to camera deployments using FO wire and sliping

## Main items of equipment purchased in the last year

### Sercel GI Gun



- NMF are still increasing their seismic pool and the addition of another GI gun brings the total up to 5. Together with this gun a range of ancillaries were purchased to allow 2 – 4 gun deployment at a time.
- (Note: NMF also operate 20 Bolt 1500LL airguns)
- Use of these GI guns seem to be increasing due to ease of deployment and reliability.

# Main items of equipment purchased in the last year

## Cables



- NMF replace around £250K of cables each year
- New cables purchased this FY included:
  - 2 x Rochester 11.4mm x 8000m coax CTD cables
  - 22000m of Rochester triple armoured, triple fibre ROV cable
  - 2000m of 8mm synthetic rope for free fall CTD system (MVP)

## Main items of equipment purchased in the last year

### 'Cinema' Piston Corer modelling and monitoring instrument system



- Working with IFREMER and NIOZ on the development and improvement of Piston Coring operations, NMF have purchased an IFREMER 'cinema' system and 2 Licences to operate the Cinema system aboard James Cook and Discovery for Coring Operations
- This system will be commissioned in 2014 due to delays with the RS Discovery trials programme (Patrice)

## Main items of equipment purchased in the last year

### STAR ODDI



- These sensors were purchased to assist NMF in the safe working practices for cable streaming.
- We are hoping to confirm cable 'depth' , 'shape' versus wire out and ships speed to improve the confidence in carrying out these operations on passages
- These trials were planned for the 2013 RRS Discovery trials but will now be carried out during the January 2014 trials

## Main items of equipment purchased in the last year

### Nortek Current Meters



- 20 current meters were purchased to sustain the 2014 mooring programme
- This is part of the rolling programme of mooring equipment replacement

# Main items of equipment purchased in the last year

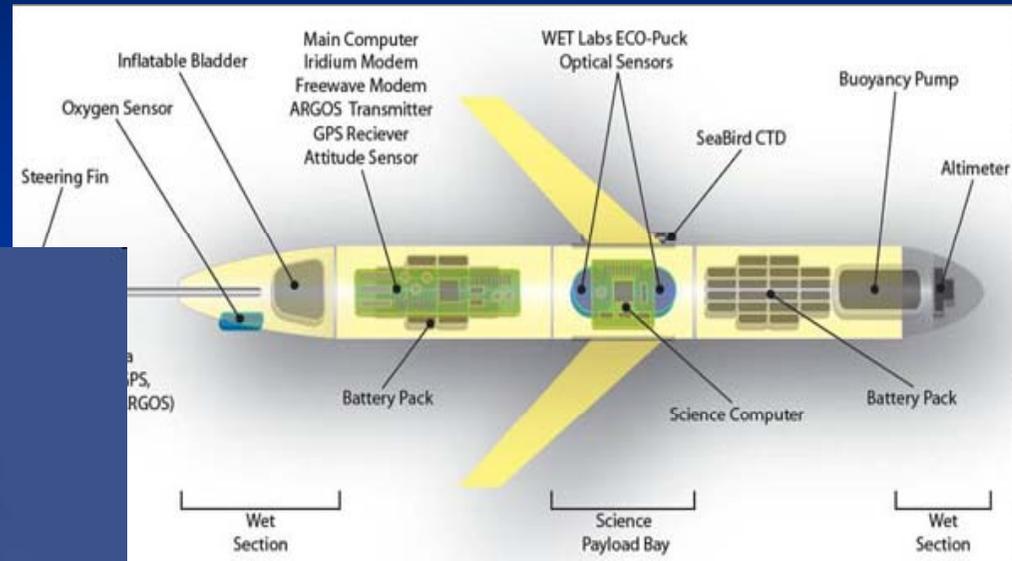
## Big Shot gun controller



- The addition of the RTS Big Shot gun controller is part of a £0.8M geophysics capital budget for 2014 in support of the NERC /CSIC seismic collaboration
- This system will become part of the NERC National Marine Equipment Pool, and support the joint NERC / CSIC seismic programme.

# Main items of equipment purchased in the last year

## Gliders



- As part of the development of the NMF Marine Autonomous Robotics group NMF have purchased 14 Gliders in the past 12 months

## Additional purchases planned for this year:

- 2 new Double Barrelled capstan mooring winches (direct replacement for old systems)
- 4 additional 5t General Purpose deck winches
- Additional Sercel solid state sections for seismic systems
- 4 x 75kHz lowered ADCP for mooring operations
- 2 new liquid scintillation counters
- NIOZ Piston Corer