RRS Sir David Attenborough and the Polar Code

Captain Matthew Neill BSc (Hons), MNI
LR Class
- 100A1 Polar Research Vessel
- Helideck
- LI
- PC4 Hull and Rudder
- PC5 propulsion
- LFPL
- ECO
- LMC
- UMS
- PSMR*
- NAV1
- CAC1
- DP(AA)
- IBS
- SCM
- Winterisation D(-35), H(-35)
- Helicopter Landing Area
‘Terror’ – Cargo Tender
‘Erebus’ - Workboat
‘SDA 1 + SDA 2’ – Humber inflatables
Design Challenges
Polar Service Temperature -35°C
Expected Time to Rescue
90 Personnel

- 20 days ice
- 10 days sea
Ice Trials Schedule

• 17 – 22/1: Ice trials around Adelaide Is.
• 23 – 24/1: Transit Case Corner
• 25 – 28/1: Ice trials Bellingshausen Sea
• 28/1 – 11/2: Case Corner
• 12 – 14/2: Transit to Rothera
Finding the right ice conditions

Performance tests
• Fast ice
• 100cm thick
• 20cm snow layer
• Level / minimal ridging
• No inclusions of ice bergs
• ~ 5 x 2km minimum extend

Operational tests
• Ice floe
• Min. 1km diameter
• Strong ice, not rotten
On-ice work

• Thickness measurements snow & ice

• Ice core extraction temperature, salinity, compression
Challenges

• Too late in the season – most of the fast ice had disappeared
• High air temperatures
• Very thick snow layer / humidity
• Competing schedules
end