Kongsberg to be Acoustic Scientific Research and Mapping Partner for RRS 'Sir David Attenborough'



Kongsberg Maritime has been awarded a contract by Cammell Laird as the primary supplier of the acoustic scientific research and mapping equipment for the British Antarctic Survey's new polar research vessel, the RRS '*Sir David Attenborough*'. The new polar research ship, owned by Natural Environment Research Council (NERC), is currently under construction at the Cammell Laird shipyard in

Birkenhead, UK, in a build project worth GBP140 million. The ship is due to enter operation in 2019.

The RRS *Sir David Attenborough* will be the UK's largest and most advanced research vessel. It will enable science across a broad range of disciplines (physical, biological and chemical oceanography, marine geology and geophysics, and atmospheric science) required to understand the impact of a changing polar environment on our planet, according to professor David Vaughan, director of Science at British Antarctic Survey.

Survey and Mapping Payload

The RRS *Sir David Attenborough* is required to meet the science requirements of the UK for a modern polar seagoing science platform and for provision of logistical support for land-based polar science. The ship will enable scientists to explore and undertake science in new areas of the Antarctic and Arctic seas, supported by an extensive, integrated Kongsberg scientific research and mapping technology package, including:

- EM 122 Deep water multibeam system
- EM 712 Medium depth multibeam system
- TOPAS PS 18 Sub bottom profiler
- EA 640 Scientific echo sounder
- EK 80 Biological multi-frequency echo sounder
- ME 70 Biological multibeam echo sounder
- MS 70 Biological multibeam echo sounder
- SH 94 Omni direction sonar
- SX 94 Forward looking sonar (Omni directional)
- K-Sync Synchronisation unit

The multibeam mapping systems will be ice protected for high reliability and accuracy in polar regions and the scientific systems will be integrated to provide the maximum benefits of integrated data sets for the scientists. Kongsberg has enjoyed a long association with the Natural Environment Research Council and the British Antarctic Survey, providing in the past scientific acoustic and vessel operational systems for the RRS *James Clark Ross*, RRS *Ernest Shackleton*, RRS *James Cook* and RRS *Discovery*.

Open for UK Researchers

Operated by the British Antarctic Survey (BAS), the RRS *Sir David Attenborough* will be available to the whole UK research base including postgraduate training. The new ship will have greater endurance, to enable longer voyages, which coupled with the use of helicopters will ensure significantly greater geographic coverage. The enhanced coverage will open up new locations for science and will clearly demonstrate and reinforce the continuing British presence in Antarctica and the South Atlantic.

The RRS Sir David Attenborough, is named after the renowned naturalist and broadcaster and will be one of the most advanced research vessels in operation. With a length of 125m, a breadth of 24m and draft of approximately 7m the new vessel features scientific cargo

volume of approximately 900 cu metres and an endurance of up to 60 days in polar regions. The crew compliment will be approximately 30, while up to 60 scientists and support staff will be accommodated on-board. It has a range of 19,000nm at 13 knots transit and ice breaking capability up to 1m thick at 3 knots.

https://www.hydro-international.com/content/news/kongsberg-to-be-rss-sir-david-attenborough-s-acoustic-scientific-research-and-mapping-partner