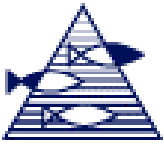


Main characteristics

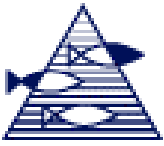
- L.O.A.: 77.5 m
- B. mld.: 16.4 m
- Draught: 5.8 m
- Gross tonnage: 3800 GT
- Total power: 6000 kW
- Dieselelectric propulsion
- DC propulsion motors
- Fixed propeller
- Max. speed: 17 knots
- Survey speed: up to 13 knots
- Pulling force (5 kn): 50 tons
- Berthing capacity: 15 crew, 30 scientists



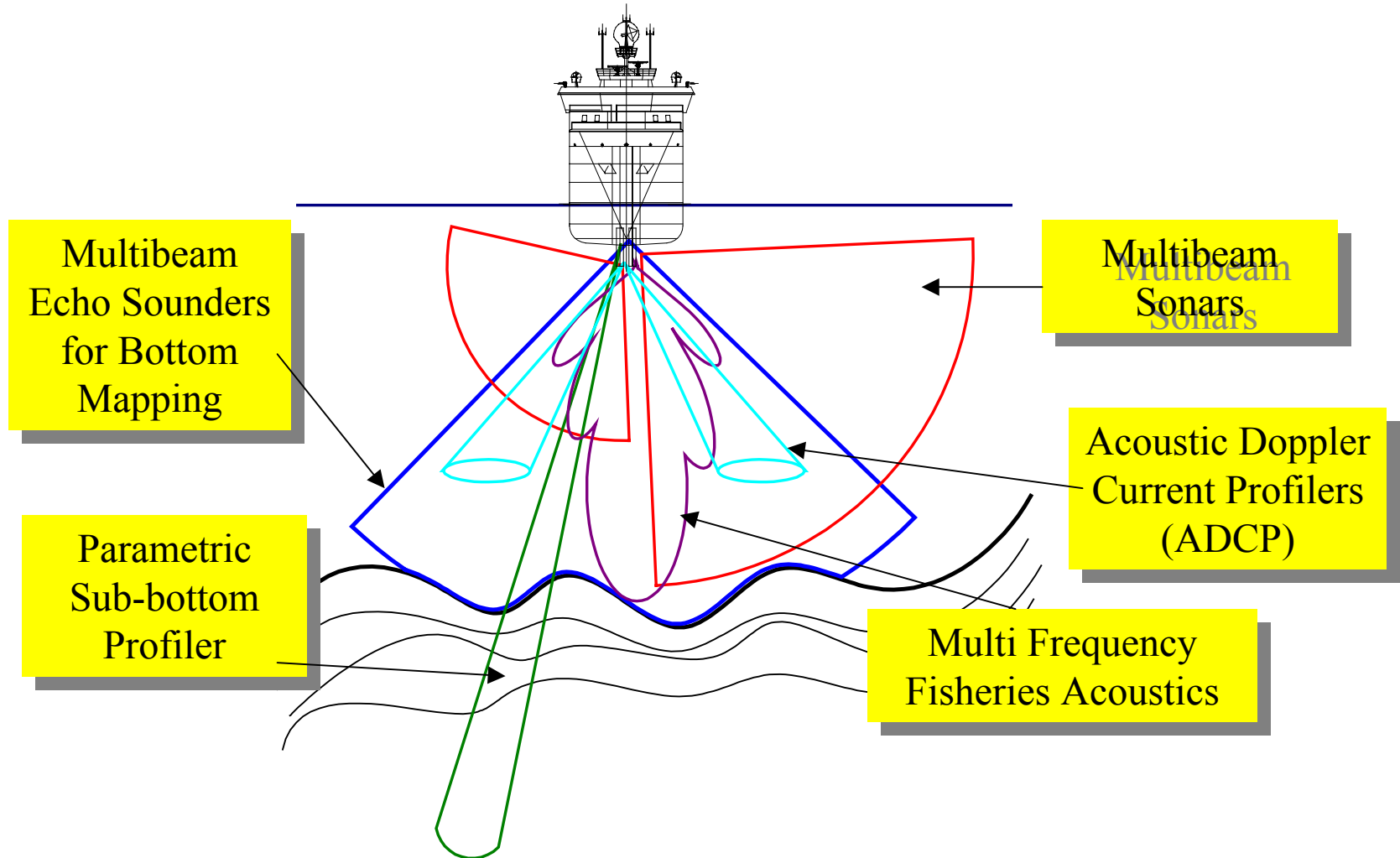


The vessel to be capable of carrying out research work such as:

- Pelagic trawling
- Bottom trawling
- Plankton sampling
- CTD/rosette operations
- Towed body operations
- Hydrographic operations
- Water sampling
- Misc. Kinds of environmental sampling
- Grabbing and coring
- Hydro-acoustic research work
- Seismic operations



Hull- and drop keel- mounted hydroacoustic instrumentation

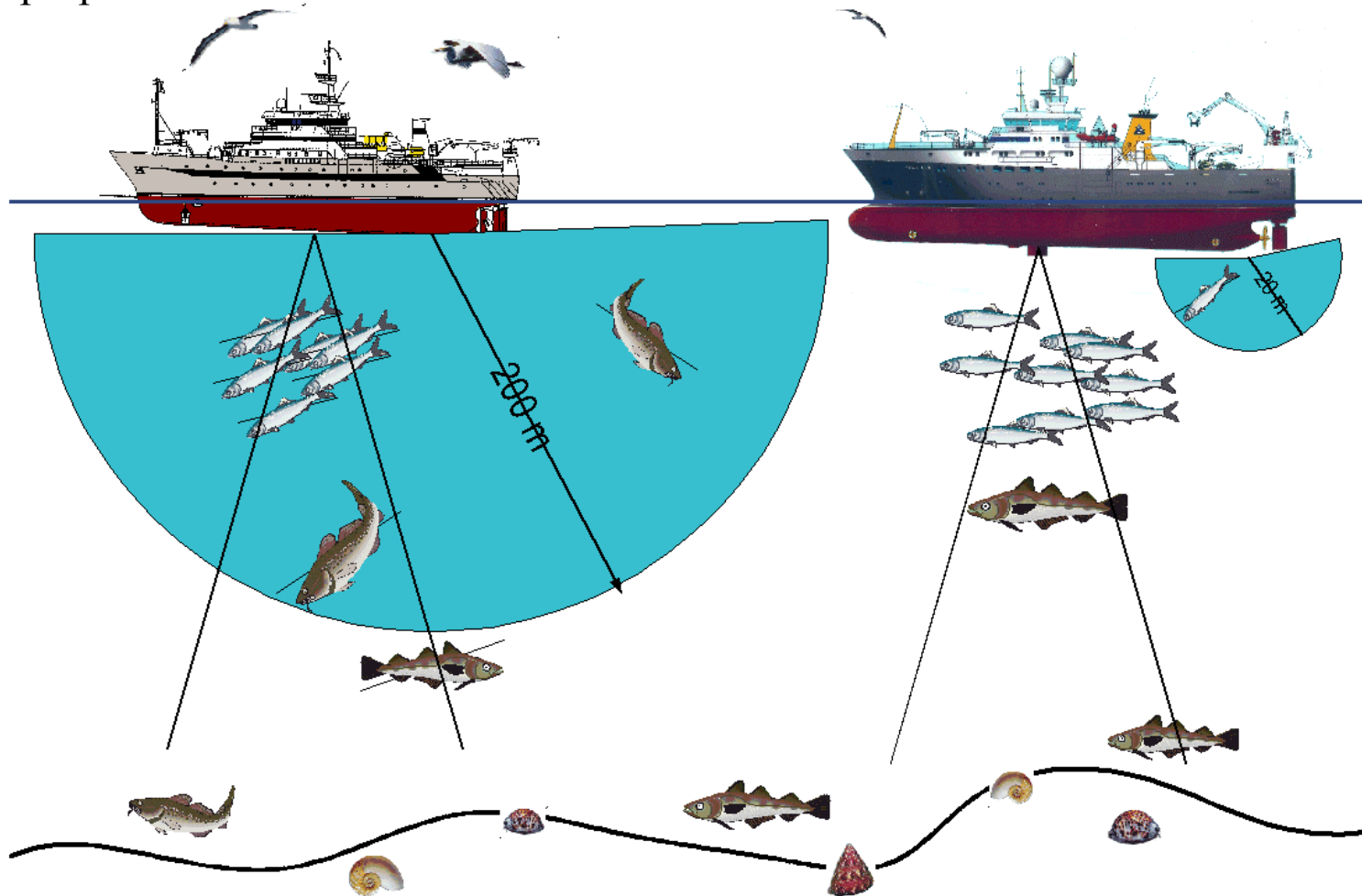




Vessel noise

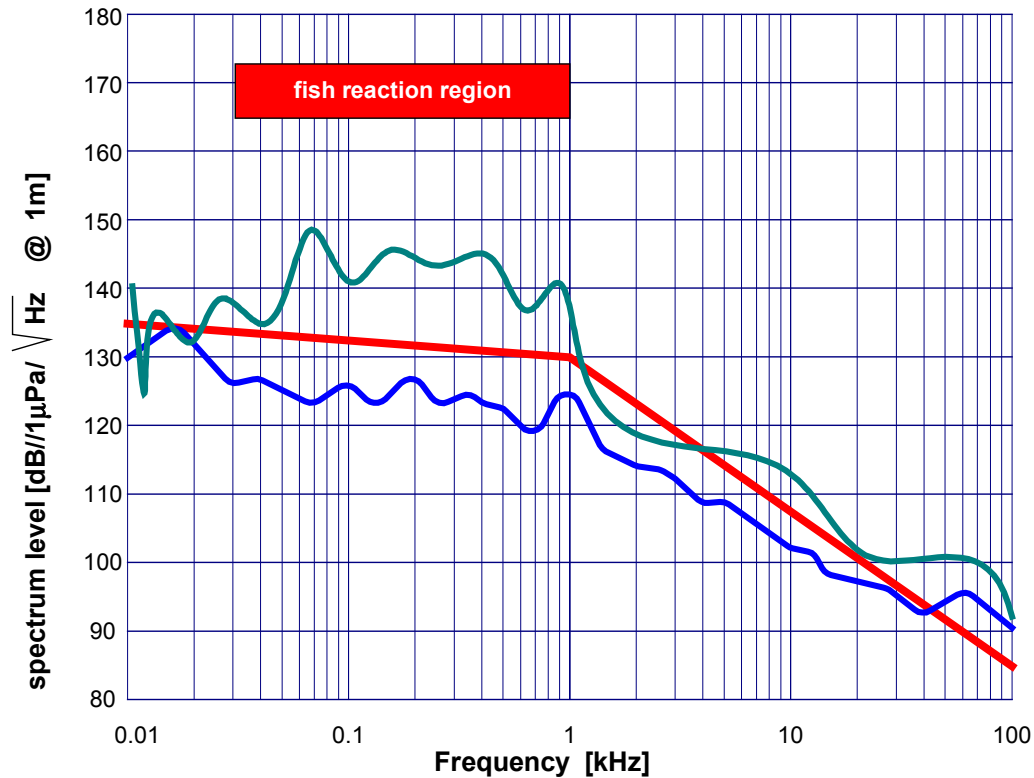
Conventional
propulsion

Dieselectric
propulsion

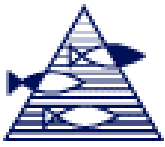




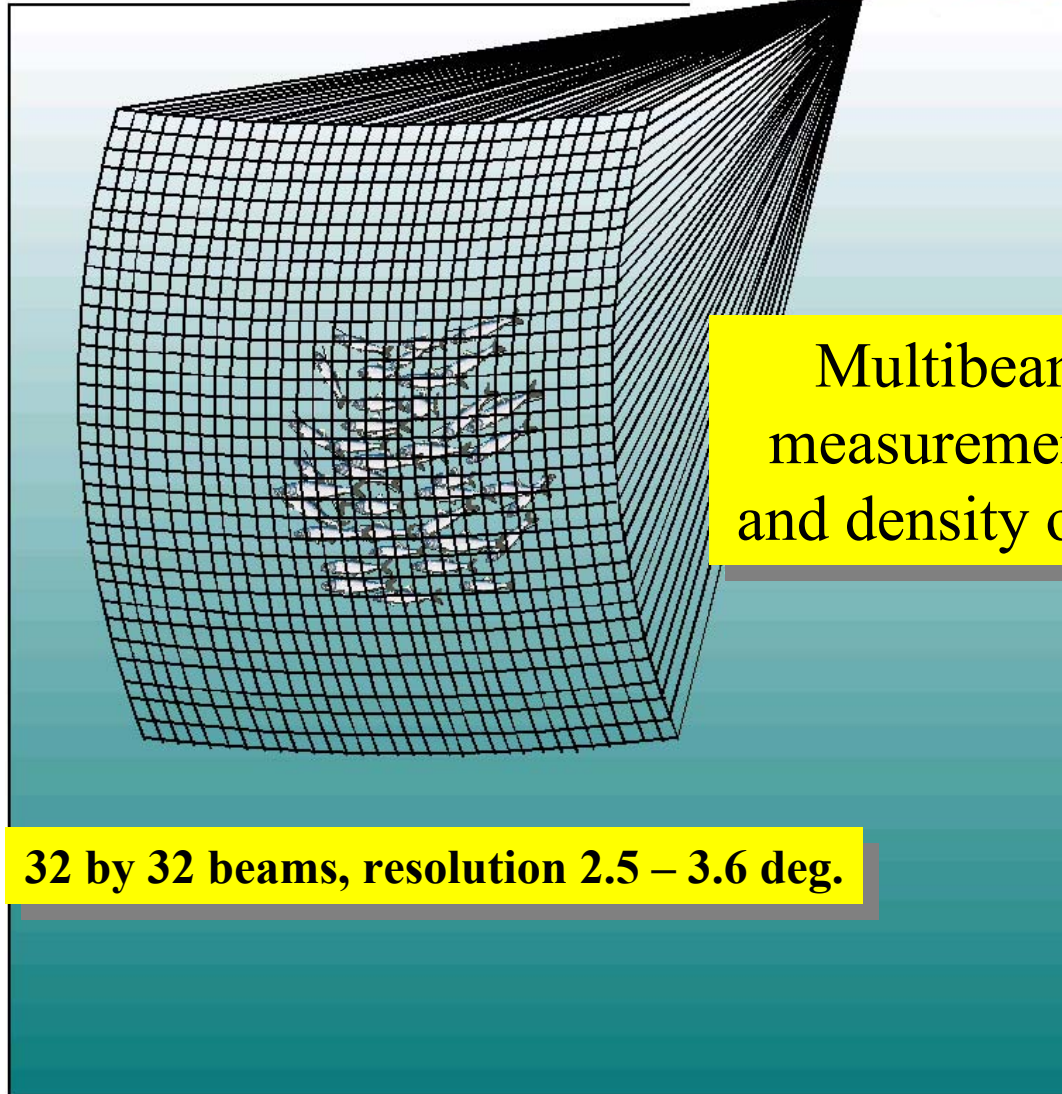
Typical research vessel noise signatures ICES CRR209



- R/V "Scotia" (dieselelectric propulsion, DC motor)**
- R/V "Johan Hjort" (Conventional propulsion, CPP)**
- Recommended maximum level, CRR no. 209**



The new RV "G. O. Sars"



Multibeam sonar for
measurement of volume
and density of fish schools

32 by 32 beams, resolution 2.5 – 3.6 deg.



The new RV "G. O. Sars"

Multibeam echo sounder for high resolution seabed mapping



EM1002

Frequency:.....95 kHz
Number of beams per ping:....111
Beamwidth:2x2°
Depth range:2 to 1000 m
Depth resolution:2,4 - 8 cm



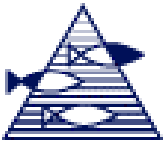
The new RV "G. O. Sars"

Multibeam echo sounder for deep sea mapping



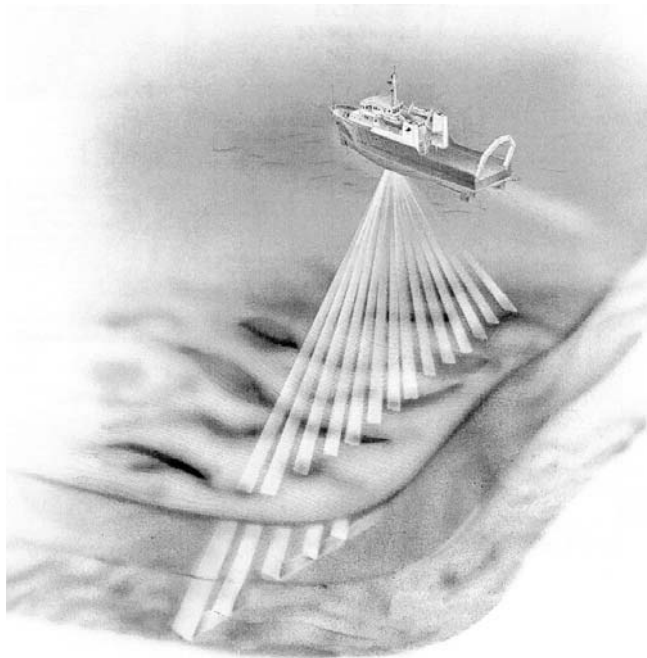
EM300

Frequency:30 kHz
Number of beams per ping:..... 135
Beamwidth: $1 \times 2^\circ$
Depth range: 10 til 5000 m
Depth resolution:4 - 30 cm

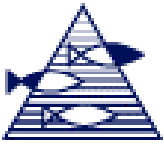


The new RV "G. O. Sars"

TOPAS PS 018 Parametric Sub.bottom Profiler

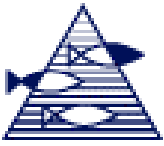


Primary operating frequency:.....15 kHz
Secondary frequency:0,5-5 kHz
Primary beam width:.....3,5°
Secondary beam width:5°
Depth range:30 til 10000 m
Range resolution:<0,3 m
Penetration capability:>150 m



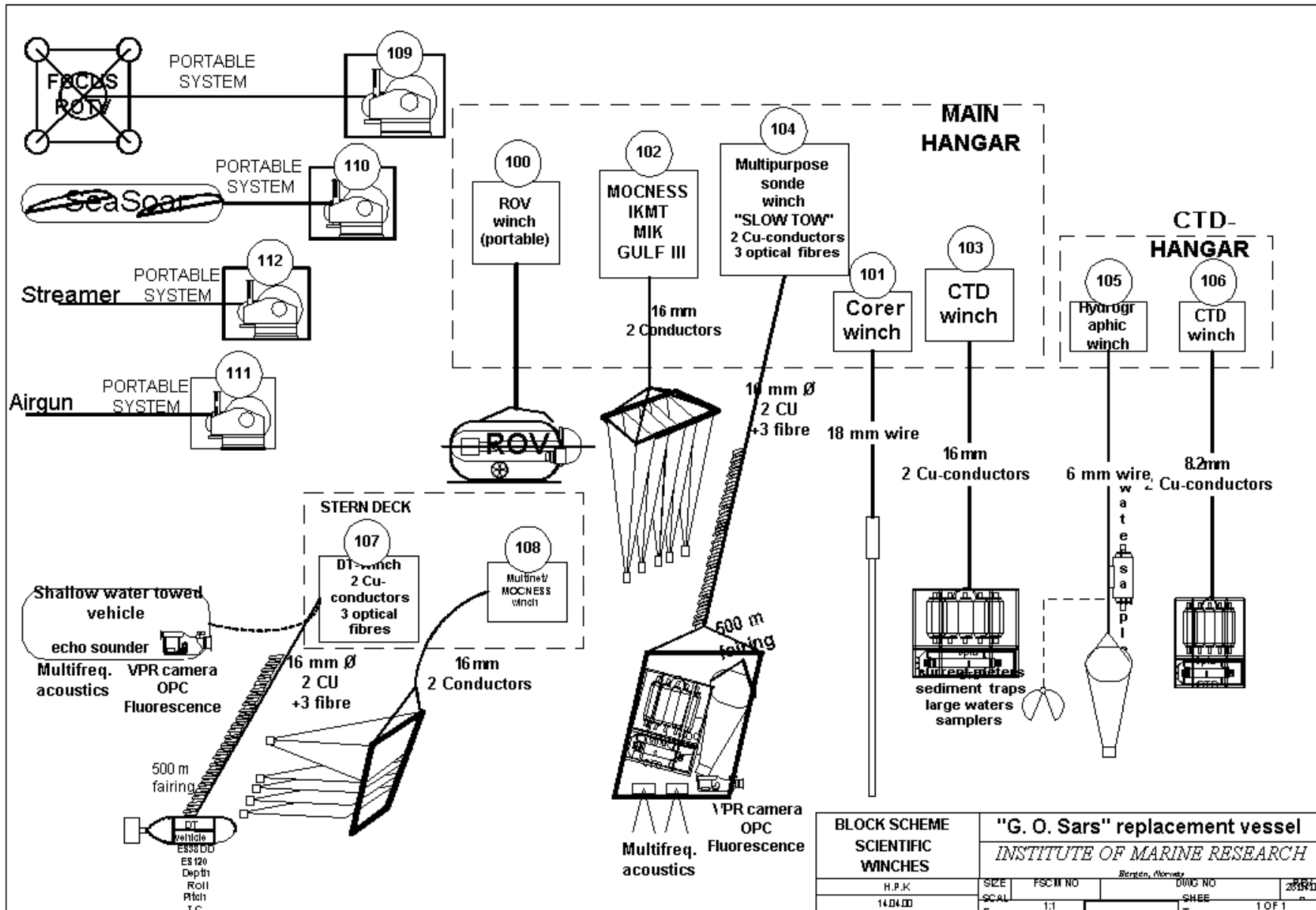
Towed equipment

- ROTV (Focus)
- Undulating vehicle (SeaSoar)
- Airgun
- Streamer
- Multipurpose towed vehicle
 - Multifreq. Acoustic
 - OPC
 - VPR
 - Fluorescence
 - Plankton Sampling Net
- Deep Towed Vehicle
 - Multifreq. Acoustics
 - Attitude sensors
 - Temperature
 - Conductivity
- Multinet plankton samplers (MOCNESS)



Lowered equipment

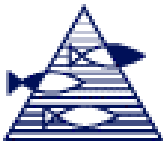
- ROV
- Multinet plankton samplers
 - MOCNESS
 - IKMT
 - MIK
 - GULF III
- CTD
 - Water samplers
 - Sediment traps
- Multipurpose sonde
 - CTD/rosette
 - Multifreq. Acoustics
 - OPC
 - VPR
 - Fluorescence
 - Plankton sampling net
- Deep sea corer





Laboratories

- Wet lab chemical samples
- Lab for tracer metal/radioactivity
- Lab for organic chemistry/salt lab
- Wet lab plankton, geology, clean bottom samples, marking of fish
- Dry lab, analysis of plankton samples
- Wet lab chemical samples
- Lab for inorganic chemistry
- Wet lab, fish sample room
- Dry lab, chemistry, physics, biology



The contract was signed 22 December 2000



Scheduled delivery
1 February 2003

