

RV MBA Sepia

A versatile platform for marine and coastal research



Multi-Disciplinary Research Vessel

The Marine Biological Association of the UK (MBA) has operated research vessels since 1888 and the most recent of these is **RV MBA Sepia**.

MBA Sepia is a custom built 15.45 m Category 2 Maritime and Coastguard Agency (MCA) coded workboat. The vessel is a versatile platform to conduct research and survey work operating from shallow upper estuarine environments to coastal waters up to 60 miles offshore.

Survey work has included; demersal fish surveys, plankton and young fish sampling, benthic and sediment sampling, multi-beam surveys, acoustic tracking of fish, and instrument deployment and recovery.

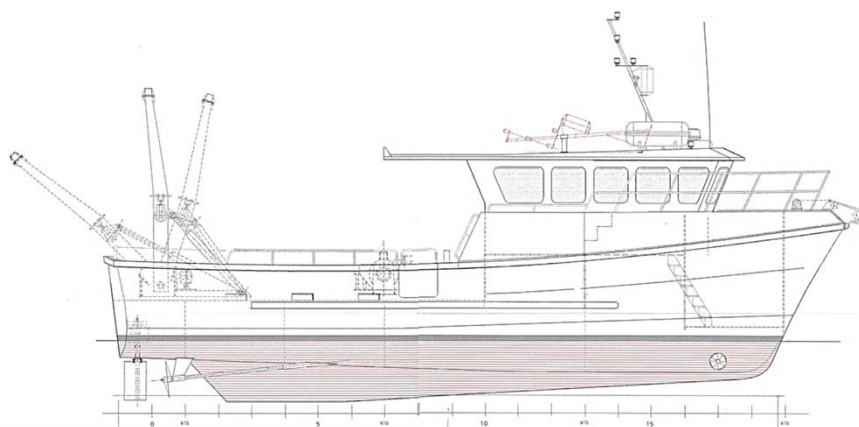
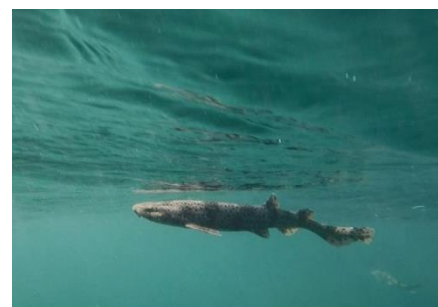
Key Features and Capabilities

- A-Frame capacity of 2.5 tonnes
- Ability to survey upper estuarine habitats, up to 60 miles offshore
- Demersal fish surveys
- Plankton sampling
- Water quality and nutrient sampling
- Large seawater holding tank 5000 L
- Instrument deployment and recovery
- 12 passenger capacity

General	
Ship Name	MBA Sepia
Type	Purpose built Fisheries Research Vessel
Owner/Operator	The Marine Biological Association of the UK
Built	2004
Builder	Kingfisher Boats Ltd.
Classification	Category 2 Workboat
Flag	United Kingdom
IMO Number	908964
MMSI	235017255
Call Sign	MENE6
Maximum no. of persons	15 (maximum of 12 passengers)



Main Characteristics	
Length Overall	15.45 m
Breadth Moulded	5 m
Draft	1.55 m
Depth Moulded	2.75 m
Gross Tonnage	34.20 tons
Displacement Tonnage	44 tons
Method of propulsion	Motor Twin Screw
Service Speed	12 knots
Speed Max	15 knots at 2000 + rpm
Economical Speed	9.5 knots at 1800 rpm



Main Equipment	
Main Engines	Two Cummins 6 CTA 8.3 m 350 hp at 2500 rpm (total capacity 700 hp 522 kw) fitted with marine gear box with 3:1 reduction ration
Main Generator	Beta Marine 8 kva diesel alternator
Output	Rated 204 hp at 2200 rpm
Bow Thrusters	K25 kort propulsion Hydraulic Bow Thruster Hypro V5-60E24V 25 hp
Electrical Systems	240 V AC for laboratory and domestic galley services 24 V alternators (x2) on each main engine (lighting, navigation, communication) 24 V backup emergency and redundancy system 24 V 100 amp Victron Energy Skylla-TG

Navigation and Communication	
Auto Pilot	Hy-ProDrive PC45 Constant Running Marine Autopilot Hydraulic Pump
Speed Logs	Garmin 152 Furuno GPS CP 32
Echo Sounder	Simrad NSS12 Evo 3 with 3d structure scan and medium/high CHIRP transducer, down and side scan fish finder, frequency 83/200/455/800 kHz
Navigational Equipment	Ray Marine RL 80C and Simrad CP42 Video Plotter Garmin GPS 152 Navigator Ray Marine L770
Radar	Ray Marine PL 80C Path Finder
Communications	ICOM IC-M503 VHF ICOM IC-DS 100 DSC VHF Jotron TRON TR-20 DSC Hand Held VHF

Deck Machinery	
A-Frame	Hydraulic A-Frame aft deck 2.5 ton
Winch	2.5 Ton Spencer-Carter TW7X-857 3 Drum Winch 2 Barrel ends 250 m winch cable

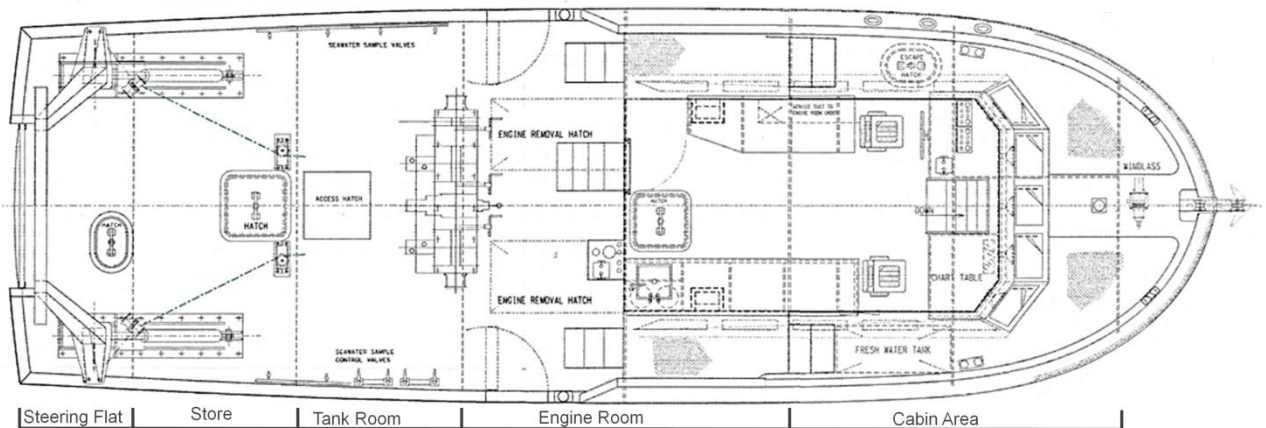
Survey Facilities	
Dry Lab	12 m ²
Deck Space	15 m ²
Galley	6 m ² Table and seating
Seawater tank	5000 L saltwater storage facility

Other	
Dive lift	Light alloy persons/diver recovery system SWL 150 kg 24 V
Tender vessel (Sepiolo)	Zodiac 2.8 m length x 1.8 m beam (engine 5 hp 4 stroke Mariner)
AED	Automated External Defibrillator CU Medical System iPad
O₂	7 L cylinder

On-board facilities	
Crew	3
Visitors	12
Heating	Hydronic M 10 W 24 V air and water Erberspacher
Galley	Fridge/freezer Microwave Kettle Toaster
Toilet	1 (300 L black water storage)
Storage	1 wet locker 1 m x 2 m x 2.5 m storage locker
Freshwater tank	4000 L freshwater storage tank

Survey Equipment

Trawling	A variety of otter and beam trawl nets suitable for demersal trawling specific dimensions available on request
Benthic Sampling	1 m ² Van Veen Grab sampler with sieve table Agassiz Trawl Naturalist Dredge
Plankton Sampling	1 m ² Young Fish Trawl Phytoplankton Tow nets (20 µm mesh, 61 µm, 142 µm, 200 µm, 585 µm, 710 µm)
Oceanographic Equipment	Richter & Wiese Niskin Water Bottle 12 L Valeport CTD Sound Velocity Profiler Model 606 Valeport Data Log Express
Hydroacoustic Equipment	VEMCO VR3-UWM and VR4-UWM Ultrasonic Receiver VEMCO VUE Software Teledyne Benthos Acoustics UDB-9000 Universal Deck Box
ROV/UW Camera	Deep Blue Pro II Underwater Video Camera (depth rating 240m) with 15m cable and real time LCD viewing monitor
Microscope	Brunel BM1 Long Arm stereomicroscope (x5 to x70) with Bresser Mikrokular Full HD Eyepiece Camera
IT Systems	HP Desk Set Windows 10 Pro i7-6700 CPU @ 3.40 GHz RAM 16 GB Printer



Main deck



The Marine Biological Association of the UK

The Laboratory
Citadel Hill
Plymouth
PL1 2PB

T: +44 (0)1752 633207
F: +44 (0)1752 633102
E: MBAsepia@mba.ac.uk
W: www.mba.ac.uk/facilities/research-vessel