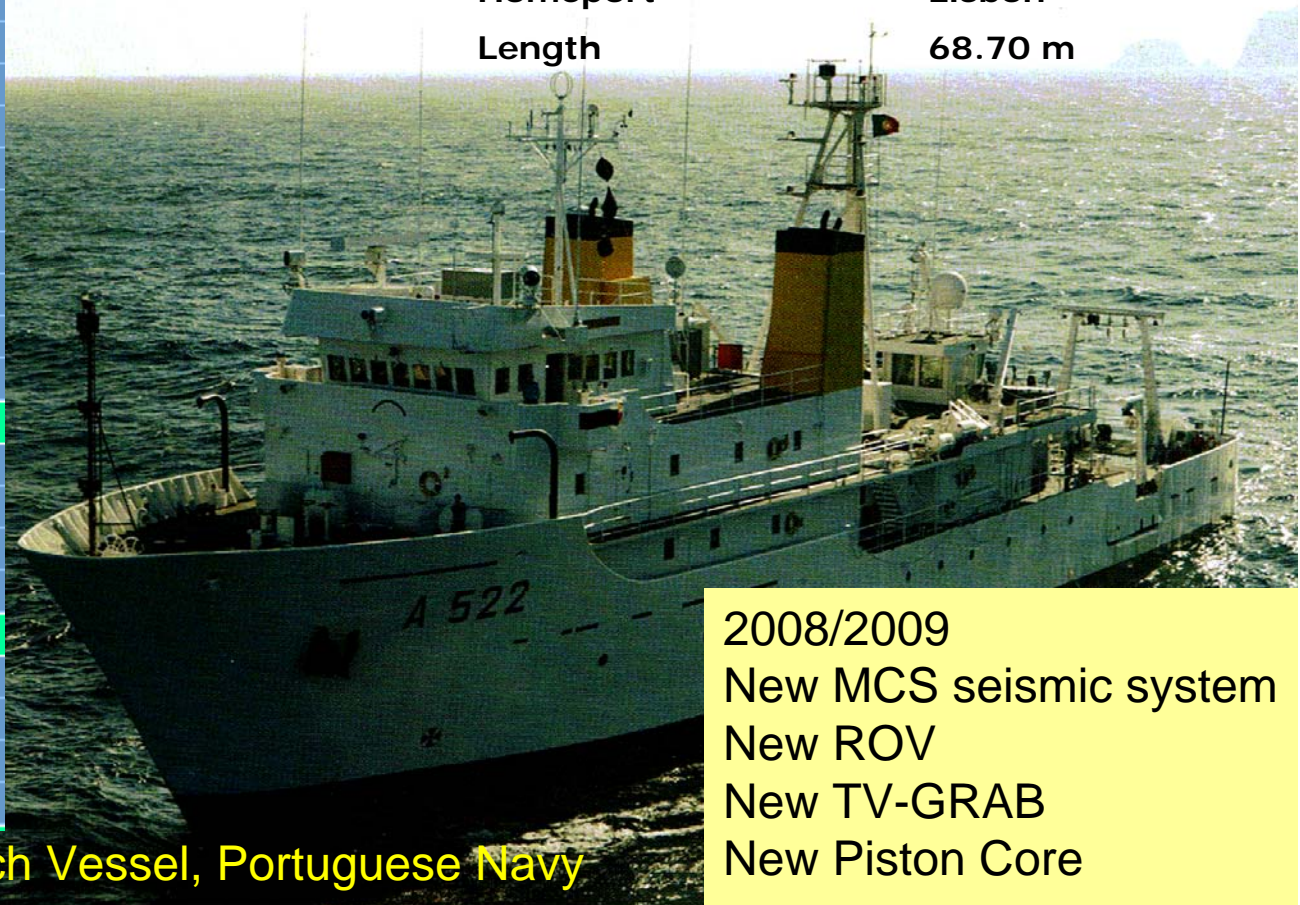


RESEARCH SHIPS. NRP (*Navio da República Portuguesa*) D. Carlos I, Portugal

Main Dimensions	
Length	68.70
Freeboard to Work Deck (m)	3.0
Draft (m)	5.6
Main Vessel Activity	
Main Activity	Oceanography
Operating area	NE Atlantic
Capacities and Working Spaces	
Gross Tons	2300
Capacity Dry Cargo Area (m3)	50.0
Fuel Capacity (m3)	700.0
Area Wetlab (m2)	18.0
Area Drylab	18.0
Water Capacity (m3)	20.0
Water Gen (m3)	20.0
Clean Water Generation Method	No
Free Deck Area (m2)	100.0
Space Cont Labs Supported	1 TEU
Radioactive Isotope Support	No
Range, Speed and Endurance	
Range (n mi)	6400
Speed Cruise (kt)	9.7
Speed Max (kt)	10.5
Endurance (days)	30
Accommodation	
Officers	6
Crew	28
Scientists	15
Air Cond (yes/no)	yes

Same class, also **NRP Alm. Gago Coutinho**

Status	Operating
Main activity	Oceanography
Operating area	NE Atlantic
Country	Portugal
Year built	1989
Homeport	Lisbon
Length	68.70 m



Research Vessel, Portuguese Navy

2008/2009
 New MCS seismic system
 New ROV
 New TV-GRAB
 New Piston Core

RESEARCH SHIPS. NRP (*Navio da República Portuguesa*) **ANDRÓMEDA**, Portugal

Main Dimensions	
Length	31.40
Freeboard to Work Deck (m)	1.2
Draft (m)	18.1
Main Vessel Activity	
Main Activity	Oceanography
Operating area	Iberian Seas
Capacities and Working Spaces	
Gross Tons	245
Capacity Dry Cargo Area (m3)	20
Fuel Capacity (m3)	35
Area Drylab	15.0
Water Capacity (m3)	11
Free Deck Area (m ²)	30.0
Space Cont Labs Supported	6 m ²
Range, Speed and Endurance	
Range (n mi)	1980.0
Speed Cruise (kt)	10.0
Speed Max (kt)	12.0
Endurance (days)	8
Accommodation	
Officers	2
Crew	11
Scientists	6
Air Cond (yes/no)	yes
Data Processing Equipment:	
Data Processing Computers	2 PC
Data Processing Printers/Plotters	1 printer

Same class, also **NRP AURIGA**



Navio de investigação Oceanográfica da Marinha Portuguesa.

RESEARCH SHIPS. ARQUIPÉLAGO (DOP), Portugal

Arquipelago

Status	Operating
Main activity	Multiple activities
Operating area	NE Atlantic
Country	Portugal
NODC code	
Call sign	CNST
Year built	1994
Homeport	Horta
Length	25.00 m
Avail. for charter	No
Last update	16.04.2008



RESEARCH SHIPS. NORUEGA (IPIMAR), Portugal

Main Dimensions	
Length	47.50
Freeboard to Work Deck (m)	2.2
Draft (m)	5.9
Main Vessel Activity	
Main Activity	Fisheries
Operating area	NE Atlantic
Capacities and Working Spaces	
Gross Tons	495.0
Fuel Capacity (m3)	174.0
Area Wetlab (m2)	20.0
Area Drylab	6.0
Range, Speed and Endurance	
Range (n mi)	9500.0
Speed Cruise (kt)	11.0
Speed Max (kt)	13.0
Endurance (days)	29
Accommodation	
Officers	4
Crew	18
Scientists	12
Air Cond (yes/no)	yes
Data Processing Equipment:	
Data Processing Computers	Schneider Portable PC 7640
Engineering Design Particulars	
Hull Material	Steel
Engines	Engine Number: 1 Engine Make: Diesel Engine Power: 1500 at 825rpm Propeller Diam: 232.0



Status	Operating
Main activity	Fisheries
Operating area	NE Atlantic
Country	Portugal
Year built	1978
Homeport	Lisbon
Length	47.50 m
Avail. for charter	Yes

ROV's. **LUSO** (EMEPC), Portugal – new 6000M ROV

VEHICLE DETAILS

UV Information and Contact

Name	Luso
Owner	Ministry of Defense
Operator	Ministry of Defense
Contact person	Ministry of Defense
Phone	null
Email	null

Type of vehicle	ROV
Model	Argus Bathysaurus XL 6000msw
Country	Portugal
Mission Type	Oceanographic Surveys
Manufacturer	Norway
Year Built	2008

General Specifications

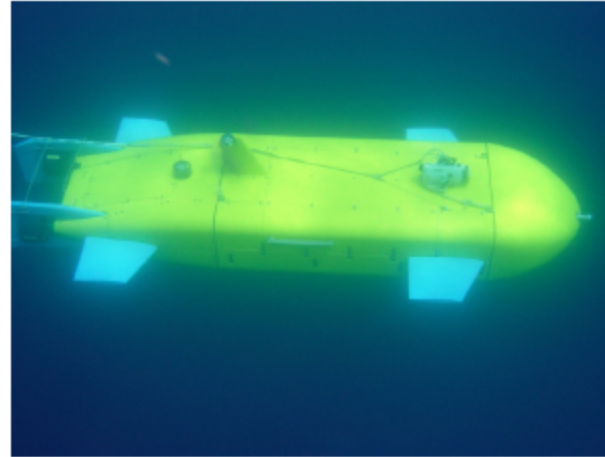
Length (m)	2.1
Height (m)	1.8
Gross weight (in air) (kg)	2200
Max operating depth (m)	6,000



ROV's. INFANTE/delfim (DSOR), Portugal

GEOPHYSICAL NAVIGATION

1.9. AUV INFANTE– IST/ISR



INFANTE is an autonomous underwater vehicle (AUV), designed and built in Portugal by IST/ISR. The AUV is an experimental testbed for the development of technologies for ocean exploration. It is also a versatile platform capable of carrying advanced sensor suites for the acquisition of ocean data in a purely automatic mode.

Construction year: 2002

Operator: Instituto Superior Técnico (IST), through its Institute for Systems and Robotics (ISR)

Contact: António Pascoal (antonio@isr.ist.utl.pt)

Website: <http://www.isr.ist.utl.pt>

1.10. ASV DELFIM – IST/ISR



DELFIN is an autonomous surface vessel (ASV) for automatic acquisition of ocean data. The ASV is routinely used for bathymetric operations in coastal areas.

Construction year: 1999

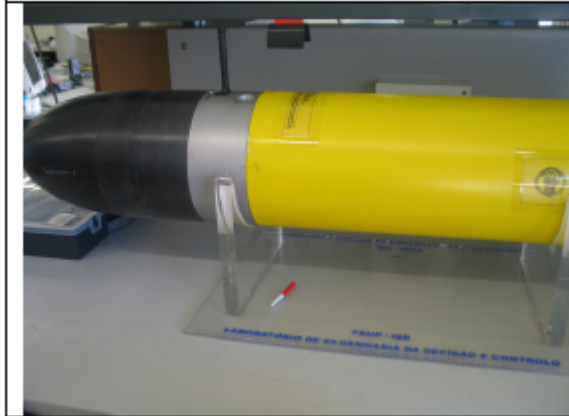
Operator: Instituto Superior Técnico (IST), through its Institute for Systems and Robotics (ISR)

Contact: António Pascoal (antonio@isr.ist.utl.pt)

Website: <http://www.isr.ist.utl.pt>

ROV's. **ISR** (U. PORTO), Portugal

1.13. AUV ISR U. Porto



Construction year: 2005

Operator: Faculdade de Eng. da Universidade do Porto

Contact: João Tasso F. Borges de Sousa

(jtasso@fe.up.pt)

Website:

http://paginas.fe.up.pt/lsts/lsts_www/English/index.html

1.14. AUV Isurus U. Porto



Construction year: 1998

Operator: Faculdade de Eng. da Universidade do Porto

Contact: Fernando Lobo Pereira (flp@fe.up.pt)

Website:

http://paginas.fe.up.pt/lsts/lsts_www/English/auv.html