



BULGARIAN ACADEMY OF SCIENCES  
INSTITUTE OF OCEANOLOGY

# 10<sup>th</sup> ERVO Annual Meeting 2008

Chartering of  
Regional Class European R/V and  
Research Institutes from USA

case study ( Black seas )

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# Possible chartering of

## European Regional class research vessels:

- All types EU Research projects which connected with sea investigation—
- Companies (Oil & Gas Pipelines and Communication cables at sea bottom) need preliminary investigations and further control of them.
- Underwater Culture Heritage (Black sea and Eastern Mediterranean)

All types EU Research projects  
which connected with sea  
investigation

**SESAME** Integrated Project Southern  
European Seas: Assessing and modeling  
Ecosystem changes -2007

Companies  
Oil&Gas Pipelines and Communication cables  
at the sea bottom  
needed preliminary investigations  
and  
further control of them.

Melrose Resources Sarl (a Bulgarian  
Company and subsidiary of Melrose  
Resources PLC) have used

**R/V Akademik 2007**

## PLANNED SOUTH STREAM AND NABUCCO GAS PIPELINES



# Deep-Sea Underwater Culture Heritage (Black sea)

**2001-2002**

With support from NOAA's Ocean Exploration Initiative and National Geographic Society, R/V Akademik and Bulgarian research 3-person submersible PC-8B were chartered by Institute for Exploration (IFE) (Prof. Robert Ballard) for joint American-Bulgarian investigations for discovering of well-preserved ancient shipwrecks.



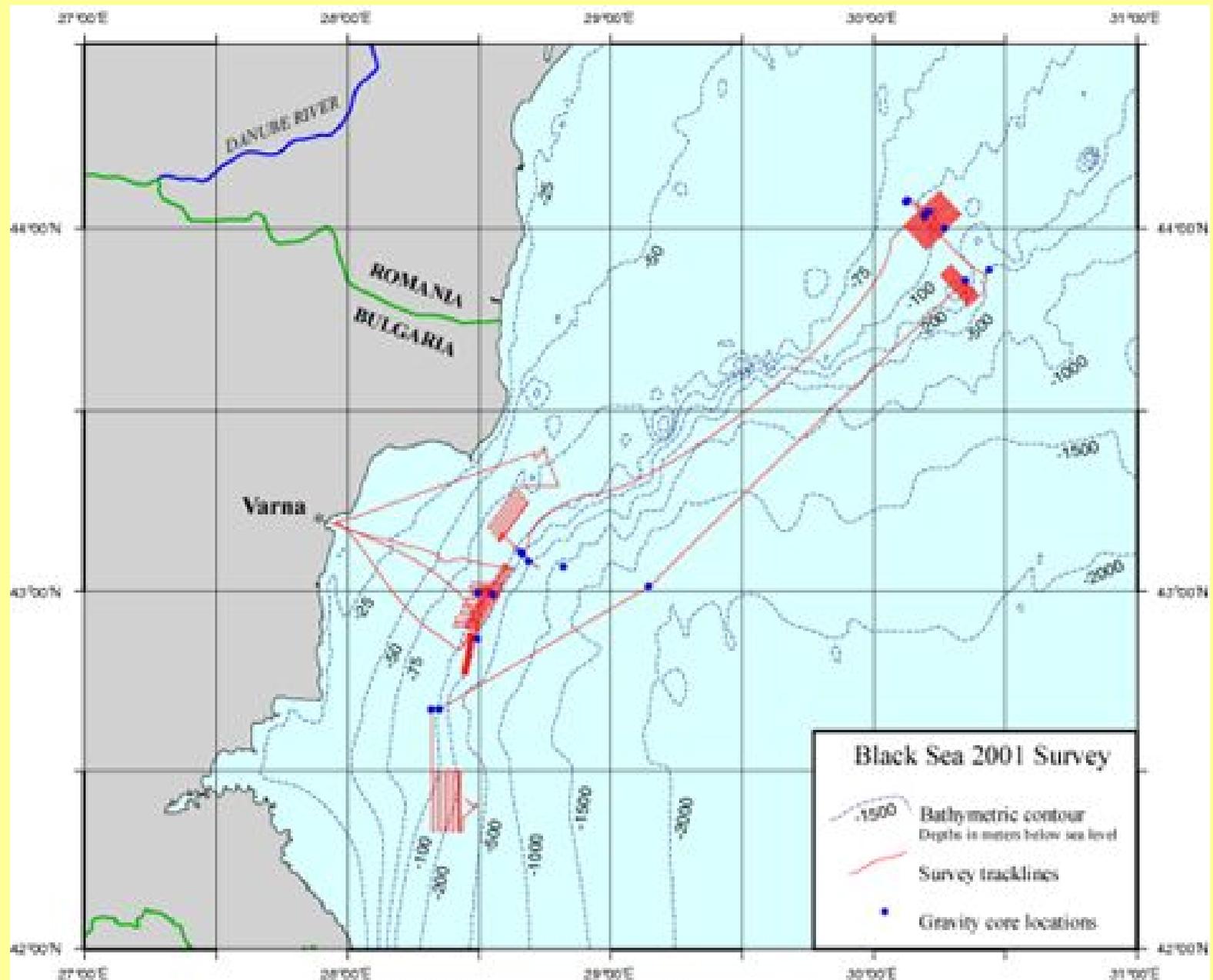
# NATIONAL GEOGRAPHIC SOCIETY

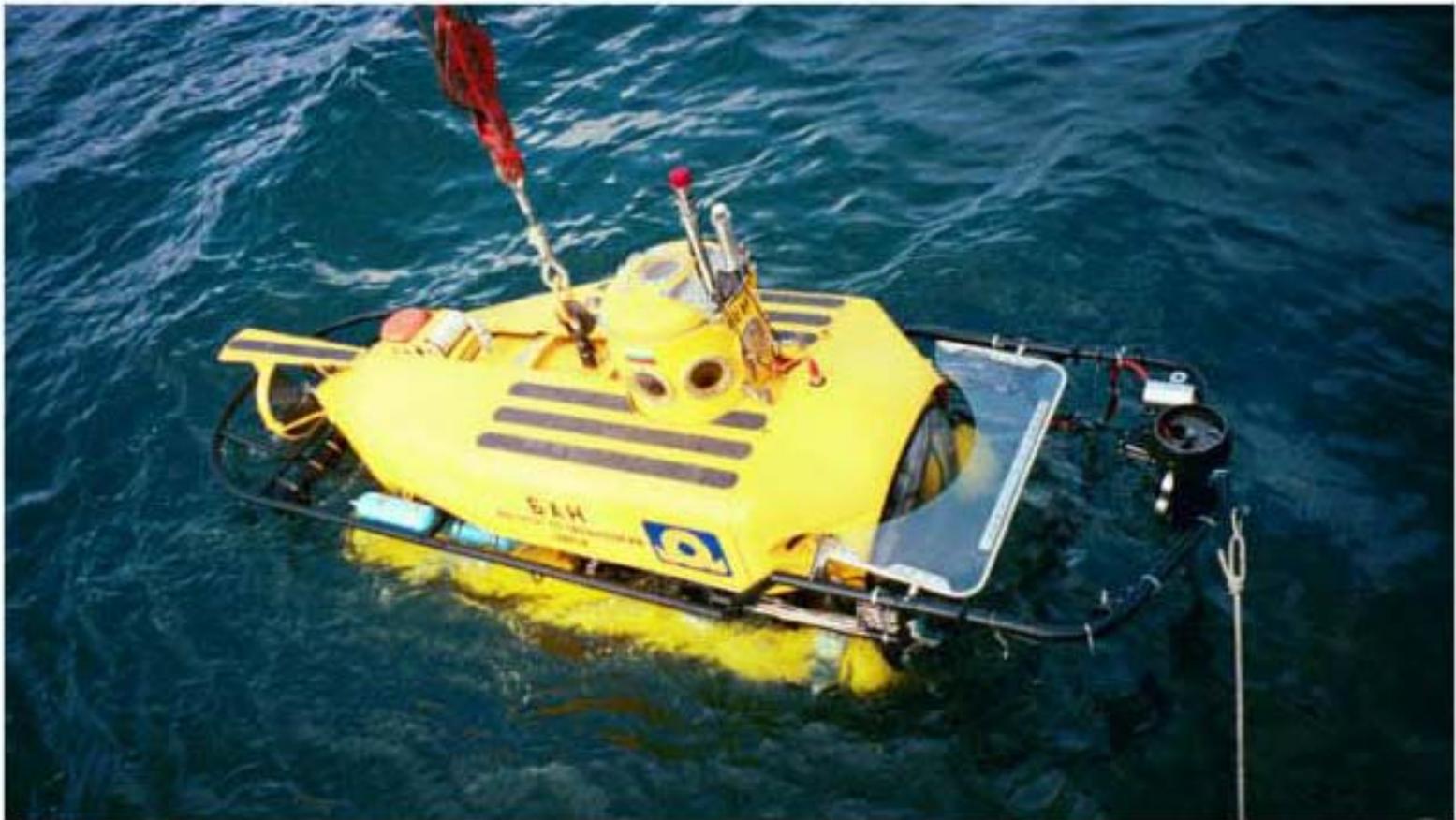




Bulgarian Academy of Sciences  
Research Vessel *Akademik*

# Black sea survey 2001 off Bulgaria





The 3-person submersible *PC-8B*, equipped with a scanning sonar, lights, an underwater video camera, and manipulator, is capable of diving to depths of 250 meters.



Distribution  
of  
**the sunken  
ships**  
off  
**BULGARIA**

**WHOI, MA, USA,**

**Department of Marine Chemistry of**

Aug/Sep 2006, under the

**Project of US NSF have chartered**

**R/V Akademik**

for 5 days ship time

took water samples

about

**DNA Analyses of water column**

in Black sea (shelf and deepwater part of the Black Sea basin).



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Thank you!