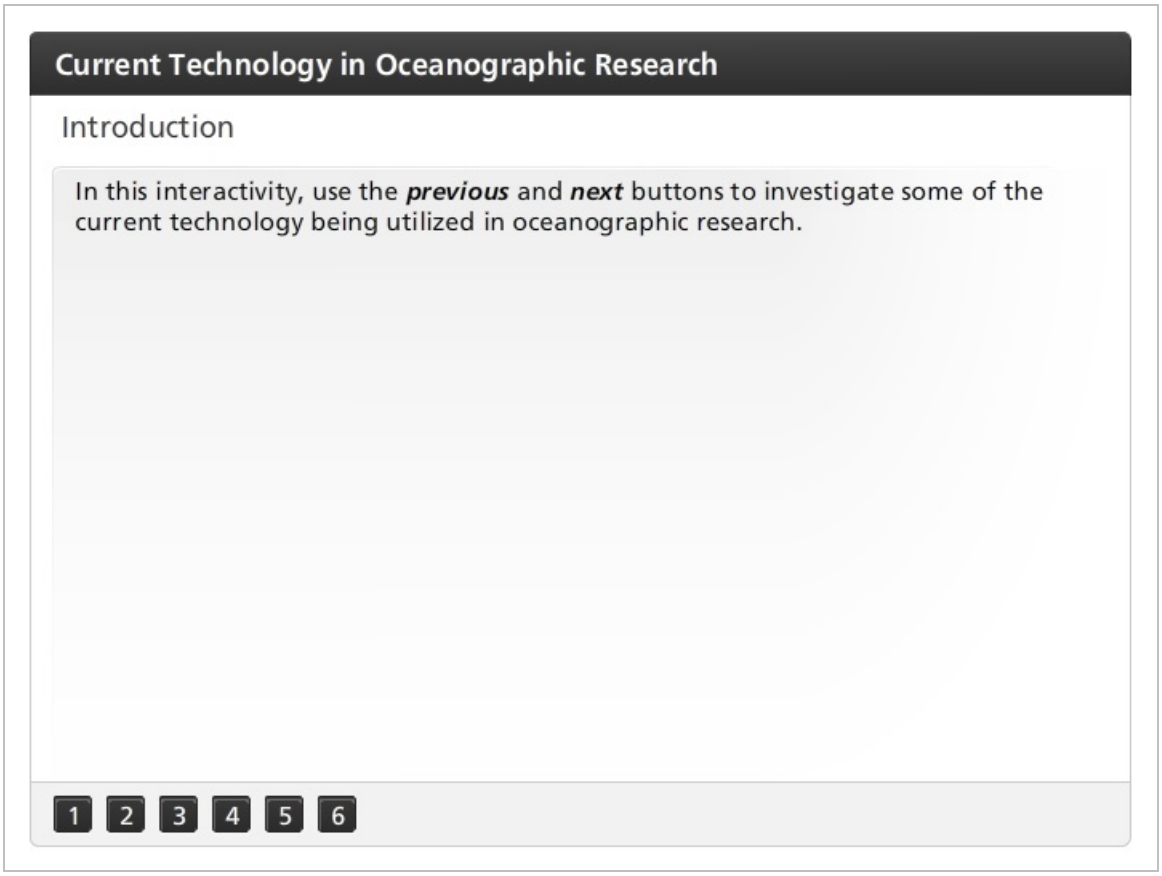
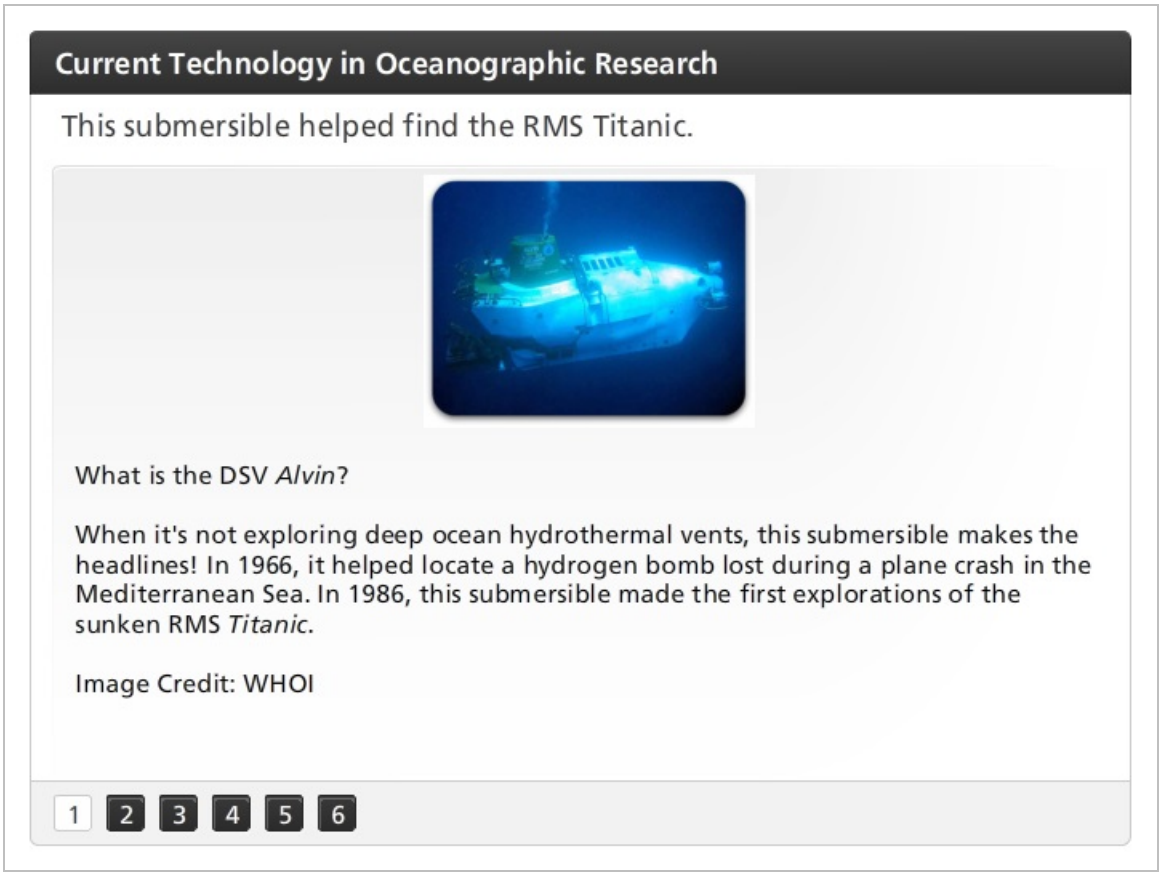
Module 1: An Introduction to the Science of Oceanography

Topic 3: Current Technology in Oceanographic Research Notes



In this interactivity, use the ***previous*** and ***next*** buttons to investigate some of the current technology being utilized in oceanographic research.



Question: This submersible helped find the RMS *Titanic*.

Answer: What is the DSV *Alvin*?

When it's not exploring deep ocean hydrothermal vents, this submersible makes the headlines! In 1966, it helped locate a hydrogen bomb lost during a plane crash in the Mediterranean Sea. In 1986, this submersible made the first explorations of the sunken RMS *Titanic*.

Image Credit: WHOI

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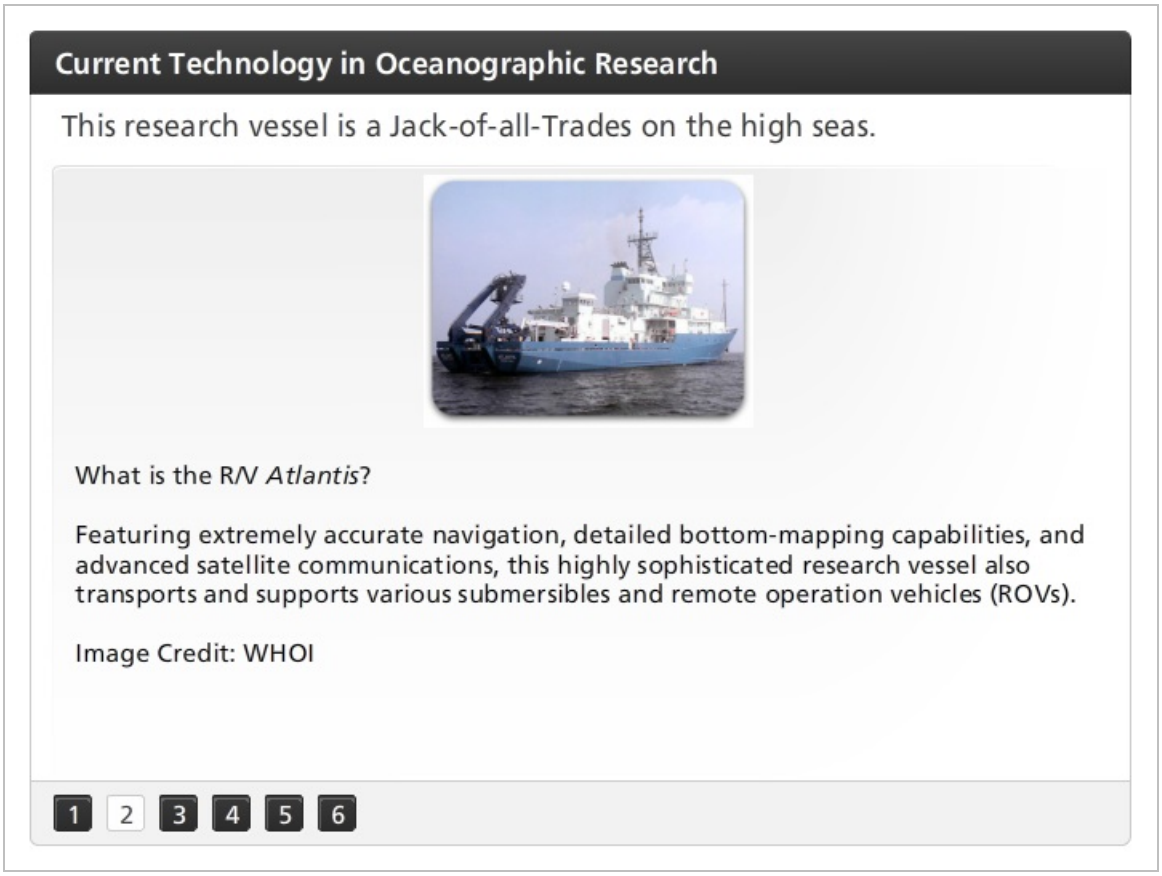
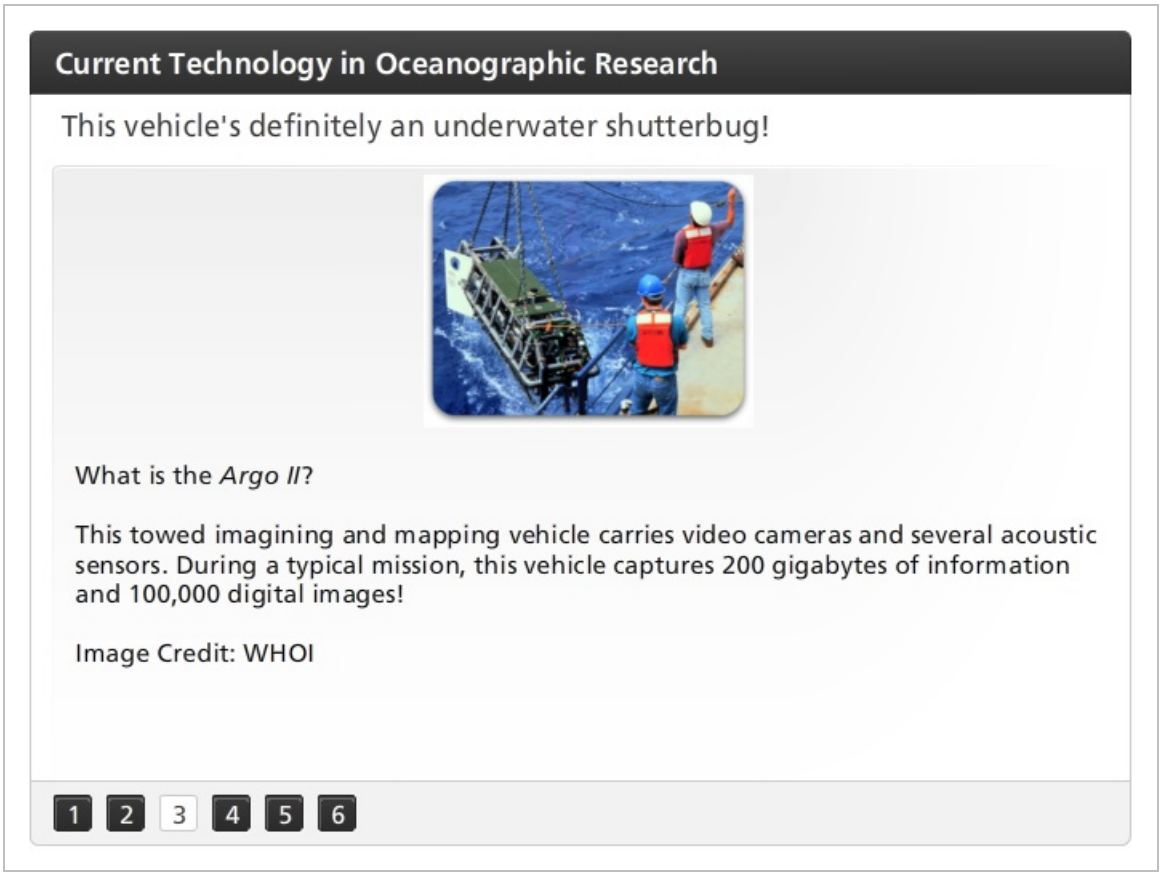


Question: This research vessel is a Jack-of-all-Trades on the high seas.

Answer: What is the R/V *Atlantis*?

Featuring extremely accurate navigation, detailed bottom-mapping capabilities, and advanced satellite communications, this highly sophisticated research vessel also transports and supports various submersibles and remote operation vehicles (ROVs).

Image Credit: WHOI

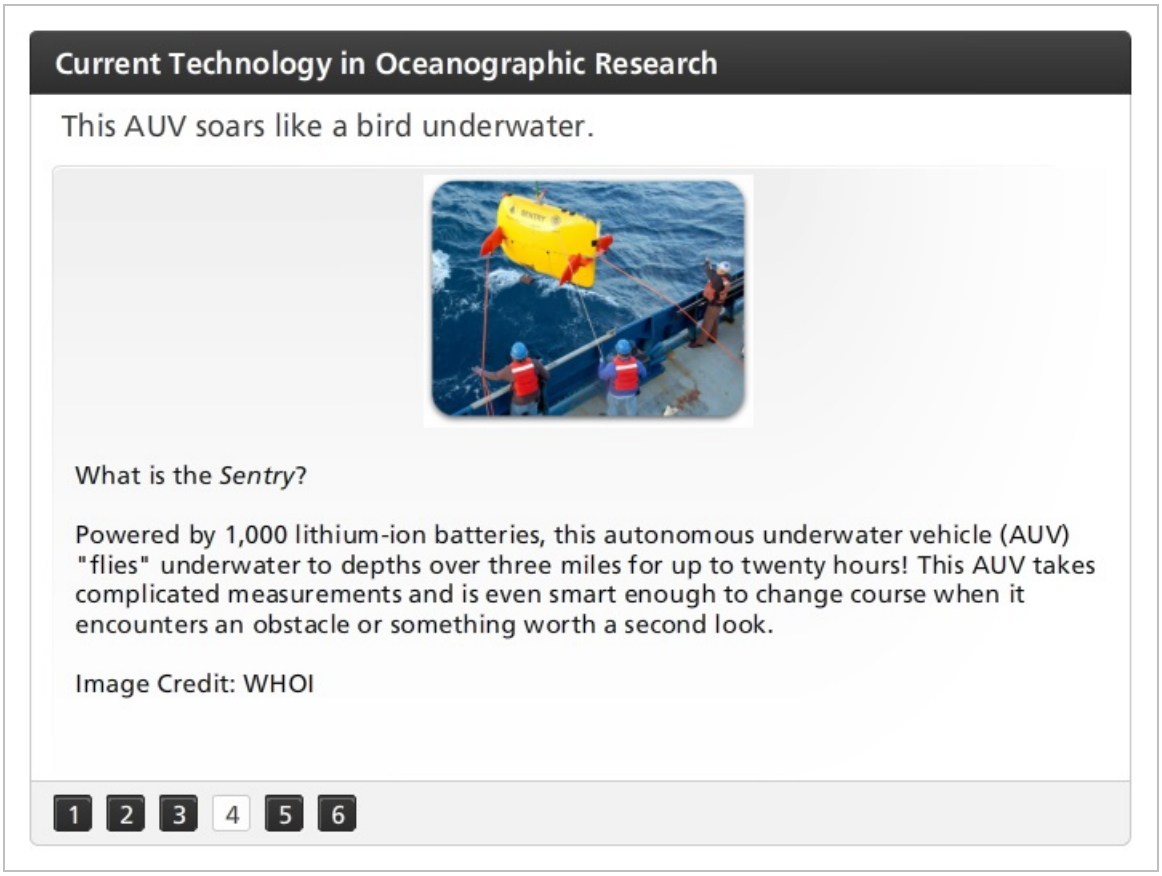


Question: This vehicle's definitely an underwater shutterbug!

Answer: What is the *Argo II*?

This towed imagining and mapping vehicle carries video cameras and several acoustic sensors. During a typical mission, this vehicle captures 200 gigabytes of information and 100,000 digital images!

Image Credit: WHOI

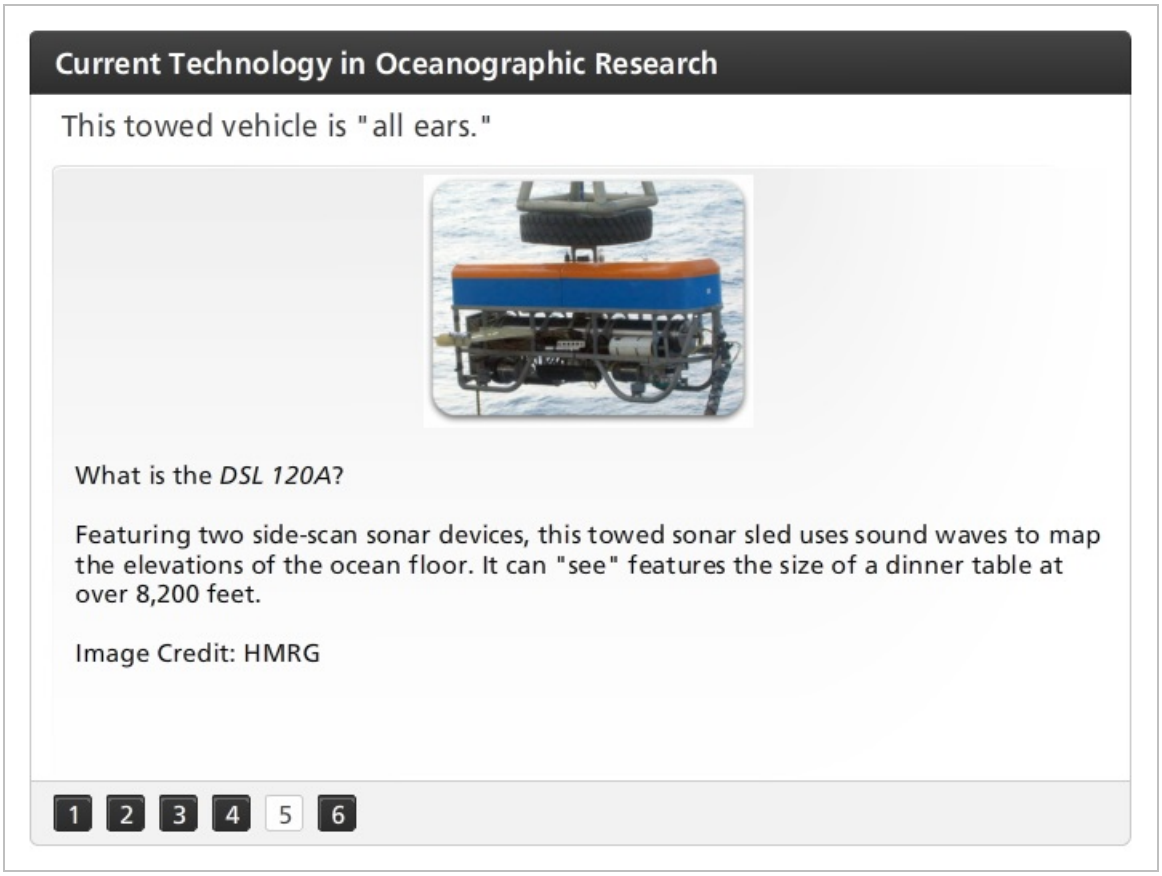


Question: This AUV soars like a bird underwater.

Answer: What is the *Sentry*?

Powered by 1,000 lithium-ion batteries, this autonomous underwater vehicle (AUV) "flies" underwater to depths over three miles for up to twenty hours! This AUV takes complicated measurements and is even smart enough to change course when it encounters an obstacle or something worth a second look.

Image Credit: WHOI

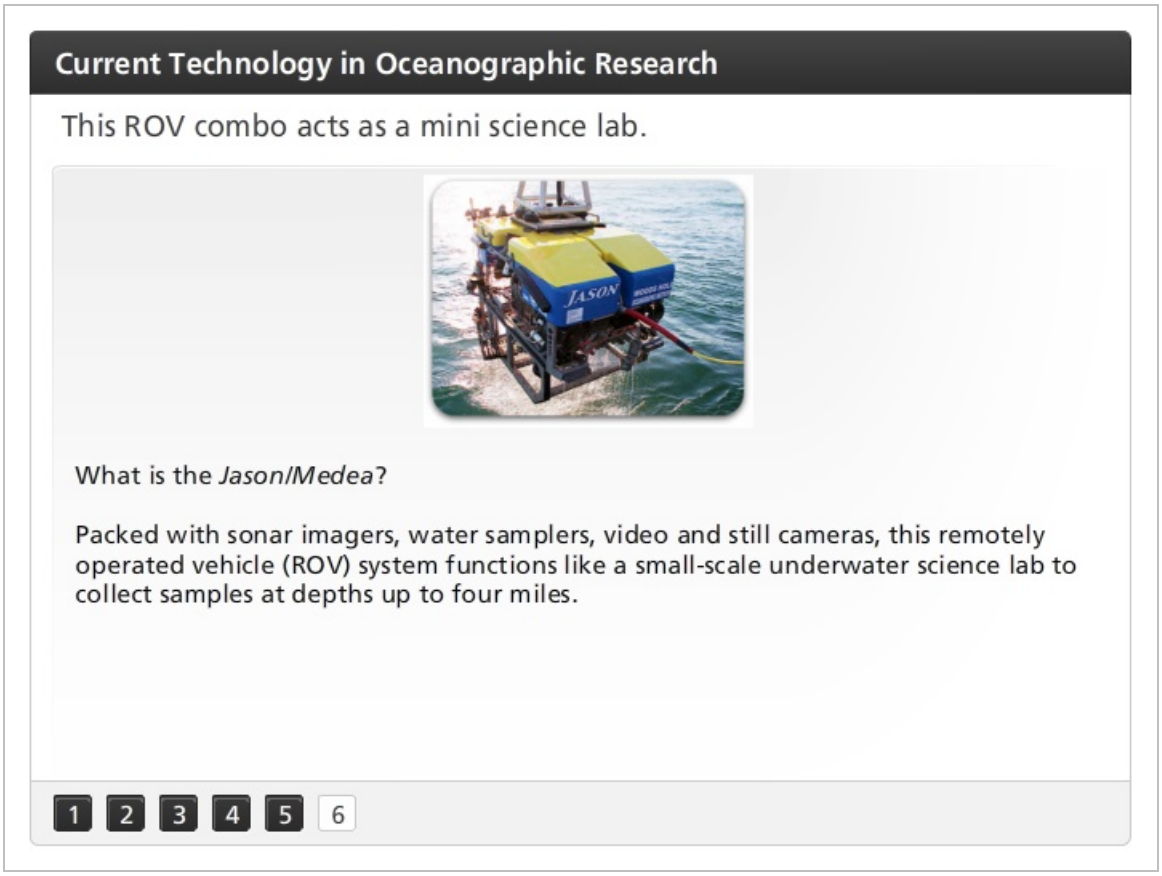


Question: This towed vehicle is "all ears."

Answer: What is the DSL *120A*?

Featuring two side-scan sonar devices, this towed sonar sled uses sound waves to map the elevations of the ocean floor. It can "see" features the size of a dinner table at over 8,200 feet.

Image Credit: HMRG



Question: This ROV combo acts as a mini science lab.

Answer: What is the *Jason/Medea*?

Packed with sonar imagers, water samplers, video and still cameras, this remotely operated vehicle (ROV) system functions like a small-scale underwater science lab to collect samples at depths up to four miles.