

FINDING THE TITANIC



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- September 1, 1985 a US-French expedition located the Titanic
 - 350 miles southeast of Newfoundland and 2.2 miles deep on the seafloor



FINDING THE TITANIC

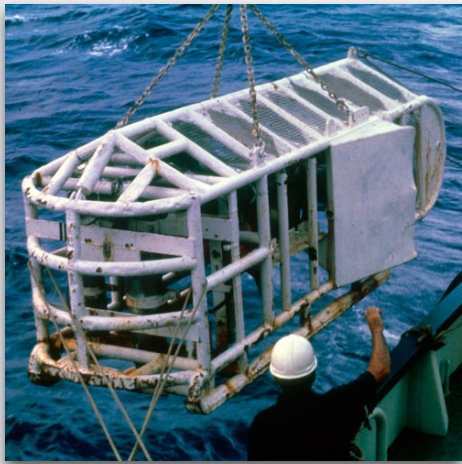
- Dr. Robert Ballard led the expedition with the help of French Oceanographer Jean-Louis Michel



Robert Ballard

FINDING THE TITANIC

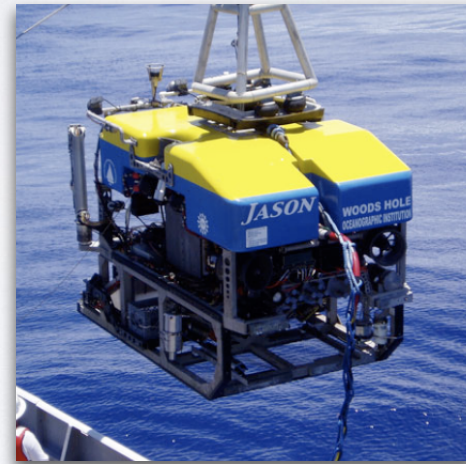
- Robert Ballard used a variety of tools and technology to help discover and explore the wreckage of the Titanic



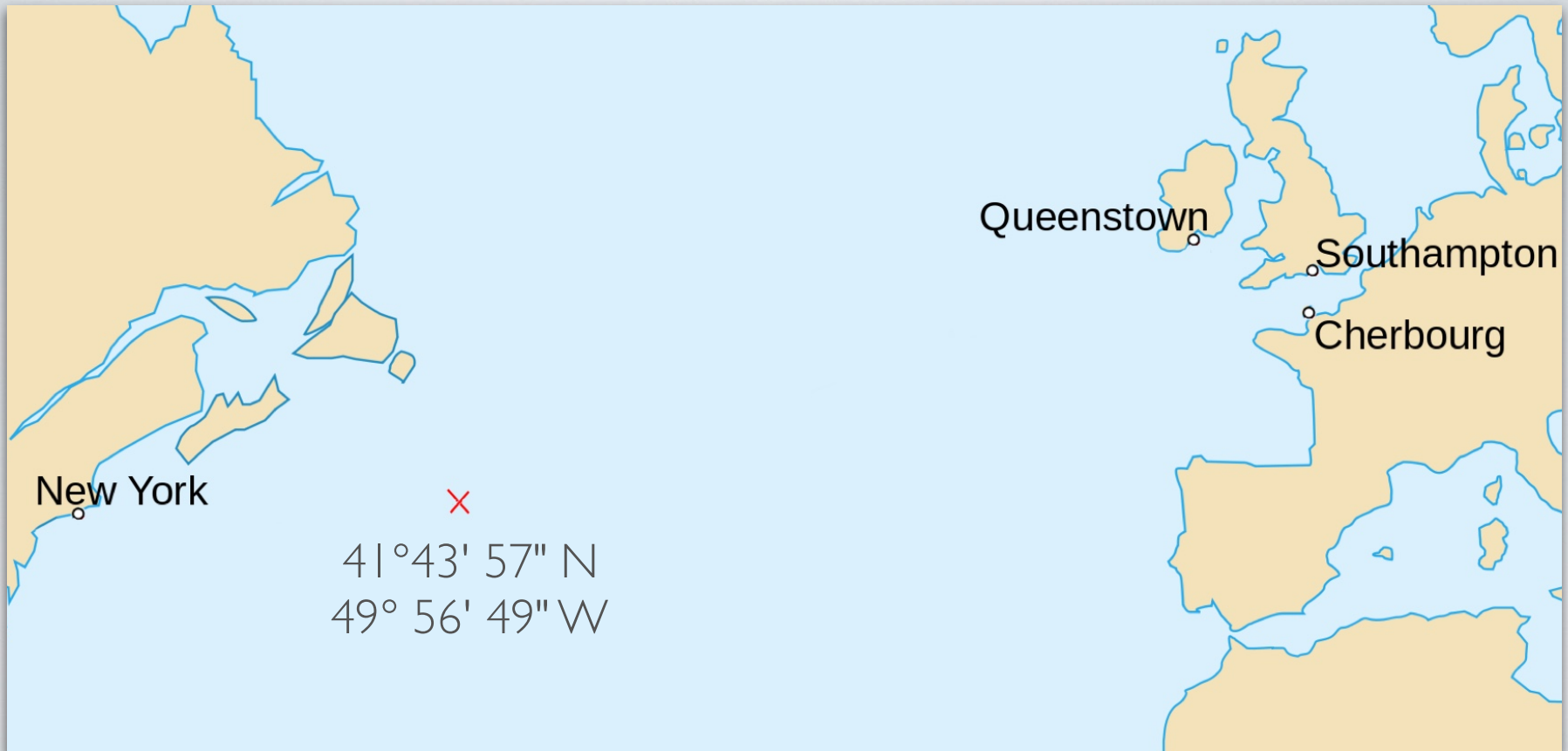
Argo



Alvin



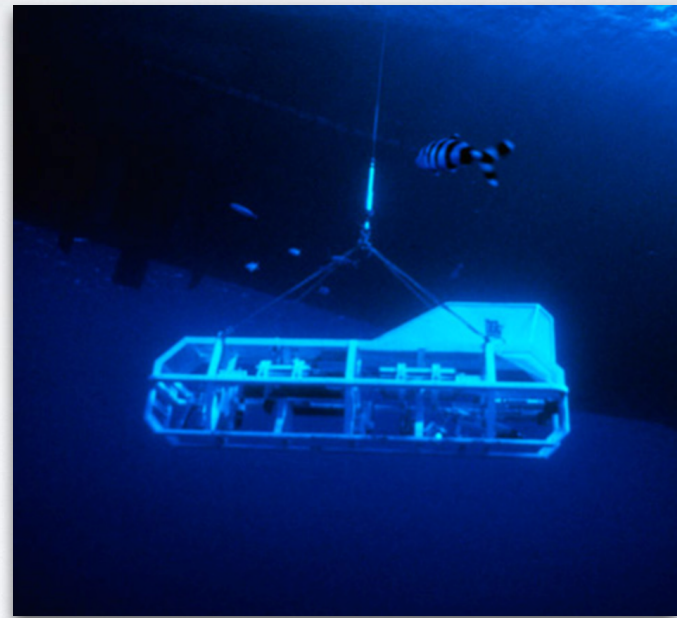
Jason



Titanic's Location

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- Technology Used:
 - Argo - unmanned deep-towed undersea sonar and video camera sled developed by Dr. Robert Ballard



Argo



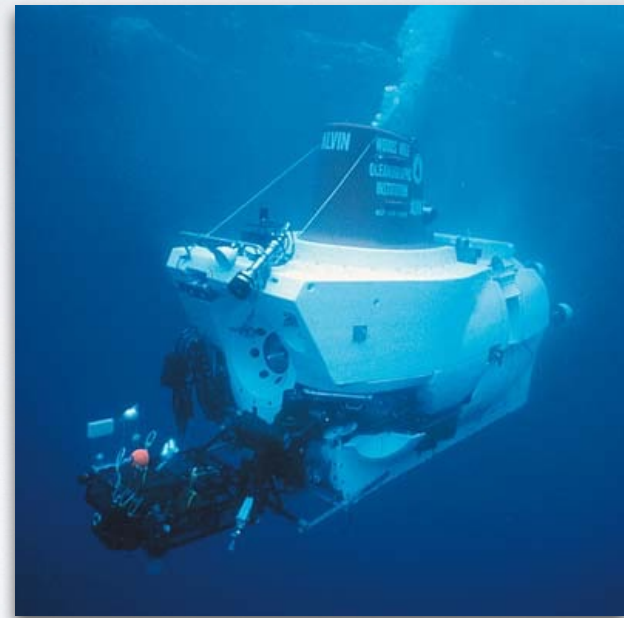
Argo



Sonar Image of the Titanic

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- Technology Used: (continued)
 - Alvin - manned deep ocean research submersible owned by the US Navy and operated by the Woods Hole Oceanographic Institute



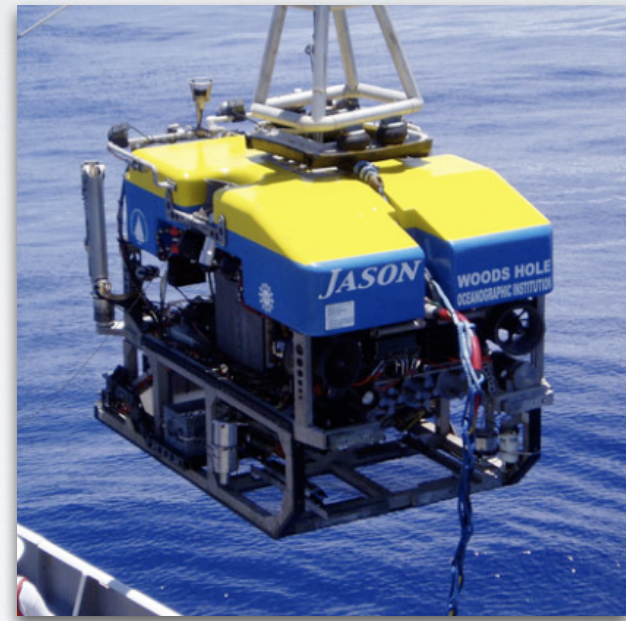
Alvin



Alvin

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- Technology Used: (continued)
 - Jason - a remote operated vehicle (ROV)



Jason

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- The video from Argo, Alvin, and Jason help provide important information about the actual reason for the sinking



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- New Evidence:
 - The actual holes created by the iceberg were not large enough to have caused the ship to sink in under three hours
 - The rivets holding the over lapping steel plates of the hull “popped” causing water to enter at every joint
 - A study found that the rivets were incorrectly made and under cold temperature caused the heads to “pop”



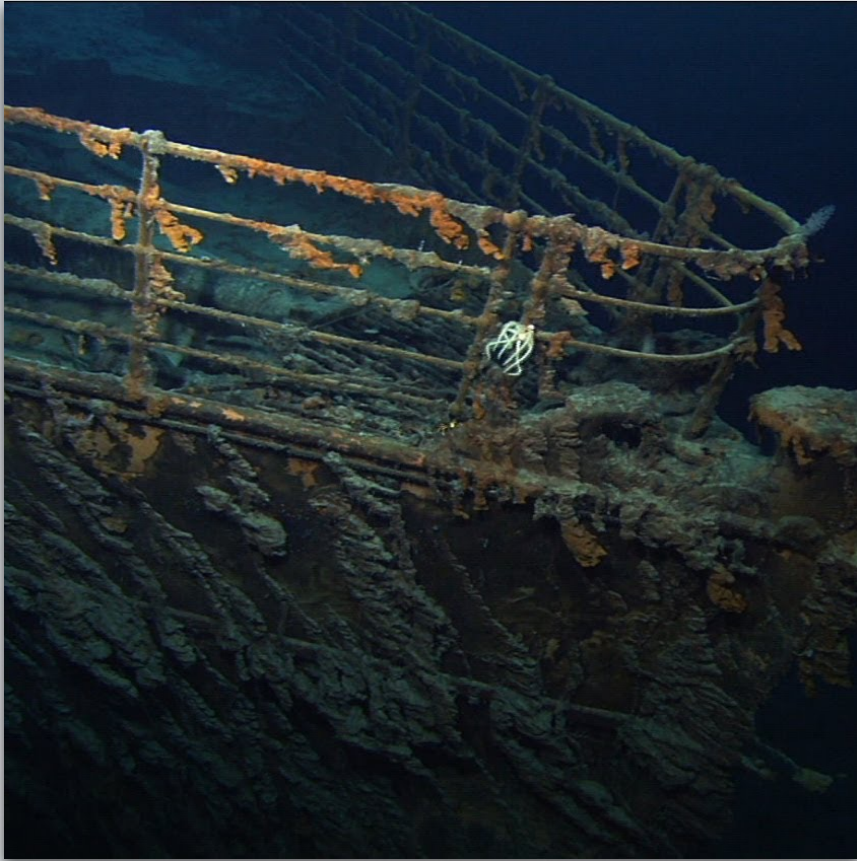
Rivets Holding Overlapping Steel Plates



Rivet Head "Popping" After Stress



Rivet Head



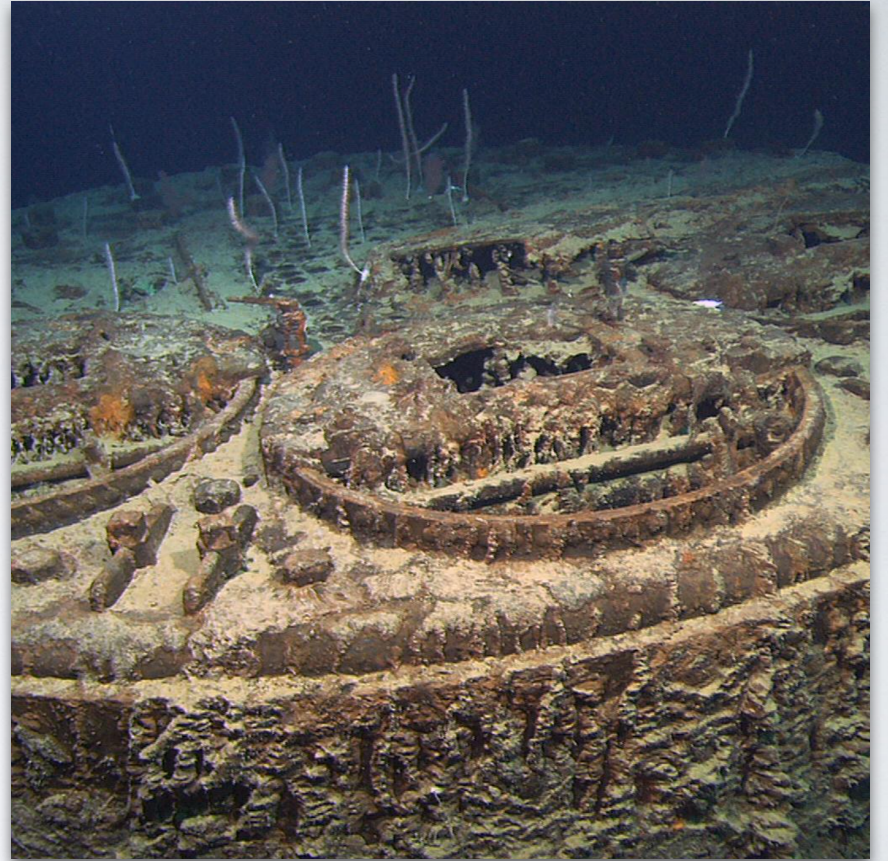
Bow



Exterior Cabin



Propeller



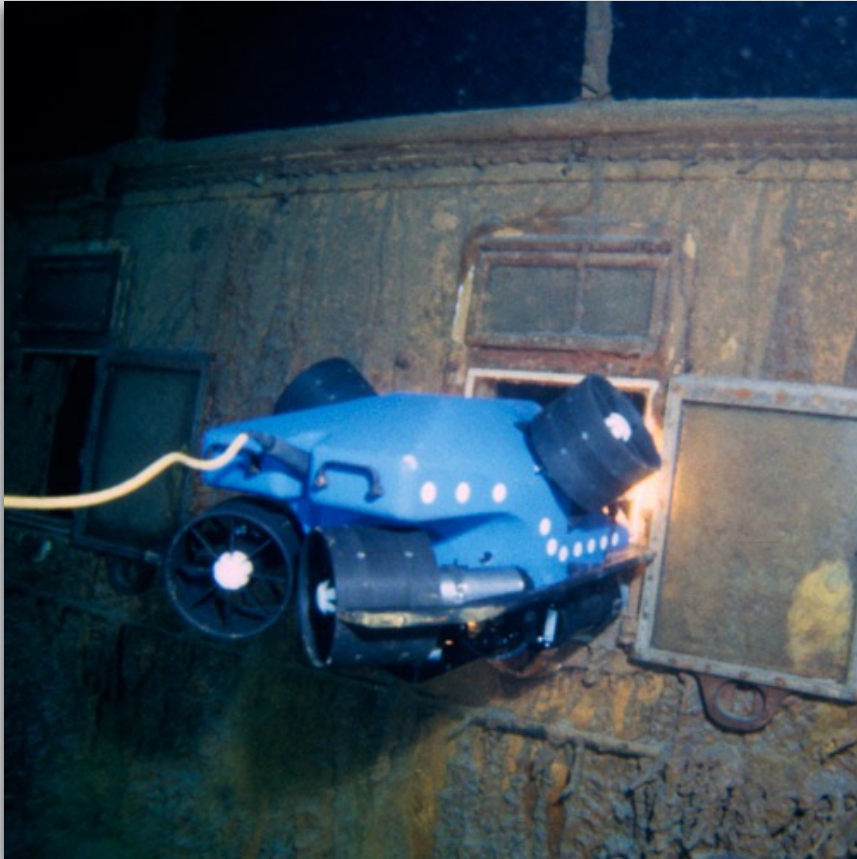
Boiler



Shoe



Dishes



Jason Jr. Exploring



Captain Smith's Tub

FINDING THE TITANIC

- What was learned:
 - Ocean liners must carry sufficient lifeboats to accommodate all passengers and crew
 - Bulkheads must be watertight
 - Development of an iceberg monitoring systems
 - Movement of sea lanes farther south in the winter months



Fairview Cemetery - Halifax, Nova Scotia