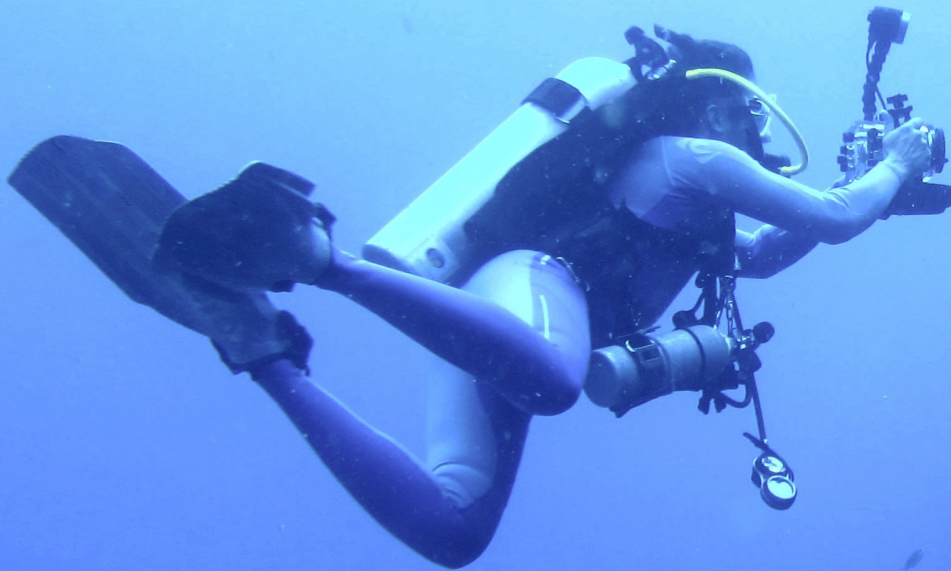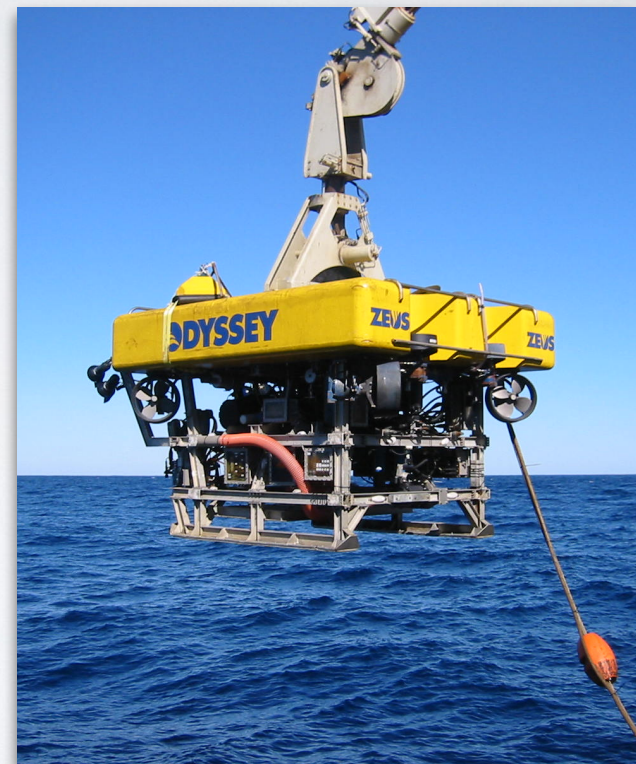# EXPLORING THE DEPTHS

EXPLORING THE DEPTHS

- Exploration on the ocean's surface soon paved way for exploration below the surface
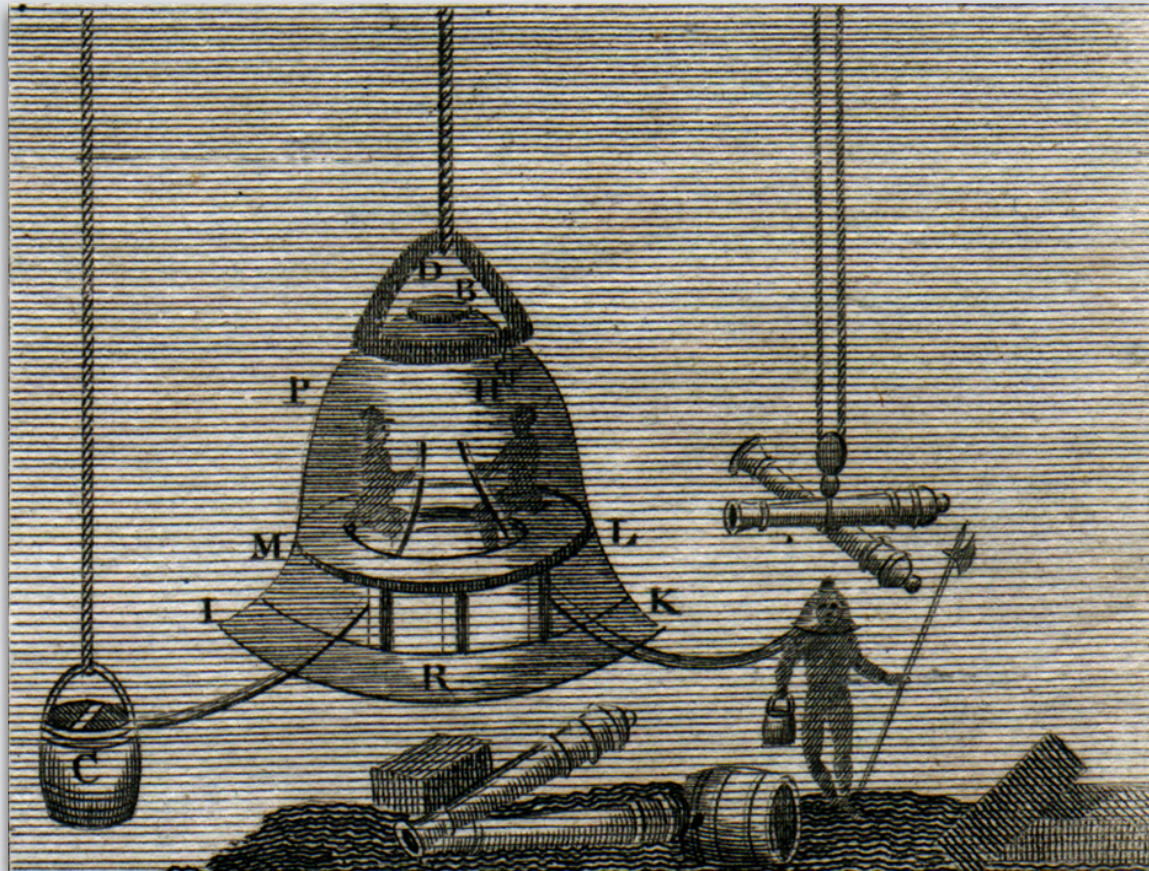
EXPLORING THE DEPTHS

- Early Exploration

  - Glass was developed and crude face masks allowing one to see under water (2500 BC)

  - Persian divers would recover treasures from their own ships after being sunk (400 BC)

EXPLORING THE DEPTHS

- Early Exploration (continued)

  - Edward Haley developed the diving chamber which held larger amounts of air in a reserve barrel (1700s)

Halley's Diving Bell

EXPLORING THE DEPTHS

- Early Exploration

  - The diving suit, which was made of watertight canvas and a heavy metal helmet, had an air supply that was pumped from the surface through a tube to supply oxygen (1850 - 1950)
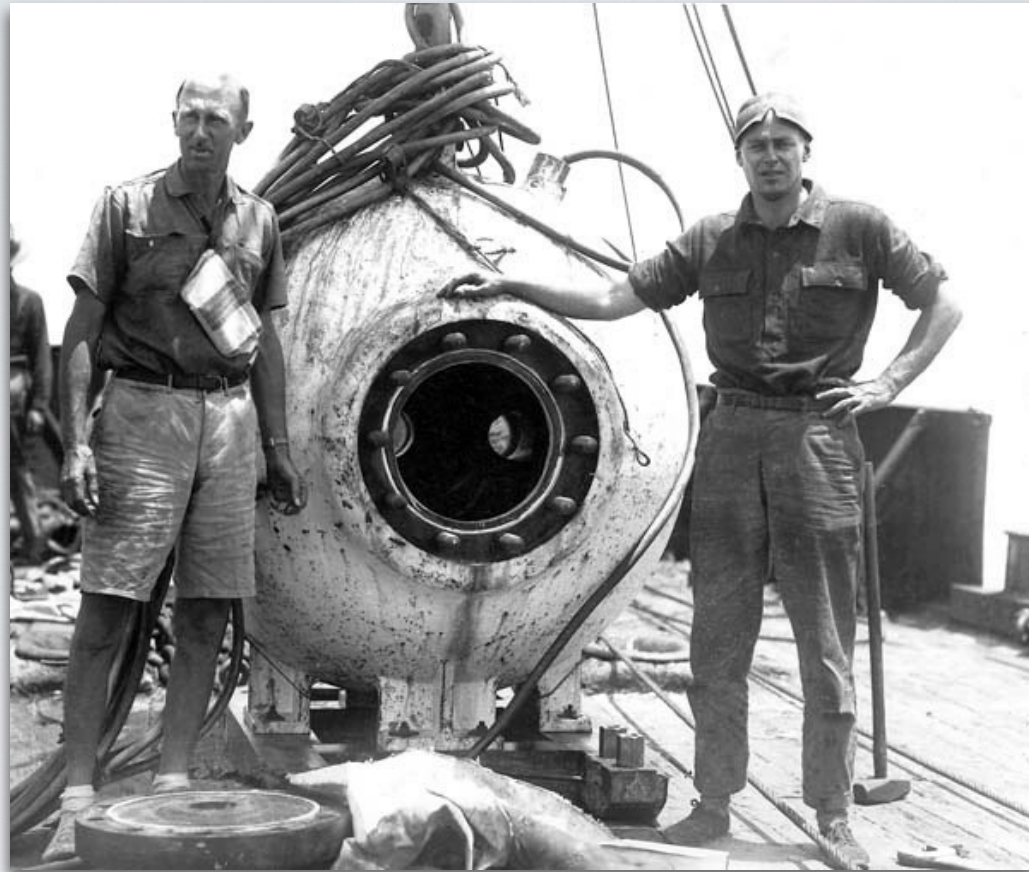
The Diving Suit

EXPLORING THE DEPTHS

- Modern Exploration (continued)

  - Bathysphere was developed by William Beebe and consisted of a steel hulled chamber attached to a ship by a steel cable

Beebe's Bathysphere

Beebe's Bathysphere

EXPLORING THE DEPTHS

- Modern Exploration (continued)

  - Self Contained Underwater Breathing Apparatus (SCUBA) was invented by Jacques Cousteau and allowed for dives of up to 150 meters (1943)
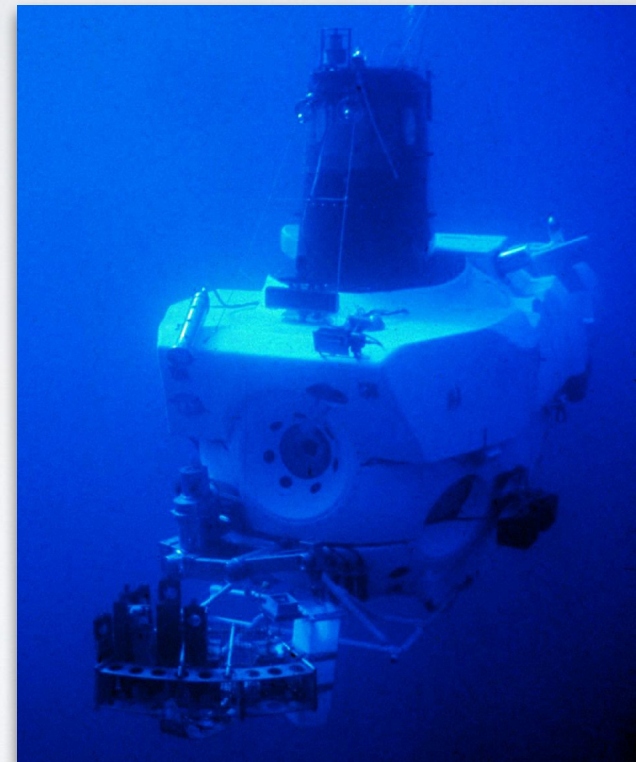
SCUBA

EXPLORING THE DEPTHS

- Modern Exploration (continued)

  - Alvin is an untethered and manned submersible that was developed at the Woods Hole Oceanographic Institute

    - Alvin was used to find the Titanic and is still being used to explore the ocean bottom
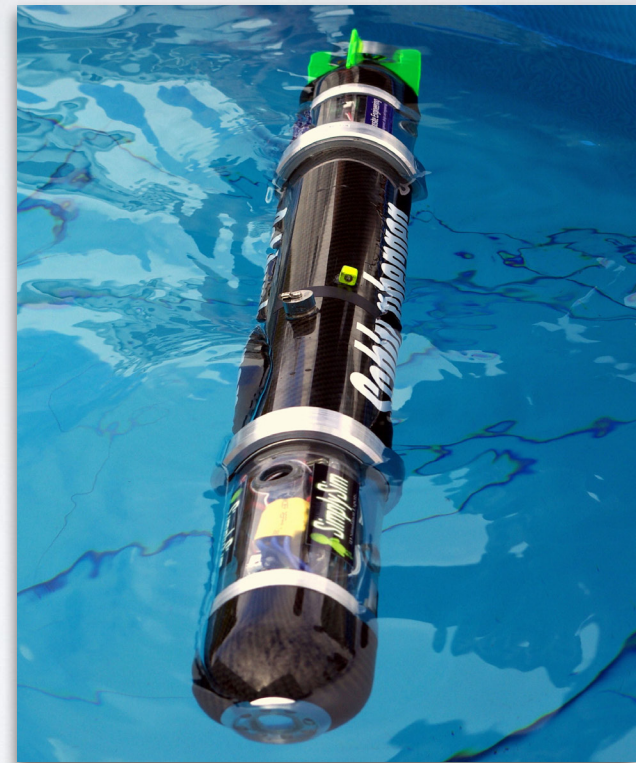
Alvin

EXPLORING THE DEPTHS

- Modern Exploration (continued)

  - Remote operated vehicle (ROV) are used to explore deep ocean depths that are unsafe for humans

    - Jason was used to enter and explore Titanic's interior and discover new forms of life near the Galapagos Islands
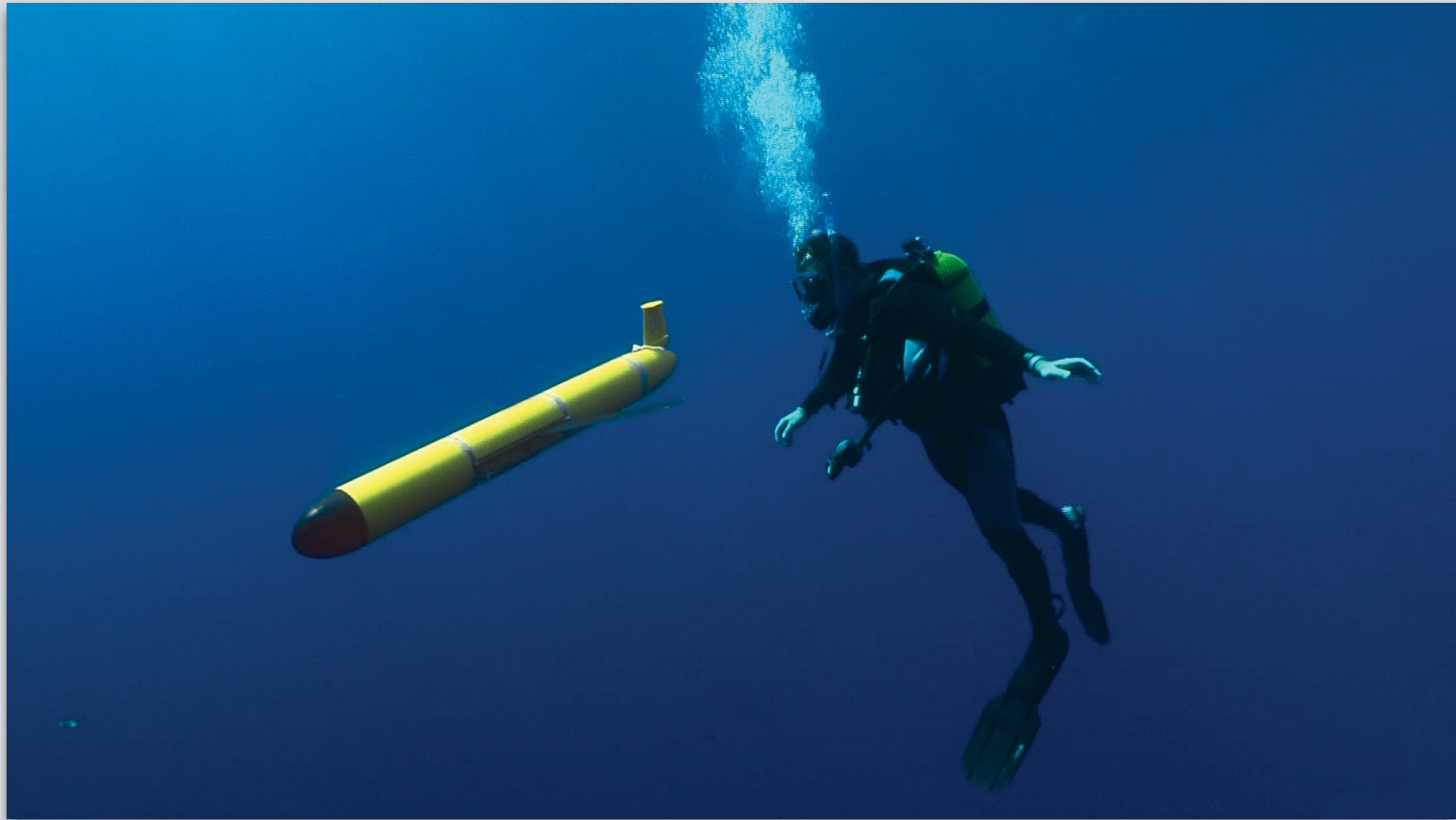
EXPLORING THE DEPTHS

- Modern Exploration (continued)

  - Autonomous underwater vehicles (AUV) are unmanned and untethered that are sent out for months to gather data
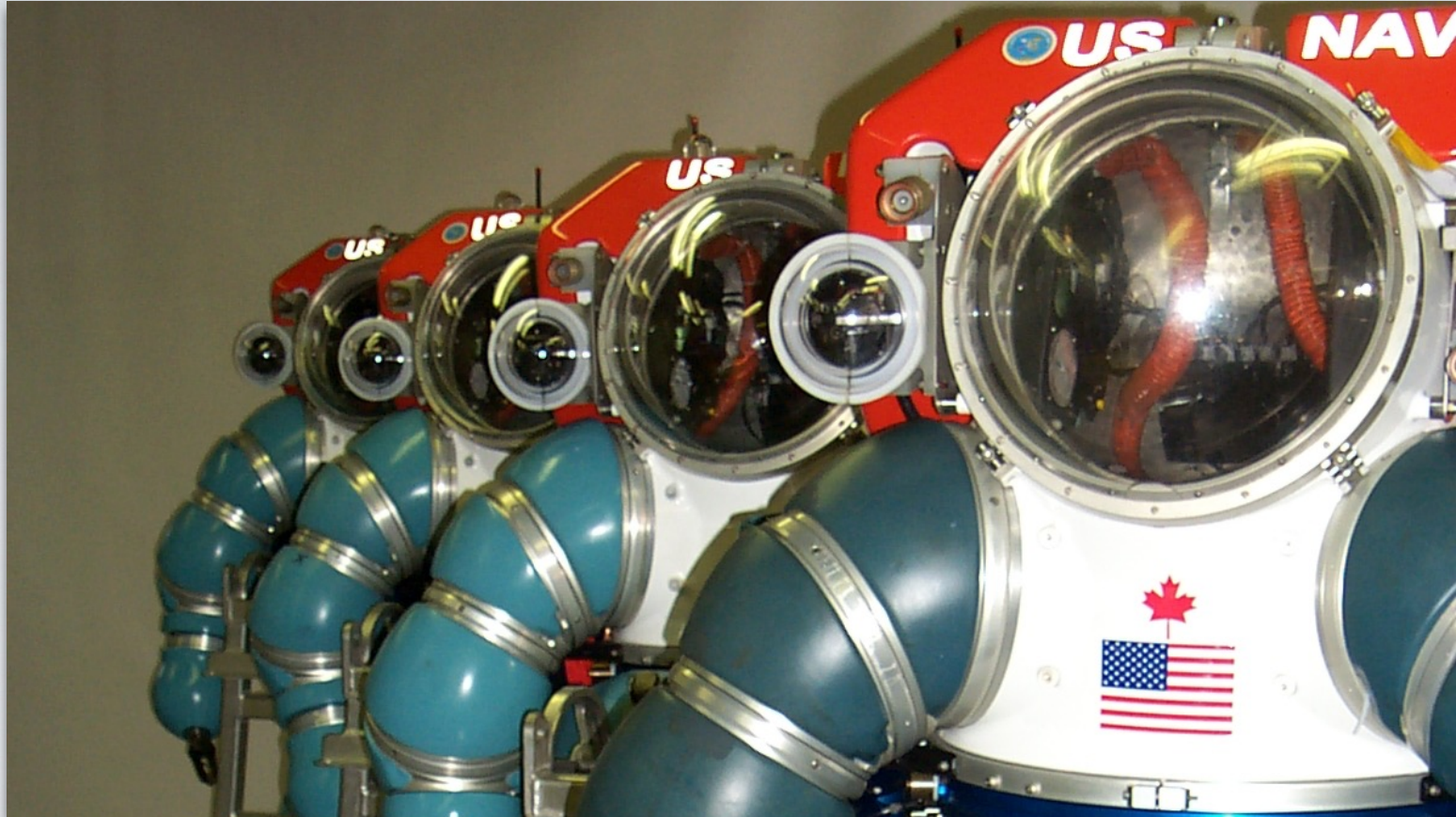
Autonomous Underwater Vehicles (AUV)

EXPLORING THE DEPTHS

- Modern Exploration (continued)

  - The Jim Suit is used in dives of up to 600 meters to extended the working range of undersea exploration and work

    - Constructed of carbon fiber and reinforced plastic

Jim Suit

Robert Ballard