

Remotely Operated Vehicles (ROVs)

How do we explore the ocean without actually being *in* it? We have underwater robots do it for us! They are called ROVs, which stands for Remotely Operated Vehicles. This means that we can control them from a ship, in a similar way that you would play a video game. We can steer them, have them take videos or photos of the ocean, and even have them capture a sample of an ocean organism with their robotic arms. If you like to play video games, you might want to think about a career as a ROV operator.

An ROV operator controls the ROV from a system on board the ship. Using a joystick, a camera control, and a video monitor, the operator can move the ROV around to explore its surroundings and can “see” what the ROV is “seeing.”

ROVs range in size from that of a small computer to a small truck. The larger ones are very heavy and need other equipment to put them over the side of a ship. They have a cable that connects them to the ship at all times. Exploring the ocean with ROVs is safer and easier than using a submersible because no one gets wet!

What other reasons are there to use a ROV? It can be helpful for safety reasons. For instance, if a submersible becomes caught on fishing gear during a dive an ROV can “see” the situation and help scientists decide the best way to free the submersible, or cut it loose if needed. It is also easier to use a ROV if the weather is too rough for a submersible to work in.

