

ALVIN Submersible

Alvin is a deep-sea submersible or in other words, a vessel that can work underwater so we can study the ocean. It got its name after a man who helped design it, Allyn Vine. NOAA uses the submersible, which is owned and operated by Woods Hole Oceanographic Institute, for deep sea research investigations. Alvin can hold three people in it: two scientists and a pilot to operate it. When it was first developed in 1964, it could only dive to 35 feet. Now it can dive almost three miles down into the depths!



What is it like to dive in Alvin? A dive usually lasts up to six hours, so passengers pack a lunch and some snacks for their fantastic journey. It can be very cold in the submersible, so scientists usually dress in warm clothes for their journey, even though they don't get wet. In an emergency, Alvin could stay under water for up to three days, which would likely give rescuers time to get the passengers to safety.

Alvin has two machine-arms which can lift very heavy objects, or can be used to take samples of sea floor sediments or organisms. It also has three small portholes so its passengers can observe their deep-sea surroundings. Alvin's top speed is about two miles per hour. You could actually walk or run much faster than Alvin can go through the water.

Alvin has had an exciting "life." In the 1960's, it broke from the cables that raise and lower it into the water, and it sank almost a mile to the sea floor! Its pilot had a few minor injuries, but he got out of the sub before it sank, so no one was in it when it came to rest on the seafloor. It stayed there for almost a year before it could be recovered. Because the deep sea is cold and doesn't have much oxygen, the lunches that had been left on board were soggy but you could have still eaten them!

Alvin has its own ship that it stays on when it is not diving. It is lifted off the deck of the ship by a big crane, and plopped gently into the water. When the dive is over, the sub comes to the surface near the ship, and a diver swims out to it to attach a cable to Alvin. The cable is hauled in by the



crane and Alvin is put safely back onto the deck of the ship.