

National Park Service

The National Park Service's Submerged Resources Center (SRC) has explored several historic underwater wrecks in U.S. waterways with the VideoRay ROV. One of the VideoRay's first wreck dives was a 2002 reconnaissance mission in Nevada's Lake Mead. The three-day mission explored an Army Air Force B-29 bomber that crashed into the lake in 1948. Because the crew was ordered by superiors not to discuss the events that led up to the crash, the circumstances surrounding the sunken bomber – including its location – remained a mystery for more than 50 years. Once the SRC learned its location, they immediately began to seek answers about the 1948 crash. Because the wreck lies at a depth that is difficult for sustained dives, the SRC contracted a VideoRay to gather video footage from inside and around the aircraft. The VideoRay collected data that helped the Park Service come to more definitive conclusions about the mysterious crash and the sunken aircraft's present-day condition.

In addition to the Lake Mead exploration, the Park Service also utilized a VideoRay ROV to explore the wreck of the USS *Arizona*, famously sunk during the attack on Pearl Harbor in 1941. VideoRay first explored the USS *Arizona* in 2004 as part of an investigation into the ship's structural integrity. In 2009 the Pro 4 became the first submersible robot to image the battleship's interior, performing a non-invasive, condition assessment of accessible cabins while maintaining the sanctity of the ship's classification as a "war grave". Using cameras designed by Woods Hole Oceanographic Institution (WHOI), the VideoRay filmed 3D footage for use at the USS *Arizona* Memorial Museum. The 3D-HD imagery creates a uniquely immersive experience for visitors to the exhibit, allowing them to explore the wreck firsthand while remaining on dry land.

"The VideoRay has proven itself as an invaluable tool for allowing the Park Service to image and access submerged resources in specific areas," says Brett Seymour, a photographer for the SRC who was part of the USS *Arizona* exploration. The data collected by the VideoRay ROV – including visual documentation, and details about the wreck's location, condition, and environmental factors – can help the Park Service make management decisions regarding the wreckage, such as the level of protection or intervention necessary to preserve the sunken relics of American history.

