

What CIA Learned From Soviet's Sub

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Washington

When the Central Intelligence Agency recovered part of a sunken Soviet submarine in 1974, it retrieved a detailed description of how all Soviet submarines communicate to the homeland.

So much of the communications system of the Soviet submarine was recovered from the floor of the Pacific Ocean by the CIA that U.S. Navy experts were able to piece together how that system worked and to monitor communications between Soviet submarines at sea in the Atlantic and Pacific Oceans and their home bases in the Soviet Union.

"It was a real bonanza," one source close to the CIA said. "The whole salvage operation was worth every penny we spent on it."

The salvage operation was conducted in July and August, 1974, by a \$250 million ship called the *Glomar Explorer*, which had been built for the CIA by the late Howard Hughes. The vessel raised from a depth of 16,000 feet about one-third of a Soviet submarine that suffered an underwater explosion and sank with 86 crew members aboard almost nine years ago.

There have been conflicting news stories about what parts of the Soviet submarine were recovered and what they were worth to intelligence experts since the story first surfaced 21 months ago.

Sources have now told the *Washington Post* that nuclear warheads were indeed taken by the *Glomar Explorer* from the recovered part of the Soviet submarine. These sources have said the warheads come from the surface-to-surface missiles, not torpedoes.

This means that the one-third of the submarine the *Glomar* recovered was the middle section, which included the "sail" or conning tower that had been built to twice-conventional size to hold three missiles fitted with atomic warheads.

It also means that the *Glomar* recovered the submarine's communications gear intact, because the gear was installed inside the conning tower. Its antennas appear in pictures taken by the U.S. Navy and even in photographs released by the Soviets showing antennas sticking out from the center of the conning tower.

Just how Soviet submarines communicated with the homeland is still unclear, but almost certainly they did it the same way U.S. *Polaris* submarines did it for years. They stayed submerged and floated to the surface an electronics buoy that carried radio signals back and forth between the submerged ships and the naval bases on land.

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The U.S. long ago switched to a satellite system in which submarines rise to within 20 feet of the surface and communicate via satellites that are able to pierce the first 20 feet of ocean water with a powerful radio beam. The Soviets are understood to have adopted such a system within the last six months.