

U.S. Navy Photo

Soviet conventionally-powered submarine of Golf class.

## CIA Attempted to Raise Russian Sub in Pieces

By Thomas O'Toole  
Washington Post Staff Writer

The Soviet submarine that sank in the Pacific Ocean seven years ago was found to be in pieces on the ocean floor, which led the Central Intelligence Agency to attempt to raise the sunken boat piece by piece last summer.

The CIA photographed the lost submarine as long as five years ago, using a diving bell fitted with underwater cameras and spotlights and an oceanographic ship named the Glomar Challenger, that is owned and operated by billionaire Howard Hughes, sources said.

The photographs showed that the submarine was in pieces at a depth of 16,000 feet, which made it possible for a salvage attempt to bring up the entire boat.

The lost submarine was not a nuclear-powered vessel, as was reported yesterday by The New York Times and The Washington Post. It was a diesel-powered submarine of the Golf class, 320 feet long and displacing 2,800 tons, according to reliable sources.

This class submarine, designated Golf by NATO officers, is 17 years old and has few secrets of interest to the CIA, but the undersea craft carried three ballistic missiles with nuclear warheads and a code machine that unscrambled the Soviet Union's secret naval messages.

News reports of the salvage operation were met by silence from the

White House and the Kremlin. President Ford had "no comment" on the entire report and not a word about the incident came from Moscow yesterday.

Intelligence sources said the prime purpose of attempting to raise the sunken submarine was to get at the code machine, with the warheads a close second on the priority list. There was almost no interest in the submarine itself, which presented little strategic threat to the United States because of its limited range.

The CIA raised one-third of the submarine, using a deep-sea mining vessel built at least partly for the purpose of salvaging the submarine by Howard Hughes at a cost of \$250 million. Just what was inside the salvaged part of the submarine is a secret, with some sources implying that at least one nuclear warhead may have been salvaged in the operation.

Whatever the salvaged piece of the submarine contained, recovering it took the Glomar Explorer the better part of two months' work at sea. The operation was carried out about 750 miles northwest of the Hawaiian island of Oahu in July and August when the Pacific is extremely calm.

The operation was code-named Project Jennifer, often referred to in the CIA simply as "Project J." It was begun early in 1970 with the full support of President Nixon. In fact, Nixon was

See SUBMARINE, A14, Col. 1

## SUBMARINE, From A1

On several occasions as the Glomar Explorer was being built in a shipyard outside Philadelphia that the salvage job had excellent chances of success, sources say.

When the Glomar Explorer was able to raise a 100-foot section of the submarine, the CIA wanted the Explorer to stay on station in the Pacific last summer and attempt to raise the rest. But the weather began to worsen, making continued recovery operations almost impossible.

One report had it that the section of the sub that was raised included part of the "ball" or conning tower, where the three nuclear warheads were located. This would suggest that at least one of the warheads had been salvaged, but this report could not be confirmed.

A second attempt at recovery was to be made this coming summer, an attempt that now will probably never be made. One reason the CIA may choose to abandon Project J is fear of political reaction from the Soviet Union, while a second may be pressure from within the United States, particularly the Navy and the State Department.

One source said that the State Department and the Navy were privately pleased with the news that Project J

had been made public, if only to avoid repetition of the U-2 affair in 1960 that troubled U.S.-Soviet relations for years.

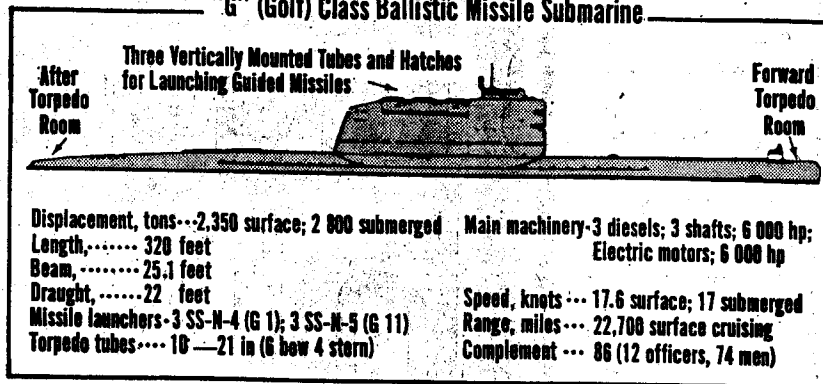
"The trouble with the U-2 was that we got greedy and made too many overflights of the Soviet Union," this source said. "The trouble with Project J is that we might keep going back to that submarine, making one too many attempts to lift the boat back up."

The same source pointed out that the Law of the Sea Conference is being held this week in Geneva, wondering about the timing of the news break. The source said that many maritime lawyers had questioned the legality of the CIA's attempt to raise another nation's warship, noting that a continued attempt might do grave harm to U.S. legal positions on oceanic issues.

The way sources pieced together the events that led up to last summer's salvage operation strongly suggests that Project J had the highest secrecy classification in the United States, even though thousands of people had to be brought in on some of its details.

One highly placed official in Washington said that Project J was so secret that he was denied access to it, the only such project inside the government he was not cleared to know. Another official with top-secret clearance said he re-

### "G" (Golf) Class Ballistic Missile Submarine



The Washington Post

#### Data on Soviet submarines from "Jane's Fighting Ships, 1974-1975."

ceived a letter from CIA Director William E. Colby, requesting that he ask no questions about Project J.

The Soviet submarine that triggered Project J sank between Midway and Hawaii in 1968, with about 86 men aboard. The circumstances of its sinking are unknown, but apparently it sank so fast that the Soviets themselves did not know where it came to rest.

Sometime in 1970, it is believed, the Howard Hughes-owned ship Glomar Challenger sailed to the site of the sinking and sent down a diving bell to photograph the wreckage.

The photographs apparently

showed that the submarine had broken into four or five pieces, scattered over the ocean floor at a depth of 16,000 feet. The submarine apparently filled up fast with water and sank like a stone to a depth just short of 1,000 feet, where it was crushed by outside pressure as if a giant hand had squeezed it.

At the time it was crushed, all the air inside the submarine was forced out. When this happened, the lungs of the crew members were crushed, forcing the air out of them. The interior of the sub became superheated from the terrible pressure.

With the air gone from the submarine, the boat lost all its buoyancy and continued to plummet. It may have struck the ocean floor at a speed of 50 miles an hour, almost surely the reason the submarine was found to be in pieces.

The fact that the submarine was in pieces made a salvage operation possible. The complete submarine weighing 2,800 tons, would have been almost impossible to lift from a depth of 16,000 feet.

It is not known whether the CIA came to Howard Hughes to build the salvage vessel or whether Hughes had already begun the design of the 36,000-

ton Glomar Explorer to mine the seabed. In any case, the keel was laid for the \$250 million vessel in 1971 at the Sun Shipbuilding and Drydock Co. near Philadelphia.

The ship went on its first sea trials late in 1973, with reports that it actually mined the sea floor off the coast of Nicaragua for manganese. There was a report that the Glomar Explorer attempted to raise at least one lost American nuclear submarine, though sources this week denied that this was the case.

Two U.S. nuclear submarines have been lost in the Atlantic, the Thresher off Cape Cod in 1963 and the Scorpion off the Azores in 1968.

The Glomar Explorer is unlike any ship afloat. It is more than 600 feet long, 115 feet wide and has a well scooped out of it that is 200 feet long and almost 100 feet across. Under and into the well fits a huge submersible barge that acts as the receptacle for whatever the Explorer brings up from the sea.

There was apparently a debate inside the CIA as to the worth of the mission and the usefulness of the ship. Some people argued that the risk and cost were too high, the rewards too low. They were overruled by those who said that the potential rewards were priceless—a Soviet nu-

clear warhead and a Soviet submarine's code machine.

The chance of salvaging a coding machine swung the day, sources say. U.S. intelligence people have always had a tough time with Soviet codes, and even a machine seven years old could be used to decipher thousands of Soviet messages sent in the coldest period of the Cold War in the '60s. This would help U.S. analysts to understand Soviet intentions.

Weapons experts were just on a Soviet nuclear warhead, as eager to get their hands even the small warheads on the 650-mile-range Serb missiles that were carried on Golf class submarines.

"We'd never seen the other man's hardware," one source said, "and you can't imagine how useful it would be to know its size, its weight, how it was machined and what kind of metal he used. If nothing else, it would tell us whether our own intelligence estimates all these years were the right estimates or not."

By the time the Glomar Explorer reached Hawaii last summer, the entire U.S. intelligence community in on Project J was behind it. Intelligence people anticipated success with Project J, if only its secret could be kept through last summer's operations at sea.

The Glomar Explorer had a crew of 170 men, all of them

contract employees of the CIA. The CIA apparently paid their salaries, just as it had picked up most of the \$250 million price tag for the Glomar Explorer.

The Glomar Explorer was spotted by Soviet trawlers when it finally left Hawaii last summer for the salvage site. According to some reports, it was followed for awhile, but then the Soviet ships left.

It took the Explorer most of last July and August to raise the about one-third of the submarine it managed to get off the ocean floor. It is no known whether it raised the one-third in pieces, which were later put together, or all at once. Its lifting limit is 800 tons, which it manages with a giant claw.

Along with a piece of the submarine, the Explorer raised the bodies of 10 Soviet submariners. The dead men were given a burial at sea, where the ceremony in Russian and English and the Soviet national anthem played. The entire burial scene was filmed in sound and color.

This was done because the CIA had worried ever since the start of Project J that it would be accused in a flood of propaganda of desecrating Russian bodies.

"Believe me," one source said, "this was one of our greatest fears. We took some unusual precautions on this one."

# Sinkings Raise Questions

By Michael Getler

Washington Post Staff Writer

The Soviet Union appears to be having more than normal problems with its ships and submarines, as highlighted by the dramatic disclosure of a U.S. attempt to salvage a Russian submarine.

Six months ago, a Soviet guided-missile destroyer of the Kashin class exploded and sank in the Black Sea, with considerable loss of life among the crew.

In March, 1972, a Russian Hotel class ballistic-missile-firing submarine experienced some sort of severe problem in the North Atlantic off Newfoundland that forced it to the surface and resulted in the nuclear-powered vessel being towed all the way back to the Soviet Union.

In April, 1970, another nuclear-powered Russian submarine, this one of the November class meant for attacking shipping, was also forced to the surface by an emergency and eventually sank in the eastern Atlantic's Bay of Biscay.

"Kashin," "Hotel" and "November" classes are NATO designations for various types of Soviet naval vessels.

Given the large size of the Soviet fleet—including some 300 submarines of all types and several hundred surface ships—the list of known disasters does not seem large.

On the other hand, a number of U.S. naval specialists believe the Russians appear to have more serious and more frequent problems with the reliability of their ships than is generally realized and more than the U.S. fleet experiences.

Information on this aspect of the Russian fleet is extremely hard to obtain, according to U.S. specialists. But more and more in the past year, Defense Secretary James R. Schlesinger has put pressure on the Navy to try to ascertain how maintenance and crew-training problems affect the readiness of the Russian fleet and to take such estimates into account in estimating Soviet naval fighting strength.

Some early studies just completed are said to have concluded the Soviets generally have more of a problem in overhauling faulty vessels in shipyards than had been previously assumed, and also that they may be having a problem retaining crewmen for submarines, in particular.

From what is known about Soviet vessels, it is believed that the living condi-

tions, ventilation and air circulation systems are relatively primitive by U.S. standards.

The study has concluded that in many circumstances, the actual availability of Russian warships is probably less than the U.S. had previously estimated.

Some sources say that U.S. intelligence spots, on the average, about two Soviet submarines a year being towed back into port. This is said to occur mostly with older vessels used in coastal defenses, and only rarely if at all with the latest class of Yankee and Delta long-range missile-firing submarines.

The Russians are known to keep far fewer of their more than 40 modern missile submarines at sea than the U.S. Navy does. Some specialists believe this is due to the extensive amount of time it takes the Russians to keep these complex vessels in working order.

Others, however, believe the Russians are less worried about surprise attack than the United States and thus keep fewer of their ships at sea at any one time.

The U. S. Navy has also suffered fatal mishaps with submarines, losing the Thresher in April, 1963, and the Scorpion in May, 1968. In both cases, the specific cause was never determined.

Similarly, the backlog of overdue maintenance work on current vessels is very large, according to the Navy, because of work put off during the Vietnam war and the soaring costs of shipbuilding and repair.

On the whole, however, the general consensus is that the Soviets' problems at sea exceed those of the U. S. fleet, but indications of this only comes from fragmentary information.

Though the Russians appear not to have known exactly where their submarine went down in the Pacific in 1968—a key factor in the U.S. decision to try and raise it—the Soviets have been keenly aware of the value of salvaging their sunken warships.

Sources say that after the Kashin destroyer sank in the Black Sea, divers went down to blow up the remains. Also, in the 1970 submarine sinking, a Russian hydrographic ship was stationed over the wreckage for a long time and other vessels still periodically sail near the area.