Human Error Is Cited In'74 Glomar Failure DEC 9 1976

By SEYMOUR M. HERSH

The Central Intelligence Agency's attempt in July 1974 to salvage a Soviet submarine failed when an error in judgment resulted in damage to prongs of a huge claw that was to have retrieved the submarine from a depth of three miles, according to two former members of the

Wayne R. Collier of Houston, who was in charge of recruitment on the project for the C.I.A., and his brother, Bill C. Collier, who was a cutting torch handler, said that at least two prongs of the claw were severely bent back as C.I.A. technicians tried to grab the 320-foot Soviet submarine on the ocean floor 750 miles north of Hawaii, where she had sunk in 1968. The claw was unable to fully support the vessel as she was being lifted, and she broke into two large pieces, the brothers said.

The front section, less than one-third of the submarine, was brought to the surface, according to high-level intelligence officials.

The C.I.A., which spent four years building a computer-run submarine rescue ship, the Glomar Explorer, was forced

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to cancel a second attempt to recover the main section of the vessel after news-paper publicity about the operation early last year. The Glomar Explorer was built under elaborate cover and was considered —under the code names Azorian, Jennifer and Matador—to be one of the Govern-

ment's highest-held secrets.

In a series of interviews, the Collier brothers also provided an insight into the C.I.A.'s extensive efforts to recruit, train and direct the 125 crew members of the Glomar Explorer without attracting pub-

Their detailed account of the operation's basic failure—the inability to retrieve all of the submarine, including the code room and three nuclear-tipped missiles—was independently verified by The New York Times in interviews with another crew member and high Government officials with first-hand knowledge of the operation.

The Collier brothers' description of the

unsuccessful mission is at variance with published reports, including one in Time magazine alleging that the C.I.A. operation did recover all of the submarine, and one in Science magazine speculating that the vascel might have been recovered in the vessel might have been recovered in

Such reports, which have drawn official "no comments" from the Pentagon and the C.I.A., were depicted as fallacious by the Collier brothers and by The Times's sources inside the intelligence communi-

Some 'Questions' Acknowledged

Richard L. Duncan, deputy chief of correspondents for Time magazine, acknowledged that "we've run into questions on our own about the story we published and we're still investigating." He added, "I'm not willing or able to say now that our story is wrong."

John Walsh, editor of the News and Comment section of Science magazine, said that his magazine's article "clearly distinguished between fact and speculation. We think that it added important information and feel it is correct in its basic analysis."

Wayne Collier, who is 33 years on and is now in the oil business in Houston, also said that some crew members of the Glomar Explorer, including his brother, were exposed to radioactivity from corroded nuclear warheads during the C.I.A.'s subsequent analysis of the recovered section of the Soviet submarine. Mr. Collier added that he and his brother were considering legal action against the

were considering legal action against the intelligence agency.

"I fell it was negligence on the part of the agency," Wayne Collier said. Since leaving his job at the Glomar Explorer, Wayne said, his brother Billy—who weighs 240 pounds and is known as "Bimbo" to his friends—has felt weak.

"It's as if he doesn't have any energy," Wayne Collier said. In addition, he said, Billy's wife suffered a miscarriage three months ago.

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Wayne Collier said he did not know whether the other crew members who were exposed to the radioactivity were suffering from similar ailments.

Hughes's Role in Mission

The Glomar Explorer was widely reported to be a revolutionary ocean mining vessel built for Howard R. Hughes's Summa Corporation. The late Mr. Hughes's known eccentricity, and his agreement to pretend to own the ship, were key factors in shielding the vessel's ultimate mission for the C.I.A. for nearly four years

four years.

Wayne Collier and his literary agent, Michael Larsen of San Francisco, have made available to The Times his diaries and notebooks dealing with the Glomar Explorer, more than 150,000 words that he eventually hopes to publish.

Although Wayne Collier did not directly participate in the recovery operation, his account of what went wrong has been corroborated in subsequent interviews with a number of high-level intelligence officials and others in the Government whose information on the project was reliable in the past.

The key failure, according to Mr. Collier, was not mechanical, but rather, a failure in human judgment.

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The concept behind the planned recovery of the submarine was simple: A huge claw capable of grabbing and lifting the submarine was constructed, fit under the Glomar Explorer at sea, and then—while the Explorer was stabilized with the aid of computers over the sunken submarine the claw was slowly extended into the -the claw was slowly extended into the

The Explorer, a 36,000-ton vessel 618 feet longand more than 115 wide, was capable of generating 12,000 horsepower. The ship's "moon pool," a huge hold into which the submarine was to be hoisted, was 200 feet long and 65 feet wide. Once

was 200 feet long and 65 feet wide. Once the submarine was recovered and placed in the pool, the water would be pumped out and the disassembling would start.

The claw, whose three miles of supporting pipe was estimated to weigh 10 million pounds in air, was equipped with strobe lights and television cameras to enable its operators—working in the Glomar Explorer's control room—to observe the lifting operation.

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The submarine was known, on the basis of previous reconnaissance photographs taken by deep-diving Navy craft, to be intact. The plan, according to Wayner Collier and other sources, was for the claw to encircle the submarine and pull it to the surface. The claw, nicknamed "Clementine" by crew members, was operated by a seawater hydraulic system.

Entangled in Seabed

But, Wayne said, two or three prongs of the claw somehow became entangled in the seabed along the aft end of the submarine. According to Wayne's account, there was a debate inside the control room; repositioning the claw could cause an extensive delay and, at the greae stress of the three-mile depth, could even lead to a mechanical breakdown.

The project leader, a high-level C.I.A. official known to the crew as "Black-jack," ordered the claw's engineer to increase the power to pull the claw around the submarine, Mr. Collier said.

After some agonizing moments, the claw encircled the submarine, the account coinued, but the few prongs that had ecome stuck were bent out of shape and could not fully support the submarine.

At 5,000 feet, the rear two-thirds of the submarine broke off and sunk, Wayne said. It was a moment of intense fear, he added, because the men aboard the Glomar Explorer thought that one of the submarine's nuclear warheads might be triggered by the fall.

The section that broke off, Mr. Collier said, included the conning tower, the three missiles and the vessel's code room—the prime targets of the recovery mis-

Billy Collier, who generally agreed with his older brother's statements in a separate interview recently, told of his jum-

bled feelings about his participation in the project.

In the interview near his home in Baytown, Tex., he told of his pride and the glamour of working on a secret mission

glamour of working on a secret mission for the C.I.A. He was among 125 oilfield workers and seamen who had been carefully recruited and screened by the C.I.A. before being assigned to the project.

Mr. Collier's was a vital job on the Glomar: As a specialist trained in the use of a cuting torch, he said, that he was to be among the frst to work on the Soviet submarine after her recovery, stripping away sections of the craft for

the Soviet submarine after her recovery, stripping away sections of the craft for the more highly trained C.I.A. analysis.

Billy Collier talked at length about his intense 12-hour days disassembling the vessel in the huge hold of the Glomar. As many as 100 oversized air-conditioning units were working apparatus in the ing units were working constantly in the "moon pool," he said, in an attempt to re-create the water temperature three miles down, and to delay the submarine's

Souvenirs Were Collected

There were other memories, he said—the smell, for example. Billy's face still turns sour when he tries to re-create it in words. "It was terrible. Hard to describe. Damp rotten." He stops trying to explain and says simply: "The bodies."

"A crew of doctors went at them first," he continued, "two doctors and some medics. They took out everything that they found." The intact bodies of at least six Soviet submariners were recovered, later to be buried at sea. Parts of other bodies were also found, he said.

Many crew members, in direct violation of C.I.A. orders, quickly stripped the bodies and the submarine of souvenirs and items of value—rings, watches, coins

And yet, Billy Collier said, he and other crew members were moved and upset during the C.I.A.'s formal burial of the Soviet dead. "A lot of people had different feelings," he said. "It was like everybody had lost their mother—everybody was all shook up."

After the services, which concluded with a rendition of the Soviet national anthem, a huge crops dropped the lorge.

anthem, a huge crane dropped the large metal coffins into the pacific Ocean, he said, Mr. Collier recalled that the crane held each coffin until its special compart-

held each coffin until its special compartments filled with water and sank. Billy Collier, who now works as a trouble-shooting mechanic for a Texas steel company, says that his exposure to radioactivity has left him afraid. He thinks he may have suffered gene damage.

The Soviet submarine, a 1958 Golf class model driven by a diesel engine, was radioactive, as C.I.A. analysts had predicted, the Collier brothers said. There had been decay of the nuclear warheads that were mounted on the vessel's three missiles and four torpedoes, they said. Two of the torpedoes were recovered, according to the brothers.

Crew Told Ship Was Hot'

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Moments after the submarine's forward section was brought into the "moon pool," Billy Collier recalled, the crew members were summoned to the ship's dining room where "Blackjack," the high-level C.I.A. official, told them the submarine was "hot" and gave them a chance to forgo working on the project and thus to avoid exposure to radiation. The men all agreed to go below to work, he said.

Special uniforms were provided, including a full-length cotton jumper and a shiny outer uniform that seemed to Moments after the submarine's forward

and bracelets, according to the Collier have a metallic content, Billy Collier brothers.

And yet, Billy Collier said, he and other said, and the men all wore oxygen masks and hoods with built-in microphones. The

and hoods with built-in microphones. The suits were described as hot and clumsy. After work, Billy recalled, the men were carefully checked and ordered to take hot showers. "After five days, they decided it wasn't necessary to take all of the precautions," he said, and the suits were dispensed with to insure that the job of dismantling the submarine could proceed quickly.

Mr. Collier worked his normal shift with about six other men, he said, and then he and others took a break and were routinely checked for radioactivity. "The instrument went as high as anything could go," he said, "and they found it was on me."

He remembered that the others exchanged long looks and he was undressed.

changed long looks and he was undressed and ordered not to touch his skin. He

changed long looks and he was undressed and ordered not to touch his skin. He said that he showered and scrubbed down for an hour, was examined and told to return for more scrubbing. Later, he said, he was ordered to throw all of his clothing overboard.

Mr. Collier said he thought little of the incident until his wife recently had a miscarriage during her second pregnancy. Now he is frightened, he said, but does not know what to do. He has yet to see a physician about it, and he says he does not want to do anything to give the C.I.A. any problems. If asked, he added, he would gladly serve on another project for the intelligence agency.

Billy Collier was recruited for the Glomar Explorer by his brother. Wayne, a former undercover agent for the Justice Department who was hired by the C.I.A. in 1973 as personnel manager for the submarine recovery operation.

The fact that the ubmarine was not

fully recovered was published initially by The Times and other newspapers in March 1975, although the precise reason for that failure was not known then. In subsequent months, however, a series of newspaper and magazine articles not only asserted that the Glomar Explorer did, in fact, recover the entire submarine, but ale alleged that the CLA had sought but alo alleged that the C.I.A. had sought to shield that success by planting phony newspaper accounts of a partial recovery.

For example, in June, Science magazine published a careful analysis of the Glomar Explorer's capabilities, based on data published in part by the General Services Administration, which was then unsuccessfully attempting to lease the ship to private industry.

The magazine, in suggesting that the C.I.A. may have withheld information C.I.A. may have withheld information about the operation's success in an effort to prevent diplomatic problems with the Soviet Union, noted that the submarine was 320 feet in length, while the officially published length of the "moon pool," the submarine recovery area, was only 199 feet. The magazine added that one explanation for the discrepancy would be that the submarine had broken into several sections when she sunk and into several sections when she sunk, and those sections were individually salvaged

by the Glomar Explorer.

The Times's sources, reached within the last few days, said that the moon pool was smaller than the submarine only because the C.I.A. never intended to bring back all of the vessel. Divers with blow torches and other welding gear blow torches and other welding gear were set to work as the submarine was slowly lifted, they said, and would have cut away much of the vessel, jettisoning those sections that the C.I.A. deemed

A similar procedure was used during

the disassembling operation of the recovered portion of the submarine, according to the Collier brothers. As the C.I.A. concluded its on-board analysis of various sections of the submarine, they said, the unneeded parts were scattered into the ocean. The Glomar Explorer eventually returned to its Long Beach, Calif., berth carrying the most significant remaining parts of the Soviet submarine.

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Another account was published two weeks ago by Time magazine, which said that the C.I.A. recovered all the submarine, including its ballistic missiles. This material later was analyzed at a United States base somewhere in the Pacific, Time said, "most likely" at Midway Island.

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Time said, "most likely" at Midway Island.

Asked about that account, intelligence officials noted that the Time magazine article failed to explain why the C.I.A. sought permission until early this year to return to the area for a second recovery attempt. One official, who was briefed on Project Jennifer throughout its various phases, also noted that the article was at variance with statements by William E. Colby, the retired Director of Central Intelligence who had personally urged newspapers not to publish the first accounts of the operation in 1975.

Reached by telephone at his home in suburban Washington, Mr. Colby refused to discuss the specifics of the submarine operation. But he did say, "You know I'm not a liar."

The precise importance of the C.I.A.'s findings could not be learned, nor could The Times determine how much money was spent on the overall operations. Sources generally agreed that more than \$500 million was spent, a total that is roughly twice as much as publicly acknowledged by the Government.