



## When Intelligence Made a Difference

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### Almost Lost

#### The Recovery of a Hexagon Capsule

In April 2013 the US Naval History and Heritage Command's National Museum of the United States Navy at the Washington Navy Yard hosted a special presentation by the Central Intelligence Agency's (CIA) Historical Collections Division (HCD) in its Museum Education Center. CIA historian David Waltrap spoke about a recently declassified 1972 secret operation to recover a spy satellite film capsule that sank 16,400 feet below the surface of the Pacific Ocean.<sup>1</sup>

"It happened in 1971 and 1972 during a nine-month period, and this week [last week of April, 2013] is the 41st Anniversary of the conclusion of that operation," he said. "This is only the second underwater intelligence operation ever declassified by the CIA." The first was called Project Azorian, a 1974 operation to retrieve a Soviet submarine that had sunk about 1,500 miles from the Wadden Islands in the Pacific Ocean.

"From an operational and intelligence perspective, this earlier mission is just as interesting, if not more so, than Azorian," Waltrap said. "It demonstrated our ability

to retrieve a very small object of high intelligence value from the depth of 16,400 feet. At the time, it was the deepest underwater recovery ever attempted and showed that we could do this in 80 percent of the Earth's deep oceans."

The story remained hidden from the public until last year when the CIA and the National Reconnaissance Office – the agency that controls our spy satellites – revealed that what they recovered was a piece of an American spy satellite code named "Hexagon."<sup>2</sup>

The spy satellite took photos of "denied areas" – areas of the Earth's geography that had information unavailable to the intelligence community through other means – and returned the film to the Earth in one of four, 42-inch high [by] 56-inch diameter, recovery vehicles called "buckets." The buckets, containing 40,000-foot spools of film, were ejected from the satellite and then returned to Earth with the help of a parachute. Air Force C-130 aircraft would then seize the buckets in mid-air near a recovery site north of Hawaii. The first and second buckets were retrieved successfully, but the third bucket's parachute snapped off and the bucket traveling at more than 400 feet per second plunged into the ocean.<sup>3</sup>



1. This article is a condensation of a Naval History Command item by MC1 (AW) Tim Comerford, entitled "Joint CIA, Navy Operation unfolds at National Museum of the United States Navy," May 1, 2013. [https://www.militarynews.com/norfolk-navy-7agship/news/quarter-deck/joint-cia-navy-operation-unfolds-at-national-museum-of-the-united-states-navy/article\\_db275b23-5eac-5d1e-a585-202c762b7450.html](https://www.militarynews.com/norfolk-navy-7agship/news/quarter-deck/joint-cia-navy-operation-unfolds-at-national-museum-of-the-united-states-navy/article_db275b23-5eac-5d1e-a585-202c762b7450.html). Edited by Peter C. Oleson.

2. KH-9, No. 1 (Mission 1201), was launched on June 15, 1971. Its planned decay date was August 6, 1971. ([https://en.wikipedia.org/wiki/KH-9\\_Hexagon](https://en.wikipedia.org/wiki/KH-9_Hexagon).)

3. When parachute failed, the canister slammed into the water with an excruciating 2,600 Gs of force. (NBC News, Aug. 13, 2012)

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After weeks of teams trying to find out where the bucket may have rested on the floor of the ocean, the search area was reduced to an 8-mile long by 1.5-mile-wide search zone. Using transponders, Fred N. Spiess (PhD), director of the Marine Physical Laboratory at Scripps and the crew onboard the USNS *De Stieguer* (T-AGOR 12), located and photographed the upper housing of the bucket embedded in the sand on October 20, 1971.

The CIA partnered with the Navy, which possessed the only vessel capable of operating at the recovery depth needed, to plan and execute a recovery. At the time, the Navy was using three deep sea submersible “bathyscaphes,” named *Trieste*, *Trieste II* and *Trieste II Deep Sea Vehicle 1* (DSV-1).

The Navy proposed using the *Trieste II* DSV-1 to help CIA with the operation. Over a period of eight

months, deep submergence vehicle *USS Trieste II* (DSV-1) painstakingly searched for the missing bucket with assistance from its support ship *USS White Sands* (ARD 20) and support tug *USS Apache* (ATF 67).

“Everybody was thrilled,” said Lee Mathers, a former Navy intelligence officer, “and Dr. Spiess was absolutely chuffed. They had accomplished their mission. They got the photograph, they knew where their target was, they put two more transponders in the water to mark the target and left the area absolutely convinced that they had met all criteria of their mission.”

An Integral Operating Unit (IOU) consisting of sea-going tug *USS Apache*, WWII-era auxiliary repair dock *USS White Sands* and *Trieste II* (DSV-1) arrived in the search area a month later. All three ships were needed in order to conduct the dive. *Trieste II* (DSV-1) was housed in the *USS White Sands*, which also

supplied, repaired and equipped the bathyscaphes and *USS Apache* towed the repair dock.

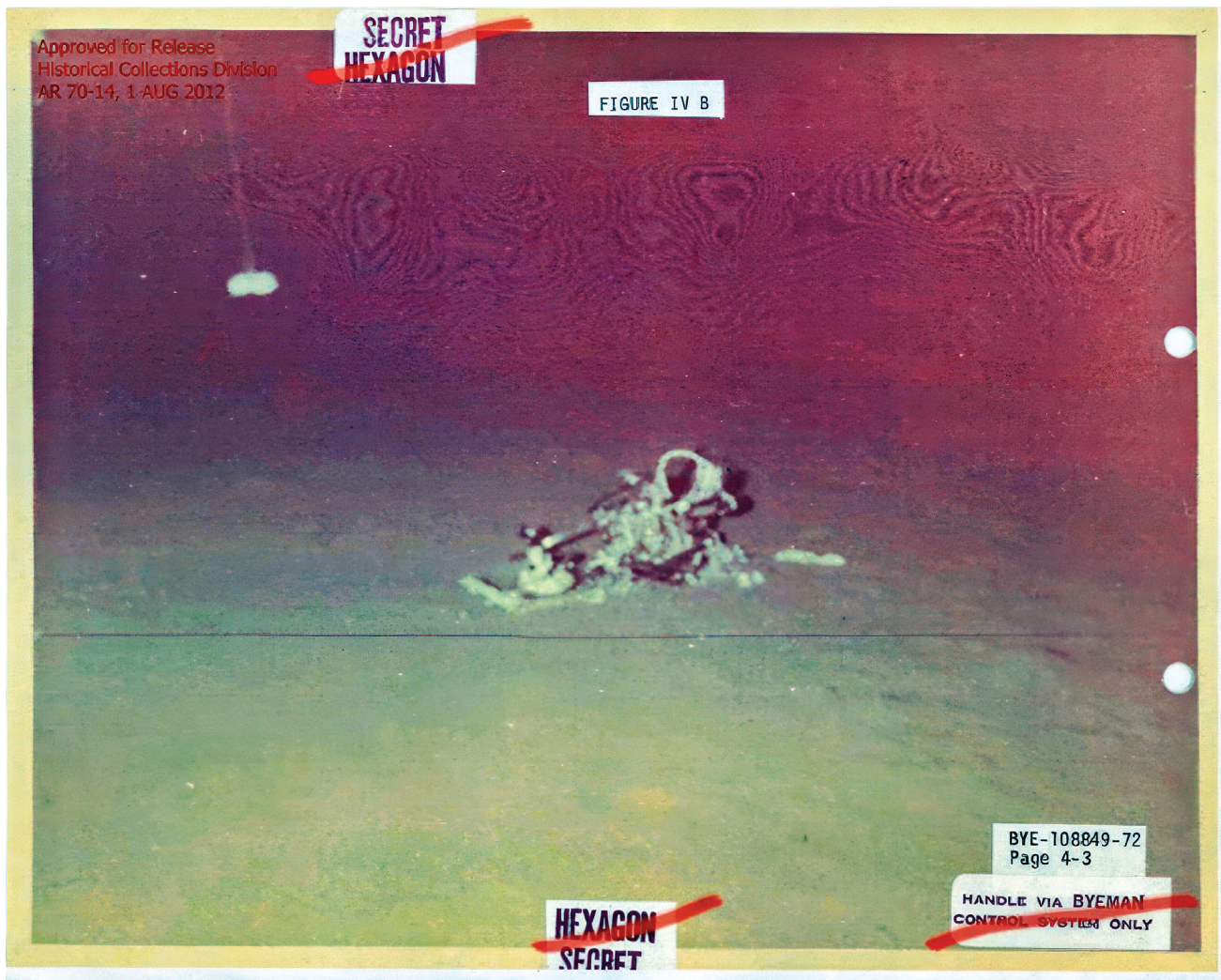
It was then that the problems started occurring.

“Our first dive off Hawaii was in early November of 1971,” said Mathers, “We saw what our search area looked like and got down on the bottom. There were no sonar contacts of consequence when we got there. We used up our battery and went back to the surface. What happened was the recorded positions of two of the [transponders] were reversed. So, we were maneuvering some 2,500 feet from where we should have been and in a vessel like *Trieste II* that’s miles.” After that, mechanical and weather problems pushed back the schedule, until April 25-26, 1972 when they made a breakthrough.

“We went back out again for another dive in April and we found a pile of junk on the bottom. But it was

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FIGURE IV B



encouraging because it was man-made. It was a part of the satellite, we don't know what part, but there it was," said retired Navy Commander Richard Taylor, one of three *Trieste II* pilots during this operation. After finding more junk, they came upon what they thought was yet more pieces of the bucket, but it was much more. "That was the film pack. We didn't know that was what we were looking for, but we talked to the surface [operators] and they convinced us."

Using a claw hook, the *Trieste II* managed to grab the film pack, and after waiting for sediment to drain, they radioed to the USS *White Sands* and started toward the surface. "Everybody was excited, you could hear it in their voices," explained Taylor. "We had found the object and we were starting to come back. On the way up, it starts breaking up, all the way up to the surface pieces are falling off it. When we got to the surface, the biggest piece I saw was about six feet of film that a diver had in his hand. Everything else was gone – it was a cloud of dust. We were just devastated."

The film, already punished by hitting the surface of the ocean, was not able to take the force of movement and dissolved. Although the object disintegrated, there were two bright spots in the outcome of the mission. "We proved we were able to find an object that size – about a big garbage can size – at 16,400 feet, and we were able to go back there and, after overcoming some real problems, were able pick it up and bring it back to the surface," said Taylor.

Taylor expressed his admiration for all the crew of the ships, that much like today, don't have high visibility jobs. "The Sailors are the ones I credit for this, the guys on the *Apache* and the *White Sands*. They are just Sailors. They are out there chipping paint, cleaning their bilges, making the engines run, washing dishes – doing all that sort of thing that Sailors do. They don't get any credit for that, they don't get any of the glory," he said.

This item has been approved for publication by CIA's Prepublication Classification Review Board.