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**EMBARGOED until Monday, December 7 at 12:01 am ET  
News Alert!!!**

**(\*\*Photos, B-roll Footage, Experts available upon request.)**

**NOVA EXPEDITION DISCOVERS SUNKEN WRECK OF  
MISSING JAPANESE MIDGET SUB NEAR PEARL HARBOR  
AND UNRAVELS MYSTERY OF UNDERWATER ATTACK  
68 YEARS LATER**

**In Surprise Twist a New Find Reveals Another  
Secret Story of WWII**

***Killer Subs in Pearl Harbor* to Premiere on NOVA on Jan. 5  
at 8pm ET/PT on PBS**

BOSTON, MA [December 7, 2009]—NOVA announced today that a routine test dive in the waters near Pearl Harbor has uncovered a find that could rewrite the history of the Japanese attack on the U.S. on December 7, 1941, which claimed the lives of more than 2,400 Americans and drew the nation into World War II. A team of researchers on an underwater expedition led by the signature PBS science series recently discovered three sections of mysterious steel wreckage deemed by experts to be the unaccounted-for fifth and final Japanese midget submarine used against the U.S. in a top-secret mission to attack the American fleet from below on that day. The compelling new evidence suggests that the sub fired its torpedoes at U.S. ships in Battleship Row before it sank. In an unexpected twist, investigators piecing together clues on how the submarine arrived at its final resting place on the ocean floor have revealed an untold story of WWII involving another secret disaster that occurred in Pearl Harbor a full three years after the attack.

The sunken, two-man, Japanese midget sub was found more than 1,000 feet below the surface during a dive 3 miles south of Pearl Harbor. The *Pisces IV* and the *Pisces V*, two deep-sea research submersibles operated by HURL (Hawaii Underwater Research Laboratory), located the missing sub nestled among the wrecks of several U.S. amphibious assault vehicles. HURL operations director and chief pilot **Terry Kerby** was the first to spot the mysterious sunken vessel amid the unusual debris. **Parks Stephenson**, a marine forensic historian and former U.S. Navy officer and submariner, led the expedition for NOVA to investigate the find.

“A giant piece of the Pearl Harbor puzzle has fallen into place,” said lead investigator Parks Stephenson. “This important discovery sheds light on a World War II mystery that has eluded historians for nearly seven decades.”

To identify the wreck and determine what happened to the missing sub and its crew,

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NOVA assembled a team from both sides of the battle: Scientists, marine forensics experts, naval intelligence analysts, eyewitnesses, and American and Japanese veterans and historians worked side by side on the project.

Stunning, first-ever underwater footage of the missing Japanese midget submarine will be presented in high definition—along with newly declassified archival images, scientifically based CGI sequences, and revealing new evidence uncovered during the investigation—in the new **NOVA** television documentary, ***Killer Subs in Pearl Harbor***, premiering on Tuesday, January 5, 2010, at 8 pm ET/PT on PBS.

### ***Five Japanese Midget Subs Used to Attack Pearl Harbor***

The popular perception is that Pearl Harbor was primarily an aerial attack, but the evidence indicates the U.S. fleet was also attacked from below. According to military records, five Japanese “mother” submarines slipped undetected to within a few miles of Pearl Harbor prior to the battle, each one carrying on its back Japan’s most secret weapon: a Type-A, two-man, midget submarine, barely 80 feet long and just 6 feet wide. Powered by a 600-horsepower electric motor that could propel it underwater at speeds of 19 knots—twice as fast as many of the U.S. subs of the day—the technological marvel was capable of carrying two Type 97 Long Lance Torpedoes.

The five midget subs deployed at Pearl Harbor were early models and unlike any others that followed. Over the years, all but one have been found, and it is clear those did not complete their mission. Scuttled, destroyed, or run aground, they missed the targets, failed to fire, or were recovered with torpedoes intact. But historians have long puzzled over the fate of the missing sub. After examining the wreck from aboard the submersibles, the team on board identifies it as the elusive fifth midget sub based on the unique rudder design, distinctive propeller, and the figure-eight-shaped net cutters attached to the bow. After some initial hesitation, even Admiral Kazuo Uyeda (Ret.), the Japanese Navy’s senior surviving midget submariner from the war, confirmed the discovery: “One can conclude definitely that this was the special submarine that was used in Pearl Harbor.”

Historians have also debated whether the fifth midget sub penetrated Pearl Harbor to fire on U.S. battleships and whether these torpedoes found their targets.

### ***New Evidence and Clues that Fifth Midget Sub Fired Torpedoes at U.S. Ships***

\* No torpedoes are found on the wreck, so NOVA enlists a microbial ecologist who, based on her study of the rusticles (rust-like encrustations covering the empty torpedo tubes that are actually living microorganisms), is able to determine that the midget sub fired its torpedoes before it sank.

\* A close look at Japanese war records reveals that the mother sub for the fifth midget sub sent word to the Japanese high command reporting the success of the mission.

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\* NOVA interviews U.S. veterans who survived the attack and gave eyewitness accounts of the *USS Arizona* being torpedoed from below.

\* To search for evidence of a torpedo hit on the hull of the *USS Arizona*, NOVA was given special permission for divers to film the wreck, located 40 feet beneath the surface—a solemn war grave where more than 1,000 American servicemen lost their lives.

\* No visible evidence is found on the *Arizona*, but experts uncover an obscure passage in a Congressional report by Admiral Nimitz, Commander of the Pacific Fleet, which describes an unexploded torpedo sighted and recovered inside Pearl Harbor and carrying an explosive charge of 1000 lbs (more than twice that of aerial torpedoes). This report offers corroborating evidence that a midget sub did penetrate Battleship Row and fired upon it.”

\* Naval intelligence experts give their thorough analysis of a newly declassified photograph, taken by a camera on a Japanese plane the morning of December 7th and recovered after the war. Painstakingly studied for decades, this single picture is believed to document a midget sub in action firing a torpedo straight into Battleship Row.

\* Intensive examination of an archival photo from the attack reveals tantalizing clues: torpedo tracks in the water, the splash plumes created by the sub’s propeller, and the concussion waves radiating from the ships that have been hit. All these clues point to the effects of an underwater torpedo blast rather than those made by an aerial bomb strike.

\* NOVA reengineers original classified calculations to develop revealing animation of the shockwave created when a torpedo blasts into a ship and subsequent cavitations that occur to lift the sub to the surface, as in the photo. The correlation is perfect, per analysts.

If the accounts of some eyewitnesses and the Nimitz Report are correct, one torpedo was fired at the *USS Arizona* but turned out to be a dud. If the photographic experts are correct, two torpedoes were fired, hitting the *USS West Virginia* and the *USS Oklahoma*. Either way, the experts agree that the fifth midget sub successfully fired its torpedoes inside Pearl Harbor.

### ***Secret Story Adds New Twist and Clues to Unravel Mystery of Fifth Midget Sub***

During the attack on Pearl Harbor, a US Naval minesweeper reported both sighting and firing upon what appeared to be a midget submarine trying to escape the harbor. But a more complicated story emerges when the expedition teams look for clues to establish whether the crew of the fifth midget sub scuttled their vessel. This still would not explain the recent finding of the minisub in three pieces at the bottom of the ocean several miles *outside* Pearl Harbor.

\* The expedition team believes the sub crew ignited a scuttle charge in order to keep Japan’s secret weapon out of enemy hands and searches for clues to the location where the sub originally may have

been scuttled. Examining a Japanese map from one of the other recovered midget subs leads them to believe the fifth midget sub escaped to the relative isolation of the West Loch, a backwater replenishment area at the time.

\* Investigators study the blast patterns in experiments conducted by a team of demolition experts who ignite charges to replicate the scuttling of the midget sub—both while surfaced and while submerged—concluding the sub was likely scuttled underwater.

\* The fate of the fifth midget sub appears unexpectedly intertwined with another Pearl Harbor disaster, which took place in the West Loch on May 21, 1944, three years after the Japanese attack and, until recently, was veiled in secrecy. As the US Navy prepared for invasion of the Pacific island of Saipan, an ammunition accident in the loading of LST 353 set off an explosion that sank six LSTs, killed nearly 200 sailors, and wounded hundreds more.

\* The U.S. Navy quickly and quietly cleaned up the remnants of the 1944 West Loch disaster to get the top-secret invasion back on track. The NOVA investigation team believes that the fifth midget sub, scuttled in that location years earlier, was scooped up with the damaged equipment and landing crafts from the munitions accident. The whole mass was raised up using cables and then hauled outside the harbor and dumped.

“It’s my contention that during that clean up, the U.S. Navy found our midget sub, raised it, put it in with the rest of the debris, took it a few miles outside of Pearl Harbor, and dumped all of it together,” said Parks Stephenson, “which would explain why it now lies amidst an assortment of US military hardware from the West Loch disaster.”

NOVA senior executive producer Paula Apsell agrees. “More information may one day come to light, but this find certainly changes history as we know it,” said Apsell. “NOVA is deeply honored to be part of such an important discovery and an investigation that gives new meaning to the heroic and tragic events of that day,” she added.

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### **Production Credits**

#### ***Killer Subs in Pearl Harbor***

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