

Submerged Cultural Resources Exploration Team

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Exploration Updates

Spring 2005

Issue 1

Welcome to the first issue of *SCRET's* newsletter for 2005. Our goal is to publish the newsletter twice each year. Each issue will focus on *SCRET's* efforts to explore and document significant submerged cultural resources in the Pacific Northwest.

Grumman TBF-1 Avenger, Bureau #00539

The focus of this newsletter is a Grumman TBF-1 Avenger, a World War II era torpedo bomber, whose remains lie approximately 200 feet deep in Lake Washington.

History

On December 7, 1941, the Japanese attacked Pearl Harbor. The attack was a devastating loss for the United States and it precipitated our entrance into World War II. Less than two months later, on January 30, 1942, the first production run of an aptly named torpedo bomber entered military service. The bomber was named the Avenger, inspired by our desire to 'avenge' the attack on Pearl Harbor.

The Avenger bore a family resemblance to Grumman's successful Wildcat fighter but the bomber was much larger. Besides a general similarity in appearance, the new torpedo bomber used the same type of rearward-folding wings as did the smaller fighter. This allowed the large Avengers to be packed tightly together and to fit on deck elevators, increasing the number that could operate from carriers. The Avenger could even operate from the small escort carriers, whose size prohibited their carrying many other large aircraft.

The Avenger became one of the US Navy's most important aircraft in World War II and it saw a variety of action in both the European and Pacific theaters. In addition to a weapons bay that was capable of carrying up to 2000 lbs of bombs or a 22 inch torpedo, the Avenger was outfitted with three machine

guns. Avengers shared in the sinking of multiple German and Japanese ships. They took part in D-Day operations and made significant attacks on Japanese oil refineries, reducing output at multiple plants to a mere trickle at a time when every drop of fuel was critical to the Japanese army and naval forces.



Grumman TBF-1 Avenger

Manufacturer: Grumman Corporation

Type: Torpedo Bomber

Crew: pilot, turret gunner-bombardier and radioman-ventral gunner

Power plant: one 1,900 hp Wright R-2600-20 engine

Dimensions: wing span, 54 feet, 2 inches; length 40 feet; 11 inches; height 16 feet, 5 inches

Weight: empty, 10,080 lbs.; gross, 15,905 lbs.

Performance: max. speed, 276 mph; cruising speed, 145 mph; service ceiling, 22,400 feet; range, 1,215 miles

Armament: one forward firing .30 cal. machine gun in engine cowling; one .50 cal. machine gun in dorsal turret; one .30 cal. machine gun in ventral position; and up to 2,000 lbs. of bombs or one torpedo.

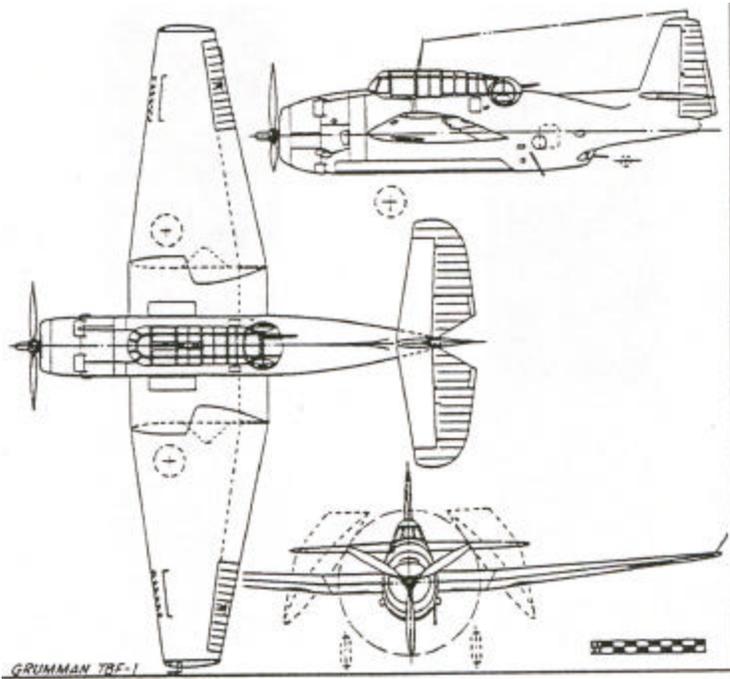


August 17, 1942. Operating out of NAS Seattle at Sand Point, four Avenger torpedo bombers made a simulated torpedo attack on a target in Lake Washington, located near Meydenbauer Bay. Three Wildcat fighters were simulating defense of the target. The torpedo bombers were traveling east, toward Bellevue, at about 200 knots. The three fighters made an opposing run from ahead at about 300 knots. The pilot of one Wildcat held his attack too long to affect a safe recovery and collided with one of the Avengers. The fighter pilot continued west, toward Seattle, lowered his landing gear to slow his plane and bailed out. The Wildcat went into the lake off Leshi.

The damaged Avenger and other aircraft flew north toward NAS Seattle. According to Seattle Times cartoonist, Sam Groff, who was fishing from a boat, "I saw five planes flying in formation. There were three torpedo bombers and two fighters. Suddenly one of the bombers began to tip on its right wing. It was getting lower and lower. The next instant it struck. The impact tore off the right wing." (*Seattle Times*, August 18, 1942).

After the crash, the pilot, F. W. Janney of Philadelphia, PA, and top turret gunner, Charles W. Price of Houston, TX, managed to get out of the damaged Avenger before it sank. However, the radio-man/ventral gunner, Bernard J. Viscovich of Shamokin, PA, was trapped in the plane and drowned.

Another eyewitness, Paul Moran, provided this account of the crash: "I was on a sailboat near the crash site when it occurred. We had been to a marina in Houghton and were returning toward moorage between Juanita and Champagne Point. Someone aboard shouted "look at that plane!" and when I looked it was approaching the water at high speed and at a fairly steep angle. When it hit, the wings appeared to fold forward and all kinds of debris threw up spray ahead of it. A large piece of debris, which we thought was the propeller, cart wheeled across the water ahead of the fuselage. We saw what we thought to be the pilot thrown 20 to 30 feet into the air. We turned the boat around and proceeded to the crash site to see if there were any survivors. We found a person floating in his life jacket who was dazed and barely conscious. We could see another person also floating in the water some distance away that seemed to be in slightly better shape so we stayed with the first person to be sure he wouldn't drown. We were afraid to bring him aboard because we didn't know the extent of his injuries. We



held him along side until a crash boat arrived from NAS Seattle which retrieved both persons.” (*Personal Communication, December 3, 2004*).

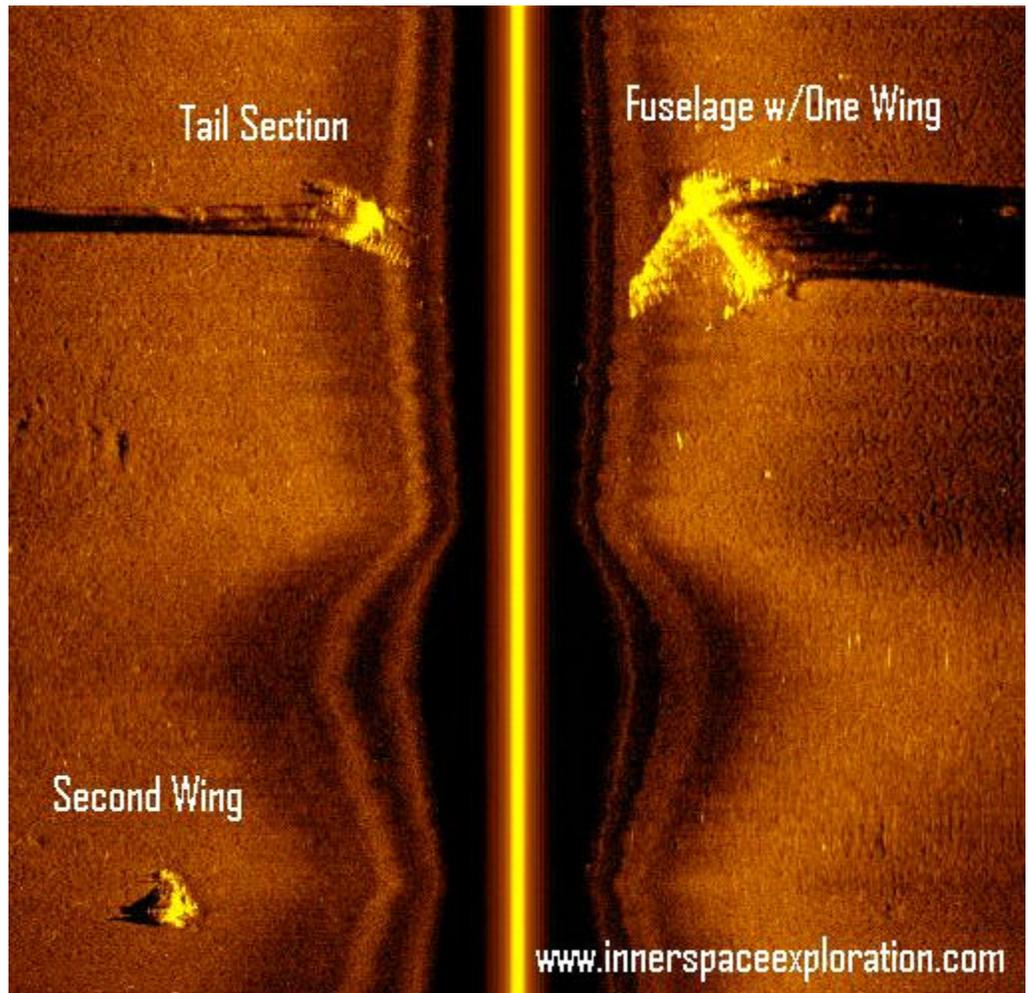
Paul Moran also reported that, after the crash, the Navy had a Mary Ann class powered barge with a crane on it anchored over the site for several days. He assumed that the Navy was attempting to recover the plane and/or the body of the missing crewman. However, Mr. Moran could not remember whether either was accomplished.

The Avenger Today

The location of the Avenger in Lake Washington remained a mystery for 62 years. It managed to elude attempts by Gary Larkins and others to locate all of the WWII era Navy aircraft in the lake.

During the fall of 2004, representatives of *SCRET* and Innerspace Exploration Team discussed a new effort to locate the remains of the Avenger. It appeared to us that earlier searches had focused on finding intact aircraft, rather than the wreckage of an aircraft that had broken apart on impact. In addition, like most technology, side scan sonar has improved significantly in recent years.

On October 31, 2004, Crayton Fenn and John Sharps ventured out on the lake to conduct the search using high resolution side scan sonar. They ran a grid pattern over the probable area of the crash site, which had been determined based on the eye-witness accounts. Later that day, they saw, glowing on the sonar display, the first images of the Avenger that anyone had seen in 62 years. To an experienced eye, the images were clearly parts of an aircraft. It was a very exciting find.



Side scan Image of Avenger in Lake Washington

Provided by Innerspace Exploration Team

Following the discovery, divers from *SCRET* and Innerspace Exploration Team made a series of dives on the wreckage to identify the aircraft, determine its condition and obtain video documentation of the site.

The Avenger is broken in pieces. The largest section of wreckage (top right in side scan image) is about 21 feet long. This section consists of the middle portion of the fuselage from the top rear turret to a little in front of the wings. The engine is missing. The aft section of the fuselage is also missing from about the ventral gun position back. This section of fuselage is inverted (top down) on the bottom. The bomb-bay doors are open along the bottom side of the fuselage. The remains of the top rear turret are on the bottom at the aft end of this section of fuselage. The starboard landing gear is next to the forward end of the fuselage, laying on the bottom. A grapple hook is attached to the starboard landing gear strut. The port wing is attached to the fuselage and is generally intact, although the tip of the wing is damaged. The port landing gear is tucked into the wheel well in the port wing.

The tail of the aircraft (top left in side scan image) is

sitting upright on the bottom about 30 feet from the main section of fuselage. The horizontal stabilizers rest on the bottom and the vertical tail extends straight up. The surfaces of the tail section are extremely fragile. The portion of the fuselage that should be below the tail appears to be missing. It could be in the bottom below the tail, but this does not appear likely.

The starboard wing (bottom left in side scan image) is laying on the bottom about 85 feet from the main section of fuselage. It is relatively intact. In addition, there are two small pieces of twisted aluminum (from the plane) about 50 feet from the wing.



Side of fuselage below port wing



Gauges in remains of top gun turret



Leading edge of port wing



Starboard landing gear & grapple



Tip of port wing



Bomb-bay doors



Port landing gear in wheel well of port wing

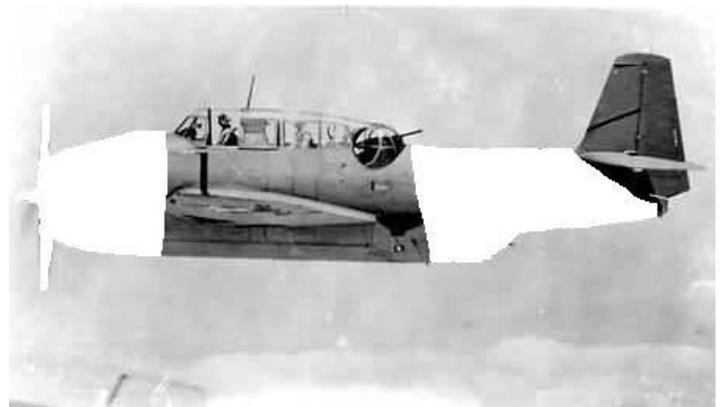


Photo altered to show missing sections of Avenger

Mysteries Remain

The Avenger site still holds mysteries. What happened to the missing parts of the aircraft (*i.e.*, the engine and aft section of the fuselage)? These missing parts are illustrated in the photo above. The side scan survey of the area did not reveal other pieces of wreckage that could be parts of the plane. Also, what happened to the missing crewman? Interestingly, the Navy accident card for this incident states only that the aircraft “Sunk in Lake Washington,” and it does not mention the loss of one of the crew.

We know from Paul Moran’s account that the Navy had a barge on the wreck site for several days after the crash, presumably attempting to recover the plane and/or body of the missing crewman. In addition, there is an old grapple hook attached to the starboard landing gear, which indicates that someone located and hooked the fuselage in the past. The crewman who did not make it out of the plane was the ventral gunner and his position was located in the aft section of the fuselage that is missing. Perhaps the Navy recovered this section of the fuselage.

According to Wendy Coble, of the Naval Historical Center’s Underwater Archeology Branch, there is nothing on file indicating that the Navy recovered either parts of the plane or the missing crewman. Ms. Coble added, however, that the lack of records does not mean that the Navy did not recover parts of the wreckage.

In any event, the Avenger site is a testament to the military personnel who served their country so well during World War II. It also represents an important part of our local history.



Tail sitting on bottom of lake



Top of tail showing rudder

Special thanks to John Sharps and Crayton Fenn for their help with this issue

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I would like to contact *SCRET* for information on a wreck – write to info@scret.org

I would like to become a member of *SCRET* – join on-line at www.scret.org

I would like to make a financial contribution to *SCRET* – mail to *SCRET*'s address shown below.

I would like to contribute an article to *SCRET*'s next newsletter – e-mail to wjaccard@mindspring.com or mail to *SCRET*'s address shown below.

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