Vessel History

The USS Florikan (ASR-9) was a submarine rescue ship built for the U.S. Navy during World War II. Florikan belonged to the Chanticleer class, which comprised the largest submarine rescue ships built for the Navy during the war. These were very specialized ships designed to aid disabled submarines, rescue survivors, and, if feasible, refloat the vessels. Eleven ships were ordered, but only nine were built between 1942 and 1947. Ships of this series were named for birds. Florikan was named for a species native to India. It served for nearly half a century.

Florikan was laid down at the Moore Shipbuilding and Dry Dock Company of Oakland, California on September 30, 1941, and launched on June 14, 1942. Several months after its commissioning on April 5, 1943, Florikan participated in submarine rescue training exercises off Hawaii and later off Midway Island acting as a target, screening, escort, and torpedo recovery vessel.

World War II

On January 16, 1944 the USS Flier (SS-250) grounded during a storm while entering the harbor at Midway. The rescue vessel USS Macaw (ASR-11) attempted to refloat the vessel but also grounded on the same reef, slid off and sank. The Florikan completed the salvage of Flier and during another storm, towed the submarine to Mare Island,
Californian for repairs.

*Florikan* later proceeded to the Aleutians where it assisted in the salvage of the Japanese submarine *I-7*, which was scuttled by the Japanese after taking heavy fire from U.S. forces near Kiska, Alaska. Its divers were able to enter an intact portion of the hull and retrieve documents and personal papers that were later turned over to Naval Intelligence. The *Florikan* then trained submarine crews in rescue operations at Midway until November 12, and at Pearl Harbor from November 16 to June 11, 1944. From June 18 to January 31, 1945, *Florikan* operated out of a forward base for submarines established at Majuro in the Marshall Islands before returning to Pearl Harbor. In September of 1945, the Navy transferred *Florikan* to San Diego, California.

**Korean War**

*Florikan* operated in the Korean War Zone between September 1951 and January 1952. During the remainder of 1952 it was based in San Diego conducting submarine training operations, including diving bell rescue operations with the USS *Blenny* (SS-324), while the submarine rested 200-feet below the water’s surface. It returned to Korean waters from May through September 1953. During the next 15 years it was based in San Diego, making periodic cruises to Hawaii and the Far East.

**Vietnam and Post-Vietnam**

During 1969 *Florikan* operated in the Vietnam War zone based at Da Nang. During that period it participated in the Tet Counteroffensive. It was again based in San Diego through the 1970s and 1980s.

In December 1972 the *Florikan* served as support ship for operations of the submersible *Trieste II* off the coast of southern California. On April 29, 1988 the nuclear USS *Sam Houston* (SSBN-609) ran aground in Carr Inlet, Puget Sound. The *Florikan*, assisted by four tugs, was able to refloat the submarine with minor damage. In 1990 the ship accompanied USS *Schenectady* (LST-1185) on a cruise with a mobile construction battalion and an underwater construction team to the Marshall, Gilbert, Solomon, and Cook Islands; Papua, Tuvalu, and Tonga.

The *Florikan* was decommissioned on August 2, 1991, and transferred to the U. S. Maritime Administration on July 28, 2001. It is currently in the National Defense Reserve Fleet in Suisun Bay, California.

**Historic Context**

Since the middle of the nineteenth century, the Navy has used divers in ship salvage and repair, construction work, and military operations. Early Navy divers were generally swimmers and skin divers. During the Civil War Battle of Mobile Bay, swimmers were
sent in ahead of Admiral Farragut’s ships to locate and disarm Confederate mines that had been planted to block the entrance to the bay.

Prior to 1900, the Navy operated submarines on a limited basis. As technology grew, so did its submarine fleet. However, from 1912 through 1939, the development of the Navy’s F, H, and S class boats was marred by a series of accidents, collisions, and sinkings. Several of these submarine disasters resulted in a rapid growth of the Navy’s diving capability. During the 1920s, the Navy converted six WW-1-era Bird-class minesweepers into submarine rescue ships by adding diving systems and recompression chambers. One of these former minesweepers, the USS Falcon (ASR-2), participated in the rescue and salvage operations of three high-profile accidents that occurred between 1925 and 1939.

In September of 1925 the Ocean Steamship Company’s City of Rome collided with the USS S-51 (SS-162), sinking the submarine 14 miles east of Block Island, Rhode Island. Public pressure to raise the submarine and recover the crew was intense. Salvage of the S-51 covered a 10-month period of difficult and hazardous diving. The submarine was finally raised and towed to the Brooklyn Navy Yard in New York. This accident provided the impetus for expanding the Navy’s diving ability.

In 1927 the Navy lost the submarine USS S-4 (SS-109) in a collision with the Coast Guard Cutter Paulding (DD-22). Nearly one day after the sinking, divers reached the submarine in 102 feet of water and exchanged hand signals with the men trapped inside. The submarine had a hull fitting designed to take an air hose from the surface, but what had looked feasible in theory proved too difficult in reality. With heavy seas causing repeated delays, the divers could not make the hose connection until it was too late. Tragically, all of the men on board the S-4 perished. Even if the hose connection was completed in time, rescuing the crew would have posed significant problems.

The Navy pushed for development of a rescue chamber that was essentially a diving bell with special fittings for connection to a submarine deck hatch. The apparatus, named the McCann-Erickson Rescue Chamber1, was used in 1939 after USS Squalus (SS-192), a diesel-electric submarine built at the Portsmouth Navy Yard, Portsmouth, New Hampshire, suffered a catastrophic valve failure during a test dive off the Isle of Shoals May 23, 1939. Partially flooded, the submarine sank to the bottom and came to rest keel down in 60 fathoms (240 feet) of water. The rescue chamber made four trips and safely brought 33 men to the surface. The remaining crew was trapped in the flooded after-section of the submarine and died in the sinking. The Squalus was raised by salvage divers using air and helium-oxygen mixtures. Following its repair, Squalus, renamed USS Sailfish (SS-192), compiled a proud record in World War II.

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1 A diving bell with special fittings for connection to a submarine deck hatch.
During the *Squalus* rescue, *Falcon* not only helped to refloat the submarine, but it also rescued 33 survivors using aqualungs and a diving bell. This experience strongly influenced the future design of submarine rescue ships.

Navy divers were used in rescue and salvage operations after the 1941 Japanese raid on Pearl Harbor. Within two hours of the start of the raid, the first salvage teams were already cutting through the hull of the overturned battleship USS *Oklahoma* (BB-37) to rescue trapped sailors. Teams of divers recovered ammunition from the magazines of sunken ships in the event of a second attack. The enormous salvage effort was highly successful. There were 101 ships in the harbor at the time of the attack and most sustained damage. The battleships suffered the brunt of the attack. Six battleships were sunk and one was heavily damaged. Of this number, four were salvaged and returned to the fleet for combat duty; the *Oklahoma* was righted and refloated but sank en route to a shipyard in the United States. Only the USS *Arizona* (BB-39) and the former battleship USS *Utah* (AG-16) could not be salvaged.

Battleships were not the only subjects of the salvage effort. Throughout 1942 and part of 1943, Navy divers worked on destroyers, supply ships, and other vessels, often using makeshift shallow water apparatus inside water and gas-filled compartments. In the course of the Pearl Harbor effort, Navy divers spent 16,000 hours underwater during 4,000 dives. Contract civilian divers contributed another 4,000 diving hours.

**Diving since World War II**

Navy diving has not been limited to tactical combat operations, wartime salvage, and submarine sinkings. Fleet diving has become increasingly important and diversified since World War II. A major part of the diving mission is the inspection and repair of naval vessels to minimize downtime and the need for dry-docking. Other aspects of fleet diving include the recovery of practice and research torpedoes, installation and repair of underwater electronic arrays, underwater construction, and location and recovery of downed aircraft. Sinkings and beachings caused by storms and human error continue to demand the fleet’s salvage and harbor clearance capabilities in peaceful as well as in hostile times.

**Loss of the USS *Thresher* (SSN-593)**

The loss of the *F-4, S-51, S-4* and the sinking of the *Squalus* all led to improvements in the Navy’s diving capabilities. In the 1960s, however, a submarine disaster of major proportions had a profound effect on the development of new diving equipment and techniques in the postwar period. This was the loss of the nuclear attack submarine USS *Thresher* (SSN-593) and all its crew in April 1963. The submarine sank in 8,400 feet of water, a depth beyond the survival limit of the hull and far beyond the capability of any existing rescue apparatus. An extensive search was initiated to locate the submarine and determine the cause of the sinking. The first signs of the *Thresher* were located and
photographed a month after the disaster. Collection of debris and photographic coverage of the wreck continued for approximately one year.

The Deep Submergence Review Group (DSRG) was formed to assess the Navy’s undersea capabilities. Four general areas were examined: search; rescue; recovery of small and large objects; and the Man-In-The-Sea concept which involved trials that tested man’s ability to work underwater for prolonged periods. The basic recommendations of the DSRG called for a vast effort to improve the Navy’s capabilities in these four areas.

**Deep Submergence Systems Project**

Direct action on the recommendations of the DSRG came with the formation of the Deep Submergence Systems Project (DSSP) in 1964, and an expanded interest regarding diving and undersea activity throughout the service. Submarine rescue capabilities were substantially improved with the development of the DSRV, which became operational in 1972. This deep diving craft is air-transportable, highly instrumented, and capable of rescuing a submarine’s crew at a depth of 5,000 feet. Three other significant areas of achievement for the DSSP included: Saturation Diving; the development of Deep Diving Systems; and progress in advanced diving equipment design.

**U.S. Navy Saturation Diving**

The Navy developed and proved saturation diving techniques in its Sealab series as well as in ongoing programs of research and development at the Navy Experimental Diving Unit (NEDU), Naval Medical Research Institute (NMRI), and the Navy Submarine Medical Research Laboratory (NSMRL), as well as many institutional and commercial hyperbaric facilities. Saturation diving using Deep Diving Systems (DDS) is now a proven capability. The Navy developed two types of DDS. The DDS MK I supported two 2-man teams of divers through a 14-day mission profile. The DDS MX I system used in trial dives to 1,148 feet is no longer in service. The DDS MX 2 MOD 1, designed for saturation diving, supports two 4-man teams for an extended mission time. DDS MK 2 is installed as part of the basic equipment of the ASR-21 class of submarine rescue ships.
Description/Characteristics of Vessel Type

**Type:** Submarine Rescue Ship  
**Hull Number:** ASR-9  
**Builder:** Moore Shipbuilding and Dry Dock Company of Oakland, California  
**Year:** 1942  
**Length:** 251.4'  
**Beam:** 42'  
**Draft:** 14.10'  
**Displacement:** 1,670 tons standard; 2,015 tons full  
**Propulsion:** Diesel-electric, four engines  
**Horsepower:** 3,000  
**Speed:** 15 knots

The ships of the *Chanticleer* class were single screw vessels powered by diesel-electric engines with 3,000 horsepower, providing a cruising speed of 15 knots. Their hoisting gear consisted of a tripod mast aft with five booms. One 61-foot boom had a capacity of 13 tons. Two of the remaining booms had capacities of 5 tons and two had capacities of 2.5 tons. To position themselves over a sunken vessel the ships were fitted with enough anchoring gear to place a 6-point mooring in 1,000 feet of water. Two 2-ton danforth anchors were carried in quick release mountings on either side of the stern and two mooring buoys in quick release mountings on either side amidships. The ships were also equipped with heavy towing winches and capstans, and two 35 foot work boats.

The *Florikan* mounted two 3-inch 50 caliber guns and two 40 mm guns. The 3-inch guns were removed some time after World War II. Rescue equipment included one McCann submarine rescue chamber, two double lock re-compression chambers, HeO2 diving equipment to sustain divers at depths up to 380 feet, 110 cylinders of mixed HeO2, and 40 cylinders of oxygen for decompression or treatment of bends. The normal complement was 102.

Statement of Significance

The *Chanticleer* class was the first class of ships that were built specifically as submarine rescue ships and were fitted with the McCann Chamber. *Florikan* was the third of nine vessels built of the class. *Florikan* participated in WWII and the Korean and Vietnam Wars.

Integrity of Characteristics/Features

The vessel is in poor condition and has been in the Maritime Administration’s Reserve Fleet in Suisun Bay for more than eight years. Most of its equipment had been stripped prior to the ship being transferred to the Maritime Administration. It has been stripped
National Register Eligibility Statement

Although the steel-hulled submarine rescue ships proved to be a very successful design, the Florikan does not possess the significant historical or technological characteristics, or integrity of design and materials necessary for listing. While Florikan participated in many note-worthy events, it was one of many vessels involved and one of many vessels that performed rescue and salvage work during WWII and during the Korean and Vietnam Wars.

Date: 12 May 2009
Determination: NOT ELIGIBLE

Sources


Dictionary of American Naval Fighting Ships; Department of the Navy, Naval Historical Center; Government Printing Office, Washington, D.C.

Internet Sites

U.S. Navy, Naval Historical Center website: http://www.history.navy.mil/faqs/faq90-3.htm#anchor156376