

During the early years of the Cold War, the primary threat to the superiority of the U.S. Navy was not an enemy surface fleet but the numerous Soviet submarines that regularly patrolled the world's oceans. In response to this very real threat, Grumman designed the S2F-1 in the early 1950s as the U.S. Navy's premier sub hunter. Outfitted with the latest submarine detection equipment, the S2F-1 Tracker revolutionized anti-submarine warfare (ASW). Variations of the basic S2F-1 design were developed to serve many functions including: fire bombing, target towing, photo-reconnaissance, Carrier Onboard Delivery (COD) and multi-engine proficiency training.



Also called the “Stoof” (S-Two-F), the Tracker's twin engines and crew of four allowed the plane to search hundreds of miles of ocean on each patrol, ensuring that American carrier groups could proceed without harassment from Soviet subs. The S2F carried a search radar mounted on the bottom of the fuselage in a retractable radome, a retractable magnetic anomaly detector (MAD) mounted at the base of the tail fin and air-launched sonobuoys carried in the ends of both engine nacelles. The Tracker's armament included ASW torpedoes, bombs, depth charges and rockets. It is interesting to note the unique wing folding mechanism of the Tracker, the right wing folds slightly forward while the left wing folds slightly aft. This allows the wings to remain nearly flat on top of the cabin, reducing the plane's width by nearly 40 feet.

The S2F-1 was a very successful design. It was sold to several countries including Australia and Argentina. Additionally, the Tracker was produced under contract in Canada by de Havilland. The “Turbo Tracker,” a version of the plane refitted with turboprop engines, is still in service in Brazil and Taiwan. The ultimate conversion of the “Stoof” was the E-1B “Tracer,” an Airborne Early Warning (AEW) aircraft. The Tracer featured a massive radome mounted on the top of the fuselage earning the E-1B the nickname “Stoof with a Roof.” The Tracer's radar system had a search radius of some 250 miles, and the E-1B saw extensive

service in Vietnam as the U.S. Navy's "eye in the sky."



The Cavanaugh Flight Museum's S2F-1 (BuNo. 136431 ) was accepted by the U.S. Navy in 1957. Assigned to the Air Anti-Submarine Squadron 37, it completed one deployment aboard the U.S.S. Philippine Sea (CVS-47). The aircraft was converted into a US-2B (the unarmed utility and training version of the Tracker) in 1964 and served with various U.S. Navy squadrons. Last stationed at N.A.S. Corpus Christi with Combat Training Wing (COMTRAWING) 4, the museum's Tracker was retired in January 1979. During its service with the Navy, it accumulated nearly 11,000 flight hours and performed more than 650 catapult launches.

Two ENGINE-1820-82 Cyclone radials 1,525 h.p. each

ARMAMENT-1 torpedo or 4,810 pounds of depth charges, bombs or rockets; plus sixteen sonobuoys

WING SPAN 69 feet 8 inches

LENGTH 46 feet 6 inches

HEIGHT 16 feet 3.5 inches

MAX TAKEOFF WEIGHT 26,000 pounds

CREW 4

MANUFACTURED BY Grumman Aircraft Corporation

TOTAL BUILT 854

TOTAL EXISTING Unknown

FIRST BUILT 1953

MUSEUM'S AIRCRAFT BUILT 1967

ON DISPLAY AT Cavanaugh Flight Museum, Addison Airport (KADS), Dallas, Texas

MAXIMUM SPEED 260 mph

RANGE 840 miles

SERVICE CEILING 23,000 feet

BU NO 136431