

General Motors TBM-3E Avenger

1945

General History

Tough Torpedo Bomber

The *Avengers* were designed and built by Grumman Aircraft Corporation, and were originally designated TBFs. Grumman had a reputation of building good airplanes quickly, and built a total of 2293 TBFs. Production was transferred under license to General Motors in New Jersey, where 2882 TBM-1s and 4664 improved TBM-3s were built. Production ceased in September 1945.

Avengers served in all theatres with the U.S. Navy, the U.S. Marine Corps, the Royal New Zealand Air Force, and the British Fleet Air Arm. TBMs continued in U.S. Navy service post-war until 1954.

Avengers were made to replace outdated airplanes developed in the 1930s. Saddled with the dangerous job of pushing through enemy fighter protection, dodging a barrage of gunfire, and releasing a torpedo at “can’t miss” range, the *Avenger* was well armed and well armored.

While slower and bigger than Grumman’s *Hellcats* and *Wildcats*, the *Avenger* bomber strongly resembled its fighter plane brothers. On one occasion, Japanese ace Saburo Sakai mistakenly approached an *Avenger* from behind. He thought he had a single-man *Hellcat* in his sights. A blast from the torpedo bomber’s turret damaged his *Zero* and nearly killed the famous flyer.

By war’s end *Avengers* had sunk about 60 enemy ships, and participated in the destruction of the world’s largest battleship, the *Yamato*. In the 1950s, when Japan was allowed to rearm, one of the first aircraft the Japanese requested was *Avenger*.



The Turkey

Navy pilots called the tubby *Avenger* by the nickname “Turkey.” Some said it earned the title because of the way it looked on approach for landing, with wide wings and long, gangly landing gear hanging below. Others said the name was because of a series of combat failures when it was first introduced. Once the big plane had proven itself in battle, launching “tin fish” (torpedoes) at enemy ships, lobbing depth charges onto submarines, and showering ground troops with bombs and rockets, the nickname remained Turkey, but it took on a decidedly more affectionate tone.

About This Aircraft

As with many *Avengers* during World War II, this Grumman-designed TBM was built by General Motors (Eastern Aircraft). Accepted into the U.S. Navy on August 31, 1945 and delivered six days later, the aircraft flew in VT-37 (Torpedo Squadron 37) and VT-7 early in its career. While with VT-7, this *Avenger* was based at Naval Air Station Klamath Falls, Oregon.

Afterwards, the airplane served with Naval Reserve units based in Norfolk, Virginia, Denver, Colorado and Kingsville, Texas. It was struck from Navy records in May of 1956 with a total of 1,194 hours flown. Purchased by Riverside Aircraft Company two years later, it was converted for aerial spraying and dropping fire retardant on forest fires. Carrying nearly a ton of chemicals, the old torpedo bomber was ideal for the task, and was used until 1983. It was restored to original military configuration and purchased by Evergreen in 1989. Today, it wears the paint scheme of the *Avengers* that flew from the aircraft carrier *USS Langley* during World War II.

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Specifications

Type:	Torpedo Bomber
First Flight:	XTBF-1 on August 1, 1941
Wingspan:	54 feet 2 inches
Length:	40 feet 11.5 inches
Height:	16 feet 5 inches
Wing Area:	490 square feet
Weight, Empty:	10,545 pounds
Weight, Loaded:	14,160 pounds
Power:	One Wright R-2600 1,900 horsepower engine
Normal Crew:	Three (Pilot, Gunner, Radio Operator)
Typical Armament:	Three .50 cal. machine guns; bomb or torpedo load of 2,000 pounds

Performance

Cruise Speed:	147 miles per hour
Top Speed:	251 miles per hour at sea level
Range:	1,010 miles (with torpedo)
Service Ceiling:	30,100 feet