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**NORTHROP GRUMMAN**

## 2012

World War II Grumman Fighter  
Discovered off Florida Coast

By Tony Chong

The sea gave up one of its treasures last year when the wreck of a Grumman-built F6F Hellcat fighter was discovered in the waters off the Atlantic coast of Florida.

OceanGate Inc., a private company that operates and leases the five-man submersible vehicle Antipodes to researchers, commercial institutions, and governmental agencies, made the discovery during a contracted survey of the artificial reef system around the Miami/Dade County coastal area on June 29.

The site initially showed up as a 100-foot-long feature during a surface sonar scan. It appeared to be the wreckage of a small ship, but Antipodes quickly dispelled that theory after it inspected the location and found the much smaller aircraft lying on its back in more than 240 feet of water.

After notifying the Smithsonian Institution and the U.S. Navy of its find, OceanGate continued exploring the site throughout the summer and early fall of 2012. During its eight dives, the crew utilized the vehicle's high-frequency 2D and 3D sonar

scanners and photo and video equipment to capture quality imagery of the aircraft. The company announced that it would donate this data to the Naval History and Heritage Command in Washington, D.C.

The Hellcat was the sixth fighter type built for the Navy by heritage Grumman Aircraft Engineering Corp., based in Bethpage, N.Y.

The company began initial design studies in February 1938. Development accelerated in September 1940, when the Navy realized it would quickly need a more powerful aircraft than the Grumman F4F Wildcats then in service.

Two power plant options were considered, with the 2,000-horsepower Pratt & Whitney R-2800 radial engine winning in the end. First flight of the first prototype XF6F-1 occurred on June 26, 1942, followed by the flight of the R-2800 prototype (designated XF6F-3) on July 30.

Leroy Grumman was adamant that the new aircraft be easy to build, maintain, and fly. It also needed to be

rugged, reliable, maneuverable, and deadly. These qualities were realized brilliantly when the Navy test-flew the aircraft and declared it ready for mass production in September 1942 — three months after first flight.

From a modest production start of 12 Hellcats in 1942, numbers ramped up rapidly in the following two years. By the time production ended in November 1945, 12,275 F6Fs had rolled off the line at Bethpage, including a staggering 605 in March 1945 alone — 105 aircraft above their quota for the month.

The Hellcat's combat record was just as impressive. It became the scourge of the Pacific Theater, racking up an

impressive 19-1 kill ratio during the war. Only 270 Hellcats were lost to air-to-air combat, far fewer than to ground fire, other operational causes, or training accidents, including 79 off the Atlantic coast of Florida alone.

About 22 Hellcats survive today, with only a handful still flying. The OceanGate discovery is a welcome addition to this exclusive collection and a proud reminder of our Northrop Grumman heritage.

More information about OceanGate Inc., including additional F6F imagery, can be found at this site: [www.opentheoceans.com](http://www.opentheoceans.com). 

**Editor's note: OceanGate Inc. contributed to this article.**



A video of the wreck site is available here:

[http://www.youtube.com/watch?v=LvKFRsLXNZc&list=UUV90kzX\\_bwwndciTCbSsm9A&index=1&feature=plcp](http://www.youtube.com/watch?v=LvKFRsLXNZc&list=UUV90kzX_bwwndciTCbSsm9A&index=1&feature=plcp)



Two F6F-3s fly in formation sporting the standard mid-war Navy two-blue and white color scheme and the July-August 1943 star and bar markings with red outline. The fact that U.S. and allied gunners in the Pacific Theater shot at anything with red on it quickly led to the removal of the outline.



The wreck of the F6F lying on its back. The aircraft is in relatively good shape, all things considered. Note the deployed flaps. The retracted main gear and wheels are clearly visible in the wings.

Photo courtesy of OceanGate Inc. Reprinted with permission.