

## The First Phantom by E J Sherwood

The Phantom II was the McDonnell Douglas F-4. So what do you know about the first Phantom?

### The McDonnell FH-1 Phantom

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\* The emergence of the combat jet in the postwar era meant that the US Navy (USN) had to acquire jet aircraft to keep up with the advance of technology. The first carrier-based pure jet fighter acquired by the service, the McDonnell "FH-1 Phantom", was inadequate, but it led to a scaled-up successor, the "F2H Banshee", that was a significant component of the Navy's carrier air power well into the 1950s. This document provides a history and description of the Phantom.



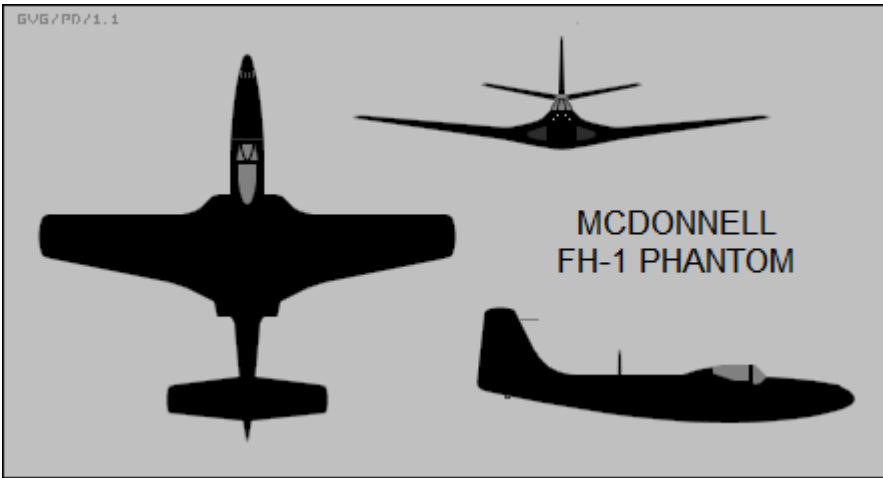
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### FH-1 PHANTOM

\* The McDonnell Aircraft Corporation was founded in Saint Louis, Missouri in 1939 by James McDonnell. By 1940 the company was busy building subassemblies for other aircraft manufacturers as the US geared up for war. Work on aircraft prototypes began in January 1944, with the first prototype flying on 26 January 1945 and 21 July 1946. The XFD-1 (later designated the FH-1 for production) began carrier trials on the USS FRANKLIN D. ROOSEVELT, making it the first US jet aircraft to operate off a carrier. The initial production machine performed its first flight on 28 October 1946, with first deliveries to the Navy in 1947.

\* **The FH-1 Phantom** was a neat, sporty single-seat aircraft of conventional configuration, built mostly of aircraft aluminum, with a raised cockpit; and tricycle landing gear. The wing folded straight up outboard of the main landing gear, and featured ailerons and split flaps, with a solid-panel spoiler-type airbrake on the top of the wing outboard of the wing fold. The tail assembly was nothing unusual, featuring elevators and rudder. The

engines were Westinghouse J30-WE-20 turbojets with 1,600 lbs. of thrust each, with the exhausts canted slightly outward to protect the rear fuselage. Two "jet-assisted take-off (JATO)" rocket bottles could be attached for boosted takeoffs if desired. Internal fuel supply was 1,420 liters (375 US gallons).



The pilot had a good field of view, with the canopy sliding back over the spine of the aircraft to open; the pilot did not have an ejection seat, but the canopy could be discarded in an emergency. There was a stinger-type arresting hook under the tail. Armament consisted of four .50 caliber, M2 Browning machine guns on the top side of the nose, with 325 rounds of ammunition per gun. There were also stub launchers under the wings for eight 127 millimeter (5 inch) HVAR (High Velocity Air Rocket) projectiles. A conformal belly fuel tank with a capacity of 1,117 liters (295 US gallons) could be attached. Production FH-1s differed from the XFD-1 prototypes in being 48 centimeters (19 inches) longer to provide more fuel capacity; having a tailfin with a squared-off top, instead of the round-top tailfin of the prototypes; and being fitted with a smaller tail section. In service, the FH-1s were generally painted in overall dark sea blue, the typical USN color scheme for the time.

<b>MCDONNELL FH-1 PHANTOM:</b>	
<b>Wingspan</b>	<b>40 feet 9 inches</b>
<b>Folded Wingspan</b>	<b>16 feet 3 inches</b>
<b>Length</b>	<b>38 feet 9 inches</b>
<b>Height</b>	<b>14 feet 2 inches</b>
<b>Empty Weight</b>	<b>6,680 pounds</b>
<b>max Loaded Weight</b>	<b>12,035 pounds</b>
<b>Maximum Speed</b>	<b>480 MPH / 415 KT</b>
<b>Service Ceiling</b>	<b>41,100 feet</b>
<b>Range</b>	<b>695 MI / 605 NMI</b>

Only 60 FH-1s were actually built, since the end of the war ended any urgency for obtaining jet fighters, and though the Phantom was apparently a very pleasant aircraft to fly it was also underpowered, not much faster than the best piston fighters of the day. It also had much less range.

**The First Phantom** served with one Navy and two Marine squadrons. All FH-1 Phantoms were out of first-line service by the end of 1949, being replaced by the McDonnell Banshee. The Phantoms were passed on to Navy Reserve squadrons with the FH-1's final retirement from military service being in 1954. Although the FH-1 Phantom had a short service life, it served a useful purpose in familiarizing the Navy and Marines with carrier jet operations. A few FH-1s remain on static display, but none are flying today.

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