P-3 Orion

The P-3 Orion, perhaps the world’s premier antisubmarine and maritime surveillance aircraft, has served the US Navy for more than five decades. In the early Cold War, the most important role of the four-propeller aircraft was continuous tracking of Soviet ballistic missile and attack submarines. However, the Orion has served ably in many other contingencies, from the Cuban Missile Crisis to Vietnam, from the Balkans to recent Mideast wars.

The P-3 was developed simultaneously with the Lockheed L-188 Electra turboprop airliner. The Orion differed structurally from the L-188, with a shorter forward fuselage, a long tail boom for the magnetic anomaly detector to search for submarines, and space for a crew ranging from 11 to 23, depending on the mission. It boasted many features: short-takeoff and landing capabilities, exceptional range, heavy load capability, long loiter time, wide variety of armament options, and high reliability. Its mission was to use sophisticated electronic and acoustic gear to locate submarines and, if called on to do so, destroy them at sea with an array of weapons. During the Cold War years, these included nuclear depth charges. The Orion has been sustained and extended by continuous upgrades.

The P-3 is one of a handful of exceptional military aircraft—such as the B-52 bomber, U-2 spyplane, and KC-135 tanker—that has seen continuous US service for more than 50 years. The Navy has over time changed P-3C operational emphasis to antisurface warfare. Indeed, the P-3’s long range and long loiter time have made it a valuable weapon in recent Iraq, Afghanistan, and Libya operations. The Navy’s P-3 aircraft will eventually be replaced by the P-8A Poseidon. —Walter J. Boyne

In Brief

Designed and built by Lockheed • first flight Nov. 25, 1959 • number built 757 (Lockheed, 650; Kawasaki, 107) • crew of 11 (three naval aviators, two naval flight officers, two flight engineers, three sensor operators, one inflight technician) • Specific to P-3C: four Allison T56-A-14 turboprop engines • armament (defensive) Zuni rockets • munitions load up to 20,000 lbs of ordnance—Mk 46/50 torpedoes, AGM-84 Harpoon, AGM-84E SLAM, AGM-84H/K SLAM-ER, AGM-65 Maverick, Zuni rockets • max speed 473 mph • cruise speed 378 mph • max range 2,738 mi • weight (loaded) 142,000 lb • span 99 ft 7 in • length 116 ft 8 in • height 38 ft 7 in.

Famous Fliers


Interesting Facts

Deployed for first mission in 1962 Cuban Missile Crisis • the Royal New Zealand Air Force set an airborne mission record for the type of 21.5 hours • flies on station with one or even two engines shut down to conserve fuel • provided aerial support to rescue of Richard Phillips, kidnapped by Somali pirates • modified for use in counterdrug operations, especially against “narco-subs” • played major role in search for missing Malaysian Airlines flight MH370 • suffered midair collision with Chinese J-8 interceptor in 2001, leading to forced landing on Hainan • flown by 20 military air arms, four US civilian agencies.