## Northrop Grumman EA-6B "Prowler"

The Hickory Aviation Museum's EA-6B Bureau # 163033 is on loan from the National Museum of Naval Aviation. It came from MCAS Cherry Point, NC on 14 May 2016. This is one of the only AC to fly-in and do a flight demonstration prior to its arrival.



Role Electronic Warfare/Attack AC National origin United States of America Manufacturer Northrop Grumman First flight 25 May 1968 Introduction July 1971 Retired Semi-Retired Status Retired, USN 2015; still in service w/US Marines Corps **Primary users United States Navy United States Marine Corps** 170 **Number built** 2 × Pratt & Whitney J52-**Propulsion** P408A turbojet **Unit cost** \$52M 1998 (Advanced Mod) \$30M 1981 (Upgrade Mod) \$20M 1973 (Earliest Variant) Grumman A-6 Intruder/EA-6A **Developed** Electric Intruder From

The Northrop Grumman (formerly Grumman) EA-6B Prowler is a twin-engine, four-seat, mid-wing electronic warfare aircraft derived from the A-6 Intruder airframe. The EA-6A was the initial electronic warfare version of the A-6 used by the Marine Corps in the 1960s. Development on the more advanced EA-6B began in 1966. An EA-6B aircrew consists of one pilot and three Electronic Countermeasures Officers. It is capable of carrying and firing anti-radiation missiles (ARM), such as the AGM-88 HARM missile.

Prowler has been in service with the U.S. Armed Forces since 1971. It has carried out numerous missions for jamming enemy radar systems, and in gathering radio intelligence on those and other enemy air defense systems. From the 1998 retirement of the United States Air Force EF-111 Raven electronic warfare aircraft, the EA-6B was the only dedicated electronic warfare plane available for missions by the United States Navy, the U.S. Marine Corps, and the U.S. Air Force until the fielding of the Navy's EA-18G Growler in 2009. Following its last deployment in late 2014, the EA-6B was withdrawn from U.S. Navy service in June 2015. The USMC plans to operate the Prowler until 2019.

#### **General characteristics**

**Crew:** 4 (one pilot, three electronic countermeasures officers (ECMOs))

Length: 59 ft 10 in (17.7 m)
Wingspan: 53 ft (15.9 m)
Height: 16 ft 8 in (4.9 m)
Wing area: 528.9 ft² (49.1 m²)
Empty weight: 31,160 lb (15,130 kg)
Max. takeoff weight: 61,500 lb (27,900 kg)

### **Performance**

Maximum speed: 566 knots (651 mph)
Cruise speed: 418 kt (481 mph, 774 km/h)
Range: 2,022 mi -2400 mi (tanks kept)
Service ceiling: 37,600 ft (11,500 m)
Hardpoints: 5 total. Able to carry: Up to 4×

AGM-88 HARM Anti-radiation missiles, ALQ-99 Tactical Jamming System Pods, Chaff, LITENING targeting pod (USMC only), Fuel.

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#### **Operational history**

The EA-6B entered service with Fleet Replacement Squadron VAQ-129 in September 1970, and Tactical Electronic Warfare Squadron 132 (VAQ-132) became the first operational squadron, in July 1971. This squadron began its first combat deployment to Vietnam on *America* 11 months later, soon followed by VAQ-131 on *Enterprise* and VAQ-134 on *Constellation*.

Two squadrons of EA-6B Prowlers flew 720 sorties during the Vietnam War in support of US Navy attack aircraft and USAF B-52 bombers. During the 1983 invasion of Grenada, four Prowlers supported the operation from USS *Independence* (CV-62). Following the Achille Lauro hijacking, on 10 October 1985 Prowlers from USS *Saratoga* (CV-60) provided ESM support during the interception of the Egypt Air 737 carrying four of the hijackers.

Prowlers jammed Libyan radar during Operation El Dorado Canyon in April 1986. Prowlers from USS *Enterprise* (CVN-65) jammed Iranian Ground Control Intercept radars, surface-to-air missile guidance radars and communication systems during Operation Praying Mantis on 18 April 1988. 39 EA-6Bs were involved in Operation Desert Storm, 27 from six AC carriers and 12 from USMC bases. Over 4,600 flight hours, Prowlers fired over 150 HARM missiles. Navy & Marine Prowlers flew 1,648 sorties without a loss.

With the retirement of the EF-111 Raven in 1998, the EA-6B was the only dedicated aerial radar jammer aircraft of the U.S. Armed Forces, until the fielding of the Navy's EA-18G Growler in 2009. The EA-6B has been flown in almost all American combat operations since 1972, and is frequently flown in support of the U.S. Air Force missions. In 2001, 124 Prowlers remained, divided between twelve Navy, four Marine, and four joint Navy-Air Force "Expeditionary" squadrons. A Joint Chiefs of Staff (JCS) staff study recommended that the EF-111 Raven be retired to reduce the types of aircraft dedicated to the same mission, which led to an Office of the Secretary of Defense (OSD) program memorandum to establish 4 land based "expeditionary" Prowler squadrons to meet the needs of the Air Force.

Though once considered being replaced by Common Support Aircraft, that plan failed to materialize. In 2009, the Navy EA-6B Prowler community began transitioning to the EA-18G Growler, a new electronic warfare derivative of the F/A-18F Super Hornet. All but one of the active duty Navy EA-6B squadrons were based at Naval Air Station Whidbey Island. VAQ-136 was stationed at Naval Air Facility Atsugi, Japan, as part of Carrier Air Wing 5, the forward deployed naval forces (FDNF) air wing that embarks aboard the Japan-based *George Washington*. VAQ-209, the Navy Reserve's sole EA-6B squadron, was stationed at Naval Air Facility Washington, Maryland. All Marine Corps EA-6B squadrons are located at Marine Corps Air Station Cherry Point, North Carolina.

In 2013, the USN planned to fly the EA-6B until 2015, while the USMC expect to phase out the Prowler in 2019. The last Navy deployment was on George H.W. Bush in November 2014, with VAQ-134. The last Navy operational flight took place on 27 May 2015. Electronic Attack Wing, U.S. Pacific Fleet (CVWP), hosted a retirement commemoration for the EA-6B from 25 to 27 June 2015 at NAS Whidbey Island.

https://en.wikipedia.org/wiki/Northrop\_Grumman\_EA-6B\_Prowler