From Ravens to Prowlers

Crewed by both Air Force and Navy aviators, the EA-6B Prowler is the dedicated joint-service tactical jammer. While not as fast or long-ranged as the supersonic-capable EF-111 Raven, the Prowler can land on aircraft carriers, and most of the type are relatively young. For those reasons, DoD officials chose to retain the EA-6B if there had to be only one tactical jammer between the services. Above, an EA-6B with a USAF crew flies a training sortie. At right, four EF-111s demonstrate the various angles of wing sweep for the Raven.





The last EF-111 Ravens left the Air Force in May, their departure having been twice postponed by regional commanders reluctant to give up their capability until the last possible moment. Budget cuts, and not obsolescence, forced the Ravens into retirement. Since the F-111 had already been phased out, the expense of the logistics tail for just 42 aircraft was deemed too great, but crises around the world gave the Raven a two-year stay of execution from the originally planned 1996 cutoff. The EF-111s at left returned home to the 429th Electronic Combat Squadron at Cannon AFB, N.M., for the last time in April. The 429th, which stood down June 19, had maintained continuous rotations in Southwest Asia since October 1993more than 2,000 days.



In joint Prowler squadrons, with crew members wearing the same flight suits and patches, it's hard to tell who's Air Force and who's Navy until you can see the silver or gold of their wings, as evidenced by these two crewmen (at right) at NAS Whidbey Island, Wash. The Navy and Air Force began joint training there three years ago.





The Navy/Marines have 19 EA-6B squadrons. Five squadrons are tagged as expeditionary units that will remain ground-based but carrier-capable. USAF pilots converting to the EA-6B had to qualify for carriers, but the requirement has been dropped, and USAF pilots will go right to the expeditionary squadrons. The limited number of Prowlers available for flight training led to the shift, the Navy says.

The EA-6B is a four-man "office," with a pilot and three Electronic Warfare Officers. Air Force officers—some pilots and some EWOs—like Capt. Jeff Fischer, at left, will typically make up one-fourth of an expeditionary Prowler crew.



In the never-ending comparisons offered between their airplanes and those of the Navy, USAF crews point out that the EF-111 was not only much speedier than the EA-6B but also had much longer range and was automated enough to let a two-man crew do what requires four on the Prowler.

The EA-6B's speed, range, and loiter time are its major shortcomings, but a big factor in its choice as the new joint jammer was its recent avionics upgrade. (Funds for a similar upgrade for the Raven were channeled to the Prowler.) In addition, the Prowler can carry and shoot the HARM missile, giving it some lethal Suppression of Enemy Air Defenses capability. The other "ordnance" under its wings are generators to feed the voracious energy requirements of the jamming gear.





Pilot Maj. Pete Bussa (right) checks out a Raven before his next flight. Though officially dubbed Raven, the EF-111 was more affectionately known as "Spark Vark," a combination alluding to its electronic mission and its roots as the F-111 Aardvark.







At left, A1C Samuel Johnson, checks the safety wires as he helps "button up" the electronics bay.

The EF-111 dates from 1973, when air combat in Vietnam and the Yom Kippur War showed that then—top line fighters like the F-4 Phantom needed escort jammers to help defeat increasingly lethal ground threats. The solution chosen to most quickly and inexpensively fill the void was to equip F-111As already in the force with jamming suites adapted from the Navy's Prowlers. Modifications started in 1979. Forty-two Aardvarks were converted into EF-111As, and the first operational unit stood up at Mountain Home AFB, Idaho, in November 1983.

Sporting a gray-blue camouflage and distinctive bulges on the tail and belly, the EF-111 has always been easy to distinguish from its bomb-dropping brethren. A veteran of real-world missions in Libya, Panama, Iraq, and Bosnia, the EF-111 racked up an impressive record of combat support. On Jan. 17, 1991, with an Iraqi Mirage F-1 on its tail, a Raven crew dropped low, employing chaff, flares, speed, and superb evasive maneuvers. In hot pursuit, the Iraqi pilot tried to close but flew into the ground.





The formal Raven good-bye was held in May at Cannon, with about 18 jets still on the ramp. With the inactivation of the 429th, the last of its Ravens, including the four-ship above, flew to the "boneyard" at Davis-Monthan AFB, Ariz. On June 29 the Air Force transferred control of Operating Location Alpha, the USAF element at the Whidbey Island EA-6B training facility, from Cannon to Mountain Home, the site of the first EF-111 electronic combat squadron and now home to USAF's Air Expeditionary Wing.

Air Force officials maintain that although USAF presence in Prowler squadrons may not be significant, their impact has been. Working more jointly than ever before, Prowler crews—the first combined squadron deployed to Japan in 1996—are showing that Air Force and Navy cultures and techniques can be harmonized to do the job.



Carefully managed, the Prowler force is expected to serve until 2005 or so; what happens then has not been decided. Leading replacement candidates are a variant of the F/A-18E/F and a version of the Joint Strike Fighter, neither of which would be ready in time. Industry offerings look promising, but the Navy has no money for such new development. USAF is not planning an EF-111 follow-on.



Photo by Erik Hilds