

Air Test and Evaluation Squadron 1: 60 Years of Pioneer Pride



By Lt. Jamie Chitko



Left, this PB4Y-2S Privateer assigned to VX-1 was equipped to detect, track and attack submarines. Above, an early squadron P-3C Orion.

Submarine hunting has been a primary mission of the Navy since Germany patrolled the underwater depths of the sea during WW I. To counter Germany's increasing subsurface fleet and the considerable threat it posed to the U.S. and its allies, the Aircraft Antisubmarine Development Detachment, Atlantic Fleet was established on 1 April 1943 at NAS Quonset Point, R.I. With orders to conduct experiments using new models of aircraft and new airborne equipment, this establishment marked the beginning of 60 years of innovation by what is now known as Air Test and Evaluation Squadron 1.

On 17 September 1943 the detachment became part of a new unit called Antisubmarine Development Detachment, Atlantic Fleet. It was redesignated Experimental Squadron (VX) 1 on 15 March 1946 and moved to NAS Key West, Fla. The Navy later changed the definition of the designator VX, and thus the squadron became Development Squadron 1 in October 1949 and Air Development Squadron 1 in February 1950. The current designator Air Test and Evaluation Squadron 1 took effect on 1 January 1969, and on 15 September 1973 the *Pioneers* relocated to NAS Patuxent River, Md.

The squadron's mission evolved throughout the years. Originally its sole tasking was to test and evaluate antisubmarine warfare (ASW) equipment, determine the equipment's usefulness to the fleet, and develop and coordinate ASW tactics. VX-1's first major contributions to the fleet were scanning sonar, surface radar, helicopter dipping sonar and hunter/killer ASW tactics. The 1950s spawned innovative aircraft that represented major advancements in technology. The P2V Neptune, AD Skyraider, S-2 Tracker, P-5 Marlin and HRP-1 helicopter were just some of the types of aircraft evaluated at VX-1. The squadron played a considerable role in increasing the fleet's ASW capabilities with operational testing and evaluation of sonobuoys, towed magnetic anomaly detectors, improved sonar, advanced radar equipment and ASW mining techniques. Operational evaluations were also extended to air photography, human factors in ASW, target interpretation and target recognition.

Today, VX-1 has expanded beyond its previous focus on undersea warfare. The squadron is integral to the test and evaluation of surface warfare, airborne mine

countermeasures, logistics support, extended range surface/land attack and electronic warfare technology and tactics. The *Pioneers* perform operational testing and evaluation on the Navy's and Marine Corps' newest aircraft and systems, including the MH-60S, MH-60R and KC-130J Hercules. Additionally, VX-1 continues to evaluate evolving systems on legacy aircraft, such as the E-6 Mercury, EP-3 Aries II, P-3C Orion, S-3B Viking and SH-60B/F Seahawk. "VX-1 is a direct reflection of the U.S. Navy. If anyone wants to know where the Navy is today and where we are heading in Naval Aviation, they only have to visit VX-1," stated Captain Glen Ives, former CO of the *Pioneers*.

One of only a handful of multiplatform test and evaluation squadrons, VX-1 is home to approximately 50 naval officers, 1 Canadian and 2 British exchange officers, and 263 enlisted and 6 civilian personnel who are all committed to improving the warfighting weapons and tactics of the maritime aviator. These men and women include officers with recent fleet experience, and many have advanced degrees in such fields as computers, underwater acoustics and aerospace engineering. The enlisted personnel possess talents and skills representative of those found in operational fleet squadrons.

The unique multiplatform nature of this squadron was highlighted in the recent change of command ceremony when HSL pilot Capt. Glen Ives turned over command of VX-1 to P-3C pilot Capt. Tom Mehringer. Capt. Mehringer's XO, Capt. Steve Smith, an HSL pilot, will assume command in fall 2004. "Without a doubt it is the



Left, a *Pioneers* SH-2 Seasprite receives maintenance. Below, in 1949, this "open-air" helicopter was the current antisubmarine warfare version of the HRP-1 tested at VX-1.





Above, VX-1 fires an AGM-114M Hellfire missile from an SH-60B Seahawk for the first time, over the Chesapeake Bay. Right, a crew from VX-1 tests the vertical replenishment capabilities of the Navy's newest helicopter, the MH-60R.

Kandi Horten



quality of the men and women of VX-1 that makes this command achieve such great success,” commented Capt. Mehringer. “The scope of responsibility and diversity of projects requires each officer, chief and Sailor to be on their game in order to accomplish the missions of operational test and tactical development. I truly rely on their professionalism and experience to get the job done.”

As threats to national security change, so does the nature of projects assigned for evaluation. VX-1 currently has approximately 32 projects assigned involving complex

weapon system evaluations and investigations of electronic, acoustic and optical methods of submarine detection. Contributions in updated Hellfire missile testing, overland strike capability in the Standoff Land Attack Missile-Expanded Response missile, improvements in increasing the ASW detection and hunting capabilities of our aircraft, and EP-3 software upgrades provide some of the necessary tools for protecting our nation against today’s threats. “We are the first operational squadron to test these new mission systems and platforms,” Capt. Mehringer stated.

Future projects include Advanced Hawkeye, E-6 upgrades, Marine Corps KC-130J tactical support and the multimission maritime aircraft. The squadron will also be leading the way to develop fixed-wing and helicopter tactics to project power from the sea and to support and defend the 21st century battle group. With its involvement in such a variety of platforms, the VX-1 *Pioneers* will continue the mission they began 60 years ago: developing the U.S. Navy of tomorrow. ✈️

Lt. Chitko is VX-1's S-3B NATOPS and Projects Officer.



Above, a three-plane flyby illustrates some of the variety of aircraft tested by VX-1. Left, AO1 William Lewis leads his team of VX-1 ordnance personnel during a torpedo load on a P-3C Orion. Below, the proud *Pioneers* of VX-1.

