



NAVAL FORCE AIRCRAFT TEST SQUADRON: 25 YEARS OF TEST & EVALUATION EXCELLENCE

By Lt. Sean G. Owens

On 1 April 2000, the Naval Force Aircraft Test Squadron celebrated its 25th anniversary. The following is a tribute to the countless contributions that its dedicated personnel have made to Naval Aviation over the last quarter century.

As part of the Naval Air Warfare Center Aircraft Division aboard Naval Air Station Patuxent River in southern Maryland, the Naval Force Aircraft Test Squadron, or "Force," is one of the Navy's

premier aircraft developmental test and evaluation squadrons. Force is responsible for the test and evaluation of aircraft, systems, avionics and software for fixed wing antisubmarine, sea control, airborne early warning, intelligence collection, command and control, tanker, carrier-onboard-delivery, trainer, utility and support aircraft. In this capacity, the squadron has ongoing flight test projects with numerous aircraft, including the P-3 *Orion*, S-3 *Viking*, E-2 *Hawkeye*, EP-3



An EP-3 *Aries II* conducts test and evaluation for the Sensor System Improvement Program designed to enhance interservice and fleet communications. Photo by Vernon Pugh

Aries II, E-6 *Mercury*, KC-130 *Hercules*, C-2 *Greyhound*, T-6 *Texan*, T-34C *Turbo-Mentor*, C-12 *Huron* and the new C-26.

Before introduction to the fleet, new aircraft and aircraft systems must be tested to ensure maximum mission effectiveness, reliability and safety. Aircraft and aircraft systems are tested and evaluated throughout a variety of

flight regimes by Force test pilots, naval flight officers and aircrewmembers. Test articles are refined as they complete various phases of developmental testing. Upon successful completion, aircraft and systems proceed to operational testing, where they are put through the paces in an operational environment prior to fleet introduction.



In order to meet the demands of the flight test environment, Force calls upon the expertise of a unique combination of professionals. Officer and enlisted personnel from various aviation communities work closely with government service and contractor personnel in such fields as test and evaluation engineering, logistics and maintenance.

Force traces its roots to the establishment of NAS Patuxent River, Md., on 1 April 1943. The Navy recognized the need to consolidate its flight test efforts, and the location was chosen due to its proximity to the coast, sea-level salt air environment, freedom from air traffic congestion, and isolation for testing of classified projects. Pax River's future as a test facility was cemented by the formation of the Naval Air Test Center (NATC) on 16 June 1945.

In 1975, a sweeping reorganization prepared NATC for its role as the Naval Air Systems

Command's principal site for developmental testing. Several new directorates were formed to evaluate aircraft by type and mission. Under the direction of Officer in Charge



Above, Force's T-34C (foreground), the second production *Turbo-Mentor*, flies in formation with the Joint Primary Aircraft Training System's second production T-6A *Texan II*. Right, the KC-130J *Hercules* is being tested for Marine Corps use.

Captain John A. Dunaway, the Antisubmarine Warfare Test Directorate was tasked to support the fleet through the flight test and evaluation of aircraft systems for patrol, air antisubmarine, carrier airborne early warning, fleet air reconnaissance, fleet tactical support and training squadrons. To more closely identify itself with the communities to which it was responsible, the directorate was renamed Force Warfare Aircraft Test Directorate in June 1986. In May

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Above, a P-3C *Orion* fires a Standoff Land Attack Missile. Below, the new eight-bladed propellers on the E-2 *Hawkeye 2000* are easier to maintain than current four-bladed props. The digitally controlled, all-composite NP2000 propeller system will reduce noise and enhance efficiency.



Photos pages 12–13 by Vernon Pugh



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1995, the organization officially became the Naval Force Aircraft Test Squadron under the command of Capt. Stuart A. Ashton, Jr.

Since its inception, Force has been instrumental in the advancement of aircraft technology and its integration into fleet assets. These new capabilities delivered to the fleet mean greater safety for aircrews and enhanced mission effectiveness. Force has been



Commanding Officers

Capt. John A. Dunaway	April 1975–October 1977
Capt. Arvid E. Forsman	October 1977–October 1980
Capt. Wayne A. Putman	October 1980–August 1984
Capt. Vincent P. Merz	August 1984–August 1988
Capt. William T. Broadhurst	August 1988–July 1991
Capt. James D. Keen	July 1991–August 1992
Cdr. George C. Hill	August 1992–September 1994
Capt. Stuart A. Ashton, Jr	September 1994–April 1996
Cdr. Bruce D. Remick	April 1996–March 1998
Capt. Walter M. Skinner	March 1998–December 1998
Capt. J B Hollyer	December 1998–present

responsible for the test and evaluation of many new aircraft before their fleet introduction, including the E-6A, UC-12, T-44A *King Air* and ES-3 *Shadow*. Test and evaluation of major aircraft modifications have included the P-3 Updates I, II and III; E-2/C-2 T56-A-427 engine upgrade; E-6B airborne command post modification; and the T-34 Naval Aircraft Collision Warning System.

Today, ongoing test programs include the E-2 *Hawkeye 2000* and eight-bladed propeller upgrades; the P-3 Anti-Surface Warfare



Opposite page, top, a Norwegian P-3C *Orion* sprays chaff while testing a new flare system; bottom, a Force *Mercury* tests the E-6B airborne command post modification. This page, ongoing Force flight test projects are conducted with S-3 *Viking* (top) and EP-3 *Aries II* aircraft. Inset, Force personnel pose in front of the squadron's hangar.

Christine King



Kurt Lengfield

Improvement Program and Ocean Water Laser Detection and Ranging; the S-3 Standoff Land Attack Missile Extended Range and Digital Flight Data Computer; T-6A Joint Primary Aircraft Training System aircraft; and the KC-130J.

For the past 25 years, Force has been intimately involved in developmental testing of future aircraft technologies and

modifications. As Naval Aviation enters a new millennium, the squadron will continue to ensure that the fleet receives safe and reliable aircraft and systems.

Lt. Owens is communications officer of the Naval Force Aircraft Test Squadron.

