

# Testing . . . One, Two, Three



By JO2 Jerry Knaak

**W**hen a Naval Aviator pulls the trigger, there's no time to worry about equipment failure. Aerial combat and weapons delivery happen at lightning speed, requiring rapid-fire reflexes and weapons that operate with near-perfect reliability.

A malfunction in the heat of battle could mean sudden death for aircrew. Fortunately, when Navy and Marine Corps flyers take to the skies, their aircraft armament systems have been tested countless times to ensure such a failure does not occur.

The men and women of Naval Air Weapons Station (NAWS), Point Mugu, Calif., are dedicated to researching, testing, evaluating and engineering weapon systems and

missiles for use in air warfare. NAWS Point Mugu is part of the Naval Air Systems Command's (NAVAIR) Naval Air Warfare Center Weapons Division (NAWCWPNS), which includes NAWS China Lake, Calif., and Naval Ordnance Missile Test Station, White Sands Missile Range, N.M.

When you arrive aboard Point Mugu, you feel like you stepped through a time warp and traveled

back to the late 1940s. Many of the original buildings are still in use. Quonset huts and corrugated tin structures dot the landscape, recalling the days of F6F *Hellcats* and the first guided missiles. The aircraft and missiles on the flight line have changed, but Point Mugu has been Naval Aviation's center for the test and evaluation of air warfare weapons since WW II.

## History

Point Mugu is the spot where Spanish explorer Juan Rodriguez Cabrillo is thought to have landed on 10 October 1542. Adapting the local Chumash Indian word "muwu"—which means seashore or beach—he named the site "Mugu."

## NAWS Point Mugu



Upper left, the black VX-9 Vampires F-14D Tomcat, call sign "Vandy 1," launches an AIM-7 Sparrow radar-guided air-to-air missile at a target drone. Below left, this bird's-eye view of NAWS Point Mugu shows the expansiveness of the base and the surrounding area. At lower left, Mugu Lagoon is clearly visible, along with some of the many farms located in the Oxnard tidal basin



The United States gained ownership of the land in 1867. The completion of what is now the Pacific Coast Highway in the late 19th century allowed settlers to migrate to the area, and Point Mugu became a prime fishing and hunting spot.

The Navy established Construction Battalion Center (CBC) Port Hueneme in 1941, and soon the area was flooded with Seabees who used the expansive beach area to conduct training exercises. While training for duty in the South Pacific, the Seabees built Point Mugu's first runway.

During WW II, Adolf Hitler rocked England with his *blitzkrieg*, or "lightning war." German V-1 rockets devastated London with vicious attacks as Hitler terrorized Europe. As efforts by U.S. forces to defeat the Japanese and win the war in the Pacific came to fruition, the need developed for guided rocket-bomb technology. Using captured V-1s, engineers duplicated German technology and created the Loon, a self-propelled rocket-bomb. Point Mugu became the testing site for this and many other rockets, missiles and drones, including the Gorgon winged ship-to-shore missile and the Bat glider missile.

In March 1945, Secretary of the Navy James V. Forrestal proposed a Navy base at Point Mugu. While awaiting presidential approval, the Navy began staging key missile testing personnel and equipment at Naval Air Station (NAS), Mojave, Calif., where the Pilotless Aircraft Unit had been established. Approval for the establishment of Naval Air Missile Test Center, Point Mugu came from President Harry S. Truman in May 1946. NAS Mojave was disestablished after Point Mugu began operations on 1 October 1946.

Major construction in 1948 expanded the base, which was offi-



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cially established as NAS Point Mugu on 1 August 1949. As part of the new air station, the center continued to test and evaluate weapon systems and missiles, including the CTV-N-9 Lark ship-to-air guided, AIM-7 Sparrow radar-guided air-to-air, AIM-9 Sidewinder heat-seeking and AGM-12 Bullpup air-to-surface missiles. Personnel at Point Mugu also tested the first supersonic cruise missile, Regulus II. The Pacific Missile Range, off Point Mugu, was established on 16 June 1958 and has

been used extensively ever since by all branches of the armed forces for weapon system and missile development, as well as by the National Aeronautics and Space Administration. The range now encompasses more than 36,000 square miles. Not quite a true rectangle, it runs for approximately 225 nautical miles along the coastline—from Santa Catalina Island to Pillar Point—and extends southwest out over the Pacific Ocean for approximately 180 nautical miles.

On 7 January 1959, the Naval Air Missile Test Center became Naval Missile Center, Point Mugu. The center continued to be the hub of missile testing and development throughout the 1960s and still holds that distinction today. In the 1970s, base personnel helped develop and test the F-14 *Tomcat*'s incomparable AWG-9 radar system and AIM-54 Phoenix missile. The *Tomcat* and its associated systems were put through their paces at Point Mugu until the aircraft's acceptance in 1973. *Tomcat* testing continues today at NAWCW-PNS Point Mugu with ongoing development of improved weapons and systems.

Throughout Naval Aviation weapons history, Point Mugu has been involved in many key projects,

**Look, ma, no pilot! Neither of the two photos below are optical illusions. Point Mugu has used many aircraft as target and testing drones over the years, including the QF-86F *Sabre* (below) and the QF-4N *Phantom II* (bottom). It currently costs approximately \$250,000 to convert a *Phantom* into a remotely piloted test vehicle. Below right, Point Mugu personnel prepare to recover a Regulus I cruise missile flight test vehicle on San Nicolas Island in 1957.**





A typical missile exercise begins as a DC-130A Hercules lifts off with a pair of BQM-34S Firebee target drones (above). The crew then releases the drones (left) over the sea range. And if the drone survives the exercise, it descends to earth for recovery (below).

John Burke

including Tomahawk cruise missile development. The base is currently testing the Harpoon air-to-surface missile and the Stand-off Land-Attack Missile from several different platforms, including the P-3C *Orion*.

During the reorganization of NAVAIR in the early 1990s, NAS Point Mugu officially became Naval Air Weapons Station, Point Mugu on 22 January 1992.

## Operations

Since Point Mugu's mission is primarily missile and weapons testing, the base is home to the Naval Weapons Test Squadron. The *Bloodhounds* work hand in hand with their sister squadron, the *Dust Devils*, at NAWS China Lake. The *Bloodhounds* are a fully functioning squadron comprising personnel from many different Navy aircraft communities and a total of 30 aircraft, including F-14 *Tomcats*, QF-4N and QF-4S *Phantom IIs*, NP-3D *Orions* and Metro III airliners.

The NAVAIR reorganization also



led to the disestablishment of Air Test and Evaluation Squadrons (VX) 4 and 5, whose assets were later combined to form one unit, VX-9. Established on 30 April 1994 at NAWS China Lake, the VX-9

Roger Morris

*Vampires*, Detachment Point Mugu flies four F-14As, three F-14Bs and four F-14Ds, and tests and evaluates AIM-9M Sidewinder, AIM-54C Phoenix and AIM-120A advanced medium-range air-to-air missiles. Upgrades to the ALR-67 radar warning receiver and the ALE-47 countermeasures dispenser are also currently under evaluation for fleet use.

In addition to NAWCWPNS Point Mugu, the base is also home to three other tenant commands: Helicopter Combat Support Special Squadron (HCS) 5, Antarctic Development Squadron (VXE) 6 and Patrol Squadron (VP) 65.

HCS-5 is one of only two squadrons of its kind in the Navy (see *NA News* May–June 96, p. 16). The *Firehawks*, utilizing TAR (training and administration of reserves) and Selected Reserve personnel, are responsible for carrying out combat search and rescue and special warfare missions. With the HH-60H *Seahawk*, HCS-5 flew 227 missions during the Gulf War in

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1990–1991. The squadron also performs SEAL (sea-air-land team) insertion/extraction and antisubmarine warfare operations.

Why anyone would trade the warm confines of southern California for a polar ice cap is a mystery, but as part of Operation Deep Freeze VXE-6 has deployed to Antarctica for the past 41 years, the last 23 while based at Point Mugu. The *Ice Pirates*, flying ski-equipped LC-130 *Hercules* transport aircraft, are responsible for providing logistical support to the National Science Foundation's U.S. Antarctic Program. Deployments last from August until March. The squadron will continue to deploy its LC-130s and personnel until the end of the decade when it will be disestablished and its mission assumed by the New York Air National Guard.

VP-65, a reserve squadron flying the P-3C *Orion*, stands ready to respond to any national emergency. The *Tridents* were established in 1970 at NAS Los Alamitos, Calif., and in 1971 moved to Point Mugu. Over the years, the squadron has deployed to exotic locations such as Guam, the Philippines, Hawaii and Japan.

### Geography

NAWS Point Mugu is located approximately 50 miles northwest of Los Angeles along the Pacific Coast Highway. CBC Port Hueneme and the cities of Camarillo and Oxnard

Left, an NP-3D *Orion* takes off from Point Mugu. The four modified aircraft have an over-the-horizon search capability. Below, a VXE-6 ski-equipped LC-130 *Hercules* prepares to take off from Antarctica during Operation Deep Freeze. Bottom, two HCS-5 rescue swimmers sit in the door of a squadron HH-60H *Seahawk* while in flight over the Pacific Missile Test Range. HCS-5 is one of only two squadrons of its kind in the Navy.



PH2 John K. Sokolowski



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are nearby. NAWS is nestled in between the Santa Monica Mountains and the Pacific Ocean, and some endangered species make their homes around Mugu Lagoon. It is not uncommon to see 50 or more harbor seals basking in the warm southern California sunshine. Several species of birds visit and even nest aboard the installation. Base and unit commanders take special care to ensure that flight operations do not interfere with the wildlife on base.

The weather is pleasant year round. Temperatures, controlled by the ocean, range between the upper

70s and low 80s in the summer and the mid-60s during the winter. Warm breezes and plenty of sunshine are common, but it does rain (occasionally) in southern California, contrary to popular belief.

The Pacific Coast Highway provides easy access to Malibu, Los Angeles and many popular spots in California. It also leads to the Oxnard basin, where agriculture is the dominant industry. Local farmers grow several crops, but cabbage and strawberries are the most abundant.

### Facilities

The facilities at NAWS Point Mugu are comparable to other Navy bases, including an exchange, credit union, commissary, bowling alley, and a gymnasium which offers a swimming pool, basketball/volleyball courts and workout equipment.





Housing is always a challenge wherever you travel in the Navy and Point Mugu is no exception, but brand-new housing, completed in 1996, is now available for officers and Sailors. Typical of the design trend in military housing, the homes look like modern civilian dwellings in a residential neighborhood.

## Recreation

The weather makes outdoor recreation unlimited around NAWS Point Mugu. Deep sea fishing is a favorite pastime in the area. Camping is

another popular activity for base residents. The view from one campground includes breathtaking sunsets. And Point Mugu's Morale, Welfare and Recreation Department

**Above, a BQM-34A (left) and a BQM-34E sit ready to launch during a missile exercise. Right, Point Mugu recently opened new housing units for its Sailors. Below, home to many endangered species, Point Mugu and its nearby islands host a large number of harbor seals.**



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has all the gear you could ever need for a foray into the wilderness.

Downtown Los Angeles is only an hour's drive away. "The City of Angels" offers incredible stimuli—for the mind, the palate and whatever tickles your fancy. Theaters, museums and restaurants abound in this metropolis. Public transportation is readily available, but in this film-making mecca, beware if your bus driver looks like Sandra Bullock from the movie *Speed*.

Los Angeles is also home to several professional sports teams. If you are a basketball fan, you can choose between the Lakers and the Clippers. Hockey is available with the L.A. Kings, who share the Forum with the Lakers. If baseball is more your speed, Dodger Stadium is only a hop, skip and jump away.

Point Mugu's geography, cli-

mate, and nearby recreational activities are almost reason enough to seek orders here. Or, you may find the quiet lifestyle on base combined with the proximity to big city life interesting. But perhaps the greatest reward is the opportunity for both officers and enlisted to be on the cutting edge of technology, helping develop the weapon systems of tomorrow.

So, when the "master arm" switch is selected, the Naval Aviator can rest assured that the chosen weapon will perform as advertised. And the professionals at Point Mugu can be proud of their role in making it possible. ✈