

- USAF TESTERS
- DESERT FALCON
- GERMAN TORNADOS
- ARMY AIR
- QF-4s
- STEALTH FIGHTERS

Within the vast high desert of south-central New Mexico lies the Department of the Army's largest piece of real estate, known as the White Sands Missile Range (WSMR). Covering 3,200 square miles, WSMR is the biggest military installation in the United States. Its range boundaries extend almost 100 miles north to south and 40 miles east to west, making long flight corridors possible. Through agreements with surrounding landowners, an additional 2,400 square miles can be added for test purposes on a temporary basis for longer-range scenarios.

As an element of US Army Test and Evaluation Command, WSMR plays an important role in the defense acquisition process by providing quality test, evaluation, research, assessment and other technical services to acquisition programs of the US Army, Navy, Air Force and the Missile Defense Agency, as well as some US companies and foreign allies.

Adjacent to this proving ground lays Holloman Air Force Base, home of the 49th Fighter Wing and a multitude of test or test-related units, spread out over some 59,639 acres of land.

586TH FLIGHT TEST SQUADRON



Operating on and over the White Sands Missile Range, Air Force Materiel Command's resident unit, the 46th Test Group, offers a wide variety of unique test capabilities, from indoor evaluations to actual flight-testing. The latter is the core business of the 586th Flight Test Squadron (FLTS).

SUPERBA



A quartet of 49th Fighter Wing F-117A Nighthawks formate over the New Mexico desert. The lead aircraft bears tail markings for the 49th Operations Group commander, while the two jets nearest the camera carry 7th FS and 9th FS markings respectively. The aircraft furthest away is marked up for the 8th FS.

Commanded by Lt Col Dawn Dunlop, the 586th FLTS is the only such squadron based at Holloman AFB and is responsible for a wide variety of related missions. The unit supports 46th Test Group programs as well as USAF Air Armament Center (AAC) objectives for air-to-air and air-to-ground weapons development. As such, it plans, co-ordinates, analyses and conducts flight tests of avionics, guidance, navigation and laser systems, as well as advanced weapon systems. In addition, the unit gives operational support to Department of Defense test aircraft staging out of Holloman AFB, provides target, chase, and photo support for numerous joint programs, and is involved with the oversight of UAV and commercial testing at Holloman.

To perform these tasks, the unit owns three AT-38B Talons and a Beech C-12J. All are unique, having been modified extensively to execute their specific missions.

Having previously served as fighter-trainers, for their new mission, the Talons

have been modified with the indigenous Fighter Instrumentation and Navigation System (FINS). This relies on inertial navigation and global positioning input to develop a reference for the required Time-Space-Position information, essential for testing, and is capable of providing accuracy down to less than one square meter.

Each aircraft also received radar altimeters and moving map displays, bestowing a 200ft AGL low-level navigation and target support capability. On-board instrumentation is integrated with the navigation/display system to capture real-time display information for the pilot. For specialized tests, oversized equipment can be rack-mounted and installed in the rear cockpit, replacing the ejection seat.

right: AT-38B Talon 63-8215 of the 586th FLTS captured over the incredible terrain of the White Sands Missile Range. It is one of three Talons operated by the squadron.