14 TEST SQUADRON

MISSION

LINEAGE
14 Missile Warning Squadron constituted, 17 Apr 1972
Activated, 8 Jul 1972
Inactivated, 1 Oct 1980
Redesignated, 14 Test Squadron, 10 Mar 2000
Activated, 1 Oct 2000

STATIONS
Laredo AFB, TX, 8 Jul 1972
Laredo TX, 1 Jan 1974
MacDill AFB, FL, 30 Jun 1975-1 Oct 1980
Schriever AFB, CO, 1 Oct 2000

ASSIGNMENTS
Fourteenth Aerospace Force, 8 Jul 1972
Aerospace Defense Command, 1 Oct 1976
42 Air Division, 1 Dec 1979-1 Oct 1980
310 Space Group, 1 Oct 2000
310 Operations Group, 7 Mar 2008

COMMANDERS
Col Robert Jackson, 2017
Lt Col Glenn P. Richard, 1 Jun 2019

HONORS
Service Streamers

Campaign Streamers

Armed Forces Expeditionary Streamers

Decorations
Air Force Outstanding Unit Awards
1 Jul 1974-1 Apr 1976
2 Apr 1976-1 Apr 1978
2 Apr 1978-30 Jun 1979
1 Oct 2000-30 Sep 2002
1 Oct 2002-30 Jul 2004
1 Aug 2004-31 Jul 2006
1 Sep 2004-31 Aug 2005
1 Sep 2005-31 Aug 2006
1 Aug 2006-31 Jul 2008
1 Sep 2006-31 Aug 2007

EMBLEM

14 Missile Warning Squadron emblem: On a blue disc edged with a narrow yellow border, a medium blue sphere with axis vertical, rimmed and gridlined white, enveloped by a yellow band bendwise from which issues six yellow arced lightning flashes, three above arced to sinister and three in base arced to dexter. Attached below the disc a blank medium blue scroll edged yellow. **SIGNIFICANCE:** The emblem is symbolic of the unit and the Air Force colors, ultramarine blue and golden yellow, are used in the design. The color blue alludes to the sky, the primary

theater of Air Force operations, and yellow to the sun and excellence of personnel in assigned tasks. The globe symbolizes the world, approximately 75% of which is covered by water, which is positioned in the vast reaches of outer space. Fingers of electricity girdle the globe as symbols of radar, the prime worldwide means of missile detection. (Approved, 20 Feb 1973)

14 Test Squadron emblem On a disc Sable, edged with a narrow Silver Gray border a globe in perspective Azure gridlined Argent and tilted forward on its axis surmounted throughout by a sword palewise point to base Silver Gray, hafted Tenné, pommeled and hilted Or, suspended from the cross-guard a balanced scale of the like, debruising the sword blade a flight symbol ascending to sinister chief emitting an orbital ring behind and around globe, all within a double bordure Sable and White denticled of the last. Attached above the disc a Black scroll edged with a narrow Silver Gray border and inscribed "14 TEST SQUADRON" in Silver Gray letters. Attached below the disc a Black scroll edged with a narrow Silver Gray border and inscribed with "VERITAS HONOR FORTITUDO" in Silver Gray letters. **SIGNIFICANCE:** Blue and yellow are the Air Force colors. Blue alludes to the sky, the primary theater of Air Force operations. Yellow refers

to the sun and the excellence required of Air Force personnel. The swords symbolize strength, courage and military honor. The balance scale is for preparedness and knowledge, test and evaluation. The globe alludes to the worldwide mission the unit. The flight symbol and contrail denotes the swiftness and power of the unit. The checkered border represents victory. (Approved, 2 Jan 2001)

Unofficial emblem significance provided by unit. The 14 Test Squadron arms are a round shield with upper and lower rockers, bound in Air Force silver. The shield has an inner band of alternating black and white, each traversing an arc of 10 degrees. Black and white in equal measure symbolize the nature of Operational Test and Evaluation. As a test organization, 14 TS observes and records the performance of space systems, and measures this against established success criteria. The 14 TS has no "stake" in the success or failure of any given system only an imperative to report the facts (shades of grey are inappropriate when warfighters' lives may depend upon these systems). The white and black band is also reminiscent of the squadron's uniform scarf, which is a white and black checker. Following from this, the black and white checkered flag is a near-universal symbol of victory. Ultimately, victory is the true mission of the Air Force, and 14 TS strives to contribute to its accomplishment. This black/white symbolism extends to the shield rockers, with silver-bound white text on a field of black. The upper rocker is emblazoned "14 TEST SQUADRON", the lower with the squadron's motto: "VERITAS HONOR FORTITUDO" ("Truth Honor Courage" -- the components of integrity). The shield background consists of 'manteld' azure battlements, ascending to a field of black. The azure represents the sky, within which the Air Force accomplishes much of its mission. The black represents our service's mission in space, with the ascending azure symbolizing the Air Force's transition to an "Aerospace Force". Upon the field of black are three stars (mullets of four points), one for each of the Air Force's Core Values (Integrity, Service, and Excellence). Before this is a sky blue sphere marked with white latitude and longitude bands, symbolizing the Earth and the worldwide nature of our mission. A broadsword, representing military might in general and the warfighter in particular, dominates the foreground. It is held in the rest position but is unsheathed and ready for battle at any moment, much as is the Air Force. The sword's guard also serves as the balance for a set of scales, depicted in gold. The scales symbolize the test and evaluation mission. Their unity with the sword presents a warning: the success or failure of that mission directly affects our Nation's military readiness. Orbiting all on a gold track is a silver deltoid, representing Air Force Space Command, our parent MAJCOM.

MOTTO

OPERATIONS

The 14 Test Squadron is a U.S. Air Force Reserve unit augmenting the 17th TS.

The 14 MWS mission was to "equip, administer, train and furnish personnel to provide missile warning data to appropriate agencies when Sea-Launched Ballistic Missile (SLBM) attack is directed against the defended area." The "defended area" was the continental United States. Activated on 8 July 1972, the 14 MWS conducted its missile warning mission for 8 years as an Aerospace Defense Command (ADC) unit.

With detachments at Mt. Hebo Air Force Station (AFS), Oregon; Mill Valley, California; Mt. Laguna AFS, California; Ft. Fisher AFS, North Carolina; Charleston AFS, Maine; and MacDill Air Force Base, Florida, the 14 MWS kept watch against possible SLBM attack by the former Soviet Union. In the conduct of its mission, the 14 MWS was three times awarded the Air Force Outstanding Unit Award for "their outstanding capability to accomplish the aerospace defense mission throughout the command." 14 MWS detachments operated the very capable AN/FSS-7 radar system. Rapid advancement of Soviet SLBM technology soon outpaced the system however, so the next-generation radar (PAVE PAWS) replaced the AN/FSS-7 by the end of the 1970's. With the advent of this new technology, the 14 Missile Warning Squadron deactivated on 1 Oct, 1980. As part of the reorganization of ADC and Strategic Air Command (SAC), those personnel not moved to other assignments helped transition the 14 MWS into Detachment 1, 20 Missile Warning Squadron, MacDill AFB, Florida. The 20 MWS carried on the mission of the 14 MWS, and even today, the 20 MWS operates a coastal radar that provides both ballistic missile early warning and space surveillance data to military users.

The 14 MWS at one time operated radars at eight different, geographically-separated locations. Beginning in 1966/1967, seven of the sites operated the AN/FSS-7 missile-warning radar, modified from the AN/FPS-26 height-finder radar made by Avco. The other radar was the prototype AN/FPS-49 missile-warning radar built and operated by RCA at Moorestown, NJ. The radars, in addition to their primary mission of detecting and tracking intercontinental ballistic missiles and sea-launched ballistic missiles, all had a secondary mission of tracking satellites that passed overhead.

17th Test Squadron and its Reserve counterpart, the 14 TS, were created at Schriever Air Force Base, Colo. Together, these squadrons work to provide independent assessments of new systems and present AFSPC senior leaders with fielding recommendations. The partnership between the two test squadrons is unique in that unlike many other Reserve units, which provide backup or surge capabilities for the regular Air Force, the 14 is a fully integrated partner in the testing process. Since the acquisition of highly complex systems can take several years, regular Air Force Airmen working on a project may make a permanent change of station move before the project is complete.

On the other hand, Reservists provide critical continuity throughout the testing process, bringing extensive experience and expertise to test and evaluation. This year has been particularly busy for the testing community. It has completed upgrades to the Nuclear Detonation Detection System, worked with Combat SkySat, a rapidly deployable system designed to provide extended-range ultrahigh frequency and extremely high frequency communications to unit’s in-theater, and tested a new command and control system for Global Positioning System ground stations.

The community also supported strategic and theater missile warning system upgrades in Cheyenne Mountain Air Force Station, Colo. Test results on these systems have validated new capabilities while also uncovering operational concerns. For example, the Nuclear Detonation Detection System now utilizes data from the Defense Support Program to provide better resolution of nuclear detonations. For Combat SkySat, deficiencies uncovered during testing

drove extensive engineering upgrades to the payload and platform. These upgrades have made the system more valuable to the war-fighter through increased range and improved system life expectancy during operations. Members of both test squadrons have deployed to several locations in support of these tests.

"Their efforts ensure war-fighters receive systems that meet their requirements," said Lt. Col. Scott Jokerst, 14 TS commander. "In fact, one test had to be halted when testers identified several serious deficiencies that needed to be fixed." Colonel Jokerst said if that particular system had not been tested, it could have had a significant impact on the war-fighters' ability to accomplish their mission. "Rigorous operational testing ensured system capabilities matched the warfighters' expectations," he said. "Critical systems must work the first time, and the teamwork from the men and women of the 17th and 14 Test Squadrons provide commanders with the confidence to use those systems on a daily basis." 2008

6-9 Feb 2017 Personnel from the 14 Test Squadron (TS) showcased System Planning Execution Analysis and Reporting tool conducted Cyber Vulnerability Assessments during the Rocky Mountain Cyberspace Symposium in Colorado Springs, CO

Reserve personnel from the 14 Test Squadron completed inaugural three week Space Test Course at the National Test Pilot School in Mojave, California. OT&E Course ran from 27 January to 14 February 2020.

Detachment 1, 14 MWS -- Moorestown, NJ
Detachment 2, 14 MWS -- Mount Hebo AFS, OR
Detachment 3, 14 MWS -- Mill Valley AFS, CA
Detachment 4, 14 MWS -- Mount Laguna AFS, CA
Detachment 5, 14 MWS -- Fort Fisher AFS, NC
Detachment 6, 14 MWS -- Charleston AFS, ME
Detachment 7, 14 MWS -- MacDill AFB, FL
Detachment 8, 14 MWS -- Laredo AFS, TX

USAF Unit Histories
Created: 8 Dec 2010
Updated: 20 Feb 2023

Sources
Air Force Historical Research Agency. U.S. Air Force. Maxwell AFB, AL.
Air Force News. Air Force Public Affairs Agency.