

51st MUNITIONS MAINTENANCE SQUADRON



LINEAGE

51st Aviation Depot Squadron activated, 25 Jul 1958
Redesignated 51st Munitions Maintenance Squadron

STATIONS

Vandenberg AFB, CA, 25 Jul 1958-30 Sep 1972

ASSIGNMENTS

704th Strategic Missile Wing
1st Missile Division, 1 Jul 1959
392nd Strategic Missile Wing, 18 Oct 1961

COMMANDERS

LTC Richard F. Savage

HONORS

Service Streamers

Campaign Streamers

Armed Forces Expeditionary Streamers

Decorations

EMBLEM

Approved, 26 Feb 1969

EMBLEM SIGNIFICANCE

The space vehicle is, suggested by design rather than clearly delineated. The black color represents the intense cold and perpetual blackness of outer space through which the vehicle travels. The immense speed and heat generated by the vehicle as it approaches the earth is indicated by the red and yellow colors which radiate from the apex of the reentry wave. The light blue background, of course, represents the earth's atmosphere.

MOTTO

Primi Toto in Caeli Spatio--First In Space

NICKNAME

OPERATIONS

Less than a hundred men handle the real payload of every missile that roars spaceward from the launch pads of Vandenberg. These men, specialists all, are members of the 51st Munitions Maintenance Squadron and the re-entry vehicles they mate to Air Force missiles contain, in the cones, everything meaningful in a space shot.

Since its organization in July 1958, the 51st MMS has shouldered the responsibility of providing re-entry vehicles for Vandenberg. Unlike the average munitions maintenance squadron in the Strategic Air Command, which maintains re-entry vehicles for only one missile system, re-entry vehicle analyst teams from the 51st MMS have been assembling, checking and mating re-entry vehicles for every major missile system in the Air Force inventory.

It matters little if the re-entry vehicle is a triple-ton giant of the Titan class or the slender, needle-nosed sphere on a Minuteman, enclosed is the vast array of electronic gear and multi-purpose instruments that are the laboratory from which scientists will extract knowledge.

Commanded by Lt. Col. Frank J. Gago, the 51st MMS has taken a danger-laden task and reduced the hazards until the greatest threat to its personnel is the drive to and from work. Concerned with explosives, ranging from the smallest caliber pistol round to the greatest demolition charge, safety is second nature to the men of the 51st. Each man is aware that the re-entry vehicle requires total care, and he treats all phases of his work and equipment with the same respect. This, in effect, gives all facets of the operation top level priority.

Although the name of the organization gives some hint of the activities, relatively little is known of what actually goes on inside the fenced perimeter of a munitions maintenance unit. The varied skills and diversified talents of munitions experts are veiled in a powdery cloak of secrecy. The care and exactness with which the crews prepare a re-entry vehicle for space travel is done behind locked doors.

Prior to the delivery of the completed re-entry vehicle to the site, dozens of man-hours are spent in preparation. First a multitude of components undergo rigid testing, which must survive the near-zero cold of outer space and also, the incandescent temperatures of re-entry into the atmosphere.

Once all components are proved acceptable, the RV team assembles them into what must be a 100 per cent reliable missile sub-system. The assembly may mean one day's work, as with the Minuteman intercontinental ballistic missile re-entry vehicle, or it may mean several days of exacting and tedious labor, necessary to produce the RV for the Titan II ICBM.

After all components are assembled, the entire system is again tested to insure that no faults have occurred during the assembly. Should the vehicle fail this final test, it may be necessary to completely disassemble it and start again. Only through constant training and a high degree of supervisory skills, are such occurrences prevented.

Re-entry vehicle maintenance is by no means the only phase of the 51st's mission. The storage and handling of all types of explosives is the assignment of the squadron's munitions storage branch. The unit receives every ordinance item used at Vandenberg. Each is inspected, then properly stored in a specially designed bunker. With the turnover of South Vandenberg to the Air Force, the additional duties of caring for the large solid propellant boosters for the thrust augmented Thor and the major stages of the Scout rocket, have also fallen into the hands of the 51st. Trained in proper explosive handling techniques, the men make their seemingly hazardous job safer than driving to work.

Not so docile is the work of the explosive ordnance disposal section. Equivalent to the civilian bomb squad, the men of the EOD team must be familiar with all types of weapons and explosives. Should an old unexploded projectile or makeshift bomb be reported, the EOD team removes or disarms it immediately.

Each operational ICBM launched here is tipped with a reentry vehicle (RV) which first must pass through their hands. As technicians, these men support local units and missile task forces from the operational bases during the buildup of these RV's for the Demonstration and Shakedown Operations and Operational Tests. How well these tests go is dependent upon how well those tasks are performed.

In addition to this support of the Strategic Air Command's deterrent force, the munitions maintenance function also supports Air Force Systems Command, National Aeronautical and Space Administration and the contractors operating here by storing large solid-fuel motors in preparation for use in the many different aerospace programs taking place here.

Although less publicized, the squadron also performs the dangerous, though essential task of providing explosive ordnance disposal service for the base. And when one considers the great variety of explosive material connected with the missile and space programs -- as well as the numerous munitions impact areas left over from the Army's Camp Cook days, the magnitude of this responsibility is readily apparent.

Over the years, the 51st MMS has supported and trained the missileers who manned SAC's ballistic missile fleet. Early in its career, it began conducting RV Operational Readiness Training (ORT) for all SAC units, especially on the weapon systems which are now obsolete--the Thor IRBM, all models of the Atlas, and the original Titan I.

The squadron's functions have not always remained so closely related to the missile field. The "Great Lompoc Flood" of 1969, for example, required it to deviate somewhat from its normal activities. When the long span of the Vandenberg Surf Bridge collapsed from the force of the rushing waters, the Explosive Ordnance Disposal (EOD) Section used plastic mines and explosives to destroy the remaining portions of the bridge so that the flood waters would subside in the Lompoc Valley.



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Sources

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