# 377 FLIGHT TEST MISSILE MAINTENANCE SQUADRON

**MISSION**

**LINEAGE**
394 Missile Training Squadron (ICBM) constituted, 6 Mar 1958
Activated, 1 Apr 1958
Inactivated, 15 Dec 1958
Redesignated 394 Missile Training Squadron (ICBM-Minuteman) and activated, 10 Jun 1960
Redesignated 394 Strategic Missile Squadron (ICBM-Minuteman), 1 Feb 1964
Redesignated 394 Intercontinental Ballistic Missile Test Maintenance Squadron, 1 Jul 197?
Redesignated 394 Maintenance Support Squadron, 1 Sep 1991
Inactivated, 1 Jul 1994
Redesignated 377 Flight Test Missile Maintenance Squadron on 4 Oct 2022
Activated on 1 Nov 2022

**STATIONS**
Cooke (later, Vandenberg) AFB, CA, 1 Apr-15 Dec 1958
Vandenberg AFB, CA, 10 Jun 1960-1 Jul 1994
Vandenberg SFB, CA, 1 Nov 2022

**ASSIGNMENTS**
704 Strategic Missile Wing (ICBM), 1 Apr-15 Dec 1958
1 Missile (later, 1 Strategic Aerospace) Division, 1 Jul 1960
392 Strategic Missile Wing, 18 Oct 1961
1 Strategic Aerospace Division (later, Strategic Missile Center), 20 Dec 1961
310 Maintenance Group, 1 Sep 1991
30 Logistics Group, 1 Jul 1993-1 Jul 1994
377 Test and Evaluation Group, 1 Nov 2022

**COMMANDERS**
Col John P. Couch, 1 Jul 1960-21 Oct 1963
Col Richard T. Schlosberg, 22 Oct 1963-29 Sep 1965
Col Lorenzo Caliendo, 30 Sep 1965-30 Nov 1965
Col Frank F. Young, 1 Dec 1965

**HONORS**
**Service Streamers**

**Campaign Streamers**

**Armed Forces Expeditionary Streamers**

**Decorations**
Air Force Outstanding Unit Awards
1 Jul 1963-30 Jun 1965
1 Jan 1970-30 Jun 1971
1 Jul 1974-30 Jun 1976
1 Jul 1977-30 Jun 1979
1 Jul 1982-30 Jun 1983
1 Jul 1984-30 Jun 1986
1 Jul 1986-30 Jun 1988
1 Sep 1991-15 May 1993
1 Nov 1991-30 Sep 1993

**EMBLEM**
The Minuteman missile standing on the earth represents the deterrent force of the free world. The Minuteman of Lexington and Concord, signifies our constant vigil and alertness. The shafts of lighting depict the "Instantaneous Response" of our Minuteman capability. The stars in the sky are a symbol of the accuracy which is used to plot our missile's course through the skies. The brightest one is Polaris, our North Star, from which we obtain our basic point of reference for determining accurate position on earth. Together, these symbols have become the emblem of the "Free World's First Solid Fuel Intercontinental Ballistic Missile Squadron" The 394th Strategic Missile Squadron. (Approved, 29 Sep 1961)

394th Missile Training Squadron On an AF blue disc bordered AF golden yellow, the top of a globe issuing from base, land areas grayish green, water areas AF blue; standing on the globe in sinister, a Colonial Minuteman in profile, holding a rifle, silhouetted bluish gray; in dexter chief a configuration of our four-pointed stars, AF golden yellow, highlighted white; over all in pale throughout a white missile pointing upward shaded bluish gray; issuing from the missile in base four red lightning flashes edged AF golden yellow, radiating upward, two on either side of the missile; outlines and details AF blue throughout. Significance: The partial world sphere represents the intercontinental coverage available through missiles. The four stars indicate the significance of celestial bodies in furnishing guidance data utilized by missiles for directional control. The

silhouette of the Colonial Minuteman symbolizes the early beginning of a national interest in the preservation of human rights and freedom. The missile represents the present space age counterpart of the Minuteman, and clearly shows the contrast in methods of preserving the same rights and freedom. The white color of the missile indicates clean ideals and principles. The lightning bolts represent the great potential, available through missiles, of maintaining freedom if other means fail. Approved: 29 September 1961.

When first activated, this was an Atlas unit but the designation's parenthetical was just "(ICBM). The squadron was inactivated on 15 Dec 5E and its personnel and equipment were absorbed by the 576 SMS.

**MOTTO**

**OPERATIONS**

394th Strategic Missile Squadron (ICBM-Minuteman) mission, branches and sections:
The responsibilities of the 394th Operations Branch are varied and far reaching. Responsibilities range from providing Combat Ready crews and appropriate plans in support of the Squadron's EWO commitment, to complete Operational support of the Minuteman weapons system from its bare inception to operational launches from Vandenberg. The Operations. team includes the Test Section, Combat Crew Section, and the Training Section.

Beginning with the first Minuteman launch on September 28, 1962, the operations branch has maintained an outstanding record in its support of over one hundred successful Minuteman launches. Lt/Col Tuttle, Deputy Squadron Commander for Operations, is responsible to the Squadron Commander for providing operational support to the squadron mission.

The Test Section is responsible for Research and Development testing, Demonstration and Shakedown Operations, Operational Tests, and Follow On Operational Testing programs of the Minuteman I, Minuteman II, and Force Modernization weapon systems. The various test teams direct and supervise launch support operations such as range and terminal countdown procedures. They further insure these operations are conducted in a controlled environment of operational realism and in accordance with applicable safety requirements and regulations. All range support and countdown documents are prepared and revised by the test section. Constant training is accomplished to insure the proficiency of the test team officers. Behind each Minuteman launch is a highly trained test team which conducts the countdown prior to launch. The test team mans positions at consoles in the Combat Training Launch ,Instrumentation building, and from these consoles come the coordination and commands integral to launch.

The Minuteman I Test Team began operation by participating with AFSC and contractor personnel in the first Minuteman I launch from Vandenberg. They conducted the Minuteman I Demonstration and Shakedown operation, and have supported the Operational Test and Follow On Operational Test programs here at Vandenberg. In each Minuteman I launch they have verified the readiness of the Combat Training Launch Instrumentation system to support launch, and have

executed Missile Combat Crew launch actions. Additionally, this test team has provided the nucleus of personnel and procedures to the newer test teams.

On September 28, 1962 Minuteman I Combat Crews 'were a part of the beginning of the successful Minuteman story. It was on this date that the first Minuteman I Missile was successfully launched from an operational site at Vandenberg. The launch crews for the historic first flight were Captain A. E. Gill, 1/Lt R. G. Burgess and Major C. E. Tripp, Captain C. E. Varner.

The Minuteman II Test Team became a part of the squadron to support the requirement of the 394th to support Minuteman II Research and Development testing here at Vandenberg. Minuteman II Test Team joined the squadron in July 1965. The Test Team has participated in launch and launch preparation activities for each Minuteman II launch. Additionally, they have monitored all phases of the Research and Development program to gain the knowledge and experience required for the conduct of the forthcoming Minuteman II Demonstration and Shakedown Operations. Chief of the Minuteman II Test Team is Major Thomas P. Forster, who has participated in the Minuteman program as a Combat Crew Member and Test Team Member since joining the 394th in 1962.

WING VI CREWS

Minuteman II crews attended missile orientation training at Chanute AFB, Illinois in February. The first two crews attended Operational Readiness Training at the Sylvania plant in Boston, Massachusetts, the remaining crews attended ORT at Vandenberg. The first two combat ready Minuteman II crews in SAC were Captain Vandenack's and Major Kennedy's crew. The first Minuteman II launch from an operationally configured launch facility was accomplished by Major Switzer's and Major Hopkin's crews. All Minuteman II launch crews have participated in Minuteman II launches. Major Switzer serves as assistant Operations Officer for Launch, Major Kennedy and Captain Olson are the Minuteman II Senior Instructor Crew, and Major Hopkins and Captain Williams are the Minuteman II Standardization Crew.

FORCE MODERNIZATION TEST TEAM

In November 1965 the Force Modernization Test Team was formed to meet the requirements of the Force Modernization Research and Development program. Its personnel bring a broad background of operational missile experience to the newest test team in the squadron. Force Modernization personnel are undergoing an extensive training program to enable the Test Team to support operational requirements in early 1966. Major Frank Santore has been with the 394th since May 1965, and serves as the Force Modernization Test Team chief.

FORCE MODERNIZATION COMBAT CREWS

Force Modernization Combat Crew Members joined the 394th in November 1965. Each of the eight crew members have served as combat crew members at operational wings prior to joining the 394th. The Force Modernization Crews are beginning an extensive upgrade training program to prepare them for operational launches from Vandenberg. Upgrade training will be conducted locally, and at Whiteman AFB, Missouri, where the crews will attend Operational Readiness

Training prior to assuming duties as Combat Crews here at Vandenberg. Not shown ore Capt. Smith and Lt. Payne who comprise another Force Modernization Crew.

GEMINI SUPPORT LAUNCHES

An interesting element was added to three of the Operational Test launches with the launches being timed to support Gemini astronaut visual sighting experiments. On August 24th and 25th in support of Gemini 4, and again on December 14th in support of Gemini 7, the 394th Launch support team, headed by Lt/Col Simmons, precisely timed the operational task force launch to meet NASA requirements for the Gemini program. The split-second launch timing was met in a ll three cases, resulting in visual sightings by the astronaut teams. This achievement by Test Section members is an example of the high standards met and maintained by the Force Modernization Crew.

PLANS AND EWO SECTION

The Plans and EWO section is responsible for the preparation of all squadron operations plans and for preparing squadron annexes and implementing instructions to 1ST STRAT AD operation and security plans. The section is responsible for all operations EWO preparations. In the event of implementation of the EWO plans, the section acts as the center of combat operations. The Plans and EWO section serves as the squadron security office, controlling and monitoring all phases of the security program. Not shown are Maj. Cowart and A 1 C Seal.

TRAINING SECTION

Right: The Operations Training Section supervises missile combat crew training, to include scheduling, controlling and monitoring of combat crew/crew member upgrade, recurring and corrective training. It also publishes and maintains training schedules, plans and charts; individual and crew training records and folders. In addition, the training section accomplishes necessary reports covering unit status and capability. Collateral (Ground) Training includes scheduling, administering, monitoring and recording in addition to accomplishing necessary status reports.

DEPUTY SQUADRON COMMANDER FOR MAINTENANCE

Colonel Sewell, our Chief of Maintenance, is responsible to the squadron commander for effective management of the maintenance organizations. This authority is delegated to him by the commander, and he in turn delegates authority and responsibility to his staff. Next to the commander, he is the most important link in the smooth, finely tuned machinery which makes up our squadron. A great amount of credit must be allocated to his excellent leadership ability in maintaining the high standards of maintenance observed by the personnel of the 394th Strategic Missile Squadron

RECORDS AND ADMINISTRATION

TSG Donato, chief clerk to the Chief of Maintenance, is responsible for monitoring the availability of all maintenance personnel, and maintains charts on their proper assignment. He also processes all maintenance documentation forms, making certain they are forwarded to Data Services. He is also responsible to maintain publication files and prepares all correspondence for the Chief of Maintenance. TSG Hood, NCOlC of Technical Publications, is responsible to maintain a file of every

technical publication used in the squadron, enabling technicians to perform required maintenance tasks, train new personnel, and support operational crews conducting actual missile launches.

The Analysis section, of which Maj. Malcomb is Ole, is responsible to collect and analyze data from maintenance work documents. These documents come from every work center in the squadron on any maintenance tasks they perform. From this information, Analysis provides trend indications for detailed study, thus enabling maintenance to detect potential efficiencies in material, procedures or manpower utilization.

Capt. "Mac" McAllister views one of the lengthy schematics. TEAT (Technical Evaluation Analysis Team) is responsible for aiding in problems where answers seem unattainable. Capt. Mac seems to say "Whew!" and with those sentiments, we agree.

TECHNICAL EVALUATION ANALYSIS TEAM
TEAT personnel are specially trained missile engineers and ballistic systems analysts who represent the trained capability to isolate and resolve problems beyond the scope of normal Technical Data and Training. This section resolved more than thirty major problems in the past eleven months, resulting in numerous changes to Technical Data. These actions have led to a more refined Minuteman Weapon System throughout the Strategic Air Command.

Plans & Scheduling, an integral part of Maintenance Control, is responsible for the scheduling of all maintenance requirements on a daily, weekly and monthly basis. When maintenance is required, P&S is responsible to know the availability of personnel, and to expedite maintenance while coordinating with each supervisor involved.

BRIEFING/DEBRIEFING AND RECORDS SECTION
Merged because of the similarities of their mission, these two sections are primarily responsible for briefing/ debriefing on all facets of maintenance, maintaining record jacket files on LF's, LCF's and all assigned equipment. This is accomplished through scheduling TCTO modifications, periodic inspections and maintaining maintenance status forms and configuration status reports. The section is also responsible for submitting reports on all missile movements. Reports are prepared and submitted to higher headquarters prior to each missile launch during the various testing programs conducted by the 394th Strategic Squadron.

JOB CONTROL
Job Control, the nerve center of the maintenance section, is headed by It. Hamilton and MSG Porch. With their many controllers they man this activity, 24 hours a day, 7 days a week, the year round. Direct lines of communication from their consoles to the command post, allows us the capability of instantaneous response. Our missile, because of its capabilities due to the solid fuel, is often called the "Ins tan t Missile".

The Material Control Section has the responsibility of overseeing the overall supply support for the missile squadron. To accomplish this responsibility they have a Supply Liaison Unit, and

Production Control Unit assigned. The Material Control Section insures that the maintenance personnel are supplied with whatever parts and/or equipment they require to maintain the missiles and facilities in an operational state. These parts or equipment are ordered from supply or, if not in Air force inventory, appropriate forms are made requesting purchase from civilian contractors.

Production Control has the responsibility to ensure that all reparable assets and support equipment are expeditiously processed through the maintenance shops for needed repairs, calibration, and inspections. This insures that equipment will have a minimum of down time, and be ready for use in the field. Equipment that is not serviceable, results in lost man hours and in case of national emergency, delay our retaliatory capability. Therefore, extremely rigid control is essential to maintain our alert posture always, at any cost.

The Supply Liaison Unit has the responsibility to insure that materials required to maintain the missile and facilities are obtained and delivered to the proper place at the proper time for safe and reliable operations of the missile and facilities. To accomplish this task Supply Liaison is manned with skilled supply technicians, specifically trained in logistics support.

In the previous four sections of this book, you have viewed more of the administrative part of our squadron. These, without the men in the maintenance shops and on the maintenance teams, would never fly a bird, just as the men in maintenance could not act on their own. It is the TEAM that wins, and is on top. There is always the competitiveness between shops and sections, but only to the point of betterment for all. It is because we are a team, that we are the "Outstanding Unit", the men on top, the BEST.

In the next few sections, you will see the men that make up the backbone of our squadron, the maintenance man in his own environment, at work. We feel, with appropriate authority, that they are the BEST in SAC.

It is because of men seen on these pages, and others like them throughout the Air Force, that those who would take away our rights and freedoms, will never try by force. They know that the spirit of the Minuteman at Lexington and Concord, still lives several hundred years later, in the hearts of the men of the Air Force.

MAINTENANCE SUPERVISION

By referring to our organizational structure, you can see the sections which Maj Bauler is responsible for. Next to Col Sewell, our Chief of Maintenance, Maj Bauler maintains the next most important post, and in the absence of the Chief of Maintenance, he fills in the position. In the following pages, you will see a picture story of the sections that work under Maj Bauler. It has been by the dedication of these men that the 394th Strategic Missile Squadron has made a place for itself in the annals of history.

FIELD SUPERVISION

Field Supervision Section Mission: Field Supervisors are assigned to each launch/launch control facility to coordinate all maintenance activities on site. They insure that each facility is maintained in the highest state of condition and repair and enforce stringent nuclear and missile safety procedures. They also report facility and equipment status changes to Maintenance Control. Field Supervision initially developed the squadron facility PRIDE improvement program at LCF-O 1 A, LCF-O 1 E, LF-02, and LF-09 which eventually grew to encompass all facilities in the 394SMS.

The administrative functions of Maintenance Supervision are fulfilled by four (4) administrative personnel assigned to the branch. These personnel are responsible for the maintenance of administrative files and publications, preparation and dissemination of all correspondence and management of branch alert and recall rosters.

MOBILE MAINTENANCE
The Mobile Maintenance Branch is responsible for what you might call Launch Facility Electronic Welfare.

This section is composed of four very distinct units.
1. Transport and Handling Section
2. Targeting and Alignment Section
3. Missile Maintenance Section
4. Electro-Mechanical Section The men within these units have given many long hours of unending support to the 394th Strategic Missile Squadron and the Minuteman Test Program.

THE STORY OF "Rosy Future"
At higher headquarters, it is again time to make a choice. Which operational Minuteman missile standing alert at one of the remote sites throughout the United States, will be shut down, pulled out of the hole and sent to Vandenberg AFB, California to be launched under simulated combat conditions? A hat is brought into the room, a hand reaches in, and brings out the choice. The operational base is notified, and the bird is on its way to Vandenberg.

In the meantime, activity at the 394th Strategic Missile Squadron, picks up. It is this squadron that is responsible to assist task forces .to see that the bird is received and sent to the site properly. Trucks are cleaned and painted, greased and oiled and every conceivable inspection is pulled. Nothing must go wrong. At the load test facility, men check out the cables of the TE, stressing them under thousands of pounds of pressure, making sure they are safe. Finally, all is ready, and we are now waiting the arrival of "Rosy Future", the code name given to this particular bird.

In the cold gray hours of early morning, the wind off the Pacific whips across the flight line. There on the ramp, like huge ghosts, stand the aircraft that were bedded down for the night. But at one end, a bustle of activity disturbs the quiet. Truck engines idle grumpily and heaters whine in the cabs, keeping its occupants warm. Around one of the trucks, with the Ballistic Missile trailer, the Team chief for the Transport and Handling Team walks around making the final checks, assuring that all is in readiness.

The air is shattered by the high scream of the turbo prop engines as they rev up with reversed props to slow the gigantic C-133 that just landed. Activity picks up, as Air Police move out to escort the aircraft to its parking place, and then set up a guard. Trucks move over to the aircraft, and the lengthy process is started, that of roll and transfer of the missile from the aircraft to the BMT (Ballistic Missile Trailer). This is the unit that will protect the missile

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All is now complete, and the convoy starts toward the Destruct Package Installation Facility (DPIF). Here, after another lengthy roll and transfer, destruct ordnance is installed which gives us the capability of destroying the missile should it stray off course. Destruct Ordnance Installation Team (Dot) are the men who perform this highly specialized task, but never once has there been a mishap. Also installed is the instrumentation package which will, after launch, send back vital data to ground monitoring equipment, every action the missile goes through.

The operational task force has arrived from their base, and emplacement time draws near. Now the missile is again moved, another roll transfer, this time to the TE. Once inside, the transport restraint beams are put in place, and then the missile is pushed into place for its ride to the sites. On schedule, an Air Police escort arrives, and the convoy moves out.

Approximately 17 miles away, past the flight line, past the old Titan I and Atlas pad, and finally along the beach, lies the facility in which Rosy Future will be lowered to stand her lonely vigil The LF comes into view and the TE turns in, and after checking in with the guard, proceeds to jockey into just the right position. Everything must be perfectly aligned before the trailer can be bolted down. But for the old pros it is not too difficult.

T & H personnel move over to the control panel, and slowly but surely, the TE starts up into the night air. During the whole operation, a man has to hold the button down, for if he releases it, erection will stop. Hours seem to pass, as the cold wind seems to disregard all barriers and cuts right thorugh you, but finally, there she is, toll and proud in the brilliant lights around the LF. Now MMT moves in, hustling to open the site and get the launcher closure door moved bock.

As the hydraulic pipe pusher is used, the huge 80 ton door slowly grinds bock and Rosy gets her first look at her new home. Little does she know that her stay wiII be short. Down on the first level , personnel keep constant check on Rosy as she is slowly lowered, making certain that there are no hang ups. When at lost Rosy settles onto her support ring, MMT prepares their work cage and go down to properly rough align and level her. Then comes T&A, who target Rosy with such core that it will insure that she will fly straight and true, with all sightings about the North Star.

Then EMT make their checks on the electronic gear and when they move out the site is buttoned down, all personnel leave, gates are locked, and all that guards the site are four small, harmless looking antennas. Should anything choose to intrude, they would set off on alarm, and in minutes a Combat Defense Team Would be there . Window time approaches; this is the supreme test. It is a verification of the operational reliability of the weapon
system.

Suddenly a deafening roar literally shatters the air; a giant column of smoke leaps out of the silo hundreds of feet in the air, and a perfect smoke ring gracefully decorates the sky. Through the smoke, you catch your first glimpse, the brilliant red glow of the flame spewing out of the nozzles, and then she breaks out into the clear, climbing like an arrow, roaring with her happiness to be free at last. In seconds, all that can be seen is the soft graceful contrail left in the Southern California sky.

Word comes from down range, that Rosy Future has successfully completed her mission after traveling over 4000 miles.

VEHICLE EQUIPMENT AND CONTROL MISSION: The Vehicle Equipment and Control Branch is responsible for control of Aerospace Ground Equipment used in support of Mobile Maintenance Teams, 394th Strategic Missile Squadron, and Visiting Task Force Teams. This Branch has the custodial responsibility for approximately 800 different items of transportable equipment more than fourteen (14) million dollars in value.

SMS Harvey, NCOIC for the Field Maintenance Branch, is responsible for all shop areas within the MAMS (Missile Assembly and Maintenance Shops) area. These include two main areas: 1) Facilities Section which consists of Power Production, Refrigeration, Electrical, Pneudraulics and Mechanical Shops and 2) Electronics Section, comprised of the Electronic Shop and Destruct Ordnance Shop. The shop NCOIC co-ordinates with SMS Harvey, who in turn is responsible to Maintenance Supervision.

FACILITIES SECTION
Provides for in-shop maintenance and specialist dispatch for test, remove, replace and repair of weapon system support equipment. Performs Dash Six Inspections on AGE and RPIE Equipment. This section, as a result of an outstanding Pride Program, has had no discrepancies on the last three staff inspection visits.

MECHANICAL SHOP

Responsible for performing the Field Maintenance repair of mechanical AGE and RPIE AGE equipment and assists the Pneudraulic Shop in the operation of the Load Test Facility. During the year his shop performed preventive maintenance periodic inspections on:
42 RV G&C Vans, 30 TE Containers, 42 TA Vans, 50 TAS Vans, 80 MM Vans, 56 ACU's, 64 Elevator Work Cages, 36 SSCBM's, 86 Gear Case Motors, 96 Job Hoist's and 16 Refurbishments and work cages.

The Guidance and Control/Combat Training Launch Instrumentation Area has prepared 144 Guidance Sections and over 100 Instrumentation Units for Operational Training Launches. Over 5000 items have been processed thru this area in Support of the Operational Training Launches. The Code Inserter-Verifier Area is responsible for the preparation of the secure code components used in the Minuteman Weapon System and has prepared over 200 Launch Control Panels which were used for Operational Training Launches. The Electronics Shop has also received the 394th Maintenance Excellence Award and this award was retained for a continuous period of six months.

This section of Minuteman maintenance involves three very distinct areas of maintenance. Their mission is one of extreme importance to the Minuteman System. The Electronics Shop, Drawer Test area, provide for the maintenance, repair and calibration of the weapon system electronic equipment drawers and Category II components of test equipment.

The second area of the Electronics Shop is the Combat Training Launch Instrumentation and Guidance and Control Section. This section is responsible for the inspection, preparation, checkout, and mating of the CTLI wafer to the G&C section. This section also has the responsibility of fault isolation of malfunctions in the Guidance section.

The Electronics Shop also provides for the operation, maintenance, and repair of the Code Inserter/Verifier equipment to include the preparation and encoding of the weapon system code components

The communication shop has the responsibility for maintaining the Voice Reporting Signal Assembly, the Launch Facility Security System, their associated equipment and special test equipment for these systems. The Voice Reporting Signal Assembly monitors the Minuteman Missile's status and its environmental conditions, giving the Launch Crew at the Launch Control Facility a recorded voice indication when a fault occurs at the Launch Facility. The Launch Facility Security System monitors an area within the Launch Facility Security Fence and gives an audible alarm to the Launch Crew for any and all intrusions. The necessary function of this equipment to the Minuteman Weapon, coupled with its complicated circuitry and check-out procedures, makes the Communication Shop's function one of great importance to the 394th Strategic Missile Squadron.

The Destruct Ordnance Shop is responsible for missile modifications which are performed at the DPIF. The modifications performed to the missile are the installation of Combat Training Launch Instrumentation components and missile flight safety destruct ordnance components.

Missile flight safety components are installed so that missile flight can be terminated either remotely or automatically, if necessary. The Destruct Ordnance Shop has modified over a hundred missiles to date without a known failure of the Combat Training Launch Instrumentation equipment.

The Refurbishment and Corrosion Control Branch consists of a Refurbishment section and a Corrosion section. The Corrosion Control section comprises of four-man teams that are dispatched to launch facilities and launch control facilities to conduct corrosion control. The refurbishment section is composed of three twenty-four man teams who inspect, repair, assemble and service missile facilities and related aerospace ground equipment after a missile launch to ready the facility for emplacement of another missile. The Refurbishment section has the unique distinction of being the only Minuteman Refurbishment section in the Air Force. Over one hundred refurbishment operations have been accomplished by this section since the first Minuteman missile was launched from Vandenberg Air Force Base.

The 394th Strategic Missile Squadron (ICBM-Minuteman), commanded by Col. Howard M. Levine, is one of the most active missile units in the United States Air Force. Every operational Minuteman flight test at Vandenberg is either conducted or supported by this unusual unit — and today it is preparing itself for the Minuteman III currently in the research and development stage.

The squadron is deeply involved from the moment the missile is received at Vandenberg to the time it is launched. Before launch, each Minuteman must be processed with special telemetry and destruct devices to provide the means for recording its performance and insuring the safety of populated areas should it deviate from the intended flight path. In many cases, the squadron actually launches the “bird,” either in Strategic Air Command Demonstration and Shake- down Operations (DASO) and special tests, or in unique programs controlled by other commands.

The extent of its support transcends the launch phase, however, since it also maintains the facilities involved in the launch. All must be maintained in as realistic an operational configuration as possible; and each "silo” must be completely refurbished after the devastating effects of the missile’s fiery exit.

This post-launch period also finds many of its highly skilled missileers evaluating and analyzing the voluminous data generated by the exercise, passing on their findings to assist higher echelons in the determination of valid reliability and accuracy factors for the entire alert fleet of Minutemen in the field.

It was originally activated on April 1, 1958 as a Missile Training Squadron (ICBM) assigned to the Division’s 704th Strategic Missile Wing; however, a little over eight months later it was inactivated and consolidated with the 576th Strategic Missile Squadron, an Atlas unit. It should

be noted that the squadron was then a training organization for the early Atlas ICBM and not the Minuteman. The latter came into the picture with its second and present tour of duty.

On June 10, 1960, the unit was redesignated and reactivated as the 394th Missile Training Squadron (ICBM-Minuteman) and on July 1, it was organized and assigned to the 1st Missile Division with both Training and operating (tactical) functions, a considerable change from its previous status.

With the activation of the 392nd Strategic Missile Wing on Oct. 18, 1961 (the 704th had been inactivated in July 1959), the squadron was reassigned from the division to the wing. On Dec. 20, however, the wing was inactivated squadron returned to the division where it has remained.

Construction of the first Minuteman facilities at Vandenberg did not begin until Feb. 2, 1961, and the first Minuteman I missile, an inert model for training, was not received until November of that year. In Sept. 1962, the weapon system was finally ready for its first flight test into the Pacific, and on the 28th of the month, a crew from the 394th MTS successfully completed the first and the Minuteman launch at Vandenberg. Since that time, the squadron has processed almost 250 Minuteman I and II missiles in support of flight tests for SAC and other major commands, launching many of them itself.

The 394th was redesignated to a Strategic Missile Squadron (ICBM-Minuteman) on Feb. 1, 1964, Interestingly, had it been so designated in the beginning, the Department of the Air Force no doubt would have followed the customary practice of redesignating a bombardment squadron (the 394th BS was inactive at the time) thereby giving the missile unit a prior history, lineage and honors. The procedure, however, was inappropriate" for a unit with a training designation.

As it is, the squadron has had to build a record of its own, and already has one Air Force Outstanding Unit Award to show for its efforts. Over the years, the men of the 394th have contributed substantially to such important Minuteman accomplishments as:
+ The first Minuteman launch from Vandenberg.
+The first Minuteman launch from a completely operational environment under SAC command and control.
+ The first ripple launch of two Minuteman missiles fired within minutes of each other.
+The launch of the first missile ever sighted in flight by orbiting astronauts (Gemini V).
+The first salvo (simultaneous) launch of two ICBM.

There can be no question about the type weapon employed by this squadron. Not with the familiar Colonial Minuteman in the background of its unit emblem. The 394th SMS design is unusual in one respect — it portrays a specific type of missile.
This is contrary to current Air Force regulations which prohibit such accurate representations since assigned weapons are subject to change in configuration or type. Nonetheless, this is an approved and authorized insigne. The Minuteman emblem was approved on Sept. 29, 1961 for

the 394th Missile Training Squadron and retained by the unit after redesignation. since it was still symbolic of the squadron and its mission. The emblem is dominated by the Minuteman. The bluish gray silhouette of the Colonial figure symbolizes "the early beginning of a national interest in the preservation of human rights and freedom," while his present space age counterpart "clearly shows the contrast in methods of preserving the same rights and freedom." The white color of the missile is used to denote "clean ideals and principles." The four stars of golden yellow highlighted in white which illuminate the dark blue sky are here employed specifically to indicate "the significance of celestial bodies in furnishing guidance data utilized by missiles for directional control"; however, the symbolic relationship to General Vandenberg as used in other base emblems cannot be discounted. At the base of the design is part of a globe: its land areas a grayish green and its water dark blue. This represents the intercontinental capability of the Minuteman missile. And again, the inevitable red thunderbolts, this time outlined in golden yellow, are used to denote power — "the great potential, available through missiles, of maintaining freedom if other means fail." The disc and bluish gray scroll are outlined in golden yellow.

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USAF Unit Histories
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Sources

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Unit yearbook. *Minuteman 65, 394th Strategic Missile Squadron, Vandenberg AFB, CA.* 1965.