



Volume 15, Number 1

TAC MISSILEERS

NEWSLETTER

“Serving the mace and matador missile crews and all support personnel who fought and won the cold war”



Spring 2013

Keep in touch with the Organization and stay on top of the latest goings-on by visiting your web site often at www.TacMissileers.org.

Its All About The 2013 TAC Missileers Reunion

The 2013 TAC Missileers Reunion will be held in San Antonio, Texas ...a really fun place to visit, with LOTS of things to see and do ...and, we will be staying at a Riverwalk / downtown hotel that is in the heart of all the “action.”

September 4th (Wednesday), 5th (Thursday) and 6th (Friday), 2013

Location: Hyatt Regency San Antonio, Texas

\$115 / night – double occupancy, no breakfast

\$125 / night – double occupancy with breakfast

We encourage all TAC Missileers to attend. Let’s make this our “most attended” reunion ever...

Note: The Reunion is open to all Air Force and supporting civilian personnel that were associated with any part of the Matador and/or Mace missile programs, regardless of rank or career field.

Non-TAC Missileers members will be requested to join our organization by paying one or more years dues.

For more information about things to see and do in San Antonio you may wish to request a copy of the free visitors guide that is made available by the San Antonio Convention and Visitors Bureau online at <http://www.visitsanantonio.com/index.aspx> or by calling 1-800-843-2526.

We are looking forward to seeing you there!

This newsletter contains all of the details about our reunion activities and information on how to sign up for our 2013 reunion. The registration form you will need to send in to Max Butler is found on page six. Please complete and send this registration form, along with your payment, to Max as soon as possible.

Your registration and payment must be received no later than **July 15th, 2013**. Based on commitments with the dinner/entertainment provider, regretfully, no refunds can be given after **August 1st**.

Wednesday, September 4th...

- **Registration Day** – Welcome to San Antonio!
- Relax and reconnect with old friends. No specific activities are planned. Happy Hour will find many attendees in the hotel lobby or bar area.
 - ⇒ *4:00pm until ?*

Thursday, September 5th...

- Enjoy a pleasant day of sightseeing in San Antonio at your leisure. Sightseeing suggestions and discount coupons will be available in the hotel lobby.
- **Rio Cibolo Ranch (optional) – Dinner & Entertainment**
 - ⇒ *Coaches depart hotel at 6:00pm and return approximately 10:00pm.*

Friday, September 6th...

- **Lackland AFB Tour (optional) – Gateway to the Air Force / Home of Basic Training & OCS School.** See how much has changed since the 1950s / 1960s.
 - ⇒ *Coaches depart hotel at 9:00am (& 11am, if required) and return at approximately 11:00am (& 1:00pm, if required).*
- **TAC Missileers Business Meeting & Hors d'Oeuvres Buffet at Pat O'Brien's** Pat O'Brien's is within easy walking distance from our hotel
 - ⇒ *5:00pm to 6:00pm – Business Meeting (members only). A separate hospitality area with a "cash bar" will be available for enjoyment by spouses and guests.*
 - ⇒ *6:00pm until ? – Hors d' Oeuvres Buffet* and "cash bar" (members and spouses / guests).*

Optional Reunion Activities - Rio Cibolo Ranch

Thursday, September 5th, 2013

\$63 / person

Includes round trip coach transportation from / to hotel, meal, entertainment and all taxes & service charges.

A "cash bar" will be available, but is not included.

- Buses will depart the Hyatt Regency Riverwalk at 6:00pm for a short drive to Rio Cibolo Ranch. Upon arrival at the Ranch, guests will enjoy the pleasant sounds of their resident country fiddler.
- Guests can enjoy hay wagon rides, have the chance to experience wide open Texas skies and enjoy the feeding of the resident Longhorns in the Texas-sized R.C.R. Rodeo Arena.
- Later on into the night a special show with stories of the Old West and Texas Revolution including interesting anecdotes of the Battle of the Alamo will be told by their Resident Texan Living Historian and Storyteller around open fire pits as they roast marshmallows. His presentation will truly make the guests feel like they have stepped back in time, create lots of laughter and will be memorable experience that they will soon not forget.
- The following outlines the catering and entertainment services for the group's evening at Rio Cibolo Ranch.

Guests Arrive

- Guests can choose from a variety of drinks from the Longhorn Saloon (cash bar: includes soda, draft beer, Imported can beer, Texas wine, wine coolers, well mixed drinks, call mixed drinks, and their famous Rio Ritas – margaritas on the rocks). Also, guests can relax and enjoy the sounds of the Country Fiddler on the 2,000 square foot deck of the Lazy Lily Rover House with a view of the Cibolo Waterfalls and Gardens.

Dinner

The Western Round Up

- Slow smoked beef brisket and mesquite grilled chicken quarters, served with tangy potato salad, crisp coleslaw, ranch beans with onions and special sauce, all the condiments, barbecue sauce and freshly baked Ranch rolls.
- Iced tea, water, lemonade, and coffee (caffeinated/decaffeinated) will be served.

Dessert

- Guests will gather around their large open fire pits as they enjoy assorted cobblers and vanilla ice cream, while their Resident Living Texan Historian and Storyteller tells amusing tales of the Alamo and Texas Revolution, or life as a cowboy on the range.

A Country and Western Band will be on hand for music and dancing.

Optional Reunion Activates - Lackland AFB Tour
Friday September 6, 2013 \$20 per person (Includes Transportation)

Coaches will depart the Hyatt Regency Riverwalk at 9:00am (& 11:00am, if required) for a short drive to USAF Joint Base San Antonio – Lackland (formerly known as Lackland Air Force Base).

Tour itinerary is: “Windshield Tour” of the base followed by a visit to the Airman Heritage Museum.

Coaches will return to the hotel at approximately 11:00am (& 1:00pm, if required).

Lackland AFB Tour Ground Rules (Community Relations, Public Affairs; JBSA - Lackland)

- **All** visitors must submit the full name, date of birth, and driver license number and issuing state for everyone on the trip (including bus drivers and chaperones) to our office no later than 14 days before your trip. **Absolutely** no names are allowed to be added once we pass the 14-day window.
- Your group must provide your own transportation (bus, car, etc.) in **two vehicles or less**. Transportation will not be provided by the base. You may need to limit the size of your group to meet the vehicle number requirement.
- Your group will stay together on base the entire time under the supervision of a Public Affairs escort, with the exception of groups staying overnight in lodging.
- All groups will meet their Public Affairs escort at the Gateway East Gate. Take the Military Dr. exit off Highway 90, it will be the second gate on the left.
- No pets, no exceptions.
- All tours are ALWAYS considered tentative pending mission requirements.
- Attendees/chaperones/instructors will not be permitted to make convenience stops during the visit (ex. Stopping at the BX before/during/after the tour while your group is still on base). All groups will be escorted off base at the end of the tour. Personal arrangements not including the entire group should be made for ID cardholders after the group has departed the base. Thanks for your understanding.

Please note: JBSA—Lackland Ground Rules limit us to two vehicles or less, and we expect tour interest will likely exceed the capacity of two motor coaches. To accommodate everyone, the tour may need to be done in two shifts.

⇒ 9:00am to 11:00am (up to 100 people)

⇒ 11:00am to 1:00pm (up to 50 people)

The first 100 people that register for this tour will be assigned the 9:00am to 11:00am tour. The 11:00am to 1:00pm tour will operate **only** if more than 100 people participate.

Optional Reunion Activates - Lackland AFB Tour
Friday September 6, 2013 \$20 per person (Includes Transportation)

**Please complete the following information if you are taking the Lackland AFB Tour.
You will not be able to take the tour unless you provide this information.**

Lackland Tour Ground Rules (Community Relations, Public Affairs; JBSA - Lackland)

All visitors must submit the full name, date of birth, and driver license number and issuing state for everyone on the trip (including bus drivers and chaperones) to our office no later than 14 days before your trip. **Absolutely** no names are allowed to be added once we pass the 14-day window.

Please print legibly

Your Information

Full Name: _____

Date of Birth: _____

Driver License Number: _____

Issuing State: _____

Your Spouse's (or Guest's) Information

Full Name: _____

Date of Birth: _____

Driver License Number: _____

Issuing State: _____

Name: _____

Address: _____

Phone: _____

Email: _____

I will be attending the Reunion with: _____ (spouse / guest)

I have made hotel reservations at the Hyatt Regency Riverwalk: Yes No

I will be staying elsewhere in San Antonio: Yes No

Dinner & Tour Selection / Reunion Fees

Per Person Quantity Total

Dinner / Entertainment - Thursday, Sept. 5th

Rio Cibolo Ranch \$ 63 X _____ = \$ _____

Includes round trip coach transportation from / to hotel, meal, entertainment, and all taxes & service charges.

A "cash bar" will be available, but is not included.

Tours — Friday, Sept. 6th

Lackland AFB \$ 20 X _____ = \$ _____

Reunion Registration Fee (per TAC Missileers member) \$ **10.00** _____

Dues Renewal (if applicable—\$15 for 1 year; \$30 for 3 years)..... \$ _____

Grand Total \$ _____

Please make checks payable to:

TAC Missileers Corp.

Send checks and completed Registration form to:

Mr. Max R. Butler

5625 Pearl Dr., Suite "F" Box 120

Evansville, IN 47712

Please complete and send this registration form, along with your payment, to Max as soon as possible.

— Your registration and payment must be received no later than July 15th, 2013. —

Based on commitments with the dinner/entertainment provider, regretfully, no refunds can be given after Aug. 1st.

Thanks for your understanding!

Questions? Please call Max Butler at (812) 307-0187.

Only 15 Minutes to Atomic Strike

Part Five

What ever "aerodynamic missiles" or "front-line winged missile" means - the weapon system was never fully understood by the West, and they didn't play a big role in Soviet history either. Land-based missiles should now come only in mobile (Redute Missile) used in coastal defense and in the stationary or bunkered type (Progress Missile) which was a dead end project.

As the Soviet leadership gambled on the elimination of the cruise missile squadrons on the left bank of the Rhine, in the U.S. however, the story took a different turn. The Matador had been replaced by the Mace A and the keyword was still Mobility! The answer was to look for it outside of the aerospace industry. Mobility depends on logistics, or the support vehicle. And it was a type of vehicle the Matador launch crews in the sleepy little villages of the Hunsrück had earlier realized as being needed: The MM-1 Teracruz, built by the Four Wheel Drive Auto Company. Outwardly similar to the later monster trucks mainly because of the gigantic, barrel-shaped low-pressure balloon tires with a diameter of more than one yard that equipped both the Teracruz, and the trailer known as a Translauncher; a transport and launch carriage all in one unit. Thus the Mace-A weapons system was able to travel both on highways and off road as well. The tire pressure of all twelve tires could be adjusted by the driver while driving off road to compensate for the different types of soil conditions. Additional versions of the Teracruz carried specialized power packs and missile preflight check out equipment for launch preparations and final functional tests of the warhead and guidance system. Other Treacruzers could be equipped with either a universal crane for lifting all carried objects or with a jet fuel tank pack.

In all 189 of the unusual vehicles were ordered. Thus, the new Mace A from the beginning was a highly mobile missile. With suspicion, as always, from the spies in East Berlin. "The Mace, has a new fully developed cross-country transport system, the system consists of two separate units - a multipurpose tractor and the guided missile carrying trailer, serving as a portable launch pad. The tractor reached the following speeds in flat areas of 40 MPH, when going over railroad tracks: 25 MPH. "And again: the mobility of units equipped with the Mace increases significantly. The new tractors make it possible to take the unit off roads because it is all terrain." [23] Moreover, the Mace as with the former Matador is air transportable and can be dropped by parachute over difficult terrain from a C-130 Hercules. With the Mace A had come another highlight, a new guidance system - the third now. This one raised the bar much higher: namely, it would finally provide a reliable solution to exploit the full range of the missile. The system was supplied by Goodyear under the name Automatic Terrain Recognition and Navigation (ATRAN). Work on it had already started in 1947, for use in the Matador but not finished in time. The new system was based on the principle of comparing the radar scans of the current course, obtained from two rotating back-to-

back parabolic antennas and comparing those returns with the information of the topographic profile of a particular flight route stored in advance on a 35mm film strip. From the derived data, speed, course direction and altitude could be controlled and corrected. ATRAN was a precursor to the process by which modern cruise missiles are guided into the target. It worked independently and was completely resistant to enemy interference.

The only drawback was to get the necessary terrain relief data from deep within enemy territory to make the 35mm film strips with. A major role in obtaining the necessary data was played by the capture of tons of German mapping and geodesic data after World War Two. Where this data was not sufficient, the missing pieces had to be obtained with the help of conventional, that is manned-aircraft, akin to the way the T-33 was used in training the Matador crew where missions were flown from the various launch positions up to the East German border - but this time the flights were to collect track data. Gathering the missing pieces became the responsible of the 7499th Support Group at Rhine Main Air Base, which picked up the project called, "Aunt Sue". When the project was launched the 7499th Support Group then assigned it to the 7405th Support Squadron in the mid 1950s, using some Douglas C-54s to collect the ATRAN data under (Project "Lulu Belle"). Here the current state of knowledge suggests that even the Allied air corridors to Berlin were used for the collection of the features of the terrain. In addition the 7406th Support Squadron used three Boeing RB-50D in the project called "halftrack" to collect the ATRAN data as well. According to one former crew member, the task was, to stay between 500 and 1000 feet altitude and fly as straight a line as possible to the eastern border and then turn around "The rest the track was reconstructed on sand table models by the Army Map Service based on a scale of 1:250000. On the sand tables cities and other objects with strong natural radar returns were painted white, then a movie camera moved over the models at scale altitude and exposed the ATRAN film.

Untouchable Flying Low

With the new guidance system, the Mace A was suddenly a low flying missile and thus become virtually untouchable. With a flight altitude of less than 300 meters (1000 feet), they flew under the entire East German or Soviet air defense. Anti-aircraft guns as well as the now established SA-75/S-75 missiles (SA-2 Guideline) could do nothing because of the low altitude. However, there was a hitch: The radar scans from the missile and the integrated ATRAN film strips needed to be synchronized at a point less than 20 seconds after launch, this point was called the Lock-On-Box. There could not be, under real combat conditions, before launching, an infinite number of film strips available to each launch crew and ready to be exchanged with each other, to cover the virtually unlimited number of launch positions and targets. Ironically, the sophisticated guidance system had put an end to the hard-won mobility aspect.

To Be Continued

**TAC MISSILEERS CORP
MAX BUTLER
5625 Pearl Dr.
Suite "F" Box 120
Evansville, IN 47712**

Mace Nose Cones as Conceptual Art!!

Mace nose cones were the focal point of a conceptual art display at Battery Park, Manhattan, New York, New York in 1971.

Photograph sourced from the Internet

