

Red Eagles

Spring Newsletter



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Issue 9

Fellow Red Eagles: Sound-Off



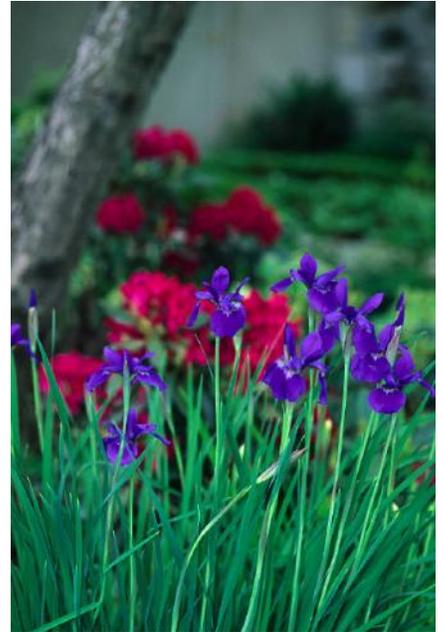
This quarters article was written by David (Dave) Stringer, Brig Gen, USAF, Ret. Dave was the first Maintenance Officer for the 4477th TES. He is currently the Director of the Plum Brook Station Vice Management Office at the National Aeronautics and Space Administration's Glenn Research Center in Cleveland, Ohio. Since 2007, he runs a 6,400 acre site in Sandusky, Ohio, with four world-unique test facilities, including the world's largest space chamber (by a factor of 4). If you visit Cedar Point (biggest roller coaster park in the world) or Kalahari (biggest indoor water park in North America), call him and you'll get a guided tour of this exceptional place.

defined. You might expect an operation set in such surroundings to mirror these qualities, but anything among humans will always be both less clear and more complicated.

The progress of America can be defined in at least four phases – scouts, pioneers, settlers and townspeople. Scouts live by themselves, see and do things that others cannot and quickly assess any newcomer as friend or foe. Pioneers share similar traits to scouts, but band together for improved chances of survival. Settlers take fewer risks than pioneers, but begin to specialize their labors in a system of mutual support. Townspeople work within an established system.

The Red Eagles were founded as a flight, with pioneers and a few scouts, most notably Bobby Ellis. As the numbers of planes and people grew, the flight became a squadron. Further growth more than doubled the number of planes, marking both in flightline and living areas the transition from pioneers to settlers. When George Gennin took the squadron, he had his orders – transition the outfit to as normal an Air Force entity as practical – townspeople in a much bigger city, with the three-squadron 4450th Tactical Group the dominant user of the airfield and the 4461st Support Group operating both a commuter airline between Nellis and Tonopah and a base the size of a normal wing.

The transition of scout to townsman usually takes decades, but in the military it can happen much faster. These adjustments are overshadowed in combat because troops focus on staying alive and getting the job done. When the urgency of a shooting war is absent, the setting is stateside and the rules of secrecy make the family involuntary participants, stresses on people are concentrated, in spite of the wonderful opportunity the Red Eagles had – flying bad guy jets to make the good guys instantly lethal on Day One of actual com-



Editor's Spring Column:

Spring is here, time to start moving:

- Time to dust off winter's cobwebs and caring for the outside of the house.
- Prep the flower beds and fertilize the lawn.
- Spring cleaning is always a pain but necessary to clear away the stale smell of winter in a closed-up house.
- Time to take off the snow tires and have the car serviced for the warm weather ahead.
- It's never too early to clean the grill and start cooking outside. Cook some ribs for me.
- You can submit your stories or roster updates by emailing them to: bgalloway5@elpasotel.net or bobbro@bresnan.net or mail to:
Ben Galloway
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The remote high desert at places like Tonopah Test Range at twilight is beautiful in a way I haven't seen at lower altitudes or among denser populations. As the orange on the horizon fades, you see the blue black of the night swoop westward in a sharp line where soft blue and yellow give way; it's the edge of night. Like the desert itself, it's stark and well

bat.

I got to Nellis in December 1980. Starting as a maintenance officer at Homestead AFB in Florida and then at Cope Thunder at Clark Air Base in the Philippines, I spent a year as an intern at the Pentagon working in Air Force General Officer Matters for Ralph Havens, where I ran two sessions of the Brigadier general Orientation Course, commonly known as "charm school."

One of the newly selected BGs was Chuck Cunningham, then the 57th Fighter Weapons Wing commander, who worked with my boss to divert me to Nellis. Having already been vetted by former Red Eagles Ron Iverson and Devil Mueller, I was slated for the 4477th but neither Tom Gibbs nor Bobby Ellis would have any of it. None of us knew each other before I met them in January 1981, but they must have thought I was a spy for those outside the squadron. I was assigned in the interim to "Obi-wan" Henderson, whose typical graciousness helped make my "limbo" period better – I even got to work on a low observable F-16 canopy test.

At the end of January, I was told to report to the Red Eagle trailer (just down from the Thunderbird Hangar at the Nellis flightline) where Tom Gibbs gave me the deal – I could serve in the squadron as the maintenance officer, but the chief of maintenance would remain Bobby Ellis -- take it or leave it. I didn't want to squander the significant efforts to get me there *and* I wanted to be part of flying MiGs, so I gladly took it. The key to making this arrangement work was the relationship I would establish with Bobby Ellis.

Bobby Ellis was an exceptionally skilled airman who, like many a leader, made it his business to control his own destiny as best he could. A scout with impressive credentials in acquiring foreign military equipment, Bobby saw the Red Eagles as a way to run his own first-class operation of pioneers without interference. It wasn't that Bobby trusted no one – I saw many instances of his seeking help from engineers, intelligence operatives and analysts and aircrews, but he had little patience with anyone who didn't add value as he defined it. Maintenance officers led the list, but there were many others.

"Daddy" Ellis also had great faith in those he hired, searching for highly capable self-starters resilient enough to endure both austere living conditions as well as the stress of program secrecy. Frequently, the people he chose had their own Ellis-like unhappy experiences with authority – arbitrary or otherwise – but as long as they did what he said, they were fine. The corollary to this precept was their refusal to take direction from anyone other than "Daddy" which reinforced the mutual support among the wrenchbenders.

And what a team of capable characters it was: I got to learn the rest of the team first, subbing for Captain Leo Bruderer, the squadron facility manager who was at Squadron Officer School for three months. This introduced me to Ralph Payne, Luis Hinojosa, Kermit Dietz and Tom Anderson, firemen extraordinary, whose firehouse, just off the runway, had a kitchen and sleeping quarters. Ralph introduced me to

Brunswick stew, easy to make with the large number of wild rabbits at hand. The firemen also taught me the ins and outs of fire prevention and response, very difficult given the dodgy level of support their fire trucks enjoyed. Rich Murphy, a New York City native, looked after our fuel tanks and supplies.

I next learned that facility construction and maintenance was as big a job as MiG maintenance. An old fighter pilot turned construction contractor, "Pub" Crouch, taught me that if there is no control over who tells the builder what to do, there is no control over costs and schedules. A trio of falconers, Link Burdick, Bill Magee and Mike Wagner, kept hawks in an aerie on the southeast end of the Nellis runway beyond the golf course and deployed the hawks to Tonopah to suppress the migratory birds during flight operations (I had fun using an alternate method, shotguns, around that runway). There was one memorable Cessna 404 sortie where we went to Ely, Nevada to pick up a hawk that Link had acquired. Once airborne, we got to see the hooded hawk move to stay upright regardless of the aircraft attitude.



In those days, the unit's housing was in transition. Bobby and a few of the old heads had single-wide trailers which were moved to permit further site expansion. Everyone else had moved out of Indian village, a rustic "U" of trailers, in favor of a series of double-wide trailers, sited below and behind the hangars. Entertainment most nights was a movie, gained from the Army and Air Force Exchange

movie rotation, shown in Indian Village until Bobby got Jack Slusher, the ground communications genius, to site a satellite dish to provide cable to the trailer array. What we were able to get was network satellite feeds, and Monday Night Football was incomparably more enjoyable when you could hear Howard Cosell tell Don Meredith what he really thought using bar stool words – while the commercials ran for everyone else.

The burden of making all this happen fell hard on the enlisted force. The aviators had a natural advantage – they had to come back to Nellis nightly to summarize face-to-face the aircrews they trained, and that's what got the Cessna 404s leased, replaced later by Mitsubishi Mu-2s ("Rice Rockets"). Non-pilots could only fly if extra seats were available, unless there was a reason to get back like an illness or a family emergency. Many of the non-pilots didn't like to fly, so they were more than happy to drive one of the vans the four to five hour trip from Nellis to Tonopah. If "Daddy" really liked you, you'd get checked out in the Kenworth tractor-trailer rig the squadron owned and you could drive in style. We had other tractors, but nothing so nice as the K-W (no, I was never checked out).

Routes were either US 95 north to Tonopah, then east to the Tonopah Test Range or north via Pahump and Ash Springs, then west. The latter route meant at least an hour on some of the most severely rutted roads I've ever experienced. Driving these routes gave you an understanding of the power of America. The new guy would be told which gas station owners could be awakened after hours, which enroute establishments were hospitable and which weren't. If you stopped on the side of the road, you would be repeatedly asked by those in vehicles (even school buses), in the neighborly tradition of the West, if you needed help.

All this mattered because until the 4461st bought the Wyoming oil shale Man Camp and set it up on the north end of the Test Range in 1983, all you had to eat was what you brought yourself.

Pilots would bring either something to microwave or a sandwich, but if you spent the night, you served yourself breakfast, lunch and dinner from Monday morning until Thursday afternoon or Friday morning. The logistics of all this meant that ground cargo capacity was essential to the Red Eagles.

People would buddy up to share cooking and cleaning chores, but as any intermountain resident knows, wind and dust begin and end life up range. People would share hospitality and strays like me who got to stay unexpectedly never had to go hungry. Bill "Big Mac" McHenry was a frequent host and he, like Jack Davis at the Nellis trailer, insisted over these dinners that Pappy Frick's establishment of a flight keep the Red Eagles off everyone's radar at Nellis and that the squadron's growth would eventually doom it.

Bobby and the pioneers put tires on the corrugated trailer roofs to keep them from acting like airfoils and vibrating all night and we endured several general officer comments about their unsightliness. I can testify to how much fun it is to try to sleep without them. It eventually fell to me to run one of the double-wide trailers as a dormitory for aircrews, when flying schedules, weather or something else forced them to spend the night. Lenny "Toad-o" Bucko dubbed this trailer "Ma Stringer's" and I kept a supply of toiletries and over the counter meds for our folks.

Let's take a tour of the business end of the Red Eagles in 1981. In the original hangars, we kept the older MiGs. The MiG-17s were in the east bay along with a lot of boxed-up collections of parts from various sources. One was called "Miss Piggy" and had a small stuffed doll replica which flew along. The Mig-21s were in the west bays. Between the two were a few offices, briefing rooms for aircrews and a conference room as well as a snack bar with a television set, coffee machine and microwave. One of the usual pursuits at lunch among the pilots was stealing each other's food, or engage in a conversation so gross that one would lose his appetite, allowing the winner to chow down - childish, but fun. I won such a match versus the previously undefeated Jim "Wiley" Green.

At the end of this hangar was the duty desk, where on a raised seat the operations admin tech (or the security guard) manned the phones, the UHF radio to talk to the MiGs, T-38s and other fighters and a VHF radio to talk to the Commuter airplanes. John "Crash" Libner, Tom Sztabnik and Gary Lewallen shared these duties and John's nonchalant nasal tone was absolutely distinctive whenever he'd make area-wide intercom announcements (if you remember the loudspeaker guy in the M*A*S*H series, you get the idea).

Bobby Ellis had maintenance organized (per a 1981 memo I still have) in three branches: Generation (Paul "Goatroper" Long and Eulalio "Chico" Noriega shared its leadership), Equipment (John Lorenzen, an NDI tech as well) and Component (Bob "Habu" Hobson, our lead avionics tech). Doug Robinson (an aerospace ground equipment technician)

was designated as the quality assurance lead and "Jeb" Baker, helped later by Rick Thompson, ran the MiG-23/27 side as these aircraft began to arrive.

The team of crew chiefs was a monument to their capability and individuality. Mike Beverlin, Tom Burzynski and Dave Hollingsworth were three aces on any flightline. Ron Papendick came to us from A-10s, and helped us troubleshoot an A-10 that landed at Tonopah with an in-flight emergency. Tim Enos had helped restore aircraft in his off-duty time at a previous assignment. Also on the team were George Whitaker, Don Walker and Larry Myers.



Billy Maggart was one of the funniest people to be around and "Charlie O" Othold was just as quiet as Billy was funny. Wayne Johnson, Bobbie Jackson, Joe Bohman and Al Christoff cut their teeth on MiGs, along with Rich Contreras and Russ Osthus. Bill McHenry, Roy "Weird Harold" Miller and Don Walker rounded out the team. Jim Richardson had the pleasure of being the "do this, do that" guy on the flightline, and teams can't win unless some block so the runners can gain ground.

So, just like the pilots, crew chiefs had to learn an aircraft unfamiliar to any of them. Even less so than the pilots, maintenance manuals were almost absent and training, necessarily incomplete and informal, gave each nowhere near enough clues as to what his jet would do next. Couple this with a randomly available parts stock and you get a small idea of the weight of responsibility on the shoulders of the ones who strapped in our pilots. Imagine the feeling if their pilot didn't come back.

In the first phase of the 4450th construction were several huge hangars, including one built next to our original which held two bays of MiG-23/27s as well as many of our shops. My memory is fuzzy as to which shop was where, but the people who ran them were memorable. In the personal equipment and life support shop was Charlie Barker, whose South Carolina drawl would greet you as you walked in. Rick Stiles assisted him. "Tennessee" Ernie Ford was the parachute shop chief, who told me that his tour length at any base was determined when he had packed his 3000th drag chute. Since the MiG-21 and 23/27 fleets used them, Ernie sweated steadily. He was joined later on by George "Cupcake" Mayberry. Bill Welcher was our first egress technician, an utterly vital specialty.

Bob "Bubbles" Pascal was an ace hydraulics technician and Buster Helms covered the pneumatics side of the house. Bob Hobson (radar), Jerry Bickford (instruments), Randy Horsley (autopilot) and the team of Homer "Squat Switch" Shell and Jim Bartlett (comm) covered the avionics specialties while Warren Brelsford and Dave Young handled electrical systems. Jeff Barrett worked hard to make armament flyable, including an early model ATOLL infrared homing missile. Their shops would usually carry an array of parts - some from the aircraft we flew and some from wherever - those who got Soviet stuff didn't ask questions. Tech data as we knew it was almost absent; so our folks were in a constant process of identification, reverse engineering, reconditioning and substitution.

Never was this more urgent than in the engines we flew.

Red Eagles Spring

Dwight "Ike" or "Dagwood" Crawley was the jet engine mechanic who served as a troubleshooter for the folks who did overhaul somewhere else. The Soviet philosophy of maintenance was to use officer engineers for crew chiefs, enlisted men for helpers with the best of the latter retained as senior NCOs and warrant officers to manage them. They built aircraft for mass attacks on NATO forces and expected to lose a lot of them. They built for performance, not for sustainment (their jet engines, for example, were built for 200-500 hours operation, then the scrap heap).

The most popular people in the outfit had to be our metal men. Each had moustaches (it must have been a hiring trait) and Dave Boudreau and Jim Spader were the sheet metal experts. They were always busy, either fixing aircraft or creating parts for other needs. Bob Griese, the machinist, was a genius at making almost any precision part we needed. One of his greatest assets was a lathe with metric on one end and English on the other – vital for dropping in things like pumps and valves from U.S. systems into these Soviet aircraft.

Equally important were our supply folks. Terry Davis and Bob Gibeault were knowledgeable of just how much we could use the vanilla system without getting quizzed as to what we were doing with (fill in the blank). Our admin team of Jack Davis, BJ Adams and Gary Lara also did their best to keep the Red Eagles into some semblance of touch with the personnel and finance systems.

The job of keeping the vehicles and ground equipment going fell to the team of Billy Lightfoot, whose personal appearance was about as covert as you could get in public, Larry Gruse and the aerospace ground equipment (AGE) team of Doug Robinson and Ben Galloway. Their operating area was a canvas-covered arch about twenty feet high filled with Soviet stuff and a corrugated metal building, both behind the hangar and surrounded by, inside and out, a remarkably diverse set of "found for free" vehicles from salvage yards across the country.

One of the AGE projects was to recondition Ivan and Natasha, two Soviet trucks (mobile power and starter units that could start two MiGs at the same time). This posed fiendish challenges as they had to clean up, assess and rebuild/substitute any number of systems and subsystems whose constraints were unknown to them. Thanks to the talents of Bob Griese, Ben was able to drop a U.S. V8 engine and transmission into Natasha and get it going.

The array of vehicles we had was impressive – and there were more than just one bare bones vehicle with a driver's seat and a slab bed behind. Two were M274 Mechanical Mules, built for the Army as sort of a light jeep for airborne forces. They were fun to drive (I had driven one in my Army ROTC summer camp at Fort Bragg) but easy to flip (just like jeeps, which we also had) and more of a toy than a tool. In the pioneer days, however, the two we had got a lot of use. Bobby Ellis's knowledge of administration taught him that property in a covert military system should disappear from the books as much as possible to avoid the audit trail that the normal system demanded. Getting stuff from salvage yards meant the property was already off the regular records and you could do whatever you wanted with it. If you had

enough time and money anything was possible.

Money we had, but time we had not. Construction for the F-117 stealth fighter program dwarfed CONSTANT PEG. Gail Peck had chosen Tonopah to leverage that new investment, but the Red Eagles were soon viewed as the extra mission at Tonopah, less important than the newer, sexier one. The 4477th Test & Evaluation Squadron, formed and operating under deep secrecy, could stay pioneers or settlers only as long it stayed by itself. As the townspeople came in to supersede the settlement, so did questions about the degree of freedom enjoyed by the Red Eagles. Why permit long hair and blue jeans when the townspeople – the 4450th and 4461st folks – didn't have that freedom?

That transition went down hard among the people who felt they had built an important national capability out of extremely difficult circumstances. To many of the old hands, the changes – cut your hair, wear uniforms, comply with vanilla maintenance rules (with little prospect of more tech data and parts) – were imposed because the new leadership suspected them of shoddiness or even disloyalty when the troops had simply been following the old set of rules. It's a shame some on both sides still feel that way almost thirty years later.

The Red Eagles are among many things, a testament to how good our already impressive enlisted force could be. Let me end with part of a recent e-mail from the board president of Mark Postai's MiG-17 accident, retired CSAF General Ron Fogleman:

"I got some visibility into their operations as a result of conducting an accident investigation when they lost one of their aircraft and as an F-15 pilot given the opportunity to fly against their assets. As I think about the 4477th I am struck by the sacrifices that were made by the officers and enlisted troops who traveled up range every week to do their jobs, but I am also struck by their professionalism and sense of duty that allowed such an operation to be conducted under cover for such a long period of time without leaks or disclosures that would have clearly hurt our national interest.

" My other observation is that what the Red Eagles were doing was important, even vital work, at a time when the fall of the Soviet Union was not on anyone's radar scope. In so many parts of the world, and in so many of our war plans, our tactical aviation assets were the tactical and strategic centers of gravity. The things learned by the Red Eagles and shared with the operational forces of the Air Force, Navy, Marine Corps and our Allies gave us the confidence that we could fight and win against an adversary that some painted as being ten feet tall."



Days Off in Las Vegas

While stationed with the 4477th, members had to find ways to entertain themselves while off-duty. The standard work week consisted of a four day duty week and three days off. Some would go boating, fishing, golf or putter around the house. I found a pleasant diversion in my off-duty time by getting involved with radio controlled aircraft or R/C's. I started out with all the bad information you can get from someone that didn't know anything about that, at the hobby shop. I was told what would be the best plane for me to start with, which turned out to be the wrong plane. Instead of guiding me to a trainer type aircraft I was directed to a more aerobatic aircraft. Needless to say I spent a great deal of time building this aircraft only to find a tutor and have him tell me you need to put this away until you know how to fly. After three more weeks of building a trainer type aircraft and setting that up to the best of my ability, I was finally able to find someone to teach me to fly R/C aircraft. After several months and finally mastering the craft, I was able to take off and land all by myself. As a fluke, I asked around the Red Eagles to see if anyone else was into flying R/C aircraft. That's when I got hooked up with Joe Bohman.

Anyone who knows Joe, is aware of his dead-pan humor at the most unexpected times. Of course, when you add beer, he gets even funnier. On the way out to a dry lake bed for flying, I told Joe about the Friday night dinner in Henderson with my wife and another couple. I think the name of the place was Nick's Supper Club and we had steak and lobster and I had escargot as an appetizer. I was telling Joe how everyone at the table looked on in horror as I removed the snails from their shells and consumed them. Joe is driving his old Chevy truck and he turns and looks at me over the tops of his glasses, then returns his eyes back to the road. So I asked "Don't you like lobster and escargot"? He turned to me, dead-pan face, looking over the tops of his glasses again and said "I ain't into crustaceans. I don't eat anything that sleeps under a rock". I laughed until I cried.

One Saturday we went to the North Las Vegas R/C flying field. I picked up Joe and he brought along a 12 pack of Coors Lite for refreshment. We set up our airplanes as we each sipped a beer. It was hot to be sure and after 20 minutes I retrieved another beer from the back of the car. Joe and I made about a half dozen flights each. Sometimes in the air at the same time, sometimes not. After an hour or so, I went to get another beer. The box was there but all the beer was gone.

I went over to Joe and asked him what happened to all the beer. Joe said "I drunk it". And I asked "Why"? He replied, "Because I was thirsty". I just looked at him in amazement. Thinking back, I never did see Joe go to the car for another beer at any time. I really couldn't be upset. After all, it was his beer.

I tried to keep my planes in good condition by keeping them clean and in good repair. Joe, not so much. If it was functional, it didn't need to be pretty. So it was not uncommon to see a half dozen different colors from patch jobs on Joe's planes. Joe was the best half-baked aeronautical engineer I ever saw. He could rig anything to fly on a R/C aircraft. The thoughts behind his ideas were intriguing although poorly planned and executed. Like the time he glued dowel rods, one each, center of each wing, to launch Estes rockets while in flight. Then, placing a separate bat-



tery pack and servo in the plane to ignite the rockets. Amazingly this worked. However, one should note in future attempts, the dowel rods should extend below the wings at least four inches. Glued directly to the wings, the rocket blast tends to set the wings on fire. Or, the time he designed drop bombs out of Minute Maid orange juice cans filled with baking flour. We won't go into using a shotgun shell (with the shot taken out), a nail and some balsa fins and an eyelet to attach it to the plane.

Although these drops took place several times, they all tumbled and I actually saw only one go off.

Or, how about the time we bought a ducted fan model kit of a MiG-15 with foam wings and a fiberglass fuselage? It's a good thing we didn't waste time painting it up and making it pretty. We slapped it together and put the best but under powered engine Joe had in it. After a long takeoff roll, it slowly climbed as Joe tried to make a gentle left turn. It departed and quickly disassembled itself into small pieces. Joe looked at me, again over his glasses and said "Well, that didn't work too well". After all the time we spent together flying R/C planes, Joe and I never learned enough to take large, plastic trash bags with us for cleanup after-the-fact.

R/C's weren't Joe's only hobby. He had a dune buggy with a bulging gas tank (this occurred while trying to weld the tank while filling water and a small amount of gas fumes), roll bars and all. Let me say this; if Joe ask if you want to take a ride in the desert in his dune buggy, just say NO! And that's all I'm going to say about that. No bones were broken but if given the choice between riding with Joe in that dune buggy or flying the back seat of a T-38 with Heater, I'll take the ride with Heater every time. The last time I saw Joe, we both still had all our fingers and toes.

Ben Galloway

Red Eagles Reunion Update For 2011

It looks like the reunion will be on Oct 28-29, 2011, in Las Vegas, Nevada. Here are the details on the reunion:

We are booking 50 rooms at Boulder Station. The room rates are as follows:

Weekdays \$49.28 including all taxes

Weekends \$71.67 including all taxes

Friday afternoon function will be at the Nellis Golf Course starting around 1600 We will have heavy hors d'oeuvres and free beer and wine. The cost is \$15.00 per person (this includes tax and gratuity)

The buffet banquet will be at Boulder Station on Saturday in the Railroad Room from 1800 to 2200. The cost is \$37.20 per person (this includes tax and gratuity)

Further details on the reunion will be forthcoming.

Do not try to book rooms at Boulder Station till after mid-April. The contract and deposit will be in place by then.

Earl (Obi Wan) Henderson can be contacted at the email listed below:

obiwanlv@aol.com

Don Muller's Interment at Arlington

Don "Devil" Muller's interment at Arlington Nation Cemetery will take place on June 17th at 10:45 AM. After the ceremony there will be a gathering of friends at the home of Hank and Vonnie Lavender. Joyce Muller will have directions for those in attendance at the interment.



Red Eagles Web Sites of Interest

Here are some web sites that you may find of interest. Just click on the link to take you to that site.

Red Eagles Facebook page. This site is maintained by Bob Breault and myself. We currently have 38 members. Please feel free to request to join the group:

<http://www.fbjs.facebook.com/group.php?gid=75655098950&ref=nf>

Military.com, this is listed as the 4477th Test Squadron. We currently have 36 members listed:

<http://unitpages.military.com/unitpages/unit.do?id=600794>

Air Force Magazine March 2011 issue "Spying on the MiG's":

<http://www.airforce-magazine.com/MagazineArchive/Pages/2011/March%202011/0311MiGs.aspx>

Air Force Magazine April 2007 issue "Constant Peg":

<http://www.airforce-magazine.com/MagazineArchive/Documents/2007/April%202007/0407peg.pdf>