



B-58A *Hustler* on the taxiway in Area B at Wright-Patterson AFB at Dayton, Ohio. Photograph provided with public use permission by the National Museum of the USAF. Also see the Historian's Report on Page 3.

PRESIDENT'S MESSAGE

by Philip Barber, James Connally 64-04 I did not know John (Jack) Mudie. I am told and I have read his obituary and it seems his service to this country and to **AFNOA** was quite spectacular. I cannot do him justice. His passing was noted in the prior edition of **DR AHEAD** and that he served as the 1st and 2nd Vice-President of **AFNOA** and as copy editor for **DR AHEAD** for a number of years. People of note, such as he, always leave fond memories and a space that cannot be filled. From birth we are ordained to age and die. Time and tide wait for no man. Of course he is, and will be, missed.

He, as well as many others who are slipping away, gracefully and probably without the accolades that their service and sacrifices deserve, are not forgotten, but will be honored in our collective memories of the times which brought forth the best in his great generation.

There is much to say about our current status and the events brought about by the recent election for Presi-

dent. My hope is that now the role of the military, militias, the police forces, and the veterans that make up our homeland security and national defense will be strengthened and rewarded, respectively. I am reminded that I enjoy and can write these remarks without fear, because it is the soldier and the armed citizenry, and not the politicians, who ensure the freedoms from the enemy and the government that we as a nation of freemen have. But the politician we must have and observe lest our ambitions outweigh our sense of dignity and the need for strength in war and in peace.

The majority of the nation's electoral voters and the inauguration of the President-Elect will soon entrust the operation of our nation to a successful businessman. He has pledged to put us on a business-like basis with some respect for sanity of and in its operations. Let us hope he can and will.

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MEMBERSHIP APPLICATION AIR FORCE NAVIGATORS OBSERVERS ASSOCIATION

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<u>DR AHEAD</u>

DR AHEAD is the official publication of the Air Force Navigators Observers Association; a non-profit, non-political organization dedicated to maintaining the peace and security of the United States of America and a spirit of comradeship among the navigators, observers and bombardiers of the USAAC, USAAF, or the USAF. TENOA, the forerunner of **AFNOA**, was organized by Clarke Lampard, Ellington Class 50-D, in 1985.

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ELECTRONIC SUBMISSIONS are strongly preferred. If you cannot send information through electronic mail or on CD, copy should be typed. Photographs and drawings are also very welcome.

CHANGE OF ADDRESS: Please report changes of address to: **AFNOA**, Inc., 4109 Timberlane, Enid, OK 73703-2825; jfaulkner39@suddenlink.net; 580-242-0526

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A B-58 Hustler undergoing center-line pod testing during the 1960s. USAF photograph with public use permission.

HISTORIAN'S REPORT

by Ron Barrett, James Connally 63-06 Some 50 years ago, we all as young navigators and bombardiers had just stood up in the Cuban Missile crisis, and were to see the assassination of our President John F. Kennedy. This was followed by a rapid build-up and war in Viet Nam.

The USAF was, in the late 50s and 60s, almost evenly split between strategic bombardment and tactical and interceptor fighters, with more than 1,400 in each force. MAC/ MATS had a much smaller count.

The USAF had dozens of types of airframes in its inventory. In the last *DR AHEA*D we featured the slow but heavy lifter, the MATS Douglas C-124. This time we will look at very fastest, the SAC Convair B-58, the wildest of all bomber aircraft from 1958 to 1968.

Navigators were expected to be able to navigate any airframe they were sent to, and they did. Bombardiers at the time were almost all Mather AFB-schooled and were sent to both SAC and TAC.

There were more than 1,000 B-47s, 400+ B-52s, and approximately 100 B-58s. Not too well advertised was the fact that TAC B-45s, B-66s and B-57s—as well as almost all fighters—were nuclear capable. Some nuclear armed fighters were even in SAC. And further unknowns were the land-launched Matadors and Maces in NATO.

The Convair B-58 was conceived right after WWII. The USAF engineers had learned from the German aeronautical R&D records that a delta winged aircraft could meet their mission specs of "go high, go fast". The B-58 had a three man crew: pilot, radar-navigator-bombardier, and defensive systems operator—who was also the tail gunner.

After a few fatal incidents a "crew capsule" was devel-

oped and each member sat fully inside his capsule. Physiological training consisted of a class session of what was to be expected to happen at high altitude and speed, if the crew were to have to punch out. They then showed a color 16mm short movie of a bear, yes a lil' black bear that had been shot out of a test B-58 at over 800 knots. Thus we were trained.

The B-58 was fully capable of flights well over Mach 2 (more than 1,000 miles an hour) at altitudes above 60,000 ft. The bomb load varied little. It was "all nuclear." There was the centerline weapon and four B-43s tightly tucked up under the wings in tandem. The B-43 was a nose-spiked laydown bomb.

The B-58 radar-navigation-bombing system was a fused long range radar (in the nose) with stellar guidance (optical port atop the fuselage) with doppler nav-update tracker under the tail section. The system "printed out" what the NavBomb needed to know!

By 1968 the B-58 had become maintenance intensive and so was replaced by the USAF ICBM fleet and USN's SSBN MIRV'd Polaris fleet. Additionally the more powerful USSR radars with their longer range SAMs made high altitude bombing very risky. This brought about the change to fly in at the lowest possible altitudes, pop up a few hundred feet, release the bomb and turn-dive away, with the exception of the B-52s over Viet Nam. **AFNOA** member Bob Harder tells of this in his book *Flying from the Black Hole*.

I want to thank those who sent in photographs of navigators in their positions. These will be shared on the internet for all to enjoy: See www.usaf-nav-history.com and www.james-connally.org.



Capt Erik "Deadeye" Kapchus, a member of the instructor cadre, trains one of the new 451st FTS instructors on equipment operations. Photograph by Capt Meghan O'Rourke, 479 FTG/PAO

479 FTG IMPLEMENTS NEW AETC PROGRAM

strive to find new and innovative teaching methods to edu-

by Capt Jeremy Greer 451st Flying Training Squadron Onboard Naval Air Station, Pensacola, an often forgotten Air Force unit resides next to the Sherman Field flight line. The 479th Flying Training Group was re-activated in 2009 with the primary mission of training Combat Systems Officers for the Air Force. Averaging more than three hundred graduates a year, the 479th FTG has to constantly cate the CSO students.

Throughout the ten month long training, instructors work to mold the young officers into educated aircrew members. As with any type of aviation program, flight training is inherently full of risks and obstacles and there are one hundred and ninety instructor CSOs and instructor pilots within the 479th FTG whose job it is to instruct in spite of these difficulties.

Students of the 479th FTG come from a variety of backgrounds and with an incredibly diverse array of flight experience. Similarly, so do the instructors. While some of the instructors are only on their second assignment, others are reaching the pinnacle of their distinguished careers. Many of the instructor cadre were instructors and evaluators in their previous Major Weapons Systems, but several were not. As a result, Air Education and Training Command (AETC) recognized a potential shortfall in training capability and developed the Next Level Instructor (NLI) program to combat the diversity in experience.

NLI is a program created by the 435th Flying Training Squadron stationed at Randolph Air Force Base, Texas. The 435th FTS trains pilots and CSOs who have been selected to fly fighter aircraft for the Air Force. Since their students have received wings, the squadron recognized that all members progressing

through their program are incredibly valuable, having already graduated from a challenging airmanship program.

A main part of NLI is that the unit must identify whether the student is "surviving or thriving" throughout training. If students are struggling on day-to-day events, it becomes incredibly difficult to instruct the student on the complexities of airmanship. However, for new instructors, it can be tough to identify how the student is coping with training. As a result, the 451st FTS, the squadron responsible for the advanced phase of CSO training, began implementing a mentorship program to instructors in early 2016. Monthly, new inexperienced instructors meet in the squadron heritage room where experienced, senior instructors discuss common student pitfalls and lessons learned. This provides an opportunity for new instructors to ask questions in a friendly environment without any fear of reprisal.

Prior to the implementation of the NLI initiative, if a student was struggling, they could easily fall through the cracks. CSO students must be capable of operating under extreme pressure which mimics the demands of their future aircraft, however the instructor must be able to recognize when a student has exceeded their capability and bring them back to a level which is conducive to learning and development. For this reason, NLI focuses on differentiating between stress and pressure. While pressure is a normal and necessary aspect of flight training, stress refers to a situation where too many demands exist and the student does not possess the aptitude to master it.

It is important for instructors to keep students under pressure throughout flight training but they must also be able to recognize when the student has exceeded their personal limits. If the student becomes overwhelmed, instructors must tailor their instruction to maximize learning. By adjusting the levels of stress and pressure throughout training, students can then learn to adapt and will be better equipped to handle the obstacles they will face in the future.

NLI is one step in creating a more effective learning environment for Undergraduate CSO students. As instructors continue tailoring their instruction to each student, students will continue to thrive throughout Undergraduate CSO Training, which will ultimately produce a higher caliber of aviator for tomorrow's Air Force.

lineage to an Air Force navigator must be established. Legally adopted descendants also qualify.

If the sponsoring navigator is still alive a letter stating the relationship of the applicant will suffice. If the sponsor is deceased some other affidavit of the relationship or letter from a family member must be provided.

The applicant must be enrolled or accepted for enrollment in a regionally accredited college or institution of higher learning. If the applicant is currently enrolled, a copy of the current transcript should be submitted.

If the applicant has not yet attended college he or she should submit a copy of his or her high school transcript and a letter from the college or institution acknowledging his/her acceptance.

The applicant must submit a letter of 500 words or less describing his or her educational program, extracurricular activities, and what his or her career plans are after graduation.

A cover letter identifying the applicant's name, address, telephone number, and a listing of the supporting documentation must be received not later than June 1, 2017. Electronic mail submissions are not acceptable

Selection will be made at the sole discretion of a committee of at least five AFNOA members. Mail the application package to:

AFNOA Scholarship Committee % Dr. James Bannerman 761 Marina Point Dr. Daytona Beach, FL 32114 Questions? Call Jim Bannerman at 386-257-3853.

2017 AFNOA ACADEMIC SCHOLARSHIPS

by Jim Bannerman, Ellington 55-06 Now is the time to submit an application for the 2017 AFNOA Academic Scholarship. This year we will be offering five \$1,000.00 scholarships to descendants of Air Force navigators. Awards will not necessarily be based on financial need or academic excellence, but on a subjective judgment by the award committee of the overall qualifications of each applicant. The application procedure is described below.

The one thousand dollar scholarships will be awarded in July 2017 to the persons best meeting the following criteria:

The applicant must be a direct descendant of a current or former Air Force navigator, observer, bombardier, CSO, RO, EWO, or WSO. The relationship may be son or daughter, grandson or granddaughter or great grandchild, but a direct

HELP WANTED

by Jim Bannerman, Ellington 55-06 We are seeking volunteers who would enjoy evaluating applications for the AFNOA Academic Scholarships. The job is very important but quite simple. We generally receive between 20 and 30 applications each year. I gather the applications and send copies to each evaluator. Your job is to review the applications and choose the ones you consider to be in the top five using your own personal subjective criteria. You notify me of your selection and I combine the evaluations and identify the five to receive checks. Your only responsibility is during the first two weeks of June.

If you would enjoy this involvement please send me an email, to: jimbannerman@cfl.rr.com, with your contact information and a very short description of your qualifications.

BOOK REVIEW

by Bill Wilkins, Ellington 52-09 THE AIR FORCE, General James P. McCarthy, USAF (Ret), Editor-in-Chief; Colonel Drue L. DeBerry, USAF (Ret), Managing Editor, Air Force Historical Foundation, Hugh Lauter Levin Associates, Inc., 2002; 368 pages, photographs; from about \$60.00 to \$95.00 online.

This is an encyclopedic history of the USAF from its Army roots in the early 20th century to the first years of the 21st century. It is beautifully bound in an Air Force blue cover accented by a raised silver, red, white and blue Air Force logo on its front cover. In appearance both outside and on every page inside, it is a "coffee table" book at its most handsome. There are pictures with detailed captions on every two-page spread. The text will almost surely inform long-time airmen about aspects of their service that they didn't previously know. It certainly did me. Even though this beautiful and informative book was published fourteen years ago, I had never known about it until it was given to me by a niece at a recent family gathering.

The content is organized into three major areas. The first section and core is entitled "Air Force Heritage." It recounts the record of the Force from its beginnings through both world wars, Korea, Vietnam and its aftermath, steps into outer space, Desert Storm, and the transition to crisis response. "Sustaining Air Power," the second section, celebrates Air Force people, discusses how the equipment is envisioned, created, acquired, and sustained. Why the "Expeditionary Air Force" was needed and

how it was brought into being is explained. The closing section, "The Air Force of Tomorrow," is a forecast from the turn of this century of our nation's needs for airpower in the future and how the Air Force would meet those challenges.

21st century.

At the end of the book there are brief biographies of the authors of each of its fourteen chapters. Although some of the authors are familiar to many of us (for example, former Air Force Chiefs of Staff Generals Michael Ryan and Ronald Fogleman as well as John Correll, former editor of The Air Force Magazine), it is a service to the reader that all of the contributors' qualifications are easily accessible.

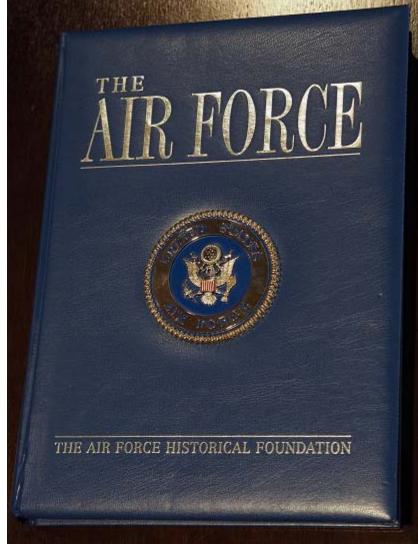
In addition to the chapters, there are several singlepage vignettes. In one of these Colonel Drue L. DeBerry, a retired Air Force navigator as well as the book's Managing

Editor, describes a flight from McGuire to Rhein-Main and back to Kelly to bring a twelve year old Army dependent for critical, emergency medical treatment at the Wilford Hall Air Force Medical Center.

Of the return flight to get the boy to life-saving treatment, he writes: "We took off an hour and a half after landing in Rhein-Main and worked every trick we knew to conserve fuel and minimize flying time.... Over Nantucket... we refueled in the air.... Our patient... survived the flight. I said a quick prayer for his safety as I collapsed into bed at the Kelly bachelor officers guarters." For a skilled, long-distance, transport navigator, Air Force flying doesn't get much better than that.

THE AIR FORCE HISTORICAL FOUNDATION A handsome coffee table-type book in size and form, THE AIR FORCE, produced by The Air Force Historical Foundation, is encyclopedic in its coverage

of Air Force history from the early roots of the service until the start of the





The Alamo in San Antonio. Photo provided by Jim Faulkner.

2017 AFNOA REUNION

by Jim Faulkner, James Connally 64-04 The 2017 **AFNOA** Reunion will be held on Tuesday through Thursday, September 26 through 28, 2017, in San Antonio, Texas. It will be held at the Holiday Inn Express San Antonio Riverwalk Hotel, which is located at 217 North St. Mary's Street, San Antonio, Texas 78205.

The room rates for our Reunion have been set at \$119.00 per night, plus tax. The discounted rate for self parking at the hotel is \$12.00 per night. There is also a discounted rate of \$10.00 for the All-American Breakfast Buffet.

The Holiday Inn Express Riverwalk Hotel is located in the heart of downtown San Antonio and has direct access to the famed San Antonio Riverwalk. The hotel is within walking distance of all downtown dining places and attractions—including the Alamo, Rivercenter Mall, La Villita Historic Arts Village, and El Mercado Market Center.

Call the Holiday Inn Express directly at 210-224-2500 no later than August 17, 2017 to make hotel reservations. Be sure to mention you are with the Air Force Navigators Observers Association Reunion to receive the group room rate. This group rate is also available for three days before and after the reunion dates (based on room availability at the hotel).

Reunion Schedule

Tuesday, September 26th: Registration and Hospitality Room, No-Host Cocktails, and Dinner Buffet.

Wednesday, September 27th: Board Meeting, Membership Meeting, Hospitality Room, No-Host Cocktails, Banquet Dinner.

Thursday, September 28th: Attendees can schedule tours for Tuesday or Thursday after arrival at the Hotel. The hotel can assist with the Hill Country Tour.

Double-Decker Bus Tour (210-224-8687)

\$24.00 with a \$4.00 discount from the hotel concierge. Pickup in front of the Holiday Inn Express starts at 9:25 a.m. and buses come by the hotel every 20 minutes. Last bus departs the hotel at 5:00 p.m. A one-hour tour of San Antonio with hop on-hop off privileges.

Hill Country Tour (210-492-4144)

\$64.50 for Seniors. Relax along scenic Hill Country back roads to the German community of Fredericksburg. Time to explore the Admiral Nimitz Museum and Historic Center as well as the History Walk of the Pacific War and the Japanese Garden of Peace. Lunch is on your own at one of the many fine restaurants in Fredericksburg.

After lunch we'll continue to Stonewall, Texas, to visit the LBJ Ranch on the Pedernales River to see the Texas White House and hear tall tales of LBJ.

Rio Taxi Riverwalk Boat Tour (1-800-417-4139)

\$7.00 is the over-65 rate. Walk one block south to the River Boat Landing. 9:00 a.m. to 9:00 p.m. Cruise of the Riverwalk area for 45 minutes.

The Registration Form will be printed in the April 2017 **DR AHEAD**.

BRIEFLY NOTED

by Bill Wilkins, Ellington 52-09 **COURT-MARTIAL: HOW MILITARY JUSTICE HAS** SHAPED AMERICA from THE REVOLUTION to 9/11 and BEYOND by Chris Bray, a former Army infantry sergeant and now an historian with a Ph.D. from UCLA. An easily read examination of cases dating from when our country relied on what the Second Amendment to the Constitution calls "a well regulated Militia" to the current debate in Congress about prosecuting sexual assault cases, the evolution of military law and justice is traced. In one example of how America has been broadly shaped by the enforcement of military law, Bray puts the roots of the civil rights movement of the 1960s and '70s in a WWI court-martial of and simultaneous hanging of 13 African American soldiers. Bray concludes "American military justice (is) neither better nor worse than civilian justice. It is just different, in good ways and bad." About \$20.00 plus postage online. *******



A McDonnell F-101A Voodoo, a Douglas B-66 Destroyer, and a North American F-100 Super Sabre refuel from a KB-50J tanker of the 420th Air Refueling Squadron at an RAF open day in England in 1963. Photograph from Wikipedia.

KB-50J AIR REFUELING

by David C. Lukens, James Connally 59-02 After graduating from navigation school at James Connally Air Force Base in Waco, Texas, with Class 59-02, I was assigned to the 420th Air Refueling Squadron, 47th Bombardment Wing, Tactical (USAFE), stationed at RAF Sculthorpe in Norfolk, England, flying KB-50J tankers. I was there from March of 1959 to January of 1961.

The pictures show the refueling process in progress. In the above picture the bomber has either just finished or is about to hook up. In the picture (on page 9) the hose operator's bubble is just in front of the insignia on the fuselage. Our maximum speed with hoses out was near the fighters' minimum speed.

The KB-50J was a souped-up B-29 with jet engines on the wings and pods on the wingtips and tail to hold the hoses and drogues that the planes to be refueled would stick their probes into. The bomb-bays were removed and replaced with large fuel tanks, the sidegunner positions were replaced with plastic bubbles for the hose operators to see the airplanes and hoses. And under the fuselage a large radome was installed for the navigation radar. The crew consisted of the pilot, copilot, engineer, navigator, and two hose operators.

The engineer had his back to the pilots and had a small window on his left side. The navigator's desk was behind the engineer with his wall of instruments separating them. The navigator sat facing to starboard, with his equipment in front of him. He had no window to look out of. Airspeed indicator, temperature, altitude, and compass were there. The compass was an electromagnetic one, with a detector on one wing tip. The pilot had a small magnetic compass, almost like a car's dashboard one. In addition to the large radar screen there were controls for VOR, which was useless in Europe because England and France used different frequencies than the apparatus was set up for. A Loran screen was there, and was used in crossing the Atlantic. Radio controls were there too. Also the navigator had the IFF screen with which he guided the planes that we would refuel.

All of our flying over Europe was along controlled airways, just like commercial flights. Radar was helpful, but radio signals were also used. Most of our refueling training was done over the ocean, far from commercial airways, with care not to act provocatively. There are details I cannot now remember.

In addition to the navigator's duties of flight planning and guiding the tanker to the rendezvous point with the planes to be refueled, we had the task of locating the planes and guiding them to us. This was done with a form of radar called IFF (Identification Friend or Foe). The tanker would send a coded signal to the plane and its IFF transponder would send a signal back. By asking him (there were no women flying service aircraft at that time) to switch modes,



A KB-50J tanker refuels a U.S. Marine Corps FJ-4B Fury from VMA214. Photograph from Wikipedia.

and looking at that mode (one or two blips on the screen) we could identify the plane that we were supposed to refuel and guide it in. The IFF scope had range and direction markers on it. The navigator's job was done as soon as the plane saw us and the hose operators saw the plane and were in radio contact with him.

Because the KB-50J was a modified B-29, many of our pilots were former B-29 pilots. In particular, my first pilot, Capt. Robert Meyers, had flown them at the end of WWII, then had gotten out and started a small business. When the Korean War started he was drafted and had to give up his business; so he stayed on when Korea ended.

His experience in the Air Force paid off. On my second flight—I was the 7th person on the plane—we were climbing to 12,000 feet along with several others of our squadron. Suddenly we began to spiral down rapidly, and were warned to prepare for a crash. After a bit we leveled off. I was called from my crouched position just behind the co-pilot to come forward and hold the wheel level, while the two pilots took a rest. Capt. Meyers was his usual calm and unflappable self, until he tried to call on the UHF emergency frequency, 243 MHz, and got no answer. That shook him up. He called on the VHF frequency 121.5 MHz and did get an answer, which calmed him down. We landed without incident, accompanied by fire trucks and an ambulance.

It turned out that, as the wings in flight flexed up at the

tips (bending the ailerons), the outer hinge of the starboard aileron broke, letting the aileron sit straight, below the wing tip, held by the inner hinge and the middle hinge. Thus it was caught in the wind and flipped up, putting us into a spiral. When the aileron broke just beyond the middle hinge, the aileron could be straightened out and we flew level. But the part of the aileron that broke off flew up and took off the top of the tail where the UHF antenna was mounted. This was why Capt. Meyers could not make radio contact. All the parts that fell off were found in farmers' fields. It was classed as a major aircraft accident because it took more than 600 man-hours to repair the plane.

Unfortunately, the airplane never saw regular service again. As part of their pre-flight check the pilots hold the wheel level and check to see if the ailerons are level with the wings. With this plane they were. But when in flight, the only way the pilots could hold the airplane level was to hold the wheel at ninety degrees to the left! The only one willing to fly it was Major Miller, the squadron's executive officer. Finally he flew it to Frankfurt, Germany, to be used for spare parts. No one was making parts for the KB-50 any more, so most repairs involved cannibalization.

Our routine was to fly once a week, training fighter or light-bomber pilots so they would keep up their skill in refueling. Our other task was to be available at their destination when fighters were coming from a long distance, so as to give them enough fuel to land or to go to an alternate air base.

An example of this occurred on 30 November 1960. Tactical Air Command wanted to show that it could move a fighter squadron (I am not sure how many planes they planned to move) from their base in North Carolina to Evreux, France, in 48 hours. Our squadron could not move that fast, so we were given more time to move our whole squadron to Evreux. The plan was for the fighters to take off from their base in North Carolina, be refueled immediately, refueled over Bermuda, refueled over the Azores, and land in France. We would be in the air to give them enough fuel to land or go to an alternate base.

The weather that night was solid cloud from 700 feet above the ground up to 29,000 feet, which is close to our maximum altitude. As the fighters came to Evreux and got in formation to land we were circling as they descended. They had been flying at a high altitude where the temperature is very cold. As each one descended through the clouds ice formed on the surface of the fuselage. As the first fighter landed, the pilot tried to release his drag chute to slow down, but the ice prevented the release. The fighter continued, and was stopped by the arresting gear at the end of the landing strip. This consists of a cable at the appropriate height, fastened to an anchor chain. As the fighter rolls forward, the cable picks up more and more links of the chain and is slowed down safely. But the landing strip is closed for the half-hour it takes to reset the cable and chain. So, instead of fighters landing every minute or so, they were landing every half hour, circling where we were and getting fuel to stay in the pattern. I do not know how long it took the squadron commander to find out what the situation was. I remember one of our own planes saying that he was running out of fuel to give out. I do remember that when it was all over, the fighters were in Evreux, Spain, Scotland, and Frankfurt, Germany, since that's where the nearest open bases were.

Another refueling episode I remember occurred over the Bay of Biscay. Several of our airplanes were refueling some fighters, when the one we were refueling said, "I see some clear liquid coming off your wing." It could only be a fuel leak. To avoid all danger of fuel vapors exploding, the pilot ordered all possible sources of sparks to be shut off. This included the radar since the antenna makes a small spark when it points to the front of the aircraft. This left us without any radar, near the Bay of Biscay, with clouds below us. Suddenly the engineer looked down through his small window and said, "I know that place! It is the military cemetery at St. Lo. I just visited it." This gave us a fix to start our way home. When we got home our radome had about six inches of jet fuel in it. Our mechanic said the spark from the antenna switch couldn't possibly start the jet fuel burning, so we used the radar.

I was supposed to stay in England a total of three

years, but some high officials decided that there were too many people on flying status; sign up for "Indefinitely" or leave now. So I left in January of 1961.

In the fall of 1961, after the Berlin Wall had been put up, I was called by the Air Force. "What had I flown?" "KB-50s." "You're no use to us; we'd have to retrain you."

So I remained a civilian.

RAY COLEY

by Henri L. Bailey III, James Connally 64-05

Our crew returned to Ubon RTAFB, Thailand, for our second Blindbat/Lamplighter tour in mid-April 1968. Before that, several significant things had happened. On January 23, 1968, North Korean forces captured the US Naval Intelligence Ship *Pueblo*. Since our mission was mostly in Vietnam, aside from reading about it in the Pacific edition of Stars and Stripes, I didn't pay much attention to it. Imagine my surprise when we arrived back in Okinawa from Vietnam in late February and the Squadron Operations Officer met me at the aircraft and told me to pack cold weather gear and get ready to go to Osan AB, South Korea, for two weeks as Senior Airlift Officer.

He gave me a choice of taking off in two hours or at 6:00 pm that night. I told him I needed time to pack, sleep, and pay my rent; so I selected the late departure. I told Colonel Holl what had happened as we debriefed at base operations. He was concerned, but was informed that the squadron had to meet the tasking. There was no one else with the required experience available to send. That assignment lasted for a month.

Another significant event was that our co-pilot, Captain Mitch Michaud, finished his tour with the 21st Tactical Airlift Squadron. We had a farewell party and wished Mitch and his family best wishes in their new assignment. In a combat environment, you get very close to the people you fly with and take risks with. It was hard to say good-bye.

Our new co-pilot was assigned two days before we left for Ubon. He was Major Ray Coley (now Colonel). That assignment didn't start well but it ended well. Ray Coley was the son of an old-line Mississippi family. He was a graduate of the University of Mississippi at Oxford and he was a Senior Pilot. As I said before, I was a brash, outspoken African-American from Chicago. Ray had never had the experience of flying with a rated African-American in his life. At that time African-Americans comprised just two-tenths of one per cent of all rated officers in the US Air Force. Colonel Holl, whom I have said before was an outstanding leader, had a crew party to give everyone a chance to get to know one another. To survive in combat, you have to bond and operate as a team.

Ray let me know that he didn't know if he could call

me a Negro because he was accustomed to using the term "Nigrah." I said to him, "That is totally unacceptable! It is an insult that I will not accept!" "Were you born with a BS from Old Miss?" He answered, "No!" "Were you born with pilot wings on your chest?" He answered, "No!" "Were you born as an Air Force Major?" He answered, "Of course not!" I, then, said, "Well all of those things indicate to me that you are capable of learning and you can train your tongue to say Negro, if that is necessary. In the meantime, while you are learning, you may address me as Captain Bailey, sir." He then said, "Well I still don't know if I can accept directions from you. I am not at all convinced that you are competent in your job." I told him, "You are the new guy on this crew. Most of the other crew members have flown with me before. We have depended upon each other and survived. If you ever fail to take a direction from me and cause us to be shot down as a result, you won't have to worry about being a prisoner of war. I will kill you myself before we hit the ground." He said, "I have a weapon, too, and I know how to use it." I said, "I know! But you are sitting in front of me and you have to turn around to shoot me. By that time you will be dead." The expression on his face showed that he had never faced such a situation before. Colonel Holl then told the rest of the crew to go to another part of the house and enjoy ourselves because he needed to have a private conversation with Major Coley.

Colonel Holl never told us what was discussed but teamwork and trust were important to him. The rest of us were battle-proven. I am sure that he gave Major Coley the choice of leaving the crew so we could get another copilot. To Major Coley's credit, he elected to stay! To say that he adapted would be an understatement. In two weeks time, Ray Coley could start a statement and I could finish it for him. The reverse was true as well. We learned to think as one and to depend upon one another. The crew became a dynamic team! Ray Coley and I learned more than working well together. We became friends and made plans to get together once we got back to the States.

My friendship with Ray Coley and Beau Hirtline, both white American males from Mississippi, represents one of the major accomplishments of the Vietnam war. In World War I, units were manned with people from specific localities with Blacks in segregated units. America's presence in that war gave notice to the world that the USA was no longer a banana republic but had become a power on the world scene.

In World War II, the War Department decision to man units with available manpower from across the nation to better fight two wars, welded our country into a nation. If we had lost World War II, we would have had a different language and a different form of government. It is my belief that we owe a special debt to the veterans of that war. The population in the country and the War Department still divided people by hue and gender but people began to think of themselves in terms of one country rather than in terms of regions. For example, the Tuskegee Airmen began as an experiment to prove that Negroes were not intelligent enough to participate in any facets of aviation. Their performance in combat put that hypothesis to the lie.

The Women Airforce Service Pilots (WASPs) were a stopgap measure, like Rosie the Riveter, to free male aircrew members for combat duty. The WASPs did a phenomenal job but it took Congress 47 years to recognize their contributions and to give them veterans' benefits. World War II started a manning policy change that wasn't completed until Vietnam. The policy change was sidetracked in Korea by a little thing called "brainwashing." Americans had never encountered anything like "brainwashing" and it was important to learn how to counter it for the well being of the military establishment.

In Vietnam, we learned that there were two sides. Americans were one team and had to support each other despite hue or ethnicity. The other side was anyone shooting at you and your team. Enemy combatants could and did include women and children on various occasions. That fact later helped to open combat assignments for American women. The rules of engagement were stacked against the American team by the American government. Enemy combatants could fire on Americans from immune zones and the American team could not fire back. The primary goal in Vietnam became staying alive. The "fam-ily" you depended upon to help you do that was the unit you were in. Units that became welded, disciplined teams had lower losses. You didn't care where your team mates were from originally. You cared that each of you was inter-ested in helping each other to survive. Your team mates were your "brothers." It didn't come about easily and guickly but it did come about. It was supported by the fact that there was a civil rights revolution going on back home. The two things became mutually reinforcing.

It is a fact that we lost the war in Vietnam. I believe it was due to a lack of leadership on the home front. You will never convince me it was due to a lack of fighting initiative or lack of discipline on the part of the American fighting man. But we did make a great and permanent contribution to American society that helped to make us a better country that was closer to the ideals of our Constitution. As a result of our experiences together, Ray Coley became my friend. I love Ray Coley! He has a special place among my "band of brothers."



BRIEFLY NOTED

by Bill Wilkins. Ellington 52-09 FLIGHTS OF NO RETURN: AVIATION HISTORY'S MOST INFAMOUS ONE-WAY TICKETS TO IMMORTAL-ITY by Steven A. Ruffin. A score of flights, many of them famous, ending in tragedy are analyzed in considerable detail. The flights range from French balloonists in 1785 to the 2014 disappearance of Malaysian 370 which is still occasionally in the news. The well known flights include Earhart-of course, the flash burning of the Hindenburg, and the loss of the space shuttle Challenger. Less known, at least to me, was an attempt by a Swedish engineer and two others to reach the North Pole by balloon and an analysis of whose bullet most likely shot down the Red Baron. Each flight discussed ended in tragedy for those on board. Many of them generated multiple theories about their causes. Ruffin makes reading about the known and the unknown interesting and easy to do. Photographs enhance the readers' experience. About \$25.00 plus postage online.

MASTER NAVIGATOR PENNANTS

by Dennis Ehrenberger, James Connally 63-19 We started the program with 57 pennants back in April 2016. The response was great and the last pennant was shipped on September 12. We do not expect to order any more. A big thank-you to those of you who supported the program. There were many positive comments about the quality of the pennants which, in my opinion, were first class. If you are interested in other military emblems, you might want to get in touch with Nick Nickerson at cavutothemoon@comcast.net where we acquired them.

LETTERS

Gentlemen:

30 August 2016

Re: The President's Message, July 2016. It was for me, in Yogi Berra's immortal words, "déjà vu all over again."

My high school years and a college year were spent pumping gas, washing windshields, changing oil and repacking bearings. There is no memorial to me or my brothers after the service station attendant went extinct. I have never understood why.

Later in life, after leaving the Air Force and the ANG, I got started with an electric utility as a meter reader in the remote California county where I grew up. They paid me to explore every backroad I'd ever wondered about in my youth, with a bonus of seeing wildlife from Bald Eagles to beavers to Thule Elk. It was close to the fun of a North Atlantic winter night celestial crossing, surfing a jet stream that ran just shy of 300 knots—with the Air Force paying me. That electric utility now has 'Smart metering' that transmits meter readings electronically to an area antenna. There will be no memorial for my service, often difficult, reading those meters—that world and every dog in it hated me and every meter reader who walked or drove a route.

And now, gentlemen, you inform me in the **AFNOA** newsletter, July 2016, that there will be a future—not too far ahead—when navigation and navigator will only be search words on the internet for an ancient task or the newest electronic device. Honestly, I think all navigators have just been waiting for the official announcement. So, what to do with this association whose members stretch from the earliest days of aviation to the last of us trained before GPS and Inertial? I came to believe after I'd first logged a bit of time that the word navigator only described part sometimes a small part—of what went on [goes on?] in the cockpit of any navigator-manned aircraft.

Every aircraft I checked out in as a navigator had a mission. I logged my first operational hours in TAC C-130s. One could describe a lot of that task as giving directions, actually. But how would that really capture the frantic computing, map reading and communications of a night troop drop of 101st or 82nd Airborne the first time you're solo leading a flight of three. In the ANG, I was a KC-97L navigator and air reserve technician. Getting from Goose Bay to Frankfurt am Main was the base ability; but a point rendezvous with a flight of F-100s departing Wheelus AB, Libya for Ramstein, Germany; refueling F-84Fs in Alaska who would need two refuelings to test Soviet air defenses in nearby Siberia; or refueling F-104s deploying from Guantanamo, Cuba, to Howard AB, Panama, were how the aircraft's capabilities were employed and it was directed by the navigator. My experience was a bit different with the KC-135A. Its navigation and rendezvous capabilities were two decades behind the aircraft's performance and the KC-97Ls. Good that the bombers directed the rendezvous and most fighters' refueling used buddy procedures. It was about that time I decided to retire, but the navigator in the KC-135 was still the guy.

And so I came to believe the navigator was not just a human pointing device. His or her skills are better described as an aircraft's mission computer. As one, a navigator directs an aircraft to its destination where its capability, whatever that may be, is also initiated and directed by the navigator. I cannot see how this differs much from what I know of today's combat systems officer. Probably the only airmanship challenge I could make to them would be a celestial 3-star fix or a day DR and MPP. They could probably put me in a 9G turn and tell me to lock onto a target.

Could the **AFNOA** with its CSO contacts educate us more on the missions, responsibilities and aircraft CSOs fly and the kind of equipment they have? Maybe course outlines and a bit about flying training. And perhaps the Air Force Navigator Observer Association should formally invite the CSO community into its ranks and change its name. I have no idea what that name would be, but logically it would be the Air Force Combat Systems, Navigator and Observer Association—AFCSNOA.org. That's a few more characters, but so it may reflect eventual reality. We can leave it to CSOs to deal with their extinction when it's their time.

If they have an annual refresher course as navigators did [do?] that would be interesting. There may be so much classified in the CSO world that we couldn't see much detail. But there must be basic information available and perhaps some links you could add to **AFNOA**.org.

Mr. Barber, AFNOA President, had me thinking of what we could show them in return about what we did back in the day. In the very funny DR AHEAD, October 2015, article about his navigation simulator in the hall closet-Good-On his wife for helping him through the episodes. I think AFCSNOA members together could come up with a couple of great ground missions. HO 249 Sight Reduction Tables are a free internet download, as is the Air Almanac. AFMs 51-40 should be posted on the web site. I've got virgin TAC Flight Plan Logs and AF Forms 21B. With some charts that we could have copied, all we need are some routes. I suggest a night Goose Bay to overhead Shannon or Lajes, Azores to Kindley, Bermuda during the day. Might not be fair to include Loran, but hey, everyone but Curtis LeMay believed in it. There are details to be sure like TAS and altitude, but there must be a lot of archive stuff available.

William L. Day of Harlingen's 61-09, our class Clerk Typist 2nd Class [I think he ought to make Staff], was looking for ideas for the class reunion in Colorado Springs a couple of years ago. We traded some ideas on the internet about a ground mission, and it became clear it was easier to propose one in 2014 than supply it. But I think this would be a very important endeavor for a couple of reasons. It will leave a stamp about what the navigator and observer did back in the day that may not be fully understood, and give Mr. Barber, me, William Day and a lot of us the great fun of resolving a three star fix.

Robert D. Bock, Harlingen 61-09B1

We have an answer to Mr. Bock's suggestion about the CSOs educating us on the missions, reponsibilities and aircraft of today. We ave already begun this process. See The E.W. Modification to the T-1A Jayhawk on page 4 of the July 2016 issue, the Pre-Requisites for Undergraduate CSOs on page 8 of the October 2016 issue, and The New AETC Program on page 4 of this issue. These are the opening pieces of what we hope will be an extensive series by the staff at Pensacola.

LAST FLIGHTS

Jim Faulkner, James Connally 64-04 Please continue to advise Jim Faulkner or Richard Mansfield at jfaulkner39@suddenlink.net if you know of fellow Navigators/Bombardiers/EWOs/CSOs who have made their last flight. Please continue sending us the obituaries from local papers if the person was a navigator/ bombardier/electronic or weapons/combat systems officer. Dick Mansfield does the research for WW II people to determine what class/school they attended. At the next reunion we will Drink a Toast to recognize their contributions to **AFNOA** and the aviation career field.

I am saddened to advise you the following navigators/ bombardiers/EWOs/CSOs have made their last flight. Please keep their families in your prayers.

CARLSBAD

McClokey, Reid	Carlsbad	NM	44-02
CORAL GABL	ES		
LaPenna, Alexander V	. Poughkeepsie	NY	44-02
Chivers, Thomas W.	Challis	ID	44-06
Zwissler, Howard R.	Miamisburg	OH	44-06
CHILDRESS			
Latvala Eino K.	Brentwood	TN	44-03
ELLINGTON			
Funderburg, Alvin K.	Dayton	OH	41-00
Kushner, Arnold A.	Plymouth Meeting	PA	44-01
Spartz, Vernon M.	Huron	SD	44-01
Corron Jr., George	Englewood	FL	44-02
Koshewa, Paul A.	Atlanta	GA	44-04
Bishop, Donald D.	Hudson	MA	44-05
Chong, Anthony S. C.	Yuba City	CA	44-06
Craig Jr., Wade M	Nashville	ΤN	44-07
Mairs, James	Marshalltown	IA	44-07
LaMotta, Samuel J.	Summit	NJ	44-08
Aboulafia, Samuel	Pembroke Pines	FL	44-09
LaRosa, Alfred I.	Brattleboro	VT	44-11
Jonas, Delmar A.	Holmen	WI	44-12
Wehner, Raymond H.	Dublin	OH	44-45
Kutach, Daniel B.	Sun Lakes	AZ	44-49
Matlock, Wallace L.	Spokane	WA	44-49
Korach, William J.	Soap Lake	WA	44-53
Kretheotis, Chris N.	Indianapolis	IN	45-04
McCain Jr., George F.	Houston	TX	45-04N
Redfearn, Leroy F.	Houston	TX	45-04N
Cool, Emiel J.	Fostoria	OH	45-08
Ganshirt, Harold T.	Houston	TX	45-08
Reeve, Leonard R.	Brecksville	OH	45-08
Mudie, John W.	Glendale	CA	50-F
Helmke, Kermit W.	Miamisburg	OH	50-F*
Kuykendall, William T.		MS	51-00
Lake, William H.	Rockville	MD	51-08

Castleman, Stanley A. McLoud, Harold J. Stanley, James L. Ford, Paul M. Semmler, Paul F. Sult, Robert L. Allen, Jon S L Massingill Jr., Harry B Cool, Brent A. Perrine, Elton L. Flook Jr., Howard O. Land, Charles P. Palm, Richard H. Thompson, George C.	Pelham Jekyll Island Clarks Summit Wilmington Houston Dallas Lubbock Leeds Pillsford Frederick North Little Rock Fairborn	ME NHA PA NC XX XX AL ND AR HWA	51-12 51-24 51-27 52-03 52-09 54-00 54-03 54-03 54-15 56-00 56-08 56-08 56-08 57-04 57-19
HARLINGEN Boerschig, Charles A. Boudreau, Carlton F. Brillos, Robert E. Drennon, Philip R. Dyer Jr., Edwin H. Fitzpatrick, Richard L. Gerber, Richard A. Hauser, Philip W. Hendelman, Lewis H. Hutsell, Robert L. Irwin, Donald L. Kaminski, Paul P. Kane, Vincent J. Kuska, Robert J. Marik, Clarence F. Miklosky, Frederick J. Nicolosi, John J. Noe, Philip S. Puleston, Arthur K. Roche, Joseph F. Slangal, Henry W. Solis Jr., Marcelino Uttecht, Donald Jerry Watson, Frank P. Wright, Roy F. Krueger, John A. Paquin, Richard E. Konopka, Raymond E Cassidy, Duane H. Forney, William E. Alexander, John C.	Fort Walton Beach Lemay Fairfax Houston Dixon St. Louis Wichita Boca Raton Aurora Sacramento Nashua Richland Hills Sacramento East Bernard Memphis El Segundo College Station Torrance Citrus Heights Portland San Antonio Yuba City Oklahoma City Fort Worth Macon Sebeka	ΤΥ ΕΙ ΜΥ ΤΥ CIM K FINICIA TY CITY CATA CATA CATA AND AND AND AND AND AND AND AND AND AN	53-11 53-12 53-12 57-06 57-14 57-14 57-14 57-14 57-14

Martin Jr., Billy	Diamondhead	MS	57-14
Miller, Roscoe R.	Forked River	NJ	57-14
Powell Jr., James T.	San Antonio	TX	57-14
Repeta, Henry J.	Syosset	ŇY	57-14
Ryan Jr., Joseph M. F.		MD	57-14
Swann Jr., James A.	Round Rock	TX	57-14
McGukin, John G.	Vinemont	ÄL	57-17
Ellis, Luard L.	Grandview	MO	58-01
Sawyers, Dale W.	Oklahoma City	OK	58-06
Hand Jr., Norbert R.	Hillsboro	OR	58-07C
Hinesley, Madison Q.	Cornelia	GA	60-03
Miller III, Elmer A.	Goldsboro	NC	60-11
Adcock, Eddie M.	Nebo	KY	60-14
Budge, Ronald J.	St. George	υT	60-14
Walker, Clayton H.	Livingston	TN	60-14
Gamber, Leonard W.	Avon Park	FL	60-15
Barrett, James J.	Panama City	FL	60-17
Belford Jr., Willis A.	Colorado Springs	CO	60-17
Benten, William A.	Haughton	LA	60-17
Carr Jr., Theodore C.	San Mateo	CA	60-17
Carroll, John H.	Limerick	ME	60-17
Carroll Jr., Roger W.		TX	60-17
Cordova, Richard L.	Port Orchard	WA	60-17
Dana, Ronald E.	Fontana	CA	60-17
Dobias, Otto C.	Lake Tapps	WA	60-17
Enko, Rodney E.	El Paso	TX	60-17
Gregory, Hugh R.	Little Rock	AR	60-17
Kozlusky, Robert J.	Maumee	OH	60-17
Liggett, Gary R.	Vacaville	CA	60-17
McDonald, James M.	Minot	ND	60-17
Mollicone, James V.	Converse	TX	60-17
Monkell, Roy E.	Berne	NY	60-17
Pate, James E.	Warner Robins	GA	60-17
Raymond Jr., Charles		VA	60-17
Stirbis, Donald E.	Patterson	NY	60-17
Tatum Jr., Sterling S.	Jacksonville Beach	FL	60-17
Williamson, James R.	-	CA	60-17
Cassidy, Leo M.	Medway	MA FL	60-20
Namlick, Anthony J.	Niceville		60-20
Finnerty, Richard M.	Honolula	HI TV	60-22
Osborne, Robert O.	New Waverly	TX FL	61-01 61-04
Nolde, Kenneth-Ken Downes, Donald T.	Pensacola Jacksons Gap	AL	61-04
Parker, Royce	Lincoln	CA	61-06
Thompson Jr., Harley		AR	61-06
Falcon, George A.	Wimberley	TX	61-07
Myers, Thomas O.	Lynn Haven	FL	61-07
Weiler, Theodore J.	Weatherford	TX	61-09
		17.1	01-00
HONDO		~ ·	10.10
Thorne, Robert F.	Claremont	CA	43-13
Reinstein, Sol	Coconut Creek	FL	43-16
Hall, Clyde C.	Thomasville	GA	44-09

Anderson Conrod T	Can Antonia	τv	44.40	Ness Denald D	C Dravidance	וס	70.40
Anderson, Conrad T.	San Antonio	TX	44-46	Nass, Ronald D.	E. Providence Benton	RI ME	72-13 72-14
JAMES CONN				Fitzpatrick, Harry B. Rudolph, Grady E.	Seymour Johnson	NC	72-14 74-07
Aman, Robert S.	Ridgewood	NJ	52-19	Deasy Jr., Robert A.	Yorktown	VA	82-00
Auster, Melvin J.	Houston	TX	52-19	Deasy of ., Robert A.	TOIRCOWIT	٧A	02-00
Buroker, Harold E.	Fort Worth	TX	52-19	SELMAN			
Graber, Elkin George	Marietta	GA	52-19	Soderstrom, Kenneth	G Sun City	FL	43-09
Hobart, Donald W.	Cypress	TX	52-19	Ricketts, Robert R.	North Easthan	MA	
Scherer, Paul B.	Oypic33		52-19	Clyatt Jr., William L.	Palmetto	FL	43-11
Shipley, Bruce C.	Niceville	FL	52-19	Rehm, Paul E.	Abilene	TX	43-11
Woolverton, Alton L.	Allen	TX	52-19	Sussman, Armand M.		PA	43-13
Cooper, Vernon R.	Youngstown	FL	52-20	Cortese, Bernard	Windham	OH	43-17
Wickstrom, Thomas L	•		53-11	Chused, Harry S.	Framingham		44-01
Robinson Jr., Robert S	-	L	54-06	Ridge, Paul D.	Lake Placid	FL	44-01
Roark, Neal S.	Newman	GA		Brindle, Ernest W.	Winchester	VA	44-05
Funkhauser, Donald H		IA	54-16	Sperber, Harold P.	Cliffside Park	NJ	44-05
Laux, Billy W.	Downieville	CA	54-16	Ricci, Aldo A.C.	Fayetteville	NY	44-06
Larson, Loren M.	Alden	IA	59-06	Sadoski, Tadius T.	Beverly		44-08
Heward, Henry W.	Ocean City	NJ	59-08	Larcy, Joseph F.	Albuquerque	NM	44-10
Thomas, William B.	Naples	FL	59-20	Tichenor, Otis K.	El Paso	TX	44-10
Garver, Edwin H.	Leesburg	FL	60-14	Kester, Robert L.	Curwensville	PA	44-13
Brown, Robert L.	Dalzell	SC	61-09	Carter, Raymond C.	Reno	NV	45-07N
Nugent, Edward R.	Orangevale	CA	63-01	Matson, Arthur J.	Flandreau	SD	45-235
Tschirhart, Leslie H.	Glendale	AZ	63-02			02	
Deeter, Stanley B.	Sarasota	FL	63-04	SAN ANGELO)		
Daly Jr., Robert W.	Mesa	ΑZ	63-09	Cochran, Julian C.	Fort Scott	KS	43-09
Knight, Gerald D.	Columbus	OH	63-09				
Madere, Antoine D.	Cedar Creek	TX	63-13	SAN MARCO	S		
Jones, Donald E.	Greenville	SC	63-14	Chin, Francis H.	San Francisco	CA	43-17
Tippin Jr., Clifford O.	Glendale	OR	63-14	Coffey, Richard E.	South Bend	IN	43-17
Coslow, Carroll B.	Laramie		63-20	Cooke, Howard P.	Stratford	СТ	44-46
Suggs, Jon C.	New York	NY	64-05	Russell, Edmund H.	Lenexa	KS	44-51
Wiese Jr., Earl J.	North Pole	AK	64-09				
Pena Jr., Juan	Colorado Springs	CO	65-05	SCHOOL UNK	NOWN		
Bryant, Perrin C.	Georgetown	SC	65-07	Kasprzyk, Emory M.	South Miami	FL	43-00
Ruthig Jr., Harold H.	Holland	MI	65-07	Schott, Richard J.	Hondo	TX	43-00
Williams Jr., Albert M.	CampSprings	MD	65-09	Clum, Robert W.	Houston	TX	44-00
Kawamoto, Calvin K.	Waipahu	HI	65-14	Mason, Daniel B.	San Antonio	TX	45-00
Maroon, William F.	Dover	DE	65-20	Wachs, Harry	Chevy Chase	MD	45-00
James, Michael G.	Rockland	ME	66-01	Walton, Clarence J.	Lower Gwynedd	PA	45-00
McRae, Christopher P.	Trion	GA	66-04	Melton, Maurice E.	Montgomery CTY	MD	46-00
Gladson, Dwayne E.	Fort Worth	TX	66-05	Behnke, Paul J,	San Antonio	TX	50-00
Thompson, Norris J.	Lakewood	WA	66-05	Nordmeyer, Marvin Da		TX	52-00
Selig, Steven D.	Gilford	NH	66-07	Dyer, Edwin H.	Houston	TX	53-00
O'Hara III, Joseph	Warrensburg	MO	66-13	Burks, Albert E.	Austin	TX	54-00
Baughn, Brent F.	Chatsworth	CA	66-17	Lusk, Edward E.	Warner Robins	GA	54-00
Willis, Albert H.	Southport	NC	66-17	Reeder, Janis E.	Panama City	FL	54-00
Boylan, Joseph F.	Killeen	AL	66-18	Allee, Robert S.	San Antonio	TX	55-00
Camburn, Gilbert L.	Ocean Springs	MS	66-18	Stiles, Roger E.	Chippewa Falls	WI	56-00
				Large, Jackson D.	Jackson San Antonio	WY TX	41-00 42-00
MATHER				Caudill, Orley B. Regn, Jr., George M.	Burlington	NJ	42-00 42-00
Castle, Robert H.	Oklahoma City	OK	42-05	Regn, or., George M.	*******		-T <u>L</u> -00

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