

MY 22 YEARS WITH DOUGLAS –TULSA AND FLYING THE B-47 FOR THE NAVY

This is the story of a 27 year old fighter pilot returning from eight months of active duty with the US Air Force in Korea where he flew 100 missions in F-84E jet aircraft and received two Air Metals and the DFC. Upon returning from Korea he was assigned to the 31 st Fighter Escort Wing at Turner AFB in Albany, GA commanded by Col Dave Schilling. This was a SAC outfit with F-84Gs, the first fighter aircraft to have air refueling capabilities. (Col Schilling was a WWII decorated ace shooting down over 22 enemy aircraft in his P-47.) This pilot's WWII experience was slim having not graduated from Army Air Corp flight school until March 13, 1945 but did train in P-40Ns at Foster Field, Victoria, Texas. He missed all combat and ended up an AT -6 gunnery instructor at both Matagorda Island, Texas and Ajo, Arizona. He was released from active duty in July of 1952 because the unit was deploying to Korea and he had the choice of returning to Korea or being released. He chose to be released and returned with his wife to Tulsa, OK to fly F-51H aircraft with the 125th Fighter Squadron of the Oklahoma Air National Guard.

THE BEGINNING

My name is Dean Abrams. I am that pilot and I will tell the story that relates to my employment with Douglas Aircraft Company of Tulsa, Oklahoma from 1952 to 1975, but also with some selective experiences flying a C-97G with the Oklahoma ANG both on active duty and in peacetime.

The only job available at that time in Tulsa in July, 1952 was with the Douglas Aircraft Co, commonly called the ' Bomber Plant' located on the southeast corner of the municipal airport. In 1949 I had attended the Spartan School of Aeronautics and received an engineering certificate. A recommendation from the then Air Force plant advisor, Lt Col Joe Turner, helped me be hired as a Liaison Engineer. Joe Turner was my Air Guard Group Commander when we were activated for the Korean War in 1950.

To explain, a liaison engineer is a 'go-between' the engineering department and the manufacturing and flight department. For the first five years I worked inside the building primarily with the manufacture and assembly of both the B-66 and the B-47 aircraft. Douglas only partially built these aircraft here at the plant from scratch. The rest, like the wings, nose assemblies, tail assemblies, landing gear and engines were built elsewhere and shipped in by freight to be assembled on our 'mile' long assembly line. I spent many long hours helping to solve engineering problems that arose during this manufacture and assembly.

THE C-132

The never-built Douglas C-132 would have been the worlds largest turboprop aircraft had it been built. It was to be built at our Tulsa facility and would require many more

employees. A wooden mock-up was started at the north end of the main assembly building. I was transferred to the 'mechanical design' section of the engineering department and worked for six months on control cable design. This was not my favorite job with Douglas, slaving over a drafting table eight hours a day with no future in sight. Instead of receiving a big contract, in early 1957 it appeared the existing contract was in jeopardy. There was no funding in the budget for the C-132 and the program was cancelled. I, with many other employees watched as the wooden mock-up was towed out to the north flight line and set afire. I was both sad but relieved because I could now go back to liaison engineering.

MILK BOTTLE ETC

A lot can be told about the B-47 'milk bottle' problem but I was there and can tell you what I saw. First, the milk bottle is a large tapered bolt about one foot long that attaches the wing section to the fuselage in two places. On March 13, 1958 an old TB-47 # 50-0013 from McConnell AFB broke up over Tulsa while performing 'unusual positions'. One wing section landed three blocks from my home in Tulsa. Both pilots successfully ejected but the third student pilot came down with the forward section still strapped in the navigators seat. The seat with the parachute was stored in our ANG operations area until we could not tolerate the odor. I also personally saw as an engineer the cracks in the wing joining plates, some two feet long, also the cracks in the milk bottle bolt holes before they were repaired. The cracks in the joining plates were stop-drilled and a large steel plate was bolted over the repair. I often thought about these repairs when I began flight testing a year later.

Management found that many of the flight test problems required engineering help, so since I had previous experience as a pilot, I was promoted to 'flight line' liaison engineer. Some of the problems I worked on involved flight controls, air-conditioning and pressurization. I also rode in the B-47 crawlway during taxi tests to observe forward landing gear problems. Charlie Kieter, Jack Miller and Gail Harris were among my coworkers.

After seven years the inevitable happened. In August of 1959 I was offered a job as a functional test co-pilot and was transferred to the flight department. Production of the BA7 had almost stopped and most of the B-47s we were now flight testing were the result of IRAN and 'Milk Bottle'. I was now flying F-86Ds with the Air National Guard so my pilot skills were current. We had just transitioned from F-51Hs and F80Cs to F86Ds and later to C-97Gs.

THE FLIGHT DEPARTMENT

It consisted of-as my memory recollects-about twelve pilots including myself, four navigators, two pilot inspectors and numerous support personnel. Bill Hightower was the flight dispatcher. We maintained our own company radio. My call sign was 'Douglas 12'.

The chief pilot was Clair Coe, who was transferred from the flight test department at the Douglas Santa Monica plant in California. His assistant was Alex Whitmore, a former

test pilot at Chance-Vought Aircraft Co. in Dallas, Texas and a ferry pilot in WWII.. The other pilots, naming a few, were; Grant Younger, Bob Allison, Lee Trout, Chuck Hammett, Jim Lucas, Dick Allen, F.R. Keene, Jack Powell and Jerry Hanten. One of the navigators, Travis Blount, became a personal friend and served with me in the ANG after we acquired C-97s and became part of MATS. He was an experienced ex Air Force B47navigator who began working at Douglas in 1956 just 13 days after being released from active duty at Lockborne AFB in Ohio. I don't know the history of the other pilots except that Bob Allison had flown P-39s in the Pacific theater during WWII and Chuck Hammett was an ex-corporate pilot. Grant Younger was ex-navy having also flown in the Pacific theater. I don't know how they all became proficient in the B-47 except through local training like I did.

The Air Force flight test department was headed by LtCol Joe Richael. His assistant was LtCol Bob Stevens who later after retiring became one our pilots for the Navy. When the contract was first signed and the initial production began Joe Richael and Clair Coe ferried a sample B-47 to Tulsa from the Boeing plant at Wichita, KN. I am assuming this aircraft was used to train the other pilots both civilian and military. It was rumored they had difficulty extending the main gear and had to use the ELGE system. The Air Force flight test section increased like ours did as more aircraft were manufactured.

Our flight department although being at the Douglas plant in Tulsa did not come under the supervision of the plant manager who at that time was Harry Woodhead. It came under the direction of Ed Heinemann at the Douglas Long Beach plant. He was chief of engineering and flight tests and was also famous for his design ofthe A-4D Skyhawk which at that time was called 'Heinemann's Hot Rod'. Clair Coe reported directly to Ed Heinemann. More on his strange behavior later.

The procedure for flight testing was our company first and Air Force second. This was common practice throughout the industry. In other words we would do the initial flight test and then the resident Air Force pilot would perform the final acceptance flight. This would only last for a couple more years as politics erupted and finances diminished.

A typical B-47 test flight went something like this. First our own pilot inspector would check over the aircraft after it was released for flight. We would make a runway taxi test and if everything was ok, take off. The fuel load was around 50,000 lbs, enough for an hour of flight tests, but light enough to abort the flight after take-off jf we had an airborne problem. Fuel transfer checks were always done early in flight in case problems arose. Unlike our Navy B-47s these test aircraft carried fuel in both auxiliary tanks. At 15,000 ft and 300 KIAS, after all engine readings were recorded by the co-pilot the flight control crossover checks were begun. The pilot would switch off the control boosts one by one and by use of trim switches adjust the aircrafts attitude. I recall one time when I flew as co-pilot and the pilot switched the rudder-elevator boost off the B-47 pitched violently upward. I leaned back in my seat and put both feet on the yoke trying to hold the nose down until the pilot adjusted the elevator trim. Usually these flights were normal, climbing to 25,000 then finally to 35,000 ft. recording both max and idle engine readings. At the same time the navigator checked his equipment. The hard part was yet to come. Either the co-pilot would have to turn his seat around or the navigator could come aft to

manually lower the landing gear with the ELGE system. On the approach the auto-pilot ILS coupler was checked and the approach chute was deployed and on touchdown so was the brake chute. De-briefings were held in the pilots lounge with the flight line supervisor and related engineering personnel. By the way, we did not test the in-flight refueling system or fire the cannons but did check the gun firing radar.

Douglas -Tulsa also had available for its use a leased four passenger Cessna 195 and an Air Force furnished Lockheed T-33. We were all checked out and proficient in both of these aircraft. We also had assigned to us two special B-47s. One, an old TB-47 #51-2077 and the other, a B-47B I 181. These were assigned to the 'NIKE' project and financed by the US Army which I will explain later. The Cessna was primarily used for company business (such as flying Clair Coe our boss to his cabin in northeast Oklahoma).

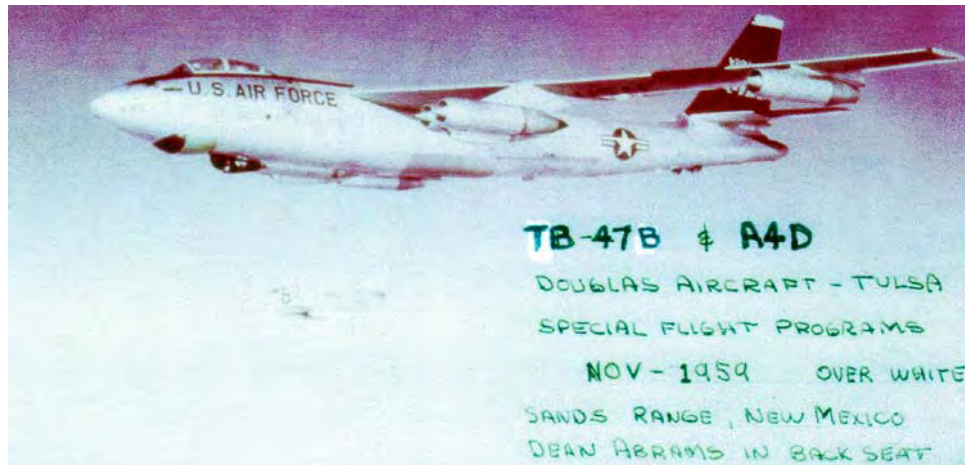


Now a little bit about Clair Coe. He was the 'boss' and I mean 'the' boss of the flight department. Clair had been flying a long time and had an ATR type rating. For some reason after I was hired he decided that all his pilots should have this same rating. Most of us had only multi-engine land ratings. That meant we would have to be up-graded. I took the written test in April of 1960 and the flight test in November. This was in an ANG C-97 which we were now flying, having transferred from the F-86. I was given a Boeing 377 type rating. The other pilots who needed the ATR had to scrounge around with their own time and money to meet this 'ridiculous' requirement. Alex Whitmore somehow arranged to have the same FAA check pilot, J.P. Seymore, who rode with me, to ride with him on a company test flight in a B-47. There was no six-engine type rating at that time so evidently Joe Seymor liked his ride in the co-pilots position of the B-47.

In May of 1960, we were given a contract to inspect and repair Navy TV-2s. This is the same as the Air Force T-33 but with some Navy changes. Jim Lucas and I became the primary test pilots for these aircraft. Up to now I had been flying as co-pilot in the B-47s but that would change because in October I began to fly in the front seat. Boy, what a change. I had been making back seat landings but now the view was entirely different.

The B-47E and RB-66 aircraft production had terminated by the end 1959 and the plant was performing mainly IRAN (inspect and repair as necessary). Out of a total of 2042 B47s built Douglas built 274 B-47s and 72 RB-66s. Other programs came to us by way of the US Army. B-47 #51-2077 was leased to Western Electric Co, bailed to Bell Telephone Lab and contracted to Douglas for operation and maintenance. This involved the development and testing of the 'NIKE' missile radar. The initial testing would be

accomplished on the east coast flying out of McGuire AFB, NJ in conjunction with the Bell Telephone Lab in Whippany, NJ. Bell was a research facility which had a contract to design the Nike missile and supply the operating system. Later testing would be at both the White Sands Missile Range in New Mexico and on Ascension Island in the South Atlantic Ocean.



The afore mentioned B-47s, 51-2077 and 51-2181, were flown by Douglas-Tulsa flight crews and were involved in all these tests. I flew many hours both as pilot and co-pilot, night and day, over the White Sands range. The program was to get as high as the aircraft could fly. We would take off from Tulsa and climb towards New Mexico reaching our assigned max altitude of 41,000 plus feet then carefully fly a racetrack pattern on auto-pilot as it was very difficult to hand-fly at this altitude. As you old B-47 pilots know this is called "coffin corner" where the stalling speed and the high speed buffet coincide. Occasionally we would operate out of Biggs AFB at El Paso, TX. This would allow more time on station with a lighter fuel load. Some of these flights included an A-4D we borrowed from the Navy (see the enclosed picture). Although I had checked out in the A-4D, I always flew the B-47. This old TB-47 was configured with tracking antennas, high intensity lighting and a unique sphere dropping system. A twelve inch diameter aluminum hollow ball would be dropped through a chute at the rear of the aircraft. This would simulate an enemy ICBM dispatching multiple warheads from the main projectile and allowing the Nike radar to acquire and track them. The A-4 was utilized in the same way, flying close to the B-47 and then dropping away fast. The other B-47, # 51-2181, was configured approximately the same way and flown to Ascension Island by way of Ramey AFB, in Puerto Rico and Recife, Brazil. The crew on this flight was Grant Younger, pilot, Chuck Hammett, co-pilot, Travis Blount, navigator, and Bill Updike, pilot inspector. Ground crew members Les Miller, Bill Goss and others followed by commercial airlines. The plan was the same, get as high as you can for tracking purposes. This information was needed because test ICBMs would be launched from Cape Kennedy, Florida 5000 miles away and the acquisition radar had to be calibrated. After these tests were completed, 51-2181 was towed to the north end of the Tulsa airport to be used as a practice fire fighting target for the airport fire department.

A-4D CONTRACT FOR ARGENTINA

The A-4D was not utilized on the Ascension Island mission but A-4s came into the picture later on. In 1966, Tulsa received a contract to modify 25 A-4Bs for the Argentinean Air Force. Douglas-Tulsa had three pilots, including me, proficient in the aircraft, but 'politics' deemed that Jim Stegman, an A-4 test pilot from the Palmdale,



California facility come to Tulsa and test fly all of the A-4s. The Argentina Air Force also sent their own pilots to final test and accept the aircraft. Most of these A-4s were lost in combat with the British during the Falklands War.



ARGENTINA AIR FORCE A-4s @
SOUTH FLIGHT LINE

I forgot to mention two other aircraft we also flight tested, KB-50s and KC-97s. I do not recall what the modifications were but I believe they were associated with the fuel system. The KB-50 had two jet engines in addition to their four engines. We were well acquainted with that jet engine because they were the same as were on the B-47. The KC-97 was identical to the aircraft I was flying with the ANG except for the boom, so I was made the primary test pilot for those planes. Policy now dictated that we share the cockpit with the Air Force pilots, I flew all the test flights with an Air Force co-pilot although they were not checked out in the aircraft. (Regulations could always be bent when the need arises.)

THE 'TALKING BIRDS'

Now a story about the "Talking Birds", These were two C-97G aircraft newly assigned to the Oklahoma Air Guard. One carried sophisticated radio and com gear and was assigned to our unit in Tulsa. The other carried support equipment such as antennas etc and was based with the ANG unit in Oklahoma City. Both aircraft had double active duty crews which were on constant standby. From 1961 to 1963 these aircraft were used to maintain constant secure communications between the nation's capital and President Kennedy during his visit to foreign countries. They were also assigned to classified missions such as the one I would be on. Both aircraft has just returned from Clark Air Base in the Philippines where they were supposed to support the invasion of Laos. This never happened and now they were directed to Turkey to serve as the air command post for "Operation Checkmate". This was an operation designed to show Russia that NATO could stop the expansion of their forces from Bulgaria into Turkey. As active duty was imminent, on June 15th I volunteered as the fourth pilot on the Tulsa aircraft. My aircraft commander was Major John Rodolf. He has written a story about these flights called "Around the World with the Talking Bird" which was published in the winter 2005 edition of "The Recce Reader", I will enclose a copy of this story. Our destination was Incirlik Air Base in Adana, Turkey. Our route took us first to Langley AFB for additional CIA instructions and then on to Newfoundland. Then the fun began. We had previously filled for Wiesbaden in Germany but weather and alternate complications arose that forced us, both C-97s, to land at dawn in Manchester, England. On departure from Manchester the second aircraft commanded by Major John Loerch was unable to start one of the four engines. Necessity dictated him to start it on the takeoff roll utilizing the air flow to tum the propeller. Great job, John. (John died of cancer recently). Radio frequency problems now required us to file as a flight of two and proceed on to Wiesbaden , There we obtained the correct radio crystals and continued, flying over France, down Italy's west coast, across Greece and arriving after dark at Adana. After spending two days briefing with the Turkish Air Force we began the mission. The plan was for the Turkish C-130s to drop an airborne military force 15 miles from the Bulgarian border.

We were to observe the drop and maintain secure radio communications with both Turkey and USA. As far as I know everything went as planned and we returned home to start our active duty tour in support of the Vietnam War.

ACTIVE DUTY AGAIN

On July 1, 1961 the 138th Air Transport Group of the Oklahoma Air National Guard was called to active duty for one year in support of the Vietnam War. The Group was assigned to the 146th h Air Lift Wing of the California Air National Guard which had been recalled at the same time. Both units flew C-97G transports.



I was now a Major and an aircraft commander with additional duties of test and instructor pilot. The ANG facility is located just north of Douglas on the same airport. Douglas navigators Travis Blount and Wade Blake were also included in this activation. The Douglas plant had been slowing down so our leaving did not affect their flight test schedule. Our unit, the 125th Air Transport Squadron, flew mainly between Travis AFB and Vietnam refueling at Hickam AFB in Hawaii, Wake Island, Guam and Clark AFB. The cargo was mainly troops and supplies going over and troops and caskets coming back. I can still recall the odor coming from these caskets as we pressurized the cabin. The flights were usually normal except for occasional engine problems. I was assigned for one month as an assistant operations officer at Clark AFB to help coordinate the Air Guard traffic. The only good that came with that duty was a three day R & R in Hong Kong. At the end of one year we were released back to state control and our civilian jobs.

BACK TO WORK AGAIN

In September of 1962, I went back to work at Douglas Aircraft Company. As required by law I returned to my same job. I was now a functional test pilot on RB-66B aircraft. The Air Force had eliminated our test flights for all aircraft except the B-66s. The B-47s were phased out and they were busy with a B-52 modification program. We were the primary test pilots for the new RB-66 modification contract. The final flight test would be done by the Air Force pilot assigned to pick up the aircraft for delivery to its base. Since I had not flown a B-66 before many hours were spent in ground school and cockpit familiarization, then on September 28th I flew my first B-66 test flight with our own instructor pilot Jerry Hanten. He had been test flying the aircraft while I was on active duty.



The Douglas flight department had changed since I was gone. The flight department now reported direct to the new plant manager, Lt Col Joe Richael (ret). Joe had previously been head of the Air Force flight test section. (one year later Joe died from a heart attack due to job stress) Alex Whitmore was my boss and Bob Allison, his assistant. Jim Lucas was still there and also Jerry Hanten. I do not recall the others but it was not as large as before.



Now, I can finish the story of Clair Coe our previous boss. He always kept a bottle of Jack Daniels in his locker. At the end of the day, after a drink or two, on the way home he rear-ended and verbally attacked a female driver, whose husband was a well known Tulsa lawyer. Guess what? The last we heard of him he was the manager of a small airport in California.

B-47s DEPLOYED

On about Oct of 1962 SAC flew in three nuclear loaded B-47s and took over our ANG facility. The C-97s were pushed over to the side and their B-47s were positioned for immediate take off with jato racks installed. The take-off was to be on runway 17 regardless of the wind and the jato racks would be jettisoned some where over Tulsa. !!! The Cuban missile crisis had arrived. All Guard personnel were restricted from the base and we at Douglas were told to get flyable B-47s ready for flight back to their bases. Thank goodness this did not last very long ..

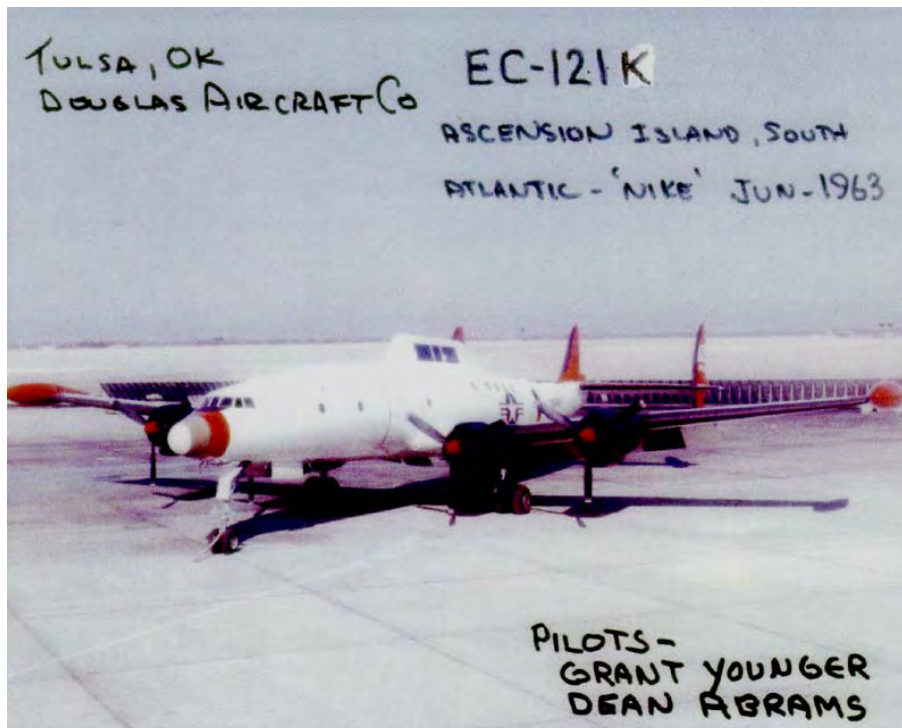
From September of 1962 to June of 1963 I flew both flight tests of RB-66s and operational 'Nike' flights to the White Sands Missile range. In July the RB-66 aircraft contract finally ended and we were forced to down-size the flight department. Since I was the last pilot hired and with the lowest seniority, guess who had to go.

ANOTHER ANG STORY "THE BULL SHIPPERS"

In November 1962, a C-97 from the Oklahoma Air National Guard's 12Sth Air Transport Squadron in Tulsa flew from the United States to Kabul, Afghanistan carrying 12 cows and 2 bulls (alive) as gifts to King Mohammed Shah from several American cattle breeders. I was not on that flight and the story is too lengthy for this book so I will enclose a copy of the story. It was originally published in the National Guard magazine by Ron Jensen.

ASCENSION ISLAND

We had an on-going special project involving a EC-121K #143196 aircraft operating out of Ascension Island in the South Atlantic Ocean. It was the same 'Nike' project as before but involved missiles launched from Florida. This aircraft was originally a Navy WV -2, an early warning radar surveillance aircraft that supported the northern Dew Line. Douglas reconfigured the fuselage adding a large optical window in the 'hump' that originally mounted the radome and enlarged the port side cargo door to accommodate 'open air' electronic equipment. This 'Connie', the Lockheed Super Constellation, was now designated as an EC-121 K.



The 'Connie', which I will call it from now on, had just returned from a six month tour on Ascension which luckily coincided with my layoff date. Jim Lucas, another short timer refused to go back with the aircraft so I naturally volunteered for the position.

Crew wise only a pilot, co-pilot, navigator and flight engineer were required. Grant Younger and Al Naumchek were the original pilots and had flown the Navy WV-2 version. Since they were both ex-navy and had navigation training the extra pilot could dub as a navigator. The flight engineer was Hershhal (Stud) Morris and with a five man ground crew completed the crew requirement. Grant Younger was in charge of the project and would remain so for the next couple of years.

On the 8th of July, 1963, I was off again for another six month 'vacation' away from my family which now had an additional two children. The flight would take us to Buffalo, NY to augment the Bell laboratory electronic specialists then down to Patrick, AFB, Ramey AFB, Paramaribo in Dutch Suriname, Recife, Brazil and then across the pond straight east to Ascension Island. This small British island had a 3000 ft inert volcano at its center, a small town called Georgetown and a support facility run by TWA. The runway then was only 5000 ft long, with a large 500 ft hill to the right and a 200 ft cliff on the approach end. Night landings were accomplished with caution. Our 'connie' had great radar and the island ADF helped on the night operations. The flights went like this, Patrick Florida missile control would schedule a missile launch and all of us 5000 miles down range would prepare our facilities. The ocean target area would have their picket ships ready so the nose cone could be recovered and Bell laboratory techs would gear up their radar. We would take off, be in position on station 100 miles to the north and fly parallel to the missile track with the open air tracking equipment pointed toward the nose cone entry point. This was always done at night at 10,000 ft, un-pressurized, and I saw some fantastic firework displays. The fuel container would first bum up as it entered the atmosphere, then the glowing nose cone would light up the sky as it went by the aircraft. The Nike radar would attempt to acquire the missile before it re-entered the atmosphere. We were always ten miles away but it seemed closer because it lit up the cockpit. In the six months I was there we participated in about eight launches some being cancelled while we were on station. We were always in HF SSB radio contact listening to the count-down from the Cape so as to be ready for the big event. One time, with the help of a ham operator, while we were waiting with a launch delay I called my wife in Tulsa on the HF radio. It was a very confused conversation. The last flight was on December 12th and the following day we started home. All the crew wanted to be home by Xmas but that seemed in doubt because between Zandrey AFB in Paramaribo and Ramey AFB we lost an engine. This caused a six day delay while Dave Wilson and crew flew down from Tulsa with a replacement engine. Dave was a flight line supervisor and a superb mechanic and without him we would still be there. We arrived home on the 23rd of December 1963 just in time for Christmas. The only good thing I can remember about the island was that the skin diving was great. As an avid scuba diver I can say the water was as clear as any I had ever seen and the fishing was fantastic. The 'Nike' project would later move to Kwajalein Atoll in the South Pacific Ocean where anti-missile missiles would attempt to shoot down an ICBM launched from Vandenberg, AFB. The 'Connie' and a complete Douglas crew with their families was assigned to live there for over a year. Grant Younger and Al Bird were the primary pilots assigned to the EC121K

aircraft. Both later switched to the Navy B-47 program after the -Nike' program was cancelled in December of 1967 and the aircraft was stored at MASDC.



STARTING OVER AGAIN

I had 'island fever' on Ascension and was determined not to return. The flight department as we knew it no longer existed. Alex Whitmore, Bob Allison and Travis Blount, the only remaining flight department flight crew had all found jobs in other departments. The only alternative for me was to return to liaison engineering. The old TB-47 we flew for the 'Nike' Zeus project had been stored in a hanger since the program had been cancelled. But wait! Somehow the US Navy had heard about the un-used Nike B-47 and sent a team to Tulsa to negotiate its use as an aggressor ECM platform. Alex Whitmore and Travis Blount had previously gone to Baltimore, MD to meet with experts at APL (Applied Physics Laboratory). APL had contracts with the US Navy for instructions on firing shipboard missiles in an ECM environment. Our contract was the result of these meetings.

On March 1, 1964, I left the engineering department for the second time to join the new Douglas Special Flight Dept under the direction of Alex Whitmore. Bob Allison and I were the only other pilots and Travis Blount the only navigator. After making the B-47 flight worthy again we flew to Pt. Mugu NAS in CA to fly a trial ECM demonstration against some off-shore Navy ships. This resulted in a one year contract that eventually became the Navy ECM program that lasted for many years. We would assemble a ground crew from existing employees, Jim Weaver, Charlie Dale, Roy Fosche and Bill Goss. Al Davidson would be their leader and Frank Lee would be loaned from the engineering department to select the ECM equipment. I have enclosed a historic picture of us just before our first deployment. Later Bill Smith and Tom Brown were assigned from the Electrical Engineering Department to assist the ECM loading. On March 23, 1964 after a local test flight we deployed to California. The Douglas flight department was active again but with a lot of TDYs.

GOOD-BY AIR NATIONAL GUARD

I had been in the military either on active duty or the reserves since being drafted for WWII in July of 1943. It was becoming difficult to meet the training requirements for the

ANG and since I had acquired over 22 years for pay purposes and reached the rank of Lt Colonel the decision to retire was easy. After making the last C-97 flight on July 25, 1965, I 'tossed in the towel'. I now would concentrate on flying for the US Navy.

FLYING FOR THE US NAVY

For the first months our missions originated from NAS North Island in San Diego, Ca and involved jamming the fire control radars of F-14 Tomcats and other navy aircraft during air to air practice intercepts. It also involved jamming the search and fire control radars of navy surface vessels. These were to be our primary missions for the remainder of the contract. We would be under control of military GCI stations on the west coast from San Diego to San Francisco depending on the military base, Miramar NAS, El Toro MCAS, Pt. Mugu NAS, Lemoore NAS and the Mare Island Training Facility north of San Francisco. On the east coast we would operate out of Oceana NAS, Cherry Point MCAS, Cecil NAS and Key West NAS in Florida. Going global, we would operate from Barbers Point and Hickam AFB in Hawaii, Goose Bay and Argentia NAS in Newfoundland, Kindley AFB, Bermuda, Roosevelt Roads NS in Puerto Rico, and Rota Navel Station in Spain. A one time mission was flown out of Crete in the Mediterranean Sea. Alex Whitmore was the pilot on that flight with Rob Tuttle as copilot and Travis Blount as navigator.



The aircraft was NC-4 (52-4120). As you can see we did a lot of TDY. I will later elaborate on specific missions. Due to the short runways and parking problems, North Island and Barbers Point were eliminated. Those of you who have flown the B-47 know that it is nice to have at least 8000 ft of runway. Most of the airfields we operated from had 10,000 ft and some like Cherry Point MCAS and Rota had 13,000 ft. We also eliminated the use of the 'drag' chute but always used the 'brake' chute. Re-packing both chutes put a strain on navy facilities. We relied on flat, slow approaches to get the aircraft down safely.

WE LOST ONE

One of the problems we had was finding and hiring qualified B-47 crew members. I was now 40 years old but considered myself young compared to the pilots we were now finding and hiring. The B-47 is a complicated aircraft to fly and unless you had previous

time in the airplane it would be months before you were qualified to fly from the front seat. Alex Whitmore was our instructor and check pilot. B-47s had been replaced by the B-52 and locating old qualified B-47 pilots and navigators who would travel again was a problem. We now needed a double crew as the Army found out about the re-activation of their old aircraft and wanted some additional 'NIKE' flights. The aircraft usually flew two, four hour missions a day.

On October 29, 1965, I was flying as co-pilot on 51-2077, our only B-47, returning from a five hour flight from Mare Island, CA to land at Point Mugu. It was 3AM, the base was obscured with fog with partial clear patches. We decided to try a GCA approach and if we found the runway clear go ahead and touch down. As luck and bad judgment would have it, no clear area was visible and as an abort was initiated and with the rapid advancement of throttles the port engines stalled. The B-47 struck the runway with the left wing down. No 1 engine struck first, catching fire and we slid to a stop.

We evacuated the aircraft and watched as the fire trucks approached and to our horror watched as they foamed the engine fire from the left side. The foam carried the burning fuel toward the center fuselage where it ignited the fuel cells located there. We watched from a distance while the aircraft was almost totally consumed. None of us were seriously hurt, Pierie Battille, pilot, myself, copilot, Travis Blount, navigator and Al Davidson, pilot inspector. I received a back strain because I had braced my right arm on the canopy rail when we hit. I was x-rayed at the base hospital, released with pain pills and told not to worry about it. The cause of the accident was the inability of the pilot and co-pilot to co-ordinate their landing abort procedures and decisions. Pierie was later allowed to resign after he dragged a #1 engine on a bad landing in clear weather in San Diego. Most of the ECM equipment from 51-2077 was recovered and trucked back to Tulsa.

NEW B-47 AIRCRAFT

We thought we were finished. We had been active for over a year and the Navy thought we had been very proficient in our operations and were satisfied with the results. They authorized two EB-47Es to be obtained from the mothball fleet, flown to Tulsa and modified with the latest active and passive ECM equipment. The bomb bay now contained racks for 24 jammers. Most of the inflight fueling hardware was removed and the navigators compartment was modified for ECM controls. The aft aux fuel cell was removed and the compartment modified to store parts. JATO racks were removed and in their place chaff dispensers were installed. The 20 mm cannon tail turret was removed and replaced with an active jamming antenna. An external ECM pod was mounted on the left wing and the pylon on the right wing was used to mount a Ryan Firebee target missile.



EB-47E 52-4100 #3 NC3



EB-47E 52-4120 #4 NC4

Aircraft 52-412 was modified first with 52-410 to follow. Now we had to hire more crew members and increase our ground crews. After searching for retired B-47 pilots we hired the following; Tom Balmer, Elmer Nagy, Tony Rais, Bill Nelmes, Dave Hall, Bob Stevens, Merele Ludevine and Rob Tuttle, among others. Rob had been flying C-135s and we had to teach him how not to 'rotate' the B-47 on take-off.

SPECIAL B-47 OPERATIONS

HIDDING IN CHAFE

One of our special airborne training methods for ship-board radar operators was to allow them to have a good radar contact on us. We would then fly toward their site, drop a wide corridor of chaff then reverse course and with the help of our navigator locate and fly in or just above it. I had an occasion to observe this from the ground and see the B-47 radar contact completely disappear from the scope into the chaff. SAC must have used this operation when planning strikes into Soviet airspace.

GOOSE BAY JANUARY 1966



Early spring in Goose Bay, Labrador

For those of you who have been to Goose Bay, Labrador, in February know how cold it gets. The Navy chose this month to 'winter' test the Talos fire control system on their latest missile ship. This ship would be north -west of Greenland in position to fire a missile at a Firebee we would launch at 30,000 feet. Although the temperature at Goose Bay was 20 degrees below zero the ship could not find weather and sea cold enough to adequately conduct their tests. After four days they used fire hoses to spray icy water over the system and we successfully launched the Firebee. As usual we never received the results. On the return trip as I was flying, the rudder-elevator hydraulic system totally failed and the emergency landing at Selfridge AFB, in Detroit was 'interesting'. Lots of slop in elevator control and steering during the taxi phase was very difficult.

ROTO SPAIN MARCH 1966

A carrier task force was being moved from the east coast to the Mediterranean Sea and we were to act as an aggressor force as they approached the Straights of Gibraltar. This is a mission we normally accomplished, with a Navy fighter under each wing acting as air to surface missiles. We would locate the aircraft carrier with our radar, jam their radars and launch our 'missiles' giving them the distance and heading. The fighter jocks really liked this operation because they could dive at max speed and legally buzz the carrier at mach one imitating the missile. This operation would begin from the Rota Naval Station in Spain. Because we did not have air refueling capabilities we had to island hop from Bermuda to Lajes AB in the Azores. Navy F-4s were stationed at Rota to assist us. I made two trips to Spain during my time with Douglas for this operation. On the last trip a Russian turbo-prop snooper Bear flew near us as we launched our 'missiles' causing the remaining missions to be cancelled for security reasons.

ROOSEVELT ROADS NAVAL STATION, PR

These many operations in the missile range at 'Rosy Roads', as it was called by the Navy, were in support of live firing exercises by the missile ships on either drones or us. They used either our Fire bees or radio controlled old F9 jet fighters launched from the base. They stopped using the F9s when one crashed into a hanger on landing. When using us as a target they would use 'home on jamming' (HOJ) to acquire us and try to shoot down the jamming aircraft. The trick was for us to turn off our jammers as soon as we acquired the active missile signal on our passive gear. We always did. This same procedure was used when we operated in the missile range at Point Mugu, Ca.

HAWAII OPERATIONS

Over the years many operations were conducted around the Hawaiian Islands. We were based at Hickam AFB adjacent to Honolulu International Airport and stayed at the beach hotels in Honolulu. The missions consisted of training the defense systems on the island to repel an airborne attack such as December 7th. We would fly out toward Midway, reverse course and come back at 35,000 feet jamming all known active military radars. ANG F-102s at Hickam and F4s from the Marine Base would scramble and attempt to intercept us. In addition various Navy surface ships stationed around the island would be involved for training purposes. This was good duty.

MID-ATLANTIC OPERATIONS

The Navy wanted to know if we were capable of navigating to a remote position in the mid-Atlantic Ocean to meet with a submarine. I made a test flight with Navy Captain John Driscoll in the co-pilots seat to prove it. This test flight was made to a lat & long position where a sub would surface at a predetermined time and UHF radio contact would be made. This flight was successful and the plans were developed for the real one. On June 17, 1967 we proceeded to Kindley AFB, in Bermuda where a Ryan Firebee target missile was loaded under the right wing. The subs position co-ordinates were given and we fueled for a max range flight. Water-alcohol was needed because of the runway length and max aircraft weight. Care was taken to mix the solution correctly because SAC had lost a B-47 when too much alcohol was used. The burned area on the side of the hill was still visible. Two hours into the flight at 30,000 feet somewhere between Bermuda and the Azores we made radio contact with the sub and launched the Firebee on the heading given to us. I was in the rear seat with the firing controls and saw the successful launch. We assumed the sub had fired a missile at the Firebee so Bob Allison in the front cockpit immediately turned the B-47 to port to vacate the target area and we headed back to Bermuda. The navigation was perfectly performed by Travis Blount who was always the navigator on these special flights. As usual we were never informed of the results but we later learned that if a Firebee was not hit and when the fuel was exhausted a parachute would deploy so that it could be recovered and used again.

DAC TO MDC TO BOEING

In 1963, Douglas Aircraft Company having cash flow problems, began merger talks with the McDonnell Corporation in St Louis, MO. The merger was completed on April 28, 1967 and now I was part of a new outfit. Nothing actually changed except the badges. The new company later merged with Boeing in August of 1997 and was called the "The Boeing Company".

MORE AIRCRAFT ARE REQUIRED

In May of 1967 the Navy decided to add two A-3B twin jet aircraft to the Douglas ECM fleet. These A-3s were stationed at the Pt Mugu CA, NAS facility and were declared surplus. Knick Knickerbocker, a Douglas Long Beach pilot who had been an A-3 production test pilot, and I flew A-3 #138968 to Tulsa for the first modification. A-3 #138922 would follow and both would require about eight months for all the necessary modifications. I was given a raise and promoted to A-3 supervisor. On March 1, 1968, Knick and I flew a troubled test flight. Immediately after take-off both the airspeed and compass systems failed. Adding to this the brake hydraulic system warning light came on. Not wanting to disrupt the commercial traffic at Tulsa we elected to divert to the NAS at Olathe, Kansas. With the help of an Air Force C-141 which was in the area we made a successful emergency landing utilizing the emergency air bottle for brake application. The C-141 gave us guidance to the airfield and airspeed readings on the final approach. Two days later I ferried the repaired A-3 back to Tulsa. The second A-3 was later successfully test flown with no problems and both aircraft continued with their modifications. The bomb bay was configured with racks for ECM equipment and later a Bendix commercial radar was purchased and installed. External ram air turbines (RAT) were mounted on both sides of the fuselage to provide additional electrical power. Chaff systems were designed and installed in the tail cone and flight checked over north-western Oklahoma. Meanwhile I continued to fly the B-47 until the A-3s were ready for operation. Now we had to locate and hire more pilots and ECM types to fly these A-3s. As usual we required double crews so I checked out existing pilots Bill Nelmes and Dave Hall in the aircraft. Additional needed personnel were obtained from our Douglas employees. Now we were ready to operate as soon as the aircraft were ready.

THE A-3B



The A-3B functionally compared to the later built B-66, in my estimation was not a great aircraft. I flew both aircraft while with Douglas. Although it was faster than the B-66 and had better engines, it did not have ejection seats, radar or good pressurization. It

was also designed by Ed Heinemann, who with the Douglas company was sued by surviving Vietnam spouses because it did not have ejection seats. Crew member bail-out was through the lower entry door aft of the nose wheel (reminiscent of old WWII bombers). The door could be jettisoned and a spoiler, operated by an air bottle, would deploy. The fuel transfer system from forward to aft tank was a hazardous gravity feed system. If wing fuel was not used it could be dumped from wing tip dump valves. The B-66 did not have this dump feature. Both aircraft did have brake chutes. One good feature was in the crew compartment. A navigator could sit beside the pilot and the ECM operator behind him. The wings and the vertical stabilizer could fold back but we rarely used this feature.

A-3 OPERATION WITH FEWSG

We now had a small air force and the Navy decided it needed to exert more control. A new Navy department was established called the Fleet Electronic Warfare Support Group. It was headquartered at Norfolk NAS in Virginia under Captain John Driscoll, an experienced electronic warfare officer. Two Navy officers, Cmdr Dick Hill and Cmdr Larry Connor, were assigned to accompany the missions as required. Both were pilots and Larry was an ex A-3 driver. Many times the A-3s joined the B-47s, especially on special assignments. We were now given special call signs; the A-3s were NC-1 & NC-2 and the B-47s were NC-3 & NC-4. (for air traffic control NC was NEW CAR)

In September of 1968 we began utilizing the A-3s for the Navy flying the missions from Oceana NAS in Virginia Beach, VA. We flew in the same operational areas as the B-47s but with some special assignments.

BELLY LANDING AT CECIL NAS



B-47, NC-3, #52-4120 Belly Landing

While I was busy flying A-3's, a B-47, NC-3, #52-4120 was having difficulty extending its landing gear for landing at Cecil NAS in Jacksonville, FL Bob Stevens was the pilot. The forward landing gear would not extend but the rear and outriggers did. B-47 landing gear is electrically operated with a cable operated back up system manually operated by

the co-pilot behind his seat. Both systems failed. The remaining gear was retracted and the runway was foamed down in preparation for a belly landing. Bob did a great job and minimal damage was done to the aircraft. Navy photographers filmed the aircraft after it came to rest on the runway. The canopy was jettisoned upon landing and you can see a Douglas pilot exiting the crew compartment via the canopy opening. Repair crews were dispatched from Tulsa and after four weeks NC-3 was ready for its next mission.

A-3B PROBLEMS

During the time we operated the A-3 no engine or other serious failures occurred. We did have a problem with cracks in the windshields which I found out was 'fleet' wide. Two flights were made to the depot at Alameda NAS in CA to obtain new windshields among other parts. Aircraft pressurization was another headache. At 30,000 ft the cabin would only pressurize to 15,000 which would require us to wear our oxygen masks. This was a pain on long transit flights to our operating areas. B-47 cockpit pressure was 10,000 up to 40,000 ft. The forward to aft main fuel transfer problem always existed and had to be constantly monitored. The lack of ejection seats always made us aware of the proper egress procedures. These two A-3s came from the R&D facility at Pt. Mugu without any radar antenna or cockpit scope so a civilian Bendix radar was later installed. Since the A-3 operated from a carrier or Navy military bases, unlike the B-66, no ILS glide path receiver was installed. GCA was the primary approach procedure. When landing in bad weather at Tulsa or other civilian airports the ILS localizer could be tuned on the VOR receiver.

JP-4 & JP-5

JP-S jet fuel was developed around 1952 to be used in all Navy jet aircraft. It is denser, has a higher flash point and can be safely stored on naval vessels. JP-4 is primarily used on Air Force aircraft, hence all B-47s used this fuel. When we first began operating from Navy bases JP-S was the only jet fuel available and the GE 147-25 B-47 engines were hard to start. The ignition probes became fouled with a white chalk like substance which we attributed to the use of JP-S fuel. We learned that if we mixed JP-5 and 115 octane gasoline together and used this mixture to start the engines it would solve our problem. Our B-47s had only the three main fuel tanks plus the forward auxiliary. The aft auxiliary had been removed to accommodate spare parts and tools so the forward aux was serviced with half and half. When used it was enough to bum off the residue accumulated in flight. The A-3s had no problem using JP-4 fuel.

SPECIAL A-3 OPERATIONS

SECRET MISSION

On Jan 13th 1969, after a three hour mission from Miramar NAS in San Diego, I was ordered to refuel, pack up my crew and proceed to Tyndall AFB in Florida for a special mission. Bob Burchardt, a retired navy ECM Lieutenant was my navigator. We were told to fully load the chaff hoppers and prepare for max use of the ECM equipment. After a late arrival and CIA briefing we were told the following story. It seems that during the

'seven day war' the Israeli Army had captured a new Russian anti-aircraft radar system. It was immediately sent to the US for evaluation and our A-3 was the only ECM aircraft available. After a short crew rest in the ops area we flew a three and a half hour ECM and chaff dropping flight out over the Gulf of Mexico finally landing at 4:00 AM. No citations were awarded for our extreme effort.

ANOTHER SECRET MISSION

Westinghouse Electronics Co located at Baltimore International Airport had contracted with the Navy to install a special missile guidance radar on the nose of NC-2.(A-3 # 138922).

'Somehow' the Navy had obtained the final guidance radar emission frequencies of a Russian 'STIX' surface to surface missile. It was to be installed on both an F-4 at China Lake NAS in California and our A-3 at Baltimore. On May 2, 1969, I flew NC-2 (138922) to Baltimore for the installation. After installation we made test flights down the Chesapeake Bay using small islands as targets. Both Bill Smith and Bob Burchardt flew with me on these flights. The procedure for future missions was to simulate launch from a small vessel, fly at max speed at 500 ft altitude and when at a pre-determined distance from the target, switch on the STIX radar. The target ship would then attempt to acquire "us" the missile and simulate a shoot down. I remember zooming over the decks aircraft carriers at 500 knots. It was great fun, legal but extremely dangerous.

NEWFOUNDLAND & ICEBERGS

A carrier task force was departing the US heading toward Europe. Its route would take it near Newfoundland so FEWSG decided to play aggressor again. Argentia NAS on the south-east coast of Newfoundland was to be the mission base. It was commissioned on August 28, 1941 and operated with the US Navy until 1974. The main runway length was only 7400 ft, with water at each end. This was too short for legal B-47 operation. On the 7th of September of 1969 I departed Tulsa via Oceana NAS to Argentia with A-3B NC-2 (STIX equipped). Travis Blount was the navigator and we had an extra flight and crew ground crew coming via commercial airlines. The first flight was scheduled for 4:00 AM the following morning and as I took-off the compass system malfunctioned, so instead of aborting I decided to continue the mission. The GCI controller gave me a heading to where the carrier should be and utilizing the TACAN and 'stand-by' compass I began the mission. Along the way we noticed a large iceberg along our route and Travis plotted it on his chart. After visually searching for over an hour and with no contacts I decided to return to Argentia utilizing the good old stand-by compass and the iceberg again for navigation until the TACAN signal could be received. The second flight crew took over the search three hours later with the same results. While they were gone the weather turned bad, 300 ft and one mile visibility. After two GCA missed approaches, I sent them to St Johns on the north coast. The next day our weather improved and they returned to Argentia NS. We found that St Johns, being an international airport, unknowingly parked the A-3 (with a 'secret STIX' installation) next to a Russian commercial transport. We didn't know if the whole mission was compromised or not so the Navy cancelled everything and we returned to Tulsa, stopping of course, at Brunswick NS for lobsters.

SPECIAL B-47 STORY

This completes all the 'special missions' for both the B-47s and the A-3s, but I do have a 'special' story that was kept confidential for many years. It concerns the 'almost' loss of our B-47 off the southwestern coast of the California. It seems that two General Electric Corp test pilots from Edwards AFB became non-current in their own 'bailed' B-47s and asked permission to fly NC-4 B-47 with Alex Whitmore along in the jump seat as instructor pilot. Travis Blount was in the navigators position and related the following story to me.

As they were conducting air to air intercepts 100 miles north-west of Guadalupe Island at 35,000 ft something hit the airplane and it went into a diving right turn. The GE chief pilot in the front seat recovered the B-47 around 20'000 ft and Whitmore changed seats with the GE co-pilot. He (Travis) gave them directions to the closest airfield which was Miramar NAS and they declared an emergency. The number four engine was missing and number five was burning. A landing was successfully made on a foamed runway. It was later determined, from residue found in number five engine, that a heat seeking inert missile had been inadvertently fired from a Marine jet and found the B-47 engine a target. A month later, after part of the right wing, two engines and outrigger pod had been replaced, B-47 NC-4 # 52-412 was back in commission. The Navy promised an additional five year contract if this episode was kept confidential. Evidently it was for a long time. No mention of what happened to the Marine pilot, but I suppose he was awarded a 'probable' friendly kill on his record.

GOOD-BY A-3B

VAW-33, a Navy A-3 ECM squadron based on Whidbey Island in Washington state was re-designated VAQ-33 and moved (without aircraft) to Norfolk, VA where they became the Navy air arm of the newly formed FEWSO. This resulted in the loss of the A-3 part of our Navy contract. On September 28, 1970 two Navy flight crews came to Tulsa to ferry our aircraft to Norfolk, VA. Two years later A-3 #138968 (our old NC-1) flying from Norfolk to NAS Pensacola, FL developed unknown flight problems. The pilot cancelled his flight plan and attempted to return to Norfolk but lost control and crashed. All three crew members were killed. I had a similar problem flying from Tulsa to Pt Mugu in the same aircraft, when fuel was locked in the forward fuel tank because the fuel CO control valve was stuck.. I made a nose heavy emergency landing in Albuquerque, NM before the aircraft became uncontrollable. This aircraft should have been designed with ejection seats like the B-66, but as usual weight was a factor. So, what can I say, we were lucky flying it I guess.

BACK TO THE B-47

In October of 1970 I was back flying B-47s. These flights were all routine, except for occasional flights into northern Canada when we would check the NORAD defense system. These flights would depart an Air Force Base in North Dakota, fly north to the Hudson Bay area, reverse course and fly south jamming and laying chaff to hide

incoming attack aircraft. Both American and Canadian air defenses would be involved in these missions.

BACK TO THE B-66

In February of 1972 McDonnell Douglas in St Louis needed to further develop the F-15 fire control system. They decided to attach an F-15 nose radome to the front of a B-66. I was chosen to be the chief pilot for this operation but had not flown a B-66 for over a year. The Air Force and McDonnell Douglas sent me to Shaw AFB in SC for re-training. This T AC unit had been in Vietnam flying RB-66Cs and had some great stories to tell.

After ground school and hours simulator training I flew about 15 hours of transition and passed their final flight check.

An RB-66C was delivered to Tulsa on March 10th and the next day I flew a test flight. Two days later I flew it to the McDonnell plant at Lambert Field in St Louis to begin modification. Since the test flights would last for six months and be just west of St Louis, Douglas relocated my family to St Louis with all living expenses paid. I would keep current in the B-47 until the B-66 was ready.

The test flights started on June 5 ,1972 with an F -15 pilot in the rear seat and two flight techs (crows) in the pressurized bomb bay 'cabin" area with downward ejection seats. Flights proceeded normally until on June 15th the port engine failed and being in western Missouri, I decided to make an emergency landing at Whitman AFB. Nine days later I ferried the B-66 back to St Louis with a new engine. Later, I 'suggested' to McDonnell they install the emergency wing fuel dump system like the A-3 had and they agreed. The flights consisted mostly with an Air Force T-33 conducting simulated firing passes on the B-66 and the F-15 pilot and techs collecting their data. The flights continued for over five months and I then flew the B-66 to the 'bone yard' at Tuscan, AZ. While at St Louis I witnessed the new DC-10 arriving from Paris on its selling tour. It was piloted by George Jenson and Chuck Hammett. Chuck was one of the original Tulsa B-47 pilots and my old deer hunting buddy.

In 1994, a USAF/Hughes program was initiated to modify an 'A-3' for F-15 software development. The only available A-3 was stored at NAS Alameda since the fleet shutdown. An F -15 nose was grafted to the front of the aircraft and the tests were flown from the Van Nuys, CA airport. On June 2011, the last flyable A-3D a Hughes/Raytheon aircraft was flown to the National Navel Aviation Museum at NAS Pensacola, FL, for retirement and display.

BURN-OUT, MEDICAL LEAVE & "CALIFORNIA HERE I COME"

I was now 50 years old and had been flying and traveling for the US Navy for fifteen years. Over half the pilots were older than I. Those of you that were in SAC know what that means. It takes both pilots to fly the B-47. I was in my second marriage with my new wife living in California. We had planned that I would stop flying and traveling but did not pick a date.

I previously told of a B-47 accident in CA when, as a co-pilot I suffered minor back pain. The pain became major now. My right arm was becoming numb and my fingers would tingle whenever I extended my arm to control the throttles. After a mylogram test in Tulsa, OK it was determined serious vertebrae problems existed so I drove to California with two months (paid) medical leave to correct the problem. A cervical fusion was performed in February of 1975 in Goleta, California using the company medical insurance. (I found out later that workers compensation should have been filed). I recuperated with my wife at our newly purchased home in Newbury Park, CA then drove back to Tulsa with a fifth-wheel trailer to continue flying, but planning to quit in three months.

I became complacent on the final approach while landing a B-47 at Roosevelt Roads Naval Station in Puerto Rico. Thinking the brake chute would always be successfully deployed, I landed too fast. The chute finally partially deployed halfway down the runway. I had to use an excessive amount of braking and the forward landing gear tires blew. The debris fouled only the No 1 engine so we were able to ferry the aircraft back to Tulsa on five engines. The boss was not happy. By the way, many times we ferried one of our B-47s back to Tulsa on five engines. All the spare engines were stored at Tulsa. We adjusted the take-off distance charts and fuel loading to accommodate.

I continued to fly the B-47 until June 6, 1975. Three days later, I picked up the 5th wheel trailer I had been living in and headed back to California. From there I called my boss, Alex Whitmore. I told him I would fly the B-47 whenever it was scheduled to come to Pt Mugu, CA, but otherwise I was through traveling. He put me on paid leave and vacation for 30 days while the request was investigated. Finally I was forced to resign because the company would not accept my offer. Both my military and Douglas retirement pension would begin in five years at age 60. I had been flying airplanes since 1944, accumulating over 8000 hours and was now ready for a new career, one that would keep me at home on the ground. This new career was with the local school district where I became a maintenance electrician for 19 years, after studying at Pierce College in Woodland Hills, CA.

McDonnell-Douglas flight crews continued to operate the two B-47s for another two years until they were replaced by (2) C-135s and (1) DC-8.

The last flight of a B-47 was on June 16, 1986. A China Lake desert target aircraft B-47, after four years of restoration, was flown by MajGen Moore and LtCol Wolf on a troubled flight to Castle AFB in Atwater, CA to join the museum. Incidentally, the B-47 # 52-0166 was manufactured at Douglas Tulsa.

WHERE ARE THEY NOW?

The RB-66C I flew in St Louis was scrapped in Tuscan, AZ.

The original NC-1, A-3B #138968 crashed in Virginia killing all three crewmembers. The original NC-2, A-3B #138922 whereabouts unknown, assumed scrapped.



EB-47E 52-412 at DYESS AFB TX NC-4

The original NC-3, B-47 #52-4120 flew with Douglas until 1977, then flown to Abilene, TX and is on display with AF markings (see picture) at Dyess AFB.

B-47 #52-4100 in December of 1977 was flown to Pease AFB in NR and put on display until 1991 when it was disassembled and trucked to Ellsworth AFB, SD. There in 1998, the nose section and engines were removed and installed on RB-47H # 53-4299. In 2003 that B-47 was placed in the USAF museum at Dayton, OR. (see picture) No record exists of the other parts.



RB-47H 53-4299

The FEWSG was melded into the FTRG (Fleet Tactical Readiness Group). Three new aircraft were obtained, two C-135s and one DC-8. CTAS (Chrysler Technologies Airborne Systems) at Waco, TX did the modifications and delivered the planes to Tulsa for operation. Later they out bid McDonnell-Douglas for the contract and maintained the aircraft and provided the aircrews. Termination date unknown at this time. FTRG later

assigned their operations to the Navy Reserves along with their own aircraft. **NUCAR-1, the old KC-135A #55-3134, was placed in storage on Feb 20, 1996. NUCAR-2, the old KC-135A #56-3596, was placed in storage the same date. NUCAR-3, a DC-8-54F #163050 (EC-24A), was placed in storage in October 1998.**

ACKNOWLEDGMENTS

All the names of people in this story are true names. I have contacted as many as possible to advise them of the use of their names. Most are either deceased or living in nursing homes or like me at age 86 are too old to remember much of the past. Travis Blount, my friend and loyal navigator, lives near San Diego, CA and has supported me in this story. Bill Smith is alive and lives in Idaho. Dave Wilson, Bill McKeel and Paul Botsford still live in Oklahoma with those ground crew members still living. Dave Hall lives in Ohio and is also a member of the "B-47 Association". I thank them all for their many contributions to this story. Also, thank you Louis Malucci for writing the "B-47 Stratojet" book that inspired me to write my story. All the events are true and factual to the best of my knowledge and memory, verified by many aircraft log books and pictures. I invite any of the above named or any others wishing to contact me, please do so at the below e-mail address.

Dean Abrams, Lt Col., USAF(Ret) October 2011
deanbonnie@verizon.net



Dean caught a ride in this June 18th 2012 An early Fathers Day gift!



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