The EC-47 Experience

Written and Compiled by
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First Edition
First Printing

Cover photo, the last day of EC-47 Missions, May 15, 1974 by: Stan Poyas

Printed by
Swearingen Ink
Printing and Publishing
125 Porter Industrial Road
Clarksville, Arkansas 72830

Dedication

This book is dedicated to my Pilot, Major Harold R. Lagasse who passed away April 17, 1998, to Lt. Col Frank E. Hinkle, my Aircraft Commander, Capt. Robert M. Harris my Navigator, "MY CREW", who made an impossible year the best year of my career. And to all the crew members of the EC-47 Mission who paid the ultimate price while honorably and faithfully serving their country in Southeast Asia, 1966 - 1974

It is hoped that what little information contained in this book will help the families and friends of those lost to better understand what their loved ones were doing and trying to accomplish in their absence from home.

James C. Wheeler
Msgt Ret. USAF Flight Mechanic EC-47 1966/67

The EC-47 Experience

A small part of the History of the operation of the EC-47 in Southeast Asia, some from memories, some from declassified archived official documents

By: James C. Wheeler Msgt U.S. Air Force Retired

Beginning with my time immediately preceding my assignment to Vietnam in 1966, under Project "Phyllis Ann"

A collection of memories

Documents

Mementos

Experiences

War Stories

& Photos

From many people who shared, "The EC-47 Experience"

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The EC-47 Experience

Chapter 1

The Time Preceding

The year was 1966, spring was in the air and I was happily doing my job as Crew Chief on one of the two T-29's, (a military version of the Convair 440) assigned to the 3750th M&S, Maintenance and Supply Squadron at Sheppard Air Force Base in Wichita Falls, Texas.

I had just a few months earlier been picked to crew the newly assigned T-29. I had been the Crew Chief on one of the two C-47's. My C-47, Serial Number 43-15949, was a beautiful aircraft. It had the white painted top with the lower part polished to a nice shinny aluminum. It had the standard cargo configuration and was the lighter of the two aircraft. And as I remember, her stall speed was only fifty-five (55) knots. I also recall two occasion's relating to the speed of the "Grand old Lady" of the sky.

On one occasion, at night, we were passing over Garden City Kansas, I don't recall which way we were going but would assume that from our location, we were either enroute to or from Denver and Sheppard.

We called in our position report and right shortly, we were asked to please confirm the aircraft type. I guess they were surprised that an old Gooney Bird was capable of 190 knots ground speed. (Good tail wind)

On the other occasion, we were going west, I assume to Arizona or California. We were out over the desert southwest somewhere and were pretty much following a major east/west highway. Working as hard as she could, my faithful old bird could not keep everything on the highway below from passing us right on by and going on out of sight. That was a long flight. (Bad head wind)

I got in a lot of left seat and right seat time in the old Gooney Bird. On one occasion, we left Sheppard AFB around midnight headed for some destination, now unremembered, but believed to be in the vicinity of Minniappolas/St. Paul Minnesota. The pilot that evening was our Base Operations Officer, a Major who's name I can't recall and the copilot was an older, white haired Captain, who's name also has long since left me. I would later, in the summer of 1967, meet up with the Major again at Nha Trang, Vietnam.

At any rate, no sooner had the landing gear tucked itself away in the wheel wells, the pilot gets out of the left seat and says, "It's all yours, I am going back and take a nap". I crawled into the left seat and the copilot said, "You've got it", and pulled out a paper-backed novel. Using the small adjustable light located above and behind his seat, he settled down and began reading.

In about ten minutes, I noticed his book had dropped, his head lay off to one side and he was making funny noises often referred to as sawing logs. I now, truly had it all to myself. I had flown many times before with these two and all the other pilots that flew the aircraft, but this is the first time I felt one hundred percent in control of everything on the aircraft. No other eyes were watching over me, it was as if I was up there alone, just me and my grand old bird.

I was not only the pilot but was also doing my own navigation and radioing in position reports. I was having a ball.

Then, as I was relaxing and enjoying the trip, the dull, peaceful roar of the engines was rudely interrupted and everyone woke up in a start. Seems, being by myself in the cockpit, without the other pair of eyes to help me watch the falling fuel quantity gauge and watch for a fluctuation of fuel pressure as a sign to change fuel supply tanks, I had overlooked, or just flat missed the fluctuating fuel pressure gauge.

When the left engine starved for fuel, naturally it quits. It does not quit turning, it just looses power and is being rotated by the propeller, just like the little plastic windmills on a stick you used to hold out the window of the car when you were

a kid. This actually creates drag as opposed to power and tends to make a horrible sound.

Before I could get the fuel supply restored and the engine back up to power, the Major, now wide awake was back up front, between the copilot and myself. When he saw what was going on he relaxed and went back to his nap. I don't think the copilot ever went back to sleep.

It was normal procedure to wait until the fuel pressure fluctuated before making the switch of fuel tanks, more reliable than the fuel quantity gauges. We had left Shepperd with 600 gallons of fuel, two tanks with 200 gallons each and two with 100 gallons each. The first two, the 100 gallons tanks were used first and were now depleted. And normally you have two sets of eyes watching for this fluctuating fuel pressure, so no problem.

Soon we were beginning our decent to our destination and I had to give up my seat to the Major for the landing. The remainder of the trip was uneventful and we were back home the next afternoon.

I had many experiences on that old airplane but never a bad one. I guess about as close as you could get to being bad was on takeoff out of Denver one day, we lost power on the left engine just before we lifted off the runway. That ain't good when you are already at 5000+ feet.

It was the first trip after a Phase Dock inspection. Just as we were approaching liftoff speed, the left engine power just falls of to zero. The fuel pressure and oil pressure were still there and the engine was still running but at zero power. The pilot, a Lt. Col. Feauette (probably misspelled), but he was my favorite of all the pilots I flew with, a gem of a guy. Anyhow the pilot popped his head around to me and said what happened chief, his pet name for me. I replied, the throttle rod fell off. He said what will you need? I told him a B-4 maintenance stand and a couple of castellated nuts, a couple of bolts and cotter keys, (the size left long ago).

When we reached the parking area, very difficult to taxi on one engine, maintenance was there to meet us with the requested items. Sure enough, one end of the throttle arm, the carburetor end, was hanging free. With it resecured, we were out to try another takeoff, this time successfully. Once airborne, the pilot ask me, "How did you know the throttle rod had fallen off?" I told him the aircraft had just come out of Periodic Maintenance and that the engine shop had a lot of trouble getting the throttle adjusted to where it would operate properly and not touch the fire wall when in the Idle Cutoff position.

(The linkage had been touching the fire wall for some time when in the Idle Cutoff position, the engine not running. This was known by me and I saw no

problem with it and had said nothing. But this was not the thinking of the boys in QC, (Quality Control), they wanted it off the fire wall regardless.)

On another occasion, with Lt. Col. Feauette as the pilot, we were bound for Denver. We were cruising along at 10,000 feet and right over Dalhart, Texas, up in the panhandle. I noticed a small oil slick appearing, yes again, on the left engine cowl. (I had never thought about it but seems like now that I am trying to assemble all this together, that the left engine was a dud. In fact it was not a dud and it was not always the same engine, as they are changed periodically.) I reported the oil slick to the pilot and went back to observe it for a while to see how bad it was or was to become. By the time I got back to the cargo compartment, the small oil slick had grown to a large oil slick and was coming from the power section , or the area where the cylinders were located.

I immediately advised the pilot that he should shut down the left engine to avoid possible fire. He proceeded immediately to take the proper measures and shut the engine down and feather the propeller.

Once the engine was shut down and secure, he turned and asked me, "What happened chief?" I told him I thought one of the cylinders had swallowed a valve. Again he took me as knowing what I was talking about and asked me what I thought we should do.

One thing for sure, we were not going to remain at 10,000 feet, we were coming down a few thousand, like it or not. At that time we were directly over an airport, I assume was Dalhart, Texas. I said, "by the book, that is where we should go, but I would suggest we go to Amarillo for several reasons, the main one is maintenance support in an engine change". And again he took my remarks and advice to heart and headed for Amarillo, Texas. We were able to maintain 6,500 feet on single engine with no problems.

Sure enough, when we parked and shut down the right engine, they were there with a maintenance stand. Up on the stand I went and peered into the opening in the front part of the engine cowling. There, big as life was one of the cylinders, split right down the middle like a watermelon that had just been hit with a chopping ax.

It had indeed, swallowed a valve, the head of which was still located inside the top part of the cylinder and on top of what was left of the piston. The valve head was now a beat-up spherical shape a little smaller than a golf ball, and had actually beat the top of the piston down and around the wrist pin boss and had not punctured the top piston surface. Again, I had made a favorable impression on Col. Feauetta.

We were only there about a week getting the engine in and getting it changed. Just think how long we might have been at Dalhart.

I was an instructor and a stand board flight examiner on the C-47 and even taught classes on the various aircraft systems for the pilots. With this, they would not only know such things as, when I put this lever here, the landing gear comes up. They would also know the sequence of events and what all had to work properly and in what sequence, to get the landing gear up and securely held in the wheel well.

I had often wondered, what happened to my old aircraft. Then in 1997, while working on a Web-Site that started as an overview of my 20 year Air Force Career, I put the question out over the Internet, trying to locate my 949.

I got a response from a Mr. Henry M. Holden that according to the information he could find, it had crashed in Vietnam in 1969 while being flown by Air America. I then contacted Air America with the inquiry.

I got a quick response from a Mrs. Judy Porter and a couple of days later, a more detailed account of what had happened to the aircraft from a Mr. Allen Cates along with a few photos, one of which is shown here.

Mr. Cates had himself flown 949 on many occasions and agreed with me, that she was truly a great old airplane. Mr. Cates also was a friend of the pilot of 949 on that fateful day.

I would on November 6, 1998 receive a note from the son of the pilot of the ill-fated 949 flight giving me the date of January 16, 1969 as the date of the crash, in which all on board perished. A tragic ending for a fine old aircraft and for the crew and all aboard her on that day.

As I look at this photo of 949 lying in a crumpled heap on a mountainside somewhere in South Vietnam, I can still see the small door latch plate on which I caught my wedding band in 1965 and almost lost my ring finger. Just one of many memories of my time with undoubtedly the best aircraft I was ever on.

Now I was on a different aircraft. It was not totally new to me as I had worked on them before in the Periodic Maintenance dock and had a pretty good mechanical knowledge of the new aircraft.

When I first got the T-29, she looked a mess. About the first thing I did with her was strip the paint from her. Then the top of the fuselage was painted with a new coat of white, the bottom and sides were left unpainted as was my C-47. It took a lot of elbow grease to get her looking good, but with the help of several of the Guest at the local jail, commonly called in the military, the Stockade, I had her looking pretty good.

Don't get me wrong, these guys were not forced to do the work, it was on a volunteer basis and many of them were willing to do the work just to break the monotony of their stay in the stockade and really enjoyed the temporary freedom, so to speak. And I am sure, that the powers that be at the stockade would let only those they thought they could trust would be granted the privilege of a day out of the place.

After the outward appearance was satisfactory, I began on the interior. This took a few more people and better coordination. When working on the interior, you have to disrupt a lot of the furnishing etc. in order to improve them. I recall the fancy birch plywood used in the cabinetry of the interior was said to have cost over fifty dollars ($50) a sheet, and that folks, was thirty three years ago.

The interior update took the help of the cabinet shop, the fabric shop for all the new upholstery etc., the sheet metal or fabrication shops plus several other shops that had to temporarily remove and reinstall equipment for the update. The aircraft had to be placed in the "Out of commission status" for these workings.

After I got the bird actually looking better than the Generals aircraft, I was offered the job of Crew Chief on his aircraft, but politely declined I wanted no part of it. You were to restricted, even in your off duty time. If he wants to go some where, you have to go.

I had been on the aircraft long enough that I had been upgraded to an Instructor Flight Mechanic on the T-29 aircraft. And again I was teaching classes on aircraft systems and this time my students included Navigators as we occasionally had a navigator onboard this aircraft. I also maintained a dual qualification status, being qualified on both the C-47 and the T-29 and maintained my Instructor and Flight Examiner status on the C-47 as well.

Then one morning, in April, 1966, I had my T-29 down on the wash rack for a wash job. I had just finished the washing when Airman Gary House drove up with a message for me. Mrs. Berry in personnel wanted to see me.

When Mrs. Berry wanted to talk to you, you Had and assignment. I got Gary to stand fire guard for me while I cranked up the engines to taxi back down to the south end of the field to the base operations ramp.

Ready to taxi, I called the tower for taxi clearance and instructions. I was told to taxi down the active runway to the base operations ramp. As I pulled out onto the runway and lined up for my taxi of about a mile and a half, the tower called again. This time they said "Expedite, I have an aircraft on short final". I thrust the throttle levers forward and almost before you could retard them, I was at ninety (90) knots, the rotation speed was one hundred and one (101) knots and I had the flight controls locked. After I got off the runway, it dawned on me the situation I had just been in.

Pulling into the operations ramp and over to my parking spot which was beside one of the base assigned C-54 aircraft, I taxied down along in front of the two C-54's, made a ninety degree left turn an stopped. Then when I got the all clear from the crew chief on the C-54 next door, I slipped the propellers into reverse and slowly backed the T-29 into her parking spot.

After the engines were shut down, I opened the door, dropped the stairway and proceeded to chock and ground the aircraft. Then I started across the ramp to call Mrs. Berry. The C-54 crew chief said, "think your pretty smart don't you" ? , just joking because I was able to back into the parking spot as opposed to getting a tow vehicle to back me in.

I made the dreaded phone call to Mrs. Berry and, yep, I had an assignment. Vietnam, my turn had come. I had earlier passed, on an opportunity to transfer from the Air Force to the Army at the rank of Warrant Officer and become a helicopter pilot, but now looked like I would be going anyhow. After the phone call, I went up to Mrs. Berry's office for the details of the assignment.

I had been hearing some scuttlebutt both at Randolph and at Amarillo about a new operation in Vietnam. I did not know if this was what I had been hearing about or not but I sure had all the ear markings of it. I was one of those selected

from my records and my experience on the C-47. There were not to many of the old birds still on active duty and the folks that were current on them were very few.

But, I was in a situation where I did not have to accept the assignment. My wife was some eight months pregnant with our youngest daughter. I had seventy two hours to either accept or decline the assignment.

Armed with the seventy two hour deadline, the scuttlebutt and the fact that if I opted to decline this assignment, I would be first in line after the baby was born and who knows what might be up then, my wife and I discussed the options. It was decided that I would accept this assignment. We were in a frenzy getting prepared for the move of the family to our hometown of Clarksville, Arkansas where she would be in the company of friends and relatives. We were gone in less than a week.

Chapter 2

The Preparation

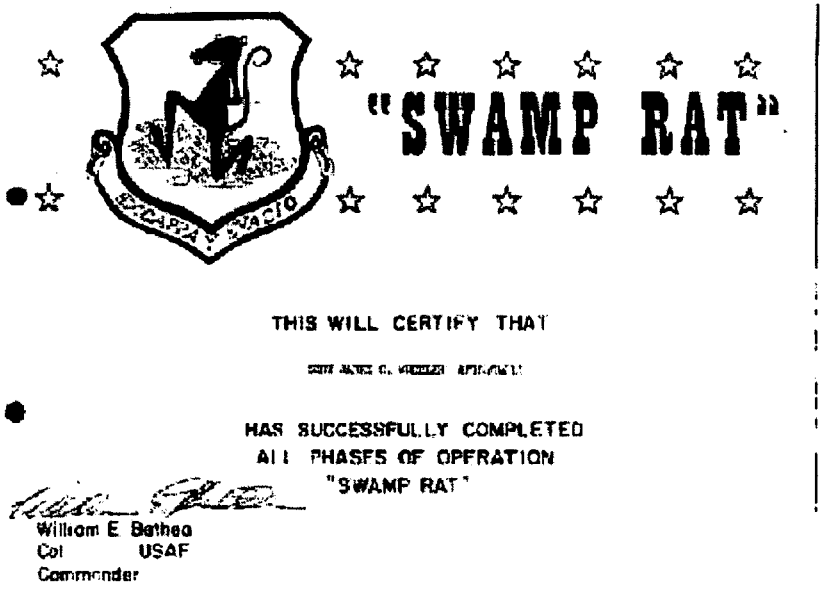
I was off to Hurlburt Field, Florida for Swamp Rat Jungle survival school and water survival school. I can't remember how long I was there, ten days or two weeks, with the other being at Alexandria Louisiana for Combat Crew Training in the C-47.

Any how, after the Swamp Rat training, I knew I did not want to be captured. A good friend of mine Mike Mineau, who by the way was also from Sheppard and was the Crew Chief on the Generals aircraft was also there with me.

At the end of our mock prison camp episode, we were being marched to a different camp. As it turned out the disruption by ambush by friendly forces, aided Mike and I to drop over an embankment and out of site. Not knowing this was actually the culmination of the exercise, Mike and I, determined not to be recaptured, headed deep into a swampy area, where we had been briefed to steer clear of. We went deep into the area and perched on some cypress knees poking up out of the water.

Seems like we had been in the swamp for two or three hours when a C-47 began circling over the swamp, big speaker squawking for Mike and I to come on in, the exercise was over. We finally found our way back to the base for the first good meal in a few days.

I dug out my old Certificate of Training for Swamp Rat Given at Hulbert Field, Florida. This would be the closest training we would get to Jungle Survival School due to the urgency of getting the first few aircraft ferried into South Vietnam. This training was in late April and early May, 1966.



"SWAMP RAT"

THIS WILL CERTIFY THAT

[illegible]

HAS SUCCESSFULLY COMPLETED
ALL PHASES OF OPERATION
"SWAMP RAT"

William E Bethea
Col USAF
Commander

Another bad experience I had was in the water survival training. You had to jump off the deck of a small moving ship in a parachute harness that was rigged to ropes to simulate parachuting into the water and the open chute dragging you. You were to allow the ship to drag you long enough to know what to expect then release the ropes as you would release a regular parachute.

When I tried to release mine, only one side released. This put me in a situation of going down, like a corkscrew, deeper and deeper. Finally, I got the other side loose and made my way to the surface for the next problem. Some of the one man dinghy's had the CO2 bottles and some did not, luck of the draw. Already exhausted from my parachute experience, I now had to inflate the dingy using my own two lungs.

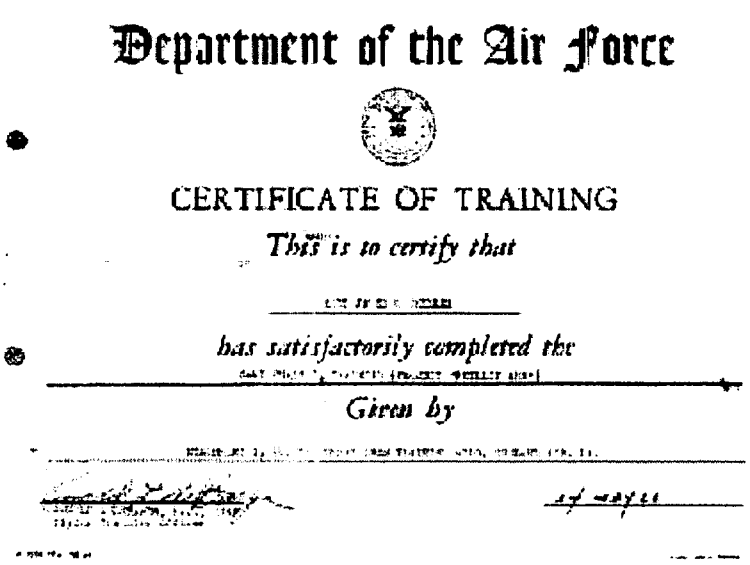
Finally, I got the thing with enough air in it that I could use it. About a mile and a half later, I finally reached the beach and again off to a good meal, totally exhausted but somewhat educated.

Due to the urgency of the mission requirements of the assignment, I did not have to attend the survival schools in Washington State nor the Jungle survival school held, as I remember, in the Philippines. I was grateful for this. Florida was real enough for me.

One thing I really enjoyed about the time in Florida, at a dollar a dozen, I ate a lot of oysters on the half shell at Bacon's By The Sea. I was now off to see my family for a couple of days before going down to Alexandria for the Combat Crew Training.

After a couple of days at home, I headed south to England Air Force Base at Alexandria. Again, I can't remember which was which, one place was for ten days and the other was for two weeks, which is which, irrelevant and gone anyhow.

This next certificate is for C-47 Phase I, Training (Project "Phyllis Ann") given by Detachment I, 4410th Combat Crew Training Wing at England Air Force Base, Alexandria LA. and is dated 24 May, 1966



Department of the Air Force

CERTIFICATE OF TRAINING

This is to certify that

has satisfactorily completed the

Given by

I don't recall anything extraordinary here other than the fact that on the 25th of May, when I had completed my last flight, I was met by someone, can't remember who, that informed me that I was the father of a new baby girl, baby and wife doing fine.

I left the base and back to the motel where we were staying to check out. I remember it was the Travel Lodge motel as it would again enter into this story a few months later. Off to Clarksville, Arkansas, arriving about five hours later.

And as I had been told, the wife and new baby girl were both doing just fine. This, my last child was born in the same hospital as my first, nine years earlier and the doctor was the same, despite having two children born in between, one, my son in San Antonio and another daughter, born at Lajes Field in the Azores Island, Portuguese Islands about six hundred miles off the coast of Spain.

I looked like the Gods were smiling on me. The way the assignment had started out, it was rush rush go now. As it turned out, my new daughter would be three months old before I left home for my new assignment in Vietnam, Which by the way, turned out to be the one I had been hearing about, code name "Phyllis Ann".

I loafed around Clarksville, Arkansas from May 26th until the end of August, waiting on my aircraft to be completed. I would go to the base at Little Rock, or more appropriately, Jacksonville every two weeks and pick up my pay.

This went fine until one day, without any current documentation that I was in fact awaiting further orders, (the latest telegram confirming this was now outdated), an overzealous Captain decided he was not going to pay me, but instead told me he was going to call the Air Police and have me arrested for being AWOL, (absent without leave). I gave him the phone number of my aircraft commander, Lt. Col. Frank E. Hinkle, who was sitting at home in New York cooling his heels just like me, awaiting further orders. He refused to make a call other than to the Air Police and giving me a ration of bull.

Sitting quietly across the room was another officer, an older, wiser and more understanding person, a Lt. Colonel, who had been around the military long enough to know that things like this are common place. After listening for some time to the conversation, now getting a little heated, he spoke up, and to the Captain. His words were "Captain, it is not my business, but my advice to you is to pay this man and let him get the hell out of here". The Captain quickly heeded the stern advice, paid me and I was off back to Clarksville, never to see him again.

The time soon approached when we were to report into Grenier Field to pick up our new aircraft for the ferry flight halfway around the world. We all reported in on the appointed day and after a good nights rest, went if for our briefing. The briefing was short, sweet and to the point. The aircraft was not yet ready and we could all return to our homes and families and await further instructions.

We did all get together in front of the aircraft for a group photo. This turned out to be the only time we would all be together at Grenier as will be learned shortly. In the photo, reading left to right, Captain Robert M. Harris, Navigator - Major Mattie, Navigator - Lt. Col. Frank E. Hinkle, Aircraft Commander - Major Harold R. "Hap" Lagasse, Pilot - Captain Anderson, Copilot, and yours truly, Ssgt James C. Wheeler, Flight Mechanic. Major Harold R. Lagasse passed on in early 1998.

Finally we got the call it was ready for pickup at Grenier Field New Hampshire, where it had undergone major equipment updates by Sanders and Associates, only after going through a major aircraft rebuilding in Florida.

The call came in a typical fashion. Seems they were have supposed to have called us a few days earlier, but somewhere someone failed to make the necessary contacts with us. When I got the call, I was to leave immediately and fly to New Hampshire on the first available flight. We, the crew of six, were scattered across the U.S. Me in Arkansas, Col Hinkle in New York, Captain Harris was in Alexandria Louisiana, I think Major Lagasse was is Phoenix Arizona. Major Mattie and Captain Anderson, I have no idea where they were.

Chapter 3

Off We Go

Finally we again show up at Grenier to pick up the aircraft. This time it was ready to go.

Photo by:David Brooks

We left Grenier in our brand new aircraft, an RC-47, later to be renamed, EC-47. We headed for England Air Force Base in Alexandria Louisiana as suggested by Captain Harris. When we arrived, I suggested we spend the night at the Travel Lodge as I had been well pleased with the accommodations and their prices, just three months prior. This is where the Travel Lodge Motel again enters the picture as indicated earlier. When I signed in, the lady behind the counter looks at me and says, "Weren't you here about three months ago with a group of five or six".? I replied that indeed I had been. She then went into another room, returning with a brown paper bag and set it on the counter and said, "You left these under your bed when you left". I had in fact left a new pair of black shoes under the bed, and by this time, long forgotten. I thanked her for keeping them and remembering who had left them.

The following morning, we departed England AFB for McClellan. For some reason not clear today, we landed in Arizona and spent the night. I could have been fuel, since it was common to buck a good headwind going west. Next day it was on out to McClellan AFB, California. At McClellan, we would spend an extra day and rest up a bit while we had additional fuel tanks installed in the cargo compartment just aft of the cockpit bulkhead and on the right side of the fuselage. With these two additional tanks, we could now carry Thirteen Hundred, (1,304 to be exact) gallons of fuel. Eight Hundred and four gallons in the standard wing tanks and two hundred and fifty gallons in each of these additional "ferry tanks" as they were called.

From here we would go on up to McChord AFB in Washington State. Again, here we would spend the night in preparation of the first long leg of our trip. The following morning, August 31, 1966 and with a full load of fuel we depart McChord headed for Elmendorf AFB in Alaska. This day would be the first day of our tour of duty in Vietnam, we had now began our tour on 31, August 1966. It was also our first over water leg of a trip that would take us half way around the world to a place we would spend the next year of our lives, hopefully. Our flight went along smoothly and was uneventful. We did find a slight oil leak on one of the engine oil coolers upon landing and had that repaired.

We were preparing for departure from Elmendorf and had a slightly excessive mag drop on one of the engines. For those unfamiliar with the term or procedure, the engine ignition system actually consist of a dual system. There are two magnetos on each engine and two spark plugs in each of the cylinders. Each of the magnetos fires one of the spark plugs in each cylinder. The mag check is a procedure of grounding out one of the magnetos thus shutting off the power to one set of plugs. You note the RPM drop when switching from both sets of plugs firing and just one set firing, the maximum allowed is a 100 RPM drop. Then you repeat the same procedure for the other set of spark plugs.

Standard Dash One procedure failed to cure the problem, so while the pilot and copilot were mysteriously distracted by something outside, I tried to perform the magic that had worked for me so many times before, but was definitely not the recommended procedure that is why I had them looking out the window. The drop was now just at the 100 RPM maximum and Col. Hinkle ask for my opinion. I told him that since it was a long flight and we would be going over water, I thought it best if we went back in for a change of spark plugs. This we did and while we were at it, we had them changed in both engines, just as a precautionary measure.

Our remaining stop over points were. Adak, out on the far tip of the Aleutian Chain, The islands of Midway, Wake, Guam, Clark AB in the Philippines and then Tan Son Nhut AB, near Saigon.

I cannot recall which leg was the longest of the entire trip, but it would have been the one from Elmendorf to Adak or the one from Adak to Midway Island, probably Elmendorf to Adak. I do remember the longest leg we logged ten hours and five minutes and burned only eight hundred and forty gallons of fuel or a rate of eighty gallons per hour, which was a little below normal consumption.

Now, with a new set of spark plug in both engines, we were off on our second over water leg of the trip. I believe this to be our longest leg of the trip, Elmendorf to Adak.

Arrival in Adak, check out the aircraft, refuel and make sure she would be ready to go in the morning. I was then of to the Club for some chow. It was here that I met up with the Sgt of the Guard, a Marine Sgt. We had a good visit and he was giving me the grand tour, such as it is at Adak. I saw hugh salmon in a small stream, so small I could actually jump across it. In places they were so thick it looked like an aquarium, you could have caught them with your bare hands.

Then he ask me if I would like to go shoot some rats? I replied, "Why not". Off to the armory where he picks up two .22 caliber automatic pistols an a few boxes of ammunition. We were then off to the dump for some fast and furious shooting. The rats there were as thick or thicker than the salmon in the stream.

After about an hour I told him I better get back to my quarters, I had a long day ahead of me in the morning.

Wakeup call came all to early for me, I was not ready to get up but I really had no choice. After a good breakfast it was off to the aircraft for a preflight before another long over water flight.

Off on time and just that quick we were out over the big blue pond again. It was on this leg that I thought I might try to learn a little bit about using a sextant. I could not seem to get the hang of it and soon left it up to the navigators. They would prove to everyone that they knew how to use one. The did an absolutely wonderful job of navigation. I am proud to say that each and every time we approached one of our small island destinations, before it was visible to the eye, it would appear on the radar scope about a hundred miles out and be dead center and coming straight down the middle of the screen.

Arriving at Midway Island, we had no problems whatsoever. All I had to do was give the aircraft a good postfllight inspection, and service her up for the next leg to Wake Island. This is where we took an extra day just to rest up a little .

I can't recall just which of these island bases it was, but a one of them, when I called for a fuel truck. I was told it would be some time before they could get a fuel truck out to me, but if I wanted to move the aircraft down to the refueling pit they could service it right away.

With the long day already, I did not want to standby and wait for a fuel truck so I ask for a fireguard so I could start the engines and taxi the aircraft to the fuel pits. It was now dark and as I approached the designated parking spot, I was slowly taxing with the right main landing gear wheel right on the edge of the paved ramp area. The man on the ground then signaled me to turn hard left, (ninety degrees) into the parking spot and on the fuel pit.

Just off the edge of the pavement, was a freshly dug trench to lay new power lines for a new lighting system along the parking ramp edge. Well guess what, I had not seen this ditch and had not been told it was there. As I braked hard on the left wheel and added power to the right engine to make the tight left turn, all was going well and I was lining up perfect on the yellow painted center line, until I felt the tail wheel drop and the aircraft come to an abrupt stop.

As you turn, the tail wheel makes a considerably larger turning radius than does the main gear wheels, thus it reached out off the edge of the ramp far enough that just as I was getting straight on the line, the tail wheel dropped off into the trench. The tail section of the fuselage now resting on the ground, tail wheel dangling in the ditch.

I shut down the engines got out, and went back with a light to survey the situation. There was absolutely no damage to the aircraft, so I had the man there to assist me in parking to act as fire guard while I restarted the engines and then to move off to the side while I tried to power the aircraft out of the ditch.

With both engines running, I held the brakes locked, pushing the control column forward thus lowering the elevator flight controls to try and create lift on the tail section with the prop wash, thus helping raise the tail wheel out of the ditch.

As I approached maximum power on the two engines, I could feel the tail section rise a little. I then released the brakes and bingo, she popped right out of the trench. I continued to move forward until I was in the proper parking spot, and believe it or not, It looked as if I had gotten the aircraft about as close as it could get to dead- center on the line.

Again I got the light and went back to survey the situation on the tail section of the aircraft. After going over the entire tail section , I could find no damage. Then I went inside the tail compartment and again found no damage.

The next day, as the rest of the crew was doing their individual part of the preflight inspection, the navigator, Captain Harris said, "someone did a good job of towing the aircraft on to the parking spot, looks perfect on the center line". I replied, in a joking manner, "It was not towed to the spot, I taxied it here". Luckily he had not noticed the tire marks coming out of the trench. Col. Hinkle would remember this short conversation between Captain Harris and I several months later.

The flight from Midway to Wake Island was uneventful with the exception of the loss of one radio. Landing at Wake Island, I had the radio repaired, postfllighted the aircraft and again serviced it up for the next flight, to Guam.

Like those before, this flight too went smooth as silk, with no problems and nothing to do but postfllight and service it up again for tomorrow's flight to Clark AB in the Philippines.

It was either here at Guam or at Clark, that I got to see the SR-71 for the first and only time. I was at the aircraft for some reason, probably doing the post flight or preflight. I recall cleaning the windshield and the cockpit windows when I noticed considerable activity at the end of the runway, about a mile or so away.

As I watched from the top hatch in the top of the fuselage, just back of the pilot and copilots seat, I could see they were taking a fabric covering off something. I continued to watch the flurry of activity for quite some time. Then here it came and I could see what it was. When it lifted off, I began a very steep climbing turn and was quickly out of sight.

I asked someone on the ground about it, and he told me he was headed for the continent (Southeast Asia), and would be back in about two hours. This is the only time I saw an SR-71 but I was truly impressed.

Off again and this would be our last flight with the additional fuel tanks in the aircraft. We would have only on more leg of the trip after this one and would be on the far side of the world.

Landing at Clark AB, and again, nothing but a post flight and service. We would spend an extra day here having the two ferry fuel tanks and associated plumbing removed before going on into Tan Son Nhut. There would be no further need for them.

Chapter 4

Our Arrival at Tan Son Nhut

Leaving Clark, we were now on the last leg of out trip. When the sun went down on us this evening, we would be in the WAR Zone. We arrived at Tan Son Nhut and delivered to the 360th Reconnaissance Squadron, later to be known as the 360th Tactical Electronics Warfare Squadron, I believe, about the sixth RC-47, later to become the EC-47. and we ourselves reported to the same unit as new arrivals. We would be formed up into flight crews consisting of a pilot, copilot, navigator and flight mechanic.

I was lucky and remained with Lt.Col. Hinkle, Major Lagasse and Captain Harris. We would as it turned out, remain together and fly as a crew for the entire tour and come home together. To my knowledge, we are the only crew form up in the states, ferry an aircraft over and remain together as a combat flight crew in the entire wing of three squadrons over the life of the EC-47 Mission, 1966-1974.

Tan Son Nhut was the busiest airport in the world at that time and probably retained that distinction for several years. Our entire trip was uneventful and we had no problems other than the oil leak and spark plug change at Elmendorf and one piece of radio gear changed at Wake Island. We had been thirteen days total enroute and had accumulated a total flying time for the trip of ninety hours in the air.

The 360th was a new unit, the first of what would eventually become three squadrons, the 360th at Tan Son Nhut, the 361st Tactical Electronics Warfare Squadron at Nhat Trang and the 362nd Tactical Electronics Warfare Squadron at Pleiku.

I do not recall all that much about Tan Son Nhut but do have a few vivid memories. One of these was, as I lay on my bunk a couple weeks after arriving there, I heard this god-awful screaming from an aircraft engine. I jumped up, ran outside with my camera. A Vietnamese A1-E aircraft was in a dive almost straight down, throttle wide open. He impacted the ground in a Vietnamese concession on the base about 3 blocks from where I stood watching. I never did learn what had happened.

I recall a couple of enterprising young airmen and their evening get rich schemes. They both required very little investment but were both rather short-lived.

The first one would set up a table covered with the brown GI blanket off his bed and then upon the blanket he would place a wooden frame some three feet square. He also provided a pair of dice for the game. Having a very small investment and a risk factor of zero and usually a big crowd, he would pull ten percent (10%) of everything that hit the table as his cut for providing the service. Pretty profitable for a while.

The second one did have a little more investment and labor in his scheme. Every evening he would arrive in the barracks area on a bicycle with as many large bags of bread hanging from it as he could manage to hang onto. These were small loaves of a Vietnamese bread, just a little larger than a hot-dog bun, and probably full of bugs. But anyhow , he would open up a few cans of Tuna Fish, mix it and sometimes some pickle an onion with mayonnaise in a large pan. He was making Tuna Sandwiches as fast as he could. If you wanted the whole thing, it was one dollar (S1), if you only wanted half, whack, with a large butcher knife, here's your half, fifty cents please.

He would literally sell hundreds of these every day and was raking in the money until the Veterinarian shut him down. (The Vet was responsible for this type operations and food safety.)

We flew a few missions out of the 360th before moving on up to Nha Trang and the newly formed 361st. I recall on one of these missions, we were of course in the delta area flying out of here. I do not recall the altitude we were at but it was lower than we would later fly. We fixed a radio transmitter target that appeared to be "market time" or a water bound vessel. We neared the area of the target and sure enough, there was this lone little guy in a sampan, right where we had plotted the target.

Probably the only really stupid thing we did, but we circled the boat for a better look. As new as the mission was that we were flying, I am sure he had no idea of what we were doing. He saw us circle and as fast as he could, he put that sampan to the bank, left it and ran. I know he thought we were the deadly cousin to our aircraft the AC-47 with all the gattling guns poking out the left side, and he wanted nothing to do with us.

Here are a couple of photos of the 360th TEWS mascot at some time after I left there. And I believe the one of her lying down with her uniform and patches was provided by David Steiner. David said shortly after this photo was taken in May 73, someone took her home stateside. Great. The photo of the "Lady Sux" sitting up was provided by Bob Looney.

I personally found it very comforting to hear that this fine, loyal mascot was brought back to the states by one of the members of the EC-47 operation.

There were many other Squadron Mascots and I can only hope that each and every one of them were as fortunate as this pretty lady.

I have a very soft spot in my heart for all animals especially those considered pets and then left to fend for themselves when the Master for some reason leaves their side.

The Parent Organization of all the TEWS Units

An Official 460th TRW Photo
Provided by Bob Looney

I really do not recall that much about Tan Son Nhut other than the fact that it was so busy, not only on the flight line but everywhere. There was an aircraft on the runway just about any time you cared to take a look, either on takeoff or on landing.

I also recall that somewhere on the base there were several small monkeys running loose. I had an old photo I took of one of them on a truck mirror but it was one of those first tries a developing my own photos and soon turned brown and was thrown out.

I know I flew more that one mission out of there but for the life of me, the only one I recall was one mentioned earlier about the sampan fix, and that is the only part of that mission I recall. And if I remember correctly, the Squadron Commander was a Lt. Col. Jelly.

Above: The 360th TEWS Operations Headquarters at Tan Son Nhut Photo by Bob Bonn

Chapter 5

And Then Nha Trang

I don't recall exactly when, but about six weeks after we arrived at Tan Son Nhut, Col. Hinkle, Major Lagasse and Captain Harris were scheduled to go up to Nha Trang and help begin the operations of the 361st. I was scheduled to stay at the 360th at Tan Son Nhut.

Col. Hinkle told me the day before he was to leave to have my bags packed, he would be by in the morning to pick me up. Said he was taking me with him to Nha Trang. Boy did that make me feel good. The next morning Col. Hinkle drove up on time, helped me load my gear into the pickup and we headed for the flight line. My gear all aboard and stowed, preflight complete and as we started aboard, Col. Hinkle said to the other flight mechanic, the one scheduled to go to Nha Trang with him, "find you a seat in the back, Jim is my flight mechanic". We were soon underway, enroute to Nha Trang.

On arrival there, there was nothing said about my being there. I signed in just as if I had orders, when in fact the only orders I had were Col. Hinkle's verbal order.

I do not recall ever receiving written orders transferring me from the 360th to the 361st but it made no difference. I spent the entire tour there without any questions or problems.

I moved in to a Villa in downtown Nha Trang with five other flight mechanics from the outfit. I don't recall what it cost us per person per month, but do remember how we would cut down on the biggest expense, the light bill. The meter was inside the house on the wall in the dining room. We discovered we could, by being very careful, pull the wire from the lead seal that was supposed to secure the meter against tampering.

Number 2 Me Lein

We made up a pair of heavy jumpers to replace the meter in the circuit. Each month a day or so after the meter had been read, we would gently ease the small wire loop out of the lead seal, pull the meter and replace it with the jumpers. We would run it this way for fifteen days and then pull the jumpers and replace the meter. We would then replace the lead seal and wire and ever so gently snug the lead seal up to the wire just enough so that it would not be loose. This cut our monthly electric bill from around three hundred dollars a month down to around a hundred and fifty or so, much easier to live with.

Ssgt Ken Evans would become a very close friend. He was also the first Squadron mail clerk. Ken and I shared a common interest, old cars. Ken had a 1931 model A coupe and I had a 1929 Hudson 4 door sedan.

I recall one night, Ken was using one of the new fads of the time, a small inexpensive reel-to-reel tape recorder making a voice tape to send his wife in place of a written letter. With my trusty .38 caliber model 10 Smith and Wesson revolver, I slipped out and around the house. Just outside his window, which had

no glass, only screen wire. I let fire three rounds into the ground as quickly as I could pull the trigger. Needless to say, he had to redo his recording.

The furnishings in the house were whatever we could scrounge up, and we, like everyone else became very good scroungers. The only thing we had in the house that had been obtained one hundred percent legitimate was a brand new large refrigerator, it was signed out on a hand receipt. Everything else was scrounged or built from scrounged material. We even had six new plastic stacking chairs from a new snack bar on base. We got them even before the snack bar was opened. We also had an electric water cooler, the type with the big five gallon jug that sits atop it. Getting the cooler was no problem, the bottle proved a little harder.

We all had new steel wall lockers and electric fans courtesy of I won't say who. But we went down with a chevy step van, supposedly looking for the nuts and bolt hardware to repair some old beat up lockers. The sergeant was kind enough to pitch us the keys to the storage building and told us where it was and to go down there and get what we needed. Taking him literally at his word, we got what we "really" needed, six new lockers, complete with hardware plus a new electric fan each. With our ill-gotten bootie loaded, we drove back by the office, pitched him his keys and politely thanked him for his help.

Another thing everyone had was a mosquito net to put over your bed. With the net, and the fan going, you could sleep pretty good. Just don't try it without the net.

Notice the table, made from scrounged materials, the new wall locker and the new fan sitting in the corner. And of course the mosquito netting.

You can see that my bed is under a window. Well one night after a long mission and a stop over at the NCO club for dinner and a few beers, I opted to not go back by squadron operations and pick up my .38 caliber revolver before going to the villa, besides I had an M-16 stashed in the wall locker shown above.

Well sometime during the night, I don't know just what woke me, but for some reason, I opened my eyes. Standing just on the other side of the screen wire in the window was what could only have been a "Cowboy" as they were called, a local thief/burglar. He was just about ready to try and enter that window I think. Had I had my .38 he would probably said good-bye cruel world on the spot. But, I did not have it, I usually slept with it under my pillow. Without moving, I tensed what seemed like every muscle in my body. Then like a coil spring released, I sprang straight up in his face and yelled something, who knows what, but scared hell out of him. Last I saw of him, he was clearing yard fences.

These "Cowboys" as they were called were very efficient in their trade. They could get in and out as quite as a cat. They got us early one morning after all but one man had left for an early morning mission. They were in and out with everything they could carry while this one man lay sleeping through the whole thing.

We did not have all the luxuries of home but we sure had it a lot better than a lot of the folks over there. At least we had a good bunk to sleep in every night and it was under a solid roof , not a tent.

While there you learned to do a number of things out of necessity. I found for instance that an electric percolator coffee pot can be used as a very good improvised crock-pot. Maybe it was because I was so hungry for them and missed my home cooking that I found if did an outstanding job of cooking pinto beans. Just take out all of the innards used to perk coffee and use it like you would a crock-pot. Those beans were delicious. It also did a great job with Kraft Macaroni and Cheese. I had a lot of beans and Kraft Macaroni and Cheese dinners sent to me. Even with these, I think I would have starved to death if it had not been for Planters Dry Roasted Peanuts and Beer.

We even had television. The Armed Forces Radio had a transmitter located offshore on Hon Trea Island. Every evening a number of the small children in the neighborhood would show up at our front door to watch the television with us. They would always remain outside the door, looking in unless they were invited to come on inside. If there were only a few, they would be invited in but we were afraid to let to many in the house to keep watch over. They were all very polite and quiet, never talking or disturbing anyone else.

This was the street just outside our front gate at the villa

There was this one little girl, she couldn't have been more than five years old. We never knew where she came from but she was a regular. She was out of the ordinary, she was alway as neat an clean as you would want your children to be. She wore nice little dresses and always had her hair neatly combed and she was just adorable. I had a photo of her, but somewhere in the past several years it became one of the things among the lost or missing. I did lose a lot of papers etc: in a move in 1986, maybe that is what happened to that photo. I have also wondered many times what might have happened to her.

Our Vietnamese neighbor on the corner had a son in the Army of South Vietnam. They ran a small store, mostly groceries etc. We had a deal with them until we were able to acquire our own refrigerator that they would keep our beer cold for us. The deal was we would take them say four cases of beer. They would keep it cool and we would get it as we wanted and instead of retrieving four cases, we would only retrieve three cases. This was our deal and it worked out great for us and them too.

The photo is of the gentleman I do not have one of his wife. His wife was all time calling us over the back fence and passing us various foodstuffs. Several times she would pass us a small watermelon.

I guess our favorite was when she would pass over a basket of freshly cooked and still hot, corn on the cob, cooked who knows how, but with the shucks still on it, boy that was good corn. He had a new motor scooter, I don't recall what kind it was but it was his pride and joy. You can't see it in this photo but he is standing with his right hand on it, a gleam in his eye. They were very nice folks, and I have also thought many times what might have happened to them. It could have become very rough for them since they did have a son in the South Vietnamese Army.

Rockets into our Coconut Tree??

The only excitement we had while living downtown Nha Trang was about 1 AM one morning the big double swinging gates came busting open and we were swarmed by the Vietnamese Army and the Local Police, the White Mice. Seems we were out front in the yard barbecuing and drinking a few beers.

This was not an unusual practice. We were in pretty good shape when it came to the business of bartering. You would really be surprised at how much you could acquire with a little horse trading, and believe me we did out part. No black market or really illegal dealings just good old country boy horse trading. We quite often came up with say a forty pound case of chicken and even an occasional case of steaks. Both went pretty good over a charcoal fire.

And yes we had a pretty good pit for cooking over the charcoal. It was made of stone that was intended to go into the construction of a new villa being built by our own landlord. He had to have known we "borrowed" a few of his stones, they were exactly like the ones he was using to build a new villa just back of the one where we were living.

A Captain by the name of Bill, was at that time living in the Villa with us at Number 2 Mei Lein. He always carried a 38 over/under derringer in his jumpboot.

Well enough belly wash and he was ready to shoot a coconut out of the tree in the front yard. Several shots had been fired and not the first coconut had been dislodged from that tree. We would have had a better chance at knocking a coconut with the stones in our pit. Then the gates busted open just as he fired another with a muzzle flash 6 feet long, everyone saw it. Bill was between me and the Swarm of Cops. He dropped the derringer, catching it about waist high with his left hand. He tried to pass the derringer to me. I did not want it but knew he would get caught. I took the derringer, while he was still covering me from full view, dropped it between my feet and without looking down, tried to move my feet enough to cover it up. All the while, Bill, still pointing with his right

hand into the tree and repeating the slurred words, "Someone's shooting rockets into our coconut tree".

Did a pretty good job of covering the thing, they looked and looked and could not find the derringer. They knew he had fired, they saw the muzzle flash. They finally left and Bill immediately wanted to know where his derringer was. I told him to forget it until morning, that there was probably someone still watching to see where he went to get it.

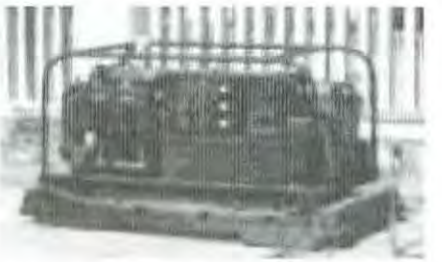
Next morning, I went out, scratched around in the sand and found his derringer, all it needed was a cleaning.

Our neighbor across the street gets a new power-plant.

One day our neighbor across the street came home with a new, at least it was new to him and the neighborhood, a portable power unit large enough to handle not only their villa but with a wire strung from their coconut tree to ours, it would supply our villa also. That would really knock down on the electric bill as we could get all the gasoline we needed to run the generator.

We never knew where they got the generator and they never said. All that mattered was it was there now, secured to the coconut tree with a hugh chain and padlock, and not one but two, fifty five gallon barrels of fuel just to get setup.

There was one slight flaw with the generator. It was long ago a new unit but it still ran very well. The problem was, when you shut it off to refuel it, it was very contrary and did not want to start very easily until it had cooled down some. Really this was no big problem.



Then one afternoon it was about time for a refueling of the generator. Ken, dressed only in his BVD's and rubber shower thongs goes across the street to take care of the refueling.

To set the stage for what happened next, they had a set of large swinging gates similar to ours. The two gates met in the middle and were secured by a pin or rod that dropped into a metal bracket in the ground.

Okay now back to Ken and the refueling. Ken decides that since the unit is so contrary to start when hot, and for whatever reason, can't recall today, but he decides to refuel without shutting down. BAD, always a bad idea.

Sure enough, while pouring from a five gallon can into a funnel, he spills some gasoline and yes, it ignites. In his excitement, Ken drops the five gallon can, still nearly full and takes of running. He heads out the gate, catching his little toe in the bracket meant for the gate and almost tears it off in his escape from the burning generator which now also had the two closed fifty five gallon barrels engulfed in flame.

Myself and a couple of the others at the house run across to the neighbors to get the maids out of the house. They were standing in the front doorway watching the fire, now climbing the coconut tree. By the time we could get them out of the house and across the street, I do not know where they came from, but there must have been a dozen Vietnamese men there with shovels. In just a very short time, they had that generator buried in sand and the fire was out.

The fire never got into the barrels, they were closed and luckily the fire was put out before enough heat was generated inside them to rupture them. The coconut tree was blacked pretty well but was still alive when I left there. Ken walked rather gingerly for some time nursing a badly injured little toe. And the bad part about it for all of us was our electric bill just went up.

The taxi drivers get a ride.

One evening after dark, Ken and I were on our way back to the villa from the NCO club. We grabbed a couple of the local man powered taxi's one for each of us no use riding together right.

What we had actually grabbed was commonly known as a cyclo. It was a bicycle without a front wheel. In place of a front wheel it had a covered seat similar to a small buggy, to carry passengers. This nestled in between what was actually two front wheel, a three wheeled bicycle in reverse. This is a cyclo that is at the time out of service. Papasan is taking his daily nap.

Now back to the tale. Ken and I thought we would be nice to the two cyclo drivers and let them ride up front for a change while we provided the power for this trip.

Finally got them both to agree so Ken and I got aboard the work end of the units and started off down the street with our passengers enjoying the ride, at least for a little while. It didn't take long and Ken and I decided to give them a real ride. We took off, as fast as we could get those rigs going. The two passengers were soon yelling and hollering they wanted out of those things. Cries that went unheeded by us. We were really having a ball, dodging all the potholes we could, hitting a few causing them to yell even more. Bet no one ever got them two in the front seat again.

Chapter 6

Some 361st History

From Nha Trang AB Vietnam 1966-68 Yearbook
History

Thanks to Paul Arnett

361st TACTICAL ELECTRONICS WARFARE SQUADRON

NHA TRANG AIR BASE, REPUBLIC OF VIETNAM

The 361st Reconnaissance Squadron was activated at Nha Trang Air Base on 8 April 1966.

The first squadron commander, Lt Colonel Ralph L. Stapper, arrived from the United States to assume command on 24 July 1966.

In August 1966, Detachment One of the 361st was activated at Pleiku Air Base in the Central Highlands with Lt. Colonel Jack A. Crook as commander.

The Detachment received their first airplane on 8 September 1966, almost a month before the arrival of the first airplanes at Nha Trang. However, once it begun, the buildup at Nha Trang was more rapid with aerial operations reaching sixty percent of current capability by the end of 1966, while the Detachment's first mission was flown from Pleiku on 15 December 1966.

Detachment One became our sister squadron, the 362nd, on 31 January 1967. In both cases, the rapid development of operational capability required Herculean efforts and much self-help construction. Then, as now, hardworking dedicated people made the difference in making the 361st an effective combat squadron.

The mission of the 361st has always been, to paraphrase the remark of a famous general, "to fly and help fight, and don't you ever forget it!" In spite of early problems such as pilots attempting to control the venerable "Gooney bird" while wearing survival "chaps" and a requirement to perform compass swings at Tan Son Nhut, the mission was performed superlatively — thanks to skill, cunning and dogged perseverance.

The Nha Trang environment contributed greatly to the ever-high morale of the squadron. For example, the official squadron history reports: "On 27 November a squadron party was held at a nearby beach. Steaks, liquid refreshment and involuntary swimming were featured." On the other hand, the shortage of billeting space for airmen was a continuing problem. The squadron has had three commanders during its history. Lt Colonel Paul A. Davis relieved the original commander on 12 May 1967 and Lt Colonel Bruce E. Hunt assumed command on 12 September, 1967. Each of these officers have since been promoted to the grade of colonel. Colonel Henry R. Briarton assumes command of the squadron in late June 1968.

Early in 1967 the squadron was redesigned the 361st Tactical Electronics Warfare Squadron. Throughout its history it has been a component squadron of the 460th Tactical Reconnaissance Wing presently commanded by Brigadier General Robert J. Holbury.

In accomplishing its mission the 361st has continuously enjoyed outstanding support from the 14th Air Commando Wing, the 66th Tactical Wing, the 66th Tactical Wing (VNAF) and several other exceptionally fine organizations which will not be enumerated. The men of the 361st have played a major role in base life at Nha Trang, consistently fielding fine athletic teams and placed first in the 14th ACW Commanders Trophy competition for February 1968.

The 361st Tactical Electronics Warfare Squadron has played a highly significant role in the Southeast Asian conflict, achieving its mission with gallantry and high

spirits. Its contribution to the defense of the Republic of Vietnam and the region have been remarkable.

Nha Trang AB Vietnam 1966-68 Yearbook Dedication

THE MEN OF THE 361st... came to Nha Trang from such bases as Tachikawa, Hickham, Sheppard, Andrews, Offutt, Dover, Scott, Randolph, Eglin, McChord, Minot, Maxwell, and more than thirty-five others. Some were in Germany, Libya, England, and France when they "got the word".

We came from SAC, TAC,AFSC, AU, ATC, MAC, PACAF, USAFE, AFLC, CONAC, and even the Pentagon. Some were students in the Air War College, Armed Forces Staff College, Aid Command & Staff College, AFIT, and the many schools of the Air Force Training Command. Others were flying, manning and maintaining such aircraft as the B-58, B-52, C-141, KC-135, C-124, C-118 and T-38 — not to mention one helicopter pilot and a minority who admitted recent experience with the Goon.

We were from eighteen to fifty-one years old and called forty-one states, the District of Columbia and Puerto Rico our home.

Our Pilots, Navigators and Flight Engineers had the added privilege of stopping along the way as such resort areas as Fairchild, Hurlburt, England, and Clark for a series of fun and games which taught them, among other things, that all black boxes are not designed by electrical engineers and that all one needs to know to fly in Vietnam is how to make assault landings.

Our flying experience varied considerably. One of the "Old Guys" flew with the RAF in the early days of World War II and most of us earned our wings between 1942 and 1966.

As the year went by and the old timers, who flew the birds over from the States, began to really believe their DEROS, others came to take their places. In August our first brand new Lieutenant Navigators, six in number, arrived fresh from flying school. In December out first Lieutenant Pilot type arrived. By the end of March the number of Lieutenants had grown to twenty-seven — eighteen Pilots and nine Navigators all of whom finished flight training between June and December 1967.

And then there were all those Captains, Majors and especially the excess Lt. Colonels!! Who was it who stated that there are no men over forty-five flying combat missions in Vietnam? Perhaps is was said before our group of twenty some oldsters left home.

Here we were! The men of the 361st. All ages, with a myriad of background experience and a wealth of talent in each man from the youngest to the oldest. We shared many new experiences — some amusing and others not so funny. We gripped about a lot of things, but we also found satisfaction and pride in a job well done.

However, the most important part of the 361st wasn't at Nha Trang. It was spread throughout forty-two states and two foreign countries where our families waited. Wives, children, mothers and girl friends who sent us thousands of letters and tapes plus lots of other things to make our lives more pleasant. They were always in out thoughts. We didn't like being away but we knew that perhaps it was an even longer year for them.

To show our love and our appreciation we ...
dedicate this book to THE LADIES OF THE 361st.

"TEWS TIGERS"

From the 361st TEWS Yearbook, 1966-68

Now we're the men so old and bold
with the ways of a tiger we've been told
in our Gooney Birds we grace the sky
Bong Song, Pleiku, Nha Trang, and Chu Lai.

We don't fly for fame or fortune, that's for sure
can't say what we're doing, except "fight'en a war"
but when it's over and they let out the news
be proud you were part of the 361st TEWS

Hail to the new troops
farewell to the old
you're both part of history
that's yet to be told.

Bud Langley

More 361st TEWS History

From the 361st Yearbook PhuCat, 1970/71
Thanks to David Brooks

Yearbook Dedication

We the officers and men of the 361st TEWS dedicate this yearbook to our commander. This choice was not made simply because higher authority selected him for this position, but because he truly earned in our hearts the title of "The Old Man". None of us were ever asked to do what he himself would not have done. During times of frustration he offered encouragement and guidance. Whether an air crew trying to make an early morning on-time take off with a cantankerous bird or a ground crew with an "irreparable" maintenance task in the middle of the night, we could count on him being there. He was no armchair leader. He not only shared in our woes but in our frivolity at the club, cookout or picnic as well. He always found time to listen to our personal problems and offered help if needed. Oh yes! he offered restraint and admonishment when we needed that too. He was the driving force that made a hell of a good bunch of men into the best damn squadron in the Air Force. We will never forget the example of his enlightened leadership, nor will we ever forget the man our Commander our comrade in arms, our friend, Colonel Perry E. Kimerer.

TO: Members of the 361st TEWS

A year at Phu Cat is something almost anybody can do without. Being in the 361st with a bunch of great guys has made the ordeal as painless as possible. Knowing that we played an extremely vital role in the United States effort in South Vietnam is a great consolation. Let no one go away from the old Gooney Birds and the barb wire without a deep feeling of satisfaction that his was a tremendous contribution. It was a great experience, but let's not do it again. While we haven't had much say in the big decisions, we've done our assigned job and we've done it well. I feel very proud in having been a member of this outfit.

Signed: Perry E. Kimerer, Colonel, USAF
Commander
History 361st TEWS

The 361st TEWS has been "in the business" for almost five years now. Activated at Nha Trang in early '66, the squadron operated out of the Riviera of the Orient for three and a half years and the crews "trolled" along the Ole Duong So, played volleyball on the beach, and fraternized with the natives downtown. A

detachment from the 361st moved out into the red dust country around Pleiku and became our sister squadron, the 362nd, now stationed at Da Nang. In September 1969, the 361st migrated north of Binh Dinh Province to become the famous Prongs of Phu Cat. This is the 361st that we knew and served in.

Lt. Col James R. Goad commanded the squadron during the move and, aided by his trusty sidekick/hatchman, Lt. Col "Chick" Preston, guided us through the winter monsoon and the spring offensive. Surviving rocket attacks and Liar's dice, Colonel Goad and the old heads began to talk less and less about the old days at Nha Trang and more and more about the "World" until pretty soon the day came that the old heads were not the people from Nha Trang but the former occupants of Prong City (East) who had emigrated to the "Hill". Phu Cat.... Pearl of the Orient.... who knows what evil lurks beyond the concertina wire??? Certainly not Prongs who were imprisoned within the citadel for a year. Claustrophobic? Perhaps, but we lived there and we griped and groaned and we did our jobs. Lt Col (Colonel) Perry E. Kimerer took over the squadron in June 1970 and was immediately faced with increased flying commitments and not even an extra monkey wrench to help him. Supported by Lt. Col Ted Mace, the Ops Officer, and by a terrific effort from the squadron, "Pops" and the boys came through. The crews flew right up against the stops, but they met the "Frag".

".....to fly and to fight, and don't you ever forget it." We flew our eyeballs off and we saved a lot of grunts. The quiet war, searching, waiting, you can't see what you're looking for and then, secondhand "they got 'em". Prongs?? What do you guys do up there anyhow??? Well...uh...can't tell you, but we do it well.

It's been a transitional year, new faces, old faces. Old guys who have been out of the flying game and young guys who have never seen a prop before. Feather!! What's feather??. Thirty hours at England Air Patch and you're ready for the war. Ups and down... feedback and saves to make you feel good and nighttime skunks to make you feel bad. Proud moments for the young guys who first command their own crews, proud moments for the old guys who showed 'em how to do it. Lots of busywork, lots of real work, lots of flying.

The flying crews have received terrific support from the guys on the line. Preflighting at midnight and launching at dawn, the 361st Maintenance Squadron troops often got their birds back just in time to turn 'em around again for the afternoon mission. The 12th Field Maintenance Squadron aided extensively in the support of the mission. The 460th Tactical Reconnaissance Wing, our parent organization in Tan Son Nhut, commanded by Colonel James E. Tilton, consistently provided us with guidance and support.

The 361st Tactical Electronics Warfare Squadron has quietly and efficiently contributed an irreplaceable element to the defense of Vietnam. The crews have endured and they have shown the special kind of gallantry that a slow war demands. In all cases the guys kept their sense of humor. They worked hard, played hard, and "didn't let them grind 'em down..."

The Goon

We would have been remiss if we had not set aside a section of the yearbook to the Gooney Bird, C-47, the Douglas Racer or what other names you may choose to call her. She has been called many names. She had been lovingly referred to bordering on adulation, in moments of nostalgia. She has been profaned in moments of frustration. Songs have been composed both idolizing her and damning her. Poems have been written extolling her virtues and maligning her eccentricities. Societies have been formed to perpetuate her memory, others have vowed that they would curse the day they ever laid eyes on her again. Both views can undoubtedly be justified. If you have character, in thirty seven years you are bound to make both friend and foe. If it's on thing the old Goon has that all can agree on, it's character.

Love here or hate her—she was the airborne vehicle that we worked on and did our job in for a year.

A Poem By: Claude "Falcon" D. Greathouse

Her windscreen is cracked
and her fabric is weak
there's a torture rack
for a pilot's seat
She's got a grind up front
and a rattle in the rear
and a Chinese puzzle
for a landing gear

Her paint is pealing
and the heater is broke
and when it rains
you're sure to get soaked

One jug is busted
and two plugs won't fire
and her piston rings
are bailing wire

But in spite of this
she flies us through
and that's about all
any plane can do

Now with the new type planes
you get some tools
some extra parts
and a book of rules

Well a ball peen hammer
and a pair of shears
is all we've needed
for thirty seven years

Now if we fly her
until that day
that they come
and take her away

If old man Douglas
stays in the game
we will fly another
by the same darn name

History of The Goon

On a gusty day in July 1933 the Grandpappy of all gooney birds took to the air for the first time. While the event went virtually unnoticed except at the Douglas Aircraft company it was the beginning of an epoch.

Even though the original was not primarily that of a war bird there have been versions of Goons in most every scrap since 1937. She was never the belle-of-the-ball but she danced all the dances. She came early and stayed late. From Koonming China, in 37 to Pearl Harbor; from Bastone to Tokyo; from the Yalou river to Inchou; from the Delta to the DMZ.

She has carried bullion, and manure; bombs and bodies; towed targets and flown picket. She has stitched a red hot 7.62mm trail across SEA as Puff. She has been cursed by the crews, pampered by crew chief and over scheduled by operations. Most of all she has been loved by all those privileged to have worked with her.

Do you remember the day,
When You were the New Guy ?

Do you remember the day you arrived at Phu Cat? You had been unceremoniously dumped off a plane at Da Nang, Tan Son Nhut pr Cam Rahn Bay and ignored. When you had inquired as to what travel accommodations had been arranged for you, unhesitatingly you were informed, "Everybody gets around in-Country best they can". Somehow after several more "Baggage Drills" you manage to hitchhike your way via a Caribou, C-123 or Whatsyacallit; finally arriving at Phu Cat. There you stood before the terminal burdened with B-4 bag, duffle bag, ditty bag, suitcases and several "what the hell did I drag this thing along for's. Still in a partial state of shock, still unable to convince yourself that you were really in Vietnam and certain that Charlie with rocket or bullet had you zeroed in, you stood there in anticipation an trepidation. It was a year about to begin. Do you remember that day? You're damn right you do!

After signing-in at the Orderly Room of your new organization your "Sponsor" did his best to help you with the settling in process. Lots of introductions to lots of new faces. Too many names to digest at a crack. EMO managed to provide you with a couple more bags of gear to your growing collection, all of which according to the Housing Officer was supposed to fit in the 2'x2' closet which came with the "palatial" quarters he had assigned you. Process in, get squared away with Finance (a 12 month or never task), get a mail box assigned, find the chow hall. Where is the Officers Club?, the Airmen's Club? Boy, do I need a drink. Finally you were beginning to get settled. It wasn't exactly home, but it would only be for a year. Only for a year !! Your day was to be divided into roughly two periods, work time — leisure time, with emphasis on the former.

It took Everyone

What the whole thing was all about, of course, was to get the mission accomplished. No one individual or one agency could have gotten the mission accomplished. It took the coordinated efforts of all. Maintenance had to get the birds ready to fly. Operations had to provide a flying schedule and crews to fill it. Administration had to fight the frustrating "battle of the paperwork". Support agencies had to attend to both functional needs as well as providing the

necessities of life for squadron personnel. If any one agency missed the mark, the mission would have suffered. We believe for our year they all scored a bulls eye.

Chapter 7

In the Beginning

362nd TEWS Squadron

From the 362nd TEWS Yearbook, 1966 - 68

The Dedication and Forward

This was "The Longest Year". For many it started in early 1966, and for others it would end with a DEROS in 1968. It was a long and trying year complete with much heroism, individually and collectively. There was the time when the Major wrenched his ankle, but still gave his all for the volleyball team — the time the airmen's softball team soundly trounced the officers on a wet field — but they were humble enough to assist in consuming the loser's treat. Many long nights were spent in bunkers, causing undue hardship on devoted poker players. Each of us have many reminders of the constant sacrifices we had to make.

Remember the early roust outs with only a towel draped around you for protection from the elements? A good shower was just the thing you needed before a 0400 flight or an early preflight — "Whot Hoppened?" Not even enough water to shave with — electric razor? — the electric supply had been shut off too. Maybe it will still be dark enough so you can get by without shaving today — black coffee will kill the taste in your mouth until you get a chance to brush your teeth at the lister bag at squadron operations.

We had lots of opportunities to: stand in long chow lines, get to the BX as the last can of black shoe polish was being sold, lose the last matching set of black socks to the laundry system, have a buddy go on our R&R trip, and have our own personal malaria pill each Monday.

Yes, we missed a lot of the conveniences of life; that tender touch in the morning, that glass of cold fresh milk, that soft clean bed, that someone to watch television with during the late, late show, that Thanksgiving turkey of Mom's, our favorite mutt bringing the morning paper and those Saturday afternoons at the beach.

We missed the Little League pitchout, the opening of deer season, the Girl Scout cookie sale, buying the wife the anniversary present, taking part in a Berkley demonstration and reading the comics on Sunday afternoon.

There were those occasional letters and CARE packages from home that helped make it all bearable. The encouraging words of support and understanding we received from the girls back home — the wife — the girlfriend — mother — we know she was uppermost in out minds — almost —However we did have someone for companionship — someone to fuss with, someone who was temper mental, someone who required the best of each of us, someone to be out late at night with, someone to walk in the rain with, someone to demand our care and affection. With these tender thoughts we humbly dedicate this book, "The Longest Year," to the one girl who helped replace so much of what we missed. She played an important part in each of our lives. She was forgiving and understanding. To this grand old girl, just as she looked standing there on the ramp, in the hot tropical sun at Pleiku Air Base, we say, "Thanks Darling"!

" Darling "

As a Captain, I was assigned as the first Commander, Det 2, 6994th at Pleiku in the summer of 1966. Unfortunately when I arrived at Pleiku, I was the sole member of the Det. Thanks to Jack Crook (The only member of 362nd TEWS), who also had no aircraft, I felt right at home. I have a book titled "The Longest Year" which has all of the 362nd TEWS personnel during the 66-68 time period. Ernest also has a list of all the original members of Det. 2

History

History — A recorded account of past events.

We cannot really write the history of the 362nd Tactical Electronics Warfare Squadron, it is a way of life, a gathering of individuals and aircraft into a working, wining team. In their small an unsung way they have helped to write the success story of the Pacific Air Forces in Southeast Asia in the defense of a free way of life in a troubled World.

No history of the 362nd would be complete without mentioning the activation of Detachment One of the 361st Reconnaissance Squadron at Pleiku Air Base in the Central Highlands of South Vietnam. That activation started in August of 1966 with the arrival of Lieutenant Colonel Jack A. Crook, plus twelve Airmen as the advanced cadre. Because of the hardships encountered and the ensuing grueling job of building a squadron, starting from scratch, under the adverse conditions, they became affectionately known as the "Dirty Dozen". **

To those twelve, fell the task of taking an area of four rundown, abandoned French buildings and converting them into a functional squadron operations, administrative, and support facilities. In the process, the jungle brush, the weeds and varmints were disposed of, the snakes were routed from their lairs, ditches were dug for drainage, and finally much, much dirty hard work and persistence made the area tenable.

The 8th of September 1966 marked the arrival of the first aircraft, old Gooney Bird "254" flown in by Lieutenant Colonel Russ Harmon, aircraft commander, Major Larry Bonham, pilot, Captain Arnie Yuen, navigator, and Staff Sergeant Larry Bristow, flight mechanic. In the meantime, Chief Master Sergeant Glenn E. Eddy and his handful of helpers were hastily constructing a maintenance Quonset hut, while simultaneously preparing the old bird for its first combat mission.

Before they could get "254" for it shakedown functional check flight, her sisters started to arrive, delivered by Major Roy Sherrett and crew and Major Loren Hauser and crew. It was beginning to look more like an operational outfit daily.

The first combat mission was flown from Pleiku on the 15th of December, 1966, with Lieutenant Colonel Jack Crook, Detachment One commander, as aircraft commander, Major Larry Bonham, pilot, Captain Arnie Yuen, navigator, and Staff Sergeant Larry Bristow as flight mechanic. Their first successful mission paved the way for many more that were to follow.

Numerous other crews, both flying and maintenance, arrived in late December '66 and early January of '67, leading to a squadron designation by 31 January of 1967. On that date, Colonel Robert G. Williams, commander of the 460th Tactical Reconnaissance Wing, Saigon, and Colonel D.J. Nelson, Deputy for Operations, were on hand to present the new squadron pennant to Lieutenant Colonel Jack Crook. At the same time, fourteen crew members were decorated by Colonel Williams; eleven had already received Air Medals for combat operations over hostile territory.

The next few months brought other changes in the name of the Squadron; we changed from Detachment One, 361st Reconnaissance Squadron, to the 362nd Reconnaissance Squadron, to the present designation as the 362nd Tactical Electronics Warfare Squadron. The changes seemed almost as frequent as the cross wind landings on the Pleiku airstrip.

By this time all of the non commissioned officers and airmen were quartered in new two story billets which replaced "Tent City", and the officers were moved from the temporary hooch's in the MACV area to the vacated contractors quarters on the main base.

A steady influx of new crews and equipment kept the maintenance men working around the clock, seven days a week with the only break provided by R&R's and one seven day leave to such exotic spots as Hong Kong, Singapore, Tokyo, Taipei, Kula Lumpur, Bangkok and Hawaii.

The 1st of May was a big day for the silver leaves of the Squadron as two of them hatched into full grown eagles — Colonel John Allison and Colonel Joe Wheeler. That same day, Colonel Williams and Colonel Nelson of the parent wing, were on hand to present the new Squadron. Colonel John Allison accepted the salute as the 362nd TEWS commander.

For some of the squadron members that magic day of the last wake up — the time to rotate back to the States and the land of the big BX — had finally arrived. All the marked days on the calendar finally added up to 365. For Lieutenant Colonel Jack Crook it was the end of his "Longest Year" and a fond far well to the faithful old Gooney Bird which continues to serve so well. Others will follow Colonel Crook when their DEROS comes around, but for the Gooney Birds the Longest Year will continue until peace and freedom can be restored to South Vietnam, and its grateful people can say "Thanks for a job well done".

** **Dirty Dozen**
Senior Master Sergeant Harold M. Snook
Staff Sergeant Franklin Willis
Staff Sergeant Merton R. Anderson

Airman First Class Wendell B. Dudley
Airman First Class Drury N. Helms
Airman First Class Russell Steve Terry
Technical Sergeant Harold E. Wires
Staff Sergeant Joseph C. Allione
Airman First Class Donald D. Akins
Airman First Class Richard C. Harding
Airman First Class Larry Osentowski
Airman Second Class Wifford Lamarre

From the 362nd TEWS Yearbook, 1969/70
Thanks to John Fuetinger

The 362nd TEWS started out as Detachment 1, 361st Reconnaissance Squadron in July 1966. The first men of Det. 1 (an officer and twelve enlisted men) arrived at Pleiku AB, RVN, in August, 1966, and set up shop in an area previously occupied by the VNAF. (We still use these buildings for our orderly room, operations building and intelligence building.) The air crews and aircraft soon followed the "Dirty Dozen", as the original pioneers called themselves, and 8 December, 1966, Det. 1 had arrived. Among those first crew members was a Lieutenant Colonel Leslie K. Skews who has since returned for a second tour. Since a large number of that original crew were in the primary zone for "grandfather", Det. 1 acquired the nickname, "The Elderly Warriors". The name is gone, but the spirit prevails. On 31 January 1967, Det. 1 became the 362nd Reconnaissance Squadron.

As our name reveals, the 362nd is, and had been a "recce" outfit. We've been very successful in out mission in the last three years and have overseen much of the action in South Vietnam. While performing our duties, we've seen places such as Ben Het, Duc Lap, Kam Duc, and many other remote locations in South Vietnam. The defenders of these spots have often expressed their gratitude to the 362nd.

We fly our missions in the "Grand Old Lady", the C-47, first built by Douglas in the late 1930's. She doesn't fly as fast, or as high, as many of the aircraft presently being used in this war, but she is one aircraft here with three wars to her credit. For many of the 362nd's older aircraft commanders, this is a reunion with the "Douglas Belle", for they knew her in WWII. As for our copilots, one war in the C-47 is more than enough.

Though they have been busy with their mission, squadron personnel have initiated many civic action programs. In 1967, we constructed a windmill for the Montagnard Agricultural Training Center. In 1968, we built a structure for the Pleiku Leprosarium. In 1969, our project was to help the villagers of Pleiku Roh put a new roof on their school house. These activities have earned the 362nd many friends, in Vietnam.

In an effort to make their "Longest Year" pass a bit faster, the soldiers of the 362nd developed many pleasant diversions. The sound of bets, bid, laughter, and church keys engulfed the living areas. Each month, "Hail and Farewell" parties were thrown for arriving and departing personnel. We all look forward to out last "Hail and Farewell" party. We've also helped many of our newly promoted members spend their first pay checks in their new grades.

As part of an emergency physical fitness program, we had a "health jamboree" in November, 1969. We played volleyball and basketball, and everyone had a go at running a mile. (A few even finished the first quarter!) Of course, the big challenge was the officer-enlisted softball game. All of the benefits of exercise were nullified when we sat down to hamburgers, barbecued chicken, and hot dogs not to mention the beer.

In December, 1969, the long wait was over. The officers hurriedly moved out of the RMK area to make way for Vietnamization of Pleiku AB. "For immediate occupancy", we were told, but no one knows if anyone lives in RMK yet or not. Few of us knew that our predecessors had also made a great move way back in 1967. The officers moved from hootches in the MACV area to the RMK area. Shortly after they got there, they built everything from patios to bunkers, and for this they became known as the "362nd Grey Mules", our answer to the "Red Horses" of the Civil Engineering Squadron.

For three years the personnel of the 362nd TEWS have endured their "Longest Year" here at Pleiku AB. Each man counts the days until he can board the "Freedom Bird" for home, but he will always remember the close friends made while in Vietnam's Central Highlands.

A Year in the Life of Pleiku Lifers
From the Longest year 1969-70

Is this the first time you've ridden on a pallet? Would you mind getting your elbow out of my site? . . . Welcome to Pleiku, garden spot of the Central

Highlands! . . . Here's a flak vest and helmet until you get your own. If you hear any loud explosions or sirens during the night, just put them on and get under the bed. You don't have anything to worry about because a rocket hit this exact room last week and they never land in the same place twice. . . . Welcome to CBPO! We'll have you out of here in a jiffy. . . . How did we ever get a cross-eyed goose for our squadron insignia? . . . What is the local military situation? Seven miles off the east end of the runway 75 to 100 rockets ! ! ! If I break my arm will they send me home? . . . I think I have a headache. Which way is the dispensary? It'll be gone by the time you get to see the Flight Surgeon. . . .Is the flying dangerous? Only if you get shot down. . . . My own plane and crew in 6 months? How about that. . . . Is this an Army base? No, they just got some good stuff in the BX . . . . Such a big desk and all those phones! Duty Officer must be a very authoritative and important job. Is it fun? . . . Good Morning! This is Sergeant Bob Slama of the Information Office reporting on Pleiku Air base activities for Friday the 13th of February. The security condition of Pleiku is presently Purple. For lunch this noon at the dining hall it's filet of corn dogs or last week's lasagna and beans on a bun, Jell-O or cole slaw, lima beans in hot mustard sauce, and grape custard for dessert. The movie at the outdoor theater is "The Lusty Lady-killer of Dodge City Corral". Worship services at the base chapel on Sunday are Protestant at 7:00, Catholic at 8:00, Jewish at 9:00, and Atheist at 10:00. Good Morning! . . .One half degree to the right and expedite! . . . MALARIA PILLS . . . TAKE ONE PER WEEK . . . This dispenser supplied courtesy of the Scott Tissue Co. Inc. . . . The squadron is just a big 112. . . Hi honey, over . . . Hi, over . . . I love, you, over . . . I love you too, over . . . I just can't get over . . .(pause) . . Are you still there, over .... Yes, I didn't mean to use the word over . . . (pause) . . .Honey, over . . . Yes, I'm still here. They did it again. Hey Sarge, you cut me off. Sorry sir, your three minutes is up. . . .Let's go to the club and have a beer. Did you make a reservation? The live show for tonight has been canceled. In its place we will show the action thriller, "Ma and Pa Kettle visit the University of California at Berkeley". Don't forget to pay this month's dues before you leave. . . Hey! We're moving out of the RMK next week. Where'd you hear that rumor? . . .The squadron will be moving to (Circle one) NKP, Phu Cat, Hue, Korea, Da Nang, Ubon, Los Angeles in (Circle another) December, March, June, August, 1975. . . Do you think it will stop raining by September or October? . . . What are you crying for? They just told me the NORS run was my goodie-goodie trip. . . . They really are showing the "Blue Max" at the club tonight. . . .What do you call them? Flight Mechanics, Engineers, or Crew Chiefs? I just say, "Hey driver!" . . . This is Cap 77. Our status is alpha through delta, the copilot is airsick, and we are weathered out of our area. What do you want us to do. Just stand by until we make a decision 77. . . Do you think they'll say anything about the 6 tape decks, 4 amplifiers, and 14 speakers in my hold baggage? . . . Short! —B.Y.

A Goon—By any other name. . . .

To most crew chiefs, a plane without a name is not safe to fly. As a result, the men who pamper the "Goons" of the 362nd, spend hours dreaming up names for their birds. The crew chiefs are emphatic about this. To them, flying a plane without a name is no better than flying on a "Red X".

In 1967 the TEWS was the proud owner of such machines as "Boomer Sooner", "Theresa", "Go Go Girl", "Voodoo Woman", and "Bimbo". Today such names as "Wahoo", "Tijuana Taxi", "Over Torque", and "The Gent" grace the flight line at Pleiku. These names won't be here long because no sooner does a crew chief leave and another arrive than a new name must be borne.

What's in a name? Is it just a label put on an airplane to dress it up? No. Without exception each airplane is subject of much love and to call it merely by a number is unthinkable. Long and sleepless nights are spent before a name comes to life.

How did aircraft 730 get it's name, "Tijuana Taxi"? Well, the custodian of the bird is Sgt Guadalupe Martinez. Does that bring any clues to mind? Or how about Sgt. Martinez nickname, "Hot Bean"? One source for names is a man's home and heritage. It seems to give the airplane something to live up to. When someone or something is part of the family, good things are expected.

"The Texan" has a similar story Aircraft 254 was named by Sgt Jack Whitson who has since gone back to the "Lone Star State" but the reminder of his homeland is still with us. It may not be for long, however, for Sgt Joe King is now in charge of the airplane and it may be rechristened.

The "Goon", like a hurricane can usually be unpredictable and so can a woman. A favorite resource for aircraft names is wives and girlfriends. Aircraft 702, "Miss Lila", bears the name of Staff Sgt Jon Ingram's wife. "Miss Maryellen", aircraft 208, was names by Sgt Joe Rogan for his "girl". Other women's names in the 362nd flock are "Louisiana Woman", Sgt Cary Lingo's bird, and "Saphire", the problem child of Sgt Versie Anding.

"The Coyote", aircraft 313, is the pride of Sgt Tom Pierce. The aircraft arrived from Tan Son Nhut with the "handle" and Sgt Pierce decided to stick with it. Sgt Tom Craig who handles 570 also decided to adopt "The Gent" rather than change its name.

Aircraft 704 now known as "Over Torque" bears the nickname of its crew chief, Sgt Norman "Over Torque" Ritter. Sgt Ritter explains that he got the name from an incident he once had with the "Goon". After repairing an engine during his early days as a crew chief, he ran the engine up. Not noticing how tight he had fastend the oil cooler onto the engine he ran the engine up to high bursting the oil cooler: henceforth the name "Over Torque".

Aircraft 072, "Wahoo", has a similarly interesting story. The airplane's crew chief is Sgt Melvin Hee from Hawaii. He is known on the flight line as Mahoo. However, Sgt Mike Adams thought everyone called him "Wahoo" and the name stuck.

Names mean a lot to the men who care for the aircraft of the 362nd. They are not taken lightly. To a crew chief, a Goon by any other name would not be the same.

Chapter 8

DETACHMENT 2, 6994TH SECURITY SQUADRON

Detachment 2, 6994th Security Squadron was organized on 1 Sept. 1966. The unit was assigned two Old French buildings for Operations, Maintenance and Administration. These buildings were in a state of disrepair and required extensive remodeling to meet mission requirements. In addition, requirements existed such that a building and associated facilities were constructed within the 330th Radio Research Company located with the 25th Infantry Division.

During the first two months of the Detachment's existence, technicians were used as construction engineers and everything else imaginable. In addition to erecting the Quonset hut at the 330th RRC, Detachment personnel rewired buildings, installed fluorescent lighting, installed the Operations security fence, poured concrete, laid generator pads, sidewalks and otherwise performed in jobs not related to their specialties.

Since that time the Detachment has come far and accomplished much. All sections: Operations, Communications, Materiel, Maintenance, Supply, Administration/Personnel and Security and Law Enforcement have contributed their share to make the unit an organization that one can be proud of having been a part of.

It is with all sincerity that the personnel of Detachment 2, 6994th Security Squadron, Pleiku Air Base, Republic of Vietnam, congratulate you on your leadership and accomplishments as Commander and thank you for your comradeship and "willing ear" as a friend. With equal sincerity we wish you the best possible success in your forthcoming job and in all future assignments.

Not a lot of information avialable yet on this unit, maybe soon we can get more of the information de-classified and posted for public reading. Until then I will keep digging. J.C.

Chapter 9

The Birth of New Equipment

March 1st, 1998, I received from a Mr. George R. Lattin, a very interesting E-mail letter. Mr. Lattin had visited my site, read my story and thought I would appreciate some background information on the special equipment aboard the EC-47 I flew in Vietnam. His comments follow.

Mr. Lattin says, "He was project officer for the first Hawkeye development and initial testing while with the Commandos 62-65. He flew one of these C-47's from Hurlburt field in Florida, to South Vietnam in January 1963 via Hawaii." He further said "A note of interest, the electronics of the system in the back was first designed and some breadboard testing was done in the basement of the Pentagon, by a Ham Radio Operator by the name of Barry Goldwater."

Mr. Lattin further said, "Another interesting note, we needed Doppler Radar which was more accurate than that in the inventory at the time. Found that the 89th at Andrews, operating Air Force One had commercial Doppler that was four times more accurate. We sent in the request and believe it or not they took one off one of their airplanes."

Thanks, Mr. Lattin

Predecessor to Operation Phyllis Ann

By: Joe Martin

Here's what I've uncovered so far from USAF records:
The earliest mention I've come across of USAF ARDF activities in SEA was a project (ca. 1962) called HILO HATTIE using a C-54. A second project—perhaps the precursor to HAWKEYE — was called MONA HI. A C-97 under the name BRAVE BULL is also mentioned, but I'm not sure it was ARDF (or even SIGINT) related. I've seen virtually NOTHING on any of these, so anything is news (at least to me!)

HAWKEYE was the prototype C-47 ARDF project. Aircraft 45-00925 was fitted with a "breadboard" system and was deployed to VN between Feb. and July 1964. Evidently results were not entirely satisfactory and the bird was returned to CONUS for further modification. A second round of tests began on 31 OCT. 65. This time results were VERY good and 925 stayed in VN until it was returned to CONUS in Aug. 66 for upgrade to "production" standard ARDF gear. Aircraft 925 was still going strong when I left in Dec. 71, and one source lists it as eventually being turned over the VNAF.

DRILL PRESS was the name of a "collection only" project involving 43-16254 and 45-00919. Apparently, these aircraft were deployed to VN separately from the PHYLLIS ANN birds. A message of commendation went out to the Army and USAF people who "on short notice, planned and executed a Drill Press mission on the night of 2 September [66] in response to NATIONAL LEVEL [my emphasis] requirements.

Differences in the EC-47N, P and Q Models.

This is part of a letter I sent to Fred Lewis and Bob Wilhelm.

What I would like to know, if you remember and can freely give out the information, is the differences in the 3 different series of the EC-47's. I know they made a lot of changes in the 7 years they were in operation after my tour.

Fred, do you remember which ones had which engines, I know some had the R-2000's installed and heard some even had the R-2800's, this is the sort of basic aircraft differences I do not know. And Bob, you may not be able to divulge your changes but what ever you can supply, I would like to add a page giving the differences for those like myself. anything you can supply will be appreciated. Thanks, J.C.

From: Robert Wilhelm
The information I can give is probably pretty basic because, being an analyst and therefore not using a console or any similar electronic equipment, I didn't know

much about the technical aspects of the aircraft systems. But here is what I remember. The EC-47N was the most basic system. It had the rod-type DF antennas (a set in the nose and a set on each wing). Inside were three consoles. One for the navigator (on the port side just ahead of the troop door), one for the X operator (immediately in front of the Nav), and one for the Y operator (on the starboard side, across from the X). As you probably know, the X console was tied into the Nav console so that targets X was working could be DFed by the Nav. The Y console was basically the same as the X except he wasn't tied into the Nav. Incidentally, I was interested to see the photos you had of the inner workings of your goons. It looked like the Nav didn't have a table or console. Was that the case?

The EC-47P had the same DF setup as the N only there was the Z1 and Z2 positions. Both were on the starboard side, Z1 in front of Y and Z2 behind Y. Whereas X and Y were primarily concerned with Morse signals (AFSC's of these men were 292, I believe), Z1 and Z2 were looking for voice targets (AFSC of 203). Analysts (202's), when they were carried, sat in the old Navigator position in the forward part of the aircraft behind the pilot. Before take off we often sat in the jump seat behind the Nav to keep the troop door open and provide some relief from the heat. Just before we pulled onto the runway, the 202 would close the door and go forward to his position.

The EC-47Q was an updated, more computerized version of the P. Its DF antennas were blade type antennas. They were still in three sets: One set on each wing and a set on the rear fuselage aft of the troop door. You can see them on one of the photos I sent.

Hope this is the type of information you were looking for. Let me know if I need to clarify anything. None of this is still classified that I am aware of.

Bob

A note on the Navigators position.

This is a reply to the question of the Navigators work table. During my tour, the Navigators equipment, for the most part was mounted on the left side at about eye level. He did have a table to work at, mounted just below this equipment. He could either work standing up or seated on a tall stool, similar to a bar stool. The drift meter was just forward of the work table as can be seen in a couple of the interior photos. J.C. Wheeler

From: George B. Montague

When I was flying as a backender from 67 through 70 we only refereed to the birds other the basic (X and Y) as "Z" which had the two extra positions for

collection. This is the bird which the analyst's flew on. The other bird was refereed to as the "Q", which also had the extra two positions for collection but they also had the added jamming equipment. Analyst would also fly on this bird along with two extra radio operators. In the three years I was with the 6994th, we never were tasked with using the jamming equipment. The story I heard when I first arrived at TSN was that the only time the jammer was activated it jammed just about all the whole radio spectrum in IV corps, and if we could not use our radios, we were at a major disadvantage. I think that equipment was upgraded after I left so I am not familiar with any of the later configurations.

From: Stan Poyas

The EC-47N and P models flew with the Pratt&Whitney R-1830 engines and the EC-47Q flew with the larger Pratt&Whitney R-2000 engines, (these are the engines normally found on the C-54, a 4 engine aircraft if my memory serves me right). Also, the Q model flew with the AN/ALR-38 systems whereas the N and P models had the AN/ALR-34 and AN/ALR-35 systems.

From: Joe Martin
An in-depth report on EC-47 Model Differences.

Herewith details (as far as I can determine) on EC-47 models used for ARDF:

The Airborne Radio Direction Finding (ARDF) EC-47s were originally designated RC-47. Model designations were EC-47N, P and Q. It should be noted that at least a few non-ARDF aircraft were also designated "EC". This listing covers only the ARDF versions.

EC-47N — Originally built as C-47A, built in both Douglas Long Beach (2,832) and Oklahoma City (2,300) plants.

EC-47P — Originally built as C-47B, all but 300 (of 3000+) built at Oklahoma City. The "B" model had R-1830-90C engines and two-stage blowers designed for the high altitude "hump" runs the CBI. The engine evidently was not a great performer, and after the war the blowers were removed from most B's which were then redesignated D's.

Without knowing the aircraft S/N, it would probably be impossible to tell the difference between models, although most photos of original B models show the long filter housing fairing aft of the engine, but some A models were also equipped this way.

The EC-47N/P were equipped with either the AN/ALR-34 (formerly designated ARD-18) or -35 ARDF system developed by Sanders Associates of Nashua, NH, (now part of Lockheed Martin.) The "X" (ARDF) radio operator and the navigator station were on the left (cargo door) side of the cabin. The "Y" operator sat across the aisle from X and the navigator and was responsible for the "documentation" of mission results and usually for passing target information to the army Direct Support Unit (DSU) on the ground. The -35 system featured some computer-enhanced plotting ability. The "Electric Goons" had a leaflet chute installed in the rearmost window on the right hand side. Early in the program, "psy war" leaflets were dropped to disguise the mission, but the practice was eventually stopped.

Some 30 EC-47s were modified into "Z" configuration by adding a pair of collection-only stations on the right-hand side of the cabin aisle. Typically, the Z1 position (forward of Y) was manned by a linguist (AFSC 203XX), with the aft (Z2) position being devoted to Morse intercept operations (AFSC 292X1). Intelligence analysts (AFSC 202XX) were sometimes carried as well.

Six EC-47N/P aircraft were equipped with the QRC-346 jamming system and were distinguishable externally by the "banjo" array of 6 long-wire antennas atop the fuselage. The standard EC-47s had only 2 wires. Most if not all of these aircraft were assigned to the 360th TEWS at TSN during the 1970-71 time frame, but were never used in their intended role, serving instead as standard ARDF/collection birds. (Note: These "Q" system aircraft should not be confused with the EC-47Q described below.) A total of 53 aircraft were converted to EC-47N/P models.

A total of 16 (11 + 5 later) Gooney Birds were modified as EC-47Q models. These were re-engined with R-2000-4 power plants (as in the C-54) and AN/ALR-38 systems which had VHF capability. The Q models can be distinguished from the N/P models by the many blade-like antennas on the aircraft. (As far as the writer knows, these aircraft were operated exclusively by the 362nd TEWS operating out of Pleiku and later Da Nang. They presumably covered areas around the DMZ and along the Ho Chi Minh trail where VHF voice targets could be profitably worked.)

The EC-47s were painted in standard USAF two-tone green over tan SEA camouflage with one notable exception: the under surfaces were a semi-gloss white rather than the usual pale cream/gray. TEWS squadron codes and "last 3" serial numbers were also in white. Codes were AJ for the 360th, AL for the 361st, and AN for the 362nd. Photos show that these codes were removed sometime after 1972. Individual aircraft sometimes carried "nose art" up to early 1970 at which time (in the 360th at least) it was over painted. Several examples

can be seen in photos on this and other web sites. The 360th was also unique in that it operated with the paratroop door removed in an attempt to provide some relief from the extremely hot conditions on the ramp at TSN. (A strap web was fastened across the "hole" once the aircraft was boarded.)

The last USAF EC-47 mission was flown from Ubon RTAFB ca. June, 1974. (See photos of this event by Stan Poyas elsewhere.) However, 30 or so EC-47s (all believed to have the older -34 systems) were supplied to the VNAF in 1972-73. The VNAF 718th Recon Sqn (TEWS) mounted 12 EC-47 missions a day from TSN (plus detachments to Da Nang) until the fall of South Vietnam in May, 1975. At that time, at least some of the NVAF "Electric Goons" escaped to Thailand.

[Source for original C-47 differences: Peter M. Bowers, "The DC-3 — Fifty Years of Legendary Flight".]
[Source for EC-47 designations: Robert W. Barnwell, "EC-47 Aircraft, 1962-1970 — A Summary of Modifications" (WRAMA Historical Study No. 24, July 1971) in the AFHRA archives.]
[VNAF info: Mr. Pham Tan Chon, former VNAF navigator, 718th TEWS.]

Joe Martin
6994th SCTY SQN, 1970-71

EC-47 Goon sparks memories for airborne mission veterans

by Airman Jennifer Gregoire

AIA/PA Kelly Air Force Base, Texas

This article also appeared in The Observer under the title of "USAF 'Antique Airlines' relies on sturdy C-47s".

Two veterans remember flying Airborne Radio Direction Finding missions aboard EC-47s over Southeast Asia during the Vietnam War.

Retired Chief Master Sgt. Tye Cobb, a personnel security specialist at headquarters Air Intelligence Agency, flew 120 combat missions out of Pleiku Air Base in 1967-68 and retired Tech. Sgt. Ross Day, editor of the Kelly Air

Force Base Observer and former editor of the Spokesman, flew 159 missions out of Tan Son Nhut Air Base 1970-71.I don't know what I really expected. It was different than anything I ever did during my career. I think going through survival training with the six airmen who were assigned to me when we got to Vietnam made it easier for us. Being together before we went made it easier on all of us. Those were the six best airmen I worked with during my 20-year Air Force career, said Cobb.

When we got there, the unit (Detachment 2, 6994th Security Squadron) was short of personnel. The day after we arrived, we were flying missions every other day. I volunteered my airmen. We knew what had to be done, said Cobb.

We were shot at everyday and would pick up shrapnel holes in the airplane. The first few missions you were worried and wondered if you would make it back alive. Tye Cobb, Personnel Security Specialist. I was fortunate I got to fly the EC-47, they re a grand aircraft. I really did fall in love with that airplane. The first goon I got on was Sept. 16,1970 in Vietnam, tail number 814. On the bulkhead, behind the navigator's compartment was brass plaque noting that this aircraft flew 300 missions over the (India and China) during World War II. We were using some very old airplanes. Most of them were sold to foreign governments that were bought back and converted EC-47s, said Day.

We were shot at everyday and would pick up shrapnel holes in the airplane. The first few missions you were worried and wondered if you would make it back alive. The next four or five missions you were so busy from the time you took off till the time you came back, it didn't bother you. We were never hit bad enough that we had to turn back to the base said Cobb.

The navigators and pilots we had were trained to maneuver around the ground fire. If something went wrong with the plane's engines, we would turn around and hop back on another plane, but we would never abort a mission. When we called in a sighted target to the fighters, I sat and looked out the window and watched them hit targets; or in a night mission I would watch B-52s knocking out the target with 750-pound bombs. It was then you knew you were in a war, said Cobb.

I don't think anyone dwelled on the fact that we were flying combat. Because we were flying airplanes much older than ourselves as air warriors. I wasn't shooting a gun or dropping a bomb. I never really felt that I was a combatant because I wasn't, said Day.

The reality of the situation came to me one day when a flight of A-37 aircraft came to the target we had called in. The lead aircraft expanded his bombs, came into strafe ahead, got his target fixation and followed his traced into the target.

That was the first time I realized that what I did had the opportunity to cause death, not only to the enemy, but to fellow airmen as well, said Day.

Those of us who became airborne mission supervisors had pretty much control of the mission. Our word was law, and in an emergency situation it had to be that way. I brought it home with me, that need for control, and it took a long time for it to go away, said Day.

Vietnam made me grow up, even though I was a 30-year-old technical sergeant. It made me more mature and helped me in my Air Force career down the road, said Cobb.

There was never a morale problem in Cobb's detachment because of their mascot. We had an ugly, ugly dog who used to fly missions with us. In the plane, he had his own chair and we used to put a seat belt on him. He was a good dog and always knew when it was time to eat. The dining hall was five miles away from where we lived. He knew the chow hall hours because the bus would make runs back and forth. The front seat on the bus was always reserved for him.

Surprisingly, the living conditions were good. We had a two-story, open bay dorm. People came in who cleaned the dorms, did our laundry and shined our shoes. We were also the only base in Vietnam that had a swimming pool. We had an NCO Club that the officers and NCOs shared, and there was an Airmen's Club. I worked there part-time as a bartender, said Cobb.

We played a lot of volleyball and softball, rain or shine. The only bad thing was the monsoons that put water knee-deep on the volleyball court. We tried anyway, said Cobb. Looking back, it was a rewarding tour. Everyone that was there knew their duty and what needed to be done. They never asked themselves why they were there; no one ever complained, said Cobb. Everyone in the detachment were close friends, even the commander, the first sergeant and the people that flew and maintained our airplanes.

The most hated of the airplanes was the tail niner. Next to the runway was a ditch 20 feet wide and ten feet deep. On the other side of the ditch were the revetments. The tail niner got out of control, took the wing tip off a C-130 that was near the runway and headed for the revetments. It stopped dead in the ditch. When the ramp of the tail niner opened up, it looked like ants pouring out of the plane.

I don't think it ever flew a whole mission, there was always something wrong and it had to turn back. That night we had a big celebration; nobody was hurt and we thought we had gotten rid of it. Four to five months it was parked, then they fixed the airplane and it went back into service. It still leaked oil like a sieve and pulled the same tricks it pulled before. You can't kill the bad ones, said Day.

The EC-47 on display at Air Intelligence Agency's Memorial Park brings memories to these two men. Every time I look at the EC-47 in the parking lot, it reminds me of Vietnam. It was our airplane, said Cobb.

I cannot ride by that airplane without recalling my year in the program. I'm glad the speed limit is only 20 miles an hour. When they first brought the airplane to Kelly for restoration it was in bad shape, said Day.

They called me up and said, We got a goon!' As ugly and beat up as she was, I touched her propeller and tears came to my eyes. Ya gotta love her.

EC-47 Memorial Aircraft Security Hill, San Antonio, Texes
Photo courtesy: Steve Wojtkiewiez

Another view of the EC-47 Memorial on Security Hill, San Antonio, Texas. Note the number 201, the number of the first EC-47 Shot Down, March 9, 1967. This Photo coutresy: Kenneth Cates

Chapter 10

A Little about the Mission

April and December, 1966. After being recommended to the Joint Chiefs of Staff in February, 1966, General John P. McConnell, then Air Force Chief of Staff, gave full support to a "crash program" to prepare and deploy 35 of the C-47 aircraft under the nickname "PHYLLIS ANN". These aircraft (designated as RC-47's, were to be deployed to the Republic of Vietnam between

Discussion between the Chief's of Staff of the Army and Air Force in April of 1966, of the Airborne Radio Direction Finding program led to an increase in the required number of PHYLLIS ANN aircraft from 35 to 47. This number would again be increased.

The aircraft were to undergo extensive inspections and repairs and factory modifications with addition of the mission specialized equipment in the continental U.S.

In the meantime the crews to fly these aircraft were to be formed and then trained on the basic C-47 equipment. This proved no big problem for the first few groups of crews as they were generally made up of people who were either currently or previously qualified on the C-47. I feel fortunate in being among the first chosen for the assignment as it put me on a crew with very well qualified pilots. Folks who had more experience on the aircraft than I.

Taken from official Air Force reports . ' The high experience level and maturity of the crew members undoubtedly helped to surmount problems implicit in such an operation. The initial complement of crew members in the 360th TEWS was 80 percent field grade officers drawn from a variety of Air Force assignments. These included command of SAC (Strategic Air Command) units and aircraft, supervisory roles in research and development activities, and staff positions in the Pentagon.

Their average age was 40, and the educational backgrounds of the initial assignees included on law degree, 18 master degrees, and 36 bachelor degrees.

This maturity and experience level has continued in all three TEWS. By the close of this reporting period, June 1968. there were 4 PhD's, 43 master degree holders, and 171 officers with at least a bachelor's degree participating throughout the three TEWS.

More than 50 percent of the assigned crew members were in the field grade, the majority of whom were lieutenant colonels and colonels. Recently, however, a large number of pilot training graduates have begun to come into each of the TEWS. These lieutenants had won their wings almost entirely in jet trainers. Adjusting well to the EC-47, they log up to 1,000 combat hours in one year.

The impact of the overall maturity and experience level may be seen in the safety record of the EC-47 operation. For the two-year period, May 1966 to June 1968, the EC-47 crews flew 109,339 hours without an accident (excluding two combat losses).'

The mission of the EC-47 remained cloaked in secrecy for many years and only recently was much of the information declassified. The data is still hard to get from some sources but is becoming a little bit more available.

Every flight crew member on the EC-47 Mission aircraft were required to have a minimum of Top Secret Security Clearance. And because each navigator must work very closely with the "Back End" Security Service personnel, he, as they, must have a Special Security Investigations Required (SSIR) clearance. All maintenance personnel were required to have a minimum of Secret Clearance. And on the earlier missions, the navigator was normally the only member of the aircraft flight crew to be privileged with at least the majority of the mission details.

This I think proved to be an unwarranted safeguard as the size of the aircraft interior and the need for all crew members to traverse back and forth through the special operators work area it could not help but be cognizant to some degree of the sensitive aspects of the mission. Recognizing this, and aware that full crew integrity would be beneficial to over-all mission accomplishment, the 460th DCOE forwarded a letter to the 7AF Air Force Special Security Office (AFSSO) requesting that all crew members be granted SSIR clearance, in addition to their already-required Top Secret clearance. Once this was accomplished, the front end and back end personnel should be able to work together as a more effective team. By AFSSO USAF message, dated 031834Z August 1970, authority to clear and indoctrinate front end crews was granted.

In the earlier days of the EC-47 operations, my time, the mission was a little simpler than in the years to come. The primary objective was to provide day and night, all weather ARDF (Airborne Radio Direction Finding) operations against low-powered enemy operated transmitters in the Republic of Vietnam, and other permissive areas of Southeast Asia in support of established requirements.

This did not mean that was all that was accomplished on the mission. Normally there would be Communications Intelligence gathered in conjunction with the ARDF mission requirements.

The target information was relayed to the appropriate authority for action as required. Some times this meant little or no immediate action but on other instances, the action taken was almost immediately. The action could vary greatly according to the situation and the particular target and its location. Naturally you are not going to call in artillery or air strikes on a target that is clearly in populated area. At other times and situations, immediate action can be called to include either of both, artillery fire, airstrips and or B-52 drops. This is not done by the crews of the EC-47 but by appropriate authority on the ground or in the field.

The earlier aircraft had what would later become to be known as minimum equipment as is indicated in figure 1. (The equipment was actually larger than is depicted in the figures on equipment layout indicate).

There would over time, be added enough addition equipment, that larger engines would have to be installed in an attempt to have acceptable minimum single engine performance.

The Figure on the next page was taken from official de-classified Micro-film records from the Archives in Montgomery Alabama.

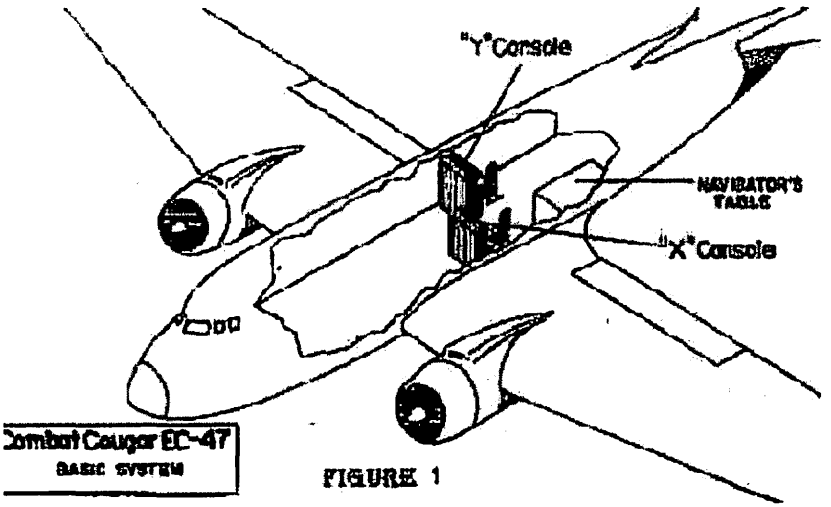


FIGURE 1

The ARDF program demonstrated without equivocation the capability to provide rapid determination of enemy locations and movement which is of paramount intelligence importance.

The number of aircraft involved in the operation kept on the increase as did the mission requirements. The aircraft would go through several major modifications. One of the major aircraft modifications would be the installation of larger and more powerful engines, the R-2000, the same engines as was used to power the larger four engine aircraft, the C-54 and know in the commercial world as the DC-4.

The larger engines were required to provide better single engine performance with the ever increasing weight of the aircraft and equipment, which would reach the maximum allowable of 27,700 pounds. The single engine performance, should an aircraft lose and engine on or just after takeoff, with these heavy weights was not what was considered satisfactory and marginal at the very best.

Some of the later added equipment can be seen in figure 2. (Again as in figure 1, the equipment was larger than indicated here. This can be seen later in the actual photos of the interior of the aircraft.)

The Figure on the next page was also taken from official de-classified Micro-film records from the Archives in Montgomery Alabama.

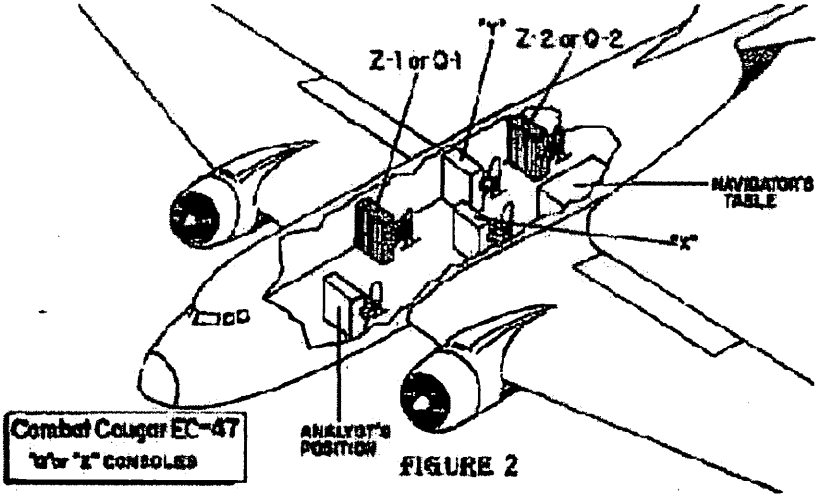


FIGURE 2

By using the larger engines, this problem was improved if not solved, but in so doing, created another problem not so easily solved. By using the larger engines the power needed was now available, but at a cost of greater fuel consumption.

With the increased fuel consumption the mission flying time had to be reduced by some ninety minutes or an additional stop for refueling had to be made. With the number of missions outside the useful range of friendly airfields that could be used for refueling, this meant extended crew duty and flying time.

By burning crew duty and flying time getting to and from refueling points and assigned mission flying areas this would cut down on the number of missions the crews would be able to fly in a given month.

The problem was so critical that it eventually lead to the position of Flight Mechanic or Flight Engineer as some call it, being eliminated. This was the position I held during my tour with the operation. By eliminating this position, the aircraft could carry an additional 200 pounds of fuel which when calculated out meant approximately another 34 gallons. That was not much but did provide another 20 minutes or so of flying time.

It is my personal opinion, if the full truth ever be known, that the elimination of this position was a contributing factor in the loss of at least two of the aircraft during emergency situations.

While true, during normal routine flight, the flight mechanic was free to roam the aircraft, all the while being observant of what was going on with the crew and

the aircraft and its systems. When an emergency arose, especially in the cockpit, the flight mechanic was there with a third set of eyes and ears.

A major portion of the job of the flight mechanic during such emergencies was to make sure that procedures and corrective actions were properly taken. While one of the pilots maintains control of the aircraft, the other normally performs the corrective actions. With the eyes of the flight mechanic to back him up, there is less chance for errors to be made.

A good example of this is the loss of an engine and in the excitement of the emergency, and believe me there can under some circumstances, especially flying under combat conditions over enemy held territory, there is normally a little excitement, the wrong engine or I should say the wrong propeller is feathered. When this happens you will normally go from having 2 engine power to having NO engine power.

This did happen on at least 2 occasions and is understandable to some extent. It may or may not have played a significant role in the emergency but the extra set of eyes would have definitely been an asset in these situations.

It seems hard to imagine that an aircraft that has hauled so may troops, paratroopers and cargo could now be given a mission that required so much additional equipment and crew that it could be overloaded without having a full load of fuel an NO Cargo.

The additional equipment, while adding greatly to the overall weight of the aircraft, did not itself overload the aircraft. Some of the weight was due to the additional crew members required to operate this added equipment. Some mission requirements called for a crew size of 10 men. When computing weight and balance, each crew member is computed as 200 pounds, for him and his equipment. Thus a crew of 10 added 2,000 pounds or about 7 ° percent of total weight.

In the beginning nearly all missions were fragged out for a full 7 hours. This was no problem then when weight was not a significant factor. The aircraft could carry a total of 804 gallons of fuel. This was not all usable and of course you had to have a little safety margin, often called "get home to mama fuel". The aircraft would burn, I found, a little less than 100 gallons per hour, but if I recall correctly we had to use a figure of 100 gallons. Of course a little more would be used on takeoff and climb out, but 100 gallons was a good number.

Also, in the beginning, the normal crew size was only six or seven crew members. These being, Pilot, Copilot, Navigator, Flight Mechanic, and two or three Operators for the special equipment.

I know on our ferry flight bringing an aircraft to South Vietnam in August 1966, our longest flight was 10 hours and 5 minutes. Just knock of the odd five minutes and call it 10 hours. When we landed, I serviced the aircraft and it only took 840 gallons to fill it to capacity. I know I just stated in the paragraph above that it only held 804 gallons, so how did I get it to take 840? If you recall earlier, as I described our trip over, I wrote that we had two (2) additional fuel tanks strapped down in the cargo compartment floor, each of which held an additional 250 gallons.

Organizational Framework

As the RC-47 fleet was being readied in the U.S., an Air Force ARDF organization was emerging in the Republic of Vietnam. The Air Force concept of the ARDF mission required separate agencies to operate the aircraft and its special equipment.

Headquarters Pacific Air Force, through 7th Air Force, progressively established three Reconnaissance Squadrons for the "front end" crews and placed them under the 460th Tactical Reconnaissance Wing at Tan Son Nhut Air Base, Saigon.

The 360th Reconnaissance Squadron began operations at Tan Son Nhut on 8 April 1966. As additional aircraft and crews arrived, other organizations were established, first as detachments and then as squadrons, first at Nha Trang and then at Pleiku Air Bases.

The 361st Reconnaissance Squadron came into being at Nha Trang on 1 October, 1966. The 362nd Reconnaissance Squadron, at Pleiku, followed on 1 February 1967. Two months later, on the 15th of March 1967, all three squadrons were more precisely retitled Tactical Electronic Warfare Squadrons (TEWS). Their RC-47 aircraft became EC-47 aircraft in May of that year.

In the meantime, Headquarters U.S. Air Force Security Service organized three units for ARDF equipment and special intelligence personnel, to be collocated with the TEWS. The 6994th Security Squadron at Tan Son Nhut, Detachment 1 of that squadron at Nha Trang, and Detachment 2 at Pleiku.

Chapter 11

USAF ARDF Equipment

The following data extracted from declassified U.S. Air Force Micro-Film records. Note: This is in reference to the earlier versions of the EC-47, the more basic of the aircraft.

With the exception of an antenna on each wing and the nose, the EC-47 aircraft is to all external appearances, a standard C-47. (This of course is referring to the earliest versions as the later versions and many times 3 antennas on it, somewhere in the neighborhood of 16-20). Several items of internal equipment, which are central to the effective accomplishment of the mission, make the aircraft system unique.

The "Back End" crew, the crew of operators is made up of specialist from the 6994th Security Squadron and its detachments, operate the equipment in the back end of the aircraft, with the exception of the navigator, who is considered to be part of the "Front End" crew although his workstation is in the back end of the aircraft as he is working in conjunction with the "Back Enders".

AN/ALR-34 ARDF:

An electronic Airborne Radio Direction Finding unit (known as the "X" console) employees a "phase measurement" technique to determine the relative bearing of a signal to the EC-47 aircraft (i.e. the angle formed by the direction of the radio signal and the aircraft heading). The AN/ALR-34 establishes the direction of the enemy signal, as a result of computing through a complex process, the time of arrival of the target signal at the three antennas on the aircraft wings and nose.

The ALR-35

Improvements to the ALR-34 capability began in 1968 with the installation of the ALR-35 in some EC-47s. This system coupled the basic ALR-34 with the Nortonics 1060 airborne data processor. It was designed to improve both quality and quantity of fixes and to provide for more rapid acquisition of fix positions. The interface of the two systems did not change the frequency spectrum, bearing accuracy, or input from the antennas, since the ALR-34 continued to be heart of the ARDF portion. The output from the Franklin Data Printer, however, was considerably different, since the automated portion performed many functions previously done manually by the navigator.

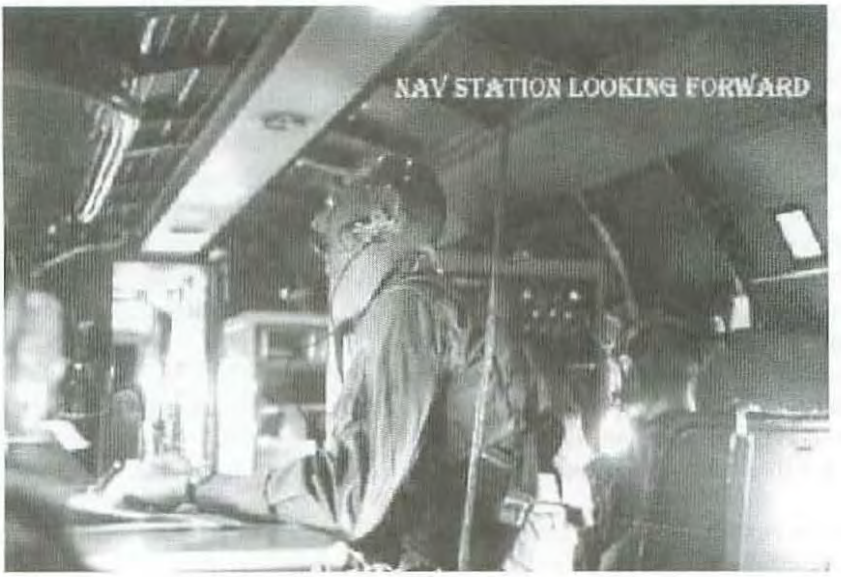
The 1060 processor compensated for induced airframe errors, converted the target magnetic bearings to true bearings, calculated the target location relative to the Doppler set point, and determined the circular error of the fix. It provided instantaneous readout of relative bearing to the target after one LOP was taken, continually updated range and bearing to target after two LOPs intersected, and computed the radius of the fix after three LOPs were taken. In addition, it simultaneously displayed relative bearing and range with each succeeding LOP. It was obvious that the ALR-35 gave the navigator additional time to position the aircraft more accurately for optimum data information. Photo on page 70 shows the ALR-35 control panel and keyboard (they were actually side by side on the console) by which the navigator controlled the equipment.

As of the summer of 1970, 14 ALR-35s had been installed in EC-47N/P/Q TEWS aircraft, but concurrently, a new system was being "married" to ALR-35 which would greatly increase its capabilities.

The ALR-35/38

On 12 and 13 March 1968 representatives from Hq USAF, Hq TAC, Hq AFSC, Hq USAFSS, WRAMA and Sanders Associates, the ALR-35 developers and contractor, met to discuss the addition of a VHF ARDF capability to the ALR-35. Initial discussions centered around a 25 to 75 MHz capability, but, as the meeting progressed, it became apparent that the equipment had an inherent capability to operate over a much wider frequency range than previously envisioned. Preliminary information indicated that this expanded VHF ARDF capability (16 to 150 mhz) could be acquired at little additional cost and with only a very slight delay in delivery.
Subsequent to the meeting it was determined that the modified ALR-35 could be made responsive to Steel Tiger VHF ARDF requirements if the upper frequency limit of the modification were 180 MHz rather than the 150mhz discussed earlier. From these discussions came the ALR-35/38.

These next two photos, on the next page will show just how much equipment was installed on the later EC-47 aircraft and how close the entire air crew had to work with the "Specialist" of the back end crews. Photos: Courtesy Doug Campbell



The first intimation of the proposed deployment came in September 1968 when CINCPACAF and Seventh Air Force were notified that the Air Staff was establishing an interim "Mini-Mod" program for Sentinel Eagle aircraft to be known as the "Mini-38" system. This action was taken to provide an immediate VHF DF capability in the two to 50 MHz spectrum, pending development of the

full. or "Maxi-38." system. The message notifying Seventh Air Force of the proposed action said in

First of three Mini-38s (installed in EC-47Q aircraft) will be available for deployment approximately 15 Nov. 68; other two available approx. 4 to 5 weeks later. Remaining Sentinel Eagle aircraft will be upgraded on present schedule which provides ten VHF DF aircraft in SEA approx. 4th qtr FY 69. Basic mod of seven aircraft and upgrading of three Mini-Mod will be done in field.

The intent of the proposal was good, but the number of actually possessed aircraft was reduced by the loss of four EC-47Q model aircraft out of Pleiku. In August 1970, the 362nd TEWS/Det 2, 6994th Security Squadron, had five EC-47Qs configured with the ALR-38 equipment, covering the frequency spectrum from twoto 190 mhz.

A target-acquisition position (the "Y" console):
This console permits its operator, as the title implies, to search various frequencies for an enemy signal. The "Y" console could monitor input AM, CW an SSB over a frequency range of 0.2 to 30 MHz. Position also contained ciphered transmission control, and on those aircraft configured for communications disruption could control two jamming channels.

The "Z" CONSOLES

The CCZ EC-47s were also configured for installation of two additional communications data collection stations. These were known as Z1 and Z2, Z1 being located forward of the "Y" console and Z2 located aft. The Z1 housed two receivers — either two HF receivers, or one HF and one VHF receiver. The Z2 console housed two HF receivers. Both consoles contained magnetic tape recorders for recording communications data from the receiver outputs. The "Y" console also housed a recorder which permitted the output of either or both receivers to be taped while the operator was engaged in analysis of another signal.

It was apparent that, with two receivers in each of the "Z" consoles, two in the "Y" console, and one in the ALR 34/35/38, in addition to three recorders, each CCZ aircraft was capable of collecting a great deal of communications data simultaneously.

KY-8 RADIO: Permits secure communications between the "back end" crew and ground contacts (located near the "Y" console in figure 1).

Seventeen of the forty-seven EC-47 aircraft assigned to the TEWS have additional special equipment. Twelve aircraft have two additional search/acquisition "Z" positions. and five other aircraft have two additional acquisition and jamming "Q" positions. (Figure 2).

Secure air-to-ground communications data exchange was made possible with the installation of the additional UHF and VHF transceivers in the back without disruption of routine aircraft communications from the cockpit. Secure speech through either of these was made possible by the addition of the KY-8 scrambler. a speech security device which operated in various radio systems to permit secure transmissions of classified or sensitive information over open channels. It was used for real-time dissemination of fixes or communications data to Direct Support Units. and other intelligence or operational agencies.

The navigator uses several distinctive items of equipment as well:

Bendix Doppler Computer CPA-24 (AN/APN-179): Enables him to fix his aircraft's position within a tolerance of .06 percent of the distance traveled and 1-7 percent of cross track distance. At 120 knots. this means that the maximum allowable error is 1.8 nautical miles per hour. To insure the accuracy of the computer. the navigator must check the position shown by the Doppler against a known position at frequent intervals.

With this technique. he can predict the accumulation of error and also establish a proportionate part of measured error. His main source for checking the Doppler is the relatively old-fashioned **B-3 drift meter**. through which he can direct the EC-47 over a known position.

Note: This is commonly known as a Doppler Set. It would become a very crucial procedure as the enemy soon learned that the aircraft would shortly be returning over the same point only going in the opposite direction. This was necessary to insure that the set had been properly made. Another point I will insert here. the lower in altitude you were when you made your Doppler Set. the more accurate the set.
Once the enemy learned that we were using the well known and mapped landmarks. it was easy for him to set up a big gun and wait. thus altitudes had to be adjusted.

C-12 Compass System: One of the most advanced compass systems available. which gives an instant readout of aircraft heading within a tenth of a degree. It is accurate within 0.25 degrees root-mean-square (RMS) at mid-latitudes and 500 knots (a far greater speed than the EC-47 can attain.)

This photo is of the very early navigator's position, 1966/67. The gentleman seated and diligently plotting a fix in this photo is Captain Robert M. Harris, my navigator. Of course, I may be a little partial, but I think he was at the very top of his profession. The black unit in the lower right corner is the Drift meter, used for setting the Doppler.

My Navigator, Captain Robert M. Harris (1966/67)

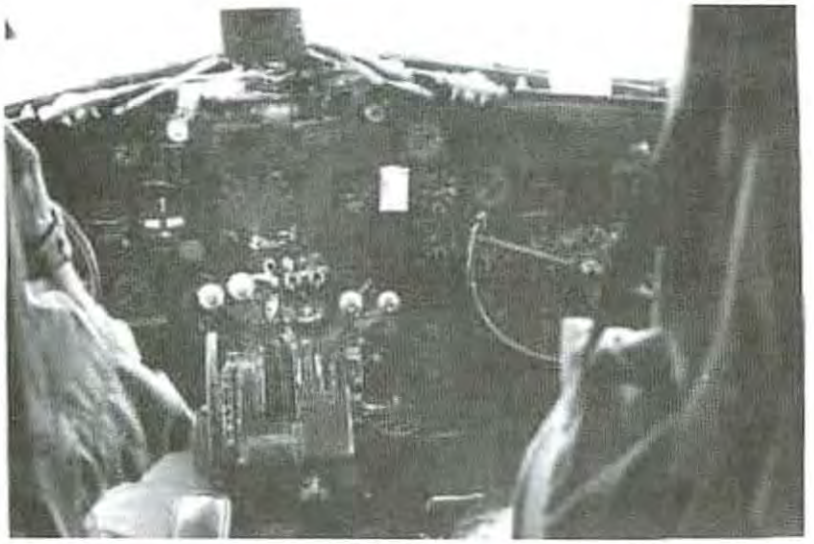
The C-12 compass system provided an accurate heading reference to the Doppler radar system, the ALR-34/35/38, and remote indicator on the aircraft. Useful at any latitude, the system used the gyro mode at higher latitudes and the magnetic mode at lower latitudes; in SEA, therefore, it was used only in the magnetic mode. The induction compass transmitter (flux valve, or flux gate) located in the right wing of the aircraft, electrically detected the horizontal component of the earth's magnetic field to provide the basic magnetic signal to the system. The directional gyroscope provided the basic heading stabilization for the C-12 system. With the system in magnetic mode, if the system heading did not agree with that of the induction compass, a heading error signal was developed. Applied to a slaving power amplifier, it produced an output to drive the gimbals of the directional gyro until the error signal went to zero. With other possible errors compensated internally, the C-12 was accurate at mid-latatudes to within 0.25 degrees at speeds up to 500 knots.

This photo below is how the navigators position appeared in the later days, 1973 to be exact, after many modifications and updates to the aircraft and its systems.

Photo courtesy David Steiner

A Bendix Weather Radar, AN/APS-113: Was one nonstandard piece of equipment the pilots had mounted on their instrument panels. The black radome on the nose of the EC-47 was a distinguishing mark from other versions of the C-47.

This is the radar I spoke of earlier in our ferry flight over in September, 1966. We were fortunate in that we did not have to use it for its primary intended puropose of detecting weather. We made our crossing in late summertime, and had no delays or problems with the weather of any kind. Quite unlike some of the other folks that took a month to make the crossing due to unfavorable wind or weather. Worked great first spotting the small island destinations and each time right down the middle or the screen. Photo on next page.



Radar screen appears just above the throttle quadrant in this photo , provided by Bob Looney.

USAF ARDF Equipment: Operation

For the purpose here, it should be pointed out that two problems are involved in locating an enemy transmitter. The position of the aircraft must be known precisely, and at least two relative bearings taken on the transmitter.

Once the AN/ALR-34 has "locked on" to a target, its relative bearing, the Doppler data on the position of the aircraft, and the C-12 Compass heading are integrated and displayed on demand by the navigator on a paper tape. This process can take place less than one second after a lock-on to a target. The navigator must then make several computations before plotting a line of position (LOP).

This entire procedure is repeated for at least one more bearing, and ideally, several widely spread bearings, to get the best fix. While a target can be fixed on a single aircraft heading, the navigator usually directs a heading change either to secure better bearings on the target or to stay close to it.

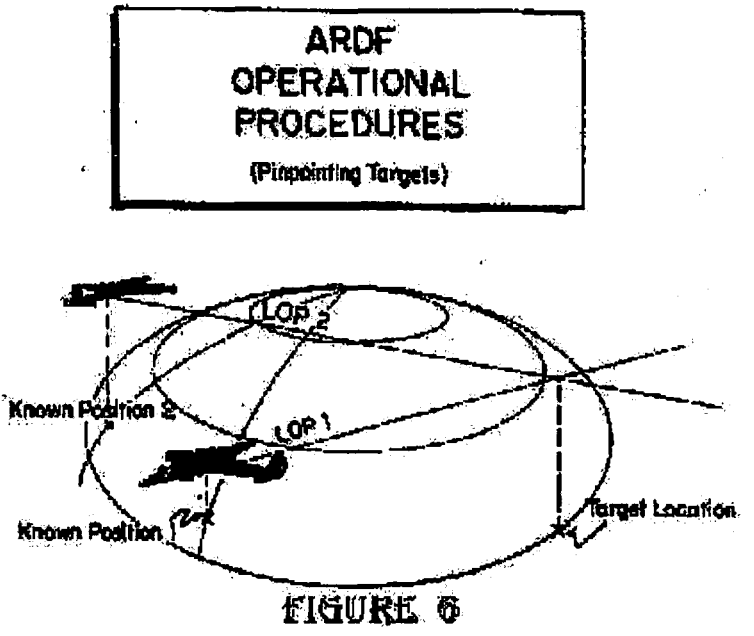


FIGURE 6

This Figure taken from official de-classified Micro-film records from the Archives in Montgomery Alabama.

A proficient navigator can compute his data, plot between six and twelve LOPs, fix a target, and pass his information for the KY-8 transmission to a Direct Support Unit in seven minutes. He uses a 1:250,000 scale chart and is capable of measuring within 1/10 degree and 1/10 mile. His judgment must come into play in deciding which lines of position form his fix.

Consideration such as terrain, weather, and an unreliable Doppler affect individual bearings. Also, the present state of his equipment makes less than a 250-meter radius fix unlikely. Indeed, up to a 10,000 meter radius fix is reportable. The fix radius is measured from the center of the fix (determined by bisecting the exterior angles) to the farthest intersection. The radius tells an evaluator that the enemy transmitter lies within a circle whose radius is the fix radius.

As indicated, the navigator passes his fix data to the special equipment operator at the "Y" console, who immediately transmits it on the KY-8 to the closest Direct Support Unit. The fix information also becomes part of a log, which the equipment operator forwards through his Security Service unit to the 509th Radio Research Group.

Chapter 12

Operating Context and Limitations

Operating Context: The Enemy

The TEWS conduct Airborne Radio Direction Finding operations over the Republic of Vietnam, Laos, and in one area six miles from the coast of North Vietnam. Only the generally permissive environment created by U.S. and allied air supremacy makes the EC-47 a suitable aircraft for the operation. The word "generally" must be used because the ground fire threat in Laos makes that area increasingly less permissive than the other two areas.

Beyond the permissive environment, three protective measures are in force for the EC-47 operation. The aircraft itself, except for the three antennas on the nose and wings, resembles the powerfully armed AC-47. Initially, the minimum operating altitude was 1,500 feet above ground level (AGL). This was raised to 2,000 feet AGL in March 1967, after nine EC-47 aircraft had received hits at the lower altitude.

Also, in high threat areas, the crews were to fly at the altitude recommended in their preflight intelligence briefing.

Finally, as a "cover" for the operation, EC-47 aircraft dropped psychological warfare leaflets, when they were available. The expenditure of leaflets was scheduled to reach 80,000,000 each quarter after 1 July, 1968. The massive transportation to move leaflets to the TEWS at Nha Trang and Pleiku appeared difficult to meet. It came to be that the aircraft of these units were flying missions with only one token box of leaflets as a cover in the event the aircraft came down in enemy-held territory. This leaflet on the next page is just a sample of one of the many leaflets that were carried aboard the EC-47.

Leaflet courtesy John Fuertinger

The first EC-47 loss, with a crew of seven, call sign Tide 86, was lost probably to ground fire in March 1967 in the Republic of Vietnam. Viet Cong troops had searched the wreckage before the U.S. Air Force ground party could reach the site. Apparently, the large number of leaflets scattered around the crash site deceived them as to the mission of the EC-47.

Enemy ground fire in Laos knocked out one engine and damaged the other on an second EC-47 on 11 March, 1968. The aircraft commander managed to steer the disabled aircraft for 60 miles to a friendly airstrip and crash-land it. His action saved the crew; the special equipment was salvaged, but the airplane had to be abandoned. The skill of the crew also saved a third EC-47 on 24 April 1968, after ground fire in Laos punched a two-foot by four-foot hole in its vertical stabilizer at the point where the vertical and horizontal elements join together, along with other damage. The crew brought the airplane to Nakhon Phanom Air Base in Thailand where it was repaired and eventually returned to service.

After a second EC-47 was hit by ground fire in Laos in April, 1968 a fourth protective measure went into effect, whereby no aircraft would operate closer than three miles ground distance to a known enemy antiaircraft position.

Another aspect of the enemy's role in determining the operating context are his countermeasures against detection by ARDF. It is uncertain as to how much the enemy knows about the EC-47 and its purpose.

Insofar as enemy communications are concerned, Security Service unit personnel know that he uses mobile transmitters (carried on various vehicles, like the sampan on the river earlier), which are extremely difficult to fix. The enemy

transmits in short bursts which reduces the chances of a "lock-on" by ARDF equipment. He changes either his frequency or power output frequently to hamper detection. By sending and receiving on the same frequency from two transmitters at different locations or by changing antennas, he might escape detection. Finally, if a U.S. or allied aircraft approached to closely to his position, he may stop transmitting.

Operating Context: Natural Phenomena:

Among natural phenomena, the weather in Southeast Asia presents obvious problems for a non-pressurized, altitude-limited aircraft such as the EC-47. The TEWS attributed to weather, either the loss of some time in the operating areas, or the loss of the mission entirely in 532 sorties out of a total of 11,632 flown during FY 1968. Thunderstorms, as well as terrain, and the coastline of Vietnam (through shoreline effect), interfere with effectiveness of the ARDF equipment. Weather also affects the Doppler navigational system, because the B-3 drift meter, by which it is normally reset, requires clear visibility.

The time of day has its effect on the Doppler system as well, because the B-3 drift meter also requires daylight. The TEWS are using other devices at night (and in weather) for resetting the Doppler. The RBS Sky spot radar device is used to obtain fixes. Also, on occasion, ceilometer lights at certain Special Forces camps are used at night to set the Doppler through the B-3 drift meter. Wiring deficiencies in the aircraft delayed the LORAN C for navigation and for setting the Doppler.

Operating Context: Man-made Limitations

The bed down problems affecting 7th AF activities in general have had their impact on the TEWS. Ideally, the squadrons at Pleiku and Nha Trang would be based further north in the Republic of Vietnam, so as to be closer to their operating areas. The 361st TEWS at Nha Trang, for example, must fly as much as an hour and fifty minutes to reach its farthest operating area near Hue, in the northern portion of the Republic of Vietnam. This handicap is diminished somewhat by conducting the search for enemy transmitters, while proceeding to and from operating areas.

Other man-made phenomena, are the artillery fire and ARC LIGHT areas (B-52 drops) of the Republic of Vietnam. They add a limitation to free operations by the EC-47 (and other) aircraft. To keep this problem to a minimum, the EC-47 navigator closely coordinates his aircraft position with the artillery fire directors and, in the case of ARC LIGHT, with ground monitors.

Equipment and Personnel Limitations

ARDF and its associated equipment are the elements in the TEWS effort, which make it a prototype operation at the end of a long supply line to the Continental U.S.. The TEWS have had a continuing supply problem with their nonstandard equipment (Doppler, C-12 Compass, and radar). The Doppler system was a completely new item in the Air Force inventory. At the outset, there were no maintenance personnel with experience in repairing the Doppler; there was no test equipment or technical data file, and few spare parts. Civilian field engineers plus a local "self-help" program was the main resource in meeting these limitations.

In any event, Aircraft Not Operationally Ready - Supply (NORS) rates for all types of equipment in the TEWS during FY 1968 exceeded the Air Force standard of five percent for six months in the separate cases of the 360th and 362nd TEWS. The 361st TEWS remained well within the Air Force Standard, allegedly because Nha Trang was "geared to a C-47 operation".

The AN/ALR-34 ARDF equipment has an inherent limitation, as it is extremely sensitive to steep turns. These turns cause errors in transmitter bearings and distort signal strength. Thus the aircraft must be level before usable data can be obtained.

The Doppler, as already indicated, is limited in usefulness unless reset periodically. Also, Doppler "dropout" may occur, causing the computer function to receive information from the Doppler memory mode. This would affect the accuracy of locating the position of the aircraft.

The general maturity and experience level of assigned personnel has been shown. However, the one year DEROS concept and other personnel actions lead to an almost complete turnover of the TEWS personnel in the period of August to March of each year.

All crew members have a definite role to play in the TEWS mission, but the navigator has an especially critical and extremely busy function. His grasp of the mission, proficiency in plotting, judging lines of position, and determining fix radii are fundamental to mission success. His plotting problem is apparent when on considers that 500 meters are only slightly more than 1/16 inch and are equal to three pencil lines on a 1:250,000 chart. The lack of standardization among the navigators in the three TEWS in determining fix radii has been a persistent problem.

It was shown that ground commander's reaction to fix reports are more prompt when fixes radii of 500 meters or less. Supervisory personnel set 250 meters as the minimum reportable fix radius because of equipment and chart limitations. The individual navigator has to judge the effect of drift meter error, Doppler errors, standoff range, altitude, weather, and terrain on the fix.

Chapter 13

A few accomplishments 1966-68

Security Restrictions

Security requirements at that time would not allow the inclusion of the full record of the accomplishments of the USAF ARDF program. Airborne Radio Direction Finding had the preponderant role in the intelligence picture used by the ground commander, but ARDF, in itself, is not the full picture.

Even the "front end" personnel in the TEWS were only generally aware of the effectiveness of their mission. Major General Gordon Blood, Deputy Chief of Staff/Operations, 7 AF, advised the TEWS parent unit, the 460th TRW, on 28 September 1967:

> "...The monthly feedback report provided by the 6994th Security Squadron, oral feedback of information obtained at weekly scheduling meetings, and congratulatory messages from MACV, although not completely satisfying, must surffice."

Reactions of Consumer:

The ground war in Vietnam was largely on of small, but bitter actions. The major contribution of ARDF had been in its assistance to the ground commander in anticipating enemy movements before such actions began. On those rare occasions when battles on a larger scale occurred, such as during the 1968 TET Offensive, ARDF played a correspondingly large role.

COMUSMACV (Commander U.S. Military Assistance Command Vietnam), had directed his ground commanders to take prompt advantage of ARDF information. There was no question that they did so, either by ground maneuver, artillery fire, tactical air, or ARC LIGHT strikes. At the very least, they used fix information as part of their overall intelligence picture to plan future operations.

One Army source advised the TEWS in March 1967, that in reacting to a fix passed to a ground force by the DSU (Direct Support Unit), the ground commander operated with definite criteria. For his purposes, the best fix was on with a radii of less than 500 meters, received in time to react, positively identified, and collaborated by other intelligence. The Army source's experience had been:

> "Twenty-five to forty percent of fixes (received) were used for immediate harassment and interdiction (H and I) of the enemy, by artillery, naval gunfire, and tactical air. Targets of major suspected importance receive all types of fire or a combination thereof depending on the forces and means available."

Fixes not acted on immediately usually did not meet the best criteria (timely reception, small radii), or fell to close to a friendly populated area. In any event, these fixes at least added to the commander's intelligence picture.

Another Army source, whose experience had been in the open country near Dak To in central RVN, advised the 361st TEWS on 2 April, 1968, that every priority target reported with a fix radius of 1,000 meters was immediately hit by artillery fire. Unidentified targets with a radius of 500 meters or less also were immediately hit.

The use of ARC LIGHT (B-52) strikes against targets produced by ARDF and other intelligence was not entirely within the local commander's jurisdiction. COMUSMACV must plan their use in the light of his total picture. Precise data were not available, but Security Squadron personnel understood that 90 percent of all ARC LIGHT strikes were based at least in part on ARDF information.

Initial Accomplishments: 1966

The success of the HAWK EYE aircraft during the second test in the Republic of Vietnam, prompted COMUSMACV to keep it in theater beyond its scheduled time. On 11 April 1966, the HAWK EYE acquired 13 fixes in the Tay Ninh area, the largest number to date. That mark fell when the first EC-47 showed it

superiority by acquiring 19 fixes on 7 June, 1966, and kept up the pace with another 13 the next day.

The Air force had deployed 26 aircraft to the Republic of Vietnam by 31 December 1966. Their effectiveness on 1,526 sorties in the May to December period was not lost on CINCPAC (Commander in Chief, Pacific) or the field commanders.

On 29 September 1966, Major General Grover C. Brown, Director of Intelligence, PACOM (Pacific Command), called to the attention of CINCPAC and his staff the early work of the EC-47 in the DMZ. Without its work and that of more sensitive intelligence, "we would have been completely in the dark about the enemy situation in the DMZ"/

On 31 October 1966, the First Infantry Division told the 460th TRW:

> "On 28 October, the 1st Infantry Division sent two battalions into the Cam Xe Jungle, vicinity XT6655, exclussively on the basis of intelligence provided by ARDF. The battalions made immediate contact. When the battlefield was policed, 70 bodies were found and evidence indicated numerous others had been carried away. Please pass to those responsible the compliments of the CG, 1st Infantry Division for a job well done. We need your continued support."

Evidence of real-time reaction to ARDF fixes also come from the G-2, 1st Infantry Division, who, within eight minutes after a Direct Support Unit received and passed him a fix, "immediately ordered 200 to 300 rounds of artillery on the fix".

Another early, but continuing dimension to the role of the EC-47 in ARDF appeared on 21 November 1967, when one of its fixes prevented an ambush in real-time. A Direct Support Unit reported:

> "Reference message received 21/0136Z and fix passed immediately to Regt S-2. Forward Air Control aircraft sent into the air approximately 21/0205Z to recon the area. Air strike requested in area by FAC. Convoy was notified of possible ambush. Four each UH-1D gun-ships sent to area due to approach of 11th Calvery convoy along Route 1. As convoy reached area of fix location, helicopters began recon by fire. Fire was returned by VC an firefight began — Important point, this ARDF prevented serious ambush...."

USAF ARDF Program Matures: 1967-1968

The USAF ARDF program reached its full proportions in 1967, as the programmed 47 EC-47 aircraft became available. They flew 10,891 sorties during 1967, of which 2,574 were flown over Laos and 478 in the area off North Vietnam. By August 1967, the crews could point to a record of 25,000 ARDF fixes and 10,000 missions, since the program had begun in May 1966.

One report on the effectiveness of the EC-47 came during a conversation between General William W. Momyer, Commander, 7 AF, and Colonel Robert G. Williams, Commander 46th TRW, in May 1967. Colonel Williams quoted General Momyer to the TEWS personnel:

> " ...I want all personnel in this mission to know that the primary and basic source of intelligence in this country comes from COMPASS DART (now Combat COUGAR) and I want the people in these squadrons to know it".

One of the war's major operations in 1967 was the two-phase Operation JUNCTION CITY in Tay Ninh Province. Several divisions, supported by 5,002 tactical-air and 126 ARC LIGHT strikes, hit the enemy in an area reported to be the center of important Viet Cong activities. U.S. and Alied Forces claimed 2,728 Viet Cong and NVA dead, 99 prisoners, and 137 returnees, plus a considerable amount of enemy material destroyed or captured.

During the first phase of Junction City, USAF and Army aircraft contributed 903 "immediate interest" fixes in an 1,558 ARDF total. The II Field Force planners used these fixes to plan their operations. On 5 March, an ARC LIGHT strike hit "the center of a mass of ARDF fixes". As many as 476 rounds of various types of artillery fire hit six fixes over a ten-day period. In the second phase of Junction City, there were 1,869 "immediate interest" fixes in a total of 2,850. The ARDF information alerted the ground forces to an enemy move colminating in "human wave" attacks on 17 March and on 1 April. The alerted ground forces killed 777 of the enemy.

Another major effort, Operation SHENANDOAH II, in September and November 1967, had significant EC-47 support. "ARDF was the primary basis for targeting...airstrikes against the 271 NVA Regiment." An ARC LIGHT strike hit an ARDF fix on the 273 NVA Regiment; "the radio station serving the unit was not heard again". The results of another nine ARC LIGHT strikes between 14 - 30 October, 1967, during SHENANDOAH II helped to highlight the accuracy of the ARDF fixes (and the proficiency of the SAC crews). The B-52 effort placed 90 percent of their ordnance squarely on target in two cases, 70 - 80 percent in three, and 60 - 65 percent in two, and 50 percent in one. In the ninth

case, the B-52 aircraft knocked out "100 meters of tunnel, three fighting positions, three bunkers, and one foxhole". The enemy lost 1,331 (confirmed), 385 (probable), and 15 as prisoners during the course of the operation.

In Operation SANTA FE (3 November through 2 December 1967), the TEWS were told:

> "ARDF...continued to be the most important intelligence product provided to the tactical commander. Although there was no action taken directly against ARDF fixes, it kept the commanders up to date on enemy locations in the tactical area of responsibility and interest."

The intelligence community in RVN had been aware through ARDF and other sources that a TET attack might take place, but did not know its precise nature. On the evening of 31 January 1968, the VC and NVA made their most daring attack in the war, a massive raid against Saigon an Tan Son Nhut Air Base. From 31 January through 3 February, the 360th TEWS was able to launch only four aircraft. The remainder were grounded by battle damage. Nevertheless, these four aircraft fixed 453 enemy targets, 70 percent within 20 miles of Tan Son Nhut and Saigon. The complete record of the reaction to these fixes is not available, but it is known that, on 4 February, artillery and air strikes hit 14 fixes. A FAC aircraft made a post-strike reconnaissance and "reported numerous enemy bodies throughout the strike zone". Similar action was taken against 33 fixes on 5 February 1968. The 199th Light Infantry Brigade enjoyed major success against the enemy on the basis of fixes reported on 4 February and used as the basis for planning the unit's deployment on 6 February.

A few days earlier, on 3 February, the EC-47 made is "most significant accomplishment.. in II Corps". The Commanding General, I FFV, "personally took information" based on 20 fixes sent under FLASH precedence to his headquarters, to Ban Me Thuot, to redeploy his forces successfully against the enemy.

In another area, at Nha Trang, during the TET Offensive, the 361st TEWS flew eight "base support" missions and supplied 40 fixes to be hit by air and naval fire. On 31 January, a 361st TEWS crew produced 11 fixes, which established that the enemy was closer to Nha Trang that other intelligence had indicated. The Assistant Chief of Staff, G-2
I Field Force, commented:

"There is no question but that this added support in the Nha Trang area contributed to the ultimate local military and political victory."

In the Delta area, the Mobile Riverine Force found itself almost completely dependent on ARDF fixes during TET. when "other sources of information became extremely limited".

Chapter 14

Deployment - Redeployment

In April 1968 Seventh Air Force received official word that ten additional ARDF-comfigured aircraft were ready for deployment to Southeast Asia. These ten, which would increase the TEWS unit equipment from 47 to 57 aircraft, would be EC-47Qs fitted with the R-2000-4 Engines, (mentioned earlier), a type more powerful than the R-1830s with which the initial EC-47 N and Ps had been equipped.

Under the parent wing - the 460th TRW at Tan Son Nhut Air Base - the total April 1968 inventory of EC-47 aircraft was assigned to the three TEWS - The 360th TEWS at Tan Son Nhut, the 361st TEWS at Nha Trang, and the 362nd TEWS at Pleiku. Although until then 47 aircraft were authorized, only 41 were possessed, split among the three locations. Thirteen were at Tan Son Nhut, 15 at Nha Trang, and 13 at Pleiku.

Collocated with each of the deployed squadrons was a detachment of the 6994th Security Squadron. Det. 1, 6994th SS. accompanied the 361st TEWS, and Det. 2 was with the 362nd to accomplish the back end functions or "fix" and "take" — "take" being the monitoring of enemy radio transmissions for content.

By April 1969 acquisition of new platforms brought to 49 the total number of aircraft possessed. Seventeen of these were based at Tan Son Nhut, 16 at Nha Trang and 16 at Pleiku.

The plan for de-Americanizing the bases at Pleiku and Nha Trang and subsequently turning them over to the VNAF units necessitated a series of decisions concerning relocation of the 361st and 362nd TEWS during the spring and summer of 1969. The possibility of squadron relocation was the subject of

considerable message traffic, reaching as high as CSAF level. Hue Phu Bai was considered and rejected, primarily for reasons of maintenance and support, although for a time EC-47s made frequent operational stops at this northernmost RVN base.

Nha Trang was already phasing down, with U.S. units redeploying to Cam Ranh Bay and other bases. On 18 September 1969 the 361st TEWS and Det. 1, 6994th Security Squadron, relocated to Phu Cat, some 100 NM north of Nha Trang. This move solved part of the problem, but the relocation of the 362nd TEWS from Pleiku was not so easily disposed of, involving as it did tri-service movements and multi-government discussions before final resolution. Among the many factors considered, reviewed, rejected, discussed, and modified before the final deployment were these:

> Support at Pleiku is to become marginal after 1 April 1970, and nonexistent after June 1970.
>
> Nakhon Phanom, Thailand, was considered optimum for squadron location, for Barrel Roll and north Steel Tiger coverage, but could not be used, because of headroom problems. Pull-out of other units from Thailand would not ease the problem, inasmuch as it would be accompanied by simultaneous headroom reduction on the part of the Thai government.
>
> Relocation of the 362nd TEWS to Hue Phu Bai or Chu Lai was ruled out, because the rationale for selection of DaNang was primarily optimization of operational posture and availability of support.
>
> No other airfield in RVN was operationally acceptable for relocation of the 362nd TEWS, because of increased distances to target area.
>
> COMUSMACV desired relocation of the 362nd to DaNang, but awaited a message from CG III MAF regarding the impact of the relocation of the Army's 138th Aviation Company from DaNang to Hue Phu Bai, which would be necessary prior to redeployment of the 362nd from Pleiku to DaNang.
>
> A 7 AF Draft Programmed Action Directive envisioned relocating the 362nd to Phu Cat with an operating location for six aircraft at DaNang. COMUSMACV disagreed

and requested 7 AF to recommend alternate locations which would permit maximum time over target in northern I Corps and Steel Tiger areas of operation.

COMUSMACV stated that the 362nd TEWS would relocate to DaNang and that the 138th Aviation Company would relocate to Hue Phu Bai, although the 362nd would have to operate temporarily with 100 feet less ramp space than really needed, pending reduction of a USMC fixed-wing refueling unit.

These were but a few of the many convolutions involved in the movement and final bed down of the 362nd TEWS, but they do cover most of the salient points. On 19 June 1970 the 362nd TEWS and Det. 2, 6994th Security Squadron, relocated to DaNang.

In April 1969 a detachment of three EC-47s from the 460th TRW had been stationed at Nakhon Phanom, Thailand (Commando Forge), and in April 1970 this force was increased to five aircraft. These relocation's provided more effective ARDF coverage of Southeast Asia than previously, with maximum possible times on target.

Commando Forge

By mid-1968 it had become increasingly evident that an ARDF/ SIGNINT (Signal Intelligence) capability would be required outside of Thailand to service CAS and Task Force Alpha with EC-47 support. Such deployment would obviously have widespread doctrinal, operational, and diplomatic impact. It was with this in mind, and with specific warnings concerning operational control, that the CSAF in September 1968, sent a message exploring the subject. Although addressed to CINCPACAF for action, it included as information addressees the Operations, Plans, and Intelligence Offices of Seventh Air Force, Thirteenth Air Force, and Seventh/Thirteenth Air Force. Acting on the planning assumption that as three Sentinel Eagle (R-2000- Powered) aircraft entered the SVN inventory, a like number of Combat Cross EC-47s would be simultaneously transferred to Thailand, the CSAF requested PACAF and/or AFSS views on the operational and intelligence basis of:

A. Three EC-47N/P operating from a Thai Base, presumably Udorn, 50 hours per aircraft per month, the crew ratio 2.0 or 1.75 at PACAF option, USAFSS 2.0 manning.

B. USAFSS DF/Collecting, processing, reporting, and maintaining a technical data base for Laotian targets.

At the same time, the Air Force Chief of Staff reminded PACAF and AFSS that they should assume that any ARDF/DSU (Direct Support Unit) operation would be a direct support function, with OPCON delegated to 7/13AF. CAS requirements for DF/COMINT collection would be handled as of the highest priority, operational consideration permitting. That is, the Air Force would not consider placing the DSU/ARDF operation directly under CAS OPCOM, but would instead operate on the premise that deployment of unit aircraft was primarily to support CAS requirements.

The reason why it was necessary for ARDF aircraft to operate out of Thai bases was simply that South Vietnam-based EC-47s did not have the loiter time to cover the North Steel Tiger and Barrel Roll areas with any degree of effectiveness and most of their flying time would be spent in transit to and from target areas. Admittedly, Pleiku-basied EC-47s would be the closest to the target areas in Laos, but the 2,500 ft elevation and considerations of flying safety acted to limit the planes gross weight. The aircraft could not launch with a full load an retain single-engine capability if an engine failed on takeoff. Sea-level-based aircraft, such as those then based at Nha Trang, could carry the fuel, but would have to fly nearly 300 miles further, to and from target areas, a circumstance which nullified the fuel-load advantage.

Operational considerations were, however, not the only factor affecting the decision as to whether EC-47s should of should not be based in Thailand. Diplomatic concern was also evinced at high level of both the U.S. and Thai governments. In a lengthy discussion at Udorn on 27 February 1969, the purpose and concept of Commando Forge operations were explained in detail to Ambassador Unger. He in turn explained that much of the problem lay in Royal Thai Government sensitivity concerning the increase in the number of U.S. cryptologic personnel in Thailand, as well as the fact that Air Vice Marshall Dawee already considered the Task Force Alpha/Imfiltration Surveillance Center complex at Nakhon Phanom a "spook outfit". After it was explained to the Ambassador that Commando Forge activities would not duplicate any existing collection capability or analysis facility, but would, rather replace and improve the current EC-47 collection program for Laos which had to operate out of RVN, he gave his solid support to the program. He stated he would have his staff study the problem of how best to present the case to the RTG, including possible visits to TFA by key Thai officials, and depiction of Commando Forge as an operation "in direct support of the tactical commander," with any "spook" aspect played down.

With the diplomatic problems eased, one continuing problem area remained, that of headroom in Thailand. The Royal Thai Government was adamant about the number of U.S. servicemen allowed in-country, and even at that time was contemplating a force reduction. Several solutions were offered — most of them involving tradeoffs with other Thai-based units or U.S. Army aviation spaces and elimination of lower priority spaces to accommodate the necessary 144 manpower spaces and three aircraft. Quite naturally, no one wanted to hurt his own operation by giving up spaces; so for some time the matter was a standoff. Fortunately, management action reducing EB-66 quarterly flying hours by approximately 1,000 hours generated sufficient manpower headroom without increasing the USAF Thailand ceiling, and so opened the way for Commando Force deployment. Detachment 2, 460th Tac Recon Wing, was established at Nakhon Phanom on 6 April 1969 (under operational control of MACV) with three EC-47s. This force was augmented intermittently throughout 1969 and early 1970 with two TDY aircraft, and was enlarged to as many as seven during periods of critical interest. On 27 April 1970, final approval was received to man five EC-47N/P aircraft at Nakhon Phanom on a PCS basis. This gave Commando Forge ARDF/SIGINT coverage over most of the permissive Barrel Roll and western Steel Tiger areas. Effective 1 June 1970, Det 2, 460th Tactical Reconnaissance Wing, was inactivated: simultaneously, Det 1, 360th Tactical Electronics Warfare Squadron, was activated at Nakhon Phanom, taking over the personnel and equipment of the former.

SENTINEL EAGLE DEPLOYMENT

Sentinel Eagle was the nickname assigned the development of ten "Super Goon" EC-47Q aircraft to Southeast Asia. The "Q" model, with the basic C-47 airframe but R-2000-4 engines, had better single engine and climb performance than the standard EC-47 using R-1830 engines. Although the EC-47Q aircraft in CONUS had been ready for SEA deployment in April 1968, OSD approval for the program was not received until 28 June of that year. This followed a lengthy "Roles and Missions" controversy in which MACV proposed a one-for-one tradeoff where each EC-47Q, as it arrived in the theater, would replace an older EC-47N/P, thus keeping the UE down to 47. On the surface this arrangement appeared advantageous, since it would solve headroom problems, facilities construction, and bed down.

The first EC-47Q arrived in South Vietnam on 11 September 1968 and was assigned to the 362nd TEWS, then at Pleiku, as were all subsequent arrivals. The assignment of the "Q" models to the 362nd was a natural move from a flight safety viewpoint, since Pleiku, with the highest elevation of any major airfield in Vietnam, could prove fatal for the successful operation of lower-powered EC-47s. Another valid consideration existed: the EC-47Qs were all equipped with the AN/ALR-35 (a second generation version of the ALR-34), and USAFSS

recommended that. because of the limited quantity of Aerospace Ground Equipment, they all be assigned to one base. This was directed by Seventh Air Force on 6 September.

There were seven Sentinel Eagle aircraft in the theater as of 31 December 1968, with three more scheduled for delivery during the next quarter. Although the figures continued to be revised, as the result of combat loss and damage, the average number of Sentinel Eagle aircraft in-country and possessed usually ran between six and nine.

ARDF OPERATING AREAS;

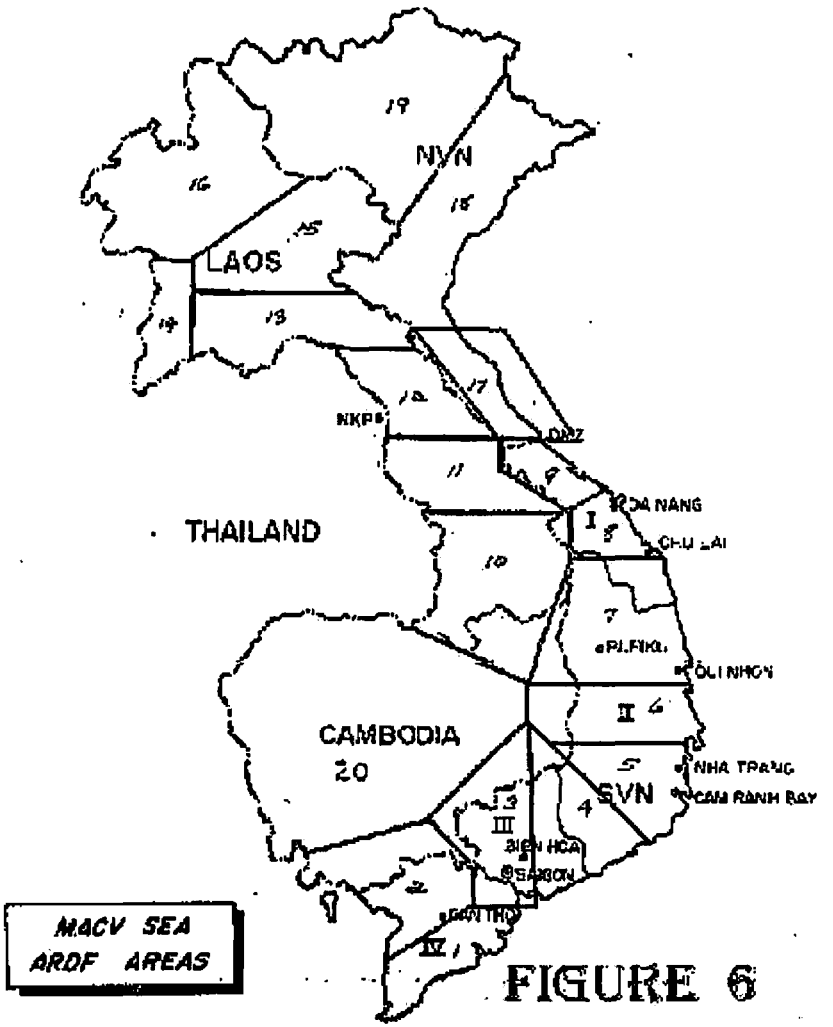


FIGURE 6

The Figure 6 on the previous page was taken from official de-classified Microfilm records from the Archives in Montgomery Alabama

The ARDF tasking purposes. MACV partitioned Southeast Asia into 20 areas of operation. The twentieth area, Cambodia, was added following the Lon Nol government's granting of permission for Cambodian over flight. Within these areas, approximately 70 by 90 nautical miles in size, missions could be fragged for either "effective" or "absolute" coverage. The effective coverage missions flew a general, or random, type of reconnaissance — intercepting, fixing, and analyzing any enemy transmission encountered within a specified geographical area. If, however, intelligence indicated a specific or general area of high interest, absolute coverage was assigned the fragged aircraft, the EC-47 normally orbiting within 20 NM of a specified point until acquisition was achieved, then fixing from five to eight miles from the captive radio. Over 95 percent of all USAF/ARDF missions were fragged for absolute coverage.

Because of the superior performance of the EC-47 (compared with U.S. Army platforms), most of the over flights of Areas 10, 11, and 12 as well as all deep penetrations of Cambodia, were executed by the Air Force. Nakhon Phanom-based aircraft were responsible for ARDF coverage of permissive areas of Barrel Roll within Laos, while aircraft of the 362nd TEWS at DaNang normally had the responsibility for coverage of Steel Tiger. All other permissive areas were flown by either Air Force and Army aircraft, although the limited performance of Army aircraft led to their being restricted to shallow penetrations of Cambodia.

Chapter 15

Nothing Flies without Maintenance

So many times a most important function of any mission is overlooked. Usually it is unintentional but nonetheless they are so often not given the proper credit. Nothing mechanical or electrical continues to work without some maintenance and since the EC-47 was a great mix of both, naturally the crews that flew the missions on her had no job without maintenance.

This oversight to some degree evident in this writing, as I have found very little in my search for the history and data of the EC-47 and her people and mission, regarding the maintenance functions and personnel.

Having spent the better part of my military career in aircraft maintenance in one form or another, I am well aware of the many oversights. I do not have a lot of knowledge of the maintenance activities in the TEWS squadrons, but I do know from personal experience by being a member of the flight crew, that they did the very best they could with what they had and kept a very high percentage of the aircraft "In Commission", mission ready.

Right: Periodic Maintenance
Photo Courtesy John Fuertinger

They were often unable to get the parts required for a repair, and the mission requirements called for cannibalization, (the robbing of parts from on aircraft), to get the other back in commission and ready to fly the mission. Stop and think about this for a minute. As if they were not already overloaded, just trying to keep the birds flying, by having to resort to the practice of cannibalization, the work was doubled.

This shortage in supply of available parts was in part due to the lack or shortage of parts available for an aircraft that had been around for 30 years, the last ones were built in 1945. Another cause of some of the problem was that some special communications and electronics equipment aboard the aircraft was so new there had not been sufficient spare parts in inventory at the time the equipment was put in service, half way around the world.

Landing Gear Retraction Test. Photo Courtesy: John Fuertinger

The only TEWS maintenance organization I really recall having any dealings with was the 361st TEWS at Nha Trang, 1966/67. I recall that Lt. Van Slyke and CMsgt Walker and all of the Crew Chiefs worked very long and hard hours, always around the clock and usually outside, to keep the flyboys a safe aircraft to fly.

Around the clock, seven days a week, they work to keep the aircraft ready for the next mission. The photos above were provided by John Fuetinger.

Some folks had their own shift patches.
This patch provided by: Charles Haram

Chapter 16

Comments from other EC-47 personnel.

These are comments, remarks, memories etc. of various folks that were assigned to the units that made up the flight crews, (front end and back end) and all maintenance and support personnel. They are in no particular order and represent a time period from Mid 1966 to Mid 1974

Timothy G. Michaud, Sgt, Morse Intercept Operator, worked X and Y positions. Det. #2 6994th SS Danang, April 72/December 72. Some guys remembered, Steve Larson, Dave Langely, Steve Makela, Al Roney, Jerry Dun and Barney. Friends Lost, Joe Matejov, Pete Cressman, Todd Melton and Dave Brandenburg.

David M. Brooks, Captain, Navigator/Intelligence Officer with the 361st TEWS at Phu Cat 1969/70. He said he was a friend and roommate of Marvin Howell while at Phu Cat.

Bob Batchelar, SSgt, Airborne Mission Supervisor, AFSC 20270 was with the Detachment of the 6994th SS at Tan Son Nhut in 1966/67. Some 130 missions were flown on operation Drillpress aircraft. A few names that came to mind included Bob Lovett, Byron Boeckel, James Cotton, Ken Dezotel, Kirkpatrick, Major "Crash" O'Malley, Lt. Fink, Lt. Almquist, Lt. Finkel and Col. Wallender (spelling ??). Also shares a memory I have of the morturary at Tan Son Nhut. It was not right behind my barracks but I do remember the fluids running down the ditch. He remembers living on canned hash and Louisiana Hot Sauce.

SSgt Kenneth J. Versele says, I was in 6994th SS at Tan Son Nhut, "back end" ("x or y" - q and z was way after my time), Airborne Mission Supervisor from middle of July 1966 to about August 1, 1967. It's been almost 32 years now, so most of the details are a little fuzzy. I was on active duty from December 1960 to Jan 10, 1969.

I vividly remember most of the guys and experiences, but for the life of me, Can't remember names. My Supervisor was a TSGT Thompson. When I arrived in- country, the squadron wasn't but 2 months old and the whole unit had less than 2 dozen personnel. I believe there were 3 aircraft at the time, and one of those was being sent to Nha Trang to start Det. 1. Does anyone remember Balls Niner (tail #009)? One aircraft commander I'll never forget was Lt. Col. Lauderdale. What a character!

I can't begin to tell you how much I thoroughly enjoyed the history project written by MSGT Bruce Nelson. It really sums up ARDF and "Phyllis Ann". It's a document I'll always treasure and something to pass along to my kids and grand kids.

After leaving "Nam" in Aug. "67, I was also one of the original instructors of ARDF at Goodfellow until I took my discharge in January, '69. I even went back in March/April 1968 (TDY) to follow up on our effectiveness with the school at Goodfellow. Instead of it taking the guys a month to become proficient with OJT, they became operational faster being trained in the states before they went over.

It was sad reminiscing about the crew that was shot down 9 Mar 67. I knew those guys and had flown with them. I was stationed with some of them at Kelly. In fact I had played cards with Dan Reese in the barracks at Tan Son Nhut just a few days prior to the tragedy (they were there TDY from Nha Trang). It was a real shock, because it is the first time a "292" (one of us) was killed in combat.

Robert Wilhelm, Served with Det. 2 6994th SS at DaNang as an Analyst 20250 on the EC-47's flying out of Danang, arriving in August, 1972 and Det. 3 at Ubon, Thailand in 72/73. The first EC-47 he saw was what was left of 009 sitting in a revetment damaged by the fire and explosion of the bird in the next revetment. Remembers 645 with the shark mouth and 702, "Margaret Ann". A few folks he remembers are Joe Matejov, Todd Melton, Pete Cressman and Dale Brandenburg. Also Steve Michael, Paul Amato, Kevin Merriman. MSgt George Payne, Sergeant Schmidley, Fred Ziemer, Tom Perdue, Pat Kious, Don Iszler, John Foxworth and Capt. William Shea and Lt. Lionel Blau and many faces with names now faded. Robert was on duty the night Baron 52 was shot down February 5, 1973,

Fred Lewis was a Crew chief. I read the analysis on the loss of BARON 52. I think I was the crew chief that launched the bird for that mission. I remember the pilot was a Capt. George Spitz. I remember him because he was a go by the book pilot. I still have Capt. Spitz bracelet. I will always remember the helpless feeling waiting on the flight line for the plane to return from the mission. I will NEVER forget it....."

Fred Lewis, an E-4 at the time, provided the following information. Served in the 362nd TEWS as a Crew chief on an EC-47 at Da Nang and also worked out of NKP Thailand. He was there in 1972/73. Fred says he remembers doing the preflight inspection, speaking to Capt. Spitz, and watch them taxi out. His next memory is of the long wait for its return that never came. Fred says, "I don't believe we were ever told it went down, but after a while they advised us there

was no need to standby any longer. It seemed like we waited forever. I've been to the WALL and have Capt. Spitz bracelet.

Rick Davis arrived at Nha Trang in November 68. Served with Det. 1 6994th Security Squadron and was there when they were relocated to Phu Cat in August 69. Rick had been at Grenier Field New Hampshire during the flight testing of the Aircraft and Equipment prior to its delivery to the Air Force. He also supplied me with quite a number of names of those folks that did not make the return trip home as did we, the fortunate. Rick is also the one that provided me with the Research Paper on the operations of the 6994th and the EC-47.

SSgt Jim Hart, served with Det. 1, 6994th Security Squadron from Sept. 1970 until Sept. 1971. Jim was a backender with about 150 missions. Some of the other backenders from that time he remembers are Joe Martin, Stan Long, Leon Wilson, Greg Shake, Guy Fox who later served at NKP, Harvey Goldstein, Tom Glass, Charlie Wright, John Lloyd James James and Larry Guise just to name a few.

George B. Montague, TSgt, Flight Examiner. Flew on birds from all sites mainly giving check rides for the local SEFE's. Arrived at TSN 6994th in November 1967 as a SSgt after spending a year at Danang, and flew my first mission on the 21st of that month. Spent the next few months in Awards and Decorations as an extra duty, then I became an IRO in July 69 and in the same month I was appointed as a Flight Examiner and worked for Lester Kimball. Stayed as a Flight Examiner the rest of my time at TSN. When Lester left to set up the unit in Korea, I became NCOIC of the Squadron Stan/Eval Section and when I left in September, 1970 turned the job over to Charles McFarlane.

When Det. 3 was established at NKP, I flew the first mission bird up there from TSN and stayed just over 30 days getting the Det. operational. It I wasn't at TSN I would have loved to have been at Na Trang. I was up there several times. I finally flew my last mission in September 1970 and finally left the country after 4 years. I retired in July 1971 and came to Australia to live and have been here ever since.

Jon C. Ohman. Jon was an aircraft Crew chief and only flew on functional check flights. Jon was a Sergeant with the 362nd TEWS starting out at Pleiku April 1970 and then moving to DaNang in May of 1970, staying there until April, 71. I assume Jon was Crew chief on tail number, 570 because he included in his information, " By the way, I called for the whereabouts of my old bird just as you did. To my surprise, I received an e-mail from Bob Wilhelm, including a picture of 570 sitting on the Ubon flight line in 1973. Good to know she was still flying two years after I last saw her".

Jim Trozzo (Troz) Flew EC-47 Antique Airlines Electric Goons from December 1970-71 as a Back end Crew Intel. Analyst. Flew from Saigon and DaNang, with the 360th TEWS/6994th and 362nd TEWS/Det.2 6994th. I would like to connect with others from old Squadron or others whom this airplane brought back many times. Flew 122 missions over Southeast Asia. Many fond memories.

Allen Simmons says, I was a 1st Lt. in the 361st TEWS at NKP, Thailand, from April '73 to April '74. Started as a copilot with Maj. Ray Marquez and later Capt. Mark Race. In February 74, completed his upgrade to Aircraft Commander (as a 1st Lt.) and flew until April, 74. While flying as Aircraft Commander, his copilot was 1st Lt. Terry Crist, and his Navigator was Lt. Col. Clyde Hollingsworth. He flew 115 missions in the EC-47N,P& Q.

Bob Bonn was a young 1st Lt. Pilot flying EC-47's with the 360th TEWS out of Tan Son Nhut from March 71 to March 72. Says "It was my first operational tour out of Pilot Training— I volunteered to go to Vietnam, and never regretted it. Best tour of my career. Also says, "I witnessed the Vietnamization of the EC-47 squadrons. It was a great experience for a young man. Made Instructor Pilot over there. Came back and flew HH-43s, C-141s, T-39s and C-21s. Am now living in Montgomery Alabama.

David Piper was stationed at DaNang and flew with the 362nd TEWS from September 22, 71 until August 31, 72. David was a Pilot and a Captain. As the year passed, became an Instructor Pilot and finally a Flight Examiner. Says, "My name in the Air Force was Waringpiper, because that's what was on my birth certificate, even though my family had and has not used that name for generations.

Says, " I remember fellow pilots John Soule' from Louisiana(?) who was the Aircraft Commander of the bird that lost an engine shortly after takeoff right after I got to DaNang, and who saved our butts with a masterful flying job down one valley and up another as we found our way to recently closed Phu Cat, where he put us down safely in a strong cross wind. Remembers Burt Jones from California; Randy Bailey from Washington, (Randy, did you ever open your restaurant?); squadron Flight Surgeon Sid Schwab from Oregon, and wild man Flight Mechanic, Billy Schlafke (did you stay a free man?). Also remembers a John, Gage and Dave.

Finally, although there little interplay between the 6994th SS folks and the non Navigator TEWS folks, I remember the professionalism and dedication of the SS people. Many of them seemed to love their mission, while most of us TEWS people were just doing our jobs.

Bruce Obermeyer. I was assigned to the 362nd and the 361st Tactical Electronics Warfare Squadrons from November 1972 through November 1973. I was stationed at DaNang, RVN and at NKP and at Ubon in Thailand as an instructor pilot in the EC-47N. P and Q. I held the rank of Captain.

James Line (Bob) Served with the 6994th SS at Tan Son Nhut in 1966-67. Says he missed the Phyllis Ann missions but flew as a Backender on the Compass Dart and Combat Cougar missions. Knows a Pilot, Captain Harold Businger and a Navigator Major Dave Eddy.

Charles Van Zandt. Says "I was stationed in all 3 locations (I assume by the date involved he meant Tan Son Nhut, Nha Trang and Pleiku) in 1968 as a Radio Operator". "I flew mainly out of Nha Trang and Pleiku. I believe the EC-47 #681 is the one plane I flew on a lot, the name was Big Jean". Says he has a few pictures that he will try and dig out. Says he would like to stay in touch as this represents a big part of his life and that he is still very proud of the 6994th. Ended his tour with 107 missions, the Distinguished Flying Cross and four Air Medals.

Bill Boltinghouse writes, Some of the earlier models with the AN/LR-34 systems. The Navigator did stand or sit on a stool as you described. However, on the N, P and Q's the Navigator had a console with his navigational equipment mounted in it. It was located just in front of the jump seats on the port side and he faced forward. The ARDF was the AN/ALR-35 system. We had two aircraft at Pleiku which had the AN/ALR-38 Mini system. One A/C was 208, but I cannot remember the other tail number. The aircraft lost out of Pleiku from the shot down on April 22, 1970 was 402. I was "Bravo" maintenance and 402 was always having problems. I was supposed to go with it that morning but at a later time. Aircraft 133's engines would not start as usual so they moved 402 up almost an hour early. The guys could not come get me in time to go with it! So, I was spared! I had more flights than most other electronics guys. I had 38 missions and was awarded the Air Medal.

John Hockemeier, says, I was at NKP from Aug. 72 to Aug. 73. Flew as a Navigator on the Electric Goon. I can update one aircraft loss at NKP. The Aircraft crashed during touch an go. Copilot was making the approach. The Aircraft struck structure between the runway and taxi way, bending the propeller. The Pilot took over control and told the Copilot to feather the engine with the bent propeller. The Copilot feathered the good engine!! The Aircraft went down just off base facing opposite direction from approach. One backender, (name unknown) and the Pilot were killed. The Pilot was my next door neighbor in the hooch. His name was Captain Robert A. Kohn, a 1969 graduate of the Air Force Academy.

Bob Lung says, I was a backender in the EC-47 and was stationed with Det. 2, 6994th Security Squadron at Pleiku. I was in Pleiku from March 1969 to March of 1970, but during that time I had also spent 3 months or so TDY at NKP because they desperately needed instructor radio operators when they opened Det. 3. It was actually a labor of love because not only did I enjoy my 3 month tour there, but I spent some fun times with buddy, (Ken Stengal) that I was stationed with at Misawa prior to that. Also says, "Wouldn't it be great if a bunch to us, regardless of whether we were in the front end or back end could have some kind of reunion

Kenneth Batson says, I was a SSgt with the 6994th SS at Tan Son Nhut and Hue Phu Bia from September 1967 to September 1968 and flew over 200 missions in the various EC-47's. Received the Air Medal during my service there. Says "No where have I found reference to the 19 or so Airmen who served with me a Hue Phu Bia.

The base came under almost daily attack from mortars and 122 rockets. We came under heavy ground attack during the Tet offensive of 1968 and had to evacuate to Nha Trang.

Stan Poyas says, I served with the 6994th in Vietnam in 1969/70 at Pleiku, DaNang and at PhuCat for 18 months. I was in Bravo Maintenance and also flew mission in the area. Returned again in 1973 to NKP, Thailand for another tour and moved to Ubon until we quit our operations in May of 1974.

Col. Paul Arnett says, I was the Aircraft Maintenance Officer for the 361st TEWS from March of 1968 to October of 1969.

Bill Gucciardo had a unique tour with the 361st TEWS. Bill was a Crew Chief and says his father was a Bombardier in WW2 in Italy. The Pilot his father flew with actually ended up as a Pilot in the 361st. Says they had many good times together.

Fred E. Sanders says, I flew with the 360th TEWS at Tan Son Nhut for about a year beginning in August 1967. He was the Wing Flight Examiner. Fred says he remembers a couple of the fellows from the 361st. One by the name of Jim Stoke, and another, last name Smith but says he cannot recall his first name. Fred is now a retired SMSgt living in Destin Florida, just outside Eglin AFB. I am sure glad he showed up, now I know I am not the only Flight Mechanic that is still around. Just joking, but I was beginning to wander where they were. J.C.

L. Gordon Bassett, Says he served as a Pilot/Aircraft commander as a Lieutenant with the 362nd TEWS at Pleiku from June 68 to June 69. Had several TDY's to NKP and Ubon Thailand and flew missions over the northern parts of Laos.

Bill Petrie says, I was a Buck Sergeant, AFSC A43151A, A Crewchief/Mechanic with the 360th TEWS at Tan Son Nhut in 1968. He says he spent most of his time up in Hue/Phu Bai attached to the Army's 8 R&R (Rock&Roll) Radio Research Company on the RU-8 aircraft. This unit flew missions similar to the missions of the TEWS. Bill is responsible for some of the nose-art on the EC-47's. The "Pink Panther", "Snuffy Smith", "Arkansas Razorback", "Buzz Off" and "Patches" were some of his handy work. Says he remembers a SSgt or TSgt Booker. Bill Retired a CMSgt. See The War Story Page for a little more from Bill.

Dave Abel provided the following today, 26 June, 98. Dave says, I was assigned to Det. 2, 6994th Security Squadron at Da Nang from January 71 to January 72. He was an Airborne Electronics Warfare Repairman with the AFSC 301x5. Says he flew 50 missions. His maintenance shop was called "Bravo Maintenance".

Joe Martin says, I was a 292X1 Morse Intercept Operator with the 6981st Sct Gp (Elmendorf AFB) from Dec 1967-Nov 1969 and after TDY to Goodfellow, survival schools at Fairchild and Clark AFBs, served with the 6994th Scty Sqn (Tan Son Nhut) from early Feb 70 to 11 DEC 71 when I returned to CONUS for discharge. I was also TDY to the detachments at NKP and Phu Cat. During the last months of my VN tour I was an IRO in the 6994th group charged with "Vietnamization" of the ARDF effort, orienting ARVN [not VNAF] Morse operators to take over our mission.

Darwin R. Bruce, SSgt was assigned to the 6994th Security Squadron at Tan Son Nhut in 1966-67. Says I Flew the JC-47D (43-16254) (Drill Press) with "crash" O'Malley Lt Col John Brotherton, Maj Weathersby, SSgt Jerome Cotten (deceased), SSgt Joe Dennison, SSgt Byron J. Boekel, A1C Eugene Ross. I can't find a record of the Lingy on our flight. I learned my RA202X0-L trade from Carroll (Chief) Miller (deceased). Chief and I remained in touch until his death. Col Robert L. Wallander was the first full time commander of the 6994th. He and I still correspond. Maj Fisher (deceased) was the Ops Officer. MSgt Tony Z. Odom was the NCOIC after "Chief" Miller transferred back to AFSCC. Here's a few more names I remmeber from the Drill Press Project: A1C Ed Klem, TSgt Troy Little, TSgt Johnston (Turk) Claire, SSgt Bob Lovett, A1c Ken Klann, A1C Russ Raymond, A1c Dave Sothard, A1C John Fitzpatrick. That's all I could find from my old records.

Jim Kesterson, says I was assigned to the 360th TEWS at Tan Son Nhut from July 4, 1967 until July 1968. I was an Instructor Flight Mechanic and spent a lot of time with the 362nd TEWS at Pleiku and even more time up country, at Hue PhuBai.

John Fuertinger says In July 1969 I was sent to Eglin AFB to fam school for the Douglas A-1E Skyraider. But in true military fashion when I arrived in Viet Nam in Sept. 1969, I was a bit surprised to be assigned to the 362nd TEWS at Pleiku and that I would be working on EC-47's.

For the first few months, I was assigned to the flight line crew. Later I was assigned to the Phase Dock crew. During a phased inspection, the aircraft is given a very thorough going over. All access doors and panels are opened and things that are not normally checked during pre and post flight inspections are addressed. Things like flight control rigging, landing gear wheel and brake assemblies were taken apart and checked, the floorboards were taken up, and the control wires given a liberal of dose of CPC (corrosion preventative compound, a black foul smelling gunk that looked like tar). The best thing about the phase dock was that we worked under a roof.

One of the more unusual duties I was subject to was Security Police augmentee. All of the lower enlisted grades (E1 thru E4) had to pull this duty one or two nights a month. At 2100 hours, we reported to the SP compound, drew a M 16, got on a flatbed truck and were dispersed to sandbag bunkers around the perimeter of the base. It wasn't very heartening to be told "Don't worry, the VC wont try to kill you on their way in, but they will on their way out!" Around 0600 we were picked up. At least we were given the next day off.

About June or July 1970 the squadron was moved to DaNang AB. I liked DaNang much better than Pleiku. It was a much bigger base, with better facilities, both for maintenance work and off duty hours as well. I also felt much safer there too because of a large Marine base that was nearby. All in all, as I think back about my tour, I feel honored and fortunate to have been given the opportunity to have worked such a classic and beloved airplane.

William W. (Bill) Watters had the following SEA tour data to share. I was stationed with the 6994th Security Sq. at Tan Son Nhut Air Base in Saigon from Jan. to Dec. '72 as a young SSgt. Flew over 150 combat missions in the EC-47 Combat Cougar/ Combat Cross as an Operator, Instructor (IRO), Airborne Mission Supervisor (AMS) until the program was turned over to the VNAF/ARVN.

It was the most challenging and rewarding assignment in my 24 year 3 month Air Force career. I was awarded the Distinguished Flying Cross and four Air Medals

along with some unit awards. Most of my tour in Vietnam is etched in my memories; however, some names have faded. Lt. Col. McMakin was the 6994th commander when I arrived and Major Dave Eddy succeeded him a few months later. MSgt Bill Marshall, NCOIC of Airborne Ops, a friend named Frank Adams, a few others were the last 94th personnel to leave Saigon in mid December 1972 after the Headquarters was moved to NKP, Thailand.

Robert (Bob) Patzelt says, I was a Crew Chief with the 360th TEWS, & Combat Cougar, February 1970-71.

David (Dave) Liebergot supplied the following information about his tour. I was assigned to the 6994th from Aug. 70- Aug. 71 as an Intercept Analyst. While I was there, analysts were added to the flying program, so I got to be in the initial group of trainees.

By the way, Troz and I probably worked together while we were there. In addition to flying, I was a primary intel briefer when I was not flying and an instructor after about my 15th mission.

Ended up flying 56 missions out of Ton Son Nhut. My memories of those times are very vivid to include the 360th mascot who attended all of our briefings and ate the crummy chicken the in-flight kitchen put in the box lunches, aircraft 009 clipping it's starboard wing on a takeoff, one of my aircraft loosing an engine in Cambodia, then watching as the other started smoking when we neared the Parrot's Beak on the way back to Saigon. We landed that day at Tay Nihn AAF. Great hamburger lunch! By the way, the only front end guy I remember was 1lt Frenchie Rondeau. He was the pilot on the aforementioned emergency landing.

My best friend from when we were stationed in Germany at the 6910th was Msgt Monte Pettit, who was at TSN with me. We were room mates there and flew a few missions together. He was a white knuckler but ended up flying over 150 missions if I remember correctly. One other note, Monte Pettit and I were stationed with TSgt Lou Cleaver at the 6910. Lou was on the flight that lost the wing, and nosed into the ground in the jungle.

Glen Germany sent this information in today, 12 Aug. 98. Says he was assigned to Detachment 2, 6994th Security Squadron at DaNang in 1971. Says he was a Sgt. at that time. He is interested in locating some of the folks he worked with.

Steve Sohn, Sunday, August 16, 1998 Whoa! Knock me down! I left in Dec 69, and I remember many of the guys you have listed in the 362d. What a trip! Wish I could do much of it over again. I was the last guy to sleep in the RMK (alone) at Pleiku, since everyone else moved to the new quarters and I was derosing the next day. What a night. What a time!

I arrived in country a First Lieutenant and flew as Copilot. Passed my check ride for Aircraft Commander an got curtailed. Left as a First Lieutenant.

Steve also confirmed that the Photo of the EC-47 crash in the water was the one that lost an engine on takeoff from NKP Thailand. Copilot received a broken leg.

Bob Washburn says I was a Z-1 crew member on 128 missions out of TSN from January 20, 1971 until January 1, 72. I arrived as an A1c and left a Sgt (Maybe should read SSgt) I have a hundred or so photos of or from Electric Goons. A quick look through the album finds: Fini flight dousing 072 and 491 tail numbers unfortunately no clue as to crew members. 871 in flight including a great shot with foreground of unknown EC47 wing at sunset. 702 in flight - 814 on the ground TSN - 979 in flight and Phnom Penh Airport from air.

We did an emergency landing and an overnight. Lost radar on a late evening flight. Storm between us and base, pilot reported low oil pressure #2 engine. Phnom Penh airport closes at dusk. We buzzed the runway and did a one engine landing. Pulled off the runway and waited. Eventually someone rode up on a bicycle. One of the Vietnamese trainees on the flight spoke to him in French and he rode off. Half an hour later a truck shows up with a home made drag bar and pulled us over to the military side. Air attachÈ was not happy to see us. Next day they brought in a recovery plane. Mechanics could not reproduce the low oil pressure condition and we flew back to TSN.

Jim Lamont sent me the follow today, 21 August, 1998. I went to Tan Son Nhut (6994th) in June (I think) of 1968 and flew my first mission in Aircraft tail number "009" or "balls 9" as it was referred to. After passing my 10 flight orientation, went on to the norm of doing at least one mission every two days for the next 2+ years. I flew missions out of all of the Detachments (Pleiku - Phu Cat - NKP) and more than I can remember out of Saigon. For my last 6 months before leaving in October 1970, I was the Senior SEFE (Stan-Eval-Flight-Examiner) for the 6994th and did many a flight check out of all the Dets on other subordinate SEFEs.

I flew many missions throughout III and IV corps and a few out of the corps assigned to Dets I and II. NKP was my favorite with the daytime missions into the Plain of Jars and Upper Steel Tiger. Clearly remember one mission when we had engine problems and got an escort back to NKP from the adversary (NKP units) Jolly Green Choppers and A1-Es who laughed us out of the club that night. Learned that day that a Jolly Green could out-fly us. Nobody wants to admit that a twin engine aircraft (with 1850 HP engines) couldn't keep up with a damn helicopter.

Your mention of the Q and Z birds sure brought back memories although I always preferred sitting X but I was good at all positions except, of course, the spot occupied by the happy language boys.

I was also assigned to the evacuation effort of Saigon during the last 3 days working out of the old MACV gym processing refugees and others and could provide you with some interesting info if you are interested. I left at approximately 7:00pm the night before the fall (29 April 1975) on a C-130 loaded with 250 Vietnamese.

Tom Glass says, I arrived in Tan Son Nhut in July of 1970 as a 292x1 from RAF Chicksands. Served in TSN as a radio operator, AMS, and IRO during my tour. I ended up with 180 missions, the most "memorable" on being on May 16 1971 when we lost the left engine, and the pilot feathered the right engine and couldn't get it started again. The words still live on, "Everbody get your damn chute on and get ready to go!" Luckily we made it to Tay Ninh, and then TSN sent a bird to pick us up. A lot of good times and great people! Departed for home in June of 71. As I talk to more people, more names of friends keep coming back. Thanks for the memories!!

L. D. (Vern) Holm says I am from Parkersburg, Iowa. Was a Sergeant with Det. 2 of the 6994th SS (DaNang) from July, 1970 to June, 1971. Flew 126 missions. Arrived at DaNang about the same time as Todd Melton who was also at DaNang (he was just out of tech school). Played a lot of cards with Todd and others. Roommates were Jimmy Godsey (Kansas) and Phil Pratt (Muscogee, Oklahoma) now of Albuguerque. Hello to Tom Yunker, Tom Glass, Phil Pratt, Mel Saltz, Charlie McGee, Perry Kaupa, Hy Brock, Jimmy Godsey, Wayne Ricks and all my other friends from DaNang. If anyone comes across this, please correspond.

Bob Looney says, I was a pilot in the 360th at Tan Son Nhut from Mar 1971 to Mar 1972. Bob Bonn, Jim Lashua, and I arrived about the same time and were pretty close throughout the year (in fact, I named my #2 son James Robert after the two of them).

Phil Pratt says, I was an RO with Detachment 2, 6994th Security Service at Da Nang from May, 1970 until May, 1971.

Al Jump say, Was with Det 2, '94th at Pleiku. Have a few dozen (hundred) photos of mission aircraft, including what was left of Goonies after rocket/mortar attack in April/May. Knew Mike C. on a personal basis as he was dnif when I arrived (broke his arm). He was shot down (57 mm AAA) 13 klicks ssw of firebase Nancy in April of 70. Sure hated to lose him. I was the "last one to turn

out the lights" at Pleiku after Uncle Charles let us know that he wanted the place more than we did.

Ended up at ACC (Combat Cougar/Combat Tiger) with 509th Radio Research Group (ASA). I have buku slides gathering dust. BTW, would like to locate a friend of mine "J J " Pitruse (Rabbit Ears). He also at Pleiku in between two tours at 6921/89th at Misawa. (Goon best aircraft God ever built!!)

Don Dennis says, Excellent Web Page. Brougnt back loads of memories. I was an inertial/doppler radar tech on the EC-47's. I was also airborne maintenance along with SSgt Richard Williamson in Nam in 71 and 72 at Tan Son Nhut. I also worked the EC,s out of NKP in Ubon along with the AC 130,s in 73. The system we worked on was out of a 707 and put in a 47, where the ground speed was usually less than a 110 which was the landing speed of a 707. We got a lot of "Red Balls" for the EC,s for maintenance especially after they pulled the Americans off the birds and put Viet's in as crews. I had 10 Viets to train and I had 9 of the best.

Henry Cremer in a letter this morning says, I was assigned to the 360th TEWS in 1966, before there were any aircraft there. He became the Crew Chief on the First EC-47 to arrive at Tan Son Nhut. Henry was a close friend of a friend of mine at Nha Trang, SSgt Prentice "Pat" Brenton, Flight Mechanic on ill-fated Tide 86 on March 9th, 1967.

Steve Transue in signing my guest book today, left the following information. Steve says was a SSgt with 6994th SS. He flew aboard the EC-47's as Airborne Mission Supervisor and Instructor Radio Operator. His tour ran August, 1971 to July, 1972 at both PhuCat until it closed out then up to Det. 2 at DaNang. Also flew a few missions out of Saigon and NKP. Flew total of 175 missions and had a few hair raising missions mixed it. Says he really enjoyed his tour.

J.D. Smith served a tour flying the EC-47's in the 360th TEWS at Tan Son Nhut in 1970-71. Says he has some photos to share soon. Says I have a photo of my finni flight, that is an EC-47 with a drag chute. Says I had it tied on to the tail wheel an threw it out after we cleared the runway. We taxied all over Tan Son Nhut and stopped all work when we taxied thru the F-4 revetments (You will see this photo elsewhere in this book).

Lewis B. Davis says he was a Flight Mechanic, stationed with the 360th TEWS at Tan Son Nhut from January, 1968 thru December, 1968.

John Calleazzi says, I served as an EC-47 Nav and IN with the 361st TEWS at Phu Cat, RVN from august, 1970 through August, 1971. I enjoyed your site and am glad to see that some of what we did is finally getting recognition. I was

particularly pleased to see the reference to "Project Phyllis Ann", as I am interested in compiling a "history" of the TEWS squadrons and ARDF in the Vietnam war. Any information you have would be appreciated. Thanks again for making this site possible.

James Dobbs was a 1st Lt. at the 362nd at Pleiku from February 68, just after TET, to January 69. He got almost 1000 hours flying the EC-47s as Pilot. Says some of those goonies were older than he, a 1st Lt. just out of flight school. Says, we lost one plane, with a crew of 10, and one got hit in the right wing by a 37mm.

Says, I was the copilot on the one that crashed on takeoff on December 31, 1968, because a halon fire extinguisher discharged into the cockpit which blinded the pilot an me when the tail wheel had just gotten airborne and he lost control. Continues, We departed the runway to the left, headed East, and went over the bank behind the tower. Crossing the road we made a convertible out of a pickup truck, and almost went through a warehouse.

We all got out when the main gear hit a culvert, collapsed and spun the aircraft around, tore the right engine off and started a fire. I thought I was dead, but got out with only minor scratches as did every one else.

Rick Hand writes, I really enjoyed your site. You've done a remarkable job gathering all the info and researching the history of the TEWS and USAFSS and their use of the EC-47. As a SSgt, I was involved in the Combat Cougar program from July 4, 1967 until mid-1968, then again From 1970 to Feb. 6, 1972. I began with the 6994th SS at Tan Son Nhut. I was a "lowly" ground support analyst. On occasion they would give us "ground pounders" thrill rides.

My first ride was in "Balls 9," the bird who had run across the infield at TSN on takeoff and clipped it's wing off on a fuel truck - something about the locking the old tail wheel. After a month or so at TSN I got elected to go out and liase with the ASA. Kind of a permanent TDY to make sure the ASA ground sites were giving us "stuff." I was there with the 175th Radio Research Co. until late May of 1968. I left the 6994th one year to the day after I got there (I traded my helmet, army TA-50 gear and my flak vest to a clerk for a July 4 port call.

I eventually ended up at HQ USAFSS at Kelly working for Col. Pappy Wallander, Major Dave Eddy, and Capt. Harold Businger. Chief Carrol Miller was also in and out of USAFSS and he convinced me to go back to Vietnam with him (TDY to Det. 1 at Nha Trang) to work on some targeting projects that we had been involved with working with ASA troops while at Bien Hoa. (That whole ASA thing rose out of, I think, the ASA's preference in giving the ASA ARDF (aural null birds) better intell for targeting than we had...I may be wrong. I often am.)

We went in March of 69. Carrol stayed there - Vietnam was his favorite place in the world. I came back to USAFSS in July of 69. One of the people I ran into there was the CG's aide, 1LT James Clapper. We spent some time talking about ARDF. He would eventually take the helm of Det. 3, 6994th at Nakhon Phanom. (He would later retire as LT GEN Clapper, Director of the Defense Intelligence Agency. In August of 1970 he invited me to join him there and I did - Aug. 4, 1970 to Feb. 6, 1972.

I left USAFSS then to accept a commission in the Army Reserve. While undergoing infantry training at Ft. Benning, GA I would learn from "Major Clapper" that John Ryon, my replacement had perished in the crash of a goon out of NKP. John was a great guy who wanted more than anything to be a back end flying 202. He returned to the states, took the altitude chamber stuff, and survival school at Fairchild, and returned as a flying 202 at Det. 3. It was a very hard day rubbing his name on The Wall last December. Also injured in that crash was my best friend in USAFSS - Paul Weyandt. He was a super X operator who had flown about nine zillion missions at the 6994th and Det 3. He would survive only to die in an auto wreck in the PI.

Nikali "Nik" Carl Boldrini, writes, I was an E-4 with the 360th TEWS at Tan Son Nhut. I was a Technician in the Radar-Nav shop on night shift from September 1967 - September 1968. Did a lot of work on the Doppler systems. Nik has a book out about his tour in Vietnam titled "Sitting Duck".

Doug Milton says; Hi, I served with the 6994th Security Squadron from June of 68 thru May 69, arriving at Nha Trang and ferrying to and from Pleiku, flying lots of missions as a 203 occupying the Z1 position. Many memories. I remember Sgts Gott, McNeil, Farley, VanZandt, Klemme, Al Martinez, and Koepke.

Doug Campbell says; I served with the 6994th Security Squadron from August of 66 to February 68. Says he arrived at Det. 1 at Nha Trang before there were any aircraft there. Got his ground training at Tan Son Nhut. Says he and Jim VanScooter were aboard the first aircraft brought up from Tan Son Nhut to Nha Trang.

Richard J. Burda says, I was a backender at Tan Son Nhut and Phu Cat on the EC-47's in 1971-1972. Great mission, a great 30 year career and the highlight was the flying in Vietnam.

Rick Yeh says, This site brings back a lot of memories and is a great source of information on our mission in SEA. I was a 207 AMS ditty bop at Det 3 in NKP from Nov. 71/72, but was mostly known as "Ho Chi" (as I was christened by my IRO— Skeeter Dickerson on my Cherry ride). I found this site looking for info on Baron 52. I had left NKP only a week before we lost the plane. As I surfed the

site, I noted that you didn't have many pictures of Det 3, so I plan to send a couple of shots I have recently digitized. I hope you can use them. I think you've done a great job with this site, and I've downloaded a lot of your articles about the ARDF program and the Baron 52 shoot down, as they are excellent descriptions of what we could never talk about until now, and of course are a great part of my personal history. Hope to visit this site many more times in the future.

Frank Dayton says, I served with the 6994th from Dec. '69 thru Nov. '70 as a 292. I started my tour at Pleiku and went to Phu Cat when we turned Pleiku over to the Vietnamese. I also spent a two or three week TDY at NKP, so I got to see a lot of the organization and meet a lot of great people during my 11+ months in country. I feel very proud of my service there and today it provides me some of my greatest memories and personal accomplishments. I'd really like to hear for some of the friends I made during that time. Don Adam, Dave "Hippy" Holt, John Callahan are a few of the many.

Chon T. Pham writes, I was one of the first six Vietnamese Navigators who were sent to 360 TEWS for training in early 1972. My IN name was Major Pannel and I wish to have a chance to talk with him again. I found out your web site by Mr. Joe Martin. I was really enjoyed every single page. At least I still have something to remember and to forget.

Richard (Dick) Kale says, I was assigned to the 94th in 1970 & 71. When assigned, we were short people, so after my cherry flight, I was made IRO, one month later, was put in Stan Eval. Along with Capt. Collins, Bob Scofield, Homer D. Reynolds, and two other operators, we started up the Vietnamization program. I checked out the first of these flights, not only did we loose an engine, but the day before, we lost the other one, sort of hairy, but all turned out well. I was only in country 10 months, but did fly 149 missions. I was known as Kale and his munchkins.

Ernest L. Short says, As a Captain, I was assigned as the first Commander, Det 2, 6994th at Pleiku in the summer of 1966. Unfortunately when I arrived at Pleiku, I was the sole member of the Det. Thanks to Jack Crook (The only member of 362nd TEWS) , who also had no aircraft, I felt right at home. I have a book titled "The Longest Year" which has all of the 362nd TEWS personnel during the 66-68 time period.

Dick Aufiero says, I was a crew chief with the 360th TEWS at Tan Son Nhut and crewed the VC-47 number 44-77284.

Edward J. "Jim" Maloney says, I was a Lieutenant with the 360th TEWS at Tan Son Nhut from September, 1971 to September, 1972.

Robert Benzon, says, Whew! I was beginning to wonder if I ever did serve in a TEWS unit! Not much in the history books about what we did over there. I served as a 2nd Lt, then 1st Lt copilot in the 362 TEWS at DaNang AB during 1972 and 1973. We closed the unit down several months after the spring of 1973 cease fire agreement. Interestingly, we continued to fly missions from DaNang after the cease fire with South Vietnamese markings on the airplanes. I never did fully understand that little maneuver. I went on to fly as a copilot and aircraft commander in KC-135s, shot through the ranks to Captain, and went off active duty in 1980 or so. I'm now an aircraft accident investigator for the National Transportation Safety Board.

Walter Palmer says I was stationed at Nha Trang, 1968-69 with the 6994th SS, Det. 1 as the Operations NCO and flew 205 missions in the EC-47's. The commanding officer at the time was Lt. Col Raymond H. Rade. I would like to hear from anyone that worked for me at Nha Trang. They all were the finest bunch of NCO's and airmen that you will ever find.

Mike Keller says I was a First Lieutenant and was a Navigator with the 362nd TEWS from November 1967 to November 1968.

Bob Brown during the year of 1969 I had the pleasure of flying with some great guys.

Michael D. Lee sent the following information on his tour in SEA. I Arrived RVN Cam-Ranh Bay, flew north to Phu Cat on C-123. First afternoon "Charles" welcomed me to Phu Cat with my first rocket attack. I was a Sgt and was Assigned to the Phase Dock of the 361st TEWS. On 16 Oct. -71 I was flown north to Da Nang on advanced party to merge some of our "GOONS" into the 362nd TEWS. I remained in the Phase Dock at the 362nd TEWS until DEROS in 1972. The pride that I developed in these two squadrons is still with me in everything I do today.

Al Budington served with the 6994th as a 292x1, Morse Intercept operator on the "Back End Crew", can't recall the exact dates but late 72 to late 73.

Richard L. Snook I was in Vietnam from December 1967 until December 1968 and I was assigned to the 360th at TSN. I was an E-4 and a crew chief on the EC-47's and had a small crew of six men and six airplanes to maintain. We worked on the flight line from 3 PM to 11 PM each evening. When the TET offensive hit we had just left the flight line for the barracks. It was a couple of

days before the base was secure enough to return to the line to see our shot up airplanes. In a week or so, we had them back together so they could continue their flights.

I have used my Air Force aviation experience to continue to work on DC-3's. I am president of a small mission/humanitairan effort here in South Florida called Missionary Flights International. I learned to fly after Vietnam and I am now a captain on the DC-3. MFI provides air support to over 600 missionary families working in Haiti and the Dominican Republic. We have four DC-3's that we use in this service. We just returned from Honduras where we assisted in relief efforts due to hurricane MITCH. I was landing on 2500 foot grass strips with food, water and other supplies. It was a great experience to see the DC-3/C-47 doing what it was meant to do, reach out to people in need. It is a great OLE bird and my admiration for the airplane grows each time I fly it. After being around the DC-3's for over 30 years I can attest to the airplanes trustworthiness. I am sure they will be flying long after I hang up my wings. I am grateful the Lord gave me my basic training on the EC-47's in Vietnam. I have used it for His glory ever since.

John J. (J.J.) Moore says,I was a Flight Commander in the 6994th at Tan Son Nhut from 8/70-8-71. Col Inge was our Commander, Lt. Col McMakin (sp) was Deputy. SMgt Jerry McKee and MSgt Buddy McGuire were also Flight Commanders.

I remember the scary missions being caught in heavy storms during the monsoons. I remember us being shot at during night flights as we took off from Tan Son Nhut. I remember my first combat takeoff——wheels up before we were airborne. I remember a mission when flying at 5000 feet and notifying everyone I observed heavy ground explosions. We had been flying under a B-52 arc light bombing mission. I remember when my roommate Red Scholander was on a mission which had to be aborted because the pencil flares exploded when he laid his flak vest on top of the radio equipment directly in back of the cockpit . I remember frequently holding onto the navigators legs as he peered out the side door between the webbing trying to get a Doppler set for the computer.

Dave Felker says. Served as a RO in NHA TRANG from 1966-1969. Flew 360 missions with 13 air medals and DFC.

Joe Wesner, I was there, in Da Nang from Mar 72 thru Feb. 73 and was an A20270. Ran flight ops for 202s for awhile then was SEFE for 202s for the remainder of my tour. I knew Joe Matejov, Pete Cressman and Todd Melton who were killed on their fateful flight out of Ubon. I flew several flights with them when they were assigned to Da Nang. We closed Det 2, DaNang in Feb., 1973.

and I rotated back to the ZI. The scariest part of my tour was at the end when they painted out the U.S. flag on the tail of the remaining EC-47s and replaced it with the RVN flag. If we had gone down and been captured, we had no cover story or any way to fool the NVN and would have surely been shot. Other than that, it was the best assignment (job satisfaction wise) I had in my career. I met and worked (played??) with some of the finest and most professional guys I ever knew. As time passes, my memory dulls but I have some vivid memories of some great times in both Swampy and Gunfighter villages on DaNang AB, RVN.

Bill Christian says, Spent 3 tours in Vietnam, Nha Trang 7-67 to 6-68, Danang 9-70 to 4-72, head SEFE in Danang, 376 combat missions, 2 DFCs, many air medals. Responsible for testing 38 in Grenier after returning from Nha Trang (Major Eddy nav and myself the RO) in 1969 (give or take a year).

Many memories and many happenings during that time. As time goes on I will try to relive some of those. I remember when I left in 1973 only a few had flown over 400 missions, Mike Presslar, Art Silvin, Don Boston, and Mike Wilson. I never made that goal!!

John T. Shultz says, I was stationed at Det 2, 6994th Security Squadron, at Pleiku, Republic of Vietnam, from 1967 to 1969. I worked as a 202.

Shorty Pettit Jr. says, I was in the 360th TRW in 1967-1968 I am well aware of the missions of the EC-47 and outstanding dedication everyone in my outfit gave to the Nam. Out of all the aircraft I remember is balls 9. She was a good girl and gave her all for America. In the time I was there she never missed a flight. I am proud for what I did for my country in Nam.

Larry J. Cromer says, I was a 292 then 202. In Vietnam I was AMS on Drill Press and Phillis Ann. Was at Phubui when tet came about. I got out as soon as we could and went to Pleiku and continued to fly our mission from there. I left there in 68. The name of one of our gooneys was BIG JEAN last 3 digits were 068 I think.

Orvin Copeland says, I was a TSgt and was assigned to the 360th TEWS at Tan Son Nhut. I arrived there in July of 1967 for a years tour. Says most of his tour he was flight examiner.

Dave Eddy says, I was with the program from it's inception, flying the first prototype (Hawkeye) out of TSN beginning in Sept. 1965. That tail number by the way was 50925. The prototype system was the ARD-18, and 50925 was sent back to Sanders Assoc. to be modified and outfitted with the ALR-34. Missing from your list is 49268 (can't recall the year, but I think a 43 model) which was

the first ALR-34 delivered in April of 67. Our crew Businger, Line, and others I can't recall, were the first to fly that one and started the training of the 6994th Operators and the front enders on the system. There was a second Hawkeye...and I want to say that it was 703. Maybe Bob Line can help with that. I was also fortunate to start training for the TEWS on the ALR-35 and theALR-38 system. Ended up several years of ARDF fun by closing TSN in DEC of 72.

Melton L. (Randy) Francis says, I was with the 360th TEWS from Nov. 1968 to Nov. 1969. I remember having a hell of a time replacing the heat exchanger on "Balls Nine"!! I have always said the Gooney Bird is the best aircraft the Air Force ever owned!!

John L. Hurst writes, I flew with you on the EC47's while assigned to Det 1, 6994SS at Nha Trang, RVN from the earliest flights in 66' until I PCS's in Oct. 67. I was an AMT (Airborne maintenance Technician). I only flew 18 missions for 104.6 combat hours on those Gooney birds. I was a brand now SSgt when I got to VN, but stayed in until I retired as SMSgt in 1980.

Thomas V. Cutcher says, I Served in the Air Force Security Service from March of 1968 to July 1972. I was an analyst (202). Basic at Amarillo, training at Goodfellow. First assignment 6981st at Elmendorf AFB Alaska, then to Danang AFB 1970 6994th Det 4, next to Tan son Nhut AFB 1971 6994th as liaison with 509th Army Radio Research Group, Saigon.

Gary D. Letterle writes, A quick note from another old crew chief. I was the crew chief of aircraft number 668, WATZAMATTAU, in 1968 at Pleiku air field in Vietnam. An EC-47N model. In my opinion the most RUGGED, DEPENDABLE, HEAVY DUTY, MUSCLE Airplane ever made. A tear comes to my eye every time I think about Her. Thanks for keeping the tradition of the ultimate in no frills flying alive.

Dave Kettenhofen writes, I was a Sgt and was stationed at TSN AB from May 1970 to May 1971 as a Radio Operator with the 6994 SS. During my tour I flew approximately 130 EC-47 missions and was awarded the Distinguished Flying Cross and 3 Air Medals. Some names I can recall are Bill Wooten, Rick Heilman, Roy Jordan, Gary Graeber, Brent Spoelstra, Hank Cravens, Nolan Pressley and a guy called "Stumpy". How many of you remember the trips down good old Plantation Road?

Jim Luther writes, I spent from November 1971 until August 1973 with the 6994th SS. Started out in Tan Son Nhut from there I went to DaNang and later, moved over to Ubon, Thailand. Was Chief of SEFE at Danang and Ubon. Was there thru Baron 52 and lots of other things. All those on Baron 52 except Dale Brandenberg worked for me in Stan Eval.

Don Line writes, I first served in Vietnam at Phan Rang with a C-123 unit and after about two weeks, was sent to the 360th TEWS at Tan Son Nhut. I was a Sgt and served in the 360th TEWS at Tan Son Nhut in 1971-1972. I worked night shift on the flight line as a Crew Chief on EC-47 number 43-48767. I believe this plane was transferred to Tan Son Nhut from Pleiku in 1971.

Bob Irving, writes I served as a Navigator in the 362nd TEWS at Pleiku from September 1967 to September 1968. Recalls hanging out at Del-Mac's... the unofficial R&R center (bar) in RMK area. Mike Keller and I were proprietors for the tour. You were all a really great bunch of guys. I've always been very proud of the job that we all did.

Chapter 17

EC-47 Mission Losses 1966-1974

EC-47 43-49679, Hit by China Airline 18 February, 1967

The following based on USAF Accident/Incident Report dated February 18, 1967.

History of Flight

At 1024 Hours on 18 February 1967, at Tan Son Nhut Air Base, Republic of Vietnam, RC-47P, serial number 43-49679, received substantial damage when struck by a China Airline C-46, tail number CA2. The RC-47 was parked in a designated parking area, properly chocked with controls locked. The C-46 left the high speed taxi way and collided with the RC-47.

Shortly after landing on runway 25, the China Airline C-46 was observed by the tower advisor to have a smoking brake, and the crash phone was actuated. The China Airline pilot turned off the runway onto the high speed taxi way (W-5) and at this time discovered that he had a defective right brake. The pilot ground looped the aircraft to prevent it from crossing the east-west taxi way onto the C-

121 ramp. The C-46 aircraft made a 360 degree ground loop to the left and struck the RC-47 upon starting a second ground loop. The engines of the C-46 were stopped and the crew and passengers evacuated the aircraft. Fire trucks were on the scene and standing by. There was no fire nor any personnel injuries.

EC-47 TIDE 86, First EC-47 Loss

EC-47 43-49201, Lost March 9, 1967

(Note: The following is based on documents included in the "History of the 361st Tactical Electronic Warfare Squadron, 1 Jan 67 - 31 Mar 67" from the archives of the US Air Force Historical Agency, Maxwell AFB, Alabama. All times are Vietnam local.)

RC-47 [designation later changed to EC-47] serial number 43-49201 of the 361st Tactical Electronic Warfare Squadron, operating under the tactical call sign TIDE 86, departed Nha Trang air base at 1425 hr. 09 MAR 67, on PHYLLIS ANN mission number 2880. ETA back at Nha Trang was estimated to be 2055 hr.. The last positive contact was with PEACOCK control at 1425 hr.. The aircraft at that time was 130 degrees for 102 nautical miles off Pleiku TACAN [channel 53.]

A communications search initiated at ETA + 35 yielded no results and at 2340 hr., the 38th rescue SQ. was notified. Bad weather the next day hampered aerial search activities by the USAF and surface searches by USN and Vietnamese navy boats in the adjacent off shore areas, but the RC-47 was sighted by a USAF O-1 FAC at approx. 0810 hr. 11 MAR at 14 degrees 40.5 min N / 108 degrees 58.75 min E.

A 361st/6994th team from Nha Trang was flown to the crash site by helicopter, arriving at 1520 hr.. The wreckage was on hillside, approximately 200 feet below the ridge. The aircraft appeared to have been in a climbing left turn. The left wing was torn off and the forward half of the aircraft was torn apart, scattered and burned. The pilot, copilot and flight mechanic were found in this area and identified. The rear portion of the fuselage lay 140 feet down valley in an

inverted position, badly torn apart but not burned. Six bodies were identified, the seventh was not recognizable. All deaths appeared to be instantaneous and all bodies were recovered.

It appeared that "the VC... thoroughly combed the area stripping valuables, survival gear, boots and socks, side arms, gun box (5-M-16's) and canteens." The ARDF equipment did not appear to have been tampered with. The navigator's console was fairly intact and was destroyed by an army demolition team along with the IFF and such ARDF equipment that could not be salvaged. One undamaged altimeter read 1,740 ft and the clock read 1820 hr.. No engine instruments were located and the throttle quadrant could not be found. Props were not feathered, but engines were so badly destroyed by the crash and fire that inspection "yielded little factual data." Leaflets carried on the aircraft [for decoy purposes] were scattered all around the site. Both pilots were experienced and highly qualified. The crash reports note that both were nondrinkers.

By reviewing the navigator's work chart, printer tapes, and the radio operators' notes, it was possible to reconstruct at least some of what happened during the last minutes before TIDE 86 smashed into the hillside. TIDE 86 appeared to have last worked target "golf" (i.e., the 7th of the mission), which was clearly plotted over water. The investigators conjectured that TIDE 86 descended in an attempt to make visual contact in accordance with MARKET TIME procedures. It was supposed that either weather prevented a sighting or that if a sighting was made, low altitude (1,500 feet) prevented reporting it.

The team further conjectured that TIDE 86 attempted to make one last Doppler setting [at point G-5] before darkness set in and that "some serious cockpit emergency" took place immediately thereafter. "In this high threat area", the report noted, "battle damage, power loss, engine fire, or a combination of all three" could have distracted the crew in the 4 minutes between the last Doppler setting and the crash. The report also noted that "heavy small arms or automatic weapons fire could have precipitated evasive action, delaying the return back to safer terrain." The wreckage was found at a point 260 degrees 8.4 NM from this last supposed Doppler set point. TIDE 86 was the first EC-47 lost to enemy action in Southeast Asia.

Crew members Lost from each unit.

Ivel Doan Freeman	Major	361st TEWS
Leroy Preston Bohrer	Major	361st TEWS
Roger Paul Richardson	Captain	361st TEWS
Prentice Fay Brenton	SSgt.	361st TEWS

Raymond F. Leftwich	TSgt.	Det.1 6994th SS
Charles D. Land	A1c	Det.1 6994th SS
Daniel C. Reese	A1c	Det.1 6994th SS

More data on Tide 86, This data directly from Official Declassified Documents.

A SPECIAL HISTORICAL STUDY OF USAFSS RESPONSE TO WORLD CRISES 1949 - 1969 U.S. Air Force Security Service

When you see (.), that portion was censored.

At approximately 1530Z on 9 March, Det 1, 6994th SS reported to HQ USAFSS that a PHYLLIS ANN C-47 (.) number 43-49201 was overdue from a mission. A check of all bases in and out of South Vietnam for a possible emergency landing failed to locate the aircraft.

By 10 March 1967, it was obvious that the aircraft had crashed. The 6994th SS reported that "We have given some areas of search concentration to rescue people based on last known location of (.) scheduled for that mission." Meanwhile, 7th AF told the rescue people to give the search mission a high priority. Also, 7th AF instructed the rescue people to destroy the aircraft with napalm an high explosives when they found it, providing, of course, that there was no one in or around it and there was no way to secure and salvage it.

Downed C-47 Sighted

On 11 March 1967, 7th AF (TACC) reported that a downed C-47 had been sighted and one U.S. body was laying beside the aircraft. There was no sign of life. The aircraft was broken up and there was evidence of flash fire.

Later that day, an Army ground rescue party reached the aircraft. The point of impact was approximately 200 feet from the top of a mountain. Both engines appeared to have been operating and the fire occurred on impact. The Pilot, Copilot and Flight Engineer were inside the aircraft; the Radio Operators and Navigator were outside. All apparently were killed before or at crash impact. Viet Cong or mountain tribesmen (Montagnards) had been on the scene. While all weapons, shoes, and other personal effects of the crew members, were missing, there was no evidence of interest in classified material. The (.) (.) partially burned with some pages missing was recovered. All classified materials and aircraft papers within view and within a radius of 500 yards were recovered. Psychological warfare leaflets were scattered over a large portion of the crash area.

Approximately 20 feet of the fuselage containing the ARD-18 had torn off and was inverted. The "X" operator's chair was still erect, but the ARD-18 console was torn loose. All equipment was removed from the fuselage before Army demolition experts destroyed it with 50 HC-4 charges. The only portion of the equipment not found was the Franklin printer. Remaining portions of the aircraft also were destroyed by the demolition team.

Due to partial destruction of the aircraft by impact and fire, cause of the crash, whether ground fire or other cause, could not be immediately determined.

However, the investigating officer later determined that an explosion took place in the rear compartment of the aircraft in the vicinity of the (.) position. The autopsy reports showed numerous pieces of shrapnel in the bodies of crew members occupying the fuselage. One had a wound, appearing to be a gunshot, beginning below the chin and coming out the head, indicating that small arms fire also took place. The 1013Z time found on the operator's scratch pad was the time of the last positive aircraft position. Two assumptions were made: (1) the (.) had scored a direct hit in the aircraft fuselage, or (2) the aircraft was hit while making a Doppler set over a Doppler set point. The latter seemed to be more logical based on time factors. Also, since the Doppler set points were used constantly, it was concluded that the Viet Cong would soon be able to detect this and set up antiaircraft fire at these points.

As mentioned previously, the psychological warfare leaflets aboard the aircraft were scattered around the crash area.

As a result of this battle lose, the following procedures were immediately put into effect:

1. The terrain clearance COMPASS DART (PHYLLIS ANN) aircraft was raised from 1500 to 2000 feet.

2. (.) material aboard the aircraft for use by USAFSS personnel was reduced to a minimum.
3. Doppler set point procedures were modified to prevent establishment of predictable patterns.

EC-47 44-77016 Lost, March 11, 1968

Another EC-47 Lost, This data directly from Official Declassified Documents. A SPECIAL HISTORICAL STUDY OF USAFSS RESPONSE TO WORLD CRISES 1949 - 1969. U. S. Air Force Security Service

This is as told by a couple of the Radio Operators

When you see ( ), that portion was censored.

On 11 March, 1968, COMBAT COUGAR C-47 aircraft 44-77016 sustained severe combat damage from 37 MM antiaircraft fire while flying in ( ). The Pilot managed to control the aircraft, recovered, and flew it back into South Vietnam near Ben Het Special Forces Camp. All crew members were able to get out of the aircraft safely. Two of the Radio Operators who flew on the mission gave the following version of the incident:

11 March started out as another typical day with just one exception. The Radio Operators had a little trouble getting to their survival gear. Other than that, things went smoothly. This was the first time this crew had ever flown together, so after the intelligence briefing, everyone introduced themselves.

Aircraft 016 was functioning normally and we were off the ground at 0545L. Since there isn't (sic) much happening that early in the morning and we had a two hour flight to our assigned area, 03, the entire crew was feeling somewhat relaxed.

Our Flight Mechanic made coffee and passed it around to all those who wanted it. To help pass the time on the way to the area, the Aircraft Commander amused the entire crew by telling us some of his previous experiences. The entire crew, got some good laughs from these stories, but even greater than that, I think it gave us a little sense of security knowing that we had a vary capable and highly experienced AC. Besides listening to these stories, the RO's were doing their normal jobs as usual.

Before reaching our assigned area, we had changed positions a couple of times. At the time of the hit, 0835L, the "X" operator notified the AC of the damage to the #1 engine (which he) observed from his vantage point. After perhaps a moment of indecision as to what to do next, the back end crew went to work and functioned as a well organized team. Our radios were set up on the emergency frequencies, and the destruction of all classified material was begun by the RO's. While we were doing this the FM was busy jettisoning of our equipment. As this was being done, the AC handled the may day procedures and the Navigator, remaining very calm, plotted our position and gave the AC the heading for out nearest friendly unit.

Up front the Pilot and Copilot had their hands full. The #1 engine took the hit, but the #2 engine was the one that gave them all the trouble. The #2 engine started to race and the AC directed the copilot to allow the engine to run 2400

RPMs and then bring it back to 1800 RPMs. This was done approximately 18 to 20 times. By so doing,, they were able to keep the engine running for some time rather than feathering it. When it got so bad that they could no longer control it, they tried to feather it and found it impossible, thus causing them to cut the engine completely. This happened at approximately 0850L. With #2 engine frozen and because the landing gear had come down when we too the hit, we had a tremendous amount of drag and were losing 700 feet of altitude per minute. Because of this condition, the AC directed that all unnecessary equipment be jettisoned.

Since the FM's took kit was sucked out when the rear door was jettisoned, we had no tools to work with. The receivers on the "X" and "Y" were jettisoned along with the MC88 from the "Y" position. The "X" operator literally tore the typewriter from the table to which it was secured. Since there were not tools, this was virtually all of the heavy equipment that could be jettisoned. All of the spare parachutes and harnesses were thrown out, along with the raft and Gibson Girl radio. We kept the M16's until the AC directed that they go. It is the general opinion of the back end crew that everything that was loose, or could be torn loose, was jettisoned from the aircraft.

As soon as the may day was sent out by the AC, we were joined by an "O-2". The "O-2" Pilot worked directly with our AC and advised him on what directions to take to get to Ben Het. This just confirmed what the Navigator had already passed to the AC. This again points out the efficiency an accuracy of the work that the Navigator had done. The "O-2" Pilot at one point recommended to the AC that he give the order for the entire crew to bail out. The AC had every right to give that order, but we feel that he did no do so because of the information that he was continually getting from his Navigator, and his own experience. Because we were losing altitude, we could not go over the mountains that were in front of us. Instead, the "O-2" Pilot directed us around them and over the lowest possible terrain.

At this point, we feel it is fitting to pay the highest possible tribute to the rescue people and those who aided us when we reached Dak To. We are fairly certain that had we bailed out, the Jolly Greens would have been there to pick us up the minute we hit the ground. These people are certainly a welcome sight when someone is in trouble, and any recognition that they receive is well deserved.

Minutes prior to our crash landing at Ben Het, the AC directed that everyone buckle in and prepare for the impact, and this was immediately accomplished. Upon impact, the aircraft bounced once and then turned in a large loop before coming to its final resting position.

As far as the back crew goes, the Navigator got bounced around more than anyone else. Within 30 seconds after the aircraft came to an abrupt halt, the entire crew was off the bird an on the ground. As soon as we were a safe distance from the aircraft, the Special Forces and Montangard joined us and really could not do enough for us. When the AC determined that the aircraft was not going to burn, he, along with the two Radio Operators, went back aboard the aircraft to gather up all of the classified material that had been torn an scattered about. At this point, we feel it should be said that the AC was interested first in crew safety and then he wanted to make sure that all classified material was either destroyed or properly guarded. After guards were placed around the aircraft, the entire was flown to Dak To in the gun ships that had been with us from the beginning.

Once at Dak To, a phone patch was put through to the 361st TEWS at Nha Trang. The AC informed them of the crash an said that all the crew was safe and all classified material had been destroyed. He also informed them that all the crew would be leaving for Pleiku as soon as possible. There was an O-2 leaving almost immediately and the AC told the FM, Navigator and Copilot to leave with it. He instructed them to check with the flight surgeon as soon as they got to Pleiku. This again shows the interest he had in the safety of his crew. As soon as they had left for Pleiku, the AC and the ROs returned to the downed aircraft to make sure that all classified material had been removed and destroyed. A small amount of classified material was found on the aircraft. This was gathered by the RO's and burned. The burning of this material was witnessed by an Army Officer assigned to Dak To. After this had been done, we again returned to Dak To and awaited our transportation to Pleiku. From Pleiku, we were flown home by another 361st TEWS aircraft flying that area. As far as praise goes, there are not enough words to express the feelings of the RO's. The Pilot and Copilot did a highly outstanding and professional job of bringing that aircraft back to Ben Het. Although this was the Copilots first crash landing, he handled himself like a veteran. When the gear collapsed upon landing, they did an outstanding job of controlling. Also, enough cannot be said about the crew coordination. Without this, we feel that we would certainly have had to bail out. The entire effort was directed by the AC, and his directions were followed to the letter. He, at all times, kept the crew informed of what was happening. It is because of the coordination and highly professional manner in which everyone handled themselves that we are back here today. Also, we most assuredly had the Grace of God.

EC-47 Crash Landing in Alaska, enroute to SEA

EC-47 42-24304 Crashes October 25, 1968

From USAF Accident/Incident Report Dated 9 Nov. 68

Summary

Upon arrival at McClellan Air Force Base, California, Lt. Colonel Ronald A. Bena, Major Jerry E. Marshall, Major Floyd J. Brazile and SSgt Thomas Kaminski, were directed to ferry EC-47Q #42-24304 to Southeast Asia.

The personnel performed the following duties on the flight: Aircraft Commander, Lt. Colonel Bena; Copilot, Major Marshall; Navigator, Major Brazile; Flight Engineer, SSgt Kaminski. The crew departed McClellan AFB, California, for McChord AFB, Washington, at 1930Z 24 October 1968. Flight time enroute was four hours.

At 1500Z, 25 October 1968, the crew departed McChord AFB, Washington for Elmendorf AFB, Alaska. Flight altitude was 10,000 feet IFR and estimated time enroute was eight hours and thirty-seven minutes.

At approximately 1955Z the aircraft yawed to the right. Lt. Col. Bena, the aircraft commander, feathered the right engine. The nearest suitable landing field was determined to be Annette Island Coast Guard Station, Alaska and an immediate turn was made toward Annette.

Altitude could not be maintained on one engine so an enroute descent was made to 6,500 feet. The flight continued until at approximately 2020Z when the left engine lost power. The aircraft was still approximately 70 miles north west of Annette Coast Guard Air Station. Attempts were made to restart the left engine. When attempts to restart the left engine proved fruitless, the right engine was unfeathered and attempts were made to restart it all to no avail.

During the descent following loss of power on the left engine the C-47 became IFR at 5,000'. Upon reaching 3,500' a break in the clouds to the right of the plane revealed water below. A turn was made toward the break in the clouds and decision was made to ditch rather than bailing out over very mountainous and wooded terrain. VFR conditions were attained at approximately 3,000 feet. The cargo door was jettisoned in preparation for ditching.

As a pattern was set up for a water landing, a small marsh on the edge of the edge of a lake was observed. This lake was Big Salt Lake, actually an inlet of salt

water on the western side of Prince of Wales Island. A left hand pattern was initiated for a gear up landing on the marsh. Final approach was at 90 knots and half flaps. Initial contact was made almost simultaneously by both wings on three large stumps.

The right wing was partially separated near station 100 and both wing tips were torn off near station 340. Ground contact was made shortly thereafter by the rear portion of the fuselage. The aircraft traveled approximately 430 feet after contact was made with the stumps. Initial landing slide fairly smooth. At approximately 60 feet from the final resting place, the right wing separated completely from the aircraft at station 100. Approximately 40 feet from the final resting place the aircraft hit another stump which caused the aircraft to swerve to the right. Final resting place of the aircraft was on a salt marsh on the north side of the eastern tip of Big Salt Lake.

No serious injuries were received by the crew and the aircraft did not catch fire. Parachutes were deployed to assist other aircraft in locating the crash site. This was of prime significance because the aircraft was painted with camouflage paint.

A USAF KC-135 arrived over the site approximately 30 minutes after the crash. Contact with rescue aircraft was complicated by apparent survival radio malfunctions. Shortly after the KC-135 arrived overhead, an Alaskan Airline Golden Nugget Grumman Goose aircraft, an amphibian, landed on the lake and evacuated the copilot, Major Marshall and the flight engineer, SSgt Kaminski. The Pilot, Lt Colonel Bena and the navigator, Major Brazile remained behind to guard the classified equipment aboard the aircraft. The pilot and navigator were evacuated by a Coast Guard H-52 helicopter about 5 1/2 hours after the crash. Security of the aircraft was maintained by tow Coast Guard security personnel who were aboard the helicopter which evacuated Lt Colonel Bena and Major Brazile.

{{ NOTE: }} For those of you not familiar with the phrase, "station 100" or "station 340" etc., these are references in inches measured from a particular point on the aircraft. I can't recall where the wing measurements begin, but just for the sake of clarification, we will call it at the center of the fuselage and measuring from there outboard on each wing. The same measuring system is used throughout the aircraft and I believe the fuselage measurements begin at the nose and count toward the tail. Among other things, these "station locations" are used for references as you see here and for weight and balance of the aircraft when loading cargo or when making modifications that either add or deduct weight from the aircraft structure. Hope this helps you to understand.

{{ NOTE: }}This aircraft was enroute to Pleiku according to the report.

EC-47 43-48702 Crashes, December 31, 1968

The following based on USAF Accident/Incident Report dated December 31, 1968.

History of Flight

Aircraft Crew members

Capt. John A. Bator - Pilot
1st Lt. James B. Dobbs - Copilot
Major Walter J. Brooks - Navigator
TSgt Gerhard R. Frenton - Flight Mechanic
SSgt Robert N. Hudak - Radio Operator
SSgt Randall R. Williams - Radio Operator

On 31 December 1968, at 1435 hours, EC-47P, aircraft SN 43-48702, call sign Cap 19, started takeoff roll on runway 09 at Pleiku Air Base, Republic of Vietnam. The flight was approved by 460th Tactical Reconnaissance Wing as mission number 2770. Programmed enroute time was to be 7+00 hours with recovery at Pleiku AB.

The maintenance preflight inspection of the aircraft was accomplished by the ground crew at approximately 0030 hours. The Pilot and crew reported to the squadron at 1325, briefings were conducted, clearances signed, and they arrived at the aircraft at approximately 1345 hours. The required preflight inspections were completed by the individual crew members and no discrepancies were noted. Everything continued normal until completion of the "Before Takeoff Check" as the aircraft was holding number one for takeoff short of the runway.

At about this time, fumes that smelled like alcohol were noticed by the pilot, copilot and flight engineer. A check of the cockpit area was made. The hydraulic compartment, isopropyl alcohol tanks lines, switches and controls were found to be normal. The pilot detected a damp area on the bulkhead padding behind, above, and to the left of his head. The flight engineer checked this area and the area on the opposite side of the bulkhead which he also found damp. The pilot and engineer suspected that this dampness came from an alcohol vent line that ran through the area. The copilot thought the fumes could have come from other aircraft that were running up in the area or from a C-123 that had just landed.

The fumes finally dissipated and the pilot believed that a safe mission could be flown as fumes were no longer present. He was also approaching his scheduled takeoff time and three aircraft were waiting behind him.

The aircraft was cleared into position to hold after a landing aircraft. Two light aircraft were cleared to takeoff at mid field ahead of him. After the second one started to roll, the pilot advanced his power to 30 inches manifold pressure and obtained satisfactory power and systems check. When cleared for takeoff, he released his brakes and advanced the throttles to approximately 40 inches. As briefed, the copilot continued the throttles to maximum takeoff power.

Shortly thereafter, during the takeoff roll there was a return of very strong fumes, which immediately brought tears to the eyes of the crew members in the cockpit. The copilot quickly opened his side window. The pilot reached for his side window with his right hand. The aircraft started to slowly veer to the right. As the aircraft approached the right side of the runway, the pilot corrected with hard left rudder. The aircraft swerved to the left and departed the runway about 1300 feet from the takeoff end at an approximate 45 degree angle.

At approximately this point the throttles were retarded. The aircraft continued across a depressed median, up and over a taxi way, through a perimeter fence, crossed a road, striking a wrecker and a jeep, coming to a stop astride a culvert.

The driver of the jeep suffered a minor laceration of the head. The aircraft came to rest at a position approximately 1700 feet down the runway and 400 feet off to the left side. The Pilot turned on the alarm bell, turned off the individual ignition switches and the battery switch. The crew evacuated the aircraft without difficulty. One crew member receiving a minor injury (The Navigator sprained his right thumb).

The crash equipment was at the accident scene almost immediately. The flight line fire truck responded even before the aircraft crossed the median. The tower sounded the crash alarm as the aircraft left the runway. The fire department put out a small fire in the right engine and EOD removed all explosives (Flares, guns, etc.) from the aircraft.

EC-47 43-49547 Ditches in Mun River in Thailand

The following based on USAF Accident/Incident Report dated February 18, 1967.

Aircraft Crew members

1st Lt. Attila T. Simon - Pilot
1st Lt. David M. Perry - Co-Pilot
1st Lt. Douglas C. Abbes - Navigator>
SSgt Malcomb E, Donaldson - Flight Engineer
Sgt Phillip (NMI) Brown - Sr RO
Sgt Ronald W. Alter - RO
Sgt Larry E. Pulley - RO
Sgt Dewey M. Nielsen - RO

History of Flight

Cap 09 was scheduled for a classified combat mission eminating from Pleiku AB, RVN on 7 June 1969. The proposed departure time was 0725 hours local time. Estimated time enroute was planned for 7 hours total flying time, which required a planned refueling stop after the first four flying hours at Ubon RTAFB, Thailand. There were 470 gallons of fuel on board the aircraft at Pleiku for engine start.

The officer flight crew was awakened shortly after 0500 hours and was transported to the Squadron Operations building around 0550 hours. Neither pilot ate breakfast. The flight mechanic was awakened at 0450 hours and ate breakfast in the dining hall.

The mission briefing began at 0605 hours and was interrupted for approximately 30-45 minutes by (incoming) rocket attack. After the all clear signal and the completion of the briefing, the crew reported to the aircraft. Aircraft Preflight, engine start, taxi and engine run-up were accomplished. The crew reported that during the engine run-up the number one engine RPM drop on both magnetos was approximately 30-40 RPM while the number two engine magneto drop were re called as approximately 50 RPM.

Takeoff from Pleiku AB, RVN was made at 0755L hours. The flight crew recalls no significant or unusual portion about the first period of flight other than the failure of the airborne weather radar. During this flight the copilot left his position to eat his flight lunch and the pilot let the flight mechanic fly the aircraft for 30-45 minutes. During the GCA approach into Ubon RTAFB, Thailand, Lion Control notified the flight crew that the 362 TEWS Operations had extended their crew duty day to 16 hours. Landing was accomplished at 1135L at Ubon RTAFB. The aircraft was parked and the required engine shut down checks were accomplished. ((NOTE: A blanked out line here.))

Seventy gallons of fuel were on board the aircraft upon landing. The Flight Mechanics dip stick readings were 40 gallons in the right main tank, 30 gallons in the left main tank. Both auxiliary tanks were dry.

There were two entries in the AFTO Form 781A. One was for a stopped up urinal and the second was for a Bravo Malfunction.

A fuel truck met the parked aircraft. The pilot instructed the flight mechanic to fill the auxiliary fuel tanks and to add approximately 50 gallons to each main tank. The flight mechanic filled the aircraft with 490 gallons of 115/145 octane AVGAS which raised the total fuel aboard the aircraft to approximately 560 gallons. At approximately 1145L hours the refueling was completed.

The aircraft was closed up and locked and the flight crew was transported to the officer's club and the NCO club for lunch.

The flight mechanic visited the BX and a concession after lunch then walked back to the aircraft at approximately 1300 hours. At this time he completed a walk around preflight inspection, opened the aircraft, checked the oil quantity, drained the fuel sumps and removed the control surface locks and ground wires. The flight mechanic noted a slight oil leak in the accessory section of number one engine but considered it to be of minor significance.

At approximately 1330 hours the officer flight crew members returned from lunch and BX shopping.

The copilot and navigator stopped in the terminal building for a moment, then walked out to the aircraft while the aircraft commander stopped by base operations to check on enroute and terminal weather at Pleiku. When the pilot walked out to the aircraft the copilot and navigator were taking pictures of an F-4 aircraft on the runway so the pilot stated that he would get on board and perform the Before Starting Engines Checklist and for the copilot to join him in the cockpit when he had completed his picture taking.

The copilot remained outside for a few more minutes then entered the aircraft and began buckling into his seat in the cockpit. By the time he had adjusted himself in the copilot seat, the Before Starting Engines Checklist had been completed by the pilot in the left seat. The interior of the aircraft was extremely hot and uncomfortable to the air crew.

The engines were started using the aircraft battery as the primary power source. Transient alert personnel assisted the crew with pre departure procedures of engine start, gear pin, etc. The ground crewmen stated that both engines back-fired during the engine start.

At 1346 hours Cap 09 called Ubon Ground Control for taxi, takeoff instructions. At 1348 hours Cap 09 was informed that they had made a wrong turn from the parking spot and to make a 180 degree turn and taxi in the opposite direction. At 1350 hours Cap 09 was warned by Ubon Ground Control: "use caution, numerous vehicles on the circular". The copilot stated that the pilot was taxing fairly rapidly, but not in an unsafe manner.

The aircraft taxied onto the run-up pad for runway 23 and parked to the right of a static AC-130 aircraft. At this time the pilot stated that he accomplished a "modified run-up check". This "modified" run-up checklist omitted the Propeller exercise, Generator, Propeller feathering and Propeller Reverse. The pilot bled (unreadable) the manifold bleed valve, noted the manifold pressure reading at (unreadable) inches, the carburetor air temperature as about 35 degrees C and checked the magnetos on both engines. The flight mechanic used carburetor air temperature of 40 degrees C to assure the proper power RPM schedule.

The magnetos on number two engine indicated a 40-60 RPM drop and a steady 2425 RPM. The magnetos on number one engine indicated a 30-40 RPM drop, and a steady 2390 RPM. However after checking the right magneto on the number one engine, the RPM did not increase back to 2390 RPM. The pilot felt that the throttle may have slipped back so he reaccomplished the magneto check on number one engine. The second magneto check indicated a normal drop and a normal power/RPM schedule. This completed the engine run-up checklist.

The pilot called for the Before Takeoff Checklist and began taxiing toward the number one position for takeoff. At 1357 a minute after taxi from the parking ramp, Cap 09 notified Ubon Tower that they were ready for takeoff. The tower granted clearance for takeoff and the pilot called for the lineup checklist while taxiing into takeoff position. (The gross weight of the aircraft was assumed by the accident investigating board to be approximately 26,576 pounds. The temperature was 31 degrees C, dew point 24 degrees C and field elevation is 405 feet. No form 365F was on file).

The pilot advanced the throttles to 30 inches manifold pressure, the flight mechanic switched the overhead inverter switch to ON and the pilot released the brakes and applied power for the takeoff roll. There was a momentary overboost of both engines to 49 inches manifold pressure and the copilot stabilized the power at 47 inches manifold pressure.

At 70 knots IAS the engineer, who was standing between the seats reported the power is good. He recalls the number one engine CHT as 230 degrees and the number two engine CHT as 200 degrees, both propellers at 2700 RPM and all indications normal.

At 80 knots IAS the copilot made a final check of the engine instruments, then directed his vision outside and put his hand down by the landing gear lock ready to retract the landing gear on command.

The pilot held the aircraft on the runway until 90 knots IAS, lift off was smooth and normal. At approximately 95 knots and 200 feet the pilot called "Gear UP". Apparently, at the exact same time the flight mechanic, noticing a slow drop in manifold pressure on the number one engine called over the inter phone system "we're losing number one". Crew members report hearing a muffled pop and a banging of sorts on the left hand side of the fuselage. Ground witnesses reported hearing the number one engine backfire and the aircraft veered to the left. The landing gear remained in the down and locked position.

The flight mechanic watched the manifold pressure on number one engine reduce to 10 inches manifold pressure and hang there for a moment, then drop. The pilot advanced the power on number two engine to maximum power and then feathered the number one propeller. The pilot also retarded the number one throttle to idle and moved the left hand mixture control lever to idle cutoff. He did not close the fire wall shut off valve. The aircraft remained under positive control during this period of time.

At 1358 hours (10 minutes after taxi from the parking area) the pilot transmitted the following message to Ubon Tower: "Tower, this is 09, we just lost number one, coming back around".

Ubon Tower cleared Cap 09 t land on runway 05 if necessary. The pilot began a slow left turn with the intention of flying a left hand pattern for landing to runway 23. At this time the indicated airspeed was 90-95 knots. The pilot ordered the wing flaps extended to 1/4 flaps. The flight mechanic extended the flaps to the 1/4 position, then went aft to report on the condition of the feathered engine. The pilot directed the copilot to begin the "cleanup checklist" for the inoperative engine. At this time the flight mechanic returned to the cockpit and handed the copilot a checklist opened to page E-2 (Engine Failure). The copilot began completing the checklist and remembered completing this checklist through item 8 (ignition switch).

The copilot stated on inter phone "we're losing airspeed". The flight mechanic then said on inter phone "we only have 30 inches on number two" and reached into the cockpit and tapped the number two throttle to insure it was full forward. The pilot also verified the throttle at full power.The airspeed continued to decrease slowly through 90 knots IAS, the 85 knots IAS and the aircraft began buffeting slightly. The pilot said over inter phone "check flaps 1/2". The flight mechanic said "we can't drop 1/2 flaps" to which the pilot replied "I meant 1/4".

At 1400 hours the pilot transmitted to Ubon Tower, "Ubon Tower, this is 09, is putting the aircraft down in a lake, receive that, over".

The aircraft, indicating approximately 80 knots, descending and periodically buffeting, was headed toward the Mun River. The flight path carried the aircraft through some trees on the river bank and then into the middle of the 350 yard wide river.

Prior to impact, the copilot sounded the alarm bell. The pilot reduced the power on number two engine to idle. The flight mechanic moved to the navigator section in the cockpit, fastened his seat belt and placed his head in his hands on the table. (Next paragraph blanked out.)

These two Photos Courtesy of: Steve Sohn

Impact in the river was made in a wings level, nose level, gear down, power off, 1/4 flaps condition. Apparently there were two impacts.

The first impact presented a skipping sensation which dislodged a few unsecured items in the fuselage area. The second impact was quite severe followed by immediate deceleration. It is believed that the landing gear dug into the water thrusting the nose down severely. At this point crew members in the rear of the aircraft reported considerable debris (parachutes, crew member kits, weapons, L.P.U.s, survival vests, etc.) flying forward through the air. The cockpit area submerged momentarily and then bobbed to the surface, water filled the cockpit area momentarily then subsided. The entire front area of the cockpit was peeled open and back down. The aircraft came to rest on the main landing gear in approximately seven feet of water.

Egress was orderly, calm and through the rear cargo door for the navigator and radio operators. Crew members in the rear of the aircraft were rescued by Thai citizens in sampans. Personnel in the rear of the aircraft were unable to release the aircraft life raft from its container. (** This line blanked out **) The crew members cut the raft free from its container with survival knives.

A two line paragraph blanked out here.

After impact, the flight mechanic unbuckled his seat belt and went forward toward daylight. He reported a large wall of water filling the cockpit during the second impact. The pilot was just raising himself from the left seat. The flight mechanic jumped into the water from behind the copilot in front of the aircraft and was followed by the pilot. Both assisted the copilot to unbuckle his seat belt and realized that he was injured, held him in the water. A sampan came to their rescue and they held ton to its sides until the rescue helicopter arrived overhead. The copilot was hoisted on board the helicopter and taken to the hospital. He suffered a broken leg and facial cuts. Shortly thereafter the helicopter returned and carried the pilot and flight mechanic to the hospital. They were uninjured. Other personnel were transported to the river bank by the Thai sampans where they were met by the base crash control team and brought back to Ubon RTAFB.

A paragraph of about 7 lines blanked out here.

EC-47 43-48402 Lost April 22, 1970

On 22 April, 1970, the 362nd TEWS lost Aircraft number 402 with eight crew members on board, was hit by antiaircraft fire (presumably 37MM) while flying a combat mission in eastern Laos. The Navigator was wounded by shrapnel from

the explosion. The Pilot turned the aircraft on an easterly heading toward friendlier territory, but control problems prevented his success. The aircraft crashed near A Loui Airfield in South Vietnam. The Pilot and one Radio Operator were killed in the crash. The remaining crew members, although wounded, survived the crash and were rescued by helicopter. In order to assure destruction of the classified equipment on board, an EOD team policed the area and destroyed scattered components and the aircraft. Additionally, six Tactical Air Sorties were flown on the crash site." This Data provided by: Jon Ohman

((Additional Information.))

22 April. 70 (S/N given as 34-58636, which is NOT an original C-47 S/N.) Casualties 1 USAFSS + 1 TEWS, 1st Lt. George M. Wall and SSgt Michael R. Conner. others rescued. Joe is interested in this one. The aircraft was out of Pleiku.

John Fuertinger, a USAF mechanic, had this information on the EC-47's. "During my tour as a mechanic at Plieku and Da Nang from 1969 to 1970 we lost three aircraft to enemy action. One was shot down, with two KIA, the copilot, I believe his name was Lt. Wall, and an electronic console operator, whose name I don't recall. I heard that an A-1E air strike was called in to make sure the wreck was totally destroyed. The other two were hit by mortar fire on the ground. 804 gallons of 115/145 AvGas makes a good bonfire!. Although I would not have any way to confirm that air strikes were called in to destroy the wrecks, that was the scuttlebutt that went around. Maybe there is someone out there who can corroborate this."

EC-47 43-15133 Destroyed in Rocket Attack, 1970

I saw Mr. Millers page on tail numbers for EC-47's. I guess that answers my question of two airplanes having the same last three numbers. 45-1133 was a EC-47P which was shot down, and 43-15133 was a EC-47N which he states was destroyed on the ground by rocket fire at Pleiku in May 1970. He asks if this was the plane in the photo. (I'm assuming he means the one on the page of slides I sent you.)

I think I can say yes on this. I looked at the slide mount and it had Apr. 70 stamped on it. I know for sure that the melted propellers came from the plane that was hit by rocket fire that day. The slides of the melted props was stamped June 70, so the dates seem to jive.

I had to think about it for a while, and this is how I remember it. I was off duty in the barracks area at the time. It was during daylight hours when the first 122 mm Katusha (spelling?) rocket hit the flightline scoring an almost direct hit on the aircraft, which had a full load of fuel on board, and it burst into flame.

The air-raid siren sounded and everybody was running into the bunkers when a second Katusha landed in the street between two barracks. It must have had a delayed fuse, because it burrowed into the ground before it exploded, blowing a crater about 10 feet deep and 20 feet across. Two Purple Hearts were earned that day. One was a mechanic on the flight line, whose name I cant recall, who suffered shrapnel wounds. Fortunately they weren't life threatening. The other was Sgt. "Smokie" Smoak, who, like me, was off duty in the barracks area, but didn't quite make it into the bunker fast enough, and was hit in the head with a football size chunk of blacktop. Again, fortunately, his injuries weren't life threatening either, and after a few days in the hospital, he was good as new.

That night I went to work, but the SP's had the revetment cordoned off, so we couldn't get too close. After checking for any more unexploded ordinance, they brought in a big front end loader and scooped the remains of 133 into a dump truck and hauled it away. From that day on until we moved to DaNang a few months later, we had to work in our flak jackets and steel helmets. And heaven help you if the chief of maintenance caught you not wearing them, you would be in for a sever reprimand.

EC-47 45-0937 Crashes August 19th, 1971

The following based on USAF Accident/Incident Report dated 19 August, 1971.

Aircraft Crew members

1st Lt. George E. Crowder Jr. - Pilot
1st Lt. James C. Lashua - Copilot
Major Doyce R. Black - Navigator
SSgt James W. James - R.O.
A1C John P. Lloyd - R.O.
Sgt Gregory R. Shake - R.O.
Sgt David K. Townes - R.O.

History of Flight

Aircraft 45-0937, an EC-47P of the 460th Tactical Reconnaissance Wing, was scheduled for a classified tactical mission originating at Tan Son Nhut AB, RVN on 19 August 1971. Scheduled departure time was 1615 local for a mission

duration of five and one half hours. The aircraft (call sign LEGMAN 48) had a fuel load of 672 gallons and was computed at 26,365 pounds takeoff gross weight.

The Aircraft Commander, 1st Lt George E. Crowder, Jr., and his crew arrived at the 360th Tactical Electronics Warfare Squadron Briefing Room at 145 hours. Intelligence, weather, operations and mission briefing were completed at that time. The mission weather was forecast to be VMC with a Military Weather Warning and Advisory, valid 0600-1400Z. (Thunderstorms within 5 NM of the field.) The crew of seven picked up their personal equipment and proceeded to the aircraft to complete the appropriate preflight inspections.

A thorough preflight revealed no discrepancies and the engines were started at 1535 hours. The Before Taxi Checklist was completed in the revetment and the crew called for taxi clearance. Taxi clearance was received. The Pilot initiated the Taxi Checklist and proceeded to the run-up area near the approach end of Runway 25L. The Pilot's and Copilot's brakes were checked in accordance with local procedures and were found to be operation normally during taxi. The Engine Run-up Checklist was accomplished in the run-up area and all checks indicated that the aircraft systems were operating normally. The Before Takeoff Checklist was completed and no abnormal conditions were noted. At approximately 1605 hours the Copilot called tower for takeoff clearance and LEGMAN 48 was cleared by the Tower for takeoff. The Tower reported the winds at 120/05, which for this takeoff was a left quartering tailwind. The Aircraft Commander called for the Lineup Checklist and applied power to enter the runway. The Copilot accomplished his required checklist items. The Pilot verified that the throttle friction lock was adjusted and locked the tail wheel when the aircraft was aligned with the runway centerline. He allowed the aircraft to roll forward a few feet to confirm that the tail wheel was locked and then the Copilot stated that the Lineup Checklist was complete.

The Pilot, Lt Crowder, applied power slowly and notified the crew on inter phone that they were rolling for takeoff. No differential power application was applied, but the pilot noted that number one throttle required about 1/2 inch lead on number two throttle in order to maintain equal manifold pressure. Both the Pilot and Copilot cross-checked engine instruments as power was advanced through 30 inches manifold pressure. All engine instruments were within normal operating range. Power increase was continued, reaching an estimated 42 inches manifold pressure. This was the maximum power applied during the duration of the takeoff roll. (Takeoff manifold pressure was computed to be 48.8 inches.) Takeoff roll was normal until the aircraft reached a point 2306 feet down the runway. At this point, the aircraft started a gradual left turn. The right gear crossed over the runway centerline 2480 feet down the runway from the approach end of runway 25L. The left turn continued (approximately 9 degrees

left of runway heading) until the left main gear reached a point 75 feet from centerline, 3080 feet down the runway. At this point, tire marks either from the right brake being applied or from the right gear experiencing side loading, were apparent. The aircraft paralleled the runway centerline with the left gear rolling on the extreme left edge of the runway for 150 feet. The aircraft then began a correction toward centerline which rapidly developed into a rolling skid turn to the right (aircraft skidding to the left. (** 2-3 words blanked out **) It crossed the runway centerline 3660 feet from the approach end of the runway. The aircraft direction of travel at this point was computed to have been 295 degrees, while the actual aircraft heading was reconstructed to have been approximately 350 degrees. (** 1-2 words blanked out **)

These two Photos provided by: Bob Looney.

The angle formed by the runway centerline and the longitudinal axis of the aircraft was measured to be 101 degrees. The aircraft departed the right side of the runway 3720 feet from the approach end on the same approximate heading and direction of travel. The left main gear failed from side load tension when it contacted the lip of a drainage ditch which was approximately one foot in depth. The propeller failed and separated from the Number 1 engine 15 feet beyond the gear failure point. The aircraft rotated 20 degrees to the left on a perpendicular axis through the left wing tip. It came to rest 3920 feet from the approach end of the runway and 290 feet from the runway centerline.

During the attempted takeoff, the power was never advanced beyond 42 inches manifold pressure. The maximum speed attained during the roll was estimated by the crew members to have been between 50 and 60 knots.

After the aircraft had come to rest, the Pilot cutoff the right mixture control and attempted to cutoff the left mixture control. The left mixture control was jammed and he was unable to move it. At some point shortly after coming to rest, the Pilot turned the alarm bell switch on to evacuate personnel from the aircraft. The bell was heard by back end crew members but the Pilot and Copilot do not recall hearing it ring. The Pilot attempted to close the fire wall shutoff valves but had difficulty in moving the levers. As he bent over to operate them, one of the Radio Operators thought he was hurt and ran forward to assist him out of the aircraft. The Radio Operator insisted that they get out of the aircraft before it caught fire. The Pilot and Copilot accomplished no further actions and got out of their seats and exited the aircraft.

No crew members experienced and difficulty in exiting the aircraft and there were no injuries. Once clear of the aircraft the regrouped as a safe distance and waited for the crash rescue assistance. An estimated four or five minutes elapsed before the first fire trucks arrived on the scene. There was no fire even though there was extensive fuel and hydraulic fluid spillage. No additional damage to the aircraft occurred once it came to rest.

More on this one

During initial takeoff the aircraft experienced a power loss on one of the engines and an abort was initiated. Being fairly "squirrely" on the ground the aircraft got away from the pilot and departed the runway into the grassy area between the parallel runways at Tan Son Nhut. After leaving the hard surface the aircraft hit a ditch which was hidden by tall grass and sheared the left main gear off (the gear can easily be seen behind the left wing in photo 937r). As the aircraft settled onto the left wing the left prop dug into the ground and separated from the engine (easily seen in photo 937).

As most of the pilots knew, if the left prop separated it was supposed to come through the cockpit but, fortunately, power on the engine had been reduced to idle during the abort and the prop did not have sufficient energy to make all the way through the pilots' laps. If, however, you look closely at photo 937 you see a dark spot behind and slightly above the aircraft commander's side window ..... that is where the first blade entered the fuselage ..... just behind the AC's head!

No injuries were sustained and the aircraft was rebuilt for service. An interesting side note ..... for the purpose of the accident investigation the tall grass was ordered to be mowed.

During the mowing more than a few unexploded rockets (from previous "Sapper" attacks) were hit by the mowers.

But of greater interest was a VC tunnel still in use as a weapons cache RIGHT BETWEEN THE RUNWAYS!

Bob Looney

EC-47 43-48009 Crashes November 10, 1971

The following based on USAF Accident/Incident Report dated November 1971.

Aircraft Crew members

Capt. Timothy J. Buer - Pilot
Capt. David J. Cruz _ Copilot
Lt. Col. Richard J. Smigelski - Navigator
Sgt Thomas F. Draken - Flight Mechanic
Sgt Ronald L.Schebler - Flight Mechanic
SSgt John Allen - Radio Operator
Sgt Walter M. Kawalski - Radio Operator
Sgt Donald G.Bloomfield - Radio Operator
Sgt Ronald M. Arevalos - Radio Operator
Sgt Andres Gonzlaes - Flight Mechanic

History of Flight

Aircraft 43-48009, and EC-47Q call sign TACO 20, from the 362nd Tactical Electronics Warfare Squadron was scheduled for a classified tactical mission departing from Nahkam Phanom West RTAFB, Thailand and recovering at DaNang AB, RVN. The scheduled departure time was 0605 local. The aircraft was rerouted to fly direct to DaNang because Doppler problems prevented accomplishment of the original mission.

The Aircraft Commander Capt. Timothy J. Buer and his crew arrived at the TUOC (Tactical Unit Operations Center) at 0430 local for pre-mission weather and intelligence briefings. Departure and arrival weather were forecast to be VMC. The crew of 10 then picked up their life support equipment and proceeded to the aircraft arriving there at 0510 local.

The crew chief informed the crew that the Doppler was written up in the AFTO form 781A as inoperative. 362nd TEWS Operations as DaNang was notified at approximately 0525 that TACO 20 was "mission unable" because of Doppler problems. 362nd Operations told Capt. Buer to try to have his airplane repaired and operations would contact the Wind Command Post for guidance. At approximately 0730 local, Capt. Buer was informed via 362nd Det. 1 Operations that his assigned mission was canceled and to fly the aircraft direct to DaNang. Capt. Buer then went to Bass Operations and filled an ???? flight plan. He arrived back at the airplane at approximately 0830 local to start engines. All checklist were completed and taxi clearance was called for at 0845. TACO 20 taxied to the run up area for takeoff on runway 15. TACO 20 was cleared for takeoff at 0914 local and told to contact Departure Control. The copilot then contacted Departure Control at the Lineup checklist was accomplished while the pilot taxied the aircraft onto the runway to a point approximately 400 feet from the approach end.

Capt. Buer held the brakes and advanced the power to 30". All engine instruments indicated normal. Brakes were released and power was advanced to 48" with the copilot making final power adjustments. The aircraft rolled approximately 700 feet and began to veer to the left at a point about 1200 feet down the runway. As the aircraft approached the left edge of the runway the copilot called out abort and the pilot retarded the throttles. The aircraft departed the left side of the runway and paralleled it for approximately 300 feet. The pilot reapplied power on the left engine in an attempt to return the aircraft to the runway. The aircraft then made a sharp veer to the right and crossed over the runway and ran off the right side. The pilot then advanced power on the right engine in an attempt to parallel the runway heading. As the aircraft was careening back to the left, the right main gear entered a ditch 120' from the runway. The aircraft entered the ditch and came to rest 2355' from the approach end of the runway. No fire occurred and the crew exited the aircraft.

EC-47 43-49771 Crashes on Takeoff November 21, 1972

The following based on USAF Accident/Incident Report dated November 10, 1971.

Aircraft Crew members

Capt. Robert A. Kohn - Aircraft Commander
2nd Lt. Edgar H. Hirshouer III - Copilot
1st Lt. Michael G. Danielle - Third Pilot
Lt. Col. Howe L. Vandegriff - Navigator
MSgt John W. Ryon - Radio Operator
SSgt Paul W Weyandt - Radio Operator
Sgt Thomas E. Way - Radio Operator
Sgt Charles F. Fidroeff - Radio Operator
Sgt Laurent A. Morin - Radio Operator
Sgt Clalude W. Pennell Jr. - Radio Operator

History of Flight

The flight was a normal classified combat sortie assigned to the 361st Tactical Electronics Warfare Squadron on 21 November 1972. The aircraft was an EC-47, Serial Number 43-49771. The crew consisted of those above.

They met at the Tactical Unit Operations Center (TUOC) for the scheduled 0900 briefing, checked the crew information file, picked up the classified documents kit, and proceeded in a flight line taxi to the Life Support building to pick up necessary survival gear and then to the aircraft for preflight. The copilot entered the aircraft and began the interior preflight while the aircraft commander and the third pilot began the exterior preflight inspection. No discrepancies were noted. The Aircraft Commander then put the third pilot in the left seat and the copilot in the right seat for engine start, taxi and run-up. The Aircraft Commander stood between then and monitored checklist procedures during this period. The copilot gave the before takeoff briefing with the Aircraft Commander adding that if there were and difficulties on takeoff, he would take control of the aircraft. (In Progress Report Number One 260930 Nov. 72 it was stated that "Lieutenant Hirshouer briefed takeoff procedures up to the point of takeoff and in-flight emergencies at which time Captain Kohn stated that if there were any difficulties on takeoff, he would take control of the aircraft." In later testimony during the formal board proceedings Lieutenant Danielle stated that emergency procedures had, indeed, been briefed by Lt. Hirshouer and that Capt. Kohn's statement was an addition to the briefing.)

The board is now of the opinion that the procedure followed during the briefing were in accordance with the then existing policies and that the failure to designate a specific crew member to execute a bold face item was partially the result of a deficiency in the Dash One (See section on publications and directives and Recommendations; however, it is ultimately the responsibility of the pilot in command to insure that all crew members are aware of their specified emergency duties (Bold Face)). In all radio calls the call sign Baron 56 was used.

Baron 56 was cleared for takeoff by the tower at Nakhon Phanom at 1044L. Scheduled takeoff time was 1035L. The copilot made the right seat takeoff with the aircraft commander in the left seat. Takeoff, climb out, and level off at 10,000 feet were normal and a normal, uneventful tactical mission was flown.

After the mission, the aircraft proceeded to Nakhon Phanom and entered the GCA pattern at 1700L. The weather at the base was 5,000 feet scattered, 10,000 feet scattered with winds 070 degrees variable three to seven knots. The copilot made two uneventful GCA precision low approaches: after the second low approach the aircraft commander took control of the aircraft and requested and received permission to enter a left-closed downwind. The VFR approach was normal and the tower cleared Baron 56 to land calling the winds at 070 degrees at seven knots. According to statements from crew members, the touchdown was normal with perhaps a slight bounce, but the aircraft then began a gradual movement to the left, nearly departing the runway; the aircraft commander applied high power to the left engine and the aircraft then swerved sharply to the right, departing the right hand side of the runway approximately 1800 feet from the approach end at a 45 degree angle.

Power was applied to go-around; the path of the aircraft (?? a few words blanked out here too) went just to the right (north) of the 6000 feet remaining runway marker, crossed a ditch, and became airborne after the right main landing gear struck the west (far) side of the ditch embankment. After becoming airborne the aircraft cut a wire to the base perimeter lights and also contacted a tree along the west base perimeter. Apparently some damage was done to the Number One (left) propeller or engine since the third pilot, sitting in the flight engineer's seat noticed that the propeller disc was erratic instead of flat as it is normally. Also, other crew members thought the Number Two propeller or engine was not functioning properly, causing vibration, and noticeable slowing down. All crew members recall vibrating or knocking throughout the airframe at approximately this time; the aircraft was momentarily in a shallow left bank attempting to clear the trees and parallel the runway.

Approximately three fourths of the way down the runway a shallow right turn was begun and the aircraft commander, who had noted a power loss of failure of the Number Two engine (??several words blanked out here) ordered the Number Two engine feathered. The aircraft was just above the trees at this point still in a shallow right turn. The navigator thinks he heard the copilot acknowledge the order to feather the Number Two engine. The aircraft commander then initiated the emergency procedure of engine failure by stating "throttle - closed" (?? a few blanked out words here too) and at approximately this time the third pilot states he saw the Number one propeller slow down and a blade pitch change occur. Also crew members agree that at this point no sound of engine power was heard from either engine. According to the third pilot, the aircraft commander told the copilot "you feathered the wrong one, you feathered Number One," followed shortly by "Bring it in, bring it in." Shortly after this , at 1740L, the aircraft impacted the trees and crashed.

More on this one.

21 November, 72 (S/N 43-49771) Crashed while making a touch and go at NKP. 1 USAFSS, others (if any) not known. Information provided by Joe Martin

On 21 November 1972, Master Sergeant John W. Ryon, assigned to Detachment 3, 6994th Security Squadron, was killed when the EC-47, tail number 9771, on which he was a student radio operator went out of control while making a touch and go landing. The aircraft crashed two miles past the runway at Nakhon Phanom Airfield.

{Note:} John Hockemeier, provided this additional information on this loss. The Aircraft crashed during touch an go. The Copilot was making the approach. The Aircraft struck some structure between the runway and taxi way, bending the propeller. The Pilot took over control and told the Copilot to feather the engine with the bent propeller. The Copilot feathered the propeller on good engine!! The Aircraft went down just off base facing opposite direction from approach. One backender, MSgt John W. Ryon and the Pilot, Captain Robert A. Kohn, were killed.

EC-47 43-48636 Shot Down, February 5, 1973

05 February, 73 (43-48636) The "Baron 52" incident.

SYNOPSIS:

February 5, 1973, about a week after the signing of the Paris Peace Agreement, an EC47Q aircraft was shot down over Saravane Province, Laos, about 50 miles east of the city of Saravane. The crew of the aircraft consisted of the pilot, Capt. George R. Spitz; Capt. Arthur R. Bollinger, 2Lt. Severo J. Primm III, 1Lt. Robert E. Bernhardt, Sgt. Dale Brandenburg, Sgt. Peter R. Cressman, Sgt. Joseph A. Matejov, SSgt. Todd M. Melton, all listed as crew members. The families of all aboard the aircraft were told the men were dead, and advised to conduct memorial services.

It is known that the four enlisted men were members of Detachment 3, 6994th Security Squadron from Ubon, Thailand. The aircraft, however, was flying out of the 361st TEW Squadron (Tactical Electronic Warfare Squadron) at Nakhon Phanom Air base, Thailand. It is not known which, if any, of the officers aboard were assigned to the 6994th at Ubon, and which, besides Spitz, were assigned to the 361st at NKP.

The men in the 6994th were highly trained and operated in the greatest of secrecy. They were not allowed to mingle with others from their respective bases, nor were the pilots of the aircraft carrying them on their missions always told what their objective was. They were cryptology experts, language experts, and knew well how to operate some of the Air Force's most sophisticated equipment. They were the first to hear the enemy's battle plans.

Over five years later, Joe Matejov's mother, Mary Matejov, heard columnist Jack Anderson, on "Good Morning America", describe a Pathet Lao radio communiquÈ which described the capture of four "air pirates" on the same day as the EC47Q carrying her son was shot down. NO OTHER PLANE WAS MISSING THAT DAY. Anderson's information indicated that reconnaissance personnel had 40 uninterrupted minutes in which to survey the crash site.

The report of the reconnaissance team, which was not provided to the families for over five years, showed that three bodies, which were thought to have been higher ranking officers because of the seating arrangement, were found strapped in seats. Four of the men aboard the aircraft were not in or around the aircraft, and the partial remains of the eighth man was recovered. No identification was brought out from the crash site, and no attempt was made to recover the three bodies from the downed aircraft. It is assumed that the reconnaissance team was

most interested in recovering the sensitive equipment aboard the EC47Q. The EC47Q became known as the "Flying Pueblo". Most of the "kids" in back, as some pilots called them, were young, in good health, and stood every chance of surviving captivity.

There were specific reports intercepted regarding the four missing men from the aircraft missing on February 5, 1973. Radio reports indicated that the four were transported to the North Vietnam border. None were released in the general POW release beginning the next month.

Peter Cressman enlisted in the United States Air Force in August, 1969 and after two years at Elmendorf AFB in Anchorage, Alaska he volunteered for service in Vietnam and left for Da Nang in June 1972.

In Da Nang, Peter spent his free hours at Sacred Heart Orphanage. His letters to his hometown priest in Oakland, New Jersey, resulted in the forming of "Operation Forget-Me-Not". Community schools, churches, merchants and citizens joined the effort to help the innocent victims of war. The group eventually provided a boxcar of supplies to the orphans.

Peter was transferred to the air base at Ubon, Thailand. He was intensely opposed to the secret missions being flown into Laos, and had written letters to his congressman in that regard. His family has been active in efforts to locate information on Peter and the nearly 2500 others who remain unaccounted for. They founded the National Forget-Me-Not Association for POW/MIAs in St. Petersburg, Florida, the largest POW advocacy group in the country.

Joseph Matejov enlisted in the Air Force in 1970 from his home state of New York and went to Southeast Asia in April, 1972. Joe's father and two brothers were career military. His sister graduated from West Point in 1981. Steven Matejov died in 1984 not knowing what happened to his son. Joe's mother, Mary says, "Joe may be alive. If so, this government has a legal and moral responsibility to get him home. The next generation of servicemen should not have to wonder if they will answer the call to defend their country only to be abandoned. We must stop this tragedy now, and never allow it to happen again."

Thousands of reports received by the U.S. Government have convinced many experts that hundreds of Americans remain captive in Southeast Asia. Members of a crew flying a secret mission after a peace agreement had been signed would likely be considered war criminals. If they are among those thought to be alive, the survivors of the EC47Q have been held captive over 15 years. It's time we brought our men home.

A Mini-Wall Memorial

In Memory of the Downed Crews of the EC-47, 1966-1974
Any omissions are unintended and unknown.

This Mini Wall can be found on "The EC-47 History Site" on the Internet It is dedicated to those crew members who gave their lives in service to their country, while flying unarmed reconnaissance missions aboard the EC-47 aircraft over Southeast Asia during 1966-1974. Listed chronologically, by unit, by rank.

Ivel Doan Freeman - Major 361st TEWS - March 9, 1967
Preston Bohrer - Major 361st TEWS - March 9, 1967
Roger Paul Richardson - Captain 361st TEWS - March 9, 1967
Prentice Fay Brenton - SSgt 361st TEWS - March 9, 1967
Raymond F. Leftwich - TSgt Det. 1 6994th SS - March 9, 1967
Charles D. Land - A1c Det.1 6994th SS - March 9, 1967
Daniel Cortez Reese - A1c Det.1 6994th SS - March 9, 1967

Harry Tillman Niggle - Lt. Col. 362nd TEWS - February 5, 1969
Homer Morgan Lynn Jr. - Major 362nd TEWS - February 5, 1969
Robert Eugene Olson - Major 362nd TEWS - February 5, 1969
Walter Francis Burke - Captain 362nd TEWS - February 5, 1969
Louis J. Clever - SSgt Det.2 6994th SS - February 5, 1969
Hugh L. Sherburn - SSgt Det.2 6994th SS - February 5, 1969
Rodney H. Gott - SSgt Det.2 6994th SS - February 5, 1969
James V. Dorsey Jr. - Sgt Det.2 6994th SS - February 5, 1969
Clarence L. McNeill - Sgt Det.2 6994th SS - February 5, 1969

Bradley Rogers Ransom - Captain 361st TEWS - October 8, 1969
Ronald Harold Knight - 1st Lt. 361st TEWS - October 8, 1969
Max Emmanual Rosen - 1st Lt. 361st TEWS - October 8, 1969
Lester William Redman - TSgt 361st TEWS - October 8, 1969
Elmore L. Hall - SSgt Det.1 6994th SS - October 8, 1969
Michael L. Stiglich - SSgt Det.1 6994th SS - October 8, 1969

George M. Wall - 1st Lt. 362nd TEWS - April 22, 1970
Michael R. Conner - SSgt Det.2 6994th SS - April 22, 1970

Robert Alan Kohn - Captain 361st TEWS - November 21, 1972
John W. Ryon - MSgt Det.3 6994th SS - November 21, 1972

George R. Spitz - Captain 361st TEWS - February 5, 1973

Arthur R. Bollinger - Captain 361st TEWS - February 5, 1973
Robert E. Bernhardt - 1st Lt. 361st TEWS - February 5, 1973
Severo V. Primm III - 2nd Lt. 361st TEWS - February 5, 1973
Todd M. Melton - SSgt Det.3 6994th SS - February 5, 1973
Dale Brandenburg - Sgt Det.3 6994th SS - February 5, 1973
Peter R. Cressman - Sgt Det.3 6994th SS - February 5, 1973
Joesph A. Matejov - Sgt Det.3 6994th SS - February 5, 1973

Known Ground Attack Losses

Frederick Sebers - Tsgt 6994th SS Killed in Ground attack
Tan Son Nhut, Saigon - on November 7, 1967

Paul Anthony - A1C 6994th SS Killed in Mortar attack
DaNang AB, Vietnam - on April 8, 1970

Chapter 18

A Few War Stories:

A few personal Memories of individual tours.

A Doppler Set Run Plus

By: James D. Trozzo

Here is a cute story that is light and humorous. Use it as you please we were flying somewhere over Cambodia and it was not a particularly busy mission. The targets were pretty solid and as an analyst, my predictions were fairly accurate, but we were just doing our thing, as we always did. Always looking for some adventure. I often asked the navigator if I could do the Doppler (dop sets) updates. I really got a kick out of playing 12 o'clock high by steering the airplane over a preset mark via voice commands to the front-end crew. The effect of pushing the button, to update our position, was like dropping the bombs.

Typically the navigators used a highly identifiable structure on the ground to be a dopset. unfortunately, too many of the navigators used and reused the same dopsets day after day, and therefore we became too predictable. but that's another story.

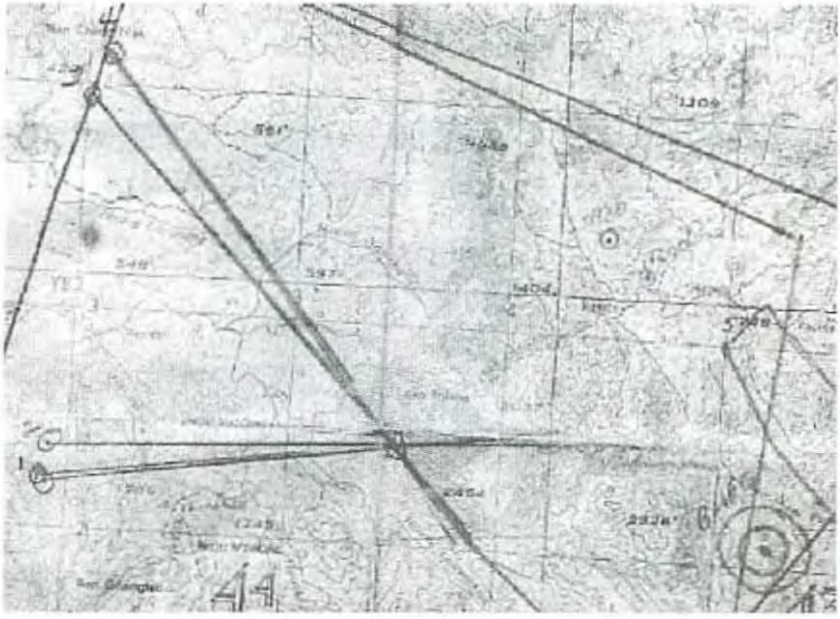
So here we are lumbering alone over the Cambodian skies when the navigator asked me to take us over the junction of two streams that formed a distinctive point. As I prepared to push the button for "bombs away", I made the course corrections to the pilot. "left two (degrees), steady on 135, right 1, steady, steady, bombs away," I said into the mike. Remember, I was actually looking down at the ground through a telescope affixed with cross hairs. Just as I pressed the button, I saw two small boats with several people in or around the boats as they were beached on a small sandbar.

Black pajama clad people were unloading or loading boxes but they never looked up as they heard us fly over. I told the entire crew what I saw, and collectively we agreed to call hillsboro, the command & control (c&c) aircraft requesting a fac (forward air controller). Neither Snoopy or Raven were available (these were the call signs of fac's working the area). I was aghast, here found Charlie out in the open, looking like a rabbit ready to run and we couldn't even get a shooter on station. We asked for some fast movers with available ordinance, but the jet jocks won't go low without the eyes of a fac.

Since we were truly alone, unarmed and not necessarily afraid, we did the next best thing a gooney bird crew could do. We made another pass over the boats sitting right on our dop set point, with "steady on course 072 degrees, correct to 1 left, drifting, drifting, left 2, steady, steady, bombs away!" at the command of bombs away, someone kicked out 5 unopened boxes of "chu-hoi" leaflets under our door netting. I tried to watch the impact to report damage at our debriefing, but the pilot said, "we're getting the hell out of dodge", as he dove away for airspeed before the fireworks started.

Another Doppler Set Run

By: J.C. Wheeler
Boy do I remember the Doppler runs, I actually did a lot of the navs work with my crew. I might act as navigator for the better part of a mission. I still have a very faded chart with the targets I worked over Laos. A small portion of that chart can be seen here. One of my treasures of the time.



The entire crew from the A/C through the RO's all signed it in a mock certificate of a qualified navigator. I still have it.

I also got many an hour at the controls of the aircraft, again some days flying the better part of the mission. I vividly recall one Doppler run, I was flying and our Navigator, Capt. Robert M. Harris was on the drift meter making the heading calls. We made a good pass over the set point. Going a bit past the point our procedure was to make a 90 degree right turn followed by a 270 degree left turn and line up again on the same point to recheck the setting. I made the right turn, turned the wheel hard left and back on the stick in a pretty tight left hand 270 degree turn. After completing the run, Capt. Harris said, "Jim, that was a great Doppler run but it sure got my pucker string tight."

This is me on one of my days to serve as navigator. Not really by the book but what the heck.

I worked with the greatest flight crew anybody could possibly ask for. Each and everyone of us could and did operate at any of the flight crew positions. I tried the console positions several times, didn't know beans about the CW I was hearing on the headset, but believe it or not

actually picked up a couple of targets from the tinny, squeaking, transmitters they were using, terrible sounding transmitters.

Early Leaflet Drops

This is me dropping leaflets the old fashioned way, a hand full at a time out an open window. A Chute was latter installed.

Enemy Tanks Below

By: Bruce Obermeyer

The Baron 52 incident has always been important to me because, in some ways, I feel connected with it; not just because some of those guys were personal friends, but because the whole "Midnight Smoker" operation may have resulted from an incident that happened on one of my earlier missions. You may be familiar with the incident in December '72 or January '73 on the Plain of Jars where a tank tried to cross in broad daylight, was killed after some activity by aircraft, and they found the crew chained inside. It was a diversion, and while this was going on, about 300 tanks made it South down the Ho Chi Minh trail.

One evening about dusk, we were patrolling just across from NKP on the Laos side. I had just bought a pair of binoculars at the BX and was trying them out; I still have those binoculars. I noticed a dust cloud coming South on a road near the river, but whatever it was got into cover in the trees before I could make it out. We called it in, and an OV-10 in the area gave it a look. He said he thought it might be a tracked vehicle because of the tracks it left in the road. It may have been a Scout for the tank column. Soon after that we began the night operation looking for tanks that resulted in the loss of Baron 52. Eventually over 250 of the tanks were killed crossing into South Vietnam, so it would seem the effort paid off. For the families of those lost on Baron 52, it was not a wasted, senseless, or illegal mission; they served their country with pride as professionals and made the ultimate sacrifice.

Bombs Exploding Below

By: Paul Brady

It was a typical clear and sunny day over the Plain of Jarres (Plannesde Jarre, as the French called it, if I'm not mistaken). I believe we Mission #209C. It was probably 9 AM, and we were doing our "thing" when out of nowhere, it seemed that the hand of God grabbed the tail end of the aircraft and gave it one big shake. Or maybe he just chose to flick the plane's tail with his index finger. Whatever it was, it scared the living daylights out of me and probably most of the others in the back end.

Immediately, the pilot asked the navigator to check the underbelly to see if we were hit with enemy fire. We checked all over and couldn't find a thing wrong with the plane and it seemed to steer correctly, so there was probably no damage to the tail. I, however was not going to settle for that calm, casual voice of the pilot, that all was well on the Southeastern front. I put on my survival vest, checked it out and then proceeded to extract a parachute from the bin. I at least wanted a chute to lay claim to. I was sweating bullets about bullets.

What seemed like an eternity but which was only about 2-3 minutes went by when one of those old carrier type bombers from WWII showed up on our right side. Our pilot asked that pilot to check us out because of the incident we had just experienced, when our new neighbor said that we had probably just received some shock waves from the 500? 25? lb. bomb he had just dropped below us. Mind you we were at about 12,500 feet. To this day I pity those poor folks who were 12,500 feet from the point of impact on the ground. If anything, I took more seriously the preflight check outs we did with our radios and weapons.

TET Offensive 1968

By: Bill Petrie

During the TET Offense of '68'. We were taking a pretty good beating in the camp before we were ordered to leave. Many 122mm rockets and mortar rounds came in on us. That is the only place I ever heard Hanoi Hannah. She was bad mouthing us guys with the "Black nosed birds at Phu Bai and said they would eat in our chow hall before the week was over.

When the runways were being overrun, we were ordered to make a run for the ramp and head south. We sped through sniper fire in an Army utility vehicle, I believe there may have been close to 30 of us, I could be wrong. I think the tail

number was 009, "Balls-Nine". When we broke over Phu Bai village and headed out over the water we had about 300 holes in the bird, No-one was hit. That is when the aircraft earned the nickname "Patches". I actually painted the patches different colors and put stitching around them using black and white paint.

Said he thought it was around Christmas Eve and they had blown a jug, (cylinder) over the DMZ and ended up with an engine change. The Marines brought over a tank and they used the muzzle to assist in the engine change. (I assume they used it as a hoist.)

Unexpected Stopover

By: George B. Montague

This was one of my memorable missions. We were supporting the Big Red One around An Loc on one of the late missions which recovered after the afternoon Monsoon started and when it was time to head back to TSN we were advised that the base was closed because of weather. The Nav and Pilot talked it over and decided that the best option was to try Tay Ninh Army Airfield. The pilot contacted Tay Ninh and was advised that the field was open but the runway was being resurfaced and at the 4000 foot area there was about a 4 or 5 inch lip where the new surface ended but if he landed very short and slowed down enough it should not be a problem. The pilot accepted this and advised the tower that he would contact them again when he was on his downwind approach.

When the pilot contacted Tay Ninh as he started his downwind, the tower told him that there was a 15 foot ditch at the end of the runway and that it was marked by a fire in a 50 gal. fuel barrel. The pilot told him he could see the fire and then advised the tower he would be on the ground until TSN opened up and that he needed fuel. The tower told him where he should taxi to after landing to refuel and that the refueling point was manned. After turning on final the pilot and the copilot were talking about where the runway started because they wanted to touch down very short and just as the pilot was ready to touch down he yells "oh shucks" and goosed the power and we gain about 30 to 50 feet of altitude and then we set down hard and fast but near the 1000 foot mark then the pilot or copilot starts breaking very hard then we hit the lip where the new surface started and pop up about 20 or 30 feet and then come down again very hard. This time we stay down and the pilot slows the A/C and heads to the refueling area. What the tower operator forgot to tell the pilot, was that the fire in the barrel was not on the runway side of the ditch and this is where the pilot thought it was and he was aiming at the fire thinking that that was the start of the runway.

When we arrived at the refueling area the pilot shuts down and we all exit the A/C. An Army refueler is there and he asks the pilot how much fuel he wants and the pilot tells him 800 gallons and the army dude almost has kittens. All he has is a 500 gal. trailer and some jerry cans. The only birds he refuels are o-1's, otters, beavers, Etc. He tells us he will have to get someone from the motor pool who can drive a refueling truck and that might take an hour or so and the pilot tells him we will be on the ground for at least that long because TSN is closed and not expected to open for at least another hour.

Eventually the truck arrived and we got our 800 gallons, then we were advised that TSN was open so we thanked the ARMY and went home.

All I can say is I was very happy to have had some outstanding pilots up front because that could have been a an unmitigated disaster, but because of their skill another mission ended in the best possible way SAFELY.

I just wish I could remember the pilots name, maybe he might read this and it might bring back some fond memories for him to.

In the Midst of a Bombing Run

By: Bob Wilhelm

It was the fall of 1972 and I hadn't been at DaNang (Det. 2, 6994th) too long. I was learning my job as an analyst (202) and was still flying with an instructor. We took off and were headed down the coast and hadn't been airborne too long when the pilot informed us he had a fire warning light on the left engine. He asked us backenders if we could give him a visual check. One of our crew thought he saw a whisp of smoke but wasn't sure. It could be exhaust, he said. The fire warning light kept going on and off and the pilot was pretty sure it was just a faulty light but we all kept an eye on the engine anyway. The pilot didn't want to pull the extinguisher unless we saw a real fire. It would make quite a mess of the engine and the mechanics would be pretty upset if they had to clean out a perfectly good engine. After a while, the pilot decided to be on the safe side and RTB. He advised us to get suited up in our parachute harnesses and to pass out the 'chutes, just in case.

This was the only time in my 102 missions that we ever did this but it was a worthwhile precaution. As we neared DaNang the copilot asked if he could get some GCI time in and the pilot thought that was OK and put in the request to the DaNang approach controller. We weren't too far out when one of the backenders reported seeing a South Vietnamese A-37 attack jet making a bombing run from

left to right in front of us. We watched as he released his bombs across our flight path and broke away. The pilot informed DaNang control but by now another A-37 was making his run, apparently oblivious to our approach. He released his load in front of us and we were right overhead when his bombs detonated. Even though there was a lot of noise in the aircraft and we had our headphones on, we could hear the explosion and the concussion rocked the old goon. By the time the controller and the pilot got everything figured out, we were past the danger. The rest of the flight was uneventful until after we landed. That's when the pilot and the controller had a meeting. I certainly wouldn't have wanted to be in the shoes of that controller who led us right through that bombing run! As for the fire warning light—it turned out that our fire warning light was just a faulty light. But it was a pretty memorable flight for a new guy!

A letter from a new friend.

"An Individual is reunited with memories of his EC-47 experience in Vietnam."

Dear J.C.

I stumbled on your web site as I was searching for any inf. about the 360th TEWS. It is a very moving for me as I could not get past the second page, of the first crew lost as tears began to roll down my face. You see I was one of the first crew chiefs to be assigned to the 360th in '66. When I arrived there we didn't have any planes. I was assigned the first plane to land as my aircraft. We were barracks with the Flt mech at the end of Charlie row in the 400 area and I knew quite a few them TSgt Payne, SSgt Baldwin, Ssgt Ruiz, A2c Hooks, etc. The one Flt mech that I knew the best was SSgt Brenton or as I called him "Pat" as he didn't like the name Prentice. Pat and myself go back a long way. We were stationed in Canada together with KC-97's on alert with SAC and we shared a room together. Pat and his wife Helen were like grandparents to my children. Pat took me under his wing and taught me a lot about aircraft. He would tell me stories about his tour in the Marine Corps in WW II.

I was surprised the day Pat arrived in the 360th we had a big reunion that day. He was very upset about how everything was going there at TSN and when the chance came to go to Nha Trang he jumped on it as he told me he wanted to get out of there away from all the politics. I tried to talk him out of it but Pat was very head strong.

SSgt Baldwin notified me that Pat's crew was missing and it took two weeks for word to get back to us. From what I was told the crew in the cockpit survived the crash and was stripped of the cloths had their hands tied behind their backs and was shot in the head. How true this was I don't know. Anyway I did my time there and was assigned to Pete Field CO. flew on T-29's than back to Nam on my second tour flying on the Caribou C- 7's. From there I was assigned to Andrews were I flew C-131's then to Mcguire AFB were I retired in 1980 as a MSgt.

Your name rings a bell with me but I can't put a face with it. I know I have talked with you before or after a mission. Did you live off base at Truman KY I think that's how you spell it?

I just wanted to say thanks for the web pages as they will let my grand children know what I did in the war.

Best of luck JC look forward to hearing from you.
Henry Cremer

A Fishy Tale

By David Brooks

Seems David had an attraction to Tropical Fish, so using some of the ingenuity required to make his tour in SEA more enjoyable, David fashioned himself a small aquarium made from an old ammo can and some plexiglas.

A creek ran through Phu Cat that contained fresh water tropical fish such as Grammies and walking catfish. I obtained a 20MM ammunition box and with the help of Civil Engineering turned it into an aquarium, shown in pic 1. I caught some fish in the creek and put them in the tank. The maids in our porta-camper area, pic 2, all came around to admire the fish. Soon other fish appeared in my aquarium, larger, nicer fish. Some days there were fewer fish than on other days. One day I found the dirt disturbed behind our porta-camper. I found fish bones buried in the ground. The maids were using my aquarium as a holding tank for their future lunches. They would take out their fish and cook it for their lunch and bury the bones. Periodically they would restock the "holding tank". Photos by: David Brooks

Photo by: David Brooks

"Moon over Cambodia"
By David Steiner

According to the way it was told to me, David, who took this photo was about to take the photo and was engaged in radio conversation with the crew of the aircraft above "072" it appears.

Any how, they asked him to wait just a minute before he took the photo. David waited and when they said it was okay, he snapped the shot. The crew of 072 then suggested that he name the photo "Moon over Cambodia" (evidently because they were over Cambodia).

David said he could not understand the reasoning for such a name, until he enlarged the photo. Then it became apparent as he could see in the third window back , in the cargo compartment or back end. It is not really visible here on this small photo, but it was, a "Moon" over Cambodia.

Another of the lighter moments of a mission.

Al Budington

I wasn't on the bird that took this photo, but the story goes that a Viet A-1 apparently thought the goon was hostile, tried to make it land (note gear down as a sign to land) and after the crew gave him the finger through the window and didn't make any attempt to land, he peeled off and apparently was going to make a hot pass to shoot them down. Somebody finally got him on the radio and told

him the goon was friendly, all this was hearsay from a member of the crew who gave me these two photos. Al Budington.

These two Photos of the A1-E taken by: Dave Masson

Chapter 19

Historical Working Notes on the TEWS Operation
Extracted From Declassified 460th TRW History Documents.

January-March 1968 460th TRW

During this period, one EC-47 was lost after being hit by enemy ground fire during flight. This crew was recovered. Steady progress was made in the preparation of the calibration site for the ARD-18 equipment at Cam Ranh AB., RVN. Activation of the site is expected in early April. The ARD-18 equipment installed in all EC-47 aircraft in the wing will be re-calibrated while the aircraft fly a list pattern in the vicinity of the site. Calibration flights will be launched out of Nha Trang AB. These calibration will be accomplished at least once every six months for all EC-47 aircraft.

January-March 1968 360th TEWS

Compass Dart EC-47's

On 20 February 68 the responsibility for the two Sentinel Sara (JC-47) aircraft was turned over to the 362nd TEWS.

On 31 January the TET offensive was launched. During this ground attack, six 360th TEWS aircraft received damage requiring more than 24 clock hours to return to operational status. This fulfilled Pacific Air Force Reg. 66-24 as being reportable damage. Three other aircraft received lesser damage that same evening. Five aircraft received reportable damage on 18 February and on each on 19 and 24 February. Most of these aircraft were returned to operational status very rapidly. However some of the aircraft received serious damage and were out of commission for most of the remaining quarter. This created a shortage of aircraft.

October-December 1968 360th TEWS

During this period, four EC-47's were damaged on the ground due to enemy mortar attacks, three at Pleiku AB, RVN and one at Tan Son Nhut AB, RVN. And one EC-47 was damaged during flight by enemy ground fire.

Combat damage to the 360th was negligible this quarter. At 0115 on 1 November, 68 shrapnel from a brief mortar attack put a 2" hole in the left flap on aircraft number 254 and nicked a tire. The flap took two hours to repair. On 29

December 68 aircraft number 153 was hit in the left fuel tank by a .30 caliber bullet, probably while at 1000 feet in the traffic pattern. The slug was found in the fuel tank.

On 2 November 68 a warning of probable rocket attack caused a flurry of measure to limit damage. C-47's were put in alternate revetments with jet reconnaissance aircraft between to prevent the destruction of all of one type of aircraft. Crew members were restricted to quarters and all got their flak vest, etc., ready— but it was a false alarm.

Major Jerry E. Marshall, who had successfully crash landed and EC-47 that he was ferrying from the states to Vietnam, signed in.

Our safety record is good in spite of several factors that the venerable old C-47 and her pilots must contend with: (1) routine gross weights ranging up to 28,800 pounds which is only 200 pounds below the maximum gross weight; (2) landing with a tailwind, a notoriously dangerous thing to do in a heavy C-47; (3) flight approaches in the congestion near Tan Son Nhut in the hazy weather present in the quarter; (4) training on flights to upgrade young pilots fresh from Undergraduate Pilot Training who have only flown the C-47 or 30 hours; and (5) the age of the C-47.

October-December 1968 361th TEWS

Nothing of historic value during this period. There were no flying accidents or incidents during the reporting period. The squadron is approaching 50,000 accident free hour mark.

The arrival of the NE monsoon in early November brought increased rain and low ceilings to the Nha Trang area. The squadron was twice alerted for possible typhoon evacuations and all flying was canceled on 22, 23, and 27 Nov. 68.

October-December 1968 362nd TEWS

Of the 20 aircraft assigned to the unit, 7 are EC-47Q's, 7 are EC-47P's and 6 are EC-47N's. The two C-47's that the squadron used for the Sentinel Sara mission have been replaced with EC-47Q's. Their job has been partially replaced by the aircraft equipped with "Z" consoles. The number of aircraft has never dropped below the number required to execute the general war plan.

The squadron maintains 32 combat ready and available crews. These crews remained as such for the entire quarter.

The crew upgrading program remained normal throughout the quarter. As is squadron policy, the unit maintains no copilots. All pilots are given a left seat

checkout after the initial training phase. Pilots coming direct from UPT, and those with limited prior aircraft commander time are normally given an aircraft commander checkout after six months in country and 500 combat hours.

October-December 1969 460th TRW

8 October - EC-47 aircraft assigned to 361st TEWS, Phu Cat AB, RVN, crashed west of Qui Nhon.

12 October - Wreckage of EC-47 aircraft which crashed 8 October was finally located by SAR helicopter. Weather in the area hampered search operations.

16 November - Assistant Secretary of Defense David Packard landed at Tan Son Nhut.

14 December - Colonel Frank Borman, Apollo 8 commander, visited the 460th TRW.

April-June 1970 460th TRW

22 April - An EC-47 assigned to the 362nd TEWS at Pleiku AB, Vietnam, reported the loss of one of their aircraft, number 402. The loss of two lives incurred.

3 May - An EC-47 assigned to Pleiku AB, RVN declared emergency and landed at his home station with battle damage.

5 May - The Detachment of the EC-47's at Nakhon Phanom AB, Thailand reported that one of their aircraft had been damaged by a refueling truck and would require extensive maintenance.

7 May - An EC-47 declared an emergency and landed without incident due to number two engine backfiring.

7 May - A ground taxi incident occurred with the EC-47 at 0520 which required the notification of the wing staff.

7 May - The 361st TEWS at Phu Cat AB, RVN, reported that the landing gear of one of its aircraft had collapsed while in a revetment and maintenance was completing a post flight inspection.

18 May - The 360th TEWS duty officer informed the ROC that one of the EC-47's was returning to base with fumes in the aft compartment and the navigator and radio operator were sick. The ROC coordinated with the air traffic control

agencies for a straight in approach with priority handling of this aircraft. By the time the aircraft was safely on the ground three individuals were sick and unable to complete the assigned mission.

19 May - The 362nd TEWS at Pleiku AB, reported that they were under rocket attack. A direct hit was made on one EC-47 which destroyed it. Another EC-47 was damaged. This item is covered in detail in the 362nd TEWS history.

21 May - An EC-47 declared emergency due to both engines suffering intermittent RPM fluctuations. The aircraft landed without incident.

7 June - An EC-47 declared an emergency and landed without incident with an unsafe landing gear indication.

10 June - An EC-47 made a successful emergency landing with number one engine backfiring.

12 June - An EC-47 declared emergency due to sparks coming from the cowling of number one engine, also the engine was backfiring. A successful emergency landing was made on a 3788 foot runway at Tay Ninh West Airfield, Vietnam.

14 June - An EC-47 made a successful emergency landing. The aircraft was on a functional test flight. After practice feathering number two engine, the air crew was unable to restart it.

24 June - An EC-47 declared an emergency and made a successful landing with a fuel leak on number one engine.

During the month of April, 1970, One EC-47 aircraft received small arms/automatic weapons rounds at or below 4500 ft AGL

Loss of EC-47 number 402 occurred on 22 April, 1970 while on an out-country ARDF mission. A shell exploded under the aircraft, which resulted in the aircraft experiencing a loss of oil and power and crashed shortly thereafter.

On 3 May 1970 EC-47 number 491, while on an in-country mission, encountered a burst off to the right and back of the aircraft. The damage to the aircraft was one small crack and 18 scratches.

During this report period the 360th TEWS completed its 100,000th accident-free hour of flying to set a record in the Republic of Vietnam.

July - August 1971 460th TRW

5 July - An EC-47 from the 360th TEWS diverted to Phnom Penh, Cambodia, with and engine out. Landed without incident.

5 July - Five rockets hit DaNang. No damage to our units, though 5 USAF personnel were killed and 38 wounded.

12 July - An EC-47 of the 360th TEWS shutdown engine because of heavy smoke. Recovered safely.

14 July - An EC-47 of the 360th TEWS landed at Soc Trang due to #1 engine out. No incident.

October 13, 1998. Jim Hart adds, I was aboard this aircraft, AJ-158 when we made an emergency landing at Soc Trang after the aircraft had engine failure on the "Left" engine.

The emergency came when the Copilot feathered the propeller on the "Right" engine. Jim, who was aboard, says he cannot remember any of the names of the other crew members, but says, "The Pilot did a hell of a job recovering and making a safe landing."

He continues, "I'm sure it was just an incident to them, but it sure caused a good pucker factor with those of us who were on the aircraft."

19 August - EC-47 45-0937 crashed on take off roll at Tan Son Nhut. Crew evacuated the aircraft with no injuries. A report of this incident is available elsewhere on this site.

31 August - The 460th TRW was deactivated.

July - August 1971 361st TEWS

Combat readiness: For the third quarter of 1971, the 361st TEWS maintained a C-1 Rating. The 361st has continued its policy of extra training for air crew members to supplement the loss of flight engineers in the last six quarters.

Flying activity from 1 July to 31 September: The 361st TEWS flew 1166 missions for a total of 7285 hours. 1092 fragged missions were flown for a total of 6983 hours. As in the past, the difference between total fragged hours and total hours is made up by sorties flown in support of our mission, i.e., transition, IRAN, Corrosion Control, Tan Son Nhut Flights, and functional check flights. During the quarter the squadron flew 59 transition flights and 73 functional check flights.

Mission results: During the period 1 July to 31 September, a total of 5868 were worked and of these 4647 were fixed. An average of 4.2 targets per flight were fixed during the quarter. The only reported reaction to targets fixed as artillery reaction by the 23rd Infantry Division in their normal area of operations. They expended a total of 780 rounds of mixed artillery on the targets.

Safety: Captain Dennis M. Lane continued as Squadron Safety Officer until 22 September 1971. He was replaced by Capt. Joseph Cartwright 23 September 1971. Flying Safety reports no major or minor flying accidents. There were two flying incidents during the quarter. On 17 August 1971, just after becoming airborne, the overhead hatch separated from an aircraft. On 18 August, an attempted high speed turnoff resulted in minor damage when the aircraft struck a TACAN sign at the north end of the taxi way. The Pilot attempted the high speed turnoff with side loading on the tail wheel before placing the tail wheel lever in the unlocked position. Ground Safety reports on accident on 17 September. At that time, while being towed for maintenance, the aircraft was struck by a vehicle, causing extensive damage to both vehicle and aircraft, but no injuries.

4 July - Aircraft 204 departs for IRAN at Tai Chung Taiwan.

5 July - 5 122mm rockets hit base, two impacted in Gunfighter Village destroying one barracks, damaging one other. 5 USAF KIA, 38 WIA.

5-7 July - Squadron aircraft deploy to Phu Cat AFLD on weather evacuation.

11-13 July - Squadron aircraft deploy to Phu Cat AFLD on weather evacuation.

16-18 July - Squadron aircraft deploy to Udorn and Nakhon Phanom, Thailand on weather evacuation.

25 August - 1 122mm rocket hits base damaging three U.S. vans. 2 122mm rockets hit off base causing 5 CIV KHA, 6 CIV WHA, 40-50 CIV killed in secondary fires, 100 CIV houses destroyed by fire.

25 August - Aircraft 730 departs to Kadena AB, Okinawa, for corrosion control.

26 August - Lt. Col. Wacker becomes squadron executive officer.
I have been informed this took place in the 362nd TEWS

24 September - Lt. Col. Richard D. Courtney becomes squadron commander. This likewise took place in the 362nd TEWS

25 September - 5 122mm rockets hit in area just SW of DaNang Airfield bomb dump. No casualties, no damage.

30 September - Aircraft 730 returns from, and aircraft 704 departs for, corrosion control at Kadena AB, Okinawa.

Chapter 20

EC-47 Aircraft Numbers

A listing of the known EC-47 Tail Numbers
Thank you Mr. Matt Miller

Mr. Miller writes:
I was not involved in the conflict so I have no first hand knowledge. I am merely an enthusiast of and researcher into the exploits of the C-47 and DC-3.

To add to your list of incidents, I offer the following:

18-Feb-67 43-49679 EC-47P Hit while parked by China Airlines Curtis C-46.
7-Jun-69 43-49547EC-47P Somewhere in Thailand.
30-Sep-69 43-48959 EC-47Q Somewhere in South Vietnam.
19-May-70 43-15133 EC-47N Destroyed by rocket attack, Pleiku.

Perhaps someone can describe the circumstances. The dates are probably when they were struck off charge. The incident may have been earlier by a few days.

Also, I have provided a list of known EC-47's. The totals are very close to those in the letter from Joe Martin. It is possible there are one or two errors in the variants.

EC-47N

42-23882	42-24300	42-24313	42-93161
41-108980	42-93735	42-93814	42-100513
42-100950	42-100984	43-15112	43-15133
43-15668	43-15979	43-15980	43-16055
43-16123	43-48072	43-48158	42-9316
42-100665	42-15603	43-16095	

EC-47P

43-48402	43-48480	43-48767	43-48886
43-48947	43-49009	43-49100	43-49126
43-49260	43-49491	43-49547	43-49679
43-49865	44-76524	44-76668	44-77016
45-0925	45-1044	45-1046	45-1102
43-48933	43-49210	43-49703	44-77254

EC-47Q

42-24304	42-93704	43-30730	43-15204
43-15681	43-16029	43-48009	43-48087
43-48959	43-49208	43-49570	43-49771
45-1131	45-1133	43-15619	43-48636
44-76304			

Others

Got the following from Dave Eddy, December 15, 98
He was in from the beginning, Hawkeye and says aircraft number 50925 and I assume that was 45-0925 was a Hawkeye and later updated. Also says he thinks 703 may have been the other Hawkeye bird. AND he gave me another tail number that I was missing, "49268"

43-48703 EC-47P. May be 43-48702? You show photos of a "702".
Can't be 43-49702.
43-48871 Either an EC-47P or EC-47Q
43-49013 Either an EC-47P or EC-47Q
45-0937 Listed as both an RC-47P and EC-47P
43-48153 Listed as RC-47N
45-1080 EC-47P?

Known EC-47's Flown by 361st TEWS, NKP Thailand
Provided by: David Steiner

The tail numbers of the planes at NKP when I was there: 009(Q), 029(Q), 072(N), 087(Q), 153(N), 208(Q), 260 (P), 304(Q), 313(N), 491(P), 570(Q), 665(N), 681(Q), 704 (Q),730(Q), 814(N), 882(N), 937 (P). My Cha Chees was #681, a Q model.

EC-47N's	EC-47P's	EC-47Q's
42-100665	43-49260	42-93704
42-23882	43-49491	43-15681
42-24313	45-0937	43-16029
42-93814		43-30730
43-48072		43-48009
43-48153		43-48087
		43-49208
		43-49570
		44-76304

"Known Transfers of EC-47's to SVNAF"
Provided by: Matt Miller

I have listed the transfers of the EC-47's to the SVNAF as I know them. These are listed below.

EC-47N and EC-47P airplanes transferred to South Vietnam Air Force

EC-47N and EC-47P airplanes with 718 Squadron of the SVNAF in November 1972. These were probably transferred from the USAF during implementation of Project Enhance Plus.

Source: a privately published British magazine, British Aviation Review, August 1974

The first data are the individual airplane codes. They were normally written on the vertical stabilizer. The first letter represented the squadron and was usually rendered in a smaller font than the second letter that represents the individual airplane. In later photos, the appearance of the codes was greatly simplified. These have been included to aid in identification of any photos that may exist.

Note that the final airplane, 42-23520, is reported in several Air Force records to have crashed on 2 May 1944 in Burma. However, this airplane is listed in several records as converted to an EC-47N for use in Vietnam. Clearly, one or other record is incorrect.

wA 45-1044	wB 43-48886	wC 45-1046
wD 43-48480	wE 43-48158	wF 43-48871
wG 43-48767	wH 43-48933	wI 43-16095
wK 43-48947	wL 44-76668	wM 42-100984
wN 42-93166	wO 43-16055	wP 43-15603
wQ 43-49009	wR 43-49013	wS 42-93735
wT 43-15112	wU 43-49126	wV 42-100950
wX 42-23520		

Other EC-47 airplanes were transferred to the SVNAF also. These were probably held in reserve or used for spares. The following have been reported.

42-93161	42-100513	42-108980	43-15668
43-15979	43-15980	43-16123	43-49703
43-49865	44-76524	45-0925	

EC-47 History Roster by Number

This List is made up of bits and pieces of data that I receive from you folks, the ones that were there and have little bits of information stored back. So if you can fill a blank or correct an error, it would be greatly appreciated. It may take a while to get it all, but will try.
It is my intent to have only the when and where on this page with a note only in the event of loss, no history. - - And I will combine some of the bits of cohesive dates along as I can get to them to make them more readable. J.C.

42-23520 (N) Was Transferred to SVNAF
42-23882 (N) Was at TSN with 360th TEWS, at least from Sept. 1970 to Sept. 1971 *** Was at NKP with 361st in 1973
42-24300 (N) Was at TSN with 360th July 69 thru Aug 70 *** Was at TSN with 360th TEWS, at least from Sept. 1970 to Sept. 1971 *** Was at Pleiku with 362nd (This Pleiku entry may be in error, any help??)
42-24304 (Q) Lost to Non-Hostile Oct. 25, 1968 by 362nd.
42-24313 (N) Was at TSN with 360th TEWS, at least from Sept. 1970 to Sept. 1971 *** Was at Pleiku with 362nd in April 1970 *** Was at NKP with 361st in 1973
42-93161 (N) Was Transferred to SVNAF
42-93166 (N) Was Transferred to SVNAF
42-93704 (Q) Was at NKP with 361st in 1973
42-93735 (N) Was at TSN with 360th July 69 thru Aug 70 *** Was Transferred to SVNAF
42-93814 (N) Was at TSN with 360th July 69 thru Aug 70 *** Was at TSN with 360th TEWS, at least from Sept. 1970 to Sept. 1971 *** Was at NKP with 361st in 1973
42-100513 (N or P) Was at TSN with 360th July 69 thru Aug 70 *** Was Transferred to SVNAF
42-100665 (N) Was at TSN with 360th July 69 thru Aug 70 *** Was at TSN with 360th TEWS, at least from Sept. 1970 to Sept. 1971 *** Was at NKP with 361st in 1973
42-100950 (N) Was at TSN with 360th TEWS, at least from Sept. 1970 to Sept. 1971 *** Was Transferred to SVNAF

41-108980 (N) Was at TSN with 360th July 69 thru Aug 70 *** Was at TSN with 360th TEWS, at least from Sept. 1970 to Sept. 1971 *** Was Transferred to SVNAF

42-100984 (N) Was at TSN with 360th July 69 thru Aug 70 *** Was at TSN with 360th TEWS, at least from Feb. 1970 to Sept. 1971 *** Was Transferred to SVNAF

43-15112 (N) Was Transferred to SVNAF

43-15133 (N) Was at Pleiku with 362nd in April 1970 *** Lost Non-Hostile May 19, 1970 by 362nd

43-15204 (N)

43-15603 (N) Was at TSN with 360th July 69 thru Aug 70 *** Was at TSN with 360th TEWS, at least from Sept. 1970 to Sept. 1971 *** Was Transferred to SVNAF

43-15619 (Q) **This number may be in error, any help appreciated. J.C.**

43-15668 (N) Believed to have been at Phu Cat AFB, RVN with the 361st TEWS at least during the period August 1970 thru July 1971. *** Was Transferred to SVNAF

43-15681 (Q) Was at NKP with 361st in 1973

43-15979 (N) Was at TSN with 360th TEWS, at least from Sept. 1970 to Sept. 1971 *** Was Transferred to SVNAF

43-15980 (N) Believed to have been at Phu Cat AFB, RVN with the 361st TEWS at least during the period August 1970 thru July 1971.

43-16029 (Q) Was at NKP with 361st in 1973

43-16055 (N) Was at TSN with 360th July 69 thru Aug 70 *** Was at TSN with 360th TEWS, at least from Sept. 1970 to Sept. 1971 *** Was Transferred to SVNAF

43-16095 (N) Was at TSN with 360th TEWS, at least from Sept. 1970 to Sept. 1971 *** Was Transferred to SVNAF

43-16123 (N) Was at TSN with 360th July 69 thru Aug 70 *** Was Transferred to SVNAF

43-30730 (Q) Was at NKP with 361st in 1973

43-48009 (Q) Was at NKP with 361st in 1973 *** Lost to Non-Hostile Nov. 10, 1971 by 362nd *** (Contradiction in dates has been identified)

43-48072 (N) Was at TSN with 360th TEWS, at least from Sept. 1970 to Sept. 1971 *** Was at NKP with 361st in 1973

43-48087 (Q) Was at NKP with 361st in 1973

43-48153 (N) Was at TSN with 360th July 69 thru Aug 70 ** Was at TSN with 360th TEWS, at least from Sept. 1970 to Sept. 1971 *** Was at NKP with 361st in 1973

43-48158 (N) Was at TSN with 360th TEWS, at least from Sept. 1970 to Sept. 1971 *** Was Transferred to SVNAF

43-48402 (P) Was at Pleiku with 362nd in April 1970 *** Lost to Hostile Action (Shot down), April 22, 1970 by 362nd

43-48480 (P) Was Transferred to SVNAF

43-48636 (Q) Lost to Hostile Action (Shot Down), Feburary 5, 1973 by 361st

43-48702 (P) This Aircraft wrecked on take-off at Pleiku on December 31, 1968, Accident report is available on this site. It was evidently repaired and put back in service and Was at TSN with 360th TEWS, at least from Feb. 1970 to Sept. 1971

43-48767 (P) Was Transferred to SVNAF

43-48871 (P) Was at TSN with 360th July 69 thru Aug 70 *** Was at TSN with 360th TEWS, at least from Sept. 1970 to Sept. 1971 *** Was Transferred to SVNAF

43-48886 (P) Was at TSN with 360th TEWS, at least from Sept. 1970 to Sept. 1971 *** Was Transferred to SVNAF

43-48933 (P) Was Transferred to SVNAF

43-48947 (P) Was Transferred to SVNAF

43-48959 (Q) Lost to Non-Hostile Sept. 30, 1969 by 362nd

??-??971 (P) This aircraft number is incomplete. I have no record of this one except Captions received with photos and this reference from a crew members Flight Log. Was at TSN with 360th TEWS, at least from Sept. 1970 to Sept. 1971

43-49009 (P) Was at TSN with 360th July 69 thru Aug 70 *** Was Transferred to SVNAF

43-49013 (P) Was at TSN with 360th TEWS, at least from Sept. 1970 to Sept. 1971 *** Was Transferred to SVNAF

43-49100 (P) Lost to Non-Hostile Oct. 8, 1969 by 361st

43-49126 (P) Was Transferred to SVNAF

43-49201 (P) Lost to Hostile Action (Shot Down) March 9, 1967 by 361st

43-49208 (Q) Was at Pleiku with 362nd in April 1970 *** Was at NKP with 361st in 1973

43-49260 (P) Was at TSN with 360th July 69 thru Aug 70 *** Was at TSN with 360th TEWS, at least from Sept. 1970 to Sept. 1971 *** Was at NKP with 361st in 1973

43-49491 (P) Was at TSN with 360th TEWS, at least from Sept. 1970 to Sept. 1971 *** Was at NKP with 361st in 1973

43-49547 (P) Lost to Non-Hostile June 7, 1969 by 362nd

43-49570 (Q) Was at NKP with 361st in 1973

43-49679 (P) Lost to Non-Hostile Feb. 18, 1967 by 362nd

43-49703 (P) Was at TSN with 360th July 69 thru Aug 70 *** Was at TSN with 360th TEWS, at least from Sept. 1970 to Sept. 1971 *** Was Transferred to SVNAF

43-49771 (Q) Lost to Non-Hostile Nov. 21, 1972 by 361st

43-49865 (P) Was Transferred to SVNAF

44-76304 (Q) Was at NKP with 361st in 1973

44-76524 (P) Was at TSN with 360th July 69 thru Aug 70 *** Was at TSN with 360th TEWS, at least from Sept. 1970 to Sept. 1971

44-76668 (P) Was at TSN with 360th July 69 thru Aug 70 *** Was Transferred to SVNAF

44-77016 (P) Lost to Hostile Action March 11, 1968 by 361st

44-77254 (P) Was Transferred to SVNAF

45-0925 (P) Was at TSN with 360th July 69 thru Aug 70 *** Was at TSN with 360th TEWS, at least from Sept. 1970 to Sept. 1971 *** Was Transferred to SVNAF

45-0937 (P) Was at TSN with 360th TEWS, at least from Sept. 1970 to Sept. 1971 *** Was at NKP with 361st in 1973

45-1044 (P) Was Transferred to SVNAF

45-1046 (P) Was at TSN with 360th July 69 thru Aug 70 *** Was Transferred to SVNAF

45-1080 ("D") This aircraft is believed by some to have been a straight C-47D. This very well could be. I have had two (2) folks refer to the "VIP aircraft at TSN" this could be it.

45-1102 (P) Was at TSN with 360th TEWS, at least from Sept. 1970 to Sept. 1971. *** This aircraft is reported to be the one destroyed by rocket attack at Pleiku and belonging to the 362nd TEWS on the night of 12/13 April, 1972. There is some controversy surrounding "102". I have posted several photos of this aircraft "102" or I should say the remains of it, in a revetment and it was definitely destroyed whether by rocket attack or other cause, but the tail number "102" is clearly visible on one of the photos. These photos place the attack at DaNang.

45-1131 (Q) Was at Pleiku with 362nd in April 1970 *** This aircraft reportedly destroyed in the same rocket attack as 45-1102 although it did not take a direct hit as did 45-1102, Night of 12/13 April, 1972.

45-1133 (Q) Was at Pleiku with 362nd in April 1970 *** Lost to Hostile Action (Shot Down) February 5, 1969 by 362nd

Chapter 21

Any Landing You Can Walk Away From

"The Flight of Brew 41"

Submitted by: Joe Martin

Editor's note: The following is a retyped copy of documentation in the U.S. Air Force Historical Agency archives. This mission represents one of the truly remarkable feats of airmanship in the SEA war. Clarification notes are enclosed in brackets. If anyone knows the whereabouts of any of the crew, please leave a message on the site bulletin board.

The Crew of Brew 41

Aircraft Commander
Dobyns, Robert E., Lt Col
Pilot
Marks, Stanley R. II, 2Lt
Navigator
Polites, John J., Maj
Flight Engineer
Lott, David J., SSgt
Radio Operator
Stennes, Louis R., SSgt
Radio Operator
Corbin, Kenneth J., SSgt

Narrative

At 0545 hours, 11 Mar 68, Brew 41 took off from an RVN base [Nha Trang] on a classified combat mission. The EC-47 reached the target area on time, flying at 9,500 MSL. Fifty minutes later the crew heard a loud metallic crack, the aircraft lurched and immediately filled with dense blue smoke. A quick damage assessment revealed shrapnel holes in the left engine nacelle and wing, loss of all hydraulic systems and a rough running right engine. The terrain was rough and mountainous, covered with forests, and no friendlies [were] in the area. Lt Col Dobyns immediately set course for Pleiku, approximately 100 miles away. The [landing] gear had fallen free and there was a loss of power on both engines. After a few minutes the number two prop began to overspeed and for awhile it was controlled by the feathering button. The feathering system soon failed and so the engine was shut down. The propeller windmilled to a stop and the engine froze. The aircraft began losing altitude, 200 to 500 feet per minute.

In the meantime rescue had been alerted and Crown [airborne command post] advised that two Jolly Greens and fighters were on the way and that four army choppers were already in the area. Mighty comfortable [comforting] words. About 15 minutes after the hit a Forward Air Controller (FAC) in an O-2 joined up to escort the crippled Gooney Bird to a safe area.

To lessen the load the crew began to jettison everything [that was] loose. The oil temperature on the left engine read zero and oil pressure was down to 30 psi. Twenty-three hundred was the maximum rpm obtainable. It was already apparent the aircraft could never make Pleiku. The FAC then advised that clearing one range of hills would put the crew in friendly territory. This range was cleared. The FAC then said there was an emergency strip eight miles ahead but he recommended bailout because of two intervening ridges. After checking with his

navigator who had been giving him fixes during the entire route, Lt Col Dobyns elected to circumnavigate the ridge crests. This was successful, leaving one last small hill about 500 feet high, two miles short of the intended landing point. This hill was circumnavigated about 200 feet below its crest and for the first time the strip came into sight. Fifteen hundred wonderful feet of aluminum planking [at the Ben Het Special Forces camp.]

The landing could best be described as an arrival. No flaps, no brakes, a left tire blown by shrapnel, and no differential power. It touched down 300 feet down the runway, veered to the left and left the runway and the 2/3 point, and veering further around to the 160 degree point it came to a stop even with the end of the runway. The flight engineer summed it up pretty well when he said, "That was the best landing I had ever seen in my life." Of note, the four Army choppers were sitting on the runway by the time the aircraft came to a halt.

This flight demonstrated superior airmanship by Lt Col Dobyns and his entire crew, superb crew discipline and performance by professionals who knew their job and weren't about to panic. It also points up the magnificent search and rescue effort in Vietnam. This was a case of a crippled aircraft being led, almost by the hand, across 60 miles of hostile territory to a safe haven, with Army helicopters in attendance to take care of any eventuality.

This crew is not only deserving of PACAF and 7th Air Force awards, but should be considered for additional USAF recognition.

[Ed. Useable items were salvaged and the hulk of EC-47P S/N 44-77016 was consigned to the scrap heap ó a sad ending for the first "Electric Goon" assigned to the to 361st TEWS.]

Tribute to the DC-3

In fifty-one they tried to ground the noble DC-3
And some lawyers brought the case before the C.A.B.
The board examined all the facts behind their great oak portal
And pronounced these simple words "The Gooney Birds Immortal"

The Army toast their Sky Train in lousy scotch and soda
The Tommies raise their glasses high to cheer their old Dakota
Some claim the C-47's best, or the gallant R4D
Forget that claim, their all the same, they're the noble DC-3.

Douglas built the ship to last, but nobody expected

This crazy heap would fly and fly, no matter how they wrecked it
While nations fall and men retire, and jets go obsolete
The Gooney Bird flies on and on at eleven thousand feet.

No matter what they did to her the Gooney Bird still flies
One crippled plane was fitted out with one wing half the size
She hunched her shoulders then took off (I know this makes you laugh)
One wing askew, and yet she flew, the DC-2 and a half

She had her faults, but after all, who's perfect in every sphere?
Her heating system was a gem we loved her for her gear
Of course the windows leaked a bit when the rain came pouring down
She'd keep you warm, but in a storm, it's possible you'd drown.

Well now she flies the feeder lines and carries all the freight
She's just an airborne office, a flying twelve ton crate
They patched her up with masking tape, with paper clips and strings
And still she flies, she never dies, Methuselah with wings.
Author UNKNOWN

Chapter 22

Electric Goon

The Story of the EC-47
By Joe Martin, 1998

Introduction

I've been interested in airplanes pretty much since I was old enough to know what one was. I've never had a burning desire to drive the things, but the development and use of the machines themselves has always fascinated me. I started this project in December, 1977, by writing a letter to the historian's office of what was then the U.S. Air Force Security Service (USAFSS). I was curious about some of the details relating to the EC-47 aircraft in which I had spent something like 1,500 hours as a radio operator between February, 1970, and December 11, 1971, when I returned stateside for discharge. This was in the days

before the Freedom of Information Act, and I actually got answers to my questions!

Over the years, I came across mention of the 'electric goon' now and again but never saw anything of much substance. A couple of years ago, I decided to make a trip to the Air Force Historical Research Agency at Maxwell AFB, Alabama. I copied what relevant material there was in the histories of the 360th, 361st, and 362nd Tactical Electronic Warfare Squadrons (TEWS) and got copies of a couple of other documents. There were a few nuggetsóthe story of TIDE 86 being probably the bestóbut I filed it all away and went on to other things.

When I finally went 'on line' earlier this year, for one of my first experiments I typed in 'EC-47' and clicked on the search button. The rest isóor at least I hope it will beó'history'. J.C. Wheeler's site has blossomed at a rate that I doubt any of us associated with the EC-47 could ever have imagined. After submitting a few things which J.C. graciously posted and corresponding via the web with guys I hadn't seen in 25+ years, I decided to finish the project I started in 1977.

I recently made another trip to Maxwell, where quite by accident I ran into Col. Bob Bonn, who has made several contributions to the site. If all goes as planned, the result of this visit will be the release of the TEWS material that remains classified or 'For Official Use Only.'

What I intend to put here is really the story of the EC-47 itselfóhow it came to be and the role it played in the Southeast Asia war. No aircraft is any better than the people who fly it and those on the ground who keep it flying, but that's a different story and the web site is telling more of it every day. This 'hardware' part of the tale will be added as I sift through the newly-released material and get feedback from you the reader.

Once I've completed the story as best I can, I hope to get it published in one of the international aviation magazines. (Yes, I'll get paid if that happens, but I'll guarantee that whatever the amount is, it won't cover what I've already spent!) I plan to have the first installment, covering the 'Hawkeye' years, out to J.C. within a week. There are still some blank pages in the EC-47 story and I hope those of you who were there will help fill them in.

Joe Martin
Chandler, AZ
October 10, 1998
joe.martin.phx@worldnet.att.net

Chapter 23

Electric Goon

A History of the EC-47
Part 1: Project Hawkeye
© Joe Martin, 1998

Beginnings

On December 22, 1961, Army Specialist 4th Class James T. Davis died in an ambush not far from Saigonóthe first U.S. soldier to be killed in action in the Vietnam war. Davis did not wear the distinctive beret of some elite force; in fact he was not even part of a combat unit. SP4 Davis was a radio operator from the 3rd Radio Research Unit (RRU) of the U.S. Army Security Agency (ASA).

He was killed while attempting to locate Viet Cong (VC) radio transmitters. Radio direction finding (RDF) is one of the oldest tricks of the signal intelligence (SIGINT) trade, originating in the days before World War I. Not surprisingly, direction finding was one of the techniques employed in U.S. 'counterinsurgency' operations early in the war. Elusive they may have been, but even the VC found it necessary to utilize radio communications. Consequently, ASA activated the 3rd RRU in May, 1961, to handle SIGINT operations in Vietnam. However, the low-powered transmitters such as Davis had been chasing proved difficult to fix by conventional ground-based RDF methods.

The solution seemed obvious, and not long after Davis' death both the army and air force began to experiment with airborne radio direction finding (ARDF). In March, 1962, a modified USAF C-54 was dispatched to Tan Son Nhut, the principle airfield in the Saigon area, under the project nickname Hilo Hattie. The aircraft was equipped with standard cameras as well as infrared (IR) and ARDF gear. An abundance of targets presented themselves, but the ARDF and IR systems "did poorly" in the 102 missions that were flown during the 10 months Hilo Hattie operated. Meanwhile, three ARDF-equipped DeHavilland L-20 (later designated U-6) Beavers were placed in service by the 'aviation section' of the 3rd RRU, which coordinated the overall effort.

'Phase Angle Discrimination'

One shortcoming of the early army ARDF systems was the use of an 'aural null' technique that required the aircraft to turn until the target could no longer be heardóthe 'null' signalóat which point the airplane was headed either directly toward or away from the target. A series of maneuvers was then required to obtain sufficient lines of bearing (LOB) to fix the target. For obvious reasons,

repeatedly turning toward the target transmitter was not an ideal tactic. Furthermore, the method was time consuming and heavily dependant on operator technique to determine exactly when the null occurred. Since the aircraft were not equipped with any sort of navigational equipment, determining the position of the aircraft at the time the LOB was taken was difficult and that in turn made the fix less precise.

Air force legend has it that the idea of 360-degree ARDF capability came from General Curtis E. LeMay, long time leader of Strategic Air Command and later USAF Chief of Staff. Could not, LeMay is said to have inquired, some sort of 'omni-in-reverse' be devised so that a transmitter could be pin-pointed by an aircraft flying by instead of the other way round?

In its mature form, the Air Force ARDF system employed this principle of 'phase angle discrimination' whereby the target signal was intercepted by a triangular antenna array, one set of dipoles mounted on each wing and the third on the forward fuselage just aft of the cockpit. The aircraft position at the moment of 'lock-on' was determined by a Doppler navigation system, with precise heading information input from a gyro compass.

"Less than two seconds after signal lockñon", stated the navigator's manual for the air force ARDF system, "the measurement was made automatically, without any human input or manipulation, [thus] eliminating any human error in the bearing angle measurement." In addition, "there was no 180 degree ambiguity in the angle measurement (as with the aural null). If the station stopped transmitting immediately after lock-on, the station direction was known without a doubt. Now the direction of the station could be determined from any location and from any aircraft heading."

Sanders Associates (now part of Lockheed Martin) of Nashua, New Hampshire, was selected to design and build a prototype phase angle measurement system and on September 26, 1962, the Warner Robbins [Georgia] Air Material Area (WRAMA) received a directive to begin the necessary modification work on a C-47D, serial number 45-925, then attached to the 1st Air Commando Wing at the Special Air Warfare Center (SAWC), Eglin AFB, Florida. Thus began project Hawkeye, out of which would eventually come the EC-47.

Hawkeye is Hatched

WRAMA was tasked to complete work on #925 by October 12 in order to meet a projected January 2, 1963, deployment date. TACAN, IFF, updated radios, a gyro compass, Decca navigation gear and Doppler equipment was installed and on October 18, the Hawkeye bird departed for Hanscom Field, Massachusetts, where the 'breadboard' ARDF equipment was to be installed by Sanders. Further

modifications were completed and on December 1 the aircraft, still minus the ARDF gear, made a successful test flight.

At this point, the documented trail of the Hawkeye aircraft virtually disappears. As the author of a WRAMA historical study points out, this was the time of the Cuban Missile Crisis. In any case, #925 reappeared at Eglin in early 1963, presumably with Sanders' prototype phase angle discrimination ARDF equipment aboard.

By late April, however, evidence indicates the aircraft was in Korea. Whatever tests may have been conducted during the summer of 1963, #925 was scheduled back at WRAMA on October 7 for work on the navigational system. This was rapidly completed and on October 10, the Hawkeye aircraft returned to SAWC. This time its ultimate destination was Vietnam, and 45-925 was to spend February-July 1964 there. About the same time, the army deployed another flock of RU-6A's, referred to as 'Seven Roses', in the Mekong delta region southwest of Saigon.

Due to time and budget constraints, the Hawkeye aircraft had been calibrated to within only 30 degrees of the fuselage centerline and was thus only marginally more capable than its army counterparts. When the navigation system failed completely in July, #925 was again sent back to the U.S. Shortly thereafter, events would fundamentally alter the nature of the war.

On August 2, the destroyer U.S.S. Maddox, supporting clandestine activities in the Gulf of Tonkin, exchanged fire with North Vietnamese patrol craft. A similar incident on the 5th was answered by USN air strikes against North Vietnamese coastal bases and oil depots. Two days later Congress passed the Tonkin Gulf resolution, giving President Lyndon B. Johnson authority to commit American forces to full scale involvement in the Vietnam war.

The U.S. Buildup Begins

In January, 1964, Headquarters, U.S. Air Forces, Pacific, (PACAF) had requested 7 additional Hawkeye-type aircraft, but approval was delayed pending results of the Hawkeye tests. Again, official records are sparse concerning the whereabouts of #925 from July 1964 until late 1965. Apparently the aircraft was continuously modified and tested, with at least some of the activity taking place in Florida, presumably under SAWC direction.

Meanwhile, a program nicknamed Red Chief involved the modification of another gooney bird, this one HC-47 serial number 42-92916, to carry ARDF-associated equipment developed by the Baltimore facility of the Martin Company. Little is known of Red Chief operations, but the aircraft did fly

missions in Vietnam during 1965. It was written off after catching fire on the taxiway at Bien Hoa on September 6.

On October 31, the Hawkeye bird was back 'in country' and on December 13 scored big by fixing an enemy battalion in the Michelin rubber plantation. By the end of 1965 the U.S. had completely cast aside the advisory role and taken virtually complete responsibility for war in South Vietnam.

Earlier in the year, the Marines had been blooded in operations around Da Nang, and in November the newly formed 1st Cavalry Division (Airmobile) had first ridden its 'Hueys' into battle in the Ia Drang valley campaign. Likewise, the VC 'insurgents' had largely been superseded by regular units of the People's Army of Vietnam (PAVN), sent southward down the arduous Ho Chi Minh Trail winding through the mountains of eastern Laos and western Vietnam. It was these troops, under the overall command of the victor of Dien Bien Phu, General Vo Nguyen Giap, that the American 'grunt' would face for most of the long duration of the war.

ARDF – Army or Air Force?

The Hawkeye aircraft had been scheduled for a 120 day trial, but continued success prompted MACV (Military Assistance Command, Vietnam) to request an extension. The Army had continued to build its ARDF force and with 15 aircraft was now capable of providing some 240 hours per week of ARDF coverage versus Hawkeye's 32 hours.

The overall ARDF effort was still coordinated by the army's 3rd RRU. In late December, Lt. Gen. Joseph H. Moore, commander of the USAF 2nd Air Division, citing the "short range" and "lack of all weather capability" of the army aircraft, pointed out "the need . . . to enter this special area of aerial reconnaissance as a proper role for [the] USAF."

Moore's views got immediate attention when in early January 1966, COMUSMACV announced intentions to increase weekly ARDF coverage by a factor of nine to 2,424 hours. Even with an additional 41 army aircraft already programmed, a shortfall of 1,252 hours per week was projected. A draft of the coordination letter concerning the increased coverage had originally stated that "It does not appear that the C-47 will meet this requirement in a timely manner." Gen. Moore had the sentence deleted. Furthermore, a MACV message was reported to have stated that a total of 79 army U6 and/or U8 aircraft would be required to make up the deficit. Second Air Division withheld approval until the wording was changed to omit reference to any particular type of aircraft.

Nonetheless, the air force was soon forced to admit, at least internally, that "No sustainable air force capability exists, either qualitatively or in suitable quantity. One C-47 aircraft (Hawkeye) is currently performing a minimal ARDF task using bread-board equipment designed and made in 1963."

Sensing the potential for a significant set back at the hands of the army, air force brass reacted swiftly. A briefing to the Commander in Chief, Pacific (CINCPAC), the overall commander of all U.S. forces in the area, had the desired effect. CINCPAC recommended to the Joint Chiefs of Staff that the USAF begin a crash program to deploy 35 ARDF C-47s to Vietnam beginning in April, 1966.

Inter-service politics aside, the discussions in Washington did recognize one salient fact: the air force had lots of potential platforms in inventory; the army had none. Project Hawkeye won the USAF a slice of the ARDF pie, but the hard work was still ahead and there wasn't much time in which to do it.

Footnote
The Hawkeye aircraft, 45-925, would soldier on until August of 1966, when it was returned to the U.S. for installation of production standard ARDF gear. It returned to Vietnam in March, 1967. The writer flew several missions on #925 in 1970-71, but was unaware at the time of the significance of this aircraft in the development of the EC-47.

Readers are encouraged to point out errors and to add to the historical 'data base' of the Electric Goon. A photo or 2 of the Hawkeye aircraft, 45-925, during its experimental phase would be a great addition to the EC-47 story. Also, can anyone confirm that #925 was in Korea during 1963-64? Likewise, any information on the Hilo Hattie C-54 or the Red Chief project would be welcomed.

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Chapter 24

Electric Goon

A History of the EC-47
Part 2: Phyllis Ann

Phyllis Ann is born

Although the official go-ahead for the C-47 ARDF program was not given until February 17, 1966, planning was well underway more than a month before. On January 11, Second Air Division issued Southeast Asia Operational Requirement (SEAOR) 32, outlining the air force's ARDF proposal.

By the end of the month, SEAOR 32 had made its way through channels and was in the hands of WRAMA's Directorate of Materiel Management. A conference at Wright-Patterson AFB on February 1 provided further clarification and on February 10 WRAMA received notice of the project under its new cover name, Phyllis Ann. This was 2 days prior to the CINCPAC briefing that 'sold' the air force ARDF program!

Phyllis Ann originally called for the modification of 35 aircraft, 20 from storage and 15 to be 'recruited' from stateside flying squadrons. (As it turned out, most of the Phyllis Ann Gooney Birds seem to have been received in flying condition from air guard and regular USAF units.) The cost and feasibility study (FS) for implementing SEAOR 32 was assigned the number FS 1876, and although another number was assigned for the actual work, the Phyllis Ann modification was usually referred to by WRAMA as 'Modification 1876'.

Modification 1876

Modification 1876 called for the installation of a whole suite of electronic equipment in addition to the ARDF gear and the electrical system necessary to power it all. Camera installations were planned initially, but this idea was soon dropped. Deciding what equipment was necessary was one thing, obtaining it was another. A very accurate Doppler/computer combination was absolutely essential to the ARDF mission. Not enough standard military items were available for Mod 1876 so off-the-shelf Bendix DRA-12/CPA-124 models were utilized. Likewise, the Magnavox FM-622A commercial VHF/FM air-ground communications radio was chosen, although the long lead-time of these sets necessitated interim use of the less satisfactory military ARC-44.

The modifications were carried out in two stages. In the first stage, the aircraft were sent through Inspection and Repair as Necessary (IRAN) and the unclassified equipment installed. This work was contracted to Air International Corporation of Miami, Florida, which was already involved in similar work on the AC-47 gunship conversion. In stage two, the modified aircraft were flown to Grenier Field, New Hampshire, for installation of the Sanders ARDF equipment.

New 'opportunities' presented themselves almost daily. For example, extremely accurate heading information was of prime importance in ARDF operations and

to properly set or 'swing' the gyro compass, the Gooney Bird had to be in flight attitude. Flight International used a lift truck to raise the tail, but it was not known if that sort of equipment would be readily available in Southeast Asia. A little experimentation revealed that the task could be accomplished by unhooking the relevant parts of the compass and leveling them instead of the entire aircraft.

In March, the decision was made to include an 'acquisition' radio operator's position in addition to the ARDF console. The ARDF position was referred to as 'X' and the other position 'Y'. These designations remained standard throughout the EC-47 program.

In April, the number of authorized C-47 ARDF aircraft was raised from 35 to 47. This decision came out of joint Army-USAF discussions on how best to meet MACV's ARDF requirements. A combined force of 47 USAF C-47's and 57 Army aircraft could provide ARDF coverage 16 hours per day for all of South Vietnam and the Laotian panhandle.

Deadline Difficulties

Mid-May had been the original target date for Phyllis Ann deployment to Southeast Asia, but 2nd Air Division noted that an earlier delivery date for the first aircraft would be of the "utmost advantage" in demonstrating the air force's ability to "deliver [the] promised product on time." "Extreme measures", continued 2nd AD, were "not only justified but necessary." This notion was reinforced in a similar message from Headquarters, USAF. Sanders was authorized to work around the clock, 7 days a week, if necessary.

To avoid delays from the airframe end, two C-47's already undergoing IRAN were designated as ARDF aircraft. The WRAMA history provides some insight into the difficulties encountered in producing the ARDF equipment:

The first five AN/ARD-18's were fabricated from pre-production drawings, installed and calibrated in a minimum of time, and precluded thorough engineering and environmental testing. Initial funding of the Sanders contract would permit only a partial sub-contract procurement of "raw material" enough for 5 systems.

Shortages of electrical connectors and components for the printer aggravated the situation. Despite much expediting of material, the schedule eventually shook out to a complete equipment installation and ground check of the first aircraft in mid-April, with completion of flight testing and partial calibration to be completed by the 20th. The classified ARDF equipment would then be removed and the aircraft readied for the ferry flight. Aircraft and ARDF equipment would be re-united in Southeast Asia, where calibration would be completed.

After crossing the continental United States, the venerable Goon would fly up the west coast of Canada to Anchorage, Alaska, then to the western extremity of the Aleutian Islands chain. From there, the major over-water chunk of the Pacific crossing was made by way of Midway-Wake Island-Guam-Philippines, leaving one last leg across the South China Sea to Vietnam. Aircraft number 2 followed an easterly route across the Atlantic [and presumably Europe, the Middle East and India], but the remainder of the Phyllis Ann aircraft made the Pacific crossing. These long flights required additional temporary modifications in the form of 250-gallon auxiliary fuel tanks and propeller de-icer boots.

Phyllis Ann Debuts

Meanwhile, the buildup of U.S. forces in Vietnam during 1965 had caused the USAF to change its organizational structure to accommodate the dramatic increase in personnel and aircraft. By January 1966, there were more than 500 aircraft and 21,000 airmen stationed at 8 major air bases in South Vietnam.

From the very beginning, reconnaissance had been one of the primary air force missions in Southeast Asia, and to handle the increased demand the 460th Tactical Reconnaissance Wing (TRW) was established at Tan Son Nhut on February 22. On April 1, 1966, Seventh Air Force replaced 2nd Air Division as the major USAF command in Vietnam. The 460th would shortly become the largest and most diverse wing in 7th AF, providing photo reconnaissance capability with RB-57, RF-101 and RF-4 aircraft.

In anticipation of the Phyllis Ann deployment, the 360th Reconnaissance Squadron was established at Tan Son Nhut on April 8, assigned to the 460th TRW. The radio operator positions were to be manned by radio operators of the U.S. Air Force Security Service (USAFSS), and approximately 15 USAFSS personnel had been on temporary duty (TDY) in Vietnam since December 1965.

The 6994th Security Squadron was officially activated at Tan Son Nhut on April 15, 1966. The 6994th and its detachments would be responsible for the classified elements of the EC-47 operations, including maintenance of the ARDF and associated equipment, throughout the war.

In addition to the original Hawkeye aircraft, the 360th also inherited a pair of Gooney Birds that, although not ARDF-equipped, played a significant role in the eventual shaping of the EC-47 mission. These two aircraft, 43-49680 and 43-16254, were 'collection only' platforms operating under the code name Drill Press.

Details concerning Drill Press operations are sketchy, but apparently VC/NVA voice radio communications were the targets. Wing maintenance records show these three aircraft flying a combined total of 74 sorties in April and 64 in May. How many of these were operational missions is not clear. Check flights and the like may have been included.

The first Phyllis Ann aircraft, 43-15112, arrived 'in country' on May 26. Necessary calibration and other testing, apparently consisting of 6-8 flights, was rapidly completed, and on June 6 the aircraft was scheduled for its first mission.

Working the Tay Ninh area northwest of Saigon, the crew of #112 bagged 19 fixes, besting by 6 the previous Hawkeye record. Records indicate that 33 Phyllis Ann sorties were flown in June, but again some may not have been operational missions.

By mid-July, the 360th had four RC-47's on hand. (The designation was not changed to 'EC' until 1967, but EC-47 will be used for the remainder of the narrative.) For the month, Phyllis Ann managed 64 sorties, coupled with 9 by the Hawkeye aircraft. The two Drill Press birds added 46 more.

Origins of the TEWS

To provide the most effective coverage of the projected ARDF areas, three Phyllis Ann squadrons were planned. The 360th would be stationed at Tan Son Nhut, close to Saigon, MACV, and 7th AF headquarters. A second squadron, the 361st, would be established at the coastal base of Nha Trang, long-time Vietnamese Air Force (VNAF) training site and now home to the USAF's 14th Air Commando Wing.

The 362nd squadron would operate from Pleiku in the central highlands. All three outfits were initially designated as reconnaissance squadrons. Although the more descriptive Tactical Electronic Warfare Squadron (TEWS) was not applied until 1967, in order to maintain continuity 'TEWS' will be used in the remainder of the narrative.

The 361st TEWS was activated at Nha Trang effective April 8, 1966, but did not receive its first aircraft (44-77016) until October 17. By December 2, the full complement of 9 aircraft was operational and 78 sorties had been flown in support of various allied ground operations.

The 362nd TEWS began its existence as Detachment 1 of the 361st when a cadre moved to Pleiku in August. A brief description of the 362nd's first days by squadron commander Lt. Col. Jack A. Crook gives a glimpse of conditions. Among the first personnel to arrive were 12 aircraft mechanics sent TDY from

Nha Trang. The "dirty dozen" found themselves assigned to an area that had formerly been used as a VNAF motor pool. After 30 days of landscaping improvements "which included ditchdigging, killing rats and snakes, one of which was the deadly kraat species" the dirty dozen were so pleased with their work that they volunteered and were accepted for permanent assignment to their new home in the 362nd.

On December 8, EC-47 number 44-77254 arrived at Pleiku. By the end of the year, 7 aircraft and 11 crews were in place and 48 ARDF sorties had been flown.

Proof of the Pudding

The initial results of the EC-47 missions were "beyond expectations, providing eagerly sought information for strategic and tactical planning." The 360th completed 758 of 781 sorties 'fragged' during September-December 1966, including 99 missions into Laos that were staged through Da Nang. Operations over Quang Tri province near the demilitarized zone (DMZ) on August 29-30 were singled out as "reflecting excellent coverage of extremely high priority target locations." ARDF consumers expressed "their complete satisfaction" and "requested further coverage by Phyllis Ann aircraft specifically." Kudos were also received for a Drill Press mission on the night of September 2, planned and executed in response to "national level" requirements.

The 360th was reminded that the enemy still retained the ability to strike almost at will when aircraft 43-93166 received major damage to its tail section during a Viet Cong attack on December 4. The EC-47 was out of commission for 18 days. The elderly Goons also experienced their share of maintenance problems and all the TEWS suffered from material shortages. The rather primitive operating conditions in Southeast Asia, especially the perpetual dampness, played havoc with electronic equipment of any sort and the sensitive ARDF and Doppler equipment caused a number of aborts, a problem that was never completely overcome.

All in all, though, Phyllis Ann represented some remarkable feats of engineering, logistics, and good old 'Yankee ingenuity'. In roughly a year's time, the EC-47 went from a proof-of-concept prototype to a fully deployed weapons system that was already leaving its mark on the Southeast Asia war.

Footnote: As always, readers are requested to point out errors and to provide additional information. Photos of the early Phyllis Ann and Drill Press aircraft I would be especially welcome.
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Chapter 25

A History of the EC-47

Part 3: The EC-47 in Action; 1967

Antique Airlines

By the end of 1966, Sanders Associates had turned over 30 of the originally programmed 47 Phyllis Ann aircraft to USAF ferry crews. By January 31, 1967, 29 were in Vietnam with 8 others en route. Eight more were scheduled to arrive in February-March, and 2 were earmarked for special tests. Six additional aircraft were designated to be equipped with the QRC-346 jamming system. The TEWS began to reach authorized strength and settled into a pattern of operations that would remain essentially unchanged for the duration of the war.

Although the nickname was applied specifically to the 360th TEWS, "Antique Airlines' would have been a fitting description of the entire EC47 program. The aircraft themselves were of 1942-45 vintage, and more than a few TEWS pilots had flown the Gooney Bird in World War Two. In early 1967, over 80% of the 360th's pilots and navigators were filed grade officers drawn from a variety of assignments all over the war. The average age was over 40 and the squadron claimed a law degree, 18 masters, and 36 bachelors degrees in various fields.

On January 17, 1967, a CBS television crew visited the 360th TEWS and filmed various scenes and squadron activities. The unofficial squadron emblem was prominently displayed, with "an old tiger, scarfed no less to keep out the chill, sitting in a rocking chair between the two roaring engines of the true and tried 'Douglas Racer'. " Excerpts of the film were televised on the evening news during the week of January 23-29.

Phyllis Ann and the SIGINT Community Both ASA and USAFSS were parts of the overall SIGINT operations directed by the National Security Agency. (Some wags avowed that NSA stood for No Such Agency'.) Throughout its existence, however, the ARDF program in Southeast Asia was a unique SIGINT operation. A top secret Phyllis Ann briefing (now declassified) reveals some subtle aspects of the program.

The briefing acknowledged that USAFSS was responsible for collecting communications intelligence (COMINT) "on the Soviet Union and other Communist countries of the world." To accomplish this mission, aircraft such as EC-130's and EC-135's were deployed as "airborne communications reconnaissance platforms (ARCP) in selected orbits along the periphery of Communist countries to obtain signals which are unobtainable from the ground." These collection assignments, "considered to be 'National' in character" , were levied by NSA, which processed the intercepted material. ACRP was "basically a peacetime program", with the aircraft flown by SAC, TAC, or other USAF commands. The intercept operators, however, belonged to USAFSS, which was essentially the Air Force's contribution to NSA. In the case of the EC-47, the TEWS were a part of TAC, but the 'backend' crews of Morse intercept operators and linguists were assigned the 6994th Security Squadron (USAFSS) and its detachments.

The Phyllis Ann briefing went on to explain that MACV required "a tactical platform which is immediately responsive to theatre requirements" which ACRP could not provide. Furthermore, ACRP aircraft were "not particularly well suited to in-country tactical operations." The C-47 had been chosen for the ARDF role "because they were available and they meet the requirements of [relatively slow] speed and endurance." ARDF was emphatically not a part of ACRP, but "a separate and distinct program ", not controlled by NSA but "commanded and operated by 7 AF in response to MACV requirements."

Officially, the TEWS/USAFSS mission was:

To conduct daily, day/night all weather ARDF operations against enemy transmitters in the RVN [Republic of Vietnam] and permissive areas of Laos as a basis for tactical exploitation in support of requirements established by COMUSMACV and Commander, Seventh Air Force.

Seventh Air Force, through the TEWS, did of course own the EC-47 fleet but "MACV requirements", naturally enough, reflected the MACV command structure and that structure was dominated by the U.S. Army.

Controlling ARDF

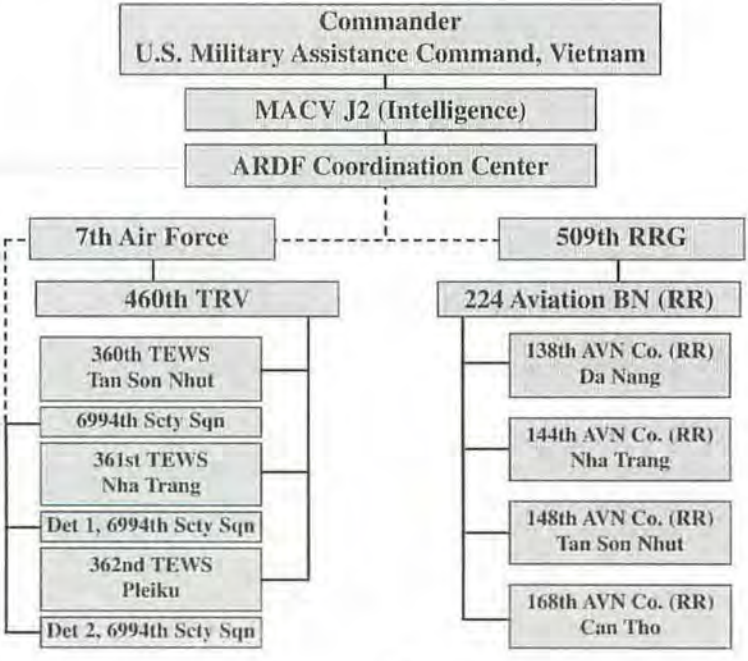
Exactly 'where' in Vietnam and other 'permissive areas' ARDF missions were to be flown was dictated by the needs of the various intelligence 'consumers', primarily the Army and Marine ground commanders. MACV J-2 (Intelligence) had the responsibility to "Receive, validate, and approve" requests for ARDF support. A coordinating committee made up of representatives of MACV, 7th Air Force, ASA, USAFSS and NSA met weekly to analyze and prioritize 'consumer' requests. Once these priorities were established, the detailed planning was

accomplished by an organization originally known as the Joint Platform Management Group, but which was later designated as the ARDF Coordination Center (ACC). The ACC established specific time over target, designated specific targets as 'priority', arranged for encryption of ARDF data for transmission to the consumer, and finally distributed the specific tasking to the TEWS and ASA units that would fly the mission.

As the TEWS were gearing up in the second half of 1966, ASA likewise increased its presence in Vietnam. On June 1, 1966, the 509th Radio Research Group (RRG) was established at Tan Son Nhut, replacing the 3rd RRU. Unlike the split responsibilities of the Air Force ARDF program, the 509th RRG controlled the entire Army operation from collection to analysis and dissemination of the finished intelligence product to the commander in the field. The flying part of the 509th's mission was done by the 224th Aviation Battalion (Radio Research), under which were 4 aviation companies, one in each of the 4 Corps areas of South Vietnam.

A simplified diagram of the MACV ARDF operation is shown below. Changes of station were made and a TEWS detachment was established in Thailand in 1969, but the basic organizational structure remained in place until the 460th TRW stood down in late 1971.

Basic ARDF Command and Control Structure



The 509th also controlled 'Direct Support Units' (DSU) at the division or brigade level. The DSU had direct radio communication with the ARDF aircraft, whether Army or Air Force, and relayed the information to the field commander, sometimes within minutes after the fix was plotted. The Air Force might have wished it otherwise, but the EC-47 basically operated as a collection vehicle for the 509th RRG.

The Jungles of Puerto Rico

MACV may have called the planning shots, but the USAF continued to maintain that the EC-47 was a demonstrably better ARDF platform than the Army aural null system. Eventually, the Department of Defense and/or NSA decided to put matters to the test in a sort of "fly-off". These "Phase III" tests were conducted in Puerto Rico beginning around March 1, 1967. USAFSS radio operators and two pilots and two navigators from the 362nd TEWS were assigned on temporary duty (TDY), along with Sanders representatives and some maintenance personnel. The ASA contingent provided a pair of RU-8 aircraft. Aircraft 43-49547 was one of two EC-47's deployed, suitably emblazoned with a "Beat Army" motif on the nose. The overall operation was under the [presumably] neutral direction of a U.S. Navy officer.

David Eddy, one of the Hawk Eye project leaders, also participated in the Puerto Rico tests. He recalls that: We flew missions against Special Forces troops with jeep-mounted and back pack radios. Most of the transmissions were from vertical

whips although some slant wires were used, and the duration of the signals varied from 30 seconds to 10 minutes. It isn't disputed that the AF got more fixes because we could do fly-bys instead of turning towards or away from the signal as the U-8 had to, being an aural null system. The AF was more effective against the shorter signals, and had a better overall accuracy. This is obvious in the data, but the political summation of the tests was that the systems were comparable.

A humorous aspect, as the tests went on, the Army team realized we knew the direction to the target immediately, so they would fly in close proximity to the Goon so they would know the direction to always turn nose to the target instead of tail to. I believe both services got to learn a lot about their system during the tests.

A summary report showed the average error of 124 [EC-47 ?] fixes to be 717 meters. Half of all fixes could be expected to be accurate within 600 meters. About 72 percent of targets would be within 1,000 meters of the reported location and only 10 percent would have errors greater than 1,500 meters.

The Air Force also conducted tests to determine how well the EC-47 could perform against horizontally polarized signals emitted from antennas suspended from balloons to eliminate ground effect. Holloman AFB, in the New Mexico desert, was the chosen test site.

Again Dave Eddy: Signal strength as well as bearing data was taken from 360 degrees around the antenna. We were able to verify that when off the end of the horizontal antenna, the bearings were fairly accurate, while the most inaccurate were when flying parallel to the antenna orientation. A definite drop in signal strength was noted as you approached abeam of the antenna. Efforts to mount several polarized antennas under the [EC-47] fuselage were unsuccessful, and it was decided that signal strength, when monitored by the X operator and the navigator, could provide insight into the antenna type. So, assuming the target was active long enough, you could evaluate each LOB, [line of bearing] and its signal strength and make some assumptions as to its validity. The lessons learned from the 1967 tests would be incorporated into the newer AN/ALR-35 system.

The Jungles of Vietnam

Initially, MACV had three objectives in 1967: To stop any attempted North Vietnamese invasion across the DMZ (I Corps), to block Communist infiltration through the Central Highlands in II Corps and to sweep enemy held areas in the III Corps areas north of Saigon. To accomplish this, a series of multi-brigade operations had been launched in late 1966. Some of these continued into the new year while new ones were continuously planned and executed. With good reason, Shelby M. Stanton in his book The Rise and Fall of an American Army would

call 1967 "The year of the big battles". ARDF would play an increasingly important role in deciding when and where these battles would be fought.

In 1966, the USAF had supported 30 major ground operations and had flown 73,911 strike and 86,928 reconnaissance sorties inside Vietnam. The fledgling TEWS contributed 1,146 'in-country' ARDF missions to the total, all in the last 6 months of the year. EC-47 sorties would increase dramatically in 1967 as the full complement of Electric Goons became operational.

Once the EC-47 crew had fixed a target, the information was passed as soon as possible to the assigned DSU. Once the ground commander had the fix information, a number of things might occur. The quotations in the following paragraphs are from a USAFSS paper dated June, 1968:

The tactical commanders react to the information differently, depending on the known significance of the target, the immediate tactical situation, and the proximity of the target to friendly military forces. Some commanders have ordered that a minimum of three rounds of heavy artillery be placed on each fix location. If the target is of known tactical significance, the commander may order an immediate tactical air strike against the location. It is also common practice to direct a forward air controller (FAC) into the area for reconnaissance purposes.

The results of a fix by a Phyllis Ann aircraft on November 21, 1966, provides a good illustration of timely use of ARDF data. The fix was received by the DSU at 0136Z and passed immediately to regimental intelligence. Roughly a half hour later, a FAC was sent to the area. Air strikes were requested and an 11th Armored Cavalry convoy moving along Route 1 was advised of a possible ambush. Four 'Huey' gunships were dispatched to the scene and began a 'recon by fire', which the enemy returned. A fire fight erupted, but a message sent afterwards noted " ——Important point, this ARDF prevented serious ambush for which this command is indebted to the COMINT community."

Although results were rarely this dramatic, they were no less important. Again quoting from the USAFSS paper:

In some cases a study of ARDF fixes obtained within a given area has been the sole basis for conducting an operation. The planned area of operations has often been altered during the operation based on ARDF information. Tactical commanders rely heavily on ARDF data for planning troop maneuvers and fire support. Also, it is possible, to a large degree, for the commanders to measure the effectiveness of their actions through ARDF.

Heavy use was made of ARDF information in both planning and executing Operation Junction City, which was at the time the largest operation conducted in Vietnam. Twenty-two battalions from the U.S.1st, 4th and 25th Infantry Divisions, 196th Infantry Brigade, 173rd Airborne Brigade and the 11th Armored Cavalry, along with 4 ARVN battalions, spent nearly three months sweeping the long-time VC stronghold known as War Zone C northwest of Saigon. Some 4,400 fixes were obtained, of which 2,772 were of classified as 'immediate interest'.

These kinds of results were impressive, but the USAFSS study noted that "This close tactical support (CTS) is largely incidental since ARDF operations are conducted daily in most areas within MACV jurisdiction." ARDF was also frequently used to target B-52 'Arc Light' strikes.

Ninety percent of the B-52 strikes targeted by the 3rd Marine Amphibious Force in the DMZ area were purported to be based on ARDF.

The table **'not available here'** was complied from various sources, gives some indication of the magnitude of ARDF CTS for ground operations specifically mentioned in USAFSS and/or TEWS documents. The number of B-52 strikes has been included as a point of interest since it seems reasonable to conclude that a fair proportion of them must have been precipitated by ARDF.

For the EC-47 crews who flew in 1967-68, a fair amount of feedback material such as that shown in the tables is contained in USAFSS and/or TEWS documents of that period. Names of crewmen are given, along with a brief description on what action was taken on the fixes they obtained. For example, on December 6, 1967, the crew of Quintanna, Johnson, Warren, Veal and Harris fixed an enemy unit "which may have been involved in the attack on the 199th Light Infantry Brigade forces north of Bien Hoa." Artillery was fired into the area and a patrol was inserted. When the patrol was extracted later in the day, it received heavy fire, wounding the helicopter pilot.

Unfortunately, these reports appear to name only the TEWS or 6994th crews, not both. The example above could list a bare minimum crew of pilot, co-pilot, navigator and 2 radio operators, but that seems doubtful since during this time the TEWS flight mechanic/engineers were still carried. More likely, the fifth man was an instructor or Standardization/Evaluation Flight Examiner (SEFE) accompanying a normal TEWS or 4-man USAFSS backend crew.

Modification 2000

The possibility of 4 radio operators aboard the Electric Goon resulted from the continued success of the two Drill Press aircraft. These were often deployed to

Hue/Phu Bai in the I Corps area, within easy flying distance of the DMZ and surrounding areas. Beginning in August, the 360th TEWS augmented the Drill Press effort by rotating a pair of ARDF aircraft to Phu Bai.

To provide for more Drill Press-type collection capability, WRAMA was directed to undertook modification of 30 Phyllis Ann aircraft to include the 'Group A' wiring and other modifications necessary to support 2 more intercept consoles. Known as "Z" positions, they were similar to the existing "Y" console except that one of the HF receivers was replaced by a VHF receiver. Tape recorders were included and the rearmost Z position, on the right side of the aisle just forward of the cargo door, was equipped with an MC-88 typewriter for transcription of Morse intercepts.

Like the original Phyllis Ann project, WRAMA generally referred to this one by its sequential project number, thus becoming known as 'Modification 2000'. Some aircraft were modified prior to deployment, while others were modified 'in theatre'. Initially on 24 Z consoles were procured, which meant that only 12 of the 30 aircraft could operate as "Z birds" at any given time. The 362nd TEWS reported the last Mod 2000 complete on January 19, 1968.

Other Missions

On January 31, 1967, 'Antique Airlines' demonstrated ARDF capability of another sort. At 1620 hours, 'Dragon 94' picked up the emergency beeper signal from a downed Army helicopter. A fix was made approximately 18 miles west of Phan Rang. The EC-47 crew notified Phan Rang tower then proceeded to the fix location. The Electric Goon orbited the downed chopper, which was still taking enemy fire, and helped direct a USAF rescue helicopter and 4 Army gunships that had arrived to provide cover. At 1650 the Air Force helicopter was seen to take 5 people aboard and by 1700 the remaining 5 had also been extracted. The entire operation had taken just 40 minutes from the time Dragon 94 picked up the beeper signal.

To disguise its ARDF mission, the EC-47 was modified by replacing the rearmost right-hand window with a leaflet chute. While trolling for enemy radio signals, psychological warfare leaflets were scattered over the countryside in prodigious quantities; the 360th TEWS reported dropping over 32 million the in first quarter of 1967 alone! The cover was credible, since other C-47's were in fact assigned this mission full-time, tagged with the sobriquet "Bullshit bombers". A variety of these leaflets were printed, but all were aimed at convincing the communist soldier to lay down his weapons and turn to the open arms of the American or ARVN forces. The leaflets, some in comic-strip form, usually contained a 'safe conduct' pass on one side. As the war went on, the TEWS eventually discontinued the leaflet dropping exercise.

The Loss of Tide 86

The EC-47 fleet suffered its first loss on February 18, 1967, when an Air America C-46 suffered brake failure after landing at Tan Son Nhut and ground looped into the revetment where aircraft 43-49679 was parked. Fortunately, no one was near the EC-47 and no injuries occurred to the C-46 passengers or crew, but 679 was a write-off.

But It was, after all, a war and casualties would occur. The inevitable happened on March 9. 'Tide 86', RC-47 [before the designation was changed to EC-47] 43-49201 of the 361st TEWS departed Nha Trang at 1425 hrs local time. Estimated time of arrival (ETA) back at base was 2055 hours. When the aircraft failed to return as scheduled, a communications search was initiated but yielded no results. Shortly before midnight, search and rescue operations were notified that Tide 86 was missing. Bad weather hampered visual search efforts, but at approximately 0810 on March 11, an O-1 FAC spotted the wreckage.

By mid afternoon, the area had been secured and a joint 361st/6994th team was lifted to the site by helicopter. The wreckage was on hillside, approximately 200 feet below the ridge. The aircraft appeared to have been in a climbing left turn. The left wing was torn off and the forward half of the aircraft was torn apart, scattered and burned. The rear portion of the fuselage lay 140 feet down valley in an inverted position, badly torn apart but not burned.

The enemy had "thoroughly combed the area stripping valuables, survival gear, boots and socks, side arms, gun box and canteens." Leaflets were scattered about the crash site and evidently served their intended purpose, the ARDF equipment did not appear to have been tampered with. The bodies of all 7 crew members were recovered and an Army demolition team destroyed the remains of Tide 86.

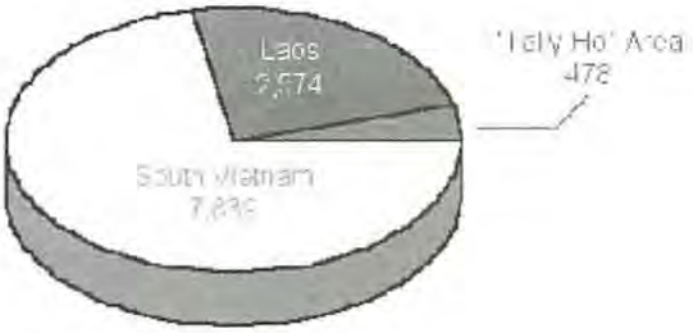
The loss of Tide 86 prompted a change in EC-47 operating procedures. Nine Electric Goons had been hit by ground fire since the inception of the program, and after this loss minimum operational altitude was set at 2,000 feet above ground level (AGL).

Summary, the First Full Year

At the end of 1967, the TEWS and the 6994th Security Squadron could look on their accomplishments with some pride. The Electric Goon had firmly established itself as a major weapon in the intelligence war. Direct support of ground operations inside Vietnam remained a major focus of ARDF operations, but 1967 also saw increased emphasis on "out country" operations, mostly over the Ho Chi Minh trail in southern Laos.

Distribution of EC-47 Sorties, 1967

10,891 Total



Source: CHECO Report

In February, a special ARDF area had been assigned to the 362nd TEWS. This area, off the coast of North Vietnam, paralleled the "Tally Ho" interdiction zone which ran from the DMZ to a line approximately 30 miles north. (This ARDF area was later discontinued.)

In the last months of 1967, U.S. intelligence noted a change in enemy tactics. PAVN/VC forces had gone on the attack , and with increased force size. A series of battles erupted along Special Forces outposts in the sparsely populated highlands near the borders with Laos and Cambodia. The Marines had also established a combat base on a little plateau overlooking the old colonial Route 9, which ran just below the DMZ from the Vietnamese coast west to the Laotian border. Enemy activity was particularly heavy thereabouts, and before many more months were out this obscure spot would be forever etched in American military history. The Marine stronghold took its name from the nearby village, a little place called Khe Sanh.

David Eddy quite likely has a broader knowledge of EC-47 activities than anybody on earth, and he has been most generous in answering my questions. The story of the EC-47 can be told in considerably more detail thanks to his input.

Dennis Buley contributed the "Beat Army" photo, which was taken by ARDF pioneer Herb Hovey. (Dennis is the webmaster for the Army Special Electronics Mission Aircraft site well worth a visit.)

The anecdote concerning fixing of a beeper signal comes straight from the 360thTEWS history, but I do not recall the EC-47 having this capability. Both UHF (243.0 MHz) and VHF (121.5 MHz) "guard" channels were well beyond the range of the AN/ALR-34/35 systems. There was, as I recall, also an HF guard frequency, but I don't believe the standard survival radio operated on HF. Can anyone explain?

Chapter 26

Electric Goon

A History of the EC-47

Part 4: Tet and Beyond
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Tet of '68

"The North Vietnamese 1968 Tet offensive was the most decisive battle of the war. It put an end to the illusion that U.S. intervention could result in an independent South Vietnam . . . and was the beginning of the end of U.S. involvement, despite the fact that the United States and its [South] Vietnamese ally won decisively on the battlefield."

Thus did Vietnam war historian Col. Harry G. Summers describe the communist offensive that became known as 'Tet of '68'. Beginning on January 31, NVA and Viet Cong forces launched a series of coordinated attacks across South Vietnam which, they believed, would culminate in a general uprising by the 'oppressed' southerners. That of course failed to occur and ultimately the communist forces took such heavy losses that the VC was effectively eliminated as a fighting force.

Whether Tet should be considered an American victory has long since become a moot point. A more important question is this: Was MACV caught off guard? In

an interview some months later, a 6994th spokesman admitted that, while ARDF had pointed to an upcoming operation, no one had made an outright prediction of the Tet offensive.

The 360th at Tan Son Nhut had almost a third of its aircraft temporarily put out of action the first night, with 3 others receiving minor damage. Despite enemy attacks all three TEWS continued to provide coverage throughout the offensive, although at least one enemy unit bluffed ARDF by leaving his transmitters close to the Cambodian border while the main force was actually advancing on Saigon.

Operation Niagara

Beginning with a view of Viet Cong sappers sprawled dead on the lawn of the U.S. embassy in downtown Saigon, the American public was treated to a close up look at the aftermath of Tet. The bitter fighting around the old imperial capital of Hue received nightly coverage on the television news, and the three-month siege of the Marine combat base at Khe Sanh evoked memories of the French defeat at Dien Bien Phu.

Thanks to American airpower, Khe Sanh did not become another Dien Bien Phu. Some 3 weeks before the Tet offensive began, MACV commander Gen. William C. Westmoreland ordered a massive and continuous bombing campaignóthus the name 'Niagara'ó designed to annihilate the communist forces building up around Khe Sanh.

The first order of business was to locate the enemy forces. In many respects, Khe Sanh became the first 'electronic battlefield.' Various types of sensors dropped into the nearby forests revealed troop movements, and ground and airborne communications intercepts helped determine the enemy order of battle.

The 'Drill Press' aircraft were again cited for their efforts and the ARDF birds no doubt made a significant contribution although most details, unhappily, remain classified.In the end, the attackers suffered horrific losses from the unending cascade of bombs, but they made life at Khe Sanh a living hell for the better pat of 3 months. The only way in or out was by air, and the pilots of the cargo aircraft that provided the lifeline deserved every bit of the credit, and then some, they received for their remarkable efforts.

"The Road"

Throughout the war, one of the primary missions of the TEWS was to track enemy movements along the Ho Chi Minh trail. By the time of the Tet offensive, anti-aircraft defenses along the route were becoming formidable, and before long

the Electric Goon would be among the victims. In at least one case, the story had a happy ending. The following narrative was copied from the 361st TEWS history.

At 0545 hours, 11 Mar 68, Brew 41 took off from an RVN base [Nha Trang] on a classified combat mission. The EC-47 reached the target area on time, flying at 9,500 MSL. Fifty minutes later the crew heard a loud metallic crack, the aircraft lurched and immediately filled with dense blue smoke. A quick damage assessment revealed shrapnel holes in the left engine nacelle and wing, loss of all hydraulic systems and a rough running right engine.

The terrain was rough and mountainous, covered with forests, and no friendlies [were] in the area. Lt Col [Robert E.] Dobyns immediately set course for Pleiku, approximately 100 miles away. The [landing] gear had fallen free and there was a loss of power on both engines. After a few minutes the number two prop began to overspeed and for awhile it was controlled by the feathering button. The feathering system soon failed and so the engine was shut down. The propeller windmilled to a stop and the engine froze. The aircraft began losing altitude, 200 to 500 feet per minute.

In the meantime rescue had been alerted and Crown [airborne command post] advised that two Jolly Greens and fighters were on the way and that four army choppers were already in the area. Mighty comfortable [comforting] words. About 15 minutes after the hit a Forward Air Controller (FAC) in an O-2 joined up to escort the crippled Gooney Bird to a safe area.

To lessen the load the crew began to jettison everything [that was] loose. The oil temperature on the left engine read zero and oil pressure was down to 30 psi. Twenty-three hundred was the maximum rpm obtainable. It was already apparent the aircraft could never make Pleiku. The FAC then advised that clearing one range of hills would put the crew in friendly territory. This range was cleared. The FAC then said there was an emergency strip eight miles ahead but he recommended bail-out because of two intervening ridges.

After checking with his navigator [Maj. John J.,Polites] who had been giving him fixes during the entire route, Lt Col Dobyns elected to circumnavigate the ridge crests. This was successful, leaving one last small hill about 500 feet high, two miles short of the intended landing point. This hill was circumnavigated about 200 feet below its crest and for the first time the strip came into sight. Fifteen hundred wonderful feet of aluminum planking [at the Ben Het Special Forces camp.]

The landing could best be described as an arrival. No flaps, no brakes, a left tire blown by shrapnel, and no differential power. It touched down 300 feet down the

runway, veered to the left and left the runway and the 2/3 point, and veering further around to the 160 degree point it came to a stop even with the end of the runway. The flight engineer summed it up pretty well when he said, "That was the best landing I had ever seen in my life."

Of note, the four Army choppers were sitting on the runway by the time the aircraft came to a halt. This flight demonstrated superior airmanship by Lt Col Dobyns and his entire crew, superb crew discipline and performance by professionals who knew their job and weren't about to panic. It also points up the magnificent search and rescue effort in Vietnam. This was a case of a crippled aircraft being led, almost by the hand, across 60 miles of hostile territory to a safe haven, with Army helicopters in attendance to take care of any eventuality.

Useable items were salvaged and the hulk of EC-47P S/N 44-77016 was consigned to the scrap heap ó a testimonial to the durability of the old Goon and to the skill of a veteran pilot and his crew.

Barely a month later (April 24) aircraft 43-15979 of the 362nd, callsign "Rare 08", was also hit by AAA over Laos. The tail section was badly peppered with shrapnel, but all hands were safe after an emergency landing at Nakhom Phanom (NKP) Thailand. The airplane was out of action for almost two months.

On August 23, another 362nd bird, 43-49547, took a hit in the right wing while serving on the 'Laotian highway patrol'. Crewmembers suspected radar directed AAAóprobably 23 or 37mmósince the Goon was above the overcast. Fortunately no casualties resulted and the aircraft returned safely to base. By the time the TEWS stood down in 1974, two more EC-47s would be brought down by hostile fire while flying over Laos.

Flying the Mission

Every EC-47 veteran has his unique memories of what it was like to fly or be a crewmember on the Electric Goon. Operational details varied from unit to unit and tactics underwent minor changes, but fundamentally the 'mission profile' remained the same throughout the war.

The following narrative, written by First Lieutenant James C. Harwood of the 362nd TEWS, was included in the history of the 362nd, Sep-Dec 1968. It is a contemporary account of a typical mission. Only obvious spelling/typographical errors have been corrected.

A normal mission of the 362d begins some time between 0500 and 1400 hours with a crew pickup in the RMK area. Ten minutes later the crew is outfitted in their survival vests and harnesses. Next, they attend a briefing by the Assistant

Operations Officer on current operations policies, safety of flight items, artillery fans in the local area which might affect the departure., and current Air Base and area weather. A briefing on AAA threats en route to the target, ground activity, and alternate fields follows. This last briefing is given by the intelligence officer. He also covers non-overfly areas and any directives sent down by MACV or Seventh Air Force.

The Navigator briefs the route the crew will take to the target area, and also how he expects to conduct various equipment checks. He also briefs where suspected targets are probably located and what priority targets are in the area. [JM: At least in my experience at TSN , Phu Cat and NKP durig 1970-71, the Senior Radio Operator or Airborne Mission Supervisor briefed the suspected targets.]

The Pilot then briefs the altitude, assures that the technical order and emergency procedures are understood in certain critical areas, and assures crew coordination by standardizing the procedures he prefers to use during target acquisition.

After this final briefing, the crew is taken out to the aircraft in a crew bus. They perform a normal preflight, takeoff and departure, and begin to check out the equipment in the back end. Several Doppler checks and resets are performed in route to the area to insure that any target can be fixed with the highest degree of accuracy. These Doppler sets require crew coordination of the utmost compatibility.

Once established in the target area, the crew [actually the navigator] begins to plot lines of position on enemy transmitters, eventually attaining a fix an their location. Depending on the configuration of the aircraft . . . transcripts of the content of these transmissions are attained by the Radio Operators and are often dropped off to Army Intelligence at Phu Bai or Da Nang.

Throughout the mission the Flight Engineer and pilots conduct visual reconnaissance. The Engineer also drops leaflets under certain conditions when the aircraft commander deems it necessary for diversionary purposes. The EC-47 also has the capability to fix the location of the RT-10 Survival Radio in either the voice or beeper phase of operation. Consequently, the 362d is often involved in search and rescue operations. Some of the more important successes of the squadron in this area are annotated in the history itself.

En route to Pleiku, the crew is again occupied with further checks of AN/ALR-34, ALR-35, and Doppler systems. A thorough debriefing of the Form 781 with the Maintenance Section terminates the mission.

Fixing a Target

Fixing of targets required close communication among all crew members. The 'X' [ARDF] operator monitored an oscilloscope which enabled him to visually detect target signal 'spikes' over a range of frequencies. Moving the 'cursor' of a second oscilloscope line underneath the spike synchronized the ARDF gear with the signal. Flipping a toggle switch 'locked on' the signal and a needle resembling those on a TACAN or VOR pointed toward the target.

The action began with the 'X' operator announcing over the intercom. "Lock on target [number or letter in a sequence], signal strength [1 to 5, 5 being strongest]". The pilot immediately rolled the aircraft level, and so announced when the maneuver was complete. The signal strength estimate enabled the navigator to make a guess as to the proximity of the target and, after printing out the relevant information furnished by the ARDF system on the initial 'line of position' (LOP), directed the pilot through a series of headings designed to obtain a maximum spread of LOPs in a minimum amount of time.Three or more LOPs were required to plot a fix. Fixes were reported as the center of the plotted LOPs, with an accompanying radial error; for example 'XT 456 789 with a radius of 500 meters'. Two hundred fifty meters was the minimum reportable radius, that being about the equivalent width of a pencil line on the navigator's charts.

The Doppler was a critical part of the ARDF system and required re-setting every 20 minutes or so to guarantee acceptable accuracy. Gyro-stabilized drift meters were installed fairly early in the program, which made this task much easier and provided more accurate settings. The 'Dop set' was accomplished by overflying a point such as a bridge or intersection and making a printout when the set point passed under the crosshairs of the drift meter. Comparing the known location with the location calculated by the Doppler enabled the navigator to interpolate for Doppler drift and adjust his plot estimates accordingly.

Doppler set points were annotated in each ARDF area and when a re-set was required the navigator would direct the pilot to fly towards one. The pilot would report a 'tally ho' on the set point and call "under the nose" when it passed underneath the aircraft and out of his view. The navigator would acquire the point through the drift meter and direct minor course adjustments until the set was made.

Experienced crews could and did work multiple targets simultaneously. Depending on many factors, the 'bag' for a mission might be anywhere from 4 or 5 fixes to as many as 20 and on some occasions nearly 30. Shutouts were rare but did occur. 'Cuts' estimated by only 2 LOPs could be legitimately reported, but were sometimes ignored unless the target was of known high priority.

During suitable lulls in activity, the 'Y' operator would pass the fix data to the DSU. (Operation of the communication radios interfered with the ARDF system.) By 1968 or so, KY-8 VHF/FM secure voice systems were available for this task. If the KY-8 failed, the information had to be passed 'in the clear' using one-time encryption pads, a prospect universally dreaded by the radio operators. In the 'old days', this was evidently accepted as a matter of course!

New Directions

By the summer of 1968, the American public, the Congress and even the military itself was deeply divided over the war in Vietnam. Early in the year, Lyndon B. Johnson had announced that he would not run for re-election and the Republican candidate, Richard M. Nixon swept to victory in the November elections. The cornerstone of Nixon's policy towards Southeast Asia was "Vietnamization"ó the U.S. would train and equip the South Vietnamese, but henceforth it would be their war.

The much publicized fight for "Hamburger Hill" in May, 1969, was the last major U.S. ground operation of the war. By the end of the year, the first U.S. units began to stand down. In November, the 362nd TEWS was credited with saving many lives when a strong enemy force was fixed near fire support base Kate. The base was abandoned before the attack fully materialized.

The Electric Goon would continue to support the American effort in Southeast Asia up to and after the 1973 cease fire. The mission remained essentially unchanged, although operational areas shifted somewhat. As has been previously noted, much of the TEWS activity involved operations over Laos. Operating from bases in South Vietnam made this coverage less effective due to flying time to and from the target areas. Despite efforts to maintain adequate standoff from known AAA sites, the Laotian missions continued to draw fire. On February 5, 1969, aircraft 45-1133 failed to return from a mission. The wreckage was not located for some time afterwards. The crew was declared killed in action.

Special EC-47 missions from had been occasionally flown from Thai bases, notably from Ubon in May of 1968 supporting the defense of Lima Site 36. Seven similar missions were flown by a lone 362nd Goon in December, with 54 fixes obtained despite a temporary interruption due to a MiG sighting near the target area.

The notion of basing EC-47s in Thailand had obvious appeal to MACV and after some diplomatic wrangling, the first Electric Goons were temporarily based at Nakhon Phanom Royal Thai Air Force Base in April, 1969. NKP, as it was universally known, was a somewhat primitive airstrip hacked out of the jungle a few miles west of the Mekong, across the river from the Laotian town of Thahek. Somewhat primitive by the standards of the day, it may have been, as one saying went, "the worst base in Thailand, but the best base in Vietnam." In April, 1970, the EC-47 became an 'official' resident of NKP with the establishment of Detachment 1 of the 360th TEWS.

Meanwhile, other changes were taking place. In September,1969, with Nha Trang slated for turn over to the VNAF, the 361st TEWS moved north to Phu Cat, in Binh Dinh province, about mid-way between An Khe and the coastal town of Qhi Nhon. When Plieku was likewise turned over to the Vietnamese the 362nd, after prolonged deliberation, was finally settled at Da Nang in June of 1970. The USAFSS detachments moved concurrently.

Before leaving its central highlands home, the 362nd racked up a major score in the battle along the Ho Chi Minh trail. In December,1969, the TEWS and the supporting USAFSS detachment had been tasked with locating the headquarters of the NVA 559th Transportation Group. This outfit, designated for its date of origin (May, 1959), was responsible for overall direction of the logistics flow down the trail. Despite the constant AAA threat, by early 1970 enough fixes were obtained to convince 7th Air Force that the southern HQ of the 559th had been positively located. On February 1, 29 B-52 sorties were directed against the target. Eighty-seven secondary explosions were observed and no further transmissions were heard.

The NVA got revenge, however, when 'Cap 53' took a direct hit from what was believed to be a 37mm shell on April 22, 1970. At approximately 0235Z [1030 local] the aircraft was reported to have transmitted a May Day call and headed east. Ten minutes later aircraft 43-48402 crash landed at the abandoned A Loui special forces camp just across the border into Vietnam near the A Shau valley, some 50 or 60 miles west northwest of Da Nang. One of the front end crew and one radio operator was killed. The other six survived and were rescued. A team from the 101st Airborne set explosive charges to destroy any classified gear, and air strikes were called in to finish off the remaining scrap.

Cambodia

It was clear to American planners that the large NVA presence in 'neutral' Cambodia posed a serious threat to the ever-shrinking U.S. forces remaining in South Vietnam. As early as 1968, the 360th in particular had begun to fly missions quite close to the border north and northwest of Saigon. Not surprisingly, these proved quite fruitful and the crews were told to "keep the shadow of the airplane in Cambodia" in order to obtain maximum coverage. The potential for a political 'incident' was obvious, and initially only specially selected crews were allowed to fly these missions.

MACV knew that the Cambodian border sanctuaries would have to be sealed off, at least temporarily, to cover the American withdrawal. Secret B-52 attacks (Operation Menu) had begun in 1969 and President Nixon authorized a limited U.S./ARVN operation across the border on April 30, 1970. For the most part, the enemy elected to flee rather than fight, but large caches of weapons and supplies were destroyed. The Cambodian 'incursion' indeed bought timeóit took the NVA two more years to move enough men and supplies south to launch another offensiveóbut Cambodia paid a heavy price. The depredations committed by the Khmer Rouge rank among the most horrible in modern history and were stopped, ironically, only by another invasion of Cambodia by the victorious NVA in 1978.

For the 360th TEWS, the Cambodian operation marked a radical change in operations. The prohibition against entering Cambodian airspace was of course lifted and after May, 1970, ninety percent or more of the 360th's missions were flown "across the fence". Coincidentally, the Air Force finally found an exclusive use for ARDF. American ground troops were allowed to operate in Cambodia for only thirty days, but no such restrictions applied to aerial support of 'FANK' (Forces Armées Nationales Khméres) troops. An RF-4C, also attached to the 460th TRW, was assigned to the top priority ARDF area along with an EC-47. Targets locations fixed at 1,000 meters or less were passed to the RF-4 which then photographed the area.

A more 'real-time' experiment involved passing the fix information to OV-10 'Rustic' forward air controllers (FAC) out of Bien Hoa. Begun May 14 on a 30-day trial basis, project 'Blue Beetle' proved to be enough of a success that it became a permanent fixture of the 360th's operations. At first, a 'dedicated' FAC was assigned, but this was soon discontinued and the OV-10s worked the ARDF targets on an 'as can' basis. A similar program in the northern areas of Vietnam operated as project 'Black Bear'.

One of the less successful American efforts centered around the elusive 'COSVN' (Central Office, South Viet Nam), the political headquarters of the

NVA, believed to be located somewhere along the Mekong in the Cambodian province of Kampong Cham, about 120 miles northwest of Saigon. In late 1970, the 360th covered the suspected area up to 10 hours a day. Transmitters using what were believed to be COSVN's call signs were picked up on a regular basis, but they proved to be difficult to fix and were not consistently located from mission to mission.

The writer recalls one occasion when he, by then a very experienced 'X' operator, 'locked on' to a COSVN signal and determined to snare the varmint. A couple of promising LOPs were obtained when, without missing a 'dit', the ARDF needle swung a good 15 or 20 degrees and never broke lock. Several more LOPs were taken before the target 'went down, but the jumble yielded a fix on the order of 1,500 or 2,000 meters, barely good enough to report! COSVN never was caught, by ARDF or anything else.

Chapter 27

Electric Goon
A History of the EC-47 Part 5:

The End of the Line
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By mid-1971, the American withdrawal was well underway. USAF advisors were hurriedly training their Vietnamese counterparts under the VNAF 'Improvement and Modernization' (I &M) program. Among the projected VNAF units was a TEWS squadron, to be formed with ALR-34 [non-computerized] equipped EC-47s. Personnel form the 6994th Security Squadron at Tan Son Nhut had begun training ARVN [not VNAF] Morse intercept operators in April, and by late in the year, the first VNAF navigators had begun OJT with the 360th.

Among the USAF organizations to stand down in 1971 was the 460th TRW. On August 31st, the wing was inactivated. The TEWS were initially reassigned to the 483rd Tactical Airlift Wing with HQ at Camh Ranh Bay, but this organization was itself inactivated on May 31, 1972. The TEWS bounced from wing to wing for another two years before the final USAF EC-47 mission was flown from Ubon in May of 1974.

The author does not yet have access to much of the TEWS histories written after the stand down of the 460th. It can be safely assumed that the EC-47 continued to provide a significant chunk of intelligence on enemy operations and no doubt made major and specific contributions in turning back the 'Easter Offensive' of 1972 and to the 'Linebacker' campaigns that, most would say, convinced the North Vietnamese to sign the 'Paris Peace Accords' on January 27,1973.

As of that date, American combat actions in Vietnam were to cease. The TEWS continued to operate, however, and a few veterans of those days recall flying from Da Nang in USAF EC-47s painted in VNAF markings. Be that as it may, the remaining U.S. ARDF aircraft were officially pulled back to Thailand, where they carried on for more than a year.

Only a few days after the cease fire, an Electric Goon was involved in one of the most notorious shot-downs of the war. On February 5, 1973, EC-47P serial number 43-48636, operating under the callsign 'Baron 52' was shot down over Laos. The wreckage was spotted in a remote mountainous area of Xekong province. The aircraft had caught fire and rescue crews remained on the scene only long enough to remove a few remains in or near the cockpit.

The Sky Dragons

Beginning in 1973, the USAF began turning EC-47s over to the VNAF. By August or so, the VNAF 718th Reconnaissance Squadron had been formed at Tan Son Nhut as part of the 33rd Wing. The "Sky Dragons" eventually operated approximately 33 ex-USAF EC-47s, staging a daily complement of missions from Tan Son Nhut and also deploying through Da Nang to cover the northern areas.

On May 13, 1974, a VNAF EC-47 operating near the 'Parrot's Beak' northwest of Saigon was shot down. The sole survivor was the navigator, Lt. Troung Tu An. The following narrative of Lt. An's experience was supplied by another former EC-47 navigator, Pham Tan Chon. [JM: The original has been edited slightly for clarity.]

We took off from Tan Son Nhut AFB at 1300 hours and headed for the Tay Ninh area. There were no [enemy] radio signals for the first two hours on target. We thought that it would be a peaceful mission. We traveled on a north-south axis over the border of the two countries [Cambodia and Viet Nam] and every thing was quiet. We did not expect any enemy action until we changed heading 270 to the Parrot's Beak at 1530 hours and we saw couple trails of smoke were chasing our air plane. We ignited four or five decoy flares. One of them drove the surface-to-air missile away during as the pilots were making a sharp turn at 10,500 feet.

Suddenly we felt [as if] our air plane was stopped with a big boom, and I used the drift meter to check under the airplane and I found a big hole at the left wing, about 3 to 4 feet in diameter. At that moment the Pilots already shut down the left engine and turned around to Tay Ninh airport.

I do not know what was happened after that movement, and I felt that I was being thrown out the plane because the centrifugal force when the plane started to spin. I was captured by North Vietnamese Army soldiers and later they turned me in to the Viet Cong. In March, 1975, I was sent to Hanoi and they released me on May 13, 1982.

Pilot, Copilot and Flight Engineer were killed inside the plane. Two Radio Operators were killed because their parachutes did not open and [they] impacted into the ground. The North Vietnamese soldiers told me that they shot down another C-130 from Korean Air Force [?] at the same time and in the same area. The crew members of that plane were rescued by VNAF choppers. [Lt. An notes that this may have been a USAF C-130 because the Koreans were not involved in Vietnam after 1972.]

Pham Tan Chon reports that "After 'Thien Long 13' was shot down, we changed the thirteenth mission to 'Thien Long 12 bis'. (i.e., to 'Sky Dragon 12 plus'.) On April 30, 1975, the VNAF flew the last EC-47 missions of the Vietnam war. Maintaining coordination and good discipline until the bitter end, the Sky Dragons boarded the airworthy Electric Goons and flew them to Thailand. Within hours, NVA troops were on the Tan Son Nhut flight line.

Epilogue

Meanwhile, Baron 52 became the subject of a debate that, despite the passage of time, has not entirely ceased. Based on statements by a former USAFSS analyst, the story circulated that the 'back end' crew of Baron 52 had survived the shoot-down, been taken captive and, because of their knowledge of U.S. SIGINT secrets, were turned over to the Russians. Subsequent testimony indicated that the original statements were based on an improperly translated or improperly interpreted radio intercepts, but accusations of a government conspiracy/cover-up persist.

In November 1992, a preliminary survey was made of the Baron 52 crash site and in January-February1993, the site was excavated by a joint U.S./Laotian team. Only a few fragments of human bones were found, but considering that wild animals inhabit in the area, the unpleasant possibilities are obvious. Among the artifacts found were the 'dogtags' of three of the USAFSS radio operators.

As for the Electric Goon itself, the last of them in USAF service, Q models stripped of the ARDF gear, seem to have ended up in the Philippines in 1974. The ultimate fate of those VNAF birds that escaped to Thailand is unknown, but it is unlikely that they remained in flyable condition for long. Somewhere in some Southeast Asian junkyard may lie the hulks of a few Electric Goons, indistinguishable to all but the sharpest eyes from the basic transport version.

More personnel were lost on EC-47 aircraft than on any other type of mission in USAFSS history. Outside the headquarters of the USAF Air Intelligence Agency, the organization that absorbed what was once USAFSS, a replica of an EC-47 has been set up as a memorial to those fallen crews. On its tail fin has been painted the serial number of Tide 86, the first Electric Goon to be lost in action. It's a fitting tribute.

Chapter 28
A Few Squadron Patches and Memorabilia

I can't recall all the names, so to all, thanks for the memorabilia

Two Patches above provided by David Steiner

These two patches, the provider is unknown, but Thanks

The Barron patch provider is Unknown. The 718th TEWS patch was provided by: Chon T. Pham, one of the first 6 Vietnamese Navigators assigned to the 360 TEWS at Tan Son Nhut

The last two patches on the previous page: Electric Goon patch Provided by Bob Looney and Stan Poyas. The 120 Mission patch provided by Bob Bonn

360th TEWS Antique Airlines Patch was provided by Bob Looney. The Old tiger Patch on previous page was provided by Bob Bonn.

A few of the items we all carried on the mission.

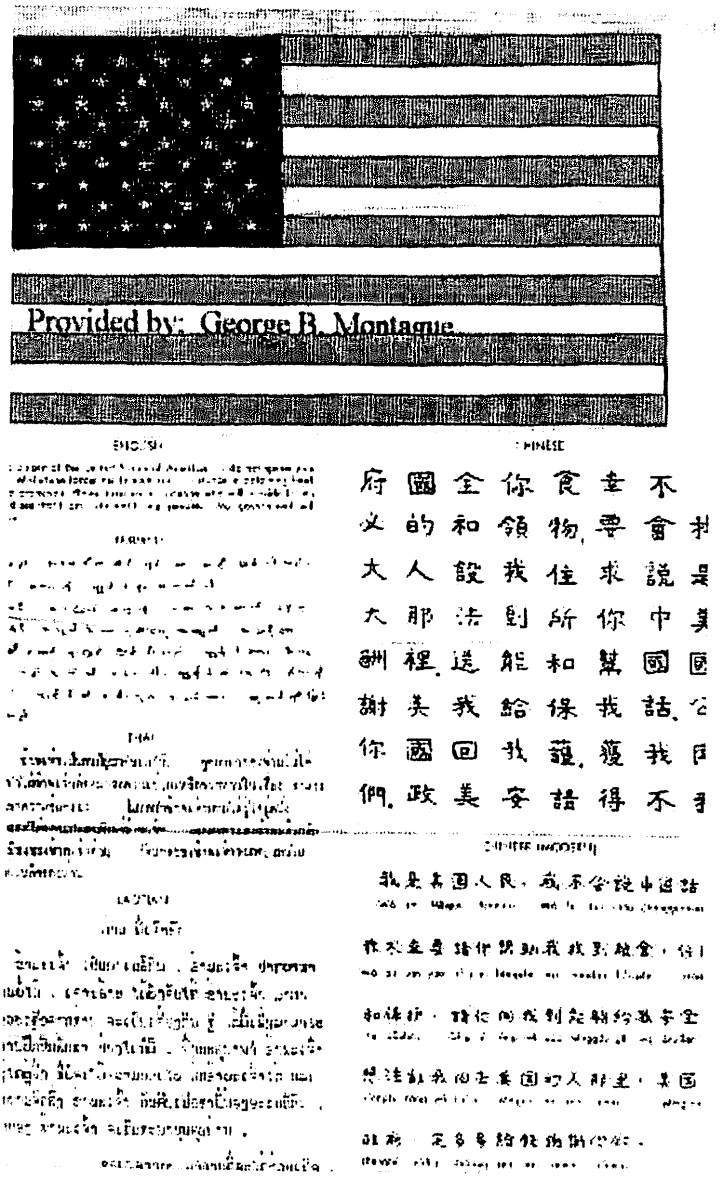
The E&E kit contained a button compass, a wire saw and a 2 5/10 pencil look-alike, that held a metal tool. Photo provided by Bob Looney

The P-38 can opener was carried by everyone. You had to have one handy in order to get to all those delicious morsals of the rations left over from the two previous wars like , chicken, tuna, ham and beans and of course, that little bitty loaf of bread, what ever it was that weighed about a pound. Also made a good Dzus fastener opener.

The Pointee Talkee pictured at the left was somewhat of a language dictionary cross reference guide. Provided by: Bob Looney

The DOD Evasion Chart was a very handy thing to have along with the button compass, should you, heaven forbid, ever end up on the ground in the wrong place.

Provided by:
Bob Looney



And the blood chit (shown above), which I believe was in 13 languages. It was used to hopefully get aid and comfort from whomever you might come across should you ever be put into an escape and evasion situation.

Provided by: George Montague


VIỆT-NAM CỘNG-HÒA

Huấn - Vụ Bội - Tinh

JOSEPH FRANK MARTIN Jr.

HUẤN - VỤ BỘI - TINH

KBC 4082 ngày 3 tháng 12 năm 1971

A Citation given by the Vietnamese to the Instructors from the Back End Crew. This one is Joe Martin's

Chapter 29

Civic Action

There were times when the crews of the three TEWS squadrons and those of the 6994th SS and it's Detachments were not engaged in flying duties or resting up for them or from them. A lot of this time was occupied by a beer at the club, sports, a beer at the club, a session in the hobby shop, a beer at the club, a swim at the beach party, with a beer.

No seriously there were many activities both on the base and off the base that the men could occupy many of their free hours. Probably the most rewarding were those activities of the Civic Action groups. These groups, gave unselfishly of their time and talent to aid and assist not just those of the military community but of the local community as well. They sponsored and held many parties and celebrations with and for the local children. They used their time and talent to aid the local population in construction, repairs and maintenance.

There was even an unofficial off base clinic for the local folks of Nha Trang, especially the children. This clinic was held on a daily basis at the Villa "Number 2 Me Lein". That is the Villa, I called home for my tour at Nha Trang, although I was gone by the time the clinic came into being.

I did know one of the "clinic specialist", a Captain Bill Fenlon. Bill had moved into the Villa prior to my DEROS. His profession was that of Navigator. I had flown with bill on occasion, one mission I recall vividly was along the border of Cambodia up near the corner with Laos.. This was before the times when it was permissible to fly over that country. There was supposedly a 5 mile buffer zone along the Vietnam side of the border, a safety factor.

Well on this one mission, we were very near the border and had a good lock on a strong target signal. I was doing what I could to help bill with the plotting etc. as I often did with my own navigator, Capt. Harris. After a while the aircraft commander, Lt. Col. Hinkle, called back on the inter phone, "Nav, aren't we close to the border?". Bill replied, "we are 20 miles from the border". He was telling the truth, just not elaborating on the facts. We were indeed, 20 miles from the border, on the other side. I really think Col Hinkle knew this, just covering his back side.

At any rate, Bill Fenlon was only one of the "specialist" at the clinic at Villa Number 2 Me Lein.

Bill Fenlon at the No.2 Me Linh Clinic
Operated by Capt. Fenlon, Major Carl Laubrich and SSgt "Mac" McMaster. Open each evening.

Another at the Clinic

Besides the war in the skies, some in our squadron fought a war on the ground for the hearts and minds of the Vietnamese people. The good they did can still be seen. They fought a war against ignorance and poverty with their knowledge, back, and with supplies sent from loved ones at home.

At 2 Me Lein we find a striking example of this humanitarian concern. Major Carl Laubrich, Captain Bill Fenlon, and Staff Sergeant "Mac" McMaster earned the title "Bak Si" (doctor) for their ministrations to the sick and injured at their regular evening clinic. Nine-year-old Lin will never forget them.

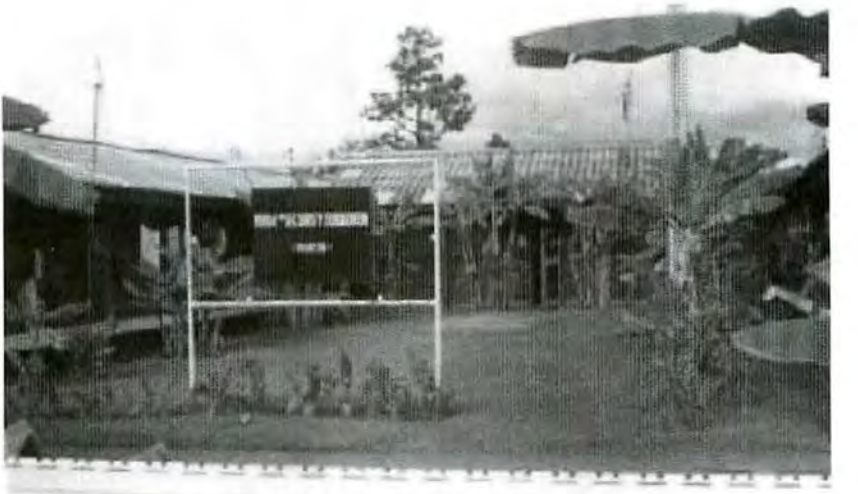
There were also parties for the children. Staff Sergeant John Brooks' wife sent food and gifts from Carbondale, Illinois... as did other wives from their homes ... to add to the joy of these needy children.

Below, for six months adequate technical knowledge was not available to repair the inoperative seismograph machine in the Seismological Laboratory of the Nha Trang Institute of Oceanography until Jim White and Bob Tipton offered their talented services to Mr Chin, head of the laboratory.

Above: Jim White and Bob Tipton assisted by Mr. Chin, repair inoperative Seismological Lab. Equipment.

Chapter 30

A few places we lived, worked and relaxed



6994TH BARRACKS 1972-73

These Two Photos by: Al Budington

Det 3 6994th Ubon

Photo by: Doug Campbell

Photo by: Doug Campbell

Photo by: Rick Yeh

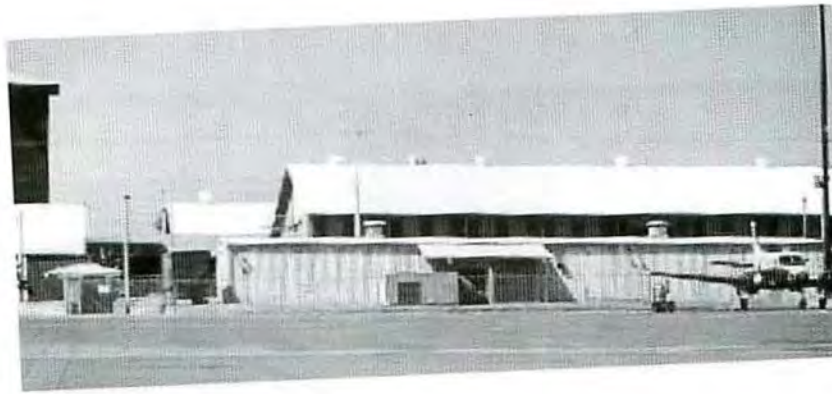


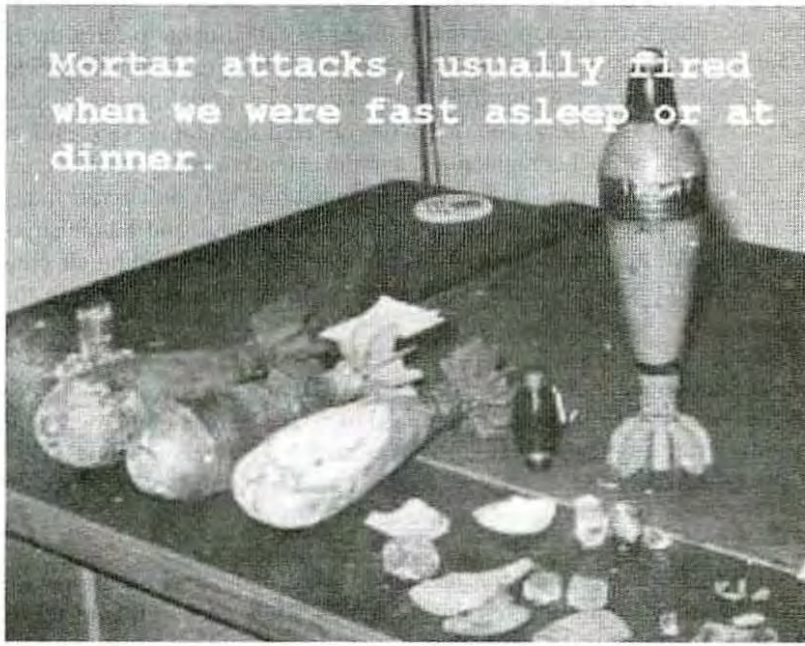
Photo by: Rick Yeh

361st TEWS Ops and NCO Club at Nha Trang, from yearbook, 1966-68

Officers Club and Airmans Club, Nha Trang, photos from yearbook 66-68

The Old Tiger & the MARS Station, where we made our phone calls home.
Photos from yearbook, 1966-68

We also lost a few aircraft to ground rocket/mortar attacks.
These three photos provided by Fred Lewis.


Mortar attacks, usually fired
when we were fast asleep or at
dinner.

Chapter 31

End of an Era

Deactivation of the 361st TEWS

Extracted From Declassified 460th TRW History Documents.

The 361st TEWS officially was inactivated on 30 June, 1974 following several months of uncertainty regarding its termination date. It had been programmed for phase out no later then 4-7 June, but its inactivation was moved to June 30th. Since 1974 began, the squadron had been gradually phasing back its operations and curtailing air crews and support personnel. On 27 March 1974, the squadron was notified that 361st TEWS operations would terminate 15 May 1974 when it flew its last seven missions.

Before it was inactivated, the 361st TEWS was the last organization of its kind in SEA. Its primary mission had been to conduct day and night Airborne Radio Direction Finding (ARDF) collection operations against enemy forces in Laos, Cambodia and in Thailand. The intelligence data gathered by the 361st TEWS was provided to requesting agencies as directed by USSAG which was located at NKP.

Personnel of the 361st recognized that it might be called upon to ferry the EC-47's out of Thailand to Clark AB for temporary storage. Without previous guidance or instruction, the squadron initiated over water briefings for air crews on 8 April and 29 May 1974. The first series covered such things as clearances, flight plans, weather, fuel computations, and the extensive updating of overeater navigation procedures. The second series included briefings on aircraft transfer and emergency procedures, search and rescue capabilities and administrative requirements. All air crew training was accomplished for remaining air crews, and the squadron began phasing down its crew force from six crews to three crews.

During the current quarter, the squadron flew ARDF missions over Phnom Penh, Cambodia, where enemy pressure continued to be placed on supply routes north and south of that city. Other areas also were sampled for enemy targets. On 10 May, the TEWS daily sortie rate was increased from five to seven sorties to cover suspected Communist activity in northeastern Thailand.

361st TEWS operations were finished on 15 May, and squadron efforts were directed toward planning the ferrying operation. Two weeks prior to the last operational mission, it was learned that the squadron would deactivate on 4 June 1974.

Project officers were designated to assure close-out operations were completed. On 18 May 1974, the wings Operating Location (OL-1) at Ubon was closed, and the EC-47 aircraft were returned to NKP pending their disposition. The first C-47A declared excess to NKP's needs was flown to Clark AB by Major Robin Purdie on 10 May. A "Sawadee" or going away party was held on 1 June in honor of personnel who supported the TEWS mission and for departing squadron personnel.

According to Lieutenant Colonel Charles D. Gragg, the last commander of the 361st TEWS, "the C-47 proved itself again in its new role of electronic surveillance."

This Photo by: Rick Yeh

A great old aircraft, has completed another duty assignment and added to the ranks of those who flew and admired her, and maybe a few who cursed her.

While this assignment may well have been her last military assignement. it will surely be remembered as one of the most secretive and productive of here glorious military career. And she had to have been the most expensive of any of the configurations ever assembled.

She will surely remain one of the most recognizable aircraft ever to fly the skys of nearly every country on earth.

And

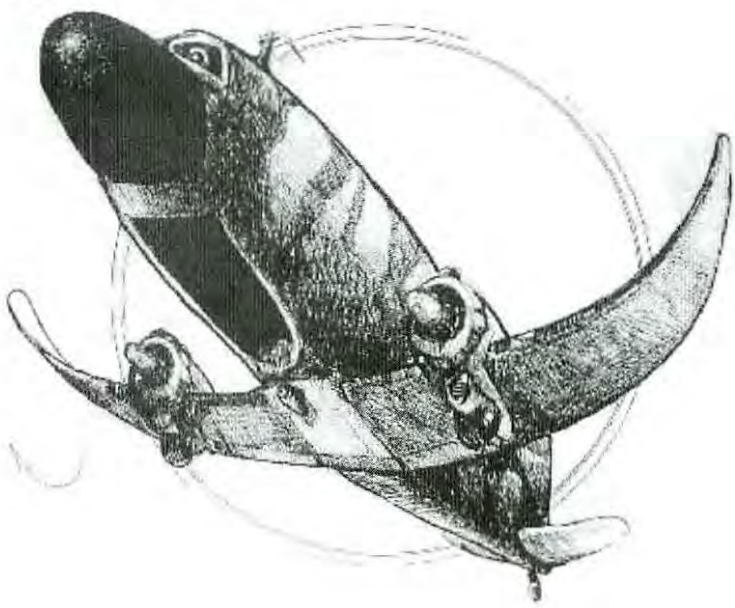
A Farewell to the 6994th

SPOKESMAN

AUGUST, 1974

VOLUME XVI - NO. 7

Farewell to the '94th



USAF SECURITY SERVICE

The Spokesman Newsletter provided by: Stan Poyas

Farewell to the '94th They boasted that they flew 'unarmed, alone and afraid,' but they wrote one of the most distinguished chapters in the USAF Security Service History.

The 6994th Security Squadron was located in sweltering, sometimes dangerous places, but a former member of the unit which was closed in midsummer said, "Most members would probably consider the '94th as their best assignment."

Commenting on the most decorated organization in USAF Security Service history, CMSgt. Luther David, Headquarters USAFSS, explained, "It was a unique unit: there were very few officers assigned so there were many NCO's in very responsible positions — everyone had considerable responsibility."

What were some of the things that went into the making of a unit which earned the Presidential Unit Citation twice and the Air Force Outstanding Unit Award five times?

"For one thing, the people had experience under their belt," the senior NCO continued. "They all had been with the USAFSS units before going to the '94th. For several years everyone had at least a five-level, those in Operations anyway, and I think the same was also true for those working outside the Operations area.

"A good example of the responsibility and experience I'm talking about could be found in the air crews. There were E-4s who were certified Airborne Mission Supervisors and many times they had to make some very significant decisions concerning the actual success of the mission. "That's another thing that made the '94th unique: the mission was extremely challenging to say the least. It was dangerous sometimes, flying in those 'gooney birds.' And too, it was the first combat experience for many, in the air and on the ground."

Experience and responsibility were only two of several factors that made the squadron what it was, according to Sergeant David.

"Camaraderie — and competition were also important."

"There was always, I guess you could say, a comradeship among crew members. You didn't always fly with the same people, we didn't have 'fixed' crews like some operating (flying) commands, yet there was a spirit of close cooperation — and good crew harmony.

"We took pride in 'outdoing' others, doing things better than the Army, for example. There was a natural sense of competition not only while on-duty, but off-duty. We kidded other units about the fact that we flew unarmed."

The 6994th's move from the Republic of Vietnam to Thailand in 1969 created new experiences, but brought some of the same hardships. There would be more "war-stories" that could be later told.

"When Det. 3 was activated at NKP (Nakhom Phanom, Thailand) the unit had worse living conditions than those in Vietnam. We lived in tents, it got hot — sometimes it got up to 120 degrees — and the fans weren't any good. For while the base had power problems.. You couldn't go to sleep before midnight, but then because of the heat in the morning, you couldn't sleep much after five or six."

There were also some good times...

"One thing I've got to mention is our mascot, Charlie Brown," Sergeant David said as he began to smile.

Charlie Brown's Photo on next page.

"That dog was a favorite with the unit. He went on a number of missions, he earned his wings, and was awarded the Air Medal with on cluster I think.

"And then everyone assigned to the unit knows about the time when Colonel Eddy (Lt. Col. David A. Eddy, now commander of the 6916th Security Squadron) had 'navigation trouble. 'He was serving as a navigator.....

"It was always hot inside those 'gooney birds' and once when the aircraft was taxiing, he opened a window to catch a little of the breeze. Well, he got more of a wind than he had expected and his mission maps were blown out of the aircraft."

Updating the incident, Sergeant David explained that Colonel Eddy was presented with a "personalized" duplicate of the maps at a recent reunion of former '94th members.

Above: We had good times, like luaus; one featured a 230 pound pig.

For the sake of the mission, they endured the rigors of war in Southeast Asia, logging thousands of flying hours.

In June 1974 the good times and the bad times became memories with the official deactivation of the squadron. The men of the 6994th were once called "some of the most distinguished members of the command." For the sake of the mission, they endured the rigors of war in Southeast Asia, logged thousands of combined flying hours and ultimately some bled — some died.

In understated praise for the units accomplishments, Sergeant David modestly concluded, "They did a good Job." August 1974

Flight Operations end at the 94th IS
excerpt taken from the Spokesman, May 1997.

by Tech. Sgt. Mark Harlfinger
94th IS
Fort George Meade, Md.

An EC-47 aircraft, tail number 43-15112, taxis into position at Tan Son Nhut Air Base, Vietnam. The scratchy call from the tower echoes, "PRONG-33 GULLIBLE, you are cleared for takeoff." Holding down on the brakes, the pilot begins to slip the power levels forward, bringing the engines up to speed. Over the headset, the pilot hears, "Crew ready for takeoff" and he releases the brakes. With a sudden jolt forward, the aircraft begins its roll down the active '60 knots" and the aircraft lifts-off.

This was the only aircraft assigned to the 6994th Security Squadron June 6, 1966 when they flew their first mission, Combat Cougar. But by the end of the year, the fleet had grown to 25 EC-47s.

The 6994th, born April 15, 1966 in the throws of the growing Vietnam Conflict, had five officers and 52 airmen, although its unit manning document called for 11 officers and 178 airmen. The missions became demanding while the unit continued to grow working side by side with flight crews and navigators from Pacific Air Force's 460th Tactical Reconnaissance Wing. By the summer of 1967, detachments at Nha Trang and Pleiku Airport had organized and a total of 44 EC-47 aircraft were flying missions over Southeast Asia.

The 6994th provided "back-end" crew member support for the dangerous Combat Cougar missions. The flight crews were assigned to Tactical Electronics Warfare Squadrons at various air bases. However, there were instances where a mission crew consisted entirely of members from the 6994th. (Note: I question the last sentence. J.C.)

The quality and skill of the squadron's members were recognized frequently. The unit received the Air Force Outstanding Unit Award on six occasions, one with the device for valor and the Republic of Vietnam Armed Forces' Gallantry Cross with the Palm award. Even today, it is one of the most decorated units within the command.

The numerous awards did not come without a price. March 9, 1967, a demoralizing feeling of disbelief flowed through the unit as information came in that an aircraft was lost, the unit's first. Unfortunately, members of the 6994th would have to deal with aircraft lost to hostile fire on several occasions right up to, and even after, the signing of the cease fire agreement.

Eighteen members of the 6994th made the ultimate sacrifice. To this day, these courageous individuals remain in the hearts of the men and women of the 94th Intelligence Squadron and will never be forgotten.

At the end of hostilities, in Vietnam, the 6994th was moved to Thailand, where it spent two years before it was deactivated on June 30, 1974.

The above extracted from the Spokesman, May, 1997 as provided by AIA.

The names of those men lost are available on the Memorial Page.

6994th Security Squadron Unit Awards

Awards and Decorations Period 1966 - 1974

Air Force Outstanding Unit Award (AFOUA) with Valor,
15 April 1966 - 31 May 1967, DAFSO GB-81

Presidential Unit Citation,
1 September 1967 - 10 July 1968, DAFSO GB-124

Presidential Unit Citation,
11 July 1968 - 31 July 1969, DAFSO GB-804

AFOUA with Valor,
1 July 1969 - 30 June 1970, DAFSO GB-850

AFOUA with Valor,
1 July 1970 - 30 June 1971, DAFSO GB-43

AFOUA with Valor,
1 July 1971 - 30 June 1972, DAFSO GB-39

AFOUA with Valor,
1 July 1972 - 30 June 1973, DAFSO GB-819

360th Tactical Electronic Warfare Squadron (TEWS)

Presidential Unit Citation (PUC)
Air Force Outstanding Unit Award (AFOUA)

PUC, 1 Sep 67 10 Jul 68, DAFSO GB 124/1970

PUC, 11 Jul 68 31 Aug 69, DAFSO GB 804/1970

AFOUA with Valor, 1 Jul 69 - 30 Jun 70, DAFSO GB 127/1971

AFOUA with Valor, 1 Jul 70 30 Jun 71, DAFSO GB 185/ 1972

AFOUA with Valor, 1 Sep 71 31 Dec 71, DAFSO GB 663/1972

PUC, 1 Feb 71 31 Mar 71, DAFSO GB 815/1972

AFOUA with Valor, 1 Feb 72 24 Nov 72, DAFSO GB 862/1973

Republic of Vietnam Gallantry Cross (RVNGC) with Palm,
8 Apr 66 - 24 Nov 72, DAFSO GB 330/1975

361st Tactical Electronic Warfare Squadron (TEWS)

Presidential Unit Citation (PUC)
Air Force Outstanding Unit Award (AFOUA)

PUC, 1 Sep 67 10 Jul 68, DAFSO GB 124/1970

PUC, 11 Jul 68 31 Aug 69, DAFSO GB 804/1970

AFOUA with Valor, 1 Jul 69 30 Jun 70, DAFSO GB 111/1971

AFOUA with Valor, 1 Jul 70 30 Jun 71, DAFSO GB 185/ 1972

AFOUA with Valor, 1 Sep 71 31 Dec 71, DAFSO GB 663/1972

PUC, 1 Feb 71 31 Mar 71, DAFSO GB 815/1972

Republic of Vietnam Gallantry Cross (RVNGC) with Palm,
15 Mar 67 1 Sep 72, DAFSO GB 330/1975

AFOUA with Valor, 23 Feb 73 28 Feb 74, DAFSO GB 600/1975

362nd Tactical Electronic Warfare Squadron (TEWS)

Presidential Unit Citation (PUC)
Air Force Outstanding Unit Award (AFOUA)

PUC, 1 Sep 67 10 Jul 68, DAFSO GB 124/1970

PUC, 11 Jul 68 31 Aug 69, DAFSO GB 804/1970

AFOUA with Valor, 1 Jul 69 30 Jun 70, DAFSO GB 111/1971

AFOUA with Valor, 1 Jul 70 30 Jun 71, DAFSO GB 185/ 1972

AFOUA with Valor, 1 Sep 71 31 Dec 71, DAFSO GB 663/1972

PUC, 1 Feb 71 31 Mar 71, DAFSO GB 815/1972

AFOUA with Valor, 1 Feb 72 31 Mar 72, DAFSO GB 489/1973

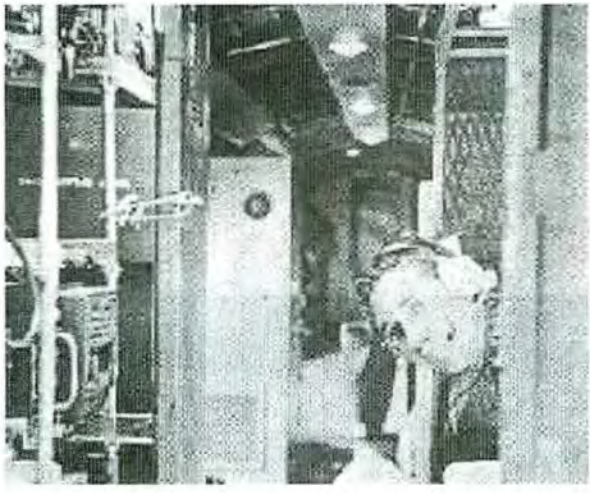
AFOUA with Valor, 1 Jul 72 30 Jan 73, DAFSO GB 872/1973

PUC, 1 Apr 72 26 Jun 72, DAFSO GB 877/1973

Republic of Vietnam Gallantry Cross (RVNGC) with Palm,
1 Sep 67 28 Jan 73, DAFSO GB 330/1975

Chapter 32

Untitled Photos



SABR
PHU CAT MASCOT

TEX THE WONDER DOG


MAIUY

My Aircraft Commander for my tour with the EC-47 and its mission, August 1966 to August 1967.

Lt. Col. Frank E. Hinkle

My Pilot for my tour with the EC-47 and the mission, August 1966 to August 1967

Major Harold R. Lagasse
(Deceased)

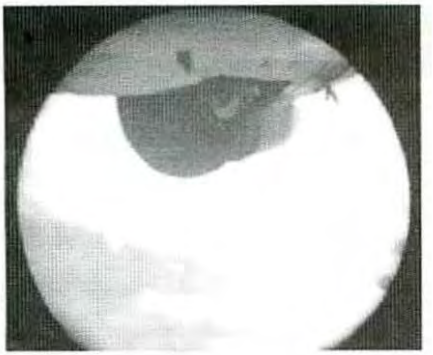
I am sorry, I do not have a photo of my Navigator, Captain Robert M. Harris to place here.

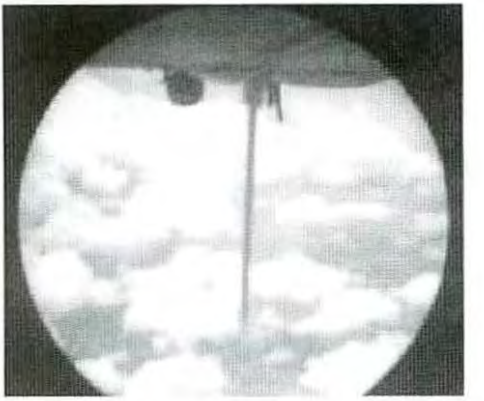
These three gentlemen made my tour in Vietnam the best year of my 20 year Air Force Career.

NKP Transportation the Samlar

The New Florida Bar

Ubon





That's All Folks

I hope you have enjoyed this book. I added as much of the information on the operation, the mission and the organizations as I could locate.

Much of the information contained, was supplied by the folks who made up the EC-47 mission personnel. The information within this book is used with the approval of the folks who supplied it initially to the web-site, "The EC-47 History Site". I want each one of you to know that it was truly appreciated.

I wish to extend a special thanks to Joe Martin for his fine contribution on the EC-47, or Electric Goon. And also to Stan Poyas who provided me with the original photo for use as the cover photo. Other photos were considered but this "last days returning" seemed most fitting for this book. This photo is only one of a role of 35MM Stan took of the returning EC-47's as they completed the Mission as we knew it. He is not sure if this cover photo was the "LAST" mission return or not, but it was at least one of the last. If I were to make an assumption, I would assume that due to the smoke flare, that it most likely was "the last".

The book came about after I kept getting suggestions that I should put the web-site into a book form. Additional copies are available from:

James C. Wheeler
HC 62 Box 6
Clarksville, AR 72830

If you have not visited "The EC-47 History Site", you are invited to visit it at this URL http://www.ec47.com . The site continues to grow and will contain new information, not presently available at the time of this book printing.

The Author, Then and Now. Thanks, James C. Wheeler


CHINA
CHINA
LAOS
THAILAND
LAOS
CAMBODIA
South China Sea
Vietnam