Puff the Spooky Dragon

A VIETNAM MEMOIR

ABOUT THE AC-47

By

DICK DUTNELL

aka

Dad & Grandad

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R.C. (Dick) Dutnell

This account of what I experienced before and during my tour in Vietnam is written forty years after my return so that those (my family in particular) who might care to read about them will have a small insight into what one aviator's experiences were relative to that conflict. It commences on a September '65 Friday, right after I'd turned 33, when I'd taken off from work a little early in the afternoon and was on a ladder painting the second story eave of our house in Fairborn, Ohio. My wife, Janey, came out to tell me that Wright Patterson Air Force Base (WPAFB) Personnel was on the phone. When I answered the call, the lady on the other end said that President Johnson had authorized a major buildup of personnel in Southeast Asia (SEA) and I was selected as one that might go, but that the President wanted everybody that did go to be a volunteer – was I a volunteer? I said, "Does it really make any difference?" She said "No"... I said "OK, I'm a volunteer. What are the details?" By regulations, the AF is required to give 90 days notice of a Permanent Change of Station (PCS) so I didn't have to go to Vietnam until January, but I had to go on temporary duty (TDY) to Survival Training at Stead in Reno, Nevada first, and then TDY to Combat Crew Training (CCT) for the AC-47 at Hurlburt AFB in Fort Walton Beach, Florida. Worse yet, I had to be at the Survival Training in less than a month! Janey and I had a quick pow-wow and decided to move "Lock, stock and barrel" to her hometown, McAllen, TX. But "what shall we do about the house on such short notice?" We decided to rent and she went to the Dime Store and got a "For Rent" sign so that I could finish up the painting. She found a stake in the garage, but could only find a couple of hair-pins to hold the sign to it. She put this unlikely combination together and barely pushed it into the ground in the front yard. The kids were running around the yard playing and they kept knocking it down such that it was lying on the ground in pieces more than it was up. I finally finished my painting in the late afternoon, got down, and put the sign together to stay. Despite all this, believe it or not, by sundown that night we had it rented to another AF captain and his family! This left only Janey's Studebaker Grand Tourismo sports car disposal and the move to accomplish before we started our travels. After my call, the Base took care of the move. We ran a newspaper ad for the car, and got only one inquiry in the next ten days – a guy wanting to know if we'd trade it for a Chris-Craft birch strip inboard runabout and trailer. We did the deal, and hauled that "damnboat" (one word according to Janey) all over hell and gone – down to McAllen, over to Florida and back to Texas. The boat was too big for the trailer which had only 12 or 14 inch wheels and we kept blowing the little tires on the first leg. But I finally bought Bearing Buddies (in Tennessee I think) and that took care of any moisture conversion to steam that would dissolve and extrude the grease in the bearings, so that we were finally able to pull it without having a flat every so often due to heat buildup in the little rims. With that, we were able to perform the rest of the marathon of TDY travel without any more "damnboat" problems.

We found a very nice house for sale in McAllen whose owner had moved to Dallas and was willing to rent for the 14 mos. or so that we would need it . We moved in, and I went to survival training at Stead AFB in Reno, Nevada. During training, I lost 16 pounds and learned, basically two things: most important of all that I didn't want to get captured

(but who does?), and that little else of what I learned in the mountains of Nevada would have any application in SEA. For example, during a group field trip, we were shown that at the head of the mountain streams, near the tree line, there is a bog through which the snow-melt funnels before it begins its tantalizing cascade down the mountainside as depicted in the Coors Beer commercials. Succulents grow in the bog and the deer and elk love to feed on them and relieve themselves as they are browsing – the point being that no matter how inviting the water may be, we absolutely must either boil or treat chemically all drinking water in a survival situation (and that Coor's claims about pure mountain streams aren't all that true). But how many snow-melt streams are there in SEA? Another interesting fact we learned on that trip was that rabbit meat has practically no nutritional value. So the pioneers that lived on them when they crossed the plains filled their stomachs, but got very little nutrition – probably the reason they were more susceptible to disease. But how many rabbits are there in the jungle? We were told that if we got snake bit, we should kill the snake, then sit down and wait out the consequences, which would be extreme sickness, but not (normally) death. This is only partially true – in the case of a Rocky Mountain rattlesnake, perhaps yes – in the case of a SEA jungle Krait, probably not.

For our simulated escape and evasion (E&E) we were allowed to take all the pemmican that we wanted, but only one candy bar. I didn't take any pemmican, because it's terrible stuff – a protein concentrate conceived by the indians that is so rich it made me sick when I tried it on the field trip. Instead, I took a multi-fruit flavored candy and rationed it out over the three day trek to the "Guerilla" camp which was our destination. We were taken up into the mountains by truck, let off one at a time along a logging trail near the tree line, and spaced so that we had to travel alone. We had to get to and stay as close to the tree line as possible to avoid detection, and all we had with us was the typical gear we wore or carried when we flew and the candy bar or pemmican. The scenario was that we bailed out of our aircraft over enemy territory and had to make our way to a friendly camp in two to three days without being captured. This is when I lost the 16 pounds. Even though the nights were chilly, I never had any problem sleeping, because the trudging over the rough terrain all day, on what little sustenance I had, flat wore me out. When we entered the "Guerilla" camp we were given a hard roll and a glass of water – one of the more delicious meals I've eaten in my life. That was the end of the training and we were given a coupon for a free meal and $20 to spend gambling at Harrah's in Reno. I ate a prime rib dinner and promptly lost it because of the contrast with the starvation diet/survival "rations" I had been eating in the mountains – but it was worth it. I had an enjoyable evening playing Blackjack for a couple hours with the 20 bucks (drinks were free in those days) before heading back to the base. The next day was graduation day and then air travel home. At the graduation party, I met the NCO who had simulated a communist interrogator during my stay in "prison", when I was clad in dirty khakis and he in a suit and tie. At the time, he had me braced against the wall of his simulated office, with my mouth full of water such that it was difficult to breathe, while he was laying all kinds of demands on me to which I obviously couldn't respond. I finally got fed up with the charade and spit the water all over him and his suit and tie. Where-upon, I was ordered to do 20 pushups (simulating being flogged or worse in actual captivity). At the party, he apologized for getting so mad, but he had just gotten the suit back from the cleaners. Ha!

Shortly after I got back with the family, Janey and I loaded up the car and took

Steve (5) and Tammy (3) (plus the "damnboat") to Fort Walton Beach. We left Russ (just 7) with Janey's parents in Mc Allen, so he could commence and continue uninterrupted his schooling in Texas. We found a duplex for rent with a dock on the Gulf inland waterway. We could afford it, because only off-base housing was available, and that meant I was receiving $16 a day per diem allowance, which was quite adequate in those days. The duplex was about ten miles up the waterway to the Hurlburt AFB Officer's Club (a former residence of Al Capone during the rum running era). I would motor up the channel every morning to the club, tie up the boat at its dock, go in for a cup of coffee, and call the motor pool for transportation to the flight line (legit since I was TDY). A very pleasant way to start the day – except for one day. On that day, I woke up to find the area in a heavy fog. No problem I thought. I'll just leave a little earlier and drive the boat a little slower. So I putt-putted down the middle of the channel slowly but surely toward the club. About halfway there, there was suddenly this huge barge bearing down on me out of the fog. I sped off toward the starboard shore and avoided the collision, and probably should have changed my skivvies. This was the only time I encountered any traffic on the waterway. Wouldn't that have made a great story? "Air Force Pilot Smashed by Barge on his way to Combat Training." Janey, the two kids and I also had some fun with the boat on weekends, but mostly it was just a convenient way for me to go to work and leave Janey with the family car during this TDY hassle. By the way, Hurlburt was the base where the Doolittle Raiders trained for their mission to bomb Tokyo at the beginning of the war with Japan. There was one real short east-west runway they used to make short field takeoffs with their B-25s. We never used it, although we certainly could have, as slow as we were in the C-47s used for what amounted to aircraft flight characteristics familiarization training – there being no AC-47s in the USA for close-air-support mission simulation.

Thus, by the end of November '65, I'd completed a month and a half of traipsing all over this U.S. of A.(at considerable expense to myself and the USAF I must add) to pursue Survival Training more relevant to the Korean War scenario than my mission in SEA (where the only thing in common was that the insurgents were Asians, albeit very different Asian), and an aircraft checkout that could just as well have been accomplished by the Base Flight Section at WPAFB. In December, I took 30 days leave and didn't do any thing towards the Vietnam assignment except enjoy the family and pack a 3'x3'x4' "cruise" box - a wooden lockable crate issued to me at the Naval Academy in1951 to store my belongings while on summer training cruises and vacations. I filled it with all the things I thought I might need while in Vietnam except, of course, the military clothes, civilian clothes, and flight gear I would need as soon as I got there. Those I packed in a large suitcase, a canvas B-4 bag, and a briefcase which I took with me in early January 1966 when I left Janey and the kids in McAllen. The cruise box was picked up before I left, and got as far as the Corpus Christi Naval Air Station, where it stayed, unfortunately, until I got back. Maybe it found a home back in Navy hands and refused to leave until I showed up again – who knows?

I flew to California by commercial air and caught a military taxi to Travis AFB where I was placed on a contract jet bound for Saigon, South Vietnam and Tan San Nuht AFB. My assignment was to the Air Commando Squadron, headquartered then at Tan San Nhut, to fly, as stated above, AC-47s; a C-47 transport – nicknamed the Gooney Bird

Bird – built originally in the 1930s – 1940s and armed with guns in 1966. (Read the articles on the following page; one titled *Dragonship Is* As *Old As Its Crew Members*, and the other titled *Modern Dragons Fight VC* - then note that I was born in 1932).

General Electric developed the 7.62mm minigun during the late 50s as a natural evolution from their 20mm Vulcan contract. However, the Air Force did not identify a need for the weapon until the 60s, and the advent of V.C. and North Vietnamese massed assaults, when the gun was first mounted on the wings of single engine Attack aircraft and the fuselage of Attack helicopters. The guns cost $22,000 apiece. On the AC-47, they were aimed with a WWII sight device in the side window at the pilot's eye level – through manipulation of the rudder, tail, and ailerons – and were fired, usually only one at a time, by a trigger button on the pilot's control column. The 22 modified aircraft were originally in "moth balls" at Davis Montham AFB (we called it the "bone yard") or were Base Flight Aircraft, stationed all over the U.S., and used for behind-the-lines Reserve, National Guard, and Active Duty pilots (pencil pushers like myself at that point) to get their 4 hours flying time every month so as to draw flight pay and stay somewhat current (and for Base Commanders to fix up (illegally) as their private "airliner"). Before this refurbishment, the depreciated aircraft were deemed worth less than the guns - even though some of them were "Spit and Polished" when they arrived at an airport in Miami, Florida where a contractor stripped off their shiny skin down to the basic understructure, repaired/replaced any otherwise hidden components that needed it, completely overhauled the engines, changed the landing gear and tires to an "assault" version for soft field landings (see figure 1.), restored the skin, and then painted the upper portion with green black and brown camouflage, and the underside a light grey - whereupon they were flown to California for further modification and then transport to SEA.

Figure 1.

Dragonship Is as Old As Its Crew Members

SAIGON—In 1941, a Douglas-built C-47, twin-engine transport plane, tail number 45-1121, rolled off the assembly line into World War II. Twenty-five years later, the same plane, now outfitted with three rapid-firing, Gatling-style machine guns, is serving in its third war.

Assigned to the 4th Air Commando Sq., No. 45-1121 is now an AC-47 Dragonship. The "A" in the new designation stands for attack. The Dragonship label derived from the plane's tongue of fire which reaches out to enemy positions.

The year 1941 was also the year of birth of three Air Force officers on No. 45-1121's seven-man crew—the pilot, 1st Lt. George R. Dixon; the co-pilot, 1st Lt. Ray White; and the navigator, Capt. James Cavell.

Together the 25-year-olds patrol the night skies of South Vietnam, ready to repulse enemy attacks on friendly outposts, villages and bases.

The Dragonship delivers both flares and firepower to discourage night attacks by Communist guerrillas.

Modern Dragons Fight VC

WHEN THE Viet Cong launches an attack or directs harassing fire at U.S. and Allied positions in Vietnam at night, Air Force AC-47 Dragon-ships are usually called for by the defenders.

Dragon-ship crews are on ready-alert every night, at bases throughout South Vietnam. They normally reach the position under fire within minutes after being called.

Dragon-ships carry ultra-intensity flares. Once over an area under Viet Cong fire, AC-47 crews drop the flares and begin flying an orbit over the enemy position.

Equipped with three 7.62mm cannons, an AC-47 can fire up to 18,000 rounds per minute. A Dragon-ship cannon has six barrels which rotate around a drum. One barrel fires while the other five are rotating.

Rotation keeps the barrels cool enough to sustain the cannon's extremely rapid fire. Each cannon can fire up to 6000 shots a minute.

The cannons are mounted in the left side of the AC-47, just aft of the wing. Two cannons are mounted on windows and one is fired through the door.

The cannons are aimed and fired by the Dragon-ship pilot. Gunners keep the cannons firing properly.

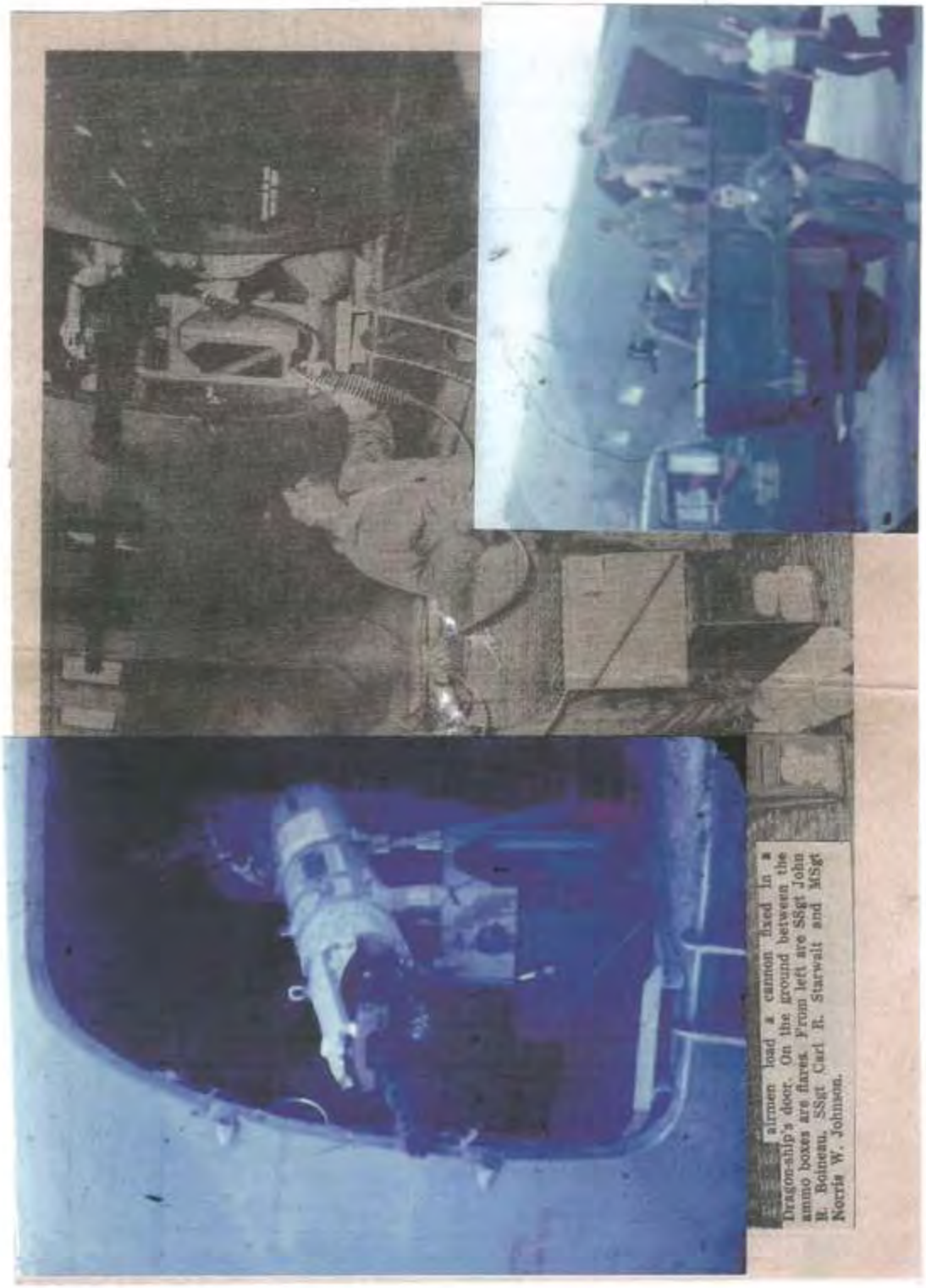
Cannons are installed in fixed positions, perpendicular to the axis of the aircraft. They fire straight ahead and are not swung by the gunners.

By flying an orbit over the enemy position, an AC-47 pilot can keep a continuous broadside of cannon focused on it.

Official records show Viet Cong night attacks and harassments are usually broken off almost as soon as a Dragon-ship appears.

At right is a close-up view of the six-barreled 7.62mm cannon carried by Dragon-ships. Checking the loading mechanism are A1C John [illegible] and Capt Tom A. Maltbie.

Articles 1.



airmen load a cannon fixed in a Dragon-ship's door. On the ground between the ammo boxes are flares. From left are SSgt John R. Bolneau, SSgt Carl R. Starwalt and MSgt Norris W. Johnson.

Figure 2.

It was reported that one C-47 aircraft flew into the Miami site carrying flight crews to take delivery of refurbished aircraft. When it parked in the Base Ops area, the contractor's dismantling crew assaulted it and began removing panels preparatory for total refurbishment and the aircraft commander had to shoo them off before they got too far along.

In California, the planes were outfitted with large fuel tanks in the passenger area to enable safe flight over the Pacific to Vietnam in the fall of '65.

My first knowledge of the side-firing concept was obtained in 1962 while stationed at Wright Patterson AFB in the Flight Dynamics Laboratory, and flying around the flag pole one day with two officers from the Aeronautical Systems Division; all of us getting in our required flying time for the month. They told me how they were going to Vietnam on TDY to observe the effectiveness of the side-firing concept in close air support. (The test applications were with 30 cal. side-mounted guns.) According to them, the idea came about as an extension of the Australian paratroop drop procedure used during WWII. The Aussies had discovered that, at a certain altitude, angle of bank, and airspeed a pilot can keep the wingtip of his aircraft fixed on a point on the ground during bail out, thereby reducing the paratrooper re-grouping problem on the ground. Once recognized, the application to precision placement of strafing rounds on the ground was really a "no brainer", and the test firing confirmed it.

While the State-side refurbishment was taking place, Pilots, Crew Chiefs and Loadmasters (all with considerable C-47 time) and Navigators, and Strategic Air Command gunners – people in all kinds of jobs all over the world – were ordered to Forbes AFB for three months of Refamiliarization and Combat Crew Training. In October '65, the 4th Air Commando Squadron was formulated from these personnel, and they were given their first mission; to ferry the 22 AC-47s across the Pacific. The Pentagon estimated that they might lose as many as three of the aircraft in the island hopping ferrying operation – they lost none. The guys that accomplished it were, of course, still on station when I arrived and they had some interesting tales to tell about the experience.

The fuel tanks were removed and three 7.62 mini-guns were installed at Saigon. The three gun pods installed in each aircraft were about 2' in diameter, 6' in length and originally designed to be slung under an attack winged aircraft or helicopter. For the AC-47, they were strapped into a semi-circular aluminum tray supported by a bridge-like structure constructed from 3" aluminum channels and angles, as shown in Figures 2, and mounted on an aluminum plate attached to two floor braces. Per my later calculations, the strength and rigidity of each structure was probably designed to control twice the loading of the mass of each gun under adverse g-forces while being fired during flight, such that it was more than adequate, for control of the mini-gun forces imposed during the typical non-turbulent firing pass. They were pointed out the left side of the aircraft, perpendicular to the aircraft center line and at a few degrees declination below the horizontal. The first was inserted through a window just aft of the trailing edge of the wing. The third was placed in the open cargo bay, and the second gun was inserted through a window midway between the other two, all as shown in Figure 2 on the preceding page.

Upon arrival in Saigon, I was directed (as it turned out misdirected) to catch a

military bus to Bien Hoa (pronounced Ben Wah) AFB, about thirty miles north of Saigon. I only have three impressions from my short Bien Hoa visit as follows: the numerous handball courts on the base were three sided concrete structures built outdoors by the French, because it would be too hot to play handball indoors; the Australians stationed there were a bunch of characters; and lastly, my squadron was screwed up. My first (and only) night there I went to the O'Club to eat dinner and the Aussies assigned to Bien Hoa were having a chug-a-lug party. They were playing some kind of simple game, and whoever lost had to stand on the table and stick his head into the ceiling fan with the flat part of the blades striking him on the forehead until it stopped. Then they would all cheer and chug-a-lug some more beer (like they really needed it). When I checked in with the Bien Hoa detachment commander in the morning, I was told that there was a change in the plans for my utilization and I was to report back to Headquarters, where I would receive a new assignment to, as it turned out, Binh Thuy in the southern Delta; hence, another "baggage drill."

South Vietnam was divided into four Roman numeraled Corps with "I" (called "eye" rather than "one") Corp in the north next to the De-Militarized Zone (DMZ) with North Vietnam, and IV (Four) Corp in the very southern, Delta region. Besides the Headquarters and Bien Hoa crews in III corp, we had detachments at Binh Thuy in IV Corp, Nah Trang in II Corp, Da Nang in I Corp, and Udorn in Thailand. When I left Vietnam, HQ had been moved from Saigon to Nah Trang.

One of the advantages of being assigned to a Detachment rather than a Permanent Duty Station was that we were entitled to $2 a day TDY per diem, which meant, with combat pay, we were making $4380 more in a year than we would at a permanent duty station in the States(about $10000 in today's dollars). Every little bit helps, but the down side was that we were away from our families, we were being shot at, and we were subject to being moved at the whim of Headquarters (which in this instance itself was moved, for whatever reason I know not).

There were about six crews and four aircraft at each station. A crew consisted of pilot, copilot, navigator, crew chief, and two gunners. At some locations, a Vietnamese Air Force (VNAF) bi-lingual Advisor would be assigned to those flights supporting Republic of Vietnam Army (ARVN) troops in case language translation was necessary. To my knowledge they were never used, because there was always an English-speaking Special Forces troop on the ground radio; hence, all the "Advisor" did was sleep most of the mission.

I boarded a Jolly Green Giant helicopter (the one with rotors at both ends) bound for Binh Thuy the next day to be teamed up with a Major Haller's crew as its copilot. (In Figure 3, on the next page, he is the one to the far left in this comic pose where we are holding a hose in reference to what we did to the enemy with our mini-guns). The low level flight gave me a most interesting perspective of the country as I sat on the floor by the open entry way to the helicopter; the agriculture gradually changed from dry land in the Saigon (now Ho Chi Minh City) area to rice patties in the Delta.

The Air War in Vietnam consisted of the Strategic (or planned) War, and the Tactical (or target of opportunity) War. The planned war was like no other in history up to that point, with all potential targets being fed into computer programs, which

Figure 3

identified the optimum targets from which selections could be made. That sounds great, but some B-57 jocks told me about bombing the same target three days in a row, because of miss interpretation of the computer print out by "Intelligence." By the way the B-57 guys used to take great pleasure in singing about "Puff, the tragic wagon (versus magic dragon)…" when any of us entered the O'club. We had a retort which I have forgotten, but it was all in good natured fun.

Our part in the Strategic War was limited to the Airbase Defense/Combat Air Patrol (CAP) mission. We were primarily used in the Tactical War at night for fort defense, troop support, and truck interdiction. The mission in IV Corp was the first two of these – CAP and fort defense. Figure 4 on the next page is my depiction of this activity. The way we were deployed, all at night, is one night on Combat Air Patrol (CAP) over the base for six hours (subject to being scrambled to wherever we were needed for as long as we were needed in IV Corp), one night on 15 minute standby alert to replace the CAP, if they were scrambled, one night on 30 minute backup alert to the 15 minute crew, and then one night off. I never visited one on foot, but as viewed from the air, the forts appeared to consist of administrative buildings and barracks surrounded by earthen dikes and several rows of concertina wire. The Viet Cong (VC) would attack at night and attempt to destroy the fort, the ARVN and the American Special Forces troops therein. When the latter came under attack, they would contact Corps headquarters and ask for us.

Figure 4

We would be scrambled and get there as fast as we could. This is where the Navigator did his job. He would take the coordinates for the fort's location given to us over the radio, locate it on the map of the Corp, pinpoint our location at the time (the base if it's our first launch, or by using navigation radios if not), determine the heading required to get to the fort and convey this to the pilot. When we got close to the fort, it was usually readily identifiable by the rifle, machine gun and/or Mortar flashes in the area. If they were not being overrun, they usually just wanted us to illuminate the area with flares. If they were at risk of being overrun, they asked for us to use both flares and the "pistols" as they called our guns. In the case of the latter, I had two basic options; a linear/curvi-linear pattern, or a pin-point pattern. For the first of these, the pattern speed was 120 kts and the angle of bank was 30 degrees and virtually any pattern (except true pin-point) could be drawn with the bullets on the ground. For the second, it was necessary to dive to gain 150 kts, allow the target point to pass underneath the engine nacelle, then simultaneously bring the nose up, roll into a 45 degree bank, and center the gunsight pipper using the rudder and ailerons as necessary. It is almost impossible to hold altitude with a 45 degree bank while concentrating on a target, so one of the co-pilot's responsibilities is to assure that a safe altitude is maintained; i.e., the pilot concentrates on the two horizontal dimensions to stay on target, and the co-pilot keeps the third (vertical) dimension at least safe, if not constant.

Figure 5

We carried, as best I can recall, a 4'x 4' aluminum box, divided into 6" square compartments by metal rods, and tall enough so as to hold erect 60 flares on the right side of the aircraft opposite the open doorway in the back (see figure 5). The 5" to 6"diameter aluminum cased flares were about 3' long. At the pilot's command, the crew chief would remove one of the flares, attach a lanyard fastened to the aircraft to the firing ring on one

end of the flare and await the pilot's command to throw the flare out the open doorway. The pilot would receive instructions from the American advisor on the ground as to where illumination was needed, would maneuver the aircraft, allow for wind drift and then tell the crew chief to launch. When the flare reached the end of the lanyard, the firing ring was pulled, the flare was illuminated and a parachute deployed. Since our attack altitude was 2000-3000 ft., each flare was effective for at least five minutes, as I recall – time enough, at any rate, for the fort to see where the bad guys were and what they're up to. If the V.C. were on the earthen dikes, they'd tell us to use our pistols at such and such location, which we would gladly do. Usually that was all we needed to do and the V.C. would withdraw, because one three second burst with one gun would put one of 300 of the 7.62mm rounds – equivalent to the thirty-ought-six (deer rifle) round;i.e., 1.25" long, by 5/16" at the casing, by 3/16"at the base - in every square yard of a 2700 square ft. area: be it 30' x 90' curvilinear or a 59' diameter circle. Not a very big round (see Figure 6), but not much room to hide.

Figure 6

One officer on a Vietnamese reviewing team designated to approve use of the weapon in-country said the tracer rounds (every fifth one) from such a display made the aircraft look like a dragon spitting fire (recall Figure 4). Hence, the nickname "Puff" became attached to the aircraft pursuant to a kid's tune at the time; "Puff the Magic Dragon." We hoped that in fact our call sign could be "Puff", but, for whatever reason, the Command decision was made that our call sign would be "Spooky."

We only fired one gun at a time, because the two gunners had their hands full loading and doing simple maintenance to keep at least two of the three guns available at all times. There are six barrels in each gun which means that with one 3 second burst, each barrel must discharge 17 rounds per second. Each barrel is good for about 100,000 rounds, but they occasionally jammed and required simple maintenance to free them while on target. Each gun pod held 5000 rounds, which was good for about 16 passes.

The instantaneous firepower of even one gun most assuredly was terrifying if not fatal. However, as fearsome as it must have been for some, not all the VC ran for cover. While performing this type mission is when I first fired the guns and first got shot at in turn (by a 50 caliber gun reportedly mounted on a makeshift bamboo platform to facilitate firing into the sky). Like our ammo, every fifth round of the 50 caliber gun is a tracer. They float up like an orange pumpkin and are fairly easy to avoid, but you're not quite sure where the

live rounds are in the darkness as you maneuver; because while they are also affected by gravity they are not losing weight like the tracer rounds so their trajectory is not the same; nevertheless, we never took a hit. By the way, our consciences are clear regarding our shooting, because the forts always took credit for all the kills they found the next morning.

On one of our nights off is when the base came under mortar attack. The crew on CAP located where the mortar was being fired and repeatedly requested permission to fire, but the IV Corp CO, a Vietnamese general officer - for some weird curious, reason - wouldn't grant permission. The attack lasted at least 15 or 20 minutes. Fortunately, the VC were in error as to where they thought they were relative to the base, because they marched the mortars up and down an open field at the south end of the base where only the Air Police dog kennels were, such that they only killed a couple of German Shepherds when they most assuredly thought they were destroying our aircraft on the parking ramp a quarter mile to the northwest. Because of a bright moonlit night, our CAP was able to watch the attackers pack up when they were finished and hustle over to their small boat beached along one of the numerous nearby inland waterways. About that time, the Corp CO gave approval to fire, which was too late, because we were not allowed to fire at water craft as there were too many noncombatants on the waterways also.

There were sandbagged bunkers in the open area outside of our "hootches." The hootches at every base, some nicer than others, were open bay, screened in quarters similar to what I used to endure in Boy Scout Camp (see Figure 7 - sans bunker). One difference now was that it was a lot hotter and more humid than scout camp in Ohio, the large ceiling fans not withstanding. During the above scenario, we were standing on top of our bunker watching the explosions to the southeast, wondering why they weren't getting any closer to us, and wondering why Spooky wasn't firing – not aware that South Vietnamese politics/Viet Cong human error were involved with what was going on.

Figure 7.

There was another occasion, in daylight, when the Vietnamese Air Force was attacking some VC positions about two or three miles to the north of the base with A3Ds (I think they were called) given to them by the U.S. The "A3D" was a single engine, propellor driven, one man aircraft developed in the '50s with the bomb carrying capacity of the WWII B-17. There were three of them and they put on quite a dive bombing display, with us cheering them on (as if they could hear us) from the top of our bunker.

Probably in February, our whole crew got moved to headquarters at Tan San Nhut AFB in Saigon (Figures 8 & 9). I was still the co-pilot designate, but Major Haller had checked me out as Aircraft Commander and let me fly and shoot on some missions.

Figure 8 - HQ

Tan San Nhut Flight Line, Figure 9

He and I rented the upstairs two bedroom half of a two story duplex owned by a Vietnamese Major who lived with his family on the first floor. Probably for a lot of reasons, the houses in Saigon were made primarily of steel reinforced concrete. Our duplex was no exception nor was the two story house under construction across the street. It was interesting to watch the progress on the latter- all by one person – using wheel barrows, pails, rope, pulleys and hand tools. No cement mixer, elevator, etc. Our quarters were just outside the gate to the base. The military came and went in Vietnam such that there were always ownerless bicycles left behind on base "for the taking" by the replacements. Haller and I latched onto two, and used them for our daily commute to the base as needed.

It was during this Saigon assignment that I found the French restaurant in the wealthy part of town that served steaks (water buffalo) and onion soup (with the large croutons and swiss cheese floating on top) – both were delicious. As I said, it was the wealthy part of town, and the streets were tree lined boulevards with mansions behind eight foot high, jagged glass topped walls and wrought iron gates, just like in Mexico. We also located a roof top, Vietnamese restaurant that served delicious sweet and sour pork. (It might well have been dog, because where are they likely to get pork when most of the farmers are communist sympathizers?). One time when we went, the kitchen door was open and I could see inside. Yuk! What a dirty place, but we kept going there, because it was good, it was acknowledged as such by all, and, surprisingly it would seem, nobody ever got sick from eating there. The roof-top dining area was perhaps ten stories high so that while we were eating after dark, we could watch the war going on outside of town where the V.C. were attacking some military installation and we could see, but not always hear, the tracers and explosions.

Saigon was the only town I felt safe enough in walking the street after dark, and even then we went in pairs or more. Figures 10, 11, & 12 are some sketches I made of Saigon street scenes; the unbelievable traffic congestion showing the thriving economy despite being at war and the mixture of the old and new transportation forms that co-existed, the contrasting visions of an impoverished beggar woman with child, and the frivolity of a younger generation couple on the typical private conveyance – the motorcycle. The sketches were made from memory at my hootch and then painted with rubber cement – the only thing I could come up with to preserve them against the prevailing dampness; hence the reason they are now cloudy.

Besides Saigon, I only went on foot into Cantho – to a farmers market in broad daylight, where I bought a lacquer painting titled *Year of the Horse* in Vietnamese (which 1966 was). I did travel by USAF vehicles through other sites, and the visitations to these former French colonial areas, albeit few and brief, revealed to me the definite, positive and upscale impact on the amenities and architecture imparted by France.

Figure 10.

Figure 11.

Figure 12

We had only been in Saigon for a short while, and I was serving as OIC one night, when the squadron (me) was notified in the early morning that one of our Da Nang aircraft had not returned from its mission over the Ho Chi Minh Trail. The copilot on that aircraft was a Capt. Bob Passekoff (sp), the guy with whom I went through CCT at Fort Walton Beach, Fla. The last time I had seen him was at Thanksgiving in '65 when he went out to dinner with Janey, Steve, Tammy, and I (His wife did not accompany him to CCT). The next day, he and I and Steve went red snapper fishing. He, however, was seasick the whole time and didn't enjoy the fishing very much. His and my training order differences were a classic example of the luck of the draw. He was sent to survival training in the Phillipines in December after CCT and got to Vietnam ahead of me such that he filled a vacancy at Da Nang in late December or early January. As stated above, I was sent to Survival Training at Stead AFB before CCT, was allowed to go on leave, and then sent to the southern part of Vietnam in mid January. Thus, his demise could very well have been mine.

I was elevated to Aircraft Commander, sent to Da Nang, and teamed up with Ron Haren as my co-pilot (See Figure 13.) to replace the two pilots lost. Da Nang was where two South Vietnamese factions (generals) fought each other in a coup attempt, in 1965 I think; a war within a war so to speak. When I got there, the battle scars to the base from the mortar exchanges were gone, but there was still unrest in town, such that I had no desire to go there, and the Air Force discouraged it too. Nevertheless, the Navy maintained offices and personnel (including later Dallas Cowboy quarterback, Roger Staubach) in support of the seaport and logistics operations there.

Figure 13.

I was assigned to my CCT mate's hootch, locker, and bunk – eerie indeed (the lower bunk in Figure 14.). Ron Haren appears again in this figure foreground where he was just visiting, and my hootch-mates in the picture are (clockwise from the left) John Mathews (another Aircraft Commander), Lee Trigillo (a nurse), and Jim Bowens (a hospital administrator in the upper bunk).

Figure 14

Our mission at Da Nang was more complex. We had an 8 hour nighttime CAP, and the associated 15 and 30 minute Alerts, an 8 hour mid Ho Chi Minh Trail patrol, a ground alert at Dong Ha to support the Marines there in their activities along the DMZ, and then one day off. Unlike the other bases I'd flown at so far, the enemy was the North Vietnamese (NVN) rather then the VC, and there were air conditioned crew rest trailers, so that when we came back to our hootch at dawn, we had the option of sleeping in the trailers (Figure 15.) instead of our too warm, day lit, and noisy hootch – bunk. Also, while at Da Nang, the monsoon season occurred where it rained cats and dogs around the clock. (See figure 16.) When I arrived at Da Nang, I was issued galoshes – the kind we wore in Ohio in the winter – and I couldn't imagine what they were for. I found out during the monsoon season, when, on some trips out to the aircraft to fly, we had to wade through 6 inches of water running across the tarmac where the aircraft were parked. Kudos to the Supply guys who kept our feet dry. I use them again now for snowy days.

Figure 15

Figure 16

The nighttime CAPs were the most boring. Usually, I was the only one awake in the aircraft as we endlessly circled the base and city for eight hours. These flights were the primary cause of my becoming constipated and contracting the famous pilots' and truck drivers' ailment - Hemorrhoids. My only diversion was a radio station out of the Philippines that played popular music of the time. There was a Marine Base east of our base that sent patrols out into the jungles all the time looking for trouble - which they usually found right at or shortly after dark. They would then call for flare support, which could be provided by the marine base artillery or by us, depending how far away they were when they got their hynie in a crack. Our detachment commander was Lt. Col. Carter - a very nice guy who did not fly. (Incidentally, his wife was also living in McAllen while he was in Vietnam, but curiously, she never got in touch with Janey nor vice versa). He took the initiative and got some 6" square by 3' long wooden boxed flares from the Navy that would float in the water or burn on the ground for a long period of time. On one occasion, I was scrambled to a hilly area well south of the base. When I established contact with the marine in charge on the ground he would only whisper into the microphone for fear of his whereabouts being detected by the NVN in the area. I, of course, wasn't sure where he and his men were on the ground and he wasn't inclined to give away his position by flashing any kind of light, so I had my crew chief toss out one of the Navy flares (and hoped that I didn't hit one of the troops). Fortunately, it hit where the guy on the radio could see it and use it for positioning us to drop aerial flares relative thereto. Once we dropped the aerial flares, he sounded more relaxed, but when I offered to shoot he declined. So all we could do was drop flares until we almost ran out. A fire fight never broke out and they were able to disengage and head back safely toward the base.

On another occasion while on CAP, I got a call from the control tower asking me to land, taxi up to base ops and keep the engines running, because there were two wounded marines that needed to be transported to Dong Ha ASAP. The hospital ship was anchored due east of there, off the coast, in support of Marine operations near the DMZ. Col. Carter had recently had all our aircraft modified with overhead slings to accommodate stretchers and had notified those with a need to know such a thing in case they were ever needed. I got out of my seat and went to the back of the aircraft to observe the loading process. I can't begin to describe my emotions while observing my guys and the corpsmen gently but firmly wrestling the two wounded men and their IVs into position over the top of the guns - no easy chore. They exerted seemingly super-human strength in getting the job done. I was very proud of them. In fact, when I got back into my seat, I was so inspired to get those young men to the north as quickly as possible that, after takeoff, I left the engines at Takeoff (maximum) power all the way to Dong Ha, carefully monitoring oil pressure, cylinder head temperature, etc. A helicopter awaited our landing and took the men to the ship. We never did hear how the two men faired, which is one of the bad things about war conditions - what happens, happens.

The Ho Chi Minh trail mission was probably the hairiest; particularly during the heavily overcast monsoon season. We took off at sunset, flew north about 50 miles, than due west into Laos to look for trucks on the trail, which roughly paralleled the mountains separating Laos and South Vietnam. It ran all the way from just south of Hanoi all the way to and through Cambodia (See Figure 17 and Article 2 which follows). We patrolled approximately the middle third, Udorn the upper third and I think Nah Trang; and/or perhaps Bien Hoa had the lower third. Some of the trucks driven by the NVN were of the type used in strip mining operations.; big with six ft. diameter wheels and a cab positioned between the front wheels fairly close to the ground.

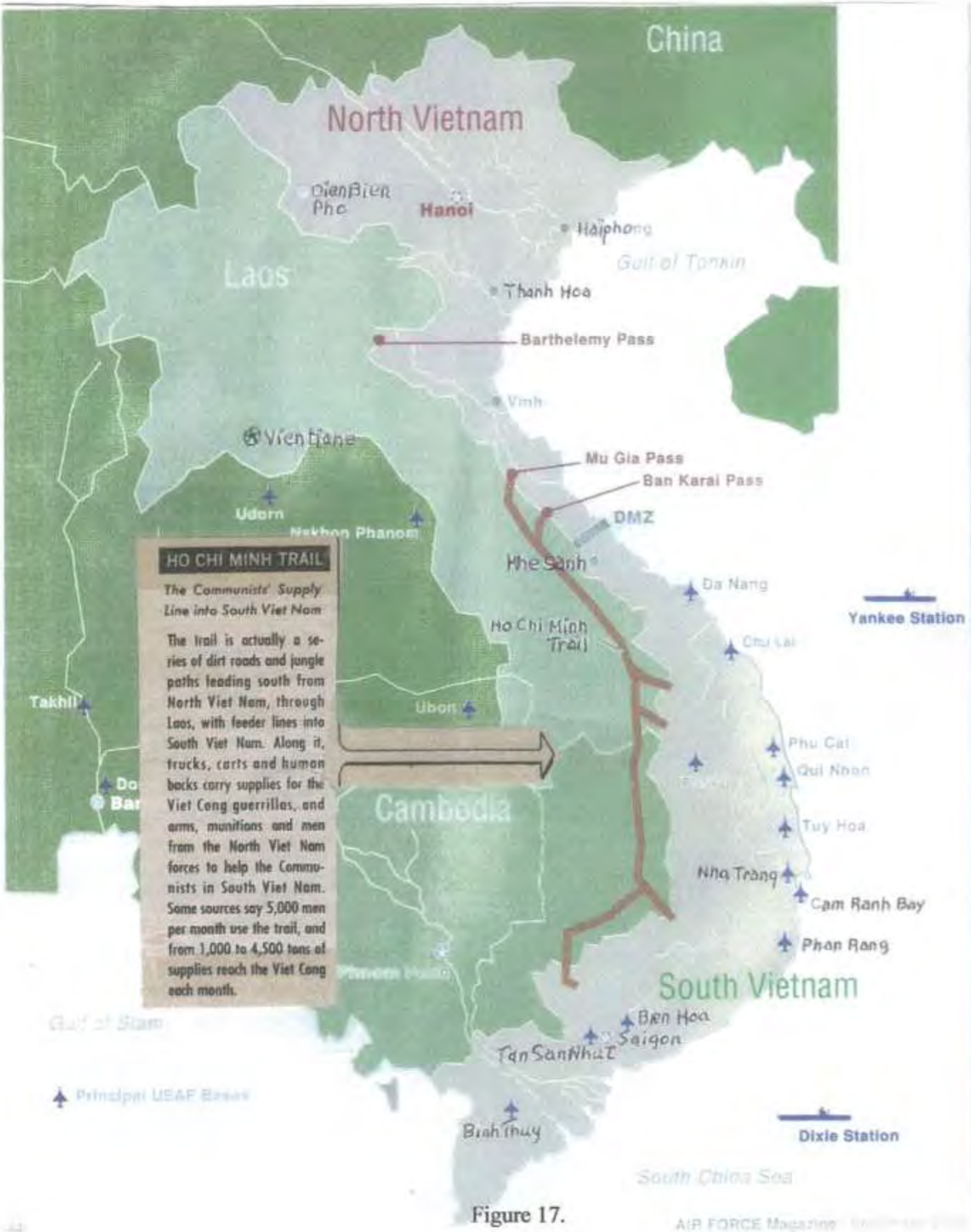

China
North Vietnam
DienBien Phe
Hanoi
Haiphong
Gulf of Tonkin
Laos
Thanh Hoa
Barthelemy Pass
Vinh
Vientiane
Mu Gia Pass
Ban Karai Pass
DMZ
Udorn
Nakhon Phanom
Khe Sanh
Da Nang
Yankee Station
Ho Chi Minh Trail
Chu Lai
Takhli
Ubon
Phu Cat
Qui Nhon
Cambodia
Tuy Hoa
Nha Trang
Cam Ranh Bay
Phan Rang
South Vietnam
Bien Hoa
Saigon
Tan Son Nhut
Principal USAF Bases
Binh Thuy
Dixie Station
South China Sea
HO CHI MINH TRAIL
The Communists' Supply Line into South Viet Nam
The trail is actually a series of dirt roads and jungle paths leading south from North Viet Nam, through Laos, with feeder lines into South Viet Nam. Along it, trucks, carts and human backs carry supplies for the Viet Cong guerrillas, and arms, munitions and men from the North Viet Nam forces to help the Communists in South Viet Nam. Some sources say 5,000 men per month use the trail, and from 1,000 to 4,500 tons of supplies reach the Viet Cong each month.

Figure 17.

Troops, Supplies Still Flow Down the Ho Chi Minh Trail

By ANTOINE YARED

VIENTIANE, Laos (AP)—"South Vietnam is like a leaking ship, and if the leaks are not plugged the vessel will sink," a South Vietnamese official remarked a few years ago.

He was referring to military supplies and men being smuggled into South Vietnam. They come from north Vietnam and are destined for the Viet Cong in South Vietnam.

Considerable progress has been made recently in plugging the leaks, but still the communist reinforcements come through.

One of the big "leaks" is the Ho Chi Minh Trail, named for Ho Chi Minh, the wispy-bearded old communist who seized power in north Vietnam after World War II and is still the nation's dictator.

"Trail" is actually a euphemism. The Ho Chi Minh Trail is a collection of dirt roads and jungle paths that circumvents the 17th Parallel, the truce line dividing north and South Vietnam.

The trail runs about 300 miles from north Vietnam, through many miles of wild Laotian jungle and mountains, down alongside the South Vietnam frontier. This area is under the control of the Pathet Lao, who are Laotian communists allied with the north Vietnamese.

How many men and what quantities of military supplies are channeled down the trail into South Vietnam is debatable. Intelligence reports vary, sometimes widely.

Few foreigners have ever set foot on the trail, or have any chance to observe the movements through it. Air observation is extremely difficult as much of the trail lies beneath dense jungle.

The American command in Saigon has to rely on reports emanating from local "scouts" operating from the Laotian side of the border. They spy on anything that moves through the trail, but their reports are not always accurate.

A Saigon report said the north Vietnamese smuggle as much as 4,500 tons of supplies over the trail each month into South Vietnam. Western intelligence sources here say, however, that the trail is not much use for supplies because of air attacks and the difficult terrain. These sources say the trail is much more useful for men, and they estimate that 5,000 men go through it monthly. It usually takes the men three weeks to get into South Vietnam, they say.

Sea Is Main Route

The sources say, however, that only an estimated 1,000 tons of supplies are going through the "trail" every month. They believe that most of the supplies are still being smuggled into South Vietnam by sea.

The sources point out that the Americans almost sealed off many South Vietnam coastal areas during the last year's landings but a few gaps still exist. The sources say the Americans hope eventually to completely shut off the coastal regions.

This explains why the north Vietnamese are reported to be improving the road network in the Ho Chi Minh Trail to use it as a substitute for channeling more supplies.

Actually, the sources say, the trail has roads capable of accommodating trucks. But this does not mean that "one can drive a lorry all the way from Hanoi to the South Vietnamese border." The trail at places narrows to jungle tracks and supplies have to be carried by men to the next stretch of road wide enough for trucks.

Hard to Hit

Different actions are being taken to prevent the north Vietnamese from using the trail. These include increased air attacks by American planes. But the air strikes are not always effective because of the dense forests covering the trail, giving it a natural cover. The north Vietnamese reportedly use the trail at night to avoid the air strikes.

Unconfirmed reports said the United States was considering using American ground troops from the Laotian side to choke off the trail.

American diplomats here say this is politically and physically impossible. They point out that open committment of American ground troops in Laos would "tear apart" the 1962 Geneva Agreement on Laos. The United States wants to avoid doing this openly at this time when it is deeply committed in South Vietnam.

American officials say the physical aspects of the trail makes it militarily impractical to use American ground troops from this side of the frontier. The Viet Cong controls the areas in South Vietnam where the trail emerges. The Americans say it is more practical for American and South Vietnamese troops in South Vietnam to try to block the trail from their side.

Laotian Prime Minister Prince Souvanna Phouma has publicly opposed the use of American troops in Laos in any action related to the South Vietnamese war. Souvanna asserted he wants to keep Laos aloof from South Vietnamese events.

Laotian officials have also denied that American planes are allowed to bomb the Ho Chi Minh Trail on Laotian territory.

But a high-ranking Laotian official said privately that the Laotian government is aware that American planes are flying bombing missions over the trail.

"We close our eyes because hitting the communists anywhere in Laos relieves the pressure on us," the official said.

Pacific Stars & Stripes 9
Saturday, March 19, 1966

Article 2.

All, regardless of type, traveled slowly at night by moonlight, or with low beams focused on the road right in front of the driver. Our Navigator positioned us over the trail using a map of the area showing where the trail is and ranges and bearings from a VOR station in the middle of Laos (maintained operational by our Special Forces troops), and/or from a VOR in the DMZ (probably maintained by the Marines), or, in the worst case, using a "Star Scope" which intensifies the light of the moon and stars thereby enabling visual sighting (with any luck) of the road. We maintained 2000 ft. above the surface mapped elevation to assure remaining clear of the "cumulus rockus" (scary, because the topo was done by the French) and when the Navigator (and hopefully theVORs) indicated we were over the road, we would look for the road, turn up or down it and follow it by available light until we lost it or spotted something to warrant circling and popping a flare. If there happened to be a truck on the stretch of road under a flare, the truck driver would flip on his high beams and high tail it down the road to the nearest turn-off, where every so often, the NVN had built roadside parks complete with picnic tables about 100 yds. off the highway for two reasons; primarily so the drivers could take advantage of an agreement our government made with the Laotians to not fire ordnance outside of 50 yds. either side of the road (can you believe it? – see article which follows), but also so the truckers could rest and eat meals. When I spotted a truck, I would drop another flare and "hose" him down so to speak. I never stopped one on the trail, and was pretty convinced that we were wasting our time until we got a Special Forces report that there were quite a few disabled trucks in several of the roadside parks they checked. Regarding the ordnance constraint: first of all, Laos was a non-combatant with no direct stake in the conflict, and secondly, the primitive natives that live in that part of the country are nomads of a sort who slash and burn the jungle to live here this year, and over there next year. In the spring, when over the Trail, we could see the numerous fires where new living sites (villages?) were being created.

We also FAC'd Navy aircraft sent over with bombs and bullets to stop (no, hinder) the traffic. One flight of three contacted us one night and asked if we had any targets. I said I didn't have any trucks, but I'd spotted a stretch of road along the side of a nearby mountain that was out in the open and inviting destruction. The flight commander said "Let 's go take a look." My Navigator gave the location details, and we all flew to the spot where I popped a flare so they could see the situation. I said, "Do you want to fly toward the mountain or parallel to it?" The flight leader said, "Let's fly toward it." So I set up an elliptical lefthand racetrack pattern toward the mountain at 2000 ft. The Navy planes set up at a higher altitude in right hand turns. When they were ready, I popped a flare on my next inbound leg toward the mountain. The flight leader said, "I'm in" and flashed by headed for the mountain. I saw him pull up and then the flash of his 200 lb. bomb - dead in the middle of the road - such that 50 yds of it, at least, disappeared into the gorge. I popped another flare just to make sure we were finished here and said, "That's it boys, I don't have any more targets, sorry." The next day I checked with Intelligence and learned that they sent the Special Forces out to verify the claim in my debriefing the night before, and they found the road already repaired. It turns out the NVN maintained bull dozer and other earth moving equipment and personnel to constantly repair, day and night, whatever damages we inflicted and to fight the relentless jungle vegetation growth that struggles to recover from any incursions into its domain. Regarding the latter, we (the AF in general) had aircraft go down and cut a swath thru the jungle when crashing, be accurately located and recorded, and there be no visible evidence of the event one week later (certainly the primary reason for some AF MIAs such as my CCT mate). The AF had C-130s dropping Agent Orange on portions of the jungle canopy

over the southern portions of the road to expose it for interdiction purposes. In retrospect, that program was also helping the NVN with their road maintenance program.

The Army had a small twin-engine airplane that flew out of Phu Bai up and down the road recording infra red signatures by the trucks. When he got one he'd call us and give the coordinates. The only problem was that he wouldn't get a read-out until five to ten minutes after the contact such that the Navigator had to make an estimate of where the truck might have moved to in that period of time to give me a range and bearing to fly to from the VOR. I'd follow his instruction, look for any sign of headlights and pop a flare regardless. We never saw any of the trucks the Army guy ever reported to us. His primary mission was more of an Intelligence one - i.e., recording the amount of traffic each night - rather than support for our mission. He, however, being aware of us from his Intel' briefings was just trying to be helpful. Sadly, one of those aircraft apparently had engine trouble on a night when I was not flying and the pilot had to bail out near the southern portion of the trail. We were informed in a subsequent pre-flight intelligence briefing that he was found by the Special Forces people hanging in his parachute from a tree with his head cut off, probably by the Laotian natives who would look upon him as some kind of monster from the sky.

You may have noticed my references to "Special Forces" activities in Laos; maintaining the VOR station and performing reconnaissance - on foot and by light aircraft - by day. They're something else when you think of all the hazards they faced in that environment: the NVN, the natives, and the jungle critters – up close and personal.

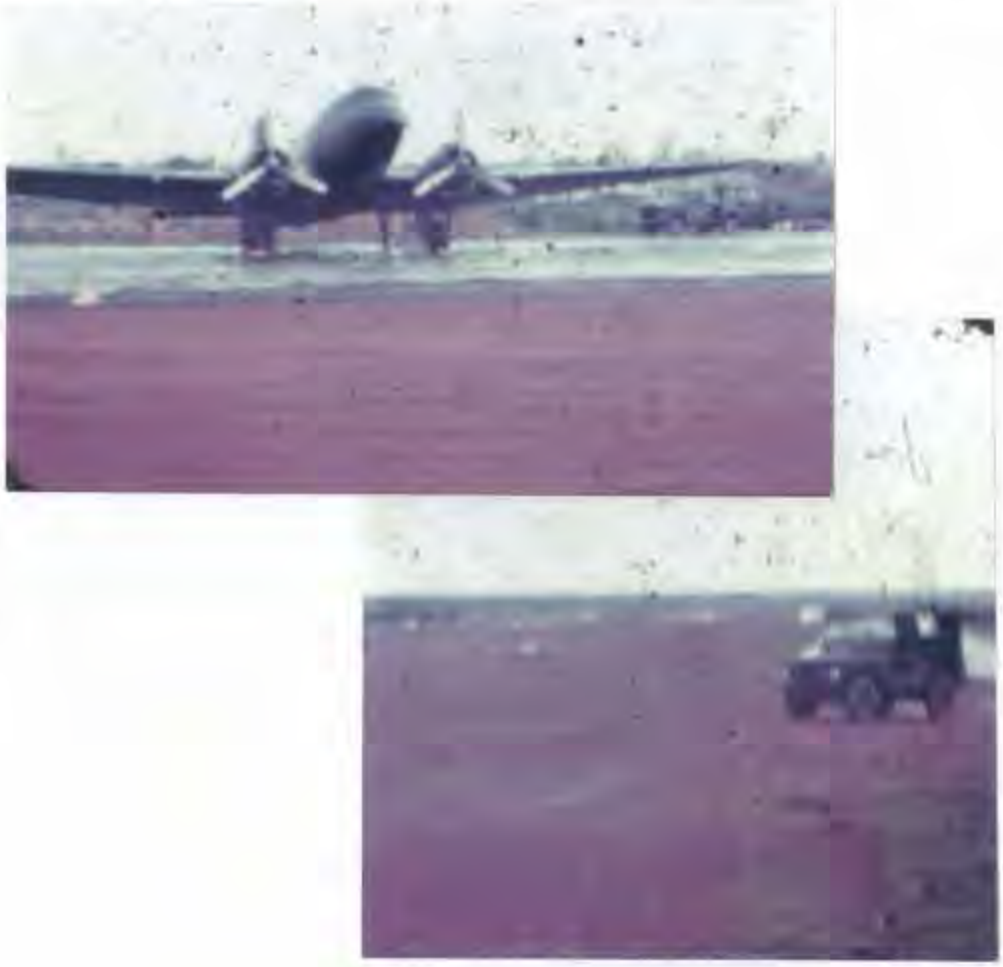
My hairiest experience on the trail occurred one cloudy night with a 2500' monsoon overcast, but no rain. (If it had been raining we would have aborted the mission, because one can't see a thing in a monsoon downpour). After popping a flare at 2000' to locate the road, I spotted a truck seemingly stalled at a creek crossing. I launched another flare and circled down to 1000' to get a closer look. Just as I rolled over to hose it down, a 30mm opened up and sent a burst off our nose followed by one off our tail. I recognized the tracers immediately from the gun firing practice observed while on my Naval Academy cruises. Since we had specific instructions not to engage in air to ground fire-fights with anti-aircraft guns, I applied full power, turned away from the enemy guns, pointed the nose down to aid acceleration, and we "got the hell out of Dodge." They did not fire at us again, probably because they were having to reload. My co-pilot grabbed his control column and kept me from being too rash, because some of the trees there are reportedly 300' tall, and since streams and much of the trail are in valleys between hills and ridges, the foliage on them pretty well encroached upon our air space

I learned a few things that night: 1. Watch out for traps - it was the first any of our crews out of Da Nang had reported (however, my CCT mate may have experienced the same thing, but never got back to report it), 2. The white tracered 30mm are on you in a heartbeat, unlike the 50 cal. I had experienced before, and 3. When a flare is lit, don't stay straight and level too long. It is probably fortunate that I rolled over when I did from level flight because that most likely contributed to, if not directly caused, their missing us. We were like a sitting duck outlined by the flare against our shadow on the illuminated overcast. Later that night, I tried to relocate "The Trap" to guide a Navy aircraft looking for something on which to unload his ordnance before returning to his ship, but for some reason, the range and bearing given to me by my Navigator did not locate the same stretch of road. Can't say as I blame him. The enlisted crew was on the verge of mutiny when they learned what I was up to, and he was just protecting us from my

doing something he too thought foolhardy. So I dropped one of our Navy flares, lined up the Navy jet with the ground flare for reference, and maybe had him punch some craters in the Trail with his bombs which he could not take back to the ship anyway for safety reasons.

"The Trap"is a classic example of the mundane description of flying anytime, but especially in wartime; i.e., "Hours and hours of boredom interrupted by moments of extreme elation or stark raving terror."

The fourth mission we had was the ground alert for the marines at Dong Ha. On this mission, we departed Da Nang at 1800 (6:00PM) so as to land at Dong Ha before dark. The airport there was carved out of a portion of the Marine base. The 3500' east-west runway was paved with laterite (a red gravel which is high in iron and aluminum oxides), the parking ramp was a rubber tarp on the north side of the runway opposite the runway control unit (see figures 18 &19.), and the runway lights were smudge pots lit up only for emergencies. On the south side of the runway, the control unit or "tower" (See figure 20.) consisted of a 12' high, perhaps 30' long, 4 wheeled trailer surrounded with sand bags, with a small plastic cage for the controller to look out (if he wanted to) to see his inbound traffic, and another similarly sand bagged trailer with a petroleum fuel powered engine that generated the electric power to operate the radios, air conditioners, etc.



Figures 18 & 19.

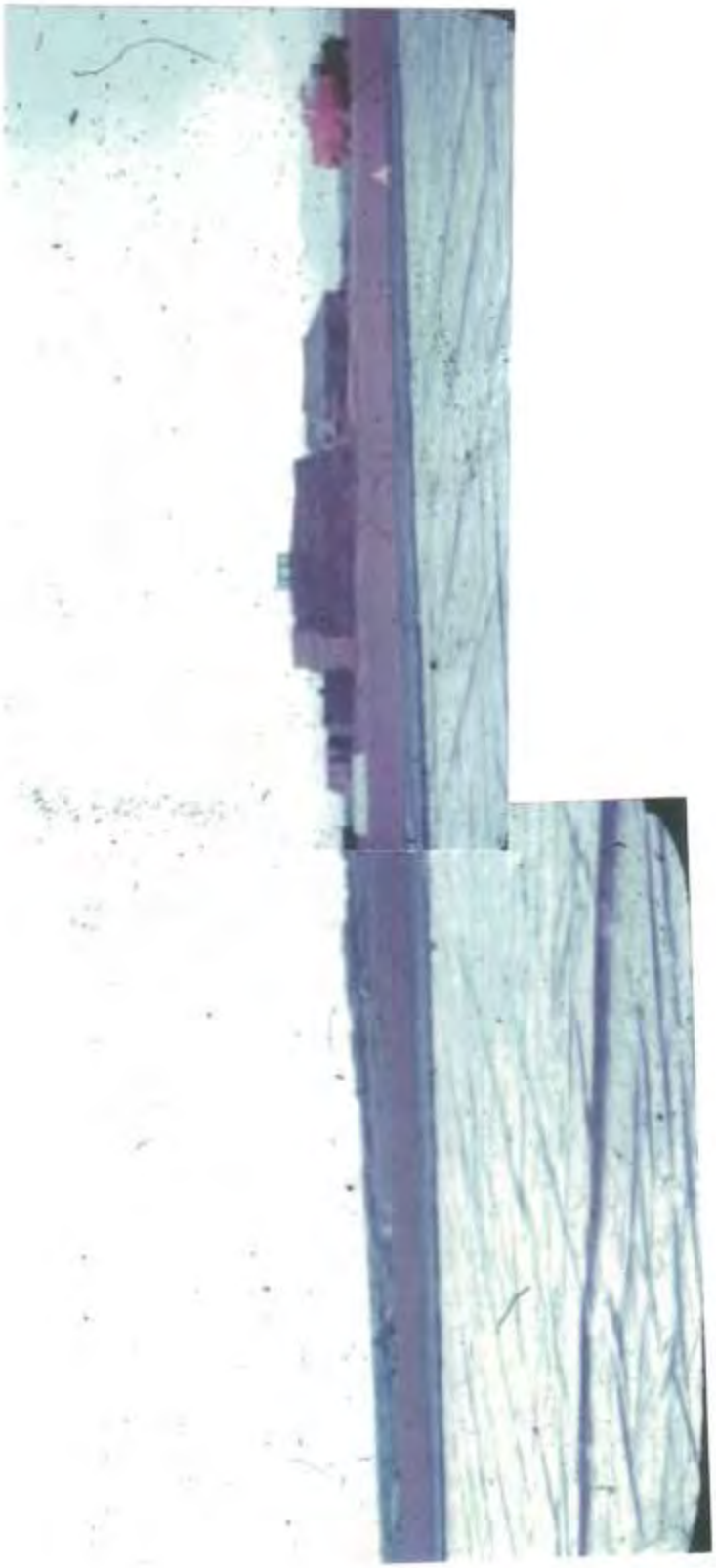


Figure 20.

Just to the west of these two trailers (See figure 20.) were two large wall tents; one for the controllers to sleep in and one for the Spooky crew. They had cots in them with air mattresses, which were quite comfortable. Perhaps five hundred yards or so to the west (near the west end of the runway) were a 105mm and a 155mm howitzer. Periodically during the night, without warning, one or the other would send off a round into the jungle just to keep the NVN honest. One of my gunners said the only reason they gave us air mattresses to sleep on was so it wouldn't hurt so bad when we came back down after jumping from fright. The other tent for the controllers, also had a short wave radio, which came in handy on one occasion for me - more on this later. After we landed and parked, we lazed around until dark when we'd try to sleep. More often than not we'd get scrambled after dark, to support some major Marine operation in the jungle somewhere where they got crosswise with the NVN after dark and needed us to drop flares to light up the battle scene. These were more significant operations than those in the Da Nang area. They sometimes involved artillery support, which complicated our function, because we had to dash in, drop the flares where they wanted them, and then dash out for the artillery barrage to take place. They never asked me for fire support which is a shame because usually there were so many NVN involved that I could see them moving around on the ground trying to get away from illumination by the flares. To this day, I don't know whether the Marines feared we might shoot them or they just wanted to do it their way. On one occasion they let me FAC in carrier planes with napalm because we could better see, maintain illumination of, and describe where they needed to place it. I was really impressed with the courage demonstrated by those fighter jocks flying at low level over the treetops rimming the ridges and foothills in the DMZ area and placing the napalm precisely where they were told.

On one occasion we were scrambled west rather than north to an operation later simply described (incidently in LIFE magazine) as "The Rock" which was a mesa in the jungle just east of the mountains separating Vietnam and Laos. A large marine contingent, perhaps a Company, came under attack by the NVN (after dark naturally) and they scrambled up on this more defendable mesa to preclude getting overrun. We were called upon to provide flare support so they could see the bad guys trying to climb up with them. A week or so after this mission, on a rare occasion when we didn't get scrambled, we were preparing to fly back to Da Nang in the morning when a platoon of Marines came up to us to look over the aircraft after being on patrol all night. One of them, a sweaty, shirtless, hatless 17 year old maybe, with a bandoleer of cartridges for some kind of automatic weapon slung over his shoulder came up to me and said, "Sir, were you dropping flares over The Rock the other night?" I said yes I was, and he said "Boy, were we glad to see you" - one of the simpler rewards for a job apparently well done and truly appreciated.

An interesting tidbit about Dong Ha involves an F-4 returning to Da Nang from Hanoi with battle damage. The pilot decided he couldn't make it to Da Nang's 10000' runway, and chose to put down on Dong Ha's 3500' runway. Thus, both the pilot and the aircraft were severely challenged. Needless to say, even though he landed with gear up, he went off the west end of the runway and became briefly airborne again a couple of times as he bounced from hillock to hillock before coming to rest probably 3000' into the

boonies. The pilot and his weapons officer got out unscathed. If the USAF wanted to salvage the aircraft, which of course they didn't under all the circumstances, they would have had to move fast, because almost immediately, the South Vietnamese civilian scavengers attacked it and stripped everything of any conceivable value to them (particularly the wiring) in no time at all.

One sad note about the Dong Ha/DMZ area that hit close to home in more than one way involved a seaplane pilot in my hootch. He was killed returning to Da Nang at dawn from a night rescue patrol mission in the Hanoi area. He was apparently flying along - fat, dumb, and happy - off the coast low over the water, when he was hit by an NVN SAM, fired from an undetected trailered site just north of the DMZ that took advantage of a sitting "Albatross" (the name of the Seaplane), rather than a sitting Gooney Bird over land. Our salvation may have been that the trees and terrain concealing their location - which was probably chosen because they were primarily interested in the aircraft going to and from Hanoi - precluded their intercepting us. Who knows? Regardless, the Navy took care of that site in a hurry.

Besides their value when supporting the troops on the ground, which I've already cited, Col. Carter had another use for the Navy flares in mind. Because none of us ever saw a truck give even the slightest indication of being hit, there was some speculation that maybe the gun sights weren't properly aligned with the guns, and some of us were even going as low as 1000' above the ground so that we could see the tracers, which burned for about 2000', hit the truck. Persuant to this line of thinking, Col. Carter did two things: 1. He found out that a round that would explode on contact (I'll call them VTs) had been designed for the mini-gun, but Mc Namara (Sec. of Defense) had not authorized their manufacture, probably because the mini-guns were originally perceived to be an anti-personnel weapon only and not to be used against any vehicle more sophisticated than an ox cart. 2. This being the case, and fearful of our descending to1000' (Headquarters said not to descend below 2000'), because one of us might get too close to the jungle for our own good, he had every one of the crews, on one of their days off, take each of the aircraft out over the China Sea, drop a Navy flare in the water, and then shoot at it from 2000' to record where the rounds splashed the water relative to it. This was good, because we learned that all the gun sights were essentially true and where we aimed from 2000'is where the rounds were going, so descent to 1000' was unnecessary.

Col Carter was good at also finding other things for us to do on our days off. On one such day, he asked that I and another AC accompany him to the motel in town where all the news media reporters resided. They had learned about our aircraft and wanted to get some TV footage. We quickly put the "Qui-e-tess" on that notion, however, because they wanted us to fly at dusk or at dawn on an actual mission when the lighting would be more optimal for their cameras. Part of what little elusiveness that the AC-47 had lay in the fact that a circling target is difficult to hit at best, but that is particularly so after dark in combat, when the running lights, rotating beacon (or strobe light) are turned off, and the shooter is not quite sure what the target is doing (if he can even see it). In broad daylight it's just a big fat bird in the sky asking to be shot at by anyone, but particularly by someone with an automatic weapon whose tracer rounds can be started outside the circle of flight and guided to intercept the very slow, more obvious, flight path. He saw some of my art work, so he had me design and see to the fabrication of the placard I have

showing the dragon and the airplane over SEA (See Cover and Figure 21.). I designed it with colored pencils on paper (see cover), and took it to a fabricator in Saigon who somehow came up with enough brass artillery shell casings and mahogany backs to make one for every body in the squadron exactly on schedule as promised.

Figure 21

On still another occasion, TV personality Arthur Godfrey came to the base and asked for a briefing on the AC-47. What he really wanted was to fly it and shoot the guns (he was a pilot and had DC-3 flying experience), but headquarters said no - too risky to even go out over the China Sea and shoot at a Navy flare. It would have been one hell of a PR deal for the squadron, if I could have taken him, but all I could do was let him sit in the seat and look through the gun sight and try to visualize what it was all like in the air. I am sure he was bored to tears by the half hour briefing, but he was very gracious.

About mid-tour, Col. Carter asked me to investigate the possible cause of the loss of one of our aircraft from Udorn, Thailand, over the northern portion of the Ho Chi Minh trail. He told me that HQ requested the study, because they had found out that the Aircraft Commander, feeling the same exasperation as we did about maybe only damaging the paint on the trucks, had taken it upon himself to have one of the mini-gun pods removed and replaced with a 50cal. gun bolted into the bottom of the tray. With this mod, he not only got a bigger round, but he got access to VTs. He had test fired it in the Udorn area once or twice and then contacted a Major from the AF Research and Technology Division who was stationed in Saigon and whose job was to "keep an eye open" for weapon system improvement opportunities. I don't know whether the Major witnessed any of the test firings, but he was on the manifest for the flight that went down. Armed only with these tid-bits of info, I wrote to Janey to send me my Strength of Materials text and my slide rule and began my research into the tech pubs maintained by Maintenance and the Base library about the guns. Through them, I learned that the mini-gun has an initial impact recoil force of 600 lbs. which then drops to a steady state force of 300 lbs. as the gun continues to be fired. With the 50cal, the recoil force is 1250 lbs., as I recall, and back to zero for each round. After I got the text and slide rule from home, I analyzed the structure supporting the mini-guns and it was evident that they were, as I sited before, "built for stout" but the strength of the floor braces to which the base plates were attached was suspect for the forces imposed by the 50cal. Because my primary responsibility was flying missions, and because this engineering activity was done during my "free" time, I didn't want to get into an aircraft structural analysis. So I wrote to Douglas Aircraft, which had built the airplanes 30 or more years ago and were still in business in '66, revealed my findings regarding all this, and asked for an opinion regarding the floor braces. Amazingly, they responded without a contract saying that they too believed that the forces from the 50cal were too high for the floor braces/gun base interface, but that if a more detailed analysis was desired they would be happy to sign a contract to that effect, etc.,etc.,etc.. Beyond this conclusion there can only be speculation on what happened. Obviously, the structure stayed together during the test firings, but there are at least two possibilities of what may have happened during the Trail mission: 1. They were just shot down by an anti-aircraft battery which were more prevalent in the northern region, and the loss had nothing to do with the 50 Cal., or 2. All prior firings stressed and fatigued the 50cal floor braces/gun base interface such that they failed when he got on the final target and pressed his attack; thereby, shooting himself down.

In aircraft structural design, the factor of safety used is two; i.e., they are designed to withstand twice the actual load expected, in part because the failure modes are unpredictable in other than laboratory conditions and also because impact loads have twice the effect of the same load in steady-state. In any case, with malleable metals such as aluminum, the approach to failure is gradual rather than abrupt. If the interface failed, starting at the front edge of the

base plate where the moments were the greatest, the consequence of this and what ensued is only up to one's imagination. The pilot doesn't know what's going on in the back until he is informed, and although the crew chief is on the intercom with the cockpit, there is an inherent delay in getting the pilot to stop shooting if he is concentrating on a target. So if the gun started to violently damage the aircraft...who knows? Because of the part time nature of this study (and a slide rule rather than small electronic calculator/computer analysis - capabilities that didn't exist then), it took me much longer than I would have preferred to complete it. However, I conveyed my findings to Headquarters (and Col. Carter, of course) in late September, saying essentially these same thoughts, and heard back only from Col. Carter, any appreciation for the effort, except perhaps for a Distinguished Service Award that didn't mention this activity.

In October, one month before Janey and I were going to R&R in Hawaii (we had to be in-country about 10 months in those days to get Hawaii for our R&R), I received a call in the middle of the afternoon, from I think the Red Cross, informing me that Janey was in the hospital with a collapsed lung. I had just enough time before I had to fly the Dong Ha mission to do some inquiring about what my course of action could and should be. When we landed at Dong Ha at dusk, I asked the control tower operator in the tent next to ours, if there was any way he could contact Janey's folks in Texas on the short wave I mentioned above. He said he'd give it a try and set to work twisting dials and calling in the blind to try to raise another operator. He got a response from a USAF operator in the Phillipines, who in turn hooked us up to a civilian ham operator in Maryland, who dialed the folk's phone in Texas. (A far cry from today's soldiers getting on the Internet or a cell phone to call home at will, directly). It was about 1830 in Vietnam, 0630 in Texas. Mom answered the phone and the first thing I had to do was school her on how to say "over" when she had finished a statement and to wait for me to say it when I was talking before she started talking again (that's the signal for all the operators to convert from "transmit" to "receive" or vice versa). She never got it perfect, but she got it good enough to get the job done. Basically, after I'd heard more of the details about what happened and how Janey was doing, I told her that I'd learned that the doctor had to tell the Red Cross that Janey absolutely had to be moved out of the Valley ASAP, so that I'd get sent home (early) to accomplish that. We were in the middle of our discussion back and forth, when – wouldn't you know it - while I was talking, one of the artillery guns sent a round into the jungle and scared the heck out of Mom - she just knew I was under attack. I told her what it was all about, but it gave her a good story to tell. She and the doctor did their thing and I was sent home about three weeks later in late October rather than early January.

But, before I left, on my last CAP mission, I was scrambled to support some marines, again south of Da Nang. After we had been on station awhile, it became clear that we were going to run out of flares and ammo before the issue was resolved, so I called the base and had them scramble the alert aircraft (now on CAP) to our location so that I could return and reload. This was done, and when we were relieved, I hurried back to the base, got permission to land downwind, and asked the tower to have the ammo truck meet us at the down wind end of the runway, so that all we had to do was land, reload, turn around and takeoff. This all worked out fine like we had done it all the time, which of course we had not. We returned to the fire- fight and relieved our relief who was likewise running out of ammo and flares. We stayed on station until sun-up. The enlisted personnel were brand new and had been assigned

to me to introduce them to what we do - they got a good indoctrination. I was proud of them and I let them know it. Sadly, in late January '67, after I left in October '66, this same crew (with only the aircraft commander changed) was shot down south of Da Nang when they took a hit in the flare box. The flares burn at 5000 degrees F as I recall (hot enough to melt metal) and produce an extremely toxic gas. With the back door open (which it always was, because it was completely removed), there was a circulation to the front of the aircraft, so these toxic fumes almost immediately got to the cockpit. After the hit, the aircraft was observed from the ground to turn to the east, level off, and disappear into the darkness. It was later found crashed into a Vietnamese cemetery with all hands killed. Ironically, the guy who took my place wanted to get out of the AF, but he was told he had to finish his tour and be returned stateside before he could resign. I was slated to return to the States in early January and would not have been on that flight anyway. Nevertheless, it was another case of the "luck of the draw"for the two of us, bad for him and good for me (but too close for comfort).

I used some of the money we had saved for R&R to buy things at the BX from the Orient for Janey and for our home - sets of china and artistic pieces. Since my cruise box never made it, I had to scrounge around in Supply for some foot lockers that I could use to send home those items and all the other stuff I didn't want to take with me on the trip home. Fortunately two were available, and I got everything packed and in the supply chain going home before I had to leave.

Janey was a real trooper during all this ordeal. She also had the moral support of her mother and father close at hand and she was able to get a "live-in" 19 year old maid, Ponchita, for $25 a week, who helped with house cleaning, the kids, cooking and you name it. Ponchita was great, and is a good friend to this day.

I bought tape recorders (the early reel-to-reel type) for Janey, my parents and myself at the BX so that we could send voice messages back and forth on small 3" diameter reels as well as written letters. I don't remember my parents ever sending any tapes back to me, but Janey and I sent numerous tapes back and forth. Janey wouldn't stay on the tape very long because she said her voice was too "twangy" (i.e., Texan) but she made sure the kids all said their piece, whatever it was, and I really loved to hear their little voices. It of course made me homesick, and I wished Janey would talk more, but the concept definitely helped make the separation more bearable, for me anyway.

When her lung collapsed, it was apparently from an asthma attack due to the agricultural spraying that was going on at the time in the Rio Grande Valley. We were so fortunate that she was treated by a surgeon, Dr. Vincente Tavarez, who really knew his "stuff." He got about two quarts of junk out of her lung and sent her on the road to recovery with an evacuation technique rather than by cutting on her as urged by other doctors. His son, also Vincente, was a classmate of our son, Russ, and they and Steve used to do things together (which is enough material for another book in itself). Dr. Vincente was a real patriot, and often said that he appreciated what I was doing and he did what he did for us in honor of that. In fact, not too much later he joined the USAF Reserves and served as a Surgeon in San Antonio on weekends. He certainly didn't do it for the money - he had plenty of that. He did it out of a feeling of patriotism - a great guy. Ironically and sadly, he died at an early age from prostate cancer that also migrated into his lungs. It was he who told the Red Cross that Janey needed to be evacuated from the Valley ASAP for medical reasons so that I could come home early and do just that; hence, for many reasons, we are forever indebted to him.

By the way, before it had deteriorated too much and before she got sick, Janey sold the damnboat for about what we would have gotten for the Studebaker had we kept it, but in the case of the latter we wouldn't have had all the fun (?) we had with the former.

When I got back to the States, I conveyed my frustrations, concerns and recommendations for improvements regarding the AC-47 mission and configuration through the USAF Suggestion Program. I received a very nice response back, albeit a "thanks, but no thanks", saying that an AC-130 had been designed incorporating all my suggestions, and then some; i.e., besides, an ejectable flare box, it has all the features cited in figure 22 and partly visible in the Figure 23 artist's depiction of Spooky and "Specter"; the latter the AC130 designation.

Figure 22

Can you imagine the consternation of the NVN truck driver driving down the Trail fat, dumb, and happy on a cloudy rainy night when all of a sudden his truck explodes? Hence, our AC-47 is to today's Attack Cargo aircraft as the Ford Model-T is to today's autos. However, the evolution may be finis with the advent of the shoulder fired Surface-to-Air Missiles, one of which may have knocked down the one AC-130 I heard about that was lost in Desert Storm. While our missions were hazardous, they were not nearly as hazardous as the jet missions over Hanoi against the big SAMs, or as hazardous as ours would have been if the VC and NVN were armed with these newer weapons.

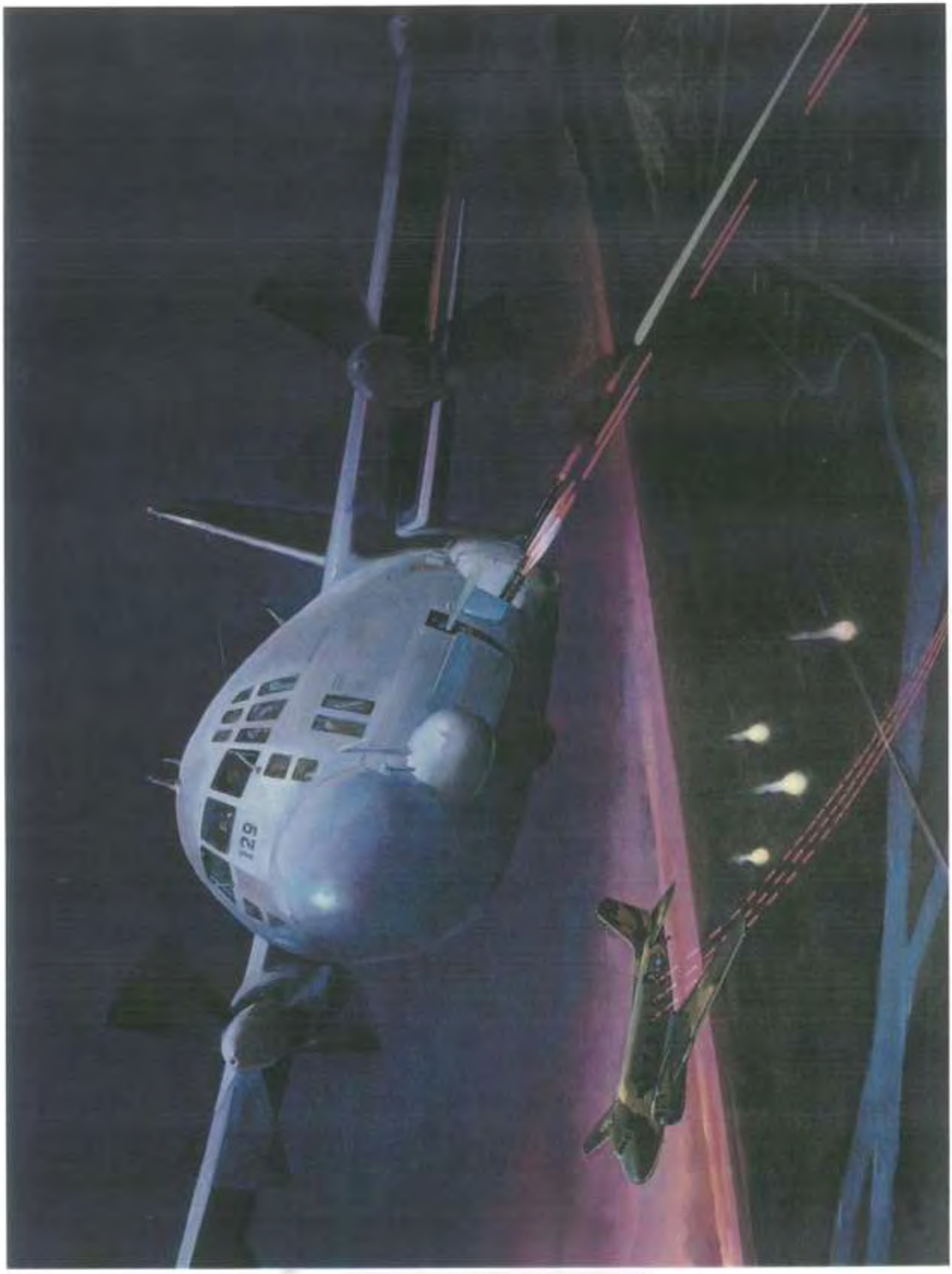


Figure 23

In ten months, I logged about 750 hours - 95% at night in a combat situation. We did not lose very many aircraft while I was there – only the two that I mentioned, and they were due to combat. But they represented about 9% of the total number of aircraft the squadron had, and that's enough to get your attention and cause you to make sure you weren't next, because of doing something stupid. One was lost in '65 in combat before I got there, and a fourth was lost after I left, it due to a poor flare storage/ejection design (if the pilot had been able to eject the burning flares with a switch in the cockpit, the results of at least this last incident would have been different).

In all my SEA flying, there was never an occasion when I didn't have at least one gun to fire when I needed it, and I only experienced one aircraft system malfunction – an inconsequential right engine oil pressure drop near the end of a mission. The pressure drop could have meant oil pump failure with impending engine failure, but it turned out to be only a faulty gage. Pursuing the "If it ain't broke, don't fix it" philosophy, I didn't shut the engine down until we were safely on the ground and taxiing on the runway. Because of the difficulty with directional control of a one-engine-out, tail wheeled, twin engine aircraft (versus that of a similar nose wheeled aircraft), we had to be towed to our parking area by a tug, but not before the crew chief wore himself out running alongside the tail and pushing against the elevator to hold the aircraft in a semi-straight direction – something I couldn't effect in the cockpit with braking – until we got off the runway. In retrospect, I (and the crew chief) wish that I had waited until we were clear of the runway to shut down the engine. These aircraft and gun performance records were typical throughout the Squadron, and are a testimonial to the quality of the equipment (though some of it very old) that we were provided, and to the care given it by the Squadron's maintenance personnel, crew chiefs, and gunners.

However, one of my gunners was convinced that some day (night) we would have an engine failure on takeoff to the north over DaNang harbor and the China Sea. We were always at max. allowable weight of 29,500 lbs for takeoff at sea level with a crew of six, 8hrs. fuel, 50,000 rounds of ammo, 60 aerial flares and five ground flares. The aircraft seemed to him to labor to gain altitude at Climb Power with two engines, and he didn't believe that we could get back to the base on one engine, even at Max. Power, such that we would have to ditch. Because we didn't carry any water survival gear like life vests, because he didn't know how to swim, and because he had a deathly fear of drowning, he requested (and was granted) transfer to a more land-locked base. He wasn't afraid of combat, just of drowning. I liked the guy and hated to lose him, but what else could I do, after assuring him that we could make it on one engine, besides forward his request?

A few thoughts in closing: The AC-47 anti-personnel, close-air-support mission was, for the most part (even though it was crude by today's standards) well conceived, planned, and executed. The truck interdiction mission had none of these attributes. Even the above, more technologically advanced and sophisticated C-130 version, had little justification for being there. It was like trying to stop an ant hill food supply project by hindering, maybe killing, one ant in the supply chain at a time, randomly, and only after dark. But, we were just a small part of the big picture. Because of diplomacy, B-52 saturation bombing, as was used in North Vietnam, was not possible, and smart bombs didn't exist then. Thus, in Laos in particular, we felt more like a tactical nuisance than a

meaningful part of a strategic effort. In other words, if the Vietnam War can be thought of as a conflict between two cavalries, we were more like a horse fly to their supply train - a pain in the ass, but not really a threat. On the other hand, perhaps we were like a horseshoe nail in our own cavalry's effort - contributing a small, but essential, part thereto. Who knows? But in either case, our lot was not unlike that of the noble futility described in Tennyson's *CHARGE OF THE LIGHT BRIGADE* – "Ours was not to wonder why. Ours was but to do or die." And I (listen to the drum roll) am proud to have been an Air Commando.

The following article, titled "Revolutionary Road", appeared in the March 2008 issue of the Smithsonian Magazine. The first two pages of the article feature a picture of a stretch of the Ho Chi Minh Trail that could very well be the portion I'm talking about in the bottom paragraph on my page 25. The Dong Ha mentioned in the Smithsonian at its page 64 is the same I picture and describe on page 27 through the top third of page 30 of my Memoir.

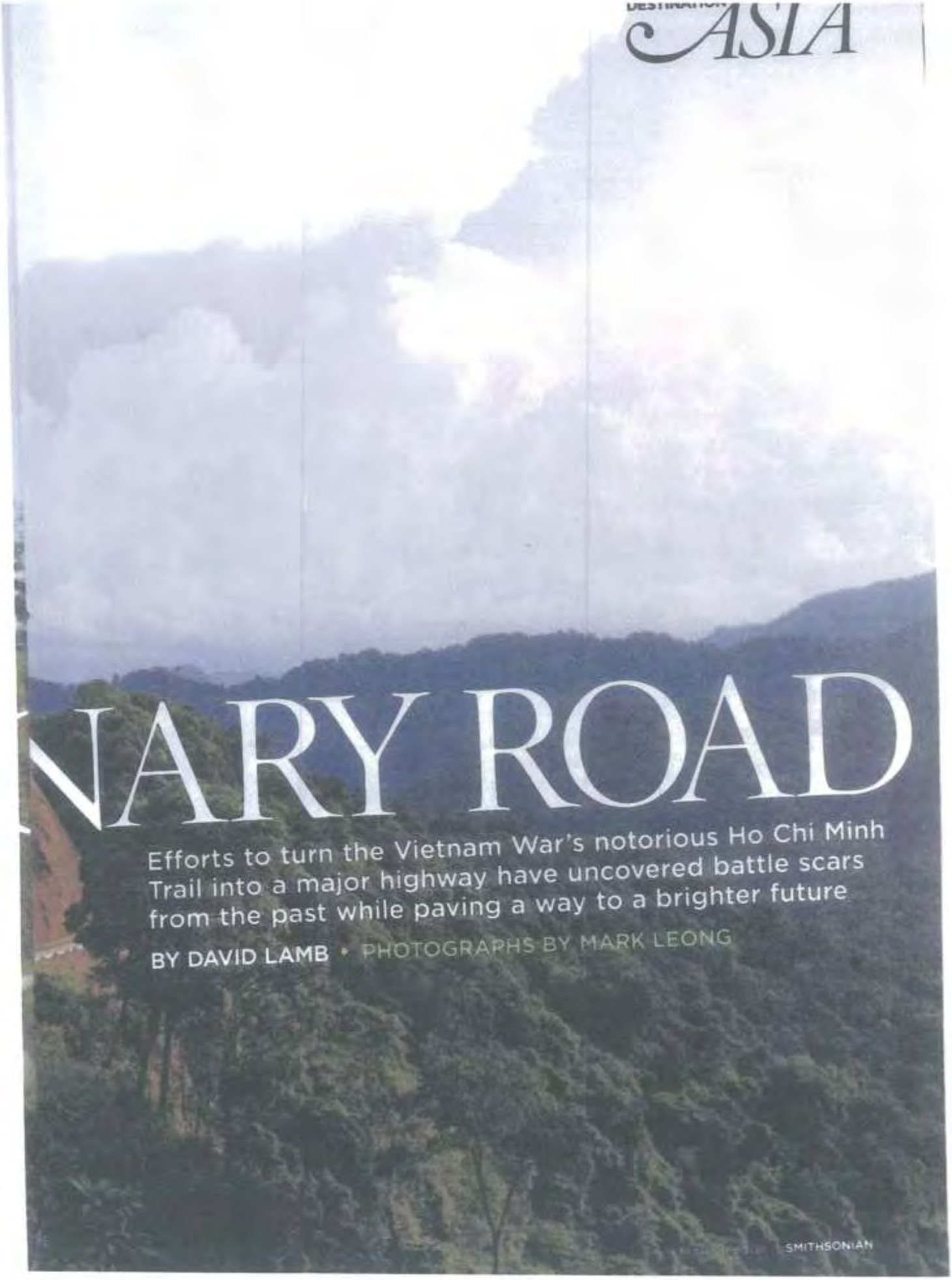
The author of "Revolutionary Road" may have seen only portions of the road and assumed that what he saw at one location (evidence of carpet bombing in the NVN portion for example) was typical for the entire length from NVN to Cambodia. As I cite on page 25, this was not the case in Laos in 1966. It is possible that in later years the agreement with Laos disallowing discharge of ordinance outside of 50 yds. of either side of the road was aborted, but I doubt it.

You may notice other differences (and similarities) with what I have said about the past. In any case, I stand behind what I have written, so read the article for information about what is true now and take comments about the past "with a grain of salt."

March 2008
Smithsonian Institute
Magazine Article

REVOLUTIO

ON THE WARPATH
Where thousands of soldiers turned
Supplies toward the front, a new
road swings through Viet Bac Province



NARY ROAD

Efforts to turn the Vietnam War's notorious Ho Chi Minh Trail into a major highway have uncovered battle scars from the past while paving a way to a brighter future

BY DAVID LAMB • PHOTOGRAPHS BY MARK LEONG

SMITHSONIAN

THE OLD HO CHI MINH TRAIL passes right by Bui Thi Duyen's doorstep in the hamlet of Doi. The hamlet, quiet and isolated, is of no consequence today, but during what the Vietnamese call the "American War," many thousands of northern soldiers knew Doi, 50 miles south of Hanoi, as an overnight stop on their perilous journey to the southern battlefields. The camouflaged network of footpaths and roads they traveled was the world's most dangerous route. One North Vietnamese soldier counted 24 ways you could die on it: malaria and dysentery could ravage you; U.S. aerial bombardments could disintegrate you; tigers could eat you; snakes could poison you; floods and landslides could wash you away. Sheer exhaustion took its toll as well.

When the war ended in 1975, much of the Ho Chi Minh Trail was abandoned. The jungle pushed in to reclaim the supply depots, rickety bridges and earthen bunkers that stretched more than a thousand miles from a gorge known as Heaven's Gate outside Hanoi to the approaches of Saigon. Hamlets like Doi were left to languish, so remote they weren't even on maps. That North Vietnam had been able to build the trail—and keep it open in the face of relentless American attacks—was considered one of the great feats of warfare. It was like Hannibal crossing the Alps or General Washington the Delaware—an impossibility that became possible and thus changed the course of history.

DAVID LAMB, *a writer based in Virginia, is the author of* Vietnam, Now: A Reporter Returns. **MARK LEONG**, *an American photographer living in Beijing, has covered Asia since 1989.*

I met Duyen when I returned to Vietnam last May to see what was left of the trail that bore the name of the country's revolutionary leader. She was sitting under a blue tarpaulin, trying to fan away the breathless heat and hoping to sell a few sweet potatoes and half a dozen heads of lettuce spread out on a makeshift bench. At 74, her memory of the war remained crystal clear. "There was not a day without famine then," she said. "We had to farm at night because of the bombing. Then we'd go up in the mountains and eat tree roots." What food the villagers had—even their prized piglets—they gave to the soldiers who trekked through Doi, pushing bicycles laden with ammunition or stooped under the weight of rice, salt, medicine and weapons. She called them the "Hanoi men," but in reality

TRAILBLAZER
Le Minh Khue once filled bomb craters but now avoids motor scooters on Hanoi streets (above) as "too dangerous."

many were no more than boys.

These days, though, Duyen has things other than the war on her mind. With Vietnam's economy booming, she wonders if she should cut her ties with tradition and swap the family's 7-year-old water buffalo for a new Chinese-made motor scooter. It would be an even trade; both are worth about $500. She also wonders what impact Vietnam's most ambitious postwar public works project will have on Doi. "Without that road, we have no future," she says.

The project, started in 2000 and scheduled to take 20 years to complete, is turning much of the old trail into the Ho Chi Minh Highway, a paved multilane artery that will eventually run 1,980 miles from the Chinese border to the tip of the Mekong Delta. The transformation of trail to highway struck me as an apt metaphor for Vietnam's own journey from war to peace, especially since many of the young workers building the new road are the sons and daughters of soldiers who fought, and often died, on the Ho Chi Minh Trail.

The old infiltration and supply route—which the Vietnamese call Truong Son Road, after the nearby mountain range—wasn't a single trail at all. It was a maze of 12,000 miles of trails, roads and bypasses that threaded through eastern Laos and northeastern Cambodia and crisscrossed Vietnam. Between 1959 and 1975 an estimated two million

soldiers and laborers from the Communist North traversed it, intent on fulfilling Ho Chi Minh's dream to defeat South Vietnam's U.S.-backed government and reunite Vietnam. Before leaving Hanoi and other northern cities, some soldiers got tattoos that proclaimed: "Born in the North to die in the South."

During the war, which I covered for United Press International in the late 1960s, the Ho Chi Minh Trail had an aura of foreboding mystery. I could not imagine what it looked like or who trekked down it. I assumed I would never know. Then in 1997, I moved to Hanoi—the "enemy capital," I used to call it in my wartime dispatches—as a correspondent for the *Los Angeles Times*. Almost every male I met over 50 had been on the trail, and during my four years in Hanoi and on subsequent trips to Vietnam, I filled several notebooks with their stories. They invited me into their homes, eager to talk, and not once was I received with anything but friendship. I came to realize that the Vietnamese had put the war behind them, even as many Americans still struggled with its legacy.

Trong Thanh was one of those who greeted me—at the door of his home, tucked deep in a Hanoi alleyway, with a cup of green tea in hand. One of North Vietnam's most celebrated photographers, he had spent four years documenting life on the Ho Chi Minh Trail and had toured the United States with his pictures in 1991. The images spoke of the emotions of war more than the chaos of combat: a North Vietnamese soldier sharing his canteen with a wounded enemy from the South; a moment of tenderness between a teenage soldier and a nurse who looked no older than 15; three adolescent privates with faint smiles and arms over one another's shoulders, heading off on a mission from which they knew they would not return. "After taking their picture, I had to turn away and weep," Thanh said.

Thanh, whom I interviewed in 2000, six months before his death, pulled out boxes of photos, and soon the pictures were spread across the floor and over the furniture. The faces of the youthful soldiers stayed with me for a long time—their clear, steady eyes, the unblemished complexions and cheeks without whiskers, the expressions reflecting fear and determination. Their destiny was to walk down the Ho Chi Minh Trail. It would be left to their children to be the first generation in more than a hundred years not to know the sounds of battle or the bondage of foreign domination.

"It used to take two or three months for a letter from your family to reach you on the front," Thanh said. "But those were our happiest times on Truong Son, when we got mail from home. We'd read the letters aloud to

THE LONG ROAD SOUTH
The new highway will eventually run down Vietnam's spine, linking already completed sections (below) with luxury hotels in Dong Ha (below right: plans).

each other. Pretty soon one soldier would laugh over something in a letter, then everyone would laugh. Then you'd feel so guilty for being happy, you'd cry, and the whole forest would echo with falling tears."

STORM CLOUDS were rolling in from Laos the morning last May that I left Hanoi with a driver and an interpreter, bound for the former demilitarized zone that once separated North and South Vietnam at the 17th parallel. The bustling capital gave way to rice paddies and fields of corn. An elegantly dressed young woman went by, a live pig strapped to her motor scooter's rear rack. A small red flag of Communist Vietnam fluttered from her handlebar—its five-pointed star representing workers, farmers, soldiers, intellectuals and traders.

"Where's the road south?" my driver shouted to a farmer as we passed through Hoa Lac, 45 minutes southwest of Hanoi. "You're on it," came the reply. So this was it: the start of the new Ho Chi Minh Highway and below it, now covered by pavement, the legendary trail still celebrated in karaoke bars with songs of separation and hardship. No historical plaque marked the spot. There was only a blue-lettered sign: "Ensuring public safety makes everyone happy."

The new highway, which will not stray into Laos or Cambodia as the old trail did, will open up Vietnam's remote western interior to development. Environmentalists fear this will threaten wildlife and flora in national preserves and give access to illegal loggers and poachers. Anthropologists worry about its effect on the minority mountain tribes, some of whom fought on the side of South Vietnam and the United States. Health experts say truck stops along the route could attract prostitutes and spread AIDS, which took the lives of 13,000 Vietnamese in 2005, the last year for which figures are available. And some economists believe the $2.6 billion for the project would be better spent upgrading Route 1, the country's other north-south highway, which runs down the eastern seaboard, or on building schools and hospitals.

EMOTIONS OF WAR
The late photographer Trong Thanh spent four years documenting trail life. After taking a picture of three doomed soldiers (top), he "had to turn away and weep."

But government planners insist the highway will be an economic boon and attract large numbers of tourists. "We cut through the Truong Son jungles for national salvation. Now we cut through the Truong Son jungles for national industrialization and modernization," former Prime Minister Vo Van Kiet remarked, as construction began in April 2000. Most of the 865-mile stretch from Hanoi to Kon Tum in the Central Highlands has been completed. Traffic is light, and hotels, gas stations or rest stops are few.

"It may sound strange, but although it was a terrible time, my four years on Truong Son was a very beautiful pe-

riod in my life," said Le Minh Khue, who defied her parents and at age 15 joined a youth volunteer brigade on the trail, filling bomb craters, digging bunkers, burying corpses and ending each day covered head to toe with so much mud and dirt that the girls called each other "black demons."

Khue, a writer whose short stories about the war have been translated into four languages, went on: "There was great love between us. It was a fast, passionate love, carefree and selfless, but without that kind of love, people could not survive. They [the soldiers] all looked so handsome and brave. We lived together in fire and smoke, slept in bunkers and caves. Yet we shared so much and believed so deeply in our cause that in my heart I felt completely happy.

"I'll tell you how it was," she continued. "One day I went out with my unit to collect rice. We came upon a mother and two children with no food. They were very hungry. We offered to give her some of our rice, and she refused. 'That rice,' she said, 'is for my husband who is on the battlefield.' That attitude was everywhere. But it's not there anymore. Today people care about themselves, not each other."

The road was born May 19, 1959—Ho Chi Minh's 69th birthday—when Hanoi's Communist leadership decided, in violation of the Geneva Accords that divided Vietnam in 1954, to conduct an insurgency against the South. Col. Vo Bam, a logistics specialist who had fought against the French colonial army in the 1950s, was given command of a new engineer unit, regiment 559. Its 500 troops adopted the motto, "Blood may flow, but the road will not stop." The trail they started building was so secret that their commanders told them to avoid clashes with the enemy, "to cook without smoke, and speak without making noise." When they had to cross a dirt road near a village, they would lay a canvas over it so as to leave no footprints.

Before long there were thousands of soldiers and laborers on the trail, hidden under triple-canopy jungle and camouflage nets. They built trellises for plants to grow over, scaled cliffs with bamboo ladders, set up depots to store rice and ammunition. Villagers donated doors and wooden beds to reinforce the crude road that slowly pushed south. Porters stuffed bicycle tires with rags because their cargo was so great—up to 300 pounds. There were makeshift hospitals and rest stops with hammocks.

The United States began sustained bombing of the Ho Chi Minh Trail in 1965. B-52 bombers dropped loads of 750-pound bombs in 30 seconds to cut a swath through the forests the length of 12 football fields. The monster Daisy Cutter bomb could carve out a crater 300 feet in diameter. That same year, a young doctor, Pham Quang Huy, kissed his wife of two months goodbye in Dong Hoi and headed down the trail. He carried the traditional farewell gift that wartime brides and girlfriends gave their departing soldiers—a white handkerchief with his wife's initials embroidered in one corner. So many young men never returned that handkerchiefs became a symbol of grieving and parting throughout Vietnam. Huy did not see his home again—

or even leave the trail—for ten years. His daily ration was one bowl of rice and one cigarette. In all the time he was away, he and his wife were able to exchange only seven or eight letters.

"The soldiers became my family," Huy, 74 and retired from his civilian medical practice, told me. "The most terrible time for us was the B-52 carpet-bombing. And the artillery shelling from the coast. It was like being in a volcano. We'd bury the dead and draw a map of the grave site, so their families could find it. Our equipment was very simple. We had morphine but had to be very economical in its use. Soldiers begged me to cut off an arm or leg, thinking that would end their pain. I'd tell them, 'You should try to forget the pain. You must recover to finish your job. Make Uncle Ho proud of you.'"

TRANQUILLITY REIGNS
A sleepy rest stop could awaken when the Ho Chi Minh Highway reaches Doi. "Without that road," says Bui Thi Duyen (above), "we have no future."

TRYING TO STOP the infiltration of men and supplies into South Vietnam, the United States bombed the Ho Chi Minh Trail for eight years, setting forests ablaze, triggering landslides, denuding jungles with chemicals and building Special Forces outposts along the Laotian border. The Americans seeded clouds to induce rain and floods, launched laser-guided bombs to create choke points and trap truck convoys, and parachuted sensors that burrowed into the ground like bamboo sprouts, relaying data on movement back to the U.S. surveillance base at Nakhon Phanom in Thailand for evaluation. But work never stopped, and year after year infiltration into the South increased, from 1,800 soldiers in 1959 to 12,000 in 1964 to over 80,000 in 1968.

After each aerial attack, hordes of soldiers and volunteers scurried to repair the damage, filling craters, creating bypasses and deliberately building crude bridges just beneath the surface of river water to avoid aerial detection. By 1975, truck convoys could make the trip from the North to the southern battlefields in a week—a journey that had once taken soldiers and porters six months on foot. Antiaircraft artillery sites lined the road; a fuel line paralleled it. The trail made the difference between war and peace, victory and defeat, but it took a terrible toll. Upward of 30,000 North Vietnamese are believed to have perished on it. Military historian Peter Macdonald figured that for every soldier the United

States killed on the trail, it dropped, on average, 300 bombs (costing a total of $140,000).

AS MY INTERPRETER AND I headed south along the new highway, there was nothing beyond tidy, manicured military cemeteries to remind us that a war had ever been fought here. Forests have grown back, villages have been rebuilt, downed fighter bombers have long since been stripped and sold for scrap metal by scavengers. The mostly deserted two-lane highway swept through the mountains north of Khe Sanh in a series of switchbacks. In the distance flames leapt from ridge to ridge, as they had after B-52 strikes. But now the fires are caused by illegal slash-and-burn logging. Occasionally young men on shiny new motor scooters raced past us. Few wore helmets. Later I read in the *Vietnam News* that 12,000 Vietnamese were killed in traffic accidents in 2006, more than died in any single year on the Ho Chi Minh Trail during the war. Peace, like war, has its price.

Sometimes we drove for an hour or more without seeing a person, vehicle or village. The road climbed higher and higher. In the valleys and gorges the ribbon of road flowed south through a parasol of high trees. What a lonely and beautiful place, I thought. A new steel bridge spanned a fast-flowing stream; next to it stood a crumbling wooden bridge over which no soldier's sandals had trod in 30 years. We passed a cluster of tents with laundry drying on a line. It was 8 p.m. Twenty or so bare-chested young men were still at work, laying stone for a drainage ditch.

In Dong Ha, a shabby town once home to a division of U.S. Marines, we checked into the Phung Hoang Hotel. A sign in the lobby inexplicably warned in English, "Keep things in order, keep silent and follow instruction of hotel staff." A segment of the twisting mountain highway we had just driven over had been built by a local construction company owned by an entrepreneur named Nguyen Phi Hung. The site where his 73-man crew worked was so remote and rugged, he said, the earth so soft and the jungles so thick that completing just four miles of highway had taken two years.

Hung had advertised in the newspapers for "strong, single, young men" and warned them that the job would be tough. They would stay in the jungle for two years, except for a few days off over the annual Tet holiday. There were unexploded bombs to disarm and bodies of North Vietnamese soldiers—seven, it turned out—to be buried. The site was out of cellphone range, and there was no town within a week's walk. Stream water had to be tested before drinking to ensure it contained no chemicals dropped by American planes. Landslides posed a constant threat; one took the life of Hung's youngest brother. For all this there was handsome compensation—a $130 a month salary, more than a college-educated teacher could earn.

"When we gathered the first day, I told everyone life would be hard like it was on the Truong Son Road, except no one would be bombing them," Hung said. "I told them, 'Your fathers and grandfathers sacrificed on this road. Now it is your turn to contribute. Your fathers contributed blood. You must contribute sweat.' I remember they stood there quietly and nodded. They understood what I was saying."

I left the Ho Chi Minh Highway at Khe Sanh and followed Route 9—"Ambush Alley," as Marines there called it—toward the Ben Hai River, which divided the two Vietnams until Saigon fell in 1975. Looking out the window of my

CLEARING THE WAY
Ordnance specialists clear bombs and lecture students near Dong Ha (below and center). Billboards (right) exhort citizens to build a modern country.

SUV, I was reminded of one of the last promises Ho Chi Minh made before his death: "We will rebuild our land ten times more beautiful." If by beautiful he meant prosperous and peaceful, his pledge was being fulfilled.

Factories and seafood-processing plants were going up. Roads built by the colonial French were being straightened and repaved. In the towns, privately owned shops had sprung up along the main streets, and intersections were clogged with the motorcycles of families who couldn't afford a pair of shoes two decades ago. I stopped at a school. In the fourth-grade history class a teacher was using PowerPoint to explain how Vietnam had outsmarted and defeated China in a war a thousand years ago. The students, sons and daughters of farmers, were dressed in spotlessly clean white shirts and blouses, red ties, blue pants and skirts. They greeted me in unison, "Good morning and welcome, sir." A generation ago they would have been studying Russian as a second language. Today it is English.

Since the early 1990s, when the government decided profit was no longer a dirty word and, like China, opened its economy to private investment, Vietnam's poverty rate has dropped from nearly 60 percent to less than 20 percent. Tourism has boomed, foreign investment has poured in and the United States has become Vietnam's largest export market. A stock market is flourishing. Vietnam still wears the cloak of communism, but today the blood of free-market reform fills its capitalistic heart.

Two-thirds of Vietnam's 85 million people were born since 1975. For them, the war is ancient history. But for their parents, the trail and its rebirth as a highway are potent symbols of sacrifice and loss, of endurance and patience—a symbol as enduring as the beaches of Normandy are to Allied veterans of World War II.

"My greatest pride is to have followed my father's generation and worked on the highway," said Nguyen Thi Tinh, a senior planner in the Ministry of Transportation, who knows every turn and twist of the new road. Her father, a professional singer and saxophone player, was killed in a bombing attack on the trail while entertaining soldiers in 1966. "I'm embarrassed to say this, but if I'd had a gun at

REBEL WITH A CAUSE

HO CHI MINH WAS LITTLE KNOWN to most Vietnamese in 1911 when he boarded a French passenger ship in Saigon as an assistant cook to discover the world. He spent 30 years abroad, working as a pastry chef in Boston, studying in Paris and moving to Moscow, where he became a Communist agent. He traveled through China, Hong Kong and Thailand before returning covertly to Vietnam and setting up headquarters in mountain caves.

Ho—his full name translates as He Who Enlightens—hoped for reunification of Vietnam, which had fought China on and off for a thousand years, spent nearly a century under French rule and had been occupied by Japan in World War II. Ho died at age 79 in 1969, his dream of a united Vietnam still unfulfilled.

SPEEDING FORWARD
While rural Vietnam lags behind, living in poverty and hoping for a brighter future, Hanoi and other cities have produced stunning growth since the war.

the time, I would have killed all Americans," she said. "Then I realized that the same thing that happened to my family happened to American families, that if I had lost my son and I was an American, I would have hated the Vietnamese. So I buried my hatred. That is the past now."

We talked for an hour, just the two of us in her office. She told me how in 1969 she had gone—during a bombing pause—to the battlefield where her father died. With the help of soldiers, she dug up his grave; his remains were wrapped in plastic. Among the bones was a tattered wallet containing an old picture of him with her—his only daughter. She brought him home to Quang Binh Province for a proper Buddhist burial. As I got up to leave, she said, "Wait. I want to sing you a song I wrote." She opened a notebook. She locked her eyes with mine, placed a hand on my forearm and her soprano voice filled the room.

"My dear, go with me to visit green Truong Son.
We will go on a historical road that has been changed day by day.
My dear, sing with me about Truong Son, the road of the future.
The road that bears the name of our Uncle Ho.
Forever sing about Truong Son, the road of love and pride."

IN A FEW YEARS THE HIGHWAY will reach Ho Chi Minh City, formerly known as Saigon, then push on into the Mekong Delta. I left my interpreter and driver in Hue and caught a Vietnam Airlines flight to Ho Chi Minh City. April 1975 and Saigon's last days flashed to mind. Thirty-two years ago, I had spread out a map on the bed in my hotel near South Vietnam's parliament. Each night I had marked the advancing locations of North Vietnam's 12 divisions as they swept down the Ho Chi Minh Trail to the city's doorstep. The end of the war was at hand and it would come amid chaos but with surprisingly little bloodshed.

"I was 12 miles north of Saigon with the 2nd Division before the final advance," said Tran Dau, a former North Vietnamese officer living in Ho Chi Minh City. "We could see the lights of the city at night. When we came in, I was surprised how modern and prosperous it was. We had been in the forests so long that anyplace with pavement would have seemed like Paris."

Dau knew how harsh Hanoi had been toward the South in the nightmarish 15 years following reunification. Southerners by the hundreds of thousands were sent to re-education camps or economic zones and forced to surrender their property and swallow rigid communist ideology. Hanoi's mismanagement brought near-famine, international isolation and poverty to all but the Communist Party elite. In 1978, Vietnam invaded Cambodia, overthrowing the regime of dictator and mass murderer Pol Pot, then, in 1979, fought off invading Chinese troops in a month-long border war. Vietnam stayed in Cambodia until 1989.

The former colonel shook his head at the memory of what many Vietnamese call the "Dark Years." Did he encounter any animosity as a victorious northern soldier who had taken up residency in the defeated South?

He paused and shook his head. "People in Saigon don't care anymore if their neighbor fought for the South or the North," he said. "It's just a matter of history." ○