

Vietnam

**September 1971 -
June 1972**

Julius F. Ariail



Photography and text by Julius F. Ariail

Graphic design by Julia C. Ariail

Published September 7, 2021

Updated November 19, 2021

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Introduction

The dates are so clear in my military personnel file. On September 7, 1971, I arrived in South Vietnam. On June 22, 1972, I returned to the United States.

Between those two dates, I served as a first lieutenant in the U.S. Army assigned to field artillery combat units in support of the government and armed forces of South Vietnam. After fifty years, I can remember most of what I did, but not everything. I can remember most of the locations where I was stationed, but not all of them. Of what I can remember, the faces of the men with whom I served are the most vivid. I have forgotten none of them.



From the fall of 1967 to the spring of 1968, I was a graduate student at Yale University. During that time, I was deferred from the draft because of my educational program, but when that deferment policy ended in 1968 I decided to volunteer for military service rather than wait to be drafted so I could choose my branch of service and military speciality. I remember that I decided on the Army because my father had served in the Army in World War II, and field artillery because it seemed to be an exercise in solid geometry, which I had enjoyed in my high school classes. Starting in January, 1969, I was in various training courses, culminating with being commissioned as a second lieutenant in October, 1969. My initial duty station was at Fort Benning, Georgia. I received orders to report for duty in Vietnam on September 7, 1971.

For convenience throughout this book, I am going to use “Vietnam” to stand for “South Vietnam,” a sovereign country that no longer exists. When the war ended with the fall of Saigon

on April 30, 1975, the two separate countries of North and South Vietnam that had been artificially separated at the close of World War II were reunited to form the Socialist Republic of Vietnam. This is not a book about the long history of the war, or about the reasons for our military presence there. It is only about my experiences in the U. S. Army on duty there.

While in Vietnam, I regularly took 35mm slide photographs using a single lens reflex camera equipped with wide angle and telephoto lenses. Those slides were stored away when I came home and remained in storage during subsequent moves over the years. Given that the slide format had fallen out of favor, I looked at some of them from time to time, but never organized them into a coherent whole.

As slide scanning equipment for home use became more common several years ago, I experimented with scanning a few slides to convert them to digital images, but the resulting quality was not satisfactory. Now that scanning equipment has gotten better, I have recently scanned all of the slides. The passage of time has caused some of the original images to deteriorate, both in color fidelity and in occasional degradation of the image surface. I have done some slight editing to restore the color cast back to what I remember it might have been, but have chosen not to fix the occasional spots and speckles that were caused by age. Images that lack proper focus are included if needed to support the narrative of a particular time or place.

I have arranged the photographs in this book to tell the story as best I can of where I was and what I did, and have added captions to supply whatever explanatory details I can recall of an experience that is now fifty years in the past.

This book is dedicated to the memory of the late Laura Boddiford Ariail (1947-2000), who endured the months I was stationed in South Vietnam with infinite patience; to Phyllis and John Hiers, who regularly corresponded with me while I was there; and to Julia Claire Ariail, who



**Lawrence M. Sullivan
in Vietnam, 1970**

inspired me to scan and organize these photographs and who is responsible for the graphic layout of this book.

It is additionally dedicated to the memory of the late Lawrence M. Sullivan (1947-1970), with whom I served for several months in a field artillery unit at Fort Benning, Georgia, while we were both training for our upcoming assignments in Vietnam. He was killed in action on October 13, 1970. His name may be found with all of our other fallen comrades-in-arms on Panel 7W, Row 133 of the Vietnam Memorial. Thoughts of our friendship at Fort Benning and of his death in combat were ever present while I was in Vietnam, and remain with me to this day. When you visit the Vietnam Memorial, look for his name and tell him I sent you.

And to my eight grandchildren, for whom this book was made:

For you, may this never be the way.

**Julius F. Ariail
September 7, 2021**



Julius Ariail at the Vietnam Wall in Washington, DC, August 3, 2016. Photograph by Julia Ariail.



Just before landing at an Air Force base in South Vietnam, my incoming flight from the US passed over this landscape marked by bomb and artillery shell craters.



The entrance to the replacement unit near Saigon. When I received orders to go to Vietnam, most soldiers went as individuals and were assigned to field units after they arrived depending on the need at the time. I knew no one on my flight, and knew no one in my first artillery unit when I received my initial assignment to join it in the field.



The U.S. military's base camp near Saigon.



A field artillery battalion headquarters building. A battalion had three batteries with from four to six artillery pieces in each battery. The batteries were located on remote fire bases. Often a battery would be split into two units on separate fire bases, with from two to three pieces in each location. Each of those split batteries was commanded by a first lieutenant, which was my rank and my assignment.



The living quarters for field artillery officers and enlisted men at a base camp. The buildings were surrounded by sandbags and barrels filled with dirt as protection against rocket attacks. The bunker that is completely covered by sandbags offered more protection during an attack. Most of it was underground.



Another view of protective bunkers behind living quarters.



These perimeter bunkers for the base camp were manned at all times.



The headquarters for a transportation unit in the base camp.



A Chinook helicopter, used to transport troops and equipment to and from the field.



A Cobra helicopter armed with machine guns and rockets.



This radar unit at the base camp could track the trajectories of incoming rockets fired by enemy soldiers and pinpoint their firing locations so that they could be attacked.





My initial assignment in South Vietnam was to command the field artillery unit at Fire Support Base Andrews. We had two of these 8" self-propelled cannons in our unit. Each could fire a shell that weighed 200 pounds about 15 miles. To see a map of this location, go to page 307.



Andrews was on an extremely flat plain, and it was frequently flooded by near-daily rainstorms. There was no way for the rain water to drain away from the fire base. It was a miserable location.



Our living quarters on Fire Base Andrews.



We tried to dry our wet uniforms on fencing erected inside the fire base as a protection from rocket-propelled grenades launched by Viet Cong soldiers. If a rocket-propelled grenade hit one of these fences, it would explode before it reached its target.

For another fence like this built on another base, see page 107.



The entrances of two living quarters at Andrews. The roof structure was made of pieces of metal culvert covered by sandbags, and the floors were sheets of metal planks normally used for helicopter landing zones.

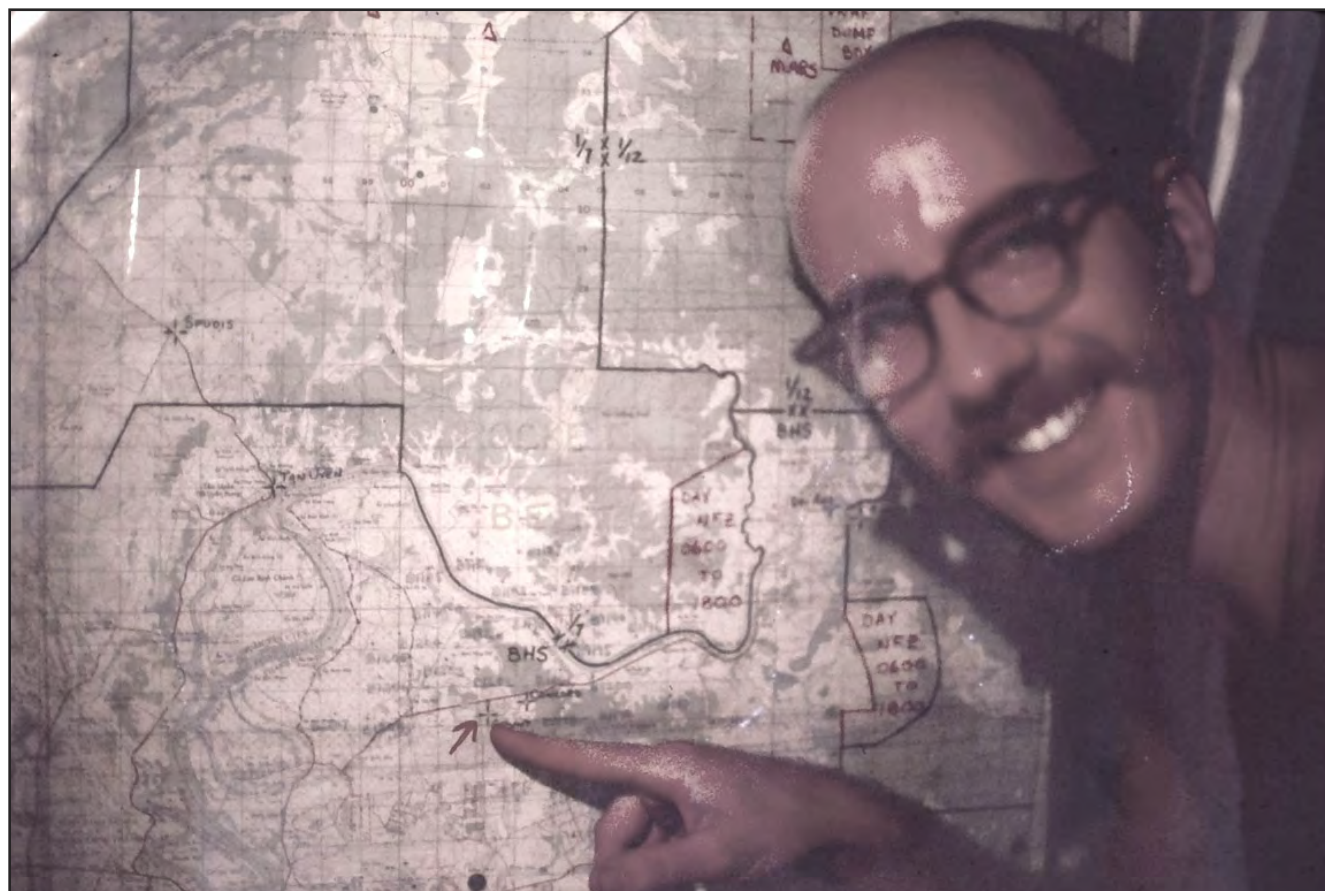


The ammunition storage bunkers were frequently flooded by rain.

The mountain in the distance, the core of an ancient volcano, was named Núi Ba Den, or the “Black Virgin Mountain.” After the war, the mountain became a nature park. To show you how flat the terrain was here, that mountain was approximately 17 miles away.



The flat-sided vehicle is a mobile fire direction center or FDC, for the artillery unit. The men in the FDC determined the coordinates of a designated target and the commands necessary for the artillery crews to hit that target. The flag is for the state of Colorado. State officials would often send flags to men from their home state free of charge upon request.



One of the target plotting maps in the fire direction center. The crew member is pointing to the location of Fire Support Base Andrews.

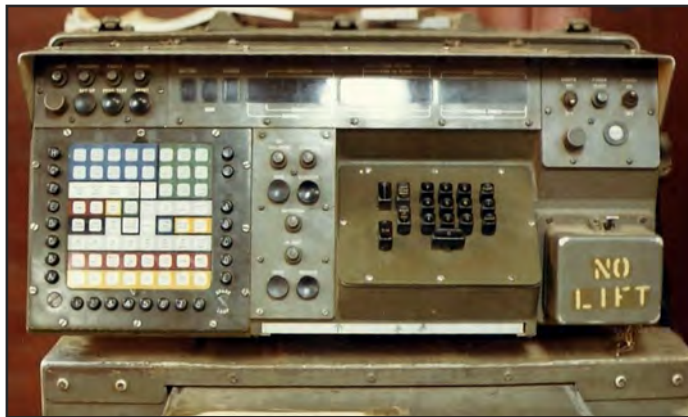


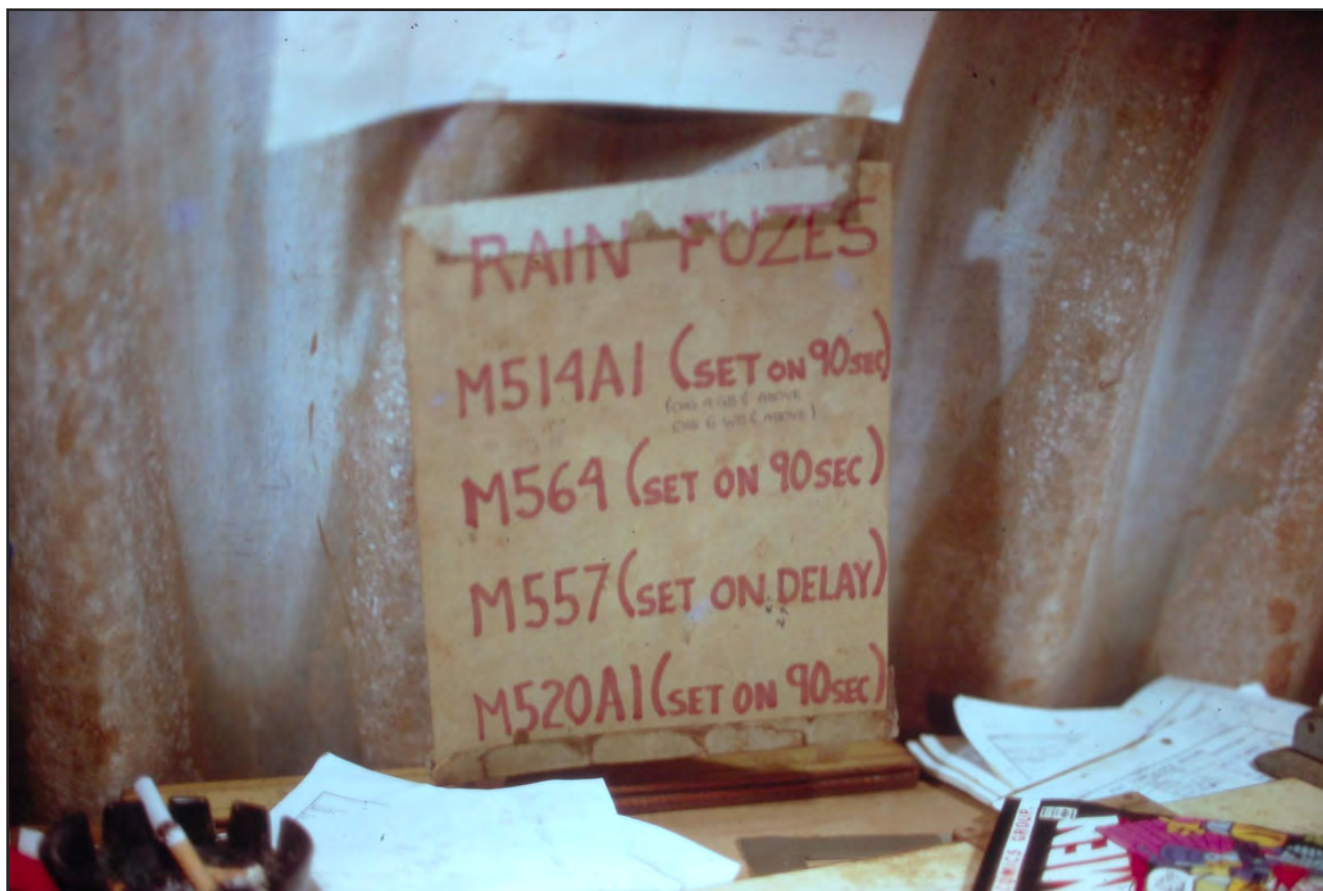
Another target plotting map. Andrews is in the center, and the outermost red circle shows the maximum range of our two 8" artillery pieces. The yellow circles show the maximum ranges of nearby artillery units we could call upon for support if attacked. The red crosshatched areas marked NFZ are no fire zones, usually rubber tree plantations, into which we were normally not allowed to fire.



An enlisted man in the fire direction center. Much of the time was spent waiting for a fire mission, a command from higher headquarters to fire on a certain target in support of combat operations.

To figure out the commands necessary to aim one of the artillery pieces to hit a target, we used an early form of a digital computer, the first I had ever seen. If time was available, we double-checked with manual slide rules. I did not come home with a photograph of that computer, but have placed one below from an official US Army archive. Its official name was FADAC (Field Artillery Digital Automatic Computer), but we called it Freddie.





We often had to fire in periods of heavy rain, and the fuzes on the artillery shells were not designed for such conditions. So we had a handmade chart with rain settings for the fuzes.



On several occasions my artillery unit was ordered to leave a fire support base and set up in the field for a few days to support a combat operation. For this operation, my unit of about 40 men had three 155mm howitzers towed to the site by trucks. The men rode in the open backs of the trucks.



These photographs were taken in the first hour or so after arriving at the field location as the troops worked to set up and properly store away all our equipment. We were usually at field locations like this only two or three days, so just as soon as the site was set up we had to take it down again and move to another field location or back to the fire base.



The metal culverts in the foreground were used as shelters at night. Three or four of them put together served as a tent. When we had time, we put sandbags on top for additional protection.



Setting up a field operation.



Setting up a field operation.



The fire direction center in the field. The round tables held plotting maps. We had to be ready to fire within minutes of arrival, even though all of the equipment had not been set up yet.



Filling sandbags to place on top of the metal culverts used as sleeping quarters and around the ammunition storage areas. This was a lower priority than setting up the howitzers and the fire direction center. Often on the first night in the field when not firing the howitzers, we slept in the open, unprotected.



At this field location, we were next to a Vietnamese artillery unit with six 105mm howitzers. About 100 Vietnamese soldiers were there. Their 105mm howitzers were smaller and fired a lighter shell than our 155mm howitzers, but were much more maneuverable.



The ammunition bunker for the 105mm howitzers under construction. The wooden boxes are crates used to transport the 105mm ammunition, and when empty served as building blocks for the ammunition bunker. The long dark tubes each held one 105mm howitzer round, including the shell and the powder. The metal cans held fuzes for the shells.



Our cooks had their own truck, loaded with cooking equipment and food supplies. Initially the food served here would be from pre-packaged ration boxes, but within a few hours the cooks were able to serve a hot meal. I was always amazed at their ingenuity at adapting to field conditions.



From time to time, entertainers from the USO (United Service Organizations) came onto our fire bases. The photographs on the next 15 pages are from several locations where I was stationed.



USO entertainers. They came on helicopters with all of their costumes, instruments, and sound equipment. We built the stage they used and took it down after they left. The canopy on this stage is made of light blankets taken from our sleeping quarters.



USO entertainers. At this location, the canopy was made of parachute fabric.



USO entertainers. The shows usually included music, singing, and a variety of other acts like this ventriloquist and his puppet.



USO entertainers. On the left, a comedian. On the right, a magician.



USO entertainers. I cannot remember much about the types of music played, but it would certainly have included the pop tunes at the time. Each USO show lasted about an hour.



Troops watching USO entertainers. This stage looks more permanent than the other USO temporary stages on other bases, and may have been constructed just for this purpose. On page 137 in this book, there is a photograph of it being used as a temporary PX (Post Exchange), a small general store.



Troops watching USO entertainers. On the right, the men are sitting on top of a small motorized truck, basically a flat table with four wheels and a gasoline engine that was used to transport heavy items within the fire base. The man in the center is leaning on his M-16 rifle, with the barrel resting on the ground — not an approved position but shows how comfortable we were carrying deadly weapons during daily routines.



Troops watching USO entertainers. The four men in the center and left of this photograph had just arrived from a field operation. Two of them are sitting on their packs.



Troops watching USO entertainers.



The USO entertainers always traveled by helicopter. Seated second from right is one of their helicopter pilots. Third from right is a liaison officer escorting the entertainers.



In addition to USO shows, when combat conditions permitted we were also regularly visited by “Doughnut Dollies,” representatives of the Red Cross who came on the fire bases to visit with the troops, play board games with them, and to just sit and talk.



Two Red Cross representatives on a fire base.



Visiting and talking.



Playing a board game.



While en route by helicopter from one fire base to another, I had the opportunity to see a US Army installation on the top of a mountain. The name of the mountain was Núi Chúa Chan. The nearest city was Xuan Loc, about 11 miles to the west, the site of the last major battle before the fall of Saigon on April 30, 1975. A map of this location is on page 307.



Approaching the landing zone on the top of the mountain. After the war, this mountain became a vacation resort, reachable by cable car.



The top of the mountain was a heavily-fortified communications relay point. The US Army controlled the top and the bottom of the mountain, and the enemy controlled the sides. In my next assignment, I was stationed at a fire base near the bottom of this mountain and participated in the defense of the relay point with artillery support fire.



My next assignment was to a fire base near the mountain with the relay station. There were two companies of US infantry there along with another US artillery battery with three 105mm howitzers. My artillery unit had three 155mm howitzers and about 50 soldiers. This jeep belonged to the infantry, and yes, a word on the sign on the back is misspelled. Twice. I did not share this sentiment.



An overview of the fire base, named Crossed Sabers. About 250 soldiers were stationed here. The infantry unit was part of the First Air Cavalry Division, and the infantrymen were quite aggressive on the offense in the field and in defense of the communications relay on top of the nearby mountain. I experienced more combat operations here than anywhere else. For a map of this location, go to page 307.



One of the 155mm howitzers in my artillery unit. It fired shells that weighed 100 pounds about 13 miles. Those shells could kill or injure anyone within 50 yards of impact if that impact area was open ground. Of course, in light vegetation or heavy jungle the effect was diminished. We could rarely see the impact area directly, and depended on spotters with the infantry units on the ground or overhead in helicopters to send us reports.



A 155mm howitzer crew preparing to fire. The mountain with the communications relay on the top is in the background.



The impact of artillery on the side of the mountain. These shells were WP (white phosphorus), which were fired as the initial rounds to check the impact area for the subsequent HE (high explosive) rounds. These WP shells were always fired with timer fuzes to explode in the air since allowing the corrosive phosphorus contents to hit the ground was forbidden. With these rounds, we obviously made a mistake.



Preparing to fire a 155mm howitzer. Two crew members are ramming home the shell.



The moment after firing the howitzer. The barrel has recoiled after the shell headed down range toward its target. A series of hydraulic valves controlled the length of recoil and the return of the barrel into position to load the next shell. Our maximum rate of fire was about four shells per minute, but the usual sustained rate was about one per minute.



Preparing to fire a 155mm howitzer. The crew member on the right is holding the lanyard that triggered the firing pin. Another howitzer is seen to the left rear.



The telescope-like instrument on a tripod on top of the bunker is a collimator, used to aim the howitzer extremely precisely. The crew gunner looked through a telescopic sight into the collimator, and determined the correct deflection (side to side movement). These aiming devices used a circle with increments of 6,400 mils (milliradians, a very small unit of measure), rather than the normal civilian circle of 360 degrees.



Preparing to fire a 155mm howitzer. The gunner is looking through the sight mounted on the left side of the howitzer. Another crew member is lifting a shell into the breech.



The moment of firing the howitzer. The barrel is in full recoil position.



There was another artillery unit on this fire base with smaller, 105mm howitzers. Here a crew is preparing to fire, with the gunner looking through the sight mounted on the howitzer. In the far right, another crew is preparing to fire another howitzer.



The crew chief is signalling with his upraised arm that his howitzer is ready to fire.



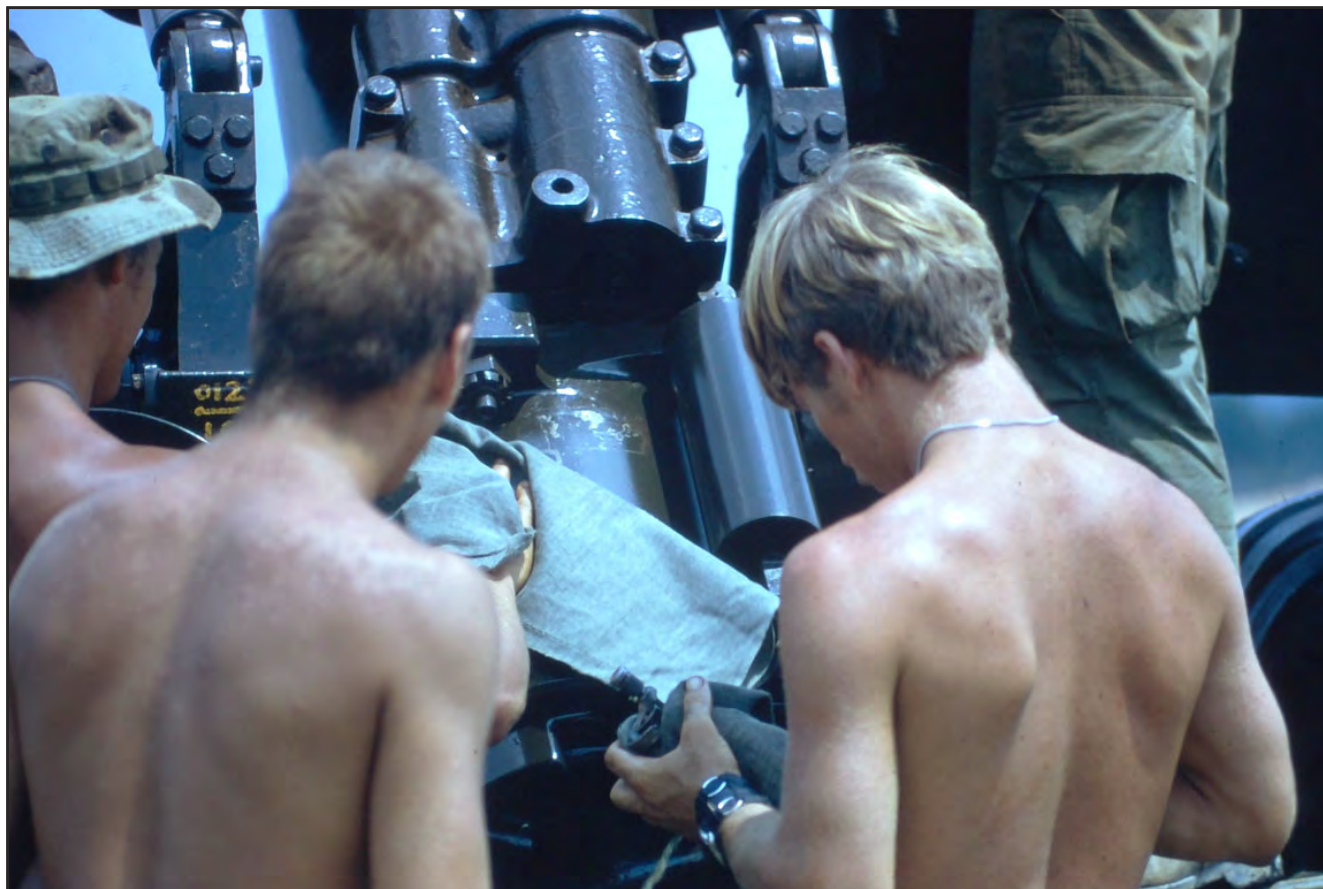
The man on top of the ammunition bunker is looking at his watch preparing to give the command for several howitzers to fire at the same time.



A gunner cleaning the sight on a 155mm howitzer. A spirit level used as part of the aiming mechanism is visible just below the sight.



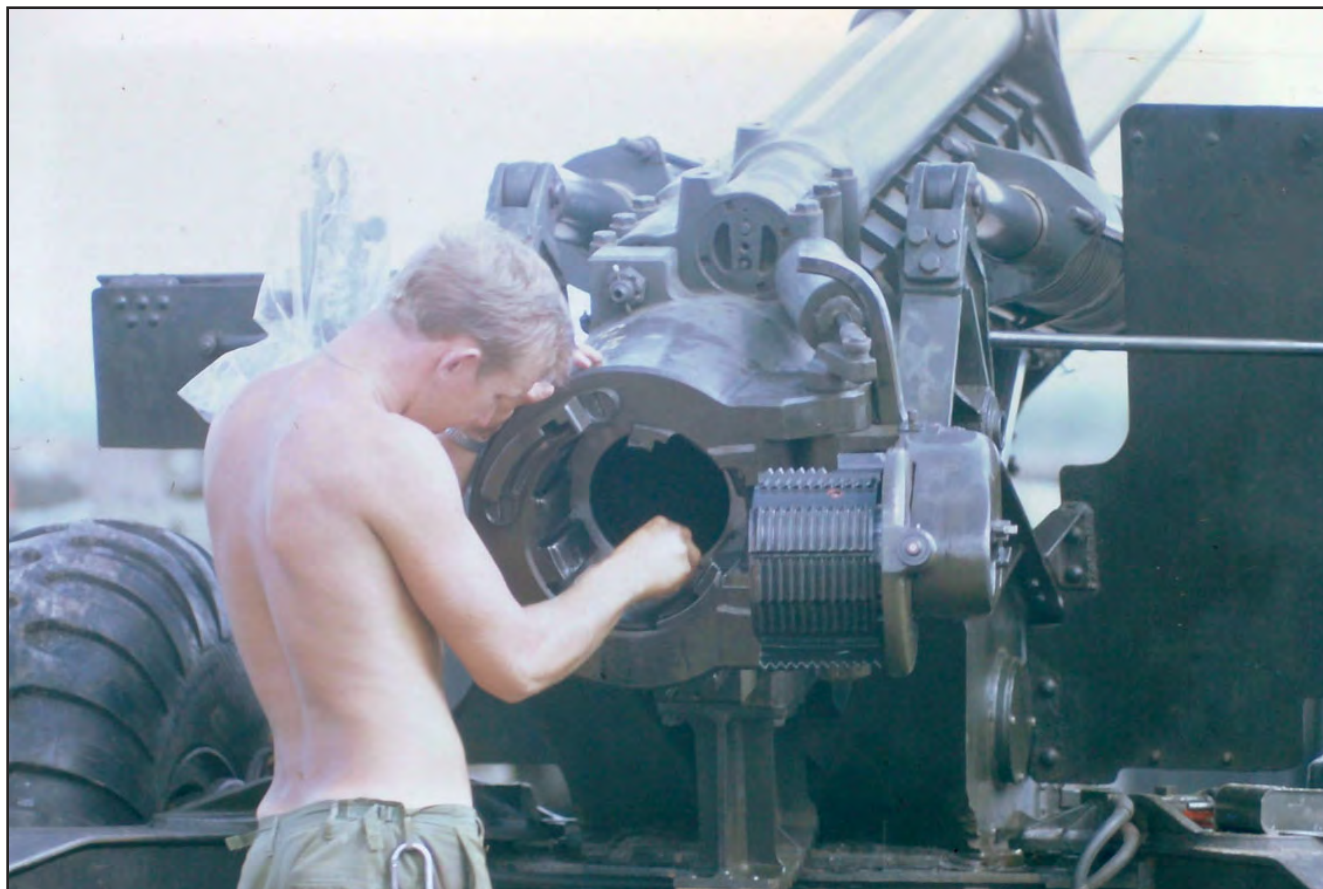
Another gunner is checking the sight on his howitzer. These sights had complicated internal mechanisms and were always handled with care. Even the smallest defect could cause a shell to fall hundreds of yards away from the intended target.



Cleaning the breech mechanism of the 155mm howitzer with empty, never-used sandbag fabric.



More cleaning routines. The crew member on the right has completely disassembled the firing mechanism for cleaning.



Cleaning the interior of the breech. The screw threads on part of the breech mechanism show how tightly that area could be closed to contain the blast produced by firing the shell down range.



A fuze on a HE (high explosive) shell. This has only two settings — “SQ” (Super Quick) and “DE” (Delay). With the “SQ” setting, the shell explodes a few milliseconds after impact. With the “DE” setting, the shell explodes a half-second or so after impact. That setting was used to attack buried fortifications. The setting was changed with a flat-tip screwdriver.



On the left: a timer fuze on a shell. The desired time before explosion could be set in 0.1 second increments up to 200 seconds. These fuzes were used to achieve an air burst above the target. Making the calculations necessary to determine the correct time setting was difficult, since it involved not only the range to target but also the relative elevation of the target above or below the battery's location and the weather between the battery and the target. We had access to daily "winds aloft" reports to help in those calculations. The 200-second time setting was at the extreme, but sometimes we would need it when firing at a target on the other side of a mountain. On the right: high-explosive shells.



On the left: WP (white phosphorus) shells. The one in front is fitted with a timer fuze used to achieve an air burst of white smoke above an intended target. Unless we were trying to achieve complete operational surprise, we would fire one or more of these WP shells first so the spotter on the ground or in the air could verify that we were aiming at the designated target and that our calculations were correct to hit it. On the right: air-tight metal canisters of powder bags for 155mm howitzers. Each canister contained enough powder for one round.



Ammunition deliveries were an almost-daily routine. This is a flatbed trailer with crate of 105mm howitzer ammunition. Each crate contained a shell and a powder canister. After use, the wood in these crates was used in various carpentry projects.



An ammunition truck driver in my artillery unit.

Preparing to unload 155mm artillery shells from the back of a truck. Each shell weighed 100 pounds. If mechanical hoists were not available, each shell had to be unpacked from the transport case and carried by hand from the delivery truck to an ammunition storage bunker next to each howitzer. When in periods of heavy firing to support combat operations, we spent many hours each day on this activity. Everyone in the unit participated in this task — officers and enlisted men regardless of rank or job assignment. Other than firing the howitzers, unloading and storing the ammunition was our highest priority.





An artillery crew member with an ammunition transport truck in the background. The truck is carrying 155mm high-explosive shells.



Two crew members placing sandbags between two types of artillery shells in an ammunition bunker.



This instrument on the tripod is an aiming circle, used to make sure that each howitzer is pointed in the same initial direction toward the general target area. It contains a very accurate compass and a direction measurement device with 6400 mils, much more precise than a usual compass with 360 degrees. It was usually set up on a tower like this which we constructed from 105mm ammunition crates.

Another part of the aiming devices for each howitzer was this collimator, or a device that the gunner could use as an aiming point through the telescopic sight mechanism.

The complete set of aiming devices were the aiming circle, the gun sight, and the collimator. By establishing the angles between those three points, the howitzer could be aimed very precisely. The computations needed to determine those angles were done by the men in the fire direction center using a digital computer but always double-checked manually by slide rules and tables in printed manuals. Except in extreme combat conditions where speed was of the essence, each reading on one of the aiming devices was double-checked by another person.





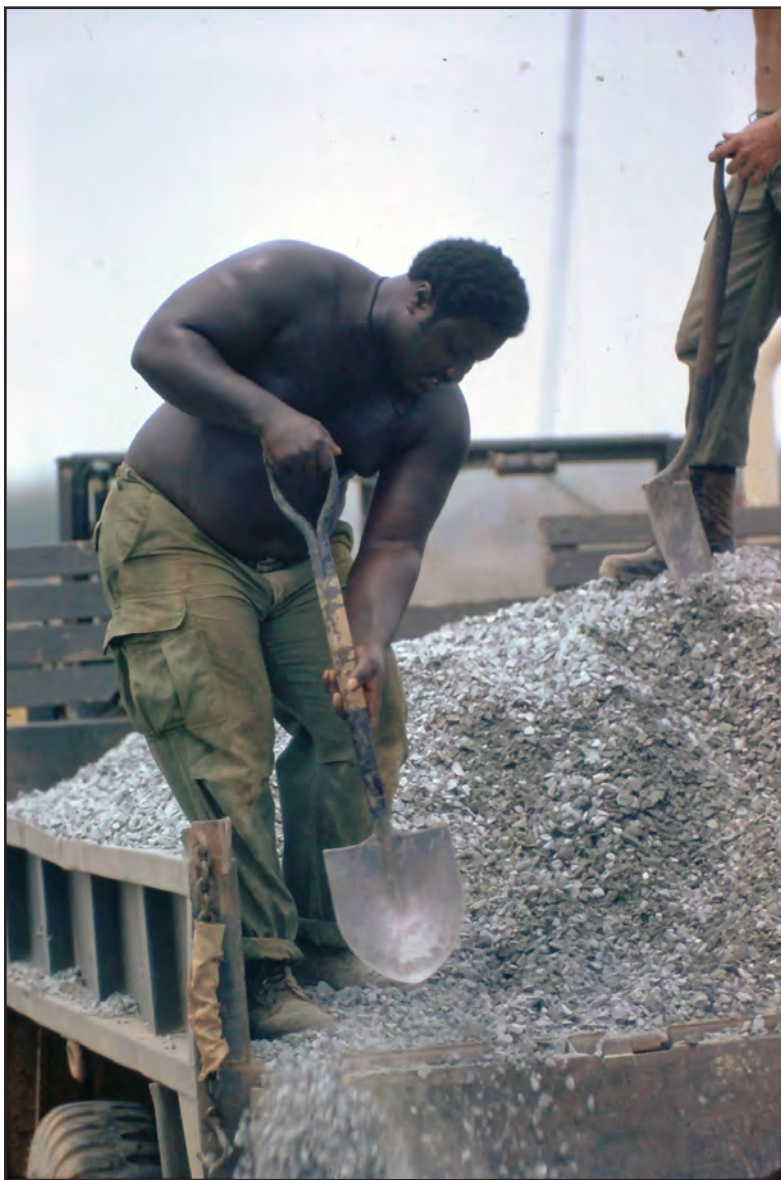
Jacking up the center pivot of the howitzer so that it could be moved to point to a new location.



One characteristic of all artillery emplacements in Vietnam was that each weapon had to be able to fire in any direction at any time. The enemy forces could be in front of us, or behind us, or both. These men are manually lifting one of the rear supports of the howitzer and moving it sideways so that the howitzer could pivot in place to fire at a target in a different direction. The howitzer weighed 6.4 tons, but could be moved from side to side fairly easily due to the central pivot point under the barrel.



The ends of the two supports behind each howitzer had built-in spades to stop the howitzer from moving too far backward during recoil. The men would dig pits for the spades to embed themselves after the first round.



Members of our headquarters unit in the rear sent trucks of gravel to us to spread in the gun pits to provide a steadier footing. Otherwise, the surface of those gun pits would become muddy and slippery during the frequent rainstorms.



Spreading the new gravel in a gun pit. The board on the left with holes is the top of a transport crate of 155mm shells. It was about 4 inches thick and proved quite useful in base carpentry projects. Another photograph of this thick board being used to protect shells during transport is on page 76.



Each artillery round came with enough powder to fire it at maximum velocity to achieve maximum distance. Each powder canister had several bags of powder, and the men in the Fire Direction Center determined how many bags to load with each round to achieve the desired distance. The remaining bags were gathered up and burned in shallow trenches at the end of the day.



Filling sandbags to strengthen tops and sides of bunkers. This work was never completed. There were always more filled sandbags needed.



One of the sleeping bunkers. The sides and top were made from metal pieces normally used for helicopter landing zones, and then were lined by layers of sandbags. The floors were raised to avoid flooding and were constructed from boards salvaged from the 105mm ammunition transport crates.



One of the two surviving photographs of me in Vietnam. At the time, I was twenty-seven years old. I am in an underground command bunker, holding a radio handset, working on what looks like an inventory of artillery ammunition on site. I have no memory of why that television set was there. Certainly there was no television reception in that area, although we did receive regular Armed Forces radio broadcasts. As with many things in my Vietnam memories, the TV is a mystery.



The bunk in my sleeping quarters on December 25, 1971. This was inside a CONEX, or metal shipping container originally used to transport freight aboard ships. This one was in a block of ten that were placed in a deep trench and then covered with metal sheet planking and several levels of sandbags. By my pillow is a radio handset. In the upper left there is a small wooden Christmas tree. I brought it home, and it remains in my set of Christmas decorations.





A bookshelf of paperback books in an underground bunker. The books were donated by people in the US, collected by Red Cross volunteers, boxed up, and shipped to military units all over Vietnam for free distribution to the troops. At any one time, hundreds of these books were available on the fire bases where I was stationed. After all the daily maintenance tasks were completed, we spent a lot of time just waiting for a command from higher headquarters to get the howitzers into action. From first command to first round in the air was often only a few minutes, so we could not get far away from the howitzers. Reading was a favorite activity to pass the time between fire missions. The books were both fiction and non-fiction, on every subject imaginable, and were seemingly packed into the shipping boxes randomly. Opening a box upon arrival on the fire base was always a delight.



I carried a loaded pistol almost all the time while in the field. This is my standard US Army .45-caliber model. I later replaced this heavy pistol with a lighter 9mm Beretta model — unauthorized, but many officers in my unit did the same. The memory of carrying a loaded pistol for so long is the reason I am not comfortable now with children playing with toy guns in my presence. Having experienced the constant presence of a loaded pistol — the real thing — makes me turn away from them now.



This fire base was very close to a major highway, and so we had a robust set of perimeter defenses between us and that highway. This photograph shows a Vietnamese passenger bus driving in front of one of our perimeter defense bunkers. That bunker was made of metal culverts covered in sandbags with a wooden floor made from 105mm ammunition crates, a standard building material.



A convoy of Vietnamese army troops passing on the highway near our fire base. Note the wooden construction with two “X” ends and a long central timber. This was enhanced with rolls of barbed wire (not visible) and used to block the central entrance point to the base until arriving vehicles could be checked by the gate guards.



During the construction of this fire base, bulldozers had pushed back the trees and brush to create a clear field of fire in all directions to help in perimeter defense.



One of the guard posts on the perimeter “berm,” or wall of dirt pushed up to make a protective wall. This guard post was manned every night from dusk to dawn and during daylight hours if security conditions required.



Machine gun ammunition stored in each perimeter bunker and in other locations within the fire base.



Each guard post had a supply of Claymore mines, which were placed in front of the guard post as part of the overall perimeter defense.



Claymore mines in place outside of the perimeter.



Each Claymore mine contained a set of metal ball bearings in front of a layer of plastic explosive. When the perimeter guards armed a mine with a fuze screwed into one of the holes in the top, they would run a length of wire from that fuze to the guard post and stayed alert all night in case of a ground attack. To explode the mine, the guard squeezed a trigger mechanism at the end of the wire.



I mentioned earlier that this fire base had several units assigned for perimeter defense. This is the emplacement of a mortar unit. The plastic sheeting is protecting the sight mechanism on the mortar from rain. Shells from this mortar tube could be fired in a high arc over that perimeter wall to explode in the cleared ground around the fire base. One section of the perimeter berm, or earth wall, can be seen in the background.



Other perimeter defenses included mobile machine-gun units mounted on trucks. Each of these has four .50-caliber machine guns mounted on a swivel base to turn easily from side to side. These machine-gun units could be moved from place to place within the perimeter as combat conditions dictated. We had three of these units on this base.



Another truck-mounted machine-gun unit.



The third of the three machine-gun units. On the right, someone has hung a “flak vest,” or protective body armor. All of us were issued these vests, but we rarely wore them because they were so heavy and hot. The German word “GÖTTERDAMMERUNG” [sic], or “Twilight of the Gods,” refers to the Wagnerian opera. Someone on this crew was a Wagner fan.



An airplane from the US Air Force firing rockets at ground targets near our base. This was always a welcome sight.



The rocket explosions outside our perimeter. From time to time, we would follow up these rocket missions with artillery fire on this same target.

One part of our defenses was the use of chain-link fencing installed within the fire base. These fences would cause a rocket-propelled grenade to explode prematurely before hitting its intended target, perhaps a command bunker or artillery howitzer.

Another fence like this was built on a different base. See page 15.





On the left: two Vietnamese army officers from a nearby base. They had come to our base to meet with some of our officers and men, and to take a group of us on a tour of their base and a nearby orphanage.



The Vietnamese base. The mountain with the communications relay is in the background.



A guard tower at the Vietnamese base.



Distributing candy and toys at the Vietnamese orphanage. This was not planned or conducted well, and we never returned to do it again. Staff at the orphanage made it clear that we were not welcome.



Helicopter operations were a daily occurrence on this fire base. These men with red hats were specialists in rigging the helicopters to carry heavy external loads on slings underneath the helicopter. They cleaned and checked those slings frequently.

These men in black hats were the Pathfinders, trained to be the liaison between the pilots flying overhead and the troops on the ground. They controlled all of the air traffic flying over or near the fire base. This man is holding a radio handset with the radio base unit on the ground by his folding chair.





A helicopter picking up a 105mm howitzer and its ammunition load from our base to ferry it to another field location.



A helicopter carrying a 105mm howitzer and its ammunition load from our base to another field location. Attaching the howitzer's sling to the bottom of the helicopter was a dangerous job. One soldier would stand on top of the howitzer while the helicopter hovered just above his head and then place the end of the sling over a hook hanging down from the helicopter.



A helicopter carrying a 105mm howitzer and its ammunition load from our base to another field location.



Infantry troops waiting to board a helicopter to go to a combat operation in the field. My artillery unit would often support them with artillery fire when they engaged in combat with enemy soldiers in our region.



Infantry soldiers returning from combat operations in the field.



An Infantry soldier returning from combat operations in the field. This man was probably part of a Long Range Reconnaissance Patrol (LRRP) unit, four or five men who would be dropped off by helicopter at a remote location, move stealthily on foot to another location, and then wait in hiding for several days and nights to observe enemy movements.



A member of a LRRP team returning from the field. These LRRP soldiers usually bound the legs of their uniform pants with cloth tapes to minimize noise while moving through heavy vegetation.



A member of a LRRP team returning from the field. We loved to swap rations with them, since the distinctive LRRP meal was an all-in-one dehydrated mixture of rice, beans, some kind of protein, and sauce in a sturdy plastic pouch. To prepare for eating, you poured in about a cup of water — hot if the conditions allowed for heating water, cold if not. To my knowledge, this was the first dehydrated all-in-one meal I had ever seen.



A typical set of battle gear carried by an infantryman on this fire base. The rifle is a standard M-16 model with an attachment under the barrel for firing small grenade rounds. Clips of M-16 ammunition are in the row of cloth sacks on top of the backpack. The belt of machine-gun ammunition would be transferred to the machine gunners in the unit while in combat. Note the two canteens for water.



The infamous Vietnam “boonie hat.” Never an approved uniform item, it was nevertheless allowed to be worn while away from base camp because it provided so much more protection from the heat than the standard uniform “baseball cap.” Of course, the pin with the peace sign was also completely unauthorized but commonly worn — again, away from base camp.



A large generator on this fire base. It usually ran constantly, and provided electricity for the command installations with their extensive communications facilities and also for lights and ventilation fans in the underground sleeping quarters. When it was broken or down for maintenance, the communication units could run for hours on batteries, but our fans were useless, and the nights were hot.



Reading the military's Stars and Stripes newspaper, published almost daily and distributed widely to US troops. Contents included current events in the US and abroad. Other than Armed Forces radio and letters from our families, it was our connection to home.

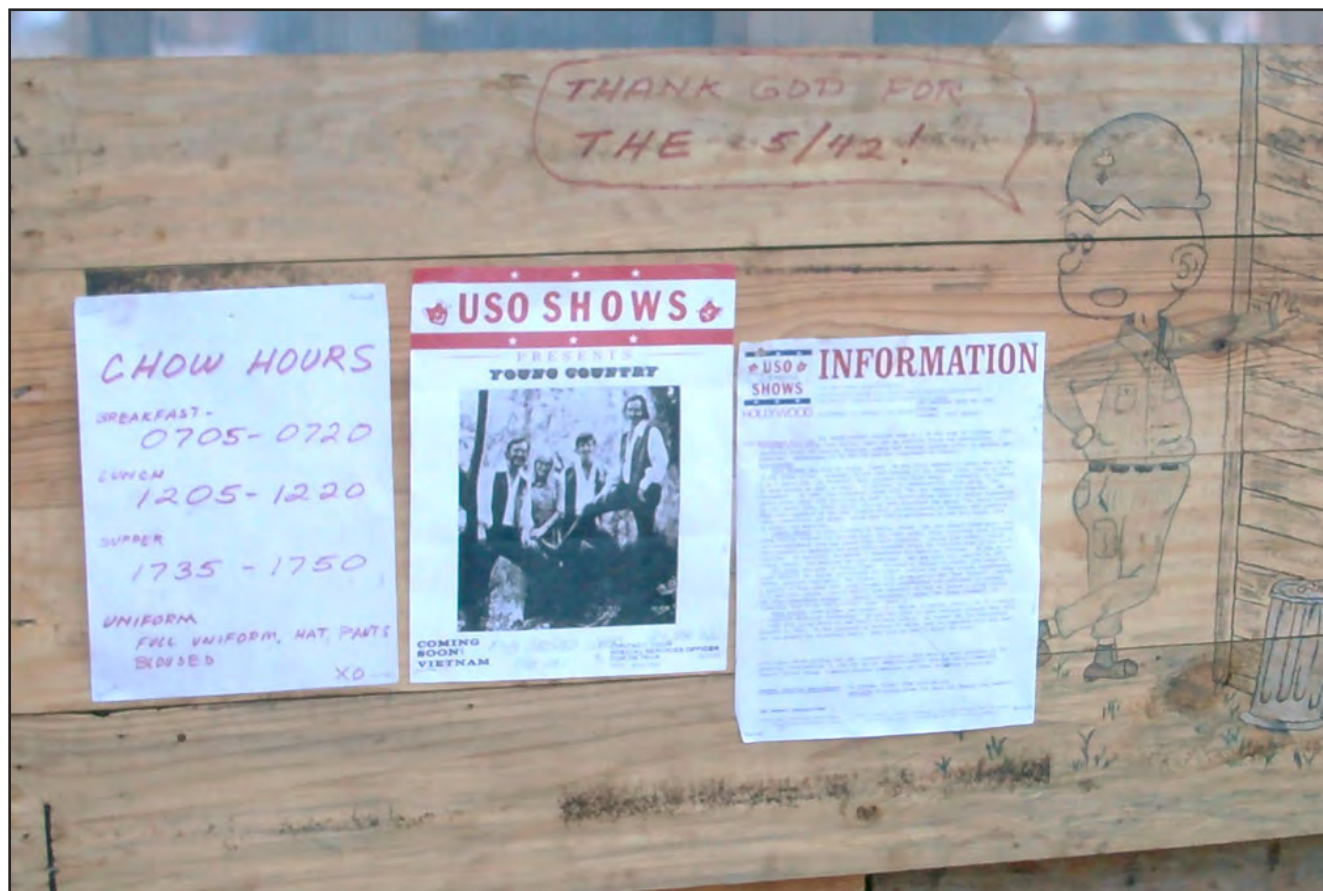
In the background, note the bridge over a drainage culvert made from empty crates of 105mm ammunition.



Cleaning a machine gun in a half-barrel filled with diesel fuel.



Building bunks from wood salvaged from 105mm ammunition crates. The soldier on the right is disassembling one of the crates.



A bulletin board near our mess hall. The meal schedule allowed only fifteen minutes to go through the food line at each meal: breakfast, 7:05-7:20 a.m.; lunch, 12:05 - 12:20 p.m., supper, 5:35 - 5:50 p.m. We ate quickly so we could return to the howitzers and so the cooks could clean the mess hall and move to other duties. The handwriting on the chow hours poster is mine. The illustration of Beetle Bailey was drawn by one of my men.



The interior of the kitchen on this fire base. The floor was made of concrete, so it could be swept and cleaned after each meal.



Cooks at an outdoor barbeque using a half-barrel grilling unit. The metal cans to the left (two are stacked here, one on top of the other) are the standard food transport containers on fire bases or in the field.



Going through a meal line outdoors. The tall canisters held hot and cold liquids, and the cooler with the upraised lid could have held canned soft drinks.



Local Vietnamese workers were hired to wash dishes and cooking vessels outside the perimeter of the fire base using potable water trucked in daily from a rear location or purified on base by truck-mounted water purification units. The motorized transport vehicle was a flat cart with a small gasoline motor that could carry the dirty items outside the perimeter wall and return them when cleaned. Vietnamese civilians were not permitted on this fire base.



A moment of relaxation, playing cards.



A moment of relaxation, listening to Armed Forces radio that broadcast 24 hours a day, seven days a week.



Another moment of relaxation with a goat. Memory fails me on where this goat came from or what happened to it, but I know that it was not a pet on this fire base. Such pets, usually dogs, were common on other fire bases, but were not allowed on this base due to our frequent combat support operations that tolerated few distractions.



Lining up for a vaccination. We had medics attached to our unit, and doctors visited the base from time to time. We took weekly pills to prevent malaria, but this photograph seems to show a vaccination in progress. There was no opt out policy for these vaccinations, and we all carried shot cards showing our complete vaccination record.



On this base, the nearest PX (Post Exchange, or military general store) was about 11 miles away, but we rarely had an opportunity to go there. So from time to time PX representatives would visit our fire base with a small supply of items, mainly specialty food items or entertainment units such as radios, cassette players, and speakers. These troops are lining up to check out the items for sale.



The main ammunition storage bunker on this base. This was for the infantry's weapons. All of our artillery ammunition was stored in our own bunkers next to the artillery pieces.



A CBS television reporter with Vietnamese camera and audio recording crew members interviewing an infantry officer.



In the center: a high-ranking US Army officer, probably a brigadier general, visiting the fire base.

In honor of this or perhaps another distinguished visitor: using white phosphorus shells on timer fuzes to “draw” the initial letter of the visitor’s last name in the air just outside the fire base. In this case, the letter was “K.” Computing the seven different trajectories for the howitzer shells and the settings for the timer fuzes was fiendishly difficult, and getting the result we needed required much practice in the days preceding the visit.

This was not my favorite activity.





A religious worship service on this fire base. Judging from the covered chalice on the table, I think this would have been a Roman Catholic or an Episcopal service. Chaplains were not stationed on this fire base, but visited frequently. Regardless of denomination when ordained, each chaplain could conduct a worship service in any one of several religious traditions. Their visits were always appreciated.



A memorial service for a fallen comrade-in-arms in an infantry unit. I have no explanation for the soldier in the foreground lounging near the sandbagged bunkers. This makes no sense to me, just one of several mysteries in this collection of photographs.



Another memorial service for a fallen infantryman. The rifle squad members on the far left are firing the traditional 21-round final salute.



The soldier in the middle has an unauthorized mustache style. On the fire bases, uniform and grooming standards were often relaxed. He served as our artillery spotter, flying in a helicopter over the target areas to observe the fall of the rounds and to determine if we needed to make any adjustments.



During my Vietnam service, the number of US troops stationed there was steadily being reduced. As a result, units were being deactivated and the remaining soldiers assigned to other units. My artillery battery on this fire base was part of one of those units to be deactivated. It was tradition for the men to gather around and sign several of the last artillery rounds to be fired by us from this location.

One of the signed last rounds. The peace symbol on an artillery shell seems a bit out of place, but it was a ubiquitous presence on every fire base where I was stationed.





My artillery battery at Fire Support Base Crossed Sabers, along with other associated artillery batteries, was deactivated in early 1972 as a part of the gradual reduction in US combat forces. We brought all of our howitzers in from the field and prepared for a deactivation ceremony on a large headquarters base. I do not know if any other artillery battery replaced us at Crossed Sabers, or what became of the mission to defend the communications relay on the nearby mountain top.



Some of our howitzers lined up for inspection as part of the deactivation ceremony. The larger 155mm howitzers are on the right, and the smaller 105mm howitzers are on the left.



A closer view of several of the 105mm howitzers. We wiped the metal surfaces with diesel fuel to clean them and make them shine in the bright sunshine.



Left of center, in khaki uniform: a brigadier general attended the deactivation ceremony.



Some of the men standing in formation representing the several artillery batteries present at the deactivation ceremony. I cannot remember why I was on the sidelines here, able to take this photograph, but perhaps by that time I had been reassigned to another unit and was only observing this event.



Senior officers spoke at the ceremony. Note the Red Cross representative in light blue uniform seated with the Army officers.



The presentation of medals was a part of ceremonies like this.



The flag of the artillery battalion to be deactivated was carefully rolled by the senior enlisted man in the unit. The battalion commander held the staff during this process.



After the flag was rolled up, it was encased in a cloth sack for return to an Army history archive in the United States.



One final salute at the end of the deactivation ceremony.



Before I was assigned to another artillery field battery, I spent some time visiting other fire bases on a variety of temporary assignments. I do not have photographs of my activities on the ground during this time, but I do have photographs taken from some of the helicopter flights to those bases. In this photograph, my helicopter is taking off from a small US airfield.



Flying over fields marked with craters from bombs and artillery shells was common.



A Vietnamese village with a Vietnamese military installation nearby in the darker area.



A rubber tree plantation. As a general rule, we were not allowed to fire into these plantations because it took several years for new trees to grow to maturity, and income from these trees was so important to the local economy. They were usually outlined on our battle maps as NFZ, or No Fire Zones.



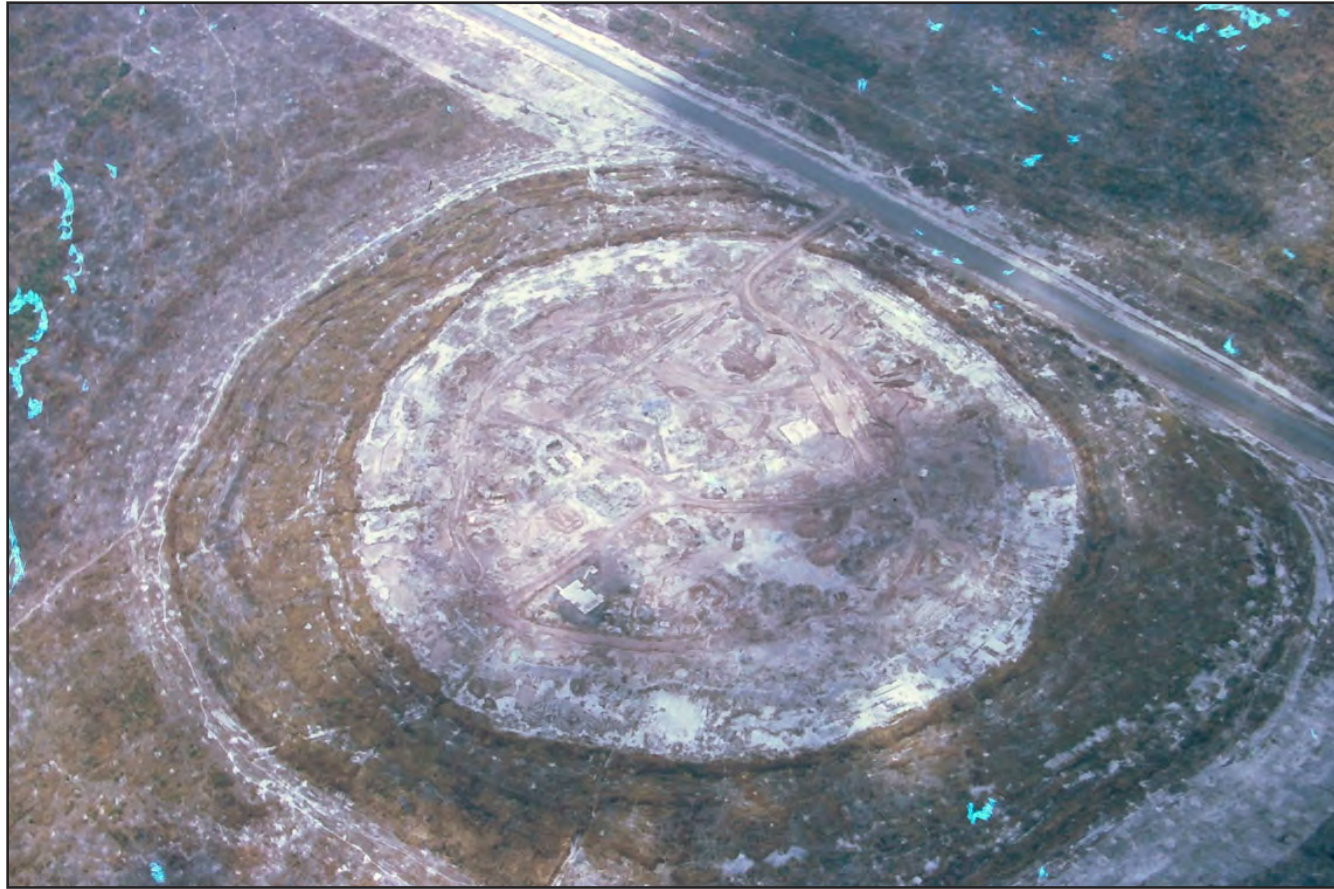
Vietnamese villages were sometimes relocated to areas away from enemy influence. This is one of those relocated villages with new housing along a major highway. Note the small Vietnamese military base on the far right with its perimeter in a triangle formation.



A river with heavy vegetation on both banks. In hostile areas, also called Free Fire Zones or FFZ, boats on rivers like this were considered valid targets for artillery fire. These were difficult fire missions, since we usually fired on stationary targets. Moving targets required difficult trajectory calculations.



Another river with a major city on one bank.



An abandoned fire base.



One common practice of the US military was to spray a potent herbicide called Agent Orange from helicopters and truck-mounted units to kill vegetation along roads where our troops had to travel. This is a helicopter with one of the spray attachment rigs. Later it was discovered that Agent Orange caused a variety of illnesses and birth defects.



A dirt road through a forest where the sides have been sprayed with Agent Orange to kill all vegetation and to provide a clear field of fire for any military convoy that was attacked. When traveling in one of these convoys, I was always grateful for the protection the cleared areas provided. Only years later did I learn of the health effects this herbicide caused not only to our troops but to the South Vietnamese residents, both during the war years and for generations afterwards.



In 1970, US troops in the First Infantry Division, the “Big Red One,” were ordered to carve this replica of the division’s insignia into a heavily-forested section within the division’s operating area. From top to bottom, the replica is 1.5 miles long and 1 mile wide. One of my helicopter flights passed over the area, and I was able to get this photograph. The New York Times article reprinted on the next page makes it clear that this operation had absolutely no military value and was akin to someone carving initials on a tree to say “I was here.” The next page has a copy of the New York Times article about this originally printed on April 5, 1970.

Departing Division Leaves Its Mark in Vietnam

**G.I.'s Bulldoze Strip in Jungle
a Mile and a Half Long in
Form of Unit's Emblem**

Special to The New York Times

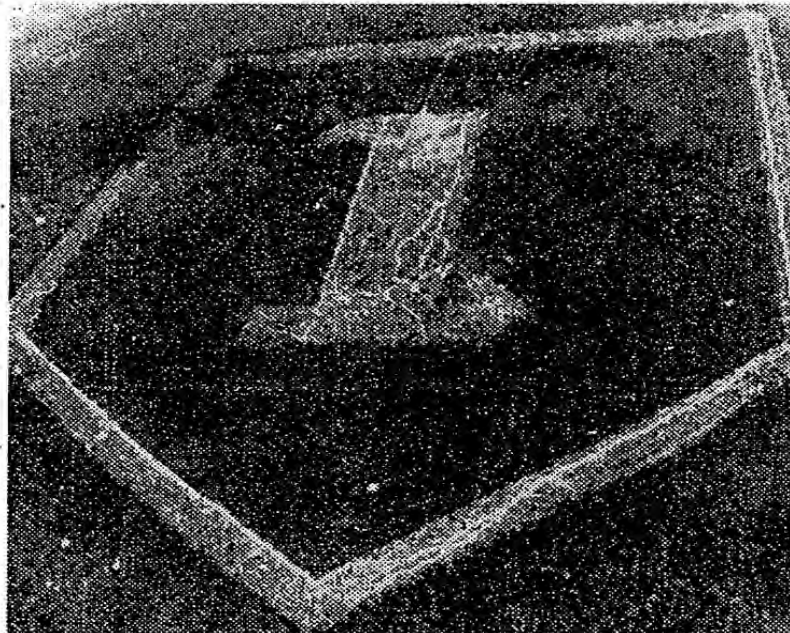
SAIGON, South Vietnam, April 4—The United States First Infantry Division displayed its colors in South Vietnam for the last time yesterday, but the division has left its mark on South Vietnamese soil for years to come.

The mark was a one-and-a-half-mile long, one-mile wide swath of jungle bulldozed into the form of a First Infantry Division emblem—the “Big Red One.”

To the embarrassment of top military officials here, engineers from the division spent six days in mid-February bulldozing out jungle east of the Michelin rubber plantation about 25 miles northwest of Saigon in the form of the division's patch. Three soldiers were reportedly wounded in the operation.

Like a proud boy who had carved his initials in a tree, the officials of the First Infantry Division were about to publicize their achievement at the departure ceremony yesterday, but public relations officers at Army headquarters in Longbinh vetoed the publicity.

The idea to carve their emblem in the jungle was reportedly approved by Maj. Gen. Albert E. Milloy, the division's commanding general. Division officers had reportedly rejected an idea to stage a divisional march down Highway 13 to Longbinh as a parting gesture because of the chance that one enemy rifle shot could turn the whole affair into a public-relations debacle.



The New York Times

Mile-and-a-half-long emblem of First Infantry Division, bulldozed in jungle, is northwest of Saigon, South Vietnam

Although many sections in the area have been bulldozed clear of jungle growth for tactical reasons, the “Big Red One” patch is believed to be without tactical value since there are no clear entrances to it that would allow tanks to enter it with minimum risk of an enemy ambush. Generally, such tank passageways in the jungle involve numerous zigzag cuts to allow for travel in all directions. The “Big Red One” cut has no tactical entrances or exits.

An Army photographer sent to photograph the emblem was reported to have had to fly to an altitude of 6,000 feet to get the entire patch in camera focus with a 28-mm lens.

Army officials today claimed ignorance when asked about the patch and directed all queries to the First Infantry Division information office, Fort Riley, Kan., where the division is to take up residence next week.

The New York Times

Published: April 5, 1970
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After that period of temporary assignments, I was assigned to command a detachment of three 155mm howitzers on a new fire base under construction about two miles away from the major US base and air field near Bien Hoa, a major city east of Saigon. These photographs show my unit moving from that rear area to the new fire base.



A truck loaded with troops and ammunition and towing a 155mm howitzer.



Another view of that truck/howitzer configuration.



On the road to the new fire base, which was named Grunt II. The term “grunt” was a term of affection for an infantry soldier. I suppose that there had been a Grunt I base somewhere else, and this new base was named to continue the memory of that earlier base.



From the new base, we had a clear view of the rear headquarters base and air field about two miles away. One of our main missions was to defend this headquarters area from attack. The other was to support infantry operations in the field within 15 miles or so from the fire base. To see this location, go to page 307.



This sequence of photographs shows a 155mm howitzer being placed on a platform of heavy timbers as a central point upon which it could rotate to fire in any direction.



Backing up the truck with the towed howitzer behind it.



Approaching the center platform. The gun chief on the left of the platform is supervising this activity. If done correctly, the howitzer would be very stable, which was necessary for accurate artillery firing.



The howitzer is in place on the center of the platform. The men are unhooking the towing mechanism and preparing to spread the two trails from side to side.

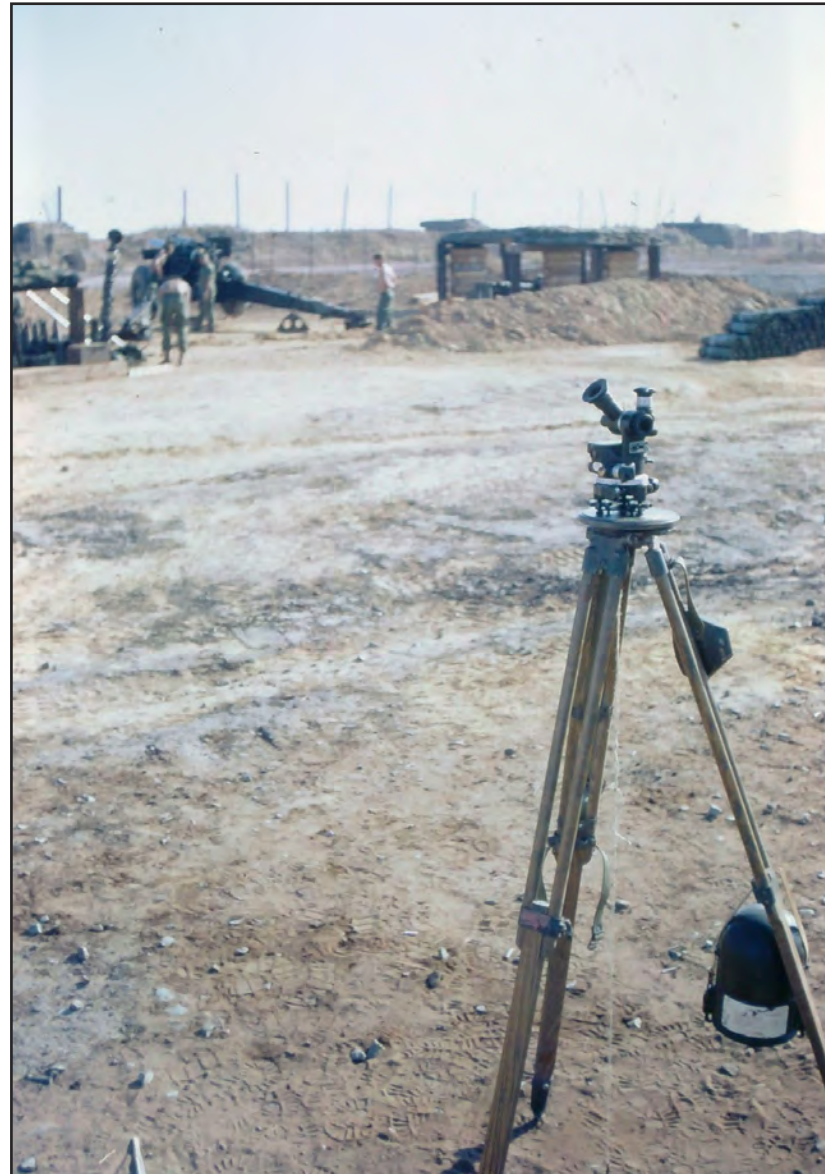


The howitzer is in place, with the center pivot raised and both trails spread apart. This forms a very stable three-point platform to anchor the howitzer in place during firing.



It took several weeks to complete work on the howitzer positions, including the ammunition bunkers. This is a temporary bunker, completed in only a day.

At first, the aiming circles that were used to insure that each howitzer was pointed in the same general direction were placed on the open ground.





Later, the aiming circles were placed on top of a perimeter berm. The dark stain under one of the aiming circles is diesel fuel, spread around the area to cut down on dust.



Finally, a shield of made from metal culverts was erected behind each aiming circle to protect anyone who had to climb onto the perimeter berm to re-orient a howitzer. As the senior artillery officer, that was usually my job. I was grateful for such protection, no matter how slight. The perimeter guard tower on the right was constructed from ammunition boxes. “Grunts II” was the name of this firebase.



Gradually the storage bunkers for the ammunition and a protective wall took shape around each howitzer.



A start on a protective wall of dirt.



The wooden boxes used in constructing the ends of the bunkers were empty 105mm ammunition boxes. They were our “Lego” building blocks. The floor and roof of each bunker were sheets of metal planks normally used to build helicopter landing pads. The men assigned to each howitzer competed for the neatest possible arrangement.



A stack of the empty ammunition boxes used for all types of carpentry projects and heavy construction. The black objects in the left foreground are heavy rubber containers used to transport aviation or diesel fuel. They could be carried on slings under helicopters and placed on the ground near the base without the helicopter having to land itself.



More construction progress on a 155mm howitzer emplacement. The large cylinders on the ground are empty powder canisters from 105mm howitzers. One of these would be placed on top of a metal rod, which was then driven into the ground with a sledge hammer to hold the protective blast walls in front of each ammunition bunker in place.



Note the metal rods holding up the metal sheets of the blast walls.



Until we could get a shipment of gravel to spread around the howitzers, we dripped diesel fuel on the earth to hold down dust and provide steadier footing. This soldier is holding a cloth bag full of diesel fuel with a shower head attached to the bottom. These bags were normally used for water showers in the field away from the bases, but could be converted for other purposes. We were good at these conversions.



A howitzer emplacement nears completion. Note that gravel has arrived.



A completed emplacement. The low perimeter wall was made from empty 155mm powder canisters. After each fire mission, the empty canisters were placed here until the circle was completed with the exception of narrow walkways to enter the area.



Each canister in this protective wall represents one round fired. Given our frequent fire missions, we had plenty of building material.



Another view of a rear protective wall of empty powder canisters under construction. Note the row of tools leaning against the rear of the ammunition storage bunker on the right.



A 105mm howitzer emplacement. These weapons fired lighter shells at shorter ranges than our 155mm howitzers, but also could fire faster than we could since their reloading process was simpler. For our perimeter defense, these howitzers could also fire “beehive” rounds, or small metal arrow-shaped metal rods called “flechettes“ that had the effect of a shotgun blast sprayed in a wide area in front of the howitzer barrel.



A completed 105mm howitzer emplacement. In the background: an observation tower at the headquarters base camp.



A sequence of four photographs showing the steps in the firing of a 155mm howitzer. In this first one, two men have carried a shell to the howitzer on a metal tray, and another crew member is using a long ramrod to seat the shell in the barrel. I remember taking this sequence deliberately to have a record of these separate actions.



In this second photograph, a crew member is inserting a cloth bag of powder, with the red end at the rear. This red end is the section that will be ignited by the firing mechanism. When the powder explodes, the shell is forced out of the barrel. The gunner, sitting on the howitzer, is preparing to look in the sight to set the proper aim.



In this third photograph, the crew chief holds a level on top of the barrel to determine the proper elevation of the barrel. The gunner, seated behind the crew chief, is looking through the sight and using hand wheels to set the elevation and deflection (side to side). Another crew member attaches the lanyard to the firing mechanism.



In this fourth photograph, the crew chief has pulled the lanyard to fire the round down range. The men might or might not be wearing protective ear plugs, and some are using their fingers in their ears for added protection. The physical shock wave of the sound from the firing of a round was as painful as the sound in our ears. The ear plugs supplied by the Army were flimsy and did not seem to offer much protection from the sound of firing.



Another view of the full recoil position of the barrel. Smoke from this and other howitzers firing nearby dims the view in this photograph. More shells with fuzes attached may be seen in the bottom left, in front of the crewman on the far left.



A 105mm howitzer firing. We often watched the other artillery crews to learn from them, and they watched us for the same reason. And, of course, there might have been a bit of friendly rivalry involved.



Since this fire base was under construction when my artillery unit arrived, there were several heavy earth-moving machines in action for several weeks until the construction was finished. We loved seeing these guys and their machines in action, and often told them so.



A small bulldozer. This driver's machine might have been smaller than the others on the base, but he knew how to use it to precisely shape a mound of dirt on the perimeter berm.



A large front-loader used to scoop up dirt from one place on the base and move it to another place.



An excavator digger. This particular machine saved us days of time which would have been spend digging drainage ditches by hand.



This equipment could scrape up large amounts of dirt from one location and move it to another location. Much planning went into insuring that rain water would drain away from our sleeping areas, which were usually underground. A ground survey crew constantly checked the elevation of different sections of ground until they were approved for construction.



Dust from construction. It looks like chaos, but the engineers had a master plan for the site and we loved seeing it emerge day by day.



Finally our sleeping quarters began to take shape. These were rows of metal CONEX shipping containers buried in long rows underground with a central corridor for ventilation. The entrance to one of these sleeping bunkers is on the far right. The excavating machines, especially the diggers, made these trenches for us.



Covering up a row of buried shipping containers to be used as sleeping quarters.



The long structure at the left rear is the mess hall on this fire base. Food was prepared inside and served at the walk-up open windows on the side. On the right is what appears to be a white cloth mounted on sheets of plywood which could have been used to show movies at night. I have no memories of these movies.



Much work was done on installing culverts to drain water away from the sleeping areas and howitzer emplacements. The building to the right rear is a shower.



The shower on the left had a large water tank on a tower beside it. More work on the systems of drainage culverts is underway on the right.



Another water tank mounted on a tower. The mess hall is in the rear, with the serving windows protected by sheets of plastic. Note the two rows of sandbags protecting the top of the mess hall.



Another major construction project on this fire base was the main ammunition dump. Note the steel girders brought in to form the base of the roof.



The roof on the ammunition dump was made of interlocked metal sheets usually used for helicopter landing pads. Later this roof would have several layers of sandbags installed for additional protection.



Shoveling dirt to close in the sides of the entrance ramp down into the sleeping area.



The top of one of our sleeping bunkers. The men are disassembling wooden ammunition crates to make furniture for the rooms underground.



Furniture construction projects underway in several locations. I had several men in my artillery unit who had been carpenters as civilians, and they loved to disassemble ammunition pallets and crates to make items for the underground sleeping areas. One of those ammunition pallets is in the front center of this photograph.



Some sections of the underground sleeping areas were protected from rain water by rolls of tar paper and a roof of light metal sheets. Underneath the tar paper are several layers of sandbags. Note the 155mm howitzer in the left rear of the photograph.



Installing the light metal sheets on top of a roof structure.



After fire missions, the empty ammunition boxes were placed by the perimeter berm for anyone to come and get for construction projects. Given the number of artillery rounds we fired from this base, we never ran out of empty boxes.

One such construction project was making a set of steps down into the underground sleeping area. These steps are ammunition boxes filled with dirt, held in place by metal stakes driven into the earth with a sledge hammer.





After the steps were finished, concrete was spread in the entrance area. At the same time, work was underway on a louvered door assembly that could be closed in times of heavy rain.



One of my master carpenters with his completed louvered door assembly which could be closed in case of rain. The words painted over the door say "OFF LIMITS" in English and Vietnamese. On this fire base, Vietnamese workers were allowed on the base during daylight hours but were never allowed in any of the bunker areas.



After most of the major construction projects were completed, we began smaller projects like these picnic sheds where we could eat a meal in the shade while sitting down on benches at a table. We hired Vietnamese craftsmen to make the thatched roofs and the sides made of woven bamboo strips.



These picnic shelters had handmade tables and concrete floors.



Smoothing the concrete floor in one of the picnic sheds.

Continuing to smooth the concrete floor in one of the picnic sheds.





Painting the sides of one of the sheds. This one had wooden sides made from disassembled ammunition boxes.

This picnic shelter has a concrete walkway from one of the underground sleeping bunkers. This was an unusual luxury, one I never enjoyed on any other fire base. We were proud of having made it ourselves.





This Pathfinder soldier served as one of the air traffic controllers over this fire base. The box beside the seated soldier contains canned food. The Pathfinders often had to remain on duty during mealtimes.

A helicopter coming in for a landing outside the base's perimeter wall. A 155mm howitzer is in the foreground.





A Cobra helicopter armed with rockets in the side pods and a machine gun in the turret under the pilots' cockpit. Two pilots flew in these attack helicopters, one to fly the helicopter and one to control the weapons.



An F-4 Phantom jet passing over our fire base and coming in for a landing at the nearby air base we were assigned to protect.



Four Huey helicopters leaving the base. These helicopters carried two pilots, one or two crewmen, and around six passengers. Most were armed with machine guns on the sides, operated by a crewman sitting in an open doorway. Note one of those machine guns mounted outside a side door of the helicopter on the left.



A Chinook helicopter ferrying a damaged Huey helicopter on a sling attached to a large hook under the Chinook. A Chinook helicopter could transport about 30 troops with their combat gear or carry heavy loads like this helicopter or an artillery howitzer.



A Chinook helicopter approaching the base with a 105mm howitzer and ammunition bag underneath. Note a second Chinook helicopter on the far right nearer the horizon.



The commander of this fire base, a lieutenant colonel in the First Air Cavalry Division, got to park his helicopter right at the entrance. The headquarters base we were defending is visible in the distance at the end of this road.



A Huey helicopter bringing infantry troops back from a combat mission in the field.



Infantry troops leaving their helicopter transport.



Three infantry soldiers resting just inside the perimeter berm of this fire base. The wooden structure behind them is a latrine.



This fire base was close to a Vietnamese village. As a result, our perimeter defenses were strong with multiple layers of barbed wire.



Barbed wire outside the perimeter berm.



Installing the barbed wire. Sometimes we added small flare units to the wire. Each flare was about the size of two D-cell batteries stacked end to end. If touched, a trip wire attached to the flare and the barbed wire would pull away from the flare, which would then ignite and burn intensively to make a bright light for a few minutes. The sound of the trip wire pulling away from the flare was a rapid “click-click,” sort of like the sound of the click of a ball point pen. This is the reason I remain sensitive to anyone clicking a pen behind me now. Even after 50 years, I flinch inadvertently whenever I hear that sound.



Barbed wire outside the perimeter.



Some of the barbed wire was in long single strands with sharp barbs. We unrolled those strands and then strung them from pole to pole. Another form of barbed wire was this concertina wire, which came joined together in large loops with sharp edges similar to razor blades. Thick gloves were necessary to work with this type of barbed wire.



A warning sign about the presence of sentry dogs as part of our perimeter defenses. Note the Vietnamese farmhouses in the tree line in the rear of this photograph.



A posted sign about the alert signals in case of an attack on our base. The most ominous was a red flare, used to signal that the 105mm howitzers were about to fire beehive rounds, the ammunition packed with hundreds of metal arrow-like flechettes that sprayed out directly in front of the howitzer barrel like a shotgun blast.



A column of smoke from a bomb dropped in defense of our base.



On one occasion, a flight of B-52 bombers attacked an area near our fire base. The bombers flew too high to be easily seen from the ground. The impact of their bombs shook the ground around us, much like an earthquake. Even at this distance, we could feel the vibrations in the earth from these bombs. When planning to fire our howitzers in such a manner that the trajectory of the shells would have a very steep arc up and then down, we had to have special clearance from an air traffic controller in the rear to make sure our shells would not interfere with any B-52 bombers or commercial airliner flights in the area.



Since this fire base was so near a large base camp and a Vietnamese city, we had regular laundry service from authorized Vietnamese vendors. The men paid for this service themselves, but the cost was nominal. There was a military laundry service that was free to use, but it was much slower than the commercial Vietnamese service.



A Vietnamese woman reading a newspaper while sitting in the cab of a laundry delivery truck.



A Vietnamese boy on a trash collection truck.

A Vietnamese boy on the back of a metal scrap collection truck.





A Vietnamese bulldozer driver.



Vietnamese troops and one of their trucks from a nearby Vietnamese military base. They were on our fire base to pick up something and move it to their base, but I do not remember what that was.



A truck driver in my artillery unit. His truck is in the background.



Three soldiers in my artillery unit.



Two soldiers in my artillery unit sitting on the front of an ammunition bunker. One is smoking a cigarette, which was not authorized near the ammunition but happened frequently. When properly stored, there was nothing in the howitzer ammunition bunkers that could catch fire easily.



Four soldiers relaxing near a howitzer ammunition storage bunker. The long metal poles sticking upright in strap supports on the wooden boxes are ramrods for the 100-pound howitzer shells. We always stored them away from the ground so that no dirt could be inadvertently carried into the breech mechanism when the round was rammed into place.



There was a map of the United States in one of the picnic shelters, and men used it to show the location of their home towns. This soldier was from Utah.



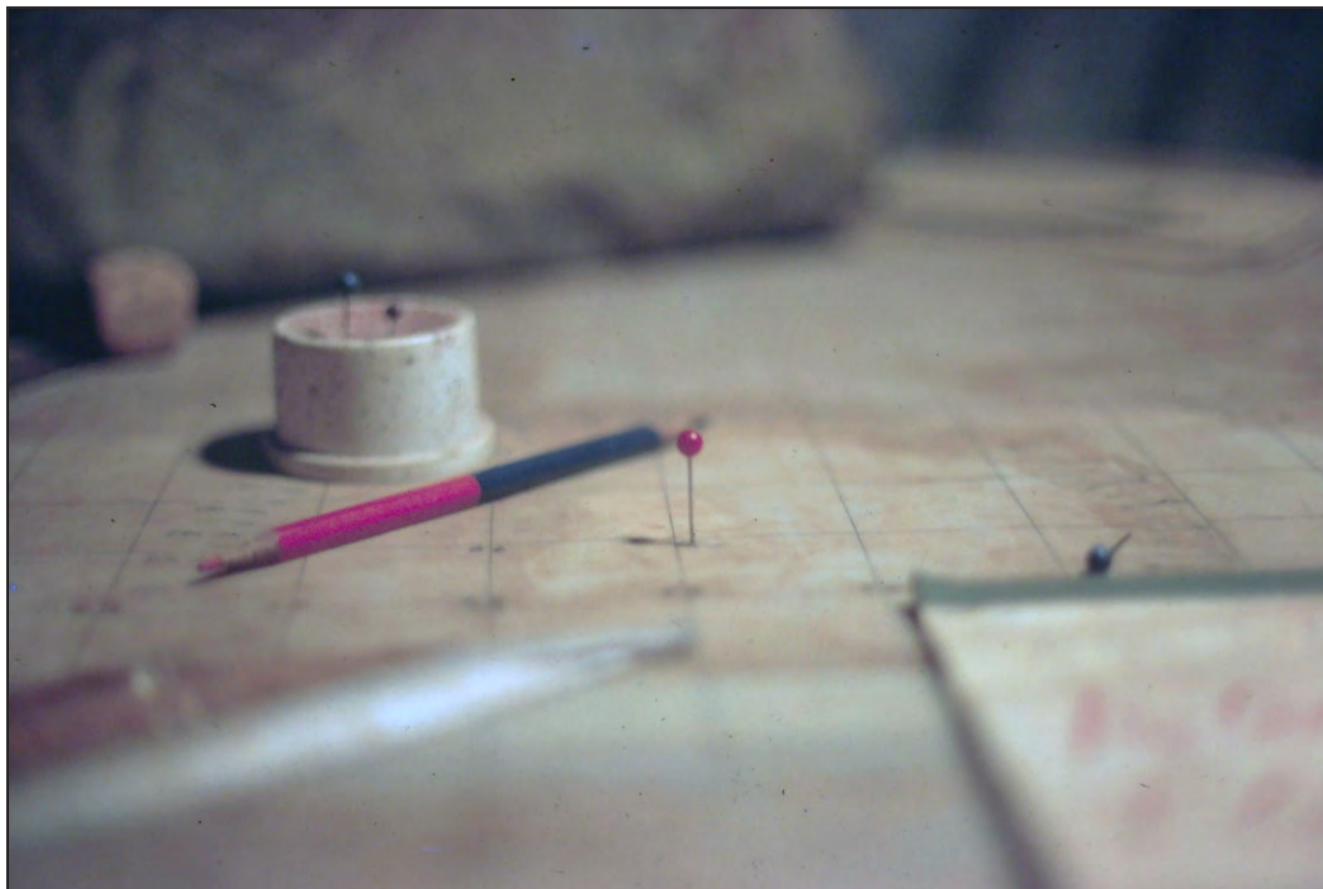
A basketball court on the base. I am not sure if the device with the antenna in the background was a radar unit or a satellite transmitter/receiver, but the men who worked with it were based in the small building on the left. Note the use of wooden ammunition crates to protect the sides. Those crates would be filled with dirt for this purpose.



Given all the helicopter traffic at this base, there was an open-air shed where the straps for carrying cargo were stored. The rounded buildings to the right were pre-fabricated assemblies that were trucked onto the base and unloaded by a crane. These were used mostly for storage of small equipment items.



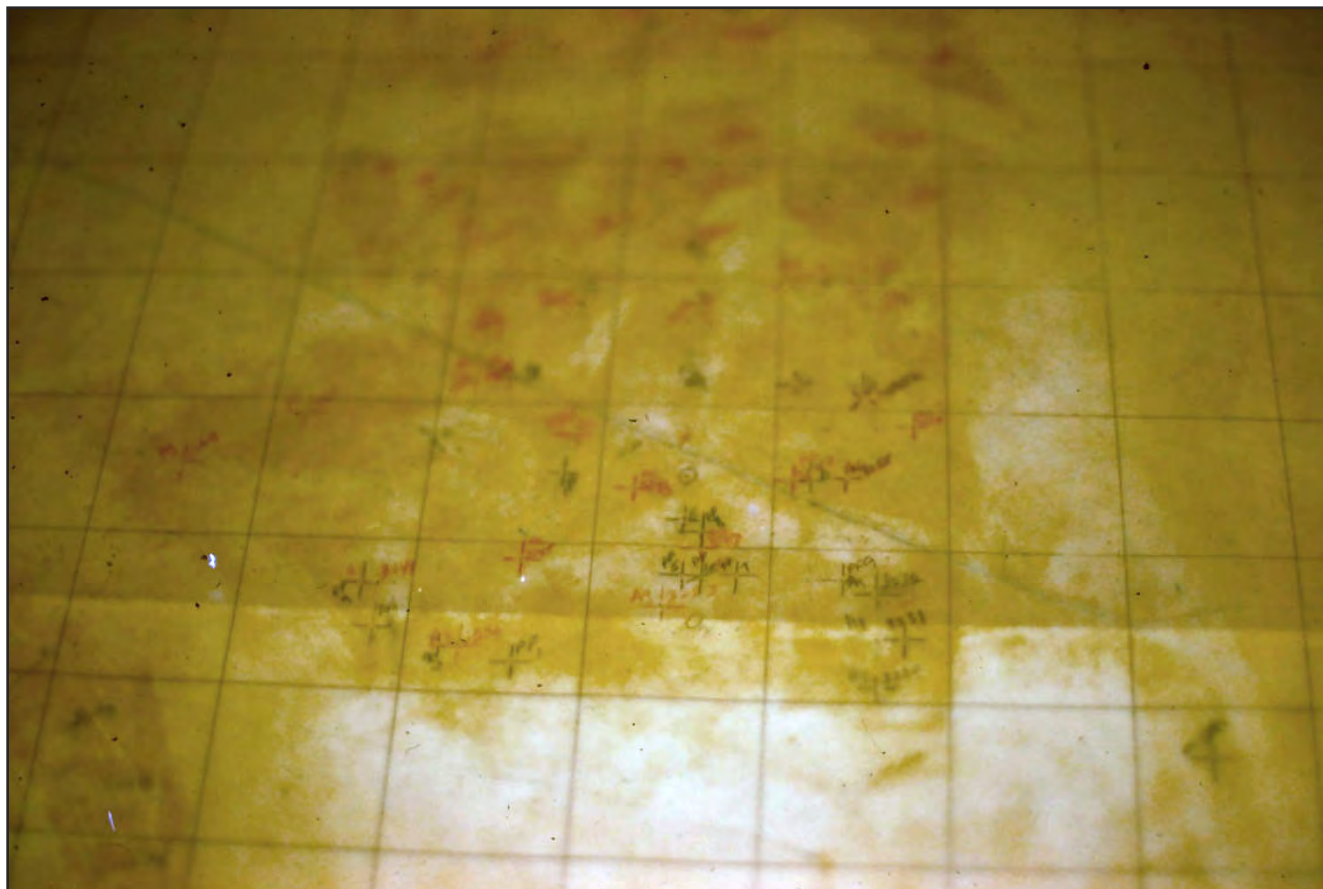
A crew member in my fire direction center, preparing to make the calculations for a fire mission. These missions had three types: supporting infantry in the field; attacking enemy personnel spotted from the air; and interdiction fire, or targeting road and trail junctions in hostile areas at random times just to keep the enemy off-balance. We could usually get after-action reports on the effectiveness of the first type of mission, but we rarely heard reports back from the others.



Pins and a pencil on the target plotting board.



A terrain map of a target area.



Each mark on this map indicates a target area that had recently been fired upon by howitzers in my unit.



Crates of machine-gun ammunition stored in the large ammunition bunker used by the infantry on this base.



One afternoon that ammunition dump caught fire. The cause was not enemy action but was the result of some sort of accident inside the storage area. I never learned the exact cause. Fire trucks responded from the nearby headquarters base to fight the fire.



Firefighters in action. The other personnel on the base were evacuated to a safe distance away or were ordered to stay in underground bunkers.



At some point, the ammunition in the dump exploded and destroyed the dump and a lot of equipment and buildings in the immediate area. Some firefighters were killed and some were wounded by the explosion, but I cannot remember how many.



Debris from the explosion was everywhere.



Some of the remnants of unexploded ammunition sitting in water from the hoses of the firemen.



Heavy, dark dust and crumpled pieces of metal roofing material was all over the base after the explosion.



The blast of the explosion damaged the back of the protective wall around one of the howitzer emplacements. The dirt-filled canisters in this wall would normally have been arranged in a perfectly curved line.



A steel girder that had formed part of the roof support of the ammunition dump landed on top of one of our underground sleeping areas. Thanks to the protective layer of sandbags, no one was injured in that sleeping area.



On the left, note that at least one of our picnic sheds was damaged by the explosion. It took many days to clear away all of the debris, and even longer to rebuild the structures that had been destroyed.



One morning we received a briefing from a staff officer from the rear headquarters area. North Vietnamese units with small tanks had been spotted in our area of responsibility. This was something new for us. Previously we had been battling units of the enemy guerillas. Having North Vietnamese tanks within range was chilling.



Another briefing about the appearance of North Vietnamese army troops equipped with armored vehicles, the light tanks that had somehow been transported from North Vietnam.



A few days after the news of the approach of the North Vietnamese tanks, a detachment of troops arrived from a base in the United States armed with anti-tank rocket launchers mounted on jeeps.



These anti-tank units remained outside our perimeter for a day, and then suddenly left to move to another location. I never learn where they went, or whether they actually engaged the North Vietnamese and their armored vehicles in combat.



My assignment in Vietnam ended soon after the introduction of the anti-tank units. Normally I would have remained on duty until September 6, 1972, an entire year since my arrival, but in mid-June I suddenly received orders to transfer to an artillery unit based in West Germany. This was part of the drawdown of US forces during this time. I departed Vietnam on June 22, 1972. This is the second of two photographs of me in Vietnam, standing on top of an observation tower on Grunt II.



When I left the fire base to travel to Saigon for my flight back to the United States, I took some photographs of the countryside along the way. This is a Roman Catholic church. I would have liked to have seen inside, but did not have the opportunity.



Farm workers in a field.



A rubber tree plantation.



Buildings on a farm.



Roadside vendors.



Roadside vendors.



Roadside vendors.



Two women on a motorbike.



Houses built on stilts next to a river.



School children with an adult crossing a bridge. Note the buildings on stilts on both sides of the river in the background.



A store in Saigon.



Residences in Saigon.



Stores in Saigon. Note that one of the store signs, William's Tailors, is in English. In the right center of this picture, a US soldier is riding in the front of a motorcycle taxi.



Street traffic in Saigon.



Inside the airplane on the flight home.



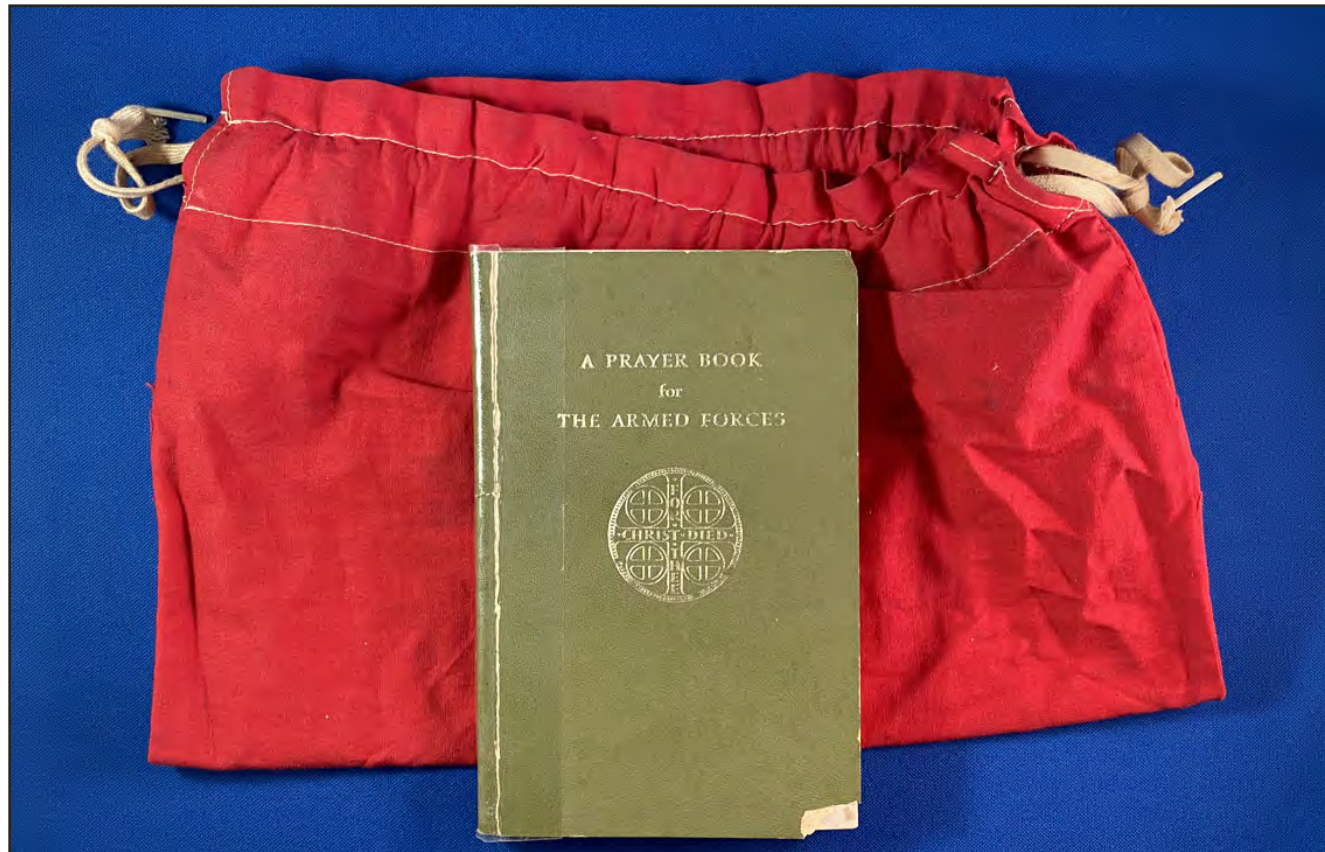
The view from my seat window over the Pacific Ocean. The flight landed at a military base in Guam to refuel, and then went on to the San Francisco airport. From there I caught commercial flights to Las Vegas, Nevada; then to Atlanta, GA; and then finally to Columbus, GA. Total transit time was about 36 hours, including waiting time in airports.



These are a few of the things I brought home. At the top: a leaflet dropped from the air saying in Vietnamese that our medical evacuation helicopters with red crosses on the sides were unarmed and were not to be fired upon. At the bottom, on the left: a one-dollar bill in US military scrip. We received our salary in this scrip form to avoid having the US dollar become a black market currency. On the right: a bill in South Vietnamese currency.



On the top: two Christmas cards that I purchased to send home for Christmas 1971. On the bottom: an invitation to the decommissioning ceremony for one of the artillery battalions in which I served. You can see photographs of that event on pages 148-157.



The red bag was part of a Red Cross program to collect small comfort items like soap, candies, toothbrushes/toothpaste, shaving razors, and packs of playing cards from donors in the US to be distributed to members of the military. This bag had a label from the Red Cross in Providence, Rhode Island. The prayer book came from an Episcopal chaplain I met while in Officer Candidate School in the fall of 1969.



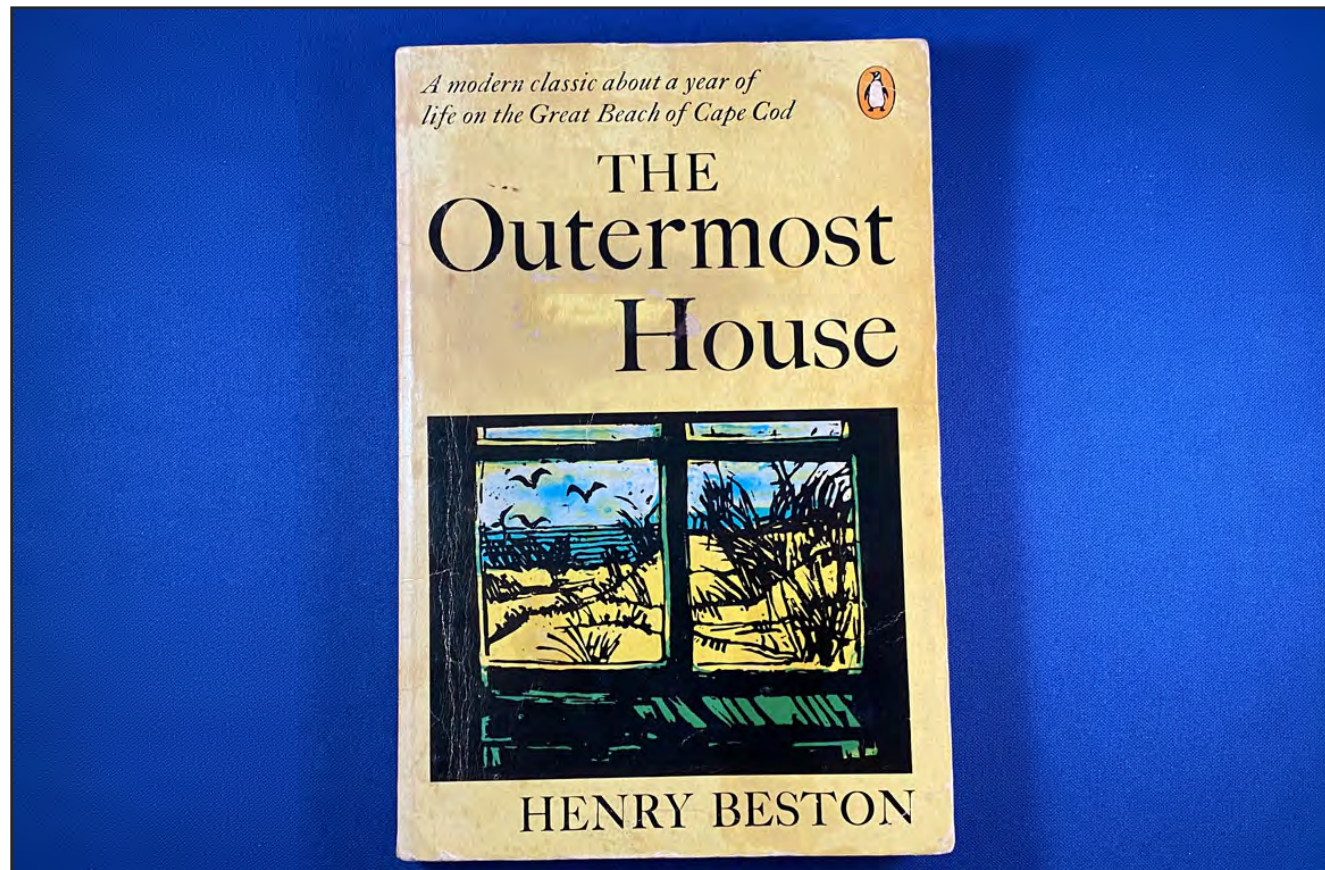
At the center: the wooden tree that was a part of my Christmas celebrations in 1971. You can see it in the photograph on page 90.

Around the tree: a woven cloth headband. You can see one like this being worn by a soldier in the photograph on page 43.



On the left: a military sewing kit with appropriately-colored thread and buttons.

On the right: uniform patch insignia from a South Vietnamese artillery unit. I traded some of my unit's patches for this set.



I discovered this book in one of the boxes of donated paperback books sent by the Red Cross. It was the only one of those books that I brought home. First published in 1928, Henry Beston's recollection of a year spent observing nature while living alone in a cabin on the Cape Cod seashore was my favorite reading while off duty in Vietnam. You can see a shelf of those Red Cross books on page 91.

After 50 years, things missing and things ever-present

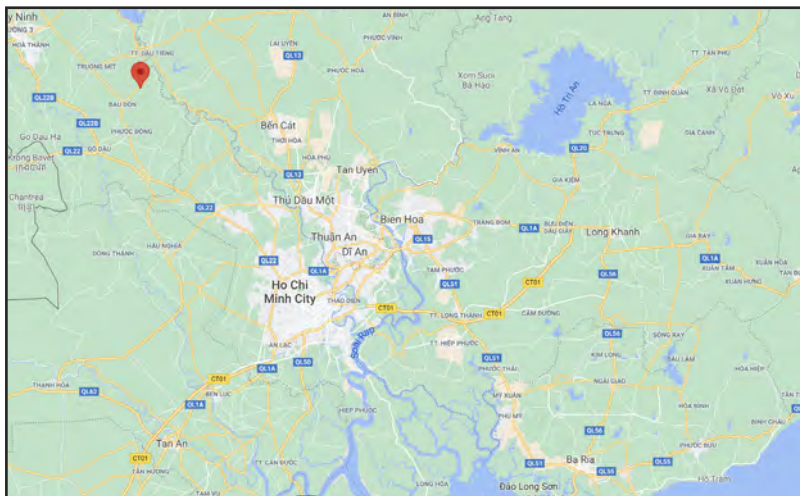
Among the things I did not bring home from Vietnam, I regret most not having any of the letters sent to me by family and friends. I do not even have photographs of the letters or of the almost-daily mail calls when mail was delivered. Sacks of mail would come in by truck or helicopter along with food, equipment, and ammunition resupplies. I could write a letter to someone in the United States and reasonably expect an answer within 10 days or so. As a soldier in a combat area, I paid no postage on my letters. All I had to do was write the word "Free" in the upper right corner of the envelope where a stamp would normally be. People back home writing to me paid normal domestic first-class postage rates by using my Army Post Office (APO) address, and somehow that letter would find me eventually no matter where I was stationed in the field at the time.

This book contains photographs from three of the five fire support bases where I was stationed. I do not seem to have sets of photographs from the other two, although I suspect that a few included in this book, particularly the photographs of the USO show on pages 34-35, are from one of those other bases.

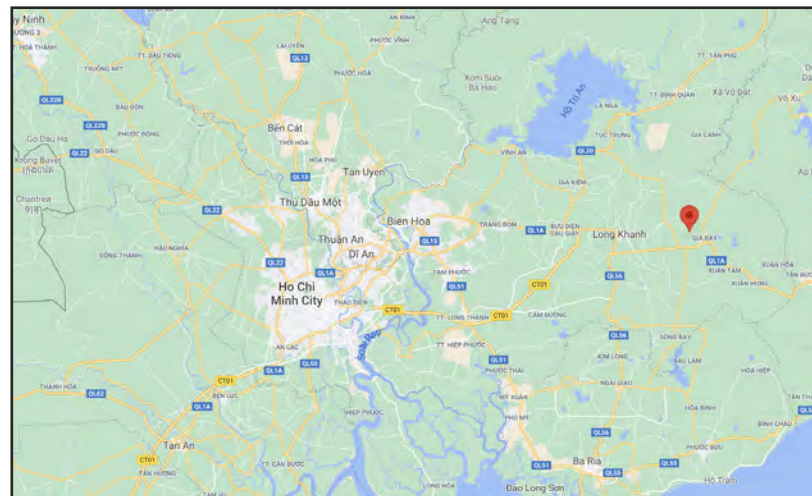
I also did not come home with a list of the dates I was stationed in different places. My personnel record has the date that I arrived in Vietnam, and the date I left, but all of the specific dates in between are lost. That is why the photographs in this book are undated, with the exception of the one on page 96. I remember taking that one on Christmas Day, 1971.

One other thing I did bring home was a U.S. Army tactical map of the southern provinces of Vietnam that measured 48 by 39 inches. Using that map, I have determined the approximate locations of three of my fire support bases and the radio relay point on top of a mountain. Coordinates of those locations are on the next page along with a link to those locations as they look today on Google Maps. You will note that the city that I knew as Saigon is now named Ho Chi Minh City.

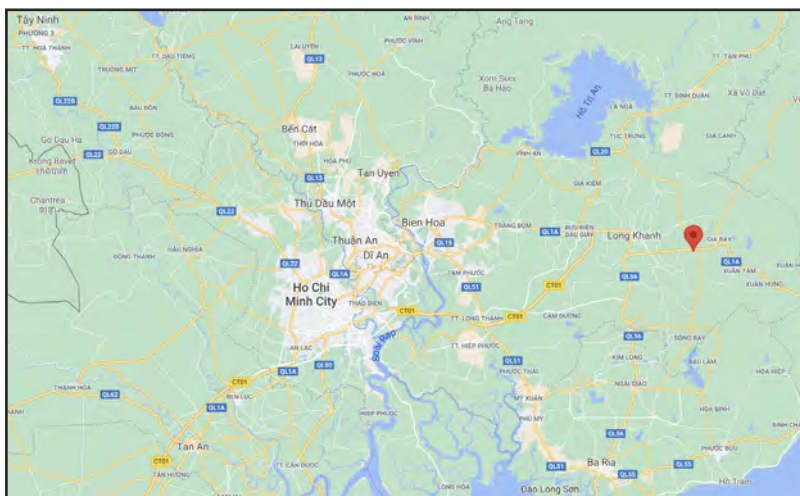
The captions on the photographs in this book are from my memories today of that period, now fifty years in the past. As I noted in the introduction to this book, some details in those memories are fading, as are the colors in the original slides. The faces of the men with whom I served, however, remain as clear as they ever were, and this collection of my photographs is my tribute to them.



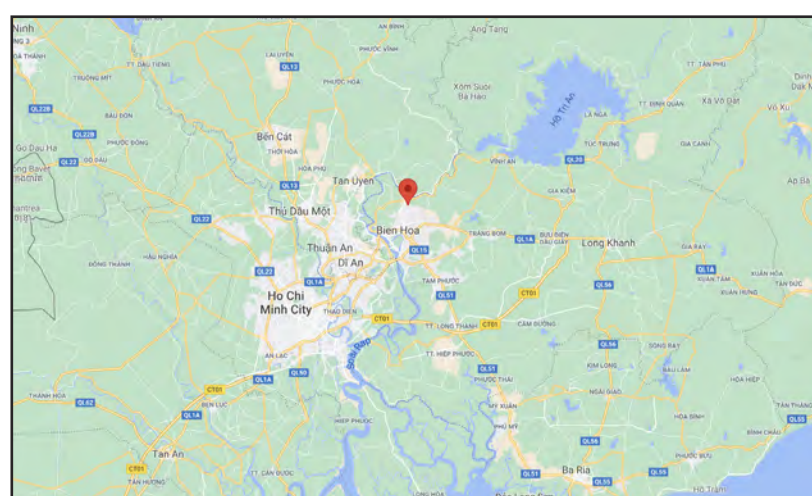
1) Andrews 11°12'13.3"N 106°20'42.4"E
<https://goo.gl/maps/LzVSfzGQ9Tf7DNMu6>



2) Mountain top 10°56'23.7"N 107°22'35.4"E
<https://goo.gl/maps/BxaS3gZPzXFebTCE9>



3) Crossed Sabers 10°54'20.8"N 107°21'22.0"E
<https://goo.gl/maps/DQApiTm8FdSFNsAl8>



4) Grunt II 11°00'23.2"N 106°51'40.8"E
<https://goo.gl/maps/Bdffip5PbUjv4Hwu9>