

Random Memories of the 36th Engineer Battalion
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&
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I spent my full tour on the S-3 Staff of the 36th Engineer Battalion (Construction) at Vinh Long Airfield, Mekong Delta, South Vietnam, from January to Dec 1971. The 36th was under the 34th Engineer Group and the 20th Engineer Brigade. We were later under Engineer Command - Vietnam.

I was placed on the S-3 Staff, as Officer in Charge of Surveyors, Officer in Charge of the Soils Lab, and Officer in Charge of Quality Control. The 36th Engineer Battalion (Construction) was finishing up work on QL-4, around Vinh Long: final asphalt pavement and one prestressed precast beam bridge. The bridge was three spans, each 81-ft long, with 11 concrete 'T' beams weighing 22-T each. I believe we were the only construction battalion in Vietnam to build prestressed precast concrete beam bridges. Other bridges of this type were built by the joint venture, RMK - BRJ (Raymond, Morrison Knudsen, Brown & Root and Jones). We worked with an adviser of RMK - BRJ.

The battalion was charged with building about 65-km of asphalt road, LTL 7A, from Vinh Long to Tra Vinh, and 22 concrete bridges, some of which also were prestressed precast concrete beam bridges. The beams were built by the Vietnamese in Saigon and barged to us in Vinh Long.

My first mission was to work with the battalion surveyors to make sure the abutments and piers were constructed at the correct location, distance and *****length shall change to alignment*****

, because the concrete beams could not be cut to fit the spans. When I arrived at Vinh Long, the 36th had one portable concrete batch plant and one portable asphalt plant at the Vinh Long Army Airfield. It had two rock offloading piers, one near Vinh Long and another about one-quarter the distance to Tra Vinh, near the Bravo Company Base Camp. All our rock was barged to us from north of Saigon because there was none in the Mekong Delta. As the road progressed from Vinh Long to Tra Vinh, we built Charlie Company Base Camp and rock pier on the Mekong River, near Tra Vinh. The Charlie Company Base Camp would have a portable concrete batch plant and a portable asphalt plant. Our site at the Vinh Long Airfield would also *****get change to got*****a second portable asphalt plant. As the work got further down the road from Vinh Long, we started running asphalt truck conveyors, with Vietnamese drivers in yellow commercial trucks (we called yellow birds).

As we finished sections of road, city-size buses and semi-trucks could use the road. We had the road for construction from 0600 to 1800; anyone else had it the other 12 hours. We painted a "red seahorse" in the middle of the white stars on our vehicles, and while we were on the road, everyone knew the vehicles with the red seahorses on them were the engineers. The 36th was the Seahorse Battalion (from World War II and the 36th Engineer Division). I was Mustang 6, Commander of the Battalion Reaction Force.

When the new battalion commander came about midway through the year, I was asked if I would stay on staff as the Assistant S-3, Civil Engineer. I accepted. I had other S-3's coming to see our operation and quality control procedures. The 36th Engineer Battalion (Construction) was a meritorious unit in 1971.

Even though, I am service-connected disabled due to Agent Orange, I would do it again. We dredged all the sand we wanted for construction out of the Mekong River, never thinking it was contaminated with Agent Orange. As a licensed professional engineer, I feel the time in Vietnam was a great experience, and used some of the road stabilization procedure in Kansas in the 1980s, 1990s and 2000s.

When I came to the 36th Engr Bn (Const) in Jan 1971, LTC Potter assigned me to the S-3 section as Construction Engineer. The S-3 at the time was MAJ Ed Janus. I was OIC of the Bn surveyor, OIC of the Bn soils lab and OIC of quality control. I can not remember the C company commander, before CPT Cox. Since I was In-Charge of the surveyors, I spent a lot of time on the road and at the bridges. I was to make sure the abutments and piers were the right location and alignment. One could not cut a precast prestressed concrete beam. The first beam was set on QL-4 and they forgot the tagline as the 40-ton crane backed up. The tagline tipped the beam and it broke and fell. The next day, the Commanding General - Engineers was to arrive to see the first beam set. The beam was buried under the span and the reviewing table setup on top of the buried beam. I get the other side beam to the site and it was placed before the General arrived. C Company was still working on the bridge. D Company took over to finish the handrails and open the bridge. Since most of the bridges from Vinh Long to the B Company camp were built, C Company was moved to the river at Tra Vinh, to work from there back toward the B Company base camp. At Tra Vinh, I had a soils lab for testing at that end of the road, C Company was given a second concrete batch plant and a third asphalt plant for work at that end of the road.

Note: when the culvert / concrete structure was being built at I believe site 6, a load of concrete arrived on site already setting up in the batch truck. I was there with the soils lab. I advised the C Company plt ldr to not use the load and to dump it. The plt ldr adding water and used the concrete. The soils lab took cylinders of the concrete that was poured. I wrote a memo to files saying I advised the load to be dump, but it was used. The 28-day strength was about 1200 to 1500 psi. Less than half what the specs called for. Before the cylinders were broke LTC Potter (Stoney) told CPT Cox to file charges against the plt ldr or me. Cox refused at was removed from command. At this point, the concrete batch truck were loaded dry and required water added at the site, because travel time was getting too great. The one concrete Marsh Arch bridge remained with the bailey span in the middle.

When LTC Potter was rotated out, LTC Robertson asked my to stay on S-3 staff, as the Asst S-3 (Bn Civil Engr), and I did. The 36th Engr Bn (Const) was a Distinguish Unit in 1971.

As far as I remember, concrete was batched at the concrete batch plant on the airfield and sent to the job site, either wet or dry.

The soils lab monitored the mix, but the cement have hydrated in the S-4 yard from the rain. Therefore we changed the mix to get the strength we wanted.

We continued using swinging leads and template with batter pile. Most pile were driven using a 40-ton crane on a barge at the bridge site. I can not remember it C Company drove the pile or a port construction unit, attacked to the 36th.

The precast beams were unloading on Vinh Long with two 40-ton cranes.

We went to 40-ft precast pile with splice boxes to connect pile sections. Seems pile went down 200 to 300-ft, friction pile. We let the pile setup friction and ran a pile test to see if we could broke them lose.

We built a rock pier at the Tra Vinh base camp, with a barge and bailey bridge, due to tidal effects. I laid out the Tra Vinh base camp on the cleared site, plus dredged sand. We used large arched plate culverts for the living quarters and so other structures. The arched culvert was covered with sand.

So when I left in Dec 1971, C Company Tra Vinh had a rock pier, a concrete batch plant, and an asphalt batch plant.

As far as I remember, we never got fired at. Everyone learned that the trucks with the Red Seahorse or the large yellow dump trucks were the engineers, building the road. As the road was completed, there were city size buses and semi's on the truck, tying the country together.

Looking at an aerial photo, the upper portion of the road may have been realigned.

We had other battalions coming to see our QC program.

I remember at 31 March and 1 April 1971, as Bn Reaction Force Commander, reinforcing the Vinh Long rock pier, C Compant reinforced the QL-4 bridge site and B Company reinforced their rock pier and the bridge at the Mang Thit canal.

That is my war story. LTC Potter said that the 36th fought in WW II, and we would not ask the Cav for help, even though I had a light ship and a cobra on call. I also have one of the ocean going tug parked off the rock pier with an empty barge and its two 50's.

If I remember right, Bob Elmore was in B Company. I am copying him

Addition note, from what I heard LTC Potter, after leaving the 36th had a heart attach and died

I guess it was about October 1971 and at about 0400 hrs, the Bn XO MAJ John Brown knocked on my door. It was a nationwide drug shake down. MAJ Brown searched my room. He found my M-16 locked in my closet. He said you know where this belongs. He also found a explosives detonator in the all. He said take this to S-4. After I was inspected, he had me go to D Company and help with their inspection. The Vinh Long Airfield was in lock down for 3-days. By then their thought the drug users would be in withdrawal and show their drug use. After I helped D Company, I was back in the S-3 shop and one of our advisers came in and want me to go to Can Tho to see a concrete beam launcher. I think. I said we were under lock down. The airfield commander was called, and I got a special pass with the airfield commanders signature on it. I and the adviser left the lock down airfield for our meeting. I was doing a special airfield drainage project for the airfield commander, since drainage was my major in college. I was moving the airfield pump station from the middle of the airfield to the perimeter. He want this project done before the rains, so he let me off the airfield. He also wanted the Officers Club not to flood. Thinking about it, it may have been a little earlier in 1971. We left the airfield and complete our trip. After I had the plans approved by the airfield commander, he closed the east end of the landing strip. I talked to PAE, the airfield engineer, about buried utilities in the area. He said there were no utilities.

I moved a 40-ton crawler crane with clam shell to the east end of the landing strip and began digging a drainage channel from the pump station to the berm. That afternoon the airfield power went down and the off post generators went wild. The crane pickup a 440-V perimeter power cable. The airfield engineer got his backhoe and started digging in front of the crane, He cut a 4-inch

communication cable, which was died, No utilities in the area !!! WE called PAE, Promises, Alibis and Excesses.

Somehow S-4 got 12 submersible pumps from the Marines in I Corp, and I laid out a pump station with 9-pumps. Q & B designed the structural concrete sump and pump station. It was finished before I left, but I never saw it run except for a test.

The airfield commander was happy. The airfield water would be pumped into the surrounding field and not be recycled on the airfield.

That worked better than when we asphalted the landing strip. There was too much distillate in the tack coat. The asphalt was soft when the first C-130 landed and rutted the landing strip.

It was great experience for a future design engineer in water resources, ag and civil design engineer. Interested we used clay / lime stabilization in Wichita, KS, in the 1980's and 1990's and for KDOT in the 2000's.

Neil, My name is Curtis M. (Mike) Ford. I recently stumbled across the 36 Engr. Bn. web site and was especially interested in your photos. I was in the Bn. from Jan. 1979, through Christmas Eve 1970. The last half of the year, I was the commander of C Company. After LTC. Potter task organized the battalion, I was responsible for the bridges on LTL-7a, and the one on QL4 with prestressed concrete girders. Before I left, we were able to begin the one on QL4, to the point of putting in the sand key at one approach and starting to drive piles. I noticed, in one of your photos, that one of the girders had broken into several pieces. Of course, this was because it wasn't correctly picked up and placed. I thought the C Co. Commander(my previous XO) had understood how they had to be handled. Can you remember if C Co. did that, or if D. Co. had taken over(I found the news article that D. Co. finished it)? Had C Co. moved to Tra Vinh, by then? I'm guessing, by your other photos, you were working in the 3 shop. Can you remember who the S3 was at that time? I was pretty excited to find the web site and the 20th Bde. site. I tried to log into the Guest book 3 times but was not able to. I thought I followed the prompts, but may I missed something. Is something special required? I am famously computer illiterate, but even my grandson couldn't help me. Finding the web site made me think about that time in my life, and the work we did. I have a lot of photos of , what I consider, interesting parts of the work; so I am thinking about writing a book(mostly captions for the photos). I write articles for the German Gun Collectors Assn., but never anything as ambitious as a book, so it may not get written. Sorry for rambling on, but other than CWO Tansella, who was already a friend from the 43d Engr. Bn., I haven't really contacted anyone from the 36th. I did email the guy that had the web site, but he didn't answer back. Best regards, Mike

Neil, See, there is no substitute for accurate "as built drawings". With good "as built", locating the utilities wouldn't be problem. Our contractors tried to submit contract drawings as "as built". We had some engineers that would accept them, I wouldn't. Contractors were always complaining, because I "wouldn't pay the bills". I had one contractor try to claim a bunch of extra money, because the contract called for replacing 6'-8"x3'0" doors in a multi-storied barracks; but the actual doors were 6'-10". The Project Engineer was about to pay them, but I went back into the original contract records and found out that the same contractor had installed the oversized doors as a "deviation" and didn't record them on "as built". I stopped the payment, causing a lot of trouble with the contractor, and some with the Area Engineer, because I had the "gall" to check their claims. In Vinh Long, one

of my men turned himself in to the "amnesty program", to get clean of drugs, before his PCS. The Bn. Surgeon called me 3 days later, saying Can Tho had returned him after 3 days. He said it wasn't fair, three days wasn't nearly enough. I kept him under guard, on a cot, in the orderly room; until his PCS, a week later. At least he was clean when he left us- I hope he stayed clean, but the odds were against it. I had other problems with potheads and addicts, but not as much as other units. In the main, troops usually "do right" when they are working on something worthwhile. Our area flooded the year before you got there, but not in the buildings. Somewhere I have a photo of a crane with the rear wheels in an inlet that w under water, and couldn't be seen. Too bad you weren't there in 69, instead of 71. When I was there, we had a 100kw generator with a backup, for Bn. power(maybe 200kw?), plus another for the asphalt and sand/cement stabilization plant. When the airfield lost power, we had our own. When we had a mortar attack, we turned off the main power, but kept it on at the asphalt plant and kept working. I have good stories about keeping the asphalt plant going. Your memories bring a lot of mine to mind. Thanks for sharing. Mike

As far as I know, the Asphalt plant was in A Co. A Co.s 1LT Zander(Zauner?) was in charge of it. LTC Potter would change things around, if he though it would work better. Did he send Jarvis to A Co. or give the plant to HHQ? Mike

After I got there, the Bn Adj Jarvis went to run the asphalt plant. I thought the asphalt plant was in A company His father ran portable asphalt plants in States.

Neil, Thanks for the info. That is really interesting about the concrete setting up. Before I left, we poured an abutment too far for the transit mixers to make it before they got hot. I came up with the idea to batch the rock, sand, and most of the water in enough trucks to make the pour; and sent a lowboy with cement and an extra bucket to the site. We batched the cement(rounding up to the next whole bag), mixed, and added enough water to bring the slump up to spec. We didn't have QC on site, so I made cylinders. They broke fine. B Co. had lost an abutment (Engr. Command. checked it with a Swiss Hammer) and had to tear it out. They had poured it using a 16S mixer. I wasn't about to get caught in that trap. Sometimes you can add a little water, if it is a little stiff, but not hot. It takes a lot of experience to know the difference. I'm surprised someone didn't remember how to make that pour. Was C Co. still using my "Wild" hammer? I had a crane and a hammer, but no leads(I had used the last of it making a "Swinging lead"). I had seen a commercial Air Hammer working in Saigon , when I went up to check the pre-stressed girders. I told the old man I wanted to set the hammer up to sit on top of the pile and run it w/o leads(had to use a template). He asked If I had talked to Dan about it(Tec .Rep. from Quinton Budlong) I told him Dan said it wouldn't work, so he told me not to do it. A week later the Old Man was at the site when Dan said he had come up with an idea to use the other hammer. It was exactly the same as I had described. The Col. looked at me, smiled, and said go ahead. It worked like a charm, even on batter piles; you just had to know how to cock it and get it running. I often wondered about it. I knew we would have to move to Tra Vinh. We went down to recon the site and later to check the land clearing team. I ran into the son-in-law of a gunsmith friend of mine at the Tra Vinh MACV. I knew him at Ft. Benning , we had a good visit. Coming back, we took a little fire(no one hit), so we came back with war stories. When we came in the gate, there was ammo & trash all over the place. Sappers had gotten into the ammo dump. Our little war story

didn't mean any thing then. The bridge you mentioned, with the Bailey span, was blown while I was there. The XO took a detail and 1000 lbs of C4 to cut the debris loose. He used 700 lbs, and still didn't have it. One of the E6s that knew what to do took the other 300 lbs, and dropped every thing in the Mang Thit canal , just as pretty as you please. The XO took credit for it, even though he blew debris everywhere, with a big piece damaging an ARVN duce and a half. We had to repair it in the 3rd shop, and take our trucks out to do it.He went to Bde. tdy to help plan the Cambodian incursion. He talked like he had planned the whole thing. Gp.Maint. made arrangements for Bde. to keep him, so a lot of people were happy about that. It seems like we both have a lot of stories to tell, I have enjoyed it but my key board is acting up, so I will go and put new battery in. Mike





