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VOLUME I

HISTORY OF THE 4TH BATTALION, 37TH ARMORED REGIMENT IN OPERATION DESERT SHIELD/STORM

BY

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United States Army

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HISTORY OF THE 4TH BATTALION, 37TH ARMORED REGIMENT IN OPERATION DESERT SHIELD/STORM

An Individual Study Project

by

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The 4th Battalion, 37th Armor, distinguished itself during Desert Shield/Desert Storm. The 37th Armored Regiment's last combat experience was in World War II under the leadership of LTC Creighton W. Abrams III. The battalion's high level of training and combat readiness, quality of personnel and leadership, and modernized equipment, prior to the invasion of Kuwait by Iraq on 2 August 1990, made it a prime choice for duty in Southwest Asia.

The battalion began preparing for deployment and combat on 3 August. A gradual escalation of combat preparedness ensued up to 8 November, when the division's formal deployment notification was announced by President Bush. The intensity and sense of urgency from 9 November 1990 to 8 January 1991 affected every aspect of the battalion's combat operating systems and family support operations.

The battalion built combat power in port facilities at Ad Dammam in Saudi Arabia and in a forward tactical assembly area near the Iraq border from 9 January to 17 February 1991. Detailed rehearsals were executed for a deliberate breaching operation against fortified Iraqi positions. Planned combat operations began on 19 February and continued until G+3 days on 28 February.

In one hundred hours of continuous combat, the battalion executed a deliberate breach of Iraqi defenses, executed an exploitation through Iraqi Republican Guard Army units, and cut the path of retreat of Iraqi Army units. The battalion destroyed over sixty tanks, fifty armored personnel carriers, thirty artillery guns, and captured over one thousand prisoners.

At Safwan, Iraq, the battalion assisted in securing and hosting the peace negotiations. Stability operations on the line of demarcation continued from 4 March to 20 March. The battalion continued to destroy enemy equipment and supplies. After being relieved at Safwan, the battalion became part of the VII Corps reserve.

The battalion returned to the Port of Ad Dammam on 28 April and redeployed for the United States on 12 May 1991. The battalion's homecoming was a major success.
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BACKGROUND

5 APRIL 1941 - 1 AUGUST 1990

The 37th Armored Regiment

The 37th Tank Battalion (Bn) was formed in 1941 at Pine Gap, New York (NY). The battalion achieved fame under the command of LTC Creighton W. Abrams, Jr. in World War II (WW II). Specifically, the battalion was awarded five battle streamers, three French fourragères, and a presidential citation. Its most notable feat was the relief of the city of Bastogne during the German's Ardennes Offensive. Under adverse circumstances, LTC Abrams led his battalion over one hundred miles in the dead of winter, spearheading the 4th Armored (Ar) Division (Div) of GEN George S. Patton's 3rd Army until he broke through the German perimeter and made contact with the 101st Airborne Div's "Bastogne Bastards."

Of special note: the soldiers in WW II named their tanks and painted a specific name on the exterior of the tanks. LTC Abrams' tank was named "Thunderbolt." Other battalion tanks with names like "Cobra King" and "Blockbuster" would become legendary. The battalion always ended their written operation orders with the words, "Attack! Attack! Attack!"

LTC Abrams continued his military career until he became the Army Chief of Staff. All in all, he served a total of forty years, with at least half of his service time spent as a general officer. Few military leaders ever achieved the respect and admiration GEN Abrams achieved prior to his death from cancer in
1975. In 1978, the new main battle tank for the United States (U.S.) Army was named after GEN Abrams—the M1 Abrams tank.

The 37th Tank Bn did not serve in combat again until the Gulf War in 1991. However, the 705th Tank Destroyer Bn, a derivative of the 37th Tank Bn, served in the WW II Pacific Theater and in the Korean War. Hence, the 37th Tank Bn added five more battle streamers and a meritorious unit citation to its colors.

The 37th Tank Bn changed its name and organization several times from 1945 until 1956: the 37th Tank Regiment (Regt), the 37th Tank Constabulatory, and the 1st Bn, 37th Ar. The battalion served continuously in the Federal Republic of Germany (FRG) after WW II and received the nickname the "Abrams Battalion."

About 1956, the battalion divided into four battalions comprising the 37th Ar Regt. A Company (Co) became the 1st Bn, 37th Ar, and served in the FRG at Crailsheim, Katterbach, and Vilseck. B Co became the 2nd Bn, 37th Ar, and served in the FRG at Erlangen, Boblingen, and Vilseck. C Co became the 3rd Bn, 37th Ar, and served initially in the FRG at Schweinfurt, Erlangen, Boblingen, and eventually at Fort (Ft.) Riley, Kansas (KS). D Co became the 4th Bn, 37th Ar, stationed initially at Ft. Knox, Kentucky (KY), and then Ft. Riley.

One of the most significant events of the regimental system was the initiation of an honorary Regimental Commander and Command Sergeant Major. The first three of these selections were men who served with GEN Abrams in WW II. The 4th Bn, 37th
Ar, began to regain its identity and traditions through the visits of these veterans. Also, five nominations are made each year to elect honorary regimental members. These individuals receive award presentations at division-level ceremonies during Armed Forces Week.

The assignment of LTC Richard W. Smith, LTC David F. Gross, and myself was the first interaction of Battalion Commanders assigned to the 3rd and 4th Bns, 37th Ar, who had prior assignments with the 37th Ar Regt. A major effort began during our command tours to teach the soldiers in the unit the history of the regiment.

Today, the 37th Ar Regt consists of four battalions. The 1st and 2nd Bns are assigned to the 1st Brigade (Bde), 1st Ar Div in Vilseck, FRG. The 3rd and 4th Bns are assigned to the 2nd Bde, 1st Infantry (Inf) Div at Ft. Riley. The 3rd Bn is, by regulation, the custodian of the regimental colors because it is the lowest-numbered battalion stationed stateside.

**The 4th Battalion, 37th Armor**

The 4th Bn, 37th Ar, remained at Ft. Knox for a total of twenty-five years. During this time, the battalion was part of the 194th Bde (Separate). Their primary mission was to support the U.S. Army Armor Center (USAARMC); but as time progressed, increased emphasis was placed on the battalion's own training and combat readiness.

The battalion had a great reputation and was commanded by a number of Battalion Commanders who made major contributions to
the armor force in later years. In 1982, the battalion was reassigned to Ft. Riley.

The battalion was sent to Ft. Riley in an attempt by the Army to establish the regimental system. Unfortunately, during the move, the battalion lost many of its archives and historical artifacts. From 1982 through 1989, the battalion was led by Battalion Commanders with no prior assignments to the 37th Ar Regt. The unit lost its identity despite efforts by the Army to establish the regimental system.

From 1983 on, the battalion became a Cohesion, Operational Readiness, and Training (COHORT) battalion. This meant soldiers assigned to a tank company went through basic and advanced individual training together and were assigned to their first battalion as a unit. Over a period of time, a COHORT company, once trained in a stateside battalion, was sent to a 37th Bn in FRG.

A COHORT battalion gave the unit a priority on personnel and helped maintain a personnel fill of approximately ninety-eight percent. This was a real advantage. The other advantage was a significant number of key leaders remained with the battalion for an extended length of time. As an example, the supply sergeant of Headquarters, Headquarters Company (HHC), SSG Gary B. Curry, served with the battalion for seven consecutive years.

Another key event assisted in creating a topnotch battalion. When the 1st Bn, 37 Ar, moved from Katterbach, FRG, to Vilseck, FRG, in 1988, 155 soldiers received an early
curtailment of tour and were sent to the 4th Bn, 37th Ar. I was
the Battalion Executive Officer (XO) of the 1st Bn, 37th Ar, at
the time. I joined these soldiers in the 4th Bn, 37th Ar, a
year later as their Battalion Commander. By the time we
deployed on Desert Shield, two captains, who were once
lieutenants in the 1st Bn, 37th Ar, commanded tank companies,
and three sergeants, who were once platoon sergeants in the 1st
Bn, 37th Ar, were first sergeants of companies.

My assumption of command on 5 May 1989 brought numerous
changes to the battalion. We changed the slogan for the
battalion from "Fit to Fight" to the "Thunderbolts." Our colors
reverted to the original green and white of yesterday, replacing
the black and silver left behind by the deactivated 63rd Ar
Regt. Thunderbolt bubble gum was discovered. Unit key chains,
coffee cups, hats, t-shirts, pins, coins, officer and enlisted
brass, ties, blazer crests, and unit decals proliferated.

I assigned every new officer a history project. The
historical research project on the 37th Ar Regt resulted in a
quality display for the headquarters building or regimental
dining facility with the contributing officer's name engraved on
the display. This created Medal of Honor displays, battle
streamer and citation displays, a Battalion Commander and
Command Sergeant Major display, an honorary regimental member
display, a GEN Abrams' display, recovery of the original
battalion colors from WW II, and many, many more. Famed artist
Don Stivers was commissioned to paint the "Relief of Bastogne"
for the regiment. I placed the Adjutant in charge of the
archives closet—books, documents, and papers were collected and stored. Every written document was an operations order ending with the words, "Attack! Attack! Attack!" Soldiers were regaining the pride of being assigned to the Abrams' Battalion.

Our battalion wanted for nothing at the battalion level for training. Within the battalion, the combination of a separate headquarters building, a billet for the four tank companies, a billet for the HHC, a regimental dining facility, a new set of company orderly rooms, a staff annex building, and a first class motor pool facility made "Thunderbolt Country" the envy of every battalion on the post. Furthermore, we had excess space throughout the premises—an enviable position within the division. Even the Brigade Education Center was in the geographic center of the battalion area. The battalion continued an extensive self-help program to upgrade and maintain its facilities.

The battalion had a battle simulation center run by the S2. It consisted of model terrain boards of the battalion's General Defense Plan (GDP) in the FRG, the National Training Center (NTC), and the Multi-Purpose Range Complex (MPRC) at Ft. Riley. The battalion's geographic layout was within walking distance of the Unit Conduct of Fire Trainer (UCOFT), the Division's Platoon Training Center, the artillery call-for-fire training simulator, and the gas chamber. The division also had a Brigade and Battalion Battle Simulator (BBS). The MPRC was the best gunnery facility in Forces Command (FORSCOM), and small arms ranges were available and in abundance.
Across the board, the battalion was fully modernized with Heavy Equipment Multi-Purpose Mobility Transports (HEMMT), Heavy Multi-Purpose Mobility Wheeled Vehicles (HMMWV), M1 tanks, and M3 Bradley Fighting Vehicles (BFV). We completed the introduction of BFVs for the Scout Platoon (Plt) in 1989. All of these major end items were considered first generation equipment. We were not short any major pieces of equipment.

Although all classes of supply were available and there were no critical shortages, money and funds were restricted and closely monitored by the end of Fiscal Year (FY) 90. Even though many of our requisitions were deferred, I still adopted a "Spend! Spend! Spend!" policy. My intent was to spend my allocation of money and continue to identify our needed resources, in the form of deferred requisitions, should more money become available at the end of the FY.

Long before I took command, the battalion had a superb reputation for high marks in training. I felt we were the standard setter for the division. After my assumption of command on 5 May 1989, I attended a POMCUS Inspection of the Return to Europe Program (PIREP) in the FRG to study the battalion's GDP and to review our Prepositioned Material Configured to Unit Sets (POMCUS) stocks. This was a one-week exercise, but very meaningful for a new Battalion Commander. Furthermore, I had just returned from the FRG where I was previously assigned in VII Corps. The 1st Inf Div would be assigned to the VII Corps if there was a European war. I was confident about the battalion's war-time mission within five
days of taking command. I was knowledgeable about the environment in the FRG and our area of operations.

Reserve Officers' Training Corps Support, 1989

Upon my return to Ft. Riley, the battalion's first full-time mission was the support of the 3rd Reserve Officers' Training Corps (ROTC) Region's advance summer camp--Camp Warrior. The battalion's total resources supported ROTC cadet training in the months of June through July. Our battalion ran the host support committee, physical training committee, the obstacle course committee, Operation Green Thunder (a combined arms fire power demonstration), the grenade range, and Warrior Challenge (platoon patrolling). In addition to supervising these committees, our other battalion resources also supported ROTC.

Operation Green Thunder was for over four thousand spectators on two consecutive days. Although the sponsoring company was B Co, it was, in reality, a battalion level operation because of the external resources involved with putting such a large demonstration together. The advantage was getting the soldiers a lot of good training from participating. We were envied by the other battalions for receiving "the rose" on this one.

Fire Fighting in Idaho

We just finished ROTC support on 31 July 1989 when we received a Warning Order (WARNO) for possible fire-fighting duty. We thought it was a joke. Whoever heard of a tank
battalion fighting fires! On 3 August 1989, we were alerted for an emergency deployment to Idaho to fight forest fires with the National Forest Service. Trained fire fighters came to Ft. Riley and gave training to the soldiers. The division staff was placed at our disposal to assist in our deployment. I was totally surprised at this turn of events.

Within four days we deployed by air to Boise, Idaho. We were attached to the 3rd Bde, 4th Inf Div. My new Brigade Commander was COL Anthony Trifiletti. I was his Deputy G3 in the 1st Ar Div when he was the G3. His other Battalion Commander, LTC Robert F. Dees, was the Deputy G3 before me. The senior active army advisor to meet us at Boise was COL Peter A. Grundvig (the 1st Ar Div G3 after COL Trifiletti). It's a small world!

We set up our first family support center in the battalion headquarters at Ft. Riley and staffed it around the clock. We provided assistance, maps, and briefings to family members requiring our help. This became an example and prototype for many family support centers to follow.

The entire operation turned into an air mobile operation in the high mountains. The soldiers loved it. It was a difficult task and a real change of pace for a tank battalion. On 12 August, the Under Secretary of the Army, Mr. John W. Shannon, visited the battalion and I briefed him on our operations to date. An old friend, COL Joseph R. Inge, accompanied him, as did my future Brigade Commander, COL Anthony A. Moreno. After
fighting fires for sixteen days, we returned. The soldiers in the battalion earned the Humanitarian Service Medal.

National Training Center Rotation Training

Training for our NTC rotation began in earnest. We went to the field in late August for platoon lanes. We cross-attached B Co with the 3rd Bn, 37th Ar, and A Co with the 2nd Bn, 16th Inf when we returned from the field. I received A and D Co's, 2nd Bn, 16th Inf as part of our Task Force (TF) for the desert. D Co, 5th Engineer (Engr) Bn from Ft. Leonard Wood, Missouri (MO), was attached to us throughout this period. We trained and lived together in this configuration for the next five months.

As TF Thunderbolt, we did the first TF gunnery at the MPRC. We executed company lanes with only our battalion resources—even the chaplain became a tactical evaluator. From September 1989 through December 1989, we performed multiple grass drills (human chess game with people simulating vehicles), Pre-Combat Inspections (PCI), Standard Operating Procedures (SOP) rehearsals, Command Post Exercises (CPX), studied the NTC Rules of Engagement (ROE), and executed logistics exercises. In November, we executed our TF evaluated exercise in the worst weather imaginable—rain, cold, lightning, mud, and tornadoes. In December, we revisited platoon fundamentals with the brigade's "Back to Basics" program. In late December, we performed two days and one night of battalion level grass drills at the Known Distance (KD) range near Camp Forsythe (southwest portion of Ft. Riley).
During battalion training, the Mortar Plt scored the highest percentage in the division on the Expert Infantryman's Badge (EIB) test. The Medical Plt scored the second highest percentage in the division on the Expert Field Medical Badge (EFMB) test. The battalion competed in the FORSCOM Logistics and Maintenance Competitions. We came in second in the division for both. We won the Connally Field Mess Award and represented the division in the III Corps competition.

We rail-loaded our equipment from 26 December to 30 December 1989 in bitter cold weather. We took everything except our tanks and BFVs.

**National Training Center Rotation 90-4**

We were the first fully-modernized battalion from the 1st Inf Div to participate in the live fire portion of an NTC rotation. We broke the record in the day defense mission by shooting a record-breaking 98.2 percent. We also shot better than average in the night defense and day offense by shooting seventy percent and forty percent, respectively. Although we won no major battles, we definitely gave the Opposing Forces (OPFOR) a hard fight. C Co and the Medical Plt received the "Order of the Cobra" award from the observer controllers. In the defense mission, the OPFOR attacking regiment won by a narrow margin after a 48-hour fight.

We set up a Family Support Center at the battalion headquarters similar to the one we operated while deployed in
Idaho. Our concept for family support at the battalion level was a major success story and became the division standard.

We arrived at the NTC on the 3rd of January 1990 and returned to Ft. Riley on the 26th of January 1990. We considered ourselves better for the experience and returned better trained. All the attached units and equipment were returned to their parent battalions upon redeployment.

**Company Commander Changes of Command**

A number of company commands were due for changeover upon our return from the NTC. CPT Michael J. Clidas, the D Co Commander, became the HHC Commander. CPT Thomas D. Wock, the Battalion S4, became the D Co Commander. CPT Robert C. Beals, the Battalion Assistant S3, became the A Co Commander. CPT Curtis L. Torrence, the Battalion Motor Officer (BMO), became the C Co Commander.

By early March 1990, all of the change of command inventories were completed and the new commanders were in place. The only Company Commander in the battalion not changing command was CPT Michael C. Roberts, the B Co Commander. I slated B Co to attend a NTC rotation with the 2nd Bn, 16th Inf, in January 1991.

**Tank Gunnery Training**

Tank gunnery training started in earnest almost upon our return from the NTC. With new commanders in place, the battalion was determined to retain its reputation as the "top guns" in the division. After a thorough train-up in late
February and early March, we arrived at the MPRC on or about 20 March 1991.

We had an extensive gunnery awards program. We even assigned the Combat Support (CS) and Combat Service Support (CSS) troops to a tank crew, making them eligible for prizes. I made a personal wager with each Tank Commander to the tune of $10.00. I was playing the odds I could outshoot at least half of them. It seemed like a safe bet at the time.

When we finished shooting, we owned four of the six gunnery records at the MPRC. We qualified a total of seventy-two tank crews even though we were only authorized fifty-eight tank crews (I insisted that all armor personnel qualify on a tank). All of the platoons qualified on the Platoon Kills Battalion (PKB) exercise. All six scout crews qualified for the first time in their BFVs. They fired an unbelievable 912 point average out of 1,000 points. This included the first 1,000 point perfect score, which was fired by SSG Mark W. Flowers' crew.

Of major significance, MG Thomas G. Rhame, the Commanding General (CG), directed us to shoot tank gunnery by hot-bedding tank crews. We took thirty-three tanks of our authorized fifty-eight tanks to the MPRC and rotated shooting crews. Hot-bedding, combined with the bad weather (even snow and a tornado), gave us a challenge not reflected in any statistics. We tested the concept to try and to cut costs. In the end, we proved the concept was not a big cost saver, and it placed an additional training distractor on the battalion. We saved all
future battalions shooting tank gunnery this hardship by proving our case.

The new Secretary of the Army, the Honorable Harold P. W. Stone, visited us at the MPRC. He was escorted by MG Rhame. We gave him a complete rundown on the range operations and ran the PKB exercise for him to observe. We also briefed him on the layout and operation of the MPRC.

Secretary of the Army with LTC Marlin and members of the "world's greatest" Scout Plt. SSG Mark E. Firestone, to the right of the Secretary of the Army, named his newborn son Bradley, after his BFV.
When tank gunnery finished, we had a special ceremony in Normandy Theater to make the award presentations for the best shots. I paid out about two hundred dollars in lost bets, but I could not have been prouder. Under the most adverse conditions, we had broken records and qualified more crews than any previous battalion in the history of the Big Red One.

**Battle Command Tactical Program**

The battalion participated in the division's Battle Command Tactical Program (BCTP) evaluation in April by executing all of our brigade's functions during this computer battle simulation. The successful performance of the division made a major impact on the division being sent to Desert Shield. MG Rhame was convinced the division's successful, evaluated performance during this exercise was one of the two key deciding factors in the division being deployed to Saudi Arabia. He also felt our gunnery scores at NTC was the second major factor.

**Inspector General's Inspection**

We were inspected by the Inspector General (IG) inspection team in mid-May 1990. We were fortunate to have a respectable amount of time to prepare. The last twelve months were busy, to say the least, and it was good to have time to go through everything and make any necessary corrections. The inspection was very thorough and lasted about four days.

We received commendations for our supply room operations and the Medical Plt's operations. All other areas were satisfactory, with the exception of maintenance operations.
Specifically, we needed to improve our oil analysis program and our Tactical Army Maintenance and Management System (TAMMS) procedures. At the time, we did not have a BMO assigned to the battalion. We were re-inspected in these areas a month later and received satisfactory ratings.

Nobody could ever accuse us of avoiding an inspection. We were proud of our accomplishments and sought out inspections. In truth, we were using these inspections to assist us in getting ready for the annual FORSCOM Logistics and Maintenance Competitions.

Reserve Officers' Training Corps Support, 1990

We had the distinct privilege of being the only battalion in the 1st Inf Div to do three consecutive years of ROTC summer camp support. I argued and won my case for doing the same committees we did in 1989 on the grounds we would be more efficient. This was a cost-cutting year. However, the name of the game was to provide better training support to the cadets at reduced costs.

Using the lessons learned from the previous year, we set up a battalion operations center to monitor all the battalion's resources and to deconflict schedule requirements. In the end, our established relationship with the committee's Officer in Charge (OIC) from the colleges was a major success.

We went out of our way to make the ROTC cadet company that we sponsored a part of the 37th Ar Regt. Each committee received more support from the battalion than they requested;
our soldiers' professionalism was a positive influence on the cadets; a high standard of training support was provided; Operation Green Thunder became a "world class" event; and the soldiers received excellent training. In the end, we completed this difficult mission under budget.
CHAPTER 2
TRAINING FOR WAR
2 AUGUST 1990 - 8 NOVEMBER 1990

Invasion of Kuwait

The initial impact of Iraq invading Kuwait on 2 August 1990 was not significant enough to prevent the battalion from taking the scheduled block leave planned for the month of August. We went about our routines of business as usual and watched the usual flurry of diplomatic hustle. We anticipated the crisis would receive the usual saber rattling and verbal charges and counter-charges and, in the end, there would be no change. Either Iraq would possess Kuwait, or some agreement would be made to prevent bloodshed at all costs. When the XVIII Airborne Corps from Ft. Bragg, North Carolina (NC), was notified to deploy to Saudi Arabia, we became more attentive.

We all began watching the Cable News Network (CNN) daily. Not a day passed without updates or discussion or speculation on events in Saudi Arabia. We paid closer attention to our geography and Iraq's order of battle. Soldiers at all levels wanted to know about Iraq and the conflict in general. Throughout the month of August, we started seeking information on Iraq's armed forces and the geography of the area. In many respects, this became the first mission of many of our new key leaders who arrived in August.
Key Personnel Status

CPT Darrell M. Williams was assigned as the Battalion S2 after completing the Military Intelligence Advanced Course. He was an infantry officer prior to his branch transfer to military intelligence. I assigned CPT Joel E. Hodge and CPT George E. Loche as the BMO and Battalion Assistant S3, respectively, after completing the Armor Officers Advance Course. Both of these officers served in LTC Terry W. Bullington's (the present division G3) battalion in the FRG and came highly recommended. Chaplain Gerald D. Bacon arrived in July from his advance course. Like CPT Williams, he was an infantry officer prior to choosing the way of the cloth.

Although MAJ Phillip M. Cook, our new Battalion S3, had arrived in July, he had a gall bladder operation just before he signed in and was in the hospital for the whole month of July. He reported for duty in early August. He had just completed the Command and General Staff College (C&GSC). He and I served together on the 1st Ar Div staff in 1986. During the interim, he served a tour in Bahrain and married a Bahrainian citizen. His primary background, in addition to being an armor officer, was in logistics and maintenance. However, he served previously at Ft. Riley. Little did he, or we, realize he would be returning to the Middle East in less than six months.

We had the most qualified platoon leaders in any battalion in the U.S. Army. Five out of the twelve had been in charge of their platoons for almost two years, and the rest were not far behind them in experience. This was our battalion's strength.
and it was a Godsend. Because of the crisis, I called a meeting of all the lieutenants in the dining hall one night to explain why I was delaying their rotation to new duties.

I felt if we went to war, having competent, experienced Platoon Leaders was an absolute. We owed this to our soldiers—to provide experienced leadership at the point of impact. No officer should feel slighted for staying with a platoon a longer than normal time under these conditions. I informed them I felt very strongly that we would be notified to deploy. If we were not deployed, I would rotate the junior officers to new positions within the battalion to enhance their career progression and to provide them a higher level of responsibility. They supported my philosophy and decision.

I assigned LT Timothy A. Powers as the Mortar Plt Leader in place of LT Paul D. Russo. LT Powers was a chemical branch officer with a lot of leadership potential. This left the Battalion S3 Section without a branch qualified chemical officer. LT Powers was offered the platoon because the 12th Chemical Co was not going to provide him the opportunity to be a Platoon Leader. I refused to treat non-armor officers differently than armor officers. As a Battalion Commander, my responsibility to the Army was to develop junior leaders regardless of their branch of service.

Four new Platoon Leaders were assigned. LT Conrad J. Wiser, LT Robert A. Law III, LT Andrew J. Kounas, and LT Robert M. MacMullen all arrived in August. LT Wiser was assigned to C Co. The other three lieutenants were assigned as Platoon
Leaders in B Co. LT Wiser shot high tank crew on his first tank gunnery. All three of the new B Co Platoon Leaders began training for the NTC.

CPT Clidas was counseling his 1SG, 1SG Franklin Jensen, for a few months with regard to his performance. He kept CSM Willie C. Milling and me advised on his assessment of his 1SG. 1SG Jensen was the 1SG of HHC with over one year under the previous commander. Neither one of them was very happy with the other. CPT Clidas wanted him replaced. I concurred just prior to the end of the gunnery period. However, I was convinced 1SG Jensen had potential. I often felt he needed the opportunity to serve as a 1SG of a tank company prior to duty with the HHC consisting of 327 soldiers (half the battalion).

I called LTC G. Patrick Ritter, Commander of the 1st Bn, 34th Ar, and asked him if he needed a tank company 1SG. I explained, truthfully, the circumstances and he volunteered to accept 1SG Jensen as a First Sergeant of a tank company. I gave 1SG Jensen an evaluation report with the tacit understanding I expected him to do better with the new company. This was his opportunity and second chance.

The brigade and division Command Sergeants Major (CSM) became upset about being left out of the decision. Tough. We did the right thing and served many needs with a good solution. I brought 1SG Timothy C. Thiede from C Co to be the new HHC 1SG and moved 1SG James Macasio from the S2 section into the C Co 1SG spot. Both 1SG Thiede and 1SG Macasio served with the 37th
Ar Regt in Vilseck. We completed the exchange immediately upon our return from the MPRC in November.

I removed CPT David P. Paluso from the Adjutant’s position because I was very dissatisfied with his overall performance. I sent him to be the Battalion Assistant S3 and assigned CPT Loche as the Adjutant.

At the end of the summer, four of the five armor Battalion Commanders in the Big Red One served together overseas in the FRG. LTC Ritter, LTC Gross, LTC Robert Wilson, and I served in the 1st Ar Div together. We worked together in operations and training for a number of years. I always thought of this as a special, coincidental relationship.

**Competition and Training**

SFC Herman B. Wilson, the Battalion Mess Sergeant, entered his cooks in the Connally Field Mess Competition in late summer of 1990. He won the year previously and was defending his title. This was excellent training for the cooks. It was one of the few times the cooks set up the Mobile Kitchen Trailer (MKT) and a mess site to specific training standards. It was the closest thing the Army had to an evaluated exercise for cooks. We operated a regimental dining facility with the 3rd Bn, 37th Ar. Hence, we had some cooks from the 3rd Bn participating in the competition.

This was a terrific initiative on SFC Wilson’s part. He personally coordinated, planned, and trained his personnel at Camp Funston (southeast portion of Ft. Riley). This effort had
no officer involvement. He was very proud of his soldiers and the Army was his family. Although he had a marginal weight problem and was threatening retirement, he took top honors for the second consecutive year and went on to represent the division in the III Corps competition. We had competent, field-tested cooks knowledgeable in sanitation, food preparation, and field craft.

My own soldiers thought I was asking too much of them to enter the battalion in the FORSCOM Logistics and Maintenance Competitions from August through October. We were attempting to prepare for the tank gunnery and brigade NTC rotation. I insisted. I felt any free inspection could help to maintain our combat readiness, and I also thought we had a good chance of winning.

After some last minute hard work on the part of all the supply personnel, commanders, and the Maintenance Platoon, we came in first place in the FORSCOM Logistics and Supply Competition, and second place in the FORSCOM Maintenance Competition. I felt the battalion did a great job just entering these competitions. I knew the soldiers learned something from the inspections and I considered this good training.

In the same time frame, the Mortar Plt scored the highest percentage of soldiers earning the EIB in the division. The Medical Plt scored the third highest percentage of soldiers earning the EMFB. Furthermore, the Medical Plt trained the highest ratio of "combat lifesaver" to assigned personnel in the division. The "combat lifesaver" program was a program of
training combat soldiers to a high degree of emergency medical aid. As an example, a soldier was taught and practiced in the administering of an intravenous fluid injection.

**Platoon Training**

In preparation for simulation training at Ft. Knox, I personally evaluated the SOPs for each platoon. Philosophically, I always stressed the retention of SOPs and battle drills at platoon and company level. From 2 August until 25 August, our efforts aimed toward maintenance recovery from our ROTC advanced camp support mission, the month prior, and block leave. By this time, we began reading Middle East Intelligence Summaries (INTSUMS) on a regular basis.

We deployed to Ft. Knox for Simulation Network Training (SIMNET) in late August. We changed our battle focus toward the Iraqi armed forces and desert warfare. At Ft. Knox, we concentrated on platoon battle drills and the validation of platoon and company level SOPs. Our second mission at Ft. Knox was to get smart on SIMNET technology.

While at Ft. Knox, we continued to seek information on the situation in Saudi Arabia and the availability of training material. The 194th Bde at Ft. Knox deployed hundreds of soldiers to the 24th Inf Div to fill their personnel shortages. Even the OIC of the SIMNET center was reassigned to the 24th Inf Div. We also found out the SIMNET staff was sent to Ft. Stewart, Georgia (GA), to help train the 24th Inf Div before they deployed. We trained at Ft. Knox for one week and then
rode the buses home. Our key leaders and commanders remained at Ft. Knox another eight days to host the 2nd Bn, 16th Inf, and 3rd Bn, 37th Ar.

Each tank Company Commander evaluated every platoon in his company in a deliberate attack, a deliberate defense, and a hasty attack in a four-day field exercise. We set up the operations center in a small building behind range control. Each platoon rotated through a series of exercises, culminating with a detailed After Action Review (AAR) by the Company Commander. All opposing forces were billed as Iraqi forces with corresponding titles to match the Iraqi order of battle. We began using names like Raghead and Baghdad in our operation orders. This was our first deliberate effort to get soldiers to understand the enemy was Iraq. Each AAR site was set up with a General Purpose (GP) tent with lights, chairs, and butcher paper board. In addition to the platoon field exercises, a field grade officer executed the PCI of each platoon in the motor pool. He checked load plans, knowledge of the operation, personal equipment, Multiple Integrated Laser Engagement Simulation Systems (MILES), and tactical SOP knowledge. The temperatures were over one hundred degrees, and over one hundred twenty degrees inside the tent. We did a lot of heat safety training.

CPT Roberts, the B Co Commander, volunteered his company for the additional duty of furnishing the OPFOR in the platoon's deliberate defense. CPT Roberts was my most experienced tank Company Commander with 16 months of command. The other three
line Company Commanders were experiencing their first field exercise with their companies since taking command in March 1990. CPT Roberts was slated to be cross-attached to the 2nd Bn, 16th Inf after the platoon lanes. His company was scheduled to attend the NTC rotation with the infantry battalion in January 1991.

**Cross Attachment**

B Co deployed to the field several days prior to the exercise and planned to stay in the field after the platoon lanes to get additional training. All three of the B Co Plt Leaders were new and this was their first exercise. In the end, it proved to be too much. Their maintenance posture plagued them and they were forced to return to garrison earlier than planned. When they returned to garrison, they were attached to the infantry battalion and moved into the infantry motor pool.

C Co, 3rd Bn, 37th Ar, was assigned to us and moved into B Co's location in the motor pool. C Co, commanded by CPT Timothy A. Norton, attended the NTC rotation with the brigade in January 1990 and, for this reason, did not attend with the 3rd Bn, 37th Ar, in January 1991. CPT Norton was an experienced and extremely competent Company Commander.
Multi-Purpose Range Complex

I made the decision to move the battalion to the MPRC to support the brigade NTC rotation training and gunnery and to support our gunnery program. Since our return from the field, we concentrated on home station gunnery training: tank gunnery skills and the UCOFT simulator. Funds were limited during this time period because of the proximity to the end of the FY. All requisitions were monitored closely and command guidance was established on the purchase of repair parts: defer low priority parts until the end of the FY. After a few weeks in garrison, we deployed up to the MPRC for a thirty-seven day stay.

We had multiple objectives to achieve at the MPRC: qualify all tank and BFV crews on gunnery table VIII and the PKB exercise; qualify all soldiers on individual and crew served weapons; and provide OPFOR support and range and gunnery support for the two TFs training to go to the NTC. Two other implied objectives were to shoot the division's remaining ammunition allocation for FY 1990 and to be the test case for the division's new platoon evaluation and qualification system. I also established the criteria and requirement for all armor
officers and all Military Occupation Specialty (MOS) 12's (armor enlisted) to take the Tank Crew Gunnery Skills Test (TCGST) and to serve as a crew member through Tank Table VIII--crew qualification. I was a stickler for all combat arms personnel maintaining technical qualifications--myself included.

**Support Mission for Brigade's NTC Rotation**

We occupied the MPRC early for the sole mission of supporting and operating the range for TF 2-16 and TF 3-37. We transported and unpacked the ammunition, furnished all tower operations personnel, established the AAR site with a detailed terrain board, and provided all the checkpoint (CP) and safety personnel and equipment. Our mission was to run a first class operation and to alleviate the support burden from the training units. Those personnel not directly involved with these missions continued gunnery training, qualified small arms weapons on the small arms range to the east of the tower, qualified crew served weapons on the zero range east of the tower, and attended classes in the billeting area on Iraqi equipment and order of battle. It was simultaneous, multi-echelon training, to say the least.

After we qualified all of the platoons from the brigade's two TFs, we policed the range and began preparing for OPFOR duty. We prepared professional development classes regarding the Middle East and Iraq. We started a "Desert Want List" eventually becoming the standard for the division. About three times a week, the battalion XO, MAJ Richard F. Machamer, met
with SFC George F. Samuels, CPT Torrence, and SSG Curry to develop a list of supplies and requirements needed to deploy to Saudi Arabia. The concept was to have a ready list and to have all the requisitions ready to be dropped at a moment's notice if funds became available—"Spend! Spend! Spend!"

I was disappointed at B Co's performance in gunnery as part of TF 2-16. All three of their platoons failed to qualify at platoon gunnery. I felt strongly about the three new Platoon Leaders not being tank crew qualified before the PKB. This had a direct impact on their platoon's performance. However, they were attached to TF 2-16 and I did not have as much say as I would have liked.

As part of the NTC training for the two TFs, we were the enemy. I directed C Co, 3rd Bn, 37th Ar, to take the defensive mission. C Co rotated platoons into the exercise and developed a tough defense. They would eventually win ten of twelve battles. I took my other three tank companies and became the attacking Iraqi battalion. All of our vehicles were equipped with MILES.

CPT Beals, CPT Torrence, and CPT Wock, the A, C, and D Co Commanders, respectively, comprised our attacking Iraqi battalion. We woke up for the next eight consecutive days at 0400 hours, formed the battalion into a road march, and attacked a defending infantry or armor company. We doctrinally replicated an attacking Iraqi battalion. During the AAR to the defending company, we introduced ourselves as Iraqi commanders and explained our order of battle and tactics. We eventually
won twelve of twelve battles. This exercise was very significant. This was the first and only time the three new tank Company Commanders commanded and maneuvered their companies prior to deployment to Saudi Arabia. They learned battalion level operations with a whole new command and staff team. The new Company Commanders and XO's received a chance to work with me. Many of the formations were the same ones used in the desert.

B Co's maneuver performance in the field was worse than their tank gunnery. COL Moreno counseled me several times and suggested I spend a little time with CPT Roberts. He was having difficulty commanding his unit and had severe maintenance problems. I later discovered a key part of the problem was the inoperability of three of his four-wheeled vehicles. This was hampering his maintenance operation. We fixed the problem by providing additional support from the MPRC, even though his company was not legally part of the battalion at this time. However, I also discovered we were providing some maintenance support to both TFs and several attached units throughout this period. We even voluntarily fixed the "oldest gas truck in the world" for the range crew at the MPRC. They were appreciative.

Personnel not actively engaged in OPFOR duty continued to receive small unit and individual training. We had two shuttle buses so the soldiers were able to visit home periodically.
Preliminary Tank and Bradley Gunnery

We never, ever stopped training. We were the only unit in the entire division wearing flak jackets as a matter of routine in training. In the name of efficiency, I believed in doing more than one thing at a time. By the time we began our scheduled gunnery training at the MPRC, we were qualified on individual weapons, small arms, crew served weapons, and had attended several professional development classes: hot weather training, cold weather training, Iraqi order of battle and equipment, Middle East geography, customs and courtesies of the Middle East, Soviet small arms training (we kept three or four Soviet-made small arms in the A Co arms room for training), and first aid for snake, scorpion, and spider bites. All of the officer and enlisted personnel not assigned to tank crew positions were formed into crews and assigned to a tank. An abundance of training literature was being circulated at this time: three lessons learned booklets from the Center of Army Lessons Learned (CALL), Iraqi equipment and aircraft recognition booklets, and Iraqi tactics booklets. Even the MPRC lounge was decorated with Iraqi training posters. The "Desert Want List" was forcing commanders and staff to think about desert warfare with a lot of attention to detail.

We began with the TCGST for all armor personnel. We modified the armor vehicle recognition test to reflect Iraqi vehicles, substituted an ammunition transfer drill in lieu of the breech block assembly and disassembly, and added two MILES training stations. We also required Tank Commanders to check
bore sight prior to bore sighting and developed our own check bore sight cards for this purpose. The ammunition transfer drill was demonstrated to MG Rhame, BG William G. Carter III, the Assistant Division Commander for Maneuvers (ADCM), and to COL Moreno. This drill was adopted by the USAARMC as a standard for all future TCGSTs. The only armor officer exempt from this test was the Battalion Support Platoon Leader, LT Craig A. Thompson. As the Support Plt Leader during this intense period, his hands were full.

The Scout Plt supervised its own BFV crew qualification test. With two master gunners and several more topnotch Non-Commissioned Officers (NCOs), this platoon was highly trained and was the current gunnery record holder for BFV platoon gunnery at the MPRC.

The Battalion Master Gunner, SFC Terrance L. Ballinger, in concert with the Company Master Gunners, set up the Tank Crew Proficiency Course (TCPC) on a dirt road running adjacent to the MPRC. Because of the available daylight hours versus night hours, I made the decision to shoot five day engagements and five night engagements for Tank Table VIII—crew gunnery qualification. I was determined to shoot around the clock with no range downtime attributed to the unit. This was the same design used for the TCPC course. We trained to the same standard being used on Gunnery Table VIII. Each tank company master gunner and commander was responsible for training his crews on the TCPC course. Simultaneously, crews were being sent
back to use the UCOFT at the Div Plt Training Center. Training was now simultaneous, multi-echeloned, and continuous.

Tank negotiating the TCPC course on a dirt road vicinity north of the MPRC. Shack and antenna are one of three safety CPs used to operate the MPRC.

**Crew Qualification**

We qualified seventy-two tank crews and six BFV crews. If a crew failed the first time, they were sent through the training again. Additional training was always available. Chair drill (tank crew sits in four chairs and rehearses fire commands and crew actions) prior to an actual live fire run was mandatory and served to prepare the crew. We were convinced using the chair drill with flash cards or a blackboard was a
winner. Evaluations were executed by the Division Master Gunner and his crew evaluators.

Of the fifty-eight assigned crews, fourteen of these belonged to B Co. I brought them back to the range when they finished their training with TF 2-16 and insisted they qualify their crews. After thirty-seven days, B Co was still shooting as we were clearing the range and starting to move back to garrison.

Looking down range from the MPRC tower. Notice the vehicles are painted dark green. Note the "Master Blaster's" (Master Gunner's) billboard with the unit crest.

The additional fourteen crews were comprised of the staff officers and NCOs we put together as makeshift crews. This was
not a practice I started just for Desert Shield. I believed all armor personnel must be prepared to back-fill any tanks on the battlefield. In war, I would not accept a non-operational tank for lack of a crew. I would fill it from my own staff if necessary.

We always chose one day of every gunnery period to invite family and friends to the range to visit husbands, friends, or family members. We would usually provide a bus and each visitor was encouraged to bring a picnic lunch. We also set up a static display of vehicles for visitors.

LTC Marlin briefing family members at the MPRC on Family Day.
For those who were interested, a tour, briefing, and a shooting demonstration were available at the range tower. I usually gave the briefing. Earplugs were issued, then we would shoot a tank and BFV on the range for them. This event usually was very impressive.

This gave the soldiers an opportunity to show their family and friends what they did for a living. Plus the Chaplain, CPT Bacon, provided church services at the MPRC in the afternoon to accommodate families. By 1500 hours, the families departed and the range was in operation again.

On 28 October, GEN Vigleik Eide, the Chairman of the NATO Military Committee, visited the range with MG Rhame. We had advance notice of his visit and prepared a platoon to run the PKB exercise. He had about four high level officials with him. We gave them our usual first class treatment—coffee and "Thunderbolt" cookies (a chocolate sugar cookie baked by SFC Wilson).
LTC Marlin greeting GEN Eide and MG Rhame at the MPRC. Note flak jacket worn by LTC Marlin.

They observed an impressive PKB and toured the AAR site where we explained our training techniques. GEN Eide visited an M1 tank and received some hands-on training by one of our Tank Commanders. He seemed genuinely interested in speaking to the tankers. I was very pleased with the battalion's performance. I was also intrigued as to whether his visit had anything to do with the possibility to our deployment to Saudi Arabia.

**Platoon Qualification**

We fired all of the tank platoons on a day and night PKB. This included a tactical evaluation of each platoon. The Tank
Platoon started with a one day and night tactical scenario, accompanied by a captain as an evaluator, and entered into the live fire portion of the exercise at the end of the tactical problem.

Prior to the actual exercise, the platoon trained on our terrain board and performed "grass drills." A grass drill consisted of the entire platoon walking through an open field, rehearsing and simulating the events per their SOP.

All of the platoons qualified on both the tactical exercise and the live fire. Not all of them qualified on the first attempt. Those failing to qualify on the first attempt were brought back and they repeated the exercise. This included my B Co Plt. I refused to leave the range without making sure everybody was qualified to the new division standard for the PKB qualification. We also qualified the C Co, 3rd Bn, 37th Ar, platoons.

Each live fire exercise resulted in a detailed two hour AAR given by MAJ Cook or me. This was done in the debriefing shack on a detailed terrain model.

We also qualified the Scout Plt on a modified scout guard PKB exercise.

Ammunition for Fiscal Year 1990/1991

MG Rhame gave us the mission to use all of our FY 90 ammunition during this gunnery. We were also given the mission to shoot up everyone else's leftover ammunition. Bullets appeared out of nowhere. Every time I thought we had a handle
on our main gun round count, more ammunition showed up. The
bottom line was units were passing us their ammunition. They
did not want to get caught with ammunition in their account by
the end of the FY. Managing all the ammunition for three
battalions shooting on the range, using ammunition from both the
FY 90 and FY 91 accounts, and the extra ammunition showing up
kept us extremely busy. I assigned the impossible mission to
MAJ Cook and SFC Ballinger to keep track of the ammunition
expenditure status.

With the possibility of going to war, I repeatedly asked MG
Rhame, BG Carter, and COL Moreno if I could shoot my FY 91 main
gun ammunition allocation. I was told not to fire more than
fifty percent of my annual allocation. This was another
indication of the uncertainty of deploying during this time
period. Unfortunately, with the confusion in keeping track of
the ammunition and my insistence to re-shoot unqualified
platoons, we fired approximately sixty-five percent of our FY 91
ammunition. I envisioned my career ending here.

As it turned out, I was two days away from the Quarterly
Training Brief (QTB) (a brief showing my FY 91 ammunition
account deficit to MG Rhame) when we were alerted. I made the
right decision and the soldiers received excellent marksmanship
and gunnery training during the last thirty-seven days. We
realistically, through good training, expended all the
division's remaining ammunition prior to the end of FY 90. For
thirty-seven days, we trained with pistols, rifles, crew level
machine guns, missiles, tanks, and BFVs. Cooks and mechanics
even fired tanks. Our combat support personnel fired more machine gun bullets in a one-month period than they usually were able to fire in a year. Not a day passed in thirty-seven days--regardless of the battalion's mission--when we were not shooting on a range.

**Commander's Comments**

On the night of 2 November, I assembled the entire battalion in formation in the billeting area of the MPRC. We were about to head home on 3 November. I climbed up onto the top of a pretty shaky picnic table and the soldiers fell in around me. I gave my "under the lights" speech. I wanted to make sure they were as conscious and as proud of their achievements as I was of them. I restated their successful accomplishment of our objectives. I made clear to them no other battalion on Ft. Riley trained as hard or as well as them. The statistics I quoted them were used to prove my point.

I also told them we were going to Saudi Arabia. Instinctively, I stuck my neck out. I wanted them to be ready, physically and psychologically. I would rather eat my words later than have my soldiers unprepared to go to war. I told them the question was not "if" but "when" because it was just a matter of time. I had no concrete proof of any of this. I later discovered that the Company Commanders briefed their companies with the same mind set. The Company Commanders observed training was being taken very seriously regardless of the subject: buddy first aid, Iraqi equipment, Arabic language,
armored vehicle identification. Everybody had a new sense of urgency. They all truly believed we were going to Saudi Arabia.
MG Thomas Rhame's Command Meeting

We finished our recovery operations from tank gunnery as MG Rhame, returning from a III Corps exercise at Ft. Hood, announced a commander's meeting for 1600 hours on 9 November 1990. The news media was already alerting everyone in the division about the President's decision to send the Big Red One to Saudi Arabia.

When he arrived, he was fired up and had a sense of urgency about him. He briefly outlined the division's priorities for preparation and deployment of our equipment, soldier's individual training (specifically chemical training), and family/soldier preparation. He stated the order of march from Ft. Riley would be the Division Support Command (DISCOM), separate battalions, and Division Artillery (DIVARTY). He then flipped a coin to determine whether the 1st or 2nd Bde would deploy first. The 2nd Bde was to follow the 1st Bde. Needless to say, there were a lot of unanswered questions and details to be resolved.

Although it was a Friday, no soldiers were called in to work on the weekend. The S4 Section was the exception. We activated the "Desert Want List." We realized it might be the soldiers' last weekend with their families for some time. The leadership, on the other hand, had several meetings in
preparation for Monday. I chose not to have any weekend meetings. We all met for our first meeting Monday morning sharp. Operation Plan (OPLAN) Lexicon Danger was in effect.

Statement by MAJ Cook, the Battalion S3, describing his alert notification on 9 November 1991:

All of the battalion was expecting to be alerted for deployment to Saudi Arabia. For the past three months, we were training the unit; not specifically for Saudi, but our training plan was intensive with platoon lanes, SIMNET exercises, OPPOR duty for 2nd Bde, and tank gunnery to include the PKB gunnery and TCGST. The battalion had just returned to garrison after thirty-seven consecutive days at the MPRC and was in the last day of recovery operations when the alert call came.

I remember having just arrived home from work to start fourteen days of leave. LTC Marlin called, "You're going to regret ever answering the phone; your leave is canceled. Report tomorrow morning for a command and staff meeting to discuss our plan." I knew once I picked up the phone the alert was real. The hardest part of the whole day was informing my wife the division was leaving.

The next six weeks were busy for the battalion. We sorted and packed, repaired and painted vehicles, identified and sent advance parties to Saudi, issued new uniforms and equipment, upgraded from the .45 Colt to the 9mm Beretta pistol, gained new trucks, qualified all personnel on weapons and through the Nuclear, Biological and Chemical (NBC) chamber, performed NBC Common Training Tasks (CTT) training and certification, certified all tank crews on the M1A1 tank, prepared families for the eventful happenings, prepared soldiers for deployment with shots and medical and dental updates and administrative and legal matters, and let's not forget performing the closeout of all facilities within the battalion. On top of all the details, we were able to bring the unit up to strength with the influx of volunteers from Table of Distribution Allowances (TDA) organizations throughout the country.

We were lucky to be able to complete all our preparations before Christmas and were allowed to take a few days off to be with families. It was, for me, a sensitive time. All of my family was home for the
holidays. They made Christmas a big social event within the community of Hugoton, Kansas.

After the holiday, the time was spent in final preparations for deployment. The battalion finally got the word to deploy on 7–9 January along with the remainder of the 2nd Bde.

**Operation Order Lexicon Danger**

Operation Order (OPORD) Lexicon Danger was a detailed division order outlining the procedures for deployment of the division from Ft. Riley. The original order was for deployment to Europe to link-up with POMCUS stocks. The order was detailed enough for battalions to understand what actions needed to be taken immediately.

The list of missions to prepare for deployment was endless. From this point on, many things happened simultaneously. On Monday morning, 12 November, the commanders and staff met with me in the battalion training room. We outlined on the blackboard our tentative plan and schedule. It was a good thing we used chalk, because the information changed frequently. Meetings were scheduled twice a day for updates and changes. The idea was to meet twice a day briefly to evaluate our status, put out important information, and coordinate our actions for the day and forthcoming day.

The pace of business within the battalion was unbelievable. No one needed to be encouraged to do anything. Team work became the norm without any additional motivation. Soldiers were ready and willing to do whatever it took to prepare for deployment to Saudi Arabia.
Unfortunately, there was also confusion. In the end, the division staff published over three hundred Fragmentary Orders (FRAGO) to OPORD Lexicon Danger. Some FRAGOs were superseded even before they reached me at battalion level. Battalion Commanders were getting frustrated by division and brigade staffs' demands for information on short notice and the unintentional misdirection coming from those staffs. I initiated "tea time."

I notified LTC Gross and LTC Daniel R. Fake. We agreed to start meeting at 1000 hours at the Post Exchange (PX) Coffee Shop every day to compare notes. This was beneficial. It was fascinating finding out the different guidance and instructions being issued to the Battalion Commanders in one brigade. However, it was not just within the brigade. Eventually, LTC Gregory Fontenot, Commander of the 2nd Br, 34th Ar, began joining us. He had the same problems across post.

Our days became longer and they did not stop when we reached home. Phone calls lasted throughout the night. If I was not talking business, I was talking to friends or relatives expressing their support or concern.

On 13 November, I was interviewed by a reporter from the Manhattan Mercury. I was a very reluctant interviewee and agreed only after the Public Affairs Office (PAO) insisted it was directed. The story was in the front page of the Manhattan Mercury the next day—on the front page with my picture. I was embarrassed. The article was well done; I just would have preferred the article to be about someone else.
**Painting the Combat Vehicles**

One of the first priorities for the division and the battalion was to paint the combat vehicles sand colored. The original color was a dark green camouflage for the purpose of fighting in Europe. The major potential constraints were time, the use of a chemically toxic paint, the resources to paint, and the weather.

The division started painting vehicles at the Directorate of Logistics (DOL) and began contracting civilian agencies to assist in the painting. The painting was going too slow. The decision was made to let each of the maneuver brigades paint its own vehicles. Due to limited painting tools, one battalion in each brigade hosted the painting in its motor pool. Our battalion was selected for this mission in the 2nd Bde.

After a safety check, two maintenance bays were set aside for the paint mission. Each of the three battalions furnished a paint team consisting of eight soldiers and an NCO. Each battalion paint team worked an eight-hour shift. The painting went on around the clock. Our paint team was headed by SFC Thomas V. James from D Co. The brigade staff provided coordination for the painting materials and an aviation field light set to be used at night. We turned a daily status into brigade. If something went wrong at 0300 hours, I was the one called.
Freshly-painted tanks. Note the aviation light set, five gallon cans of paint, and the unpainted M109 van in the background recently brought from Ft. Hood, Texas (TX).

Because the paint, referred to as CARC (Chemical Agent Resistant Coating), was toxic, the entire area around the maintenance bays was marked off. The paint team wore oxygen tanks and face masks with disposable suits for painting. As resources ran low, the soldiers began wearing NBC protective suits and wet weather suits to protect themselves from the fumes. Repairing the paint guns was a constant problem. As the Battalion Commander, I spent a significant amount of time getting the paint guns repaired. Several of the soldiers worked in car paint shops before they joined the Army. The paint
itself was so coarse, it wore out the needle in the paint gun in
less than half the time of regular paint. The fire department
kept us supplied with oxygen bottles.

Member of the paint team in an NBC protective suit with mask, rubber boots, and oxygen bottle.

The priorities of the paint line changed daily. We started
by painting the tanks first. The next day, the priority went to
trucks. We went back and forth for several days. The
difficulty was in ironing out the schedules across the division
among all the paint efforts on and off post. Furthermore, the
debate continued on whether we would or would not be exchanging
our tanks for M1A1 tanks in Saudi Arabia. We could not get
confirmation. The tape and masking team, led by SFC Michael A. McCurnin, was confused in the first few days because of the constant changes affecting vehicle preparation for painting.

LTC Fontenot had the paint mission for the 1st Bde. We worked together closely, trading information and materials to get the mission completed. Needless to say, we were both in agreement about our motor pools being the busiest places on post. With all the painting going on within the brigade, we were both still trying to get all the other things done for our own battalions.

In the end, about half the brigade's vehicles were painted in our motor pool. The other half were painted at DOL or in off-post contracted agencies. The entire process took ten days. The real miracle was the decent weather for those ten days. CARC paint could only be used at temperatures above freezing.

**The M109 Van Caper**

Prior to notification for deployment, CPT Oscar J. Hall IV and LT Eduardo Ortega, the HHC XO, drove to Ft. Hood to see if they could scrounge materials from the departing troops. My original charter to them was to find some hard body truck shells for our two-and-a-half ton truck fleet. The tool trucks, Prescribed Load List (PLL) trucks, and Command Post (CP) trucks were in dire need of these types of shelters.

When the balloon went up, I fretted over two of our key people being out of the area. When I was notified to deploy the battalion, our Battalion S4 and HHC XO are two people needed as
soon as possible (ASAP). They did manage to locate some vans, but had no transportation assets to move them to Ft. Riley. They returned to Ft. Riley immediately.

I wrote a lengthy suggestion to the USAARMC's "Thunderbolt Suggestion" program spelling out the need for these types of vehicles for infantry and armor battalions in 1988. The USAARMC concurred with my suggestion and even wrote back telling me they would change the Table of Equipment (TOE) authorization to reflect the use of vans. Two years later, I discovered they had put it in the "too hard box." I felt strongly about the function of these vans, especially in the desert environment. This was a twenty year old problem. I decided to take a risk to get something done about it.

I directed CPT Hall to arrange for transportation and to return to Ft. Hood and get the vans. Initially I told him we needed eight. I later changed this to thirteen. My concept was to have five hard-bodied vans for the five company tool trucks, five for the PLL trucks, one for the Battalion S3 Section's reproduction van, one for the Unit Maintenance Collection Point (UMCP) vehicle, and one for the field trains CP.

CPT Hall received four brand new trucks from the post Transportation Motor Pool (TMP). They had a total of forty-two miles on them. By regulation, they were not supposed to be driven outside a one hundred fifty mile radius of Ft. Riley. He borrowed two truck trailers from the 201st Forward (Fwd) Support (Spt) Bn. On the first trip, he managed to return with four vans. However, he made all the arrangements for another eight.
I could not afford to send him back. I needed him to manage the rest of the deployment.

SFC Jackson D. Freeman, the Support Plt Sergeant, took charge of the mission. We still had the four TMP trucks, now three days overdue, but only two trailers. The 201st Fwd Spt Bn was screaming at us to get their trailers back. They had to paint them and still pack and deploy them. We stalled and promised to paint the trailers for them. I went looking for more trailers. No help was in sight. Contracting for transportation was still operating on business as usual basis and was not about to help on short notice.

I located an Association of the United States Army (AUSA) corporate member, Mr. John A. Trygg, a local contractor. He took CPT Hall with him in his Cadillac on a Sunday out to a road construction site and commandeered two trailers. My convoy left Sunday for the final mission to Ft. Hood: four TMP trucks outside their bounds, two overdue trailers, and two uninsured civilian trailers. I envisioned going to jail if anything happened. They returned two days later with all eight vans.

We returned the trucks, painted the 201st Fwd Spt Bn's trailers, returned the two borrowed trailers, and kept our mouths shut. The paint operation was still going on in our motor pool. We could not hide our newly acquired vans. The vans' presence raised several questions. Few people realized this was an objective I had pursued for over three years.

We distributed the vans within the battalion, stacked the old flatbeds on the wash rack, and lined the trucks up in the
paint line. Once the trucks were painted and re-stencilled, they looked pretty good. The soldiers in the Maintenance Platoon appreciated having an adequate shelter for tools and repair parts.

Many of the interiors of the vans had bins and drawers. The soldiers proceeded to install tool cabinets, lights, heaters, and, in general, improve the interiors. Mr. Philip A. Corbo, a volunteer civilian, personally modified the three designated CP vans with map boards, desk tops, radio mounts, and lights. For the first time in my twenty year career, I was in a battalion properly equipped for sustainment operations and command and control.

Mr. Philip A. Corbo

Mr. Philip Corbo was LT Philip Corbo's father. LT Corbo was the B Co XO. Mr. Corbo was visiting his son at Ft. Riley when the battalion was alerted for deployment. As an Army veteran, he epitomized, by his actions and thoughts, the American people's support for their sons, daughters, friends—soldiers.
SGT Hector N. Soler with Mr. Corbo.

Statement by Mr. Corbo, a retired, volunteer civilian, who assisted the battalion in its deployment to Saudi Arabia:

We went to Ft. Riley several times prior to our visit in November 1990. The reason for the visit was to see our new grandchild who was expected to be born near the end of October or early November. My wife and I were spending some time in TX in October and were scheduled to be in KS sometime around the 3rd of November. Exact dates evade me at this time. Our grandson was, in fact, born on 12 October 1990. We were in the Killeen area of TX about the middle of October and visited Ft. Hood. The troops of the 2nd Ar Div had already left for Saudi Arabia. This gave us reason to be concerned about our son Phil and the Big Red One. Several phone calls from TX to KS only told us nothing was happening with the 1st Inf Div. In fact, I think Phil's main concern was the battalion was scheduled to go to the NTC. Well, we got to Ft. Riley and no sooner arrived then the 1st Inf Div received its marching orders.
Phil became so busy we hardly saw him at all. I was very impressed with the professionalism of all the soldiers I met and with their dedication to their jobs. My wife was busy doing things mothers and grandmothers do, but I was bored to death sitting around the house. I met some of the soldiers and officers of B Co when I visited on a previous trip. I decided to go and talk to 1SG Dewey R. Powell of B Co and see if there was anything I could do to help out. CPT Roberts, the Company Commander, was in the office. I also met him on a previous trip to Ft. Riley. 1SG Powell took me in to see CPT Roberts and told him of my offer. I explained about being in the heavy construction business for thirty plus years and could do anything he asked, even sweeping the floors.

After a few moments of thought, he asked if I could build him a storage box for his HMMWV's pickup bed. I assured him I could and, after finding out what he had in mind and scrounging some very rudimentary tools and getting some plywood and other supplies, I built him a box for his HMMWV. While I was doing this, several other officers and NCOs came by and asked if I would build boxes for them. I agreed to build boxes for anybody needing them. It was hard to get materials and supplies through channels, so many of the soldiers paid for the materials themselves. I also contributed to the effort by buying some of the screws and other supplies and tools we needed. However, the demand for boxes of all types exceeded our resources and other actions were taken.

During my travels to the company and back, I passed a new child care center under construction near the PX. Knowing my way around construction sites for thirty years told me there would be a lot of serviceable materials being thrown out in the trash on the job. I took the liberty to check out the site scrap pile, and sure enough there was all kinds of lumber being thrown away. I went to the construction trailer on the job and spoke to the job supervisor. I told him I needed all the used lumber I could get and what I needed it for. I asked permission to salvage materials from his scrap heap and he gave me the okay to do so. I went back to the company and reported to 1SG Powell of my good fortune. He then sent a five ton truck to help me get the lumber. I could never figure out how the Army rated its trucks. I could have hauled twenty-five tons on that truck! We made many trips to the scrap lumber pile during the month of November.
The boys in B Co and the other companies were a bit perplexed at my daily presence behind B Co dressed in my issue coveralls. I was busily making a lot of noise and sawdust behind the company supply room. At one point, 1SG Fowell invited me to come and run with the guys in the morning. I declined. I started early with the guys and stayed late in the evening until everyone else was finished for the day. It seems the Battalion Commander was having some very long, late afternoon meetings with his Company Commanders and many nights were still going at it at 7:00 to 8:00 p.m.

When I wasn't making boxes, I was painting or making signs or sweeping the floor or helping work on one of the vehicles. Many pallets of a certain size were needed and pre-cut materials were delivered to each company. They had to be assembled and I could see some method had to be devised to make sure they all ended up being the right size and dimension. I made a jig to hold all the pieces in place so they could be nailed by the soldiers. The jig saved a lot of time and was passed around from company to company.

I also had the opportunity to have some serious discussions with some of the soldiers. I have to say again, I am very impressed with the quality of today's soldier. I think one of the biggest concerns of the soldiers at the time was the country would not stand behind them and support them. I must admit, it was a major concern of mine also. I was resolved not to let the guys down. I was determined to do everything I could to get all the support possible for them. I reassured many of the younger soldiers they would be okay. They would be proud to serve this great country we live in. I believe we all take this great country for granted too often.

I made many different storage boxes in several different styles. I found I could knock out three or four boxes a day and still have time for other things. I'm a very well organized and efficient person when it comes to getting things done. The construction business is a little like the Army. You always have to do a lot with a little. I built a masterpiece storage box for 1SG Powell's HMMWV. It was built in a way as to look like a tool box with doors and such on a pickup. However, he never got to use it. It ended up in CPT Hall's possession.

One day when I was busy making sawdust, this very tall LTC came by, looked at me, and said, "Who are you?" I answered I was LT Corbo's father. At this
point, I thought, "Well, that's it for me and for
Phil." I really thought the bureaucracy had caught up
with me and we were in deep trouble. Well,
fortunately for me, it was LTC Marlin, and after
exchanging some pleasantries, I asked if I could be of
any service to the battalion. Not knowing what I was
capable of, he asked some questions and I responded.
I thought I could build what he needed. He was very
busy trying to get the battalion ready to deploy. He
sent me to see his Battalion Maintenance Technician
(BMT), CW3 Alexander LeMay, Jr., and through him I
built several command van interiors inside some old
truck bodies someone liberated from Ft. Hood. I also
modified the inside of at least one M113 Armored
Personnel Carrier (APC) and worked on several trailers
for the CW3 LeMay.

My wife, in the meantime, got involved with the
Family Support Group and helped out. The battalion
was supposed to deploy around the end of November, and
I decided to stay in KS until they left and then take
my daughter-in-law and the new baby back to New Jersey
with me. The deployment date got moved back several
times and I decided to send my wife home and I would
stay for a while longer. As it turned out, the
deployment date was moved up to the end of December
and I decided to fly home for Christmas. After the
battalion deployed, I flew back to KS and then drove
my daughter-in-law and new grandson back to New
Jersey.

I would like to say my three to four weeks of
working with the soldiers of the 4th Bn, 37th Ar, was
one of the most rewarding experiences of my life. I
have always been very proud to be an American and have
always believed this is the greatest country in the
world. The men of the 4th Bn, 37th Ar, lived up to
their proud tradition. I would have loved to have
gone to war with them. They helped make us all proud
again.

**Ammunition Upload**

All combat vehicles were sent to Saudi Arabia fully loaded
with ammunition. There was a possibility of going to war as we
stepped off the boat. Nobody could be sure. The National Guard
was called in to Ft. Riley to assist in the hauling and delivery
of our ammunition. We loaded all the vehicles in the motor pool
at the same time we were painting. Things became a little crowded. One of our main concerns was the issue of main gun ammunition for the tanks. Only a limited amount of model 800 series armor piercing ammunition was available. This was thought to be the only round of 105mm capable of penetrating and destroying the T72 Soviet tank. In the end, we loaded only about ten percent of the 800 series ammunition and the rest was the 700 series.

LT Kevin L. Sullivan supervising his platoon uploading ammunition in the motor pool.

LT Thompson, the Support Plt Leader, supervised the hauling of ammunition day and night. Eventually, all the residue was
placed outside the motor pool and the National Guard policed it up. They did a great job.

Inside the vehicles, the main gun ammunition was secured with lacing wire on the ammunition racks. All small arms ammunition was kept in its original container and secured to the turret floor with wire. We could not understand why we were not allowed to store it in the ammunition boxes designed for this purpose. Space was at a premium. When ready, we coordinated for inspectors to review our loads to ensure the tank passed the rail and port inspection. Our full basic load of ammunition would be issued to us in Saudi Arabia.

Vehicle Deployment Preparation

Per MG Rhame's guidance, getting the vehicles ready for shipping overseas was our initial priority. In addition to uploading the ammunition, painting them sand colored, and making modifications to many of the vehicles, a number of other preparations were just as critical.

The division came out with a new tactical vehicle marking system for the desert. Our battalion number was 6. The second number designated the company - A Co was 61 and B Co was 62. At the platoon level, a hash mark placed to the left, right, top, or bottom of the number designated the platoon. As soon as the vehicles were painted, we applied the tactical new number system.
Soldiers of C Co uploading vehicles and preparing them for shipment. Note number system on the side of the vehicle. Note HEMMTs unloading ammunition in the background, also Military-owned Demountable Container (MILVAN) and billets in the background.

All of the canvas on the wheel vehicle fleet was removed and stored. All of the vehicles required a secondary load. This involved placing banded, loaded Container Express (CONEX) inserts in the backs of the vehicles and strapping them down.

Division's guidance for track wear on the tank fleet was for us to ensure each tank had at least five hundred miles of track life remaining. We received about twenty sets of tank track and began changing track on the tanks. This was heavy duty maintenance and required even more space in the motor pool.
Two sets of M113 APC track were replaced and a significant amount of M113 APC pads were replaced. The motor pool was a very busy place between heavy maintenance, painting, ammunition uploading, preparing secondary loads, and substituting vans for flatbeds.

CW3 LeMay executed health checks on all of our tank engines at the recommendation of COL Moreno. Thirty-two engines were below the desired performance level. These engines met continued use criteria for training at Ft. Riley, but were not at the minimum standard for deployment into a hostile theater. Discussions with the 201st Fwd Spt Bn and 701st Main Spt Bn resulted in the decision to correct the problem in Saudi Arabia. Time restrictions left us no other choice.
Decisions on security of the vehicles were made and changed on a daily basis. Eventually we had to place special locks and bolts on the tank side skirts and hatches. All the secure communication equipment was removed. Machine guns went with the tanks.

The Division's Master Gunner, SFC Benjamin B. Byler, an alumni of our battalion, asked if he could bring MG Rhame's, BG Carter's, and LTC Bullington's tanks into our motor pool. He needed support to get them ready. Just what we needed in our motor pool—three more tanks. The next thing I knew we were in charge of rail-loading them.

**Military Van Containers**

With careful packing and by using secondary loads, the battalion barely had enough room to pack everything it needed in the desert. For this reason, we were issued seven MILVANS. These were large twenty foot box-like containers. The MILVANS were portable and could be mounted on a truck chassis to have them moved.

We used one MILVAN per two tank companies and used the other five to help pack the rest of HHC. All of the contents inside the MILVANS were packed and banded inside CONEX inserts. We filled the MILVANS. We were also issued (and filled) a forty foot SeaLand container. Brigade kept one SeaLand container until the end of December for the three battalions to share for last-minute packing. We could not have made the move without these additional containers.
Scrounging

Once the deployment announcement was made, the floodgates opened on resources. Unfortunately, there was not enough time to capitalize on the availability of the resources. The day after the announcement, we dropped all deferred maintenance requisitions and the Desert Want List requisitions. Material began rolling in at a rapid pace. We even had deferred requisitions suddenly being filled as far back as 1983. Unfortunately, the material showing up was not in the priority we needed. The flow of supply and repair part items was severely hampered by DISCOM. They were trying to paint their vehicles and were packing to deploy.

We began to seek out critical items not showing up through regular channels. After the DISCOM departed, we made frequent trips to the DISCOM's maintenance facility and warehouse. I was surprised at how much material they had left behind. So many of the things we were looking for were there. I started making regular runs to their facility with a truck and a detail. The other warehouse, the class II and IV warehouse, was full of material, and more was arriving daily. The warehouse personnel's instructions were to re-ship these materials to Saudi Arabia. I took all I could get—chem lites, fire extinguishers, and tank tow bars. I received enough tank tow bars to have full sets on the M88 recovery vehicles and still have one per tank platoon. I recommended, through the USAARMC "Thunderbolt" suggestion program in 1988, to build a mount on the tank to mount the tow bar. It was disapproved. So we
mounted them anyway we could. We continued this process right up to the last vehicle being rail-loaded. We were still bringing items down to the rail-load site at the last moment.

One of the advantages of the truck vans was being able to open the door and put items inside at the last minute without having to pack the items in a CONEX insert.

We also went crazy down at the Directorate of Resource Management Office (DRMO) site. We managed to obtain canvas for tents, fans, and 20mm ammunition boxes for the tank bustle ranks. Many items we did not have time to wait for we obtained on short notice through this property disposal office. I gave my permission to put the 20mm boxes on the tanks—a reversal of my previous directive. I knew the soldiers were going to need the space.

Visit by GEN Edwin H. Burba, Jr.

MG Rhame made the decision for the FORSCOM Commander-in-Chief (CINC) to visit our motor pool as we painted vehicles and loaded ammunition. He informed me of this during one of his impromptu visits. GEN Edwin H. Burba, Jr.'s visit on the 22nd of November was uneventful.

We met him in the motor pool entrance and escorted him around the motor pool. I asked him to speak to members of the "World's Greatest Scout Platoon" and several of the tank crew members. COL Moreno and MG Rhame were present. His presence was good for the soldiers and I made sure they were aware of his presence.
The battalion was issued five brand new five-ton trucks. We turned in some of our worst five ton and two-and-a-half ton trucks. The trucks were already painted desert camouflage when we received them. We were allowed to keep the turn-in trucks right up to the point of our deployment. This allowed us to maintain some transportation assets after all of our authorized equipment was shipped to port. MAJ John F. Garrity III, our new Battalion XO, had the foresight to paint over the turn-in truck's bumper numbers. This prevented us from getting in trouble every time somebody reported a sad-looking truck with our bumper number going down the road.

We also picked up an additional six HEMMTs from a National Guard unit. The motor pool was starting to get a little crowded. With these additional HEMMTs, we needed additional drivers and a driver's training program to match. Each tank company gave up a reliable, experienced tanker to become a member of the Support Plt. CSM Milling did the interviews and the commanders supported the mission. We needed experienced, reliable persons for this duty. In exchange, commanders were given new tankers to fill platoons and crews. Unfortunately, we executed only classroom instruction for driver's training. The combination of the HEMMT rail shipment schedule and bad weather canceled two attempts for hands-on training. The new drivers would have to learn in Saudi Arabia what they did not have time to learn or experience at Ft. Riley.
We received two Rider rental cargo trucks and two rental passenger vans to assist our deployment preparation. I assigned one of the passenger vans to the Battalion S3 Section and the other three vehicles were under the control of CPT Hall, the Battalion S4.

We sent four NCO's to Camp Funston to receive training on the new tank mine rollers and plows. Our key men were SSG Arthur C. Williams and SFC Richard Neff. I went to check on the training in mid-November and discovered my very first 1SG from 1972, Mr. William C. Blum, now retired, was the instructor. After one intensive week of training and a commander's demonstration in one of the local training areas, the NCOs were prepared to train the other soldiers in the battalion.

We were issued a total of twelve mine plows. All of the rollers went to TF 2-16 and TF 3-37. They would be the initial breach force. However, I retained four mine roller mounting kits to be mounted on our tanks. Four ten-ton flatbed trucks were also issued with the rollers and went to TF 2-16 and TF 3-37.

I distributed the plows In Accordance With (IAW) our battle drills and SOPs. Hence, A Co and B Co received six each. If we made contact on virtually any maneuver, they would be the companies required to breach a mine field or obstacle.

We were issued twenty-four sets of Global Positioning System (GPS) equipment. MAJ Cook made the initial distribution proposal. After changes, we issued the equipment. We never realized the critical role this item would play in the months
ahead. We issued three sets per Tank Company, three sets to the Scout Plt, one to the Mortar Plt, three to the Command Group, one to the Maintenance Plt, one to the CSM, one to the Tactical Operations Center (TOC), one to the Battalion Administrative and Logistics Center (ALOC), and one to the field trains. This distribution remained unchanged and worked.

We gave several classes on this item at Ft. Riley, but like I said, nobody really appreciated its capabilities. Several of the soldiers experimented with the system and managed to rig it up to their vehicle's power supply. We also underestimated the rate of consumption of AAA batteries.

We were also issued two Senator chemical decontamination units. These were mounted in the back of a five-ton truck and consisted of a water bladder, heat pump, and hose kit. Their purpose was to assist in a hasty chemical decontamination of vehicles and equipment. All of our chemical NCOS received training on how to operate the equipment.

I asked SFC Ballinger to design a wooden gun stock for our M240 machine guns. As a pure tank battalion, we had a limited number of ground-mounted machine guns. The M240s on the tank could not be used in a ground role. By using a detachable wooden stock with a Squad Assault Weapon (SAW) bipod, the M240 could be fired from the ground. I approached COL Gary L. LaGrange, the Garrison Commander, with my recommendation. Using SFC Ballinger's prototype, he made DOL manufacture a total of six hundred stocks for the entire tank fleet in the division.
Photo of a wooden M240 machine gun stock designed by SFC Ballinger.

The battalion was authorized approximately six hundred sets of night vision goggles, but had only about two hundred sets on hand. Within a day or two of the deployment notification, another four hundred showed up. To put things in perspective, the battalion had six hundred individual sets of night vision goggles in addition to another one hundred and twenty-two vehicle-mounted night vision thermal/passive devices. No battalion in the world could match our battalion's night fighting capabilities.

We received the Maneuver Control System (MCS) in September. This was virtually the total extent of the battalion's computer
resources. I had worked with this system extensively from 1981 to date. Nothing had changed; it still had the same problems it had in 1981. After ten years, I could never understand how this project continued to be sold to the Army. The system was virtually useless.

Fortunately, we were issued two lap-top computers in December. We desperately needed them and they proved their worth in the end. One was issued to the Battalion Maintenance Plt, and the other went to the Battalion S3 Section.

**Key Personnel Changes**

MAJ Machamer was the Battalion XO. I had served with him at Ft. Knox in 1981 and recruited him from C&GSC. He also served in the 1st Bn, 37th Ar. Before Desert Shield, MAJ Machamer requested to attend Kansas State University to get his master's degree. He was not accepted. I spoke with COL Moreno. COL Moreno spoke with a few officials and was able to have the decision reversed. Sending MAJ Machamer to school was in the Army's best interest.

After the alert notification, both MAJ Machamer and I felt he should stay with the battalion for the duration. My main concern was the institutional knowledge, training, and stability MAJ Machamer offered the battalion. I discussed the issue with COL Moreno at length.

MAJ Garrity, in G3 training, was scheduled to replace MAJ Machamer in December. MAJ Garrity also was a highly sought, professional officer. When I saw my effort to retain MAJ
Machamer as fruitless, I discussed the possibility of making MAJ Cook the XO and MAJ Garrity the Battalion S3. MAJ Cook was senior and had a background in logistics and maintenance. MAJ Garrity was a previous Battalion S3 as a captain. The decision was made by MG Rhame to go ahead with the scheduled change. MAJ Machamer was disappointed. On 1 December 1990, I had a new Battalion XO. This move was simultaneous with the changing of my CSM.

CSM Milling was scheduled to become the 1st Bde CSM in December. The decision was made prior to the alert notification. CSM Milling served as a Battalion CSM in three previous battalions and had undergone open heart surgery. With 26 years of experience, he merited the Brigade CSM position. I concurred with this change on the grounds the battalion received CSM Donald P. Stockton as our new Battalion CSM. CSM Stockton had already served as the CSM in the 3rd Bn, 37th Ar, and the 2nd Bn, 16th Inf. He knew the 2nd Bde and even served with the 1st Inf Div in Vietnam. He was extremely technically and tactically competent. I felt we would not lose too much continuity with this particular CSM change. On 26 November 1990, we had a new CSM.
A retreat and colors ceremony for CSM Milling and CSM Stockton. LTC Marlin passes the colors between the two in front of the battalion formation. 1SG Thiede acts as the color bearer.

In November, we also were assigned CPT Stephen C. Phillips, our new doctor. The first time I met him I told him to get a haircut. He came back the next day with white sidewalls and a smile and I knew we had a winner. A new Physician's Assistant (PA) was assigned from Ft. Knox, CW2 Mark A. Bratcher. Another key individual who volunteered from his reserve advisor job was SGM Clyde B. Neel, Jr., the new Battalion S3 Operations Sergeant. CPT Joseph M. Martin, the Battalion Assistant S3,
arrived in September, and CPT John Feeser, another Battalion Assistant S3, arrived in December.

By the time we stepped on the plane, I had a new XO, CSM, two new Assistant S3s, a doctor, a PA, and a SGM. I had a Battalion S3, SI, S2, a Chaplain, and BMO assigned only since August. I had three tank Company Commanders assigned since March, but they had limited time doing maneuvering training with their companies. Fortunately, they were all competent and professional soldiers.

**Rail-Loading**

The usual search and count continued for the elusive shackles and tie-down equipment for rail-loading. It seems no matter how many times we rail-loaded, there was always someone missing shackles and tie-down equipment or the inspectors required a different type or brand of equipment not required the last time. After numerous counts and numerous trips to the DISCOM and the railhead, we finally received all the tie-downs and shackles we needed.
On the 3rd of December, we began rail-loading. All of our vehicles were road marched from Custer Hill (troop billeting area) to Camp Funston. Despite all the planning, brigade changed the time schedule and we had to accelerate our move to Camp Funston. This led to some confusion and danger in the motor pool. I became angry at several lieutenants and sergeants in B Co for attempting to "jump the line." Of our entire fleet of vehicles, only one tank was towed to the railhead, and one B Co tank ran out of fuel en route to the railhead. I was upset over B Co's lack of preparation for the move.
Tanks waiting to load on the railhead on 5 December. Note shackles on rear of tank, vehicle markings, gun tube tie-downs, and ammunition sign taped to tank. Bus in the background returns the soldiers to Custer Hill.
Tanks loading on the railhead. Soldiers wear helmets for safety. Every tank carries a spare road wheel.
Soldiers ground guide tank into position on the rail car. The white sticker on the side of tank is a Logistics Marking (LOGMAR) label. Chalk numbers are road convoy serial numbers. Soldier with white tape on his helmet is a rail-load team chief.
Tanks on the railhead ready to roll. Final lock-up in progress. Note the 20mm ammunition boxes on the bustle rack and the vehicle identification sign.
All of our equipment was rail-loaded from the Camp Funston railhead to the port of Houston, Texas. MAJ Machamer was now working for COL Moreno as the Brigade Rail OIC. He was in charge of the entire railhead and did his usual great job. Each battalion was in charge of one of the five rail-load points. Our equipment was rail-loaded from three of the five points. The tanks were loaded at or near the entrance to Camp Funston and the heavy wheels and APCs were loaded behind the New Equipment Training (NET) and processing site. The other wheels were loaded from the rail site adjacent to the Maintenance Assistance Inspection Team (MAIT) site. All of the rail-loading was completed by 4 December 1990. The temperatures were in the teens and there was some snow on the ground.

Statement by CPT Hodge, the BMO, describing his duties at the railhead on 4 December 1990:

The most remarkable memory I have of our preparation for overseas movement was the railhead operation. As OIC of the wheels and light tracked vehicle docks at Camp Funston, I was able to see thousands of vehicles loaded onto rail cars and moved away toward the port of Houston the minute the cars were loaded and secured. The rail-load team worked every day of the week from 0530 hours to 2100 hours. COL Moreno was usually present at our dock two or three times each day. There was a National Guard Movement Control Team at our dock site. Their sole function was to ensure operations ran smoothly at the dock. They had six team members, all on temporary duty status. They did not get out of their heated van very often. However, they did have some good rail-load stories about Ft. Hood, Ft. Bliss, and Ft. Stewart. Talking with them made me realize the enormous scope of this nationwide deployment to Saudi Arabia.
Training

With the heavy equipment on its way to Saudi Arabia, we turned our focus to individual training. We had received new 9mm Berettas the previous month. Although ammunition was limited, we scheduled a range and made sure everyone was familiarized with the weapon. All other individuals re-zeroed their rifles and did familiarization firing.

We were directed by division to complete specific training tasks prior to deployment—the majority of these were chemical training. MAJ Cook organized all the NBC NCOs to train all the soldiers in the maintenance bays of the motor pool on one Saturday morning. Using a circuit approach, we eventually processed everyone through the required tasks, including the gas chamber for a mask check. Several soldiers had great difficulty fitting their masks.

We re-initiated the classes started during our gunnery at the MPRC. We taught classes on the Islamic religion, snake and scorpion bite first aid, hot and cold weather safety, Iraqi order of battle, traditions and customs of the Middle East, General Order Number 1, peacetime and wartime ROE, Soviet equipment, and several classified classes on weapon effects.

An abundance of training literature was provided. Iraqi order of battle and tactics handbooks were issued. Vehicle recognition guides were passed out. The CALL provided three different journals of lessons learned by units already serving in Saudi Arabia. We continued getting updates on the situation.
in the Middle East and gave out these updates as we obtained them.

Soldiers participating in battalion battle drills (grass drills) at the KD range at Camp Forsythe. Note the card in each helmet band—this represents their vehicle bumper number. Note the Desert Camouflage Uniform (DCU).

We spent one full day at the KD range at Camp Forsythe rehearsing battalion, company, and platoon battle drills. We used our grass drill technique. Each vehicle commander placed a card with his vehicle bumper number in his helmet band and we walked through all of our immediate action drills. This was a perfect training technique considering our equipment was being shipped. It also initiated our new XO and CSM on the battalion
SOPs. Grass drills were a routine part of our SOP training and we found it was a real time saver before going to the field. No unit should ever be allowed to go to the field before they can demonstrate with a grass drill their competency to execute the unit SOP and battle drills. Our soldiers understood this philosophy and practice.

**Medical Platoon Training**

Prior to the deployment notification, we averaged one combat lifesaver qualified soldier per four soldiers in the battalion. We placed increased emphasis on first aid during our individual training and taught one additional class of combat lifesaving. Furthermore, the combat lifesaver kits arrived and every soldier who was a certified combat lifesaver received his authorized kit.

Medical evacuation was a major concern of mine. I was not convinced we had a sound understanding of responsibilities and duties within the battalion. I chaired several meetings after giving CPT Phillips the assignment to develop an evacuation matrix. This matrix demonstrated all the various considerations and potential situations occurring in combat and who was responsible for evacuation execution.

One of the most serious aspects of medical evacuation was the repair and turn-around of a damaged tank, possibly with body parts or blood still in the turret. CPT Hodge, the BMO, accepted this responsibility and organized teams and resources (soap, lime, brushes, buckets) to ensure we could handle the
situation properly. The medical evacuation matrix was a solid plan.

Battle Plans

We were forewarned we would be the initial breach team for the division, possibly for the VII Corps. It did not take a genius to figure out why we were issued the tank mine plows and rollers. However, only I was told anything in particular prior to departure from Ft. Riley about our upcoming mission. COL Moreno insisted on absolute secrecy.

With COL Moreno, LTC Gross, and LTC Fake, I began participating in battle plans for the initial breach. We shared many round table discussions with COL Moreno in his office. Eventually we drove to Ft. Leavenworth, KS, and executed our tentative plan on the Janus computer simulation system. We learned what would and would not work. We continued to refine our plan periodically throughout the deployment phase in secrecy.

As noted earlier, TF 2-16 and TF 3-37 were training and preparing to go to the NTC. COL Moreno decided to keep these TFs intact and use the 4th Bn, 37th Ar, as the pure tank battalion. TF 2-16 and TF 3-37 would make the initial attack on the Iraqi trenches. Our battalion would go between the two TFs to attack armored vehicles behind the trenches, expand the breach outward, and stop any Iraqi counterattacks.
Diagram #1. 2nd Bde's Concept of the Attack.
While at Ft. Leavenworth, LTC Dennis W. Cox had his CALL team give a special presentation of lessons learned from Saudi Arabia. LTC Cox and I went to college together and graduated from the same ROTC program in 1971. We all took copious notes and the CPT giving the presentation was very knowledgeable as he had just returned from duty with the 3rd Ar Cavalry (Cav) Regt.

On or about 14 December, GEN (RET) William E. DePuy addressed all the commanders in Patton Hall. All of our Company Commanders attended. He spoke about combat. He stressed the necessity of seeking the enemy's weak point and for commanders to have patience as well as be aggressive. He seemed in a reflective mood as he spoke. As a veteran of the last three wars, we paid attention to his guidance and, in the end, truly admired him for his words and time.

Soviet Equipment Training

During the last week in November, a group specializing in training units on Soviet-made equipment arrived at Ft. Riley. We were training on Soviet small arms and some light anti-tank weapons stored in the A Co arms room. This group arrived with approximately ten armored vehicles, including a BMP (armored infantry fighting vehicle), a BTR (armored personnel carrier), a T55/54 tank, a T62 tank, a BRDM (armored reconnaissance vehicle), and a T72 tank. These vehicles were kept under lock and key in a wing of the now empty DISCOM maintenance building.

We scheduled all of the soldiers for a four-hour orientation on all this equipment. It was a real confidence
builder for most of the soldiers. They came away from the
orientation feeling the Soviet equipment was substandard. I
spent a lot of time one on one with the OIC on the T72 tank and
concluded it was a comparable weapon in the defense, but a non-
threat in the offense compared to our M1 tanks.

This group also had possession of a Hip and Hind-D
helicopter. These helicopters were flown over Custer Hill for
five consecutive days. The helicopters were doing gun runs on
the motor pools during the painting of vehicles and uploading of
ammunition. It was great training and the soldiers were given
a realistic view of the helicopters as they might appear in
combat. Beyond vehicle recognition training, the flying
helicopters kept us all aware of what lay ahead. It kept us
conscious of our mission. In December, the helicopters were
flown down to Camp Forsythe for our closer scrutiny.

**M1A1 Tank Training**

The M1A1 tank NET team showed up at Ft. Riley on short
notice to train the tankers on the M1A1 tank. This tank fired
the 120mm main gun as opposed to our 105mm main gun. Each
company went to the range for a one-day training and
familiarization firing. In addition to the main gun, there was
a significant number of product improvements to the tank. The
key advantages of the tank were its additional armored
protection, larger gun, and NBC protection system.

We were never guaranteed we would receive the M1A1 tank in
the Saudi Arabia theater of operations. However, the general
consensus was we would get them. Either way, we were prepared to fight.

In addition to the M1A1 tank training, all of the soldiers were issued new tanker uniforms. This included a NOMEX (flame proof) jacket, coveralls, body armor, and gloves. We also ordered and received through the supply system a limited number of the new Kelvar Combat Vehicle Crewman's (CVC) helmet.

**Lessons Learned on Tank Engines**

On or about 24 November 1990, a civilian team from Teledyne (tank engines) visited. They gave a brief to the entire chain of command. This was a real eye opener with regard to tank engine failures caused by the sand and dust in Saudi Arabia. They stressed the sand as being finer and different than sand at the NTC.

The most important aspect of their presentation dealt with the air intake filtration system. Filters and seals had to be new and correctly fitted. I returned to the battalion and directed all of my officers and Platoon Sergeants to attend the same afternoon briefing at Normandy Theater.

When they returned, we looked closely at our air filtration systems and ordered the repair or replacement parts. We were told we would get them in Saudi Arabia because the 701st Main Spt Bn was packed and ready to deploy.

One of our requisitions from 1989 was for five A-frame tents. These tents were given to the five maintenance teams. The tent was the only tent in the Army perfect for use as a
dust/sand cover when working on tank engines. Four soldiers could pick the tent up by the four corners and place it over the top of the engine. This protected it from sand and allowed soldiers to work under white light conditions at night. When it was time to put the engine back in the tank, the tent was picked up and set aside. I pointed this out to the briefers and my chain of command during the briefing.

**Intelligence**

I made regular trips to the Special Security Office (SSO) to update top secret level developments in Saudi Arabia. For the most part, I was hearing the same thing on CNN. The division began passing down INTSUMS and started the flow of intelligence information started.

The Battalion S2 was having a tough time getting maps and we were constantly being told they would be waiting for us in Saudi Arabia.

**Advance Party**

We were required to send two officers as our advance party to Saudi Arabia in mid-December. CPT Martin, the Battalion Assistant S3, and LT Thompson, the Support Plt Leader, were sent. CPT Martin served with me in the 1st Bn, 37th Ar, several years prior. He departed on or about 17 December 1990.

Once in Saudi Arabia, CPT Martin proceeded to the Tactical Assembly Area (TAA) Roosevelt and began preparations for our arrival. He called me long distance on the 28th of December at 0300 hours. We had a discussion, but because it was late, I do
not recall more than his description of the area as being flat and looking the same for tens of miles.

**Soldier Preparation**

The checklist for a soldier being deployed overseas was extensive and thorough. Each company began to prepare soldiers for deployment to Saudi Arabia. This was fairly consistent with the unit's routine procedures with regard to each soldier's Preparation for Overseas Movement (POM) packets. In other words, we were ready to go. The deployment schedule provided us time to scrutinize each soldier's deployment preparation and we took advantage of it.

In addition to the division's Family Support Center established at the Community Recreation Center, 1SG Thiede, the new HHC First Sergeant, organized a soldier preparation site within the dining facility. The 37th Regt Dining Facility was closed during our gunnery period for major renovation. We decided not to re-open it for meals due to the deployment, but to continue with other overdue renovations. Every soldier in the battalion was processed through the dining facility. At a series of stations, every soldier received a medical record review, Acquired Immune Deficiency Syndrome (AIDS) testing, execution of a will, execution of a power of attorney, dog tags, and identification (ID) card. Sole parents were individually interviewed to ensure a responsible guardianship was available. Virtually every aspect of a soldier's preparation for going overseas was taken care of immediately.
Soldier receiving an updated immunization by a member of the Medical Plt. Ouch!

Soldiers not deployable for medical, performance, legal, or other reasons received priority for appointments and were monitored on a by-name basis by the chain of command. Personnel identified as non-deployable were transferred immediately to the U.S. Army Garrison (USAG) Command. They received all the disabled and the misfits—lucky guys. We had about fifteen personnel transferred to the USAG. Three senior NCOs were
scheduled for retirement: SFC Kent V. Hill, the Mortar Plt Sergeant; SFC Charles M. Martindale, the HHC Maintenance Section Plt Sergeant; and SFC Wilson, the Mess Plt Sergeant. All three were mandatory retirement deferrals.

Soldiers received all immunizations from the Medical Plt. This included all out-of-date shots and the infamous Gamma Globulin shot. This immunization was supposed to last us six months and we would take a booster in the hindquarters in the desert.
Soldiers were issued NBC equipment and DCUs prior to shipping out. The sizing and fitting of protective masks was adhered to rigidly. Packing lists and details of toilet items were constantly being reviewed. Some of the recommended shopping lists were a little extreme. My wife received one of the lists and bought everything as Christmas presents for me. About seventy-five percent of it stayed at Ft. Riley.

**Family Support**

Chain of concern rosters were updated. A series of family support briefings were held at the division family support center for all spouses and family members. My wife (Peggy), Irene Milling (CSM's wife), and Chaplain Bacon attended and hosted the initial briefing. The briefing provided updates on the soldiers' departures and answered questions regarding everything from pay vouchers to casualty notification. Spouses volunteered for every needed area. Parents and relatives also asked what they could do to help. It was very touching.

Each company had an NCO assigned to work with the spouses up through the departure date to ensure the spouses had access to information within the company. With the assistance of the NCOs, single soldier rosters were compiled and accurate status was provided on spouses' intentions to stay at Ft. Riley or reside elsewhere.

The emphasis on the family support side of the house was two-fold: prepare for the soldiers' departure and his subsequent deployment. This effort was extremely well
coordinated by the spouses. The hardest part of the family side of the deployment was the uncertainty of the situation, the length of time we would be gone, and if we would ever come back.

**Christmas Party**

With the money we accumulated with the lounge operation at the MPRC, we decided to have a battalion level Christmas party. Actual planning for the party began as early as September. CPT and Mrs. Clidas coordinated for a coffee cup with the battalion crest as a gift for each soldier.
The coffee cup was a gift to each soldier in the battalion. Note the plastic top. Many soldiers took this to the desert and it was perfect for keeping the sand out of their drink or preventing spills when traveling cross country.

CSM Stockton assisted in coordinating all the NCO's efforts. We rented the Polo Club at Camp Forsythe. SFC Wilson baked two large cakes (he continued to win cake decorating contests throughout my two-year command) and prepared an abundance of food. With the money from our lounge operation at
the MPRC, we provided drinks and had the club system cater with even more food. Spouses also contributed plates of goodies for each table. We decorated, brought in a tree, and hired a magician for the kids. Parents provided Christmas gifts for their children. Additional gifts were provided by the Santa's Workshop Program.

Over eight hundred people attended. It was a well-timed party. The equipment was shipped out and the soldiers were ready. We just happened to luck out (the flip of a coin) by not being shipped out before Christmas. The party really helped strengthen the Family Support Group. We also made special farewells to MAJ and Mrs. Machamer, CSM & Mrs. Milling, and Mr. and Mrs. Corbo. We presented Mr. Corbo with an Army Achievement Medal (AAM). We welcomed LT and Mrs. Brian C. Cook, a new Plt Leader in D Co and LT Michael P. Evans, a new Plt Leader in A Co. They were the last officers to arrive. As a newlywed, LT Cook was at Ft. Riley two days before Christmas and was already packing his bags. We could not have had a better send-off party. We were proud to be serving our country.

Our final schedule allowed the soldiers to take care of personal details and to close out the billets and motor pool.

**Billet and Motor Pool Close-Out**

A final inventory was taken of all the installation property. Stay behind personnel assigned to USAG signed for all the property and took control of the keys. This included boxed
and banded personal property locked in the arms rooms of the various companies.

The motor pool was taken over by Directorate of Engineering and Housing (DEH) as soon as the rail-load was completed. We thoroughly cleaned it out and submitted all the work orders to fix all inoperable or damaged areas of the facility.

One item I insisted on throughout our deployment process was job orders for all the facilities. I told the commanders they would return to these facilities and it would be a shame to waste repair time in our absence. Furthermore, DEH would be looking for work to do--especially if we stayed away a long time. We made sure plenty of work was available in our absence.

Soldiers took their cars to Camp Forsythe to be inventoried and secured.

Casing the Colors

The formal casing of the colors was CSM Stockton's idea. I agreed and he set up all the arrangements. On 4 January 1991, we had a formal ceremony in Leonard Gymnasium. We held a battalion formation and did a formal casing of the colors ceremony. We explained the purpose for the casing of the colors to the soldiers and recited our proud history. It was a solemn affair.

After the casing of the colors, I did one of my "fall in on me" command information briefs. I always liked to speak to the soldiers out of formation in a large semi-circle around me. It
made me feel closer to the soldiers and I truly believed made them not so shy about asking me questions.

We decided the colors would accompany me on the first flight into Saudi Arabia. We would uncase the colors as soon as we disembarked the plane.

Shipping Out

On 7, 8, and 9 January 1991, we said our final farewells to loved ones and departed for Saudi Arabia. We brought all the soldiers for each flight into the Leonard Gymnasium. Each soldier loaded his two duffel bags onto a truck. The truck took the bags to Forbes Field in Topeka, KS, to be loaded onto the plane. After a final role call, we loaded buses with our rucksacks, weapons, protective masks, Load Bearing Equipment (LBE), and were taken to Marshall Army Airfield on Ft. Riley.
1SG Thiede in the hangar at the Army airfield. Note his rucksack on the floor with a desert camouflage cover and his one authorized carry-on bag.
CSM Stockton, his wife Linda, and daughter saying goodbye in the Army airfield hangar.

Despite the wee hours of a snowy morning, families made the journey to the hangar for a final, tearful farewell. I was also impressed by the number of volunteer organizations offering assistance and services in the hangar at all hours. In addition to the free cups of coffee, one Veterans of Foreign Wars (VFW) group was giving away a gift package of suntan lotion, sunglasses, hair conditioner, and toothbrushes.
LTC Marlin and his wife Peggy in their quarters at Ft. Riley just before driving up to Leonard Gymnasium. Note the desert baseball hat was not an issue hat. The local, newly-opened, Army surplus store in town was making money by selling everything soldiers wanted not issued by the Army. Peggy is wearing a Desert Shield sweatshirt sold by the Officers Wives Club (OWC). The profits were used to aid families of deployed soldiers.

A final records and manifest check was made. Once we had confirmation from Topeka of the flight being on schedule, we reloaded the buses and went to Forbes Field to catch the plane to Saudi Arabia. It was the first time we had to catch our breath since 9 November. We were finally on our way after sixty-one arduous, straight days of preparation. We were ready.
Forbes Field in Topeka

After a one-hour bus ride with our rucksacks in the undercarriage of the bus, we arrived at Forbes Field in Topeka. It was about 0200 hours. It was snowing and the temperature was about fourteen degrees. No sooner did we disembark from the bus than I was informed our flight was delayed.

As the flight commander, I made everyone get off the buses. We moved into a sheltered area inside a large hangar. There were plenty of chairs and a large television screen. The Red Cross volunteers were being very generous with their coffee and donuts. For one of our flights, these volunteers even ordered Domino's Pizza. We were comfortable for the time being. However, I was now being told by the flight officials the delay would be longer than anticipated.

The civilian in charge was very apologetic. The whole reason for not departing Ft. Riley until the flight was ready was to avoid delays at Topeka. He suggested we move all three hundred soldiers into a portion of the civilian terminal for the night. We accepted, and within a matter of minutes we cleared the hangar and were inside the terminal. Once inside, we had access to toilets and a heated area. We slept on the carpeted floor until about 0400 hours. The OIC woke me to tell me the plane was ready.
We loaded back onto the buses and boarded the plane. At 0630 hours, we were airborne on our way to Saudi Arabia. The flight was uneventful, but about sixteen hours long. As we came closer to Saudi Arabia, the soldiers provided the stewardesses instruction on their M17 protective masks. They were issued the masks, but never received any training.

We landed at the wrong airport. We were supposed to land at the King Fahd Airport south of Dhahran. At no time during the flight did the pilot or anyone on the aircraft inform us of a change of plans. To this day, I do not understand why we went to the Abu Hadriya Southwest Airport. Furthermore, I was not aware we were at the wrong airport until after we disembarked the plane.

Statement by MAJ Cook, the Battalion S3, describing his flight and arrival in Saudi Arabia on 9 January 1991:

I was appointed as the chalk commander for 296 personnel on my flight. We reported to Leonard Gym at midnight to assemble the passengers and inventory equipment. At 0300 hours, we were bussed to Marshall Army Airfield to POM and manifest. At 0600 hours, I said goodbye to my wife and boarded the bus for Topeka and the flight to Saudi Arabia. While at Topeka, KTKA TV 49 interviewed me and a few soldiers from the flight. Snow was falling and had accumulated more than six inches before we lifted off at 1100 hours on 3 January.

The plane we flew on was an American Airlines DC-10. The flight attendants decorated the whole aircraft with yellow ribbons and posters to show their support for the soldiers' efforts. The lavatories were decked out with pin-ups from "Playboy." Games and sing-a-longs were executed by the crew and involved the soldiers. The service provided was outstanding, to say the least!
Our flight took us to Boston, Massachusetts, where we were met by a new crew and well-wishers in the terminal. We then proceeded to Rome, Italy, for another crew change, and then on to the King Fahd Airfield southwest of Dhahran, Saudi Arabia. The weather was breezy with some scattered showers, but the temperature was warm. We sat at the airfield until early evening awaiting the busses to take us to the billets in Dhahran. We arrived to find out we were the first flight to arrive for the battalion. This became a concern since no one knew where LTC Marlin's flight was.

Soldiers getting off the plan at Abu Hadriya Southwest Airport.

As we came off the plane, we formed up in ranks and uncased the colors. The climate was hot and humid, but bearable.
CPT Williams with soldiers forming up for the uncasing of the colors. The white filter on his flashlight was SOP for HHC soldiers.

A detail unloaded the duffel bags and each soldier retrieved his bags. A Marine corporal led us off the tarmac to a holding area. As we walked the approximate half mile to the holding area carrying our rucksack, two duffel bags per man, our carry-on bag, and NBC protective mask and weapon, the corporal informed me we were at the wrong place. I'll never forget his first words, "You're the first Army guys we've seen around here in six weeks!"
Soldiers in the holding area after leaving the tarmac. Note they are holding their desert parka. We went from fourteen degrees to ninety plus degrees.

I was upset. After sixteen hours of flying, we were stranded. I instructed the corporal to find his OIC. He failed in this mission. I finally told him to get my men some water and he took care of this. We were all just standing out in the hot sun. I walked over to the air terminal and found a Marine warrant officer who seemed to know what was going on. He helped me make some arrangements for transportation and an armed escort. He had no knowledge concerning the 1st Inf Div and could not even put me in contact with them. I used his phone to call the operations personnel back at Ft. Riley. I said some
things I should not have said. I asked them to relay my status to the 1st Inf Div in Saudi Arabia.

CW3 LeMay, the BMT, and SFC Willie H. Ingram, the Battalion Motor Sergeant (BMS) waiting for the Military Police (MP) escort to arrive.

I finally managed to scrounge eight buses and two truck trailers. A total of four hours passed since we landed. A Marine Senior Gunnery Sergeant did not want me to take his buses. I promised to bring them back in two hours. Even though the convoy was ready to move, we were not allowed to depart until an armed MP escort arrived. As we had no ammunition with us, the escort was for our protection. Two more hours passed until two MP HMMWVs showed up for escort duty.
CPT Hodge, SFC Martindale, and CW3 LeMay with the eight buses and cargo trucks. Local bus drivers are standing in the background.

We drove to the port of Al Jubayl. This was another Marine operation. While the soldiers took a stretch break, I went to one of the headquarters and tried to find help contacting the division. I wanted to let them know where we were. The Marines did not have communications to 1st Inf Div and did not even know where the VIII Corps liaison was located. It was now 2200 hours. I made the decision to drive to Dhahran. The Marine Senior Gunnery Sergeant would have to wait a little longer for his buses. The MP escort knew the way.
It was midnight and another long drive before we found Army Central Command (ARCENTCOM) Headquarters in Dhahran. I went into the headquarters and asked an Army major if he could put me in contact with the 1st Inf Div. He called somebody on the phone. He finally said, "Yes, sir, I have a LTC Marlin here who wants to speak to you." I asked him who it was as he handed me the phone. He said, "It is MG Rhame." I was trapped. After a forty-eight hour trip I had just woken up the Division Commander in the middle of the night to ask directions.

MG Rhame sent me to Warehouse 18 at the Port of Ad Dammam. The inside of Warehouse 18 was pitch black and over a thousand soldiers were sleeping on cots. The time was now 0400 hours. We were exhausted. I finally woke up LTC Russel L. Honore, the Battalion Commander in charge of port operations. He arranged for bus transportation to the Khobar Towers, later referred to as "Scud Towers." We released our borrowed buses back to the Marine Senior Gunnery Sergeant about eighteen hours overdue. We arrived at our original destination at 0600 hours. All of the battalion's flights departing Ft. Riley after us had already arrived or arrived at the same time.

**Moving Into Khobar Towers**

I walked into the reception point to inform the billeting officers we had arrived. I was informed all the billets were filled and there was no room for my flight's personnel. I told them this was the wrong answer. I found CPT Roberts, CPT Wock, CPT Beals, CPT Torrence, and CPT Clidas and explained the
situation. We pulled together to get everyone into the billets for the day to get some rest. After using a fire bucket chain to unload the duffel bags, we finally found everyone a place to park their body by daylight. The battalion was in three different buildings at this time. By 1700 hours the next day, I arranged to get the entire battalion into one building.

Khobar Towers, renamed "Scud Towers" by the troops.
LT John L. Ward, the Scout Plt Leader, code name "Wolf Pack," inside the meeting room in Khobar Towers.
SPC Mark H. Goforth, my HMMWV driver, in Khobar Towers. Note the green uniforms. We had a schedule of three days wear of Battle Dress Uniforms (BDU), then three days of DCUs.
LT Powers, the Mortar Plt Leader, in the meeting room. His code name was "Thumper." Note the white sidewall haircuts—all the soldiers received close "shaves" because they were not sure when the next haircut might be.

The buildings had toilets and showers. However, the water went out two days after our arrival and we had to use outside latrines most of the time. We set up a meeting room, established a Staff Duty Officer (SDO) roster, and posted local security in the stairwells. Each building had eight floors and each Tank Company occupied one floor, with the other four floors going to HHC. Some of the air conditioners worked and some did not work. There was no furniture. Some cots were available, but for the most part, soldiers slept on the floor.
Khobar Towers. Notice the laundry and sleeping bags being hung out to dry. Laundry was washed in sinks and bathtubs. Even with the visible air conditioners, most of the windows are opened.
Soldiers quickly discovered where to eat. The underground garages served breakfast and dinner. The meals were catered and seemed decent enough. Lunch consisted of an MRE and a supplemental pack of soft drinks, fruit, cookies, and fruit drink. Soldiers also discovered the telephones in the underground garage. American Telephone and Telegraph (AT&T) set up about twenty-four phone booths in the garage. Both of these places made me nervous. Because of the congestion, I was always fearful of a terrorist act. I seldom went to either of these
places and expressed my concern to COL Moreno at our first commander's meeting.

CPT Williams, 1SG Thiede, and SFC John C. Maines in the meeting room. Note the MRE boxes stacked up for an SDO desk. The meeting room also doubled as the operations center.
Entrance to the telephone service. Note the satellite dishes behind the palm trees.

We created our own security nightmare by moving tens of thousands of troops into a congested area. For this reason, security was of constant concern. One infantry battalion was assigned the mission to guard the perimeter of the Khobar Towers with BFVs. Other infantry units patrolled the interior fence line, manned the barriers at the entrances, and patrolled the roofs.
Security at Khobar Towers

COL Moreno was assigned the responsibility for a block of buildings with regard to a security plan. He subsequently broke his block into sub-blocks and placed his Battalion Commanders in charge of the sub-block. I was assigned a total of eight buildings because I was the senior officer in the eight buildings. The difficulty with the plan was getting the senior officer of each building to cooperate when we had no command authority over them. Most of them cooperated. CPT Williams handled most of the coordination. We used runners from each building to reside permanently in the SDO office for communications as there was no other means of communication.

Main entrance to Khobar Towers. Note the concrete barriers, BFV, sandbagged bunker, and guards on the roof.
Each building used door guards and floor guards. Armed soldiers were on the roof of each building. We exercised several test drills from blackout conditions to lock-ups. We were as secure as we could hope for under the conditions. I personally preferred being out in the desert in a pup tent with a foxhole. Ammunition was still restricted to key leaders, and even this ammunition was kept in pouches with a strict ROE criteria.

Statement by MAJ Cook, the Battalion S3, describing security operations at Khobar Towers on 12 January 1991:

Terrorism was the biggest concern for American forces in Saudi Arabia. While at Khobar Towers, I was appointed as the area security OIC, insuring door guards were posted in each building within our quadrangle and a roving patrol was alert and functioning. This job was made difficult due to the quick turnover of units through the Khobar Towers. It was a continuing nightmare keeping the list updated of soldiers and units in the assigned buildings. All this was to assist in recognition of individuals in the case of a terrorist attack.

The Port of Ad Dammam

Our first ship was scheduled to arrive about the 14th of January. After settling into the Khobar Towers, the soldiers reverted back to a regular schedule. We continued our training classes with materials and leaders available. Physical training was done with protective masks at the ready. With the battalion stabilized, MAJ Garrity, key staff members, and I caught the shuttle bus to the port facility.
LTC Marlin and MAJ Garrity at the division operation center in Warehouse 18.
COL Moreno and LTC Gross at the division operation center in Warehouse 18. Lights in the background give an idea of the size of the warehouse.
LTC Donald F. Schenk, the Brigade XO, COL Lon E. Maggart, the 1st Bde Commander, in Warehouse 18.
CSM Milling, now the 1st Bde CSM. He continued supporting the battalion whenever he could. In port, he always loaned his vehicle to us when we needed it. He was very loyal and it was appreciated.
One of the battalion HEMMTs being unloaded by a crane. Ships without a roll on/off capability took forever to unload. Note our ammunition is already loaded on the truck.

The bus was packed and we had to leave an additional load of personnel at the bus stop. This was an indicator of our worst nightmare. With a twenty plus kilometer distance between the port and the Khobar Towers, no dedicated transportation was available for us to move the battalion to port and back, as needed. As a Battalion Commander, I continued to hitchhike back and forth. Many times I would be stranded at the port or at the Khobar Towers.
CPT Wock and CPT Torrence in the division operations cell at Warehouse 18. Weather changed to wet and cold on or about 13 January. Note CPT Wock is wearing a rain poncho.

As the ships came in, we found our equipment was mixed with other battalions' equipment and in no logical order of arrival. The tanks for the 3rd Bn, 37th Ar, tanks arrived and we received our HMMWVs first. We loaned them some HMMWVs to help out. Neither of us ever received the bus continuously being promised to us by the staff and chain of command. There was a tremendous pressure and sense of urgency to move our equipment off the boats and to the TAA.
As the ships arrived, there was more and more command pressure to move out to the TAA. The port was a nightmare, with congestion alone constituting a major safety hazard. When the equipment came off the boat, we had to locate it. This included the MILVANs. The location of Warehouse 18 (division operations center) and the holding and staging areas were not in walking distance, especially for troops carrying all their personal gear. All of these problems were compounded by no communications within the port or back to Khobar Towers. To help with communications, some of the companies used commercial walkie-talkies with a range of one mile in port.
LT Douglas M. Weiner, the C Co XO, in Warehouse 18. Note another rain jacket (for all those thinking Saudi Arabia was warm all year round).

The burden of this poorly thought out system was placed on Battalion Commanders. I spent whole days just trying to arrange for transportation for the battalion. I solicited help from every member of my chain of command: COL Moreno, BG Jerry R. Rutherford, the Assistant Division Commander for Supply (ADC(S)), and the Division G4 representative, LTC Vernon C.
Johnson. Everybody tried to help, but the result was the same—no bus. The message was, "Just get it done," while at the same time directives were put out specifying how many wheeled vehicles I was allowed outside the staging areas. Selective disobedience followed. The situation was ridiculous and dangerous.

SGT Michael F. Zuilkowski and SGT Craig L. DeYoung in Warehouse 18. SGT DeYoung served in the 1st Bn, 37th Ar, in the FRG with LTC Marlin.
Our equipment coming off a roll on/off ship from the front.

I found myself, with all my contemporaries, commanding the security of a block of buildings twenty kilometers from port with a serious potential terrorist threat. I was simultaneously trying to organize the battalion movement to the TAA with no communication or transportation assets.

On 16 January 1991, COL Moreno gathered the Battalion Commanders and told us in confidence the air war would start on 20 January 1991. I estimated I could be out of port and away from this nightmare before another one started.
Eventually, we gave up the possibility of any assistance. LT Wiser went so far as to borrow a white Datsun pickup truck from a local TMP for C Co to use. Leaders at all levels scrounged, borrowed, stole, or commandeered transportation to get soldiers back and forth from the Khobar Towers and to and around port.

With the few HMMWVs available, we shuttled small groups of soldiers. Because of the problem in locating equipment, we positioned a soldier near the ship as it arrived and he monitored the vehicles by bumper number as they disembarked. We reported what had arrived at the division operations center in Warehouse 18. Even division operations did not know exactly what equipment was on what ship. Theft of equipment was blatant. As items moved to a staging area, we secured it by having our soldiers guard it or live on it. I was constantly being advised not to have my personnel live on the vehicles in the port staging areas. However, I ignored this. The soldiers became "Wharf Rats" and actually preferred being in port to the Khobar Towers. C Co moved three tank crews to port. They lived under an overhang for three days. They tried to get into Warehouse 18 unsuccessfully. They decided to stay in an open bay on the pier and made a thorough reconnaissance of the area. Despite appearances, the chain of command took good care of these soldiers and CSM Stockton made sure they did.
A Co's tanks in the staging area waiting to be loaded on Heavy Equipment Transports (HET).

I was convinced the port facility was out of division's control. However, the transportation organization was their responsibility. In the end, I virtually lived at port in Warehouse 18. The average day was about eighteen to twenty hours. It was easier than trying to hitchhike back and forth to the Khobar Towers. Outdoor latrines were available. Furthermore, all soldiers, myself included, were not allowed to go anywhere without their weapon, protective mask, protective clothing, LBE, and Kelvar helmet.
C Co tank being loaded onto a HET in a staging area. Note the soldier wearing his protective suit indicates photo was taken after first Scud missile attack on 17 January.

The equipment was driven to a staging area within the port facility. Once the equipment was prepared by the crew, it was fueled and taken to a second staging area for deployment to the TAA. There were four loading areas and convoy assembly areas within the port—tanks, wheels, personnel carriers, howitzers, and BFVs. The wheels were not a problem. They were usually ready to roll as soon as the communication requirement was squared away. All the track vehicles required wheel transport and this was a daily fight among commanders to move their
equipment out of the port. Transportation was not well organized.

B Co tanks being loaded on HETs in the staging area. Notice all the soldiers are wearing their protective NBC suits.

The main challenge for Battalion Commanders and subordinate commanders was to find their equipment, find the MILVAN with the radios, fight for the wheel transportation and assign a convoy commander to lead and trail the convoy to the TAA. (The TAA was a twelve hour drive from port.) This mission was accomplished by the coordination of Battalion Commanders and their subordinate commanders.
Tank Swap

We were informed we would not receive the M1A1 tanks in port, like 1st Bde did. Time would not allow it. However, if we could identify our historical maintenance problem tanks, we could swap them for some of the 1st Bde better tanks being turned in. I coordinated directly with LTC Ritter. With his help, we swapped four of B Co's tanks, two of D Co's tanks, and three of A Co's tanks. CPT Torrence, C Co, did not want to swap any.

One of my greatest leadership challenges was to inform my men we would not receive the M1A1. Many of the key leaders, like myself, had extensive experience on the M1A1 and we knew the difference between the two tanks. We took the universal approach of being optimistic and pointed out to our soldiers the advantages of keeping our M1 tanks. Few people will ever realize the superb leadership demonstrated by the key officers in the battalion over this one issue.

I met COL David O. Bird, the OIC of Army Material Command (AMC) at port, during the tank swap. He was the authority on M1A1 tanks and tank issue and a true soldier's soldier. As an experienced armor officer, he gave me carte blanche on the swapped tanks for parts and tools. He also helped us get access to some repair parts for some of our deadlined vehicles. He was a savior and understood in war there was possibly no tomorrow. The negative side to the tank swap was the additional burden of moving equipment and people back and forth again to the AMC and staging areas. AMC was on the far side of the port.
Statement by CPT Wock, D Co Commander, describing the trading of tanks with the 1st Bn, 34th Ar, in Ad Dammam Port on 14 January 1991:

About 14 January 1991, four of my company's tanks arrived in the port of Ad Dammam. LTC Marlin informed all of the Company Commanders they had an option to turn in "dog" tanks in port, and draw other M1 tanks in a direct exchange. At the time, LTC Marlin did not put a numerical cap on the number of tanks a company could turn in. I also remember mentally comparing LTC Marlin to Monte Hall on Let's Make A Deal because he really seemed to be encouraging us to "go for door number two." It seemed as though LTC Marlin wanted us to confess our secret of possessing a number of tanks with unshakable maintenance problems.

In reality, I did not have any tanks I considered as "dog" tanks. I did have, however, one tank whose engine would shut itself off at some pretty inconvenient moments. Worse yet, the tank would not start until every circuit breaker in the vehicle was reset. This meant the crew had to add an additional 10-20 seconds to the engine's start cycle in order to recycle the tank's electronic system. In my mind's eye, I could envision an enemy tank round striking this immobile tank as its frantic crew was busy flipping circuit breaker switches. Given this sobering prospect, I was prepared to notify LTC Marlin of wanting to swap one of my tanks.

I had another tank as a possible swap candidate in mind. It was good old D-31 which needed a starter and a new engine. This was the tank we drug onto the train at Ft. Riley. Knowing this tank could not move under its own power automatically meant it would be loaded on the cargo ship last, and when it arrived in port, the tank would end up in area reserved for "frustrated cargo." This area was named this because if you ever had to go there and find your equipment, this is exactly what you became: frustrated. If you were part of an extremely smart but lucky group, you would actually find your equipment within a day or so. At any rate, if you found your broken equipment in the "frustrated cargo" area, you usually couldn't get the equipment out because there were no maintenance personnel with parts and tools to help you bring this sixty-three-ton piece of pig-iron back to life.

So after conversing with CW3 LeMay, the BMT, I realized there would be no quick solution to fixing D-31's problem. Looking for a tank engine in the port, I was assured, would do about as much good as
expecting to see the Good Humor Ice Cream Man out in the desert. As a result, I decided to swallow my pride and notified LTC Marlin about swapping two tanks.

The next day, I swapped the tank out with the engine cutting off problem. At the same time, the 1st Bn, 34th Ar, was turning in all of their M1s and drawing M1A1 tanks. LTC Marlin made the necessary introductions between us and their Company Commanders. Our counterparts helped us pick the best tanks. Once we were given these candidates to inspect, each company had a small inspection team to decide which of the tanks we were going to take. In my company's case, the team consisted of the Tank Commander and my master gunner. The Tank Commander's job was to verify the basic soundness of the vehicle's automotive condition. The master gunner's job was to verify the tank's fire control systems and weapons. Neither person had the luxury of several hours to examine the new tank. In the space of two hours, this team selected two tanks after examining four tanks. Within the following three hours, my crew signed for these tanks, and turned in the one tank we had brought with us.

As it turned out, my decision to draw another tank for D-31 was later validated. I did not see D31 for another month as it blipped into the Twilight Zone and later materialized in TAA Roosevelt.

In addition to the tank swap, we provided trained tank crewmen to the 1st Squadron (Sqdn), 4th Cav. LTC Wilson asked for help to man the nine tanks he received in port. I gave him twelve tank crewmen. The G1 was supposed to give us priority for licensed HEMMT drivers as part of the agreement. This never happened. Our tankers serving with LTC Wilson did a magnificent job.

Field Ordering Officer

SFC Samuels, the Battalion S4 Non-Commissioned Officer in Charge (NCOIC), was assigned the additional duty of being the
SFC Samuels, LT Thompson, MAJ Garrity, and CPT "Oz" Hall in Warehouse 18.

SFC Samuels eventually purchased three small generators and some assorted items. In all, we did not purchase as much as we could have if we would have had a better understanding of the systems problems and been in port longer. Fortunately, we had acquired three lightweight, Yamaha generators from our firefighting experience in Idaho. These generators proved critical
to our operating the desk-top computers issued to us at Ft. Riley.

**Water Trailers and HEMMTs**

In port, we were issued three more water trailers which were invaluable. We were supposed to be issued six more HEMMTs. We eventually received them after some initial confusion as to where they were, who was to pick them up, and, in general, trying to get the straight story on them. However, when the final count was over, I still had the only pure tank battalion in the brigade, but had one less fueler than the other two TFs.

**Convoy Preparation and Line-Up**

There were two convoy line-up areas in port. One was the wheel convoy area, and the other was the track vehicle area. As vehicles were unloaded and readied to move, they assembled in the line-up area and were convoyed to TAA Roosevelt.
C Co tanks ready for movement to the TAA.
Vehicle line-up area adjacent to port facility. Plywood boards indicate specific convoy line up areas.
LTC Marlin at the Ad Dammam Port entrance. Note HMMWV does not have canvas on the vehicle because it is still in a lost MILVAN. LTC Marlin and his driver slept on the plywood board in the back of the truck in port most nights.

Unfortunately, the convoys were mixed vehicles from different units. We assigned whoever was available from within the brigade meeting the requirements of having a vehicle and radio. While it appeared organized, it was just the opposite. The truth was Battalion Commanders did not have command of their battalions from the time they left Ft. Riley until they arrived in the TAA.
CSM Stockton and CPT Hall at the port of Ad Dammam.
LTC Marlin and CPT Hall at the vehicle line-up area adjacent to the main entrance to port. Note the BFV guarding the entrance in the background. LTC Marlin is cleaning his 9mm.

Convoy Commanders were responsible for the safety brief and to ensure soldiers had the correct number of meals and water rations for the trip. Buses were provided to haul the troops/crews of the track vehicles to the TAA. We could never get a straight answer on whether we were supposed to furnish an assistant driver to accompany the driver. The assistant driver requirement varied depending on whether the unit was civilian or military. Our battalion was piecemealed out to the TAA and was subjected to the potential enemy threat as a piecemealed battalion over a period of seven days.
I was in Warehouse 18 the night we attacked Iraq. We pulled a number of all-nighters. This was just one of them. At approximately 0200 hours, I was still awake and working in the operations cell when the lights came on in the warehouse. Everybody was woken up and instructed to put on NBC protective over-garments. We referred to this as MOPP (Mission Oriented Protective Posture) 3. The news was on the radio that we had started the air war with Iraq. At 0230 hours, the sirens went off. Iraq was retaliating with Scud missiles, and we masked immediately. I heard about twelve hundred soldiers: cheeks slap together simultaneously--pucker factor.

LTC Marlin in MOPP 4 on the night of 17 January in Warehouse 18.
I was more upset about the timing than the Scud missiles. With the difficulty of getting out of port, I did not need more distractions or confusion. The stress and pressure became worse. The G4 representative lost his composure. He panicked and ripped his mask off. He acted as if he was in the middle of a breakdown. It took several officers to get him under control.

CPT Roberts in MOPP 4 in Warehouse 18.

The port authorities could not seem to get their act together. I was not sure who was in charge of the port. We went back and forth from MOPP 0 to MOPP 4 about four times in three hours. It was exhausting. After this schedule, I learned my lesson. I found a chair and sat and relaxed until we came
out of MOPP 4. It was too tiring to do otherwise. The rest of
the night was non-productive because of the confusion. When MAJ
Garrity showed up the next morning, I went to clean up and take
a nap. The charcoal from the chemical suit made all of us look
like a bunch of raccoons. The charcoal powder was all over our
skin and penetrated through our BDU/DCUs.

**Getting Out of Port**

We had an unbelievable sense of urgency to get out of port. BG Rutherford showed up the morning of the 18th and insisted
that all HEMMTs move out of port ASAP. We executed these
instructions and were aware all of our drivers were not
completely trained.
Diagram #2. Ad Dammam Port.

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Statement by CPT Torrence, C Co Commander, describing his situation in port on 15 January 1991.

The night of the 15th of January, most of our equipment arrived. Once the air war started, we did everything to get ready for "break out" in case of air attack. We had to take all radios, weapons, firing pins, chemical equipment, and Vinsons out of the MILVAN at night in MOPP 4. We had no information as to the enemy situation. We processed tanks all night long in hopes of moving or driving out the next day. We even started to make plans to consolidate the battalion at Assembly Areas (AA) outside port in case of attack. The situation was made worse by the numerous "attack" warnings and total lack of information. They told us to start taking NBC pills and break the seals on our NBC nerve agent antidote gear. All indications led us to believe we could expect incoming chemical Scuds or air attacks at any moment. We tried to get radio nets established and regain Command and Control (C2), but it was extremely difficult to coordinate over the large port area with limited transportation and no communication with higher headquarters. The soldiers did an outstanding job in functioning in total chaos. Tank Commanders got all of the companies' tanks, with the exception of H65, to HETs by early morning. We had, by chance, made the decision to move the company to the port in the morning based on the total lack of transportation. By night, we had transported by bus and by the TMP truck all of C Co and most of D Co. This was the only reason we were ready to move on the morning of the 16th. We were the only company ready and the first out to the desert.

LTC Gross, LTC Fake, and I accepted the responsibility to operate control of three load points for track vehicles. The difficulty was getting control of the wheeled transport assets to load the vehicles. There was no priority and the vehicles had no true schedule. When they showed up, whoever was there to claim them received them. Many times, arguments, bordering on fist fights, broke out between Battalion Commanders across division lines and their subordinates. We parked our rear ends in the offices of the Transportation Battalion Commander's
office and refused to leave until served. This was the only way it was accomplished. I repeatedly stayed up all night in my HMMWV waiting for transport trucks to roll in.

Eventually, the equipment and people began moving toward the TAA. I decided not to deploy to the TAA until at least half my battalion was out of port. Having no idea what was going on in the TAA, I sent MAJ Cook with the first pieces of equipment. He was supposed to link-up with CPT Martin, our advance party, and organize the TAA. After I left, it was up to MAJ Garrity to get the rest of the battalion and equipment out to the TAA.

COL Moreno left for the TAA on 19 January and left LTC Schenk in charge of the brigade operation in port. BG Rutherford was in port the first few days of our attack. He was previously assigned to the 1st Inf Div as the ADC(M) prior to his assignment to the 2nd Ar Div's 3rd Bde (Forward) in the FRG. I had worked with him before. He arrived one night in Warehouse 18 and chewed me out. LT Douglas C. McBroom, the A Co XO, was in charge of a bus accompanying a HET tank convoy. The driver did not have his MOPP suit with him. I offered no defense and fixed the problem. In truth, the driver was not mine; the bus was not mine. LT McBroom was not the senior officer or the Convoy Commander, and most of the vehicles and equipment in the convoy were not from our battalion. This highlights the problem of lack of unit integrity in the port and in the convoys.
Humor

The second night of our attack on Iraq was similar to the first. MAJ Garrity chose to be with me this time. He reacted like I did the first night when the sirens went off. There was a tendency to be over-reactive. After I masked, I told him to come and sit down and relax.

Everyone looks the same in a mask. We were with all these frog-like persons sitting around picnic tables. While we waited, about eight of us listened to the British Broadcast Company (BCC) on the radio. In the middle of the chemical alert, the commentator on the radio talked about the quality of gas masks. He referred to the U.S. manufactured masks being of a lower quality than those found on the civilian market—nothing like being told our masks were second rate in the middle of a chemical attack. As we sat there, one of the several frog-like persons gave the radio the "bird." We could sense and see the laughter coming from behind the masks. It was a typical, "Now they tell us!"

Khobar Tower's Black-Out

I left MAJ Garrity about 0200 hours and returned to Khobar Towers where I also had responsibilities. Near the end of the half-hour ride, the sky lit up overhead. SPC Goforth and I were startled. A Patriot missile was taking out a Scud missile off to the west, and it looked like the Fourth of July.

Security at Khobar Towers was tight. I became visibly upset when one of my soldiers challenged me at the building door.
with the password and I could not remember the response. He failed to understand his recognition of me as his Battalion Commander took precedence over the password.

CPT Williams had the entire building in black-out conditions with all the windows closed. Soldiers sat in the dark in their MOPP gear. CPT Williams moved all the runners into my room to get them away from the sliding glass doors and the operations cell. I was exhausted and filthy. I ended up taking a cold shower with my gas mask on and slept four hours. CSM Stockton woke me up at 0600 hours and I went back to port.
Convoy on the Tapline

Statement by MAJ Cook, the Battalion S3, describing his convoy's movement to TAA Roosevelt on 16 January 1991:

I moved to the port on the afternoon of 16 January to form and lead a convoy to TAA Roosevelt the next day. The air war with Iraq started. Scud attacks were being launched against targets in Saudi Arabia and the port area was a prime target. We were being constantly woken up to implement MOPP level 4 status. It was a helpless feeling not being able to do anything.

My convoy left at 1500 hours on 17 January with over eighty track vehicles loaded on trucks driven by a mixture of American and Saudi Arabian drivers. I arrived at the Release Point (RP) at 0500 hours on 18 January with only six trucks. There was no control on the convoy or the drivers. Fortunately, everyone was provided a map of the route and where the RP was located. The remainder of the convoy straggled in by 0700 hours and unloaded.

The RP was uncoordinated. When the light started to break, I noticed how bunched up the RP was with 2d Bde vehicles. I took action to set up a defensive perimeter and was in the process when the Commanding General drove up. MG Rhame asked what was going on. I briefed him on the immediate situation and my actions. The problem I had was the lack of keys and drivers to move the tanks into position. He seemed satisfied with my actions and departed the area.

Two hours later, our link-up with escorts to TAA Roosevelt was completed and we departed for an area twenty kilometers to the north.
Statement by CPT Hodge, the BMO, describing his convoy along Tapline Road on 16 January 1991:

I was notified twelve hours before our convoy Start Time (SP) time to be the assistant OIC and trail vehicle from port to TAA Roosevelt. Considering the shortage of HET vehicles at port, and the general chaos at the division operations center, I was not surprised about the short notice. The most challenging aspect of the movement was continuously preparing for chemical attacks after staying up all night the previous night.

We went without sleep for about forty hours before we started the movement out of port. Along the route, the HETs began dropping out of the convoy left and right. After the sixth HET broke down during the second hour of movement, I gave up trying to get assistance for every broken-down HET. It was so different from the organized and orderly convoys I led as a Support Plt Leader in Germany. I do not know how all the HETs ever made it to our final destination. Actually, one of the HETs caught fire and ended up burning up one of our M88 recovery vehicles along with it.

My driver was falling asleep at the wheel, so I drove part of the way on the Tapline Road. Then I started falling asleep, so we switched again. Once, I remember drifting into the oncoming lane. A big truck was flashing his lights and honking his horn as he bore down on us. My driver woke up in the nick of time and drove us back into the right-hand lane.

I did not link-up with the convoy OIC, MAJ Cook, until late the next day at TAA Roosevelt.

I was designated as the trail vehicle for a convoy with three serials consisting of over seventy vehicles and left the Ad Dammam port at 0730 hours on 20 January 1991. CPT Clidas was leading as the Convoy Commander. There was radio communication between the lead vehicle and the trail vehicle. At the convoy line-up point, I met with the HET Plt Leader.

My initial impression of his soldiers was they were an undisciplined lot of reservists. They were out of uniform and
did not seem too concerned about their lack of military appearance. The Plt Leader tried to make me believe the movement of his trucks up the pipeline was routine and they did not need any further instructions. He tried to imply to me their appearance and behavior was caused by the long hours and hard work they were putting in on the road. This was no excuse in my book. The truth was he was not in charge of his platoon. I made all his soldiers involuntarily attend the convoy safety and administrative brief given by CPT Clidas.

I failed to appreciate the difficulty we would have on the road controlling seventy-two vehicles with two control vehicles. The variables of a very long road march (number of vehicles, number of control vehicles, mixture of different units, civilian and military HET drivers) made this mission almost impossible. I had not experienced the Tapline Road previously and was unable to predict the difficulty we would have moving this size unit to TAA Roosevelt.
Diagram #3. The Tapline Road.
A guide vehicle with flashing lights led out of port. I was relieved to get out of the port area. I never understood why we just did not take the battalion ten miles out to the desert and set up a pup tent area. This would have reduced security requirements, and the dispersion would have eliminated us as a potential mass casualty and terrorist target. As the equipment arrived off the boats, it should have been driven out to our AA and been manned. This would have reduced the congested safety hazards in port and eliminated our transportation problems by maintaining unit integrity as soon as we disembarked from the planes. Once all the battalion equipment was with the battalion personnel, the HETs could have arrived in our AA to load. We would have moved to the TAA as a battalion ready to fight as opposed to a battalion scattered and stretched between port and the TAA for seven days.

Once on the main four-lane highway, I really felt great. I remember thinking to myself, "What's all the fuss; this is a great highway and we're really making good time." I thought the estimate of a twelve-hour ride was exaggerated. Movement along the coastal road going north was smooth. When we made the turn onto the Tapline Road, things changed.
Viewpoint from LTC Marlin's HMMWV as the trail vehicle on a convoy heading from port to the TAA. Note the white sign telling all convoys to turn onto the Tapline Road. Note the bus carrying vehicle crew members with duffel bags packed upright on luggage rack.
Same bus after getting off the six-lane highway onto the Tapline Road. Quite a contrast. Note the bermed area in the foreground is the MP CP.

The Tapline Road received its name from the oil pipeline running parallel to the northwest. It is not a major road. As a matter of fact, it resembled an American two-way highway found in the mid-west back in the 1950s. It was narrow, congested, and dangerous. The Tapline Road was heavy with traffic of every imaginable form of transportation. We dropped only one HET with a tank prior to hitting the turn off. I recorded the location and kept moving. After the turn onto the Tapline Road, our convoy began to intermix with all the other traffic and
continued to get more and more mixed with other traffic as we progressed.

Viewpoint of the Tapline Road shortly after clearing the first CP. Note the length of traffic in front of the vehicle. Helicopters used the Tapline Road to navigate on a regular basis.

With limited communications, it became impossible to know when a vehicle dropped out. We lost control of our convoy. Traffic movement went from the initial rapid pace to a crawl, and eventually to stop and go movement. I could not communicate with CPT Clidas. By the time we hit the refueling point, I might as well have been by myself.
Logjam of vehicles on the Tapline Road. Photos are taken looking ahead and to the rear. This photo was taken with over two hundred kilometers to go to the division RP.
When I finally arrived at the 1st Inf Div RP and CP, twelve hours from the convoy start time, I had no idea of the convoy status and only had a few dropout vehicle locations. As I checked into the MP CP, I discovered the serial commanders fared better than I could have hoped for and they seemed to have a fair account of their serials. We were still missing a few vehicles. My driver was exhausted and I still was not sure how to effect the link-up with my own battalion. Nobody was at the CP to meet me.

**Tapline Road Damage Assessment**

In the end, we lost two vehicles on the Tapline Road. A soldier with a learner's permit driving a HEMMT totaled the vehicle. His accident was caused by an oversized wide vehicle coming toward him while the wreck of another vehicle was protruding onto the road from the right side. An experienced driver was with him, and there were no serious injuries. However, we were short one HEMMT cargo truck, considering the criticality of transportation assets.

One HET caught fire when the brake lines ignited. It was carrying an M88 recovery vehicle and it could not be removed before the flames engulfed it. The battalion now had one less recovery and heavy lift vehicle to assist our maintenance and recovery effort.

**Link-Up With the Battalion**

We still had no communications to speak of because most of the wheeled vehicle radios were in the MILVANS. About a half
mile beyond the CP, I located a scattering of our tanks and other vehicles. Soldiers climbed off the bus and mounted their tanks as they were unloaded. Other soldiers, whose tank was missing because their HET was broken down, stayed on the bus. I gathered the senior person of each company together and made the effort to get them organized and in a defensive perimeter. When CPT Martin arrived, we had about one hour of daylight left and I wanted to get this group of soldiers and tanks forward as quickly as possible, so we moved out. I did not allow the soldiers to stay on the bus. I put them with other crews and sent them forward. They could return for their tank when it arrived. My biggest priority was regaining the battalion integrity and personnel accountability. I instructed CPT Martin to send CPT Bond back in a HMMWV to man the link-up point for all vehicle and personnel stragglers arriving after we left.

Statement by CPT Torrence, C Co Commander, describing the situation at the RP on Tapline Road on 17 January 1991:

As personnel moved by buses, we ended up having people at the drop point without tanks or equipment. Several tank crews lived in the "Bus Brigade" (a broken bus at the drop point) until their tank arrived. Some soldiers stayed for almost a week waiting for their tank. The 1SG would make the one-hour trip daily to check on the soldiers. It was cold and the bus was the only protection from the elements. By the time these soldiers arrived, they were tired, dirty, and unshaven, but happy to be linked back up with their own company.
LTC Marlin by his HMMWV in TAA Roosevelt. The photo was taken in the heat of the day. With only eight hours of daylight, the days were short and the nights were cold.

CPT Martin led us about twenty-five kilometers into the desert going due north. I was in my HMMWV and my tank and crew preceded me. As we arrived into our assigned sector in TAA Roosevelt, it became dark— I mean pitch black, no moon, like a curtain had fallen. Fifty yards was the same as fifty miles. I lost my tank. I tried to link back up with CPT Martin. No such luck. I found SFC Ralph M. Day, a C Co Plt Sergeant, and spent the night adjacent to his tank for security reasons. I did not like the situation at all. I slept with a loaded pistol
and my gas mask out of the case, next to my head. This was the epitome of uncertainty—and I was the Battalion Commander.

**Tactical Assembly Area Roosevelt**

Morning did not arrive soon enough from my perspective. The weather was now wet, rainy, and chilly. January in the desert was usually just above freezing at night, with a high of sixty-five degrees in the middle of the day. There was always a wind and the air seemed damp even when it was not raining. This is the climate I woke up to.
LT Ward waiting for the command and staff meeting to start. The berm in the background is part of the TOC defense put in by an M88 recovery vehicle.
LTC Thomas R. Madison, the Division IG—a fine officer and a man I always felt I could confide in. Notice the rain water on the ground behind him; it does rain in the desert.

The terrain was perfectly flat—and I do mean flat. There was not a terrain feature in sight, and the only limitation to our visibility was the weather and our eyesight. I sought MAJ Cook and CPT Clidas. I gave MAJ Cook instructions before he left port on how to set up in the TAA. He gave me an update and
I felt somewhat reassured things were organized as best they could have been at the time. As equipment and soldiers arrived into the TAA, he linked them up with their senior leader present and they put them into the unit sector.

Statement by MAJ Cook, the Battalion S3, describing his actions in TAA Roosevelt on 18 January 1991:

TAA Roosevelt was a flat, sandy area in the middle of nowhere. B Co had a tree in their sector, otherwise no vegetation higher than scrub-type weeds and patches of grass to feed roving herds of camels and sheep were evident.

We deployed the battalion with A Co on the left flank, B Co in the center, C Co on the right flank, D Co in reserve, with the Mortar Plt behind D Co, and the Scout Plt forward for early warning. The battalion was at the center of the brigade sector with TF 3-37 to our left and TF 2-16 to our right.

The first week in the TAA was spent preparing vehicles for the attack. Training plans were developed and sent forward through brigade to division. Individual training and maintenance was the name of the game for the time being. As time progressed, we started preparing for breaching operations. Grass drills from the Rubber Duck kit were prepared continuously by CPT Paluso. Actual rehearsals were executed continually until everyone knew by heart where they were going and what they were doing.

The Command Group—consisting of myself, LTC Marlin, the Air Liaison Officer (ALO), LT Arthur W. Anderson, and the Fire Support Officer (FSO), CPT Steven Bratina—executed rehearsals for movement during the attack. The S3 SGM, SGM Neel, practiced jumping the TOC to make the TOC personnel efficient. Operation orders were written and all preparations were made to attack.
An A Co tank fully camouflaged at a distance of four hundred meters. The tank is not visible. Note the green grass patch in front of the tank position. At a distance it looks like solid grass. As one gets closer to it, it virtually disappears.
Bedouin tents erected inside the field trains site. These tents were totally useless. Most were never used by the soldiers.
TOC location in TAA Roosevelt.
FSO's APC with the UMCP in the background.
SPC Phillip S. Michel, SGT Nathan L. Reynolds, and SGT Jerry E. Alleyne setting up the TOC site in the TAA. The painted M109 van assigned to the S3 Section was used for reproduction of orders and graphics.
SFC Ballinger giving instructions to the TOC crew. Soldiers are busy unpacking the CONEX inserts from the trailer.

We established communications with the brigade headquarters, and one M577 command vehicle was acting as our TOC. Things were dismal. My mind was still concerned with port operations and MAJ Garrity, and the vehicles and personnel stuck or broken down on the Tapline Road. We were living off the meals and water we brought with us. 201st Fwd Spt Bn had not closed and was not set up for operation. Tentage for the soldiers was sad. The Bedouin tents provided were a joke. They leaked terribly. One soldier even set his pup tent up inside the Bedouin tent because of its inadequacies. Shower stalls and plywood latrines were positioned in the area.
LTC Marlin's tank position around the TOC site. The hole was dug by an M88 recovery vehicle. LTC Marlin established a policy for all equipment and personal items to be placed underneath the camouflage net. Note the tank has no M2 machine gun mount. Antenna for GPS is visible on top of turret and tow cable is mounted on front of tank for combat recovery. The TOC is visible four hundred meters to the rear of the tank.
An A Co tank position. Soldiers have dug a fighting position with the tank plow and then backed the tank up to set up the camouflage net. It took two full net sets to correctly cover the tank. Over a period of time the wind would damage the fiberglass poles and net beyond repair.
MAJ Cook's tank and crew--SGT Calvin Johnson, SPC Wesley J. Kinnett, and SPC Rocky L. Wall--in vicinity of the TOC.
I made the rounds to all my soldiers' positions. I wanted them to know I was there and I needed to get an idea of our real status. COL Moreno came by to tell me MG Rhame had visited my area on my first day and to tell me we looked like a California National Guard unit. Morale was high. Most of the soldiers were just elated to be out of the port area. The 1st Sqdn, 4th Cav called to say they found my tank and crew. The tank arrived about 1600 hours the same day. We spent the next four days just getting all the pieces together. MAJ Garrity showed on the 24th of January with the last of the unit's personnel and equipment. He was outright hostile toward the port area. We finally closed
on the 26th of January. We were hardly ready to fight. I was amazed at how we had taken a combat-ready battalion, dissected it, scattered it, then expected us to put it back together. There has to be a better way.

Security

My first concern was security. We had the Egyptian units to our front, positioned between us and the Iraqi border. Should Iraq attack, some heavy fighting would take place before they reached us. However, a main attack was not my only fear. There were still terrorists and spies to be concerned about.

Statement by CPT Torrence, C Co Commander, describing a contact between the Egyptian and U.S. forces on 26 January 1991:

The Egyptians had practice "alerts" at all hours. We would see them go on alert status and react accordingly. We also "captured" a lost Egyptian who stayed with us for several hours. We called higher to ask for guidance, but no one knew what to do. Later, at night, we released him when we saw his unit dispatch vehicles for a search. He seemed to be very young and his weapon was wrapped up in cloth. We fed him and he exchanged pictures with my driver. Later, my 1SG was "captured" by the Egyptians. He was Hawaiian and looked, at night, to be an Arab. The soldier we captured validated he was from the U.S. forces located next to their positions.
Diagram #4. TAA Layout.
I put the Scout Plt forward between the tank companies and the rear areas of the Egyptian units. I brought the Scout Plt in to a lager position during the daytime, and put them back out at night. Three tank companies--A, B, and C--went up on the perimeter from left to right. A and B Cos tied in with the left and right limits of TF 3-37 on the left and TF 2-16 on the right. I kept D Co in reserve behind C Co. The TOC was about two kilometers behind D Co. The Mortar Plt Battalion Aid Station (BAS), ALOC, UMCP, and field trains were dispersed behind B Co. This was appropriate because the field trains were in line with the 201st Fwd Spt Bn. Each of the smaller units established perimeter defenses and dug in.
The Mortar Plt in TAA Roosevelt. Notice how the camouflage nets make it difficult to identify the type of vehicle under the net. Note the tank tracks on the surface--these became speed bumps and made wheeled transportation difficult and slow.
UMCP in TAA Roosevelt.
A B Co tank and camouflage net on the perimeter of TAA Roosevelt.
C Co tanks on the TAA perimeter. Photo was taken from D Co's reserve position.
The tank companies and Scout Plt set up range cards and Target Reference Points (TRP) using the Yukon stoves. With the plows on the tanks, we were able to dig in to a hull-down position. I insisted we set up the camouflage nets even though the Company Commanders did not feel it was worthwhile. Our nets were green and not the desert pattern. We discovered within a few days the camouflage nets were effective at a distance and prevented vehicle type detection from the air and ground.
**Maintenance**

The maintenance of our personnel and equipment had an initial, direct effect on our security. I held a 1600 hours command and staff meeting. Using the back of a latrine, I personally would chair the running tally of deadlined vehicles and their status. The equipment was out of our possession for over six weeks and was exposed to the ocean and long periods of inoperation. We were using the repair parts we brought with us. We had brought an abundance of repair parts, above and beyond what was authorized, anticipating shortages. Within a few days, LTC Schenk began chairing an 0800 hours maintenance meeting. CPT Hodge and CW3 LeMay normally attended.
Back of the latrine by the TOC. LTC Marlin used this to record deadlined vehicle status for the first few weeks in the desert. Note at the very top it says "#1 Priority." Vehicles are listed by bumper number and the broken part. Bottom panel listed names of personnel/unit we were still trying to locate. Note the "60" in yellow. This was our battalion number and was used to distribute latrines and showers into the TAA.
CW3 LeMay inside the UMCP. Note his wet weather clothing. The built-up trailer was constructed courtesy of Mr. Corbo. The M109 van is being used as his CP.
LT Thompson inside the UMCP. Note the MILVAN in the right-hand corner. We were still wearing uniforms according to a three-day schedule, but did not change the camouflage cover on our helmets.

The weather was cooler, so our need for showers was not as great as it could have been. The soldiers had to dress warmly with sweaters, parka covers, pile caps, gloves, and sometimes were wet weather boots and jackets. For the most part, we were healthy and able to sustain sanitation operations. No mail had been received since our arrival in Saudi Arabia.

**Plow Demonstration and Test**

COL Moreno and the other two TF Commanders were still experimenting with the mine plow and rollers. I took my
commanders and MAJ Cook over to TF 3-37's area to watch a plow demonstration. LTC Gross had several of his plow tanks there for trials. We did several experiments with the plow tanks and looked at the depth and length to determine how wide a lane we could plow. We also considered the possibility of using the plow against bunkers and to bury the trench line once the initial breach was made.

COL Moreno and LTC Gross observing a tank plow demonstration. COL Moreno is standing in a twelve-inch deep cut.
TF 3-37 tank plow attempting to widen the lane by trailing another plow tank. Note the Tank Commander has the turret over the side and must stand up in the hatch to observe his plow blades.

The plows were very effective in the desert sand. Over a period of two weeks, TF 3-37 broke several of their plows. I gave them replacements without hesitation. They had the initial breach mission and our plows were for contingencies only. The weight of the plow was insignificant compared to the weight of the tank as far as maneuver and speed were concerned.

**Tactical Operations Center and Command Group**

SGM Neel had the TOC dug in. He had an M88 vehicle dig a berm around the perimeter and borrowed some backhoes from an
adjacent engineer unit to dig foxholes. Concertina was staked and put up. All communications eventually went "up" and we were well into the planning stage. Intelligence updates of our forthcoming operation arrived daily.

The Command Group consisted of four vehicles and crews—my tank and crew, MAJ Cook's tank and crew, LT Anderson's APC and crew, and CPT Bratina's APC. We operated like a four-vehicle platoon. Our HMMWVs stayed with the TOC during combat operations. We had battle drills and formations. When we were not forward, we provided security to the TOC. One day after MAJ Cook had reviewed the SOPs with all the new and old crew members, we went out and rehearsed our battle drills and formations. This allowed us to shake out our communication problems. I was still having problems with my tank's communication system.

During operations orders, my gunner, SSG Antonio Evans, served as the Platoon Leader for the Command Group, and MAJ Cook's gunner served as the Platoon Sergeant. This freed MAJ Cook and I and ensured the vehicle crew members were informed of our operations and were taken care of with regard to maintenance and logistics.

MAJ Garrity took charge of the TOC and worked on operation orders and all the staff functions required by higher headquarters. MAJ Cook approached me one day and stated I was not getting enough work out of him. I realigned several of the duties between MAJ Garrity and MAJ Cook shortly after receiving MAJ Cook's advice.
Maps and Navigation

CPT Williams distributed what few maps we had prior to our departure from Ft. Riley. There were only six 1:250,000 scale maps, and the 1:50,000 scale maps were incomplete and too large once they were assembled. He acquired some 1:100,000 scale maps in-country at the Khobar Towers. These also were incomplete and rather large when assembled for the distances involved in our operations. One item stood out after we assembled our maps—they all looked alike.

CPT Williams and SPC Jason E. Peters sort out maps for distribution at the TOC.
Because the terrain was featureless, we found ourselves looking at nothing more than a blank piece of paper with lines on it. It was funny at first. Then we came to the conclusion we could use a blank piece of paper with lines and just write the numbers on the left and right. As we changed map sheets, we renumbered the sheet with the lines. This solved our problem of getting maps to every vehicle commander. The technique became the "CPT Paluso map." CPT Paluso was the first to use the blank paper map inside the TOC.

I ended up using a 1:100,000 scale map for the actual breach operation, and a 1:250,000 scale map for continued operations. I made my map board out of two MRE case lids with acetate and green Army tape. This was tailored to be manageable inside my tank.

The GPS devices we were issued at Ft. Riley came into their own. After a few attempts at navigation with a compass, we discovered we had to get computer smart. Hands-on training over the next two weeks made all the key leaders believers in the GPS—myself included. I tried using a compass for awhile. On a moonless night it was impossible to find anything in the desert unless we hit it dead center. I eventually became quite proficient with the GPS.

There was no repair system for this piece of equipment. Plus, it was such a sought-after piece of equipment, once repaired, it was questionable whether it would ever be returned. Many times our computer illiteracy would cause us to jam one up.

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We spent hours (because of our ignorance) getting it "unjammed" to avoid turning it in.

At one point, we reviewed the distribution of the GPSs and no change was made. I directed each Company Commander to provide one of his three GPSs to his Fire Support Team (FIST). I felt strongly about the use of artillery and the need for the FIST to know exactly where he was to make a call for fire. The commanders were reluctant, but executed the order.

I visited division headquarters on the 2nd of February. MAJ Michael R. Barefield, our former Battalion S3, gave me a vehicle compass to mount on the front of the HMMWV. It was a very nice item, but it was not very effective because of distortions from the HMMWV engine.

**CPT Roberts Relief**

On 29 January, LT Corbo approached me with something on his mind. He informed me CPT Roberts had an altercation with LT Kounas the night before last and had struck LT Kounas. LT Corbo was genuinely distressed over what had happened and felt he was disloyal to CPT Roberts for coming to me. I assured him he had done the right thing.

I visited LT Kounas' position within the hour. LT Kounas had a small cut on his lip, cheek bone, and the top of his head. He informed me, reluctantly at first, that an altercation had taken place with his Company Commander. CPT Roberts had climbed onto his tank late at night. There was no evidence of anybody being awake. He found LT Kounas sitting in the Tank Commander's
position with his helmet off. Despite making a lot of noise, LT Kounas did not acknowledge being awake. CPT Roberts took the 7.62mm ammunition box from the loader's machine gun and dumped the ammunition down the Tank Commander's hatch. LT Kounas woke up. A shouting match took place between the two. CPT Roberts climbed down the Tank Commander's hatch on top of LT Kounas, initially kicking him and then striking him with his fists. The crew sleeping on the back of the tank heard the entire affair. The tank crew adjacent to LT Kounas' tank also heard the shouting.

Statement by LT Corbo, B Co XO, describing events leading up to the relief of command of CPT Roberts on 29 January 1991:

I arrived in Saudi Arabia on 10 January 1991 after closing out the remainder of B Co's property at Ft. Riley. The first four days in country were spent getting acclimated and doing individual chemical training. This was interrupted by numerous trips to the port while waiting for our combat equipment to arrive. On the morning of 16 January 1991, I was informed by CPT Roberts that I would lead a wheeled convoy to TAA Roosevelt the following morning. The rest of the day I spent trying to find our equipment. As the transports were unloaded, the stevedores moved the equipment to different areas in the port. By 1600 hours I was able to pinpoint all of the B Co equipment. I started to consolidate the wheel vehicles with the tanks and began preparing them for the long road march the next morning.

At 0200 hours on 17 January 1991, I was checking the progress of the soldiers working on the tanks when a soldier in A Co told me we were at war. I expressed my disbelief at the notion, when my comments were cut off by the air raid siren. We spent the rest of the night in and out of MOPP gear with very little sleep.

The next morning, my first of many in a war zone, was uneventful. I was looking forward to leaving the port area because it was a very large target. The road march was long and uneventful. The convoy was
met by CPT Bond and CPT Martin. They directed us to a refuel point and a lager area. Later in the evening, the rest of the battalion started to close on the TAA. At about 0200 hours, CPT Roberts informed me all our tanks had not arrived in the TAA and I should wait for the stragglers and bring them forward to the company when they arrived. On 20 January, the last of the B Co tanks arrived and I sent them forward to rejoin the main body. After policing the area to ensure no equipment was left behind, I started forward to rejoin the company.

The company was located near the 701st Main Spt Bn. They were in the process of drawing countermine equipment. As soon as I arrived, I noticed something was wrong. I could sense a lot of tension in the air. I was met by LT MacMullen, the 2nd Platoon Leader. He informed me CPT Roberts had hit LT Kounas the night before last. I immediately sought out LT Kounas to confirm what I was told. I found LT Kounas by his tank confirming with his gunner, SGT William F. Schaeffer. LT Kounas had a large bruise under his eye and he was visibly shaken. I asked him what happened and he told me he fell asleep in his tank and CPT Roberts had caught him and hit him. I told him he was wrong for falling asleep on duty, but the captain should not have hit him. I read LT Kounas and SGT Schaeffer their rights and had them prepare statements. The morale of the company was at a very low ebb, especially in the 1st Platoon.

Later in the evening, I talked to CPT Roberts. He told me he had climbed around on tanks looking for people asleep at their post. He also said he had to shake up a couple of people in 1st Platoon. He wanted me to go out at night and "mess with soldiers." I told him I did not think that was a good idea. I would go out and check the perimeter, but I would not sneak around. That could be dangerous.

Two days later I was able to go to the battalion TOC and confer with LTC Marlin, the Battalion Commander. I told him what happened and the morale of the soldiers was low. I expressed to him my fear of something else occurring between CPT Roberts and another soldier. I gave him the statements LT Kounas and SGT Schaeffer wrote. After a short conference, I left to go about my business.

The morning of 27 January I left the company area for the UMCP. I was trying to repair a couple of broken tanks. I was gone for most of the day. I returned to the company area about 1600 hours and was
met by 1SG Powell and LT MacMullen. I was told CPT Roberts was relieved of command. I immediately called the TOC for further instructions. I experienced both relief and fear—relief because the incident was behind us and there would be no further reoccurrence; fear a black mark would follow us and taint our reputation.

At 1800 hours I drove to the TOC for the nightly command and staff meeting. I briefed the Battalion Commander on the status of B Co. I was told CPT Martin would take command of B Co effective immediately. On the return trip to the company area, I briefed CPT Martin on the status of B Co and its key leaders. I think he was surprised at what he found during the first week he was in command.

What I did took long hours of thought and was the hardest thing I ever had to do in the Army. It was a situation no classroom training could have prepared me for.

CPT Roberts was my most experienced Company Commander. There was a possibility we would move to attack within a few days. I sought a solution based on the good of the battalion—either keep CPT Roberts in command to use his expertise and possibly save soldiers' lives, or maintain morale and standards within the battalion. In a short period of time, the entire battalion heard of the incident. I spoke with CPT Roberts. He knew as soon as I brought up the subject he was wrong. LT Kounas wanted to press charges of assault. I slept on it for twenty-four hours then went and explained to COL Moreno my reasons for seeking the relief of CPT Roberts. He concurred and would clear it with the CG.

We had a lengthy discussion on who would replace CPT Roberts. CPT Hall was next in line for command. However, as the Battalion S4, he was absolutely critical to the battalion's
success in this war. I could not afford to lose him from the logistic's effort. I recommended CPT Martin on the basis of prior knowledge of CPT Martin and his advance party time in the desert. COL Moreno concurred, but both of us would later talk to CPT Hall to make sure he understood the rationale of the decision.

A day later, I informed CPT Roberts of his relief. I instructed him to gather his belongings and to report to brigade headquarters. I put CPT Martin in charge and gave him some immediate instructions to prepare for battle. The next day, I visited all the leaders in B Co to clear the air. I made sure they understood my grounds for relief and the circumstances. I wanted them to know the facts. CPT Martin was not present. I explained the need for them to pull together and to support CPT Martin. Later that night, in the dark, I took all the commanders and staff outside the TOC and explained what had happened to CPT Roberts. I was very sad. I believe it showed. I explained there were no circumstances under my command justifying the use of physical force against a subordinate.

On 7 February, CPT Roberts received an Article 15 from MG Rhame. He was charged one thousand dollars from two months' pay. After the hearing, I walked outside with him. We talked, he cried. I could not excuse myself for being partially responsible for his actions. He understood and knew he was wrong, but I was his coach, mentor, and commander. COL Moreno caught up with both of us and also spoke with CPT Roberts about professionalism and duty. He had a job for CPT Roberts and we
still had a long fight ahead of us. CPT Roberts went to work for the Brigade S4, MAJ James F. Lorenzos.

CPT Roberts was not the only commander relieved during Desert Storm. LTC Ralph Hayles was also relieved for causing a fratricide during an Apache helicopter engagement during counter-reconnaissance operations, on the Saudi Arabia and Iraqi border. As one of my contemporaries, I knew LTC Hayles. I also knew how MG Rhame felt about commanders commanding their units and not getting involved in singular combats at the risk of loss of command and control.

Over the last year, I sat through numerous sessions at the NTC, as did LTC Hayles, on the importance of maintaining command of one's unit. Loss of command usually resulted in catastrophic losses within a battalion. MG Rhame was the primary instructor and coach at these sessions. He was so adamant on this fact, I thought he was going to take my tank away and put me on an M113 APC to ensure I did not get involved in the fight.

Four days before LTC Hayles' incident, I was approached by COL Moreno and again told to make sure we maintained control of our battalions. Stay out of the tank-to-tank fight. This particularly applied to me because I was "killed" eighteen times at the NTC in January 1990. I understood. I was also aware these recent instructions came out of a Division Commander's meeting and LTC Hayle's Brigade Commander, COL James L. Mowery, was also present. MG Rhame was correct in his philosophy.

We also had contingencies for loss of key leaders in battle. Every one of us had a designated replacement. Mine was
LTC Robert L. Westholm, Jr. LTC Westholm and I served together on the operations side of the house in the 1st Ar Div. We were good friends and he was assigned to the division staff.

The Company Commander's replacements were scheduled to come from the battalion and brigade staffs. All the Battalion Commanders sat in a closed session with COL Moreno to determine a priority list for Company Commanders should someone die or become injured. The Company Commanders called this the "Death Wish List"—even a perverted humor was better than no humor at all.

Attachments

CPT Bratina arrived with all his FIST teams. Unlike the other two TFs previously training to go to the NTC, we did not have FIST teams assigned to train with us. This was the first time we had seen the teams. Only one of the FIST lieutenants had experience. The rest were new lieutenants.

The ALO arrived. Although LT Anderson was new to this business also, his NCO had some experience. I assigned CPT Robert L. Role to work with him as part of their team. CPT Role was a light infantry officer who showed up in the desert looking for a job. He seemed like a competent officer and interacted well with the troops, so I accepted him. He had some experience in air-ground operations. With the three of them together, we were in good shape.

The Air Defense Artillery (ADA) Plt showed up: one Stinger team went with the Scout Plt, one team went with the TOC, and
the rest of the platoon went to A CO for logistical support. I was thankful we had an established battalion SOP.

The Ground Surveillance Radar (GSR) team showed up in two M113 APCs. They were from our former Battalion S2's new GSR Plt. LT Michael J. Colarusso personally linked them up with us. They were attached to the Scout Plt for the duration.

CPT Grant D. Steffan, Commander of A Co, 9th Engr Bn, from the FRG, was placed in support of the battalion. His engineering company was primarily a wheel unit. His equipment was still painted olive drab and his soldiers were wearing BDU's.

The Maintenance Support Team (MST) from B Co, 201st Fwd Spt Bn, linked up and moved in with our Maintenance Plt. All total, about eight hundred soldiers were now part of the battalion. We spent time getting to know each other, training newcomers on our battalion SOPs, and rehearsing for battle.

Rehearsals

The initial plan called for the two TFs in the 2nd Bde to make a breach in the Iraq defense abreast of one another. We would do a simultaneous feint and probing attack on the right flank of the same trench line. Once the lanes were in and the two TFs were oriented to the east and west, we would burst through the breach at full speed and destroy the tanks and artillery in the defense, the counterattacking forces, and secure and expand the breach head.

Prior to the actual attack, we would execute a deception move about one hundred kilometers to the northwest and occupy an
initial Battle Position (BP). We would then occupy defensive positions along the berm. From the BP, we would assist in executing artillery raids against the trench line, executing counter-reconnaissance missions and a deception plan. LTC William L. Hand and I did an aerial reconnaissance of the route to BP 23.

A deliberate attack against a deliberate defense is the most complex, offensive operation of all military operations. Meticulous planning was required at all levels in order to achieve success.

**Advance Party Walk-Through**

Within the first week of the TAA occupation, we had a rehearsal for the advance party to move to BP 23, referred to as the "berm area." CPT Paluso laid out engineer tape and markers from our "Rubber Duck" kit, and we did a full walk-through of the entire advance party move to BP 23.
The advance party rehearsal. Note the "Rubber Duck" kit on the ground used to replicate the map graphics. Note the small berm to be used for prone rifle positions if the TOC was attacked, and LTC Marlin's tank position in the far background.

The advance party was to contain elements from each of the battalion's sub-units and to be led originally by CPT Wock, and later by MAJ Cook. This move put us in position for the attack and placed us in harm's way. The total distance was over one hundred kilometers and crossed the Wadi Al Batin and one highway.
Statement by CPT Wock, D Co Commander, describing his reconnaissance of the route to BP 23, on 30 January 1991:

Sometime around the end of January 1991, the battalion began to make plans to move from TAA Roosevelt to BP 23. At this time, LTC Marlin told me I would lead the advance party for the move. Within a day or so after receiving the operations orders for the mission, I was ordered to go on a routine reconnaissance mission from TAA Roosevelt to BP 23. Dutifully, I recorded all the necessary points on the route I would need to navigate with my GPS, a hand-held device I was shortly to master. At this particular time, I was good at navigation to points under twenty miles away, but I was still a novice when it came to navigating the forty-five plus miles I had to go to get to BP 23.

On the first leg of the reconnaissance position, I came upon an Egyptian tank battalion's dug-in positions. Their M-60 tanks looked extremely menacing. This was especially true after they had captured 1SG Macasio from C Co. I made a note about the Egyptian position laying so near my route and moved on.

Before long, I came upon a British infantry unit. Their unit lagers differed greatly from ours. They always pushed sand berms up around their position. At the same time, I could not help but notice the berms gave them a false sense of security, as the units inside them seemed to have an almost garrison atmosphere about them. They also had the damnable habit of placing irritable anti-wheeled vehicle trenches around their positions. These were, of course, of no real tactical value, but were a serious source of irritation to me on this particular reconnaissance. My driver seemed to find it quite sporting to have to negotiate these trenches. Unfortunately, he was a typical NBC NCO, and his military knowledge was wholly confined to NBC. As a driver, he left much to be desired. Whenever he drove into one of these trenches, he invariably had difficulty getting out. I am convinced to this day the only reason we got out of most of these wheeled trenches was due to my proficiency in the vernacular. Anyway, I recorded each of these trenches as we proceeded along the route.

Eventually we came to a major two-lane highway. Directly on the other side began the Wadi Al Batin. This was no longer the flat dull terrain of the desert
we had been traversing up to this point. No, this was more like the dull ravine-like texture of the Badlands. About this time, my GPS began to go on the fritz. The steering instructions it was giving me were very contradictory. The GPS would indicate we needed to drive right on a heading of forty-five degrees, for example. One minute later, it would tell us to turn left ninety degrees. I was beginning to wonder if we were passing our way points, as the GPS information was so contradictory. At this point, we stopped for a ten-minute break. When we started again, the GPS seemed to be functioning alright once more. However, I knew we were no longer on the correct route, and we were actually paralleling it. Two to three hours later, we reached the RP. As we turned around, my driver informed me we had a little over a quarter tank of fuel remaining. This was not a heartening development. Nonetheless, I remembered seeing an Arab gas station near the highway we had crossed. We struck out at once for the station.

By the time we reached the station, the fuel gauge read "E." In fact, it read so "E" that when we hit a bump, the gauge's needle did not move. When the driver opened the gas cap, I could hear the fuel tank sucking air into itself. We fueled up and returned to TAA Roosevelt. Once at the battalion TOC, I briefed the MAJ Cook on the results of my mission.

During the next week, we began to execute grass drills of our move up to BP 23. As I was the only one to see the actual terrain from the ground, I had the distinct honor of briefing all of the key leaders of the plan for the movement of the advance party. I briefed them on what the terrain looked like, what their actions should be at every point along the way using Phase Lines (PL) as guides. Once at the RP, I briefed them on what their separate actions would be in securing the area for the battalion, and what our actions would be as we waited for the battalion main body to join us.

Now this particular advance party was rather large. It contained a platoon from my tank company, a Tank Plt from each of the other companies, the Scout Plt, the fuel section of the Support Plt, two Stinger teams, and part of the S3 Section. MAJ Cook and I Executed two rehearsals. In both cases, the Platoon Leaders and separate vehicle commanders were required to attend. As the rehearsals progressed, I made each leader describe what he was doing at each point to ensure everyone understood their specific tasks. Basically, I felt I had briefed everyone quite well.
Diagram #5. Route to BP 23.

TOTAL DISTANCE FOR RT HUDSON 115 KMS.

ZONE RED
We went over all the details three times, and then had the group leaders back-brief the operation. The advance party would mark the route by dropping sandbags every five hundred meters, man and secure the refuel points, and position the Scout Plt as guides at the highway and at the RP prior to BP 23.

CPT Torrence briefing his soldiers on the plan. Even the slightest changes were briefed to the lowest level. There was no such thing as a stupid question or an overlooked detail.

The advance party plan would change several times. Each time, we jumped through hoops to execute the new rehearsal. Part of the problem was nobody knew when we would move. Each day was the usual two days from now, a week from now, maybe
tomorrow. We stayed on pins and needles, never really knowing when we would go. Uncertainty ruled the day.

**Battalion Battle Drills**

I did a grass drill refresher class for all the key leaders in late January. Once we were satisfied everyone was educated, we tried it on our vehicles.

We mounted our vehicles for the key leader battle drill exercise. With all the commanders, FISTs, and Command Group vehicles, we did a Command Field Exercise (CFX) running east and west along the length of the TAA. We rehearsed all our battalion level battle drills and even added a new play called the "suck center." This drill was designed to counter a meeting engagement against a larger force. If the enemy was spotted six thousand to ten thousand meters away and coming toward us, we would "rear march" until we had a handle on air and indirect fires. We would then turn simultaneously to confront and to flank him while hitting him with air and artillery.

**Battalion and Brigade Walk-Through**

Brigade set up a terrain model of the attack mission inside the berm area of the original TOC site. With a brigade rehearsal scheduled for 1200 hours, we had a battalion rehearsal at 1000 hours on the same site. At the battalion rehearsal, we walked through each phase of our plan.
COL Moreno executed his rehearsal and it was down to Company Commander and key Platoon Leader level. An integral part of the rehearsal was CSS assets. We rehearsed the scenario three times in one afternoon.

LTC Marlin using the brigade model to execute a battalion rehearsal. He used butcher paper to illustrate most points. Engineer tape on the ground was part of the brigade model. CPT Clidas and CSM Stockton were sitting.
We executed moving into the zone forward of the berm to provide security for the artillery units executing the artillery raids, the deception plan, and the passage of lines of the artillery units. We then rehearsed the actual attack on Ground (G) day. We would assault the Iraqi trenches with a feint on the right flank, and then move perpendicular to the flow of the actual breach and push through to kill tanks and counterattacking Iraqi forces.
After I completed our rehearsal, we stayed and joined the rest of the brigade's key leaders for the brigade rehearsal. The most significant part of the rehearsal was the coordination between units and our timing with the other two TFs.

**Tank Gunnery Training**

The VII Corps (Jayhawks) finally set up a range on the south side of the Tapline Road for tanks to test fire and bore-sight tank guns. The tankers were anxious to shoot their tanks to make sure the systems were intact from the long move overseas.

MAJ Cook supervising the firing line on Jayhawk range.
CPT Torrence and 1SG Jimmie D. Moser from the 1st Bn, 37th Ar, on Jayhawk range. Desert Storm brought numerous impromptu reunions such as this one. Of the four battalions in the 37th Regt, three would fight in Desert Storm.

On the 1st and 2nd of February, we sent our tank companies to the range. We finally had the MILVANs moved into our field trains site and retrieved the Aiming and Accuracy Check (AAC) boards. After the gunnery checks, we occupied Jayhawk range and started shooting. For the most part, the shooting was routine. TF 3-37 joined us on the range about mid-point of our shoot.
LTC Gross on Jayhawk range. Note he is using his GPS for the first time to get him to the range. He is carrying an M17 protective mask, although as a Tank Commander, he also has an M25 mask. Most key leaders maintained two masks—one of each type, depending on the vehicle they were in at the time.
C Co HMMWV on Jayhawk range. Note the improvised door to help keep the heat inside the vehicle. The door and canvas for the vehicle were either stolen in port or the driver had yet to find and unpack the MILVAN with his canvas inside.

One of the big issues was our concern over the new model 900 series sabot ammunition. It was untried and we had very little data on it. Furthermore, it was in extremely limited quantities. We were unsure as to whether the 800 series would penetrate the Soviet T72 tank. The 900 series was supposed to have about the same penetration capabilities as the 120mm sabot found on the M1A1 tank.
Tanks on the firing line. One tank would shoot while an adjacent tank would sense the round. Note the CVC helmet also repainted desert sand color and the camouflage net strapped to the turret side.
A D Co Tank Commander getting his weather data from 1SG Johnnie R. Lightsey. Temperature, barometric pressure, and wind data were all necessary updates to the tank computer to complete bore-sighting the main gun.

We test fired both. In all cases, the 900 series ammunition flew high or over-line. The 800 series ammunition was dead center, as was the 700 series ammunition. The tank crews were confident with these rounds. The 900 series ammunition was not a confidence builder. All the machine guns were test fired and zeroed. As tanks finished, they moved back to the TAA by company. The range was a twenty-five kilometer one-way trip. We put fifty kilometers on the tanks just going to and from the range.
The Scout Plt's BFVs also fired and zeroed. Deadline vehicles were sent to the range as soon as they became operational. By the 5th of February, all the vehicles in the battalion were test fired and zeroed.

**Ammunition Upload**

We had most of our Tier I ammunition (ammunition on the tank) on the tanks before we left Ft. Riley. Once we were settled into the TAA, we began uploading the ammunition to fill the Tier II requirements (basic load carried in the trucks). This was an adventure in itself. Even though we were one of the few units requiring 105mm ammunition in theater, we had to make multiple trips to the division Ammunition Supply Point (ASP) to get ammunition.

There was no distribution system in effect. Our trucks went to the ammunition point. If ammunition was available, we picked it up and returned it to our AA. To get all the ammunition straight, we were constantly re-distributing ammunition among the three maneuver battalions. The 201st Fwd Spt Bn was not handling any ammunition. Many times we were told to pick up ammunition, only to arrive and learn there was none to pick up. The round trip to and from the ASP took about four hours. We made as many dry runs as we did productive ones.

As we began to achieve our Tier II ammunition fill, we became concerned as to whether we could carry it all with the limited trucks we had available. We lost one cargo truck on the Tapline Road. We loaded up the tanks with a lot of 7.62 machine
gun ammunition and put a main gun spare round (still in the "tootsie roll" shipping container) on the top of each tank. We carried this round in the gun on G-day. However, fifty-eight ready rounds saved us two pallets of space on a cargo truck.

We made a conscious decision to load on each tank six High Explosive Anti-Tank (HEAT) rounds, the rest was armor piercing. Our primary targets were to be tanks and armored counter-attacking vehicles. We carried all 700 and 800 series sabot ammunition because the tank threat was primarily T55 and T62 tanks. We wanted to save the 900 series for T72 tanks.

By G-day, we were in good shape. The world was not perfect, but we were more than capable of killing all the Iraqis anybody could throw at us. The 9mm ammunition was limited, and we received few, if any, hand grenades. I remember the night before we moved out sharing my fifteen rounds of 9mm with my crew. We were making sure each man had at least three or four rounds for his personal weapon. Everybody on the tank knew if we reached the point where we had to rely on these pistols to win the war, we were in big trouble. This was probably best as CPT Wock demonstrated how his 9mm Beretta jammed after seven rounds. We discovered through his demonstration the necessity to take apart the magazine and clean it as well as the pistol. Sand would get into it and cause the pistol to jam. I found the soldiers to be very responsible individuals in the handling of ammunition.
Breach Rehearsal

The division scheduled two consecutive breach rehearsals to refine the actual breach techniques to be used against the prepared defenses of the Iraqi trench line. The division had the engineers construct a replica of the Iraqi defenses identical to the one we expected to attack on the west side of TAA Roosevelt. The entire leadership was present for this rehearsal.

LTC Fake, LTC Gross, MG Rhame, and LTC Marlin at the division breach demonstration.
BG Carter with his Aide-De-Camp, Lt. Michael L. Maus. Lt Maus was our former Scout Plt Leader. Once a "Thunderbolt," always a "Thunderbolt." The berm in the background is part of the replicated Iraqi defensive positions.
COL Maggart, the 1st Bde Commander, and LTC Sidney F. "Skip" Baker, Jr., Commander of TF 5-16 at the breach site.
LT Maus with LTC Bullington on the second day of the breach demonstration.
LTC Wilson with his boss, COL Mowery, and LTC Gross at the breach demonstration site. LTC Bullington is on the left side of the photo, and LTC Fake is observing the Mine Clearing Line Charge (MICLIC) detonation with binoculars to the right.

The key leaders meeting at the breach site to discuss modifications and changes and refinements followed each demonstration. The conclusion was the lead tank company would go into over-watch about 1500 meters before the mine field and trench line. A plow tank followed by a MICLIC Armored Vehicle Launched Bridge (AVLB) vehicle would follow in the tanks' tracks. At the point of the anticipated mine field, the tank would stop and the MICLIC would fire over the top of the tank. After the detonation, the plow tank would plow through and the
tank roller would follow. An engineer Combat Engineer Vehicle (CEV) with a mine rake would put the final touches on the lanes.

LTC Steven R. Hawkins, the Commander of the 1st Engr Bn, answering questions and giving final instructions on the engineer's role in the breach. He is standing on an AVLB chassis used to carry and mount the MICLIC.
LT Wiser, LT Sullivan, CPT Torrence, and LT Sylvester Ashford from C Co at the breach site. This was a great professional development class among other things.
Replica of Iraqi trench. Rehearsals included burying the trench and the men in it with the plows after the breach was complete, as opposed to placing our soldiers in the trench to dig the enemy them out.
Plow tank approaching the staked triple strand concertina wire at the front of the replica mine field.
MICLIC after-effects. Soldiers inspect the damage done by the detonation of the line charge. Although difficult to see, the line charge cuts a small trench in a snake pattern on the ground.
A CEV with a rake following the plow tank after the MICLIC charge. While the plow cuts lanes for only two tracks, the rake clears the entire width of the lane.
A CEV rake at the demonstration site.
The effect of the rake. Note the entire lane has been dug out.
A lane marker used for the demonstration. Lanes were marked with an orange 4'x8' plywood panel in alphabetical sequence from west to east.

The demonstrations were done as realistically as possible and allowed all of us to see firsthand the effectiveness of our planned techniques. Company Commanders briefed all the soldiers later. It was a very convincing demonstration. At one point, I crawled down into an Iraqi trench and looked at the world from
the defender's point of view. There was no doubt in my mind we were going to win. We began to adopt a training philosophy of "Training to Get Even with Saddam" for every miserable day we spent in the desert. We were also committed to doing it right the first time so our children would not have to come back for a repeat performance.

**TF 3-37 Moves Out**

On short notice, TF 3-37 was told to move to the berm ahead of schedule under the command of BG Carter. The division assembled a counter-reconnaissance force to secure the area we would eventually move into.

The departure of TF 3-37 caused me to realign the battalion's position to fill the void in the perimeter left by TF 3-37's departure. We back-filled the gap with D Co and the Scout Plt.

**Battalion Full Scale Rehearsal**

Despite ongoing maintenance problems, I made the decision to execute a full battalion rehearsal over a forty-eight hour period on the 7th and 8th of February. I received as much assurance as I could hope for under the circumstances that we would not be moving forward for the next two or three days.

MAJ Cook coordinated with brigade and identified a piece of land for us to use in our area of operations. This was to be a full-scale rehearsal for everyone, with the exception of the Maintenance Plt. I did not want anything to distract the efforts of "making us healthy." MAJ Cook took some A Co tanks
out and put in eight plowed lanes simulating the lanes TF 3-37 and TF 2-16 would plow for us in the actual attack.

We spent the first twenty-four hours executing a simulated passage of lines of the artillery units behind our tank companies. This was an all-night affair under moonless, pitch black conditions. After the artillery missions were fired, we executed the rearward passage of lines and moved the tank companies back. I was dissatisfied with the performance of the passage of lines coordination and execution.

During daylight of the first rehearsal, I assembled the ISGs and we went over passage of line coordination and execution. We were scheduled to do this procedure for about seven straight days in the plan. It was dangerous and required a great deal of coordination. I stopped the rehearsal and started over. We repeated the same rehearsal the next night. It went much better. We continued to the main attack phase.

The attack phase went as planned over the next twenty-four hours. I was very pleased and proud of the soldiers’ performance. We executed the final push through the lanes much easier than I anticipated. We discovered things we could improve and did so. The actual experience was now into the seventy-second hour and we were tired. The equipment traveled an additional one hundred kilometers and we increased our deadline report. Some of the downed vehicles were scattered around the area. Time would be lost recovering them.

My own tank continued to have communication problems. As I rehearsed, communication problems forced me to dismount and
get in my HMMWV to maintain control of the rehearsal. Though I had all new communication equipment, the radio stopped transmitting at the most inopportune times. During one of these times, my driver, SPC Goforth, demonstrated to me the ineffectiveness of a HMMWV attempting to cross an Iraqi trench. We became stuck in it. CSM Stockton bailed me out the next morning. SPC Goforth's pride was injured. The rehearsal was a major success.

**Tank Towing Demonstration**

One item concerning our first move was the long distance recovery of tanks. We knew from our past desert experience the M88 recovery vehicle could not tow a tank for an extended period of time on sand. I set up a demonstration with the two headquarter's tanks and brought the key leaders in to observe my proposal. We doubled the length of tow cables to put a greater distance between the heat and exhaust of the towing tank and the towed tank. Going slowly, we could do self-recovery with no problems as long as the ground was reasonably level—like the desert. The commanders concurred. This was the technique we used on our first move.
Diagram #7. Tank Towing Tank.
Scout Platoon Holes

A part of the plan was to maintain Listening/Observation Posts (LP/OP) in the zone forward of the berm during daylight hours. To accomplish this mission, the Scout Plt dug holes at night to occupy during the daylight period. These holes were within sight of the Iraqi trench line.
Diagram #8. Scout Plt LP/OP Hole.
The design of the hole was to sustain a man for a twelve-hour shift. From this location, he provided intelligence and could call for fire to place artillery on the Iraqi trench. The BFVs would back him up.

**Back-Briefs**

COL Moreno wanted a detailed back-brief. We set the date and gave him a back-brief. It was in the TOC. We used a series of butcher paper slides to illustrate our key points. All the commanders and staff were present.

MG Rhame visited the next day. We were prepared to give him a back-brief. About five minutes into the brief, he received a message to report to VIII Corps Headquarters. He left with us believing we were about to receive the message to move out. MG Rhame was anxious to get on with it.

**Brigade Full-Scale Rehearsal**

We participated in a brigade full-scale rehearsal on the 10th and 11th of February. We still had no idea when we would make our first move. We had just repaired the vehicles from the battalion rehearsal. Only forty-eight hours elapsed between the two events. TF 3-37 moved forward to the berm. We simulated their presence in the rehearsals.

For the most part, the rehearsal on the right flank was identical to our battalion rehearsal. Our greatest challenge was to extract ourselves and move perpendicular to the flow of the division going through the breach site, link-up with our lanes, and push through maintaining our command and control and
combat power. We failed because I had not put two and two together.

At one of the brigade staff meetings, a paper was passed out outlining the breach rehearsal layout. It was modified from the breach layout used by division. I failed to catch the significance and turned the paper over to CPT Williams without a thought. We used the right, but wrong, lanes during the rehearsal. Brigade's "eyes" did not notice the error until the second rehearsal. They were concentrating on the initial breach force. During the brigade rehearsals, we pushed the breach all the way to PL New Jersey. At PL New Jersey, the boss gave me an ear full.

The combination of LT McBroom wearing a "doo dad" hat (a rag wrapped around his head), a misplaced artillery unit pushing forward of PL New Jersey, failure to tie in with TF 2-16 on the right flank, and CPT Beals eating an MRE was less than he expected out of his tank battalion. After a "come to Jesus" session, we went back and ran the exercise two more times. We never did it right because nobody was able to identify the real problem. We continued to use the wrong lanes because we thought they were the right ones. MAJ Garrity took a Polaroid photo of the TF 2-16 Scout Plt with a B Cc Tank Commander to convince COL Moreno we had achieved link-up. He was not laughing. MAJ Garrity was a fighter and I felt good having him back me up. Overall, I was not satisfied, and neither was COL Moreno.

The next day, I coordinated for COL Moreno to meet us at the improvised breach site with the understanding we would run
through the exercise one more time with HMMWVs and key leaders. We discovered our error. The exercise went off without a hitch.

**Another Battalion Walk-Through**

Rehearsals were cyclic: plan, execute, correct, rehearse. On the 13th of February, we executed another full-blown "grass drill" on a large terrain model. I had every vehicle commander within our over two hundred and fifty vehicle command participate.

SGT Elery J. Berry, 1SG Macasio, LT Thompson, CPT Torrence, and SSG Anthony Waller participate in the battalion's last grass drill rehearsal in TAA Roosevelt.
SSG Waller participating in the battalion grass drill rehearsal.

During the rehearsal, each commander was given time to discuss and practice his own rehearsal at unit level. This exercise took over three hours. Every soldier in the battalion knew his exact mission. I briefed all the Company Commanders on GEN Schwarzkopf's overall plan in some detail. We were very trusting. I contend, at this point, our soldiers were the most informed of any battalion in history.

Maintenance Problems

When we first reached TAA Roosevelt, there was still the possibility of getting M1A1 tanks. By the 4th of February, the decision was made that we would not receive the newer tanks.
This was a hard pill to swallow. Although our tanks were good tanks and during the IG's inspection we received very high marks for the condition of our combat systems, the truth was the tanks were over seven years old and had various shortcomings. As a trained M1A1 tanker from the FRG, I knew the differences, and so did CSM Stockton. We had a real leadership challenge. Both of us were determined to win with what we had at all costs. Neither of us expressed to our soldiers any comparison about the differences between the two tanks. We were positive and hard-charging.

I waited for the repair parts to show up or, so to speak, "for the floodgates to open" on parts. It never happened. More command emphasis and pressure was placed on commanders to get healthy in maintenance. We became totally enmeshed in details. CSM Stockton gave maintenance classes to all Tank Commanders above and beyond the operator's level of maintenance. He set up the decontamination unit, the Sanator, to blow out the oil coolers on all tanks. We lifted the back decks on all the tanks to inspect for hydraulic and fuel leaks causing potential fires. We did maintenance, maintenance, and more maintenance.

The cool, wet weather assisted us. Our air filtration systems were spared damage. Soldiers learned all the tricks to keep their vehicles running. We also made ourselves look bad in the division's senior leadership's eyes because we reported everything by the book. This was the big "catch 22" of desert maintenance. Senior leaders wanted honest reports, but an honest report usually received a response implying something was
wrong at the operator level instead of providing the assistance
the system was supposed to provide—like repair parts. Junior
leaders began referring to our maintenance system as the "Pound
Down Maintenance System."

We survived with the repair parts we brought in the MILVANs
and with what we could scrounge. I turned in blue chips to
friends to get repair parts, as did CSM Stockton. We brought
fifty-eight tank fuel pumps when we were authorized only six on
our PLL. The finer grade of diesel fuel furnished by Saudi
Arabia was causing problems because it was more capable of
cauing leaks in fuel lines and pumps. We used all of them
within the first ten days and had sent them in for repair. Over
the next three weeks, only two were returned. In addition, all
of our requisitions from Ft. Riley were canceled and we had to
start over. We never did receive the spare tank engine float we
were doctrinally supposed to keep.

There was no system. I kept hoping and praying, but it was
not to be. The parts shortage within brigade forced us to run
a brigade deadline maintenance program. If four vehicles were
down for the same item, brigade would direct the part to the
most important of the four vehicles regardless of the parts
designated recipient. This was not helpful to any of us as far
as maintaining a maintenance system. I eventually was forced
into parts substitution and vehicle cannibalization, using the
parts off one vehicle to support many vehicles.

I continued pursuing the elusive tank air seals after
hearing the "lessons learned" brief at Ft. Riley. I sought help
from LTC Hand, COL Robert D. Shadley, the DISCOM Commander, and COL Moreno. At one point, our maintenance status, along with the rest of the brigade, was so dismal BG Rutherford chaired a meeting with all concerned parties.

**Statement by CPT Hodge, the BMO, describing maintenance operations in TAA Roosevelt on 26 January 1992:**

The first six days in TAA Roosevelt were the calmest days I would experience in months. Except for MAJ Cook, CPT Clidas, and CPT Bacon, there was no other senior leadership in the battalion area of operations. The reason for the clam was most of the battalion's vehicles and personnel were either still in port or on the road. We were the first to arrive with vehicles in the TAA. Our vehicles were starting to break down. The 201st Fwd Spt Bn would not be operational in the area for another two weeks. We could not get any repair parts to fix vehicles and our own supplies were in our lost MILVANS.

On 21 January, four days after my arrival in the TAA, I began to grow uncomfortable with the lack of senior NCOs from the Maintenance Plt who still had not arrived from port. LTC Marlin was wondering when CW3 LeMay, MSG Patton, and all five maintenance team chiefs would arrive. On 23 January, they all arrived and it was as if a giant electrical current suddenly energized the mechanics. Our deadline report was cut in half in one day. I was impressed. I also became aware of the criticality of the large stock of PLL and repair parts CW3 LeMay and MSG Patton chose to bring with us to the desert. I would realize later our own PLL would have to keep us afloat for roughly the next three or four weeks.

My days at TAA Roosevelt were full of activity. There was a daily maintenance meeting held at the brigade ALOC and a command and staff meeting nightly at the battalion TOC. Sometimes I was called to brigade to explain the deadline report or other matters relating to the maintenance of our tanks. There was often a big difference between the Tank/Tow/Bradley/Squad (TTBS) Report, provided by the battalion TOC, and the Department of the Army (DA) form 2406 deadline report I gave the Brigade XO each maintenance meeting. By definition, each report will almost always have a difference because of the time
separation of their submission and the method used to report vehicles.

The DA form 2406 deadline report was used in strict compliance with the operator's manual for each vehicle. The criteria for deadlining a vehicle was very clearly defined. The TTBS report was a reflection of the vehicles incapable of moving, shooting, or communicating. Brigade finally accepted the difference between the two reports, but only after two weeks of midnight wake-up calls for me to go to the brigade TOC to explain the discrepancies.

My daily maintenance meetings lasted between two and three hours. I was never fully convinced the meetings were worth three hours out of each day. Daylight was at a premium during January and no one was allowed to move at night. I always suspected the meetings were held at 1300 hours so we could all find the brigade ALOC. Anyway, the meetings were an excellent forum for establishing the brigade maintenance posture.

However, due to the poor repair parts distribution system, there was really very little accomplished at the meetings. If a repair part became available, regardless of its location, we would immediately dispatch someone to police it up. We went to get parts from another corps logbase to locations three hundred miles away. Nobody ever brought us the part, we always had to go find it. The distances involved resulted in the initiation of the infamous "Logbird" concept. A helicopter with mechanics, tool box, requisition cards, and our deadline report would travel by air back to port to get parts. They would return by air the next day.

We were incredibly desperate for repair parts. In our battalion, we badly needed V pack seals—rubber, rectangular gaskets used to keep the sand from entering the air induction system on the turbine engine. After dropping requisitions at Ft. Riley and again in TAA Roosevelt, and trying unbelievable methods to obtain V pack seals, we were still empty handed. Only after every member of the chain of command was asked to help and BG Rutherford got involved did we get results. We got six V pack seals out of the fifty-eight we needed.

We planned for the worst when we left Ft. Riley. We brought an excessive amount of repair parts with us. An example of this was the fifty-eight tank fuel pumps we brought with us. Our PLL only authorized us
six. Within thirty days, we used all fifty-eight as replacements. We turned all the bad ones in for repair and rebuild and got a grand total of two back for the duration of the war. The M1 tank fuel pump was not as good as the M1A1 and the finer grade of diesel fuel furnished by Saudi Arabia was causing leaks.

I was not the only one frustrated by the lack of distribution system for repair parts. The Company Commanders could not believe we had so few parts. The stash of additional, non-authorized Line Replacement Units (LRU) CW3 LeMay brought from Ft. Riley was running critically low. I think a couple of Company Commanders thought we were hoarding certain repair parts in one of our maintenance trailers. This was not true. My stature in the eyes of LTC Marlin and the Company Commanders slowly deteriorated at TAA Roosevelt, to include COL Moreno. One morning at 0630 hours in the brigade TOC, I had to explain directly to COL Moreno why we had twelve deadlined tanks in the battalion. This was not a pleasant experience.

The maintenance teams were working with and located with each tank company except for the tool trucks. These stayed in the UMCP. The notable exception was the A Co team. For the first two weeks, they stayed in the UMCP. I thought the reason was because there were so many A Co tanks down for engines. I found out later it was because the A Co Team Chief, SSG Larry D. Glover, did not want to leave the UMCP. I later discovered CPT Beals was threatening legal action. I wished CPT Beals had brought it to my attention.

The UMCP operation was much easier for me once LTC Marlin combined the ALOC with our site. The reason was we had a difficult time maintaining communications with battalion on our single PRC-77 radio, in the back of our truck being used as our CP. I could not properly train enough radio operators and the radio had a short range. The ALOC being located with us at the UMCP was helpful for both parties. CPT Hall and the Medical Plt benefitted from the increased security of the M88's caliber 50 machine guns, and the Maintenance Plt was helped by additional communications.

I had the constant impression our senior leaders were misled about the true maintenance picture. Because of this, our
senior leaders seemed to think the maintenance problems were originating at the unit level. There was a major disconnect somewhere in the perceptions between our senior leaders and unit level commanders. I also think we did the right thing reporting by the book. To his credit, COL Moreno insisted on accurate and truthful maintenance reports.

The D31 tank showed up three weeks after we closed in TAA Roosevelt. It was completely stripped and everything was stolen. Over the course of two weeks, we floated three non-repairable tanks at our levels. As part of this program, we were issued a 59th tank. I assigned this tank to MAJ Garrity. We assigned a crew and made it part of the TOC operation. The tank had limited tools and equipment. On the good side, the XO had a tank, and the TOC had some security when the Command Group was forward.

One of the float tanks arriving for B65 was a new rebuild. I claimed this tank and gave my old tank to LT Corbo and his crew. The old one was a good tank, but the communication problem had to be in the wiring harness. I could not place the battalion in jeopardy by not being able to communicate. I explained all of this to LT Corbo and his crew.

My own crew did not want to swap. They had put a lot of time and effort into our tank and it was in good shape except for the communication side. I made them give the heater from the new tank to the B65 crew and my crew had to remount all the M2 machine gun equipment from the new tank to the old. In the
end, it was the correct decision and paid big dividends for the battalion.

CPT Hall acquired six brand new VRC-12 radios. I did not ask any questions on the acquisition. These were a Godsend. I directed the distribution. Each Company Commander received one, one went to MAJ Cook, and I received one.

**Allied Marking System**

Division published a directive to mark all vehicles with an inverted "V." This was to be the universal recognition sign for all coalition forces.

Within the division, we had already been directed to put orange aircraft marking panels on the rear of the combat vehicles. We distributed these as best we could. Some were cut in half and shared.

**Combat Trains**

When we initially set up in the desert, we operated with a doctrinal BAS, UMCP, and ALOC geographically dispersed. This did not work very well. There were problems in personnel shortfalls providing security for each of these sections. Information flow was many times misdirected and redundant. Each section furnished personnel to man its radios around the clock. It was not a very efficient organization.

On the morning of 28 January 1991, I visited the UMCP to inspect their stand-to. At 0500 hours, everyone was asleep and I was angry. I waited for CPT Hodge to return from delivering the morning DA form 2406 daily (deadline report) to brigade.
Then I assembled CPT Hodge, CW3 LeMay, SFC Ingram, and MSG Patton. I chewed them out something fierce. It was a real "ready my lips" session. I inspected again the next day and it was better, but I still was not satisfied.

I asked MAJ Garrity's, CPT Hall's, and CPT Hodge's thoughts on combining the ALOC, UMCP, and BAS. They all concurred it would be better. On the 6th of February, CPT Hall became the OIC for the combat trains. The ALOC served as the CP for the aid station and the UMCP. None of us ever regretted this decision.

**Life in Tactical Assembly Area Roosevelt**

Soldiers always manage to make the best of any given situation, and life in TAA Roosevelt was no different. Our routine consisted of a 0500 hours "stand to" until 0700 hours every morning. We stayed on fifty percent alert at all times. As both a Battalion Commander and as a Tank Crew Commander, I strove to set the example.
LTC Marlin and his tank crew, consisting of CPL Robert D. Perkins, SSG Antonio Evans, and SPC Ronald B. Schnurr. Note the aircraft marking panel was placed on all combat vehicles for recognition by aircraft and other friendly vehicles.

Each morning, the tank crew member of my tank on watch would wake me at 0430 hours. I woke up, climbed inside my tank and sat frozen for two hours. Our heater was broken. My driver was awake and on the radio in the HMMWV. The entire tank crew was ready to fight at 0500 hours. We normally went through our preparation-to-fire checks to ensure the tank was fully operational. I made all the communication checks with my subordinate commanders.
At 0700 hours, we ran to the rear of the tank to warm up from the exhaust. In the next hour, we heated water to shave and clean up and have a cup of coffee. I had a good tank crew and HMMWV driver and felt we had a good relationship. I was happy to be one of the boys, up to a point, and they understood. They took care of me and I took care of them. I preferred sleeping outdoors on top of the tank turret. On bad nights, I found a home on a plywood board in the back of the HMMWV. My HMMWV driver was required to pull a watch shift on the tank crew. I was exempt from guard duty. The soldiers identified with me on the grounds I never asked for special favors or privileges. One night, I slept on top of the turret in the rain and woke up the next morning soaking wet. I, like the rest of my officers, did my own weapons cleaning and laundry. We led by example.
LTC Marlin's tank crew doing morning hygiene at 0715 hours.

On a humorous note, we also shared our personal property. Eventually, my coffee pot, tape player, and AM/FM radio became my tank crew's property. I kidded them repeatedly about how the crews of the other Battalion Commanders were taking much better care of their Battalion Commander than they were (all totally false, of course). They were an excellent source of reliable information and never stopped reminding me of any shortcomings in the battalion. Not a day passed without CPL Perkins informing me of his lack of mail. Mail finally caught up to us about the 6th of February.
LTC Marlin's radio, coffee pot, and vehicle-mounted compass. The AM/FM radio from Radio Shack was our most reliable immediate source of the news. LTC Marlin kept his father's Korean War footlocker in his HMMWV.

COL Moreno directed us to remove the names from our combat vehicles. I put out the instructions, but my heart was not in it. No battalion has a greater claim to tankers naming their tanks than ours. It is part of our history. The tradition originates from every horse having a name in the old Cavalry days. The effort would prove counter-productive. I set the example by having my crew paint over "Thunderbolt II," but this was as far as I went in enforcing the policy.
The original "Thunderbolt" tank was commanded by LTC Abrams. Traditionally, all the Battalion Commander's tanks in all the 37th Bns followed suit. All of our battalion radio call-signs were also "Thunderbolt."

We were receiving one hot meal a day. The field trains prepared the meal and it was distributed by the 1SGs to all the units. Eating food eventually led to a bowel movement. We were provided with plywood latrines. Most of these were four-seaters with a large oil drum underneath. The human waste was burned daily with a mixture of gasoline and diesel.
Hot chow being served to the TOC location. Soldiers picked up bottled water and MREs for the next day at the same time.
SPC Goforth trying out one of the issued latrines. In January, the only purpose these served was to reduce the wind chill factor. Insects were not a problem. Most soldiers just chose to dig a hole and bury it.
Latrine burning detail. Soldier is using an old camouflage pole to stir the "pot."
SSG Judge using a urine tube. The tube takes the urine deeper into the earth and keeps it off the surface to entice insects. Not really necessary for a dispersed combat unit.

I established a policy for anyone taking mail labeled for "any service member" to write a reply. The "any service member" mail was a real joy to the soldiers. It ranged from school children's thoughtful expressions to photos of women offering sexual favors when the soldiers returned.

The soldiers did their laundry in plastic washtubs we picked up in port. They built open fires and burned trash and residue. Because of the cold, they also used these for heat. Several soldiers in other units were injured from secondary explosions (aerosol cans) in the fires. We were very careful to
place only safe materials in the fire pits. One soldier, a SGT, received an Article 15, non-judicial punishment, for not maintaining his personal hygiene and not setting the example for his crew. He was reduced in rank.

Soldiers were not allowed to load weapons in TAA Roosevelt. Bedouin trucks kept driving through the area. One day, B Co stopped a truck going through their area. By the time I arrived, they had one tank blocking the truck's front and one tank blocking its rear. We eventually let him go once we were satisfied he was not one of Saddam's spies.

At one point, an equal opportunity charge was presented to me by the HHC wheeled maintenance section. Some soldiers were upset because CW3 LeMay and MSG Patton had all the black mechanics with them at the UMCP, and all the wheeled mechanics in the field trains were white. In other words, all the white soldiers in the field trains with the showers, chow, and mail were complaining. It took me a while to figure this one out. In the end, it was a lack of communication taking place between SFC Martindale and CW3 LeMay.

COL Moreno made a point of personally visiting every combat vehicle crew in the brigade. Although very time consuming, he many times set out on foot to visit the crews. I admired his technique. Valuable information was gained about our soldiers and our combat readiness. I attempted, as best I could, to follow his example.
Field Trains

The field trains were headed by CPT Clidas and were our primary link with the 201st Fwd Spt Bn for supply. CPT Clidas used one of the M109 vans as his CP, and the Battalion S4 van operated adjacent to him. Primarily, the Mess Section, Wheeled Maintenance Section, and Support Plt operated under his control.

LTC Marlin and CPT Clidas promoting SGT Zuilkowski to SSG at the field train site. Note the American flag. This flag flew over our nation's capitol and was the property of LT Ortega.
SFC Ballinger and LT Ortega in the field trains.
SFC Martindale and SFC Martin R. Smith in the field trains.
CPT Clidas, SFC Freeman, SSF Ronald B. Berget, SSG Curry, and SFC Wilson in the field trains.
LT Thompson, SFC Wilson, 1SG Thiede, and LT Powers in the Mess Section of the field trains.
SSG Alan C. Grodman from the Support Plt. A mover and a shaker in the ammunition department. Note the pallets are used to break down the rations for company 1SG pick-up.

1SG Thiede operated a shower point and handled transportation requests to the telephones in the area. He arranged to use one of the Sanators to heat water for the showers and recruited a soldier barber for haircuts for all soldiers desiring one. The telephones were about an hour's drive away. He provided a shuttle service with one five-ton truck for the soldiers.
The shower point at the start of the move into TAA Roosevelt.
SPC Goforth getting a haircut at the hands of SPC James D. Handy. Note the red generator behind him is one bought by the field ordering officer on a contract.

The showers were a big deal. We averaged about two weeks in the desert before we were able to take our first showers. It was not so bad because the weather was cold; but we reached a point where things started growing on us. The water was hot, but as soon as the water stopped and the air and wind temperature reached bare skin, the comfortable side of a shower in the desert was over.
SSG Curry checking the water level on one of the showers.
LT Richard L. Jerrells taking a shower. Part of the decontamination apparatus can be seen in the right bottom corner of the photo.
During one of my visits to the field train site, CPT Clidas presented me with two weapons--both 9mm. They were civilian weapons someone dropped off or deposited at the shower point. Someone was in violation of General Order Number 1: "Thou shalt not bring personal weapons into the theater." SSG Gregory D. Hart, the Scout Plt Sergeant, found them and turned them in to CPT Clidas. I spoke with LT Ward at a later date. He informed me he thought they belonged to one of his soldiers but could not prove it. I instructed him to issue the order one more time. I would offer amnesty to anyone who turned in any other personally owned weapons. He returned later with another 9mm
pistol. I turned these in to brigade at the next command and staff meeting.

Re-Pack ing the MILVANS

The sever. MILVANS eventually showed up. We re-packed them with items we would not need in the immediate future. We kept only those items we needed to fight the war. Every soldier had arrived in Saudi Arabia with at least two duffel bags and a rucksack worth of personal gear. There simply was no room on the tank or vehicles to support carrying all this property. Most of the soldiers re-packed their bags and fought the war with one rucksack of personal gear. The remaining duffel bags of property went into the MILVANS. The soldiers would not see these bags again until after the war. The MILVANS were then transported back to the DISCOM holding area for safe keeping.

The SeaLand vans never made it to TAA Roosevelt. They were still missing long after the war.

The Battalion Post Exchange Operation

We assigned SFC Smith, the Communication Plt Sergeant, the additional duty of operating our PX. Through SFC Smith, we were authorized to take a truck to King Kalid Military City (KKMC) or back to port to make a $10,000 purchase of goods and return with them to sell. Cigarettes were always in demand. The majority of things purchased were snacks and treats. After all the goods were sold, he repeated the process.

There was no system to aid commanders in simplifying the process. In reality, this was almost a full-time job for SFC
Smith. The truck used to make the runs was not within our authorization for equipment. This system never changed. The burden of responsibility to execute PX operations rested with the Battalion Commander. If we kissed it off because we could not resource it, we were bad commanders and were not taking care of our men. If we complied, we paid for it out of our hide. The entire CSS system in theater, commercial included, was a pull system. Nothing was pushed to the soldiers at the front edge of battle. If we wanted it, we had to go and get it ourselves.

**Commercial Telephones**

The commercial telephones, sponsored by AT&T, were a one-hour drive from our location. They were positioned about one thousand meters off the Tapline Road. Soldiers were briefed by the chain of command on the sensitivity of security prior to using the phones. This was not a foolproof system. We had no guaranteed way of censoring the telephones. Plus, the telephones were not secure. They could be monitored by Iraq.

The only time I was free to use the phone was late at night. Daylight was too valuable as far as getting things done. I made the trip with my driver late one night, about midnight. We drove there in an hour to find a very long line. I let my driver go first and I guarded the HMMWV. By the time he finished, there was not enough time for me to wait in line. We returned to the TAA. I learned later there was a special tent
for Battalion Commanders and above, set aside to expedite our calls.

On the 12th of February, we were told the deadline was midnight for all telephone calls. We had no notice when we were moving, but this certainly gave us room to speculate the move was not far off. I made my last and only call home on the 12th of February.

MAJ Garrity received a letter from a friend. His friend was a foreign area specialist in the Middle East. He shared the letter with me. The two-page handwritten letter basically said the Arabs will never surrender and will fight to the death. The letter even cited historical examples.

**Advance Party Order to Move**

At 1100 hours on 13 February 1991, I was informed over the radio of the advance party alert order to move. The advance party was to depart at 1500 hours. This caught us completely off guard. The battalion would leave the next morning. MAJ Garrity and MAJ Cook both attempted to get things organized.

I had a piece of sand scratch my left eye in all the confusion. It was extremely painful, but not serious. I had CPT Phillips look at it. He gave me some eye drops to soothe it initially and some wonder drugs to help me. I wore a patch over my eye to the brigade move briefing.

Changes were made to the original plan and times of departure were changed. Everyone was rushed. COL Moreno was frustrated. We saw all of our rehearsals and planning going
down the drain because of the short fuse. We also knew we came
to Saudi Arabia to do whatever it took to get the job done—no
bickering, no whining, just a "can do" attitude.

By the time I reached the battalion, MAJ Cook and MAJ
Garrity were both in the area getting things ready. CPT Wock
had not returned from his second reconnaissance to BP 23. We
notified brigade we would not be able to meet the 1500 start
time. The time was changed to 1600 hours. It would be changed
again to 1800 hours before all was said and done. I put out the
call for a command and staff meeting ASAP at the TOC.

We had difficulty getting everyone together. The TOC was
in the process of packing up. Darkness was starting to fall.
I was in a great deal of pain, and my head felt like it was
going to leap from my shoulders from the headache caused by the
eye. I briefed all the key leaders on the changes and put MAJ
Garrity in charge of making sure the advance party was out on
time. MAJ Cook was not present. He was trying to organize the
advance party. Our start time for the battalion main body was
0900 hours the next day.

I made a decision to remove the tank plows for the move.
We went back and forth on this issue several times. I finally
told everyone to take them off. We trucked them to the BP. My
concern was fuel consumption. I regretted this later.
Fortunately, in the end, we did not have enough truck space for
all the plows and one or two were left on the tanks.
Statement by CPT Wock, D Co Commander, describing his return from his second route reconnaissance to BP 23 on 13 February 1991:

About eight days later, I asked for permission to conduct another route reconnaissance of the same route. This was approved so I embarked on my merry way. This time, the trip was relatively unexciting. I was able to refine many of the points along the route. When I returned to the battalion's position, I saw many vehicles being drawn up into several columns. I immediately reported to the TOC. The TOC crew was tearing the TOC down in preparation for a move. LTC Marlin told me we were ordered to move NOW, and not in the next four days as I was led to believe. The battalion was still refueling. A and C Cos were still removing mine plows from their tanks. Meanwhile, I had forty-five minutes to refuel, brief the key leaders, and have the convoy on the route.

I went to lie down for a few minutes and the drugs took over. I fell asleep in the back of the HMMWV. My driver told me the next morning he nose-dived the vehicle into a foxhole at night and it did not wake me. I was really out of it at the wrong time. MAJ Cook and the advance party left at 1800 hours. MAJ Garrity readied the battalion to move.
CHAPTER 6
MOVEMENT TO THE BERH
17 FEBRUARY 1991 - 18 FEBRUARY 1991

The Advance Party Move

The advance party moved out into the darkness. Amid the confusion and haste of getting under way, there were still a lot of loose ends. The move took all night and was only hours ahead of the main body.

Statement by CPT Wock, D Co Commander, describing the actions of the advance party to BP 23 on 17 February 1991:

We moved out in total darkness. Along the first leg, I saw something loom out of the darkness. Upon closer dismounted inspection, I discovered I was looking at the Egyptian tank battalion. The nearest tank had its gun tube leveled on my HMMWV. I saw two Egyptian soldiers about twenty meters away from me trying to see me in the darkness. I quickly realized we had absolutely nothing to say to one another. So I hopped back into the HMMWV and continued along the route.

Until we got within a mile of the two-lane highway, things were pretty much uneventful. Suddenly, the earth opened up and swallowed my HMMWV. Dazed from eating too much windshield, I stumbled out of the vehicle to see what we were in. No, it was not one of the small anti-wheel ditches we saw in the British sector. This was a de facto anti-tank ditch. I called the next tank in line forward by shouting. After all, radio listening silence was in effect. After ten minutes of vehicle recovery, the column was on its way again. As we neared the highway, I halted the column briefly and watched the two scout vehicles leave the column to take up their positions as guides at the authorized crossing sites over the highway.

Once on the other side of the highway, the wadi really began to break up the column. With radio listening silence in effect, everyone followed their last orders. No one broke the silence to tell me they were falling behind. Even using night vision goggles,
the best I could see was the vehicle behind me and this was hard to do. At the same time, we were supposed to be marking the route for the rest of the battalion with sandbags every half mile. Unbeknownst to me, a HEMMT driver and his co-driver fell asleep when the column halted to extract my vehicle out of the anti-tank ditch. Consequently, the last fifth of the column, containing the marking team, most of the Support Plt, and my XO's tank were not with me after I crossed the highway.

Around 0430 hours the next morning, we arrived at the RP. We formed the basic lager we had planned. I was standing astride the march route watching the column elements move into their positions. I was taking accountability. I was missing fully a fifth of the column. I briefly discussed the situation with MAJ Cook. He said, "Well, it will be daylight in an hour. You can go look for those elements then." At 0530 hours, my driver and I began to backtrack on our route. About a half hour later, I spotted one of my tanks leading a dust cloud towards me. It was my XO, 1LT Kenneth C. Leonard III, leading my lost sheep in. I was only happy that I had ensured that "KC" had the same way points as me.

We were about two kilometers short of the RP when I noticed an American helicopter flying on an oblique course designed to intercept me. As the helicopter neared, and then landed along my intended route, I looked at my driver and said, "You know this can't be good." He agreed as neither one of us were chums with anyone who ranked his own aircraft. It was COL Moreno, and let me tell you, there is nothing like seeing your senior rater early in the morning after a sleepless night. Basically, he did not know where our advance party was. Worse still, he did not know where his TOC had jumped to. Since I knew the answers to both locations, I told him. He then asked me what we were up to. I told him and he went into one of his many hovers. "No," he said, "Don't you guys do anything. Just get accountability of everybody and everything, and then wait." He then flew ahead and spoke directly to MAJ Cook. Five minutes later, I pulled into the battalion lager with the rest of the column. COL Moreno was just leaving as I arrived. I talked to MAJ Cook about what Moreno told me. MAJ Cook informed me it was exactly what he flew up to tell him. After this, I did not feel so bad.

Later in the day, the battalion main body linked up with us, but at a different RP. No one had informed us of an RP change. LTC Marlin later told me.
the Scout Plt failed in their mission as guides at highway crossing points. To me, this information was merely the capstone of a less than great evening.

**Preparation for the Battalion Move**

I woke up for "stand to" the next morning. After a quick shave and cup of coffee, MAJ Garrity dropped by and updated me on our status. I appreciated I had a second in command who was a hard charger and would stick with a mission until completion.

One of the first issues to be resolved was whether we wanted brigade to obtain HETs to haul the deadline vehicles forward for us. Brigade was promising HETs by 1300 hours. I told MAJ Garrity, "No, thank you," we would take care of our own from this point on. Not a single CSS promise had been kept to date in this theater. The other two TFs opted to use the HETs. Five days later, their equipment was still sitting in TAA Roosevelt.

We had no word from MAJ Cook and the advance party. They were on radio listening silence and were out of communications range.

I went straight to the UMCP to get the correct information on what we had to tow and how our maintenance posture looked. I spoke with CW3 LeMay. He had the Maintenance Plt ready to move out with the exception of mine plows. The M88 burned on the Tapline Road was already being missed.

I moved up to the SP. The SP was at a well-defined crossroad in the British sector about three kilometers from our
AA. I waited there for our first units to move through. I made the move in my HMMWV and went with the lead units.

Photo of the area around the SP. This was about the best we could hope for as a well-defined point. Photo is taken looking towards Iraq.

Tactical Movement

We moved out with C Co in a line formation on the left, and A Co in a line formation on the right. Things were looking pretty good. As we moved farther away from the SP, I kept looking back for the other three companies. Nobody was in sight. I could not figure out what had happened, and radio listening silence prevented me from communicating with them. I slowed the tank companies to a crawl. On two occasions, I
stopped the formation and waited for any sign of life behind us. Over a very far distance, I finally saw a dust cloud and figured they were catching up.

Before the road crossing, the dust trail caught up to us. I doubled back to find out what was going on. I met up with the 201st Fwd Spt Bn S3, MAJ Michael W. Brown. After a brief discussion, we realized the 201st Fwd Spt Bn had begun their road march an hour prematurely and had cut into the middle of our formation. I was angry. I turned towards the road as C Co crossed on line disregarding the designated crossing sites. CPT Torrence crossed the road and stopped his company. Our Scout Plt sat and watched the crossing offering no guidance or assistance whatsoever. I could not believe this was happening after all the rehearsals and planning. When it rains, it pours. COL Moreno landed his helicopter.

After losing about ten pounds and having my professional competency questioned, I set off to share some of the good fortune. I grabbed the Scout Plt and set them straight. They were not briefed properly by either LT Ward, MAJ Cook, or CPT Wock. They were now ready for all the traffic behind me. COL Moreno also questioned why one of my tanks (instead of an M88) was pulling another tank. Now was not the time to debate. We sent M88s to pull the tanks. I started C Co moving again as quickly as possible and found A Co farther down the trail having a maintenance and snack break. I was enraged and my Kelvar helmet went flying across the desert with a few choice words to CPT Beals to get his company moving ASAP. He responded.
Directly to the west of the road crossing was the infamous Wadi Al Batin. The engineers graded the parts of the non-trafficable wadi. We had to move single file to get through the wadi. We continued to move intermixed with the 201st Fwd Spt Bn. By the time we reached the other side of the wadi, D Co and B Co, and A Co, 9th Engr Bn, caught up to us. We continued to move to the refuel point.

Photo taken from a helicopter during our move to north. This shot was taken after clearing the Wadi Al Batin.

When we reached the other side of the wadi, we regained our original information and picked up the pace. At one point, we hit a small berm not trafficable for the wheeled vehicles. I
drove to the back of the column and moved a tank with a plow forward. We were through it in a matter of minutes. I was embarrassed about the mishaps we had encountered. It seemed uncharacteristic for us to make the simple mistakes we made on this move. I needed to have a "come to Jesus" session with my key leaders ASAP. The 201st Fwd Spt Bn column formed up a road, pulled ahead of us, and was out of sight. We were going to be the last in the brigade to close. I also had no idea of our downed vehicles status because of radio silence. As we closed on the refuel point, we were running on fumes.

The refuel point was nowhere in sight. I was confused. Today was just not my day. I checked and re-checked my location. I drove the perimeter, searching with binoculars for fuel HEMMTs. None in sight. CSM Patrick G. Tadina, the Brigade CSM, arrived in his HMMWV from the north. I asked if he had seen fuel trucks. No. I stopped the tanks and cut the engines to save fuel. I searched again. Nothing. COL Moreno arrived via helicopter again. He informed me the fuel trucks were just ten kilometers to the north. To my amazement, he came on the radio and confirmed it. We moved out.

**Refueling Point**

At the refueling point, I sought out the Company Commanders as they arrived, and quickly assigned sectors to form a perimeter in BP 13. Darkness was about thirty minutes away. I was busy trying to get us closed before it darkness fell. No such luck. The curtain fell.
Our instructions were: no movement of vehicles after dark. We froze everyone in place and went to a fifty percent alert status for the night. I spent the rest of the night attempting to get a status on our downed and lost vehicles.

I discovered the refueling point location was adjusted by brigade. They instructed MAJ Cook to move it. He failed to recognize we did not know the new location. He should have sent a guide to the old location. I was determined to have a better day tomorrow.

Recovery Operations

We had great difficulty getting a status on all of our broken-down vehicles. The combination of moving in a formation and no radio use prevented getting accurate locations and definitions of the problems. I dispatched MAJ Garrity, CSM Stockton, and CPT Hodge with GPS devices to search, find, and recover them.

Four of our M88s blew engines attempting to tow tanks. I was wrong for not debating the issue with COL Moreno at the time—I knew better. It took us over four days to recover all the downed vehicles (seven tanks). We learned several valuable lessons: criticality of broken-down vehicles' locations and the specifics of the problem.

I was thankful I had men like CSM Stockton and MAJ Garrity with me. They worked around the clock to recover our soldiers back to the unit.
Battle Position 13

The night in BP 13 was uneventful. Unknowingly, we had parked the TOC only four hundred meters from the brigade TOC.

The next morning, MAJ Garrity showed up at the TOC and fired his driver. I was chuckling about the way MAJ Garrity was carrying on about his driver. I tried to get the GPS to work. CPT Torrence came by to inform me he had lost his Key 13 (a code key for the radio). I stopped chuckling and directed a systematic search. I went to a brigade operations meeting at 0800 hours. This day was not starting out good.

**Movement to Battle Position 23**

COL Moreno gave us instructions on how to occupy our BPs. He praised TF 2-16, 4th Bn, 5th Field Artillery (FA), and the 1st Engr Bn on their move forward. For some strange reason, he neglected to mention the 201st Fwd Spt Bn and our battalion. I returned to the battalion and met with key leaders.

We piled all the Platoon Leaders into HMMWVs and drove forward to the berm on reconnaissance. I laid out the plan for occupation and made them all give me a brief-back. We departed at 0900 hours from BP 13 to BP 23 and the berm. We used the same formation we used the previous day to move forward.

Just for the record, PL Vermont and the berm were not one and the same. I never did understand why higher headquarters did not have a PL on the berm. Because of this, the berm was constantly being called PL Vermont. At the berm, we were to do final preparations for the attack. We had TF 2-16 to our west, and a fourteen kilometer wide sector tied in with the 2nd Sqdn, 8th Cav, from the 1st Cav Div on the east. Tensions were
extremely high. There was no one between us and the Iraqis from this point forward.

The 46th Chemical Co, 84th Chemical Co, and the 18th Psychological Operations (PSYHOPS) Team were attached to us. We now had a force of over one thousand soldiers in the battalion.

Statement by CPT Wock, D Co Commander, describing his company's occupation of BP 23 on the "berm" on 18 February, 1991:

On 18th February 1991, the "Thunderbolts" battalion moved forward from BP 13 to occupy a defensive position on the "berm." The berm was marked by a two to three kilometer long berm that was an anti-tank ditch. There were also five lanes cut through the berm, graphically numbered sixteen through twenty, from left to right in our sector. A Co, 9th Engr Bn, the battalion Scout Plt and Mortar Plt, and B Co were forward just behind the berm. C Co was slightly behind A Co, 9th Engr Bn, and D Co was in reserve behind A Co. When we first pulled in, I immediately saw a battery of 155mm artillery pieces in place and two to three Multiple Launcher Rocket Systems (MLRS) batteries.
From the intelligence reports we received, it appeared we were in for less than a fun time. PL Vermont was well within enemy artillery range. After D Co pulled into position, I noticed an almost relaxed atmosphere among my company trains personnel. I quickly informed them they were in range of the enemy's artillery. After I spoke, I was greatly surprised at how quickly they began to dig in. The tank crews set up camouflage nets. The company trains personnel were digging together as one with their shovels and picks. In record time, each of them had a proper two-man fighting position dug.

Aerial photo of the berm. The ditch is on the south side and the berm is on the north side.

Throughout the day, the artillery batteries cut loose volley after volley of artillery fire and rockets deep into enemy territory. On the 18th, the wind must have been blowing just right. After the cannons fired, the propellant charge gases set off two M8 chemical alarms. D Co masked immediately and donned chemical protective suits. After twenty-five
minutes of testing the air with M256 chemical detection kits, the results were negative on multiple separate tests. The all clear was given.

155mm howitzers move forward of our positions to fire artillery raids into Iraq. Artillery then withdrew to the rear. These raids continued for five days on the enemy trenches and fortifications.

The tension in the air was palpable. We received several reports of enemy observers using the berm as an observation point. Our confidence was not improved by the small unit actions of TF 1-41 or the 1st Cav Div. These units made contact with Iraqi elements in the dark and lost combat vehicles to enemy fire. The MLRS batteries continued to fire day and night.
Diagram #11. Enemy Dispositions.
From the enemy contacts made, we began to put together a mosaic profile of the two different enemy divisions facing us some twenty kilometers to our north. Based on these nightly encounters, we found out the 25th Iraqi Inf Div was to our northeast. The 25th Iraqi Inf Div sent at least one enemy tank platoon regularly to different locations in its forward security zone. This was the same division that had laid and executed a battalion-size ambush for a company size reconnaissance element of the 1st Cav Div. We also wondered whether we had properly templated the boundary between the 25th and 26th Iraqi Inf Divs. Actions within the 26th Iraqi Inf Div's zone were limited to small reconnaissance parties and mortar raids.

**Passage of Lines for TF 1-41**

The passage of lines was not a well coordinated effort on TF 1-41 or 3rd Bde's part. It became more of a race to the rear. As a result, it took us longer to confirm whether or not they were clear of the area north of the berm. A Tank Company withdrew through gap number sixteen and a wheeled Scout Plt withdrew through gap number twenty.

The burned-out hull of a BFV was dragged back through gap number nineteen and left there. Our crews had time to look it over. It was not an impressive or confident sight. This was the BFV killed by an Apache helicopter two nights prior with a Hellfire missile. LTC Hayles, the attack helicopter pilot and Battalion Commander, was relieved as a result.

Statement by MAJ Cook, the Battalion S3, describing the rearward passage of lines of the 3rd Bde on 19 February 1991:

Upon occupying BP 23, my mission was to ensure our flank units were tied in with TF 2-16 on the left and the 1st Cav Div on the right. BP 23 was behind a border berm approximately eight to ten feet high for seventeen kilometers along our front. The berm had
five openings units moved forward through and did reconnaissance inside Iraq. On the left flank, pressed against the berm, was a Saudi Arabian border patrol house. Moving along the berm after ensuring the left flank was secure, I was directed to supervise a rearward passage of lines. TF 1-41 was returning from a mission forward of the berm. I linked up with TF 1-41's representative at berm cut number sixteen to make arrangements and coordination. After making the necessary coordination, my driver and I stayed at the site to act as a liaison.

The south side of the berm. Everything forward of this landmark was enemy.

As elements came rearward, an enemy artillery round landed fifteen hundred meters forward of my position. I called a spot report to the battalion TOC. At the same time, Dagger 6 [COL Moreno] came across the brigade command net advising us an artillery round had hit an M1A1 tank in TF 1-41. About ten minutes passed before the tank came through the berm under its own power, crippled, no turret power (gun tube pointed south), engine on fire, and a
crew member wounded. The crew was unaware of the fire. I relayed through Dagger 6 to the 3rd Bde Commander to the Unit Commander to the crew. The tank halted. The crew members scampered to put out the fire and evacuate the wounded crewman. As soon as the rest of the TF came through (which was confusing because the withdrawal was disorganized and lacked control) and the unit verified accountability, I departed to the TOC for my tank.

Statement by CPT Torrence, C Co Commander, describing the artillery raids on Iraq from BP 23 on 18 February 1991:

On the morning of the 18th of February, we finally saw the infamous berm. It was supposedly held by the enemy or at least patrolled by observation posts capable of bringing in artillery fire on our new positions. We occupied our position as the battalion reserve. We received orders to move forward of the two chemical (smoke) companies and provide security as MLRS and British eight-inch howitzers struck the enemy from behind us. It was a glorious sight. For over three hours, we continued to strike the bad guys with artillery.
MLRS being launched adjacent to C Co's position. These missions went continually at odd hours around the clock.

There was absolutely no coordination with the ground units. For days we practiced the passage of lines and extensive coordination. It did not happen.

Statement by LT Powers, the Mortar Plt Leader, describing the rearward passage of lines of the 3rd BDE on 18 February 1991:

We pulled up to BP 23, more colorfully named the "berm." BP 23 was the de facto boundary between Saudi Arabia and Iraq. We pulled up behind the TOC. From there, we moved to the berm (two kilometers away), executed a registration and one round fire for effect on a building about four thousand meters away. We were very nervous to be so close to the berm. Just hours prior, a TF from 3rd Bde had withdrawn. As an M1A1 tank crossed a gap in the berm, it was hit by an enemy artillery round. A direct hit on a moving tank by artillery is something you rarely see. We saw the tank moving through the gap and it was smoking. I
realized at the time the enemy could hit us. After we registered our rounds, we occupied a firing position just two hundred meters to the rear of the Scout Plt on the berm to support them. Nothing happened at night.

**Hill 437**

The best omen of the day was when MAJ Garrity selected Hill Number 437 on the map as the new TOC location in the middle of BP 23. It was not much of a hill—more like a small pile of dirt left over from yesterday. The TOC was as safe as we could hope for on this terrain.

The TOC located on Hill Number 437. TOC was reinforced with a dirt mound around the perimeter.
We averaged over five hundred kilometers on our track vehicles since arriving in Saudi Arabia. Between the range shooting, battalion rehearsals, brigade rehearsals, and the move to BP 23, over three hundred miles of wear were on our tracks. Considering some of our tank's track life, I was concerned. Plus, the sand was harder on the engines and suspensions than back on the plains of Kansas.
Artillery Raids

The artillery raids never seemed to stop. I was glad we were sitting on the Saudi Arabian side of the berm. I had never seen so much artillery congregated in one place. At several times, there were over seven artillery battalions supporting the brigade. Both the British and the U.S. forces were pulling the lanyards.

Artillery units in the vicinity of BP 23 shooting into Iraq. All varieties of artillery were shooting at different times.
The artillery units in front of us, behind us, in the middle, or to the left and right would then "shoot and scoot." They did not even take the time to pick up their residue. Soon the area was littered with artillery trash.

It was difficult to sleep at night. Before we realized it, an artillery unit pulled into our area of operations and started shooting. It always took an extra second to realize it was our artillery and the chemical alarms were false. The whole sky was lit during the night shoots. It was a beautiful sight.

British traffic in the area also increased. We had a "no movement policy" at night to reduce potential fratricides and increase our surveillance capabilities. The British did not seem to be aware of our policies.

Statement by CPT Beals, A Co Commander, describing the artillery raids from 19 February to 23 February 1991.

I had the company in BP 23 and was linked in with B Co, TF 2-16, on my left. C Co was supposed to be on our right, but they never quite occupied BP 23. We were about thirteen hundred meters from the berm. A battery from the 4th Bn, 5th FA, was set up in a diamond formation less than one hundred meters behind my company trains. A Co, 9th Engr Bn, occupied BP 23. They were equipped with M113 APCs. We loaned them three of our M1 tank decoys. I never saw our tank decoys again.

We started each day with a two-hour "stand to" with the company at one hundred percent readiness. During "stand to," we executed fire preparation checks to make sure we were ready to fight. A bore-sight was done during the last half hour of Before Morning Nautical Twilight (BMNT). These were the two longest hours of the day. It was bitterly cold every morning and we tried to fill the time working from checklists that seemed to grow longer every day.

On the night of 19 February, the 4th Bn, 5th FA, began firing. In the wee hours of the morning, a
battalion volley began. SPC Donald L. Steisel was sleeping on my HMMWV. He was startled and rolled off screaming, "incoming." When he hit the ground, he was still in his sleeping bag crying, "Oh my God, I forgot my mask on the HMMWV. I woke up when the first volley was fired and realized it was outgoing artillery. I rose up and looked at SPC Steisel and said, "Calm down, it's our artillery!"

At 1900 hours on the 21st of February, a truck with British soldiers went straight through our BP heading north toward Iraq. They crossed the berm and kept going. It took us about thirty minutes to track them down. They were completely lost. My driver and I sat up all night trading stories about women and drinking. One of my lieutenants bargained with them and traded for a British Gortex sleeping bag. The British wanted our cots and night parkas, especially our night desert parkas. The next morning, we took them to the company CP and fed them. We got tired of waiting for a guide, supposedly coming from their headquarters, so 1SG Ronald A. Hurley took them to the nearest British unit.

The Battle Damage Assessment (BDA) reports indicated the Iraqis were receiving extremely accurate fire. On top of the artillery, the priority for Close Air Support (CAS) shifted to our front. I was always concerned about counter-artillery fire from the Iraqis, based on our artillery location in the area of operations.

**Fighting Positions**

With the assistance of the engineers, we immediately dug fighting positions and used the berm as cover for most of the fighting vehicles. Although the tanks were one to two kilometers from the berm, their direct line of sight was just over the top of the berm.

To secure the berm, the Scout Plt with the GSR devices and a company FIST were positioned on the berm. I became upset when
I learned both the radars were inoperative because of maintenance problems—not because they were broken, but because nobody was trying to get them fixed. CPT Williams and MAJ Garrity applied the immediate action necessary for this fix.

The engineers built platforms to raise the BFV weapon systems over the berm. This was critical for night surveillance as well as for shooting. After the first few days, I was forced to remove the Scout Plt to a lager position because of their maintenance posture: too many inoperative night sights. I subsequently rotated tank platoons to the berm at night.
Diagram #12. BFV Platform.
LTC Marlin's tank and HMMWV position. The berm is in the background. Notice the orange marker panel on both vehicles.
SPC Goforth seeking relief in the foxhole. With exception, this was the most privacy a person could hope to achieve. Soldiers converted Igloo water coolers into toilets by placing a plastic bag placed inside.

The majority of the combat vehicles put up camouflage nets and made sure a foxhole was nearby just in case they were caught off their vehicle. The Scout Plt was at one hundred percent alert on the berm at night and slept in the daytime.

The Engineers and Chemical Cos had M113 APCs. This was not a problem in the daytime. At night, C Co moved from under their camouflage nets and infiltrated the M113 APC area to increase surveillance and provide protection if necessary.
Statement by CPT Torrence, C Co Commander, describing security operations on the berm on 20 February 1991:

At the berm, we pulled forward at night to reinforce the Smoke [chemical] Plts. After being on the berm for three days, we began rotating a Tank Platoon to replace the Scout Plt on the berm. They were becoming combat ineffective due to maintenance. All three platoons rotated forward through a period of two days, spending twelve hours at Readiness Condition (REDCON) 2.

The Smoke Company was always very happy to see us. They had limited firepower and worried about their flank coordination with the 1st Cav Div. As the boundary location kept changing, they worried about a gap in the defense.

We provided the Chemical and Engineer Cos and the Scout Plt with the tank company decoys. From a distance, these decoys looked like M1 tanks and gave the appearance of tanks. In a fight, they were designed to draw fire away from the real vehicles. We had twelve of these decoys and dispersed them throughout BP 23 and on the berm. Neither of the two chemical companies had a GPS. We helped them position themselves by assigning a tank company for them to maneuver with if they had to move.
SPC Edward J. Sullivan with a tank decoy in BP 23. The decoy also came with a small Honda generator to give the tank a thermal signature at night.

Within the first forty-eight hours of occupying the berm, we pulled all the combat vehicles up to the berm and test fired our weapons. This was probably the first and only time most of our tankers fired a tank gun and machine gun with no range restrictions. All the companies made range cards and established TRPs forward of the berm. The soldiers were definitely alert after seeing the tank get hit with artillery the day prior. I was impressed with the commanders of the Engineer and Chemical Cos. They had well-trained, disciplined soldiers and fit right into our organization.
The Changes to the Plan

The original plan called for the battalion to go forward of the berm each night to support artillery raids and to execute deception operations in a sector approximately twenty by fourteen kilometers. We were to physically occupy the sector continuously with observation after the first night's mission.

The Scout Plt was relieved when the plan was changed to reflect artillery raids from south of the berm and a restriction from VII Corps on operations north of the berm. VII Corps was concerned about showing our strength prematurely. We were denied the intelligence we wanted and needed due to the restriction.

The basic attack plan remained unchanged. For G-day, our sector was reduced to a three kilometer wide sector with a guard mission to the east. The feint to the north was to be executed. There was no change to the actual exploitation of the breach.

Part of the deception plan called for us to establish a retransmission station to replicate a brigade TOC site. LT Benjamin A. Okiyama, the Battalion Communication Officer, executed this mission on the east side of the sector. The intent was to confuse the enemy on our order of battle and draw attention away from the actual brigade TOC.

Iraqi Intelligence

We wanted all the intelligence we could get about the Iraqi unit and positions forward of the berm. There were still many unanswered questions about their strength, mine fields, and tanks.

TF 3-37 sent CPT John E. Long III, their B Co Commander, to brief all our commanders. He had been on the berm since the first week in February. He disclosed all the activity he witnessed over the past weeks and highlighted on a map specific areas of interest. It was a very good first-hand update. He also back-briefed us on results from the Enemy Prisoner of War (EPW) interrogations. About six EPWs were taken since the division occupied the berm. The area on the other side of the berm became the "no man's land" between us and Iraq. The Iraqi defenses were approximately twenty kilometers to the north.
"No man's land"--looking over the top edge of the berm from a scout vehicle position. What you see is what you get!

The most significant item CPT Long revealed was the confirmation of the light security zone to our front compared to the heavily-guarded security zone to the 1st Cav Div's front. This indicated the difference between the two enemy divisions to our front. What we were conscious of was the heavy security zone with enemy tanks on our right flank during our proposed movement to the trench line.

While the actual detail of the trench line location had not changed significantly since we left Ft. Riley, the location of mine fields and other fortifications eluded us. I was primarily concerned with the actual location of the reinforcing enemy tank
platoons behind the trench line. It changed constantly in the reports. It would be at one of three places. We also had the artillery positions behind the trench line as primary targets. They had not changed. I wondered how many of the enemy tanks and artillery would still be there after the artillery raids and air strikes. I hoped none. We were also very conscious of the Iraqi's chemical mine capabilities.

Diagram #15. Enemy Tank and Artillery Positions.
My other concern was the three possible counterattack routes into the breach site area from the adjacent Iraqi positions. All three had to be stopped. We measured their response time against the time it took us to deploy from the breach site.

Drones and Flares

Both sides used drones in the vicinity of the berm. Camouflage nets deprived the Iraqis of gathering useful information from us. The troops saw the drones at night and they continued to make us very conscious of the threat in the area. We were instructed not to shoot at them. We always had more air cover in the air than the Iraqis did, and there was genuine fear of creating an aerial fratricide.

Statement by CPT Martin, B Co Commander, describing the Iraqi's use of drones on the berm from 18 February to 23 February 1991:

While in the BP, we saw some Iraqi intelligence initiatives. One prevalent intelligence gathering asset they had was their drones. These drones flew primarily at night and used a visible light to take pictures of our vehicles and their disposition. What I saw was a light somewhat similar to a flashlight in the sky. The light was slightly dull and flashed only momentarily. Then it was gone. The only noise I heard was a small plane propeller.

Our precautionary measures were to camouflage our vehicles with radar scattering camouflage nets. The nets worked well for camouflaging our vehicles, but they limited our lateral visibility. This made the soldiers nervous, so we always set our nets up like a garage to be able to drive in and out.

One noteworthy thought was the paranoia we had about the drones. At first, everyone was on watch for them. As time progressed, we simply spotted them and reported the direction of travel. Generally, the drones were more of a nuisance than any real or immediate threat.

We eventually appealed to the British, through channels, to give us some drone support to obtain photos of the breach site. They provided us aerial photos of the area. This was the first real, first-hand intelligence we had received since we had been
in theater. Although we had map scaled, situational templates, no sincere update was offered since we left Ft. Riley. As a member of the priority corps, division, brigade, and battalion executing the main attack, I was disappointed with the intelligence effort. We were just not getting the detailed information available under the circumstances. As late as the day of the attack, there was still confusion as to whether we had pinpointed the specifics of the unit we were attacking.

Like clockwork, Iraqi flares were sent up every night. We speculated this was for their patrols to execute passage of lines with the trenches. They were usually fired by mortars and stayed in the air for several minutes. They were approximately fifteen to eighteen kilometers away. The feeling was eerie. The men sitting on the actual berm tended to get high strung at this point. There was also speculation the flares were being fired to prevent or to stop Iraqi deserters.

**Lost Fire Support Team**

On the 21st of February, the FIST and vehicle designated for duty with the scouts on the berm was delayed. It was dark before they were ready to move into position. I was called from the TOC and asked if they should still move forward. I did not like this idea, but I had no choice. The Scout Plt needed a FIST and the Apache helicopters had planned a raid on this night. I talked to LT Ward. He said he could effect the link-up. It was pitch black again.
Twenty minutes later, I was monitoring the brigade radio net and TF 2-16 began tracking a potential target. LT Ward could not establish communications with the FIST vehicle. The possibility of the target and the FIST vehicle being one and the same was very real. I continued to monitor the net. Just as I was about to prevent TF 2-16 from firing, LT Ward called to report he had found the FIST vehicle. It was not the same as TF 2-16's target and was still safely in our sector.

The no movement at night policy was there for a reason. If it moved, it could die. Every night seemed to offer some new form of excitement.

**Botulism Shots**

The Army had a limited amount of botulism vaccine—a total number of about eight thousand doses. The decision was made to immunize troops on the basis of priority: from the front lines to the rear. I remember thinking, "Lucky us. We get more shots and the guys in the rear get pizza and PXs." There was some confusion over whether the immunization was voluntary or not.

The drug was never approved by the Food and Drug Administration. It was used for about twenty-five years by personnel who worked around clinics with botulism studies. The truth was there was never a requirement or need to mass produce the drug or to process it through all the red tape to get it approved for consumer use. Once I explained this to my soldiers, there was no problem with them receiving the immunization.
They also signed a routine agreement making the immunization a voluntary effort. I hate immunizations with a passion. This particular one on a cold, damp day, outdoors, was no exception. The thought of dying from a biological agent was worse. As luck would have it, some trooper called home on a commercial telephone after the war to report we were forced into taking experimental drugs.

About the same time we received the vaccine, the mail and hot chow started up again. These two items always seemed to take a minimum of forty-eight hours to catch up to us every time we moved. In this case, the mail and chow seemed a small reward for another enduring day. A soldier made a comment about the chow being more experimental than the vaccine.

1st Cavalry Division Reconnaissance in Force

The night of 20 February, a company/team from the 2nd Sqdn, 8th Cav, 1st Cav Div, executed a reconnaissance in force in the adjacent sector. They coordinated with our battalion to ensure we did not confuse them with the Iraqis during the operation.

About 0200 hours, a fight broke out about ten kilometers forward of the berm on our right flank. There was a definite fire fight going on in the 1st Cav Div sector. The fight lasted for about thirty minutes.

Although some fratricide was involved, the Iraqis hit them with a anti-tank ambush and several soldiers were killed and wounded. A few tanks and armored vehicles were destroyed. It
was a real eye opener. We learned not to take anything for
granted forward of the berm.

Fratricide Prevention

The answer to fratricide prevention was training and good leadership. We had a "no night movement" policy in effect. This reduced the chance of a vehicle getting lost and straying into a fire zone. We had our vehicles marked with orange aircraft landing panels and the allied marking system on the sides. At night, we used color-coded chemical lights and flashlights to designate our units. We stressed over and over the ROE at all levels.

Since the incident on the berm involved an Apache helicopter killing several BFV crew members, everyone was sensitive to potential fratricides. Prior to our arrival at the berm, D Co, TF 3-37, attached on a mission with the 1st Sqdn, 4th Cav, had a close call. CPT Michael A. Scully, the commander, was given the mission to clear a group of buildings forward of the berm. A fire fight broke out, which resulted in our soldiers shooting at friendly soldiers with small arm weapons. Three soldiers were wounded. CPT Scully was sent to our battalion to speak to all the Company Commanders to share his experience with them. It was not easy for him to do this, but it was very important. I respected his effort. He did this voluntarily and I believe it was a significant factor in our avoidance of similar situations. My Company Commanders paid close attention to what he had to say.
Berm Mine Check

On the 20th of February, we were given the mission to sweep the berm of any mines or obstacles and to search for indications of enemy activity in the form of foxholes or patrols. I assigned the mission to the Scout Plt with a platoon from the Engineer Co. The Scout Plt provided the security for the Engineer Plt. LT Ward was in charge. The Engineer Plt searched the berm, particularly the gaps, for mines and enemy activity.

The search took all day and revealed several old foxholes and a communication wire running to the north. We concluded the feasibility that the enemy was coming as far as the berm, or at least was there earlier.

Attack Helicopter Raids

Brigade used attack helicopters against the trenches on the nights of 21 and 22 February. They flew in from the south and went forward of the berm in our sector. We monitored their radio net and simultaneously provided support with our FIST vehicles.

All the FIST vehicles were sent to the berm on the nights we flew the attack helicopter missions. They used their lasers to shoot beams due north. The helicopter pilots used this to assist in their navigation. This was also a confidence-building exercise for the pilots since the fratricide incident involving LTC Hayles.
Tank Sweep Forward of the Berm

Brigade assigned the mission of sending a tank company approximately fifteen hundred meters forward of the berm as a show of force and to clean out the area directly in front of the berm. I assigned the mission to CPT Wock and D Co.

Statement by CPT Wock, D Co Commander, describing his company's tank sweep on 20 February 1991:

On the evening of 19 February at 2100 hours, LTC Marlin called me to his tank's location and gave me a verbal operations order for the next day. My mission was to move my company through lane sixteen, turn east, clear a twelve hundred meter wide zone of all enemy forces out to lane twenty, and return through lane twenty to my company's BP. To aid my mission, LTC Marlin gave me priority of the battalion's Mortar Plt and one platoon of engineers from A Co, 9th Engr.

At 0900 hours on 20 February, the platoons participating in this mission, CPT Bratina, and all the FIST officers were present at my rehearsal site. This rehearsal site was a seventy meter by seventy meter model of the berm site and the mission area. There was a thirty minute delay as we waited for the Scout Plt Leader, LT Ward, to arrive. The delay, however, was appreciated as it allowed the Mortar Plt Leader, LT Powers, the FSO, and FIST officers to be read in on the fire support plan. I began the rehearsal. We rehearsed the actions on contact, the formation we would use, and the smoke screen the Mortar Plt would lay down to obscure our left flank once we turned east. What we did not rehearse were the Engineer Plt actions on dealing with contingency plans. Our time to cross the Line of Departure (LD) was set for 1300 hours on 20 February.

At 1300 hours, D Co entered lane sixteen right on schedule with the Mortar Plt firing its first round. We turned east and assumed a company wedge formation with 3rd Plt on the left, 1st Plt in the center and leading, and 2nd Plt on the right nearest to the berm. Each platoon had one squad of engineers attached to them and trailing in an M113 APC. As we began moving east, the FIST officer began building a mortar smoke screen on our left flank. We found foxholes near the berm and destroyed them with the tank tracks. We also found numerous communication wire lines on the ground.
We wrapped these wires to the tank tow pintles and continued to drive off in hopes of causing some poor Iraqi soldier to come out of his spider hole to chase his mobile field telephone.

Diagram #17. D Co's Tank Sweep.
Our company frequency was 41.7 and I was picking up clear radio transmissions from an American tank range in the FRG. We could tell it was from the FRG because the administrative traffic on the radio perfectly described Grafenwöhr (from the weather data they passed to a description of the motor pool areas). At any rate, this radio traffic was a distraction hampering some of my unit's command and control.

Throughout the mission, excited tank commanders reported seeing various "hot spots" through their tank thermal sights, but I would not let them engage until they had positive identification (ID) of the targets and their wingman verified their spot report. We probably saved the U.S. taxpayer some money using this technique as a rusting five gallon can at two thousand meters in the sun looks just like a dug-in infantryman. I will not say I did not understand my Tank Commander's initial nervousness. After all, this was their first combat mission; we were in MOPP level 2; and we had someone in Grafenwöhr telling us the barometric pressure and temperature half a world away.

I received a spot report concerning two buildings within our zone. I observed the two buildings and quickly realized I would have to send in a dismounted engineer squad to clear them. I did not like the situation. There were simply too many nooks and crannies an enemy could be using for shelter in these two buildings. So I ordered the 1st Plt Leader, LT Peter J. Lee, to have one of his tanks fire one HEAT round into the concrete block building. Since I could see daylight through the building's sole window, I reasoned the HEAT round would only punch a four-foot hole in the wall. SFC James' tank belched a nasty looking tongue of orange flame. Voila! One second later, there was no more building. All that remained was a cornerstone ten feet high.

Satisfied we had impressed any Iraqis lurking about in the area, I ordered an Engineer Squad to dismount and clear the remaining building. I repositioned the 3rd Plt so the Engineer Squad did not mask the tanks overwatching their clearance operation. An Engineer Squad dismounted and began running full tilt towards the building. About half of the squad hit the ground and set up an M60 machine gun in overwatch. The other half of the squad realized it probably was not wise to run up to the building. They began to bound forward using three to five second rushes.
About this time, I heard LTC Marlin on the battalion command net demanding to know what we had shot at. I tried to tell my XO, LT Leonard, to tell LTC Marlin we just engaged a suspected enemy position. Unfortunately, I had more FRG tank range radio traffic at the same moment. Apparently, LT Leonard did not monitor my transmission, for he told LTC Marlin, "We engaged and destroyed one building, time 1350 hours, continuing mission, over." I knew immediately this was not the explanation the Battalion Commander wanted to hear. So, for the next five minutes, LTC Marlin reminded me of my responsibility to let him know when and at what targets I intended to fire.

Shortly after the discussion with the Battalion Commander, two men of the Engineer Squad reached the building, kicked in the door, and began clearing it. Once the building was clear, they investigated a two-man fighting position and the debris of the former concrete block building. Once they cleared the area, one of them placed a satchel charge next to the remaining building. It took me a second or two to realize the engineers were planning to demolish the building. I quickly called LTC Marlin and asked him if he wanted the second building destroyed. LTC Marlin replied, "Negative!" Just as he answered, an engineer pulled the primer on the charge, igniting the time fuse. This was not a good development. Now I had a demolition charge set to blow up a building I was not supposed to destroy. The engineer who had set the charge turned around and was about to run out of the blast area when I ordered his Platoon Leader to cut the fuse and retrieve the charge. The Engineer Plt Leader succeeded in having the fuse cut and the charge retrieved.

The mission continued. We found a few oiled roads along with several dirt piles about one and one-half meters high. We probed a few of the piles to make sure explosives or vehicles were not in them. The results were negative. As far as I could tell, these piles looked like hasty defensive positions for convoys along the road.

In any case, we soon reached lane twenty. We executed a short halt, cleared all weapon systems, and sped through the lane to the relative safety of friendly lines. To some, this mission may seem to be insignificant; but it was clearly one of our more important missions. With this mission, the entire battalion saw the value of controlled fires. More importantly, the Tank Commanders of D Co came to grips
Statement by LT Powers, the Mortar Plt Leader, describing the Mortar Plt's actions in support of the D Co tank sweep on 20 February 1991:

On the 19th of February, we moved back to rear position. Again, at night, we moved up to occupy a firing position to support the Scout Plt. Again, nothing happened at night. We were all very aware the enemy could move in at night.

On the 20th of February, we had the mission to smoke, or provide a smoke screen, for D Co. They were going to sweep forward of the berm. We set up and fired for observation. The only problem was White Phosphorous (WP) registers with High Explosives (HE). This is common SOP for mortars. When I said, "Fire," my adjusting gun fired an HE round. We all watched for the smoke, as did LTC Marlin. There was none. I asked my Plt Sergeant if he fired an HE round. Sure enough, he did. We were fortunate LTC Marlin did not notice and we quickly fired a WP round at thirteen hundred meters. D Co cross the LD and provided a most impressive smoke screen. It was the best I had ever seen. The D Co Commander was also impressed. I could not see over the berm. I could only see the smoke rising over the top.

We fired about one hundred twenty rounds of WP. LTC Marlin did not want me to fire so many rounds. His only guidance was to screen D Co. CPT Wock said, "Don't worry, Thumper, you will always get more rounds from the Support Plt." The night occupation was uneventful.

On 21 February, we fired to destroy a building suspected of housing an Iraqi LP/OP. Everything went well except for the initial rounds. One of my guns fired a round eighteen hundred meters short of the building. This was in front of the Scout Plt on the berm by about sixty meters. The Scout Plt very calmly inquired about the source of the rounds. We told them to keep their heads down. We fixed the problem and destroyed the building.
Air Strikes

On the last three to four days on the berm, the number of air strikes increased dramatically. CAS struck the trenches and the targets selected by us and brigade. We were systematically working on the breach site and the defenses around the breach site.

On any given day, it was not unusual to see dozens of aircraft overhead and to hear them at night. Both the sound and the flashes of light reached our position. The pilots also gave us accurate BDA on the effects of our artillery. The air attacks were reassuring and were a confidence builder for our soldiers. We knew we commanded the skies.

On the last two nights, the B52 bombers struck the trench line. Twenty kilometers away the effect was heard and witnessed. On the night of the 23rd of February, two "blue lights" (15,000 pound air-fuel explosives) were dropped on the trench line and fortifications. The flashes lit up the entire sky twenty kilometers away. I truly do not know how the enemy withstood what we dropped on them.

Maintenance and Recovery

After the movement from the TAA, we were not in good shape. We had approximately twelve tanks and five of our six M88s deadlined. Division became involved and BG Rutherford chaired his second maintenance review with all the 2nd Bde key personnel.
The soldiers were doing a one hundred and twenty-five percent effort on their tanks. The soldiers were not perfect, but they were not the major problem. At this point, we had submitted over two thousand and one hundred new requisitions and received only a six percent fill. The tangible support our support battalions provided came in the form of correct job orders and requisitions. Paper was not a good substitute for parts. Finger pointing was not the answer—we knew this would have been counterproductive and deliberately avoided it. The excessive amount of PLL we brought with us and were using was not being replaced.

With the addition of the two chemical companies and all the previous attachments, the battalion was now maintaining a total of over two hundred armored track vehicles and over two hundred wheeled vehicles. This was twice the normal size of the battalion, with only a twenty-five percent increase in maintenance support. The attached units used a significant portion of our repair parts at a time when replenishment of repair parts was non-existent.

We were still reporting by the book. Of the twelve tanks I reported deadlined, eight were operational and could fight. We stuck to our guns, and this is what the COL Moreno and I insisted on. MAJ Garrity, CSM Stockton, and I had many late night sessions on maintenance. We began visiting other units and friends to locate parts. I even dispatched CSM Stockton to some old friends with letters of introduction seeking fuel pumps, tank air filter seals, and scavenger systems. CW3 LeMay
took our maintenance posture as a personal affront; he was extremely proud of his responsibilities. CSM Stockton was extremely technically qualified. I had a round table discussion with both of them to work out solutions. Teamwork—mission—professionalism. CSM Stockton wanted me to replace MSG Patton with SFC (P) Ingram. I informed CSM Stockton I would not make any changes until after the war.

Statement by CPT Hodge, the BMO, describing his maintenance efforts on 25 February 1991:

There was an enormous amount of pressure in the days leading up to the start of the ground war. COL Moreno and LTC Marlin wanted as many vehicles operational as possible. COL Moreno even flew to the ALOC/UMCP to tell CW3 LeMay and myself his desire in person. His main point was we needed to be more aggressive in making the five to six tanks we had deadlined operational. At the time, I thought I was giving all I could to our cause, both physically and mentally. I realized later I could have done more. I was not the only one under a tremendous amount of pressure and stress.

Due to a mix-up in communications between myself and CW3 LeMay, we accidentally reported a tank, A12, as being operational when it was really deadlined. The deadline report was corrected within a few hours, but not before I was on the recipient end of a few lectures from senior ranking officers. I realized from their tone it was critical for each vehicle to be combat ready. As one might expect, there was a lot of tension in the air because of the forthcoming attack. I, in turn, let CW3 LeMay and the maintenance team chiefs know how important accurate reporting was to me and them.

Three days prior to G-day, almost half the TOC's M577 series vehicles became non-operational. For whatever reason, we simply could not keep fixing the S3 Section's M577s as fast as they were breaking. I could only speculate on their operational readiness rates during the war. Our tanks, on the other hand, performed well during the war and definitely reached over ninety percent. Our soldiers gave one hundred and fifty percent and kept us in the war. I was
extremely disappointed by the performance of the theater's CSS operations with regard to maintenance support and repair parts.

Our wheeled fleet was doing remarkably well. SFC Martindale was doing a superb job of keeping things operational. This went unnoticed by most people. I believe we had the highest wheeled vehicle operational rate in the division. The major weapon systems received more of the attention, and a large part of this was inappropriately negative. Most of the soldiers knew all the tricks: drive the tank with the gun tube over the front right fender so the sand kicked up by the track is deflected by the turret and does not fall into the air cleaner vent; correct cool down times; use an issue desert scarf to shield the air vent from the heavy sand; check everything every time the vehicle is halted.

We deployed to the desert with at least five hundred miles of track life on each tank. After the rehearsals and our move to the berm, we had already accrued almost four hundred per track vehicle. At the time, this was not a major concern; after all, the breach site was only about sixty kilometers in length.

Batteries were consumed by the tanks. Unlike the M1A1, the M1 fuel nozzle was not soldier proof. Eventual fuel residue build-up on the fuel nozzle resulted in excessive start-up times for the tanks and more wear and tear on the batteries.

The meeting with BG Rutherford did nothing more than get a general officer involved in decision making with regard to major assemblies needed to fix the tanks. After six weeks of being in
the desert, our logistics system required a general officer's personal involvement to get things accomplished. Repair parts distribution outside the unit level was the major problem, not operator maintenance.

I discovered the true meaning of "taking care of the soldier" in the desert. The soldier wanted the equipment and repair parts needed to keep him alive. The resources used to support things like a PX, telephones, USO shows, and movie theaters are seen as a misuse of critical resources and transportation when the soldier cannot get transport for his vehicle or his repair parts.

**Tearing Down the Berm**

The engineers began widening the gaps in the berm. After the attack, the gaps in the berm and the cleared lanes became the Main Support Route (MSR) for the entire VII Corps.
Armored Combat Engineer (ACE) vehicles plowing down the berm and widening the gap in front of BP 23. The ACE was another new piece of equipment fielded at Ft. Riley for the Engineer Bn before we departed.
Last Letter Home

On the day and night of the 23rd of February, I truly believe every soldier wrote his last letter home. We were confident, but not overly optimistic about the next day's attack. If the Iraqi army could not match us with conventional weapons, there was still a very real threat of chemical weapons. I wrote to my wife and parents. These were sad letters, but letters with a purpose and ones basically saying we were going to do this right the first time so our children would not have to come back and do it for their generation.

Statement by LT Powers, the Mortar Plt Leader, describing his actions and intentions the night of 23 February 1991:

On the 22nd of February, we moved to execute a registration in support of the Engineer Plt doing a dismounted patrol about one kilometer in front of the berm. We registered, but the patrol did not require any fire missions. We grew more secure in our positions on the berm. We all hoped the Iraqi army would pull out. This was not the case.

On the same day, I wrote a last note to my wife Carolyn explaining to her we were about to start the battle. Sure enough, on the evening of the 23rd of February, we were told we were attacking on the morning of the 24th of February. I went back to my platoon and notified them. I told them to get ready to go into battle. We all went back to prepare ourselves.

We began taking our nerve agent pills forty-eight hours away from the LD time. Despite all the rumors circulated by the soldiers, nobody was worried about their future sex drive at this point—everybody took the pills. Nobody slept much on the
last night. At the same time, we were actually tired of waiting. The attitude was one of "Let's get to it!"

Chaplain Bacon made the rounds on the 23rd of February. He visited all the units and provided services for the soldiers desiring to participate. A somber mood was noticeable.

Statement by CPT Bacon, the Battalion Chaplain, describing his actions on 24 February 1991:

We started moving toward the breach site this morning. It is sunny and windy after an early morning rain. The soldiers say, and I agree with them, that this has to be the wettest desert in the world.

Last night, LTC Marlin asked me to come to the TOC and offer a pre-battle prayer. It was pitch black as I followed the tail lights of Oscar's [CPT Hall] HMMWV to the TOC. When we arrived, everyone was standing around in small groups talking quietly. The conversations were easy and light hearted. No one seemed to be the least bit nervous as we shared news with each other.

After the evening's business, LTC Marlin asked me to pray. I prayed for God to be with us, to protect us in this time of danger, and I prayed for our success. I asked God for wisdom, courage, and strength for our leaders. Finally, I prayed that someone would be with our families back home while they watched the news of the battle.

Once I finished at the TOC, I followed Curt [CPT Torrence] back to Charlie Co. A few of the soldiers in the company asked that I come by and see them. These were the guys who would be out in front, going toe to toe with the Iraqis. They definitely needed the peace of God's blessing. The mood in Charlie Co was probably like the mood in Gethsemane. Our tankers would rather that they didn't have to drink of this cup; yet they would willingly do so. No one in the battalion has refused the cup today.
The Attack Plan

We made a few last minute changes to our attack plan. The battalion sector was reduced to a narrow three kilometer width with the understanding we would execute a guard mission oriented to the east. The two chemical companies would occupy the berm and generate smoke as part of the overall deception plan.

The division wanted us to occupy our sector on the 24th of February, then execute the breach on the morning of the 25th of February. I instructed the commanders on the changes and we held a short rehearsal with a "rubber duck" (sand table walkthrough) session the day prior to the attack.

The Scout Plt would lead us all the way to the trench works. A Co would follow the Scout Plt, go into overwatch for C and D Co, and then form a guard mission on the right flank. D and C Co would bound forward and C Co would build a guard force on the right flank tying in with A Co. B Co would follow in reserve. The A Co, 9th Engr Bn, would trail B Co and have a secondary mission of EPW support.

Intelligence Outlook

From the information we had, the enemy unit located immediately to our north was the 48th Iraqi Inf Div, regular army; and to the northeast was the 26th Iraqi Inf Div. The information on the 26th Iraqi Inf Div had just come to light
through interrogation of EPWs. Our breach was to be executed along the division boundary of the 48th and 26th Iraqi Inf Divs instead of brigade boundaries within the 48th Iraqi Inf Div. The breach was to take place in the vicinity of grid NT8035.

To the battalion's east were elements of the 1st Cav Div. In the days leading up to G-day, the 25th Iraqi Inf Div was very aggressive with combat actions in their security zone. As a result, our division chose to narrow the battalion's sector from about fifteen kilometers to three kilometers and place a guard mission on the flank.

Imagery of the enemy's defensive line showed a sparsely fortified front line, particularly at the breach site. This indicated the possibility of light resistance or possibly a fire sack.
Diagram #18. Enemy Dispositions at the Berm.
D Co would do a feint at the trench line while the breach force attacked. Our company XOs joined up with TF 3-37 and TF 2-16 to serve as guides at the link-up points to get us through the breach lines.

Diagram #19. Order of March Through the Breach.
Statement by CPT Williams, the Battalion S2, describing the weather and enemy dispositions on 24 February 1991:

On the morning of 24 February 1991, the area was experiencing unusual weather. In the early morning, there was fog and cloudy skies, thus allowing us to move forward without being observed too closely. The winds were blowing from the south for the first time since we arrived in BP 23. This did not favor the use of chemicals by the enemy. Reports from EPWs indicated the enemy's firing units did have chemical munitions. The temperature was cool, making the wear of our NBC protective overgarment more bearable.

Imagery indicated the 48th Iraqi Inf Div did not have obstacles, wires, or mines to their front. This was inconclusive because wire and mines were difficult to detect through imagery.

An aerial photo taken after the breach of part of the Iraqi trench line. Tank and artillery positions supported initial trench works from the rear.
Reports from brigade indicated we should expect a high number of enemy EPWs. Most of us did not comprehend what a "high number" meant. Also, we felt our attack into Iraq would meet a great deal of resistance as they would defend their country. The battalion plan for handling the EPWs was to use A Co, 9th Engr Bn as the collection team for the battalion.

Scout Platoon Leads the Attack

Statement by LT Ward, the Scout Plt Leader, describing his actions on the 23rd of February 1991:

At 1600 hours on 23 February 1991, I received an order to return to the berm immediately and to link-up with the Chemical Platoon on my right flank. As I issued the order, I was impressed with my crews. HQ231 had a thermal sight failure and both HQ232 and HQ234 shot frequently with manual power due to azimuth drive failures. All the crews refused to be left behind and readied themselves for the attack. They were all hard-core soldiers.

At approximately 1800 hours, I had the platoon set in position. The link-up was made with CPT Brian A. Butler, the Chemical Company Commander. The total vehicle and personnel count for the platoon at the time included six BFVs, one M113 APC, and thirty-two soldiers. We remained on the screen line all night and watched the fireworks—a massive artillery preparation that lighting up the night and making night into day. Other than friendly fire, the night was actually quiet, with no enemy spotted.

At 0430 hours, we moved from our location on the berm to prepare for an SP at 0600 hours. Initially, the platoon had a hard time crossing the berm and moving into our two-section formation (double-play) due to the pitch dark and fog drifting into our sector. We could barely see one hundred feet to our front even with our thermal sights.

As 0515 hours approached, the platoon finally began movement in the desired formation as we crossed PL Vermont and then PL Minnesota. Between PL Minnesota and PL Chevy, I had to stop quickly in order to cut some wire running across our sector. After PL Chevy, I reported a false mine field. At PL Kansas, we had our first contact.
At 0815 hours on 24 February 1991, I received a report from HQ233, SSG Michael J. O'Hara. He observed a large antenna and a bunker complex to his front. SSG Firestone was able to confirm the report for SSG O'Hara. The platoon continued their movement and reports started to flow across the platoon radio net.

SSG O'Hara reported he had spotted two dismounted personnel attempting to escape from the bunker. Simultaneously, two vehicles were spotted moving north toward the enemy trench line. I ordered SSG O'Hara to fire on the troops. The first burst of 25mm was short, but it forced the enemy soldiers to duck for cover.

I decided not to risk moving too close to the bunker. I requested SSG Firestone call a mortar fire mission on the complex. After approximately three minutes, the fire mission was sent up and the Mortar Plt prepared to fire.

During the three minutes the mission was sent up the chain, D Co pulled on line with my platoon. As the Mortar Plt fired and the first rounds fell, HQ233 and D11 (commanded by LT Lee) found themselves within fifty meters of the impact. At this time, I terminated the fire mission.

Following the mortar mission, SSG O'Hara continued to place fires on the dismounted team. Within minutes, the rest of the battalion began to close on PL Kansas along with an Apache helicopter. The enemy finally decided they had had enough and moved towards our position with their hands in the air. HQ233 and my track (the Lone Wolf) pulled forward of the battalion to take the EPWs. SSG O'Hara, PFC Martin L. Liutermoza, and PFC Michael Johnson dismounted their BFVs and searched the first prisoners. After searching two personnel, SSG Michael D. Myers and his radar crew escorted them to the EPW collection point.

We received orders to move on to PL Birch and PL Plum. At PL Birch, we were surprised to find ourselves sitting two kilometers from the enemy trench line. I had a great view across the brigade front as hundreds of EPWs surrendered to different units. We went forward and assisted D Co for about an hour in taking several more EPWs. We then received information we would cross the breach today.

The first LD time given was for 1300 hours. My platoon received instructions to move to the breach
link-up points. About half-way en route, we received word to move back and pick up fuel since the LD was moved to 1400 hours. We refueled and formed a column in preparation to move to the breach site.

A vehicle from the "Wolf Pack" moves into Iraq. Equipment was strapped to the sides of the vehicle for extra standoff; however, they were careful not to conceal the allied marking on the vehicle.
Apache Helicopter Support

The brigade had two Apache helicopters overhead in support of the operation. As we moved forward, they flew continuous support over the sector and stayed on the brigade command net. Their distinctive advantage was being able to see all the way to the breach site and provide immediate intelligence to the brigade and to our battalion. However, at times, we seemed to have two Apaches dominating a radio net designed to be used by six battalions in the attack.

I remember the disruption the two Apache helicopters caused during the operation. They kept cutting us off the net with their radio and were more of a hindrance than a help. COL Moreno kept getting upset at them, especially one "cowboy" pilot who went forward and landed his helicopter.

The Scout Platoon's Mine Field

Statement by SSG Hart, the Scout Plt Sergeant, describing an encounter with a mine field on 24 February 1991:

During the movement on 24 February, the Scout Plt was in the process of moving from PL Chevy to PL Kansas. At approximately 0715 hours, SSG Firestone reported a mine field at grid 834265. From his observations, the road to his front appeared to have small holes dug across its width. After calling in the report to me, I decided to send the report to the battalion CP.

I discovered later I made a mistake by not requiring SSG Firestone to send a dismounted scout to verify the mine field. After the initial discovery, I instructed the platoon to continue north. As the battalion continued its movement, the Engineer Plt discovered the mine field was actually a couple of potholes along the road surface. By not confirming the mine field, I might have forced the battalion to
alter their course. Luckily, this was not the case and the battalion continued its movement to PL Kansas.

A Company Crosses the Berm

Statement by CPT Beals, the A Co Commander, describing his company crossing the berm on 24 February 1991:

Our ground offensive began on 24 February 1991 at 0500 hours. Our mission was to move north of the berm separating Saudi Arabia and Iraq. The battalion planned to achieve a sweep of the sector between PL Vermont and PL Minnesota. Our mission changed the night before. We went through the berm at passage point sixteen and set up a half moon defense five hundred meters north of the berm to overwatch the rest of the battalion. We relieved the Scout Plt and began to overwatch the rest of the battalion. Once the other Thunderbolts passed through our lines, we executed a wheeling motion to the right to link the battalion with the 84th Chemical Co dug in along the berm. We linked up with the 84th Chemical Co at 0800 hours. Our mission at this point was to secure the battalion's right flank. From PL Vermont to PL Minneapolis, we had one engagement.
A Co's tank, A24, engages an enemy bunker as the company advances into Iraq.

During this mission, the fog was thick in the morning and visibility was extremely low. I told my Tank Commanders to scan in thermal, but verify all targets in the daylight channel and report before engaging. SFC Velasquez F. Fernandez called in a spot report of one vehicle with an antenna twenty-two hundred meters east of our position. LTC Marlin took the report and gave me permission to engage. I gave SFC Fernandez permission to fire two rounds of HEAT at the suspected target. The first round was over-line. The second round was a hit. When the sun rose and the fog burned off, visibility was better, and the target became clearer. It was, in fact, a bunker with a pole resembling an antenna. The heat in the bunker made it look like a small reconnaissance vehicle in our thermal sights. We had successfully eliminated an enemy reconnaissance team. We never got close enough to do a BDA.

Around 1030 hours, LTC Marlin informed me our mission was changed. The actual LD on the breach site was moved to 1300 hours (one day earlier). He ordered
me to take the company to attack position 33 for refuel and to be ready to launch at 1300 hours. A Co was in attack position 33 at 1100 hours and began to refuel. By 1230 hours, we were completely refueled and had executed critical maintenance checks (oil levels and air filter checks). By 1300 hours, we were ready to move again.

LTC Marlin called and told the commanders there was a delay. The new LD time was now 1500 hours. Emotions were running high. The "pucker factor" grabbed us and the two hour wait seemed to take forever. A combination of MOPP 3, the uncertainty over chemical agents, and our one engagement had us pumped up with adrenaline. But we were a full day ahead of schedule and everything was going flawlessly so far. I remember thinking of all the hard training at NTC and Ft. Riley finally paying off in big dividends. I thought A Co was ready for the LD time. I just wanted it to come quicker.

Mortar Fire Mission

Statement by LT Powers, the Mortar Plt Leader, on a mortar fire mission executed on 24 February 1991:

At 0600 hours, the morning of the ground attack, the Mortar Plt launched across PL Vermont behind B Co. Our mission was to support the Scout Plt and D Co with 107mm indirect fire. All was going according to plan. At approximately 0901 hours, the Scout Plt reported enemy dismounted troops in front of their advance. The Scout Plt contacted me on my internal platoon radio net for a call for fire on the enemy. SSG Firestone of the Scout Plt called for the fire. My platoon immediately went into action. We executed a "hip shoot" by transitioning from maneuvering to firing a mission. We had rounds fired on top of the enemy within two and one-half minutes after receiving the call for fire. The only problem with the mission was SSG Firestone did not advise us the mission was a "danger close" mission of less than one hundred meters from friendly troops. Several rounds landed in front of D Co and the Scout Plt. One landed sixty meters in front of SSG O'Hara's vehicle. The enemy soldiers surrendered and we ended the fire mission.

 Shortly after, C Co, LT Weiner, called me for another fire mission. He had enemy soldiers running from his positions. Again, with great determination and a great sense of urgency, we had rounds on target
within two to three minutes after the call for fire. Our rounds landed fifty to seventy-five meters in front of the enemy soldiers. They immediately surrendered. C Co ended the fire mission and we moved to get in position behind the Command Group.

C Company Gets Delayed

Statement by CPT Torrence, the C Co Commander, describing his company’s actions crossing the berm on 24 February 1991:

C Co crossed the berm at 0630 hours. We were a half-hour late due to being lost and not finding the gap in the berm. We crossed the LD and moved into a company wedge. The mission was to move forward on line with D Co and then shift to the east and provide a flank guard by tying in with A Co in the south and D Co along PL Kansas. Our most likely threat was armored vehicles to the east. At approximately 0700 hours, we linked up with D Co and started the move north by bounding platoons one thousand meters each bound. As we closed on D Co, we came up behind them and had to shift to the east. We continued to bound with D Co and started to drop off platoons with orientations to the east at PL Minnesota at 1000 hours. The rest of the company continued to move with D Co as we attacked to PL Birch. We were positioned for our guard mission by 1100 hours. On our way through the sector, we encountered our first yellow beer can shaped duds. We were not trained in their ID. We decided it was in our best interest to leave them alone.

LT Weiner’s tank broke down but he continued to relay radio traffic from his position. As we occupied the hasty defense, 1st Plt saw the first group of Iraqi soldiers. They moved out of a bunker complex. The first group consisted of seven or eight prisoners, then fifteen, then twenty. We ended up with over sixty EPWs. They continued to stream toward the 1st Plt. At approximately 1115 hours, I ordered 3rd Plt forward as the first prisoners approached the company. When the EPWs saw 3rd Plt stop, they began to move towards the tanks. We fired warning shots as they approached the tanks and they began to drop to their knees with hands up. We began a detailed strip search of each prisoner. As that started, 1SG Macasio with the Medical Plt, and the mechanics came forward to guard the EPWs. I moved 1st Plt forward to the ridge fifty meters north of PL Birch to guard the collection
site. 2nd Plt also had enemy activity in their sector. They continued to move to the south, bypassing our position.

We made a hand-off of the EPWs to the engineers shortly before 1100 hours and were ordered to move to refuel at attack position 33. We moved as a company to attack position 33 at 1200 hours. The fuel trucks for C Co were lost, so we borrowed fuel from the A and B Co trucks. At 1300 hours, we were ordered to re-occupy the positions along PL Birch. We occupied it and saw hundreds of EPWs moving toward us in the northern valley.

After we began to take prisoners, I met LTC Marlin at the Forward Line of Troops (FLOT). I asked permission to continue north as I felt we could take the Iraqis head-on easily and be a day ahead of schedule. He said, "No," and we had to go through the breach.

At this time, nature called. While taking prisoners and maintaining a holding position three hundred meters from the enemy bunker, I had to relieve myself. The timing was all wrong and I had to get rid of about thirty pounds of equipment in order to leave my mark in Iraq. Afterward, while manning my tank next to 3rd Plt, I took the first machine gun burst. The loader from D31 accidentally leaned on his M240 machine gun and sent a burst of tracers along the base of my tank. I did not even realize it was friendly fire until SFC Day informed me later. He ordered his loader to unload the weapon and he kept it unloaded for two days.

**D Co Attacks the Trench Line**

As D Co approached the trench line, four to six tanks, predominantly from LT Lee's platoon, began to fire at the trench works with tank main gun fire. The platoon was actually startled when they realized how close they were to the trench line. The engagement was brief and furious. The engagement went unnoticed by CPT Wock and I because of the slope of the terrain. This event, more than any other, would be the trigger for the mass surrenders that followed.

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Statement by CPT Wock, the D Co Commander, describing the feint against the trench line on 24 February 1991:

At 0600 hours on 24 February 1991, D Co crossed the LD at passage point sixteen in the berm delineating PL Vermont. The Scout Plt was already one thousand meters ahead of D Co. A Co was on the far right flank holding the battalion's shoulder about one thousand to fifteen hundred meters forward of PL Vermont. C Co was supposed to cross at passage point eighteen at the same time as us. Both C and D Cos were supposed to link-up in the dark, on line, on the other side of PL Vermont and continue forward to PL Iowa abreast. PL Iowa was four kilometers from the Iraqi 26th Inf Div's main defense lines. During the movement forward, the prescribed uniform was MOPP Level 3. We had been taking anti-nerve agent pills for the last two days.

Even the best-laid plans go awry, and this one was no exception. As D Co crossed PL Vermont, C Co was having difficulty getting to the LD. We continued forward, deployed in a line formation and slowed to five miles per hour (MPH) to allow C Co to come on line with us. By 0700 hours, we linked up and both companies began using bounding overwatch with successive bounds using platoons. Prior to the battalion's movement, this sector was not cleared of possible enemy patrols from the 25th Iraqi Inf Div to our northeast. Both companies bounded forward past A Co and we continued on the PL Iowa.

At PL Iowa, the Scout Plt reported seeing some type of antenna sticking out of the ground. We called artillery/mortar fires on the target. At 0840 hours, D Co was positioned on PL Iowa and we identified the "antenna" the Scout Plt had located. We also located several enemy trenches within five hundred meters of our position. I directed my 1st Plt to begin collapsing some of the trenches with tanks. D-12 was happily doing so when LTC Marlin ordered me to stop moving my tanks around. I promptly complied. Shortly thereafter, three mortar rounds impacted fifty meters from D-11 and D-66. My tank and the entire 1st Plt backed off one hundred meters. The mortar rounds were the result of the Scout Plt's call for fire on the "antenna."

Around 0900 hours, two EPWs were spotted about fifteen hundred meters in front of my position. They continued to walk until they got to the Scout Plt who were behind and to the left of D Co. At 0915 hours, LTC Marlin ordered me to take D Co forward and probe
the enemy defenses in the vicinity of PL Kansas. C Co was ordered forward as well. As we continued forward, the "antenna" turned out to be a flag pole.

We continued north. Within three kilometers, the sand began to descend steeply. We began identifying bunkers and trenches. Several of my tanks engaged and hit enemy bunkers. I looked to my left and I could see some five to six hundred armored vehicles facing north and stopped. Behind me hovered two Apache helicopters armed to the teeth. Before we knew it, small groups of fifteen to thirty men were appearing and walking toward us to surrender. Later, these little knots of men grew bigger and we were inundated with hundreds of EPWs. Occasionally, several would feign surrender and jump back into a bunker. These Iraqis were coaxed into surrendering by our firing HEAT rounds into the bunker.

At 1330 hours, D Co moved to attack position 33 to execute a hot refuel. We had just begun the refuel when LTC Marlin called and wanted D Co to return to its old position on PL Kansas. As the tanks refueled, they returned to the company's last location. By 1400 hours, we had completed the refuel and returned to PL Kansas. At 1445 hours, we moved to our checkpoint in attack position 33.

Statement by LT Lee, the 1st Plt Leader, D Co, describing his platoon's attack on the trenches on 24 February 1991:

During the initial attack on 24 February 1991 on the Iraqi trench line, my tank crew, D14 and D33, placed direct and indirect fire on the enemy, initiating the massive surrender of enemy troops before the 1st Inf Div breached the Iraqi defenses. Before reaching the ridge line overlooking the trench line on PL Wisconsin, we engaged two EPWs with machine gun fire and danger close artillery on their forward security trench.

As we maneuvered across the ridge and attacked toward the trench line, my gunner, SGT Ronnie Coates, my driver, SPC Alex A. Ramirez, and SFC James [D14] alerted me about enemy bunkers to our front. At this time, we were the lead tank and platoon for the company and battalion. The range to the bunkers varied from fifteen hundred to six thousand three hundred meters. As the 2nd Plt on our right moved on line, we identified numerous enemy running between the bunkers. SFC James reported a bunker on a hilltop to
our right front. I ordered SFC James to engage as 2nd Plt was moving forward. SFC James and I simultaneously engaged the bunker and suppressed it. When 2nd Plt came on line, they reported numerous EPWs surrendering from the area. Next, D14 engaged a bunker to our front and completely destroyed it with a HEAT round. Once D22 was in position, he engaged two bunkers and completely destroyed the bunkers and killed the occupants. My gunner and my driver alerted me of vehicle movement to our front behind the trench line. My gunner identified ten dug-in vehicles. We immediately called indirect fire. We suppressed those positions for the next hour with indirect artillery fire.

After engaging the bunkers, numerous Iraqis started to surrender. My driver counted over one hundred fifty EPWs coming from the bunkers and trench line to our front. After the initial fire for effect on the dug-in vehicles, I observed over three hundred EPWs surrendering from a bunker complex to the left of the dug-in vehicles. Although numerous EPWs were surrendering, we observed enemy moving from bunker to bunker, but not surrendering. When no more enemy surrendered, and we were ordered to move west for the breach, I reported enemy still in the trench and in the bunkers.

We completely destroyed two bunkers, killed about twelve enemy soldiers, and suppressed ten dug-in vehicles for an hour with indirect artillery fire. No Iraqis surrendered until we opened fire, then massive amounts of EPWs surrendered.
Diagram #20. D Company Attacking the Trench Line.
Statement by LT Timothy J. Brown, 2nd Plt Leader, D Co, describing his platoon's attack on the Iraqi trench line on 24 February 1991:

On 24 February 1991, D Co was leading the battalion when it made its initial attack on Iraqi positions along PL Wisconsin. The 2nd Plt was on the right side of the company wedge. I was in the middle of the platoon with SSG Tommy D. Franklin in D22 on my left and SFC Shepard in D34 on my right. We approached a hilltop, crossed, and observed a number of bunker complexes to our right front. The 1st Plt reported dug-in vehicle positions to their front as well. When we approached, a group of twenty-eight Iraqi soldiers, hidden off to our right flank, began walking towards us. My tank took these under observation and then took them as EPWs. SFC Roger A. Shepard assisted in covering me.

Meanwhile, SSG Franklin observed movement in a bunker to our front and asked to engage. I ordered him to fire. I observed as he blew up the bunker, and hundreds of soldiers held up white flags and began walking toward us. To our left, 1st Plt engaged bunkers to their front and I saw at least two hundred enemy soldiers surrendering. As 1SG Lightsey took the EPWs off my hands, my gunner observed a group of Iraqi soldiers who decided to turn around and go back and fight. We engaged them with a HEAT round and they disappeared. Soon afterwards, many more Iraqi soldiers surrendered en masse. The total number was nearly seven hundred EPWs by my rough estimate.

Statement by CPT Martin, B Co Commander, describing his company's actions at attack position number 33 on 24 February 1991:

The morning of the 24th of February was perfect for attack. It was dark, foggy, and windy. You could not see thirty feet. B Co was set to LD on PL Vermont by 0600 hours. We went to MOPP 3 at 0445 hours and started our move at 0500 hours. Almost immediately, we lost B-11 and B-22 to engine problems. We continued to PL Vermont and heard a report about C Co being late for the LD. We halted short of PL Vermont to allow C Co to link-up with D Co as they passed through passage points sixteen and eighteen, respectively. We were to follow behind C Co and D Co as the reserve.

Once C Co and D Co linked, we shot past PL Vermont and continued behind them all the way to PL
Minnesota. Initially, we picked up several targets to our front that were all friendly. The feeling of the unknown was very awakening to all of the crews. "Stay calm and make good decisions," was what I kept saying to myself. The rest of the way to PL Minnesota was very deliberate. We got set on PL Minnesota in a guard position around 0930 hours. At 1022 hours, we got the word we would execute the breach today. We moved to attack position 33 shortly thereafter. En route, we peaked a hill and observed the valley of the breach. To our front was almost an entire combat brigade on line prepared to pierce the enemy's front lines. The sight was truly awesome. The amazing thing was that all the units were in their templated place as planned. I am sure many people wondered why all of the Iragi soldiers were surrendering. The awe of the massed combat force was the decisive edge we needed to overwhelm the poor Iraqis.

Surrendering Enemy Prisoners of War

From a high ground position on PL Iowa, just east of the actual breach site, I was able to observe the entire brigade lined up against the trench line. It was an impressive sight. The Iraqis must have thought so also because they began surrendering en masse. They started out in two's and three's, and their number grew into the hundreds. I was both overwhelmed and encouraged by the sight. I remember thinking to myself that I hoped the Iraqi surrender would become contagious and there would be no need to fight these soldiers. They came from as far out as three thousand meters on foot. We became worried it would delay our actual LD time if we had to wait for them to walk in.

As the front line tanks received and secured the EPWs, A Co, 9th Engr Bn platoons moved forward to escort and guard them to the rear. The engineers were the only dismounted elements we had available. The EPW mission was originally intended to be a
secondary mission for the engineers. Demolition was their primary mission during all the rehearsals. The bottom line was we had not anticipated the large number of EPWs we were about to receive. We collected all we could prior to the 1500 hour LD time.

**Slow Start**

The guard mission on our right flank and the reason for the guard mission caused the battalion to move slower and more cautiously than the two TFs to our left. I was constantly pushing my soldiers forward in order to maintain contact with TF 2-16 on our left flank.

Statement by CPT Bond, the Battalion Assistant S3, describing the TOC’s action on 24 February 1991:

At 0500 hours, the TOC moved out to attack across the Iraqi border. About one hundred meters from the border (berm), HQ-31 broke down. We hooked it to an M1 tank (HQ-55) with a tow bar and towed it across the border. The vehicle would be towed during the first two days of the attack. Intense heat from HQ-55 burned away the trim vane and made working inside the M577, in MOPP 3, almost unbearable. By 1230 hours, we were in attack position 33. At 1512 hours, we launched the attack through enemy lines.

In early February, during rehearsals for the attack, MAJ Garrity stated the battalion would not make it to PL Colorado in ninety minutes as planned. He said he would jump off the dock at port naked if we reached PL Colorado in ninety minutes. By 1630 hours, we were on PL Colorado, and MAJ Garrity lost his bet.

**Attack Wow**

I was told to report to COL Moreno at approximately 1030 hours on the 24th of February. The site was between TF 2-16/TF 3-37 staging areas for the breach. When I arrived on my tank,
LTC Gross and LTC Fake were already there. COL Moreno said we had been given the green light to continue the attack today and the LD would be at 1300 hours. I remember being on the high ground and seeing the entire brigade of vehicles lined up perpendicular to me. It was an awesome sight. More than six thousand combat vehicles were ready to attack. Our meeting did not take long. I returned and passed the information on the radio to all the commanders. From my position on the flank (high ground) I could see the entire brigade and the entire trench line to our front. EPWs were still emptying out of the trenches and filing toward our positions. I began to move C Co and D Co back to their positions because I had prematurely allowed them to move to attack position 33. They refueled at this location, then returned to secure our front and flank. At about 1100 hours, COL Moreno called and again changed the LD time to 1500 hours.
Through the Breach

From my vantage point, the artillery landing in the breach was fierce. It left a continuous noise in the air and created a dust and sand screen obscuring the actual trench works. Artillery was also impacting beyond the initial trench to enemy positions supporting the front trench. Although I could not see the air strikes, I was witnessing their impact on the ground to my front. Two things not paying close attention to an Iraqi whipping out a white flag at the last minute are incoming artillery and a gunner viewing him through a thermal sight. Some of the Iraqis probably waited too long to surrender. At this point, the Iraqis in front of me had only two choices: die or surrender. There was no in between.

The Scout Plt passed through the lanes on the tail end of the two lead TFs. They were my primary intelligence on the real time status of the lanes. Once through, they reported to me and pushed forward approximately fifteen hundred meters searching for tanks and artillery positions. They became my "eyes" on the other side of the breach.

Statement by LT Ward, the Scout Plt Leader, describing the actions of his platoon as they passed through the breach on 24 February 1991:

After obtaining fuel in the vicinity of attack position 33, I had the platoon line up in a column formation. I received the orders to move my platoon to the breach link-up point. As we approached the link-up points, I observed a large amount of TF 2-16 traffic still moving north. Instead of waiting for them to clear, I decided to move through their columns in order to get to the link-up points in time. After passing through the first point, the platoon received
indirect rounds almost right along our column. I looked behind my track and watched as a round fell right in front of HQ233. I waited to hear a frantic call over the radio. Except for the steady reporting of lanes as they were spotted, there was nothing but silence. I found out later the round ripped a hole right through a 7.62 ammunition can approximately six inches from SSG O'Hara's head.

As soon as the platoon was set in place, LTC Marlin ordered us to move through the lanes. SSG Hart, SSG Flowers, SSG Merlon Maxwell, and the rest of Bravo Section had some problems moving through due to TF 2-16's slow rate of movement through the breach site. I knew we would have some problems linking up due to the large amount of traffic on the far side. We made immediate contact with the trail elements of TF 3-37 and TF 2-16. To link-up all my vehicles, I had each of them blow a quick puff of smoke in order to locate each other. Approximately five minutes after clearing the breach, the platoon was set in formation moving to PL Colorado.

On the way to PL Colorado, HQ 255, SSG Flowers' crew, reported spotting D30 artillery pieces and he was firing at them. He reported later only two enemy soldiers were actually manning the guns. He watched as his rounds ripped through their positions, killing them, and he felt moved at their display of gallantry.

The battalion pulled up on our rear and I received orders to move on line with the tank companies. After what seemed like only a couple of minutes, I found myself positioned on PL Colorado. As the tank companies began taking EPWs, my element moved forward of PL Colorado to set up a screen for the night. Moving approximately five hundred meters, we found ourselves in a large bunker complex.

B Section reported they had taken approximately ninety EPWs. Meanwhile, A Section was faced with a large bunker complex with a lot of enemy troop movement. Knowing we had to clear the area before nightfall, I ordered the vehicles to start firing at the bunkers. While white flags slowly arose from several bunkers, I said a quick prayer hoping the rest would do the same.

I kept observing a large amount of movement along the ridge approximately three thousand meters to my front. I was hoping that LTC Marlin would not leave us stuck in here tonight. I decided to fire at the long distance trenches in the hope the enemy troops
would surrender as nightfall was fast approaching. I remember watching one individual jump about five feet in the air as an HE round landed right beside him. Seeing the HE rounds exploding nearby were not forcing a surrender, I instructed HQ233 to place Tracked, Optical, Wire Guided Missile (TOW) shots into the bunkers. The sight of the TOW turning a bunker into a fireball must have brought some sense to the enemy dismounted soldiers. Everyone from the ridge started to wave white flags and walk toward our position.

At this time, LTC Marlin answered my first prayer and told me to pull my element back to link-up with A Co. I told him I had approximately thirty EPWs moving toward my position and I was going to wait for their arrival before moving back. I contacted B Section. They were able to pass their EPWs off to a tank company and then we made our link-up with A Co in PL Colorado.

I wondered how my guys would react to the large number of EPWs moving our way. I swelled with pride as my soldiers acted as they were trained—"as professionals." They searched and separated the EPWs in a very secure and efficient manner. I found out the EPW link-up team would be delayed several hours. We would have to guard the EPWs through the night. Two of the EPWs were wounded with fragments in the back and buttocks. My guys tried their best to treat them.

The night passed slowly and my guys guarded the EPWs through the night. One EPW was found who could speak English. He told me his tanks pulled out and headed north. Everyone in the division was waiting for the American arrival in order to surrender to save their lives. He spoke of nothing but peace.

At 0600 hours the next morning, the EPW team came by to claim the prisoners. The night proved beneficial. My soldiers gained confidence in themselves and observed the "Ragheads" as being normal soldiers. After this event, I did not hear the term "Ragheads" used. After passing the EPWs, we moved to link-up with B Section and prepare for the movement to PL New Jersey.
One of the Scout Plt vehicles in the vicinity of the breach site. One of the plowed lanes is directly in front of them.

**Breach Lanes are Clear**

When COL Moreno received reports from the two TFs they were through the breach and the lanes were clear, I could see this was not the case. I deliberately waited until lanes O and P were clear before I gave the order to move. I wanted to make sure we had positive command and control on the other side of the breach. When I gave the word for the companies to move, they moved fast. We shot through the lanes and I witnessed forty-six tanks and six BFVs fan out on line moving at about
twenty MPH. They shot at anything resembling a potential threat. It was a powerful surge.

Statement by CPT Beals, the A Co Commander, describing his attack through the breach on 24 February 1991:

A Co was ready in attack position 33. C Co still provided flank protection but was in the process of collapsing into—or rather, through—the attack position. When I picked up C Co's movement through attack position 33, I gave the word for the company to move. We moved in a double column formation heading for crossing site I and J. The XO had already linked up with TF 3-37 and secured the lane. There was a lot of confusion in the move to the passage lanes. TF 2-16's and TF 3-37's wheeled vehicles were blocking much of our movement. The company kept close together and maintained contact.

We linked up with the XO and he led us to lanes I and J. LT Evans, 1st Plt, identified lane I. LT Ryan C. Kool had difficulty locating lane J because the engineers failed to mark the lanes in accordance with the brigade and division guidance and rehearsal. After five minutes, LT Kool called and told me he had found lane J, but the lane was blocked by an engineer unit. One M113 APC had thrown a track toward the end of the lane. I went forward to see the ground. I noticed the plowed tracks and no mines were visible in the soil. I told LT Kool to create a bypass ASAP. He asked to use his mine plows. I told him, "Negative, just bypass and create a new lane."
Diagram #22. A Co at Breach Lanes I and J.
Once past the breach site, we moved into an echelon right battle formation and almost instantly made enemy contact. Our contact reports included A-30 artillery pieces, trucks, bunkers, machine gun positions, and trench lines. The company opened up and the engagements were devastating. I called my Platoon Leaders and told them to control the fires and concentrate on destroying the artillery and bunkers. The tankers were firing many rounds but the reports were not coming fast enough. I chewed them out. A fired round must be followed by some type of engagement report. The reports started to come in sporadically at first. We engaged a number of trucks, two D-30's, and a couple of bunkers.

I saw some heavy machine gun fire from my right front. It was followed by a cone of coax from three tanks and the position was eliminated. Later, I tracked down the position in the dark and placed a thermite grenade on the heavy machine gun. We got to PL New Jersey and I told the XO to report it. We got set and the FIST, LT Marshall T. Michels, went into action calling in a 155mm fire mission on a trench line to our north.
Enemy armored vehicle destroyed by A Co during the expanding of the breach.

Thunder Six [LTC Marlin] called me and told me we went too far. I already knew this, but kept moving to maintain contact with Certain [C Co]. LTC Marlin set Battle Force [B Co] on the far right and the Death Dealer [D Co] on the left. Certain Death [C Co] was moving to link-up with Battle Force [B Co]. Ace of Death [A Co] got pulled over an additional two kilometers to maintain contact. I called LTC Marlin and told him I could not cover my sector. His answer was to attach the Wolf Pack [Scout Plt] to me. Later, I only picked up one Scout Section and they set up in my lines.
Linking the 2nd and 1st Plts, we spent the night uneasy. Bypassed snipers and fearing a counterattack kept most of us glued to the tank's gun sights. We took in fifteen EPWs right before dusk. Once set, I started to send platoons to the Forward Arming and Refuel Point (FARP) site the battalion set up. Around 0030 hours, we completed our Logistics Package (LOGPAC) and were set.

One thing sticking in my mind was the effectiveness of our long-range gunnery. My gunner, SGT Cody R. Gray, made a twenty-eight hundred meter shot with HEAT in high wind with no wind sensor. We got a direct hit on the second round. I felt the service ammunition was much better than the training rounds we were used to shooting.

Explosions and Explosives Everywhere

Duds were everywhere. As I drove through the breach area following the initial attack and made the rounds later, I observed dud Dual Purpose Improved Conventional Munitions (DPICM) and cluster bombs everywhere. We put the word out over the radio. I do not think in our haste and excitement we realized the significance of the problem. CPT Hodge's HMMWV drove over and detonated a cluster bomb during the initial attack. His vehicle was catastrophically destroyed. He and his driver miraculously escaped injury, but probably had to clean out their pants.

During the initial planning and execution, LTC John R. Gingrich, Commander, 4th Bn, 5th FA, made the recommendation not to fire DPICM at the breach site because of the high dud rate. His decision saved lives. The duds found in our area were fired by the British Army and the Air Force. Several soldiers in our brigade were injured in the trench area by these duds, and several in the 1st Bde were killed.
I realized had we been aware of the huge problem these duds would cause us over the next few weeks, we would have placed greater emphasis on the soldiers' ability to recognize and avoid them. At the TOC, I dismounted my tank to speak to MAJ Garrity. My driver approached me holding up a DPICM dud by the ribbon and asked me, "What's this?" I almost fainted. We extracted him safely, but it highlighted the magnitude of the problem.

Statement by CPT Torrence, the C Co Commander, describing his attack through the breach on 24 February 1991:

At 1440 hours, C Co pulled off line from the eastern screen to move to attack position 33. The battalion wanted us to pull out at 1450 hours, but I did not think we could make it in time. I wanted to pull forward and disregard the breach. I saw PL Colorado and could be there in fifteen minutes. The Battalion Commander said, "No," and we continued the breach as planned.

We arrived at attack position 33 on time and moved with the battalion in two columns. At our checkpoint, we linked up with our guide, SSG Waller. He left two days prior and followed TF 3-37 into the breach. On order, we moved into the breach. I felt very good. Contact was limited to EPWs and I could see little, if any, resistance. We hit the breach site in the same two columns led by LT Sullivan on the left and LT Wiser on the right. We passed through the breach without incident. As we cleared, we moved into a company wedge. All fourteen tanks were operational.

1st Plt had visual contact with A Co, and 2nd Plt had intermittent contact with B Co. 3rd Plt engaged first with HEAT rounds against trucks one and one-half kilometers north of the breach site. The site was full of confusion. Infantry vehicles were everywhere and there was no terrain to use as a reference. 2nd Plt was the first to identify our D30 battery objective. We fired on them and continued to attack toward them even though it was too far north of PL Colorado and our final position. We moved in a wedge right up to the edge of the D30's and found several destroyed and some intact. LT Wiser led a section of
tanks to complete the destruction with thermite grenades.

While this was going on, 1st Plt engaged targets north of the D30's and killed the first tank for the company. EPWs began to show up as we consolidated our position. The 1st Plt and Medical Plt began the evacuation of twenty to thirty EPWs with the assistance of the engineers. We also evacuated the first wounded EPW, a captain who died in transit to the aid station.

By this time, we established contact with B Co and continued moving to the west. We moved through the D30 artillery position, passing numerous Air Force dud munitions. At one time, my tank ran over one and we thought we were under attack. We moved about three kilometers and began to link our left and right limits. B Co continued to move with TF 2-16 and caused confusion as we tried to set our position. Daylight was ending and we started to set our positions. The 2nd Plt set on a bunker complex and moved forward because they were set on a reverse slope.

During the night, we executed a hot refuel and re-armed the platoons. It was very dark and the extensive amount of vehicles in the rear caused confusion. Finally, all our elements topped off and got ammunition. We bedded down for a few hours and prepared for the movement the next night. During the night, 1st Plt captured another wounded EPW who was treated by the combat lifesavers from C15 and C12. The EPW was evacuated. 1SG Macasio wrecked his 113 APC at night by driving into a B32 bomb crater, although sustaining no injuries.

The Magellan GPS proved to be invaluable for flank coordination. We were using eight-digit grid coordinates to tie in with our flank companies. Night was the same as day using this system.

**Bunker Busters**

We had trained our soldiers to be extremely violent but controlled. They understood the choice was either them or the Iraqis and no quarter would be given to an Iraqi soldier attempting to kill Americans. The two TFs executed their plan
to plow under the trench line after the breach. With our twelve plows and no infantry, we instructed our soldiers to plow under any bunkers. No mercy. This was done on several occasions. There was no way to check, but I have no doubt in my mind some Iraqis were buried alive in caved-in bunkers.

Statement by LT Law, the 3rd Plt Leader, B Co, describing his platoon's actions attacking through the breach on 24 February 1991:

On 24 February 1991 at about 1300 hours, B Co moved into attack position 33 to refuel and wait for our turn to cross the breach. As we waited, the last minute checks were made, reassuring words were spoken, and everyone wondered about the hours ahead. Being in MOPP 3, we were drinking water. The crew tried to eat some food, but our appetites were not up to par. CPT Martin was relaying information coming over the battalion net about TF 3-37 and TF 2-16 as they started their breach drill. We heard resistance was light throughout the theater, but we were most interested about the Iraqi positions on our front. We had seen the intelligence photos and heard the strength estimates, but what would we really encounter—troops eager to fight until death, or troops eager to surrender?

Finally, we got the word to roll! The company was already in our two-column formation with 2nd Plt and our Command Group on the left. The 3rd Plt and 1st Plt were on the right. Our platoon was to lead the column and link-up with 2nd Plt after the crossing. As we came out of our herringbone formation, we started to see the smoke and dust rising from the front. We linked up with the XO, LT Corbo, one kilometer to the front of our assigned breach lanes. He moved up. TF 2-16 was to be our guide. With all the vehicles moving forward, it was not hard to pick his tank out for the company was flying gold flags from the antennas.

About eight hundred meters prior to lane N, the company was ordered to halt in order to let the trail elements of TF 2-16 catch up. By this time, we saw the breach and realized all those long rehearsals and hours spent had finally paid off. Resistance was light. We were to move to PL Colorado. At about 1500 hours, B31 hit the breach site and moved through the
lane. The first B Co tank was in the breach. We started passing the cleared trenches and barbed wire defenses. One by one, the tanks cleared the site and my platoon moved to link-up with 2nd Plt in an echelon formation. Once we were cleared, the main priority facing the company was to link-up with C Co on our left and TF 2-16 on our right.

Armored vehicle destroyed by B Co after their passage through the breach.

The echelon formation was not working out, so we quickly changed, came on line, and continued the advance on PL Colorado. Soon after this change, several tanks started to send up spot reports of targets to our front. Our tank had two D-30 artillery pieces and 2nd Plt had some trucks and bunkers. As we moved into effective main gun range, the tanks started to open up. One hour into the battle, the company had our first kills. The two D-30's were destroyed, several bunkers were in flames, and we rolled on.

We encountered our first Iraqi EPWs soon after the bunker complex. There were a large number, still
clutching their white flags, who were rounded up by some of our BFVs. In order to pass them and still stay linked up, the platoon was split, with my wingman and I moving with 2nd Plt, and the other two tanks moving with 1st Plt.

A little after this, while moving to link back up, we encountered another bunker complex. As my wingman moved through, shooting his machine gun into the bunkers, my gunner, SGT Robert S. Reid, and I saw what appeared to be a white flag come out from one. We ceased fire on the bunker, overwatched it, and reported to the commander. After a few minutes of no movement, we fired again. By this time, the 1SG and mechanics were moving forward to help us clear the bunkers and we were to overwatch until they arrived. Just before they linked up with us, we fired again and the "white surrender flags" turned out to be three white birds. I reported it to CPT Martin and received several laughs about it later.

While this event was occurring, B33 was collecting fifteen Iraqis who were surrendering, and my Platoon Sergeant was engaging other bunkers. 2nd Plt was using their plows on other bunkers and calling in artillery, while 1st Plt was still rolling with TF 2-16. 1st Plt would later end up with TOW wires dangling off their turrets from TF 2-16 shooting over their heads.

Soon before nightfall, we halted on PL Colorado and set up in a hasty defense. My tank and B23 moved out and set up our M1 decoys eight hundred meters to our front. Once they were set up, our flanks linked in and fire plans were set, and the company started moving back to the FARP to re-arm and refuel. During one of these runs, my B34 tank blew an engine at the FARP and my Platoon Sergeant jumped into B33 to continue the fight.

While scanning our sector, we encountered individuals moving with weapons toward our decoy. They were about one kilometer out when we opened up with machine gun fire. We did not have any hits, but the Iraqis dropped their equipment and took off running away from us. After a few quick cat naps, we were once again planning for future operations and reviewing graphics. Before dawn, we were to roll towards PL New Jersey.
Statement by CPT Wock, the D Co Commander, describing his attack through the breach on 24 February 1991:

At around 1430 hours 24 February 1991, D Co still occupied a defensive line just forward of PL Kansas. Actually, we were just eight hundred meters short of the Iraqi main defense. At 1450 hours, LTC Marlin ordered us and the Scout Plt to begin moving west along PL Kansas to attack position 33, some three kilometers to the southwest. We moved immediately and arrived at CP 21 in attack position 33 at 1455 hours. There we waited and I tried to establish radio contact with my XO, LT Leonard. He had taken his tank, D-65, to link-up with TF 2-16 the night before so he could watch their progress in establishing breach lanes and act as our lane guide to lares O and P. I could not reach him all day, and then I realized the battalion, the night before, was ordered not to change frequencies as per the code book. Sure enough, LT Leonard was on the "proper" next-day's frequencies. We linked up with D-65 at passage point 16. He pointed out the orange panels marking the entry to lanes O and P.

We waited for LTC Marlin to give the word to execute with the line companies of the battalion in their combat columns behind their passage points. I listened intently for information concerning whether lanes O and P were cleared. Suddenly, a ragged figure emerged from lane O. He was too far away to clearly see. I kept thinking he was an engineer trying to indicate that lane O was closed. At this time, we got the order to execute. We began to roll to lanes O and P. As we got closer, I could see the lane figure was an Iraqi soldier attempting to surrender. He had his hands over his head, holding his surrender banner between them. This guy was perhaps the sorriest individual I had ever seen. He was earnestly trying to surrender and no one would take him. He ran to each of my approaching tanks, but none of the crews were about to stop for him. He attracted the attention of an Apache helicopter fixing him in its dust cloud from its low hover and would not land or let him run anywhere.

Nevertheless, my attention was riveted to the front as my tanks began entering the plowed lanes for O and P. There were tanks and B芙s everywhere. Off to my right flank, there was a Brazilian armored car burning from previous ground fire. I looked to my left flank as I exited lane P. I did not have visual contact with the rest of the battalion. All I saw were remnants of TF 2-16 and B Co, TF 3-37, cutting...
obliquely across my unit's front heading to my right flank. D Co quickly assembled into their assigned positions within a company wedge formation. We slowed down to a five MPH crawl as TF 2-16 cut across our front. As we slowed, I identified B Co, 4th Bn, 37th Ar, trying to get into its position some fifteen hundred meters to my left. We also began to acquire enemy targets three kilometers from our position. My gunner, SGT Richard R. Yankee, identified a D-30 towed artillery piece and I gave him permission to fire at it. He did and hit it at a range of 2,930 meters with one HEAT round.

After TF 2-16 cleared our front, we moved northwest to get to our position within the battalion diamond formation. We had not even achieved this when C Co and A Co reported crossing PL Colorado. Immediately, I directed my lead Platoon Leader, LT Lee, to identify A Co and maneuver to their left flank. He identified A Co and we moved up on their flank. As we did, we came abreast of a bunker complex with some Iraqi trucks nearby. Suddenly, a machine gun opened fire on D-22 from a bunker. D-21 returned fire with one HEAT round and two hundred rounds of 7.62mm machine gun fire. The enemy position was silenced.

The next thing I knew, A Co stopped and was reporting set. We came on line with A Co. I could not see TF 3-37, supposedly on our left flank. LTC Marlin called me and informed me TF 3-37 was some two kilometers to my left rear. I squinted my eyes in the general direction of the almost setting sun. In the distance, I could see the silhouettes of many vehicles. I moved D Co back two kilometers to PL Colorado and tied in with TF 3-37 on my left flank. A Co began setting in on my right flank.

Command Group Through the Breach

A gap was created between B Co and C Co. B Co stayed close to TF 2-16 and supported them as they moved down the trench line to the east. However, B Co's echelon formation was too sharply angled. As a result, a gap was created. I took the Command Group forward to fill the void. We managed to fill the gap
until we reached PL Colorado. I told CPT Martin to extend his company to the north.

Statement by MAJ Cook, the Battalion S3, describing the actions of the Command Group attacking through the breach on 24 February 1991:

The Command Group, minus HQ66, moved into position behind C Co, ready to move to lane K, as practiced many times prior to today. HQ66 moved forward to monitor the unit's move to the breach lanes.

As the battalion prepared to move forward, preparatory artillery was falling on enemy positions on the north side of the breach. The ground shook from the artillery shells exploding and the view was hindered by smoke and dirt in the air.

The command from Dagger Six [COL Moreno] came at 1500 hours to move. The artillery finished firing and the attack force was poised to enter the breach. As the lead vehicles began moving forward, the artillery fired again. Dagger Six screamed over the radio to halt in place. Initial confusion lay between the Bde Commander and the DIVARTY Commander. Rumor was the DIVARTY Commander miscalculated the firing. Unaware of the British preparatory taking place, the DIVARTY Commander gave the all-clear for the attack to begin.

At 1510 hours, the artillery finished. COL Moreno moved the brigade into action. As practiced, TF 3-37 and TF 2-16 plowed the breach lanes and moved through into Iraq. We moved forward with all companies on line.

The Command Group, while moving as planned behind C Co, received a call from LTC Marlin to move to his position behind B Co on lane N. Crossing to lane N was difficult since all elements were moving. This involved pulling out of the column without all the elements behind the Command Group becoming confused and following. Directions given, we moved to the right flank and continued slowly while the vehicles behind the Command Group passed to our left and linked up with C Co. We then moved away and fought our way across lanes L and M to link-up at the rear of B Co on lane N.

I remember at this point the difficulty of the M113 APCs keeping up with my M1. Between the
confusion of a "last-minute change," the difficulties encountered by crossing through two columns, moving around digging operations of an engineer element, and linking up with B Co and HQ66, I wondered the reason for the last-minute change. Looking around, I spotted HQ66 forward in the column. We continued through the breach without incident and radio traffic overloading the airwaves.

Diagram #23. The Command Group in the Attack.
As the Command Group cleared a breach into Iraq, we linked up with Thunder Six [LTC Marlin] and continued in a northeasterly direction. Our position was approximately one hundred meters behind the lead tanks and "riding the seam" between B and C Cos. As we moved forward, B Co, to our right, maintained positive control with TF 2-16. C Co moved with the intention of destroying D-30 artillery pieces in positions to his front. The seam between B and C Cos started to widen as B Co continued in an easterly direction and C Co to the northeast. I remember several calls made to C Co to shift forces to maintain contact with B Co. Seeing this was going to take time to correct, the Command Group moved forward to plug the gap.

We drove the gap initially with all four vehicles to PL Oregon. LTC Marlin and HQ66 moved to the northeast to check troop movements. The remainder of the Command Group moved forward to PL Colorado on the front line. Upon reaching PL Colorado, we left the gap as C Co pulled into positions. HQ66 and HQ230 moved to check positions along PL Colorado where A and D Cos were located. I took HQ65 and HQ32 and moved to check B Co to ensure a solid connection with TF 2-16.
TOC setting up for operations on the northern side of the breach. Notice the continuous haze in the air.

All this time, we continued to engage enemy positions along the hill mass to our front. We also dodged Cluster Bomb Units (CBU) as we moved. Our Air Force had left their calling card.

As B Co moved forward clearing bunkers, I moved HQ65 behind the center of their company. We all ended in the middle of the remains of several dead enemy tank positions with CBU ammunition laying around. HQ66 closed back and linked up at my position as the sun was going down. We then moved back to the TOC location. Upon arriving, I was directed to escort an ADA Plt forward to B Co's location. HQ65 moved the ADA Plt forward after dark.

As the TOC pulled into the area to set up, they received small arms fire from a lone bunker position. Everyone began to
low crawl and several soldiers returned fire. SGM Neel, the experienced combat veteran he was, grabbed a grenade and threw it at the bunker. Everyone waited for the detonation; then they realized he had forgotten to pull the pin in his excitement. He threw another one. The detonation caused the Iraqi soldier to surrender.

**Fire Support on the Trench**

LTC Fake and I had already agreed for my Mortar Plt to support his fight in the trench once we passed through the breach. I felt he would have a greater need for them based on our respectively different missions. The Mortar Plt would range our battalion also, but I knew there would be no speculation required for fires into the trench line to support his infantry. The two Mortar Plt Leaders had prior coordination and rehearsal. We fired several extremely accurate missions into TF 2-16's sector at their request.

*Statement by LT Powers, the Mortar Plt Leader, describing his actions in the attack through the breach on 24 February 1991:*

At 1200 hours on 24 February, the Mortar Plt was positioned at attack position 33 at CP sixteen waiting for the move to the breach. The breach was held off until 1500 hours and was preceded by an artillery preparation of about eleven thousand rounds on the enemy positions. We moved behind Death Dealer [D Co] to the breach. When the lanes were clear, we moved out. When we moved into the breach on lane O, my platoon had several enemy artillery rounds land beside us and behind us. We continued to push through the barrage until we reached the other side. We continued to move behind Death Dealer [D Co] until we took up our position behind the Command Group.
We pushed on to PL Colorado, where we stopped short, just in front of the enemy D-30 artillery positions, to receive a call for fire from Ace's [A Co] FIST. We shot three missions on PL Colorado, resulting in some of the most accurate mortar fire placed on the Iraqi positions I have ever seen. Because of these missions, we then moved to take up a location about two kilometers in front of the battalion TOC to await further orders to move out. We remained in these positions until the morning of the 25th of February.

Casualties

One wounded EPW was brought to the BAS with a suspected bomb strapped to his chest. CPT Phillips, with courage and without hesitation, took charge to extract the individual from the BAS. The bomb turned out to be a clock the individual stole and taped to his body under his shirt. The danger at the time was real—as was CPT Phillips' courage.

Statement by LT Paul Wakefield, the Medical Plt Leader, describing his actions attacking through the breach on 24 February 1991:

The Medical Plt came through the breach in Lane M. We followed the companies up to the first objective, where the BAS was established in the ALOC. We were all relieved to learn there were no casualties, but the tank companies were still engaging targets. We got to the BAS and dug our foxholes. From our position, we saw tanks shooting at targets.

Our first casualty was an EPW. C Co's medics brought him into the aid station just after dark. SGT Michael L. Goff told me as they arrived, "He's pretty messed up, sir." They brought him on the litter to the triage area where an assessment showed he had already died. He bled to death from multiple wounds to the arm, thigh, and legs.

He was something of a curiosity to the medics—our first fatality. We gathered around the litter to see for ourselves, for the first time, the wounds of war. For some, it was their first look at the face of death. The elation of a quick, successful breaching
operation was suddenly dampened by the somber reality human beings were dying.

As darkness set in, we saw hundreds of living EPWs marched to a hastily constructed holding pen. The engineers, after making the holding area, came back to our area and dug a grave for the dead Iraqi. His insignia showed him to be a captain. He was buried there in the middle of the ALOC. His pocket possessions--ID card, some money--were turned in along with the grid location where he could be found.

There was fifty percent security at night. We had two shifts of "treatment teams." One other casualty came in at night, an EPW with multiple gunshot wounds. These were bandaged and he was evacuated with the other EPWs.

Statement by CW2 Bratcher, the Battalion Physician's Assistant, describing the medics' actions in dealing with a booby-trapped EPW on 24 February 1991:

On 24 February 1991, at approximately 1030 hours, the BAS was receiving and treating EPWs of the Iraqi army. We discovered an EPW with a large, flat, square object with batteries on his chest beneath his clothing. The object was discovered by CPT Phillips, who immediately decided the device was of a potentially explosive nature and the BAS and other personnel were in immediate danger.

Without delay, while others stood stunned, CPT Phillips issued instructions for two litter bearers to remove the EPW to a safe location away from the aid station. Communication was made to the EPW to expose the device and to determine its true nature. The device was later determined to be a clock the EPW was stealing. CPT Phillips' prompt leadership demonstrated a total disregard for his personal safety, and ensured the safety of his medics and patients.

Enemy Prisoners of War

Once through the breach, EPWs continued to surrender. The engineers were overtaxed and eventually all of the units had to use some of their elements for EPW control. We continued to ad lib the EPW situation. Brigade had not anticipated the success,
and EPWs quickly became a brigade-level problem. Hence, there was confusion about EPW sites at all levels and a great deal of misinformation was transmitted on the net. CPT Steffan, the A Co, 9th Engr Bn Commander, finally called me for help about midnight. He was tired and frustrated from lack of transportation, darkness with regard to security of EPWs, and just exactly where the brigade EPW site was located. I contacted CPT Hall and made it clear EPWs would go from the engineers to the brigade ALOC from now on. I could not afford to tie up the engineer for this length of time on EPWs. CPT Steffan collected between two and three hundred EPWs in a twenty-four hour period and he was exhausted. EPWs continued to be a problem the next morning and throughout the war.

Statement by CPT Clidas, HHC Commander, describing the field trains' actions during the breach operation on 24 February 1991:

At approximately 1700 hours, the EPW team moved through the breach lanes. Shortly before passing through the breach, we saw what we thought to be the new brigade EPW collection point setting up. The battalion field trains were still co-located with the 201st Fwd Spt Bn approximately twenty miles south.

As we linked up with the ALOC, we saw A Co, 9th Engr Bn bringing in approximately one hundred EPWs. We volunteered to bring these EPWs south to the collection point we previously identified. About the same time, CPT Hall received a message more EPWs were being brought in by A Co, 9th Engr Bn, and the brigade EPW site was not established. (I do not know if this was now established. I do not know if this was the same site I witnessed.) CPT Hall asked for me to leave the two five-ton trucks with him and he would arrange to get the EPWs back to the site. It was already dark and CPT Hall wanted to wait until the next group of EPWs arrived before he made the run to the brigade EPW site.
My driver and I then left the ALOC and began the trip to the battalion field trains, preparing to jump the next morning.

**Combat Trains Stay Close**

CPT Hall was placed in charge of bringing all the combat trains, for the entire brigade, through the breach. He stayed behind the battalion's combat vehicles and linked up with the combat trains of TF 3-37 and TF 2-16. This was a very difficult mission. Once we were through the lanes, I notified COL Moreno and he signalled CPT Hall to execute. The trains were right behind us as we came through the breach, as were the combat engineers.

For the one and one-half ton trailers to fit the plow tracks, we reversed the wheels. This extended their width enough to fit into the cleared lanes and gave them better balance over the rough terrain. Plus, unlike peacetime restrictions, every HEMMT was pulling a trailer fully loaded. As we found out, our twenty-some trailers equated to another ten five-ton trucks' worth of cargo space.
Aerial photo of the combat trains in the area of the breach site with additional ammunition and fuel.

Statement by CPT Hall, the Battalion 84, describing the handling of EPWs by the combat trains' personnel on 24 February 1991:

The combat trains plus twenty-three fuel HEMMTs and ten cargo HEMMTs departed to set up just south of PL Vermont vicinity of passage point eighteen. About 0700 hours, the trains reported set vicinity passage point eighteen. No sooner were we set than the Scout Plt reported EPWs being taken. I was told to move north and prepare to detain an undetermined number of EPWs. I called A Co, 9th Engr Bn Commander, CPT Steffan, and told him my grid location. By the time he got to my location, I would have an EPW site established. My next transmission was from CPT Clidas. He was coming forward to take the EPWs from my site. On or about 1200 hours, the first EPWs showed up and were put inside the holding area.
Diagram #24. EPW Holding Area.
All total, eighty-five EPWs were taken and transported by CPT Clidas to the brigade EPW site. It became very clear to the one hundred plus soldiers with me, after seeing the EPWs, they were now in a WAR.

Statement by CPT Clidas, the NHC Commander, describing the EPW situation on 24 February 1991:

As the operation progressed on 23 February 1991, the battalion took more and more EPWs. By 1300 hours, the battalion had taken seventy-nine EPWs. As A Co, 9th Engr Bn, moved to each company to collect the EPWs, CPT Hall constructed a hasty EPW holding site adjacent to the combat train location. CPT Hall also assigned two five-ton trucks, under the supervision of SFC McCurnin, to assist me in retrieving the EPWs from A Co, 9th Engr Bn. The EPW team and I went forward and linked up with CPT Steffan. We then shuttled the EPWs back to the battalion holding site.

As we took the second load of EPWs back, CPT Hall moved the combat trains forward, and the MLRS batteries to our southwest began their preparatory salvos for the breach. After returning with the second load of EPWs, we prepared to move all seventy-nine to the brigade collection point. We loaded the EPWs and began a fifteen kilometer move to the west. Upon arrival at the division site, we unloaded the EPWs and gave capture information to the MPs. Since A Co, 9th Engr Bn, had confiscated all EPW documents and property and placed it all in one bag, it was difficult to give the MPs and interrogators any information.

Additionally, none of the EPWs had EPW collection tags, so it was impossible to determine time and place of capture. We finally turned the EPWs in and returned to the hold site to retrieve the materials the two five-tons had downloaded. En route, SFC McCurnin and I saw two small explosives in the vicinity of the holding area. We continued to move to the site, since we saw no follow-on explosives. Upon arrival at the site, we quickly uploaded the equipment and moved forward to link-up with the combat trains passing through the breach.
EPW holding area in the vicinity of the breach site.

Night in the Breach

As night came, we stayed on one hundred percent alert. The danger was real. We had only a minimum of time in position before nightfall to solidify our position. Our Scout Plt was too fragile and would not be effective trying to cover a twenty-four kilometer front. I had all four tank companies on line. The terrain was favorable for their surveillance. I pulled the
Scout Plt back into A Co's sector to thicken their over-extended line. The night passed with the occasional scare and one or two more foolish EPWs approaching at night. Everyone was able to re-arm and refuel.

Statement by CPT Wock, the D Co Commander, describing his company's first night in the breach on 24 February 1991:

A flurry of activity from sector sketches and the placement of decoy tanks occurred as we waited for an enemy counterattack. We had just finished bore-sighting the tanks' main guns as darkness fell and we were told the FARP was established. I began sending twenty-five percent of the company back to the FARP to re-arm and refuel.

When it came time to move my tank, D-66, to the FARP, we started the tank, turned one hundred eighty degrees, and moved about ten meters when the engine died. The tank refused to start. We discovered my second fuel pump had just bought the farm. "Just my luck!" I lamented. There we were, needing fuel, waiting for an enemy counterattack, with my thinnest armor facing the enemy. Not a good deal. We immediately set to work replacing the fuel pump. No M1 fuel pumps were available, so my maintenance team had to jerry-rig a two-and-one-half-ton truck's fuel pump instead.
CHAPTER 9
G-DAY + 1 DAY
25 FEBRUARY 1991

3rd Brigade Passage of Lines

At 0500 hours on the 25th of February, the 3rd Bde (2nd Ar Div Fwd) began their passage of lines with the 1st and 2nd Bdes. As they approached from behind us, D Co turned their sector over to them, then moved to a BP behind the rest of the battalion. They followed in reserve as we expanded the perimeter of the breach to PL New Jersey.
Sign put up at the breach lane entrances by the Division's engineers.

Statement by CPT Wock, the D Co Commander, describing the passage of lines of the 3rd Brigade on 25 February 1991:

At 0500 hours on 25 February 1991, D Co had just begun stand-to procedures when we were notified to anticipate the arrival of the first elements of 3rd Bde, 2nd Ar Div, to relieve us and A Co on PL Colorado. My platoons retrieved the decoy tanks they set up earlier last evening.
Around 0600 hours, the first M1A1 tanks from 3rd Bde arrived at my unit's position. They took up positions between my tanks. We made quick coordination with the company's XO. We notified battalion once the relief in our sector was complete and were given permission to move to BP 889 in the east. At 0615 hours, we moved to BP 889. By 0635 hours, D Co was set in the BP waiting to move forward for the attack to PL New Jersey.

**Scout Platoon Out**

As soon as the 3rd Bde was set in place, I received the order from brigade to begin my move to PL New Jersey. I pushed the Scout Plt ahead of the battalion with specific instructions for A and C Cos to overwatch them carefully. We would be approaching a second echelon trench position belonging to another enemy division toward the northeast.

Statement by LT Ward, the Scout Plt Leader, describing the platoon's attack to PL New Jersey on 25 February 1991:

After passing the EPWs over to the Engineer Co, the platoon began its preparations for the next battle. A and B Sections linked back up and we moved back to the FARP. We received both items within a few minutes and prepared to move out. I received an SP time of 0800 hours; however, as soon as I departed the refuel site, SGT Jackie L. Thompson pointed out I had broken another number four cable (the third one). I immediately rushed over to the UMCP in order to regain communications. After searching almost every truck, CPT Hall saved the day by providing me with his cable.

I rushed back to a spot behind C Co in order to link-up with the rest of the platoon. After linking up, we moved forward of the battalion and prepared to lead the way.

At 0900 hours, we hit the SP. After traveling only a short distance, I watched as elements from 3rd Bde crossed my rear in front of the tank companies. They were definitely out of place, especially since they were supposed to be on my northern flank as I traveled east.
After some additional movement, B Section came into contact with some dismounts to our front. After trying to get through to the A Section, I finally gave up and had SSG Hart go to the Mortar Plt net. Sure enough, soon after, he was laying mortar rounds right along the top of the dismounts. They quickly threw up the white flags and we passed them along to the follow-on units.

A short time later, I received a report from SSG Firestone. He was observing several vehicles within his range. I ordered him to shoot and I sent the spot report to battalion. He quickly took out two vehicles with TOW shots, then all of a sudden two A-10's came into the area and began to shoot at the remaining vehicles. LT Anderson started asking me if I had any more requests for fire. I could not believe the firepower I had at my call. However, after the vehicle convoy was taken out, I could not immediately identify any additional targets.

At about this time, A Co pulled on line with me and my section and we continued movement with them. We soon spotted two trucks, but discovered they had already been destroyed.

We continued to move with A Co and reached PL New Jersey at approximately 1012 hours. I received orders to continue movement and to set up a screen in front of PL New Jersey.

Upon moving up, B Section came in contact with another bunker complex and began to make calls for fire. Likewise, A Section found itself in a large bunker complex. SSG Firestone led a group into one series of bunkers and discovered hundreds of Rocket Propelled Grenades (RPG) and some documents marked "Top Secret." Prior to his group going out, SSG O'Hara and I engaged a bunker complex with dismounts and a truck in the area. My first TOW round fell short. SSG O'Hara moved forward and hit the truck. After the explosion, we did not see any more dismounts. I stayed at my position on the screen line.

B Section called and stated they had engaged the bunker complex with mortars and had approximately ninety soldiers moving to their position to surrender.

I suddenly received a call to move out of the area immediately. I quickly passed the word and set up a link-up point behind C Co. B Section still had EPWs moving to their position to surrender. I had to
tell them to move the soldiers to the south to TF 2-16. I found out later TF 2-16 captured the EPWs and one of them was the Division Commander.

A and B Sections made the link-up and I soon discovered why the order to move was given. Brigade was about to drop indirect artillery on all the trenches we had been set on. We set up a small AA for the rest of the afternoon, did some quick maintenance, and passed over the Top Secret documents. I switched the radios and did maintenance on my system so I would not destroy any more number four cables.

Right before dark, I received word to link-up with C Co for the night. The platoon moved up and I made coordination with CPT Torrence. As I moved back to put the platoon in place, everything got pitch dark. Since my thermal sights were out, I could see almost nothing and I had some problems putting my elements in place. After getting everything set, I got a message requiring me to move to the TOC to receive the next order. At 2100 hours, I moved to the TOC and received the next order and graphics. I called in all my BFV commanders for the issue of the order and passed out both the order and the graphics to them. We kept all the vehicles close together for the rest of the night and began preparing for the next move at 0400 hours.

We continued to monitor the brigade net as we moved forward. MAJ Garrity and I carefully monitored a conversation regarding PL New Jersey and the VII Corps' decision to use anything forward of PL New Jersey as a free fire area. Our Scout Plt was now forward of PL New Jersey and were investigating a set of bunkers in the northeast. COL Moreno was upset because someone had changed the earlier decision on his control of fires forward of PL New Jersey. Suddenly, we realized our Scout Plt was in danger. I called LT Ward and ordered him to move back to C Co ASAP. He stayed with C Co until our next move.
Statement by LT Powers, the Mortar Plt Leader, describing his fire support during the attack to PL New Jersey on 25 February 1991:

On 25 February, the battalion moved out from PL Colorado toward PL New Jersey. The Mortar Plt followed behind the Command Group, anticipating fire missions in support of the Scout Plt and tank companies. We moved just short of PL New Jersey when the Scout Plt reported enemy infantry and trucks up ahead. We immediately set up for a fire mission. The Scout Plt Sergeant, SSG Hart, called for a fire mission for approximately two hundred dismounted infantry and some trench lines.

We took the fire mission. After firing two or three adjusting rounds, we fired for effect. The results were unbelievable. We fired variable time fuse so the rounds would explode over the trench line. The rounds exploded about one or two feet above the trench line, with several rounds exploding in the trenches. The results were predictable. Those who could immediately threw out their weapons and surrendered.

Shortly after, we had a fire mission in support of Battle [B Co] from their FIST. We were again firing on troops in a trench network. During this fire mission, we received a second call for fire from the Ace [A Co] FIST. We executed a simultaneous fire mission with deadly accuracy. Our last fire mission was again from the Scout Plt.

In all, we fired about four missions, for a total of about eleven to twelve fire missions to date. We fired over three hundred fifty rounds of HE, and one hundred twenty rounds of WP. The mission that we fired for the Scout Plt included an enemy brigadier general and his staff among the survivors. However, the Scout Plt could not capture them because they were ordered back to PL New Jersey. Consequently, the prisoners walked to TF 2-16, where they were captured.
Diagram #25. Scout Plt Forward of PL New Jersey.
A Close Call

Once the move started, the entire battalion drove about five kilometers per hour (KMPH). We were all on line and being extremely cautious. The fog still hung in the early morning air and visibility with the naked eye was limited to about five hundred meters.

A tank company suddenly came up behind my position in the fog. They were M1A1s from A Co, 2nd Bn, 66th Ar. I was directly behind A and C Cos. I was initially terrified they would fire on the rear of our tanks. They were in the wrong place and moving too fast. I was on the net screaming for brigade to contact the 3rd Bde before someone shot a friendly. I alerted my companies of the situation and made sure they were buttoned up. After a few minutes of radio calls between the brigades, they were able to get word to A Co. It was re-oriented and taken to the right location. I was relieved, but genuinely feared a tank from this brigade making its entrance into the war zone would have a hair trigger in the fog.

Statement by LT McBroom, the A Co XO, describing the tank company's attack to PL New Jersey on 25 February 1991:

On 25 February, at approximately 0600 hours, 3rd Bde relieved D Co to begin the move to PL New Jersey. A Co had to shift to the right because 3rd Bde had moved through us and cut us off from the rest of the battalion. After shifting between 3rd Bde and C Co, A Co occupied an area about five hundred meters. After the units began moving, this area increased greatly as units spread apart. Approximately halfway to PL New Jersey, A Co's movement area had grown from five hundred meters to about twenty-five hundred meters. As the drawing out of the units stopped and the dispersion was brought under control, A Co moved
in to about one thousand to fifteen hundred meters. For A Co, the rest of the move was basically uneventful except for capturing about twenty-four EPWs.

Statement by CPT Torrence, the C Co Commander, describing his company's attack to PL New Jersey on 25 February 1991:

At 0800 hours, the company crossed the LD at PL Colorado going to PL New Jersey. We moved over a ridge in front of the 2nd Plt and continued moving in a company wedge to the east. There was no resistance and the move was unhampered with the exception of maintaining contact with A Co on the north.

As we approached PL New Jersey, 2nd Plt identified targets about five kilometers forward of our position. We continued to move and watched as B Co engaged targets out to four kilometers. We held our fires because many of the B Co rounds were falling
short. We paused about three and one-half kilometers from a group of vehicles about the same time the A-10s attacked them. The A-10s made several passes with Mavericks first, then 30mm guns. Six vehicles were destroyed and the A-10s reoriented on a trench line in the center of A Co's sector. During the A-10 strike, I assisted the A-10s in finding targets through LT Anderson. I shifted fires as the A-10s made passes using the last burning vehicles as reference points.

We established our BP around mid-day and consolidated our position. The Scout Plt moved up at dusk and filled in our line to assist in the defense at night. At around 2200 hours, we received the OPORD for a long movement deep into Iraq. The company OPORD took place in the Medical Plt M113 APC around 2400 hours. We also brought the HMMWVs forward because of the negligible threat to our front.

T55 tank destroyed in A Co's sector of the breach area.
**Joint Firepower on the Iraqis**

When we came within one kilometer of PL New Jersey, CPT Martin reported a large group of buildings with men and vehicles running around. The target was approximately four thousand meters from us at the time. I asked him the range, and he replied that it was about thirty-four hundred meters. I asked him why he was not shooting. Unlike my other Company Commanders, CPT Martin had never been to the NTC. He did not realize this was an acceptable range to engage. I woke him up. He took charge immediately and gave a company level fire command. Simultaneously, I was talking to CPT Bratina and LT Anderson for both artillery and air strikes. I reported it to brigade. We had caught an enemy unit off guard out in the flats. The buildings CPT Martin reported were, in reality, trucks.

I was to the left of B Co at this point and moved forward. B Co opened up en masse. Two A-10s were on station and LT Anderson brought them in on the targets. The artillery was delayed, but LT Powers and the Mortar Plt completed some missions instead. We had B Co shooting them, the two A-10s taking turns (one up, one down), mortar rounds, and two Apache helicopters from brigade opening up with 30mm chain guns. We decimated them. The trucks totally disintegrated. We never made it close enough to make the BDA. We halted on PL New Jersey. However, I doubt anything was left when we finished.
Statement by CPT Martin, the B Co Commander, describing his company's attack to PL New Jersey on 25 February 1991:

On PL Colorado at 0600 hours, I had given the company instructions to maintain their general personnel and equipment. Shortly afterward, the battalion XO gave me orders to go to REDCON 2. REDCON 1 was next, with marching orders for PL New Jersey. We held the same formation for both battalion and company as we did the day before. We only had reports from the Scout Plt for the first four kilometers. B-21 called a spot report of unknown targets six kilometers to our front. I told the company FIST to plot the target. We rolled on at five to fifteen MPH. Two kilometers later, we still had no indirect fire support. It was time to forget the artillery.

At thirty-six hundred meters from the target (looked like buildings with vehicles in between), B-21 called me with a report of enemy fire. I reported higher (a mistake) and then divided the objective into three parts. With each platoon having its own sector of fire, I approved two rounds of HEAT per tank. What looked like a volley fire was really a company command with controlled fire. The objective lit up with target strikes. Next, two on-station A-10s were called for by battalion and guided to the target by C Co. The aircraft destroyed the remaining targets forward of PL New Jersey with Maverick missiles and 30mm cannon.

Statement by LT MacMullen, 2nd Plt Leader, B Co, describing his platoon's attack to PL New Jersey on 25 February 1991:

On 24 February 1991, the company was set on PL Colorado with good lateral observation and TF 2-16 on our right. However, we had lost contact with C Co to our left. With EPWs swarming the area and an unknown enemy situation, I had the mission to find C Co's right flank. I had to move through a still-occupied bunker complex with my tank [B21] and crew. We maneuvered swiftly and safely through the complex and found our left flank.

The next morning, the company was ordered to seize PL New Jersey. As always, we started out as the lead tank for the company and provided direction as we moved to our objective. About six thousand meters from PL New Jersey, I reported an array of hard targets to our front. Immediately, we estimated the
location of the enemy position. With the determined location, we requested fire support from our company FIST. The fire support channels were clogged and gave us no response for the drastically needed artillery.

At four thousand meters from the target, we spotted enemy fire directed toward our formation. We requested permission to return fire on the enemy. Upon approval, we dissected the target area into thirds to give the company an effective field of fire. Our company shot and destroyed the targets on the objective at thirty-four hundred meters. Our platoon's quick reactions gave the unit the stand-off range to safeguard our formation from enemy fire.

Upon reaching PL New Jersey, we found the targets on the objective were transportation assets from a higher echelon logistics base. The BDA included fifteen trucks and four bunker complexes destroyed. As we got established on PL New Jersey, one hundred forty EPWs and a brigadier general moved out from their fortified defenses to surrender. Our accurate and effective direction allowed our company to overwhelm the enemy and crush his defense before he could acquire us with any of his weapons systems.
Statement by CPT Martin, B Co Commander, describing his company's attack on 25 February 1991:

We closed within one kilometer of the objective and finally the artillery was ready to fire. I stopped them from engaging because we had spotted white flags on the objective. My FIST informed me his battalion insisted they be allowed to fire the mission. I told them, "No, there are white flags on PL New Jersey." I reminded the artillery who was in charge.

Finally, we were set on PL New Jersey (actually six hundred meters short of the PL). Multitudes of EPWs were now coming out of their bunkers to our front. The nightmare with EPWs the night before prompted me to do something I would later regret. I told the tank crews to wave the prisoners south into TF 2-16's sector (grunts like the EPW business). Unfortunately, I later found there was a brigadier general who surrendered with the one hundred and fifty EPWs who came from my sector. Only the Battle Force [B Co] will know the real story.

A T55 tank destroyed in B Co's sector of the breach area.
Statement by CPT Role, the Assistant Battalion S3, describing the activities of the Air Liaison element during the attack to PL New Jersey on 25 February 1991:

On 25 February at approximately 0900 hours, the Scout Plt called in a visual confirmation of enemy vehicles in the vicinity of PL New Jersey. The closest tank company was six to seven thousand meters away from the target, and we were traveling with the Command Group about four hundred meters to the rear of Certain [C Co]. SSG Timothy A. Carley (USAF) was the track commander in the M113 APC with SPC Michel as driver. 1LT Anderson (USAF) and I were traveling in the troop area with the cargo hatch buttoned up due to anticipated incoming artillery.

I woke 1LT Anderson who was "cat napping" and told him to call in CAS on the enemy position identified by the Scout Plt. His response was, "Why bother, the artillery will get it." I told him to get on the radio and request immediate CAS on the target. He began calling in the CAS request. After having provided all the information to the brigade ALO, LT Anderson was told to re-send it all in "the manner in which we prefer it" from the brigade ALO. After re-starting the mission request, LT Anderson informed Thunder Six [LTC Marlin] we had called in CAS but we probably would not get it. About three minutes later, two A-10s were on station. I popped the hatch and began looking for the aircraft.

Meanwhile, LT Anderson was on two different radios trying to make contact with the aircraft. Thunder Six called and told us not to hesitate to move forward to control the aircraft. LT Anderson was so involved with his radios he did not hear Thunder Six. SSG Carley asked if he should have the driver go forward. No response from LT Anderson. He asked a second and third time. My microphone did not work on my CVC, so he could not hear me screaming, "Yes. Yes." Finally, I grabbed him, pointed forward, and yelled, "Go!"

As we approached the front elements, the A-10s had already made visual contact with enemy targets. They began shooting at them with Maverick missiles. They asked for help identifying targets, and the Scout Plt and Certain Six [CPT Torrence] provided additional targets. When all the Mavericks were expended, the A-10s made strafing runs. When they ran out of all munitions, they broke off and did reconnaissance for more enemy targets north of PL New Jersey. About ten
minutes later, they reported negative contact with additional enemy forces and returned to their base.

An enemy APC destroyed in B Co's sector of PL New Jersey.

The British Passage of Lines

Once the 3rd Bde had completed its passage of lines, the United Kingdom's 1st Ar Div made its passage and continued north. This was a thirty thousand man division. I had no contact with them, but our field trains saw their passage and were delayed by their movement. Behind the British division, the entire VII Corps logistic effort began their passage through the cleared lanes. On the morning of the 26th of February, we
cut perpendicular through VII Corps against the flow of thousands of vehicles.

Statement by CPT Clidas, the HHC Commander, describing the movement of the field trains through the breach site on 25 February 1991:

The Brigade Support Area (BSA) moved at approximately 0900 hours on February 25. By this time, the BSA was twenty-five miles behind the front line. Our field trains were now significantly smaller, consisting of only the Mess Section, the HHC Maintenance Section, and the S1/S4 Section. The Support Plt was detached to the combat trains two days earlier and had not returned.

The BSA moved approximately seven to ten miles north, then stopped to occupy a hasty AA to allow the British units to pass. Since the battalion was taking EPWs again, I went forward to link-up with the EPW team.

I arrived at the UMCP at approximately 1500 hours and linked up with CPT Hall. He told me we had gathered approximately thirty EPWs and I would have SFC McCurnin, SGT Richards, and one five-ton truck to assist me with EPW transport. We moved the EPWs to a brigade holding pen approximately five miles southwest. Due to numerous CBU areas, the trip took roughly one hour. The EPWs were turned in and the NCOs took the truck back to the UMCP.

I moved to a position south of the breach lane to link-up with the BSA as it was en route. The convoy reached a point approximately two miles south of the breach lane at 1800 hours. By then it was dark and raining. Visibility was significantly reduced. I linked-up with our field trains and moved with them into the breach lane. The convoy then halted. Our field trains, on order of 201st Fwd Spt Bn, spent the night in the breach lane.

Change of Orders

We had no orders to go beyond the breach site. At approximately 1600 hours, just prior to dark, COL Moreno called me to the brigade TOC and issued new graphics and an OPORD. I
had to copy the one set of graphics available onto my map. There was no time to waste. The mission was to reverse direction, go back through the VII Corps' MSR, go north about one hundred kilometers, and attack the Republican Guard Army units.

The trickiest part of the mission was to pull off PL New Jersey in the middle of the night, get organized, and be prepared to move at 0500 hours from PL Colorado. It was already starting to rain, and the sky was going to be pitch black again.

I raced back to the TOC and told the commanders, over the radio, to meet me there. At the TOC, I used a butcher pad to illustrate my concept and issue my order. I informed them to swap out the 700 series ammunition for the 900 series. The Republican Guard units had T72 tanks. We began moving at 0300 hours in order to be ready at 0500 hours. There was no time to waste. This would be the third consecutive no-sleep night for most of us.

I was also afraid of getting tangled up with TF 3-37 at night. I coordinated with LTC Gross to separate our line-up times by thirty minutes to avoid confusion, and he agreed.

Statement by CPT Bond, the Battalion Assistant S3, describing the receiving of the operation order to move north on 25 February 1991:

At 0800 hours, 25 February 1991, the battalion moved out from PL Colorado en route to PL New Jersey. At 1225 hours we were set on PL New Jersey. Around 1600 hours, LTC Marlin was called to brigade to get an order for the following day's attack. We had already received an overlay for the attack and CPT Feeser, CPT Williams, and I made fifteen copies of a 1/250,000
scale graphic to issue to the battalion. We had one TOC extension up and it rained sporadically.

Around 1930 hours, LTC Marlin came to the TOC with a new overlay he had drawn on his map during the meeting at the brigade TOC. The eastern half of the overlay had shifted dramatically. We sent CPT Feeser to the brigade TAC to get a copy of the overlay (an accurate paper copy). In the meantime, CPT Role and I erased half of each of our graphics and began copying LTC Marlin's map. The graphics looked terrible and were not very accurate. Around 2100 hours, LTC Marlin issued his OPORD to the orders group. We passed out the graphics and he used a butcher pad to show how we would attack. LTC Marlin finished his OPORD with the final, "Attack! Attack! Attack!"

The attack included moving the battalion out of its defensive posture ten kilometers to a staging area. This move was executed at 0500 hours, 26 February, on a dark, foggy morning, but surprisingly went very smoothly.

Meanwhile, CPT Feeser had gone to the brigade TAC to get a paper copy of the graphic. They did not have one, and he had to go another fifteen kilometers to the brigade TOC. He did not arrive at the battalion TOC until 0200 hours, 26 February. It was instantly apparent the graphics we issued were less than perfect, but there was no time to issue a new graphic before moving. When we stopped at the staging area around 0700 hours on 26 February, the Company Commanders were called to the TOC and the graphics were updated.

Statement by CPT Wock, D Co Commander, describing the exchange of ammunition on the night of 25 February 1991:

On 25 February 1991, at 1930 hours, the battalion notified us to download our M774 sabots and upload M900 sabot rounds at the FARP some one to two kilometers to D Co's rear. This was not good news; about twenty rounds per tank had to be swapped out. It was a pitch black night and it was raining hard. I called my lieutenants and 1SG together to explain the change of mission with the ammunition. They were a little wet, albeit also a captive audience. Nonetheless, anytime you tell any true tanker to download his ammunition, you will not be well received.
The first problem was moving a portion of the company to the FARP while the rest maintained a defensive perimeter. As dark as the night was, I had visions of my tanks searching fruitlessly in the dark trying to find the FARP. So I had the XO, LT Leonard, lead four to six tanks at a time to the FARP as he had a Magellan GPS device allowing good navigation capabilities in the dark.

Just about 2130 hours, I headed to the TOC to receive the OPORD for the next day. At the TOC, LTC Marlin articulated his plan on a couple of sheets of butcher paper for attacking the Republican Guard.

I returned to my company and the ammunition exchange was about half-way complete. I held my company level OPORD a little after midnight in a torrential downpour. I stood in the rain and allowed my lieutenants to copy the graphics in my HMMWV.

Around 0330 hours, 26 February 1991, the ammunition exchange was complete and LT Leonard returned from the FARP. I quickly briefed him on the plan and gave him a set of graphics. It was now 0415 hours. As stand-to was planned for 0500 hours, it made no sense to try to get some sleep.