# INTRODUCTION 507 Maintenance Company Staff Ride

This packet of materials is designed to help participants prepare for the 507 Maintenance Company virtual staff ride (VSR). This introduction will provide background information on the purpose and the components of a staff ride and some suggestions on how best to use the read ahead material in preparation for the staff ride.

The United States Army's publication for conducting staff rides is *The Staff Ride: Fundamentals, Experiences, Techniques* (available at through the Army University Press website at: <a href="https://www.armyupress.army.mil/Books/CSI-Press-Publications/Staff-Ride-Handbooks/#staff-rides">https://www.armyupress.army.mil/Books/CSI-Press-Publications/Staff-Ride-Handbooks/#staff-rides</a>. This book defines the staff ride as a three-phased activity: a preliminary study of a historical event, a field phase at the location of that event, and an integration session.

The purpose of the preliminary study phase is to provide the participants an understanding of the historical events prior to visiting the field. This study can include reading materials, classroom sessions, movies, and any other material that can be presented before seeing the terrain. For this staff ride the preliminary study phase is primarily the read ahead material referenced in this package. The preliminary study phase is critical to the success of the field study phase and therefore equally critical to the success of the staff ride as a whole.

The field study phase most readily distinguishes the staff ride from other forms of historical study. It adds the one critical element of study that cannot be replicated in the classroom, in map study, or in readings—a view of the actual terrain. Because the field study builds upon the preliminary study, each phase compliments the other to produce a coherent, integrated learning experience. The visual images and spatial relationships seen during the field study may reinforce or challenge analytical conclusions reached during the preliminary study or generate new insights that build upon the added dimension of seeing virtual ground.

The integration phase provides an opportunity for participants to reflect upon the staff ride experience. Several positive effects stem from the integration phase. First, it provides the participants the opportunity to analyze the preliminary and field study in order to develop a richer overall view of the campaign. Second, it provides a mechanism through which participants may organize and articulate their impressions of both the campaign and the insights derived from its study that are applicable to them today. The integration phase for the 507th Maintenance Company staff ride will be conducted currently with the field phase after each stand and at the conclusion of the field study.

Participants should conduct their preliminary study by reading:

• Executive Summary: Attack on the 507th Maintenance Company (23 March 2003) An Nasiriyah, Iraq (attached)

Review "Hard Lessons" - attached or at
 https://www.govexec.com/magazine/2004/04/hard-lessons/16406/
 for additional thoughts on how well the soldiers of the 507<sup>th</sup> Maintenance were trained for combat.

## General guidance:

- 1. Participants should know what decisions were made, a general understanding as to why that decision was made (or an educated guess be prepared to defend your answer), and the impact of those decisions.
- 2. Participants should take notes during the preliminary study phase for use during the field study. The facilitators will lead the discussions with open ended questions to provide participants with the maximum opportunity to share their knowledge. Do not read from a book verbatim; it shows a general lack of preparation.

The stands for the field phase are:

Stand	General Description
The Plan and Preparation	Begins with an overview of the mission of Operation Iraqi Freedom, and the initial phases of the Operation. Against this background transitions to the history and culture of the 507 <sup>th</sup> Maintenance Company, discussion of the company's training and readiness, and integration of the company in to operations.
Convoy movement to Attack Position Lizard	Discussion of the company's movement from Camp Virginia to Attack Position Lizard.
Movement from Attack Position Lizard to the outskirts of Nasiriyah	Discussion of the company's movement from Attack Position Lizard to the missed turn outside of Nasiriyah.
Movement through Nasiriyah and the Decision to Turn Around	Covers the company's initial movement through Nasiriyah to the realization the company is lost, and the decision to retrace it's route.
Final Movement through Nasiriyah	Covers the period where the company comes under fire to the destruction of the company and rescue by the Marine Corps.

Participants will describe what happened, what the result was, and analyze the impact on the operation. As much as possible these descriptions will be open discussions. The free flow exchange of ideas and questions are the hallmarks of a good staff ride and is strongly encouraged.

## Attack on the 507th Maintenance Company 23 March 2003 An Nasiriyah, Iraq

## **Executive Summary**

The attack on the 507<sup>th</sup> Maintenance Company at An Nasiriyah was a tragedy not unlike those that have occurred in past conflicts in which this nation has engaged. Although violence and loss of life are realities of combat for Soldiers, the United States Army is committed to understanding this particular event in an effort to learn lessons and provide a means of closure for the families of those who made the ultimate sacrifice. The element of the 507<sup>th</sup> Maintenance Company that bravely fought through An Nasiriyah found itself in a desperate situation due to a navigational error caused by the combined effects of the operational pace, acute fatigue, isolation and the harsh environmental conditions. The tragic results of this error placed the Soldiers of the 507<sup>th</sup> Maintenance Company in a torrent of fire from an adaptive enemy employing asymmetrical tactics.

In the unprecedented rapid advance of the ground campaign towards Baghdad, the 507<sup>th</sup> Maintenance Company was last in a march column of 600 vehicles. The company became isolated, as communications, already stretched to the limit, could not be extended to include them while they recovered heavy wheeled vehicles from soft sand and breakdowns along a cross-country route through the Iraqi desert. Over a period of 60-70 hours with little rest and limited communications, human error further contributed to the situation through a single navigation error that placed these troops in the presence of an adaptive enemy who used asymmetric tactics to exploit the Soldier's willingness to adhere to the Law of War. Several measures were available to mitigate the risk of such an event, but were either not employed (Brief-back rehearsal) or were ineffective (Traffic Control Point-TCP).

Soldiers fight as they are trained to fight. Once engaged in battle, the Soldiers of the 507<sup>th</sup> Maintenance Company fought hard. They fought the best they could until there was no longer a means to resist. They defeated ambushes, overcame hastily-prepared enemy obstacles, defended one another, provided life-saving aid, and inflicted casualties on the enemy. The Soldiers of the 507<sup>th</sup> upheld the Code of Conduct and followed the Law of War.

The Army's examination of this event will continue through the lens of Objective Force operations on a non-contiguous battlefield. Operation Iraqi Freedom, though executed with current force capabilities in a joint environment, provided insight into the advantages and vulnerabilities that Army and all ground formations can expect to face in the future. Battle Command, situational awareness, and common leader and Soldier disciplines and skills--the "fundamentals"--down to the lowest levels become critical, perhaps more than ever before. The flexibility and agility required by the Objective Force calls upon the Army as an institution to ensure balanced investments between the advanced capabilities that allow commanders and formations to concentrate effects, and the development and retention of skilled Soldiers who are at least equally adaptive but more versatile than the threats they are likely to face in this century.

#### Introduction

**Purpose, Scope and Methodology.** This report describes, in narrative form, the attack on an element of the U.S. Army 507th Maintenance Company by Iraqi military forces and irregulars in the city of An Nasiriyah on 23 March 2003 during OPERATION IRAQI FREEDOM. It is the result of an intensive, focused effort to determine those facts that could be determined in a relatively short period of time. This report does not answer all questions. In particular, in order to ensure the integrity of war crimes investigations, this report does not address in detail the conduct of Iraqi combatants during the battle, provides only a brief description of the death or wounding of each U.S. casualty, and does not address Iraqi treatment of U.S. Soldiers held captive. All these matters are under separate investigation. This report presents but does not assess decisions made and actions taken. These are matters for the unit's chain-of-command and for "lessons learned" reviews. This report does not address possible recommendations for decorations for valor. These types of recommendations are initiated by the unit chainof-command according to Army regulations, and require substantiation. This report is intended to be an objective presentation of facts corroborated by multiple sources. Variances in individual perceptions, particularly during the intense strain of combat, make a perfect reconstruction of events impossible. The Review Team had access to the extensive work of trained experts and scrutinized a great deal of information. Finally, ongoing investigations may discover additional relevant information. This report should be read with these factors in mind.

This report was researched and prepared by a small team of Headquarters, Department of the Army officers working under the direction of the Commanding General, Training and Doctrine Command, tasked by the Chief of Staff of the Army to conduct a fact-finding review to determine what happened to the 507<sup>th</sup> Maintenance Company element in An Nasiriyah, Iraq on 23 March 2003.

**Overview.** In the early morning hours of 20 March 2003, U.S. Army, U.S. Marine Corps and coalition ground combat forces crossed from Kuwait into southern Iraq and attacked northward, beginning the ground phase of OPERATION IRAQI FREEDOM. By dawn on 23 March, major U.S. ground combat units had advanced more than 200 miles into Iraq and were approximately 130 miles north of An Nasiriyah, an advance historically unprecedented for speed of execution and depth of penetration, designed to unhinge the Iraqis' ability to mount a coherent defense.

The rapid advance of coalition troops in thousands of vehicles and hundreds of aircraft was made possible by the determined, aggressive support of scores of logistics, medical, and maintenance units, many moving constantly to maintain contact with their supported units. One such unit was the 507<sup>th</sup> Maintenance Company, tasked to support a vitally important asset – a Patriot missile battalion.

At about 0700 hours (local time) on 23 March 2003, while moving through the outskirts of the city of An Nasiriyah in southeastern Iraq, an element of the 507th Maintenance Company was attacked by Iraqi military forces and irregulars. There were 33 U.S.

Soldiers in the 18-vehicle convoy. All but two Soldiers in the convoy were members of the 507th Maintenance Company from Fort Bliss, Texas. The other two Soldiers belonged to the 3d Forward Support Battalion (3d FSB) of the 3d Infantry Division from Fort Stewart, Georgia, and were traveling in their 10-ton wrecker with the 507th.

The Iraqi forces in An Nasiriyah conducted fierce attacks against the convoy. Of the 33 U.S. Soldiers in the convoy, 11 were killed in combat or died as a result of injuries, seven were captured by Iraqi forces, and the remaining 16 Soldiers were able to rejoin friendly forces. Of the 22 U.S. Soldiers who survived, nine were wounded in action. Although all details of the battle could not be determined with certainty, it is clear that every U.S. Soldier did their duty.

It was not until 31 March 2003, that elements of the 1st Marine Expeditionary Force (MEF) would take control of the city of An Nasiriyah.

### The Attack

## Arrival in Kuwait & Preparation for Movement to Iraq

The 507th Maintenance Company arrived in Kuwait from Ft. Bliss on 20 February 2003. The company consisted of 82 Soldiers and their assigned vehicles. The unit became a part of U.S. forces under the operational control of V Corps, which was located at CAMP VIRGINIA in Kuwait. From 22 February until 20 March, the 507th prepared for its mission in support of OPERATION IRAQI FREEDOM--to repair and maintain vehicles and equipment of the 5<sup>th</sup> Battalion, 52d Air Defense Artillery (Patriot), supporting the Central Command (CENTCOM) battle plan.

Unit preparation at CAMP VIRGINIA built on training that had been conducted at Fort Bliss, which included individual and crew-served weapons qualification, tactical communications, land navigation, Nuclear, Biological and Chemical (NBC) defense tasks, first aid, spot reporting, equipment maintenance, leader certification, force protection, deployment and redeployment operations, tactical employment, and sustainment operations. Once deployed and in CAMP VIRGINIA, Soldiers of the 507th conducted additional training and preparations at CAMP VIRGINIA that included rules of engagement, unit rehearsals (movement, actions on contact, ambush procedures), and weapons and vehicle maintenance. During this time, all Soldiers received their basic combat load of ammunition for their personal weapons (210 rounds for M16A2, 1000 rounds for M249 SAW, 45 rounds for M9). The company commander ordered issue of ammunition for the unit's crew served weapons (.50 caliber and MK-19, 40mm) prior to movement, however, all pyrotechnics, hand grenades, and AT-4 Anti-tank weapons were consolidated and secured.

The plan to move V Corps units from CAMP VIRGINIA to OBJECTIVE RAMS (See FIGURE 1) involved the organization of convoys and movement of those convoys along designated routes—initially on ROUTE BLUE, then ROUTE JACKSON, then returning to ROUTE BLUE —and through three intermediate attack positions: DAWSON, BULL, and LIZARD (See FIGURE 3). The 507<sup>th</sup> Maintenance Company was under the tactical

control of the 3d Forward Support Battalion (3d FSB) for this movement. According to the 3d FSB Orders Brief, the 507<sup>th</sup> Maintenance Company convoy would be directed from BLUE to JACKSON by Soldiers at a manned tactical control point (TCP) at the site where the routes separated.

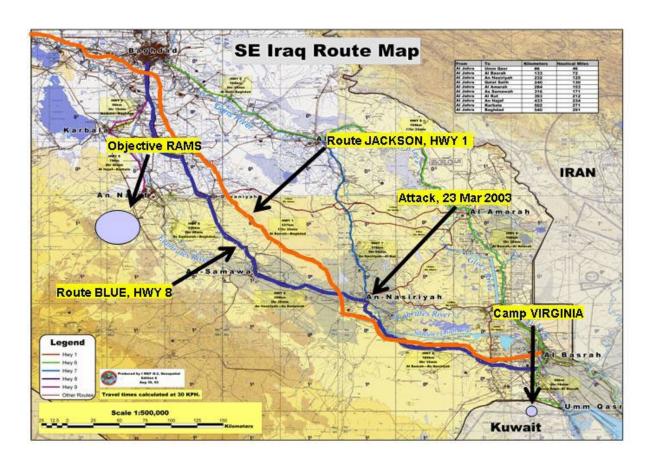


FIGURE 1 Overview of Area of Operation

The Operations Officer of the 3d FSB gave CPT King, the commander of the 507th, a CD-ROM disc that contained orders and route information. Route information consisted of the battalion orders briefing and annotated large-scale maps. The 507th had commercial Global Positioning Systems (GPS) (Garmin, ETREX VISTA), (FIGURE 2), which had been issued in the United States prior to deployment. The GPS gave CPT King directional signals via a display arrow that indicated the direction and distance the convoy should go. Five additional GPS were distributed to other leaders in the company. The unit was also issued 1:100,000 scale maps of the area of operations—the theater standard. The review of this incident revealed that CPT King relied primarily on his GPS and one of the annotated maps from the orders brief while traveling in his HMMWV(See FIGURE 1 – Note the map from the brief did not have Routes and Objectives annotated here for clarity). CPT King had highlighted only ROUTE BLUE on the annotated map, and believed in error that BLUE was his assigned route.

On 20 March, at approximately 1400 hours, 64 of the original 82 Soldiers of the 507<sup>th</sup> departed CAMP VIRGINIA in 33 vehicles and moved northwest as part of a larger

convoy. Their ultimate destination was OBJECTIVE RAMS more than 350 kilometers distant. The other 18 Soldiers (maintenance contact teams and medics) from the 507th were attached to and moved with other units.



FIGURE 2 Garmin Global Positioning System

#### Movement to ATTACK POSITION DAWSON

During the first leg of the route, from CAMP VIRGINA to ATTACK POSITION DAWSON, while still in Kuwait, the 507th traveled off-road over desert terrain. At 2100 hours on 20 March, the 507th arrived at its first stop, ATTACK POSITION DAWSON, located just south of the Iraqi border. While at DAWSON, the Soldiers refueled and serviced their vehicles, ate and attempted to implement a rest plan. Most Soldiers got some amount of sleep in the 10 hours at this location. (see FIGURE 3)

# Movement from DAWSON to link up with 3d FSB at the Line of Departure (LD), to ATTACK POSITION BULL

At 0700 hours on 21 March, the 507th departed ATTACK POSITION DAWSON to link up with the 3d FSB. They crossed the line of departure into Iraq at 1000 hours. The convoy moved approximately 35 kilometers, arriving at ATTACK POSITION BULL at 1200 hours on 21 March. (see FIGURE 3)

#### Movement from ATTACK POSITION BULL to ATTACK POSITION LIZARD

At 1800 hours on 21 March, the 507th departed BULL with the 3d FSB enroute to LIZARD, 80 kilometers northwest. The convoy continued to travel off-road and some of the heavier vehicles bogged down in the soft sand. Drivers from many units became confused due to the darkness, causing some vehicles to separate from their march columns. Poor trafficability and mechanical problems resulted in the fragmentation of

the 507<sup>th</sup> convoy into two groups. The first group consisted of those vehicles that did not break down or get stuck in the sand and were capable of keeping pace with the 3d FSB convoy. The second group consisted of those vehicles that had mechanical problems or were stuck in the sand, along with those vehicles used to tow or pull other vehicles free. CPT King took personal charge of the first group and arrived at LIZARD at about 0530 hours on 22 March, after an all-night movement. 1SG Dowdy was charged with recovering the second group and leading it to LIZARD. Working through the night of 21 March and into the next day, 1SG Dowdy recovered and repaired vehicles not only from the 507th but from the 3d FSB as well. The 1SG and the second group of 507<sup>th</sup> vehicles would eventually arrive at LIZARD at 1600 hours on 22 March, 22 hours after departing ATTACK POSITION BULL. (see FIGURE 3)

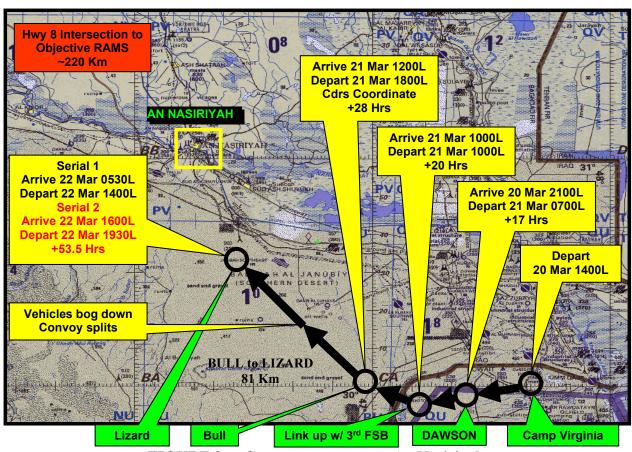


FIGURE 3 Convoy movement to An Nasiriyah

## Decision to Split the 507th Convoy at ATTACK POSITION LIZARD

After arriving at LIZARD, while awaiting 1SG Dowdy's arrival, CPT King contacted his battalion commander to inform him of the 507th's situation. LTC Joseph Fischetti, commander, 5th Battalion, 52d Air Defense Artillery (PATRIOT) acknowledged the report. CPT King also recalls reporting his status and confirming with the 3d FSB staff that the overall situation, to include route, was unchanged. The 3d FSB staff advised CPT King that the convoy would depart at 1400 hours as planned. Based on that information and with the intent to push support forward, CPT King directed his executive

officer, 1LT Jeff Shearin, to lead all the available 507th vehicles and remain with the 3d FSB convoy. Shearin departed with 32 Soldiers in 17 vehicles at 1400 hours with the main 3d FSB convoy. King remained at LIZARD and waited for 1SG Dowdy and the remaining Soldiers and vehicles of the 507th.

At about 1400 hours on 22 March, 1SG Dowdy radioed CPT King to report that he had all of the remaining vehicles running or in tow and was 10-12 kilometers away from LIZARD. He arrived at LIZARD at about 1600 hours. Along with 1SG Dowdy were the two Soldiers from the 3d FSB, SGT George Buggs and PFC Edward Anguiano. Buggs and Anguiano were driving a 10-ton wrecker and had become separated from the rest of 3d FSB while recovering 3d FSB fuel trucks stuck in the sand between BULL and LIZARD. Apparently, 1SG Dowdy coordinated with Buggs and Anguiano to tow a disabled 507th 5-ton truck after they completed their recovery of the 3d FSB fuel trucks.

At 1930 hours on 22 March, 3 ½ hours after 1SG Dowdy closed on LIZARD with all remaining 507<sup>th</sup> Soldiers and vehicles, CPT King organized them into a new march unit. This second element, led by CPT King, departed LIZARD with 33 Soldiers, including himself, Buggs and Anguiano. The convoy was comprised of 18 vehicles, two of which were being towed (see FIGURE 4; composition of convoy on 22 March, including distribution of crew served weapons, radios, and GPS).

## 507th Maintenance Convoy Serial 2

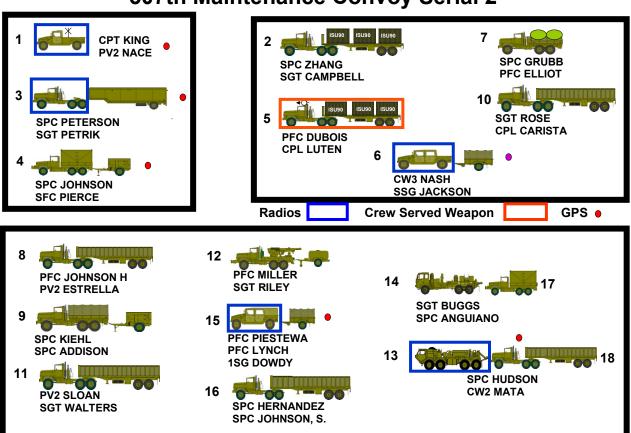


FIGURE 4 Serial 2 convoy (Vehicle numbers represent original march order sequence entering An Nasiriyah)

## Intersection of ROUTES JACKSON (Highway 1) and BLUE (Highway 8)

Unable to communicate with the 3d FSB, CPT King attempted to catch up with the 3d FSB main convoy by deciding to take the most direct route (a straight line azimuth) to Highway 8. This route proved to be extremely difficult, over rough terrain, once again resulting in vehicles becoming bogged down in the sand. It took the unit five hours to reach Highway 8 [ROUTE BLUE] about 15 kilometers away. At this point, 42 hours had passed since the 507th had departed ATTACK POSITION DAWSON. Except for a 10-hour stop at DAWSON, the 507th had been continuously moving. Most Soldiers had slept only a few hours since the morning of the 20th and were in their second consecutive night of movement.

After traveling west on Highway 8, the convoy reached the intersection with Highway 1, ROUTE JACKSON, the assigned route for 3d FSB. The road on which ROUTE JACKSON was designated led southwest of An Nasiriyah, eventually intersecting again with ROUTE BLUE, east of OBJECTIVE RAMS. The initial entrance to ROUTE JACKSON required a left turn at this intersection, where a manned Traffic Control Point (TCP) was planned to direct traffic. When the convoy arrived at this intersection, U.S. personnel were present, but by this time there was no formal TCP. CPT King states that the personnel that were present confirmed that BLUE continued North. Believing ROUTE BLUE was his assigned route, CPT King led his convoy through the intersection and headed north on Highway 8, towards An Nasiriyah in the general direction indicated by his GPS receiver – the waypoint west of An Nasiriyah.

At about 0530 hours, the convoy stopped when CPT King saw lights ahead, which he believed to be an industrial complex or an oil refinery. He conferred with 1SG Dowdy and decided to continue. At an intersection south of An Nasiriyah, Highway 8--ROUTE BLUE-- turned west, requiring a left turn. CPT King did not recognize this and led his convoy straight North through the intersection and on to Route 7/8, exiting ROUTE BLUE. Route 7/8 led the convoy across the Euphrates River into the eastern outskirts of An Nasiriyah. (See FIGURE 5) An Nasiriyah is flanked by the Euphrates River in the south and a series of man-made canals in the north. It is a city characterized by buildings no greater than four to five stories in height, with many narrow streets and alleyways. The surrounding areas of An Nasiriyah, including the roadsides along the route taken by the 507th, are marshlands that have been partially-drained, consisting of soft sand and mud.

## **Movement through An Nasiriyah**

Five vehicles in the convoy had SINCGARS radios and could communicate with one another (see FIGURE 4). SINCGARS communications were augmented by handheld radios in each vehicle, but because of the extended duration of the convoy the batteries had expired. CPT King and 1SG Dowdy were communicating about their location and situation frequently as the convoy moved through An Nasiriyah.

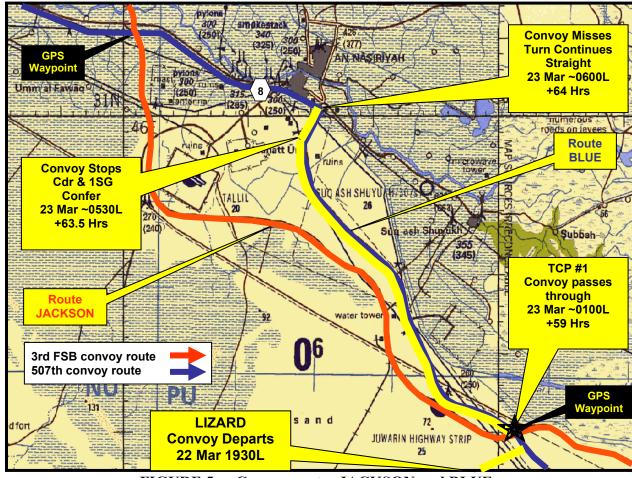


FIGURE 5 Convoy routes JACKSON and BLUE

Several Soldiers in the convoy, including CPT King, observed armed civilians and what appeared to be armed Iraqi soldiers at two checkpoints—one upon entering and the other exiting the town. None of these people fired or indicated hostile intent against the convoy. In fact, the Iraqi soldiers at the checkpoints waved to the convoy. One or more civilian trucks with armed civilians and mounted machine guns (some reports refer to these as "technicals") drove past the convoy several times during its travel through the city, but again, no hostile intent was shown towards the 507<sup>th</sup> convoy and personnel.

Statements from 507th Soldiers indicate that rules of engagement issued by higher headquarters would only permit firing on personnel that exhibited hostile intent. Soldiers had also been warned to expect possible "happy fire"--shots fired in celebration and not intended to cause harm, which is a common practice. Additionally, they had been informed that the carrying of weapons by uniformed or civilian personnel would not, by itself, constitute hostile intent. The Rules of Engagement (ROE) in effect were summarized on a card issued to Soldiers. The ROE were issued by the Coalition Forces Land Component Command (CFLCC). (See FIGURE 6, CFLCC ROE Card).

#### CFLCC ROE CARD

- 1. On order, enemy military and paramilitary forces are declared hostile and may be attacked subject to the following instructions;
- a. Positive Identification (PID) is required prior to engagement. PID is a reasonable certainty that the proposed target is a legitimate military target. If not PID, contact your next higher command for decision.
- b. Do not engage anyone who has surrendered or is out of battle due to sickness or wounds.
- c. Do not target or strike any of the following except in self defense to protect yourself, your unit, friendly forces, and designated persons or property under your control:
  - Civilians
  - Hospitals, mosques, churches, shrines, schools, museums, national monuments, and any other historical and cultural sites.
- d. Do not fire into civilian populated areas or buildings unless the enemy is using them for military purposes or if necessary for your self defense. Minimize collateral damage.
- e. Do not target enemy infrastructure (public works, commercial communication facilities, dams). Lines of communication (roads, highways, tunnels, bridges, railways, and economic objectives) commercial storage facilities, pipelines, unless necessary for self defense or if ordered by your commander. If you must fire on these objects to engage a hostile force, disable and disrupt but, avoid destruction of these objects, if possible.

#### CFLCC ROE CARD

- 2. The use of force, including deadly force, is authorized to protect the following:
  - · Yourself, your unit,, and friendly forces
  - Enemy prisoners of war
  - Civilians from crimes that are likely to cause death or serious bodily harm, such as murder or rape
  - Designated civilians and/or property, such as personnel of the Red Cross/Crescent, UN, and US/UN supported organizations.
- 3. Treat all civilians and their property with respect and dignity. Do not seize civilian property, including vehicles, unless you have the permission of a company level commander and you give a receipt to the property's owner.
- 4. Detain civilians if they interfere with mission accomplishment or if required for self defense.
- 5. CENTCOM General Order No. 1A remains in effect. Looting and the taking of war trophies are prohibited.

#### REMEMBER

- Attack enemy forces and military targets.
- Spare civilians and civilian property, if possible.
- Conduct yourself with dignity and honor.
- Comply with the Law of War. If you see a violation, report it.

These ROE will remain in effect until your commander orders you to transition to post hostiles ROE.

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## Figure 6 CFLCC ROE CARD (Copied from original for clarity)

On its way through the city, the convoy crossed a bridge over the Euphrates River and then another over a canal before coming to a "T" intersection with Highway 16 (See FIGURE 7). CPT King led the convoy left at this intersection, believing that he was still on his assigned route. The convov soon reached another "T" intersection with Highway 7, at which time CPT King turned right, heading north with the rest of the convoy following. CPT King continued to move the convov north and out of the city for approximately 2 kilometers. At this point, King realized, for the first time, that the convoy was off ROUTE BLUE. CPT King stopped the convoy and set up security. His GPS indicated that the main convoy route lay due west. There appeared to be no hard surface roads leading west from his location. After conferring with 1SG Dowdy, CPT King decided to retrace their route back through An Nasiriyah to find ROUTE BLUE/Highway 8. Realizing that he was off the convoy route, he instructed his Soldiers to "lock and load" their weapons and to be vigilant. SFC Pierce reiterated these instructions to all Soldiers. In some of the vehicles, Soldiers took the halt as an opportunity to change drivers. King then began turning the convoy around. This would be the first of two U-turns by the convoy.

While turning around, the 10-ton wrecker, crewed by SGT Buggs and PFC Anguiano, ran out of fuel. CPT King stopped all vehicles and ordered the wrecker refueled. Soldiers refueled the wrecker using 5-gallon cans, as the only fuel truck in this convoy was emptied over the course of the 507<sup>th</sup>'s extended movement. After refueling was completed, CPT King resumed turning the vehicles around and headed south on Highway 7. CPT King was at the head of the convoy and 1SG Dowdy was in the rear. At

the intersection with Highway 16, the convoy turned left (eastward) and headed back towards the city. (See FIGURE 7)

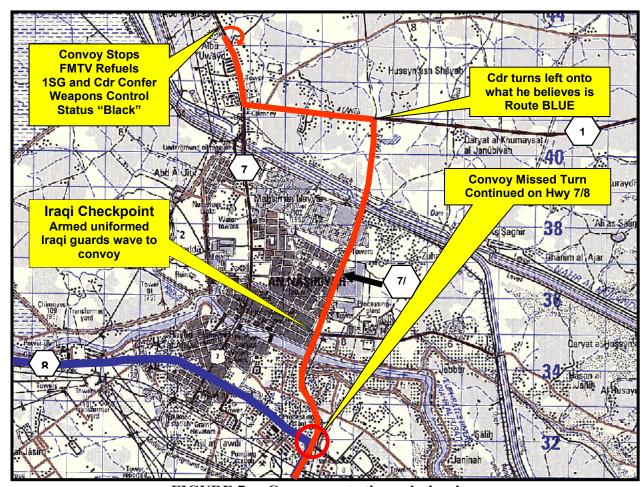


FIGURE 7 Convoy route through the city

### Attack on the Convoy (See FIGURE 8)

As the convoy turned left on to Highway 16, at about 0700 hours, it began to receive sporadic small arms fire, the source and direction of which could not be determined. The 1SG radioed CPT King that the convoy was being fired upon and they needed to speed up to get away from the small arms fire. The 1SG directed the vehicles at the end of the convoy to increase their speed, consistent with unit procedures for reacting to a convoy ambush. Due to dissimilar vehicle size and acceleration rates, spacing between vehicles in the convoy began to increase.

In the speed and confusion, CPT King, who remained at the head of the convoy, passed the intersection with Highway 7/8, missing the right turn going south. 1SG Dowdy radioed CPT King to alert him that he had missed the turn. SFC Pierce, in a 5-ton truck driven by SPC Johnson, sped up to catch CPT King, to tell him that he (SFC Pierce) knew the way back to the turn. CPT King ordered SFC Pierce to lead the convoy back to the intersection. At this point all drivers had passed by the Highway 7/8 turn going south.

Midway in the convoy a 5-ton tractor-trailer driven by PVT Sloan with SGT Walters became disabled. The vehicle behind it, a 5-ton wrecker with water trailer, driven by PFC Miller, with SGT Riley in the passenger seat, executed a combat pick-up of Sloan while moving and under fire. It is unclear whether SGT Walters was picked up by others in the convoy or remained in the area of the disabled tractor-trailer. There is some information to suggest that a U.S Soldier, that could have been Walters, fought his way south of Highway 16 towards a canal and was killed in action. SGT Walters was in fact killed at some point during this portion of the attack. The circumstances of his death cannot be conclusively determined by available information.

The remaining vehicles of the convoy had to travel almost 3 kilometers past the intersection before finding an area large enough to allow the vehicles to execute a Uturn. The convoy pulled off of Highway 16 to turn around and head back to the missed turn. While attempting to make the U-turn, the 10-ton wrecker driven by SPC Anguiano with SGT Buggs, towing the 507th's disabled 5-ton supply truck (originally driven by PFC Lynch with SGT Rose), got stuck in soft sand. While the rest of the convoy turned around and headed west, Soldiers continued to receive fire.

1SG Dowdy, in a HMMWV at the rear of the convoy, conducted a combat pick-up of Buggs and Anguiano along HWY 16. Also in that HMMWV were PFCs Piestewa and Lynch. Piestewa was the driver, and Lynch was seated in the rear. 1SG Dowdy radioed CPT King, informing him that he had picked up two Soldiers and advised King that they needed to get the convoy out of the city as quickly as possible. SGT Buggs or PFC Anguiano began returning fire with an M249 Squad Automatic Weapon (SAW) from the rear of the HMMWV as they continued south.

CPT King regained the lead position in a convoy that had disintegrated into smaller groups and independent vehicles. In the dust and confusion and still receiving fire, the larger, slower moving vehicles required additional space to turn around while smaller vehicles turned around inside of them. This rearranged the convoy's march order and further extended distances between vehicles. The remaining 15 vehicles, including a tractor-trailer being towed by a wrecker driven by SPC Hudson with CW2 Mata, sped south on Highway 7/8. The 507<sup>th</sup> convoy became divided into three smaller groups as it attempted to move south out of the area.

Group 1 The first group consisted of the following vehicles and occupants: #1- a HMMWV, driven by PVT Dale Nace with CPT Troy King in the front passenger seat, #3- a 5-ton tractor trailer driven by SGT Joel Petrik with SPC Nicholas Peterson in the passenger seat and #4- a 5-ton truck with trailer, driven by SPC Timothy Johnson with SFC Anthony Pierce in the passenger seat. As this group fought its way south through the city, it received fire from all directions, primarily from the west side of Highway 7/8. Iraqis attempted to block the road with vehicles and debris. While under fire, PVT Nace, SPC Johnson, and SGT Petrik successfully maneuvered their respective vehicles around and through obstacles and continued all the way through the city. Soldiers in this group returned fire while moving. Most of the Soldiers in this group report that they experienced weapons malfunctions. These malfunctions may have resulted from inadequate individual maintenance in a desert environment. About 10 kilometers south

of the intersection of Highway 8 and 7/8, this group met elements of the 8th Tank Battalion, Task Force Tarawa, U.S. Marines. After CPT King briefed the Marines on his unit's situation, the Marine unit immediately sent elements north on Highway 8 to attempt to rescue the remainder of the 507th.

**Group 2** The second group consisted of the following vehicles and occupants: #2- a 5ton tractor trailer driven by SPC Jun Zhang with SGT Curtis Campbell in the passenger seat. #5-a 5-ton tractor trailer driven by PFC Marcus Dubois with CPL Damien Luten in the passenger seat, #6-a HMMWV with trailer, driven by CW3 Nash with SSG Tarik Jackson in the front passenger seat, #7- a 5-ton fuel truck, driven by PFC Adam Elliot with SPC James Grubb in the passenger seat and #10- a 5-ton tractor-trailer, driven by SGT Matthew Rose with CPL Francis Carista in the passenger seat. Corporal Luten, in the tractor-trailer driven by PFC Dubois, attempted to return fire with the 507th's only .50 cal. machinegun, but the weapon failed. Luten was wounded in the leg while reaching for his M16. The group took increasing small arms and rocket-propelled grenade fire from all sides; and like the first group faced attempts to block the road with debris and vehicles. The tractor-trailer immediately in front of CPL Luten's tractortrailer, crewed by SPC Zhang and SGT Campbell, was hit multiple times and became inoperable about 5 kilometers south of the city—but short of CPT King's final location further south. Zhang jumped out of the disabled tractor-trailer and got on the tractortrailer rolling immediately behind, occupied by Dubois and Luten. SGT Campbell was shot while attempting to fire Zhang's M16/M203. The HMMWV crewed by Nash and Jackson stopped to pick up Campbell, and was disabled a short distance further south. SSG Jackson had received multiple wounds prior to stopping to rescue Campbell. Dubois, Luten, and Zhang turned around and returned to the disabled HMMWV.

SPC Grubb returned fire with his M16 until wounded in both arms, despite reported jamming of his weapon, while PFC Elliot maneuvered their fuel truck through the ambush. SGT Rose, driving a tractor-trailer, maneuvered through obstacles in the road while under fire. CPL Carista, who was riding with Rose, was wounded by shrapnel. The fuel truck, crewed by SPC Grubb and PFC Elliot, and the tractor-trailer, occupied by SGT Rose and CPL Carista, linked up with the Soldiers already at the disabled HMMWV. This group formed a defensive perimeter, while Combat Lifesavers (Carista, Elliot, Rose, Zhang) under the leadership of SGT Rose tended to the wounded Soldiers (Campbell, Carista, Grubb, Jackson and Luten). The Marines arrived at the scene and rescued the 10 Soldiers at this location.

**Group 3** This group consisted of the following vehicles: #8- a 5-ton tractor-trailer, driven by PFC Howard Johnson with PVT Ruben Estrella-Soto in the passenger seat, #9- a 5-ton truck with trailer, driven by SPC Jamaal Addison with SPC James Kiehl in the passenger seat, #12- a 5-ton wrecker, driven by PFC Patrick Miller, with SGT James Riley and PVT Brandon Sloan as passengers, #13- a HEMTT wrecker towing a 5-ton tractor trailer (vehicle # 18), driven by SPC Joseph Hudson with CW2 Johnny Mata in the passenger seat, #15- a HMMWV with trailer, driven by PFC Lori Piestewa with 1SG Robert Dowdy in the front passenger seat, and PFC Jessica Lynch, SPC Edward Anguiano and SGT George Buggs in the rear, and #16- a 5-ton tractor-trailer, driven by SPC Edgar Hernandez, with SPC Shoshana Johnson in the passenger seat.

At the point north of the city on Highway 16, where CPT King ordered the convoy to turn around and go back to the missed turn (south on Highway 7/8), this group had difficulty turning around, probably due to the large size of vehicles and the fact that all were towing a trailer or disabled vehicle.

At about 0720 hours, the 5-ton tractor-trailer, occupied by SPC Hernandez and SPC S. Johnson, came under heavy fire. SPC Hernandez tried to avoid hitting an Iraqi truck blocking the road in front of him and lost control of the vehicle, veering to the right and off the road. To their rear, 1SG Dowdy, in the HMMWV driven by PFC Piestewa, reached Miller's 5-ton wrecker and ordered him to increase speed and keep moving. The 1SG's HMMWV was then hit by direct or indirect fire and crashed at a high rate of speed into the rear of the stopped tractor-trailer, still occupied by SPC Hernandez and SPC S. Johnson.

There were five Soldiers in 1SG Dowdy's vehicle: 1SG Dowdy, his driver PFC Piestewa, and three Soldiers in the back—PFC Lynch, SGT Buggs and PFC Anguiano. 1SG Dowdy was killed on impact. Piestewa survived the crash, but was seriously injured and died in captivity. Lynch was also seriously injured and captured. The circumstances of Buggs' and Anguiano's deaths remain under investigation.

PFC Miller's truck, with SGT Riley and PVT Sloan as passengers, was disabled by enemy fire about 400 meters north of where 1SG Dowdy's HMMWV hit SPC Hernandez's tractor-trailer. PVT Sloan was killed by enemy fire before the vehicle came to a stop. PFC Miller and SGT Riley dismounted from their truck and moved to assist the occupants of the HMMWV and tractor-trailer just ahead of them. The occupants of the HMMWV appeared to be dead or beyond help. SGT Riley attempted to secure 1SG Dowdy's M16, since his own rifle had malfunctioned, but was unsuccessful. SGT Riley then directed SPC Johnson and SPC Hernandez to take cover. Riley also attempted to fire Johnson's and Hernandez's M16s, but both jammed. Johnson and Hernandez were both wounded.

Consistent with the Code of Conduct, with no means to continue to resist, SGT Riley made the decision to surrender the two Soldiers (Hernandez, and Johnson) and himself. PFC Miller moved beyond the crash-site, engaged the enemy, and was captured after being surrounded. Although unconfirmed, Miller may have killed as many as nine Iraqi combatants.

In the HEMTT wrecker towing a 5-ton tractor-trailer, SPC Hudson attempted to fire his M249 SAW while driving, but it malfunctioned. After he had driven past obstacles and debris, including an Iraqi tank blocking the road, his vehicle was disabled on the southern edge of the city. Iraqi forces continued to fire on the vehicle after it stopped. CW2 Mata, in the passenger seat, was killed, having sustained multiple wounds. Hudson, also wounded, was immediately surrounded after the shooting stopped, and was pulled from the vehicle by Iraqis and captured. (FIGURE 8 shows the final disposition of the convoy).

The 5-ton tractor trailer (#8), crewed by PFC Howard Johnson and PVT Ruben Estrella-Soto, and the 5-ton truck (#9), crewed by SPC Jamaal Addison and SPC James Kiehl,

attempted to drive out of the city. After both vehicles maneuvered several miles under fire, and nearly out of the city, both were destroyed. There are few details to describe what happened to the Soldiers in these vehicles. Both vehicles were stopped: #9 overturned at the Highway 8-7/8 intersection, possibly hit by direct or indirect fire, and #8 was disabled south of the intersection. There is some evidence to suggest that vehicle #8 struck the barrel of an Iraqi tank. All four Soldiers were killed in action.

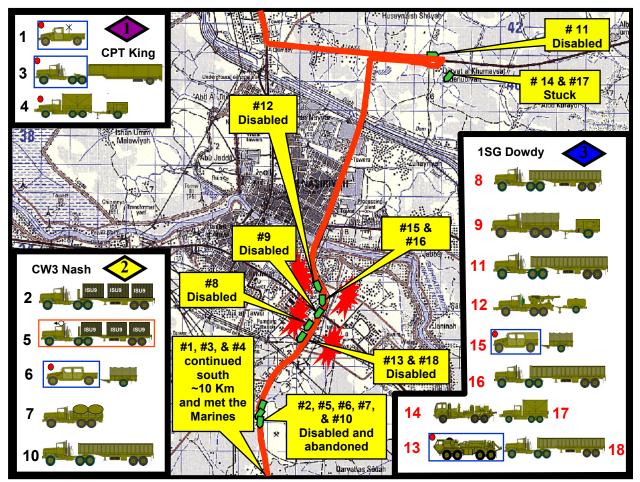


FIGURE 8 Convoy's final disposition

#### Conclusion

Of the 33 Soldiers who entered An Nasiriyah in 18 vehicles (including two that were being towed) on 23 March, 11 Soldiers were killed, seven were captured and nine were wounded (including some of those captured). Sixteen Soldiers in eight vehicles emerged from the attack. The number of Iraqi casualties inflicted by Soldiers of the 507th and 3d FSB could not be determined. From start to finish, the attack on the 507th lasted an estimated 60 to 90 minutes.

In reviewing the actions on the morning of 23 March 2003, it is clear that the Soldiers of the 507th Maintenance Company, including two Soldiers from the 3d FSB, were attacked for a sustained period of time. Fatigue, stress, the asymmetric nature of the threat, and the environment contributed to the events leading up to and during this

attack. Every Soldier performed honorably and each did his or her duty. The battle for An Nasiriyah would last until March 31<sup>st</sup> when the Marine Corps ultimately gained control of the city.

## **Hard Lessons**

## **APRIL 1, 2004**

#### **KATHERINE MCINTIRE PETERS**

**Deputy Editor** 

The nation was shocked by what happened to Jessica Lynch's unit in Iraq, but many Army officers weren't.

Well before dawn on March 20, 2003, Army and Marine Corps combat forces crossed into southern Iraq, launching the swiftest ground campaign in military history. Within three days, thousands of vehicles and hundreds of aircraft had pushed more than 200 miles into enemy territory. It was an unprecedented feat made possible by the actions of thousands of support troops-those who evacuate the wounded, keep the combat vehicles running and ferry ammunition.

At the tail end of the long support column came Pfc. Jessica Lynch's unit, the 507th Maintenance Company, whose deadly experience has reverberated through the Army, sending senior leaders scrambling to reorder priorities and revamp the service's training curriculum. Within three days of setting off from Kuwait, the 507th strayed off course on the battlefield, lost radio contact with other units and ran out of fuel. Finally, under deadly assault, most of the company's poorly maintained weapons malfunctioned. Inadequate training, insufficient equipment, exhaustion and human error all were blamed for a fiasco that left 11 soldiers dead and nine captured, including Lynch.

If the nation was shocked by what happened to the 507th, many Army officers were not. "The only thing that surprised me about what happened to the 507th was that it didn't happen to other units as well," says an Army planner at U.S. Central Command, the organization that led the war in Iraq. "The system sets these guys up for failure," he added. It is a harsh indictment, but one with which Army leaders seem to agree.

"Soldiers fight as they are trained to fight," the Army's 2003 report on the 507th notes. It may be the most telling line in the report, and explains why Army Chief of Staff Gen. Peter Schoomaker, who was brought out of retirement by Defense Secretary Donald Rumsfeld last summer, has initiated a training program aimed at instilling a "warrior ethos" among all troops-cooks and mechanics as well as tankers and infantrymen.

In "The Way Ahead," guidance to the troops published last November, Schoomaker wrote: "There can only be one standard of training for our soldiers, regardless of component or specialty." He tacitly acknowledged something everyone in the Army knows: Not all soldiers are treated equally. The combat troops in high-powered units get the newest equipment and are held to the highest standards of soldiering. The support

units, those handling logistics and maintenance, for example, often are too busy keeping combat troops' equipment running and supplies flowing to master combat tactical skills. Changing that system will take much more than guidance from the chief of staff. "No support battalion commander was ever going to be relieved [of his duties] if he or she didn't conduct a training event. They would get relieved if they didn't provide adequate support to the combat commander," says the Army planner.

#### INSTITUTIONAL CHALLENGES

Grasping why the soldiers of the 507th didn't have the tools they needed requires an understanding of how the Army is structured and how it has evolved over the past two decades. The tactical Army is composed of three types of troops: combat (those whose primary job is to pull the trigger on a weapon, such as infantrymen and tankers); combat support (those whose specialties influence the battle, such as intelligence analysts, engineers, military police); and combat service support (those whose jobs are more administrative, such as logisticians, mechanics, supply clerks and cooks). All these roles are essential on the modern battlefield. But every organization has a hierarchy of clout. Not surprisingly, combat troops are at the top in the Army.

During the 1980s, as the Army budget ballooned with the Reagan administration's military buildup, the service bought more sophisticated equipment and trained harder and more frequently. For the combat troops it was a boom time. For the maintenance units and logisticians, it was a time of enormous change and challenges. The newer equipment was harder to maintain, and as units trained more often, equipment broke down more frequently. Many support units were so busy trying to keep combat units running that they neglected training in tactical skills. In the early 1990s, tight budgets forced the Army to make deep cuts in personnel. To maintain combat strength, the Army made those cuts somewhat disproportionately from already-lean support units.

The Army's report on the misfortunes and miscalculations of the 507th provides a cautionary tale for combat commanders and their supporting units in contemporary warfare.

The 82 soldiers of the 507th arrived in Kuwait late last February from Fort Bliss, Texas, a desert post on the U.S.-Mexican border and home to the Army's Air Defense Artillery Center. Between their arrival in Kuwait and the assault into Iraq, they prepared for their mission, which was foremost to maintain the vehicles and equipment of a Patriot missile battery, the 5th Battalion, 52nd Air Defense Artillery.

At 2 p.m. on March 20, hours after the Patriot battery crossed into Iraq, 507th company commander Capt. Troy King led 64 of his soldiers in 33 vehicles from a staging area in Kuwait to a new staging area on the Iraqi border for the advance north. King carried a CD-ROM containing his orders, route information and annotated large-scale maps. He also had a commercial global positioning system receiver. His orders were to follow behind the 3rd Infantry Division's 3rd Forward Support Battalion, the unit to which he reported, through several staging areas to a destination 350 kilometers northwest. The support convoy was to take Highway 8 north, then take Highway 1 west on a dogleg

around the city of An Nasiriyah, before returning to Highway 8 and continuing the trip north. King believed, erroneously, that he was to stay on Highway 8 for the entire trip.

It took seven hours for the 507th to reach the rendezvous point on the Iraqi border. They arrived at 9 p.m., exhausted after traveling off-road over desert terrain. The soldiers refueled and serviced their vehicles, ate and tried to get some sleep before pushing on early the next morning. It would be days before many of them would get another chance to rest. They left at 7 a.m. on March 21, and around noon, arrived at the second staging area; a few short hours later they were on the move again toward a third staging area 80 kilometers northwest. It was hard going. Some of the heaviest vehicles got stuck in the soft sand. Others broke down. Drivers grew confused in the darkness and lost track of the column.

King decided to break the convoy into two groups. He put his talented first sergeant, Robert Dowdy, in charge of the vehicles that were stuck or stalled, along with those that could tow or pull them free. King then moved ahead with the vehicles that could keep pace with the 3rd Forward Support Battalion. King's group arrived at the next staging area, a position called Lizard, at 5:30 a.m. on March 22, and he reported the situation to his battalion commander. Meanwhile, Dowdy worked through the night to recover and repair the disabled vehicles. The main support convoy departed Lizard early that afternoon, along with the members of the 507th led there by King, but King remained behind to wait for Dowdy.

Dowdy arrived at Lizard later that afternoon. By early evening, King had organized the vehicles into a column. He distributed the unit's remaining five radios, six GPS receivers and single .50-caliber machine gun among the 18-vehicle convoy (two of the vehicles were being towed) and the rest of the 507th moved out. There were 33 soldiers in all, including two from the 3rd Forward Support Battalion who, with their 10-ton wrecker, earlier had become separated from the battalion after helping to rescue some of the 507th's vehicles.

King had no way to communicate with the 3rd Forward Support Battalion, now far ahead of him, and he was anxious to catch up. He decided to take a shortcut to Highway 8. That turned out to be a bad idea. The terrain was rough and vehicles again became bogged down. It took five hours to make the 18-kilometer journey to Highway 8. By then, nearly two days had passed since anyone in the group had slept.

#### WRONG TURNS

When the convoy finally reached the intersection of Highway 8 and Highway 1, King mistakenly believed he was to stay on Highway 8. By 5:30 a.m. on March 23, he was on the outskirts of An Nasiriyah. Although Highway 8 actually veers to the west of the city, requiring a left turn, King, who was relying on his GPS receiver for directions, missed the turn and continued north across the Euphrates River and into the city. By then, the convoy had been traveling so long that most of its radio batteries were dead.

Some soldiers worried when they saw armed Iraqis at checkpoints around the city, but the Iraqis waved at the troops. Other Iraqis, manning machine guns mounted on trucks,

drove past the convoy. The Iraqis were troubling, but the soldiers carried orders forbidding them from using their weapons unless they were fired upon first. Also, they had been told in briefings that just because Iraqis carried weapons it didn't mean they were hostile.

An Nasiriyah is a maze of low-rise buildings, narrow streets and alleys. The city is built on partially drained marshland, flanked in the south by the Euphrates and in the north by a series of man-made canals. The roadsides along the route King took are full of soft sand and mud, a perfect trap for heavy vehicles. King soon realized he was lost. He ordered the convoy turned around so he could retrace his steps, but the 10-ton wrecker ran out of fuel as it was making the turn. The only fuel truck was by then empty, so King ordered the soldiers to refuel the wrecker using their five-gallon fuel cans. King then led the convoy south back through the city and into one of the deadliest attacks encountered by any troops in the war. As Iraqis began firing on the convoy, 1st Sgt. Dowdy, who was at the rear of the convoy, radioed King and told him the convoy needed to move faster. King sped up, but then missed his turn. By the time another soldier caught up with him to tell him, all the drivers had missed the turn as well.

The convoy attempted to turn around again, a difficult prospect while under fire in the narrow streets. The 10-ton wrecker got stuck in the soft sand, and in a dramatic rescue, Dowdy freed the two soldiers in the truck and put them in his own Humvee. But soon, the Humvee was hit by fire and crashed into a tractor-trailer in the convoy. Dowdy was killed on impact. The others in the Humvee were seriously injured, some fatally; those who survived were captured, including Lynch. King regained the lead of the convoy, which by then had disintegrated into three small groups under heavy fire. Soldiers fired back, but most of their weapons jammed, due to lack of disciplined maintenance in desert conditions.

By all accounts, the soldiers fought bravely. Some were remarkably skillful. Pfc. Patrick Miller, a 23-year-old welder from Kansas, "single-handedly took on several Iraqis, manually slamming rounds into his assault rifle and firing as they prepared to lob mortar rounds at Lynch and other soldiers from the 507th," according to the *Baltimore Sun*. He was captured with eight others and was the only soldier in the unit to receive a Silver Star, one of the military's highest awards for valor.

King, his driver and soldiers in two other vehicles ultimately made their way out of the city and encountered a Marine Corps combat unit, which immediately sent troops north to rescue the remaining members of the 507th. It took the Marines another eight days to get the city under control.

Of the 33 soldiers that entered An Nasiriyah with the 507th, 11 were killed in combat and nine were taken prisoner. Of the 22 survivors, nine were wounded in action.

## **EVERY SOLDIER A WARRIOR**

The Army's report on the 507th is troubling reading for any soldier. The fact that so many of the 507th's weapons malfunctioned is deeply disturbing to many. It might not be surprising to a layman that most soldiers in the 507th apparently hadn't spent

enough time cleaning their weapons-the reason the weapons malfunctioned. After all, the soldiers were traveling for days with little rest and under harsh environmental conditions. To an infantryman or any other combat soldier, however, the care of his weapon is a point of pride and takes priority over virtually everything else. Even the most reliable rifles and machine guns must be disassembled, cleaned and oiled regularly. In Iraq, where sand the consistency of talcum powder permeates everything, soldiers need to clean their weapons more than once a day. Such knowledge is drilled into infantrymen until it becomes second nature.

Instilling such knowledge in all soldiers, no matter their specialty, is the new Army chief's goal. Retired Lt. Gen. Theodore Stroup, formerly the Army's top personnel officer, has much praise for Schoomaker's plan. "He has turned around the money flow, and we're going to put more money immediately into fixing some of these individual soldier [shortcomings]," Stroup says. "[Schoomaker] wants to make sure everybody can defend themselves and can react-which is different from defending-to certain battlefield tactical situations that arise from small units moving together."

Schoomaker also is emphasizing the importance of fully equipping every soldier who goes to war with the best body armor, weapons and communications equipment. In the past, the emphasis has been on outfitting units sent first to the fight or closest to the front lines. But operations in Iraq, where U.S. forces confront insurgents instead of a conventional military force, have rendered such distinctions far less relevant than in the past.

Now, all units deploying to Iraq, active and reserve, combat and support, are getting additional training in tactical skills. In addition, the Army has hired the Alexandria, Va.-based contractor Military Professional Resources Inc. to conduct realistic training in Kuwait for troops already in the region or just arriving. MPRI, which employs retired military personnel, is preparing soldiers for ambushes like the one that derailed the 507th.

Stroup says that living up to Schoomaker's training goals will require a cultural change on the part of the Army. It's a brutally demanding job for units that often are too small and under-equipped. Stroup says there's rarely enough time in the day for most units to accomplish their objectives. So how will a combat commander react in the future when his maintenance company commander tells him the unit's tanks or artillery won't be repaired on schedule because the maintenance unit has to do tactical combat training? "That's to be determined," says Stroup.