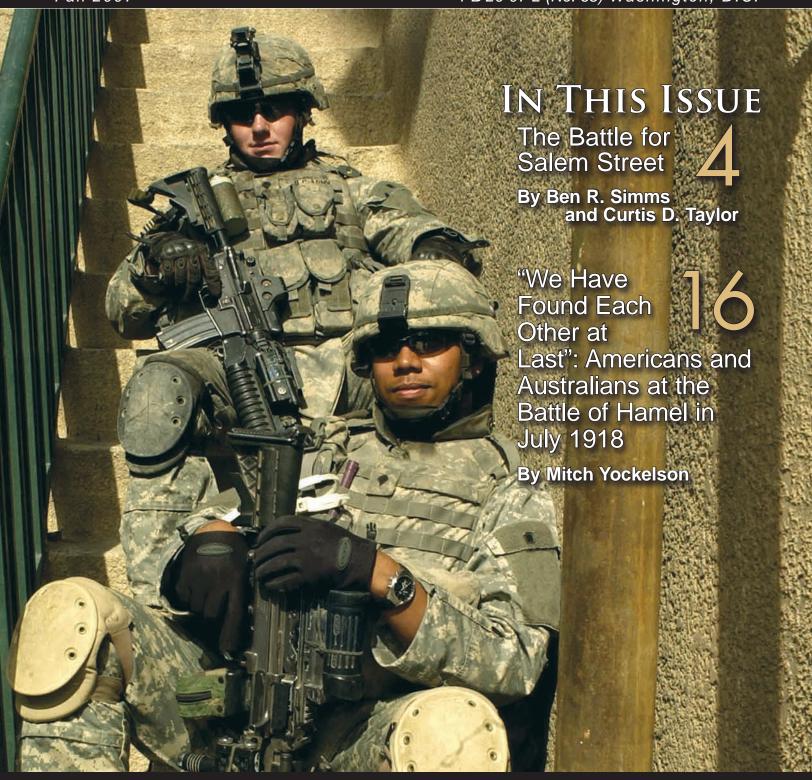
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"Despite the millions of dollars worth of advanced technology we brought to Salem Street that morning, the talent and skill of our noncommissioned officers decided the outcome of the fight."

— Ben R. Simms and Curtis D. Taylor



FOR SALEM STREET' FOR SALEM STREET'

By Ben R. Simms and Curtis D. Taylor

October 2006, a reinforced American tank platoon from Company D, 2d Battalion, 8th Infantry Regiment, supported by a platoon of Iraqi Army infantry, came into heavy contact with a large, well-equipped Shia militia force while conducting a raid deep in the heart of a hostile city.1 The battle lasted over four hours and resulted in at least thirty militiamen being killed in action and in the complete destruction of one U.S. M1A2 Abrams tank. Miraculously, no American or Iraqi Army soldiers were hurt in the action. First and foremost, this battle showcased the bravery and versatility of the young American populate soldiers that enlisted and noncommissioned officer ranks. Second. M1A2 tank proved again to be an indispensable asset in urban warfare—particularly against a well-equipped enemy. Finally, this incident demonstrated, once more, the absolute importance of the combined arms team. This essay will summarize the action in those four hectic and confusing hours and offer lessons learned from the experience.

SITUATION

In late August 2006, a large force of Shia militia loosely

affiliated with the Jaish al-Mahdi organization of Moqtada al-Sadr overran a platoon-size contingent of Iraqi Army soldiers in the city of Diwaniyah, the capital of Qadisiyah Province. With a population of about half a million, Diwaniyah lies about twenty kilometers east of Najaf in southern Iraq, and it has a history of involvement with radical, Shia-based insurgent groups. After overrunning the platoon, the insurgent leaders at the scene had their men gather seventeen Iraqi Army prisoners and publicly execute them in front of a large crowd of onlookers. After this event, the remaining Iraqi Army forces evacuated the city to the security of their nearby compound. This effectively left the Shia militia in control of the city.

Within hours of this incident, the 2d Battalion, 8th Infantry Regiment, based at Forward

Operating Base Kalsu, eighty kilometers to the north in Babil Province, received a call to prepare to deploy to Diwaniyah to restore order and enable the Iraqi Army to regain control of the city center. The battalion, an element of the 2d Brigade Combat Team, 4th Infantry

Division, initially deployed two mechanized infantry company teams and one armor company team to Diwaniyah. When the American heavy armor arrived in Diwaniyah, the majority of the militia fled the city, and a combined U.S.-Iraqi task force was able to clear portions of it with virtually no resistance and temporarily regain control of the more hostile neighborhoods. The two infantry company teams redeployed immediately after the operation. The armor company, the battalion's Delta Company "Dragoons," remained in the city to support Iraqi Army operations designed to kill or capture the militia leaders responsible for the massacre of the Iraqi soldiers.

Tue BATTLE

On the evening of 8 October 2006, the Dragoons received intelligence on the location of



A sport utility vehicle belonging to a Coalition contractor destroyed by an improvised explosive device in Diwaniyah, c. September 2006

a prominent sheik accused of ordering the execution of the Iraqi soldiers. He was videotaped brandishing a handgun he had taken from the body of the commander of the captured Iraqi soldiers. A local Iraqi offered to lead Coalition forces to the house and positively identify the sheik.

The targeted sheik located one block west of Salem Street (pronounced SAH-lem), a thoroughfare that ran through a well-known Jaish al-Mahdi stronghold. The Iraqi source thought we could approach using a side street, thus avoiding the dangers of Salem Street altogether. The most recent aerial photography seemed to support this. The force package for the raid consisted of five M1A2 SEP tanks, which were operated by the company commander and members of the 2d Platoon of Delta Company, and three Iraqi Armored Up-Armored HMMWVs, operated by Iraqi Army personnel.²

Urgent security concerns in the normal sector of the 2d Battalion, 8th Infantry Regiment, had forced the Army to redeploy all of the battalion's infantry platoons back to Kalsu. Up to this point, Iraqi Army infantry had fought well beside U.S. forces, and the battalion's officers believed that a mix of U.S. tanks and Iraqi infantry would provide the combined arms versatility that is absolutely essential in urban warfare. To further complicate matters, for security reasons the Iraqi source and an interpreter both needed to stay with U.S. forces, so they rode in the loader's position in two of the tanks. This reduced the combat effectiveness of those two tanks.





The combined raid force rolled out of the Iraqi Army compound shortly after midnight on 9 October and headed into the city. While the force moved along Jamhouri Street on its final approach to the turn to the target's house, all the lights in the city went out, shrouding the column in darkness. We were never able to determine whether the power failure was a planned reaction to our approach or an unintentional blackout, nor could we easily guess. Both types of power outage had occurred frequently in this area of operation and elsewhere in Iraq. Either way, the darkness was of little concern to us, and we continued forward without delay.

As the force approached the target, Sfc. Jonce Wright, who commanded the lead tank, observed that the planned route would not support the movement of tanks. The next best option was to use Salem Street to carry the tanks to the vicinity of the target, located less than 600 meters away. As Sergeant Wright's tank, D24, turned north onto Salem Street, it was immediately attacked by a rocket-propelled grenade (RPG) fired from around the corner of a building to its front. Sergeant Wright's crew immediately fired an M1028 canister round from the tank's 120-mm. main gun and charged into the enemy ambush.3 The RPG gunner leaned around the corner and fired a second time but again missed. While the crew of D24 reloaded the main gun, the tank commander returned fire with his .50-caliber, flex-mounted machine gun. As the tank crossed into the intersection where the enemy was last spotted, an RPG struck its right side, causing an enormous shower of sparks and



flame. The main gun was already aimed over the side of the tank, down the alley, and the crew was able to observe the location of the RPG team as it fired. There were two RPG gunners taking cover behind a car parallel-

parked on the right side of the road, and a third rifleman

hid behind a van across the street. The tank's main gun returned fire, sending a highexplosive antitank (HEAT) round into the car. When the obscuration cleared, the tank's crew observed that the car was destroyed and resting on the bodies of the two RPG gunners. The man who had been behind the van was now lying dead in the street. Almost immediately, someone came out of a house and dragged his body away.

Meanwhile, at the intersection of Jamhouri and Salem Streets, the Iraqi Army platoon that had been following the lead section of tanks heard the firing, stopped, and refused to move forward. Since the street was not wide enough to allow a tank to pass the Iraqi HMMWVs, this cut the element in half and prevented the raid force from proceeding the limited remaining distance to the objective. The Iraqi lieutenant in

charge was visibly shaken after seeing the lead tank ambushed by RPGs. He frantically claimed he had orders to return to his camp. After the company commander, Capt. Simms, made several appeals and threats, the Iraqi lieutenant finally agreed to continue his advance toward the target. While

Captain Simms was trying to negotiate with the lieutenant, a **Above**: Iraqi Army soldiers on a foot

Below: Lieutenant Merchant

left rear of his tank. First Lt. Andrew Merchant, following the who was commander's tank in D21. identified the rifleman, engaged the attacker with his .50-caliber machine gun, and had his gunner engage with the tank's 7.62-mm. M240 coaxial machine gun, destroying a bus that the rifleman was using as cover and neutralizing the threat. After the Iraqi Army platoon

rifleman appeared to the

resumed movement, the lead section of tanks led the force to the target's house and set a cordon around the access routes to it. The Iraqi Army soldiers quickly entered the building and accomplished their mission. Within minutes they rejoined us and reported that they had captured the target and recovered the slain Iraqi officer's pistol. As the raid on the house began, an RPG team attacked the trail tank, D22, commanded by S. Sgt. Russell Chapman, from the same alley where D24 had destroyed the previous RPG team. The RPG round struck the tank in the side, detonating on a side skirt. The blast disabled the commander's

> optics and started a fire in the engine. Sergeant Chapman continued to fight in the tank using night-vision goggles, while his gunner immediately returned fire down the alley with a canister round. The RPG gunner

was firing from around a corner approximately



Alleyway off Salem Street near where tanks D23 and D24 engaged attacking Iraqi militiamen on 9 October 2006

150 meters away. Because of the obscuration created by the canister round, determining if it had any effect was impossible. Another RPG team fired from the end of the alley and missed. For several more minutes, Sergeant Chapman and his crew continued to exchange fire with individuals armed with RPGs at the end of the alley while the fire in his tank engine grew in intensity. After Sergeant Chapman realized that the fire was going to consume the engine, he ordered the evacuation of the tank. Seconds before the crew evacuated, the gunner, Sgt. Jason Carroll, identified

two men with an RPG at the end of the alley. He fired a final HEAT round dead on target and destroyed the

RPG team, before abandoning the burning tank.

By this time the Iraqi Army soldiers had completed their raid and were back in their vehicles. Captain Simms asked the forward Sgt. Joseph Schumacher, gunner of tank D23, prepares to load a HEAT round

8th Infantry Regiment, to provide immediate close air support and additional armor support. S. Sgt. Jimmy Brown, commanding D23, meanwhile smashed his tank through a compound wall in order to quickly secure a key alleyway and protect the team's northern flank. At the same time, Lieutenant Merchant in D21 and Captain Simms in D66 moved back to the burning tank. Sergeant Chapman's last report was that his tank was on fire, had fired at an RPG team, and was being evacuated. As the two tanks approached, they could see Chapman's crew taking cover behind the tank and firing at a rooftop.

command post of the 2d Battalion,

The crewmen were pinned down near the burning tank by a rifleman on the roof above them. Sergeant Chapman's decision to stay until the last possible moment on the burning tank probably

saved them by allowing them to destroy the RPG team. This way they were able to take cover from the rifleman instead of facing attackers from both directions. The two supporting tanks engaged the rifleman with fire from their coaxial M240 machine guns, while Chapman's crewmen fired at him with their personal weapons. The rifleman went down in a hail of M240 fire, and the raiding force did not receive any more fire from that rooftop the rest of the night.

With the rifleman gone, Sergeant Chapman's crew quickly split up among the four remaining tanks, which were disposed as follows: Sergeant Wright in D24 faced the north on Salem Street, Sergeant Brown in D23 secured the northeast alleyway, Captain Simms in D66 secured the southeast alleyway, and Lieutenant Merchant in D21 secured the burning tank to the south. Almost immediately Sergeant Brown observed an individual carrying a sniper rifle at the end of his alley. He fired his tank's .50caliber machine gun and killed him. An RPG team appeared next and his gunner engaged it with a HEAT round. A second RPG gunner moved down Salem Street toward D24. Sergeant Wright engaged him with a canister round, destroying the insurgent and detonating the RPG round on his shoulder. Another RPG gunner tried to maneuver on D23, and Sergeant Brown destroyed him with .50-caliber fire from his tank commander's position. Several minutes later, yet another RPG team appeared, and D23 destroyed it with a multipurpose antitank (MPAT) round.4 Sergeant Brown then reported that his turret was

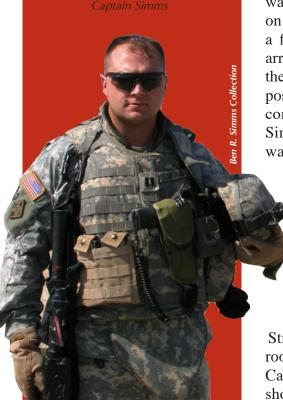
partially disabled due to cold electrical wires that had wrapped around it as he smashed through the security wall. With the turret frozen in place, the crew continued to fight by pivot-steering the tank left and right.

Because D22's crew had split up among the rest of the platoon, this contact took place while each of the tanks carried five men. With the exception of Sergeant Chapman, who displaced the Iraqi intelligence source from the loader's position in Sergeant Brown's tank, each of the dispersed American crew members, rifle in hand, had to share the loader's station with the loader of the tank he had selected, while the crew kept the tank in the fight. This greatly complicated the tasks of the loader, who had to maneuver in an already cramped space, hit a knee switch, select a round from the ready rack, and then pivot and maneuver the 50pound main gun around into the breach. Once the main gun was loaded, the loader and the extra crewman both had to ensure that they were clear of the path of the gun's recoil in a space designed for one man. All this occurred while the tanks were in a quickdraw battle with RPG gunners and snipers. Having yielded his position to Sergeant Chapman, the Iraqi civilian who had identified the target voluntarily moved to the top of Sergeant Brown's tank. Because the turret was entangled with wires, he had to hang on to the armor on the top of the tank while the main gun fired round after round down the crowded alleyways. To his credit, despite being terrified by the firefight and repeatedly jolted by the recoil of the main gun, the young Iraqi man never lost his composure.

Approximately forty minutes into the battle, as Sergeant Brown was engaged in a toe-to-toe fight on the north end of Salem Street, a flight of two Air Force F-15s arrived on the scene and contacted the battalion's forward command post and ground elements on the command's frequency. Captain Simms assessed that the enemy was moving in two groups.

The first group, at the north end of Salem Street, was trying to outflank Sergeants Brown and Wright to get into position for a clean RPG flank shot on either tank. The second group was moving along a street parallel to and east of Salem

Street and attempting to seize the rooftops around the burning tank. Captain Simms requested repeated shows of force over Salem Street



and 500 meters to the east. The flames from the burning tank were now reaching three stories high and were drawing the local chapter of the Mahdi militia like a magnet. The F-15s needed to provide a quick deterrent or the situation could soon escalate out of control. The enemy appeared to be coordinating the movement of the two groups in order to envelop the small force and cut off its line of communications. This was a level of enemy sophistication that the battalion was not used to seeing. Fortunately, the militia members had no appreciation of American night-vision systems or of the futility of seeking cover behind vehicles or walls. When they crouched behind a car or a wall, the tanks simply fired at and obliterated the obstruction. Still, the threat of envelopment was real and growing more serious with every minute.

Using the burning tank as a reference point, the pilots began to report what they were seeing directly onto the command net. The enemy was approaching from the northeast and lining up along a road that roughly paralleled Salem Street 300 meters to our east. After several low, earshattering passes from the F-15s, the enemy started to grow more disorganized and less reluctant to charge down the alleyways. On several occasions, the pilots identified hostile movement on the rooftops around the burning tank. They immediately illuminated the enemy positions with a directed infrared beam that the tank commanders picked up with their night-vision goggles.

Back at the battalion forward command post, the primary concern was how to prevent the



encirclement of the force and how to protect the long line of communications back to the compound. Clearly, the enemy's most logical course of action would be to lay deadly roadside bombs along our approach routes in order to cut us off from any relief. To prevent this, a quick reaction force of four tanks from the battalion's Company C rapidly closed the distance to the burning tank and established a strongpoint at the intersection of Salem and Jamhouri Streets. This intersection gave the relief platoon a wide field of view in four directions and allowed it to defeat any attempt to emplace explosives on either route. As soon as the relief force arrived at the intersection, it came into contact with an RPG team from a nearby alley. The soldiers opened fire immediately with a canister round. The F-15s reported men on the rooftops immediately above the tanks. Unable to see the attackers above them because of the angle, the crews opened fire with their .50-caliber machine guns, aiming for the bottom of the bright infrared light beams coming down from the aircraft. Men scattered off the roofs as the armor-piercing rounds entered the buildings near their top floors and burst through the ceilings.

While the relief force fought off the enemy attack, D66's crew spotted an RPG team trying to move down the alleyway that it was securing. A small pack of dogs and several startled birds betrayed the presence of the enemy team before it rounded the corner. This cued Captain Simms to take aim down the alley. He had a good defilade position from which he could look down the alley from the tank commander's cupola and cover it with his tank's .50-caliber machine gun, while his gunner secured the school and large wall to his north. Captain Simms fired at the RPG team members as they rounded the corner and saw flashes from the armor-piercing incendiary rounds in their midst and on the wall next to them. When Simms stopped firing, the enemy had moved back north.

Also during this time, another RPG gunner appeared from the north on Salem Street. He fired at Sergeant Wright from around a corner but missed. Wright returned fire with a HEAT round, destroying the RPG gunner. Due to the lack of gaps between the adjacent townhouselike residences that lined the alleys, those alleys offered the enemy almost no concealment or cover from our weapons. Further, the varied heights of the buildings prevented the enemy from simply moving from rooftop to rooftop to envelop the tanks. With Sergeant Wright securing the northern flank on Salem Street and the relief force holding Jamhouri Street to the south, we had "refused right" and "refused left" to the enemy on the blocks east of Salem Street. We were effectively in a standoff. The enemy fighters could not enter any of the alleyways that led to Salem Street nor could they envelop us. We could not get at them in the parallel street to the east of Salem because of the RPG threat and the necessity to secure the burning wreckage of D22.

About this time the F–15 flight lead reported that he was leaving the net to conduct a tanker refuel. This was the last we heard from our close air support, although the flight stayed in the air for several more hours. Before the aircraft returned from the tanker stop, Air Force ground control directed the flight to talk only on highfrequency radios and only to the nearest Air Force ground control team eighty kilometers north at Forward Operating Base Kalsu. For the troops of the battalion on the ground to communicate with the pilots, they had to contact the battalion's forward command post, which would relay their

messages through an online chat system to the ground control team at Kalsu that would finally pass the message to the aircrew. This effectively ended the crew's close coordination with the troops in contact and eliminated the superior situational awareness the airmen had provided to the ground tactical commander.

Just after Sergeant Wright's engagement, a second relief force led by Maj. Curtis Taylor, the battalion operations officer, arrived with one tank, one M88 recovery vehicle, and a company of Iraqi Army soldiers. The Iraqi company immediately established a screen along Jamhouri Street to secure the exit route. The tank, HQ63, and the M88 moved toward the burning wreckage that was once Sergeant Chapman's



tank. The small engine fire had grown to consume the entire vehicle. Flames reached high above the buildings, and the heat could be felt at 100 meters. Small puddles of molten aluminum were beginning to form at the base of the tank as the tracks and road wheels melted into the asphalt.

Two Apache helicopters also arrived at the scene at the same time as the Iraqi company. As the gunships made their first pass, the members of another RPG team attempted to maneuver down Sergeant Brown's alley to the northeast. Brown could see their RPG poking up into the air as they moved behind a low wall. He destroyed the wall and the RPG team with a HEAT round. Once the Apaches spotted the friendly tanks, they immediately reported dismounts on the street to the east. Captain Simms confirmed that there were no friendly dismounts. The Apaches reported taking enemy fire and requested clearance to engage. Major Taylor cleared the fire, and the Apaches began a series of gun runs down the long street parallel to Salem, catching the enemy in enfilade. The pilots reported two to four enemy dismounts killed. The fire from the helicopters pushed the members of another RPG team into Sergeant Brown's alley, and he destroyed them with a HEAT round. As attack aviation continued to search for targets, Sergeant Brown identified another group of armed individuals. He engaged them with an MPAT round but was unable to determine the effect. Attack aviation identified a final RPG team and destroyed it with 30-mm. cannons. This was the last contact with the enemy. The attack aviation proved to be

the ideal weapon at the perfect time. Unable to move against the tanks, the enemy was pinned down in the parallel street. When the Apaches spotted them hiding along the street, the enemy fighters ran out of options. Most of the survivors slipped into the nearest house and blended in with the local civilians. The engagement had lasted four hours from first to last contact. Throughout the night, a steady stream of unarmed people policed up the enemy remains, but the raiding force made no effort to interfere.

Near sunrise, the tank had burned down enough for the local Iraqi fire department to extinguish the flames. positioned our vehicles around the damaged tank to provide better security from the crowds that started forming right at sunrise, while members of the Iraqi company began to search the surrounding neighborhoods. They found a rocket at the school on Salem Street and took eight detainees. We owned the center of Mahdi-controlled territory for a total of fourteen hours as we continued our efforts to recover the destroyed tank with a complex ballet of cranes and heavy equipment trailers.

Throughout the day large crowds gathered on all sides of the perimeter we established around the recovery operation. The crowds would get as close as we would let them. Children would run to within fifty meters of the tank and throw rocks at the men and equipment involved in the recovery mission. The rocks were no more than a nuisance, but on two separate occasions grenades emerged from behind the crowd of children and



An M1A2 SEP tank operated by Company D, 2d Battalion, 8th Infantry Regiment on a mission in Diwaniyah, August 2006

detonated in front of us. One of these grenades slightly wounded Captain Simms's interpreter in the arm. On a third occasion, a sniper hiding in or near a crowd fired a round that hit a telephone pole near the recovery work. As dangerous and frustrating as this was, the soldiers never lost their composure, and no civilians were injured. By midafternoon we had lifted the derelict tank onto the back of a trailer and were on our way back to Camp Echo on the south side of Diwaniyah.

LESSONS LEARNED

The four-hour battle for Salem Street reconfirmed the value of the M1A2 tank as an indispensable weapon on the urban battlefield. In the chaotic first minutes of the attack, the tanks became fortresses from which we could dominate the battlefield. The prior night we had actually considered executing the raid with HMMWVs in order to improve our chances of

surprise. The result would have been disastrous.

Even at night, the .50-caliber, flex-mounted machine gun proved to be a very versatile and effective weapon that enabled commanders to protect their tanks from envelopment while their gunners scanned for targets. It was also a highly effective defense against the enemy on the rooftops above the tanks, and its superior ability to penetrate the masonry and medium constructions typical of Iraqi urban areas was extremely useful. API (armor-piercing incendiary) (armor-piercing and API-T incendiary-tracer) ammunition facilitate the use of the flex .50 by providing a readily observable flash on impact, especially in low light conditions.

The HEAT, MPAT, and canister rounds all proved valuable in denying the enemy virtually any cover from direct fire. Unlike the laser-tag battlefield of training exercises, here, if an enemy force



sought cover behind a wall or a vehicle, the tanks simply destroyed the cover and eliminated the threat.

Armor in the city must have the support of effective, welltrained infantry. Delta Company had an attached platoon of infantry but had redeployed it a few days earlier to address urgent needs in another sector. This left us completely dependent on Iraqi Army infantry support. While we had seen incredible heroism only days before from the Iraqi battalion that was supporting us, such heroism was absent on that particular morning from the Iraqi platoon that joined the raiding force. This is not an indictment of the Iraqi Army but a reminder that a unit is only as brave as its commanding officer. In this case, the young Iraqi lieutenant was not up to the challenge.

The close air support and close combat attack provided by the Air Force and the Apache gunships were indispensable. The F-15s first seized the initiative from the enemy by intimidating and disorganizing his movement, while providing real-time situational awareness to the ground commander. The Apaches then ended the fight with a vertical envelopment after the enemy had been pinned down by heavy armor. By expanding American force projection into three-dimensional package, the aircraft protected the tanks at the bottom of a deadly urban canyon and denied the enemy the ability to use the rooftops to gain a positional advantage. The aircraft's bird's-eye view was absolutely critical in an urban environment where the ground element's ability to acquire and kill was limited block by block. The use by the Air Force crews of infrared designators (known as Sparkle) instantly allowed the tankers to fix their sights on enemy movements and destroy them. The decision to force the aircrews to communicate through a ground control team eighty kilometers from the battlefield was unfortunate. Air Force pilots should never release ordnance without approval from trained personnel on the ground, but when their aircraft are serving in a reconnaissance and targetdesignation role, the pilots' communication requirements should be relaxed to simplify and accelerate coordination.

The show of force by the F-15s and the gun runs from the Apaches provided an immense psychological advantage to our troops. The insurgents saw that we were capable of dominating the contested streets until every soldier and every piece of hardware was safely out of harm's way. The application of airpower must also have been an absolute shock to the enemy, who suddenly had to worry about attacks, detection, and designation from overhead, especially once the Apaches began to fire into the alleys.

Finally and most important, the outcome of this action was decided largely by the ingenuity and bravery of the two junior tank commanders on the scene. Sergeant Chapman and his crew fought from his burning tank for almost fifteen minutes and then safely abandoned it under fire. Despite enemy attack from nearby rooftops, he moved his

crew to safety and then continued the fight as the loader of another tank that was also in heavy contact. His decision to continue the fight from his burning tank undoubtedly protected his crew members, as it enabled them to destroy the RPG team that would have tried to kill them after they dismounted. Further, it prevented the crew from being caught in a crossfire between the RPG team and the rooftop sniper that engaged the soldiers as they exited the tank. Sergeant Chapman's actions and leadership brought the crew of D22 unscathed through extreme peril.

Sergeant Brown's decision to aggressively seize the key northeastern alley and subsequent efforts in close combat with the enemy to retain it most likely saved the unit from being overrun. Sergeant Brown and his crew proved absolutely fearless in the face of wave after wave of enemy attack. Since his turret was partially locked due to power lines, Sergeant Brown was forced to keep his tank out of cover in the middle of the alley or risk being unable to react to enemy dismounts advancing on the company's position. Despite this, he fought on, aiming his main gun by pivot-steering and suppressing or destroying the enemy with his .50-caliber machine gun and his loader's M240. His tank singlehandedly defended the alleyway that proved to be the enemy's most heavily used avenue of approach. He also initially fought the attackers with an Iraqi civilian, our local guide, riding in his loader's hatch. Once Sergeant Chapman climbed aboard, he continued the fight with a disabled turret and a civilian on the top of the tank whose identity and safety had to be

fiercely protected. For the duration of the fight, Sergeant Brown and his crew were seemingly immune to defeat, fear, and enemy fire.

Despite the millions of dollars worth of advanced technology we brought to Salem Street that morning, the talent and skill of our noncommissioned officers decided the outcome of the fight. This is a valuable lesson. An investment in the training and care of our noncommissioned officers and junior leaders will always produce greater results in the long run than a comparable investment in technology. After all, wars are ultimately won by people, not machines. The battle of Salem Street is a powerful reminder that the resourcefulness and courage of the American soldier remains our Army's greatest asset.

THE AUTHORS

Capt. Ben R. Simms is an assistant professor of military science at George Mason University in Fairfax, Virginia. An armor officer, he graduated from the U.S. Military Academy in 1998. Simms served in Kosovo from December 2000 to May 2001 and in Iraq from March 2003 to March 2004 and November 2005 to November 2006. Maj. Curtis D. Taylor is the assistant operations officer of the 4th Brigade, 4th Infantry Division, at Fort Hood, Texas. Also an armor officer, he graduated from the U.S. Military Academy in 1994. He served in Korea from October 2000 to December 2001, in Afghanistan from November 2003 to May 2004, and in Iraq from November 2005 to November 2006.

Notes

- 1. This article is a somewhat expanded version of the essay that took first place in the Center of Military History's 2007 James Lawton Collins Jr. Special Topics Writing Competition.
- 2. The M1A2 SEP tank had received a System Enhancement Package that added a global positioning system, digital terrain maps, crew-compartment cooling and air-conditioning, provisions for an underarmor auxiliary power unit, and other improvements to the basic M1A2 tank introduced in 1993. The Armored Up-Armored HMMWV carried additional armored protection produced by the Armor Holdings, Aerospace & Defense Group, beyond the light armor installed by the reconnaissance vehicle's manufacturer, AM General. Even the windows of this enhanced vehicle contained the same level of armored protection as the rest of its body. For details, see Christopher F. Foss, Jane's Armour and Artillery, 2005-2006 (Alexandria, Va., 2005), pp. 156–59, 283-84.
- 3. The M1028 is a 120-mm. shell consisting of 1,200 quarter-inch tungsten balls encased in a disintegrating canister. The round contains no fuse and no explosives and is designed to be used in close quarters against dismounts and soft-skinned vehicles, turning the 120-mm. main gun into a large, open-choked shotgun.
- 4. The M830A1 MPAT (multipurpose antitank) round is a 120-mm. shell fired from the main gun of the Abrams tank. The round is subcaliber and uses a sabot to improve its velocity over the original M830 HEAT round, providing a flatter trajectory and shorter time of flight. A true multipurpose round, it contains a shaped charge and fragmenting case warhead and utilizes a fuse set by the loader for proximity bursts that are more effective when engaging a helicopter.