

CONCLUSION

I am advising a man on how to best employ light infantry and horse cavalry in the attack against Taliban T-55s (tanks), mortars, artillery, personnel carriers and machine guns—a tactic which I think became outdated with the invention of the Gatling gun... We have witnessed the horse cavalry bounding overwatch from spur to spur to attack Taliban strong points—the last several kilometers under mortar, artillery and sniper fire.¹

—Attributed to an American Green Beret
operating in Afghanistan in 2001.

From the beginning to the end of World War I, airplanes changed the manner in which armies conducted reconnaissance; yet, at war's end, there was still a firm conviction that continued roles existed for horse mounted units. These roles were not limited to reconnaissance and still anticipated a continued need for horse cavalry as a full-fledged combat arm. The end of World War I, at least from the American perspective, also brought recognition that something was needed to fill the space on the ground between the far reaching capabilities of airplanes to render strategic reconnaissance deep behind enemy lines, and the leading edge of ground reconnaissance forces. Armored cars seemed a good solution with road speeds and range that were less than the airplanes but greater than horses or dismounted men. Even so, horse mounted units continued to be considered indispensable for ground reconnaissance since they were considered by many the only true all-weather, day and night, cross-country traversing, agency of constant reconnaissance. The decade leading up to World War II pitted armored cars, emerging technology, against horses, proven technology. Only after the United States entered World War II did the machine completely earn the job of performing reconnaissance for the Army. Yet, it

¹ Harold Kennedy, "Special Ops Equipment: Newest—and Oldest" *National Defense Magazine* (February 2002), accessed 3 February 2003 at <http://www.nationaldefensemagazine.org/article.cfm?Id=725>.

took all of World War II to unequivocally end any future role for the horse in anything but the most special circumstances. This struggle after World War I and through World War II had a direct bearing on the organization, doctrine and capabilities of the fully mechanized reconnaissance units finally tasked with leading America's ground forces.

After World War I the American Army, and Cavalry Branch specifically, recognized the potential value that mechanization offered in the field of ground reconnaissance and combat, yet nearly ten years passed before any meaningful work was conducted to that end. Forced into action by the Secretary of War, Dwight Davis, after his visit to England in 1927, Cavalry Branch's initial contribution was the formation of an armored car troop. Having served its purpose near Washington in the first short-lived mechanization experiment, the armored car troop disappeared to West Texas where it was largely ignored. This symbolically demonstrated the horse cavalry community's prejudice against the meaningful use of mechanized ground reconnaissance. Only after the defeat of the Polish Army in 1939, with a cavalry arm similar in organization and doctrine to that of the United States, did the horse cavalry community truly begin to embrace mechanization, but in a continued subordinate role.

The second armored car troop raised for the next short-lived mechanized experiment in 1930, formed the nucleus of what was soon to become Cavalry Branch's mechanized cavalry brigade. With no other alternative, the American pioneers in armored warfare were forced to use, test, and develop the best methods they had at their disposal to improve the capability of mechanized ground reconnaissance. They had much larger goals for their brigade and good scouting and timely reporting only played one part in attaining their ultimate objective, an equal status as a combat force on a par with the lone horse cavalry division. It was not until 1940 that the men at Fort Knox escaped the shadow cast by the 1st Cavalry Division. Events in Europe finally forced the nation's gaze away from the Mexican border, where the horse cavalry division had long served, and to Europe, the most likely place the new Armored Force might see service. Regardless of where the Armored Force was deployed, the work conducted at Fort Knox during the interwar years had done the most to advance the capabilities of mechanized ground reconnaissance units.

The impact of the Great Depression cannot be ignored in the story of the development of the reconnaissance units destined to serve America's Army during World War II. The Great Depression constrained the military's budget and size, thus limiting the opportunity to conduct

large scale testing until war loomed on the horizon. By then the Germans who started with similar ideas after World War I had already taken war to a new dimension. But lack of funds had little to do with the constraints men placed on their minds, although funding for, and the expense of armored vehicles often entered the lexicon of those opposed to further mechanization. Ironically, much of what was spent was intended to assist and extend the military utility of the beloved horse, most notably the horse and mechanized regiment experiment.

At the lowest of interwar mechanized reconnaissance development, troopers in the field continually disproved their supposed inabilities and used their imaginations to improve the equipment on hand. In the early years, this was often equipment they built with their own hands. At the middle level of the debate, men like Charles Scott, Adna Chaffee, Willis Crittenger, and Daniel Van Voorhis, struggled against the establishment to advance their ideas. Even war in Europe did not change the vision of the most senior leader in Cavalry Branch, General John K. Herr, an undying advocate for retaining the horse for modern military operations. For men like George C. Marshall and Leslie J. McNair, war cleared away any questions about what kind of eyes the Army must have as it advanced to confront Axis forces. Looking back on the entire process, one cannot help but wonder how much better off the men going to war in 1942 would have been if the energy invested in continually protecting the role of the horse had been devoted to improving the capabilities of the existing mechanized reconnaissance technology and doctrine. Mechanized reconnaissance units were victorious in the contest to find the best eyes for the Army not because the event had been rigged as General Herr suggested, but because the concept proved its worth in every experiment short of war. The foundation of this success was built by a small cadre of men that the Army's rapid expansion, beginning in 1940, dispersed.

The biggest impacts of the constant efforts to preserve a role for the horse were flawed mechanized reconnaissance doctrine and units not properly organized and equipped to fulfill their intended role. Much of what developed between the wars was built on certain assumptions about the characteristics of the next war, chiefly the ability to maneuver. This meant mechanized reconnaissance units should be able to avoid fighting the enemy since there would always be space to find a way around. The men at Fort Knox did more to question this notion as it related to reconnaissance and led the way in developing more robust agencies to survive first contact and if necessary fight for information, but even their efforts were incomplete. The other assumption held, especially within the horse cavalry community, was that horse mounted units

still represented the real combat potential of any cavalry organization. When horses finally disappeared from the last hybrid mechanized ground reconnaissance units in 1942 so did the preponderance of the units dismounted capability. If interwar assumptions about the ability to maneuver were true, the dismounts would go unnoticed. But the assumptions were not true and mechanized reconnaissance units were forced to fight for information and the dismounted troopers were sadly missed.

The unfortunate result was that a new generation of men had to gain for themselves the many lessons already learned as they attended their lectures beyond the plains of Fort Riley, the deserts of Texas, and the wooded hillsides of Kentucky. Shortcomings of the mechanized reconnaissance effort during the North African Campaign were commensurate with the performance of the untested Army. Divisional reconnaissance troops received relatively high marks, whereas the 81st Armored Reconnaissance Battalion was unable to provide adequate warning about the disaster remembered today as Kasserine Pass. Missing from the North African Campaign was a corps level mechanized reconnaissance unit. Although the 91st Cavalry Reconnaissance Squadron saw extensive service in North Africa, it never did so in a corps cavalry capacity. What the 91st Cavalry Reconnaissance Squadron did demonstrate was that in the hands of an interwar horse cavalryman, units organized and equipped primarily for mounted reconnaissance were still capable of fighting for information. Or, as it was in many cases, mechanized cavalymen fought alongside the infantry.

The terrain in Sicily and Italy dictated the nature of the fighting and largely diminished many of the mechanized reconnaissance units' capabilities. Campaigning in Sicily and Italy did provide some hope to the horse advocates, now watching from the sidelines, that the horse was not completely finished. Calls from former horse cavalry stars, George S. Patton and Lucian Truscott for large horse cavalry units to serve in their traditional combat roles reinforced this hope. What the side-line advocates failed to realize was that no one was willing to give up any other unit, mechanized or otherwise, in order to gain the use of a horse mounted unit. Moreover, as Truscott proved in Sicily and Italy, mounted units could be improvised when needed. For the mechanized reconnaissance troopers serving in Sicily and Italy there were few opportunities to realize the sweeping war of maneuver anticipated during the interwar development of their units' organization. More so than in any other European theater, they continually demonstrated their ability to contribute to the fight, even if in a dismounted capacity. When the front did reopen for

brief interludes of maneuver, they were equally prepared to conduct mounted operations, though often on the flank.

There were minor changes to mechanized ground reconnaissance doctrine and the organizations tasked with carrying out reconnaissance missions. Even so, the doctrinal language, as late as June 1944, still heralded the combat capabilities of the horse and for the need of mechanized reconnaissance units to avoid combat if possible. Organizational changes, most notably the conversion of mechanized corps cavalry regiments to cavalry groups, were more a reflection of General Leslie J. McNair's pooling concept than representative of changes based on lessons learned in combat. The Cavalry School at Fort Riley used the actions in North Africa, selectively, to reinforce existing doctrine. They did the same with Sicily. But in both cases the number of mechanized reconnaissance units committed to combat was limited, and the conditions unique in contrast to where performance would matter even more, in Europe.

The war in Europe was the ultimate test of all that had been developed and accomplished since World War I. With the exception of the heady dashes during the breakout in August and early September 1944 and the final race across an exhausted Germany in April 1945, war shattered illusions of maneuver. Rarely did the units developed specifically for mechanized ground reconnaissance conduct reconnaissance. Instead, they acquitted themselves well by often fighting dismounted, a trend witnessed since North Africa. Even if they saw little service performing purely reconnaissance roles because of their inability to overcome German resistance and their failure to realize interwar assumptions about maneuver, mechanized reconnaissance units made a considerable contribution to conduct and outcome of the European campaign. The "90 Division Gamble" placed a premium on the limited number of American combat forces raised to win the European crusade. Mechanized cavalry units organized for reconnaissance often performed what would today be defined as economy of force missions—using the least number of people to accomplish the mission to allow massing of forces elsewhere. The term in use then was "gap filling" and the high degree of mobility and firepower, found in each mechanized cavalry squadron, allowed commanders, from division to corps level, a flexible solution to many tactical problems. On occasion, such as the German thrust through the Loesheim Gap in December 1944, this had serious consequences, but in most cases it worked.

Mechanized cavalry units were able to contribute on the European battlefield and do far more than reconnaissance because their leaders ultimately rejected the flawed doctrine intended

to limit the role of mechanized ground reconnaissance units. Ironically, the wartime commanders were drawn from the same horse dominated Cavalry Branch that had prescribed such a limited role for mechanized reconnaissance units because it was attempting to preserve a role for the horse. Now without horses, the old cavalymen often employed their old doctrine—the doctrine of horse cavalry as a combat arm—with their new organizations equipped with a variety of breeds of iron ponies. Like the cavalymen who had already departed for the Armored Force, they learned to accomplish all the old combat missions with different means. In the process, they, the old horse cavalymen, resurrected Cavalry Branch. When the war ended, they demanded that the doctrine change to reflect what they had done and that their units be organized and equipped to better accomplish the missions that had been theirs to perform. They had no interest in keeping the mechanized elements of their branch weak to maintain a role for the horse; rather, they rejected the horse and demanded their old identity as a branch fully capable of combat, since it took lots of combat to gain the information they were supposed to provide the units they served.

The reconciliation of cavalry and armor made sense in the longer view of Cavalry Branch's history. Cavalry, once a true combat arm, would be again based on the changes called for to its organization after the war with the General Board Report. Armor, the offspring of cavalry and usurper of the combat missions coveted by its parent, no longer looked that different from its parent, Cavalry Branch, once post-World War II mechanized cavalry units were equipped and organized with heavier tanks, dragoons (dismounts) and other combat multipliers. Again, as before the introduction of mechanization, those who rode in the van were not all that different than those who followed. Again, cavalry fully anticipated the need and requirement to be able to fight for information.

Oddly, General John K. Herr had also been right, even if his only solution, the horse, was flawed on the modern battlefield. American units never raced to meet advancing Germans, his criticism of the interwar maneuvers that had led to such a poor showing of his horse cavalry in combat and reconnaissance roles. The only dashes occurred when the Germans collapsed and it seems unlikely that American pursuit could have been maintained with hay burning units, horses, rather than with the vehicles that ground to a halt for a lack of fuel in the first instance, and political reasons in the second. The tyranny of logistics present in World War II remains today. General Herr was also largely correct when he predicted that given the “parking spaces of all this

horde of vehicles” the day would come when it became “unhealthy by reason of bombers” to be part of an armored division. Herr acknowledged that this day would take some time since “no one is adequately prepared.” Fortunately for the United States, since the end of the Cold War, all other nations with armored divisions must worry about the threat from above, but not American soldiers. When that day arrived, anticipating parity of air power, Herr believed horse cavalry would once again be in vogue. This was because only horse cavalry, with its ability to disperse off roads and move cross-country would allow it to evade the growing tide of air power.² It does not appear any nation is currently applying Herr’s solution.

General Herr also saw in air power the means to cut free from the most cumbersome aspects of the horse cavalry division as it existed. Air delivered logistics combined with the restoration of pack-trains would allow the division to cut lose from its motorized logistics tail. The promise of close air support and bombers negated the need for many of ever growing anti-tank systems the horse cavalry division equipped itself with on the eve of World War II needed to fend off armored threats. Again, Herr was partially correct. Today air power allows the United States to project and sustain military might to every corner of the globe, but not to supply non-existent horse cavalry divisions conducting operations independent of fixed lines of communications and logistics.³ Air power remains a crucial supporting force to help with the destruction of enemy armored forces, but even Herr should have recognized, as actions in Afghanistan and Iraq have proven in the first decade of the Twenty-First Century, that air power cannot linger indefinitely over the battlefield or provide support under all weather and light conditions to say nothing of enemy countermeasures from below. Thus, even with America’s dominance in the air there is still the need for ground units able to destroy enemy armored vehicles with weapons systems found within their organization.

General Herr’s hope was never realized when he wrote to General Innis P. Swift in 1941 that:

If we can get by this period of ignorance and prejudice and prevent these shortsighted gumps from wiping u[s] out of the picture in their mistaken belief

² Major General John K. Herr to Major General Innis P. Swift, 9 June 1941, Office of the Chief of Cavalry, Washington, D. C., box 6 Herr Papers, USMA.

³ Ibid.

that the iron horse replaces one of flesh and blood, we will surely come into our own.⁴

The “iron horse” prevailed, but General Herr would have been proud to know that in some capacity his beloved horses continued to serve the Army he loved equally. An article recently appeared in a largely nostalgia driven modern version of *The Cavalry Journal* (not to be confused with the Army’s oldest professional journal, the original *Cavalry Journal* that transformed into *The Armored Cavalry Journal* before finally taking on its present form as *Armor Magazine*), that described how the 10th Special Forces Group trained at the M Lazy C Ranch near Lake George, Colorado. There, the Green Berets learned mule-packing, but they also practiced firing their carbines and pistols from the backs of horses. Special forces soldiers also learned the use of open formations, General Herr’s explanation for how horse soldiers could overcome the lethality of the modern battlefield, and even the “old Indian trick of “obtaining” horses through stealth. The basis for much of this instruction was derived from pre-World War II cavalry manuals. Even with the enhanced capabilities of Global Positioning Systems and night vision equipment, things General Herr could not begin to imagine, it seems unlikely any technological breakthrough could have preserved a role for horses except under the most extreme circumstances for which the Green Berets trained, similar to conditions found in Afghanistan.⁵

Today the Army retains two armored cavalry regiments, one light and one heavy, and every division maintains a divisional cavalry squadron.⁶ To a lesser extent with the light cavalry regiment, these organizations bear the direct imprint of the interwar and especially the World War II experience with mechanized ground reconnaissance. The heavy regiment, the 3^d Armored Cavalry Regiment, serves as the best living example of what the Army managed to

⁴ Ibid.

⁵ Phil Bolte and Randy Myers, “The “Cavalry” Rides Again! *The Cavalry Journal* (December 2002), pp. 6-7.

⁶ There is some variance in the organization of the divisional cavalry squadrons from division to division. Heavy divisions maintain squadrons with a mix of heavy ground troops equipped with cavalry fighting vehicles and M1 tanks and aviation troops. During the 2003 war in Iraq, 3-7 Cavalry led the 3d Infantry Division attack. J. D. Keith, “3d Squadron, 7th U. S. Cavalry Up Front: Operation Iraqi Freedom Lessons Learned” *Armor* (September-October 2003), pp. 26-31.

learn about mechanized ground reconnaissance and how the traditional fighting Cavalry Branch lives on inside Armor Branch. The light cavalry regiment, the 2^d Armored Cavalry Regiment, is the best example of how much the Army has thus far forgotten about what it learned at the cost lives during World War II. Proposed changes and the ongoing transformation of today's Army has begun to elicit debate reminiscent of those that took place before and after World War II in regard to mechanized ground reconnaissance.

Both cavalry regiments retain the three ground squadrons recommended by Colonel William S. Biddle's Board at the end of World War II. They have undergone numerous changes during the intervening years, but retain the general characteristics recommended at the end of 1945 based on all that had been learned between the world wars, but especially what had been learned in combat. Assault gun troops are now full-fledged howitzer batteries. In the 3^d Armored Cavalry Regiment these are fully armored self-propelled weapon systems. In the 2^d Armored Cavalry Regiment today, these are towed howitzers. Towed howitzers, intended to support slow moving dismounted infantry units, are often challenged to maintain pace with the rest of the squadron and the only protection afforded their crews are the canvas tops of their trucks that shelter them from nothing more than sun and rain. Both regiments have gained a battery of air defense artillery, a company of military intelligence specialists, a company of chemical reconnaissance specialists, and a company of combat engineers. Ironically, in the light cavalry regiment the only armored vehicles belong to the chemical reconnaissance company and the only tracked vehicles are the bulldozers found in the engineer company. For each regiment, the long sought liaison aircraft added in 1945 has grown into an aviation squadron.

Although the 2^d Armored Cavalry Regiment is currently scheduled to receive the Stryker Combat Vehicle, a vastly improved version of the armored car that Colonel Biddle's Board called for nearly sixty years ago, the Army's only light cavalry regiment is essentially equipped with unarmored vehicles. Ironically, the museum pieces in the regimental area at Fort Polk, M24 light tanks and M8 armored cars, afforded their World War II troopers more protection and arguably more firepower than the grandchildren and great grandchildren of the men who freed Europe from tyranny now trying to liberate Iraq.⁷ The light tank company of World War II has

⁷ The Stryker is a six-wheeled armored platform that can come in a variety of weapons carrying configurations. The question of firepower of today's 2d Cavalry Regiment is arguable because each troop does have tank-killing TOW missile systems, but with an extremely slow rate of fire

been replaced with an anti-tank company equipped with TOW missile systems carried on unarmored trucks. Although they can kill tanks at far greater ranges than the M24 ever could have imagined, the slow firing TOW system, incapable of shooting on the move, and lacking armored protection, continues to be a poor substitute for any kind of tank.

The 3^d Armored Cavalry Regiment deployed to war in 2003 with equipment comparable to armored and mechanized infantry divisions. The 3^d Cavalry Regiment's squadrons each have a heavy tank company and three reconnaissance troops. Today's heavy reconnaissance troop has no jeeps, rather a combination of fully tracked armored cavalry fighting vehicles equipped with a 25mm gun and M1 tanks. They have the characteristics I. D. White sought at the end of World War II. Neither regiment retains a troop of riflemen in each squadron, or a squad of riflemen in each reconnaissance platoon, changes implemented after World War II. With two dedicated dismounts riding in the back of each of the twelve cavalry fighting vehicles found in each reconnaissance troop, troop and squadron commanders in the 3^d Armored Cavalry Regiment face only a slightly improved situation today if they need to generate the dismounted fighting ability often called for during World War II, or to patrol the crowded city streets of today's battlefield. With no dedicated dismounts, troop and squadron commanders in the 2^d Armored Cavalry Regiment are in exactly the same position as their predecessors during World War II. To generate any form of dismounted capability they must pick from drivers, gunners, or the key leaders who command the vehicles and man the radios that pass the vital information they are tasked with obtaining. There appears to be a minimal effort to reverse this trend.

Today's cavalry, all but incapable of dismounted action, is radically different than most of the American cavalry tradition, and certainly not what veteran cavalymen of World War II would have desired based on their experience. Stryker equipped reconnaissance units have two dedicated dismounts per vehicle and there is an expectation that these ground scouts will be

and high vulnerability to small arms fire and indirect fire what the M24 light tank lacked in firepower it more than makes for in its ability to shoot on the move, which the TOW cannot do, and the protection it afforded its crew. The M8 armored car's 37mm gun has been replaced by .50 calibre machine guns and Mk 19 40mm automatic grenade launchers on today's scout HMMWVs. It should be remembered that the M8 also had in addition to its 37mm gun a .30 calibre machine gun mounted coaxially with the main gun and an additional .30 calibre or a .50 calibre machine gun mounted on the turret of the armored car.

augmented with the support of trained linguists and counterintelligence specialists.⁸ Perhaps more interesting, as armored protection and firepower continues to decrease for the vehicles expected to close with the enemy to determine its location and intentions, a new doctrinal language about ground reconnaissance has emerged. No different than the past, today's ground reconnaissance units are expected to gain the information about the enemy to allow the higher headquarters commander "to retain freedom of maneuver in order to concentrate combat power and apply assets deliberately at the decisive time and place of his choosing by determining which routes are suitable for maneuver, where the threat is strong and weak, and where the gaps exist."⁹ In the past, the interwar expectation of gaps was rarely realized. With less firepower and protection, today's doctrine expects reconnaissance units to find the gaps and weak spots with the help of "additional sensors, scouts, and intelligence systems," which should reduce "the frequency that the squadron has to fight for information..." and "if fighting is required, it will be on a limited scale, precisely focused and under conditions favorable to the squadron."¹⁰ The cavalry trooper of today will be encouraged to know that when his "unit is compromised by the threat, self-defense will always override the need for stealth."¹¹ Unfortunately, the Stryker equipped scout will have less immediate firepower and protection to call upon when stealth fails.

Although horses were used in Afghanistan on a limited basis by special forces troops, there has been no call for a renewed debate that would once again pit the horse against the machine. The emerging debate pits manned air and mechanized ground reconnaissance units against unmanned machines and passive intelligence gathering platforms. Many of the old arguments of the interwar years are being dusted off and used in creative ways. Language once reserved for horse mounted scouts is now being applied to manned reconnaissance units.

Many Army professionals agree that the ground scout is the most efficient, high resolution, all-weather, contiguously operating, on-site intelligent decisionmaking,

⁸ *FM 3-2.0.96, Cavalry Squadron (RSTA)* (Washington: Headquarters, Department of the Army, 2002), p. 1-5. Dedicated dismounts are not responsible for driving the reconnaissance vehicle or manning a weapons system. Their most important mission is to get off the vehicle to conduct detailed reconnaissance.

⁹ *Ibid.*, p. 3-1.

¹⁰ *Ibid.*, p. 3-3.

¹¹ *Ibid.*

intent-determining, and most timely terrain retaining information asset for the commander to answer critical information requirements (CCIR).¹²

For now, every effort seems to focus on harnessing myriad emerging technology and developing the means for human scouts to enjoy the maximum advantage provided by the machines, just as mechanized ground reconnaissance once served the horse.

In other ways the old arguments are even more important as the Army continues to plan and execute its transformation simultaneously. One of the goals of the transformation is that the Army will emerge with a largely homogenous force, the Objective Force, built on a family of vehicles yet to be developed, the Future Combat System. The Objective Force, equipped with a family of air-deployable vehicles, expects to operate in an environment of information superiority. Having perfect knowledge, still a goal and certainly not reality, will in turn help the force compensate for the inherent lack of survivability of the Future Combat System, part of the trade-off for air deployability. Critics of this approach question the ability of remote sensors and unmanned platforms to penetrate all types of terrain, with a special concern for urban terrain, just as advocates for retaining the horse pointed out that no vehicle could go everywhere a horse could go.

There is no irony in the fact that one uniformed critic of the current faith in information dominance to avoid fighting under unfavorable circumstances was himself the direct beneficiary of lessons learned during World War II. Colonel H. R. McMaster—a captain in 1991—commanded Troop E, 2^d Squadron, 2^d Armored Cavalry Regiment during the first Gulf War in 1991.¹³ Fulfilling the role it was designed for in 1943 as the 2^d Cavalry Group—a corps reconnaissance regiment—the 2^d Armored Cavalry Regiment served as VII Corps' cavalry regiment as it advanced into Iraq as part of General H. Norman Schartzkopff's Napoleonic *manoeuvre sur les derrières*. Two days into the war, Captain McMaster found his troop at the

¹² Harold A. Buhl, Jr., "The Future of Scout and Cavalry Systems," *Armor* (March-April 2003), p. 20.

¹³ Robert H. Scales, Jr., *United States Army in the Gulf War, Certain Victory* (Washington: Office of the Chief of Staff, United States Army, 1993), p. 1. Colonel H. R. McMaster prepared a monograph, "Crack in the Foundation: Defense Transformation and the Underlying Assumptions of Dominant Knowledge in Future War," while serving as an Army War College Fellow at the Hoover Institution, Stanford University.

head of his squadron in search of Saddam Hussein's Republican Guard. In a storm of "blowing sand and swirling mist" McMaster found the enemy and in less than thirty minutes proceeded to destroy more than thirty Iraqi armored vehicles.¹⁴ The "Battle of 73 Easting" validated what had been learned during World War II; ground reconnaissance units would find the enemy by bumping into them, sometimes under the most extreme conditions. Having found the enemy, McMaster now had the ability to deal with the enemy in a manner far different than his regiment had dealt with the Germans at Luneville in September 1944.

Today's critics also question the one-size-fits-all approach's ability to deal with the full spectrum of war, a by-product of a homogenous force. Again, concern centers on the ability of medium weight vehicles, such as the Stryker combat system, to deal with common threats on today's battlefield that no amount of information dominance can completely overcome.¹⁵ If the .30 calibre bullet was the interwar bench mark for what a minimum amount of armored plating had to stop to insure the survivability of mechanized reconnaissance men to live long enough to pass on what they had discovered in a surprise engagement with the enemy, then the ubiquitous rocket propelled grenade (RPG) must be today's standard. The Army has already been forced to add special armor packages to Stryker vehicles to meet this minimum threshold.¹⁶ More importantly, an on going study of the recent combat in Iraq in 2003 has revealed that at the squadron level and below, little has changed since World War II with respect to finding the enemy. In 2003, as in World War II, the enemy was found when units "literally ran into them."¹⁷ Until ground reconnaissance units can consistently find the enemy short of "running into them" they will continue to need to the firepower and protection needed to survive first contact.

¹⁴ Scales, *Certain Victory*, pp. 237-238, 261-262.

¹⁵ Peter A. Wilson, John Gordon IV, and David E. Johnson, "An Alternative Future Force: Building a Better Army," *Parameters* vol. XXXIII no. 4 (Winter 2003-2004), pp. 21, 26-27

¹⁶ Matthew Cox, "Front-line Training for Rear Area Troops," *Army Times* (15 December 2003), p. 12.

¹⁷ Email exchange with John Gordon, RAND Corp., regarding ongoing study of Operation Enduring Freedom, 11 February 2004, copy in the possession of Major Matthew Morton. The same report cites improved situational awareness at division and corps level. Better communication links between these higher headquarters and units conducting reconnaissance may, under certain conditions, help reconnaissance units avoid "bumping into the enemy."

The experience of World War II bore out the fact, just as recent operations in Afghanistan did, that having a variety of types of ground reconnaissance units was useful, but the decision to field an all-mechanized ground reconnaissance force during World War II was not unwise. Commanders were still able to satisfy special needs by dipping into the past by using horses when needed or through creative organization of assets on hand. An Objective Force built with certain expectations of the future might be sadly unprepared for the reality of war. Between the world wars there was an expectation that the next war would be one of maneuver. This in part drove the doctrinal expectation that mechanized ground reconnaissance units would be able to find a way around the enemy, to “sneak and peak” without fighting. Fortunately when this proved unfounded, the men in those units could draw on their doctrinal past to see them through the crisis. With current trends already shaping the Army, soldiers in the Objective Force may not have the same luxury of falling back on old doctrine or creative organization of existing equipment.

In the end, knowing how the story will conclude, it is far too easy to ridicule the most rabid advocates of the horse. They honestly thought they were doing the right thing by defending a continued role for the horse. The horse advocates focused their energy in the wrong ways and caused unnecessary harm to the men destined to ride machines instead of horses in the quest for information about the enemy. The men at Fort Knox who continued to demand that technology rise to meet their expectations were the ones to be emulated. Unconstrained by the need to preserve a role for the horse, they did not limit their expectations of what could be accomplished by mechanized ground reconnaissance units. They could also move ahead with their experiment with the confidence that if they got it wrong, there was still a substantial portion of the Army changing less rapidly to act as a safety net if need be. The men at Fort Knox did their utmost to see that their reconnaissance units had what they needed and were more willing to admit they might need to fight to accomplish their mission.

Then, as now, war remains a human endeavor. Until the Army develops a remote sensor capable of divining the intentions of enemy commanders, there will be a need to close with the enemy to determine his intentions. The Army cannot afford to become wedded to the means, be it a horse, an armored car, or UAV. Rather, it must remain focused on the task at hand and apply the best combination of systems, employed by people, with an effective doctrine capable of deriving the maximum potential from both the people and the machines. It will not be easy for

today's descendants of the first men to ride on "iron ponies" to keep alive the spirit of the cavalry as new technologies emerge. Just as no one wants to be compared to John K. Herr when questioning the ability of emerging sensor technology to transform tomorrow's battlefield, the doubters are justified in asking their hard questions. Too much blood has already been spilled by former cavalymen while disproving interwar beliefs. The development of mechanized ground reconnaissance between World War I and the end of World War II provides rich material for consideration even today as the Army again transforms itself.