

New Book Offers Definitive History of U.S. Armor

Review by Gunnery Sergeant Leo J. Daugherty, USMCR

Camp Colt to Desert Storm: The History of U.S. Armored Forces, edited by George F. Hofmann and Donn A. Starry, Lexington, University Press of Kentucky, September 1999, 610 pages, \$35.

General George S. Patton, Jr. wrote in a February 1928 paper, while serving at the Schofield Barracks, Territory of Hawaii in 1925, that "The tank, in reality, is a modern version of heavy cavalry, as that arm was understood by the first Napoleon. When satisfactory machines are available, they should be formed into a separate corps and used, when terrain permits, for the delivery of the final shock in some great battle, when so used they must be employed ruthlessly and in masses."

George F. Hofmann's and Donn A. Starry's *Camp Colt to Desert Storm: The History of U.S. Armored Forces* is by far the single best compendium yet published on the history of the development of armor and armored fighting vehicles in the United States, from World War I to the present. Beginning with the organization of the U.S. Army's Tank Corps at Camp Colt, Gettysburg, Pa., through Desert Shield/Desert Storm, the book provides an in-depth examination of the role armor has played in the development of the combined arms team in both the U.S. Army and Marine Corps.

This collection of essays, written by military historians, analysts, and technicians, examines the role armor has played in forging U.S. Army and Marine Corps doctrine, as well as its important function in the amphibious assault. What is even more important about this book is the fact that it provides coverage of the lesser-known controversies that plagued the acceptance of armor in both services, and how this oftentimes served to hinder its effective employment during World War II, Korea, and Vietnam.

The book begins with Dale Wilson's essay on the birth of American armor during World War I and the organization of the 1st Tank Battalion during that conflict under the command of a cavalry officer named George S. Patton. What makes this particular essay important is the story Wilson tells about the battles of acceptance that armor proponents had to wage inside an Army bureaucracy that

was conservative to the point of being reactionary. Many saw the tank as nothing more than a passing fancy; for these leaders, the horse remained paramount in battle. But others saw the tank as an excellent adjunct to infantry, and later as an offensive weapon in and of itself. They included Brigadier General Samuel D. Rockenbach, who was the American Expeditionary Forces' (AEF) first commanding general of the infant Tank Corps, Lieutenant Colonel LeRoy Eltinge, and Captain (later Lieutenant Colonel) George S. Patton, Jr. Patton's detailed report, submitted to General John J. Pershing's headquarters, remained the cornerstone of U.S. armor doctrine up until its revision in the 1980s.

Captain Patton outlined the mission and tactics of this new Tank Corps, envisioning the tank as being the perfect infantry support weapon: Tanks could clear wire obstacles, suppress enemy crew-served weapons and prevent the enemy from manning the parapets or trenches after a preparatory artillery barrage, help the infantry mop up the objective, guard against counterattack by patrolling ahead of the most advanced infantry positions, and exploit the attack supported by reserve infantry, seeking "every opportunity to become pursuit cavalry."

What is important here are two themes of Patton's report that remained constant throughout the integration of armor into the Army's combined arms team. The first theme is the constant referral back to cavalry and the use of tanks, like cavalry, as a "shock" weapon. The Tank Corps leadership during WWI were cavalrymen and saw the tank and motorized vehicles as an arm of the cavalry. This theme would dominate Army thinking up to the advent of the helicopter, which in time supplanted the tank as a cavalry weapon.

The second theme describes how Army and Marine leadership viewed the tank by and large as an infantry support weapon. In fact, Joseph Alexander's essay on Marine Corps use of the tank as an infantry support weapon in the Pacific during WWII illustrates how the lessons of WWI confirmed in many of the Corps' senior leaders that the tank was merely a moving pillbox. Marine Corps armored development was influenced by its experience in World War I, and much of what was practiced as a combined arms

team during World War II had been inculcated into Marine doctrine during the interwar period in lessons drawn from the battlefields of France. The Marines' interest in the tank began almost as the war itself ended. In fact, during the occupation of Germany by the Marines, the lectures and classes Leatherneck officers attended at Army-sponsored schools, and recorded dutifully in reports and student papers during the period (1918-20), illustrate the strength of this influence inside the Marine Corps. This theme was constantly reinforced in the interwar period at the Marine Corps Schools at Quantico, Va.

Colonel Alexander's essay is focused on the period after 1943, and is superbly written, but it fails to discuss the interwar period, the most critical period in Marine Corps thinking on armor and its association with combined arms warfare. This remains a glaring omission in light of an otherwise good essay on tank and armored fighting vehicle development in the Marines.

In contrast, historian George Hofmann, one of the editors of this book, covers the developments of inventor Walter J. Christie's revolutionary tank designs in that era, which included an early experimental amphibious tank. Alexander's failure to discuss the Corps' interest in tank warfare as it applied to combined arms warfare is a significant shortcoming since the Corps leaders during the interwar period, including Major General John A. Lejeune, the commandant of the corps (1920-29), saw combined arms warfare as critical to the Corps' survival.

Historian Timothy K. Nenninger, an expert on the history of the pre-World War II Army, provides a thought-provoking and comprehensive essay on the development of both the tank and its missions and roles in an Army still dominated by infantrymen and cavalrymen. The dominant theme in this chapter is the resistance generated by opponents of an independent armored corps against those who had kept abreast of both British and German experiments with armor during the 1920s and 1930s. At this point, the editors might have better served readers by inserting an essay on foreign developments, with special emphasis on the British mechanization experiments. They codified the first field regulations and set

up the first totally mechanized formations in the mid- to late 1920s. Another foreign area to be explored is the German and Russian collaboration during the 1920s, which have been discovered to be far more comprehensive since the opening of the Soviet archives. There were also German experiments with mechanized formations, beginning even before the Nazi Party assumed power and tore up the Versailles Treaty, in 1935, which prohibited Germany from having tanks.

Christopher R. Gabel's essay on U.S. armored operations in Europe during World War II is thorough and thought-provoking, covering how the Army recovered from its first poor showing at Kasserine Pass in Tunisia up through the Third Army's relief of Bastogne and push into Germany. Despite the fact that the Americans went to war with inferior tanks, compared to those of both the Germans and Russians, the trusty old Sherman with its 76mm gun proved sufficient to provide armored support to the real victors of the ground war in Europe and in the Pacific: the combined arms team of infantry, combat support, artillery, armor, and air. In fact, Gabel's essay clearly illustrated the necessity of combined arms warfare and the importance of a team effort in overcoming superior equipment and doctrine, and it was here that the U.S. Army triumphed during World War II. It wasn't the efficacy of armor or air; it was the combined arms team that brought victory in this and subsequent wars.

Philip Bolté's essay covers armored doctrine and the use of tanks during the Korean War. His underlying theme is the Army's unpreparedness in the field of anti-armor doctrine, due mainly to the fact that it lacked an adequate anti-tank weapon to deal with North Korea's Russian-supplied T-34 tanks. Kenneth W. Estes' essay on Marine armor during this same period picks up on Bolté's theme that, despite the lack of an adequate tank to deal with the T-34, it was the countermeasures that turned the tide in the U.S. favor at the Pusan Perimeter and later at Inchon. While the Korean countryside was less than ideal for tank warfare, armor nonetheless proved to be indispensable in supporting the infantry and in stopping the North Koreans and Chinese Communists. Not only did armor provide effective close-in fire support, it also provided excellent mobile artillery against the mass attacks by the Chinese Communist forces in the perimeter fighting that took place from 1951 through the armistice in 1953. Estes' essay covers primarily the Marines' post-Korean reorganiza-

tion of their tank battalions (both active and reserve), as well as the adoption of the M48 Patton tank as the Army transitioned to the M60 series.

In seeking to counter the Soviet Union's newly-developed line of tanks, beginning with the T-54 up through the T-62 series in the mid-1960s, both the Army and the Marine Corps sought a tank that could qualitatively counter the Soviet Army's quantitative advantage in armor. The M60 Patton series proved a stopgap measure during the 1960s and early 1970s, but the advent of the Soviet T-72 and T-64 tanks moved the Army toward the eventual development of the M1 Abrams, as well as the NA4701 Mechanized Infantry Combat Vehicle (MICV), the forerunner of the Bradley. Thus began a period of tank development that few historians have yet covered, the role of armor during the Vietnam War and the necessity of developing a vehicle capable of effective fire support that could also carry infantry into battle and protect soldiers from enemy fire and mines. While the Vietnam War has been touted as a helicopter war, tanks and armored vehicles like the M113 and Marine LVTH-5 series of armored personnel carriers often carried the day, providing soldiers and Marines effective fire support despite the design and material construction flaws of both vehicles.

The book's chapter on the development of AirLand Battle doctrine and the impact of Generals Creighton Abrams and William DuPuy are excellent. With the lessons of the 1973 Arab-Israeli Yom Kippur War still fresh, the after-action discussions pointed to the Army's need to reshape its thinking on armored warfare and the use of combined arms. With the advent of man-portable anti-tank weapons, such as the Soviet AT-4 "Sagger" and the TOW missile system, as well as the proliferation of rocket-propelled grenades (RPGs), commanders could no longer think just in terms of tanks, infantry, or artillery, but had to plan in terms of combined arms. The lessons of the 1973 War pointed toward the need of an effective mechanized doctrine. General DePuy answered with his revision of *FM 100-5, Operations*, the Army's standard war-fighting battle plan. This field manual became the blueprint for what later emerged as AirLand Battle, a doctrine that challenged what had become an overwhelming Soviet/Warsaw Pact advantage in tanks and AFVs in the 1970s and 1980s.

Diane L. Urbina's and Robert J. Sunell's essays cover the development of

the Bradley Fighting Vehicle system and the "king of the killing zone," the M1 Abrams tank. Both are extremely well written and heavy with technical details, and both essays demonstrate how these two weapons complemented AirLand Battle. Despite bureaucratic roadblocks and branch infighting, as well as budget cut after budget cut, both the MICV and XM1 tank emerged as the two dominant weapon systems to enter the Army since the organization of the Tank Corps at Camp Colt.

As the Yom Kippur War of 1973 demonstrated, the ability to protect infantry and move them into battle, as well as development of a tank that could dominate the battlefield, became the most important technological and doctrinal problems during the 1970s and 1980s. The United States and NATO faced a tank-heavy Soviet Army across the inter-German border. As both Urbina and Sunell's essays illustrate, the Army planners at TRADOC eventually resolved these complicated issues and introduced into the Army one of the best armored warfare fighting doctrines ever conceived.

Stephen Bourque's essay on Desert Storm is a sobering analysis of the effects of this new doctrine and technology and how they aided General H. Norman Schwarzkopf's "end run," decimating the Iraqi Republican Guard with General Fred Franks' VII Corps slamming into the flanks of the once-vaunted Iraqi armored formations in a four-day ground war. The performance of the U.S. Army's Bradleys and the Marines' use of Light Armored Vehicles (LAVs) vindicated the pioneers of the Army's infant Tank Corps in 1917. The same spirit of those who led America's first tanks into battle was also present in late February 1991 as U.S. armored forces won perhaps their greatest victory. It was armor that led the way.

Supplemented by excellent photographs and maps, as well as a full bibliography and a post-analytical reflection by General Donn A. Starry, *Camp Colt to Desert Storm: The History of U.S. Armored Forces* is a book that will remain as the most important single volume on armored warfare in the U.S. armed forces for some time to come. Despite the lack of a chapter on foreign developments (most importantly, on Soviet armored developments), this is a book that will find its way into the curriculum at Army and Marine Corps schools and is highly recommended as a book that will be unrivaled for some time to come.

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