

# REVIEWS

**Blood Brothers: Hiram and Hudson Maxim – Pioneers of Modern Warfare** by Iain McCallum, Chatham Publishing, London, 1999, 200 pages; \$36.95 retail, \$29.56 online.

By the end of 1914, any possibility of large-scale maneuver on WWI's Western Front had become a "battlefield stalemate," a term used to describe the maneuver deadlock resulting from the effective use of the Vickers-Maxim machine gun, the creative emplacement of barbed wire and trench obstacles, and the increasingly accurate employment of high-explosive artillery fire. As a community of professional soldiers, we certainly harbor an appreciation for the effectiveness of these elements. It is certainly not necessary to understand the trials and difficulties experienced by inventor Hiram Maxim in order to appreciate the weapon's effectiveness, but the historical background provided by author Iain McCallum does place the achievement in a clearer light.

McCallum uses a combination of primary sources and contemporary accounts to tell the story of the rise to international fame of Hiram Maxim, known to most students of military history as the inventor of the modern machine gun. No less a historian than Basil Liddell-Hart said, "His name...is more deeply engraved on the real history of the World War than that of any other man. Emperors, statesmen, and generals had the power to make war, but not to end it. Having created it, they found themselves helpless puppets in the grip of Hiram Maxim who, by his machine gun, had paralyzed the power of the attack. All efforts to break the defensive grip of the machine gun were in vain; they could only raise tombstones and triumphal arches."

Heady praise for one man, but the road Maxim traveled enroute to such praise was a difficult and uncertain one. This work takes the reader on Hiram Maxim's journey from humble, barely literate beginnings in rural Maine to New York City, where by virtue of hard work and self-study he became involved in the race to develop practical electric lighting for indoor use in homes, losing by scant days to another famous inventor of the era named Edison. Focusing his efforts on commercial lighting applications, and never losing his drive for independent inventive thinking, Maxim was retained by an engineering consortium which sent him to Europe as its representative. While there, prohibited by contract from developing new lighting applications, he turned his energies towards the development of automatic weapons. I found it interesting that the inventor of such a paradigm-changing instrument basically stumbled onto the situation. Based in Paris while serving as the engineering firm representative, Maxim experienced firsthand the air of despondency in which all of France was immersed after its defeat in the Franco-Prussian war. This malaise served as a catalyst, spurring his Yankee ingenuity and backwoods familiarity with firearms, combined with his natural inventive inquisitiveness. Given his contractual prohibition

against further lighting developments, Maxim was basically "forced" into a career in weapons development.

The reader is also introduced to the "other" Maxim, Hudson Maxim, who was an incredibly talented inventive genius in his own right. He chose to focus his efforts in the area of explosives development. This was just prior to the onset of hostilities in 1914. One brother would make his mark developing an infantry support weapon, while the other would radically change the way artillery shells are delivered on the battlefield and in naval applications. The book provides interesting details about both careers as they developed, first in tandem, and then separately as personalities and egos got in the way. It is a readable study, with both quotes and pictures, which enhance the narrative and complement the uniquely human approach the author adopts. I was left with a better understanding of the complexities of pre-WWI weapons development and the impact several truly unique innovations had on that conflict. For its value in enhancing one's historical perspective, I recommend *Blood Brothers* as a book worth reading.

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**After D-Day: Operation Cobra and the Normandy Breakout** by Lieutenant Colonel James Jay Carafano, Lynne Rienner Publishers, London, 2000, 294 pages, \$55.00.

Students of World War II are familiar with the story of Operation Cobra. After two months of difficult and costly fighting in the Normandy beachhead, American forces in General Omar Bradley's First Army, particularly Major General J. Lawton Collins' VII Corps, succeeded in piercing the thin German line west of St. Lo and pushing deep into France out of the Normandy hedgerows. Traditional accounts of the operation focus on either American tactical advances that led to the victory, such as the preponderance of American air power, or the "rhino" hedgerow-busting tank, or the great ability of senior American military leaders such as Bradley and Collins. Lieutenant Colonel James Carafano takes issue with this historiography on the successful breakout from Normandy in late July 1944. In his refreshing analysis of the American operation, *After D-Day: Operation Cobra and the Normandy Breakout*, Carafano emphasizes the ability of American commanders to take advantage of what he calls "operational flexibility" to overcome battlefield challenges. A unique element of his argument is that it was the mid- to lower-level leaders, such as field grade officers, senior company grade officers, and senior noncommissioned officers, who were the most crucial in the success of this operation.

To support this, Carafano meticulously examines the operations of individual regiments and battalions of the attacking VII Corps and systematically rebuts various

opposing arguments. A striking argument that he offers is his stern critique of senior American leaders. Carafano paints Collins, the VII Corps commander, as an impulsive and rather reckless leader, whose troops succeeded in spite of his actions, rather than because of them. General Bradley's handling of the initial plan, and the carpet-bombing fiasco that led off the attack and doomed so many Allied soldiers, also come under fire.

In this study, Carafano does two things exceptionally well. First, he does an excellent job of analyzing the battle at the battalion and regimental level, while still maintaining logic and coherence. Second, he takes the time and effort to address all of the key aspects that figure into an American operation, devoting time to logistics, air power, troop morale, discipline, and unit history. From the American perspective, this is a very comprehensive work. But Carafano does not delve nearly as deeply into the German perspective. This, to be sure, is not his intent and is not cited as a criticism. While he doesn't ignore the general German decision-making process, Carafano's book remains an examination of the American operation.

One minor criticism needs to be mentioned: the maps in this book are dreadful. Carafano does recognize this problem in his bibliography and points out the best remedy — going to Martin Blumenson's *Breakout and Pursuit* in the Army's "Green Book" series, *The U.S. Army in World War II*, and copying the needed maps.

*After D-Day* remains, however, a wonderful new look at Operation Cobra, and Carafano's treatment provides a challenging approach to the operation. He succeeds in demonstrating the value of "operational flexibility," as demonstrated by the field grade leaders of VII Corps. As such, it will be of great value to any armor leader, but particularly those who are preparing to assume higher responsibility in the force and who are moving either from the company- to the field-grade level or from the junior- to the senior-NCO level. Carafano's account provides a first-rate example of just how critical these leaders can be in combat.

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**Hap Arnold and the Evolution of American Airpower** by Dik Alan Daso, Smithsonian Institution Press, Washington, 2000, 314 pages, with index; \$29.95.

Air Force pilot and historian Dik Daso opens this book with an interesting cultural — or perhaps political — observation on our own times. He states in the introduction that when he graduated from the Air Force Academy in 1981, the established "Father of the Air Force" was Billy Mitchell. Even those unfamiliar with the history of the interwar U.S. Army will likely remember Mitchell's

demonstration of air power over warships when, in the summer of 1921, he sank the German battleship *Ostfriesland*, which had been seized after WWI and was anchored as a bombing target. Most also remember that Mitchell criticized the Army and Navy for failing to exploit air power, and his criticisms led to his court martial for his more-than-outspoken comments. Daso makes the interesting observation that 16 years later, when he joined the USAF General Staff, Mitchell's place had been usurped and General H.H. "Hap" Arnold now stood in his place as the "father" of the air service.

The interesting point of Daso's observation was that the USAF, apparently very deliberately, discarded a politically rough-hewn character from their own history (Mitchell) and replaced him with one more "politically correct" (Arnold). This speaks volumes, not only about how the modern Air Force perceives itself, but how they very consciously put history to work. A reader must therefore examine Daso's extremely sympathetic biography in that light. Daso is a serving Air Force officer, and Hap Arnold is now the "Father of the Air Force."

More to the point, Daso very obviously brings with him some strong beliefs, bordering on the religious, about the legitimacy of the use of air power. These are beliefs that color his writing through the implied and explicit support for all decisions taken by the Army Air Forces in World War II. Doctrine is never, ever, an issue in this book.

Despite this disclaimer, it should be noted that Daso has certainly done his homework in bringing this biography together. His is the first work to use not just Arnold's archival collection of personal papers, but the Arnold family private collection as well. Daso's research into Arnold's time as a cadet at West Point is also extensively documented and well presented.

Arnold, the Air Force's only five-star general, is certainly a figure in American military history worth studying. As one of the very first group of pilots in the United States Army, he learned to fly from the Wright Brothers themselves. He was "there at the beginning" and was very influential in establishing the course and tempo of the development of the Air Corps, later the Air Force. Most interesting, and central to the biography Daso presents, was the relationship that Arnold established and developed with the scientific and industrial communities. This is, perhaps, the most useful aspect of this biography.

When Arnold was an influential major in the very small pond of the pre-World War I Air Service (then a sub-set of the Signal Corps), he held a crucial position. His was the responsibility to get the United States geared up for war in the air. Arnold was one of a very few coordinating the procurement aspects of creating an aviation force from practically nothing. This experience, according to Daso, was crucial because it taught Arnold the importance not only of industrial preparation but the vital link between science and

industry as they relate to aircraft development. This colored Arnold's thoughts over the next 20 years as he climbed the ladder to the top.

The reason this is interesting is because of the light that it sheds on what President Eisenhower came to call the "military-industrial complex." It could very easily be argued that no such animal existed before Arnold, and since Arnold we have seen nothing else. One of Arnold's central beliefs was the need to tap into all possible avenues of intellectual development in the field of aeronautics, and his efforts led directly or indirectly to many R&D programs or institutions still in existence today.

If one is seeking a biography of how Arnold ran the Air Corps during World War II, this is not the right place to look. Daso devotes a scant 45 pages to the entire Second World War. Many of those pages, moreover, focus upon Arnold's deteriorating health in that period as he literally worked himself to death. This is not a book about command decisions of that war, or even very much about the interpersonal relationships Arnold had that influenced his decisions in wartime. Even more disappointing is the near total absence of any new or original insights into the massive rivalry that raged inside the Army during the inter-war period.

Daso seems to be deliberately avoiding any mention of the various struggles for power (and budget) that wracked the Army throughout the period covered in this biography. He is content, instead, to continually cite how Arnold had "learned a lesson" from what had happened to Mitchell. He makes little to no mention of the many inter- and intra-service fights that Arnold witnessed or participated in, even tangentially.

Therefore I cannot say that this is a well-rounded, or even complete, biography of the Air Force's highest ranking officer. It is interesting if you are a pure adherent to the idea of strategic air power first, and if anything is left over, support to the ground. It is not a book of critical analysis and honest evaluation of all aspects of Arnold the man, or Arnold the officer. Instead it is a book celebrating Arnold, technology and industry, and the bright, smiling and wonderful people that support the concept of "Air power."

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**Breakout — The Chosin Reservoir Campaign, Korea 1950** by Martin Russ, Penguin Books, New York, N.Y., 2000, ISBN 0-88064-231-9, 436 pages, \$14.95 (paperback).

Heritage, tradition, and lore are vital to the military psyche. We have all listened to fellow servicemen chronicle the achievements and proficiency of their former units. Often, these stories are inspiring to hear. Other times, they evoke a chuckle — anecdotes

about the pantheon of characters that seems to grace every American unit. And sometimes, they get old because we have heard it one too many times. In *Breakout*, author and former Marine Martin Russ succeeds at all of the above as he relates a gripping, in-the-foxhole account of the 1st Marine Division's plight in late November and early December 1950. Russ explains the determination, bravery, and *esprit de corps* of the U.S. Marines caught up in this campaign, and as an outsider, I found myself proud of the Marines for their tremendous sacrifices. Yet Russ belabors many points — particularly the shortcomings of the U.S. Army soldier — that detract from his work.

In October, 1950, the Marines landed at Wonsan, on North Korea's east coast, to conduct the supporting attack for Eighth (U.S.) Army, which was exploiting the capture of Pyongyang on the west side of the mountain ranges that divide Korea. The 1st Marine Division, commanded by MG O.P. Smith, and his regimental commanders, Colonels Litzenberg, Murray, and Chesty Puller, drove 78 miles into the enemy rear, northwest of Chosin, with the Army's 7th Infantry Division on their right flank. Then the Chinese launched a surprise counterattack. The Marines, rapidly cut off, had to fight their way out with bayonets and entrenching tools. This is a story of privates, sergeants, and lieutenants who fought with undaunted courage under the most harrowing conditions. They were short of supplies, fighting in rugged, mountainous terrain in brutal, sub-zero temperatures, and surrounded by the communists.

As a soldier's tale, this is a great work, but as a historical examination of the campaign, it comes up short. Russ relates many interviews and uses primary source material — both strengths of this book — but includes no endnotes for further reference. This becomes important when he repeatedly criticizes MG Edward Almond, commander of the U.S. X Corps. Russ asserts that MG Almond knew about the buildup of Chinese Communist forces and their counterattack against Eighth Army in the west, but "[n]either Almond nor any member of X Corps staff bothered to pass word of the disaster to the Marines" (85). Russ cites no references for this important point. What do the X Corps official records say? Did MG Almond address this topic in his diary? Was the intelligence passed to the Marines and not disseminated?

Russ slights the U.S. Army for its poor training and motivation, failure to develop an intelligence estimate, weak control over subordinate elements, loose awards policy, and lack of initiative of small unit leaders. The best summary of his attitude toward the Army is when he writes, "the Army couldn't seem to do anything right as far as the Marines were concerned." He also explains that the Marines were "contemptuous" of the Army.

I truly cannot recall any other book I have read wherein an author so thoroughly lam-

bastes a sister service — and the worst part is that it is to no end. Russ does not mention any of the Army's improvements after LTG Ridgway assumed command in Korea, or how far we have come since. At the same time, he glosses over 1st Marine Division's own command and control problems, attributing them instead to line of sight radio limitations. He praises the Marine close air support and responsive artillery, but fails to tell the reader that the 7th Infantry Division, on the eastern shore of the Reservoir, did not have the same capabilities — or at least not to the same degree. (In a curious example of poetic justice, it is a U.S. Army bridging company that saves the Marines at Funchilin Pass by laying a bridge across a high cliff.) The tone that pervades this book ultimately detracts from an otherwise great story. In the end, Russ sounds like just another Marine that hates the Army.

Another distraction is the lack of decent maps. Russ describes in detail the actions on Hills 1403 and 1282, right down to the fire team and even individual Marine level. From the text, the reader gets a picture of what the terrain might have looked like, but topographical maps would have greatly enhanced the ability to envision and learn from these savage fights. The few maps that Russ does include are rough schematics, which depict no terrain contour and would take about ten minutes to create on PowerPoint.

The book reads easily, with balanced sentence structure and good transitions (Russ is an English professor at Carnegie-Mellon University). It goes far to tell and re-tell this hallowed Marine Corps legend of one of their most determined and costly campaigns. His only section of photographs is a series of mug shots of the major players, from general to private. This enlivens the story for the reader.

I would recommend this book for anyone interested in small unit actions. It also brings to life stories we have read about the Korean War, but now puts names and faces to the saga. A great idea would be to slip this book into your cargo pocket or rucksack; the story will alleviate your woes when you read about guys who really had it rough.

For a scholarly work, Russ has some serious issues with the Army, but does not explore them to their full end and find the reasons why. The Army may have in fact performed as poorly as Russ asserts; but that does nothing for soldiers (or Marines) today to figure out how to remedy this and prepare for future fights.

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**Modern U. S. Military Vehicles** by Fred W. Crismon, BI Publishing Company, 729 Prospect Avenue, Osceola, WI 54020-0001, \$21.95.

The author, Fred W. Crismon, has followed up his excellent books, *U.S. Military*

*Wheeled Vehicles* and *U.S. Military Tracked Vehicles*, which covered the history of U.S. military ground force vehicles, with a shorter volume on modern military vehicles. Indeed, the new book, *Modern U.S. Military Vehicles* is basically an updating of the previous book. While near-encyclopedic in coverage of vehicles in the 1990s Army and Marine Corps, the author does not claim to cover every single type of vehicle that the U.S. has purchased. The book is a fine addition for persons who wonder about some type of vehicle they have seen in service, or who get asked, what was that vehicle I just saw?

Coverage of wheeled vehicles is far more extensive than that of tracked vehicles. Many of the photographs cover experimental vehicles, or vehicles procured in Europe that did not see world-wide Army service. Coverage of the Marine Corps LAV is good, as is the coverage of the HMMWV. The coverage of some of the HMMWV prototypes is fair, although some of the missing prototypes were more interesting. The coverage of the tactical support trucks and administrative vehicles is very good.

While I recommend this book for purchase by members of the Association and post libraries, the book does have some weaknesses. The coverage of the M-151 series of vehicles, commonly called jeeps, is somewhat misleading. The original M-151 had a "swing axle" rear suspension. When operating without cargo weighing down the rear, the vehicle had a tendency to roll over. After a series of intermediate fixes, the Army finally bought (in the M-151A2) a version with all new suspension that made the M-151A2 roll-resistant. Very few of the roll cages pictured in the book were procured.

The lone picture of the M8 Armored Gun System does not allow visualization of the total vehicle. While the production of the M8 was terminated to help pay for other programs, one can hope that the M8 will be put into production to help make the Army lighter. Coverage of the Field Artillery does not stress the ability given the M109A6 to operate independently. The purchase of this system heralded a new era in artillery support when even a battery's guns need not be massed to mass fire on the battlefield.

Books of this type help highlight how complex the Army is and the logistical headaches caused by the many specialist vehicles required to support a modern, mobile army.

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**Tuskers: An Armor Battalion in the Gulf War** by David S. Pierson, Darlington Productions, Darlington, Md.; 1997; 231 pages; \$27.95, hardcover.

To most Americans, August 2, 1990 means very little. To the soldiers of the 4th Battalion, 64th Armor, 24th Infantry Division (Mech), otherwise known as the Tuskers, it would be a day they would never forget. As Iraq spearheaded its drive into Kuwait, sol-

diers halfway around the world at Fort Stewart, Georgia, were going about their daily lives. However, within days, the Victory Division and the Tuskers were on full alert and preparing for deployment to the sands of the Middle East.

In *Tuskers*, David S. Pierson provides a welcome addition to the scarce literature on tactical armored ground combat in the Gulf War. As the battalion S2 for the Tuskers, he provides a unique view of what the battalion and its soldiers experienced, from Iraq's invasion of Kuwait to the Tuskers' preparations for war, ground combat, victory, and finally the welcome parades back home.

The strength of this work comes from the detailed look into what our fighting men experienced in the desert — the heat, the fear, the boredom, and all the other universal conditions inherent to war. Additionally, Pierson provides an excellent chronological description of the battalion's daily activities and important events throughout their eight-month stay in the Gulf.

Pierson further strengthens his account by not only describing what he and the battalion experienced as a whole, but what one of the line companies experienced during the ground phase of the war. This integration of battalion- and company-level perspectives gives a seamless look into the heart and soul of an armor battalion in Desert Storm. Despite the fact that some of his descriptions seemed sensationalized, they did not detract from the enjoyment of the material.

Another unique and powerful aspect of *Tuskers* is the author's addition of lessons learned following each chapter. In these observations, Pierson gives his opinion on what leaders and soldiers can learn from his and the battalion's experiences.

Numerous pictures, illustrations, and maps also add to the author's description of his experiences. Virtually, all of the pictures are personal photographs taken by the author, which give a feel for the people and places in his narration. Although some of the illustrations and maps are oversimplified, they nevertheless aid the reader's understanding.

*Tuskers* gives a candid insight into the world of mechanized combat — its speed, its ferocity, and its problems. Leaders and soldiers at all levels have something to gain by reading this book and learning not only about life in an armor battalion, but the common experiences of soldiers in desert ground warfare.

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**The Quotable Soldier**, edited by Lamar Underwood, Lyon's Press, New York, 2000, 288 pages, \$20.00.

There is no shortage of books offering military quotations. One can also surf numerous internet sites to obtain quotations, so why read Lamar Underwood's *The Quotable Soldier*? Quite simply, it's a great read and splendid collection of quotations. Underwood's

compendium offers more than the standard series of quotations usually listed blandly, alphabetically, by author, or chronologically.

Under the heading "Order of Battle," (used instead of a table of contents) editor Underwood arranges the words and thoughts of soldiers, generals, and politicians. His chapters follow a logical progression from, "The Call to Battle: Fighting Words..." to "The Fallen" and "Final Battles," reflecting the editor's stated aim of depicting the "phases of military life." Readers will find chapters devoted to Pearl Harbor, Vietnam, command, soldiering, and humor. Too often, we neglect the latter and the lighter side of our endeavors and the camaraderie inspired by soldiering; thankfully, Underwood does not. The chapter titled "At Ease" provides an excellent portrait of the humor and camara-

derie involved in soldiering. Chapters begin with well-crafted essays from the editor, which do a nice job of introducing each chapter and tying the book together.

Lamar Underwood is the editorial director of the Outdoor Magazine Group, author of *On Dangerous Ground*, and former editor-in-chief of *Sports Afield*. He is also an "Army brat." The quotations he chooses run the gamut from ancient times through Desert Storm, with sources ranging from Geoffrey Chaucer to Ronald Reagan, and include prayers for peace and declarations of war from some of the greatest and most infamous names in military history.

The book is a highly readable collection of witty, wise, and profound words that do a superb job of describing the profession of arms. Two examples:

"This durn fight ain't got any rear." Attributed to a wounded soldier at Shiloh in 1862, when ordered to the rear by his captain at Hornet's Nest.

"Men," a sergeant told his people aboard ship before our invasion of the island, "Saipan is covered with dense jungle, quicksand, steep hills, and cliffs hiding batteries of huge coastal guns, and strongholds of reinforced concrete. Insects bear lethal poisons. Crocodiles and snakes infest the streams. The waters around it are thick with sharks. The population will be hostile towards us." There was a long silence. Then a corporal said, "Sarge, why don't we just let the Japs keep it?" (That was from William Manchester's *Goodbye Darkness*)

ARMOR STAFF

## Software

**Europe In Flames** by Talonsoft, \$44.99 from the company website at [www.talonsoft.com](http://www.talonsoft.com), or local software retailers.

Requires Windows 95/98, Pentium 133 or higher, 4X CD ROM, 16 MB RAM minimum, Microsoft compatible mouse, 16-bit high color SVGA graphics, and any Windows-compatible sound card.

Reviewed on Compaq Pentium III 450 MHz processor with Windows 98 and 128 MB RAM.

*Europe in Flames* is a compilation of three other Talonsoft titles: *Eastfront 2*, *West Front Elite Edition*, and *West Front: Operation Sea Lion*. As such, it is a great value for the money, providing approximately \$150 worth of games (original publishing prices) for under \$50. The game covers tactical combat across the European Theater of War from 1939 to 1945. Game play includes individual scenarios of vastly differing complexity; shorter, linked-campaign games; and long-term, dynamic campaign games.

For the most part, individual icons represent platoons; each hex is 250 meters across and turns approximate six minutes of real time. Battles range in size from large company engagements to corps-level operations. Equipment for each major and minor power is available for all six years of the war. Over 250 individual scenarios are provided with the two disks, which are assigned a complexity rating from 1 to 10. This rating warns the player as to the number of units, length, and map size of the scenario. Approximately 20 linked campaigns are included, and 20 dynamic campaigns. The game ships with a scenario editor that allows you to design your own engagements. There is not a campaign editor.

Linked campaigns focus on a short, specific campaign, with a predetermined unit size and side, and as such, do not include unit improvement or new equipment fielding.

Dynamic campaigns are more open-ended affairs. You are represented on the battlefield by a personal leader that will improve over time. Should he get killed, the campaign is over. Your units will gain experience, thereby improving their performance, and periodically they will receive new equipment upgrades. You can chose to play either side in the conflict (to include most minor powers), and chose between infantry and armor organizations ranging from battalion to corps size. In both campaign systems you are restricted to that front; the Germans are permitted no switching to and from France, Italy, and Russia.

This is a turn-based game, with a logical and very flexible interface. Numerous realism factors can be toggled on/off to fit player preference, and the game supports play by email, LAN, modem, or hot seat. Four "boot camp" scenarios and one tutorial scenario are provided for each front (West and East). The player's guide is substantial and detailed. Talonsoft provides excellent support for their games, and it shows in the solid performance of the game. It runs well on slower systems and has never crashed on my system. The player has a wealth of options for displays and map views to select from (2D at two scales and 3D at three scales, plus a jump map). Optional rules include: armor facing effects, extreme fog of war, more detailed command and control rules, and off map artillery support.

This is a big, complex game, but the well-thought out interface, clear player's guide, and programmed learning scenarios make it easy to start playing rather quickly. Mastery of the more complex options can come later. The game includes air support, smoke rounds, both on and off map indirect fire support, obstacle emplacement and breaching capabilities, opportunity fire, fortifications, morale effects, and the ability to blow bridges. A tool bar and pop down menus, along with numerous options for displayed status bars and unit outlines (all color coded), facilitate rapid information manage-

ment. To fully realize the potential of all these tools, the player will have to carefully read approximately 70 pages of the player's guide. You can play and win without ever completely mastering all these tools.

The only weaknesses of the game are the unmanageability of some of the larger scenarios and an AI that is marginal in the attack. In scenarios above complexity level seven, and in campaign games where you command a brigade or larger, the game bogs down. Why you would want to command a corps down to the platoon level is beyond me, but the option exists if you are a true control freak. Group movement orders exist, but direct fire control is still tedious, and you cannot put friendly units on self-control.

The computer opponent is a skilled defender, and you can adjust the advantage level prior to fighting an engagement. This influences the amount of damage sustained by each side as a result of fire attacks. But in the end, the computer struggles to execute an effective combined arms attack, and attempts to overwhelm you with a flood of units that is (usually) easy to defeat. I guess that is why multi-player options are offered and important.

This game is incredibly fun to play when in command of a regimental force or smaller, and the range of player options is amazing. Scenarios are well designed and offer a huge range of challenges and units to command. This game has just about infinite replayability value, and will continue to be supported by Talonsoft and web sites dedicated to offering new scenarios. It also provides a realistic and "pretty" tool that could find its way into a professional development program to demonstrate successful company and battalion tactics. Overall, this is a great game and an outstanding value for the money.

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