

Earl J. Hess, *The Rifle Musket in Civil War Combat: Reality and Myth* (Lawrence: University of Kansas Press, 2008). 288 pages + bibliography and index. ISBN# 0700616071. Hardcover \$29.95.

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According to historian Earl J. Hess, the Stewart W. McClelland | 120
Chair in History at Lincoln Memorial University and author of numerous scholarly works, the American Civil War “was the first major war in which both sides were fully armed with rifle muskets” (p. 35).¹ For Civil War military historians, Hess’s claim necessitates an accurate understanding of the rifle musket’s role in Civil War combat. As a result, *The Rifle Musket in Civil War Combat: Reality and Myth*, Hess’s third publication by the University of Kansas Press, probes the effectiveness of the rifle musket on the Civil War battlefield. Hess’s thesis, however, challenges the standard interpretation of the Civil War rifle musket. According to Hess, historians assume that the use of the rifle musket largely contributed to the enormity of casualties during the war, limited the offensive utility of artillery and cavalry operations, resulted in the increased construction of field fortifications, and prolonged the conflict itself. For example, renowned Civil War historian James McPherson stated in *Battle Cry of Freedom* that:

The transition from smoothbore to rifle had two main effects: it multiplied casualties; and it strengthened the tactical defensive...Time and again generals on both sides ordered close-order assaults in the traditional formation. With an effective range of three or four hundred yards, defenders firing rifles decimated these attacks. Artillery declined in importance as an offensive weapon...the guns could no longer advance with infantry toward enemy lines, for

¹ During the Crimean War (1854-1856), armies were unevenly distributed with rifle muskets. While approximately a third of both British and French troops wielded rifle muskets, only a “tiny fraction” of Russians were armed with the weapon (p.28). During the Italian War of 1859, although all armies utilized the rifle musket, it only lasted three months. Therefore, determining the performance of the rifle musket in combat is more relevant to a study of the four-year long American Civil War

marksmen could pick off cannoneers and especially horses at distances up to half a mile...The quest of both sides for victory through tactical assaults in the old manner proved a chimera in the new age of the rifle. The tactical predominance of the defense helps explain why the Civil War was so long and bloody.²

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In his introduction, Hess explains that the origins of the standard interpretation date back to Civil War contemporaries. “Even before the firing on Fort Sumter, observers in Europe and the United States assumed that the rifle musket would revolutionize warfare” (p. 1). In particular, military critics such as Cadmus M. Wilcox, author of *Rifles and Rifle Practice* (1859) and William H. Morris, author of *Field Tactics of Infantry* (1864) heralded the increased range of fire and the combat abilities of the rifle musket. Unfortunately, as Hess notes, most modern day historians have blindly accepted the standard interpretation of nineteenth century authors and neglected to question its accuracy.

However, Hess’s reassessment of the rifle musket’s effectiveness problematizes considerably this orthodox view. In large part, Hess owes due credit to Paddy Griffith, the British military historian who the author claims was the first to question the validity of the standard interpretation in his 1986 work *Battle Tactics of the Civil War*. Accordingly, Hess “was struck by his evidence regarding the short range of most Civil War firing and believed it justified revision of the standard interpretation” (p. 7). Besides Griffith, only two other Civil War historians have challenged the standard interpretation. In 2001, Mark Grimsley published the results of a study on firing ranges of Civil War combat, in which he indicated that the average range of fire was 116 yards—largely consistent with the effectiveness of smoothbore muskets. Brent Nosworthy’s *The Bloody Crucible of Courage* (2003) also agrees with the assessment of Griffith and Grimsley, in that the average range of fire during the

² James M. McPherson, *Battle Cry of Freedom: The Civil War Era* (New York: Oxford University Press, 2003): 475-477.

Civil War was far more closely associated with smoothbore, Napoleonic wars (80-100 yards) than the anticipated increased range of 300-500 yards of combat.³ Ultimately, Hess uses their ideas as a solid foundation for writing a work that is solely dedicated to analyzing the role of the rifle musket in Civil War combat.

Overall, *The Rifle Musket in Civil War Combat* argues that the common infantry soldier, whether Confederate or Union, failed to take full advantage of the rifle musket's advantages. In regards to its two primary advantages over the smoothbore: accuracy and range, Hess claims that "there is no evidence that the rifle musket was more accurate than the smoothbore musket at short range. Therefore, the old argument in favor of the rifle musket as a revolutionary factor in changing the face of warfare rests on the question of effective range" (p. 107). To answer this question, Hess includes results from his own study of the average range of fire during the war. By marshalling an assortment of primary sources, Hess concludes that the average range of fire during the Civil War was between 96-114 yards.⁴ Hess offers a four-page table that includes the range of fire from several major battles between 1862-1865, such as Shiloh, Antietam, Gettysburg, Cold Harbor, and Bentonville.

In addition to officers' adherence to close range linear tactics, other factors contributed to the limitations of the rifle musket among common battle line soldiers. According to Hess, the trajectory of the Minié ball—the most common projectile fired during the war—traced an arc, rather than the horizontal trajectory of a smoothbore round. Hess asserts that if a rifle musket was effective over 300 yards, then a significant portion of the 'killing zone' remained safe

³ Paddy Griffith, *Battle Tactics of the Civil War* (New Haven: Yale University Press, 1989); Mark Grimsley, "Surviving Military Revolution: The U.S. Civil War," in Macgregor Knox and Williamson Murray, eds., *The Dynamics of Military Revolution, 1300-2050* (Cambridge: Cambridge University Press, 2001); Brent Nosworthy, *The Bloody Crucible of Courage: Fighting Methods and Combat Experience of the Civil War* (New York: Carroll & Graf, 2003).

⁴ *The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies*, 70 vols. (Washington, DC: Government Printing Office, 1880-1901). The most important collection of primary materials related to the American Civil War. The seventy volume series contains official orders, correspondence, and formal reports from all military field operations during the war.

for the enemy since the projectiles consistently flew above the heads of those targeted. “If a man adjusted the sights of his rifle musket for a range of 300 yards, the bullet ascended so that the first killing zone was about 100 yards long...The second killing zone lay at the far end of the bullet’s trajectory...For nearly half the 300-yard range, enemy troops would be untouched” (p. 2).

Had Confederate or Union soldiers been properly trained to account for the projectile’s parabolic course, men could have accurately aimed their weapons to make use of the rifle musket’s effective range beyond 100 yards. Yet, in his third chapter “The Gun Culture of Civil War Soldiers,” Hess addresses the lack of formal training in estimating distances and practicing marksmanship; additionally, he makes the point that prior to the war a large number of soldiers remained unfamiliar with firearms. Thus, Hess argues that the revolutionizing impact of the rifle musket falls remarkably short due to an adherence to close range tactics (96-114 yards), the Minié ball’s trajectory, and the soldiers’ poor marksmanship skills. | 123

In chapters five “The Art of Skirmishing,” six “Skirmishing in Battle and seven “Sniping”, Hess examines the specialized troops who mastered the rifle musket during the Civil War. Hess argues that both Confederate and Union skirmishers and snipers utilized the long range advantages of the rifle musket by operating outside the average range of fire during the war and by mastering the operation of their weapons. Skirmishers operated as a group of light infantry, deployed in “loose-order fashion,” “out from the main line when within range of the enemy during an engagement” (pgs. 122, 146). Snipers, however, “operated individually or in small groups, [and] often use[d] specialized, long-range target rifles. They had freedom to go anywhere and [to] practice their stalking craft as they pleased” (p. 122). Hess also argues that on many occasions the tactics of skirmishers and snipers were similar, “for their duties sometimes overlapped, and snipers often were detailed from the skirmish line” (p. 176).

To differentiate them from the common infantry soldier, members of both these groups, often recruited or hand-picked by

officers, obtained specialized training in marksmanship and target sighting. Hess provides detailed descriptions of the roles of famous units including Hiram Berdan's 1st United States Sharpshooters and General Robert E. Lee's sharpshooter battalions of the Army of Northern Virginia. It is important to note that although the skirmish units and snipers utilized the rifle musket's advantages, Civil War battles were decided by the common soldiers. Although the specialized units influenced combat, ultimately, the masses of infantry, formed in linear rank, played the more decisive role in leading to an overall Union victory. | 124

The Rifle Musket in Civil War Combat provides readers with a compellingly improved analysis of the rifle musket during the American Civil War. Hess credibly makes the point that weapons are tools and remain only as effective as the human's who use them. Furthermore, the author establishes that in warfare the human factor outweighs technological advancements. As Hess explains, "combat is one of the most complex of human activities; a million factors can affect its course and outcome, and it is dangerous to assume that the level of military technology is the chief factor" (p. 119). In effect, Hess chides former and fellow historians for failing to question the accuracy of the standard interpretation. Although Civil War technology maintained the capability of killing at ranges up to 500 yards, the tactics employed by commanding officers, the soldiers' failed compensation for ballistics, and the incompetence of marksmen had greater implications on the Civil War battlefield than technological advancements. In all, Hess teaches the lesson that technology is only as useful as its user.

Most importantly, Hess demonstrates the need for continued reinterpretation of Civil War historiography. Due to this study, historians now know that the rifle musket's role did not overwhelmingly factor into the following: casualty rates, offensive cavalry and artillery operations, fortification construction and the war's duration. In chapter 8 "The Rifle's Impact on Civil War Combat," Hess briefly comments on the topics with three four-page explanations of each, wherein he blames the fate of the war on a

number of factors, one primarily being dreadful officer leadership. However, he merely opens the door for further research. This publication is an effective scholarly contribution that not only fundamentally alters historical interpretations of Civil War combat but enhances new areas of Civil War scholarship as well.

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