

SUGGESTIONS FOR FURTHER READING

The Tactical and Strategic Value of Tanks

H. R. McMaster wrote the following as the 53^{rd} Commanding General of Fort Benning and the third general officer to be Commanding General of the Maneuver Center of Excellence (June 2012–July 2014):

Enemy organizations and adversarial groups ranging from irregular forces to hybrid threats with near-peer capabilities will continue to threaten U.S. strategic interests around the globe. To evade U.S. long range surveillance capabilities and precision strike capabilities, enemies have employed traditional counter-measures such as dispersion, concealment, decentralized command and control, and smaller formations. Maneuver leaders must be expert in combined arms operations because there is no "single arm" solution to the tactical problems maneuver leaders will face. Each of the arms compensate for each other's weaknesses. And, when employed in combination with each other, combined arms operations force the enemy to react to multiple forms of contact simultaneously.

Combined Arms Operations

"We have gotten into the fashion of talking of cavalry tactics, artillery tactics, and infantry tactics. This distinction is nothing but mere abstraction. There is but one art, and that is the tactics of the combined arms. The tactics of a body of mounted troops composed of the three arms is subject to the same established principles as is that of a mixed force in which foot soldiers bulk largely. The only difference is one of mobility."

-Major Gerald Gilbert, British Army, 1907

Combined arms are the appropriate combinations of infantry, mobile protected firepower, offensive and defensive fires, engineers, Army aviation, and joint capabilities. It is the application of these combinations in unified action that allows us to defeat enemy ground

forces; to seize, occupy, and defend land areas; and to achieve physical, temporal, and psychological advantages over the enemy. By synchronizing combined arms and applying them simultaneously, commanders can achieve a greater effect than if each element was used separately or sequentially.

Combined arms capabilities are critical to success in battle because no single arm can be decisive against a determined and adaptive enemy. To integrate all arms into the fight, maneuver leaders must have an understanding of systems' capabilities and employment methods that go beyond individual branch competencies. And maneuver leaders must be able to integrate, not only Army, but also sister service capabilities into operations with a particular emphasis on joint surveillance, intelligence, and fires capabilities.

The traditional view of combined arms has focused on only fire and maneuver. This perspective, however, must be expanded in order to seize, retain, and exploit the initiative against determined enemies in complex environments. The air-ground dimension of combined arms operations is particularly critical. Moreover, leaders must also be prepared to incorporate joint, interagency, intergovernmental, and indigenous actors into their combined arms teams in order to shape conditions, consolidate gains, and retain the initiative.

An Approach to the Study of Combined Arms Operations:

First, maneuver leaders should become familiar with the relevant Army doctrine, which in turn can provide leaders with a context for studying history. Second, once familiar with relevant doctrine, leaders should read articles that provide an overview of combined arms operations over time as well as accounts of the evolution of combined arms since the early 20th century. Next, leaders might study a specific combined arms operations in which integration of the arms allowed forces to accomplish their mission and defeat the enemy at minimal cost. Leaders should discuss vignettes, both historical and contemporary, and consider the potential next evolutions of combined arms.

- Rick Atkinson, *Crusade: The Untold Story of the Persian Gulf War* (New York: Mariner Books, 1994).
- Michael D. Doubler, Closing with the Enemy: How GIs Fought the War in Europe, 1944– 1945 (Lawrence, KS: University Press of Kansas, 1994).
- Michael R. Gordon and Gen. Bernard E. Trainor, *Cobra II: The Inside Story of the Invasion and Occupation of Iraq* (New York: Pantheon Books, 2006).
- Jonathan M. House, *Combined Arms Warfare in the Twentieth Century* (Lawrence, KS: University Press of Kansas, 2001).
- David E. Johnson, *Hard Fighting: Israel in Lebanon and Gaza* (Santa Monica, CA: RAND Corporation, 2011).
- Peter J. Schifferle, ed., Bringing Order to Chaos: Historical Case Studies of Combined Arms Maneuver in Large-Scale Combat Operations (Fort Leavenworth, KS: Army University Press, 2018).
- Gen. Donn A. Starry, Armored Combat in Vietnam (Ayer Co Pub, 1982).
- David Zucchino, *Thunder Run: The Armored Strike to Capture Baghdad* (New York: Grove Press, 2007).



