

SURVIVABILITY: THE FOUNDATION OF PROTECTION

By Mr. Douglas M. Loggins

Survivability has often been described as “blade time,” which refers to the time required for an engineer digging asset to dig a fighting or protective position. This concept originated with survivability doctrine, first introduced in Field Manual (FM) 5-103, *Survivability*, in 1985.¹ This manual evolved from FM 5-15, *Field Fortifications*, which focused on engineering and provided details for constructing entrenchments, emplacements, and shelters; it also outlined the principles of terrain appreciation as they apply to field fortifications and explained how to combine individual field fortifications into a unified system through the organization of the ground.² As outlined in Army Techniques Publication (ATP) 3-37.34, *Survivability Operations*, survivability doctrine is still primarily intended for engineer staffs and officers at the brigade echelon and below, almost 40 years after its inception.³

Survivability serves as the foundation of the protection warfighting function, which refers to “the related tasks, systems, and methods that prevent or mitigate detection, threat effects, and hazards to preserve combat power and enable freedom of action.”⁴ Therefore, survivability applies to all military personnel—not just engineer formations and their staffs. All Soldiers and units carry out survivability operations within the limits of their capabilities. It all begins with individual Soldiers and units conducting tactical-level operations.

Soldiers can significantly enhance their survivability by being proficient at critical Soldier common tasks and field craft—for example, applying personal camouflage; reducing personal electromagnetic signatures; reacting to contact; protecting against chemical, biological, radiological, and nuclear (CBRN) injury/contamination; and performing self-aid/first aid. All Soldiers must understand the threat, the operational environment, and all forms of contact and consider the possibility of being under constant observation.

Survivability is also related to the ability of a unit to avoid enemy detection, defeat enemy detection capabilities, and withstand enemy effects. Units can enhance their

survivability by deploying local security measures, adjusting movement and maneuver formations, taking evasive actions, maneuvering to gain positional advantages, deploying decoys, dispersing forces, and carrying out military deception operations. Tactical units should incorporate procedures for the use of camouflage, cover, concealment, and electromagnetic emissions control—including noise and light discipline. The dispersal of formations also improves survivability by making it harder for enemy forces to identify valuable targets. Additionally, the application of CBRN defense measures improves survivability in CBRN environments.

For improved survivability, unit leaders must analyze the mission and fully comprehend the situation, problem,



Hull defilade position for an M1 tank.

and objectives. This will guide the planning process. If the current survivability measures are unable to prevent detection or mitigate the impact of threats and hazards, then leaders should coordinate with higher headquarters to acquire the necessary protection resources, thereby ensuring

survivability and mission success. Common survivability enablers include—

- Engineers, who construct fighting positions, protective positions, and hardening facilities and employ protective obstacles.
- Obscuration, which results from natural (rain, fog) or artificial causes or occurs as a by-product (smoke, dust).
- Electromagnetic protection, which includes the employment of countermeasures, the mitigation of signatures, and electromagnetic hardening.
- CBRN operations, which include the employment of capabilities that assess, protect against, and mitigate the entire range of CBRN incidents to enable freedom of action.
- Tactical deception, which refers to friendly activity that causes enemy commanders to take action or cause inaction detrimental to their objectives.



A Soldier takes aim from his man-made fighting position.

- Operations security, which is a capability used to identify and control critical information, indicate friendly force actions attendant to military operations, and incorporate countermeasures to reduce the risk of adversarial exploitation of vulnerabilities.
- Force health protection, which encompasses measures that promote, improve, or conserve the behavioral and physical well-being of Soldiers. These measures comprise preventive and treatment aspects of medical functions and include combat and operational stress control, medical services, dental services, operational public health and laboratory services, and veterinary services.

It's clear how survivability has extended beyond blade time and the engineer staff officer and how protection can manifest itself differently at echelon. In order for protection to be comprehensive, integrated, layered, redundant, and enduring, Soldiers must be trained in critical common tasks; units must employ proper tactics, techniques, and procedures; and leaders must understand the survivability capabilities of their organizations. Leaders must also coordinate for survivability support to prevent and mitigate the impacts of threats and hazards in order to achieve mission success.



Endnotes:

¹FM 5-103, *Survivability*, 10 June 1985, now obsolete.

²FM 5-15, *Field Fortifications*, 27 June 1972, now obsolete.

³ATP 3-37.34, *Survivability Operations*, 16 April 2018.

⁴FM 3-0, *Operations*, 1 October 2022.

Mr. Loggins is the Chief, Doctrine Division, Fielded Force Integration Directorate, Maneuver Support Center of Excellence, Fort Leonard Wood, Missouri. He retired from the U.S. Army after serving 23 years. He holds a bachelor's degree from Columbia College, Missouri.