

Field Fortifications: Types of Field Fortifications

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Abstract

The types of field fortifications that have existed through time have been heavily documented and criticized in reference to tactics and strategy by experts and historians alike. In an attempt to isolate a few of the more important or most utilized fortifications, I have comprised the following brief overview stemming from the Civil War era until the current Global War on Terror. Many forts are considered landmarks within the United States and can be visited year round in some parts of the country. It is amazing that so many of these structures have stood up to the test of time and this is a tribute alone to the spirit of war and drive of the American fighting man.

Types of Field Fortifications

Over the years there have been numerous situations involving conflict of nations and cultures that have enhanced the technology of war and ultimately birthed the many types of field fortifications, both offensive and defensive. Just like the evolution of man there has been a definite evolution of field fortifications as the art of war has progressed through time and the fighting man gets more and more cunning. Based on the past missions and locations of battles throughout our land, we still have historic forts that speckle the countryside from coast to coast. We still call our current military installations by the term fort, even though the current dynamics of the fort have changed significantly. Many different descriptions and terms are used to express the uses and construction of past and present fortifications. In discussing the actual types of field fortifications, you must utilize a comparison and contrast to past and present to establish an organized thought process to this subject.

Permanent

Numerous fort structures from the civil war era still exist primarily on the east coast of the United States. Fort Sedgwick Virginia, Fort Maurepas Mississippi, Fort James Jackson Georgia, Fort Gains Alabama, and Fort Barrancas Florida are just a few examples of past civil war structures that are still currently being maintained for the purpose of historical recognition and teaching. In permanent structures like these you often find solid block or brick walls surrounding a garrison or magazine in a specific design pattern, such as circular, bastion, tenaille, and polygonal. The walls would vary in height from five feet to upwards of ten feet with loopholes (small holes with a stair step type inward progression to prevent ricochets) within the walls for rifleman to engage the enemy under impenetrable cover. In some instances exterior palasading (large timbers placed side by side with a carved pointed top) was utilized to establish

external walls around the cantonment area. When the structure is in its field stage and prior to actually becoming a hard block site, the site was constructed with dirt and gabionade traverses or fascines. These fortifications were cylindrical in shape and always maintained a uniform size for the good of measurement and placement. Soldiers constructing the fortification would cut down a majority of the trees that surrounded the site. With all the sticks (after stripping off all the leaves) they would weave the cylinder shaped gabions and ultimately stack them to fill with mud, rock, and dirt. Once the individual cylinders were placed and filled, it became a gabionade traverse. The Soldiers would even use the empty powder and whisky barrels that they received supplies in to create elaborate obstacles and command posts (cask paradoses). The barrels were simply placed in the relevant position and filled with the surrounding dirt or mud to reinforce its capabilities.

Much has changed since the days of the civil war and with the use of steel and the manufacturing of different types of wire, fortifications have become more simple to use and easier to deploy in a timely manner. Ironically, in the world wars of the twentieth century, even with the modern advances mentioned, the fighting forces resorted to trench warfare. On both sides you would find an elaborate maze of trenches that would sometimes stretch for miles. Soldiers would sleep, eat, and fight in these fortifications, constantly continuing to improve their options by increasing the flexibilities and bomb proofing of each structure.

Non-permanent

Non-permanent, temporary, or moveable field fortifications were used often as obstacles or to provide any tactical advantage against a crafty enemy. Again, during the civil war they became accustomed to using mobile obstacles like sap rollers (large gabions of woven sticks and twigs that were bulletproof and were maneuvered by brigade sappers with sap hooks and sap

forks) to fortify their positions or move under fire to protect designated assets. Spanish riders (long horizontal poles with spiked sticks attached in either direction based on the need for the device) were also used because of the mobility and restrictive nature they introduced to the fight. Many of the mobile obstacles were needed due to the fact that there had to be some type of access points to the field fortifications sites and with these apparatus they were able to conduct their variation of access control. Fascines (large bundles of sticks and poles bound together rested atop a number of crossed poles designated by length) were used to shore up areas along the defense where the ground had gave way or the need to shore up a certain part of a perimeter presented itself.

During the world wars and the more industrialized period the brunt of the load for any mobile obstacles or fortifications, with the exception of rubble, were steel and wire. The Czech army had created the hedgehog (an anti-tank obstacle constructed with large pieces of angle iron welded together in a crossover pattern) to address the mobility of tanks during the European conflicts. These large, jack looking obstacles would halt a tanks progress and disable it if an attempt to negotiate them would occur. Even to this day we utilize spooled wire to create diversions for wheeled vehicles and contain or restrict personnel. Razor wire and concertina wire are used for something as simple as access control and as complex as an outer perimeter for a detainment camp.

Army forts are surrounded by cemented mesh-wire fencing that stands ten to twelve feet high and have a v-type bracketing system on the top of the fence with either barbed wire or concertina wire affixed to the top to prevent intrusion. Some electronic fortification systems may be used for more security based on the need and classification of the site. Sensors and optical devices adorn the installations (forts) of today. Camera systems are placed at every access point

to record all incoming traffic or identify potential disasters. The garrison has been replaced with a contingent of contract security guards or the assigned Military Police Soldiers to keep the individual Soldiers and their families safe within the confines of the installation.

Conclusion

There have been unbelievable advances in the construction of and use of field fortifications from the days of the civil war until the current war on terror. In today's modern Army when you mention field fortifications Soldiers automatically think of things like concertina wire and sandbags. Although we do have the modern advances in use today, many of the old ways still are functional and can be improvised for isolated situations. It leaves one to wonder, what would a civil war Soldier think about a current forward operating base in Iraq when he seen the twelve to twenty foot outside cement boundaries with the guard towers and perimeter guards gazing over their every step? The look of amazement in their eyes would be priceless.

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