WEAPONRY

The phalanx dominated Greek warfare for three centuries, but fell before combined-arms forces.

By Brian Todd Carey

SOMETIMES IN THE MIDDLE OF the 7th century BC, a new style of warfare appeared in ancient Greece, requiring a foot soldier to forsake acts of individual valor in favor of standing shoulder-to-shoulder with his comrades in a battle square. This square, called a phalanx, distinguished itself from other heavy infantry formations in the Near East in that it would evolve into a well-articulated tactical system capable of decisive offensive tactical mobility.

How and when the change in emphasis from individual to collective action on the Greek battlefield took place is still a matter of debate. During the Bronze Age and before the invention of the phalanx, Greek fighting had been dominated by aristocratic warriors who reveled in individual duels with their adversaries, in a manner immortalized by Homer in The Iliad. Even as Homer was conceiving his epic, a shift in warfare was taking place. The revival of trade routes and the beginning of colonization in the 8th and 7th centuries BC led to economic prosperity in Greek mother-cities such as Corinth, Thebes and Athens. That prosperity allowed for the democratization of war. Iron had replaced bronze as the metal of choice for weapons, allowing an increasing number of farmer-soldiers to equip themselves with helmets, armor, greaves and shields, and thus take their place in the battle line. The increasing number of armored heavy infantry was probably a major factor in the decline of individual warfare, and the Greek art of war began to change to accommodate larger numbers of soldiers.

How the ancient Greeks utilized those new developments in warfare is a subject of great interest and heated debate in military history. It is universally recognized that the new Greek tactical system required certain preconditions if battle was to take place. In mountainous Greece, each of the opposing phalanxes sought level ground. Normally the defender enjoyed a significant advantage by securing a site on a slight slope so that the attacker would have to march and fight uphill. The uphill advantage, however, was often so great that attackers usually declined to engage, avoiding the defenders’ army and destroying their crops until University of California at Santa Cruz, has taken another look at the primary sources and has come to a different conclusion. The new interpretation describes phalanx battle as the collision of two battle squares in which, as the 4th-century BC Spartan soldier and historian Xenophon described it, “crashing their shields together, they shoved, fought, slew...”

At Plataea in 479 BC, Persians fall back before an impenetrable phalanx of shields and spears—a tactic their Greek enemies had perfected in the course of fighting each other.

Since the late 19th century AD, historians have debated how the Greek armies actually joined battle. The old school of thought advocated an orderly advance into battle in which front rank fought front rank, with soldiers in the second rank waiting to fill the places of the fallen or fatigued. But a new generation of classicists, led by Victor Davis Hanson of the typical Greek phalanx formation deployed in a closely packed rank and file, usually but not always eight ranks deep. The organization of the phalanx was based more on files than on ranks, with the hoplite belonging to his file rather than his rank. The basic idea was to maintain a solid front after the opposing sides collided, to deny the enemy gaps to penetrate.

The key to the Greek phalanx’s success was in its innovative organization and technologies. The phalangeal formation...
Magazine presents

1/72 Fw-190A-3 "Black 7", Staffelkapitan 8/JG 26, Wevelghem, March 1942

Features:
- Accurate Fw190 mold
- 1/72 authentic scale
- High quality diecast metal
- Historically accurate
- Detailed cockpit
- Opening/Closed Canopy option
- Engraved panel lines
- Moveable flight control surfaces
- Rotating propeller
- Display In Flight or In Landing Mode (stand included)
- Approx. dimensions: 4.8"L x 5.7"W x 2.2"H

ITEM: ADFS $19.95

1/72 F4U-1D Corsair "Day's Knights", VMF-312

Features:
- Accurate F4U mold
- 1/72 authentic scale
- High quality diecast metal
- Historically accurate
- Removable missiles
- Detailed cockpit
- Opening/Closed Canopy option
- Engraved panel lines
- Moveable flight control surfaces
- Rotating propeller
- Display In Flight or In Landing Mode (stand included)
- Approx. dimensions: 5.6"L x 6.8"W x 2.7"H

ITEM: ADCV $24.95

1/72 P-47D Thunderbolt Razorback "Little Chief" 61st FS, 56th FG

Features:
- 1/72 Authentic Scale
- High Quality diecast Metal
- Historically Accurate
- Removable Weapons
- Detailed Cockpits
- Opening/Closed Canopy option
- Rotating propeller
- Pre-assembled
- Display In Flight or In Landing Mode
- Approx. dimensions: 6"L x 7.1"W x 2.4"H

ITEM: ADTR $24.95

1/72 Spitfire Mk.Vb, No. 249 Sqn, Takali 1942

Features:
- Accurate Spitfire mold
- High quality diecast metal
- Historically accurate
- Detailed cockpit
- Opening/Closed Canopy option
- Engraved panel lines
- Moveable flight control surfaces
- Rotating propeller
- Display In Flight or In Landing Mode (stand included)
- Approx. dimensions: 5.7"L x 6.1"W x 1.9"H

ITEM: ADST $24.95

Order toll free: 1-800-358-6327

Go online: TheHistoryNetShop.com to see the rest of our Warbird collection.

WEAPONRY

consisted of heavy infantrymen or hoplites, so named because of the ingenious shield or hoplon each carried into battle. The hoplon itself was a round, convex shield nearly 3 feet in diameter and weighing more than 15 pounds. The essential difference between the hoplon and the older shield was that the latter could hang by its strap from time to time, allowing a soldier to rest his arm, and was used in combat by holding a grip behind the central boss. The newer hoplon remained locked onto the forearm, with its weight borne by the left shoulder, resulting in more effective and prolonged use. The disadvantage was that since the hoplon was now gripped with the left hand near its rim, half the shield projected to the infantryman's left, effectively protecting only the left side of his body. To compensate for that deficiency, Greek soldiers began to stand side by side, employing the overlap of the shield to protect the right side of their bodies. Thus Thucydides explains the tendency of hoplites to edge to their right as the result of "each man, in his anxiety, getting his unprotected side as close as possible to the shield of the man standing on his right, and thinking that the more closely the shields were locked, the better the protection."

Another consequence of this new defensive formation was the abandonment of the Bronze Age, Homeric-style throwing spear for a thrusting spear; necessarily creating a tactical system that relied exclusively on shock. So important had the thrusting spear become that the sword was only utilized in emergencies.

SCHOLARS ARE NOT certain whether the use of this new equipment spawned a radical change in battlefield tactics or vice versa. It is believed, though, that the adoption of the hoplon and the abandonment of the throwing spear reinforced the hoplites' dependence on collective warfare. Unlike the rectangular shield or scutum of the later Roman legionary or the lighter round shield of the early medieval warrior, the hoplon afforded the Greek heavy infantryman little protection from an attack on his side and rear. In fact, the entire hoplite panoply evolved to satisfy the offensive and defensive role of the collective frontal attack. Perhaps even more important—and more fateful—this newfound dependence on mutual support necessitated innovation in the size and shape of the phalanx.
The invention of a superior tactical system could not be monopolized for long, however, as the phalanx quickly spread throughout Greece. That diffusion instigated an arms race among city-states, one that forced the evolution of the phalanx and in turn introduced phalanx-versus-phalanx warfare as a cultural institution in Hellenic civilization. Because of tactical diffusion, heavy infantry all over Greece wore the same type of armor and fought according to identical tactical principles. Overall, greater battlefield articulation remained difficult for phalanxes to achieve, especially since most hoplites were not professional soldiers but militia. For the most part, Greek militia had full-time occupations as farmers, artisans and tradesmen. One city-state, Sparta, solved that problem by creating a professional army, employing a warrior class that drilled for years, while other city-states experimented with the organization of the phalanx itself.

When tactical experimentation did take place, it usually involved an increase in the depth of the files of the phalanx rather than broadening the rank or frontage of the formation. Common belief held that by increasing the depth of the phalanx, greater momentum could be gained in the initial collision, but the philosophy that more was better was not universally accepted. Xenophon once asked, “When a phalanx is too deep for the men to reach the enemy or good to their friends?”

WITH THE WIDESPREAD adoption of identical tactical principles, a “cult of symmetry” arose in classical hoplite battle. The idea of symmetry on the battlefield goes back to Bronze Age aristocratic warfare, but the ethos that compelled Homer’s Achilles to battle mano a mano with Hector outside the walls of Troy was projected onto collective warfare in Greece between the 8th and 5th century BC. Phalanx-versus-phalanx combat became the preferred mode of warfare in Greece to the exclusion of more efficient means of killing, inasmuch as light infantry was not an acceptable battlefield tactical system for the Greeks. While archery was recognized in early Iron Age Near Eastern warfare as the great battlefield equalizer, allowing death to be dealt at a distance, it simply did not fit the confrontational image that was the essence of heroic warfare as defined by Homer. Consequently, archery was rele-
Spend a day in 1944 as you experience a sea and air extravaganza aboard Baltimore’s WWII Liberty Ship JOHN W. BROWN.

This exciting six-hour “Voyage into History” features: continental breakfast, bountiful luncheon buffet and afternoon snacks; live music of the 40’s; roving entertainers; reenactors demonstrating military equipment and vehicles of the War era; flybys of wartime aircraft; (weather permitting), with the ship’s Armed Guard gunners manning the guns to fight off attacking Axis planes; a ship completely open for tours. Visit the engine room and marvel at the magnificent 140 ton triple-expansion steam engine pushes the great ship through the water. Tour museum spaces, crew quarters, bridge, messrooms, troop berthing areas and much more. This is Living History!

Tickets for our 2006 Voyages are $125 each. Fees may apply to cancellations.

Sailing from Baltimore at 10:00 AM and returning at 4:00 PM on

Saturday, September 2, 2006
Saturday, October 7, 2006

For information and to order tickets, call:
Project Liberty Ship at (410) 538-0164; FAX: (410) 666-5214.
Visa / MC / Discover accepted

Explore our web site at: www.liberty-ship.com

WEAPONRY

Gated to a subordinate status, usually hunting.

Classical Greek warfare tended to be very localized in its scope, with city-state battling city-state for territorial gain. The relatively short distances between the various Greek city-states, however, were still forgiving to the hoplite army on the march. Greece’s steep slopes, deep gorges, dry washes and narrow passes dictated the use of regular routes to move armies. That alone often compromised strategic surprise and reinforced the ritual character of phalangeal warfare at the same time. Furthermore, hoplite arms and armor were much too heavy to wear in the summer if crossing difficult terrain. It meant that even for a short campaign against a neighboring city-state, the hoplite and his attendant had to transport several weeks’ rations as well as arms and armor. If pack animals or ox-drawn carts were used, the size of the marching column grew exponentially, since at least some fodder for the pack or draft animals had to be carried as well.

Greek victory in the Persian wars in the first half of the 5th century BC contributed greatly to the perceived dominance of the heavy infantry phalanx. Although some Greeks realized that Persian errors had also contributed to their victory, the more common belief was that it represented the triumph of the spear over the bow and of heavy infantry over light. As the 5th century wore on, however, individual Greek city-states began to experiment with their armies by adding light infantry to the tactical mix. During the Peloponnesian War, Athenian use of archers and javelin throwers against the Spartans at Spacteria in 425 BC improved the Greek perception of light infantry, but it was only a step toward a fully integrated army.

The Greek city-states never did adopt a complete combined-arms tactical system. That refusal cost them their freedom when, in the middle of the 4th century BC, King Philip II of Macedon marched south and defeated city-state after city-state with a balanced, combined-arms tactical system that added heavy cavalry lancers and horse archers to an improved phalanx protected by light infantry. With the invention of the Macedonian combined-arms tactical system, Alexander the Great and his Greco-Macedonian army carved an empire and ushered in the Hellenistic Age and a new era of warfare. MH