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## “Gustavus Adolphus, the Dawn of Modern Warfare, and Changes to the **Great Battles of History** System”

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Although the winds of change had been in the air for several decades previously, the battle of Breitenfeld, in 1631, was certainly the most identifiable watershed in terms of military history and a “new” method of warfare. To that extent, the Battle of Breitenfeld has often been labelled “The Dawn of Modern Warfare.” While such generic, all-inclusive labels can usually be attributed to humanity’s consuming desire to place everything that happens into a convenient pigeon-hole, this cliché contains a great deal of truth.

Prior to Breitenfeld, what was to deteriorate into the Thirty Years War was mostly the Catholic/Imperialist armies of Wallenstein and Tilly pretty much having their way, as their seemingly unstoppable Spanish-style *tercios* lumbered and looted all over central and south Germany. Things had gotten so out of hand for the Protestant cause that Cardinal Richelieu, the legendary *eminence gris* of Louis XIII’s France and a staunch supporter of Catholicism, fearing a disruption in the European balance of power that would not stand to France’s good, connived to get Sweden’s young king, Gustavus II Adolphus, into the war on the side of the Protestants!

Gustavus had been a keen student of both the ancient discourses on military tactics, and how/why they were used, as well as the recent developments under way in the Dutch Revolt, as brought about by Maurice of Nassau. As discussed below, he incorporated many of these neo-classic “innovations” into his army. He then reinforced their usage by making his force mostly a paid, standing army enhanced by hand-picked mercenaries, such as his Scots and English troops (all of which later became the usual mercenary group because Sweden did not have the manpower to replace its losses), and topped it off with a tactically and doctrinally trained command staff completely attuned to Gustavus’ methods and theories.

The result, at Breitenfeld was, as they say, a revelation. The Imperialist left-wing cavalry, Gottfried Hans von Pappenheim’s vaunted, but caracoling, “heavy” cavalry, became so frustrated at the decimating counter-charging of Gustavus’ Polish-style heavies in concert with fast-firing commanded musket infantry, that they literally gave up and galloped off the field. (One wonders about Gottfried’s motives here, a question that has occurred to many other historians.) This

enabled Gustavus to overcome the opening disaster of seeing his Saxon supposed-allies melt away at the first sign of trouble, denuding his left flank. Imperialist commander Johannes Tilly had also seen this, and his massive *tercios* were bearing down on that dangling flank, visions of destruction and looting dancing in their collective heads. And such would probably have been the result, had not Gustavus' heavy infantry brigades done something no *tercio* dared to do, or could do, had they dared – they rapidly wheeled around to the flank, marched up to the painfully slow *tercios*, and began firing volley after volley of massive salvo fire into their thick ranks. When General Baner and the Swedish heavy cavalry, having disposed of Pappenheim, crossed over to the Swedish left – capturing the Imperialist guns in the bargain the rout began. The Imperialist army – for a decade, totally supreme on the battlefield – had been just as totally destroyed in under three hours. For the Catholics, “culture shock” was a mild, albeit somewhat jarringly modern, term.

For the **Great Battles of History** series, this all provides us, as designers, with a very interesting opportunity. What Gustavus was doing in terms of devising systems to negate the effect of the *tercio* and the *caracoling* cavalry was quite similar to what the Romans did, with their infantry, to overcome the might of the phalanx, and what Alexander did with his Companion cavalry to stymie the swarming Persian archers. To that extent, we prefer to view it as a Neo-Classicist revival of the major systems of the ancient period, overlaid with gunpowder. And because of that similarity, **GBH's** third volume, **Lion of the North** (which contains the battle of Lützen, 1632, as well as Breitenfeld) is a perfect successor to both **SPQR** and **Alexander**, against which it stands out in very interesting, historical relief.

There were two main areas in which we concentrated in design terms: how the Swedish infantry attained its superiority over the previously unbeatable *tercios*, and what changes Gustavus brought to his cavalry that, most assuredly, changed the course of cavalry combat forever. For the infantry, we viewed the Imperialist *tercios* as pseudo-phalanxes, mostly without the technical skills of an Alexandrian phalanx, but with the definite advantage of musketry. The *tercio* was (basically) a square formation of tightly-packed pikemen surrounded by several layers of musketeers, sort of like Gunpowder frosting on a Pike Cake. At each corner they usually sported an extending group of additional musketeers which, from a bird's-eye view, looked like mouse-ears, which led to us calling the *tercio*-arquebusiers, “mousketeers.” (There is some evidence that, by the time of Breitenfeld, the rear mouse-ear sleeves, as well as the rear line of musketeers, had disappeared.)

The size of the *tercio* varied, from about 1200-1500 at the time of Breitenfeld up to the massive 3000+ squares it had in its heyday, and the approximate layout

was about 50 ranks of men, 30 rows deep. Originally, the musketeers were viewed simply as protection for the pike. However, as the effectiveness of the musket grew (albeit slowly), that ratio changed. At the turn of the 17th century, it was pretty much a given that a *tercio* would have slightly more pikes than muskets. By Breitenfeld, that ratio had switched to roughly 2-1, musket to pike ... although there were *tercios* which still approached parity in that area.

The growth of the musketeer arm arose from several factors, some of which were yet to be perceived by many of the commanders of the day. Most telling was the fact that it was easier to replace musketeers than it was pikemen, mostly because it was cheaper to “arm” and train the former. Musketeers wore little of the armor pikemen had, and because they were not expected to stand up to any concerted assault, they required little of the training and discipline the pikes needed.

The musketeers did, though, require a lot of drill in order to be able to fire their rather inefficient matchlock weapon. Aside from the fact that the darn thing weighed about twice what a Civil War rifle did, and often needed a “fork” to support it when being fired, the matchlock system was not very serendipitous. It required that the musketeer carry around a huge, slow-burning fuse which he wrapped around his body/arm/shoulder or whatever, praying it would remain lit, which it rarely did if the humidity rose above desert level. This meant that effective rate of fire was abysmal, especially when you added to the matchlock’s weather susceptibility the machinations the ranks of musketeers went through just to get off a round.

Forget “fire at will.” That was unheard of, if only for the fact that even at an “effective” range of perhaps 75 yards, you couldn’t hit an incoming asteroid. Fire had to be by rank and by drill, with everyone firing at the same time and in the same direction. This required a large number of steps to be performed, and a rigid adherence to what the musketeer commander was ordering. Even so, the effect of a rank’s fire at an approaching, densely-packed enemy square could be crippling, both in terms of casualties as well as morale.

So, with a huge core of solid—and stolid—pikemen surrounded by 4-5 ranks of relatively inefficient, but dangerous, musketeers, the *tercio* had become a very powerful but definitively defensive formation. Even though it showed remarkable ability to move fluidly over relatively unbroken terrain, it was not an easy formation to maneuver, its basic mode being “half-speed, dead ahead.” Because it was essentially a square in a shell, it was not prey to flank attacks, and it was virtually impervious to cavalry charges. Its very “squareness” made it easier to move forward than the extended phalanx lines, sometimes over a mile long (although not Alexander’s, for his father, Philip II, had divided his phalanx

into self-contained “brigades”), but it sure didn’t turn on a dime, and a great deal of its manpower was wasted, especially against an enemy that did not need to close to inflict damage.

And that very capability, the musket’s ability to kill from afar, is what Gustavus perceived as the key to adapting a more linear formation, one that could allow him to maneuver his infantry and impart them with a more aggressive mission. Gustavus, again following Maurice’s lead, used these perceptions to maximize his firepower and more efficiently use his pikemen. In the case of the latter, this meant thinning the ranks from 20 down to ten and even further. He formed brigades out of groups of three “regiments,” these brigades of about 1000-1500 men being the basic maneuver unit for the heavy infantry. Gustavus’ army thus became more linear, more flexible and far more maneuverable than the tercios. As the Roman legion was to the Macedonian phalanx, it became an offensive system rather than a defensive one.

To further this systematic aggressiveness, Gustavus drilled his musketeers in what the game terms “Salvo” fire: firing in massed volleys rather than by thin ranks. While the latter produced a steady fire, the steadiness had little effect. However, the stunning effect of a Double Salvo, with almost everyone firing at once, produced six times the firepower of ranked fire, and a Double Salvo could easily blow a huge hole in any enemy line, as it did many times at Breitenfeld. (Tangentially, it should be noted that the Japanese, who had had firearms for only a short time, happened upon this system decades before it ever occurred to the West.)

To simulate all of this, we devised two different types of heavy infantry counters. For the *tercios* we use large, 5/8" square counters to visually represent the size and power of these massed squares. *Tercios* not only have exceptional capabilities against flank attacks—all those musketeers on the sides—but, when they combine into the triple-tercio pyramid formations favored in that era, a formation we call *The Death Star* (with many thanks to the Boyd Schorzman Playtesters for coming up with this felicitous label), they are virtually invincible to any form of shock attack.

Unfortunately, and as players will learn, shock is **not** the way to go in **Lion**, certainly not to the level at which it is used in the first two games in the series. Firepower is “in,” and the combat system now reflects that. Gustavus’ brigades are represented by the double-sized counters we saw for phalanxes—although they are somewhat more maneuverable, to say the least—a size used to simulate their linear aspect as well as their frontage. In terms of manpower a Swedish HI brigade is about the same size as a *tercio*. What is different is the all-important Fire Rate modifier, as well as the telling ability to use Salvo Fire.

To represent the evolution in warfare from an emphasis on sheer weight to firepower, we have pretty much abandoned Cohesion as a method of reducing a unit's effectiveness. Casualties are now what counts, especially those produced by muskets. Take enough casualties and you become Disorganized, with appropriately reduced capabilities. Shock attack still uses the same table, but the same number results familiar to **GBH**ers are now used to augment a Disruption die roll ... and no longer can you simply slam into a unit and just blow it away. Most of them are too big, too defensively powerful. With some exceptions, the only way to get them out of the way is to attrit them with steady fire. Then, when they are Disrupted, use Shock to force them into Rout.

To accomplish this, the system now allows the tactics of the era – advancing with firepower to within 30-40 yards of each other and then blazing away until one side says “enough” – by making charging cavalry the only units that *must* attack. So, while the *tercios* are huge and powerful, their poor musketeer deployment and passé “rank” fire forces them to fire at a distinct disadvantage, while the Swedish brigades just move in and blaze away. (Well, it's not quite that simple – or effective, but that's the way Gustavus envisioned it. The “Death Star” *tercios* can still wreak some fearful havoc if let loose.) It was so obvious at Breitenfeld that the sun had set on the day of the *tercio* that the next time the two armies met, at Lützen, one year later, the *tercio* of the previous year was virtually nowhere to be seen. Linear warfare was now, for the most part, the accepted method, and would be for the next 200+ years.

Ironically, just the opposite was happening with the cavalry and, as a result, the **GBH** cavalry system has had to become far denser than that seen in **SPQR**. This is more from the wide variety of cavalry tactics that had arisen over the preceding 1700 years more than anything else. And to be honest, much of what we have added in **Lion** we excluded from **Alexander** and **SPQR** not only because of differences in tactics but because we did not want to overly burden the players with such tactical and system complexities. Now, however, you are *all aficionados*, each ready for the next step up the ladder of insight.

By the early years of the 17th century, cavalry, although heavily – and rather fancifully – armored, was essentially a descendant of the old Persian mounted archer, light cavalry system. You remember those boys, hmmm? They'd ride just within range, loose some arrows at you, cause all sorts of minor problems, and quickly ride away before you could get anything going against them. A few hours of this – as Crassus learned at Carrhae – and you were, physically and metaphysically, history. Float like a Lydian, Sting like a Mede, as that old Roman, Cassius, would say.

When cavalry was given small-arms to fire – and for this era we are talking wheellock pistols and a sawed-off musketoone or two for the “arquebusiers” – they quickly developed into a rather effective combined arms system often called “reiters.” Pistol-armed heavy cavalry was not only capable of harassing fire and flexible maneuver (light cavalry), but it could then turn around and charge home (heavy cavalry). This type of system had proven very effective with, say, the cataphracts of the Belisarius era. It did the same up through most of the 15th century... until the cavalry realized that when it charged home against the well-armed *tercio* (then, the Swiss Square) walls it took ferocious losses. Best ignore the charge and concentrate on the fire aspects. And out of this theorizing grew the “caracole,” a maneuver which reduced cavalry – even heavy cavalry – to a bunch of dandified pistol firers who spent most of their time avoiding any direct contact with the enemy.

For a system that was, if not truly inept, only marginally effective, the *caracole* stayed in favor for quite some time. What it did do was save money, as *caracoling* cavalry could, like those Persian archers, run away to fight another day. Cavalry was *très expensif* to replace, not a small factor in the minds of the men who raised these squadrons. There was no “heavy” cavalry – “heavy” and “light” were not terms used in those days – to aggressively counteract the *caracolers’* capabilities, in the way Alexander’s Companions had ridden down any and all Persian cavalry ... that is, until Gustavus watched the Poles in action.

Despite the almost universal acceptance of the *caracole*, it was not something the Polish cavalry took to. The Poles still charged home with the lance and sword, and they were the most feared cavalry in Europe (complete with those great, whistling-feather head pieces). Gustavus had learned this in his early battles with the Poles, and he brought the heavy cavalry charge back to Western European warfare. (By contrast, his cavalry was not as heavily armored as the Imperialist counterparts, allowing them far greater flexibility and speed.) And, in doing so, he took a page out of Caesar (probably literally), and combined his cavalry charges with the firepower of small detachments of “light infantry,” what they called Commanded Muskets.

Caesar had run into a combined cavalry-light infantry system in Africa, when he came up against the African legions and Numidian cavalry of his ex-lieutenant, Labienus, at Ruspina. (See the *C3I Pipeline* report on this battle in the **Julius Caesar** module.) Caesar quickly adopted and adapted this idea, although by the time of Gustavus’ use, things had changed... but the principle was the same. The small detachments of commanded musketeers – and sometimes even his regimental cannon! – would advance with the cavalry. The Commanded Muskets would move forward, either drawing the enemy cavalry into approaching them or firing deadly salvos into their ranks. The enemy cavalry, of

course, was mostly *caracole* – at least it was at Breitenfeld – and their ability to use their weight to negate the musket fire was not great. In any case, the second they charged the musketeers, Gustavus’ cavalry regiments would swing into action.

Operating in three squadron lines, the first line would ride in, firing its pistols. The next two lines, though, were saddle-to-saddle, swords in hand, following up the screen of fire with a two-fisted “body slam.” It was Crush and Cut as only madly charging cavalry can do and, against the *caracole*, it was highly effective. At Breitenfeld, Pappenheim’s crack left wing cavalry charged seven times, and all seven times Swedish counter-charges and musket fire drove them off. By that time, Pappenheim had given up the ghost, and he simply took his cavalry and rode off the field ... which allowed Baner to cross them over to the Swedish left and help destroy the advancing *tercios*.

For the game, the cavalry units look pretty much like their **SPQR** counterparts, with the addition of Fire Rates. What has changed is the addition of a whole Charge system, which includes charges, interception counter-charges and standing counter-charges. The *Caracole* Maneuver, though, goes into the Move-and-Fire segment, a placement which did not occur until late in development but which served to greatly clarify the entire cavalry system. The result is an often swirling, disruption-ridden mass of charging and counter-charging units, broken up by several turns of recovery, as the cavalry reform to charge again. Hopefully, while your troopers take a breather, your infantry will be in a position to exploit the problems they have caused.

With all of this, **Alexander** and **SPQR** veterans will be a bit hard-pressed in the beginning to convert from the Shock and Cohesion form of combat to the Quick Hit, Fire and Casualty aura that **Lion** requires for success. As the rules state – several times – players have to divest themselves of the “...let’s send in the Companions and see what they can do” mentality. The ability to use a combined arms methodology becomes far more important, and a far greater emphasis is placed on the ability of commanders to use their units as systems, rather than just as units, than even the legion mechanics did.

Oh, the artillery. Yes, there is plenty of artillery. Gustavus’ regimental guns aside, they can’t move and they can’t hit anything to any great effect. For that, we have to go into the next century. Bet you can’t wait!

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