

# Shock and Awe:

## Mounted Combat in the American Revolution

South Carolina. January 17, 1781

### The Battle of the Cowpens

Dawn comes bitterly cold as some three thousand men prepare to face off in a rolling frontier meadow. The attacking party is a professional force of Britain's finest light troops; infantry, cavalry and artillery. The defenders, a mixed bag of trained American Continentals and militia backwoodsmen. The British arrive as dawn breaks and the battle is soon met. Volleys ring out in the cold air, bayonets click in place and the British soon force the retreat of the American first line. Riflemen begin streaming to the rear and the British smell a rout in the making. Their best horsemen spur forward with abandon, they have firm ground and broken infantry before them - a trooper's dream come true.

Watching on the American side is Lieutenant-Colonel William Washington of the 3<sup>rd</sup> Continental Light Dragoons. He's been posted in reserve and quickly recognizes a disaster in the making as the British cavalry strike the fleeing riflemen at a gallop, hacking left and right and driving all in a panic. Washington also sees that the British dragoons appear to have no

idea of his own presence, or the fact that their flank will likely be wide open as they pass his position. Orders quickly roll down the line, swords scrape free and the Continental horsemen step out at a trot; a bugle sounds the advance, spurs come back and Washington's men thunder forward en masse...

Throughout history the cavalry charge has ranked as one of the most thrilling events in battle, repeatedly lionized and at times overblown in poems, prose and paintings. And while much has been written on the results of these dramatic events, little emphasis has been placed on the actual workings of a mounted charge; the essential energy, elements and boundaries they all shared and which ultimately governed their success or failure.

Mounted combat had progressed a great deal by the time of the American Revolution. Since the arrival of stirrups in the 4<sup>th</sup> Century the horse soldier had seen a steady progression of arms, armor and animal husbandry. Medieval knights mastered the shock tactics of their day by riding heavy, big boned horses in single ranks and carrying long couched wooden lances they used to pierce enemy formations like mobile battering rams. Massive draft style animals were needed to handle the extreme weight of armor plate and chain mail protecting both knight and horse as they

advanced through a rain of arrows while riding at their objective. Horses of this size were notoriously lacking in speed and stamina and so the charges were delivered at a trot to prolong the horse's endurance. At these slower speeds the larger animals also gave every advantage to their riders in both leverage and momentum when engaging in close combat with mounted opponents on smaller horses. When it came to the warhorse bigger was better for centuries running.

But the advent of gunpowder changed everything. The matchlock gave way to the flintlock and armor became an impediment. Tactics were evolving as well and by the arrival of the Eighteenth Century the dominant mounted weapon was thought by many to be the firelock. Complex, circular evolutions were designed whereby pistol wielding troopers rode up to the enemy, halted and fired in an on going cavalcade of wheeling pistol fire. All shock value was lost and the results were a disaster. The smoothbore, single shot pistols were inaccurate beyond ten paces and even worse from the back of an excited horse in a battle line. Longer length carbines tripled the effective mounted range but required two hands to aim and fire, not a practical option for a horseman engaging an enemy at close range on a raging battlefield. The proof was soon recorded history as opponents simply drew swords, clapped spurs and charged full bore through the weak gunfire

to cut down the mounted musketeers. Mounted tactics had come full circle and the shock of the horse charge reigned yet again.

Then during the wars of the early and mid Eighteenth century, western Europeans discovered that at greater speeds the particular size of a combat horse was largely diminished. Multiple ranks of swordsmen mounted on lighter, faster horses could at times steal the flank of the slower moving formations and occasionally rout the heavier units from the field. The primary source of these emerging tactics came from the Hungarian Hussars, and these new eastern tactics blended with western minds and transformed European cavalry into two basic types; heavy and light. Heavy units of cavalry known as horse guards, dragoons and cuirassiers were mounted on larger, heavier horses and generally rode in the “high school” style of straight legs and long stirrups. These troops specialized in massed charges designed at breaking through enemy formations of infantry and cavalry during pitched battles. Light units of cavalry known as hussars, light dragoons and lancers were mounted on smaller, lighter bodied horses capable of great stamina and these “light horsemen” tended to ride a shorter stirrup to achieve greater leverage during a melee. Highly versatile, the new light horse units could engage enemy formations in pitched battles as well

but specialized in scouting and screening an army on the march, pursuit roles, and raids on enemy supply lines.

Whether the troops were heavy or light, used sabre or lance, there were three key elements or factors that governed their success: terrain, discipline and momentum.

### Terrain

Without the right ground, mounted charges were not even attempted. Ditches, fallen timber, thick woods, swamps, and rivers were obvious impediments to a high speed charge but less obvious elements were just as dangerous; a distant clump of cane or cattails could signal a deep bog or spring in a seemingly open field. Hay fields could be strewn with hoof breaking stones hidden beneath tall grass or riddled through with gopher holes. Fences were also an impediment; a lone trooper could jump most fences, but jumping a fence at a charge with an entire troop would likely destroy all unit cohesion and shock potential and was therefore a recipe for disaster. Much of the American Revolution was fought in heavy woods where cavalry could only operate on roads bisecting thick stands of timber, creating a potential ambush point from hidden infantry at every turn. The better officers learned to scout their surroundings as much as possible; screen their movements behind ridges, swamps and large stands of timber;

secure roads for high-speed avenues of attack and maneuver; and most of all blend the speed of their horses with the terrain and battlefield conditions to gain a surprise attack on the enemy.

### Discipline

Cavalry of the American Revolution were nearly all molded after the versatile light horse units of the Seven Years War with the greatest influences being Prussian and British drills manuals.<sup>1</sup> Contrary to Hollywood myth, cavalry charges were not headlong gallops from start to finish. Strict order was essential to achieve the desired shock effect and charges typically began at a walk, progressed to a trot, a canter and a hand gallop was called for during the final fifty to one hundred yards. In this way the horses were not exhausted upon reaching the enemy and the troopers were able maintain tight orderly ranks throughout the charge. Attacking formations varied in frontage between column: long deep formations with narrow fronts, and line: wide platoon style fronts either two or three ranks deep. The line formation was preferred as it struck with a wider and greater impact, brought more sabres to bear against the enemy at once and was far more effective against an enemy flank.

Emanuel von Warnery, a Prussian Hussar officer of the Seven Years

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<sup>1</sup> See Hinde, *Discipline of the Light Horse*. Faucett, *Regulations for the Prussian Cavalry*.

War, recommended charging in a line three ranks deep.

*“A squadron formed in two ranks is very subject to waving, and much easier broken than one of three, which also must naturally have a greater weight in the shock, and be much more difficult for an enemy to penetrate, even should several of the first rank be fallen or disabled ... the horse will not fail to advance even without his rider, feeling himself pressed on each side and behind ... for a horse must be very much wounded to make him fall upon the spot.”*<sup>2</sup>

Baron von Steuben, General George Washington’s Continental drillmaster, agreed with Von Warnery:

*Cavalry, especially when two deep, is not very terrible in their attacks in front, and least so when against infantry... The deeper they are, the surer to break through.”*<sup>3</sup>

Though cavalry were the shock troops of the battlefield, they did not reign as king over the other military arms of the day. A cavalry charge directed against formed infantry or prepared artillery positions were dire proposition at best and rarely succeeded unless supported by some other martial arm or turn of event. Timing was crucial in all cavalry charges and an officer’s patience and perception in observing the enemy and seizing just the right moment to launch an attack was pivotal to success.

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<sup>2</sup> Von Warnery, *Remarks on Cavalry* p. 19.

<sup>3</sup> Von Steuben to Washington Oct 23, 1780. Mauer, *Dragoon Diary* p. 274.

## Momentum

Horses are far from individualists, quite the contrary they are highly evolved social animals, born with a compelling instinct to stay with the safety of the herd. And harnessing this herding instinct of the horses' desire to mass together at a gallop gave the cavalry charge it's most basic element of all – momentum.

Beyond any weapon a trooper carried it was the horses' physical mass, coupled with speed and directed at an enemy that consistently produced results on the 18<sup>th</sup> Century battlefield. Even in light horse units, an average mount weighed eight hundred pounds. With trooper, weapons and kit aboard each animal became a thousand pound missile that closed at over thirty miles an hour – easily more than capable of crushing the stoutest grenadier infantryman. To best exploit every pound, men and mounts were formed in ordered ranks whereby the unit could arrive as a single, overwhelming shock wave that crashed through the enemy. The immediate goal of a mounted charge was not so much to kill the enemy, as it was to hit the enemy with a wall of galloping horses and thereby break open the enemy ranks to create a rout. Once the rout was on and the enemy was fleeing, a trooper's sabre was at its most effective.

And perhaps the best way to achieve a rout was to take an enemy in



flank.

William Washington's flank attack on the British 17<sup>th</sup> Light Dragoons at the Battle of Cowpens was a textbook example of a successful flank attack. The 17<sup>th</sup> were deployed in a wide line, spread out and driving a fleeing enemy unit before them. They had chased the American riflemen some three hundred yards and during the pursuit had lost all sense of their own order when hit on the left flank by Washington's Light Dragoons. The overwhelming weight of this attack caught the 17<sup>th</sup> completely off guard and they had no chance to wheel around as a cohesive force and "front up" to Washington's speeding ranks. Instead they were rolled up in an instant as the Continentals drove in their flank and scattered the British dragoons like a tumbling of dominoes.

*"Col. Washington's cavalry was among them, like a whirlwind... The shock was so sudden and violent, they could not stand it, and immediately betook themselves to flight; there was no time to rally, and they appeared to be as hard to stop as a drove of wild Choctaw steers, In a few moments the clashing of swords was out of hearing and quickly out of sight;"*<sup>4</sup>

An officer in Washington's command counted eighteen fallen enemy troopers on the ground, a stunning testament to the effectiveness of the sabre in trained hands.<sup>5</sup>

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<sup>4</sup> Collins, *Autobiography of a Revolutionary Soldier* p. 22

<sup>5</sup> James Simmons to William Washington. 1803.

Capable of both thrusts and cuts a sabre was essentially a three-foot steel whip with an edge that could cleave through flesh and bone. Even if the edge was dull, a sabre still landed with tremendous knockdown power and could crack skulls, break arms or splinter collarbones. A deep thrust with the point of the blade was faster than swinging a cut with the edge, and no doubt deadlier, but there was always the risk that a pointed blade thrust home in a horse melee could become entangled in the enemy's body and not easily withdrawn, and most accounts refer to delivering cutting and slashing blows with the edge of the blade and not thrusts with the point. Curved blades designed primarily for cutting were also easier to move side to side in tight quarters or around a horse's head and neck. After the initial charge, cavalry combat typically turned into mounted riots and the edge may have been better suited to these swirling collisions where instinct took hold and order was lost. Most of all it should be stressed that sabre fights were rarely individual combats. They were high-speed brawls of multiple, shifting opponents fought from the backs of darting horses. Thomas Young described one such incident,

*“It was now a plain case, and I could no longer hope to engage one at a time...so I drew my sword and made battle... one finger on my left hand was split open; then I received a cut on my sword arm by a parry which disabled It. In the next instant a cut from a sabre across my forehead, and the blood blinded me so that I could see nothing... Then came a thrust in the*

*right shoulder blade, then a cut upon the left shoulder, and a last cut (which you can [still] feel for yourself) on the back of my head.”*<sup>6</sup>

If anything the advantage went to the better horseman rather than swordsmen in these plunging melees where spurs were as important as sabres and the tables could turn in an instant. Samuel Hay described the following encounter in 1777 with Continental officer Casimir Pulaski.

*"General Polasky [sic] (the commander of all our Light Dragoons) with a body of his troops attacked a body of the Enemy's Light horse... our people charged the Enemy, as it is our General's rule... He sets no store by carbines or pistols, but rushes on with their swords... They had severe cutting and slashing; the enemy had 5 killed and two taken prisoners besides a number wounded. We lost one killed and two taken prisoners... General Polaskey [sic] was taken prisoner and retaken again.”*<sup>7</sup>

But the sabre was just the latter part of cavalry combat. In all cavalry charges the better commanders tried to find some sort of advantage before ordering a charge; whether it be numbers, an open flank, a terrain advantage or just sheer surprise, and in most cases the issue was settled with the speed and shock of the horses alone before the first sabre blow was ever struck.

A case in point occurred the morning of the Battle of Guilford Courthouse where Lieutenant-Colonel Henry “Light Horse Harry” Lee was tasked with observing and if possible retarding the British advance to the

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<sup>6</sup> Young, *Memoirs*.

<sup>7</sup> Samuel Hay to William Irvine, " Camp White Marsh 14 Nov. 14. 1777" William Irvine Papers.

courthouse. The surrounding countryside was the rolling piedmont of North Carolina, heavily wooded and sprinkled with small plot farms and bisected by a number of roads linking the various churches, towns and markets of the growing rural community. Lee was certain the British line of march would follow the New Garden Road and he placed several mounted pickets at key points along the expected route. There was one part of the New Garden Road that held Lee's interest in particular, a long and narrow section bordered tight on either side by tall, well-set fences.

The leading British troops advancing on Lee's position were a veteran force of Loyalist Light Dragoons headed by Britain's premier cavalryman; Lieutenant-Colonel Banastre Tarleton who was tasked with clearing the way for the main British army behind them. On spying Lee's pickets the British Dragoons gave chase, hoping to force Lee's men into a rout down the New Garden Road. But Lee's rear troop under Captain James Armstrong refused to panic and fell back slowly, allowing Lee's two forward troops to maintain their order, keep their interval and pass safely through the long section of narrow fences bordering the road. Yet the British dragoons continued to press after their quarry and followed Armstrong's troop into the lengthy section of fenced road, accelerating deep into the section of rails as Armstrong's troop cleared the far end of the fences.

*“At this moment... the [American] dragoons came instantly to a right about, and, in close column, rushed upon the foe.”*<sup>8</sup>

Free of the confining rails, Armstrong’s column suddenly wheeled around with sabres drawn and bore down on the trailing British Dragoons at a gallop. Hemmed in on both sides, the British had no choice but to advance into the wholly unexpected attack, the two sides hurtling head on at one another amid the fences bordering the road. Out of instinct to avoid injury, horses will rarely if ever slam directly into one another at speed; polo ponies will jostle and glance off one another, race horses will press each other sideways, but true head to head collisions go against a horse’s very nature. But one could override this instinct amid the funneling rails of a narrow roadbed. Charged nose to croup; rail to rail, and rank upon rank, Armstrong and Lee orchestrated a controlled stampede and launched it square against the pursuing British dragoons. Better mounted, and holding the initiative, Armstrong’s troop went crashing into the British dragoons, literally bowling them over and then cutting down their entire front section.

*“The meeting happened in a long lane, with high curved fences on either side of the road ... the whole of the enemy’s section was dismounted and many of the horses prostrated, some of the dragons killed, the rest made prisoners... [the enemy] retired with celerity.”*<sup>9</sup>

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<sup>8</sup> Lee. *Memoirs* p.169.

<sup>9</sup> Ibid.

Lee then gave chase with his remaining troops, driving the British dragoons back down the road for over a mile until he was in turn checked by a strong force of British infantry.

In both Lee's charge on the New Garden Road, and Washington's flank attack at Cowpens, it should be understood that the directed mass of the charging horses bearing down on the enemy is what created the rout – the wall of galloping horses. The attending sabre blows, though brutal and potentially deadly, were secondary. This was a clear distinction between cavalry and other martial arms. If one infantry platoon gained the flank of another it was the distant (eighty yards and closer) firepower of the muskets that posed the immediate hazard; the missile threat of musketry, while far more likely lethal, paled psychologically to the shock of a horse troop thundering down on an opponent.<sup>10</sup>

Nowhere was this more evident than the Battle of the Waxhaws where Lieutenant-Colonel Banastre Tarleton charged a line of Continental Infantry under Lieutenant-Colonel Abraham Buford. Tarleton's British cavalry caught up with Buford in an open wood where the Continentals had deployed some three hundred and fifty infantry in a broad line of kneeling men and muskets all ready made to receive a cavalry charge. Despite having

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<sup>10</sup> Keegan, *The Face of Battle*. p.96

lost any advantage in frontage or surprise, Tarleton, flush with confidence from a string of victories, decided to launch an attack. With him were one hundred and fifty dragoons and sixty mounted light infantrymen. Tarleton quickly dismounted his infantry and formed his combined force into three distinct wings. The first; composed of his infantry and sixty dragoons would strike the right flank of the Continental line while a second additional force of sixty dragoons would charge the center of the American position. Tarleton, with a half troop of thirty dragoons and some selected infantry, would make a third looping attack on the Continental reserve and rear.<sup>11</sup>

The pieces set, Tarleton ordered the charge and the three wings bore down simultaneously on the Continental position. Starting from three hundred yards out, the British rolled forward, accelerating as they went and finally raising the swords and giving a shout as they spurred into a gallop. At fifty paces the Continentals presented their muskets but their officers ordered the men to hold their fire even as the British Dragoons came thundering forward. Fifty to thirty paces was considered the best distance to engage charging cavalry with musketry, but Buford and his officers held their men's fire well beyond that point, and the Continentals didn't fire until

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<sup>11</sup> Tarleton, *Campaigns*, p.29.

the British Dragoons were but ten yards out. The result was a disaster, or as Tarleton phrased it a “material error.”<sup>12</sup>

At so close a range the very ground beneath the feet of the infantry would have been shaking as the horses stormed forward; the dragoons standing tall in their stirrups, their sabres cocked and looming overhead. Still a volley delivered at such close range should have done terrible damage to the attacking force and by all rights it did as Tarleton listed sixteen men and thirty horses killed and wounded - likely half the mounts of the sixty man section that Tarleton sent in the direct frontal assault against the Continentals.<sup>13</sup> And while a musket firing buck and ball could easily kill a horse at ten yards distance, it was highly unlikely that it would drop the animal on a dime before it came crashing into the musket line. Especially when the animal was moving at some thirty miles an hour, or forty-four feet per second, in the final closing stage of the charge. The end result was a stumbling tidal wave of wounded and thrashing horses pitching into the smoke shrouded musket line, and it broke the Continental ranks wide open. Buford had no choice but to immediately ask for terms.

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<sup>12</sup> Ibid. p. 31.

<sup>13</sup> Ibid. p. 31.



Gruesome as it was, Tarleton's charge at the Waxhaws was probably the greatest single mounted charge of the war, and a truly sobering example of the brutal nature of mounted combat.<sup>14</sup>

Unlike the Hollywood model, cavalry charges were not pretty. They were harsh, lightning fast affairs that killed and maimed both horses and riders alike in violent applications of force and mass that could reverse the course of battle in seconds. Their success was heavily dependent on a wide range of variables, and an officer's judgment in perceiving the circumstances and directing the charge at the right moment was paramount. Cavalry did not reign supreme over other arms, it did not dictate major campaigns, capture key cities, or lay siege to enemy positions. But during the American Revolution, the cavalry was truly, and undeniably, the shock and awe of the battlefield.

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<sup>14</sup> Later attempts by Tarleton to charge infantry meet with near disaster. See battles of Blackstocks and Gloucester Point.