

Historical Overview: Armor in Advanced Squad Leader

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Introduction

Soon after their introduction at Cambrai in 1917, tanks became known (at least in the US Army) as the “combat arm of decision”. The tank’s combination of speed, mobility, firepower and crew protection have no equal on the battlefield. Then as today, only a tank can perform an approach march under fire, achieve a breakthrough, conduct a pursuit of a retreating enemy, and exploit to gain tactical, operational or strategic advantage. In WW2 as today, armor achieves its tactical goals through fire, maneuver and shock effect. In the offense, a commander masses tanks at the decisive point and time on the battlefield to achieve overmatch against a defender. The commitment of tanks at a designated place and time almost always indicates the attack’s main effort. On the defense, a commander uses tanks to conduct a mobile defense, provide lethal direct fires in support of infantry, or as a reserve to respond to threats or opportunities as they present themselves on the battlefield.

Cavalry Missions

Since ancient times, the roles of mounted soldiers were limited to scouting, raiding and shock. Alexander the Great’s Companion Cavalry served as a shock force for his army, while the Roman Legion Auxiliary Cavalry were essentially a scouting and raiding force, as were the Mongols later. Medieval knights were formidable fighters, but vulnerable once unhorsed due to the weight of their armor. The shock effect of mounted cavalrymen has won battles, as the charge of Napoleon’s Guard cavalry at Borodino, and the failure of same has also lost battles, as evidenced by French charges at Agincourt and later Waterloo.

The light and heavy cavalry concept was tried with varying degrees of success throughout WW2. The debate about roles and missions, and the equipment needed to perform cavalry missions continues to this day.



Figure 1: Shock Effect: 19th Century Cavalry Charge. Image source: historum.com

Europeans generally organized their Cavalry into medium and heavy shock units (e.g. Horse Grenadiers, Horse Guards, Cuirassiers, and Dragoons.) and light scouting, raiding and shock units (e.g. Lancers, Uhlans, Hussars, Chasseurs, Cossacks, and the like). They brought this philosophy with them into their armor design, organization and doctrine for employment into World War 2 and arguably the current day.

The US Army was one of the few major armies that fought in Europe which did not have its own tradition of heavy cavalry. At no time in the US Army's history did it deploy formations of heavily armored men with lances, sabers and breastplates as their counterparts did in Europe and therefore has no tradition of shock warfare. The needs of the US Army in the 18th and 19th centuries did not require that capability and therefore the great cost of building and maintaining these formations was not justified. What the US Army needed was men who could quickly move long distances and fight when they got there. To do this, the US Army fielded what we would call today "light" cavalry".

Light Cavalry was initially organized to fight the Indian wars starting in the Northwest Territories and later against the plains Indians. In the years leading up to the American Civil War, the Army had regiments of "light" cavalry equipped with sabers, pistols and carbines (that is, short barreled rifles suitable for firing from horseback). Cavalry was primarily used to conduct reconnaissance and security operations, and occasionally to raid lightly defended targets, such as supply trains, campsites, and so on. Cavalrymen typically fought mounted to maintain a mobility advantage over their adversaries but, from time to time, would occasionally fight dismounted if the situation required (think of Buford's defense of the 'high ground' on the first day of Gettysburg). Since cavalrymen have more class and panache' than the typical ground-pounding infantryman, dismounted fighting was a good capability but not used all that frequently – especially if enemy cavalry was nearby.

The American Army fought the Indians using a "Legion" concept (today we would call it a 'task force' or 'combat team') where they mixed an artillery battery with several

companies of infantry and a troop of cavalry. The purpose of the cavalry troop was to find and fix the enemy that the artillery and infantry would then destroy. As the enemy retreated the cavalry would go in pursuit. But essentially, American cavalry did not generally engage in fire or shock combat. In the middle of the Indian Wars, a concept was tried to improve the mobility of the infantry. First the Army tried to put the infantry in wagons and second they created the mounted rifle regiment. Neither was satisfactory and in the late 1850s they created two additional regiments of mounted troops as the 1st and 2nd Cavalry Regiments.

During the American Civil War, US Army cavalry was essentially used as a scouting and security force in support of the friendly main body, which was typically comprised of infantry and artillery. When the main body was on the move, the cavalry scouted ahead and around the flanks to identify key terrain, obstacles to movement, and attempt to locate the enemy. On the defense, the cavalry would provide reconnaissance and security beyond the range of the infantry pickets to provide early warning to the commander and harass an incoming enemy within their capabilities to do so.

As you may have observed, it is important to note that these tasks – reconnaissance and security -- are common to basically every army from ancient times to today. The only question is what formations and techniques are available to the commander to perform those tasks. As technology has changed, so have the tools and techniques. Rapid technological change, combined with doctrine, formations and techniques to use them, drives the way these mission are performed today just as they were changed in the years up to and during WW2.



*Figure 2: European 18th Century Dragoon (that is, a mounted infantryman). Note the musket instead of a carbine.
Image Credit: Wikipedia Commons*

Cavalry and Armor in WW2

WW2 was the first war in which machines replaced horses in widespread use. Although the horses were (mostly) gone, the fundamental missions of cavalry (or mounted fighting men) had not changed. Reconnaissance and security missions still needed to be conducted, as well as the need to close with the enemy and destroy him with fire, maneuver, and shock effect. Each major army had to figure out how it wanted to perform these missions and with what type of equipment. That is why you see – especially early in the war – a mix of both lightly armored and heavily armored AFVs. An examination of the AFVs of France, Great Britain and Russia especially shows you how each nation chose to implement the concept of light and heavy “cavalry”. These nations developed AFVs which were to be used as “fast cavalry” (such as the Russian BT-series) for reconnaissance, security and exploitation, while heavy armor (such as the KV1, British Matilda, and so on) was designed for effecting a breakthrough with infantry. In contrast, Germany used tanks for its *Blitzkrieg* style of warfare which prized mobility, some armor, good machine guns and a medium-range gun to destroy both tank and infantry targets. Germany’s well known heavy tanks (such as the King Tiger) traded mobility for enhanced armor protection. Unlike the Allies, Germany did not specifically design a tank for the ‘light cavalry’ role but instead used armored cars and halftracks.

Like its British and Russian counterparts, the US Army developed armored cars and light tanks for reconnaissance and security operations. Examples of this include the M8 Greyhound and the M24 Chaffee light tank. Where the US Army differed was in how its pre-war doctrine viewed the role of armor on the battlefield. Whereas the British and Russians viewed the role of heavy armor as decisive in achieving a breakthrough (while working with infantry and artillery, as they had done successfully in WW1) the American view was that a breakthrough would be performed by infantry and artillery while tanks would be used in the pursuit and exploitation phases. The differing philosophical approaches drove different design decisions, which are easily seen in the vehicle counters in ASL. Consider for example the early war British Crusader tank versus its contemporary Matilda. The Crusader, intended as a ‘cruiser’ tank to perform exploitation and pursuit, sported a 40L gun and armor about average thickness for its time period in the war and a high speed (assuming it starts!) for a fully-tracked vehicle. Meanwhile the Matilda possessed the same gun, significantly better armor, but slightly less than half (in ASL terms) of the speed of the Crusader. A similar comparison can be made with the Russian BT-series and the KV-series tanks. The BT has an adequate gun for its time of the war, light armor and a high top speed (23 MPs!) while the KV has a larger gun, substantially better armor (11 or better) and is only about half as fast. Why? Different roles to support different intended purposes on the battlefield.

Meanwhile the US Army’s different vision for armor called for a different design, which became known as the “medium tank” concept. The intended purpose of the medium tank was primarily to conduct pursuit and exploitation. For that role, the M4 Sherman was well suited, as it had a good speed (13-15 MPs in game terms, depending on the model) adequate armor (especially for the time of the war in which it was initially fielded)

a fast turret, and a quick-firing 75mm gun with favorable HE characteristics. The absence of a 'heavy cavalry' tradition in the US Army and the belief that a medium tank would be suitable for the US Army's approach for using armor meant that there was no practical heavy tank on the drawing board at the start of the war. In fact, no purpose-built heavy tank was fielded until 1945 (the M26 Pershing, which is featured in several late war scenarios).



Figure 3: The Russian BT-7 "Fast Cavalry" tank (L) and the British Crusader "Cruiser" tank (R) were designed for similar roles. Photo credits: Reddit and worldwarphotos.info

While the US Army's medium tank design differed from other nations, the US light tanks had similarities with those of its allies. The M2 and M3 series light tanks were a more reliable realization of the light tank to implement the light cavalry concept than were its British or Russian counterparts. As the thinking went, light tanks (and armored cars such as the M8 Greyhound) would be used in the traditional light cavalry role for reconnaissance and security operations while the medium tanks would pursue and exploit the enemy.



Figure 4: Scouts Out! M8 Greyhound and crew conducting reconnaissance (source: worldwarphotos.info)

Another area in which the US Army doctrine varied from its allies was in the tank destroyer concept. Since US medium tanks were intended for pursuit and exploitation, the thinking was that another branch of the Army – tank destroyers – would have the mission to destroy enemy tanks. According to the thinking of the American army at the time, the vehicle required to do this would need a high-velocity gun and a high top speed to quickly reposition itself on the battlefield to respond to the rapid moves of German *panzers*. The first purpose-built, fully tracked implementation of this concept of course was the M10 Wolverine, which possessed a good gun, adequate armor and good speed (15 MPs). The M18 and M36 tank destroyers further refined this concept with a higher speed (24 MPs!) or bigger gun (90L). The only other country to build tank destroyers in any significant numbers was Germany which had several successful designs, such as the Hetzer. Several other German designs were simply intended to provide better mobility to AT guns, with the Marder being an example of this (which is why Marder and Marder-like vehicles were often referred to as Self Propelled Anti-Tank Guns, or simply SP Guns). Although Germany fielded successful tank destroyer designs, the philosophy behind them was more practical than doctrinal: the absence of a turret made them less expensive to produce and lower profile was better for the defense.



Figure 5: German JgPz38(t). Note the low silhouette and small size of this tank destroyer. Image credit: Pinterest

Why this Matters to You in ASL

To become an effective “tank commander” in ASL you must understand not just the capabilities and limitations of each vehicle but also have some appreciation of the vehicles intended use on the battlefield. Does your plan of attack call for a flanking movement? Are you intending to screen an advancing enemy? Do you need to know what’s behind that hill? In those cases, light cavalry vehicle designs may be your best choice. Do you need to breakthrough an enemy line? Breach an obstacle? Mass armor at the decisive point? Punch an ‘armored fist’ through your opponent’s weak spot? Then the “heavy cavalry” designs like the Churchill, KV, or Panther tank will be your best choice. If you are unsure of the capabilities, limitations or intended role of the vehicles in your order of battle, the vehicle notes provide a rich detail of historical and technical information for every vehicle in the game and should be consulted as you plan how you will fight the scenario.

Now that you have a basic understanding of cavalry and armor usage, doctrine, and resulting design philosophies, you have better context for the types of tactical tasks those tanks on your scenario card were intended to perform and you can (hopefully) use them as intended. However, in ASL, as happened historically, many times armored units were used not in accordance with their capabilities but with immediate tactical needs of the moment. And, like your real-life predecessors, you will have to find a way to make it work. Good luck, tank commander!



Figure 6: Churchill Heavy "Infantry" Tanks ready for orders