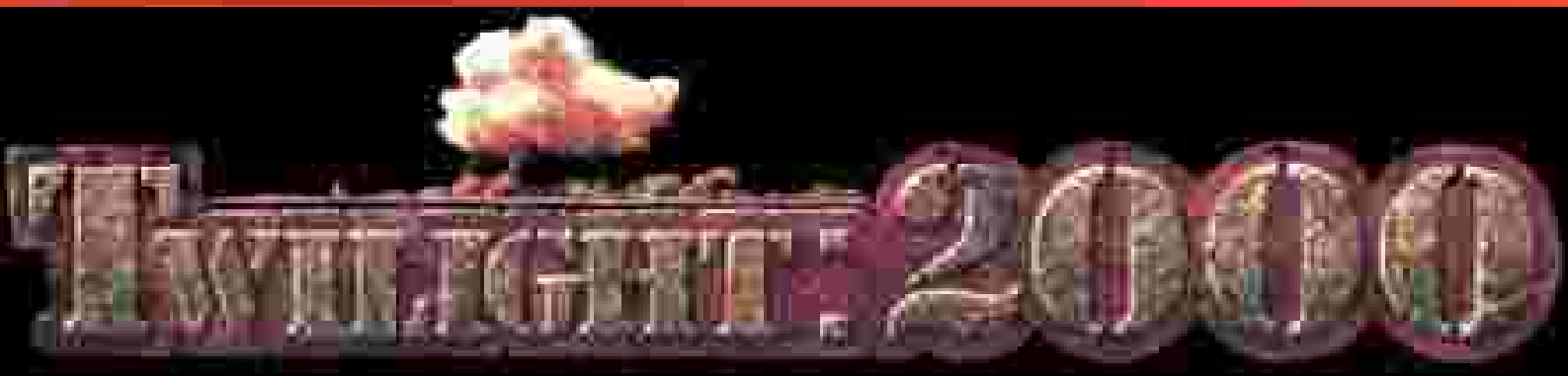


Cavalry and bicycles in the Twilight War

CITY AND COLLECTION



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With thanks to all my friends on the Twilight 2000 Forum ([www.http://forum.juhlin.com](http://forum.juhlin.com)) for all the feedback and encouragement. Some of you will find ideas or comments incorporated here. In addition Neil Grant has provided much information on riding, a field in which I am noticeably deficient!

Version 2..2.1

As the war continued all nationalities found it more and more difficult to mechanise their new and existing forces. Initially the shortfall was made up by using reserve vehicles (often of an older pattern) and improvised gun trucks . Once these were exhausted then civilian vehicles were pressed into service. These still were not enough and gradually the alternatives of horse and human mechanical power were reintroduced. This guide is intended to give an introduction to the topic.



Illustration 1: Chinese cavalry of the 67th Cavalry Regiment in action near the Mongolian border October 1995. (Peoples Information Office)

The well known photo of a British cavalry section of the Blues and Royals in Poland in 1999 gives a good indication of the weapons and equipment typically found in a unit at that time (although the Blues and Royals had always maintained a ceremonial Mounted Squadron so expertise was higher and as a result cavalry specific equipment was usually better quality as the quartermasters knew what to look for).

The section commander is carrying an L2A3 submachine gun and has a Browning High-Power inside his assault vest in the integral holster (not visible in this picture). The second in command has an SA80A1K (officially called the L22A1) with the short 20 round magazine in place (unusually however it is fitted with an iron sight – presumably the issued modified SUSAT has been damaged previously). Slung over his left shoulder is a 51mm mortar and over his right an ammunition bag for this. One member of the section carries a Para-Minimi with the bipod legs missing (if this was a field modification or as the result of damage is unknown). Three of the section carry SA80s, one is an A1 model while two are A2s (one of which has a UGL fitted). The soldier with the A1 has a webbing pouch containing two bullet trap rifle grenades that were obsolescent with the introduction of the UGL (although they continued in production and service throughout the war). All three

1. Cavalry

During the war, many units converted to cavalry, accepting the vulnerability of their mounts for extra tactical mobility. In reality these units were better classed as mounted infantry but the traditional term was more commonly used¹. The use of mounted infantry had never fully gone away, indeed in the 1980s, British infantry in the aftermath of the Falklands War had reintroduced the role using Welsh mountain ponies for long range patrols on the islands (which had over 1200 horses and ponies). Germany had a cavalry (really a mountain pony logistics) battalion split between the Gebirgsjäger (Mountain Infantry) regiments of 1 Gebirgsbrigade. Switzerland surprisingly had retained a horse mounted dragoon regiment in a combat role until 1973²!



Illustration 2: German Gebirgsjäger prepare to move into Austria to reinforce the Austrian Army in early October 1996. The mixed orders of dress are unusual at this point and would probably indicate that the troops are recalled reservists. (Bundersarchive)

The use was affected by doctrine, NATO (and particularly British) doctrine was that mounted combat should be avoided (a large numbers of aggressive US Cavalry officers unofficially emphasised the use of shock action if well supported against breaking opposition), whilst Warsaw Pact doctrine involved less dismounted action and envisioned the use of breakthrough large scale cavalry actions with cavalry replacing the armoured elements as these have grown rarer³. Cynics have suggested that this was because some of the senior Soviet officers had been cavalrymen in what they referred to as the “Great Patriotic War” and were nostalgic for horses.

- 1 Terminology also included terms such as hussars, lancers and dragoons. All were usually only used as historical terminology and only rarely indicated the current role.
- 2 They had also maintained carrier pigeons up to the start of the war and after the disruption caused by EMP actually expanded their use in 1998.

Their main role however in all armies (in practice if not theory) was to replace mechanised or motorised scouts (using the same methods as these in most armies – excepting the American where mechanised cavalry often fought in a mounted role and were thus more heavily armed). Capable of short term movement of up to 60 miles in a day in good conditions (although without the necessary logistic back up and accepting loss of horses due to the forced nature of the march), cavalry were also able to travel well cross country (even in snow and mud). Logistics however severely limited the strategic mobility options.



Illustration 3: The most common use of horses and ponies by military units was as pack animals. While this was common a large degree of expertise was required or the animal would quickly become useless for further work. The US Army FM72-11 gave details of using pack animals in a non-special forces role. It included details of suitable pack saddles intended for local production. The example shown here is either the M3 or M6 pack saddle. This photo is from the 28th Infantry Division in May 2000 and is part of a sequence shot showing the logistic build up for the summer offensive of 2000. (US Army)

In addition to the operational mobility, horses allowed a great degree of tactical mobility. Horses were frequently used to move units to deal with tactical threats. Normal doctrine here was to approach to about 800m of the enemy (more if the enemy was well equipped) or preferably further forward just before the limit of visibility. Here they would dismount and leave one in four men behind to hold the horses (Soviets tended to reduce this to one in three as the horses were less well trained). The dismounts would then move forward acting as normal infantry. The horse holders would remain in place and not move forward unless the opposition was beaten back. If the dismounts were under too much pressure they would move back to the horses as they were regarded as too vulnerable to fire⁴.

of the weapons are fitted with SUSAT sights. (The SA80 series was especially popular with cavalry troopers because the sling, being in two pieces with a quick release clip was ideal for cavalry as it was easy to sling in multiple positions securely and then release. The bull-pup action was also ideal for use when mounted.) Two troopers wear chest rigs (one British and one Soviet issue), whilst the soldier with the UGL is wearing a US grenadier's vest in woodland cam designed to carry 40mm grenade rounds. One of the remaining soldiers carries an L2A3 Sterling (note the stained leather reinforcement to the trouser leg insides shown clearly here and less obviously on at least 4 other members of the section), whilst the remaining soldier is carrying an L42A1 sniper rifle, an uncommon choice among cavalrymen. In other photos of the section, it can be seen that he has a bucket holster on the horse containing an unidentified pump-action shotgun with a modified pistol grip stock.

Note that this field cap wearing soldier appears to have a civilian riding helmet with a Kevlar helmet camouflage cover slung on the saddle. Most of the remaining soldiers are wearing or carrying standard Mark VI helmets or (as is common in units converting from an armoured role) armoured vehicle crew (CVC) helmets.

3 It is worth noting that in NATO armoured doctrine was for armour to create the gap for the mechanised infantry to exploit. The Warsaw Pact reversed this role making the use of cavalry in the break through role more understandable.

4 Despite this there are numerous cases of units moving forward to rescue trapped dismounts although the losses suffered were usually massive.



Illustration 4: Polish lancers of the 19th Cavalry Division prepare for a parade through Malbork after their reformation in late 1998. The officer is believed to be Colonel Alexi Anders who would later go on to become the Polish chief of staff. Note the readopted traditional cap. (Malbork Museum)

An unusual tactic was developed in Iran for use by cavalry against tanks that very not supported by infantry. Accepting that they would suffer losses from fire regardless of tactics used, they developed the doctrine of charging flat out towards the tanks in a dispersed formation. Taking fire from the tank they would press on aiming to reach the tank before it could reload and fire again. As the cavalry closed on the tank they would close up and attack it with anti-tank grenades and improvised weapons. In some cases some cavalymen would carry multiple satchel charges and throw themselves on the tank before detonating the charges. Initially this tactic was successful until the Soviets developed counter tactics such as infantry escorts (often in the form of tank riders) and commanders remaining outside manning the anti-aircraft

machinegun in areas suitable for such attacks.

“Let me tell you how I ended up on horseback. We were in Austria and we had this crazy Texan colonel in charge. He got tasked with improving our rear area security. I had just brought him a coffee (how I miss that!) when you could see the thought hit him (he told me afterwards it was being where that Disney film about Patton rescuing the horses from the Russians was set). He jumped up and called us all in. When all us officers were there he gave the order to gather all the horses we could find. Well we did what we could and got about 80 or so by various methods. Then the crazy coot orders us all to learn to ride. Fortunately we had a guy who grew up on a farm who taught us how not to fall off too often! He also tried to keep a straight face at some of the horses we had brought in and narrowed it down to ones suitable for riding (trading the others as pack animals with other units). Next thing I know the colonel convinces the brigade commander to start getting more horses for scouts, raiders, anything he can think of. He loved his horses did the colonel.”

Lieutenant Paula Voight

Unit not given in source

Quoted in “Soldiers on Horses” by Doug Stanton Time Warner Books 2021

Armament of a cavalry unit was very similar to a light

“I was issued with a sabre when I joined the cavalry. I carried it for about two months of fighting and the only thing I used it on was some sausages over the camp fire. I got rid of it soon after and carried a much more practical pistol instead as it weighed less and I didn't trip over it getting up from a chair.”

*Trooper Jesus Rodriguez
1st Cavalry Squadron, New Jersey State Militia*

infantry unit, few carried swords as these were very limited in use (most of those that did carry one usually carried privately purchased ones). Those that did tended to be romanticists, re-enactors or when



Illustration 5: A more typically equipped Polish cavalry unit with slung AKMS rifles. (Polish War Memorial Museum)

a commanding officer wanted to instil a sense of tradition⁵.

⁵ It is worth noting that British cavalry were still training using sabres in 1941 and other nations were continuing training after this.

Even fewer carried lances despite the popular image. The main users appear to have been the Poles who carried them more as a regimental tradition than as a practical weapon – the photographs of the Italian war correspondent Umberto Falconio are mainly to blame for the widespread belief in their use. Falconio arranged posed photographs of one of the first Polish cavalry troops in mid 1997, a romantic, he decided that these archaic parade weapons would in his words “give a noble character to the unit.”

A notable exception to the general disuse of lances was the Army of Silesia where troopers are known to have carried them (partially due to the lack of effectively armed opposition). It is believed that this was due to the romantic inclinations of the Margrave who yearned for the glories of the past (added to which his harsh punishments encouraged his troops not to disobey his sometimes strange orders).

A Soviet officer who was sent on a mission to the Black Baron's land, KGB Captain Yuri Toreivich however noted that the lance is an ideal weapon for use in riot control. He also further noted that the rumour going around the taverns was that the Baron had three pre-war cavalry re-enactors that were responsible for training his cavalymen. His report (the copy available to the author was in the possession of LCpl Sean Jones of the Royal Regiment of Wales who while attached to the remnants of the US 5th Division recovered it from a dead KGB officer in Silesia) on the Baron's cavalry gave a recommendation that Soviet KGB cavalry consider the use of the lance for riot control (interestingly however no KGB cavalry units have yet been identified).



Illustration 6: US Cavalryman of the 5-8th Dragoons of the 8th Division in a Lithuanian forest early autumn 2000. Note the locally manufactured chest rig popular with cavalry troopers due to ease of access when mounted. He is wearing his pack as he only has a riding saddle which would be severely unbalanced by the pack and result in injury for the horse. (8th Division Archive)

level as they are seen more as mounted infantry in British doctrine. Weapons were usually carried slung as the less linear design of modern rifles did not allow the use of bucket holsters (Russian cavalry usually fitted them for holding a shotgun, British saddles almost never featured them, American saddles sometimes featured them).

American cavalry in particular were keen on pistols, these were usually non-issue although the scale issue was slightly higher than equivalent light infantry units⁷.

6 Although longer range weapons were preferred as cavalry are more effective in more open terrain where the short ranged SMG is of limited value.

7 It is worth quoting the 8th Division's historian William Pearson on the use of pistols: “pistols from private purchase were officially discouraged but it was the unit commanders who set the scene for this, many turned a blind eye to them, others discouraged them. Even if they were not allowed,

Small arms used by cavalry were usually short weapons for ease of carrying (although this rule was not universal), popular choices being folding stock versions of the AK series, M177s, SA80s and submachine guns⁶. Doctrine also affected this, Russians often carried shotguns and fewer SVDs than a normal infantry unit as fighting mounted was

more commonly envisioned. British units usually carried at least one Para-Minimi (or normal Minimi if none was available) and a UGL at section

When Soviet troops invaded Austria SD298 was tasked with seizing the Lipizana stallions of the Spanish Riding School in Vienna. Performing a HAHO drop from behind their own lines and drifting over the front, the Spetznaz troopers were met by a number of local sympathisers who provided them with Austrian vehicles and police uniforms. Driving to the school they showed authorisation for the removal of the horses. While they started leading the horses out the school's director became suspicious after a soldier swore in Russian when a horse trod on his foot. His swift action in diverting a number of the precious stallions are credited with saving the breed in the west.

Many had their own purchased or looted weapons and some troopers were even known to carry two pistols western style. It is worth noting that many troopers initially found out the hard way that drop leg holsters whilst looking impressive often caused pistols to fall out when used by cavalry due to the riding position. Popular trades were the shoulder holsters issued to divisional aviators.

The 1999 raised CIVGOV 47th Cavalry Regiment in particular was issued a strange mix of weapons including a large number of weapons retrieved from an old storage site including M3A1 sub machine guns, the handy and popular M1 and M2 carbines and even the odd BAR! These were supplemented with large numbers of M1911A1 pistols from the same store and locally obtained pump action shotguns in a variety of makes.

Support weapons were rarer in cavalry units although this again varied by nationality. The British



Illustration 7: Soviet officer with tachanka. The NSV machine gun is obscured in this photo (Sovphoto)

support weapons troop (at squadron level) was much lighter than an infantry unit with three GPMGs (usually used in the light role although they were scaled for sustained fire (SF) equipment) and three 51mm mortars⁸. There were also six mules or ponies to carry stores.

"I hate those Russian wagons with their rear mounted weapon. Almost every time we tried to catch raiders they sped off and when we tried to follow one of the wagons would open up and then speed off while we reorganised."
Sergeant Ian James
16th Lancers
"Cavalry at War" Arms and Armour Press
2023

With careful loading a horse was capable of carrying an 81 or 82mm mortar and a box of ammunition. Some units on both sides had a support element usually at battalion level or higher using

these weapons, usually with multiple horses carrying ammunition for each mortar.



Illustration 8: Night vision picture of a Tchanka being ferried across a river. Note the AGS17 and the more usual two horses compared to the previous photo. (Jack Stevenson)

The Russians redeveloped the cart mounted weapon platform of the Russian Revolution known as the tachanka, a wagon towed by usually two horse with a machine gun mounted to the rear. Although in World War Three, it was usually no longer a machine gun but usually an AGS17 (although a significant number were DShK,

many still seemed to acquire them, either from home or as war trophies or in poker games. No matter how they were acquired it was well known that if a cavalryman was held upside down and shaken in the items that fell from his pockets you would find a pistol, alcohol, condoms and a pile of souvenirs."

- 8 Initially these were 81mm L16 mortars but experience showed that these were too heavy for the role and they were withdrawn and replaced by the lighter model that could be carried slung by one trooper.

NSV or occasionally KPV). The AGS17 had the added advantage that due to the low velocity of the rounds the weapon must be elevated allowing fire to the front over the horses head) if mounted correctly. These were centralised at battalion level with it is believed, eight to twelve weapons in the unit⁹. Russian nicknames for these included Hero of the Soviet Union Wagons and Corpse Carts as their exposed weapon resulted in a high level of casualties among the crews despite occasional improvised gunshields. A common unofficial tactic was to dismount the weapon from the wagon at maximum effective range

*“And to this day, the foe has nightmares
Of the thick rain of lead,
The battle-chariot
And the young machine gunner.”*
Lyrics to Tchanka, a Soviet song from 1918 which became popular again in 1998.

increasing cover protection in return for the time to mount and dismount the weapon.

US Cavalry usually used a hybrid structure with one

(heavy) squadron with armoured vehicles (usually M3 and/or LAV75 in regular units, M113ACAV plus the occasional M60A3 or 4 in National Guard units) and two or three light squadrons on horseback (by mid 1999 the armoured vehicles were often replaced by HMMWVs using their pintle mount weapons to support the lighter equipped cavalry).

*“What a lot of new cavalry
don’t get is the way that you
can’t just duck like an
infantryman when you are on
a horse. Mind you people tend
to learn fast these days. Well,
at least the survivors do. You
need to dismount BEFORE
you come under fire.
There are occasions when the
enemy appears close and the
best bet is just to go straight
for them still mounted. A
horse is very big and
intimidating coming at you,
especially if the rider is firing
(however inaccurately!). Only
snag is if they keep their nerve
that just makes them a big
target that isn’t making any
lateral movement...”*
Captain Kenneth Groves
9/12 Lancers

A good example of a locally raised MILGOV cavalry unit is the 1st Cavalry Squadron of the New Jersey State Militia raised in December 1998. Unusually for a State Government unit it had sided with MILGOV for a mix of reasons (full details of this can be found in Challenge Magazine issue 42). Initially this unit was believed to be equipped with FN-FAL rifles but research by Harriet Player has shown that these were actually C1 rifles traded from the Eastern Command in Canada. As these are nearly identically externally this confusion is understandable. The unit was formed at the command of the governor after a petition from the 6th New Jersey Cavalry Re-enactment Society. Half a dozen members of the society were commissioned into the militia and became responsible for training and organising the squadron. Uniforms were varied and some of the initial members even wore their Civil War uniforms! Gradually a pattern developed of Civil War style trousers and a woodland pattern jacket (these were sometimes OG or civilian leaf pattern). Stetsons were almost universal wear, even in combat. Saddles were a copy of the McClellan saddle. One of the unit's first actions was to requisition from a local museum a collection of cavalry sabres. These antiques despite their lack of utility were very popular with the unit although it is worth noting they were usually fixed to the saddle not the rider. Amusingly commands were given from the Civil War drill manuals causing confusion when a number of European veterans were integrated into the unit in mid 2001. The unit often operated with

the 2nd Squadron who used bank armoured cars. In late 2009 the squadrons were amalgamated as the New Jersey State Militia Cavalry Regiment and in 2016 was reduced to a part time ceremonial unit only. More details about the unit are given in the above article.

Equipment was usually of normal infantry issue. As cavalry were a late innovation in the war, most units had locally manufactured



Illustration 9: Soviet paratrooper believed to be from the 104th Air Assault Division in Iran mid 2000. The quality of mounts available is clear from the photo! (Sovphoto)

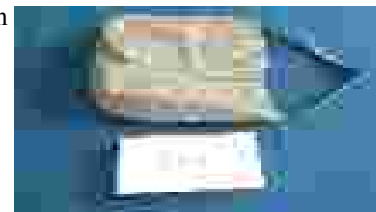


Illustration 10: M1997 Soviet feed bag from the Warsaw Collection

⁹ Recent research has suggested that there were eight in battalion level units and twelve in higher level units but given the fluid nature of Soviet organisations by this time and the ease of creation of the carts themselves this was probably not a hard and fast rule.

saddles or requisitioned civilian ones, Only in areas where there was still a strong government supply system are there standard patterns (and even then there are many variations within units). Saddles needed to be correct for the horse and professional soldiers swear that they have never had one that fitted well yet! As a result saddle blankets were used to help achieve a reasonable fit. In British units many troops either abandoned the thin 95 pattern combat trousers in favour of the earlier heavier 68 pattern or reinforced the inner legs.

Many non cavalry envied the cavalry the luxury of riding. What

“We learnt from an American prisoner the trick of feeding our horses a little meat mixed in with their feed for extra speed. We would have used it more but even we had difficulty stomaching the meat we could get and we loved our horses.”
Sergeant Ivan Dostory
Division Cuba

few realised was the amount of work that a horse requires in order for it to function as a cavalry horse. After a day riding the horse must be



Illustration 11: The stores required by a Soviet 8 man cavalry section (this does not include fighting equipment, rations or the riders' equipment). (SovPhoto)

combed down, watered, fed and checked over (in game terms half a period of hard work). Feeding a normal European or American horse on grass will result in an animal that will quickly be unable to function effectively so units must provide food. Milk (and a trick used in Iceland, herring) can be used to boost the horse. Horses however require lots of water. In normal conditions this is no problem but could pose problems

in the world of 2000 (especially as horses will not drink water that has had water purification tablets added).



Illustration 12: US Marine (wearing NBC suit) of an unknown unit in Iran, March 1999. Fanya Wilkinson for Time Magazine

Surprisingly one of the areas with the greatest use of horses was the (relatively) oil rich Iran. Here the rough mountainous terrain in the central and west of the country resulted in their increased use. 2/7 Royal Gurkha Rifles adopted techniques from the nineteenth century French Foreign Legion for the two companies which are being used for patrol operations. A typical long range patrol of eight men would have four ponies which carried the men's equipment. The soldiers in pairs took turns riding the pony. This was found to be an effective way of increasing operational mobility in theatre.



Illustration 13: 4/325th Parachute Infantry of the 82nd Airborne Division with Kurdish escorts reach allied lines at the end of operation Pegasus II. Of note are the local saddles. (Fanya Wilson for Time Magazine)



Illustration 14: Texan guerillas believed to be lead by a foreman from the Kingsley estates flee from Mexican pursuit in late 2000. Note the cavalry are about to cross an obstacle that will be impassible to the pursuing Mexican vehicles. Kingsley Archive of Texas University

Other areas where horses proved successful on a large scale included the United States where a large supply of horses in certain areas added to a romantic liking for

them resulted in a large number of local militias using them extensively. In addition a number of units in both the MILGOV and CIVGOV orders of battle were raised as cavalry.

Texan guerillas often used horses as they were ideal for fleeing ambush sites into areas that vehicles would have difficulty following up. Much of the training in riding was conducted by ex-members of the US Border Guards who still used them in patrols in difficult areas.



Illustration 15: 3rd Texan State Guard Mounted Regiment pictured in Goliad in October 1998. They are all still wearing their original uniforms, BDUs did not appear until December although some had privately purchased prior to this date. (University of Texas)

In Texas, CIVGOV units included the 3rd Texan State Guard Mounted Regiment. This unit had an unusual background in that it was originally

composed of members of the Prison Service who used horses for guarding prisoners working in the fields.

Given basic training they were thrown into the line, many still wearing their original uniforms. Weaponry was a mix of pistols (mainly Colt Police Positives and privately owned firearms), M1917 Trench Guns, Remington 870Ps, Uzis and Ruger Mini 14s. These were supplemented by M16s and M1s held in state armouries. Lacking the higher level tactical skills the unit fought reasonably well at lower levels but was

often outmanoeuvred by more tactically aware Mexican commanders who would fix the unit in place and flank it. Gradually the unit gained in tactical skill but always at the cost of high casualties. In March 1999 the unit amalgamated with the 5th Texan State Guard Mounted Regiment. In early 2000 the combined force now known as the Texas State Volunteer Cavalry was surrounded near Freer by Agrupacion Jiminez and destroyed after a week long battle with the last survivors being forced to surrender when their ammunition ran out and the escape routes were plugged by Brigada 2a using their AFVs to make a rapid move north from Laredo to cover the gap west towards Encinal.

The Mexican Army surprisingly still had a number of cavalry regiments pre-war. These were felt ideal for border patrols with the US and allowed small stealthy patrols on the border which were less restrained by terrain than wheeled vehicles. Once the invasion of the US began, Mexico found that it's indigenous arms industry (and poor economic position to allow purchase abroad even if any were available) resulted in difficulty in replacing the armoured vehicles that were being destroyed in the intensive fighting even using improvised gun truck type vehicles. Using the resources available in captured Texas in addition to native animals, the Mexican Army equipped many second line and paramilitary units with horses and it was reported that the Soviet Division Cuba also had a horse mounted element¹⁰. There was also a move to add cavalry elements to convoys as these were often attacked by mounted Texans who would then flee into difficult terrain. One enterprising commander even briefly considered mounting horses in a trailer to dismount when pursuit was required. With typical military humour these are frequently referred to by Americans as "Banditos" and "Injuns" respectively. Ironically the Russians had already referred to US mounted troops as "Cowboys."

MILGOV too used a number of cavalry units in Texas, the largest is the 1/51st Cavalry formed from Parsons' Mounted Cavalry which was part of the Corps of Cadets at Texas A&M University (part of

"We were being chased by a Mexican cavalry patrol when we lead them towards an ambush . John opened up with the 60 but the rounds went into the ground ahead of them and they broke off pursuit. I was furious that he hadn't zeroed the weapon properly and started to roast him. He insisted it was zeroed correctly so I asked why such a good gunner had missed. He told me that as a farm boy he didn't want to hit the horses. What could I say, after all I loved horses too."
2nd Lt Francis Dhama
91st Infantry Division

¹⁰ There is much controversy over this. No formal record has been found but many of those fighting Division Cuba state that they encountered cavalry. Until further evidence comes to light this will remain unclear.

the ROTC). This unit which is approximately 200 strong has been active since the Mexican invasion. Originally one of two horsed cavalry units in the US Army at the start of the war (the other being the Horse Cavalry Detachment of the 1st Cavalry used for re-enactment displays), the unit has recently been withdrawn to Northern Texas to rest and refit (the strength includes the replacements undergoing training) after taking a large number of casualties in fighting while undertaking a series of raids towards Brownsville. Their commander Colonel Paul Dalancie is a (rapidly promoted) member of the ROTC who was a mature student studying electronics at the start of the war. Many locally recruited troops feel the Texas should become independent and are waiting to see who comes out on top before declaring for any local powers. Other units are in reality small groups of guerrillas (although the distinction with marauders has become more and more blurred for these).

There was a further US Army unit trained to use horses was the Caisson Platoon of the 3rd Infantry Regiment. This unit had its equipment placed into storage at the start of the war

The Dicken Medal
This is the highest award that can be granted to an animal in British military service. By January 2001 it was recorded that twenty six dogs and eighteen horses had been awarded it since the start of the war.

and the unit was destroyed in the Thanksgiving Day Massacre.

The United Kingdom has seen little use of cavalry, mainly due to the low availability of horses. Some marauder groups



Illustration 16: British Cavalry outriders protect an armoured convoy, Operation Mornington Crescent, Captain Kenneth Groves, 9/12 Lancers (Capt Grove is on the right). Courtesy of Capt Groves



Illustration 19: Advanced cavalry training at Portsmouth. (MoD)

have started to make use of them, often for the intimidation factor, particularly as automatic (or even semi-automatic) weapons are rarer in the UK. The Royal Army of Scotland and Welsh National Army are however bigger users, equipping units with ponies for patrols in the mountainous interiors. The British



Illustration 18: British Army cavalry training Portsmouth June 2001 (Life Magazine)

Army has now started to ship back cavalry units however so their use may become more widespread (assuming remounts can be found) and the British Army Riding School has been established in Portsmouth (despite the name it also trains troops from the other arms, mainly the Royal Marines for the Navy and the RAF Regiment for the RAF)¹¹. British cavalry still use the excellent 1912 Universal Pattern



Illustration 17: Col Paul Scott (late Royal Horse Artillery), commandant of the British Army Riding School (Life Magazine)

¹¹ In January 2002 it was renamed the Joint Services Riding School and gained instructors and support staff from the other services.

saddle introduced in that year. This has the excellent property of being fully adjustable to any size of horse. It is used with the even older Universal Pattern bridle.

The Russian Army had disbanded its cavalry divisions in 1955 but a number of smaller units were retained. By the start of the war, the largest of these was squadron sized used as border patrols in some of the smaller republics, again using the horse's superior mobility over poor terrain (and the lack of a cost effective replacement unit). In addition many units quickly supplemented their official horse strength as many officers had purchased their own horses as a more practical method of transport than cars in the poor terrain.



Illustration 20: Soviet 9th Internal Defence Rifle division patrol near Mostar in November 2000. The horse on the right can be made out to be carrying an 82mm mortar and an ammunition box under magnification, the centre horse has two ammunition crates and the nearest has what appears to be the crew's personal equipment. (CIA Archives)

Aided by the larger horse population in Russia, by late 1997 some units already had mounted cavalry squadrons or even battalions particularly in China for increased mobility in poor terrain hunting guerillas. A move to full divisional cavalry was a logical move in light of the doctrine of breakthrough tactics still being used. In mid 1998 the Soviets took the decision to authorise the conversion of two Motor Rifle Divisions to cavalry, the 43rd and 98th. In late 1999 these plus the 89th Cavalry Division were brought together as the 22nd Soviet Cavalry Army and assigned to the Baltic Front. German intelligence documents recently declassified suggest that for this was intended as an attempt to create a unit that was capable of breakthrough action without the need for large amounts of fuel (this may have been in preparation for the 2000 offensive in southern Poland that was changed to the counter-attack against the NATO summer offensive). American intelligence sources indicate however that the units were intended as rear area security units. British sources are less sure and indicate that either role was possible (one account states that the Soviets themselves may not have had a clearly defined single option in mind).

The first Soviet cavalry division to be formed as opposed to re-rolled as cavalry was the 89th Cavalry Division which was a category III division that was intended to be a Motor Rifle Division. The Ural Military District however was by this point unable to equip the unit as such so the decision was made to equip it as cavalry for an internal security role in Romania.

Pact Cavalry Organisation

A Warsaw Pact cavalry division was officially made up as follows:

- * Divisional Headquarters Company*
 - * Signals company*
 - * Service company*
 - * Tank Regiment – this is theoretically part of the division but is often missing [not seen one yet!]*
 - * Artillery Regiment [often horse drawn]. Usual organisation 2 mortar battalions and 1 gun battalion [seems to be often replaced with an AT battalion with Rapira-3]*
 - * Engineer company*
 - * Three cavalry regiments of four troops each [often amalgamated]*
- Tchankas are held at troop level.*

US Army Intelligence Summary 1999 (the items in brackets are the handwritten additions in the copy belonging to the New Library of Congress collection.

A more normal technique used was that used by the Czechoslovak 17th Tank Division when the division was re-designated as a cavalry division in early 1998. The 2nd Army gathered as many horses as could be found in its area (including many of the remaining famed Lipizzaner stallions from the Spanish Riding School in Vienna). In theory these horses were to be paid for but in reality many were seized and the money that should have been used appropriated either officially by the unit or unofficially by the remount officers. A Czech breeding programme instituted on the 17th's return (and disbanding) was undoubtedly helped by the Lipizzaner stallions. This has led to the now recognised Prague breed.

Poland also took to using cavalry and hit upon a unique solution to encourage farmers to be willing to part with their horses. It hired the horses and their owners, along with any carts or similar that were required. These were released back to their farms for the harvest and planting periods when the cavalymen often acted as labourers and guards. The combination of payment and ability to be used when desperately needed for farming resulted in a population that was very supportive. It however obviously had an impact on the cavalry's mobility for part of the year.

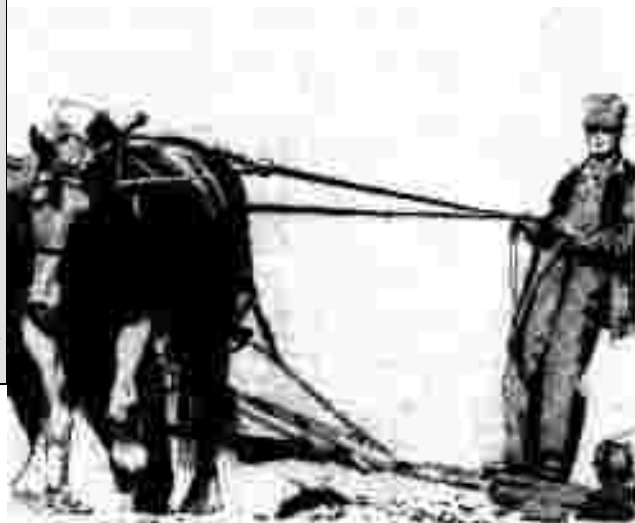


Illustration 21: Unidentified Polish cavalryman with a horse (obviously not his mount as it is the wrong breed) assisting in ploughing. (Duchy of Warsaw Museum)



Illustration 22: Training cavalry horses is a lot more complex than people realise. Here trainee Dutch cavalry horses are being accustomed to the noise and smoke of the battlefield. (Free Dutch Forces Archive)

Pre-war, Switzerland had considered that cavalry would be a useful resource for reconnaissance and delivery of supplies in the mountainous areas. As a result the government had paid a subsidy to keep mules and horses to farmers (amounting to about \$500 annually in 1990). This ensured that in 1996 the Swiss government had an adequate supply of horses to requisition and as supplies of fuels and vehicle spares ran

“When we were learning to ride our sergeant major (who was a pre-war jockey) would suddenly fire some blank rounds and if anyone fell off he would laughingly shout 'I didn't give you permission to dismount!' He never tired of the joke, we did pretty quickly... Mind you we got our own back with a stun grenade once!”

Private Ron Adams
9/12 Lancers

low the Swiss were able to maintain a mobile reserve (in addition to the more road bound bicycle troops detailed below).

Romania also used horses pre-war in the 2nd and 6th mountain brigades as pack animals. By mid 1997 with the Soviets pushing along the coast closing on the Ploesti oil fields and refineries, the Romanian high command ordered the brigades to each create a battalion of mounted infantry using the experience and veterinary service of the pack transport units. With the Soviet use of nuclear and chemical weapons at the end of the year, the brigades were amalgamated although the two cavalry battalions that were still in the process of forming escaped virtually unscathed and both were incorporated into the 2/6th Mountain Brigade as the 1st and 2nd Hussar battalions. Withdrawing along the Danube they started to harass the Soviets of the 24th Motor Rifle Division that tried to block them. By late 1998, they were under pressure from the 117th Guard Tank Division which after a nuclear strike earlier in the year had been converted to horse cavalry and given an internal security role. Pushing west along the foothills of the Carpathians the 117th and the 2/6th clashed with the outnumbered Romanians withdrawing westward. Despite accounts at the time there were few if any cavalry verses cavalry encounters as the Romanians were operating very much as mounted infantry and the Soviets were acting as an anti-partisan force.



Illustration 23: German cavalry rest somewhere in Austria March 1999. This was probably taken on a raid to gather breeding stock. It is good practice to dismount and remove the tack as much as possible) (Bundersarchive)



Illustration 24: Soviet 117th Tank Division patrol evacuating a casualty in Romania, November 1999. SovPhoto

The Italians also used horses for their Alpini mountain troops, again in the transport role. These saw only limited fighting during the initial fighting in the Alps as in most cases the Italians tried to force the passes with heavier units. Once the initial fighting was over and the war settled down, the Alpini had more of a role, acting as a raiding force using trails higher up the Alps. Horse use was still limited

however. The Alpini did see more fighting in 1998 when French forces made a grab along the Mediterranean coast fighting French light infantry units in the Alps. Horse use was however minimal so falls outside the scope of this article.

Europe saw cavalry used to a fair degree but the biggest limitation was the non-availability of horses and more importantly soldiers trained to look after them. For example it was estimated that there were 1.4 million horses in Poland in 1995. Most armies by 1999 had cavalry units but officers seeking remounts were an alarmingly common sight for European



Illustration 25: Chinese cavalry in May 1995. As these are in the older non-camouflaged uniform they are probably border guards. (Chinese Information Ministry)

farmers who relied upon the animals increasingly. Many an officer faced resistance (both verbal and physical) and many tavern stories revolve around how one was tricked. When the Russians invaded, the Chinese Army still had two battalions in the Xinjing Military District. In addition to this there were a number of horsed cavalry units for both border patrols by the Frontier Guard in rough terrain and emergency civil disaster relief. These spent the first months of the war in a cat and mouse battle with Soviet patrols in terrain that was too rough for the Soviets to use their superior vehicle mobility to great effect. Eventually though the winter conditions and an intensive operation by two soviet airborne divisions resulted in the destruction of the larger groups. As the war progressed, the Steppe ponies were taken widely taken into service by both Soviet and Chinese armies. With the widespread dispersion of units caused by widespread use of NBC weapons the ability to graze these hardy ponies had made their use much more practical. At least one cavalry verses cavalry battle was reported by the US Ambassador to China when he was returned via the Soviet forces.

In Korea very few cavalry units were organised due to the density of the terrain and the lack of horses. One however was briefly created by the 23rd Marine Regiment, 4th Marine Division. After the nuclear attack on the division in September 1997 which had reduced it to brigade strength, the regiment was reforming at Inchon and was suffering attacks from bands of North Korean raiders and deserters. A career marine, Major Ron Kovalich remembered using horses to patrol the large bases in the Philippines when posted there in the 1980s and obtained permission to create the 1st Marine Cavalry Security Detachment, a company strength unit that was used for rear area security. Highly successful in the role it was intended for the unit was disbanded in October 1998 when the widespread famine in Korea made it impossible to maintain the unit.

Not usually recorded as being a user of cavalry, the Indian Army maintained the 61st Cavalry in Jaipur in a combat role.

This regular army unit is not believed to have seen combat however in the war between India and Pakistan before it went nuclear.

“If all else fails you can always eat your horse. After all they served it in restaurants in France before the war. Most of our guys didn't fancy eating their mount but but if it came down to starving to death it was horse burger for me. Tasted a lot like beef - makes a change from things that taste of chicken...”

Private Ron Adams
9/12 Lancers

“Just remember when fighting on horseback you are fighting by committee, you and he will have different recognitions of threats, different plans and different priorities. You will both be scared and determined to be in charge. A good cavalryman is one who can be in charge MOST of the time.”
Sergeant Jenny Whitefeather
4-12 Cavalry, 5th Infantry Division
“Death of a Division” New York Military Books 2019

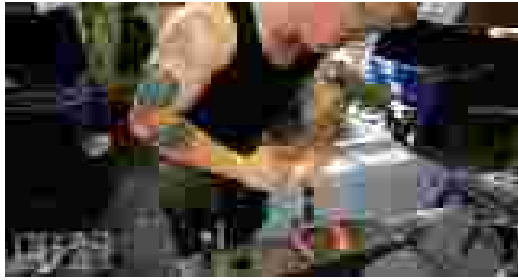


Illustration 26: British cavalry horseshoes being produced for US troops moving towards Bremehaven, Paderborn September 2000 (Life magazine)

It is also worth noting that the logistics tail of a horse unit is much larger than most people think - a typical cavalry squadron of four troops totalling 132 men required 18 wagons at full strength according to British doctrine, more if long distance moves were required. These were split 2 per troop, 2 for headquarters troop, 1 for the veterinary section (composed of a vet and three untrained assistants), 1 for the farrier and saddler (supplementing the items carried by each individual trooper), 1 for the remount section, 1 for the medical section (this was often expanded if required – often from the troop wagons but sometimes from locally acquired ones) and 4 for the logistics section. As an example of the need for

such a large logistic train, horseshoes are expected to last for four to six weeks of normal cavalry use before requiring replacement – a quick calculation shows the large numbers needed.



Illustration 28: Technique pioneered by the 4-12th Cavalry of the US 5th Division for river crossing (collection of Sergeant Ian James)

As a result the tactical mobility of a horse is high (although severely reduced in bad terrain) but the operational mobility due to the logistics train is only

slightly higher than non-mechanised infantry. One big advantage however is that the ground covered may be higher as units can disperse further than mechanised units and concentrate faster than foot units. Consequently cavalry took



Illustration 29: 3/75th Ranger in Iran demonstrating an interesting recoilless rifle captured from marauders. The original caption in Time magazine helpfully pointed out this was most definitely not designed to be fired from the mount! (Josh Gibson)



Illustration 27: Blacksmith of the Soviet 84th Cavalry Division making horseshoes the old fashioned way in late 1999 (when power was available many used power tools to assist). With the conversion to cavalry, many lower readiness units were able to trade the older members who were experienced blacksmiths for vital supplies and equipment. (Pravda)

had a small number of horses for their recon patrols.



Illustration 30: Although taken from a Soviet military magazine of 2009 this shows an example of a horse in post war camouflage that gives credence to stories of similar equipment being available during the war years (often put down to being NBC suit experiments).

News).

Also rarely considered was the need for remounts. Horses are fragile creatures (one commentator remarked that a horse was an accident waiting to happen) and the rigours of war caused many casualties. These casualties were increased as nobody could create any effective NBC protection for a horse with what remained of the industrial base, although rudimentary masks had been created in the First World War and some were locally produced. As a result cavalry units made

efforts to acquire extra horses at every opportunity and the sight of a cavalry officer looking for remounts was a feared sight among farmers. This also led on occasion to units making raids on their own side's camps to steal horses and a number of documented blue on blue incidents occurred as a result of this. Most units branded their horses as a precaution against theft by their own side (the best known example being the USMC badge used by US Marines in Poland documented by Oliver North for Fox

"This is going to sound really weird but I used to tell my horse 'Scipio' everything. We were all scared shitless and you couldn't say anything to anyone else even though we all felt the same as we would have just collapsed and not gone on. So we used to all talk to our horses and tell them everything that mattered to us. I still swear Scipio could understand everything."

Captain Kenneth Groves
9/12 Lancers



Illustration 31: Soviet arm of service patch for cavalry reintroduced in early 1998 but never widespread. (Institute of Soviet Studies)

Another area that horses became increasingly used, particularly in the Warsaw Pact was as a substitute for mechanised towing vehicles. The biggest problem here was the difficulty in transporting the ammunition and crew. The end result was often that a motorised vehicle would be used to supplement the crew by transporting the ammunition and crews for the whole battery. Western nations used little

In typical army manner, nicknames exist for different cavalry units. The British Army nicknames for example were:

US Army – John Waynes

US Marine – Real John Waynes (the emphasis on the first word varies considerably depending on if sarcasm is intended).

German – Ulhans (this is rarer than the other terms)

Polish – Lancers (occasionally Pointy Sticks)

Russian – Cossacks (note that the name includes all types of Russian cavalry not just those who are from the Cossack regions). This has even been found in official war diaries of units. Occasional references in British diaries have been found to Steptoe Wagons – these are believed to refer to tachankas.

Canadian – Mounties or Malcoms

Iranian – Short Camel Jockeys or Humpless Camel Jockeys

From “Choggers and Hins – British Army Slang of the Twilight War” by Juliet Watson, Collins 2009

towed artillery and as a result very rarely used horses in this role (although the H Parachute Battery of the British 7th Royal Horse Artillery took a great delight in returning to their historical role with their 105mm light guns in late 1998¹²). Harnesses were initially a major problem as few realised the difficulty of getting this correctly sized for the different sizes of horse breeds and several attempts were needed to build them the right size (even using historical items from museums was not ideal as these were rarely scaled for the horses available).

In rules terms horses should be treated as vehicles having a wear value and a maintenance number of 12 (if left to rest and not worked then the maintenance number drops to 6). If a horse is only grazed and asked to do any work



Illustration 32: Soviet Rapira-3 being towed. Note the locally manufactured limber and the horses used are cart horses resulting in the crew walking alongside or riding the limber removing the need for supporting vehicles. This solution was more common in areas where the front line was relatively static. (Pravda)

then the wear value will increase temporarily by 1 and will increase permanently by 1 on a D6 roll of 1 on 1D6 per period of light work or 1-3 for heavy work.

12 With the reforming of the ceremonial King's Troop RHA in 2009, the 105mm Light Gun was used to replace the World War One era guns that had been destroyed in the nuclear strike on London.



Illustration 33: British Cavalry scouts from 9/12 Lancers lead an armoured convoy during Operation Mornington Crescent. Courtesy of Capt Groves

2. Bicycles

A major alternative to the horse was pedal power with many countries lacking the horse breeding programmes necessary for cavalry using bicycles. Military use of the bicycle goes back to the 19th century when most western nations created units (often made up of part time volunteers). They were used in combat in a number of cases although their use declined during the First World War.

In the Second World War Hungary maintained six battalions of bicycle troops (alongside cavalry and armour) in the Rapid Corps. This participated in Operation Barbarossa (the invasion of Russia). This highlighted the problems with bicycle equipped troops, namely the logistic trail does not fit well with the troops, despite perceptions the units were heavily reliant on roads and that troops who cycled were unfit for combat (in game terms travelling by bike counts as a period of hard work for fatigue purposes). They were however useful for short range rapid movement (British commandos landing on D-Day were issued them for exactly this reason although many abandoned them on landing). German troops retreating from Holland in August 1944 made extensive use of confiscated bicycles (indeed even in the years leading up to the Twilight War, German tourists were still being greeted with “give us our bicycles back” by the Dutch). The German late Second World War raised Volksgrenadier Divisions used bicycle equipped troops to provide a reconnaissance element in lieu of motorised reconnaissance. They were also used very successfully by the Japanese during their invasion of Malaya when the troops who had a very limited logistic chain used bicycles (mainly civilian ones captured during the advance) to keep on the heels of the retreating British.

Post World War Two a number of countries continued to have bicycle infantry units (Sweden for example only re-rolled the bicycle battalions in the late 1980s and Switzerland still had them at the start of the war).



Illustration 34: Swiss Army Bicycle Regiment training in late 1996.

Bicycles are also capable of being used as load

“We were briefed that if the church bell rang we were to all get on our bikes and ride like hell to the church when the officers would brief us. It worked too, actually just ringing the bell drove off the marauders once.”

Patrick Harris
Militia member, Mansfield

carrying devices, a

method used extensively by the Viet Cong in the Vietnam War. The bicycle is loaded with the equipment to be carried and a pole used to help steer it. Veteran US troops are known to have passed on this tip and it was seen used regularly in Europe where the sight of refugees or small scale merchants using a bicycle for this was very common.

By the summer of 2000 one of the major users of bicycles was the Krakow ORMO. The part time companies were encouraged to buy (at a subsidised price) one of the locally produced bicycles (while still not cheap they are a very attractive offer to the militia). This

policy was intended to allow the fast concentration of the militia in an emergency. With relatively intact road network in the city this policy worked well and approximately 75% of the part-time ORMO were bicycle mounted. Whilst many communities followed a similar approach Krakow is perhaps the best documented and had the highest percentage of bicycles (mainly due to the local production facilities). Krakow bicycles came in two main types, the standard which used very simple technology such as tyres made from old truck tyres and simple if any suspension. There was also a more luxurious version that was closer to the bicycle commonly found in civilian life before the war.

In the Warsaw area the defenders in the summer and autumn of 2000, used bicycles far less (mainly due to the rubble caused by the conventional fighting and nuclear strikes). They did however maintain a small pool that were issued to units that were using them for patrols outside the city. The Baron on the other hand had used bicycles to give a degree of mobility to the Fourth and Fifth Warsaw Companies of his army that were used to patrol the roads.



Illustration 35: A folded down bicycle being unloaded for trials at Fort Dill September 1998

Russian troops used bicycles less than their NATO opponents but even here it was common for a division to include at least one battalion on bicycles (or equivalent, often it is broken down into companies to give each brigade an independent recon unit).

The German Army took to using bicycles heavily in an internal security role. Each German infantry and panzer division had a rear area security battalion of fusiliers (fusilier hintere Bereichssicherheit) mounted on bicycles and



Illustration 36: German fusilier photographed on the outskirts of Bremehaven November 2000

each brigade its own company (the exception to this is the Gerbesjaeger who instead of bicycles used horses or ponies due to their mountain role)¹³. These were tasked with patrolling the roads in the rear of the unit to keep them free from marauders. By the spring of 2001 many divisions had added a second battalion to the role with each having one of the three companies mounted in vehicles as a quick response force. The brigade component was not increased officially but many commanders authorised it locally. The exception to this organisation was the 1st Panzer Division which temporarily mounted its entire 2nd Panzer Brigade on bicycles during the American Operation Omega. In December 2000 the division officially reorganised the brigades to have two over-strength companies each in order to deal with the large number of troops that missed the deadline for the departure of TF34. The companies consisted of two bicycle mounted fusilier companies and two fusilier companies mounted in assorted HMMWVs left by the US Army. Each of these platoons included at least one ATGM armed HMMWV in response to the expected number of vehicles in the area. The divisional fusilier battalion was not expanded but the third company had its bicycles replaced by Marders as a quick response unit. In March 2001 the fusiliers adopted the tan colour beret as a mark of distinction.

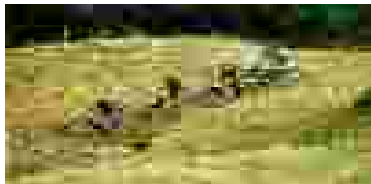


Illustration 37: Dutch cycle troops photographed in late 1999. Unfortunately no details of the unit are available.

The Dutch were (pre-war) a nation where the bicycle was a common form of transportation. With the French invasion many Dutch units requisitioned bicycles to gain local mobility. The 105th Recon Battalion was quickly outfitted with bicycles during the French invasion and used them to quickly move into blocking positions around Arnhem. French reports indicated that they believed the 105th had been reinforced by a second battalion due to the skilful Dutch local counter-attacks. The 302nd Reserve Infantry Brigade which was

being used for internal security duties had already converted one battalion to bicycle borne and was part way through converting a second when it was attacked by the French 8th Marine Parachute Regiment in the Breda-Tilburg area. Initially the 302nd was successful but as French reinforcements arrived it was forced to withdraw to the Rhine fighting in small elements using the bicycles to break contact and withdraw before repeating the delaying actions. The surviving elements that did reach the Rhine were primarily the ones equipped with bicycles. To commemorate this the 302nd adopted a yellow bicycle badge on a black background to be worn on the lower right sleeve.



Illustration 38: US troops believed to be from the 1st Armoured Division in October 2000. Note the different types of bike and the locally manufactured stowage on the bike to the left.

13 For details of the organisation of these units see Appendix 2.

American troops were not as big users of the bicycle. No formal adoption of the bicycle was ever made (a number of models had been purchased in low numbers for trials but the nuclear exchange stopped any formal adoption) but many units acquired them for local mobility. They were however a frequent sight during Operation Omega as the troops headed for Bremehaven. Here troops were using every opportunity they could to ensure that they were not left behind. As a result everything available was commandeered, particularly when motor transport broke down or ran out of fuel.



Illustration 39: An alternative model undergoing road trials from the same footage.

The British Army has also been known to use bicycles. In a scene very reminiscent of 6th June 1944, 41 Commando landed on the outskirts of Harwich in mid 2001 and using bicycles moved around the town to attack from an unexpected direction, catching the local marauders by surprise.

Finland had actually incorporated bicycle troops into the Infantry Brigade Type 80 organisation. Here these troops used bicycles and

agricultural tractors to reach their defence areas. All troops were actually trained to use bicycles and also used the trick of towing the riders behind the tractors to reduce fatigue (in a similar way to ski troops were towed by tracked vehicles further north in Finland). Also used were small trailers to carry extra supplies. Photos of Soviet troops in Finland often show captured bicycles strapped to the outside of vehicles as war trophies due to their robust nature.



Illustration 40: Often believed to be a World War Two photograph due to the .303, this picture actually dates from 2000 as shown by the modern chair and ammunition boxes.

The bike is part of the collection of the Museum of Welsh Life at St Fagans and was used by members of the Pontypridd Platoon of the Free Welsh Militia. (Museum of Welsh Life)

Switzerland with its large citizen militia also took to the bicycle as petrol supplies ran low. In addition at the start of the war there was even a regular army unit the Bicycle Regiment known as Radfahrer Kompanien (bicycle soldiers). For the reservists, stocks of bicycles were requisitioned from the community and each battalion was issued enough to supply a company. These were stored at the

headquarters and were to be used move the first company to assemble to the battalion's battle position with the remainder arriving on foot as soon as possible afterwards.



Illustration 41: British and American troops in Iran hold a jousting tournament in January 2001. No evidence has yet come to light showing the alleged 75th Ranger/5th SFG variant using motorcycles.

Outside of Europe bicycles were far less common, in Iran the availability of fuel reduced the need although some where obviously deployed there or bought locally as evidence has surfaced of their use (although predominantly they appear to have been used in base areas). In America the vast distances reduced their use to local areas. Militias have been known to use them in the same way as in Poland to gather the part time troops together in an emergency.

3. Elephants, Camels and Other Exotic Mounts

An unusual alternative to horse transport was the elephant. While not common, in a number of cases elephants were used mainly as pack animals. They had been used in this way for centuries, particularly in the Far East although the practice spread as far east as Greece and Rome¹⁴. While commonly used in the ancient world in a military role they had gradually faded from use with the advent of gunpowder weapons¹⁵. During World War Two in Burma, the Anglo-Indian troops of the “Forgotten Army” used them extensively, leading Field Marshall Slim to later write, “they built hundreds of bridges for us, they helped to build and launch more ships for us than Helen ever did for Greece. Without them our retreat from Burma would have been even more arduous and our advance to its liberation slower and more difficult.” It is alleged that in 1987 the Iraqi Army had used elephants to transport heavy weapons in Kurdistan when attacking Kirkuk.

Surprisingly the US Special Forces field manuals (FM31-27) covered the use of elephants as a pack animal at the start of the Twilight War but discouraged their use as elephants are an endangered species.

The commonest place elephant transportation was US troops in Kenya where the US Army formed the 1st Pachyderm Transportation Detachment. Composed of a dozen African elephants and twenty US troops with about the same number of locally hired helpers, this unit was used to transport supplies in



Illustration 43: Optimus Prime with what appears to be two special forces soldiers leading during the move to Nairobi. Later investigations have shown that these are probably from OD525 operating in Ethiopia although many details of these operations are still classified. (Nairobi Times)

were used by the 1st (Elephant) Engineering Company (Provisional) to assist in engineering tasks. Used as beasts of burden to assist the lightly equipped engineers. Used to help build wood bridges, dragging timbers and other such work. Again these were part of the evacuation where they continued in the role, in particular putting their bridge building talents to good use. “Dumbo” died of a heart attack during the evacuation but “Ellie” and “Optimus Prime” reached the evacuation point where they were also turned over to local helpers.



Illustration 42: Mahouts (elephant handlers) of the 1st Pachyderm Transportation Detachment. May 1999. (Nairobi Times)

low risk areas. With the evacuation the unit turned the animals over to the local helpers on the docs much to the sadness of the American soldiers.

In addition to this, in Kenya three elephants



Illustration 44: US troops attached to the 47th Division recovering "Woozle" after she was injured. The 1st Alternative Cavalry Regiment sent numerous patrols into the local areas following up rumours of elephant sightings. Operation Safari into British Columbia was one of the few operations that succeeded. Photo courtesy of Corporal Lewis Birch (on the left in the photo)

¹⁴ The emperor Claudius even brought them to Britain during his campaigns against the Britons.

¹⁵ Although they had been used in battle as late as 1893 in the Franco-Siamese War.

In the United States, the 47th Infantry Division formed the 1st Alternative Cavalry Regiment in May of 2000 using nine Indian elephants recovered from the wild after they were released by a circus supplemented by a further 20 cavalrymen. Commanded by Lt Michael K Roberts, the unit despite its name was used mainly in an engineering role. Weaponry for the unit was typical of that issued to the 47th Infantry Division being M16s (mainly M16A1s), M249s, M60s and M203s. More details of this regiment are given in Challenger Magazine issue 52.



Illustration 45: 1st Alternative Cavalry Regiment pictured in mid 2002 in a sweep through Oregon. By this date under the command of the newly commissioned commander 2Lt Lewis Birch, the Regiment was undertaking a more combat role although they had abandoned the cumbersome flak jacket armour in favour of an extra soldier in the howdah. (47th Infantry Division Archives)

The Polish defenders of Warsaw in the summer of 1997 also used elephants in possibly the only recorded use in Europe during the war. The 3rd Warsaw People's Militia made up of state employees employed the two elephants from the Warsaw zoo as beasts of burden in the ruins of the city¹⁶. The two elephants known as "Titan" and "Zeus" were used to bring supplies from the central depots to second line supply dumps. Of immense use in the rubble, they were only used at night to avoid detection and returned to the



Illustration 46: Titan pictured in late 1996. No known photos of either Titan or Zeus during the siege exist as most of their activity was undertaken at night. (Warsaw Museum)

zoo during the day. In late August their keeper sergeant Rafe Tumanski developed a sled and harness that allowed even larger loads to be moved. "Titan" was killed in an artillery strike on 26th August and "Zeus" was presumed killed in the nuclear firestorm that hit the city shortly afterwards.

In the far east, elephants were regularly used as they had been for centuries with the Vietnamese and Thai troops using them for both logistics and for patrolling in the jungle.



Illustration 47: Publicity photo from the forthcoming film about the 1st Alternative Cavalry Regiment "Jumbo Cav." Missing from this photo is the kevlar jacket patchwork armour and the two man howdah although both are promised in the film. (Pachyderm Productions)

There are difficulties in using elephants, in addition to the obvious problems of feeding and maintaining the animals. Horses who are not trained to be used to elephants will panic due to the smell. While this was regarded as useful in ancient fighting it can cause difficulties in the modern era where despite the return of cavalry to the battlefield the likelihood of them fighting elephants in close combat is minimal. It is worth noting that almost invariably the elephants used in battle in ancient times were male, originally believed to be as the male was more aggressive but latterly because it was discovered that female elephants will run from male elephants if confronted. In the late twentieth and early twenty first centuries as elephants have not fought elephants this has not been a major concern.

16 This unit included the employees of the city's zoo.



Surprisingly the Soviets had used oxen as beasts of burden along the Soviet border with China in really remote regions. This practice was never widespread and no evidence of it being used elsewhere have ever come to light. The Chinese however did make more use of oxen. With the outbreak of the Sino-Soviet War, many Chinese were called up to supply the logistic elements of the army. These were very low tech and many of the peasants operating in their local areas frequently brought along their own animals to help (spurred on by local party officials and posters encouraging them to sacrifice their own farm production for the good of the country).

Illustration 48: Possibly the most bizarre sporting organisation in the US Army. It existed from 2001 to 2008 when the 1st Alternative Cavalry Regiment was disbanded. For many years after surviving members of the club would be found feeding peanuts to the surviving animals in Langley Zoo. Courtesy of Major (retired) Michael K Roberts.

In addition, the Soviet Border Guards also had a number of units that utilised camels instead of horses in desert areas even before the war. More practical than horses they were less popular as they were harder to control. In Iran some were used as pack animals.

Some of the light US

units in Iran also started to use camels as pack beasts¹⁷. In typical fashion many US soldiers attempted to learn to ride camels but no organised programme to use them as riding animals existed¹⁸.



Illustration 49: 1st Marine Division LAV25 escorts a camel convoy in Iran, March 1999. Marines referred to these as “dawgie drives.” (USMC)

17 The US had actually had a camel equipped unit in the 1800s in an attempt to increase mobility in the Arizona deserts.

18 A return from the 24th Infantry Division for April 1999 shows that two soldiers were killed and six injured enough to require hospitalisation during the month of March 1999.

Appendix 1: 4-12th Cavalry Organisation May 2000

*Commanding Officer - Col Joshua Bond
Executive Officer – Major Trent Kohl
Riding Master – Master Sergeant Luis Oliviera*

Headquarters and Administration Squadron – Major Ian Paul

*Training Troop – Master Sergeant Luis Oliviera
Support and Logistics Squadron – Captain Theodore Williamson*

*A Squadron – Major Carl Leather
1 Troop - 1st Lt Roland Boyd
15 cavalry
2 Troop – Platoon Sergeant Peter Wolf
12 cavalry
3 Troop - 2nd Lt Oliver Hunter
22 cavalry*



Illustration 51: 2 Troop, A Squadron, 4-12 Cavalry pictured in February 2000. Plt Sgt Wolf is on the left. He was killed in action on 17th July, photo courtesy of his brother who served in the logistics element of the division.



Illustration 50: Lt Colonel Joshua Bond commanding the 4-12 Cavalry of the 5th Infantry Division March 2000 with his horse “Melissa.” Col Bond was killed in action near Kalisz in the NATO summer offensive. (US Army)

*B Squadron – Captain Martin Stephens
5 Troop - 2nd Lt Ruth Cooper
25 bicycle troops
6 Troop - 1st Lt Max Drew
18 bicycle troops*

*C Squadron – Captain Heather Wright
7 Troop - 1st Lt John Lincoln
15 troops, 4 HMMWV, 2 M2HB, 2 M60, 3 81mm mortar
8 Troop - 2nd Lt Roy King
14 troops, 1 LAV25, 1 HMMWV Avenger, 1 HMMWV TOW, 1 UAZ469*

Appendix 2: German fusilier hintere Bereichssicherheit battalion Type 98 order of battle

Please note that this organisation was very rarely met in reality but shows the official organisation adopted in May 1998.

Battalion Headquarters

*10 officers, 30 enlisted
3 Wolf (Mercedes Benz G Class)¹⁹
2 Man 7t truck*

1st Company

Headquarters

*2 officers, 6 enlisted
2 Wolf*

1st Platoon

*1 officer, 3 enlisted
4 bicycles*

1st Section

*8 enlisted
8 bicycles*

2nd Section

*8 enlisted
8 bicycles*

3rd Section

*8 enlisted
8 bicycles*

2nd Platoon – as 1st platoon

3rd Platoon – as 1st platoon

2nd Company – as 1st company

3rd Company

Headquarters

*2 officers, 6 enlisted
2 Wolf*

1st Platoon

*1 officer, 3 enlisted
4 bicycles*

1st Section

*6 enlisted – 2 x MG3 in heavy role
6 bicycles with trailers*

2nd Section

*6 enlisted – 2 x MG3 in heavy role
6 bicycles with trailers*

2nd Platoon

*1 officer, 3 enlisted
4 bicycles*

1st Section

*10 enlisted – 2 x 81mm mortar
10 bicycles with trailers*

2nd Section

*10 enlisted – 2 x 81mm mortar
10 bicycles with trailers*



Illustration 52: Post war photo of a typical locally manufactured trailer used by weapon teams. The example photographed in France is of German manufacture but captured from a Dutch unit. (Museum of the French Military)

¹⁹ These could alternatively be Volkswagon Iltis or UAZ-469s.

Appendix 3: Horse Traits

Horses each have their own personality, this table can be used to generate these. Each horse should roll on the chart below, Game rules are not included but some notes have been given to help GMs. If contradictory results are rolled either they cancel each other out or the GM can assign different traits in different circumstances.

1D100	Trait	Notes
1	Affectionate	
2	Biter	Bites other horses and possibly people
3	Blown	Tires easily
4	Bone shaker	
5	Bucks	Will try to thrown rider
6	Calm	
7	Clumsy	Think Bambi on ice....
8	Deaf	
9	Distractable	
10	Doesn't tolerate saddles	
11	Dumb	
12	Fast	
13	Fit	Extra stamina
14	Going blind	
15	Hungry	Always wants more to eat up to 1.5 times normal
16	Intelligent	
17	Kicker	Tends to kick out if anyone behind
18	Lean	Only requires 75% food
19	Loner	
20	Loud	
21	Loyal	
22	Natural leader	
23	Placid	
24	Playful	
25	Plodder	Slow
26	Poor bite	Will have difficulty with a bridle
27	Prone to disease	
28	Quiet	
29	Resistant to disease	
30	Skittish	
31	Sociable	Will get on well with other horses
32	Stall kicker	If put in stalls will try to kick its way out
33	Strong	Can carry 125% load

34	Stubborn	
35	Suffers from cold	
36	Sure footed	
37	Sweet tooth	Loves sugar – will often over-ride a bad trait if given some
38	Treader	Good at treading on toes for 1D3 damage
39	Unusual shape	Will require a special saddle
40	Weak	Can only carry 75% load
41-80	No trait	
81-98	Roll twice	May be rolled multiple times
99-100	Extreme	Roll again – the result should be taken to a much higher degree

Example horse

An unsuspecting PC buys a horse unaware that the GM is using this table. The GM rolls:

86 - Roll twice
33 - Strong - That should cheer up the PC
82 - Roll twice - Obviously the horse has character!
99 - Extreme - This could get interesting
22 - Natural leader - This is extreme so should be exaggerated by the GM in play, perhaps by making the horse lead the others if corralled together, maybe overriding their traits
85 - Roll twice - The GM is starting to think this horse has more personality than some of his PCs!
02 - Biter - This brings a smile to the GM's face
46 - No trait - Ah well, this was getting a bit much

The GM considers how the horse trader will sell this horse to the PCs – he decides that the horse will be standing proud in the pens and looks muscular. He cleverly gives it a feed bag to hide the biting.

Appendix 4: Animal statistics

Note that cavalry trained horses are double cost.

Type	Horse (broken)	Horse (unbroken)	Mule	Ox
Price	\$2000 (S/S)	\$1000 (S/S)	\$600 (S/S)	\$600 (S/S)
Hits	60	60	40	70
Meat	90kg	90kg	70kg	250kg
Tr Mov	20/20	20/20	20/20	05/05
Com Mov	10/30/60	10/30/60	10/20	05/05
# Appearing	1D6	1D6	1D6	
Attack	Nil	10.00%	Nil	10.00%
Hit #	4	4	4	6
Damage	1D6	1D6	1D6	1D6
Con	10	10	8	14
Feed	12kg + graze	12kg + graze	10kg + graze	Graze
Load	120kg	Nil until broken	80kg	70kg
Weight	350kg	350kg	300kg	600kg
Notes			Sterile hybrid of horse and donkey	

Type	Camel	Elephant	Donkey	
Price	\$1200 (S/S)	\$20,000 (R/R)	\$500 (S/S)	
Hits	65	120	30	
Meat	350kg	800kg	50kg	
Tr Mov	15/15	10/5	20/20	
Com Mov	10/20	10/15	10/20	
# Appearing	1 or 1D10	1 or 1D6	1D6	
Attack	5.00%	20.00%	Nil	
Hit #	3	4	2	
Damage	1D6	5d6	1D6	
Con	12	26	6	
Feed	Graze	Graze	8kg + graze	
Load	120kg	600kg	70kg	
Weight	1200kg	3 tons	200kg	
Notes				

Appendix 5: Cavalry equipment

Note that this has been simplified for playability.

Blacksmith Tools \$500 (C/C) Wt 25kg

Does not include an anvil. All the mechanical tools required in order to maintain a unit of up to 50 cavalry in the field. May be used by 4 blacksmiths simultaneously. Will also require a forge or very hot fire if making horseshoes. Counts as hard work to use.

Powered Blacksmith Tools \$700 (C/C) Wt 25kg Power consumption: 1kw

Does not include an anvil. All the mechanical tools required in order to maintain a unit of up to 50 cavalry in the field plus items such as a drill. May be used by 4 blacksmiths simultaneously. Will also require a forge or very hot fire if making horseshoes. Counts as normal work to use. A portable machine shop provides the equivalent tools.

Anvil \$400 (S/S) Wt 100kg

Required to make horse shoes in conjunction with one of the above kits.

Horse tack \$50 (C/C) Wt 10kg

Saddle, bridle, straps, stirrups, saddle blanket, etc. Trying to ride without this makes all tasks on horse back one level more difficult.

Pack saddle \$40 (C/C) Wt 5kg

Includes saddle, bridle, straps, stirrups, saddle blanket, etc. for carrying loads. Without this chances of injuring the animal are greatly increased.

Harness \$40 (C/C) Wt 10kg

Without this a horse can not be used to tow anything as it will strangle itself.

Grooming kit \$20 (C/C) Wt 5kg

Brushes, blanket, etc for maintaining a horse. Really the equivalent of a tool kit for a horse. Failure to use this and improvising will double the time required to look after a horse.

“When I became a cavalryman I finally got to use the odd blades on my old Swiss Army knife originally for looking after horses. My favourite was the one that I think was used for getting Boy Scouts out of horses' hooves or something like that.”
Private David Kingsway
9/12th Lancers

See Also

Challenge Magazine

Issue 42 – A Rock in Troubled Waters

Gives details of the 1st Cavalry Squadron New Jersey State Militia

Issue 52 – Going on Safari

Gives details of the 1st Alternative Cavalry Regiment



Illustration 53: Soviet troops of an unidentified cavalry unit in Iran. Of note are the pack horse and spare mount (identifiable as such by the riding saddle) tethered to the black horse in the centre. Where they were available cavalry troopers tended to ensure that they had spare horses with them. (SovPhoto)



Cavalry and bicycle troops



“Who would have thought that we would have entered the twenty first century fighting on horseback? We started the war in armoured vehicles with high tech electronics. Didn't Einstein say that he didn't know what weapons would be used in World war Three but he thought World War Four would be fought with sticks and stones. Starting to look like he was right...”

This supplement for Twilight 2000 is an unofficial guider to troops that replaced their vehicles with horses, bicycles or more exotic mounts such as elephants.

Includes details of:

- * Polish use of elephants in the Siege of Warsaw
- * German bicycle fusilier hintere Bereichssicherheit battalion Type 98 order of battle
- * A discussion of the myth of the Polish lancer
- * Krakow's ORMO use of bicycles

