## CAVALRY SPEED AND WARGAMES

Did you feel like your cavalry was moving in deep mud on your battlefield?
Did you have a bit of a hard time understanding why these generals of the 17th-19th century were sensitive about their flanks and cavalry on those flanks? But you not so much on your tables. Surely they must have been so dumb.

Friedrich Wilhelm Graf von Bismarck (28 July 1783-18 June 1860) 1821 « tactique de la cavalerie » (his books were written for instruction of cavalry officers, and translated in multiple languages; he also fought in the Napoleonic wars. He knows what he is talking about.

## La cavalerie a trois fois plus de vitesse au trot <br> que le pas accéléré de l'infanterie; c'est pourquoi <br> Ziethen a pu dire à son roi : ${ }_{\text {e }}$ Au moment ou je <br> vois l'ennemi, mes dispositions sont déja faites. ${ }^{2}$

Trad : Cavalry at the trot moves three times faster than the accelerated pace of infantry; that is why Zhieten could tell his king: "when I see the enemy my dispositions are already done".

In case: Ziethen was a renowned cavalry commander of Friedrich the great.
The accelerated pace for infantry was nearly only used for a short time for deployments and changing formations; sometimes from the Napoleonic wars, for fast short light infantry moves.
Another cavalry man Marbot : (at least on these things he would not be controversial ;)
«s'il s'agit seulement d'une course de dix à douze lieues, que le cheval peut faire aisément au grand trot en quelques heures, et à plus forte raison si elle n'est que de deux ou trois lieues, qu'il peut par courir en moins d'une demi-heure, au galop allongé, que le cheval peut facilement aller une demi-heure au galop, et faire par conséquent trois lieues en une demi-heure; »
(une lieue $=4 \mathrm{~km}$ or 3
km as old measurement no idea which one he spoke of!!)
Were he tells you that a horse can easily do 40 km in a few hours, even easier 10-15 km in less than half an hour. He can easily run half an hour (my neighbour, who is not a horse does 1+ hour every other day) so 912 km....
Have you ever seen one of your cavalry units run the length of the battlefield of Wachau in a turn of 1/2 hour?
And you will tell me...
Yes I know they are supposed to wait a lot, to get orders etc...so are the infantry. If I ever mentioned this to a rule writer, I got the answer that you"need to fiddle" to fit the table. WHY?

The idea of my rules were "you need to adapt the rules from history, to the space and figures realistically available". So what realistic speeds should cavalry have on the battlefield, from the time they started to manoeuvre in 2 ranks and speed up? (mid 18th century) ( as I read from one of those distinguished gentlemen, that when on three ranks it was slower...)

## SOURCES

"Ordonnance provisoire sur l'exercice e les manoeuvres de la cavalerie rédigée par ordre du ministre de la guerre du 1er Vendémiaire an XIII" revised 1811 the speed of maneuvers were these:
le calcul des différentes allures qu'un cheval doit parcourir :
au pas, dans une minute, 100 mètres (ou 50 toises); - $\quad 6-\mathrm{km} / \mathrm{h}$
au trot , 240 mètres ( 120 toises)
et au galop, 3oo mètres (150 toises ). 18

Karl von Decker "The Three Arms, Or, Divisional Tactics": (also was there, fighting and same pedigree as Bismarck) 1827
«La théorie indique par minute : 120 pas au pas, 240 au trot, 480 au galop ordinaire, 600 au galop de charge. » ( that be 90m-180-360-450m per minute !!!)
«.... lets admit as a rule that a cavalry attack can be 4 times faster than an infantry one."
C P Escalle's "Des marches dans les armees de Napoleon" is quoted on page 291 of Nafziger's "Imperial Bayonets".

French cavalry was able to move at 4,800 to 5,000 meters ( 3 to 3.125 miles) per hour and infantry at 3,000 to 3,500 metres ( 1.9 to 2.2 miles) per hour. However the Regulations provides for movements of upto 4,000 metres ( 2.5 miles) per hour. The real problem was artillery and other cariage which could seldom exceed 3,000 metres ( 1.9 miles) per hour because of bad roads. A mixed arms force would move about 3 $\mathrm{kph}(2 \mathrm{mph})$ on strategic movement.

General La Roche Aymon 1817 « Manuel du service des troupes légères en campagne» another guy « who was there » ; serving with the Prussian cavalry...
"Le pas est l'allure de route; c'est l'allure d'une troupe de cavalerie qui va en détachement, d'une troupe, enfin, qui marche à hauteur de l'infanterie (1) qu'elle doit sou tenir ou protéger. Le trot est l'allure de manœuvre , c'est-à-dire que toute la troupe de .cavalerie manœuvrant en présence de l'ennemi , et devant se diriger sur tel ou tel point, soit pour y porter un renfort, soit pour y prendre une position, soit, enfin, pour prolonger une ligne , s'y portera toujours à un trot plus ou moins allongé , selon l'urgence des circonstances et la distance à parcourir. C'est dans cette allure que la colonne ou la ligne conserve le mieux son ensemble, et que les chevaux ne s'essoufflent pas. Le galop est l'allure d'action pu de formations préparatoires à l'action ; par. conséquent, il ne peut et ne doit être que momentané, et réservé pour ces seules occasions; comme il essouffle facilement les chevaux, son emploi exige autant de précaution que d'intelligence. »

## Roughly :

Cavalry manoeuvring in presence of the enemy (so on table!) will always move at the trot as then it can easily keep formations and the horses do not get blown. Gallop is only for "action"(charge) and must be used carefully. (hence the need to blown horses and fatigue...jc) Walk is for road movement or keeping abreast with infantry.

## Lt.-Gen. Wilhelm Balck book(s) on tactics turn of the 19th century:

alry of the Line with that of the smaller Cossack horse. In France, training is to be so regulated that horses will cover to km , at a trot, or 6 km . at a gallop without exertion. No definite figures can be given for diatances

According to Austrian observations, the distances covered per minute on soft ground in the field, are as follows:

At a walk, $90-96 \mathrm{~m}$.
At a trok, $150-160 \mathrm{~m}$. This may be continued up to 30 minutes $=$ 4,800 m.

At a gallop, $260-290 \mathrm{~m}$. This may be continued up to 5 minutes $=$ 1,400 m.
the normal action of the lungs. General Bonie of the French army considers $5,000 \mathrm{~m}$, to be the maximum distance that a horse can gallop at a single stretch on one day. For some time after such a performance, however, a horse can move only at a walk. At Vionville, $\mathbf{v}$. Bredow's brigade rode 5.500 m . at top speed. General v. Schmidt * says: "It is absolutely

We should not take Von Bredow Totenritt of 1870 as a normal case study. But it should be exceptionally done on tables...
Late period info for Balck, but European cavalry from mid-late 18th to the end of the 19th century are mostly manoeuvring/ operating the same way.
We seem to have a consensus of a $4-5 \mathrm{~km} / \mathrm{h}$ moving on the battlefield. Attacks would be way different, as in our games they single up what could be several charges, or cat's play threatening each other, till one gives up.
We have another source, a bible, as for wargamers it is the Kriegspiel of 1818 written by officers who also "were there" for their pairs... as a wargame. Generally if your rules do things contrary to what is there, your rules are wrong.
Kriegspiel : (I was lazy so got it from 2Fatlardies eddition which should be in every napy gamers, computer.) One move $=2 \mathrm{~min}$

MARCH RATFS

| TABLE OF MARCH RATES |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Maximum Distance in paces per 2 minutes |  |  |  |  |  |
|  | Degree of inctine |  |  |  |  |
|  | 5 | $10^{*}$ | $15^{*}$ | $20^{*}$ | $20+$ |
| Covalry Q Herse Art. Walk | 200 | 150 | 100 | 50 | - |
| Trot | 600 | 400 | 300 | 200 | - |
| Callop | 400 | 600 | 466 | -- | - |
| Attack | 900 | 700 | - | - | $=$ |
| Messeogers la Adjutants | 900 | 700 | 600 | 400 | 100 |
| Note: Through light or sparse woodland Infantry, Cavaliy, Foot \& Horse Artiliery at walk - 150 Messengers and individust riders - 600 |  |  |  |  |  |

The trot remains maximum speed for all other cases, with a maximum eight continuous moves at the trot for cavalry and horse artillery. If they exceed this they lose an index point in any attack which happens in the next two moves. For long distances they should always take two moves at the walk after eight at the trot to remain battle-ready.
The 1862 version (more pessimistic) :
Walk on battlefield 250 paces $90 \mathrm{~m} / \mathrm{min}$

## Trot \& Walk 400 paces $150 \mathrm{~m} / \mathrm{min}$

Trot 600 paces $220 \mathrm{~m} / \mathrm{min}$
They do include minor stops or slowdowns for keeping line formations.
So, for a game if we follow this we have for $1 / 2$ hour say $25+\min$ possible effective forward movement? 6$7 \times 450 \mathrm{~m}$ at the trot, $3-4$ at walk. $X 150 \mathrm{~m}$ so $3-4 \mathrm{~km}$ per hour
So I have cavalry move $1.8-2 \mathrm{~km}$ per $1 / 2$ hour if they want to be nicely rested, or if they attack, light cavalry a bit faster than the heavies. If they don't attack, they can move twice. Attacks has and double moves may have additional fatigue. Rear area and road marches are a bit faster, assuming roads and march formations. And this is quite conservative, but you do have to watch them get around you ...
"A nos chevaux, à nos femmes, et à ceux qui les montent!" toast of the French cavalerie...
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