23 *Training – difficulty of team kur exercises*

Before your vaulters drop out because of boredom with the compulsories, you have to start adding some variety by introducing kur, which are freestyle exercises. But if you are not a vaulter yourself, you might need some guidance in how to pick the first team exercises for them to try. This chapter will help you make this decision, according to the ability of your vaulters, the difficulty of the exercises and the potential dangers to avoid.

There are over 300 vaulting kur exercises shown in the catalogue at the end of this book, many of them team exercises. It is not necessary to treat them individually in this chapter, because once the underlying principles are understood, the determination of difficulty follows logically.

- *Freestyle exercises* are grouped into the categories of singles, doubles and triples, within which are:

Static exercises: seats and splits; kneels, flags and benches; stands, arabesques, high benches; lying exercises; hangs; shoulderstands and handstands; exercises with push-ups or supports; statics on top of statics; flyers (supported without contact of the flyer with the horse)

Dynamic exercises: mounts, dismounts, transitions; flips, rolls, leaps, jumps; as singles, doubles or triples; assisted or unassisted

And any combination of the above: for example one sitting and one standing partner (static) lifting a flyer and turning him in the air, while supported (dynamic)

- *Criteria for difficulty*: The classification of difficulty for these exercises is determined by the following criteria:

security of holding points: whether the vaulter is holding on by the grips, the back of the horse or the neck. It is obvious that the grips are most secure!

the number of holding points: whether the vaulter holds with two arms, one arm, or free. This is also applicable for a team configuration: the more holding points *all* three (or two) vaulters use together, the more secure the exercise.

the direction of the movement: in relationship to the horse's travel direction. Most exercises are most difficult backwards and more difficult sideways than executed in the direction of travel.

the direction of the vaulter in relation to the horse: having your head up is easier than looking at the world upside down, especially on a cantering horse. Outside mounts are more difficult than inside ones, because of the effect of centrifugal force.

the distance/ height above the horse: the higher the exercise gets, the more precarious the balance, the stronger felt are the swaying movements from the motion of the horse. Obviously, the nearer the vaulter's gravity point(s) stay to the horse, the safer the position.

the size of the contact surface: when the vaulter lies across the horse with his belly, or sits on both buttocks he is naturally more secure than supporting himself on one shoulder, or standing on one foot!

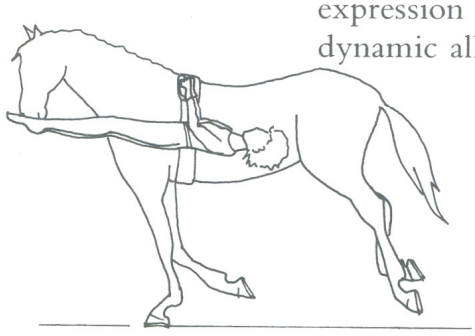
the complexity of the movement: changes in direction make an exercise more difficult. Simultaneous turns around the vertical and side axes heighten the complexity further.

All kur exercises are grouped into three different classifications in terms of difficulty by the International Vaulting Rule Book (FEI): they are EASY (class 3), MEDIUM (class 2) or DIFFICULT (class 1). This results directly from the above mentioned criteria. For *training* purposes I will classify the exercises differently. What you want to know as a trainer, who might have to learn this out of the book, because you are not an ex-vaulter yourself,

is how difficult and *potentially dangerous* certain exercises are, because your team will largely rely on your judgement in what they are able to perform. And if your judgement is wrong, there could be accidents – and you might be found negligent in your role as a coach. This is what you must avoid. It is too simplified to say that an exercise is potentially dangerous, because it is high. It is also wrong to say that because an exercise is classified as difficult, it is necessarily dangerous. Both statements are untrue and I will show this with examples.

The main reason for an increase in potential danger lies of course in *height*, which is a major factor for four reasons: *the higher the exercise gets* the higher the potential fall; the more unstable it tends to get (at least one partner standing, and lifts on extended arms); the more strength it requires (high means lifts on extended arms); the more important cooperation, timing and technique become; the less the coach can spot or help the vaulters. This does not mean that the lower exercises are by nature easier. The difficulty for *performance* is dependent also on other factors:

in dynamic exercises: the power for the height of the jump, the agility, quickness and precision for complex movements (twists and turns), the sense of coordination and timing; *in static exercises*: the stability of the configuration (number and security of holding points) the demand on flexibility (splits and extensions) demands on strength; quietness and precision in general; talent for artistic expression in general (elegance). In combinations of static and dynamic all of the above apply.



Exercise 145 in the catalogue of vaulting exercises, a 'horizontal lying hang', is an excellent example of this. It is classified as a number 1 (highest level of difficulty) and extremely hard to perform in canter as it requires great strength and control. However it is not in the least dangerous: if it is not well performed and the vaulter can't hold the position, he

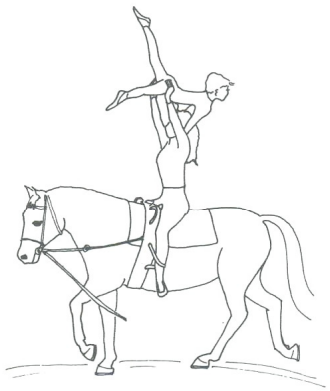
will simply come down feet first from insignificant height, and will neither twist nor fall, because he has both hands on the grips.

So when assessing a trainer's capability, we have to take his or her experience into account in terms of capability of training vaulters for the case, when an exercise *does not work*. As we are dealing with a living partner (with a mind very much of his own), unforeseen circumstances, such as the horse stumbling or spooking, may come into play at any time. As a good coach you must prepare your vaulters for such eventualities, because they must be able to react fast and 'bail out' in a safe and controlled manner.

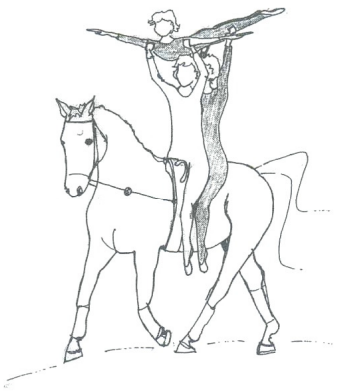
For explanation's sake I will group exercises into different 'storeys' as an indication of the height achieved in them:

- *A 1st storey exercise*: is often classified as easy, has usually at least three support points and has the carrying (one or two) partners sitting.

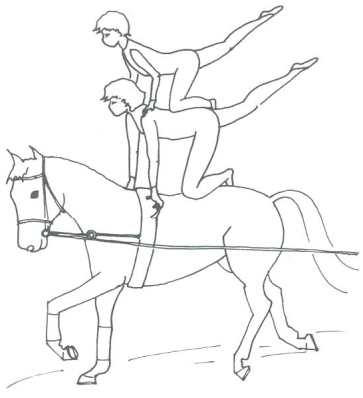
- *A 2nd floor exercise*: is often classified easy to medium, has a mix of sitting, kneeling and/or standing position in the carrying partners; one flyer may be lifted off completely, but usually with at least one sitting underman and the flyer will have three to four support points (or *potential* support points!).



'Skater's lift'

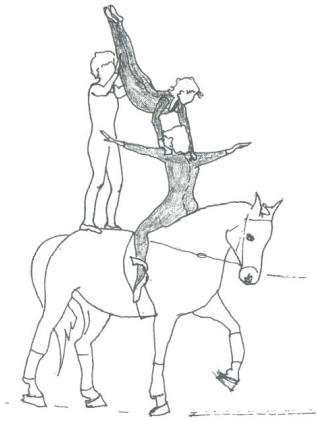


'Rocket angel'



'Double decker flag'

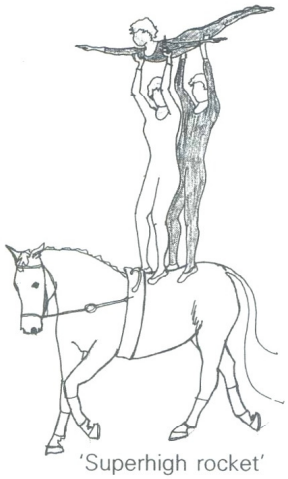
- *A 3rd floor exercise*: will be classified medium to difficult, will have one carrying partner standing; the flyer has no contact with the horse and has fewer holding points to the undermen; the security of holding points is decreased and the general stability of the configuration is more precarious.



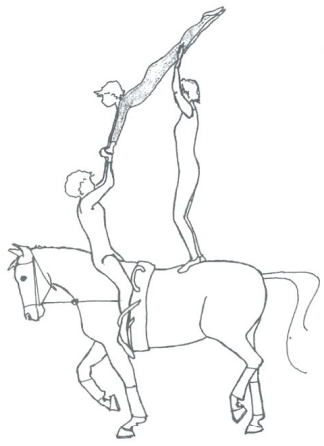
'High handstand'

'Statue of Liberty'

'Flag with flag on high bench'



'Superhigh rocket'



'Superhigh handstand'

- *A 4th floor exercise*: may have up to two carrying partners standing (no. 299c); the flyer is lifted *and* pushed high (no. 285).

Please note for reference to the quoted exercise numbers that numbers in the FEI rule book (edition 1986) and the rule book translated from the German Regulations (edition 1987) are not the same as in our Catalogue of vaulting exercises.

Correct 'bail-out' training

We have mentioned before that a fall does not, and should not, mean an accident. A *dangerous fall* is an *uncontrolled fall*. Vaulters must be taught always to expect and *plan* a fall, and must be ready to jump *into* it when the necessity to bail out arises.

Some of the ground rules are: you should never lose your balance to the back, when standing. From stand, you either jump into the fall straight, and run, or you actively fall into it and *roll*. You should not bend down or cling! The trainer should play through the three most common scenarios of falls: the horse suddenly speeds up – what happens?; the horse slows down, or stops – what happens?; the horse spooks, jumps sideways, or stumbles – what then?

In a team kur configuration, the trainer must determine, and *teach*, who should try to stay on the horse as support for others. The main supporting underman must be fully aware of his responsibility, and *anticipate* and brace. Train him like this: where will the exercise fall to, when the horse suddenly stops? Are you bracing against weight pushing you to the front, or pulling you to the back? Where will the flyer pull you to, when the horse stumbles? (Usually to the outside, because of centrifugal force.) How do you anticipate and guard against sliding off in a case like that? Let's look at some different exercises:

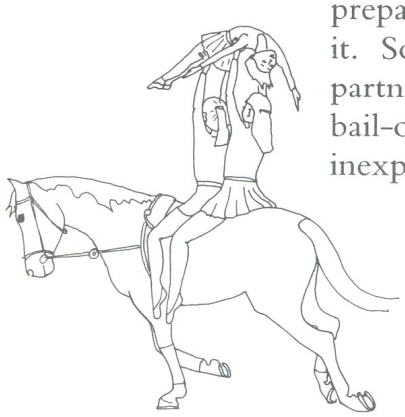
- A standing partner will usually bail out, because he is not given much choice, as he can not really brace himself or pull himself back into position.

- A sitting partner at the surcingle will cling and brace and counter-pull, as he is the fixed point of the configuration and has to steady the others.

- A solely supporting underman will try to cling until his flyer has had a chance to slide off, since the top vaulter's fall would be so much higher.

- The only case, when none of the ground rules hold true, is, when for some reason the surcingle comes loose and starts to turn. In that case clinging is the wrong solution for all vaulters, since several children may end up *under* the horse this way. *All* vaulters should separate from the horse as quickly as possible, fall and roll.

I will try to explain further with some examples of how to train for bail-out. However, all exercises are different, and the coach must look at each one individually to determine how to prepare the vaulters for the eventuality of having to get out of it. Some exercises (like a sitting flyer on top of a standing partner's shoulders with 'locked' feet) do not really allow a bail-out for the flyer, and these should *never* be attempted by inexperienced vaulters, not even in walk, *even if* they are classified as easy. And again: discuss the fall scenarios with all partners involved and ask them if they feel confident that they could handle it. Train the bail-out of high exercises in walk, trot and canter, and *never* entice your vaulters to do things they don't feel ready for!



'Draped lift'

When you read the following examples, you might think that the falling scenarios are much too difficult to be remembered by a vaulting child in case of a real fall. If you train with bail-outs in mind, however, you will find that the vaulters are very well capable of letting this sink into their subconscious, and reacting the correct way, if they have the chance to practise it often enough! Indeed they should do a bail-out every second time, when they attempt the exercise in walk, and even in trot, during practice. Although you can never guarantee that they will actually have the time and presence of mind eventually to bail out in the prescribed manner in case of a real emergency, you will at least have taught them that falls are an integral part of high exercises and no need to panic. With this alone, you will have increased the

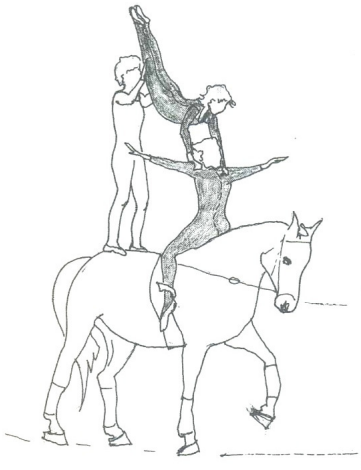
chance of avoiding accidents by at least seventy per cent! Anxiety causes cramped muscles, which in turn causes broken bones – if your vaulters are confident and relaxed, they have a very good chance of getting out of any fall without injury.

Examples of various difficulty in 'bail-out'

(Numbers refer to the Catalogue of vaulting exercises).

'Carried angel'

- *Easy bail-out*: Number 298 'carried angel', classified difficult, '2nd storey' exercise: in case of a fall, the flyer unlocks and drops her feet, while the supporting partner jumps in an active and controlled way into the fall. Both partners land on their feet and continue running. There is basically no danger of the supporting vaulter ever falling onto her back, because of the weight carried in front. The only potential danger is stumbling after landing and falling on top of each other, twisting in the air and stumbling, or coming down too hard (maximum bruises and sprains).



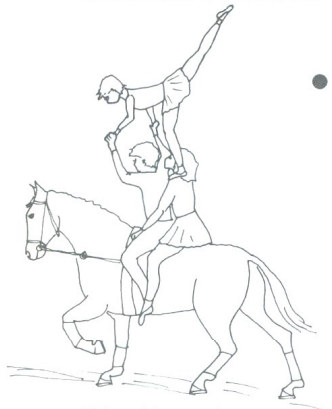
'High handstand'

- *More difficult*: Number 283, 'high handstand', classified difficult, '3rd storey' exercise: in case of a fall, the supporting standing vaulter immediately clears out by jumping sideways and slightly backwards, so as not to push the handstand flyer into a flip-over. The sitting underman braces against tilting forward or backward (depending on whether the horse stopped or speeded up) and also against sliding off sideways (pulled by the falling flyer). The flyer (coming out of the handstand) hangs on to the sitting partner's shoulders for all he is worth until his feet are down, then slides off feet first. If trained for correct sequence, so every vaulter knows what to do, and nobody panics, this should never become a dangerous situation. The worst thing to happen would be bruises on the sitting partner's shoulder, and on the flyer's legs or hips, if coming down hard on the horse.

I hope you notice the flyer's mistake...

'BW wheelbarrow on bench'

- *Bail-out with necessary twist*: Number 201(b) similar 'backward wheel-barrow on FW bench, supported from bw seat' and similar: here the supporting sitting partner must tilt off the flyer in case of an imminent fall, preferably to the outside and in such a way that the flyer will come down feet first...and facing the direction of travel, so he can run or roll easily, and with centrifugal force, away from the horse. The kneeling partner should try to cling until the flyer's feet are down, and because of the security of his holding points (both hands on the grips) and the forward direction, he should be the last to come off. If he can manage to help and steady the partner, who is at this point falling off the neck in a backward position, which is much more dangerous, this would be great!

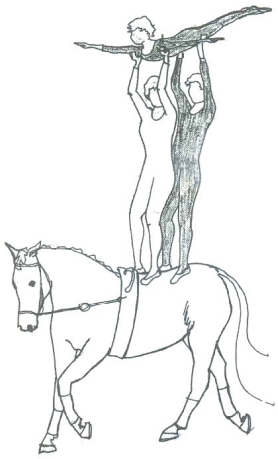


'Shoulder arabesque'

- *Double-height bail-out*: Number 258, shoulder arabesque, or number 234, more difficult with extended leg, is a situation where the supporting underman must be fully aware of how difficult the bail-out would be for the flyer, and must do his utmost to prevent strong jerky movements to any side during the performance. It looks as if the flyer can just jump off – from up high certainly – and land on his feet or roll. In fact, falls out of these exercises are more complicated. Any movement, which the underman experiences due to a stopping or acceleration of the horse, or a sideways spooking, is felt in a much aggravated manner by the flyer up top. This means that he will rarely come down feet first. An experienced and courageous flyer will immediately roll into the fall to the outside. But most flyers will tend to cling, which is dangerous, because then the direction and course of the fall become quite unpredictable. So here prevention is definitively the best solution: if the underman is fully aware of the possible consequences of *his* loss of balance, he will be more attentive and anticipate, therefore being able to counteract any such movement by the horse more effectively.

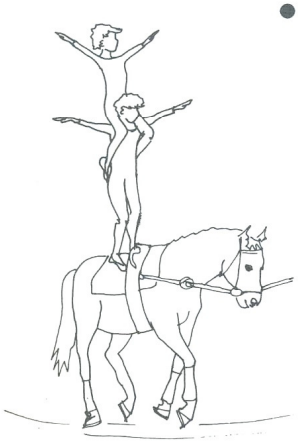
'Free stand on shoulder'

- *All-standing bail-out*: Number 299(c) shows a 'rocket angel' supported by two standing partners. In such exercises it is



'Superhigh rocket'

very important that the vaulters have an idea of where they will go in case of a fall. The flyer should get a chance to come down feet first, if at all possible. So train the back underman to drop him quickly in case of loss of balance (not by throwing him, but by flexing the knees). Teach the vaulters, in high standing exercises to rely on their own balance only – no shoving or pushing of the other partners is allowed to save their own neck! Standing partners on the croup should try to bail out to the rear, to make room for the others to come down elsewhere. It is painful for everybody to all come down in the same spot... vaulters should always try to land in the direction of travel, and preferably to the outside – centrifugal force helps you to avoid getting under the horse! Always roll, if you are not coming down in a position, where you can continue the motion by running. Teach your undermen to take on true responsibility for the flyer – the youngest and the highest one! – to try to save him or her first.



'Totem pole'

- *feet locked + height*: no real bail-out! Number 243, 'Totem pole', is one of those exercises to be performed only when all vaulters involved, as well as the horse, are truly solid and experienced. Falls in interlocked positions usually have nasty results. Don't overestimate the stabilizing effect, which a sitting partner can exert! Especially when sitting in front of the surcingle, as is often the case in such exercises. The flyer can neither freely jump off out of the sitting position, nor go into a roll, and usually all three vaulters tend to cling and come down in a twisted heap. So if your horse tends to be nervous around applause these exercises are not for your team!

No fall can ever be predicted totally accurately! However, know your horse (and his limitations!) and judge the ability of your vaulters correctly! Prepare them for the eventuality of these falls mentally, so they are relaxed and don't panic in unforeseen circumstances, and most problems can be avoided. At least by coaching them this way, hopefully nobody can prove you negligent.