

February 2017
Tattersalls FEI RMSG Summit

Consider.....

How does success happen.....

- ▶ ‘Breaking down a big goal in to small parts and if we then improve on each of them we will quite possibly deliver a huge increase when we put them all together. Each step may be small but the aggregation can be huge’
 - ▶ ‘..great performers and teams are driven by an insatiable curiosity for marginal gains together with the intellectual courage to challenge their most cherished assumptions’
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Consider.....

- ▶ There are 2 ways of looking at the chance to progress/develop/change:
 - 1. find reasons/excuses for things not to happen
 - Or
 - 2. find ways to make things happen

Goals

1. What do we want to achieve from the summit? What are the objectives?

- to inspire and enthuse the leaders and influencers in our sport to be proactive in all areas of risk mitigation and risk management
 - to create a culture of greater collaboration, co-operation, and sharing of knowledge and experience between all parties and NFs
 - to agree how we can collectively improve risk mitigation and risk management in the sport
 - to agree where we are going with our cross country courses in the modern era
 - to inspire and enthuse the leaders and influencers in our sport to continue to develop and embrace new ideas
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2000 Hartington Report Statement

In 2000, the Hartington Report rightly stated:

*“a fundamental conclusion which pervades every detailed recommendation is that everything should be done to **prevent horses from falling**: this single objective should greatly reduce the chances of riders being seriously injured as well as significantly improving the safety of competing riders.”*

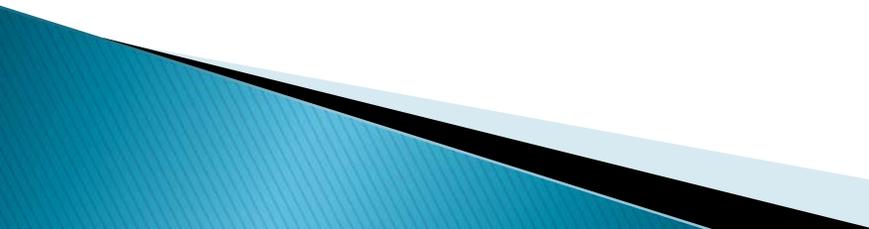
Consider.....

- ▶ Fences are just one part of the overall picture which is made up of a number of ingredients. What comes before anyone goes on a xc course is key:
 - – athlete education
 - – horse education
 - – coach education
 - – officials education
 - – rules
- ▶ Have horses changed?
- ▶ Have fences changed for the worse?
- ▶ Are courses any more 'risky' than in the past?
- ▶ What has changed?

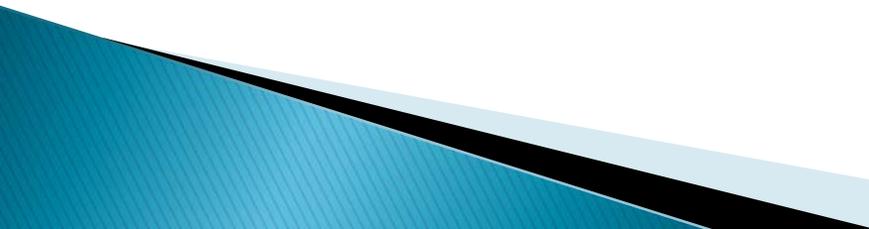
Consider.....

- ▶ Horse's intuition, is it being trained out of them?
 - ▶ Whose responsibility is it to educate athletes & officials? NFs? FEI? Others?
 - ▶ What needs to be in the athlete's and official's toolboxes to be able to prepare themselves for the sport in order to minimise risk?
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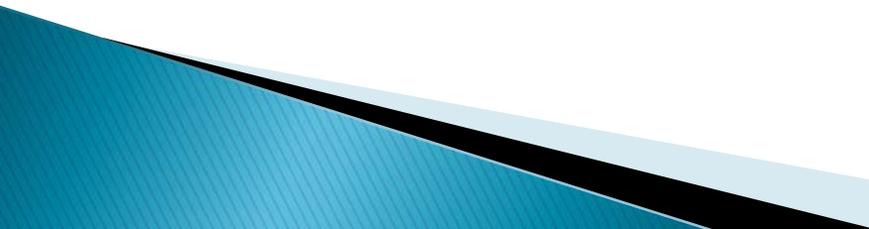
Course Design (1 of 3)

- ▶ Where are we now?
 - ▶ What have we learnt in the last few years regarding:
 - the most important elements of course design
 - the style of courses
 - any particular types of fence that are unacceptable
 - ▶ Have we plateaued in terms of what is fair to our horses?
 - ▶ Importance of lower level & national competitions
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Course Design (2 of 3)

- ▶ How do we keep the influence of the xc phase without being over the top?
 - ▶ Do we believe that the significance of the xc phase in the overall competition is still important?
 - ▶ Do we still believe that cross country is about jumping fixed fences?
 - ▶ Shape & profile of fences
 - ▶ Importance of footing
 - ▶ Use of brush – is the current trend good?
 - ▶ ‘Roundabouts’
 - ▶ Hidden fences/understanding the question
 - ▶ Bending/curving lines
 - ▶ 3 stride distances
- 

Course Design (3 of 3)

- ▶ keyholes
 - ▶ Interruptions & changes of gear
 - ▶ Mental effect on horses
 - ▶ Size of timber/rails
 - ▶ Measuring fences
 - ▶ When does a fence have top spread?
 - ▶ Leading front edges
 - ▶ Flagging of fences, corners & spreads
 - ▶ Any additional 'touches' that help horses?
 - ▶ What do horses see when jumping xc fences?
 - ▶ Course advisor programme?
 - ▶ NFs – Accredited CD structure
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Point of principle

- ▶ A fence must never be designed or built with a frangible device if the CD would not normally build it as a fixed obstacle. Frangible fences are designed to reduce the possibility of a serious fall NOT compensate for a wrongly designed or sited fence.

Do we know whether horses see colour? (1 of 3)

- ▶ I have dichromatic colour vision as it would appear they do.
- ▶ I am mainly deuteranopes, so all of the below are very correct and also quite a few of the protanopia as well. I think like me their red cone is dodgy from what everything seems to say, and i have heard a lot about there inability to see red. It would appear you can still see red without the red cone its just very muted.
- ▶ **Protanopia**
- ▶ Protanopes are more likely to confuse:-
 1. Black with many shades of red
 2. Dark brown with dark green, dark orange and dark red
 2. Some blues with some reds, purples and dark pinks
 3. Mid-greens with some oranges
- ▶ **Deuteranopes**
- ▶ Deuteranopes are more likely to confuse:-
 1. Mid-reds with mid-greens
 2. Blue-greens with grey and mid-pinks
 3. Bright greens with yellows
 4. Pale pinks with light grey
 5. Mid-reds with mid-brown
 6. Light blues with lilac

Do we know whether horses see colour (2 of 3)

- ▶ People with dichromatic colour vision have only two types of cones which are able to perceive colour i.e. they have a total absence of function of one cone type. **Lack of ability to see colour is the easiest way to explain this condition but in actual fact it is a specific section of the light spectrum which can't be perceived.** For convenience we call these areas of the light spectrum 'red', 'green' or 'blue'. The sections of the light spectrum which the 'red' and 'green' cones perceive overlap and this is why red and green colour vision deficiencies are often known as red/green colour blindness and why people with red and green deficiencies see the world in a similar way.
- ▶ All websites I find say they see colour, just a dumbed down version. Its even hard for me to know what I don't see as I can't see what's normal, its about the cones in the eye and horses have less as do I. Its like mixing paint and trying to make all the colours but not having a proper primary colours (red, blue yellow) to use eg using a dumbed down version of red and blue to try and make a version of green.
- ▶ There are a number of studies which show that colour vision deficiencies are a serious risk factor in driving. What does this imply for our horses?

Do we know whether horses see colour? (3 of 3)

- ▶ Unlike humans, which have three different types of retinal cells (blue, green and red cone photoreceptors) to detect colour, horses have only two (a blue cone photoreceptor and a second photoreceptor that is most sensitive to light and is roughly between that of the human red and green cone).
- ▶ The horse also has fewer numbers of colour detecting photoreceptors than do humans, and they are arranged differently in the retina than are human cone photoreceptors. Humans with normal colour vision typically see four basic unique hues--blue, green, yellow and red--and about 100 intermediate colours that can be thought of as varying blends of pairs of the four unique colours (for example yellow-green, reddish-yellow/orange, reddish-blue/violet) and so forth).
- ▶ The most dramatic impact of having two cone types instead of three is that horses (and some "colour-blind" humans) have only two unique hues, believed to be something similar to blue and yellow, and there are no intermediate hues. When colours at the far ends of the spectrum of visible light are mixed, the result is either a white/grey (this occurs in the blue-green range of the colour spectrum), or a desaturated version of one of the two basic hues (e.g. a pastel yellow or a pastel blue). In a sense, horses are orange-blue "colour-blind" in that although they can see objects with these colours, they cannot differentiate between orange and blue solely on the basis of colour since they both appear to be grey-white to the horse. The fact that horses also have many fewer cones in the central retina than humans do also suggests that their perception of colour may not be as vivid as that of humans and that colours appear as washed-out pastels or sepia. Nevertheless, this serves the horse's purpose.

Misc Information

▶ www.sensoryecology.com

and

▶ App:-

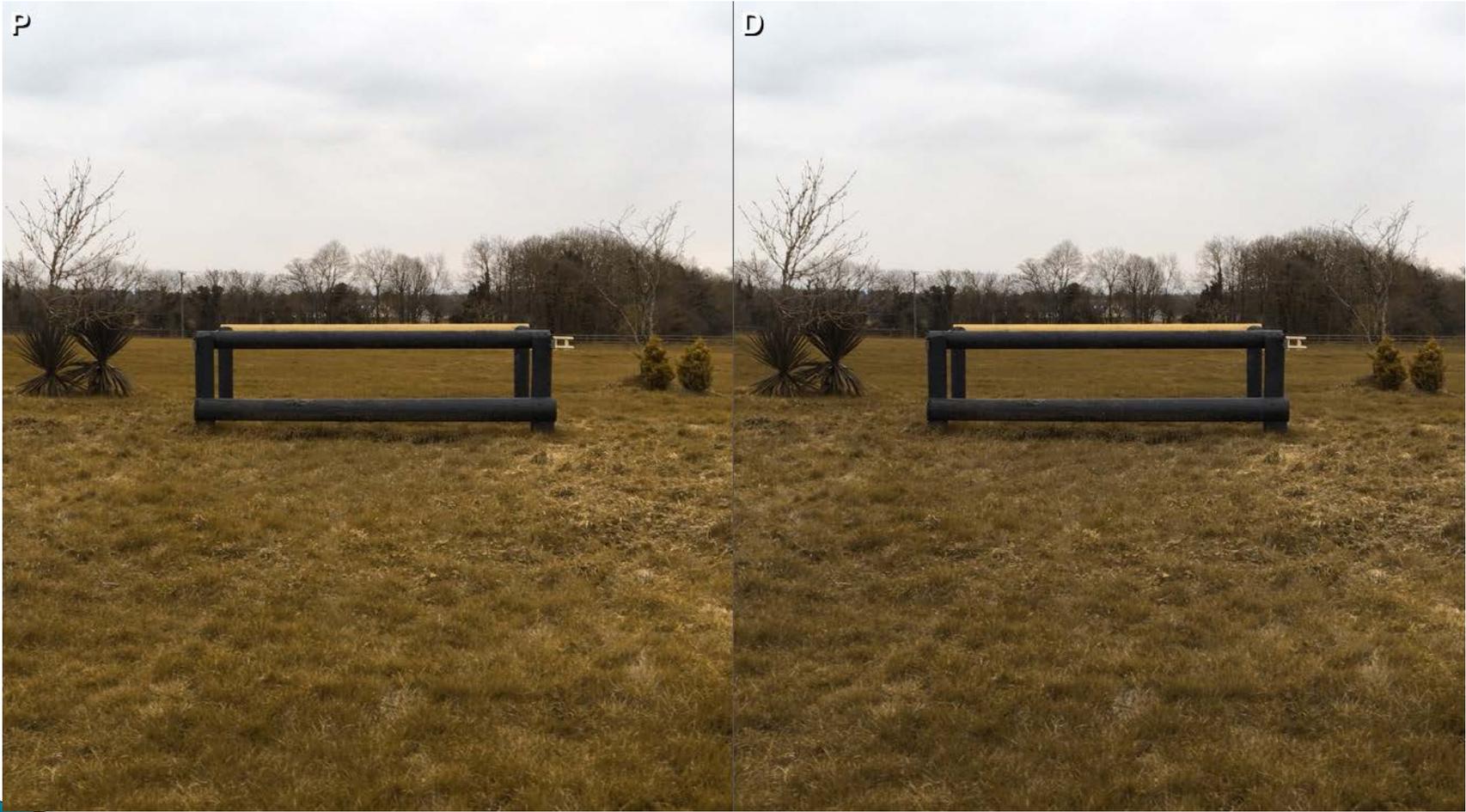
Chromatic Vision Simulator by Kazunori Asada





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Fall Rate

- ▶ Are the chances of falling that we are currently experiencing acceptable?
 - ▶ Is there such a thing as an acceptable level?
 - ▶ If so, what is it and is it acceptable that this will vary between levels?
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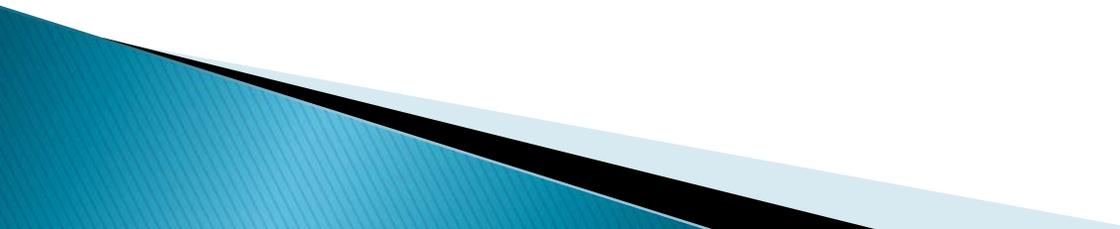
Data

- ▶ Why do we want data?
 - ▶ Are we asking the right questions in order to give us complete and accurate information that will assist with improving risk management?
 - ▶ Do we have an 'end to end' process in place?
 - ▶ Need for openness & transparency of summaries & conclusions to learn lessons as per the aviation industry
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Frangible devices & mechanisms

- ▶ Are we comfortable with using frangible devices and mechanisms?
- ▶ Do we have a responsibility to use mechanisms at our disposal?
- ▶ What are the barriers to their use?
- ▶ MIMs & pins – what have we learned?
- ▶ Do's and Don'ts when using MIMs/pins
- ▶ Standardisation of technological spec?
- ▶ Horizontal movement
- ▶ What can be done to help NFs with using pins/MIMs?
- ▶ Is there a way that ideas can be trialled safely at 1* level?

Today's ideas from NFs

- ▶ Any comments on some of the principles from what we have seen this morning?
 - ▶ Sweden rules re uprights – good philosophy?
 - ▶ Question – would it be helpful if all the ideas are in one place so that we can all see what is going on in various nations?
- 

Rotational Falls

- ▶ What more can we do to reduce these?
 - ▶ – fence design & construction thoughts
 - ▶ – new ideas?
 - ▶ – officials, especially CD, education?
 - ▶ – athlete education?
- ▶ NFs to trial new ideas at national events?

Frangible Mechanisms





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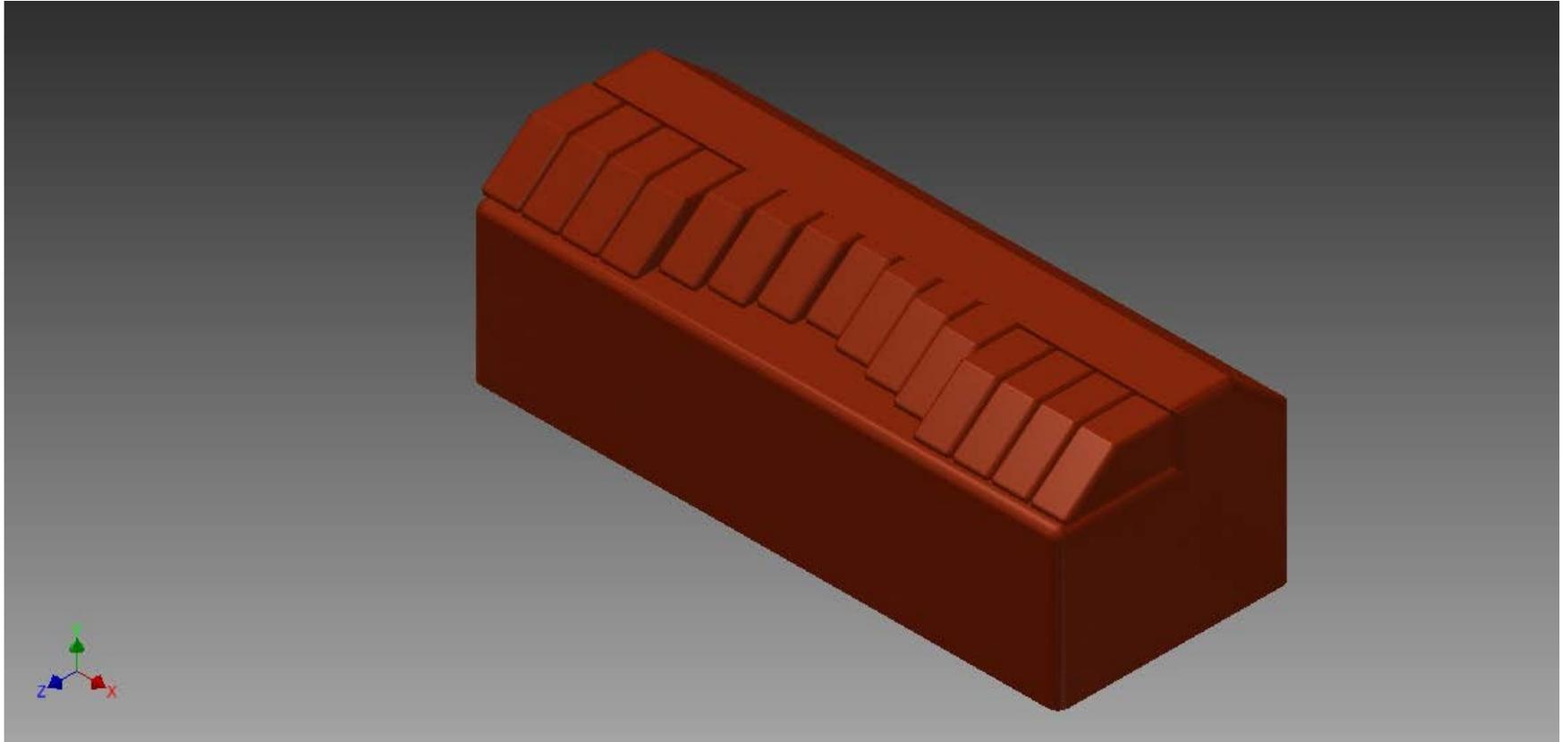




Spread with pinned back



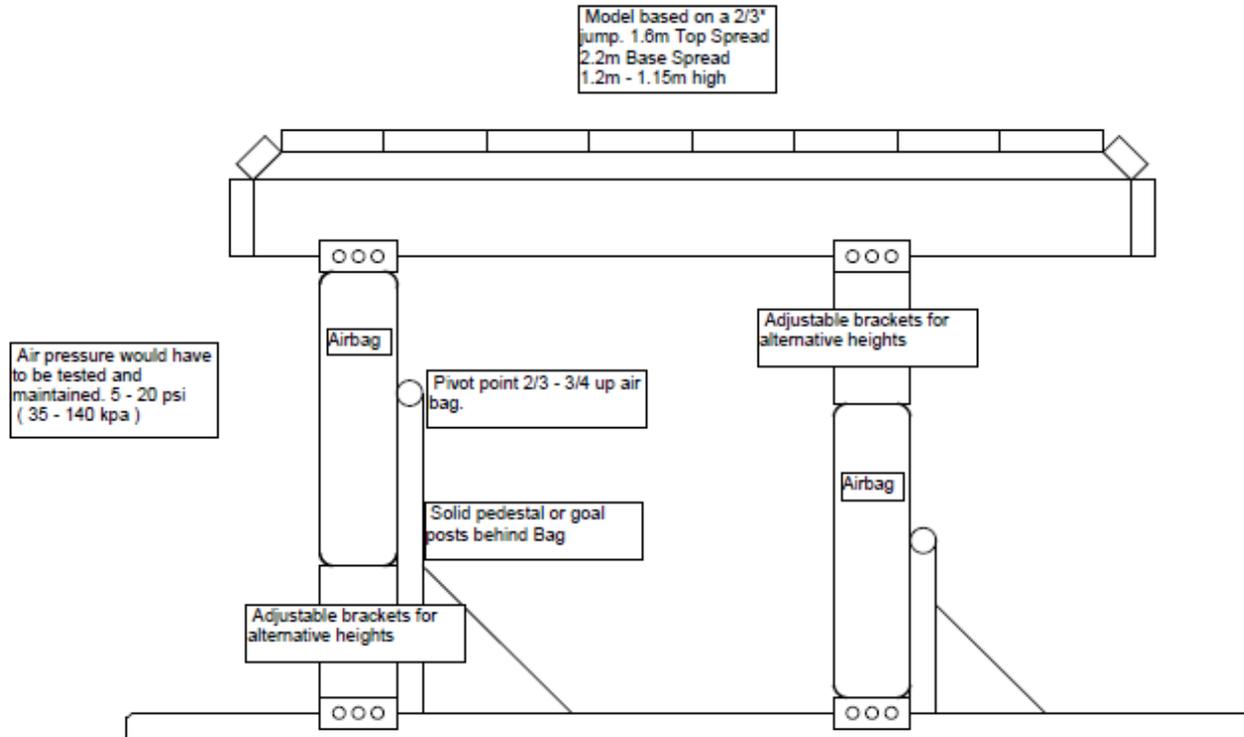
Being considered



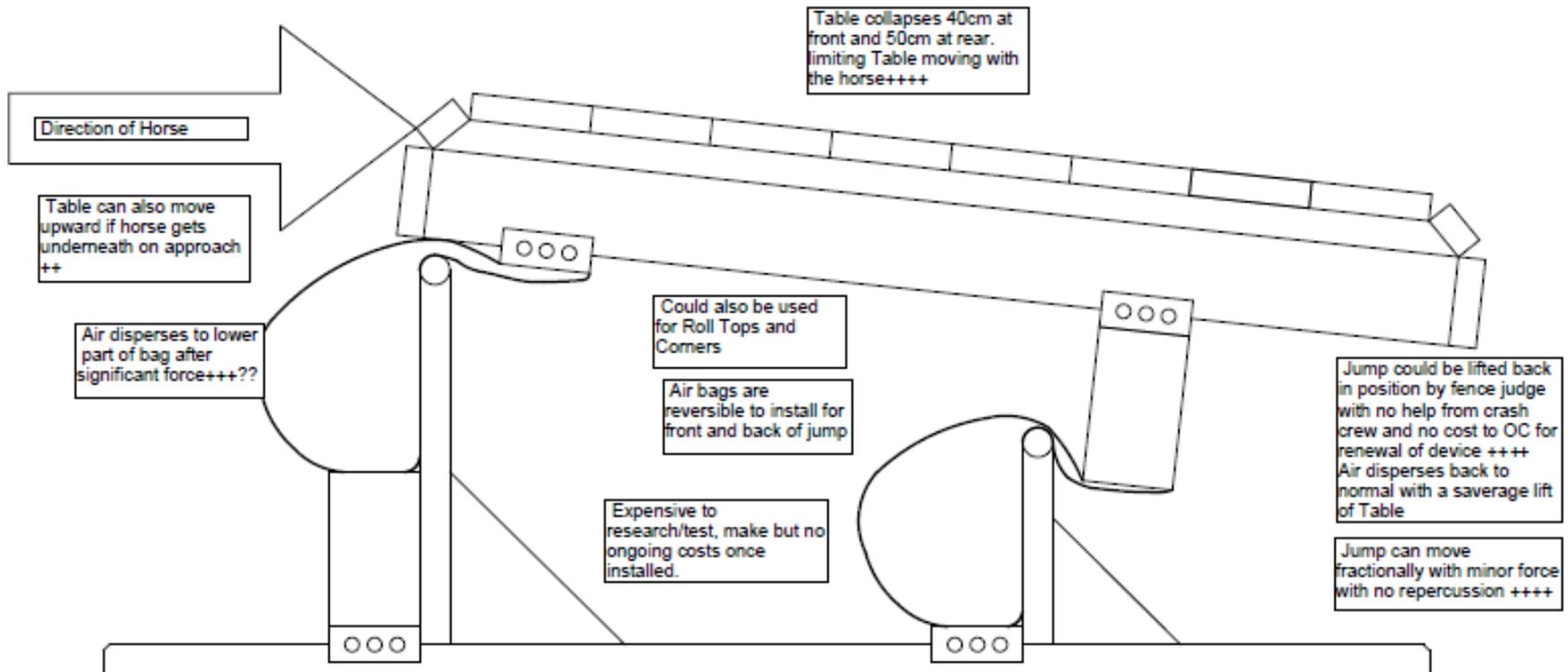
Fence air bag idea

- ▶ Some other thoughts include,
 - ▶ • Airbag could be replaced with a flexible component e.g. Rubber post
 - ▶ • Could also be used for Top Rail of Post and Rail Fences and Open Oxers
 - ▶ • A Spring could be attached to help hold the jump down once collapsed
 - ▶ • A Triangle shape could be better for Airbag or Rubber Post
 - ▶ • It would take a lot of testing and research for an approved mechanism

Fence air bag idea



Fence air bag idea



Portable pinned oxer



Portable pinned upright









Funding

- ▶ Initiatives cost money; who should pay for what?
 - ▶ Is there a way of NFs assisting each other?
 - ▶ Data collection – how can costs be minimised & is there a way that NFs be helped?
 - ▶ Fence research – how should this be funded? Where does this research take place?
- 

Jumping Phase

- ▶ Importance of
 - ▶ Does this phase have a role in risk management?
 - ▶ Are we happy with the technical rules of the phase?
 - ▶ Are our courses good enough?
 - ▶ Do we give this phase enough attention?
 - ▶ If not, what do we need to do?
 - ▶ If you fall in this phase should you be allowed to go xc?
 - ▶ Cups
- 

Misc

- ▶ More information & education on:
 - hats
 - air jackets
 - tack including saddles (design)
 - studs

Question – whose responsibility is it to do this?



Misc



Misc re athletes & officials

- ▶ Cognitive behaviour
- ▶ Importance of physical and mental preparation of athletes
- ▶ Ability to make correct decisions under pressure
- ▶ Neuroscience to improve performance

‘Good athletes let things happen, top athletes make things happen’

Dave Brailsford, Team Sky



GBR (misc)

Information

- ▶ There seems to be little or no information from the FEI available on this subject (guidelines when to use, or have to use, frangible mechanisms/devices) anywhere. I am concerned that this apparent lack of educational material is a major safety concern.

Cost

- ▶ The matter of **COST** in implementing this most important of safety technology keeps popping up as major hurdle in its use and future development.
- ▶ This must be addressed as a matter of urgency.
- ▶ simple solution as put forward by the IEOC of having the FEI set up a Safety Fund specifically to facilitate this and to ensure the implementation of and be available for any future development .
- ▶ This could easily be funded by a small starting /entry levy centrally administered.

GBR (misc)

Education

- ▶ There should also be a comprehensive practical and formal educational approach to this subject.
- ▶ A plan again has been put forward to the FEI by the IEOC to address this which I believe will be discussed by the Safety Steering Group.

Penalties Penalty points for deformable devices

- ▶ This is a very emotive subject and arguments for both sides. However, there is (as I see it) an obvious and simple solution to this dilemma. Make it compulsory to have a Damage Indicator on all systems. This would indicate if the structure has been compromised in any way and could be quickly and easily replaced prior to the next competitor, thus making it fair to all.

Thank you

Any questions?