ComBow

Here you will find soon more information about our new case study of the

Ergonomical Design of Compound Bows

used for hunting and target archery. This will be a further project in our area of "Innovative Sport and Training Equipment".

We are academically investigating the ergonomics and energy efficiency on a number of compound bows of different draw length and draw weights and simulate stresses, strains, dynamics, vibrations and shocks as well as catastrophical failure of such sophisticated sport equipment. A further focus will be given to the feasibility of arrow speeds beyond 400 feet per second.

A further objective is the vibration control / reduction of the compound bow's riser using finite element analysis.

Have a look at a basic Mechanical Event Simulaton of a Compound Bow by ALGOR.

This case study will be based on selected compound bows from well-known bow manufactureres such as PSE, Bear Archery and Hoyt.

General background information on compound bows is available on the net:

http://www.articleclick.com/Article/The-Compound-Bow-in-Archery/929922

http://www.huntersfriend.com/bowselection.htm

http://www.archerytalk.com

Video

A quick tour of the PSE archery Factory

http://de.wikipedia.org/wiki/Compoundbogen (German)

http://www.compoundbow-online.com/pages/technik/a-b-c.php (German)

to be continued ...