

## Range Limits

Our range is certificated for a maximum muzzle velocity of 3280 feet per second and maximum muzzle energy of 5160 foot pounds. For the purposes of this memo, you can ignore the muzzle energy factor as this only becomes significant in very large rifles.

We previously indicated that .17 exceeded the muzzle velocity limits and should not be used on the range. I feel we need to clarify that this applied to CENTREFIRE rifles of that calibre e.g. .17 Hornet MV 3650, .17 Remington MV 3800, .17 Remington Fireball MV 4037. All these are well in excess of the range limits.

I do not profess to be knowledgeable on the ballistics of Rimfire cartridges but I understand that a .17 RIMFIRE cartridge produces significantly less MV.

Brian Sykes has chronographed some .17 Hornady which returned an average MV of 2500 which is well within the range limits and is therefore of course acceptable.

If in doubt therefore, please contact Brian (telephone number etc.) who will be pleased to chronograph your rounds and verify that they are within our permitted limits.

Whilst on this subject, it is important that members realise that this memo is not specifically directed at .17 users but there is a need to be aware of the fact that other commonly used calibres can exceed the range limits if loaded with too light a bullet.

By way of example, a .223 with a 40 grain bullet achieves the velocity of 3674. It is only by loading a heavier bullet e.g. 50 grains, that the MV is brought down to 3200.

Similarly, with a .22 – 250 a 40 grain bullet produces an MV of 3900 and it is only by loading a considerably heavier bullet (e.g. 70 grain) that the MV is brought down to an acceptable level.

Even a .243 with a 55 grain bullet produces an MV of 4068 and it is only by loading a heavier bullet (e.g. 85/90 grain) that the MV comes down to 3000.

In simple terms, lighter bullets can be driven faster and it is important to choose the weight of your head to produce a velocity which complies with our range limits.

I am happy to provide members with the relevant velocity/energy expectations from a particular bullet weight or you can ask Brian to chronograph your load.

My information comes from Cartridges of the World 14<sup>th</sup> Edition which provides ballistic information for virtually every round (conventional calibres and wildcats).

Any problems or queries please feel free to give me a call.

Stephen Ede