



## Association of Chief Police Officers Firearms & Explosives Licensing Working Group

## Andy Marsh, Chair Deputy Chief Constable, Hampshire Police Hampshire Police Headquarters, Winchester, Hampshire, SO22 5DB (01962 871148)

19th September 2011

To Firearms Licensing Managers

Dear Colleague

## Re: Airsoft lethality thresholds

Testing has been conducted by the Forensic Science Service, (at my request following a discussion with a number of interested parties) as to the actual lethality thresholds for airsoft BB 6 mm plastic pellets (0.2 grams). This work has become necessary in the light of the Violent Crime Reduction Act since a greater focus has been given to differentiating between realistic imitation firearms (often used for airsoft skirmishing) and firearms above the lethality threshold that would fall to be considered low powered airguns (or Section 5 (1) (a) prohibited weapons if capable of fully automatic fire).

I attach a statement from the Forensic Science Service following their recent work. Whilst you will see that it has not been possible to precisely define a lethality threshold, the testing has established that there is a difference between fully automatic and semi automatic or single shot fire and, given the wording of the legislation in terms of "lethal" there would now appear to be some greater complexity in this area. However, I propose some relatively straightforward arrangements to best guide working practices.

The testing established that in respect of fully automatic fire of such pellets the energy level to achieve penetration and, therefore, potentially engage with lethality, was 1.5 joules. In relation to single shot, the necessary energy level was 2.9 joules. To describe a more or less absolutely safe threshold the FSS concluded that this would be 1 joule for fully automatic fire and 2 joules for single shot.

Of course, the testing indicates considerable margins are available in terms of the energy level and, reflecting the experience derived from current practice, it is my observation that it would be pragmatic and sensible to continue to work with arrangements that would see fully automatic airsoft firearms operating at 1.3 joules or less and those engaging in single shot modes of fire at 2.5 joules or less as not being items that we would ordinarily consider as potentially engaging the lethality threshold. Even these figures give a reasonable margin in respect of the outcome of the testing.

It is important to be aware that the law makes no distinction in this area in respect of the method by which the air or gas pressure is generated, so these considerations are equally applicable to airsoft guns that use a battery powered piston, a spring powered piston or a gas cartridge.

It should also be noted that the legislation pertinent to realistic imitation firearms applies to guns firing "paintball" missiles, such as the widely used .43" paintball. The "permitted activities" within the Violent Crime Reduction Act 2006 (Realistic Imitation Firearms) Regulations 2007 means the "acting out of military or law enforcement scenarios for the purposes of recreation". The nature of the realistic imitation firearm used for the activities is not defined, so is not automatically limited to airsoft guns. So whilst this provision is often referred to as the "airsoft defence", that title could misleadingly suggest that only airsoft guns could be covered by it. Whilst this defence might be applied to paintballing as an activity, no testing to establish the lethality threshold of a paintball missile has yet been commissioned by ACPO FELWG. Nonetheless it is clear that paintball guns are covered by the restrictions in relation to realistic imitation firearms.

In summary, I offer that it will be safe to conclude that fully automatic airsoft guns operating at 1.3 joules or less and single shot (or semi automatic) airsoft guns operating at 2.5 joules or less would not engage the lethality threshold crossing over into stricter controls under the Firearms Act. This would mean that airsoft firearms that are also realistic imitation firearms operating at or below these thresholds would, nonetheless, not be required to be sold by a Registered Firearms Dealer but that the other control provisions provided by the Violent Crime Reduction Act would apply.

Yours sincerely

Andy Marsh Deputy Chief Constable Chair, ACPO FELWG