

“MORE THAN MEETS THE EYE”

WEAPON ALTERATION - A CASE REPORT

**CAPTAIN LIOR NEDIVI
ISRAEL NATIONAL POLICE
DIVISION of IDENTIFICATION and FORENSIC SCIENCE
WEAPONS IDENTIFICATION LABORATORY**

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ABSTRACT:

This paper describes an interesting case of altering an airgun, which was design originally to discharge pellets, into a firearm capable of shooting 0.22 caliber ammunition.

INTRODUCTION:

The law in Israel prohibits any change in, or alteration of, weapons. In the case of such change, the person responsible for it risks prosecution, even if he is the owner of the weapon. The law also require us to check two factors in order to determine if a certain object is indeed a weapon:

1. Is the object capable of discharging a pellet, bullet, or any other kind of projectile?
2. Is the discharged projectile capable of killing a person?

There are no restrictions, concerning the victim's age or shooting distance from him, in regard to the killing capability. As far as the law requires it can be a day old baby shot at zero distance (contact).

In the case of airguns, we must examine them individually and check if they have lethal capability, otherwise we can not declare them as weapons.

THE CASE:

During a routine search in an apartment, two weapons were discovered. One of them was a Russian made 12 gauge shotgun and the other was an airgun of unknown caliber, make and model. The stocks and barrels, of both guns, were shortened, probably to help in concealing them.

The more interesting of the two, from examiner's point of view, was the airgun. (photos 1&2) From initial examination it appears to be an ordinary airgun, but when I tried to insert a **4.5 mm (0.177") pellet**, it fell through the bore. A more detailed examination revealed the followings:

1. The barrel bore was drilled from both ends and the original caliber was changed. The new "caliber" was measured to be approximately 6 mm.
2. The chamber was deformed as a result of the attempts to "drill out" a larger chamber. The drilling was done very crudely and the tool marks were vividly observed when using an INTRASCOPE.

3. An improvised "firing pin" had been added in front of the air piston. It was not attached to the piston but rather "floated" freely inside the piston's cylinder. (photos 3&4)

The results of this unprofessional work could also be seen on the cartridge case fired from the gun. (photos 6&7)

All the above changes made it possible for the gun to accommodate, and fire, **22 Magnum** or **22 Long Rifle** ammunition. Of course all other **0.22 caliber** ammunition could be used, but the first two are the most popular in Israel, so they were tested.

Despite the fact the firing pin did not strike directly on the rim of the cartridges, I did not have any troubles at all shooting the gun. (photo 7)

The **22 Long Rifle** bullet's velocity, at the muzzle, was measured to be approximately 120 m/s. This velocity gives the bullet enough energy to make it deadly and I was able to declare the weapon as a firearm.

The severity of the crime lies not only in the fact that the gun was altered, but also in the fact that under the Israeli law any person, over sixteen years of age, can purchase an airgun. Who ever makes such an alteration might give into the hands of a teenage a weapon which is much more lethal than the law intended.

ACKNOWLEDGEMENTS:

I would like to thank Lt. Colonel Aric Aperman for his help in scanning and editing the photos and special thanks to Major Azriel Gorski who read the article and helped me in shaping it.

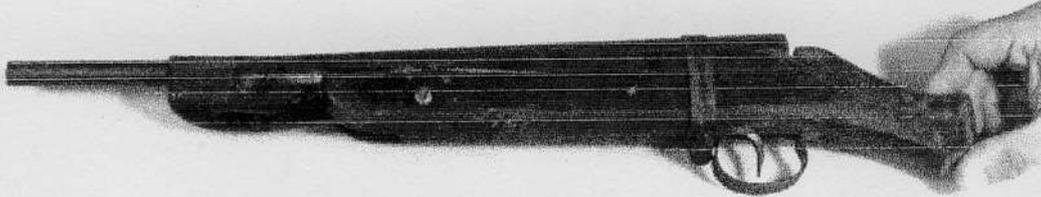


Photo 1 - Left side overall view, barrel closed.

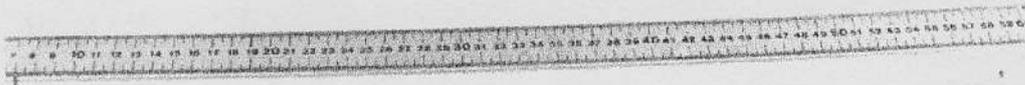


Photo 2 - Left side overall view, barrel open.

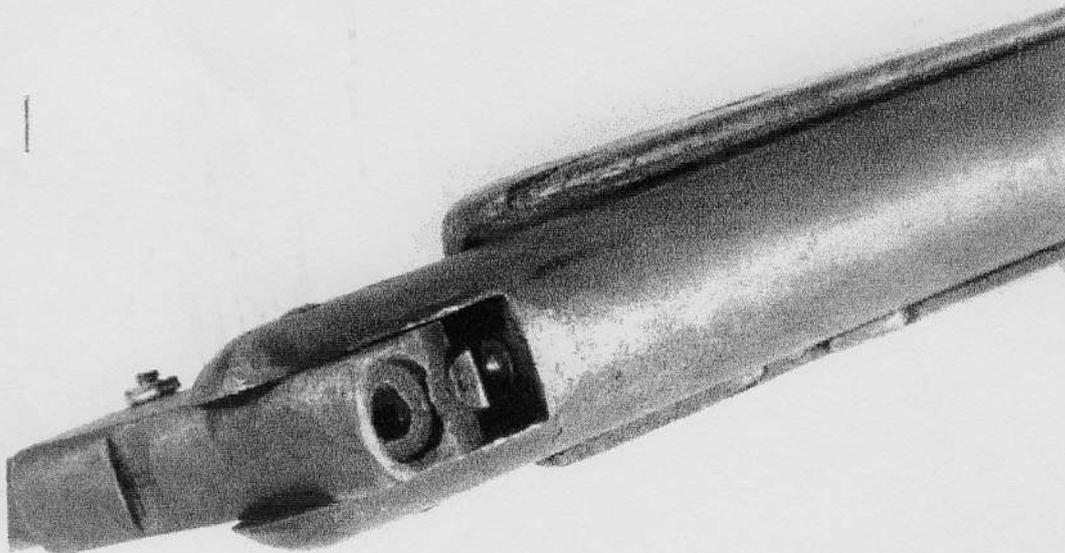


Photo 3 - The chamber and "firing pin", general view.

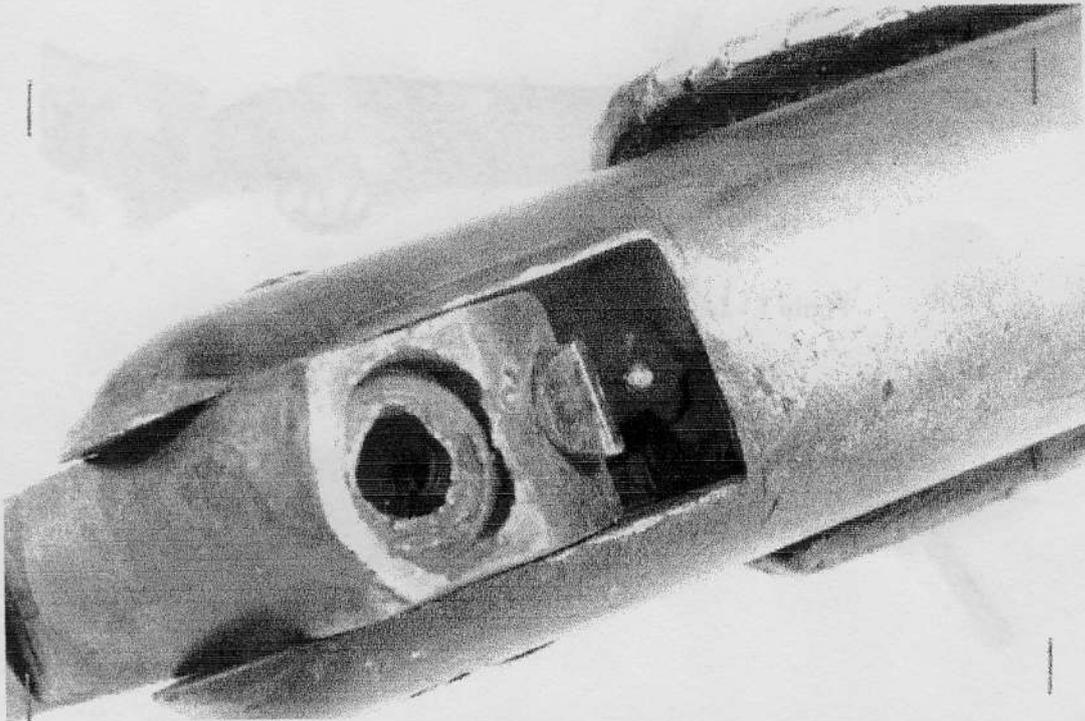


Photo 4 - The chamber and "firing pin", close view.

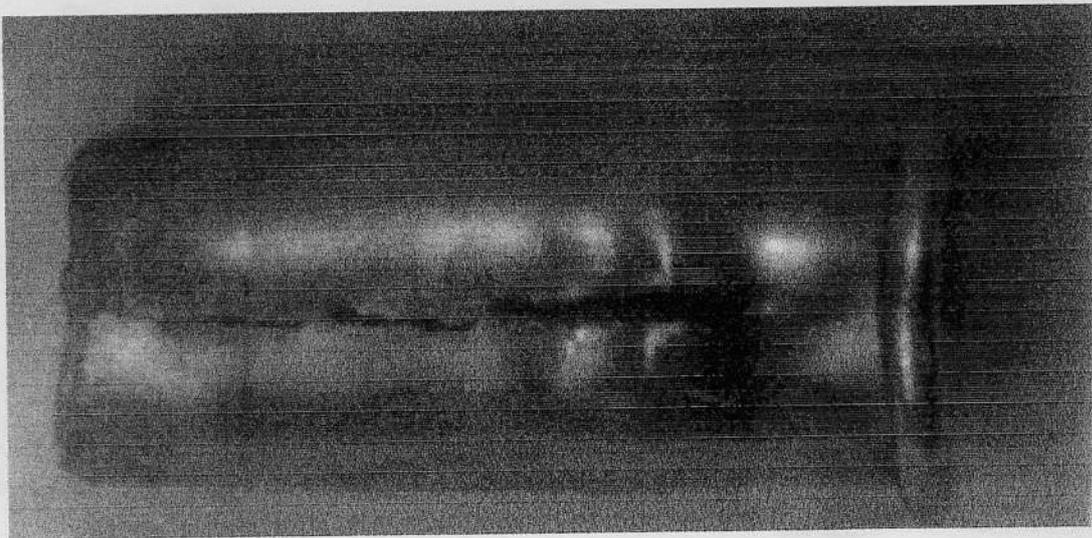


Photo 5 - Test fired cartridge case (note the longitudinal tear).

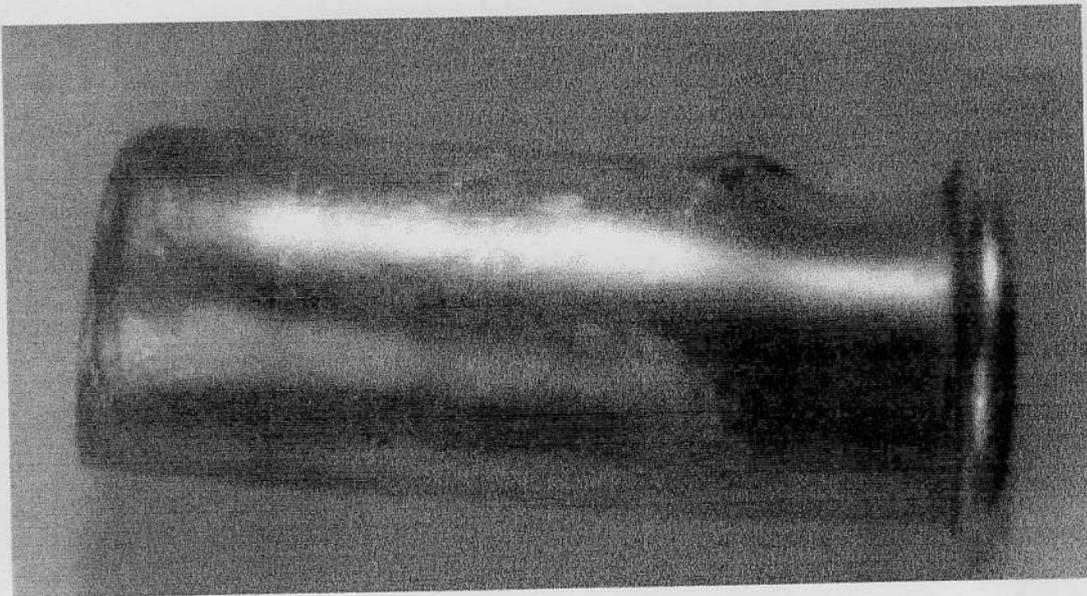


Photo 6 - Test fired cartridge case (note the deformation).

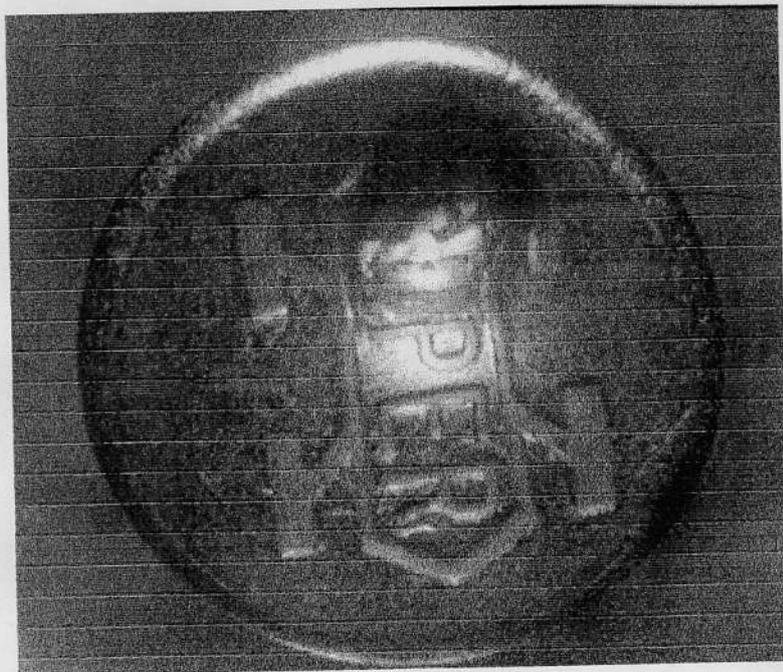


Photo 7 - The firing pin impression.