

Deputy Commissioner Michał Borusiński, Ph.D.

*Toolmark and Ballistic Department, Central Forensic Laboratory of the Police*

Henryk Juszczak, M.Sc.

*Toolmark and Ballistic Department, Central Forensic Laboratory of the Police*

## Impact of expert opinions on arms sales in Poland

### Summary

The article addresses the influence of opinions issued by experts in the field of arms research and ballistics on the Polish firearms market. Due to the lack of a certification authority for firearms placed on the Polish market, expert opinions have an impact on the qualification thereof. The problem of different classification of the same firearms model by experts and institutions issuing opinions has been identified. In some cases, the experts show a lack of understanding of the provisions of the Act on Arms and Ammunition of 21 May 1999. The article shows that such opinions are used by entrepreneurs to justify the introduction of firearms to the market without the required permit. The need to establish an institution certifying firearms introduced to the market in the Republic of Poland was also stressed.

**Key words:** firearms, revolver, pistol, opinion, law, standard, qualification, certification

In recent years, a significant influence of opinions issued by experts in the field of arms research and ballistics on the Polish firearms market has been observed. The opinions issued by experts are primarily based on the provisions of the Act on Arms and Ammunition of 21 May 1999. Additionally, experts make use of the provisions of other acts, e.g. the Act on Exercising Economic Activity in the Field of Manufacturing of and Trade in Explosives, Weapons, Ammunition and Products and Technologies for Military or Police Purposes.

At the beginning of the 21st century, KESERU K-10 and ZORAKI R1 K-10 revolvers appeared on the Polish arms trade market. Both types of weapons use separately loaded ammunition for firing. The above ammunition includes rubber or rubber-metal (composite) projectiles cal. 10 mm and Flobert side ignition alarm cartridges cal. 6 mm. The cartridge chambers in the revolver drum consist of two smaller chambers connected to each other by a fire hole. The chambers can be loaded with Flobert side ignition alarm cartridges cal. 6 mm from the side of the revolver



Fig. 1. KESERU K-10 revolver with loaded cartridges.



Fig. 2. ZORAKI R1 K-10 revolver with bullets and cartridges.

handle and with rubber or rubber-metal (composite) projectiles cal. 10 mm from the side of the barrel. When a cartridge is fired up, gases are formed as a result of the combustion of the initiating explosive pressed to the bottom of the cartridge's shell. The pressure of the emitted gases causes a bullet loaded into the same chamber as the cartridge to be ejected from the barrel.

The descriptions on the abovementioned models of revolvers show that they have been manufactured for the Polish company KOLTER.

On 5 July 2004, KOLTER received an opinion from the Military Institute of Armament Technology, in which it was concluded that "as a result of tests of percussion cartridges cal. 6 mm (originally labeled as 6 mm Flobert Platzpatronen) manufactured by UMAREX, up to 0.0459 of the initiating mixture based on lead trinitroresorcinate was found in a single cartridge. No propellants were found in the abovementioned percussion cartridges". On 20 October 2010, the Polish Forensic Association issued an opinion in which it concluded that the "ZORAKI R 1 K-10 alarm revolver cal. 6 mm No. 10000001 produced in Turkey is a 6 mm calibre firearm. Pursuant to Article 11(5) of the Act on Arms and Ammunition of 21 May 1999, no permit is required for the possession of firearms with a calibre of up to 6 mm. KOLTER has obtained several other opinions in addition.

According to the Foundation for Shooting Development, "the ZORAKI R1 revolver is a specific type of pyrotechnic airgun, in which a pyro-cartridge is used to fire a bullet, generating an acoustic wave compressing the air column behind the bullet. The ZORAKI R1 revolver should be placed in the category of shooting toys". The Foundation for Shooting Development has further emphasized that "without the phenomenon of gunpowder combustion, no shooting weapon can be considered a "firearm" under the current Act on Arms and Ammunition. The short Flobert percussion cartridges do not contain any propelling material, nor do they constitute a primer designed to be fixed inside another integrated cartridge. Therefore, they do not legally constitute firearms ammunition".

An assistant at the Department of Criminalistics of the Nicolaus Copernicus University in Toruń, in his scientific opinion, stated that "the ZORAKI R1 revolver is a shooting gadget. The abovementioned revolver cannot be classified as a firearm pursuant to the Act on Arms and Ammunition". Furthermore, he pointed out that "the revolver uses Flobert 6 mm cartridges. These cartridges contain only the initiating material, not the propelling one. The ZORAKI R1 revolver is closer to a pneumatic weapon than to a firearm".

On the basis of the above opinion, KOLTER started the sale of the above revolvers to the persons without the appropriate permit. Additionally, the company started the sale of other models of revolvers with identical principles of operation and construction,

e.g.: MATEJA – SHOTGUM, EKOL Viper, also without requiring permits.

In the light of Article 7(1) of the Act on Arms and Ammunition of 21 May 1999 "firearms are any portable barrelled weapon that expels, is designed to expel or may be converted to expel one or more projectiles or substances by the action of a propellant".

In the opinion of the CLKP (formerly CLK KGP), the revolver models analyzed meet the requirements of the above definition of firearms. In the case of the above models, the projectile propellant is the initiating explosive which is contained in the Flobert side ignition alarm cartridges cal. 6 mm. In accordance with Article 7(3) of the Act on Arms and Ammunition of 21 May 1999 "an alarm weapon is a reusable device which, as a result of the action of compressed gases resulting from the combustion of a propellant, produces an acoustic effect, and which expels from a barrel or an element replacing it, a substance capable of hitting target at a distance of not more than 1 meter". According to the CLKP (formerly CLK KGP), the revolver models analyzed do not meet all the requirements for alarm weapon as they are capable of firing from their barrels the 10 mm cal. projectiles that may strike targets at distances of more than 1 meter from the barrel outlet.

Therefore, the Department of Permits and Concessions of the Ministry of the Interior initiated an investigation in connection with the sale of ZORAKI K-10 revolvers by KOLTER to unauthorized persons.

On 24 April 2012, KOLTER received an opinion from the Polish Forensic Association in which it was concluded that "there are fundamental differences in construction between the ZORAKI R1 revolver and the KESERU K-10 revolver, which eliminate the possibility of easy adaptation of the ZORAKI revolver to shooting integrated ammunition containing projectiles". This is mainly due to the introduction of the tilting of the drum into the ZORAKI R1 revolver construction, which makes it impossible to drill through the drum". Moreover, research conducted by the Polish Forensic Association indicates that "the bullets expelled from the ZORAKI R1 revolver have a kinetic energy, which in no case reaches 17J".

On 28 May 2012, the Department of Permits and Concessions of the Ministry of the Interior sent a letter to KOLTER with information that the licensing authority, after a thorough analysis of the submitted materials, accepted the company's explanations along with the opinions presented and completed the investigation concerning the sale of ZORAKI K-10 revolvers. The above letter was issued despite the fact that the opinion of the CLK KGP has not changed, still including ZORAKI K-10 revolvers as firearms for which a license is required. After the issuance of the aforementioned letter, the companies not only continued to sell ZORAKI K-10 revolvers, but, additionally, started to sell weapons operating

on similar principles to persons without relevant permits.

On 22 March 2013, the Bureau of Prevention of the General Police Headquarters (KGP), in its letter No. ENS-1389/13, took the view that ZORAKI K-10 revolvers and other weapons operating on similar principles are considered to be firearms for which a permit is required. Despite this position of the Police, companies trading in arms on the Polish market continued to sell ZORAKI K-10 revolvers and other weapons operating on similar principles to persons who did not hold relevant permits. Persons purchasing the above weapons without a permit exposed themselves to possible allegations of illegal possession of firearms in the event of contact with the Police.

A similar problem with the sale of firearms to unauthorized persons also applies to WALTHER P-99 and WALTHER P-22 pistols.

According to the CLKP, WALTHER P-99 and WALTHER P-22 are gas firearms which, under the provisions of the Act on Arms and Ammunition of 21 May 1999, require a license.

In its letters No. ZT/96/2012 of 31 May 2012 and No. ZT/127/2012 of 14 August 2012 to the KOLTER company, the Institute of Precision Mechanics in Warsaw, referring to the Polish Standard No. PN-V-01016, expressed the opinion that the WALTHER P-22 and WALTHER P-99 pistols using P.A.K. percussion ammunition cal. 9 mm, are classified as alarm weapons with a calibre of up to 6 mm, which do not require a permit, and that the purchase and possession of P.A.K. alarm ammunition cal. 9 mm does not require authorization either. The absence of a definition of the calibre in the Act on Arms and Ammunition of 21 May 1999 has been causing the experts to refer to other sources when evaluating the calibre of firearms. Based on the above opinions of the Institute of Precision Mechanics, KOLTER started selling WALTHER P-22 and WALTHER P-99 pistols to unauthorized persons.

The Polish Standard No. PN-V-01016 of July 2004 contains definitions of: small arms, small arms barrel, small arms barrel line, and small arms calibre. According to paragraph 2.1.4 of the PN-V-01016, small arms are “barrelled weapons designed, inter alia, for self-defence, enforcing obedience, combating single and group live targets, equipment and means of fire, etc., compatible with ammunition with a calibre of less than 20 mm (with the exception of certain specialized small arms). According to paragraph 2.3.29 of the PN-V-01016, a small arms barrel is “the essential element of small arms (2.1.4) inside which the projectile is given speed and direction of movement during the firing process”. Paragraph 2.3.47 of the PN-V-01016 defines a small arms barrel line as “the longitudinal opening of the barrel of small arms (2.3.29) from the inlet to the outlet of the barrel, serving the purpose of positioning the cartridge and guiding the projectile through the barrel”. According to paragraph 2.3.58 of the PN-V-01016, a small arms calibre is “the smallest diameter of the guiding part of a small arms barrel line (2.3.47) expressed in millimeters or inches”.

It follows from the above definitions that the calibre of small arms is the smallest diameter of the projectile guiding part of the barrel line. Thus, the above definition of calibre does not apply to gas and alarm weapons, whose design prevents the projectiles from being fired (due to partitions factory mounted in the barrel line and in the chambers of the cartridge drum). The calibre of the gas and alarm weapon corresponds to the calibre of the ammunition used, e.g. cal. 8 mm, cal. 9 mm P.A., cal. 9 mm P.A.K.

According to Article 7 of the Act on Arms and Ammunition of 21 May 1999, “(...) a firearm is any portable barrelled weapon that expels, is designed to expel or may be converted to expel one or more projectiles or substances by the action of a propellant”.

The WALTHER P-99 and P-22 pistols comply with the above statutory definition of a firearm, as their barrels can be used to expel chemical incapacitating



Fig. 3. WALTHER P-99 pistol – left view.



Fig. 4. WALTHER P-22 pistol inside the factory packaging.

agents due to the pressure of gases generated during the combustion of the propellant contained in the alarm and gas cartridges cal. 9 mm P.A.

According to the Polish Standard No. PN-V-86005 of October 2000, a gas weapon is “a device made in the form of a revolver, a pistol or in other shape, used to expel chemical incapacitating agents at a distance and to produce acoustic effects with the use of a propelling charge”. According to the Polish Standard No. PN-V-01016 of July 2004, gas small arms are “small arms used to expel chemical incapacitating agents and to produce acoustic and visual effects”.

WALTHER P-99 and P-22 pistols meet the above definitions of a gas weapon, because their barrels can expel chemical incapacitating agents at a distance and an acoustic effect (bang) can be produced as a result of the action of the propellant contained in the pistol gas cartridges cal. 9 mm P.A.

The CLKP is of the opinion that WALTHER P-22 and P-99 pistols are gas weapons with a calibre of 9 mm (above 6 mm), whose possession and possession of ammunition thereto, in accordance with the provisions of the Act on Arms and Ammunition of 21 May 1999, requires a permit.

Persons who acquire such weapons and ammunition without a permit expose themselves to possible allegations of illegal possession of firearms and ammunition in the event of contact with the Police.

The above analysis shows that expert opinions have an impact on arms sales. Opinions issued on behalf of KOLTER (presented above) resulted in unjustified sales of KESERU K-10, ZORAKI K-10, MATEJA, EKOL Viper revolvers and WALTHER P-99 and P-22 pistols to persons without appropriate permissions, and thus in an increase in the number of the above mentioned models of weapons among Polish citizens.

A solution to the problem of different qualifications of the same model of firearm by experts and institutions issuing opinions would be to establish an institution certifying the firearms marketed in the Republic of Poland.

**Sources of figures:** *authors*

*Translation Rafał Wierchośławski*