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Change in the construction of improvised firearms during the last 30 years

Summary

The article presents the methods for converting combat firearms to alarm firearms and vice versa. Described are the changes in improvised firearms used for the purpose of criminal activity in Poland, occurring over the years. Until 1989, criminal activity primarily involved the use of entirely improvised weapons. In the following years, the weapons that were self-converted on the basis of factory-made units appeared more and more frequently.

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By the time of political transformation in Poland in 1989, the most commonly encountered firearms were entirely improvised. The constructions of such weapons were relatively simple, i.e., involving the tube serving as the barrel, cock, cock spring, chamber bolt and trigger. These parts were assembled together by welding and screwing. At that time, improvised firearms were mainly used by poachers. Other types of firearms, in use until 1989, involved the units improvised on the basis of weapons of World War II, hidden by the partisans fighting the German occupants as well as the people's government newly established in the aftermath of war. A large percentage of these weapons were sawed-off MAUSER and MOSIN rifles.

It should be noted that in the period between the end of World War II and the political transformation in 1989, public access to firearms was very limited. Only after 1990, there was a rapid increase in the quantity of firearms available on the Polish arms market. The firearms were most frequently imported from Western countries. During this period, gas-alarm guns began to enjoy great popularity in Poland. At the same time, the illegal inflow of gas pistols from Germany to Poland was initiated. These pistols were converted into combat firearms capable of firing live ammunition, i.e., containing projectiles. The self-conversion of gas pistols consisted most often in replacing the original barrel that did not allow firing projectiles (due to the partition

mounted inside the barrel bore) with a handmade, threaded, projectile-compatible barrel. Among the most commonly converted gas pistols were: WALTHER PPK and RÖHM RG 800 cal. 8 mm (fig. 1). In these weapons, the original barrel was replaced with a 6.35 mm cal. barrel with left-hand threading. The conversion allowed firing Browning 6.35 mm pistol cartridges. These pistols also had an externally threaded end of the barrel, which allowed for mounting a suppressor. The improvised WALTHER and RÖHM gas pistols equipped with suppressors were used in fights between various criminal groups emerging in Poland. If at the beginning, the same gun could have been used repeatedly to commit crimes, then at a later period, it was intended for a single use only and has not reappeared in terms of criminal activity thereafter.



Fig. 1. Improved RÖHM RG 800 gas pistol cal. 8 mm with a suppressor.



Fig. 2. Side view of a "firing pen".

In parallel with these guns, a large number of improvised weapons in the form of so called "firing pens" appeared on the Polish market (fig. 2, 3). The name of these firearms derives from their similarity to writing pens. The majority of "firing pens" were 100% self-made. Other constructions present on the market at that time involved the casings of the devices used for launching signal flares. In this case, the device intended to fire signal flares was assembled with a self-made barrel cal. 5.6 mm. The "firing pens" were compatible with 5.6 mm side ignition (rimfire) cartridges. Occasionally, criminal activity in Poland involved the use of "firing pens" that were compatible with Browning cal. 6.35 mm, Browning cal. 7.65 mm, or Makarov cal. 9 mm pistol cartridges. Some of these devices had a barrel with left-hand threading. After 1990, there were also other types of improvised weapons observed in Poland, e.g. in the shape of the pipe, mobile phone or walking stick. These devices were adapted to 5.6 mm rimfire cartridges, because at this small caliber, they did not cause an excessive recoil effect (pulling a firearm out of the shooter's hands).

Recently, in the Czech Republic and Slovakia, firearms have been manufactured that enable firing alarm cartridges of different calibers. They are produced on the basis of weapons capable of firing integrated cartridges (casing integrated with projectile). The conversion of firearms from live to alarm ammunition consists in mounting the pins inside the barrel that



Fig. 3. Disassembled "firing pen".



Fig. 4. Side view of a GRAND POWER K22F pistol cal. 6 mm.

prevent loading and shooting integrated cartridges. One of the pins is mounted at the height of a chamber to prevent loading. The following handguns were submitted for testing to the Central Forensic Laboratory of the Police (CLKP): GRAND POWDER K22F pistol cal. 22 mm, M57 pistol cal. 7.62 mm, CZ 70 pistol cal. 7.65 mm, CZ 85 B pistol cal. 9 mm. Combat firearms converted to alarm firearms carry the inscriptions "Blank Cvicny", "Cvicny" or "SALVE BLANK" on their surfaces. In addition to the above markings, also the last two digits of the year in which the conversion took place and the manufacturer's identification symbols are applied onto the surface of the converted alarm firearms. These weapons are sold on Czech and Slovak markets without the requirement for a permit. It should be noted that in Poland, the possession of this type of firearms requires an authorization. Alarm weapons are legally purchased in the Czech Republic or Slovakia and illegally imported into Poland, where they are converted to firearms capable of firing integrated cartridges. There are several methods for the conversion. The examples of improvised alarm handguns converted to combat units as part of a study carried out in the CLKP are shown below.

An exemplary unit submitted for testing was a GRAND POWER K22F pistol (fig. 4) with a barrel carrying three pinholes (two of them at the height of a chamber), which originally were filled with pins preventing the firing of integrated cartridges. After removing the pins, the pinholes were threaded and



Fig. 5. View of barrel pinholes closed with screws.



Fig. 6. Side view of a CZ 70 pistol cal. 7.65 mm.

closed with M4 screws (fig. 5). In the case of this handgun, the magazine was glued to the frame. The test gun was capable of firing Flobert rimfire cartridges cal. 6 mm. and Flobert rimfire alarm cartridges cal. 6 mm. Improvised, compatible cartridges were secured and delivered together with the above unit. These cartridges were made by affixing a bead with a diameter of 5.6 mm to the apical part of a part of the Flobert rimfire alarm cartridge cal. 6 mm.

Another unit submitted for testing to the Firearms Examination and Ballistics Unit of the CLKP was a CZ 70 pistol cal. 7.65 mm (fig. 6). From the inscription on the weapon: "SALVE BLANK 13 KKArms" it could be inferred that in 2013, it was factory-converted to an alarm pistol. Next, it was self-converted back to combat firearm by mounting a 7.65 mm barrel with an unobstructed, threaded bore, which allowed firing Browning cartridges cal. 7.65 mm.

Next unit tested in the CLKP was a M57 pistol cal. 7.62 mm (fig. 7). The inscription on the weapon: "Cvicny 14" reveals that that in 2014, it was factory-converted to an alarm pistol. The test gun was self-converted back to combat firearm by mounting an



Fig. 7. Side view of a M57 pistol cal. 7.62 mm.



Fig. 8. Side view of a CZ 85B pistol cal. 9 mm.

insert with an unobstructed, threaded bore inside the barrel, after which it attained capability of firing type 30 pistol cartridges cal. 7.62 mm.

Another handgun tested by the CLKP experts was a CZ 85B pistol cal. 9 mm (fig. 8). The inscription on the weapon: "Cvicny Blank" suggested that it was factory-converted to an alarm pistol. Next, the test gun was self-converted back to combat firearm by mounting an insert with an unobstructed, threaded bore inside the barrel, after which it attained capability of firing Parabellum (LUGER) pistol cartridges cal. 9 mm.

The experts of the Firearms Examination and Ballistics Unit of the CLKP have been more and more frequently dealing with combat firearms that have been converted to alarm firearms in the Czech Republic and Slovakia. An exemplary weapon of this category is a COLT M1911 A1 pistol cal. 45ACP (fig. 9). During the factory conversion, two pins were transversally mounted inside a threaded barrel bore (one of them at the height of a chamber). The addition of two pins made the handgun capable of firing alarm (blank) cartridges cal. 45ACP. Because the pin diameter is 4 mm, the weapon is also compatible with pistol pellet cartridges

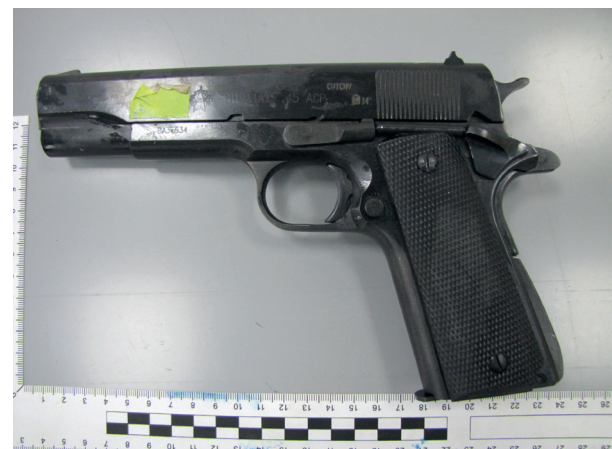


Fig. 9. Side view of a COLT M1911 A1 pistol cal. 45ACP.

cal. 45ACP. According to the provisions of the Arms and Ammunition Act of 21 May 1999, the above handgun (factory-converted into alarm weapon) is considered a firearm, whose possession requires an authorization.

Nowadays, the weaponry that is 100% improvised, is only occasionally submitted for testing. Most frequently, forensic firearms and ballistics experts are dealing with factory-made units, which were subsequently self-converted.

Sources of figures: author

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