

# **Police School in Katowice**

## **Description and the use of pistol P – 83 Ed. II**

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**Publisher  
Police School in Katowice  
2009**

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Print: Police School in Katowice

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## 1. Historical background P-83 pistol

Work on modern guns, which could replace the P-64 started the Military Institute of Armament Technology (dawn) in Zielonka near Warsaw at the beginning of the 70s Prototypes were built with large magazines capacity and pioneering molded aluminum shells, then polymer<sup>1</sup>.

The official launch of the bosses of the Ministry of Development and WdroŜeń National Defense Program targeted under the code name "Wanad", allows for the separation of adequate financial resources for development and rapid implementation of he work design. Because at the end of 1977, production of P-64, no military 9 mm caliber pistols, work on a new gun was commissioned in the second mid-70s Research and Development Center to the Metal Works "Lucznik". Gen. Walter in Radom. The work took two construction teams which joined the project implementation and execution of technical documentation prototypes.



Figure 1. 9 mm semi-automatic pistol P - 83 WANAD

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<sup>1</sup> L. Erenfeicht Z. Gwozdz, *P-83 child of his times*, "Shoot" 2009, No. 3, p. 22

From the outset the assumption that the weapons will be produced by modern methods, with wide use of oil and solder extrusions. It was to be a way of lowering weapons' weight, materials consumption, and time-consumption compared to the P-64. The first team, led by engineers Richard Chelmicki and Richard Michalski, was a pistol with an aluminum frame and a classic external safety trigger-shock blocking device. The second team, headed by B. Sc. Marian Gryszkiewicza, also adopted the concept of implementation of the core groups of the weapons - the buckle and skeleton - by pressing and soldering, but with steel sheets<sup>2</sup>. In addition, auto safety system in the form of internal trigger, self-locking trigger needle, as the only safeguard weapons in connection with the lever to slow releasing tight cock.

After the tests, the pistol Chelmicki built did not pass<sup>3</sup>. Further tests and work realization addressed only with Gryszkiewicza's skeleton gun of steel sheets and the internal safety, controlled trigger with the domestic designation "model 1978 (P-78)".

Representatives of the Ministry of National Defense, which handled the gun for evaluation, indicated the following observations: weapons should be smaller, similar dimensions to the construction of Makarov PM Pistol Soviet production, and recommended the use of an external safety mechanism.

These recommendations have been implemented, and the factory "Lucznik" joined implementation of successive prototypes of the new pistol. At the same time trying to link Radom both concepts in the work carried out jointly by drivers the two teams and engineers Chelmicki and Gryszkiewicza, which resulted in implementation of the new prototype: a pistol P-78A1. It was a weapon model Gryszkiewicza somewhat reduced in size, but it is the backbone of aluminum extrusions. The skeleton of the

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<sup>2</sup> Tams, p. 24

<sup>3</sup> How to write Erenfricht L., Z. Gwozdz, "(...) skeleton Chelmicki (prototype weapons-note. Aut.) Was be pressed from sheet aluminum. This was doubly an innovative method, since so far no one combined extraction and application of light alloys in the manufacture of weapons. This national technical innovation has proved to be a typical step <<o bridge too daleko>>. Aluminum skeleton and the skeleton extrusions are soldered to the two concepts of advanced technology weapons, but their combination did not get the health potential successor to the P-64 ". Tams, p. 24

prototype, after putting hundreds of shots burst. The idea of constructing an aluminum Wanad was dropped.

After this event, the implementation of the project remained Gryszkiewicza pistol. In 1978 he created two more versions of weapons designated as P-78 Model "A" and P-78 model "B". Pistol P-78A had an internal safety, automatic hammer firing pin, released by pressure on the trigger, and terminating in the external lever to stop and release the hammer from the rear position, stocked the performances of the release of the faucet and allowing the slow departure of the backrest on tooth safety.

The engineer judged that the mechanism of the P-78A will be convenient in the use of police and special units, where there is a need for speed in the use of weapons. Such innovation was not accepted by the Ministry of Interior or the Defense.

MON-acceptance on the other hand has been a model P-78B, which has a wing-like adjustable external safety, and releases the blocked firing pin when on it tight cock. The P-78B combined solution from two pistols Walther PP and PP Super, namely, created an adjustable safety blocked spire. Rotated flap pin safety before the release of the cock reduction rear end of the spire, bringing it out of the way this part of the head of the cock, which normally that in her hit. The head of the cock has to choose, which hides the end of reduced spire, preventing contact between the hammer and the firing pin.

This model has been classified into mass production and military equipment as "9 mm pistol military model of 1981 (P-81)".

After many disurbances, socio-political storm caused by imposition of martial law, the decision of military authorities renamed pistol on the "model 1983" - in short, "P-83"<sup>4</sup>.

Serial production started from the party, launched a prototype in 1984 and lasted, with brief intervals, until the liquidation ZM Lucznik, SA in 2000, These 16 years of production amounted to P-83 position produced najdłuŝej pistol in the history of Polish zbrojeniówki<sup>5</sup>.

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<sup>4</sup> Tams, p. 28

<sup>5</sup> Tams, p. 30

## 2. Fate Data - Technical P-83 pistol. Sections P-83 pistol



Figure 2. Pistol P-83 – building blocks

P-83 operates on the principle of free slide recoil. It consists of four main groups with a partial breakdown of the weapon: the skeleton, the slide, recoil spring, and magazine. Partial assembly and disassembly is easy. Band connecting all parts of the gun is the skeleton, forming one whole shank and a rigid ejector. The skeleton contains a fixed barrel, guide lock, grip magazine well, trigger and trigger guard. The barrel is threaded into the frame and retained by a pin. On its outer surface is the return spring. The slide includes a barrel full of her travel. Incrementally uploaded a cartridge into the chamber, close the inlet of the barrel (by force of inertia), draws its case or cartridge through resilient lift, tightens the spigot back up to the tooth coupling Kurkowego, disconnects the trigger rail performance with a latch chanterelle and security controls



pistol against premature firing a firearm. On the upper surface of the slide placed mechanical firearm solid ties and the rear sight szczerbinkowego. Power pistol ammunition is held in a box magazine with a capacity of 8 rounds. Gun has a Kurkowego type shock mechanism, with an external hammer and trigger mechanism Walther samonapinaniem system with much less than the P-64 (30 N) force samonapinaniem cock. Trigger mechanism includes breaker (to keep fire only a single), whose role is performance rear of the bus drain. Securing weapons against accidental snap implemented fuse with adjustable butterfly, while fulfilling the function of Kurkowego retarder. Security is possible both at the kurku slow and tight. Rotating the safety lever to the top results in reduction and immobilization needle in such a way that its motion is impossible longitudinal (mechanical lock) and the clumping of the hammer, as it moved down needle head is on straight wyślóbia cock. In addition, the lowering is release lever faucet, which blocks the trigger and the trigger bus, uniemożliwiając giving a shot by double-action and exempts from the back cock position if it was tight security at the time. The pistol is equipped with a lever that secures the weapon from accidentally firing a firearm in the event of impact on the hammer is located in the forward position. An additional element increasing operational safety is the presence of a cartridge chambered indicator.

A latch secures the weapons slide after firing the last bullet the magazine, which, retains the slide in the back position. Pressing the latch causes the slide to return to the forward position and the introduction of a new cartridge into the chamber.



Figure 3. P-83 pistol – the basic components

1) magazine, 2) magazine latch, 3) trigger guard, 4) bumper, 5) trigger, 6) frame & barrel, 7) barrel with chamber, 8) slide lock lever, 9) ejector, 10) hammer, 11) return spring, 12) slide.



Figure 4. Pistol P-83 Slide from the safety lever view

1) slide lock detent, 2) safety lever, 3) front sight, 4) rear sight, 5) cartridge indicator.

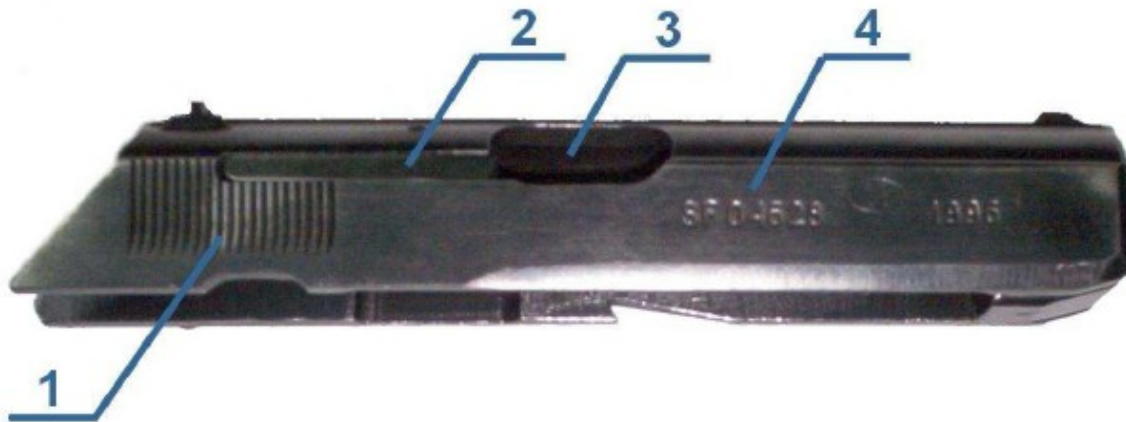


Figure 5. P-83 pistol Slide from the window extraction view

1) slide-knurled portion, 2) extractor assembly, 3) the extraction window, 4) the number, and a series of weapons and year of manufacture.



Figure 6 Cross P-83 pistol - the individual elements

- 1) slide, 2) recoil spring, 3) frame & barrel, 4) bumper, 5) bumper latch,
- 6) spring, 7) pin, 8) grips, 9) grip screw, 10) firing pin, 11) firing pin spring,
- 12) rear sight, 13) safety, 14) safety detent, 15) safety detent spring, 16) extractor,
- 17) extractor pin, 18) extractor spring, 19) trigger bar, 20) trigger bar spring,
- 21) lever Security\*, 22) springs, 23) safety lever pin\*, 24) catch the cock\*,
- 25) axis of the ratchet tap\*, 26) slide lock lever pin, 27) hammer, 28) hammer pin,
- 29) hammer spring, 30) hammer strut, 31) sear\*, 32) pin\*, 33) sear spring\*,
- 34) disconnecter\*, 35) slide lock lever, 36) slide lock lever spring, 37) trigger,
- 38) trigger pin, 39) trigger return spring, 40) magazine latch, 41) magazine housing,
- 42) magazine follower, 43) magazine spring, 44) magazine base

## **Fate DATA - SPECIFICATIONS:**

### **Dimensions:**

- Overall length (mm)	165
- Height (mm)	125
- Width (mm)	30
- Barrel Length (mm)	90
- Sight Radius (mm)	120

### **Weight:**

- Pistol with empty magazine (g)	730
- Magazine empty (kg)	0.05

### **Other:**

- Cartridge	9x18 mm Makarov
- Mass of the cartridge (g)	9.7
- Mass of projectile (g)	6
- Muzzle velocity of recommended projectile (m/s)	312
- Security: lock tongues, release and lock the cock	
- Magazine capacity (rds)	8

**3. Differences between the guns, P-64 and P-83**  
(not taking into account tactical and technical data)

**P - 64**

Indicator for the presence of a cartridge on the back of the slide.

Element connecting the slide with the frame - bail.

Slide locks in the rear position - Ejector (back wall).

Ejector - mobile.

Safety lever position for Fire - Top

Safety Features:\*

- disconnected from the latch trigger bus
- cock, immobilization and needle enclosure
- her special appearances, automatic
- release the cock from the rear position
- position front, sterile tongue movement
- trigger.

**P - 83**

Indicator for the presence of a cartridge on the left side of the slide.

Element connecting the slide with the frame - bumper.

Slide locks in the rear position - Lever lock release.

Ejector - stationary as part of the frame.

Safety lever position for Fire - down

Safety Features:\*

- reduction and block needle,
- release the cock from the rear position
- the position of the dead,
- cock lock and trigger language.

#### **4. Disassemble and Reassemble the P-83 pistol**

**Pistol P-83 is disassembled to major assemblies and parts, as follows:**

- Hold the pistol grip in the right hand, press the magazine latch, and removed the magazine from the magazine well,
- Position the safety lever to Fire,
- Check to see the weapon is not loaded: pull the slide to the rear,
- Visually check through the opening in the slide to ensure the chamber is empty, and makes himself known. control shot (check the P-83 should be precede the rate determining the presence of the chamber cartridge, which is located on the left side lock)\*
- Move the bumper down until it stops,
- Using the left hand, pull the slide to the rearmost position, slightly lift up the back end, then move the slide forward until it is removed from the frame.
- Traffic trailer disconnected from the barrel springs back\*.

**Assemble the gun in the reverse order of disassembly.**

It should be noted that the spreading gun P-64 and P-83 can perform without odbezpieczania, but then it is not possible commitment, very substantial to maintain safety, fire control.

## 5. Definitions and important concepts \*

**The weapon recoil acting on the principle of freedom of the hammer** - a weapon, acting on slide recoil principle, where the security condition of arms condition and reliability is achieved by choosing a sufficiently large weight of the slide. The weapon's barrel is rigidly connected to the chamber and the slide. Slide, while supported, springs back. The slide, under the influence of forces acting on the gas fuses from the cartridge moves the hammer to the extreme position of the rear and then under the influence of inertia from the spring comes back and chambers the next cartridge.

**Semi-automatic firearm** - only shoots one cartridge with each trigger pull. It is equipped in the breaker, a retainer to disable the trigger mechanism after each shot. In order to fire the next shot, release the trigger and squeeze it again.

**Safety before premature gunshot** - the safety used in weapons in order to prevent the shot when the inlet of the barrel and the slide are not completely closed.

**Safety prevents accidentally firing a firearm** - the safety is used to prevent the shot despite pressing the trigger. It may be blocking or preclusive.

**Breaker** - a trigger mechanism, starting uniemoŚliwiająca shock mechanism and putting the shot without an exemption, and re-pressed trigger.

**Reloading weapons:** a set of activities performed by the mechanisms of firearms, including the introduction of the cartridge into the chamber (before shot) and to extract and eject the case (after firing).



## 6. Literature

1. Waldemar Ciechanowicz, Lech Pellowski, *From Nagant to Shaka Zulu*, Slupsk 1998.
2. *Instructions for use of a gun 2 P-83 9 mm x 18*, Lucznik, Metal Works, Radom.
3. Stanislaw Kochanski, *Automatic Guns*, Publisher Periodical Technical books and Sigma Not, Warsaw 1991.
4. Stanislaw Kochanski, *Small Arms of the eighties*, Wydawnictwo MON, Warsaw 1985.
5. Erenfeicht Leszek, Zbigniew Nail, *P-83 child of his times*, "Shoot", 2009, No. 3
6. Peter Stempski, *P 83 and Makarov*, "Arsenal" in April 2007.
7. Andrew Subačius, *Poland arms short*, "Weapons" 2000, No. 16
8. Andrew Subačius, *Poland short firearms Part II*, "Weapons" 2000, No. 17
9. Ryszard Wozniak, *Heckler & Vanadium*, "Weapons and ammunition" in April 2003.