FROM OFFICIAL CIA PAPERS

Pertinent extracts from 1964 CIA study on the KGB

Installations

The defector, KHOKHLOV, described two laboratories associated with the executive action department. One produced special weapons and explosive devices, whereas the other developed poisons and drugs for "special tasks." The explosives laboratory was located near Kuchino, outside Moscow, and was responsible for the development and production of weapons, from drawing up blueprints to melting and pouring bullets. In no case was assistance obtained from military ordnance or other outside agencies.

One well publicized poisoning case involved the defector Nikolay KHOKHLOV. KHOKHLOV suffered a sudden and severe illness while attending an anti-Communist meeting in Frankfurt, Germany in September 1957. A positive diagnosis was precluded by the initial treatment given him at a German hospital but there was evidence of his having been poisoned by a thallium derivative of arsenic and/or other chemical agents, and a strong possibility that the poison had been administered at RIS instigation. KHOKHLOV himself believed, and allegedly had supporting medical opinion, that he had been poisoned by radio-activated thallium. He believed that the poison was of Russian origin because it was such a complicated substance that it was difficult to analyze and had been carefully prepared to leave virtually no trace. A unique mechanism for administering poison was described by a knowledgeable source as a pneumatically operated poison ice "atomizer" which leaves no wound or other evidence of the cause of death. The equipment and techniques used in the poisoning of REBET and BANDERA are treated below in some detail as examples of the most recent and sophisticated methods in use by the KGB.

Specific Cases

I. STASHINSKIY

In November 1961 a Soviet intelligence officer, Bogdan STASHINSKTY, surrendered to the West German police, stating that he had, acting under official orders, assassinated two individuals during the previous few years: Lev REBET, a Ukrainian emigre writer; and Stepan BANDERA, a leader of the Ukrainian Nationalist

movement. In both cases, a similar type of weapon had been used; a gun which fired vaporized poison which killed almost instantly upon being inhaled. The properties of the killing agent were such that, until the defection of the assassin, both victims were officially believed to have died from heart attacks. In the case of BANDERA, however, there was some unconfirmed suspicion of potassium cyanide poisoning although there was insufficient evidence to prove it.

The Weapon

The weapon used to assassinate REBET was a light-weight aluminum cylinder, 15-18 cm. long and approximately 3 cm in diameter, and weighing about 200 grams. The cylinder was divided into three separate chambers, one of which contained liquid poison sealed hermetically into a plastic-type ampule container under low pressure. (At normal temperatures the poison would evaporate, disappearing without trace in about two minutes.) The three components could be assembled by means of a thread which allowed one part to screw into the other. The first component was the poison ampule portion, the front end of which had a fine metallic screen. The poison ampule fitted solidly against the walls of the metal cylinder. The center component contained a piston and a piston arm which extended into the third or activating component. The latter contained a spring-mounted activating arm which, when drawn back, armed the weapon. A releasing arm was appended to the third component at an angle and was attached to the activating arm by means of a releasing catch. A small safety arm permitted the weapon to be placed in the safety position. The third component also contained a few grams of powder.

The maximum effective range of the weapon was about one-half meter; at one and one-half meters the effect of the vapors would be questionable; at two and one-half meters, the vapors would be totally ineffective. (The assassin was instructed to fire the weapon only inches from the face.)

The weapon was activated as follows: The activating arm was pulled back and the safety released. The weapon was then activated. It was held in the palm of the hand in such a fashion that it fired when the user pressed the releasing arm towards the activating arm. The releasing arm, when pressed, acted upon the

releasing catch, permitting the spring-held activating arm to fly forward against the small charge of powder. The exploding powder (which made a noise approximating the sound of a loud handclap with the hands cupped) drove the piston arm forward, causing the piston to strike against the poison ampule. The poison was thus driven out through the fine screen in the form of a liquid spray.

The weapon used for the second assassination was similar, except that it was double-barrelled. Each barrel contained a charge of poison similar to that contained in the single-barrelled weapon; however, the two barrels could be discharged separately or together as a unit. Thus, in the event the first charge did not kill the victim, a second attempt could be made. The two barrels were welded together and the weapon had two releasing arms, two releasing catches, two safeties, and two activating arms. The effect of the poison was the same.

Utilization of the Weapon

For maximum effective results it is recommended that the liquid poison be shot directly into the face of the victim, in order to introduce the vapors most quickly into the respiratory system. Since the vaport rise upwards very rapidly, the poison is still effective when aimed at the chest; conceivably, this would be sufficient time to allow the victim time to scream.

Effects of the Poison

The effect of the poisonous vaport is such that the arteries which feed blood to the brain become paralyzed almost immediately. Absence of blood in the brain precipitates a normal paralysis of the brain or a heart attack, as a result of which the victim dies. The victim is clinically dead within one and one-half minutes after inhaling these poisonous vapors. After about five minutes the effect of the poison wears off entirely, permitting the arteries to return to their normal condition, leaving no trace of the killing agent which precipitated the paralysis or the heart attack.

Allegedly, no foreign matter can be discovered in the body or on the clothes of the victim, no matter how thorough an autopsy or examination. The liquid spray can be seen as it leaves the nose of the weapon, however, and droplets can also be seen on the face of the victim.

STASHINSKIY claimed that, before using the weapon on his victim, he tested it on a dog. He fired the gun directly into the dog's face, holding his hand approximately one and one-half feet from its nose. Almost immediately after the liquid spray had hit its face the dog rolled over, without making any sound whatsoever. It continued to writhe for almost three minutes, however, STASHINSHIY was told that the poison affected a human much sooner, causing death within one and one-half minutes.

Safety Precautions for the User

STASHINSKIY was told that neither the poisonous liquid nor the fatal fumes affected any portion of the body other than the respiratory system, and that, since it could not enter the body through the skin or the pores, one could safely place his hands into a pail of the poison. Inasmuch as the weapon was held at arm's length when fired and the liquid spray ejected forward in a conical pattern, the user, under normal conditions, is safe from the effects of the poisonous vapors. Nevertheless, as an extra precaution, STASHINSKIY was provided with counteractive agents to use if he so desired.

Concealment Methods

For transportation, the weapon was transported hermetically sealed in a container, and inserted between sausages in a can which was itself hermetically sealed. It was suggested to STASHINSKIY that he should carry the weapon to the site of the planned assassination wrapped in a light newspaper, in which he had torn a small hole to enable him to reach the safety quickly just before using the weapon.

Method of Attack

In the first assignment, STASHINSKIY observed REBET debarking from a streetcar at about 0930 hours. Observing that the victim was heading for his office, the assassin preceded him into the building and climed the circular staircase to the first floor. On hearing REBET's footsteps on the staircase, STASHINSKIY turned and started walking down, keeping to the left, and carrying the weapon, wrapped in newspaper, in his right hand. The two met about halfway between the two floors. Firing directly into

REBET's face from a distance of approximately one-half meter, STASHINSKIY continued walking downstairs without even breaking his pace. The victim lurched silently forward and fell on the staircase. While still in the building, STASHINSKIY shook the liquid drops from the weapon and put it in the breast pocket of his suit. (A laboratory examination of the suit later revealed nothing of significance.) Although he had no reason to believe that he had inhaled the poisonous fumes, he used the counteractive measures provided. He later disposed of the murder weapon in a shallow canal in the city.

In carrying out his second mission, STASHINSKIY used a similar approach. Having previously abandoned an attempt to corner BANDERA in the latter's garage, the assassin gained entry into the victim's apartment house by reproducing a key which he had observed being used in the front door lock. On the day of the assassination, having seen BANDERA drive into his driveway, STASHINSKIY let himself into the apartment building and waited. BANDERA, carrying several packages of fruit and vegetables in his right hand, entered the front door with the aid of a key which was on a key ring together with other keys. As he was at tempting to disengate the key from the lock, STASHINSKIY moved away from the elevator, where he had been standing, toward the front door. The weapon was in his hand with the safety released. As he walked past the victim, who was still trying to extracate the key from the lock, the assassin took the door handle with his left hand, as if to assist BANDERA, asking him "Doesn't it work?" By this time BANDERA had succeeded in pulling the key out of the lock. Almost at the instant he replied "Yes, it works," STASHINSKIY fired both barrels simultaneously into his face at almost point-blank range. Seeing the victim lurch backwards and to the side, the assassin walked out of the apartment building and closed the front door. Although he did not wait to see BANDERA drop to the ground, STASHINSKIY is certain that, contrary to press reports, the man did not scream or otherwise call for help. STASHINSKIY later threw the murder weapon into the same canal in which he had discarded the first weapon.

Although the press reported that BANDERA had been attacked physically before he was poisoned, STASHINSKIY insisted that he had used no force, since it had not been necessary to do so. Some newspapers also reported that BANDERA had died of potassium cyanide poisoning. STASHINSKIY claims that he was told, and

believes, that the chemical was not potassium cyanide, since (1) he thinks that substance could not have been introduced into the body by the method employed, and (2) he believes that RIS would have no reason to deceive him on this matter, especially since he had to be provided with counteractive precautions. STASHINSKIY claimed that one of his Soviet contacts was pleased to learn that the police suspected potassium cyanide, since this allegedly indicated that the true cause of the victim's death was not evident.

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since the gun fired at a silhouette, rather than at a point.)
The gas shot by the pistol would penetrate the victim's clothing
and enter the skin. There is allegedly no danger to the user.

OTHER

Another weapon used is described as a noiseless gas pistol, powered by a 300 bold battery, which fires a lethal, odorless unidentified gas. The gas acts in two or three seconds, and is effective up to 15 or 20 meters. The pistol has three buttons; one for arming, one for firing, and the third for recharging the battery. (After 50 firings the battery may be recharged by plugging a transformer into normal house power source.) The pistol is normally fired 20 times, very rapidly and automatically—"Bzzzd." Although one squirt could kill, 20 squirts are emitted to saturate the area.

OTHER

Other weapons were ultra-silent, electrically fired pistols which project poisoned lead pellets from the concealment of a dummy cigaret case.

The mechanism is fired by a concealed electric push button which is connected with a small 1.5 volt electric battery. The bullets, besides containing potassium cyanide poison, have hollow dumdum point, so that the bullet will tear a hole into the victim and insure the spreading into the blood stream of the poison. The bullet is also grooved so that it will spread and increase the tearing effect on the flesh of the victim.

TWO SEPARATE INTERVIEWS WITH SAME SOURCE

Camera Gas Gun

lov. 61

Source has never seen a gas gun concealed in a camera but has heard that it shoots frozen pellets of gas which penetrate the victim's skin. Death follows after sometime depending upon the type of gas used. Sometimes death can be delayed by 20 hours.

Gas Pistol

In 1958 Source was issued a gas pistol for self defense which he took on a trip to Switzerland. He tried the gun on a dog which he killed with this weapon. Apparently, the gun shoots frozen pellets of gas at a range of 20 to 25 meters thru a tiny needle size hole. Source explained that there is no danger to the user of the weapon since it is effective only upon impact.

COUNTRY: USSR

REPORT NO. RVM-719-54 (MI-522) SUBJECT: Soviet Cigarette Case

I.D. No. 1259394

Assassination Weapons
FROM: USAREUR IC, 513 MIC REFERENCES:
EVALUATION: A-1 DATE OF INFORMATION: May 54
DATE OF REPORT: 16 August 54

SUMMARY OR SID REPORT:

This report contains information on the description, nomenclature, functioning and firing of the Soviet 4-shot, 6.25-mm and 2-shot, 8-mm cigarette case weapons. It is the last of two reports to be published on three Soviet "MVD" assassination type weapons.

Attached to this report are six enclosures; three photo views of the 4-shot weapon and a drawing of its receiver and components; photos, sketch and crosssectional drawing of the 2-shot weapon, and a drawing of the 8-mm cyanide bullet.

This report is based on the 81st OTIT report, ORDTI-27/54
It was preceded by RVM-488-54 (MI-505), which was on the
Soviet 3-shot, 6.25-mm semi-automatic pistol.

To avoid false confirmation, other agencies reprinting a part or the whole of this report must include the USAREUR IC RV number of this report, the date of this report, and mention of the 81st Ord Tech Intel Team and/or Source in the exact terms as given in this report. Doing so will also make it possible for USAREUR IC to answer inquiries based on material reprinted by other agencies from USAREUR IC reports.

SUBJECT: Soviet Cigarette Case Assassination Weapons

NOTE: This report deals with the Soviet 4-shot, 6.25mm and 2-shot, 8-mm semi-automatic cigarette case weapons. It is the last of two reports concerning Soviet weapons recently smuggled into the Western Zone of Germany for assassination purposes. To avoid the possibility of having the weapons discovered, and thus disclosing the intended plot, the weapons did not accompany Source upon his entrance into West Germany. Instead, they were cleverly smuggled into the zone via Sov Zone of Austria by means of first wrapping them in pliofilm, next wrapping them with electrical tape, then dipping them into a mixture of tar and asphalt, and finally placing them in the bottom of an automobile battery. This batter, which had been especially prepared by having the lower half of its plates removed, was reassembled, sealed and filled with electrolyte.

REPORT:

A. THE 4-S110T, 6.25-mm SEMI-AUTOMATIC WEAPON

1. General Information

One 4-shot, 6.25-mm semi-automatic, silent (gas sealed within the bore), electric ignition cigarette case weapon was examined. It was found to be unique from the standpoint of miniaturization, compactness, weight and silence of operation. No comparison, either in construction or operation, can be made between this gun and any normal hand gun, as the design and operation preclude any possible similarity.

The weapon assembly, that is, the units containing all the working members, are housed within a conventional leather cigarette case. The lid of the case is opened normally, revealing 19 cigarettes. These are nothing more than false cover of very short cigarette tips which cleverly conceal the gun and its mechanism. The weapon is discharged by depressing a concealed firing button. This firing button is located approximately at the position the thumb would rest on the cigarette case when offering the victim a cigarette with either the left or right hand. One bullet is discharged upon depressing the firing button. The firing button must be released and depressed, (cycle repeated) for discharging individually the three remaining barrels.

As the weapon is used only in close quarters, accuracy is not effected. Stopping power is provided not only by the dum-dum effect of the bullet upon striking its victim, but also by a cyanide filling which has a lethal after-effect.

2. Procedure

The examination was conducted between 3 and 5 may 54. The gun's actuating mechanism, component parts and ammunition were detail-stripped and analyzed; components measured; and functioning analyzed. No firing test was conducted.

3. Description of Gun

a. Summary of Data

Caliber	6.25-mm
Type of Operation	Gas, self-sealing system
Type of Ignition	Electric
Type of Fire	Semi-automatic
Height, overall	3.858 in
Width, overall	2.559 in
Thickness	1.221 in
Total weight w/battery	
and leather case	17.64 oz.

Battery

1 1/2 volt, type 1 (for small standard European flashlight)

Bore, length
Number of Lands
& Grooves

Twist

1 1/2 volt, type 1 (for small standard European flashlight)

4 mm

Number of Lands

5 Grooves

Uniform right-hand. One turn in approximately
1.256 in

b. Markings

On base of actuating mechanism

The symbol is stamped into base of lucite housing and painted red. No other markings or stamping.

4. Receiver Group

a. Receiver

The receiver is essentially a single block of gun metal steel from which a bettery compartment and four barrels are bored. The battery compartment is centrally located, while the barrels are arranged (superposed) two on each side. Each barrel is step-bored and can best be described as having three sections: breech section - housing the propellant charge and a threaded breech plug; gas chamber - containing the gas actuated members and bullet; and muzzle section - a very short, rifled bore.

Length	2.205	in
Width	2.166	in
Thickness	0.945	in
Barrel (inside diameters)		
Breech	0.361	in
Gas Chamber	0.320	in
Bore	0.244	in
Battery Compartment		
Diameter	0.816	in

b. Safety

To eliminate the possibility of accidental discharge of the weapon from rough handling or while it is being carried, a mechanical safety is provided.

The safety consists of a rectangular strip of stamped sheet metal with the center portion cut out to accommodate a small coil extension spring, a piece of fiber insulating material that is riveted to the lower end of the strip, and five screws which position the slide on the receiver.

Operation of the safety slide is automatic whenever the cigarette case cover is opened or closed. When the cigarette case cover is closed, the upper end of the safety slide is contacted by the cover and pushed down. This firing button, which blocks and prevents its movement. At the same time the slide is being moved down, the small coil extension spring, located in the cut-out portion of the slide is put under tension. Since the slide is under spring tension when the cigarette case cover is closed, opening the cover causes the spring to contact and move the slide forward unlocking the firing button. Forward and rearward movement of the slide is limited to five milimeters by an elongated slot which is cut in the receiver and projects up through this slot. So as not to disclose the upper end of the safety slide when the cigarette case is opened, a fake cigarette tip like those covering the rest of the weapon is fastened to the end of the slide by a copper ring.

c. Battery Compartment

Centrally located within the receiver is a circular bored hole that extends from the breech to the muzzle end for housing the battery. The battery is held in place inside this compartment by the firing mechanism on the breech end and a sliding cover and spring on the muzzle end.

Diameter	0.818	in
Length	2.087	in

d. Battery Compartment Cover

The muzzle end of the battery compartment is provided with a rectangular aluminum cover for loading and unloading of the battery. The cover is dovetailfitted to the receiver and has a thumb nail slot cut into the top to facilitate its removal.

Length	0.945 in
Width	0.905 in
Thickness	0.079 in

e. Battery Grounding Spring

Located beneath the battery cover and bearing against the base of the flashlight cell is a silver-plated conical spring. The purpose of this spring is to hold the battery in position against a circular "lucite" projection, which is part of the operating mechanism. In addition to holding the battery in position, it also acts as the ground connection.

Length	0.472	in
Diameter	0.748	in

f. Integral Barrels (components)

Although the principal parts correspond somewhat with those of the 3-shot pistol reported and described in RVM-488-54 (MI-505), there is a slight difference, namely, an asbestos wadding between the piston and the obturator plug. A screw-type breech plug with a projecting electrical firing pin is used.

(1) Breech Plug

The screw-type breech plug consists of the same material as that of the receiver, with its center portion bored out and insulated to accommodate the firing contact. It is slotted at the rear to facilitate installation with a tubular wrench.

Length, overall	0.394 in
Diameter	0.400 in
Depth of threads	0.040 in
Number of threads	36 to the inch, uniform
	right hand twist

(2) Firing Contact

Housed within the breech screw plug is a silver-plated brass pin with a projecting head, shaped somewhat like that of an arrowhead, which bears against the firing plug of the propellant case. Due to the large arrowhead projection, the pin is installed through the front portion of the breech screw and protrudes to the rear, thus assisting in the forming a gas right seal at the breech end.

Length, overall Length of arrowhead	0.512	
Maximum diameter of arrowhead Diameter of pin	0.189	

(3) Propellant Case

The propellant case is the same type as employed in the 6.25-mm pistol (see RVM-488-54 (MI-505). It is made of silver-plated brass, while the insulated firing pin is made of silver and designed so that blowback is prevented. Press-fitted within the case is a stamped metal ring containing a half bridge which serves as the ground connection for the resistance wire (igniter) that is connected to the half bridge and the insulated firing plug.

Surrounding the resistance wire is the main charge, consisting of finely granulated compound powder, yellow-green to olive in color. The mouth of the case is closed by a thin brass disc which is crimped in place and then covered with a red lacquer.

Length	0.238 in
Diameter	0.360 in
Propellant weight	0.0958 gr

(4) Obturator Plug

A cylindrical plug of phenolic composition is pressfitted into the gas chamber- just forward of the propellant case. The end of the plug facing the propellant has a slightly concaved surface, while its forward portion is conical in shape. The concaved surface serves as a focal point for the expanding gases when the propellant is ignited, thus providing a gas seal during its forward movement in the gas chamber.

Length,	before	e firing	0.276	in
Diameter	, befo	ore firing	0.320	in

(5) Lubricated Wad

A wad composed of asbestos fibers and treated with powdered graphite is positioned between the obturator plug and piston. It is thought the purpose of this wad is to act as a cushion and "spacer" and also to further assist the obturator plug in checking gas pressure. The following measurements were taken from the wad after its removal from the barrel:

Diameter, approximately 0.320 in Thickness, approximately 0.158 in

(6) Piston

Located forward of the wad and bearing against the base of a hollow-nosed cyanide-filled bullet is a free floating piston made of an aluminum alloy. The head of this piston, the part which bears against the base of the bullet, is frustum-shaped, and because of this design, almost complete silence of operation is achieved. Upon ignition of the propellant, the obturator plug drives the wad and piston violently forward, propelling the bullet from the barrel. The piston in its forward travel reaches a brass ring, which had formerly been crimped around the bullet and remains in the gas chamber after the bullet is discharged and wedges itself into this ring, thereby sealing the propellant gases within the chamber.

Length	0.279	in
Diameter	0.319	in
Length, frustum head	0.118	in
Diameter, frustum head	0.245	in

(7) Guide and Gas Seal Ring

Prior to indexing the bullet into the bore of the weapon, a brass ring is placed on the bullet, centrally located, and crimped in place. The purpose of this brass ring is to provide a gas sealing seat for the piston as well as assisting in guiding the bullet.

Diameter	0.320	in
Width	0.172	in
Thickness	0.072	in

(8) Bullet (Hollow-nosed, Cyanide-filled)

Examination of the four integral barrels revealed that only one type of bullet was employed. This bullet consisted of three parts: a mild steel jacket with its nose section slotted to form a cage, a cyanide filling, and a pointed steel core. The surface of this bullet is pre-engraved except for the slotted nose section, which is slightly underout and smooth. The filler contained a mixture of potassium cyanide crystals, an unknown additive which prevents coagulation of the blood, and gum arabic. The gum arabic acts as a binding agent, thus eliminating any possible loss of filler. The nose section of the bullet, upon striking a victim is expanded, and the filler is forced out by the steel core. The rotation that is imparted to the bullet assures distribution of the cyanide within the wound.

Total weight of bullet	3.897	gm
Length, overall	0.942	in
Diameter, maximum	0.247	in
Shape	Blunt	nose

5. Firing Mechanism Group

This group, made of transparent plastic-type material (thought to be polymerized methyal methacrylate-like the American produce "Lucite"), is in four sections, held together by two steel dowel pins and secured to the receiver by two machined screws.

a. Upper Section

The upper section, that part which bears against the base of the receiver, houses the battery contact and its three release springs. These springs and the battery contact are positioned in a centrally located projecting portion of the upper part.

Length, including circular "lucite" projection	1.478	in
Length, less circulation	1 004	, .
"lucite" projection Width	1.084	
Height	0.945	
Diameter of projection	0.802	in

b. Upper Central Section

The upper central section houses four firing pin contact springs and their screws, the firing button, firing button spring, combination rotor shaft and rotor, rotor contact wires and shaft bushing.

Length	0.472	in
Width	2.165	in
Height	0.945	in

c. Lower Central Section

This section houses the rotor contacts and the rotor shaft bearing.

Length	0.276	in
Width	2.165	in
Height	0.945	in

d. Lower Section

The only function of this section is to provide insulation for the lower central section.

Length	0.079	in
Width	2.165	in
Height	0.945	in

e. Operating Parts of the Firing Mechanism

(1) Battery Contact

The battery contact consists, on one end, of a machined projection which is the battery terminal contact and three dowel pins. The three dowel pins serve to position and guide the battery contact when it moves laterally, while at the same time preventing it from rotating when actuated by the rotor shaft. Surrounding each dowel pin is a coil spring, the purpose of which is to keep the crown gear on the battery contact constantly in contact with the gear teeth on the rotor shaft when they override one another.

On the opposite end of the battery contact, there is an integrally out crown gear consisting of slight teeth which, when engaged and diengaged by a like gear on the rotor shaft, moves the battery contact against or away from the battery terminal.

Length, overall Diameter, overall Length, machined projection Diameter, machined projection Length of Dowel Pins Diameter of Dowel Pins Crown Gear -	0.472 in 0.512 in 0.176 in 0.120 in 0.276 in 0.060 in
Tooth depth, approximately Tooth thickness Pitch plane Material	0.100 in 0.100 in 45 degrees Brass (no plating employed)

(2) Firing Pin Contact Springs

Bearing against the projecting firing pin of each individual barrel is a silver-plated phosphor bronze, flat-type spring which is held in place by a small brass machine screw. This screw also secures one end of an insulated wire, the other of which is soldered to a rotor contact.

Length of springs Thickness Screws -	0.590 in 0.011 in
Length Diameter Threads	0.275 in 0.118 in 30 to the centi-
	meter, uniform right-hand twist

(3) Rotary Shaft Bushing

This brass bushing acts as a bearing and guide for the toothed ends of both the rotory selector shaft and the battery contact.

Diameter,	outside	0.630 in
Diameter,	inside	0.319 in

(4) Rotor Selector

A silver-plated brass shaft containing a crown gear at one end, a two-armed rotor at the opposite end and a ratchet gear machined on to the central portion makes up the rotor selector.

(5) Firing Button

Located centrally within the firing mechanism is a machined aluminum button. This button, when depressed, rotates the rotor selector shaft, which in turn actuates both the battery contact and rotor arms. To operate the rotor selector shaft, a hair spring actuated pawl is located within a cut-out portion in the firing button. This pawl engages the rachet teeth, which are centra-ly located on the rotor shaft and which rotate the shaft whenever the firing button is depressed.

(6) Firing Button Spring

This is a flat, elliptic-type spring located below and bearing against the base of the firing button. Its purpose is to return the firing button to the released position. A fillister head cap screw, made of brass, holds this spring in position.

(7) Rotary Selector Contacts

The rotory selector contacts consist of four crescentshaped, silver-plated brass blades, which are positioned 90 degrees apart and held in place by a small brass screw.

(8) Wiring

The hook-up wiring consists of four short lengths of stranded copper wire covered with lacquered cellulose acetate yarn. These wires are soldered, on one end, to the rotory selector contacts, and on the opposite end are connected to, and held in place by, the firing pin contact spring screws.

6. Functioning of Weapon

a. Preparing the weapon for firing

The sliding cover located at the muzzle end of the receiver is opened, and a fresh 1 1/2-volt cell (small European flashlight size) is inserted into the receiver, with terminal end toward the firing mechanism. The battery cover is then slid into place, securing the battery and spring.

Next, the weapon is placed into the cigarette case, muzzle up, and with safety slide away from hinged side of cover, caution being taken so that firing button is not depressed as weapon, at this point, is without safety.

A false cover of cigarette tipe is then placed over the muzzle and of the receiver, and one individual fake cigarette tip is put over the projecting stem of the safety slide.

The cover of cigarette case is closed and held in the closed position by its catch. Closing the cover depresses the safety slide, thus preventing the firing button from being depressed. Weapon is now in the "safe" position and can be carried with complete safety.

b. Firing the weapon

The weapon is withdrawn from the pocket and extended with either hand as if offering a cigarette. Cover catch is then depressed, allowing cover to spring open. The cover swings open automatically due to the spring actuated safety slide which bears against it. The weapon is now ready to fire.

For firing the weapon, a slightly raised circular spot on the lower end of the cigarette case indicates the exact location of the firing button. This spot is depressed by the thumb, the firer making certain at the same time that the case is firmly grasped in the hand.

Pressure on this spot causes the spring actuated ratchet pawl contained within the rectangular cut-out portion of the firing button to engage a tooth on the selector shaft. Continued downward pressure causes this pawl to rotate the selector shaft. This rotary action causes the rotor arms, which are located on the rear portion of the shaft and positioned 135 degrees apart, to turn through 45 degrees at which point one of the rotor arms comes into contact with one of the four rotor contacts.

While this action is taking place, a circular row of teeth (crown gear), located on the base of the contact, is overriding a like set of teeth on the rotary shaft. This movement causes the machine projection, located in the center of the battery contact, to contact the battery terminal, which in turn moves the battery slightly backward against the pressure of the battery grounding spring. This completes the electrical circuit from the battery terminal through the battery contact, rotor shaft, rotor arms, rotor contacts, wiring, firing pin spring contacts, firing pin and resistance wire in the propellant case to ground, thus discharging one barrel of the weapon.

The instant the teeth on the battery contact have overriden those of the rotary shaft, the pressure of the battery contact springs forces the battery contact away from the battery terminal. This opens the electrical circuit and re-engages the battery contact with the rotor shaft.

c. Reloading

Due to the fact that this is a special type weapon, it is thought to be disposed of after firing rather than reloaded or recharged.

7. Firing Test

Negative. Due to the fact that all bullets were potassium-syanide filled, and the possibility of one becoming contaminated through handling, no firing tests were conducted with this weapon.

B. The 2-S110T, 8-mm Cigarette Case Gun

1. General Information

One 2-shot, 8-mm electric-ignition, single-action, cigarette case gun was examined. This weapon, like those described in part A in RVM-488-54 (MI-505), is unique from the standpoint of miniaturization, compactness, weight, and silence of operation. No comparison, either in construction or operation, can be made between this gun and any normal hand gun, as the design and operation preclude any similarity.

The weapon assembly, that is, the combination barrel receiver and firing mechanism, is housed within a conventional leather cigarette case, same as employed with the 4-shot gun.

The cover of the cigarette case is opened, revealing 23 cigarette tips. These cigarette tips are nothing more than a false cover which cleverly conceals the muzzle of the gun. Like the 6.25-mm, 4-shot gun, described in part A, this hand gun is intended for use only at very close range. However, greater stopping power is provided in this weapon over the two previously described by the use of an 8-mm bullet. The dum-dum effect and cyanide filling are both proportionately greater.

2. Procedure

The examination was conducted between 7 and 12 May 54.

The gun's actuation mechanisms, component parts and ammunition were analyzed; components measured; and functioning analyzed.

3. Description of Gun

a. Summary of Data

Caliber	8 - mm
Operation	Single-action, gas, selfsealing system
Ignition	Electric
Length, overall	3.858 in
Width, overall	2.559 in
Thickness	1.221 in
Weight, w/Battery & case	14.47 in
Battery: Type	1 1/2 volt (small
	European flashlight)
Markings	See par 4c below, for details
Length of barrel	0.200 in

b. Markings

The weapon possessed no serial number or other identifying marks.

4. Receiver Group

The receiver is essentially a single block of gun metal steel from which a battery compartment, two barrels and various recesses and notches are machined. The battery compartment is centrally located between the two barrels. Both barrels are step-bored like those of the previously described 4-shot weapon.

Length	2.120	in
Width	2.164	in
Thickness	0.923	in
Barrel diameters (inside)		
Breech	0.420	
Gas Chamber	0.400	in
Barrel	0.314	in

Although the barrels and components compare favorably with those employed in the 6.25-mm pistol and 4-shot cigarette gun, some variations were noted. These differences are listed in detail in par 4c below.

b. Safety

(1) Two small steel pins, one end of which is pointed and the other bent at a right angle, are provided as a safety. These two pins are inserted into holes which are drilled through a section of the receiver and firing levers near the breech end of the receiver. When these two pins are inserted, they prevent the firing levers from being depressed. Installation of these pins is performed after the weapons has been inserted into the cigarette case. Their removal is accomplished by the thumb nail when preparing the weapon for firing.

(2) An additional safety feature of this weapon is provided in the electrical circuit in the form of a spring-actuated battery ground. This safety automatically opens (breaks) the battery ground whenever the cigarette case cover is closed or in the closed position. A threaded, self-locking adjusting screw is provided on the tip end of this safety in order that minor adjustments can be made.

c. Battery

A conventional European battery is employed. The battery, a 1 1/2-volt cell, is of the type employed in a small European hand flashlight. Since one of the safety features of this weapon is in the opening or closing of the battery grounding circuit, the battery installed in this weapon must be insulated in order for the safety to function. For this reason, the cardboard tube (insulation) surrounding the battery was not removed. Markings found on the paper insulating tube are as follows: (translation from German) front - flashlight battery made by the PETRIX Co., long storage life; rear- use with bulbs not over 0.2 amps, current consumed below 2.5 volts; side - Vienna; and opposite side-batteries.

Height	1.496	in
Diameter	0.788	in

d. Battery Compartment

Centrally located in the receiver between the two barrels is a circular bored hole to accommodate the battery. The compartment is completely enclosed at the muzzle and except for a small circular insulated hole. This small insulated hole accommodates a spring-actuated battery ground that extends through it from the battery compartment. The breech end of the battery compartment is closed by a circular disc of insulating material that is held in place by the transparent base section of the weapon.

Length	1.884	in
Diameter	0.822	in

e. Integral Barrels and Components

Since the components of the barrels are identical to those previously described for the four-shot weapon, with the exception of size, only those parts which are different in design will be discussed.

- (1) Muzzle rifled portion of barrel is greater in length than that of the 4-shot weapon.
- (2) Absence of the brass gas-seal ring that was crimped to bullets of previously described weapons.
- (3) A pre-engraved brass sleeve is fitted over the rear section of the bullet which indexes with the rifling of the barrel.
- (4) A change in the angle of the frustum head of the piston to increase the overall area of that portion of the piston head which is in contact with the bullet. This redesign was necessitated, apparently, due to the fact that no brass gas seal ring is employed in the weapon. Complete gas sealing action is accomplished in this weapon by the piston alone.
- (5) Since the same size propellant case is employed in all three weapons, it became necessary, in the case of this weapon, to provide an adapter. This was accomplished by redesigning the forward portion of the breech plug.

f. Firing Levers

Located in the recesses on the upper side of the receiver are two firing levers, one for each barrel. These firing levers consist of rectangular steel bars that are held in place by end pivot upon a steel pin near the muzzle end of the receiver. On the opposite end of each firing lever there is riveted a short block of insulating material.

5. Transparent Base of Weapon

Secured to the base of the receiver by four flat-head screws is a block of transparent plastic material resembling "Lucite". This block of transparent plastic houses the battery terminal contact to which are riveted two thin, laminated silver-plated brass strips, which, when forced down by the firing levers, contact the electrical firing pin located in the breech plug, thus completing the electrical circuit between battery, the barrel, and ground.

6. Functioning of the Weapon

a. Preparing the weapon for firing.

The transparent base of the weapon is removed and a fresh 1 1/2 volt cell (small European flashlight size) is inserted into the receiver, with terminal toward the breech end. The tubular paper insulation usually surrounding flashlight batteries is not removed. This is necessary in order for the battery ground safety feature to function. An insulating disc and the transparent base are then placed over the battery and secured to the receiver by means of four flat-head screws.

The weapon is now placed into the cigarette case, muzzle up, with the firing levers located opposite the hinged side of the cover. Caution must be taken that the firing levers are not depressed, as the weapon at this point is without a safety.

The two steel firing lever locking pins are now inserted through small holes provided in the cigarette case body near the base. These lock the firing levers and prevent them from being depressed.

Next, the false cover of cigarette tips is placed over the muzzle end of the receiver, allowing the tip of the springactuated battery ground to project through and slightly above the false cover of cigarettes.

The cover of cigarette case is then closed and held in the closed position by its catch. Closing the cover depresses the stem of the spring-actuated battery ground, thereby opening the electrical circuit. The weapon is now in the "safe" position and can be carried with complete safety.

b. Firing the Weapon

Before the weapon can be fired, the two firing lever safety pins have to be removed. This can be accomplished by the thumb nail while the weapon is still in the pocket, or it can be surreptitiously removed after it has been withdrawn and held in the hand.

The weapon is then extended with either hand as if offering a cigarette, the firer at the same time depressing the cover catch. The cover swings open automatically due to the spring-actuated battery ground which bears against it. The weapon is now ready to fire.

To fire the weapon, pressure is applied with the thumb to a small area on either side of the center of the cigarette case. This pressure is transmitted through the cigarette case to one or both firing levers which are moved downward. This downward movement of the lever causes the small block of insulating material that is riveted to the rear end of the firing lever to bear against one of the battery contact leaves, thus forcing it against the firing pin contact located in the breech plug. This completes the electrical circuit from the battery terminal, through the battery contact, battery contact leaf, firing pin contact, firing pin and the resistance wire in the propellant case to ground, thus discharging the weapon.

c. Reloading the Weapon

Due to the fact that this is a special type weapon, it is thought to be disposed of after firing rather than reloaded or recharged.

7. Firing Test

Test firing of the weapon was conducted by the 7922 Tech Aids Det, USAREUR, prior to examination. Results, however, were obtained and are as indicated.

a. Penetration

15-16 in of loose cotton (test box)

b. Muzzle Flash

Not discernable, if any.

c. Sound level

Within a small closed room, the sound was an audible click similar to that made by the opening or closing of an ordinary light switch.

d. Recoil

Approximately that of firing a cal .22 long rifle cartridge.

e. Smell

Negative - no powder gas or smoke noted.

8. Comments

- a. The weapons examined reflected a high degree of workmanship throughout. To devise a weapon so small and compact, yet powerful and deadly, indicates a vast amount of planning and research on the part of the Soviets in weapon miniaturization and design. The complexity of the firing mechanism with their silver-plated electrical components, the use of a combination barrel and receiver, and silence of operation are indicative of this.
- b. Germany has long been noted for novel and revolutionary inovations, particularly in the field of weapons development. One only has to look into the vast amount of research and development that went into weapons made and used by the Germans during the years 1937 to 1945 to realize this. This, plus the fact that the Soviet weapon design up until recent years has been somewhat antiquated, tends to indicate some German influence.
- c. It is our belief, from detailed examination and study of the weapons in question, that the Soviets have made use of German weapon designers in their development.

