SEPORT NO. R-492-52

## S.I.G. AUTOMATIC RIFLE

Source stated that he had delivered ten (10) rifles to the War Technical Service on 9 September 1952 for extended test at Wallenstadt. A few rounds were fired at the Bern Walfenfebrik on each of these rifles and they were found to function properly. The War Technical Service accepted these then for the future tests. S.I.G. has not contracted with the War Technical Service for these rifles and has retained the right to exploit them in foreign countries. Source stated that his relations with the War Technical Service on the M.G. 50 (S.I.G.) mechine gun were very unsatisfactory and that the War Technical Service copied several features of his weapon without permission. For this reason they intend to not get involved with the War Technical Service.

Following is a description of the weapon:

## Automatic Carbine Neuhausen AK 52

"The automatic carbine AE 52 is a semi-automatic as well as a full automatic weapon, i.e., it is possible to fire aimed single shots from a closed breach - as with the self-loading rifle - as well as full automatic fire - as with the submachine gun (machine pistol) or light machine gun.

The AK 52 has the same characteristics as an assault rifle (Sturmgewehr) but it fires normal rifle ammunition which has a much bigger muzzle energy and a corresponding flater trajectory as the assault rifle ammunition (short cartridges) by same ammunition quality. New principles in the design made it possible to overcome the difficulties raised by the characteristics that such a weapon must have, i.e., stability while firing full automatic, low rate of fire, sufficient heat absorption capacity, but nevertheless low weight and small dimensions, simple design for handling and also manufacture, sturdiness and accuracy.

The weapon is composed of a barrel casing with straight bore from end to end. The barrel casing is firmly fixed to the stock which is provided with a pistol grip. A breech - which does not move - is fixed by means of a bayonet catch (for dismantling and eleaning) in the rear part of the barrel casing. The breech is composed of a breech block with firing pin, firing pin spring and extractor. The barrel is guided by cylindrical bearings in the barrel casing and is looked with the latter when the shot is fired. The barrel is surrounded by the actuator prolonged by the actuator tube on which and is fixed the muzzle gland. The closing spring, which is supported at one and by the barrel casing and at the other end by the actuator, presses the latter against a protruding shoulder of the barrel. In its turn, the barrel is pressed against the breach and thus the weapon is closed. The actuator controls also the looking between berrel and barrel casing.

The magazine is fixed just in front of the breech under the barrel. If a shot is fired, no part moves until the bullet has left the barrel. As soon as the bullet has left the barrel, the gases press on the mussle gland which draws the actuator tube and the actuator forward in the direction of the target. During its forward motion, the actuator first unlocks the barrel and the barrel casing, then draws along the barrel. The empty cartridge case is extracted at the same time. At the end of the forward motion, the case is ejected and a new cartridge pushed at the rear of the chamber. The rearward motion of the barrel is driven by the closing spring. The barrel is pushed over the cartridge and locked with the barrel casing by the actuator at the end of the rearward motion. The firing pin is cooked during the same motion. The following shot can be only fired when the barrel is locked with the barrel casing. The type of fire - single shot or full automatic - is selected by regulating the trigger mechanism.

The edvantages of the non-moving breach and of the forward motion of the burnel after the bullet has left it are the following:

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- 1. Shorter length of the weapon in closed position, the length of the barrel being normal.
- 2. Good accuracy because no part moves as long as the bullet travels in the barrel.
- 3. Low rate of fire because the unlocking motion begins late and because the moving parts are heavy.
- 4. The displacement of the center of gravity of the weapons immediately after firing owing to the parts moving forward gives the weapon a better stability because the increasing gravitation moment compensates the recoil moment which makes the weapon "climb".
- 5. Point 3 and 4 give the weapon a better stability when firing full automatic.
- 6. Good and regular repartition of the heat of the barrel to the barrel casing and actuator. The heat absorption capacity of the weapon is therefore considerable and it is possible to fire a greater amount of rounds within a short time without damaging the barrel.
- 7. Simple and sturdy construction, composed of for parts. The manufacture is inexpensive since there is not much milling work to be done.
- 8, Masy handling."

Attached find brochure with above description, along with three photographs showing the weapon with breech closed, breech opened and completely disassembled. It is noted in the disassembled photograph that the spring which closes the breech is not shown. Source stated this was an oversight on the part of the photographer.

COMMENTS. This rifle is available for examination at Neuhauson and arrangements could probably be made for testing it in the United States if there is sufficient interest. Instructions would be appreciated.

DISTRIBUTION: None

1 INCL: Brochure AK 52 Carbino

APPROVED:

D. O. SPRANKLE

Lt. Colonel, GS Acting Army Attache

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BID NO	uco i uto i co	COUNTRY Switzerland
REPORT NO R-492-52	Security Information	ID NO 1095,535
SUBJECT S. T. G. Automatic Rifle A		
FROM CARLIA, Duitzerland REFERENCES		
EVALUATION: B-2 DATE OF INFORMATION INCL 1 PREPARED BY: LT COL H V E		DATE OF REPORT: 10 Sep 52
	5701 B7 GO \ IL	SOURCE Mr. Amsler of S.I.G.
SUMMARY OR SID REPORT		
have been delivered to the Swiss S.I.G. has not contracted with the reserved the right to exploit the	War Technical Service ne War Technical Servi on in foreign countrie	ice for these rifles and has
Brochure is attached on the AK 52 rifls with description and photographs.		
Comment states that the rifle is available for examination at Neuhausen and arrange ments could probably be made for testing it in the United States if desired. Instructions would be appreciated.		
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