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CENTRAL INTELLIGENCE AGENCY INFORMATION REPORT

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COUNTRY	Poland	REPORT NO.	50X1 <input type="text"/>
SUBJECT	1. Army Tanks and Tank Equipment 2. Equipment of Miscellaneous Units 50X1	DATE DISTR.	9 May 1955
DATE OF INFO.	<input type="text"/>	NO. OF PAGES	10 50X1
PLACE ACQUIRED	<input type="text"/>	REQUIREMENT NO.	<input type="text"/>
		REFERENCES	

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LIBRARY SUBJECT AND AREA CODES (18)

3-02-0406	5/55
261.721	N
261.716	N
261.713	N
261.725	N
261.715	N
261.718	N
261.724	N
261.724	55M
261.721	55M
261.717	55M (+1)
261.723	55M
261.725	55M
264.61	55M
514.3	55M

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STATE	#x	ARMY	#x	NAVY	#x	AIR	#x	FBI	AEC				
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(NOTE: Washington distribution indicated by "X"; Field distribution by "#".)

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REPORT

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COUNTRY Poland

DATE DISTR. 28 Mar. 1955

SUBJECT 1. Army Tanks and Tank Equipment
2. Equipment of Miscellaneous Units

NO. OF PAGES)

DATE OF INFORMATION [redacted] 50X1

REFERENCES:

PLACE ACQUIRED [redacted] 50X1

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THIS IS UNEVALUATED INFORMATION

Tanks, Tank Equipment, and Other Equipment of Polish Army Units

SU-76

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1. Lecturers at the OCS in Poznan stated that this vehicle was no longer in production in the USSR. The OCS used the SU-76 only as a training aid in order to conserve the other more modern armored standard vehicles such as the T-34, JS-2, etc. [redacted] two types of the SU-76, one conventional and one mounted on a standard T-34 chassis. [redacted] the latter was not a T-34/76 tank because it had an open fighting compartment. [redacted]

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JS-2, 122-mm, Heavy Tank

3. [redacted] information relative to the secondary armament on the JS-tank:

Three MG, DTM, 7.62-mm, with 35 magazines of ammunition.

One HMG, DShK, 12.7-mm, with a K87 sight and 1000 rounds of ammunition.

Two SMG's, 7.62-mm, PPS, M1943.

Four pistols, TT Tokarev, 7.62-mm, M1933.

Twenty hand grenades, F-1.

One Very pistol, with 16 to 20 rounds of assorted colors.

JS-3, Heavy Tank

4.

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[redacted] the 6th Hv Tk Regt stationed at Zary (Sorau N 51-38, E 15-09) or Zegan (Sagan N 51-37, E 15-19), [redacted] was equipped with JS-3 heavy tanks.

6. An officer lecturer at the OCS told the candidates that the turret of the JS-3 would freeze if hit by gunfire anywhere near the turret ring.

7.

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[redacted] the reason the JS-3 heavy tank was rarely seen in Polish armored units was because it was either unserviceable due to some manufacturing defect or a military secret.

8.

[redacted] data on the interior of the JS-3 heavy tanks:

a. Stowage of Ammunition

(1) Ammunition for the 122-mm gun was stored both in the turret and hull. About 16 projectiles and four or five cartridge cases were stored at the rear of the turret along the turret ring. Special receptacles, partially padded with rubber, were provided which protected the projectiles and cases from damage and prevented their moving or shifting. The reason for the difference in the number of projectiles and cartridges stored in the turret was that the size of the cartridge case prohibited storing more than four or five in the turret, whereas the projectiles were relatively small.

(2) Additional projectiles and cartridge cases were stored in metal boxes on the floor of the tank, directly below the turret. To prevent their moving or shifting, the metal boxes were secured to the floor by metal screws. The spent cartridge cases were inserted into the box in order to keep the fighting compartment free. No exact figures could be given by source relative to

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types and number of rounds carried in the JS-3 heavy tank.

b. Fuel Tanks

- (1) There were four external and four internal fuel tanks on the JS-3 tank. One of the external tanks and one of the internal tanks contained engine oil, whereas the other tanks contained diesel fuel. Location of the internal tanks were as follows: Two tanks were in the hull, one on each side, at a point approximately where the front track return roller was secured; two tanks were in the engine compartment and were positioned on both sides of the engine. Four external tanks were attached to the exterior of the tank, two on each side, and visible.
- (2) The capacity or dimensions of the fuel tanks could not be given by source. However, he stated that the tank could travel from 250 to 300 km without using the exterior fuel tanks.
- (3) The exterior fuel tanks were filled by removing a threaded cap, which was located at the top center of the tank. A funnel with a fine mesh screen was used when filling the tank. The threaded cap was secured to the fuel tank by a small chain to prevent its loss.

- 50X1 (4) [redacted] the external fuel tanks were not jettisoned but were removed and stored at an assembly area prior to engaging in combat. This point was brought out several times during his OCS training and he added that all armored troops were instructed along these lines.

c. Steering and Turret Controls

- 50X1 (1) [redacted] the steering mechanism employed in the JS-3 was the controlled differential type. Steering controls consisted of two levers, each lever controlling a track. The tank was maneuvered by braking one track.
- (2) The steering levers, gear shift and accelerator were located in the same position as in the JS-2 heavy tank.
 - (3) The turret could be traversed both manually and electrically. The turret motor was located on the left side of the turret wall.
 - (4) Power traversing controls consisted of a round knurled wheel, measuring approximately eight centimeters in diameter. This wheel was located on the turret wall, to the left of the gun. Both the tank commander and the gunner used the same control wheel. Over-riding controls for the tank commander were not provided. The control wheel was calibrated and was turned right or left to traverse the turret. According to source, the turret traversed faster as the control wheel was turned further right or left from the zero point, which indicated the existence of a rheostat.

d. Other Features

- (1) A rectangular or circular escape hatch was located on the floor of the tank, and positioned slightly to the right and rear of the tank driver's seat. The turret was dome shaped and did not have a turret basket. Tank commander's and gunner's seats revolved with the turret. Both of these seats were on the left side of the gun.

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- (2) Ammunition drums for the DTM, 7.62-mm MG were stored in the turret on the right side of the gun and near the turret ring.

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T-34/100 Tank

9.

- a. In overall appearance the T-34/100 tank was very similar to the T-34/85 medium tank. the T-34/100 was slightly lower and had a wider turret than the T-34/85.
- b. The turret and sides of this tank appeared to have a greater slope, and the armor had a much smoother finish.
- c. Suspension was of the conventional T-34 type with no modifications noted.
- d. Primary armament consisted of a 100-mm gun of an unknown type and manufacture. the tube was somewhat longer and heavier than the 85-mm gun. A muzzle brake was not employed. However, a reinforcing ring was present at the muzzle end of the tube.
- e. Secondary armament consisted of three MG's, DTM, 7.62-mm, mounted as follows:
- One MG coaxially with the main armament.
 - One MG in front of the hull.
 - One MG extending through the turret at the rear.
- f. In addition to the MG's, the tank carried two PPS SMG's, 7.62-mm, M1943; one Very pistol; and 25 F-1 hand grenades.
- g. The turret was controlled electrically and had a separate motor for this purpose. The turret could also be controlled manually.
- h. To accommodate the larger caliber gun, a heavier or "beefed-up" recoil mechanism was used.
- i. The tank engine was described as the same as the engine installed in the T-34/85 tank. The only modification was the addition of a model NK-10 high pressure oil pump in lieu of the model NK-1 employed on the engine of the T-34/85 medium tank.
- j. armor thickness thought it to be the same as the T-34/85.
- k. The crew of the new tank consisted of five men: the tank commander, driver-mechanic, assistant driver-mechanic, gunner, and loader.
- l. T-34/100 tanks were to be issued only to separate tank battalions of the Polish Army. However, since the turret and recoil mechanism of the T-34/100 tank was weak and could not absorb the strain of the heavier caliber gun (100-mm), the T-34/00 tanks would not be produced in quantity until these deficiencies were corrected.

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T-34 Medium Tank (Polish Manufacture)³

10. [redacted] first [redacted] tank in the summer of 1953 at an officer's tank demonstration given by the 16th Mecz Div at Czarne for the purpose of orienting officers of various branches of the service with new equipment in the Polish Army. [redacted] this tank had been manufactured by the Joseph Stalin Foundry (Huta Imienia Jozefa Stalina) at Labedy (N 50-20, E 18-37). [redacted] the Polish medium tank was designated as a T-34/45 or T-34/54, and was an improved version of the Soviet T-34/85 medium tank. [redacted] the tank to have an 85-mm gun. The lecturer read its characteristics from a notebook, and [redacted] its characteristics, capabilities, and performance were similar to the T-34/85 medium tank produced by the USSR. From a distance of 50 m, the Polish version appeared to be like a typical Soviet T-34/85 medium tank.

11. The following differences between the Polish model and the Soviet model were noted [redacted]

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- a. Exterior armor finish was much smoother on the Polish model.
- b. The Polish model had two smoke canisters mounted at the rear of the tank. The canisters had a capacity of about 20 liters and could be electrically ignited and dropped by the tank crew. Upon ignition, they reacted as large smoke pots and created a smoke screen, under which the tank could safely avoid enemy gunfire and escape.
- c. The Polish model had locking bands and retaining springs, which were secured in place at the end of the track pins, and served to prevent the track pins from coming loose and throwing a tank track.
- d. The Polish model came equipped with additional track shoes, which were estimated to be approximately one-third the width of the regular track. These extra track shoes could be attached to every other track section whenever the occasion arose to cross swampy or extremely soft ground. This reportedly increased the tank's flotation characteristics.
- e. The Polish model had a modified transmission, which provided an additional gear or forward speed. The gear enabled the tank to travel at a minimum of two kilometers per hour and negotiate turns at this speed. Thus, with the increase in torque, the gear allowed the tank to cross extremely rough and/or swampy terrain and still fire while moving. [redacted]
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- f. The turret was operated manually and electrically, with the tank commander having over-riding controls over the gunner. The tank commander's periscope had a sighting scope incorporated in its mechanism. This sight enabled the tank commander to aim the gun with about 80% of the accuracy of the gunner's telescope. This enabled the tank commander to indicate a target readily for the gunner who could make the finer adjustments needed on his own sight. [redacted] the periscope was of tubular design rather than the conventional box design found on US armored vehicles.
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- g. The Polish model of the T-34/85 contained a new type of direct sighting telescope of Soviet design which [redacted] designated as a TSh-17. (See paragraph 12 for details [redacted] concerning this telescope.)
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- h. Secondary armament consisted of two DTM 7.62-mm MG's (mounted in the same manner as on a Soviet T-34/85 medium tank); two PPS 7.62-mm SMG's model 1943; one Very pistol with 16 to 25 rounds of assorted colors; and 25 F-1 hand grenades. One MG was equipped with the standard PPU-8T sight.

50X1 [redacted] considering the apparent duplication of the models and the absence of any major modifications, it was very likely that the Soviets had furnished the blueprints and perhaps the necessary equipment to produce these tanks at Labyed.

50X1 New Type Direct Sighting Telescope, Model TSh-17^A

12.

50X1 [redacted] the TSh-17 telescope was gradually replacing the TSh-15 telescope on the JS-2 122-mm heavy tank, the 122-mm and 152-mm SP guns, and the medium tank being produced at Labyed. [redacted]

13.

50X1 [redacted] in general appearance the new telescope was very similar to the TSh-15, but that it was more versatile and simpler to adjust. [redacted]

14.

50X1 [redacted] information on the TSh-17:

a. Characteristics:

Power of Magnification	2X (estimated)
Overall length	80 to 90 cm
Overall Weight	About 17 kg
Field of View	Unknown
Optical System	Believed to be generally the same as that used in the TSh-15 with the exception of the type and location of the reticle.
Filters	None
Reticle Light	Yes
Eyeguard	Made of soft rubber, with a rubberized head rest.

b. Reticle

- (1) A new type of reticle pattern was used which had graduations for HE (fragmentary), two types of AP ammunition (AT and HVAP), and a graduated scale on the right side of the reticle for use with the DTM 7.62-mm MG. (See page 9 for a memory sketch of the reticle pattern.)

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(2) [redacted] only one adjusting knob, which was located at the eyepiece end of the telescope. The adjusting knob, when turned, moved the center line in the reticle up or down. (Note: [redacted] it seemed that there were two reticles, one having the various scales and tic marks and the other having only a horizontal line. [redacted])

(3) The reticle was located in the center of the telescope in an assembly described [redacted] as an "Aiming Angle Box". The purpose of this box was to provide a means of adjusting the reticle to coincide with the optical axis of the sight and the axis of the gun tube.

(4) For adjustment purposes, the gun tube was first bore sighted, using a standard muzzle bore sight, on targets 25 and 800 m distant. The telescope and the gun were then zeroed by adjusting the reticle pattern onto corresponding points of the target. The reticle was adjusted by using three keys, one which measured seven millimeters and the other two slightly larger in size. These keys were permanently attached near the telescope by small chains in order to prevent their loss.

50X1 Unidentified New Type of SMG⁵

15. [redacted] saw about 12 SMG's of a type which [redacted] never encountered before. [redacted] these weapons were identical to the Soviet 7.62-mm, SMG, PPS M1943, except that a wooden stock was used in place of the usual metal folding stock.

16. [redacted] from its Polish-like letter and serial numbers located on the receiver, [redacted] deemed [redacted] to be of Polish manufacture. No other stamps or marks were noted [redacted] several soldiers equipped with these SMG's while on guard duty at the Military Technical Academy in Warsaw. No further information.

50X1 Equipment of Miscellaneous Units

17. [redacted]

18. [redacted] with the exception of the 7.62-mm TT Tokarev Pistol manufactured or assembled in Poland, all of the weapons, equipment, vehicles, and motorcycles [redacted] had been produced in the USSR subsequent to WW II.

19. During the spring of 1953, the 41st Armd Arty Regt at Czarne received six unused JS-2 heavy tanks but gave about seven used JS-2 heavy tanks to an unidentified heavy tank battalion which had just been activated at or near Czarne. [redacted]

[redacted] they arrived by rail and that the tags attached to the tanks contained Cyrillic writing, which led him to believe that they came from the USSR.

20. During 1951, [redacted] the 9th Ind Med Tk Regt exchanged all but three or four of their 76-mm SP guns for an unknown number of T-34/85 medium tanks, JS-2 heavy tanks, and 122-mm SP guns. The three or four 76-mm SP guns which were kept were utilized only for

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50X1 practical instruction purposes. in order to conserve the newly ex-
50X1 changed tanks and SP guns.

21.

50X1 Comments

1. Since the information [redacted] on other armored vehicles such as the SU-76, SU-85, SU-100, SU-122 (D-25S), JSU-152, T34/76, T34/85, T-34/100, JS-2 and JS-3, was well-known and published in available references, only that information was obtained which did not correspond with DA Pamphlet 30-3-1 and other locally available references. All information [redacted] on items of new equipment is given herein. All ammunition amounts given in this report represent [redacted] [redacted] standard units of fire.
2. Information [redacted] available does not indicate that the Soviet T-34/85 medium tank and JS-2 heavy tank had a gyro-stabilizer. [redacted] the gun of the medium tank was normally fired from short halts but that the gun could be fired when the tank was moving slowly. The gun of the JS-2 heavy tank was fired only during short halts or from a standing position.
3. This T/34 tank is the only vehicle mentioned in this report [redacted] [redacted] was of Polish manufacture. All other vehicles he believed to be of Soviet manufacture.
4. Information [redacted] available indicates the TSh-17 to be the standard Soviet sight employed in the JS-2 and JS-3 heavy tanks. A point of interest is the fact that [redacted] sketch of the reticle pattern closely resembles that of the TSh-19 sight.

5.

6.

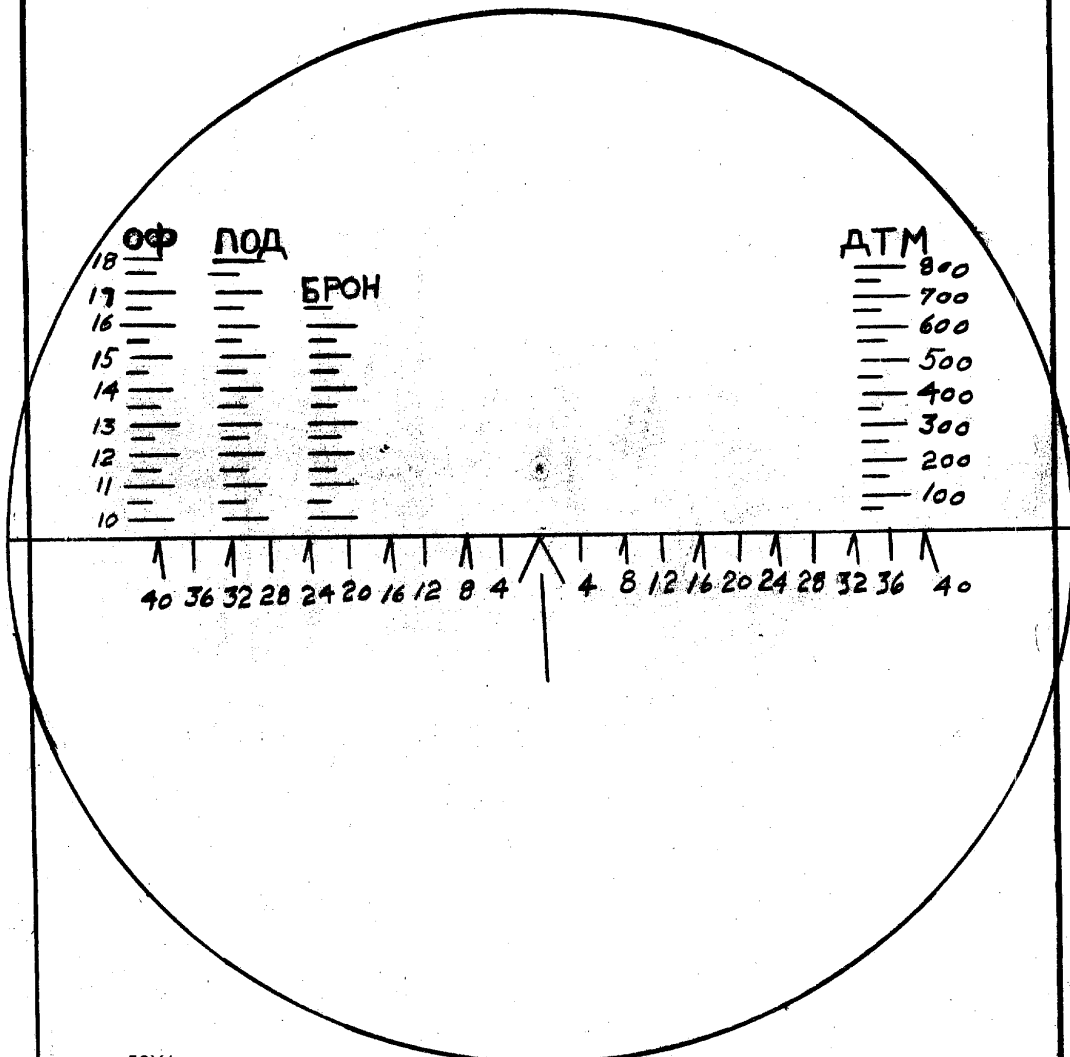
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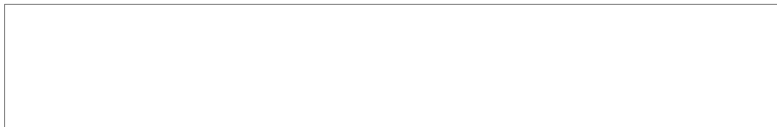
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Reticle Pattern of Direct Sighting Telescope,

TS-17



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