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EXHIBIT

INFORMATION REPORT INFORMATION REPORT
CENTRAL INTELLIGENCE AGENCY

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50X1-HUM

COUNTRY East Germany

REPORT

SUBJECT Production of Portable Geiger Counter for the East German Army

DATE DISTR. 29 MAR 1961

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REFERENCES RD

DATE OF INFO.

PLACE & DATE AT

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FIELD REPORT NO.

THIS IS UNEVALUATED INFORMATION. SOURCE GRADINGS ARE DEFINITIVE. APPRAISAL OF CONTENT IS TENTATIVE.

1. In January 1961 a microray measuring device (Mikro-Strahlen-Messgeraet) designated "MSG 1,5 V" was being developed by VEB Funkwerk Koepenick for the Ministry of National Defense. All data concerning this development are classified as "strictly confidential" (streng vertraulich). The personnel engaged in developing the device were sworn to special secrecy.

TE 2. It is planned to include this device in the standard equipment of every soldier of the East German Army (NVA). Therefore, a very high production output is foreseen. Since the device is to be worn on a belt, the NVA has specified small dimensions, simple operation, light weight, reliable functioning, sturdy mechanical workmanship and simple construction.

3. The functioning of the device is based on the principle of the geiger counter (Geiger-Mueller-Zaehler). The device measures the radiation energy in the environs, responds to α rays, β rays and γ rays, and reacts with high sensitivity to even slight radiation. Radiation is converted by the device into audible beeps (akustische Klopfimpulse) which are heard by means of ear plugs (Knopfhoerer). The interval between the acoustic beeps indicates the strength of the radiation and when the beeps come so close together so that a continuous tone is heard, the radiation count is dangerous to humans.

4. Technical Details

a. The dimensions of the device are 3 cm x 8 cm x 12 cm.

b. The geiger tube (Geiger-Mueller-Zaehrohr) used in the device is a copy of the Philips Tube type 18503, but with the outer dimensions reduced.

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STATE	X	ARMY	X	NAVY	X	AIR	X	NSA	X	OCR	X	OST EV	AEC	X
(Note: Washington distribution indicated by "X"; Field distribution by "#")														

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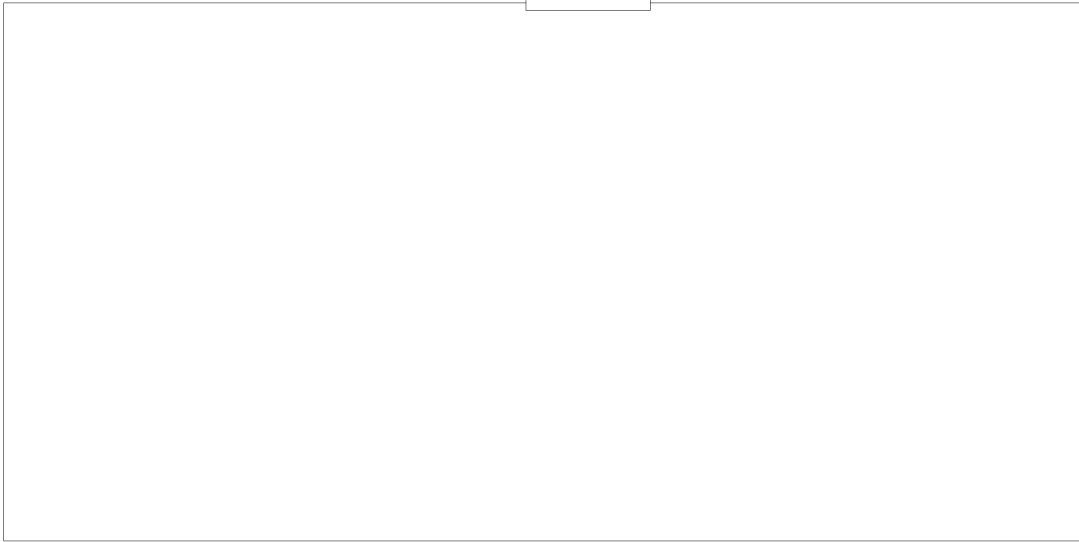
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- d. A small storage battery (Knopfakkumulator) is required which has a 60 day capacity for uninterrupted current production without recharging. Current consumption is correspondingly low.
- e. By the use of a trailing contact switch (S 1), the contact switch opens to the base of the transistor via a layer resistor (R 1) only after the switching on of the battery and closes before the battery is switched off. The layer resistor serves as a safety resistance to the outflow of residual currents from the low-voltage electrolyte condenser

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Component list for the MSG 1,5 V
 Stückliste des Strahlengerätes MSG 1,5 V

(korrespondierend mit Stromlaufplan)
 (corresponds to wiring diagram)

Condensoren
 (Kondensatoren:)

C 1 und C 2	<i>Capacitors</i> Kapasität (Kapazität) Voltage (Spannung) Tolerance (Toleranz)	5000 pF 500 V - 10 %
C 3 und C 5	<i>Low-voltage electrolytic condenser</i> (Niedervolt-Elektrolyt-Kondensator)	Kapazität 30 F Spannung 6 V Toleranz - 10 %
C 4	<i>Ceramic condenser</i> (Keramischer Kondensator)	Kapazität 10000 pF Spannung 500 V Toleranz - 10 %
C 6	<i>Ceramic condenser</i> (Keramischer Kondensator)	Kapazität 220 pF Spannung 800 V Toleranz - 10 %

Resistors (Widerstände:)

R 1	<i>Layer turn resistor</i> (Schicht-Drehwiderstand)	Kapazität 1 KOhm Spannung 0,25 V Toleranz - 10 %
R 2	<i>Layer resistor</i> (Schicht-Widerstand)	Kapazität 2,2 KOhm Spannung 0,05 V Toleranz - 10 %
R 3	<i>Layer resistor</i> (Schichtwiderstand)	Kapazität 2 MOhm Spannung 0,25 V Toleranz - 10 %

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- R 4 *layer resistor* Schicht-Widerstand 50X1-HUM
 Kapazität 10 MOhm
 Spannung 0,25 W
 Toleranz - 10 %
- R 5 Varistor Typ 2200/6,6
 (Import aus westlichem Ausland)
 (*Imported from the west*)
- R 6 *layer resistor* Schicht-Widerstand
 Kapazität 1 KOhm
 Spannung 0,05 W
 Toleranz - 10 %
- R 7 Schicht-Widerstand
 Kapazität 22 KOhm
 Spannung 0,05 W
 Toleranz - 10 %
- R 8 Schicht-Widerstand
 Kapazität 470 Ohm
 Spannung 0,05 W
 Toleranz - 10 %

Transistoren:

- T 1 *Switch transistor* (Schalttransistor)
- T 2 NF-Transistor

Gleichrichter:

- G 1 und G 2 *small selenium rectifier* (Selen-Kleinst-Gleichrichter)
one way rectification (Einweg-Gleichrichtung) = 300 V, 5 mA

Transformer (Transformator:)

- Tr 1

switch (Schalter:)

- S 1 *tracking contact switch* (Folge-Kontakt-Schalter)

Geiger tube (Geiger-Müller-Zählrohr:)

- R3 1

miniature earphone (Mikro-Hörer:)

- MH

miniature earphone
 G2000 (Mikro-Knopfhörer)

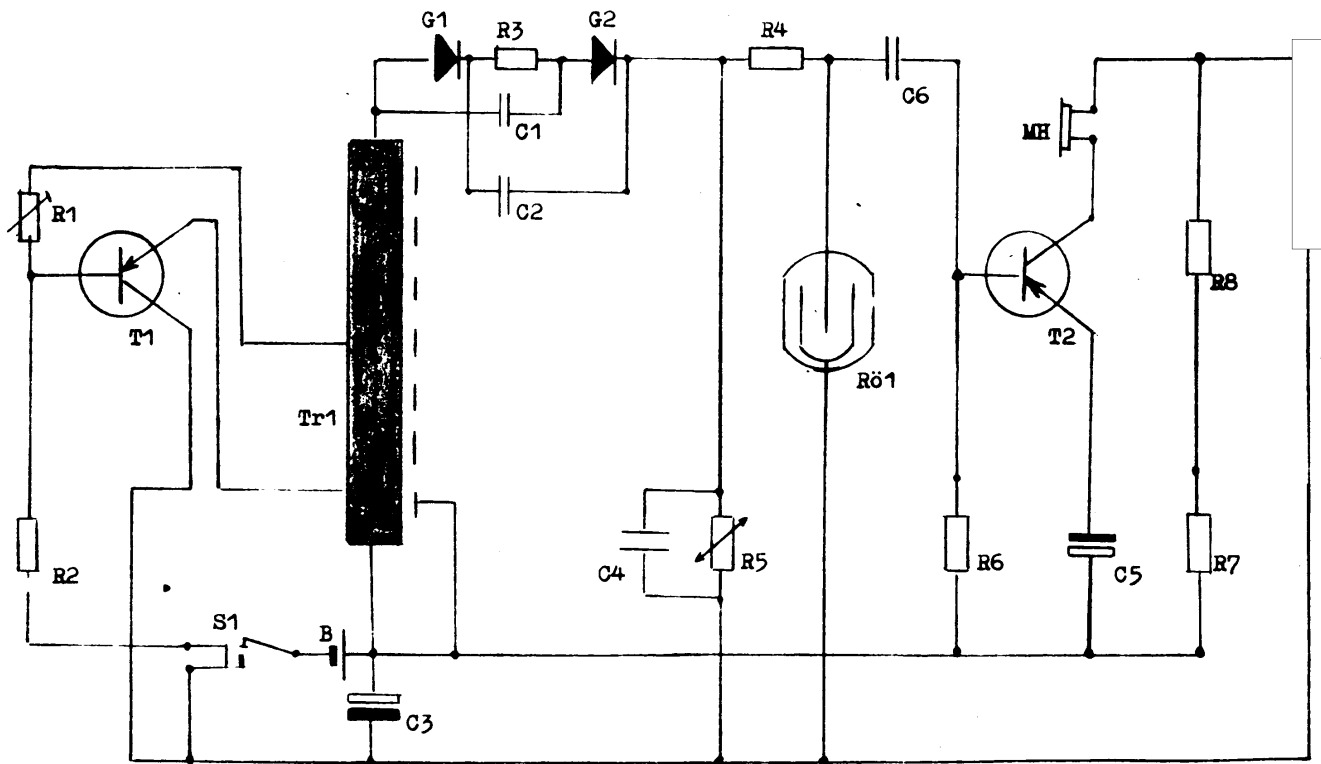
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Mikro - Strahlungs - Meßgerät MSG - 1,5 V

(MINIATURE GEIGER COUNTER)

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