50X1-HUM

INFORMATION REPORT INFORMATION REPORT

CENTRAL INTELLIGENCE AGENCY

102580

S-E-C-R-E-T

50X1-HUM

COUNTRY Czechoslovakia

REPORT

SUBJECT Chemical Warfare (CW) Training

DATE DISTR. 1 MAY 1959

NO. PAGES 1

REFERENCES RD

DATE OF INFO.

50X1-HUM

PLACE & DATE ACQ.

50X1-HUM

SOURCE EVALUATIONS ARE DEFINITIVE. APPRAISAL OF CONTENT IS TENTATIVE.

1. report dealing with the training of specialists for CW and defense against atomic warfare. such training was very superficial up to 1956. Since then such training is emphasized more, especially the latter. The training seems designed primarily to create among the men the idea that some measures are being taken for their protection, but it was clear to the students that these were merely improvisations. It seemed that the Soviets were not anxious to pass on data on atomic defense and passed only general data. When students asked about the inadequacy of CW and atomic defense preparations, the instructors said that much better countermeasures existed but these were kept secret to prevent the West from learning of them. Defense measures were emphasized as far as could be ascertained in CW units in the army. However, the three CW battalions, reformed as brigades in 1958 were intended for offensive measures.

2. The report also discusses methods of training, types of equipment used, and sketches of this equipment. With regard to defense against radioactivity, it is stated that personnel would be inoculated with a special serum intended to stop or slow down the disintegration of blood corpuscles caused by radioactivity. A similar serum was to be available for bacteriological warfare.

50X1-HUM

S-E-C-R-E-T

50X1-HUM

STATE	x	ARMY Ev	x	NAVY	x	AIR	x	FBI		AEC					

(Note: Washington distribution indicated by "X"; Field distribution by "#".)

INFORMATION REPORT INFORMATION REPORT

Sanitized Copy Approved for Release 2010/09/28 : CIA-RDP80T00246A048400150001-8

50X1-HUM

INFORMATION REPORT INFORMATION REPORT

CENTRAL INTELLIGENCE AGENCY

102530

S-E-C-R-E-T

50X1-HUM

COUNTRY	Czechoslovakia	REPORT	
SUBJECT	Chemical Warfare (CW) Training	DATE DISTR.	1 MAY 1959
		NO. PAGES	1
		REFERENCES	RD
DATE OF INFO.			50X1-HUM
PLACE & DATE ACQ.			50X1-HUM

SOURCE EVALUATIONS ARE DEFINITIVE. APPRAISAL OF CONTENT IS TENTATIVE

1. a report dealing with the training of specialists for CW and defense against atomic warfare. such training was very superficial up to 1956. Since then such training is emphasized more, especially the latter. The training seems designed primarily to create among the men the idea that some measures are being taken for their protection, but it was clear to the students that these were merely improvisations. It seemed that the Soviets were not anxious to pass on data on atomic defense and passed only general data. When students asked about the inadequacy of CW and atomic defense preparations, the instructors said that much better countermeasures existed but these were kept secret to prevent the West from learning of them. Defense measures were emphasized as far as could be ascertained in CW units in the army. However, the three CW battalions, reformed as brigades in 1958 were intended for offensive measures.

2. The report also discusses methods of training, types of equipment used, and sketches of this equipment. With regard to defense against radioactivity, it is stated that personnel would be inoculated with a special serum intended to stop or slow down the disintegration of blood corpuscles caused by radioactivity. A similar serum was to be available for bacteriological warfare.

50X1-HUM

S-E-C-R-E-T

50X1-HUM

STATE	x	ARMY Ev	x	NAVY	x	AIR	x	FBI		AEC					

(Note: Washington distribution indicated by "X"; Field distribution by "#".)

INFORMATION REPORT INFORMATION REPORT

Sanitized Copy Approved for Release 2010/09/28 : CIA-RDP80T00246A048400150001-8

SECRET

C Z E C H O S L O V A K I A

Military

Training of specialists for chemical warfare in Czechoslovakia

1. General background

a) Training of officers for chemical warfare units of the Czechoslovak army is very superficial, for it seems probable that both chemical warfare and atomic defence are still only in the first stages; up to 1956/57, more attention was given to chemical warfare, although this consisted of data already well known, which were used by the German army. In 1956/57, however, the Russians communicated some of their experience in training for atomic warfare; and this latter, though still at the stage of elementary improvisation, now receives greater emphasis than chemical warfare.

b) When military training was introduced in universities and colleges, chemical warfare was introduced into departments of chemistry, and graduates were trained as reserve officers for C/W units. The training for students was however found to be unsuitable, as the elementary and often wholly inexpert principles of chemical and atomic warfare gave them the impression that the training was only carried out to prevent the men from being frightened at the prospect of such types of warfare, and to make them think that units engaged in defence measures existed. During training held in their second and fourth years at the military training area at CERVENA VODA, or with the 1st C/W Battalion, JAROMER or the 3rd Battalion, SAFARIKOVO, the students came into contact with officers from the regular C/W units, and caused them considerable difficulty. Apart from a few graduates from the BRNO Military Technical Academy, the officers are of working class origin, and their military training consisted of only a two-year military academy course, and apart from a few basic principles of chemistry, they

have no technical knowledge and no secondary education. The presence of students specialising in chemistry led to either disputes among experts on the nonsensical nature of some of the principles, or to ridicule of primitive methods used. In either case, the students caused demoralisation. This was one reason for the liquidation of training in chemical warfare as part of students' military training, and for making them do two years' national service after completing their course at technical college.

c) The main intention of the C/W and atomic warfare units is to create among the men the idea that some measures are being taken in their defence. It was clear to the students, for instance, that many things were being improvised and many other measures taken merely for the sake of doing something. One example of procedure was that adopted with dosimeters for ascertaining the intensity of a dose of radiation. At first each man was to have had one, but it was found later that if each could find out for himself the strength of radio-activity, this would cause panic, and it was decided that only the platoon CO should have a dosimeter. Subsequently this was abandoned, and two types of dosimeter were introduced, one showing the actual intensity, for the unit CO, M.O. and C/W officer. COs of smaller sections such as companies, etc, were to have "blind" dosimeters with a numbered dial to which only the unit CO, M.O. and C/W officer have the key.

d) It was clear that the Russians were not anxious to pass to the Czech army data on their experience in atomic defence, and that what they handed over was general experience only. In reply to questions from students about the inadequacy of C/W and atomic defence preparations, the officers lecturing to them said that much better countermeasures existed, but these were kept secret to prevent the West from getting to know of them.

e) From the present position, it is clear that all measures tend merely to reduce the fear of chemical or atomic warfare. The importance of some is the time factor in that they enable

50X1-HUM

the men to continue fighting for a short time, at the cost of subsequent sacrifice of personnel, who are only given aid to suffice over a short period. In the Czech army, both C/W and atomic warfare apparently concentrate on defensive aspects, as far as C/W sections attached to army units were concerned; the three special C/W battalions, reformed as brigades in 1958, are intended for offensive measures. Instruction with the present apparatus gives the impression that this is for defence only, but it was stated that in emergency it could be used for attack.

f) The following C/W materials are in use. Category I, poison gas etc; category II, smoke-screen laying materials; category III, incendiary materials. Category I includes:

i) pungent and tear gases: bromo-acetone, chloroacetophenol "CLARK", "DICK", adamsite

ii) asphyxiating gases: chlorine, phosgene, di-phosgene

iii) blistering gases: mustard gas, N-yperite, lewisite.

iv) systematic poisons: "TABUN", "SARUN", "SOMAN"

v) special materials: hydrocyanic acid, carbon monoxide

2. Method of training and apparatus

a) Training, mainly defensive, concentrated largely on decontamination of terrain, arms and equipment from substances such as mustard gas.

b) Four different methods are employed for decontaminating terrain:

i) PDM apparatus (see sketch A) mounted on the rear side-plate [redacted]; the decontamination cylinder drive is attached by a chain to the rear wheel, on which a special gear wheel is mounted. A lever at the side regulates the size of the aperture through which chloride of lime is scattered. The crew consists of a CO, a driver and 2 men in charge of decontamination. 50X1-HUM

ii) "ACHR" [redacted] a chemical spray tanker which can be used for contamination, decontamination and smoke-screen laying. TATRA 111s are mostly used for this purpose. 50X1-HUM

iii) improvised decontamination: burning vegetation, turning over the earth; covering with stones, gravel, trees, etc.

iv) decontamination of small areas or buildings: with a spray known as RDP - 4S, which works on the principle of the garden sprayer with a tank carried on the back.

/c)..... 9863

50X1-HUM

c) Decontamination of equipment is also carried out in four ways, dry air, hot water, steam and steam and ammonia.

i) dry air decontamination is done by placing a metal and wooden grate over a hearth and building a hut above it (see sketches B and C). The walls are readymade and hooked together, and one has a window and door, and the front and back sides have small openings in them at the base for regulating the temperature. Clothes on hangers are hung on a bar inside.

ii) For decontamination with hot water, the methods Bu-2 and Bu-3 are used, consisting of a boiler with its own hearth. The boiler is also equipped with a spiral heating coilfor supplying steam.

iii) Decontamination by steam and ammonia is done with two vats and a pit 100 cm square, into which first small boards, and then the equipment to be decontaminated are put. The steam is brought by a metal pipe from two barrels holding about 100 litres, above a hearth; they have drain valves, manometers and escape valves. Ammonium carbonate can also be used, dissolving in heat and carried by the steam.

d) Decontamination of weapons: each man attends to his own weapons . Complete decontamination is carried out by the C/W sections in specially reserved areas, by the following means:

i) ACHR tankers filled with a 10 % solution of dichloramine and dichlorethane sprayed over contaminated weapons with a hose.

ii) DK-1 apparatus, Soviet make, consisting of three crates containing a pump with branch pipes for attaching hoses , protective clothing, rubber boots, indicator flags, notices, spray nozzles and jets, oil lamps for lighting working sites, rifle stands and a bench for decontaminating sights.

Layout of DK-1 in use (see sketch E)

1 - 2 Decontamination of vehicles, tanks, guns, motor cycles.
3,4,5,6, " " weapons (rifles, machine carbines, M.Gs and mortars)
7 Decontamination of optical instruments , such as telescopes, measuring instruments, compasses, in alcohol solution
8 barrel of decontamination material
9 crate containing pump and piping

e) Method of ascertaining presence of poisonous materials in terrain:

i) by means of detection powder which turns red in contact with the material.

ii) by testing apparatus (see sketch F)

1) battery
2) piston rod
3) piston
4) body of pump
5) suction aperture
6) holes in point on which the glass investigation tube is fixed

Glass tube (see sketch G)

(a) Thin-walled glass balls filled with some liquid reactor
(b) "silikogel"
(c) [redacted] bands marking the tube for a given substance 50X1-HUM

The glass tube fits on to the end of the small pump, (a large number of points make testing of several materials possible.) As it strikes the point, the glass balls break and the liquid flows into the "silikagel" (sic) The tube, which is open at both ends, fits into the suction hole of the pump, which pumps a certa in number of times; if poisonous material is present in the atmosphere, the "silikogel" turns [redacted] with mustard gas [redacted] red) 50X1-HUM

Detection of poisonous material in the ground (see sketch H)

This is done by means of a funnel, small end made of plastic material, lined with filter paper, into which earth is put; it is then fixed into the glass tube investigator

(a) funnel
(b) neck of funnel
(c) testing tube

e) C/W reconnaissance

Reconnaissance for indicating contaminated areas and ascertaining the kind of poison gas, [redacted] is 50X1-HUM carried out in heavy protective clothing with gas masks. The clothes hitherto available are rubber, heavy and unwearable in summer. The new ones are to be lighter, and made of polythene. Recce is also carried out in HACKEL German [redacted] vehicles , 50X1-HUM which are to be replaced by new Czech ones. When details have been ascertained, a report is made with suggestions for decontamination methods .

3. Method of training for atomic warfare

a) Since 1957, greater emphasis has been laid on this than on chemical warfare , but instruction is given in a still more elementary manner than for the latter. The effects of atomic explosion and radioactive radiation have been generally minimised, and countermeasures were restricted, for personnel, to to putting on protective capes and lying on the ground with the feet towards [redacted] the explosion. Removal of radio- 50X1-HUM active powder was simply to be done by dusting.

b) After an atomic explosion, the C/W units are to construct so-called "hygiene stations" for removal of radioactivity by

[redacted] /dusting..... 50X1-HUM

dusting and showers, for personnel decontamination. When an atomic attack is expected the men have to be inoculated with a special serum intended to stop, or slow up the disintegration of blood corpuscles caused by radioactivity. A similar serum is to be available for bacteriological warfare.

c) For officers, atomic warfare training is limited to the ability to handle instruments for ascertaining the intensity of radioactivity. These have been developed from ordinary apparatus used in medicine, and include:

i) Roentgenometer, for measuring the intensity of terrain contamination (see sketch J)

ii) Radiometer, for measuring intensity over small areas

iii) Dosimeter , for measuring doses of radiation (as already stated, there are two types)

Key to sketch J

1) switch

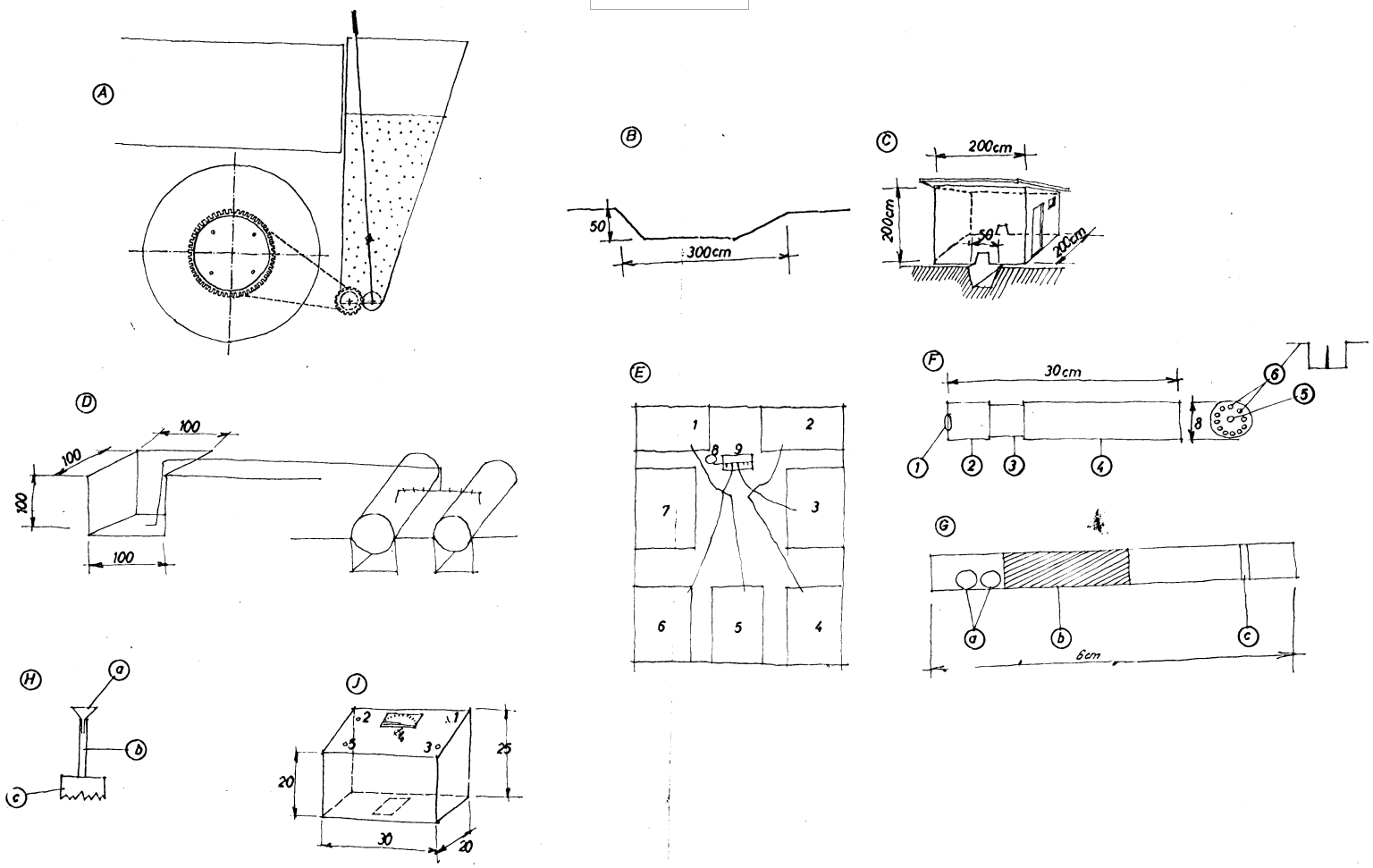
2) voltage control

3) neutral position

4) range

5) operating switch

50X1-HUM



SECRET

50X1-HUM