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Central Intelligence Agency



31 JUL 1984

SECTION TECHNICAL 108712228

MEMORANDUM FOR: The Director of Central Intelligence

SUBJECT: Soviet Doctrine for Offensive Chemical Warfare
Against NATO (U)

1. The attached memoranda documents and provides our assessment of changes in Soviet doctrine for the offensive use of chemical warfare against NATO. These studies were requested by Secretary of Defense Harold Brown in September 1980 and represent a complete reevaluation of the evidence available to the CIA. The first attachment--SOV 84-10105CX--is provided as an executive summary for the main study, TCS-5548/83. Both documents were prepared by the CIA's Directorate of Intelligence.

2. Attachment 2 is a combined OSSIAN/CIA Statute report. For convenience of reference by NFIB agencies, the codewords OSSIAN/CIA Statute have been assigned to the product and products derived from certain extremely sensitive agent sources of CIA's Directorate of Operations. The words OSSIAN/CIA Statute are classified CONFIDENTIAL and are to be used among persons authorized to read and handle this material.

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Chief
Theater Forces Division, SOVA

BB-910880

Attachments:

- 1 - SOV 84-10105CX
- 2 - TCS-5548/83

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Soviet Offensive Use of Chemical Weapons (U)

A Research Report

This report was authored by CIA Statute in collaboration with CIA Statute, Theater Forces Division, Office of Soviet Analysis. Research assistance was provided by CIA Statute Strategic Forces Division, Office of Soviet Analysis. Comments and queries are welcome and may be addressed to the Chief, Theater Forces Division, Office of Soviet Analysis, on CIA Statute (U)

This paper was coordinated with the Office of Scientific and Weapons Research. (U)

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PrefacePurpose

This study investigates Soviet doctrinal concepts for the use of chemical weapons on the European battlefield, during both conventional and nuclear phases of war. It draws upon evidence from Warsaw Pact exercises and doctrinal writings. (1) CIA

Two major issues are addressed:

- Major changes over the last two decades in the relative emphasis on offensive use of chemical warfare in Soviet military planning.
- Soviet intentions for the first use of toxic chemicals on the non-nuclear battlefield.

The latter issue has been a major point of contention within the Intelligence Community for some years.¹ CIA

Scope. Almost CIA Soviet and Non-Soviet Warsaw Pact (NSWP) classified military writings dating from the fifties to the early eighties, including the most sensitive and authoritative documents available to the Intelligence Community, were reviewed for information on Warsaw Pact policy and doctrine for offensive chemical warfare. We believe this effort is the most intensive examination yet conducted of this material. In addition, with the assistance of 25X1 a detailed survey was conducted 25X1 covering more than two decades. Specific examples of the simulated use of chemical weapons in Pact command post exercises (CPXs) or field training exercises (FTXs) were of particular interest. CIA Statute

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also were used as appropriate. Unclassified Soviet literature was not extensively exploited because it tends to be propagandistic and, in our opinion, does not provide a reliable indication of Soviet

¹ See NIE 11-14-810, Vol II, CIA Statute January 1982, Warsaw Pact Forces Opposite NATO, for the most recent interagency view on this subject. CIA

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intentions in this sensitive area. CIA Statute

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The

master key will not be published but is available by contacting
Chief, Theater Forces Division, SOVA. (U)

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Development of Doctrine After World War II

After World War II², the Soviet Union continued development of nerve agents, but a revolution in Soviet military doctrine and strategy brought about by the deployment of nuclear weapons in the mid-to-late fifties eclipsed developments in the chemical arena. Nevertheless, classified Pact writings clearly indicate that by the mid-to-late sixties, the Soviets had significantly altered their WW II concepts to place them in consonance with "modern" conditions--i.e., operations on a nuclear battlefield. Despite a number of minor refinements and a few major alterations since then, much of Soviet employment doctrine for "modern" chemical operations--covering the tactics and techniques, weapons effects, targeting, and munitions delivery--had already been formulated by 1961. This doctrine was expounded in a classified Soviet military writing, "Principles of the Employment of Chemical Missiles," which was subsequently excerpted in The Penkovskiy Papers. CIA Statute (25)

The following discussion of Post WW II development of Soviet doctrine for the employment of chemical weapons is based on authoritative Soviet and non-Soviet Warsaw Pact writings from the early sixties to the mid-seventies. In the vast majority of these writings, chemical munitions use is clearly discussed in association with the employment of nuclear weapons. Anomalous suggestions of the use of chemical weapons in the early phase of war when only "conventional means of destruction" supposedly are used are detailed in a later section.³ CIA Statute

According to Soviet doctrine from the 1960s, chemical weapons could be employed by front, army, or division-level

² The Soviet experience with chemical warfare prior to 1946 is addressed in Annex B.

³ See p. 51.

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forces.⁴ Weapons delivery systems belong almost entirely to these forces and are categorized by the Soviets as "tactical" and "operational-tactical." They are not primarily intended for chemical munitions delivery, however, but rather for nuclear or conventional fire. 25X1 25X1

sixties, in discussing potential roles for Long Range Aviation (a strategic attack force) in support of front operations, noted that bombers could be used for delivery of chemical, conventional, or nuclear ordnance beyond the range of the front's integral means, specifically against such targets as NATO forces at ports of embarkation.⁵ (26) However, neither training nor exercises for chemical delivery by LRA have been detected. 25X1

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25X1 25X1 front level chemical delivery systems included front, army, and division-level rockets and missiles (FROG-3/7; Scud A & B) which had maximum ranges of up to 300 kilometers. These rockets and missiles were equipped with chemical warheads carrying unitary munitions as well as the more prevalent cassette warheads containing submunitions (26a) Cruise missiles, assigned to the front air armies and having a range of 500 kilometers, were also available. The navy's coastal missiles and artillery also evidently were to conduct chemical strikes out to 100 kilometers in support of anti-landing operations. Other delivery systems included front and naval aviation aircraft, armed with unitary or bomblet munitions and, to a lesser extent, sprayers and other devices, possibly including chemical naval mines and

⁴ A front, the largest Pact field force, is roughly comparable to a NATO army group with its associated air forces. A front may consist of three to five ground armies (each including three to five tank or motorized rifle divisions), air forces including as many as several hundred tactical aircraft, and naval elements (when operating on a maritime sector). The overall size of a fully-mobilized front could range from 300,000 to more than 500,000 men. CIA

⁵ Although during a recent reorganization, Long Range Aviation (LRA) was abolished and the bomber assets referred to here now form air armies of the Supreme High Command (VGK), because of its historical context, the LRA will continue to be referred to by that name in this study. CIA

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torpedoes. (27) Artillery also retained its WW II role as a major chemical delivery system. Although 122 mm and 152 mm apparently continued to be the primary calibers essentially all tube artillery and mortars over 85-mm, as well as multiple rocket launchers, have been associated with the delivery of chemicals at one time or another.⁶ (28) CIA Statute

Other delivery systems, many of which apparently harken back to WW II, include: land mines, hand grenades, aerosol generators (portable and trailer mounted) and chemical spray vehicles (actually, terrain decontamination vehicles using a spray nozzle). CIA Statute (29)

Soviet offensive chemical doctrine from the early sixties through at least the mid-seventies as described in Pact documents can be summarized as follows:

- Chemical weapons are to be used in a front offensive to drastically reduce the combat effectiveness of enemy troops and to disrupt the operation of control organizations and rear services through the mass incapacitation and debilitation of personnel and through the contamination of combat equipment and terrain in the enemy's territory.
- These weapons are used by the front's rocket troops, aviation, and artillery on the main axes, by surprise and massively, in combination with other means of destruction and against targets having the greatest density of personnel and the least protection for them. CIA Statute

CIA (30)

* Specifically, Soviet principles for the use of chemical weapons reflected in Pact classified writings of this period called for the massive surprise use of chemical weapons combined with nuclear weapons against important targets. Most writings

⁶ For more detailed information on Pact CW weapons (and agents), see CIA OSI-STIR/SC/75-30 CIA Statute, December 1975, Characteristics of Warsaw Pact Chemical Warfare Agents and Weapons Systems CIA, and CIA Statute 31 January 1983, Toxic Chemical Warfare Agents and Weapons Systems--USSR (U) Appendix B discusses agents, munitions and delivery systems currently in the inventory. CIA

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noted that the element of surprise was an essential condition for effectiveness unless used against a poorly-equipped enemy. Operational deception was vital to confusing the enemy as to the true intentions and concepts of operation of Pact chemical forces, as well as means, targets, and time of use. Conducting chemical attacks at twilight, at night, or using air burst at a height sufficient to be unobservable from the ground were also seen to contribute to ensuring surprise. 25X1

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(31)

Soviet doctrine also called for the use of chemicals in both "offensive" and "defensive" operations (in the latter case often to assist in the transition to the offensive), to inflict massive casualties on the enemy, and to hinder his combat actions and the functioning of his rear services. The use of chemicals for "harassing" purposes, particularly in rear areas, was mentioned repeatedly to:

- hinder enemy repair and recovery work and the reconstruction of destroyed installations.
- disorganize shipbuilding and repair.
- hamper enemy use of ports as well as naval bases.
- prevent the enemy from conducting combat actions in specified areas.
- preclude the enemy from using specified airfields (by using chemicals and conventional munitions to neutralize the airfield for one day).
- delay the launch of NATO's missiles (by up to an hour).
- restrict the maneuver of enemy armor and channel it into prepared defensive areas.

The use of chemical munitions to create barriers or sectors of contaminated terrain that could protect friendly flanks or contain an encircled enemy and prevent his retreat was frequently advocated. Additionally, during the sixties, there were many references to the use of chemicals to support amphibious landing operations and to defeat NATO's amphibious or airborne forces at points of embarkation or landing areas--in some cases a distance

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of 400-600 kilometers. CIA Statute (32)

Normally these references combined chemical strikes with nuclear strikes. Chemical strikes were used to destroy targets which were not planned for attack by nuclear weapons or in sectors where nuclear strikes had not been employed. 25X1

25X1 a chemical attack by missiles, artillery, and aircraft could be launched in advance of, simultaneously with, or after nuclear strikes, during the initial or subsequent phases of preparatory fire. Use in advance of nuclear strikes was thought to assure maximum surprise while not reducing the effectiveness of nuclear strikes, compelling the enemy to continue to use protective equipment against contamination, thereby reducing his physical efficiency. Such use in advance of nuclear strikes had very little evidential support, however, from other sources which generally had simultaneous or subsequent use as their context.

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Pact writings noted that simultaneous chemical and nuclear strikes would require extremely precise distribution of targets. To preclude destruction of the chemically contaminated atmosphere, chemical attacks would have to be conducted on targets located outside the zone of air turbulence created by the nuclear explosion. The most recent writings indicated that the zones produced by nuclear explosions, with yields of 2 to 100 kilotons, would extend out 3 to 6 kilometers with a norm of 5 kilometers. In one example, the distance between the ground zero for a 20 kiloton nuclear missile and the ground zero for a chemical missile was to be 5 kilometers. Sources from the early sixties suggested the required nuclear-chemical separation distance might even be as much as 5 to 10 kilometers. Chemical attacks launched after nuclear strikes, however, were thought to assure maximum effectiveness. Here again, chemical targets would need to be an adequate distance from the nuclear ground zero, but would be conducted some ten to 15 minutes (some writings indicate as little as two to three minutes) after the nuclear bursts. CIA

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(33)

Pact writings also stressed the use of chemical weapons in combination with high explosive and fragmentation munitions, although normally in what appeared to be a nuclear war context. Additional casualties would result and further combat and

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recovery (reconstitution) efforts would be hindered by requiring enemy personnel to operate in hot and bulky protective gear. Soviet doctrine as far back as WW II envisaged forcing the enemy to don protective gear as a specific goal of chemical use. Operating in such gear would reduce the soldier's fighting ability, tire and demoralize him, and use up his defensive equipment thereby making him more susceptible to later chemical attack. CIA Statute

Other uses for chemical strikes, according to Soviet writings from the mid-seventies, include:

- attacking enemy groupings which have not been sufficiently neutralized with nuclear weapons.
- disruption of the enemy's transition to the defense.
- ensuring high rates of maneuver.
- defeating the enemy in meeting engagements.
- destroying encircled forces.
- assisting in the capture of fortified areas.
- preparing for assault crossing of wide water obstacles (rivers, straits, or bays over 150 meters width) and the capture of straits zones.
- assisting in mountain operations (by attacking enemy forces defending passes, gaps, and road junctions).
- supporting desert operations (in particular, to contaminate oases and sources of water--as well as supply points for water and fuel).

The use of chemical weapons to seize or defend urban areas and in operations conducted in cold climates are not addressed in the mid-seventies writings, although they appear in comparable sensitive materials a decade earlier. CIA Statute (35)

* Although a wide variety of targets for chemical attack have been listed in Warsaw Pact classified writings, some key targets were continually stressed, according to the writings 25X1

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. These include:

- Nuclear means, including enemy missile units, nuclear artillery, nuclear-delivery aircraft, and nuclear storage and logistics sites or units.
- Airfields, particularly those at which nuclear-delivery

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- aircraft are based.
- Command and control posts at the brigade, division, corps, and army, observation and radar reconnaissance posts, as well as radio-technical or radio-electronic installations.
 - Large concentrations of troops in the open, i.e., assembly areas.
 - Advancing troop groupings.
 - Tactical or operational reserves in concentration areas, moving forward, or in loading areas.
 - Rear services installations.
 - Personnel in points of resistance.
 - River crossing sites and other obstacles to movement.

Other targets which were considered key, at least in the sixties, included air defenses, ports, naval bases, and airfields supporting the embarkation of enemy amphibious and airborne landing forces. CIA Statute (36)

Changing Emphasis on Offensive Use of Chemical Warfare
Greater Emphasis in Sixties.

During the 1960s and into the early seventies, there appeared to be a greater, clearer emphasis on offensive chemical use than exists today. Employment of chemical weapons was an integral part of Soviet planning for general nuclear war with NATO. The Pact normally included the offensive use of chemical and nuclear weapons in planning front offensive and defensive operations, according to voluminous Pact classified writings. 25X1 25X1

25X1 25X1 Soviet General Staff training syllabae routinely included discussions of and planning for the use of both chemical and nuclear weapons in offensive and defensive operations of front and army; in combat use of rocket troops and artillery; in rear services support to the ground forces; and so forth. Top Secret Soviet documents provided 25X1 as well as other classified Pact writings, included numerous references to the use, and planning for the use, of chemical munitions by divisions, armies, and fronts; by Soviet tactical and strategic aviation; in support of airborne and amphibious landing operations, as well as in defense against such landings. The use of chemical weapons was also discussed in the Soviet Field Service Regulations during the sixties. CIA Statute (57)

Below is a short list of examples of the articles dealing

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exclusively with chemical employment doctrine, planning tactics, agents, delivery systems, and effectiveness, which appeared in Warsaw Pact classified military writings:

- 1961: "Principles of the Employment of Chemical Weapons" in a Soviet military journal.
- 25X1 [REDACTED]
- mid-to-late sixties in an article on the use of chemical weapons in general.
- late sixties/early seventies in an article on the employment of chemical weapons in support of division-level operations. CIA Statute (58)

During the sixties, offensive use of chemical weapons was discussed extensively in Pact literature and, in conjunction with nuclear weapons, was frequently practiced or simulated in war games and exercises. Field training exercises (FTXs) occasionally included live firing of chemical munitions. At the Voroshilov General Staff Academy, classroom training, war games, and command post exercises gave senior officers extensive practice in planning and coordinating massive chemical and nuclear strikes at front, and perhaps, Theater of Military Operations level. This training encompassed front and army allocations of chemical and nuclear weapons, including production of front-wide fire plans for ground and air-delivered chemical or nuclear weapons and the calculation of projected losses on both sides from chemical and nuclear weapons. CIA Statute (59)

Classroom training also occurred in other academies, among them the Frunze Combined Arms Academy, the Malinovsky Armored Academy, the Timoshenko Chemical Defense Academy in Moscow, and probably in all the other combined arms and air academies as well. In the Chemical Defense Academy, and possibly in some other lower-level military schools, experienced combined arms officers--whose units would be the actual users of chemical munitions--apparently received the more "nuts-and-bolts" training needed at the lower echelon to actually employ such weapons.

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CIA Statute (59)

7 The vast majority of references in classified writings to Pact offensive use of chemical weapons were in articles dealing with more general topics--such as the operations of a missile brigade, an army, or a front. CIA Statute

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Allocation and use of chemical and nuclear weapons in war games, CPXs, and FTXs was frequently practiced during this period by the Warsaw Pact, according to Pact writings 25X1

25X1 The Soviet groups of forces in Eastern Europe, Polish and Czech forces, and apparently to a lesser extent, East German and Bulgarian troops often were involved in national exercises or in major combined Warsaw Pact exercises with simulated employment of chemical and nuclear weapons. According to Soviet military writings, aspects of chemical and nuclear weapons employment and the use of computers to assess their effectiveness occurred in the annual training plans, war games, CPXs, and FTXs of many military districts. Our evidence is best for the Carpathian MD, but at least the Leningrad, Baltic, Kiev, Odessa, and Turkestan MDs also participated. Some of the major Warsaw Pact or national-level exercises in which chemical and nuclear weapons are known to have been employed offensively by the Pact include:

- LATO-67, including Polish, Soviet, and East German forces.
- DNEPR-67 (Soviet forces).
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Even in the sixties, when training and planning for the use of chemical and nuclear weapons was relatively frequent, nuclear weapons were clearly preferred; chemical weapons had a secondary role. Pact writings from the sixties and seventies stressed that--although they would be used in combination with other weapons of mass destruction and conventional means--nuclear weapons are the principal decisive, most powerful means of destroying the enemy. A Soviet classified writing from the mid-sixties, for example, noted that chemical weapons were not used in WW II; and in WW I, despite the enormous casualties they caused, were not the deciding factor in any engagement let alone in the outcome of the war. Nuclear weapons, in contrast, can decide not only battles, but an entire war. CIA Statute (61)

During this time, Soviet chemical research and development was far less important than nuclear R&D. In addition, Czech and Polish forces did more work in analyzing of the effects of nuclear than of chemical strikes and were readier in terms of planning and training to use nuclear weapons. 25X1

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Why?

There are a number of possible reasons for the greater emphasis on chemical warfare we see in the sixties. Soviet classified writings of that time demonstrated clear concern that the Pact did not have sufficient warheads or delivery systems to fulfill all major requirements. It was stressed that nuclear weapons should be used against the more important targets--and used carefully so as not to waste them. These concerns continued into the late sixties and early seventies, even though the Pact's nuclear inventory had grown dramatically. Pact classified writings 25X1

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In addition, Pact writings mentioned specific qualitative inadequacies in the types of nuclear weapons available. Until the mid-seventies the Warsaw Pact lacked accurate, short-range, low-yield tactical nuclear delivery systems which could provide adequate, close-in coverage for their forces near the forward edge of the battle area (FEBA). Especially, they did not have nuclear artillery. CIA

Thus, in the sixties chemical weapons evidently were important to the Soviets as "gap-fillers" to balance an acknowledged NATO advantage, if not preponderance, in tactical nuclear weapons. This explains why, at various times and places in the 1960s, chemical weapons were clearly an integral part of the massive "nuclear" (or "nuclear and chemical") strike. 25X1

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*** This recurring theme--the substitution of chemical for nuclear weapons when an inadequate number of the latter were available--dates back to the fifties and became common in Pact classified military writings during the sixties. In the late fifties, Soviet officers were told that in the event of nuclear weapons shortages, artillery preparation for a counterattack could consist of several concentrated salvos of chemical and conventional ammunition. (64) In particular, it was noted that:

"... considerably fewer nuclear warheads will apparently be allotted to an operation in mountainous areas under normal conditions. The role of chemical weapons will therefore become more important and they will be widely used.. When planning the use of toxic agents in mountainous areas," CIA Statute

(65)

Defensive Use. Writings from the sixties, particularly in the context of defensive operations, frequently noted the use of chemical weapons (but also conventional artillery, air strikes, special detachments, sabotage groups, airborne landings, etc.)

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to offset shortages of nuclear weapons. One writing noted that in army defensive operations, shortages of nuclear weapons could be offset to a considerable extent by chemical weapons (both to hit enemy personnel and to establish sectors and zones of contamination on the routes of enemy advance), as well as by conventional air strikes. Soviet writings note that available nuclear weapons can be made to "go farther" in a defensive operation by using them in conjunction with chemical weapons to create contamination barriers. It was also noted in the sixties that a front probably would be unable to allocate sufficient nuclear warheads to destroy an enemy airborne division's transport aircraft at their departure airfields; therefore an attack would have to employ a mix of chemical and conventional munitions. CIA Statute (66)

After the sixties such references to chemical weapons being used to make up shortages in nuclear warheads or to remedy specific, unfavorable situations where NATO had nuclear superiority became less frequent. 25X1

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AS in the sixties, the Voroshilov Academy proposed using nuclear ground bursts and persistent chemical agents to inflict maximum casualties on the enemy and delay his advance for a prolonged period. Other Soviet military academies through the early to mid-seventies also taught the use of chemical weapons in similar situations. CIA Statute (67)

Offensive Use. Sensitive Soviet writings dealing with front offensive operations through the mid-seventies taught that it was advisable in meeting engagements to destroy enemy reserves simultaneously with destroying his first echelon. If the front did not have sufficient nuclear weapons for this purpose, the advance of enemy reserves could be delayed with chemical and conventional means. 25X1

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CIA (68)

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✓ Possible Reasons for the Emphasis. It is possible that perceived inadequacies in the Soviet nuclear posture during the sixties led to a greater emphasis on the use of nuclear weapons not only against the most important enemy nuclear targets, but also on the main Soviet axes of attack, thereby assigning a proportionally more significant role to chemical munitions on

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secondary axes. 25X1

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Some substantiation for this thesis is provided by emphasis on chemical use in operations on mountain axes.

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✓✓ Another possible reason for emphasis on chemical weapons during the sixties may have been the Soviet expectation that NATO would employ chemical weapons in offensive and defensive operations. The Soviets apparently believed themselves to be well behind the West throughout the sixties. Classified Pact writings as early as the beginning of the sixties highlighted what they perceived to be the threat, especially in light of US failure to ratify the 1925 Geneva Protocol.⁸ According to one Soviet author:

"The American Imperialists, setting a high value on the effectiveness of modern chemical weapons, and not considering themselves bound by any kind of international agreements or their prohibitions, at the present time have shown intensive activity for the further improvement and production of these weapons." (69)

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(70)

Pact writings during this period expressed a concern that the "aggressive NATO bloc" would initiate the employment of chemical, nuclear, and bacteriological weapons with a massive, surprise attack. Classified Soviet writings noted some disconcerting Western activities in the chemical arena: for example, the US Army spent some \$2 billion on chemical warfare between 1951 and 1960, and the Soviets expected the US allocation

⁸ The Geneva Protocol, ratified by the USSR in 1928, was not ratified by the US until 1975. (U)

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for chemical and biological military research to at least triple in the 1961-66 period. Moreover, the US "military-chemical industry" was credited with some 100 production plants capable of producing 250,000 tons of "war gases" annually. 25X1

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Soviet fear of Western chemical warfare capabilities stemmed from two factors:

- the enormous casualties caused by their unpreparedness caused in World War I.
- their respect for Western chemistry and industrial potential to manufacture agents, based on existing capacity to produce modern highly toxic, organo-phosphorous pesticides. CIA Statute (71)

Classified Soviet writings from the sixties indicate extensive knowledge of US doctrine and capabilities for the employment of chemical weapons. Among the classified and unclassified US manuals in Soviet hands were:

- A 1959 "Secret" US Army manual, Combat Against Airborne Landing Forces, which detailed US plans to use chemical (and nuclear) weapons to counter airborne landings.
- An Army/Air Force technical manual, Combat Capabilities and Employment of Toxic Chemicals, TM 3-200/T042C-1-2, (as published by the GRU in 1961).

Various Pact writings indicated a fairly detailed knowledge of the agents in the US Army and Air Force inventories, their normal delivery systems, and US work in the area of nerve-agents and psychochemicals. They also reflected envy of the tripartite chemical/biological agreement among the US, UK, and Canada, whereby the US benefited from the work of the other two countries. CIA Statute (72)

According to Pact writings in the early sixties, however, the US chemical/biological threat was not confined to the tactical armaments of the Army and Air Force. There was clear concern that the US intended to develop weapons to fulfill strategic missions. The writings stated the US was working on an intercontinental cruise missile intended for the dissemination of chemical and biological agents. A highly-classified Soviet writing from this period credited the Matador (1240 kilometers range) and the Snark (10,000 kilometers range) with chemical payloads. The writing also addressed US plans to use the 800 kilometers range Regulus-I missile, pilotless aircraft, and B-52s to deliver biological agents. In addition, there was--and apparently still is--concern that US Army special-purpose forces

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would conduct sabotage operations in Soviet rear areas, using special nuclear devices as well as chemical and bacteriological means to contaminate food and water supplies and troop assembly areas. CIA Statute (73)

Another possible reason for the emphasis on the offensive use of chemicals in the sixties may have been its potentially major role in "defense of the homeland." During that time, there were constant references in classified writings to the use of chemical and nuclear weapons to attack invading NATO forces--particularly amphibious and airborne troops, in their concentration points or on arrival on Warsaw Pact territory. Such use evidently was exercised particularly in the Baltic area for the coastal (Polish) front, and may account for the relative frequency of chemical warfare references in Polish military literature of the sixties. Since the late sixties, the perception of the likelihood of a major NATO invasion of Warsaw Pact territory evidently has diminished. There are far fewer references to such actions now than in the past and specific, detailed discussions of the use of chemical and nuclear weapons against such landings are no longer found. CIA Statute (74)

Offensive Use in Pact Exercises and Writings Since the Mid-Seventies

Since the mid-seventies, Soviet exercises and classified writings have reflected an apparent decline in the role and significance of chemicals in Warsaw Pact offensive operations against NATO. Offensive--particularly massive, decisive--use of chemicals against NATO no longer seems to be a prominent concern to the Warsaw Pact. The relative lack of discussion of offensive chemical warfare in sensitive Soviet and non-Soviet military writings and the infrequency of its notional play in major Warsaw Pact exercises suggest it now receives only minor attention. CIA Statute (75)

Since the mid-seventies, there is no clear evidence that the intricacies of conducting massive, offensive chemical operations are a part of the instruction syllabus of the General Staff Academy. Based on Warsaw Pact writings 25X1
25X1 doctrine expounded there through 1975-76 included specific, extensive instruction about offensive and defensive use of chemicals as "special" munitions in conjunction with nuclear weapons by a front or army. However, virtually identical writings since that time either omit any mention of the use of these weapons, or at the most, contain ambiguous references that seem not to imply massive use. In previous years such writings clearly would have contained

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references to large-scale employment of toxic chemical or "special" weapons. CIA Statute (76)

A sensitive writing from 1977 for instance, discusses Pact warfighting with nuclear and conventional "means of destruction" without mentioning offensive chemical use. It refers to the planning, targeting, yields, and number of nuclear warheads needed, but does not present comparable detailed planning for the employment of chemicals. Although chemical strike planning that would have appeared earlier in such a writing is omitted, the work incorporated a detailed account of NATO's capabilities to conduct extensive chemical strikes. CIA Statute (77)

Another classified instructional writing of the same vintage deals with front operations on a coastal axis. Although it refers, in a discussion of troop control during preparations for an offensive operation, to operational directives and documents which specify the employment of nuclear weapons "and other means of mass destruction," it lacks any further specific mention of toxic chemical weapons. It discusses the conduct of operations with nuclear or conventional weapons alone. Treatment of nonnuclear ordnance gave no indication of offensive, toxic, chemical munitions. Extensive allocations of nuclear weapons were specified--along with information on nuclear targeting and yields--indicating that a coastal front might employ some 680 nuclear weapons during an entire operation. These weapons were divided into those for use in the initial massed nuclear strike, immediate tasks, for follow-up tasks, and for a reserve. Not even in the allocations for subsequent missile or aircraft strikes in the nuclear phase, however, was there evidence of the inclusion of chemical weapons on the Pact side--although there was for NATO. In fact, NATO, in this writing, initiated the nuclear phase of the war with a massed nuclear strike, combined with a sizable number of chemical strikes with Vx. Despite NATO's use of chemicals and their postulated effectiveness, there was no indication that the Pact response--clearly nuclear--included toxic chemical weapons. CIA Statute (78)

As is the case with classified doctrinal writings since the mid-seventies, there is little evidence ^{25X1} of emphasis on major offensive chemical operations in CPXs or FIXs. In fact, there is no indication in classified writings of any significant level of training or exercising in the employment of toxic chemical agents and munitions. In addition, there is no indication in detailed, highly classified Soviet and non-Soviet critiques of major exercises--such as in the Soyuz, Shield, Zapad, ^{25X1} series--of large, simulated allocation or employment of chemicals since the early seventies, despite

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inclusion of extensive information on the fire planning and allocation of nuclear weapons. Similar classified critiques in the sixties specifically addressed the allocation and employment by division-, army-, and front-level forces, of large numbers of chemical missiles and bombs as well as nuclear weapons. Although there was no indication of Pact offensive chemical use in CPXs and FTXs in the exercise critiques since the early seventies, there is no apparent reason why chemicals could not have been played. According to a mid-seventies classified planning guide for the organization and conduct of Warsaw Pact-wide combined exercises, the planning documents used in preparation for such an exercise could include information as to the distribution of missiles and bombs with nuclear and "special" warheads. CIA Statute (91)

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In addition, there is no indication in recent highly-classified Pact critiques of national-level Soviet, non-Soviet, or Warsaw Pact-wide operational and combat training, of any extensive training in or role for offensive, toxic, chemical weapons. Moreover, no clearly offensive chemical training--rather than training in the use of smoke and flame/incendiary devices--has been in such annual critiques since the late sixties. 25X1

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In the early sixties, in contrast, training in the employment of chemical weapons was reflected often in Soviet critiques of operational training. CIA Statute (80)

Further, there is no mention of the offensive use of chemicals in a wide variety of classified military writings from the mid-seventies to the present, although they were common in previous years. These cover a range of subjects from the conduct of radioelectronic warfare to the combat capabilities of tactical aviation. Of particular note, there is no mention of the use of chemicals or "special" weapons in a Pact document from the mid-to-late seventies addressing the cooperation and coordination needed between the ground forces and tactical aviation. The document specifically discussed the critical need for precise coordination amongst the various national forces during combined

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actions, specifically in regard to methods of employing nuclear weapons. Yet there is no discussion of the coordination needed for chemical weapons. CIA Statute (82)

*** Some in the US Intelligence Community have argued that, despite the paucity of recent information from exercises and training concerning the offensive use of chemicals, the Warsaw Pact is acquiring the necessary training in planning and conducting major, decisive use of chemicals under the guise of other types of operations. These observers stress that training which includes the use of live agents is preparing Warsaw Pact forces to operate in a chemically contaminated environment, including one contaminated with agents unique to the Pact such as Soman. The argument also has been advanced that there is little difference between a chemical and a high explosive round and that training in use of the latter is sufficient for use of the former. According to this line of reasoning, the Pact could get the training it needs in opposed-forces exercises where friendly forces play the role of a notional "enemy" who employs toxic chemical agents. 25X1

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Soman has never been included in the US inventory of toxic agents but there have been some ambiguous allusions to this type of agent in some classified Pact writings concerning US chemical capabilities. 25X1

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It has been asserted that many of the procedures for firing chemical munitions are analogous to those for nuclear or conventional fire support, and that Pact forces could practice the planning and coordination needed for massed chemical strikes under the guise of planning for the employment of nuclear and conventional weapons. In Soviet exercises, primarily command post exercises, many aspects of nuclear planning and coordination are practiced. The types of actions involved, according to Pact writings 25X1 include:

- intelligence gathering and evaluation.
- target identification.
- selection of delivery means.
- dissemination of target data.
- alerting subordinate elements of impending strikes.

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