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WHAT POLICY FOR NERVE GAS?

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During World War II Germany produced, but did not use, a new super-toxic class of lethal chemicals, the nerve gases. During the 1950s and 1960s the United States produced thousands of tons of nerve gas and stockpiled nerve gas weapons designed for tactical battlefield use. These are stored mainly in the continental U.S., with a lesser quantity deployed in Europe, in the Federal Republic of Germany. We have no reliable estimate of the size or the composition of the Soviet poison gas stockpile, although the U.S.S.R. and a number of other countries could readily produce nerve gas.

Lethal chemicals are generally considered to be weapons of mass destruction. For example, under not uncommon meteorological conditions a single light bomber could deliver enough nerve gas to cause a high percentage of fatalities over a downwind area of several square miles. But despite the potential of nerve gas and certain other lethal chemicals for inflicting mass casualties, quite effective protection can be provided for combat troops, in the form of modern gas masks, protective clothing, vehicle air conditioners, and other equipment. Although an initial resort to nerve gas would inflict heavy casualties on military units if caught off guard, its subsequent use against troops with modern protective equipment would be much less effective, a fact of potential importance for chemical arms control.

Edging Toward Chemical Arms Control

The principal treaty dealing with chemical weapons is the Geneva Protocol of 1925. All militarily important nations are parties, including the members of NATO, the Warsaw Pact, and the People's Republic of China. After nearly fifty years of alternating controversy and inattention, the United States has finally become a party to the Protocol, following its ratification by President Ford on January 22, 1975, with the undivided support of the Senate. The Protocol is, in effect, a no-first-use agreement. It *does not* prohibit stockpiling of chemical weapons or reprisal in kind against a violator. However, the U.S. and U.S.S.R. as parties to the Biological Weapons Convention of 1972 have undertaken, under Article IX, to negotiate effective measures for prohibiting the development, production and possession of chemical weapons of war. At Moscow in July, 1974, President Nixon and Secretary Brezhnev declared their agreement to consider a joint initiative at the Conference of the Committee on Disarmament (CCD) in Geneva to obtain an international convention eliminating the most lethal chemical weapons. This was reaffirmed by President Ford and Secretary Brezhnev at Vladivostok last November. However, no such initiative has yet been made nor has the United States put forward any proposals of its own.

. . . And Away From It

Meanwhile the Department of Defense has renewed its request, voted down in the House of Representatives last year, for funds to build a facility to produce a new generation of nerve gas weapons, safer to handle and store, called binaries. Only $8.8 million is being sought for the new facility but over the course of several years it would cost approximately $1,000 million to produce binary nerve gas weapons to replace the existing stockpile and perhaps three quarters of a billion more to dispose of the latter. For two years the Defense Department has testified before Congress in favor of binaries, while the Director of the U.S. Arms Control and Disarmament Agency has testified against. The case for buying binaries is not that they are more effective on the battlefield—in fact they are not. Rather, the arguments for and against them are largely psychological and political. Advocates consider that their safety features will overcome public opposition to transportation and forward deployment of nerve gas weapons. Critics argue that a major new round of chemical weapons procure-

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ment will spoil chances for negotiating a chemical arms control treaty and will stimulate the international proliferation of chemical weapons.

U.S. Policy at a Crossroads

While the dispute over binaries has occupied center stage, the present situaton represents a crossroads of a more fundamental nature. Broadly defined, the choice is between (1) replacement of the existing stockpile with binaries or at least the retention of the current inventory, possibly with some modifications to suit newer types of aircraft and artillery or, (2) renunciation of lethal chemical weapons, either through international agreement or unilaterally, seeking a treaty afterwards.

It is not maintained that chemical weapons are needed to deter war itself. Our conventional and nuclear forces serve that role. Neither do senior officials consider that we would have any important incentive to be the first to attack with gas should major war occur. Stated U.S. policy has long been not to start-poison gas warfare, a doctrine further solidified by U.S. ratification of the Geneva Protocol. Rather, it is argued that the prospect of retaliation in kind would contribute importantly to deterring the Soviets from using the nerve gas that they must be assumed to possess and that, if such deterence fails, our retaliation could enable us to defend Europe without necessitating immediate resort to nuclear weapons. The rationale for these beliefs rests not on the direct casualty-producing capability of nerve gas, which would be minimized by the use of protective equipment, but rather on the reduction in fighting efficiency that results from wearing masks and suits and taking other protective measures. It is contended that the ability to retaliate in kind in the combat zone and in rear support areas would allow us to impose on the Soviets the same protective posture they impose on us, greatly reducing the advantages to them of any protracted use of gas. However, it must be admitted that our retaliatory capability does nothing to reduce the advantage to the Soviets inherent in the initial casualties and confusion that could be inflicted by a surprise gas attack on our forces.

But technical military considerations aside, the case for having nerve gas rests on psychological assumptions that go to the heart of NATO defense doctrine. Would our nerve gas deter Soviet first use or would it instead encourage them to think at a desperate moment that they might use nerve gas to break a battlefield deadlock without provoking a nuclear response? And if NATO is attacked with nerve gas, would our retaliation in kind help to gain time and promote the sanity needed to terminate hostilities? Or would it so complicate the calculations of both sides as to preclude the clarity of analysis and communication needed to stop a war short of all-out nuclear exchange? Indeed, must not nuclear weapons inevitably come rapidly into play in response to any determined Soviet thrust into Europe, thereby completely overshadowing the question of gas warfare?

Setting the Example

It is generally agreed that in addition to the cost in resources, there are other costs of stockpiling nerve gas and having an active nerve gas program. Today, no non-nuclear nation is thought to have stockpiled nerve gas weapons. It is very much in our interest to preserve this situation. Our great wealth allows us to expend enormous quantities of conventional munitions in tactical war and to maintain large strategic and tactical nuclear forces. Very few countries even approach this capability. However, nerve gas weapons have the potential of wide area coverage at relatively low cost. Their proliferation would greatly enhance the capability of smaller countries and perhaps even of dissident paramilitary groups for threat, harassment, and destruction. The United States and the Soviet Union set the pace and direction of military developments throughout the world. The more interest we display in nerve gas weapons, the more we pioneer their technology and invest in them, the more lesser military powers are likely to question their case for refraining from acquiring nerve gas weapons of their own.

On a different level of concern, the rapid and accelerating advancement of biochemistry and the biological sciences is inevitably leading to a profound ability to manipulate life processes for good or ill. Over the long run, it may be very important to create an international consensus that such knowledge is not to be exploited for military purposes. The possession of nerve gas weapons maintains institutional commitments to such exploitation. In contrast, if nerve gas can be eliminated we would be free to create an atmosphere in which our increasing knowledge of life processes is directed solely to man's benefit and in which research is conducted under the more or less open public scrutiny that is probably necessary to ensure such beneficial use.

Selected Bibliography: Limiting Chemical and Biological Weapons--Part II

(Listed below are recent works concerning chemical and biological warfare. The July/August 1974 issue of Arms Control Today *contains a bibliography on this subject which is not duplicated in this issue. Copies of the previous issue of ACT are available upon request.)*

- General George S. Brown, Chairman of the Joint Chiefs of Staff, *United States Military Posture for FY 1976* (Wash., D.C.: Department of Defense, 1975), 114-120. (The Chairman argues that the advantages of the binary chemical weapons are that they are more safely stored, do not degrade during storage, and will eliminate costly disposal programs when they become obsolete.)
- John F. Henahan, "The Nerve-Gas Controversy," *The Atlantic Monthly*, September, 1974, 52-56.
- James M. McCullough, *Chemical and Biological Warfare: Issues and Developments during 1974* (Wash., D.C.: Library of Congress, Congressional Research Service Publication No. 75-13 SP, January 2, 1975), 105 pp. (A very useful reference work which explains the issues involved and the congressional actions taken