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Gentlemen:

The enclosed is a typed version of the proposal which I presented to Working Group 4 at Sochi October 25, 1969. Unfortunately, it was too late at that time to have the paper reproduced for the use of the Working Group, and only a few people were able to read the handwritten manuscript.

Perhaps this may be of some help to you.

Sincerely yours,

Richard L. Garwin

RLG:ac

enclosure

Post-Conference Contribution
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An International Registry of Riot Control Agents ("IRRCA")
and Its Possible Contribution to Progress in the Elimination
of Lethal and Incapacitating Chemical and Biological Weapons

by

Richard L. Garwin

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The Elimination of All Potent Weapons

There is near unanimity that the world, its individual nations, and its people would all benefit if biological weapons and lethal and incapacitating chemical weapons were effectively abolished. At least two approaches have been considered, the one to eliminate all potent weapons, including chemical, biological, and nuclear. The nations of the world, however, seems not to be ready to abandon either the possibility of war or the possession of all potent weapons. The other approach is to eliminate all weapons of a given nature. The wide adherence to the Geneva Protocol of 1925 shows that this approach has some merit. The Geneva Protocol, however, requires a nation to refrain only from first use of chemical and biological weapons, and not from their development, manufacture, stockpiling, or deployment. Recently, the United Kingdom has introduced into the Eighteen Nation Disarmament Conference a Draft Ban on the development, manufacture, stockpiling, or deployment of biological weapons. For whatever reason, this proposal seems likely to find wide acceptance, except for some feeling that it might be preferable to extend such a ban immediately to chemical weapons as well.

The Elimination of Specific Types of Weapons

However, it was the judgment of the United Kingdom that such a wider proposal would not gain early universal acceptance and that it was important to ban now and effectively biological

weapons and then to move on to the problem of the elimination of chemical weapons.

Reductio ad absurdum:

Oiling of roads, killing mosquitos, keeping down weeds in conjunction with military operations

I agree with this view. The problem with the effective banning of development, manufacture, and stockpiling of chemical weapons is largely one of differing definitions by various nations as to what constitutes chemical warfare, considering the possible tragets of people, animals, and plants. Yet there is wide agreement among people, nations, and even military leaders that a real benefit would result from the effective elimination of the possibility of use of those agents covered by the Geneva Protocol. A severe problem arises, however, in the normal use of insecticides, herbicides, and other materials in a theater of military operations, in the same manner that these are used in peacetime in the home country. Unless there is some provision for these normal uses, such operations will surely arouse charges of violation of any proposed ban on chemical warfare, with a resultant weakening of effectiveness of such a ban on those materials which any sensible person would agree are lethal chemical agents. Yet it is not reasonable to expect a detachment in the field to continually mow its minefields and lines of fire rather than to use herbicides as is normal in agriculture and in the management of parks.

Difficulty with definition by type or by use

Rather than to attempt the apparently impossible task of defining generically the type of chemical which may be employed in conjunction with military operations, and the use to which it may be put, I suggest consideration of the establishment under an agency of the United Nations, of an "International Registry of Riot Control Agents." I believe this may provide a better ban to escalation in the field of chemical warfare than does the simple statement, "no gas (and no spray, etc.)."

The problem of riot control agents

Almost all civilized nations use certain chemicals as "riot control agents," in order to disperse dangerous crowds of their own citizens, or in order to capture or impede criminals or

those suspected of criminal acts. Such chemicals, such as those designated "CN" or "CS", are widely regarded as a major improvement over the use of guns or clubs and seems likely to remain in use and even to undergo further development. CS, in particular, according to the United Nations Report E69.I.24 has a ratio of lethal dose to dangerous dose of 10^4 - 10^6 and has been widely used in Vietnam by the USA and by its allied Vietnamese forces. In part, these uses appear to have been similar to riot control, but CS has also apparently been used to deny access to tunnels and bases and for other purposes. Substantial criticism of such operations appears to fall into two classes: (a) the criticism of any USA involvement in Vietnam, and (b) the fear that the use of CS sets a dangerous precedent in the use of chemicals and that there is at present no effective bar to escalation in nature of the agent. While criticism of type (a) may be warranted, it is that of type (b) which bears upon the question of the potent chemical weapons which pose such a danger to humanity and civilization.

The mechanism of the proposed International Registry

The proposed IRRCA would then operate in the following way: A nation would be allowed to use outside its borders only two chemical riot control agents. In order to use such an agent, the nation must previously have used this agent on its own people and must have deposited specified information on the nature of the agent, the conditions of its use, the number of people exposed, and an upper limit to the deleterious results observed. This information would then be publicly available from the IRRCA. Beginning one year after such registry, the nation would be allowed to use such an agent in similar concentration in conjunction with military operations. If improvements were made in riot control agents, a second agent could be registered in the same way, which would then be usable after a year's time. A third agent could be introduced only if one of the others were dropped from the registry and its use abandoned.

Comments

In this way, the world community of physicians and scientists would have a year to criticize a nation's choice of agents. Further, there would be a guarantee that such agents would be used in conjunction with military operations only after

they had been deemed appropriate for use on one's own citizens. This mechanism of the IRRCA would seem effectively to eliminate the danger of escalation beyond those riot control agents which are acceptable to a population for use against itself.

The preceding is only a suggestion of the mechanism of an International Registry of Riot Control Agents. The detailed operation of such a Registry might well include a standardization function for the chemical agents, for the procedure by which the safety of riot control agents is established, and for the nature and duration of observations following actual use of the agents on a nation's own citizens.

An expanded international registry

The proposed IRRCA may contribute to the possibility of early and effective control of potent chemicals while allowing continued use of riot control agents. I might sketch even more briefly a mechanism of registry and standardization of other chemical materials which may be used in conjunction with military operations. As I have indicated, military operations involve many housekeeping-type functions, such as the elimination of vegetation along roads and in the neighborhood of encampments, the suppression of weeds such as poison ivy, the defoliation of trees to provide better visibility and safety along lines of communication. Chemicals may be used for these purposes, but plowing and burning have also been used and probably cause much more damage to the ecology. In any case, while we all wish to improve man's treatment of his environment, a reasonable guide in conjunction with military operations might be to treat the ecology as well as is done at home. To this end, each country could register a limited number of defoliants, herbicides, etc., in common use, providing data on composition, tests and experience, in order to preserve the right to use such materials outside its borders in the same way in which such materials are used at home.

My intent in proposing such an international registry is to avoid delays which might otherwise occur in dealing with the urgent problems of real chemical and biological warfare.