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SYMPOSIUM ON CHEMICAL AND BIOLOGICAL WARFARE

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FOREWORD

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This symposium on chemical and biological warfare was presented during the 1969 Autumn Meeting of the Academy. Since that time, a major government review has culminated in a series of far-reaching decisions by the Administration. On November 25, the President made the following announcements.

Chemical Warfare Program

As to our chemical warfare program, the United States:

- Reaffirms its oft-repeated renunciation of the first use of lethal chemical weapons.
- Extends this renunciation to the first use of incapacitating chemicals.

Consonant with these decisions, the Administration will submit to the Senate, for its advice and consent to ratification, the Geneva Protocol of 1925 which prohibits the first use in war of "asphyxiating, poisonous or other Gases and of Bacteriological Methods of Warfare." The United States has long supported the principles and objectives of this Protocol. We take this step toward formal ratification to reinforce our continuing advocacy of international constraints on the use of these weapons.

Biological Research Program

Biological weapons have massive, unpredictable, and potentially uncontrollable consequences. They may produce global epidemics and impair the health of future generations. I have therefore decided that:

- The U.S. shall renounce the use of lethal biological agents and weapons, and all other methods of biological warfare.
- The U.S. will confine its biological research to defensive measures such as immunization and safety measures.
- The Department of Defense has been asked to make recommendations as to the disposal of existing stocks of bacteriological weapons.

It is noteworthy that the President pointed out in his statement that the Government review had been "aided by contributions from the scientific community through the President's Scientific Advisory Committee." Scientists have long had a major influence on CBW programs and policies. In this there is an analogy with nuclear weapons. At first the main activity of scientists was to create the weapons. But subsequently, the principal role of the scientific community shifted toward a broader and more critical analysis of military requirements and to efforts at arms control. The major decisions announced by the President on November 25 are all in the direction of arms control and should encourage the renunciation of biological weapons by other nations and the ratification of the Geneva Protocol by nations still not parties to it. Beyond that, there are now before the Geneva Disarmament Conference two draft conventions for chemical and biological disarmament. The British Convention with which the United States has declared itself in general sympathy would prohibit the development, production, and possession of biological weapons. The Soviet Union has put forward a convention that would cover chemical weapons as well. Although the provision of satisfactory safeguards is bound to be an obstacle in the conclusion of any such convention, there are several approaches to the problem that may lead to substantive agreements when CBW comes up for extended discussion at the Geneva Disarmament Conference in 1970.

Just how effective the President's initiative will be in reinforcing worldwide restraints against the development and use of biological weapons will depend importantly upon the implementation of the new policies. The decision to "confine (U.S.) biological research to defensive measures such as immunization and safety measures" largely or completely removes the need for secrecy at the U.S. Army Biological Laboratories at Fort Detrick, Maryland and opens the way for the application of its substantial resources to the solution of such outstanding problems as the elimination of infectious disease, biological insect control, and the application of microbiology to the abatement of pollution. Similarly, it would seem only consistent with the President's policy to convincingly demilitarize or perhaps dismantle the Army's facility for the production and storage of biological weapons at Pine Bluff, Arkansas.

A further problem for international discussion and agreement is the specification of precisely which chemical weapons are to be kept out of war. This winter a group of 21 nonaligned states at the United Nations General Assembly introduced a resolution declaring as contrary to international law as embodied in the Geneva Protocol the use in war of all toxic chemical agents directed at men, animals, or plants. Its sponsors made clear that the resolution applied to irritant gases and anti-plant chemicals such as those used by the United States in Vietnam. Just this month, the resolution was passed by a vote of 80 to 3, with only Portugal, Australia, and the United States in opposition. This is not a new problem. Tear gases and other irritant gases were employed in great quantities in World War I. During the period between the two world wars, many nations including the United States held that the use in war of all gases including tear gas should be prohibited. These agents were not used in World War II or in the Korean War even though large stockpiles of chloracetophenone and other irritant gas munitions were available. Clearly, irritants are not weapons of

mass destruction. Nevertheless, a hazard in their employment in war, particularly when done on a large scale, is that it can stimulate the initiation or expansion of chemical warfare programs in many countries. Once chemical weapons enter military inventories and once the long observed rule of "no gas" is abandoned, there is no unique and equally simple standard for agreement on where to hold the line. The largescale military employment of anti-plant chemicals poses special ecological and public health problems of its own, regarding which we still know very little. Whether the military advantages of using harassing gas and anti-plant chemicals outweigh the ecological damage and the long-term hazard of breaking down the world-wide restraints against chemical and biological warfare is a matter for careful consideration. Thus, one of the problems still outstanding is that of finding a clear-cut and workable interpretation of the Geneva Protocol that will insure its uniform application by all.

Cambridge, Massachusetts
December 20, 1969