

FINAL REPORT OF WORKING GROUP 3

"New Approaches in Disarmament"

Introduction

In recent years progress toward substantial world disarmament has been very disappointing. The nuclear arms race continues; the U. S., U. S. S. R. and U. K. continue to expand their nuclear forces and two additional nations, France and China, have developed nuclear bombs. The world-wide build-up in conventional arms also continues. Tensions have risen in many parts of the world and local wars have occurred in several areas. Each of these has led directly to pressures for increased armament.

If we are to succeed in obtaining true disarmament, international security systems must be developed to permit local disputes to be settled short of war. International tensions must be relaxed. The U. S. and U. S. S. R., two of the largest nations, have a special responsibility to assist in these efforts.

But the press toward substantial disarmament must also continue. In view of the grave dangers from local conflicts and also from new weapons and weapons systems which may arise from modern technology, it is essential that the size and effort of our study and negotiation toward disarmament must increase greatly. Our goal is and must remain that of General and Complete Disarmament and we must greatly accelerate the world movement toward this.

2. On Local wars

The Group discussed causes of the ever growing levels of armaments. The Group believes that one of the main causes of this is the growing number and scope of local wars and intervention of great powers in them which make G. C. D. ever more difficult. Local wars destroy mutual trust between states and run counter to the basic principles of the United Nations, thus undermining the very foundation of G. C. D. The most striking and dangerous example of this is the war in Vietnam.

Apart from their grave moral and political consequences, local wars breed an ever increasing number of buyers of arms, which circumstance serves as a powerful stimulus to the manufacture of weaponry. This process is self-accelerated and stopping it is a most important step toward effecting G. C. D.

The second extremely dangerous aspect of local wars is the escalation of military effort and the types of weapons. Escalation in local wars makes each new step toward the intensification of this effort less noticeable, thus making world opinion less aware of the ever expanding scale and types of war which would have been impossible to accept had they been reached not by escalation but by a massive one-stage effort. The same is true of the production of ever more ingenious and dangerous types of weapons for which local wars serve

as proving grounds.

The Group believes that prevention and elimination of local wars constitute the most vital precondition for G. C. D.

3. BC-weapons

The Group discussed new ways to prevent the further development of biological and chemical weapons and the need to strengthen existing rules prohibiting the military use of such agents.

It was agreed, that in the present situation, groups of scientists could make a decisive contribution towards furthering these aims by presenting thoughtful analyses of the present and probable future characteristics of biological and chemical weapons, bringing forth the disastrous consequences to the world should these weapons ever be used on a large scale.

Scientists could also point out, in a forceful way, the existence of a number of loopholes in existing rules prohibiting the use of B and C weapons. It was considered that these loopholes introduced a serious risk for an escalation in the use of biological and chemical weapons. It was agreed that limited disarmament measures could be useful in helping to prevent the future development of B and C weapons, but it is important that these measures must never be pursued in such a way as to weaken the force of the Geneva Protocol and other rules of international law which prohibit the use of these weapons in war.

The Group noted that an authoritative publication on the problems of biological warfare would probably result from the efforts of the Study Group on Biological Warfare and SIPRI. It was concluded that these efforts were of an urgent nature. It was recommended that a similar approach should be taken with regard to chemical weapons and that a start could be made by assembling an international symposium, possibly under the auspices of Pugwash or SIPRI. The aim would be to assess the present situation and to prepare a monograph on the question of chemical warfare. This effort might be followed by the establishment of a Study Group on Chemical Warfare similar to that now active for Biological Warfare. Biological and chemical weapons, while different in technical aspects, should be considered by the respective Study Groups in liaison because of the many common factors involved when considered in the broad context of control and disarmament.

We have discussed the continuing activities of the Pugwash-SIPRI Study Group on Biological Warfare, and the report of the last meeting of this group which met in Marianske Lazne in May of this year. We note with satisfaction the progress being made by this group notably with respect to plans for East-West collaborative laboratory studies on detection methods, inspection procedures to determine whether development and production of such weapons are taking place, and international legal aspects of biological and chemical weapons. We endorse the activities of this study group which should go far in reducing secrecy and in promoting mutual trust between nations.

We are profoundly disturbed by reports of use of chemical weapons in Vietnam and Yemen. As stated before in the report of the 14th Pugwash Conference, held in Venice in April 1965, "the dangers to world security posed by all classes of biological and chemical

weapons are closely inter-related. Both in public opinion and in military practice it does not appear possible to maintain any lasting distinction between incapacitating and lethal weapons, or between biological and chemical warfare. The great variety of possible agents forms a continuous spectrum, starting from those that are temporarily incapacitating and ending with highly lethal ones. If the restraints on the practice of any kind of biological or chemical warfare are broken down, the entire spectrum of these weapons may come into use. "

We therefore call upon all nations to desist in the use of all chemical weapons whatsoever, whether anti-personnel or otherwise, in any conflict between nations; and to adhere to the Geneva Protocol of 1925, endorsed unanimously by the United Nations in 1966, with respect to the prohibition of the use in war of asphyxiating, poisonous or other gases and of bacteriological methods of warfare. We also urge vigorous efforts toward a formal treaty, to be signed by all nations, which would prohibit their use and in addition prohibit their dissemination.

4. Problems of disarmament related to possible new Weapons and Weapons Systems

The Group discussed the broad problem of the impact of new military technology on the arms race and on the probable need for further and perhaps different disarmament measures. Chemical and biological warfare itself includes a number of very dangerous possibilities: attacks on personnel, on animals and on crops, and the use of psychochemical weapons. There are also many possibilities for major developments in nuclear weapons systems: multiple warheads for rocket launched systems; very great increases in missile guidance accuracy; new methods for communications "blackout"; new missile defense systems. In the Group's opinion these possibilities are real and dangerous. They illustrate the fact that even the modest and uneasy stability which now exists among the great powers can one day be diminished or erased by the political impact of new scientific and technological developments. This is still another reason why efforts toward genuine disarmament must be generally increased. As an immediate Pugwash response to the dangers, the Group recommends that a small but expert Pugwash Symposium be convened soon to examine these new scientific and technological prospects in depth and to develop a monograph on their future implications to be available for wide public distribution.

In connection with this problem the Group discussed briefly a proposal for a treaty to ban military research. It recognizes that such a ban is not easily arranged and monitored but, in view of the importance of the problem, nevertheless believes that further Pugwash study of the possibility is desirable.

Of particular concern to the Group are the possibilities that the oceans of the earth and the space above it may increasingly be used for purposes of war. We recommend a study of a ban of nuclear powered submarines from the oceans or at least a monitoring of them. We recommend further a study on the question of providing a U.N. operated sonar detection system to monitor all missile-launching submarines. The Group believes that a study of this general problem as well as that of military use of space should be included in the agenda of the Pugwash Symposium recommended earlier.

Pugwash members, as scientists, have a special responsibility to study and analyse the dangers of application of science and technology to war and to assist in developing procedures for the prohibition or regulation of possible new weapons.