U.N.: Experts' Report on CBW Supports Disarmament Effort

The much anticipated United Nations Report* on chemical and biological warfare (CBW) was released last week, and it should be noted that the document justifies the hopes that the international community of those interested in reducing the threat of CBW had for it. The report grew out of a resolution by the United Nations General Assembly calling for an expert study—a recommendation which, in turn, grew out of a proposal of the 18-nation disarmament conference in Geneva. At every step of the way the proposals were actively shepherded by U.N. Secretary General U Thant, who has on many occasions over the last few years expressed his personal concern about the world's growing CBW arsenals.

The report was prepared by an international committee of 14 scientific authorities.† The American member was Ivan L. Bennett, Jr., former deputy director of the office of Science and Technology, who is now director of the New York University Medical Center and N.Y.U. vice president for medical affairs. The committee members served as individuals rather than representatives of their governments, though each worked with varied delegations of interested parties from his own country. In the case of the United States the Army delegation which initially accompanied Bennett to Geneva was at one time reported in the press to have gotten progressively more disenchanted with the directions the deliberations were taking and eventually to have excluded themselves from the report's preparation altogether. Other sources indicated that this was not the case and that the American military remained cooperative throughout, even providing statistics on such delicate matters as the U.S. use of herbicides in Vietnam. According to these sources the disagreements at Geneva had little to do with such politically volatile subjects as Vietnam and more to do with such matters as the Russians' desire to include such material as a catalog of Nazi germ warfare experiments, or with division of scientific opinion on, for example, the ecological effects of the use of chemical and biological weapons in war.

The report was presented to the public accompanied by three recommendations from the Secretary General. U Thant urged United Nations members (i) "To renew the appeal to all states to accede to the Geneva protocol of 1925"; (ii) "To make a clear affirmation that the prohibition contained in the Geneva protocol applied to the use in war of all chemical bacteriological and biological agents (including tear gas and other harassing agents) which now exist or which may be developed in the future"; (iii) "To call upon all countries to reach agreement to halt the development, production, and stockpiling of all chemical and bacteriological (biological) agents for purposes of war and to achieve their effective elimination from the arsenal of weapons."

In some ways the most significant of the Secretary General's recommendations is his parenthetical inclusion of "tear gas and other harassing agents" with the substances outlawed by the Geneva protocol. Particularly since the Vietnam conflict began, tear gas has been the hole in the dike of anti- efforts. Diligent research in the dusty records of the League of Nations by Pugwash scientists, who prepared a submission to the U.N. committee, uncovered the fact that in disarmament conferences of the 1920's and 1930's the United States went on record, along with other countries, in affirming that tear gas was indeed banned under the Geneva convention. Recent policy statements, however, have been contradictory, and our actions in Vietnam have clearly violated the spirit if not perhaps the letter of past international understandings on this point. The same researchers report that we have already used 7000 tons of CS (tear gas) in Vietnam—a figure approaching the 12,000 tons of mustard gas used by both sides in World War I. In any event it is clear from the U.N. report that experts considered tear gas and other harassing agents not as a separate category of weapons but as authentic weapons of war whose ill-considered use might turn out to be highly dangerous.

In its overall aspects the report discusses the characteristics of CBW, its probable effects on protected and unprotected military personnel, environmental factors affecting its use, its long-term effects on human health and ecology, and the economic and military-security consequences of the development of CBW arsenals. The experts did not address themselves to problems related to CBW disarmament, believing that they had laid the technical groundwork for such discussions among the political and legal authorities of their respective nations. Since the report is indeed lucid and represents perhaps the most complete description of CBW ever made available, and since it is written in language that policy-makers can readily comprehend, it is fair to say that the committee succeeded in its task.

The experts, however, could not resist some strongly worded conclusions that indicate at least where they stand as individuals:

> The general conclusion of the report can thus be summed up in a few lines. Were these weapons ever to be used on large scale in war no one could predict how enduring the effects would be, and how they would affect the structure of society and the environment in which we live. This overriding danger would apply as much to the country which initiated the use of these weapons as to the one which had been attacked regardless of what protective measures might have been taken in parallel with its development of an offensive capability. A particular danger also derives from the fact that any country could develop or acquire in one way or another a capability in this type of warfare despite the fact that this could prove costly. The danger of the prolifera-

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* "Report of the Secretary General of Chemical and Bacteriological (Biological) Weapons and the Effects of Their Possible Use." It is listed as U.N. document A/7575 and will be available shortly from the U.N. Office of Public Information at a low, but as yet undetermined, cost.

† The committee included several representatives from Communist countries: Dr. Tibor Bakacs, Director General of the National Institute of Public Health, Hungary; Dr. Jiri Franek, Rector of the Military Institute for Hygiene Epidemiology and Microbiology of Czechoslovakia; Academician O. A. Reutov, Professor of Chemistry at the Moscow State University; and Colonel Zbigniew Zoltowski, Scientific Adviser to the Ministry of National Defense in Poland. The British representative was Sir Solly Zuckerman, Chief Scientific Advisor to the government of the United Kingdom. The committee also included Dr. Hotse C. Bartlema, the Netherlands; Dr. S. Bhagavantam, India; Dr. Yosio Kawakita, Japan; M. Victor Moulin, France; Dr. M. K. McPhail, Canada; Dr. Guillermo Soberon, Mexico; Dr. Lars-Erik Tammelin, Sweden; and Dr. Berhane Teoume-Lessame, Ethiopia.

NEWS IN BRIEF

• **FDA CONTRACTS WITH YUGOSLAVIA FOR PILL STUDY:** The Food and Drug Administration (FDA) has signed contracts with the Yugoslavian government to conduct a major series of studies on the safety of oral contraceptives. This research, which will be conducted under the first FDA contracts for oral contraceptive studies granted outside the United States, will be financed with U.S. counterpart funds. (Last year, under Public Law 480, population research was approved as a use for U.S. funds that are made available in a foreign country to repay foreign aid commitments to the United States.) One project, a 4-year $130,000 study on the relation of the pill to diabetes among some users, is already under way at the Institute for Maternal and Child Welfare, Zagreb. Another project, a 6-year $200,000 study on the relation of the pill to cervical cancer among users, and the effects of pill use on rates of fertility, is expected to be approved soon by FDA Commissioner Herbert L. Ley, Jr. FDA officials say the research on contraceptives is expected to be about five times less expensive to conduct in Yugoslavia than in the United States.

• **ASTRONAUT APPOINTED TO SPACE COUNCIL:** President Nixon has named an astronaut, Lt. Col. William A. Anders, as the new executive secretary of the National Science Council. He succeeds Edward C. Welsh as chief of staff for the White House council, which advises the President on aeronautics and space matters. The 35-year-old Anders has been an astronaut since October 1963. He was a member of the back-up crew of the Gemini II program and a crew member on the Apollo 8, around-the-moon manned flight in December 1968. He will be a member of the back-up crew for the Apollo 11 moon landing scheduled for July, after which time he plans to retire from the Air Force to accept his new position. Anders graduated in 1955 from the U.S. Naval Academy and then served as a nuclear engineer and test pilot at the Air Force Weapons Laboratory in New Mexico. In 1962, he received a master of science degree in nuclear engineering at the Air Force Institute of Technology at Wright-Patterson in Ohio. Anders appointment must still be confirmed by the Senate.

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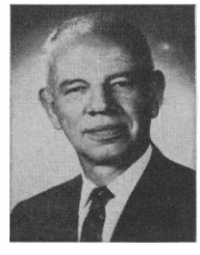
tion of this class of weapons applies as much to the developing as it does to developed countries.

The momentum of the arms race would clearly decrease if the production of these weapons were effectively and unconditionally banned. Their use, which could cause an enormous loss of human life, has already been condemned and prohibited by international agreements, in particular the Geneva protocol of 1925 and more recently in resolutions of the General Assembly of the United Nations. The prospects for general and complete disarmament under effective international control and hence for peace throughout the world would brighten significantly if the development, production, and stockpiling of chemical and bacteriological agents for purposes of war were to end and if they were eliminated from all military arsenals.

The report now goes back to the Eighteen Nation Disarmament Conference, to the General Assembly, and to the U.N. member governments. What happens next is not exactly clear, but a number of observers feel that, if steps are ever taken to curb CBW, they will be taken now. In America there are a number of straws in the wind: the sheep kill in Utah; the opposition to the Army's plan to ship poison gas across the country for dumping in the ocean; a policy review on CBW ordered by President Nixon; and, most recently, the elimination by the conservative Senate Armed Services Committee of funds for research on offensive chemical and biological weapons. In England public agitation is high, and observers report that in the U.S.S.R.—at least in the scientific community—interest in the CBW situation is nearly as intense as it is here. The solid agreement of the 14 experts is in itself significant. Whether the action will take the form of a drive for universal ratification of the Geneva protocol (the U.S. is not a signatory), with an explicit understanding that it be applied to tear gas, or whether some form of active CBW disarmament negotiations will begin, it is still too early to say. But the feeling is widespread that there is a chance this year to close Pandora's box before it opens any wider.—ELINOR LANGER

APPOINTMENTS

M. C. McLaughlin



L. J. Haworth

Mary C. McLaughlin, deputy health commissioner for New York City, elevated to commissioner. . . . **Leland J. Haworth**, director of the National Science Foundation, to assistant to the president, Associated Universities, Inc. . . . **Robert S. Edgar**, professor of biology at California Institute of Technology, to provost of "College Six" at University of California, Santa Cruz. . . . **Ervin J. Hawrylewicz**, assistant director of life sciences research at Illinois Institute of Technology, to director of research for Mercy Hospital and Medical Center. . . . **William L. Blockstein**, chairman of extension services in pharmacy, University of Wisconsin, to chairman of the health unit at the university. . . . **L. H. Schmidt**, director, National Center for Primate Biology, University of California, Davis, to associate director, chemotherapy research, Southern Research Institute, Birmingham, Alabama. . . . **Peter C. Badgley**, executive director, Gulf Universities Research Corporation, Texas, to director of the earth sciences division, Office of Naval Research. . . . **Arnold Schein**, associate professor of biochemistry, University of Vermont College of Medicine, to chairman, department of chemistry, San Jose State College, California. . . . **Roger H. Hildebrand**, professor of physics, to dean of the College of the University of Chicago. . . . **Stephen I. Morse**, associate professor of immunology, Rockefeller University, to chairman, department of microbiology and immunology, State University of New York. . . . **Louis T. Rader**, vice president of General Electric Company, to chairman of the electrical engineering department, University of Virginia, and **Edward W. Hook**, professor of internal medicine at Cornell University, to chairman of the department of internal medicine at the University of Virginia School of Medicine. . . . **Ralph A. Burton**, liaison scientist, U.S. Office of Naval Research, London, to chairman of the mechanical engineering and astronautical sciences department, Northwestern University, Illinois.