

Science in the News

Disarmament Review: It Will Clarify Some Touchy General Points, But Working Out the Details Is Difficult

The Administration's review of American disarmament policy will not be completed until mid-summer, but the general outline of at least that portion that will be made public is foreshadowed both by the tone of official and unofficial statements by the Administration and by the nature of the problem. Part of this likely course, in fact, was suggested as well as anywhere, in the recent special message on the defense budget.

"Meaningful defense budget decisions," the message said, "are not possible without preliminary decisions on defense policy, reflecting both current strategic assumptions and certain fundamental principles." It then offered a section of eight points, under the general heading "Basic Defense Policies." Each point consisted of a general statement ("Our arms will never be used to strike the first blow." "Our arms must be subject to ultimate civilian control and command at all times." "Our defense posture must be designed to reduce the danger of irrational or unpremeditated general war.") followed by a more detailed explanation of what the policy means.

Point 1 was "The primary purpose of our arms is peace, not war," and the explanatory statements read, in part: "The basic problems facing the world are not susceptible to a military solution. Neither our strategy nor our psychology as a nation—and certainly not our economy—must become dependent upon the permanent maintenance of a large military establishment. . . . Disarmament, so difficult, and so urgent, has been much discussed since 1945, but progress has not been made. Recrimination in such matters is seldom useful, and we for our part are determined to try again. In so doing, we note that, in the public position of both

sides in recent years, the determination to be strong has been coupled with announced willingness to negotiate. For our part, we know there can be dialectical truth in such a position, and we shall do all we can to prove it in action. This budget is wholly consistent with our earnest desire for serious conversation with the other side on disarmament."

The effect of the explicitness and clarity that marked the message was to give a sense of coherence and direction that made credible the claim that the increased defense budget was not inconsistent with an increased interest in disarmament.

Comment among observers at the U.N. tended to be highly favorable, for example, even though the observers were primarily interested in disarmament and the message, in its particulars, was devoted to increasing armaments.

Something similar showed up in the White Paper on Cuba last week: although it was a propaganda document, the statement did not confine itself entirely to making a case against Castro. Although it did not dwell on such points, it at least mentioned that past United States policy toward Cuba had not been flawless and that the Castro Government was not an entirely unmitigated evil. It stated flatly that no Cuban government could expect to turn back the clock on the genuine reforms Castro had put through.

The disarmament review can be expected to produce, among other things, a similarly coherent and explicit statement of American thinking in the area of disarmament. Like the defense message, the Cuban White Paper, or the Administration's public papers generally, it is not likely to contain anything greatly surprising to people familiar with the views expressed by the President and his associates in recent years. But the mere restatement of these views in a clearly written official policy declaration will serve two

important purposes: to bring these views to the attention of that large part of the world which does not follow closely the details of American politics, and to assure those who do that what the President and his associates have been saying unofficially is in fact the official policy of the government.

Officials see at least three sore points that need elucidation: our attitude toward the Russian slogan "complete and general disarmament"; our attitude toward what has become, but may not remain, our slogan "arms control"; and our attitude on the central problem of inspection. The concern with the first two is primarily a concern with propaganda effects. What is at issue is not the substance of the scheduled negotiations but the effect on world opinion of our use of these terms, both of which have come to carry a good deal of emotional impact. Our attitude toward inspection will be the basis of our position at the bargaining table, although our explanation of the basis of our policy will have effects in the sphere of propaganda.

General Disarmament

Briefly summarized, our attitude on these three points, as suggested by recent statements of the President and his associates is this:

Complete and general disarmament: This has been the Soviet slogan since the time of Litvinov and the disarmament negotiations of the early 1930's. At one time we went along with a U.N. resolution endorsing this as the proper goal of disarmament negotiations, but we have always openly regarded the use of the term as a propaganda stunt by the Russians, which laid us open to the question of why, if we so regarded the term, and if we were really serious about disarmament, we voted for a U.N. resolution which explicitly approved the term.

No government, not even the Russians', seriously maintains that complete and general disarmament is a realistic short-range goal, but nearly all see it as a final goal, something to be aimed at. A frequent type of comment encountered at the U.N. is to have someone concede that the term is often used by the Russians for propaganda effects, but to insist that "even if the Russians aren't serious about it, we are. We don't like to see America sneer at it."

All of this has had two bad effects. By both occasionally endorsing the idea but spending most of our time pooh-poohing it we have given an impression

that we don't quite know what we want. We have also given the impression, by this same ambiguous attitude toward this Soviet slogan, that we fear the Russians are so much cleverer than we that they will surely swindle us out of our eye teeth if we so much as blink our eyes. Neither impression contributes to the effect a great nation would like to produce before the rest of the world.

The most likely way to deal with this is fairly obvious, and was tried, for example, by former Secretary Herter in a speech over a year ago: this is to point out that complete disarmament implies world law and a world police force capable of enforcing that law as a substitute for the individual military power which nations must now rely on as their last resort in settling disputes.

Two months ago John J. McCloy, Kennedy's chief of the Disarmament Administration, reiterated this point: "What we . . . must understand," he said, speaking to an American audience, "is that what the world seeks is a peaceful society in which agreed and reliable procedures are set up for the just settlement of disputes, with the concomitant of general and complete disarmament which such a condition permits."

If followed through, as it appears likely to be, an official elaboration of this theme as the policy of the American government, it is hoped, would largely eliminate what has been a continuing American awkwardness about the use of this term, and might well turn it to American advantage, for the Russians have been clearly less interested in enforceable world law than we have, partly on the unstated but clearly implied grounds that such a system might interfere with peaceful coexistence, which Khrushchev has defined as an "intense struggle," short of general war, to communize the world.

Arms Control

The term *arms control* presents a related problem: technically, the term is harmless enough: given the difficulty of achieving actual disarmament agreements and the fact that disarmament, in any case, is subordinate to the broader aim of trying to diminish the likelihood of war, a broader term to cover all the various things, aside from maximizing our deterrent power, that might be done to lessen the chance of war is useful. But the term has, to a large extent, taken on a connotation that implies it is limited to control over armaments only: that is, it is often

taken to exclude disarmament. Our use of this term in U.N. discussions has helped the Russians put across their view that we are not interested in disarmament, only in inspection of "arms control," with the consequent opportunity to do a little spying on the side.

We have, in fact, helped give the term this connotation, by the relative passion with which we have talked about inspection, in comparison to the relatively little we have talked about disarmament.

Since the rest of the world is very much interested in disarmament, and not prone to see it pushed aside, the State Department has gradually become aware that our talk of "arms control" is a burden in international discussions. This was an important reason why the agency set up last fall to deal with the question was called the Disarmament Agency rather than the Arms Control Agency.

One of the tasks of the disarmament policy review is to find ways simultaneously to emphasize the importance of things which may not be disarmament in the narrow sense but are nevertheless very important in lessening the chance of war, and to rid ourselves of the burden of the "arms control" slogan, which, useful though the concept is, has taken on connotations that add to the difficulty of America's impressing the world with its case.

Inspection

Our difficulties with both slogans, "arms control" and "general and complete disarmament," stem from our legitimate concern over adequate inspection. We are attracted to the term "arms control" not only because it is a broader term and because it contains areas where progress seems more attainable than in disarmament itself, but because the term itself clearly implies adequate inspection. We have shied away from the term "disarmament" because it does not necessarily carry the connotation of adequate inspection.

The policy review can be expected to come up with an explicit statement of why we must be so concerned with inspection, with a recognition that the Russians have legitimate concerns about inspection, and with an outline of how we think the gap between the contradictory Soviet and American interests can be bridged by balanced concessions on both sides.

Jerome Wiesner, the President's science adviser, and an adviser on disarmament, along with other members of

the American delegation to the Pugwash conference last December, offered an informal appraisal of the problem on a recent telecast. They said the Russian and American scientists agreed that our concern for our security and the Russians' concern for their secrecy require that a compromise acceptable to the interests of both parties be worked out in terms of inspection commensurate with the degree of disarmament.

They described some ideas for working out a combination of stationary inspectors, who could cause the Russians no concern about espionage, with roving inspectors, who could cause such concern, arranged so that the Russians would not be subject to a great deal of roving inspection until substantial disarmament had been achieved, while the combination of inspections would offer us assurance that, if the Russians were inclined to cheat, they would be discovered before an unstable imbalance of striking force had developed.

All of this, of course, is easier said than done, and, as the test-ban talks have shown, it is easier to get the Soviet scientists to agree to what is technically correct than to get their political leaders to accept a settlement based on these technical agreements.

Nevertheless, our officials assume that a clearly stated approach to the problem will appeal to the good sense of the rest of the world, so diminishing and perhaps eliminating the unsatisfactory impression our previous statements on disarmament have produced, and they hope this approach will appeal to the good sense of the Russians and lead to some real progress.

But though clear statements of policy have good effects in themselves, these effects do not last long unless a nation shows that it means to act as well as talk.

Prior to his election, Kennedy frequently complained that our negotiating teams have been "ill-staffed, ill-prepared, and ill-advised." Speaking of the Geneva surprise attack conference, Kennedy said we "offered measures which were hastily put together, some of which, even if accepted, were of doubtful value; and others which in reality we were not prepared to accept, or even explain, ourselves." Similar complaints, by friendly critics, have been made of most other disarmament proposals we have offered.

"For 20 years," said Paul Doty, a member of the President's Science Advisory Committee and an attendant

with Wiesner at the Pugwash conference, "the major countries of the world have been putting their labor and treasury into the most complicated and highly organized effort man has ever carried out, and have erected in juxtaposed position an enormous amount of power. One cannot disassemble this casually, because if a mistake is made you risk the very catastrophe that you seek to avoid." The other side of the problem was suggested by Wiesner: "I don't think," he said, "there is time enough to tinker around with small confidence-building measures and leave more comprehensive and more or less total disarmament down to whatever minor deterrent forces you want to leave to preserve stability to some later stage. Science and technology is moving too fast."

Thus it is easy to predict with some confidence the outlines of the policy paper on disarmament that will result from the review, but despite the great urgency, it is hard to predict with any confidence that a detailed plan acceptable to the Russians can be worked out. The situation, on an awesome scale, is the familiar one that it is a great deal easier to create a mess than to clean it up.

News Notes

News Briefs

Radiological health. Steps to reduce the national shortage of specialists in the field of radiological health and of technicians to serve in radiation protection and control programs are discussed in *University Curricula in Radiological Health*, a recent publication of the Division of Radiological Health, U.S. Public Health Service, Washington 25, D.C.

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Water pollution survey. The U.S. Public Health Service has announced results of the most comprehensive survey ever made of the problem of municipal water pollution control. The survey, conducted by the Conference of State Sanitary Engineers, disclosed that the United States needs approximately 5200 new sewage treatment plants and plant enlargements and additions, costing \$2 billion.

These projects are required to treat municipal wastes, now being discharged into inland waters, from a population of about 42 million. The

Public Health Service estimates that meeting these needs, together with new ones resulting from plant obsolescence and population growth, would cost about \$600 million annually. This would be a 40-percent increase in national construction costs for sewage-treatment facilities.

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Chichén Itzá. Divers from Mexico and the United States are retrieving valuable artifacts from the depths of a *cenote* in the ruins of the Mayan city of Chichén Itzá, in Mexico's Yucatán. The sacred *cenote*, or Well of Sacrifice, has yielded hundreds of jade, gold, and copper ornaments, blackened fragments of rare Mayan fabrics, and a few human bones. Exploration of the huge natural well is under the direction of Mexico's National Institute of Anthropology and History in collaboration with the National Geographic Society and the Exploration and Aquatic Sports Club of Mexico.

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International study. The *Handbook on International Study*, a comprehensive guide listing international scholarships, has been published in two separate volumes for the first time, by the Institute of International Education. The two volumes, *Handbook on International Study: For Foreign Nationals* and *Handbook on International Study: For U.S. Nationals*, are published as sources of information for college and university personnel, student advisers, libraries, and others desiring data on international scholarship programs. The volumes can be purchased, for \$3 apiece or for \$5 a set, from the institute's headquarters (1 E. 67th St., New York).

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Reptile fossil. The 7-inch fossilized skeleton of a gliding reptile older than any previously known to science was found recently in Triassic rocks in an abandoned quarry in New Jersey. The American Museum of Natural History announced the discovery. The reptile lived some 175 million years ago.

New Journals

Agricultural and Biological Chemistry, vol. 25, No. 1, Jan. 1961. T. Mori, president. Agricultural Chemical Society of Japan, c/o Faculty of Agriculture, University of Tokyo, Bunkyo-ku, Tokyo, Japan. Monthly. \$9 per year.

Estudos Agronômicos, vol. 1, No. 1,

Jan.-Mar. 1960. H. Lains e Silva, director. Missão de Estudos Agronômicos do Ultramar, Rua Rodrigo da Fonseca, 103, Lisbon 1, Portugal. Quarterly.

Medical Electronics News, Mar. 1961. R. Rimbach, publisher. Instruments Publishing Company, Inc., 845 Ridge Ave., Pittsburgh 12, Pa. \$6 per year.

Science Review, vol. 1, No. 5, Oct. 1960. C. del Rosario, director. National Science Development Board, National Institute of Science and Technology and the Philippine Atomic Energy Commission, P.O. Box 3596, Manila. Monthly. Free of charge.

Journal of the National Research Council of Thailand, vol. 1, No. 1, Nov. 1960. B. Kalakicha, Ed. National Research Council, Phya Thai, Rama VI Road, Bangkok, Thailand. Quarterly. \$5 per year.

Abstracts of Human Developmental Biology, vol. 1, No. 1, Jan. 1961. G. ten Cate, Ed. Excerpta Medica Foundation, 119-123 Herengracht, Amsterdam, The Netherlands. Monthly. \$17 per volume.

Los Alamos Scientific Laboratory Quarterly Review, Winter 1961. Los Alamos Scientific Laboratory, University of California, Los Alamos, N.M.

Chesapeake Science, vol. 1, No. 2, June 1960. R. J. Mansueti, Ed. State of Maryland, Department of Research and Education, Chesapeake Biological Laboratory, Solomons, Md. Irregular. \$2 per year.

Applied Optics, vol. 1, No. 1, Jan. 1962. J. N. Howard, Ed. Optical Society of America, 1155 16th St., NW, Washington 6, D.C. Bimonthly. Members, \$6 per year; nonmembers, \$10.

Materials Research & Standards, vol. 1, No. 1, Jan. 1961. R. E. Hess, Ed. American Society for Testing Materials, 20th and Northampton Sts., Easton, Pa. Monthly. \$5 per year.

Bulletin of the Hiroshima Agricultural College, vol. 1, No. 3, 1960. Hiroshima Agricultural College, Saijo, Hiroshima Prefecture, Japan.

Problems of the North (complete translation of the Russian journal *Problemy Severa*), No. 1, Dec. 1960. M. Dunbar, Ed. Translations Section, The Library, National Research Council of Canada, Sussex Drive, Ottawa 2, Canada. \$7 per issue; single papers, \$1.

Kybernetik, vol. 1, No. 1, Jan. 1961. Springer-Verlag, Heidelberger Platz 3, Berlin-Wilmersdorf, Germany. Irregular. Maximum price for 1961, DM. 80.