

containment group takes the view that the arms race could be arrested by properly inspected arms control agreements.

An opposing "infinite containment school" holds views associated particularly with Edward Teller and with such other academic scientists as Willard F. Libby and the late E. O. Lawrence. In effect, they argue that the arms race has an irresistible momentum and that the only choice for the United States is to stay ahead.

The attitude of the finite containment school, which is probably the majority party among academic scientists in the United States, was well expressed by one of its more outspoken exponents, Jerome B. Wiesner, at a symposium on the ABM (the proceedings were recently published as an occasional paper by the Center for the Study of Democratic Institutions). His remarks were prompted largely by allusions to the threat implied in Soviet work on ABM defenses and a reported buildup of Soviet missiles with very powerful warheads.

Now, General [Leon] Johnson's statement about the problem we have with regard to the Russians does not seem to me to take sufficiently into account the maneuverability we have in controlling the arms race, or even our responsibility for contributing to it. When I first began to play with these toys, working at the M.I.T. radiation laboratory, I believed everything I was told. I spent the nineteen-fifties working very hard on air defense, on missiles, on a variety of things, because I was told by my superiors that the Russians were ahead of us, that they were working against the day when they would get enough power to carry out a surprise attack and wipe us out. This, it was said, was their only purpose in life. Then we graduated from that to the "missile gap," which, in fact, I helped invent. But soon it became clear that many of us had just misinterpreted the signals. Eventually, when we got enough information, we saw two things: first, the Russians had opted out of the bomber race quite early in the game; they never built a bomber force capable of wiping out our force or doing the other things we said they had wanted to do and could do. And, second, for a long time, they were prepared to settle for a missile force considerably smaller than ours.

Then, a few years ago, the Russians decided to build more missiles, and they are now drawing equal. I hope they are only drawing equal. I hope they don't intend to double what we have, because if they do we obviously will respond. I don't know why the Russians began to build more missiles. Maybe it stems from their embarrassment over the Cuban missile crisis. Maybe it stems from their embarrassment at having Mr. McNamara stand up in the Congress every time he

had to explain why he was not buying more missiles and point out that the United States already has four times as many as the Russians. Whatever their motivations, the Russians began adding to their missiles.

This point is important, and one that General Johnson seemed not to appreciate adequately when he said we might wake up one day and discover that the Soviets had made a defensive system that rendered our offensive system inoperative. I have been trying to say that nothing like this is in the cards with these massive, expensive, hard-to-build, hard-to-deploy, hard-to-train-people-to-operate systems. This is real protection. Our information is good enough and the time-lags are such that long before a ballistic missile defense system could be deployed to protect enough of the Soviet Union to make any difference we could sail past them, just as we did in the case of offensive missiles. In any event, now that we have led the Soviet Union in this new weaponry for years, I think it might be an interesting experiment to see whether we couldn't cool this whole business off by slowly cutting down on the numbers we all live by.

In the postwar era, however, the arguments for arms limitations from dissenting scientists have consistently lost out, and official policy has, in effect, been one of infinite containment.

As the Washington journalist I. F. Stone has said, "The arms race is based on an optimistic view of technology and a pessimistic view of man."

Fear of a Soviet weapons "break-through" which would nullify the U.S. deterrent has actuated almost every crucial decision on weapons development. Officials ultimately responsible for national security always tended to make the decision which corresponds with the conventional military wisdom. Any other course, incidentally, leaves the domestic political flanks wide open, as was illustrated by the missile-gap issue raised by the Democrats in 1960 and toyed with by the Republicans last year.

Strategic-weapons decisions are made in an environment which military and diplomatic doctrines and assumptions necessarily influence very heavily. Such things as increasing Soviet activity in the Mediterranean, trouble in the Middle East, the Soviet occupation of Czechoslovakia, and of course the expected debut of China as a nuclear power with an intercontinental ballistic missile capability doubtless weigh heavily in the scales.

And last week Secretary of Defense

United States Ratifies Non-Proliferation Treaty

Senate ratification has given the Nuclear Non-proliferation Treaty new momentum, but it remains uncertain if and when the treaty will go into effect. The treaty has not been ratified by either the Soviet Union or West Germany, and observers say that mutual suspicions will probably have to be allayed before either country takes action. Other potential nuclear powers which have not signed it are India, Israel, and Japan. France and Red China have refused to participate in the treaty negotiations altogether. To date the treaty has been ratified by only ten nations, but a number of other countries are now expected to follow the U.S. lead. The treaty will go into effect after it has been ratified by the United States, Great Britain, the Soviet Union, and 40 other countries. The non-proliferation treaty was ratified on 13 March by the Senate by an overwhelming vote of 83 to 15. President Nixon is expected to sign the treaty soon, but formalities have not yet been arranged.

The international treaty, which was first proposed almost 5 years ago and signed last year by 87 countries, including the United States, received U.S. approval after an 8-month delay by the Senate. The delay is attributed to the invasion of Czechoslovakia by the Soviet Union and the fact that Congress stalled action because of election-year uncertainties.

Basically, the treaty prohibits nonnuclear states which sign the treaty from acquiring or developing atomic weapons, and prohibits nuclear powers from assisting them in the development of a nuclear weapons capability. The treaty also requires the nonnuclear countries to agree to inspections by the International Atomic Energy Agency. The treaty permits nuclear powers to provide nuclear explosives for peaceful purposes to nonnuclear powers on a nondiscriminatory basis. It also includes a pledge that nuclear powers enter into negotiations to end the nuclear arms race.—M.M.