

editorial

Priority for arms control

In this issue (page 30) Victor Weisskopf commemorates the 40th anniversary of the discovery of nuclear fission. With a compelling eloquence he deepens our insight into how profoundly this event has altered the prospects for human civilization. Through the eyes of a first-hand participant in the Manhattan project, he recounts the events leading to Hiroshima and the subsequent buildup within a mere 30 years to two opposing strategic arsenals numbering an incredible 10^4 nuclear warheads each. In Weisskopf's words "the introduction of cosmic forces never before existing on Earth" has brought into being a threat to human society that far outweighs all other dangers combined. His message is that the priority being granted in world affairs to resolving the nuclear armament problem is grossly incommensurate with the danger.

The question of priorities can well be raised concerning the public involvement of physicists in this area. In the 1950's the nuclear arms race was a major public issue in the physics community and attracted the concern of a large number of physicists. But by 1970 (the year of the first round of SALT talks) we observed on this page that the interest of physicists was slackening off—the special session on the nuclear-weapons debate at the APS Spring meeting that year was poorly attended. Now in 1978 (the year of SALT II and the UN Special Session on Disarmament) we are forced to acknowledge that the public concern of the physics community has declined even further—at this year's Spring meeting there was no special session at all and only one other paper besides Weisskopf's touching on this issue out of a total of some 1000 papers.

The situation is much better if we look at the involvement of physicists on a professional basis as opposed to a public basis. The number of physicists at influential levels in the various parts of government (ranging from the Department of Defense to the Arms Control and Disarmament Agency) that become involved in decisions affecting the nuclear weapons problem has steadily grown—not decreased—over the years. We can take comfort in the fact that these physicists are on hand within government circles to provide expert knowledge when policy conflicts develop between short-range

security needs and the long-range need for arms control.

But as Weisskopf points out, a meaningful change in our political priorities will only result from the pressure of public opinion. Strong public awareness is needed to persuade Congress to support the Administration's current efforts to defuse the arms race and encourage bigger steps in this direction. We physicists, who invented and developed the bomb, are in a better position than anyone to understand and appreciate the effects of nuclear weapons. It is our obligation to take the lead in making the public much more aware of the dangers of the nuclear arms race. But first we have to reinspire ourselves. Lately much of the public concern of physicists have shifted to admittedly important problems of the environment (including nuclear reactor hazards) and energy resources. But does it make sense to work at guaranteeing supplies of energy for our population in the year 2025 while ignoring the finite probability that a nuclear catastrophe could annihilate this same population before that date? Isn't it just as, or even more, important to work at making the chances of a nuclear war as *small* as the probability of a loss-of-coolant accident in a nuclear power reactor?

We urge all physicists to read Victor Weisskopf's article *twice* and then re-examine their priorities. Remember that every Congressman regularly receives PHYSICS TODAY. Make sure Weisskopf's message has gotten through to *your* Congressman.

Harold L. Davis