

Nuclear war—educating the public

The Second Special Session of the United Nations on Disarmament will convene this month in an atmosphere spectacularly changed from the apathetic mood of the first Special Session four years ago. The remarkable upsurge of public concern about nuclear war (also evident among physicists—the APS Forum session on nuclear war at the Washington meeting was jam-packed this year compared to sparse attendance in previous years) holds the promise that at long last we will have a substantive debate on this most crucial issue that could then result in tangible actions to reduce the peril.

But, as James Reston has pointed out, this opportunity for productive debate will be wasted if we allow the control of nuclear weapons to become a partisan political issue in the coming elections. In his column (*New York Times*, April 18) Reston recently questioned whether the public will “get enough facts on this immensely complicated military and moral issue for the searching inquiry the subject requires. In short, will it be decided by government decision, by public education or by political demonstrations?” He observes that “so far, the demonstrators have outnumbered the educators. . . .”

Certainly the average citizen is woefully uninformed about the background data underlying the nuclear-weapons issue. In the days of conventional warfare forty years ago, every schoolboy could recite the models and vital statistics of the aircraft making up the opposing air forces of World War II. Today, in the nuclear age, very few people could even identify our modern weapons of destruction—Trident II, SS 20, SLBM, Backfire, MIRV, and so on—much less explain what each of these weapons is capable of doing. To be able to understand and participate in the nuclear debate, a citizen should have an accurate picture of what the physical effects of a nuclear explosion are, some familiarity with the different kinds of weapons systems, their numbers, deployment and intended missions, as well as some notion of the history of the arms race and the

efforts to control it. Another key requirement would be an appreciation of the concept of risk analysis.

Physicists are especially qualified—and have a special obligation—to impart knowledge in these areas. A number of our colleagues are already actively involved in teaching courses that cover just this kind of information. To name two examples: Arthur Hobson (University of Arkansas) and Alvin Saperstein (Wayne State University). The experience Ward Wilson (Princeton University) has had with teaching in this area on the high-school level is especially interesting (*The Bulletin of the Atomic Scientists*, November 1981, page 24). Congressman Don Ritter, one of the four members of Congress with a background in science, is responsible for introducing HR 6159—Risk Analysis Research and Demonstration Act of 1982. Although this bill is limited specifically to requiring government agencies to employ risk analysis in their regulatory functions, it might well serve to open the door to public understanding generally of the idea of risk analysis. We are pleased to report that the chances of Congress passing Ritter’s bill look good.

Information about syllabuses for courses concerning nuclear war, course materials and resources can be obtained from the Nuclear War Education Project of the Federation of American Scientists (307 Massachusetts Ave. N. E., Washington, D. C. 20002). We urge physicists at every level to consider making their primary contribution to the goal of avoiding nuclear war that of functioning as teachers to educate the public about this gravest of all concerns. Consider the conversation reported by Wilson with a high-school student who had approached him saying he was troubled by something Wilson had said during class: “You say these things have been used before?” “Yes. At Hiroshima and Nagasaki.” (No response.) “In World War II.” A downward glance, his eyes serious, a little guarded: “Huh. I had never heard that.”

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