letters

Physicists for arms-control studies

The danger of nuclear war is the overriding problem of the present day. Many of us feel that physicists, having been instrumental in the creation of nuclear weapons, bear a special responsibility to contribute to their control and eventual elimination. There is a growing conviction within the physics community that the APS should encourage and assist physicists to carry out serious studies on problems related to nuclear weapons, arms control, and disarmament.

As a step toward the implementation of this goal, the Forum on Physics and Society of the APS has established an ad hoc committee on arms control studies. The committee will coordinate the formation of study groups on topics related to nuclear arms, assist these groups in carrying on their work, investigate appropriate ways of disseminating their results, and look into possible sources of financial support. The Forum committee will maintain close contact with the POPA subcommittee on studies.

At an open discussion following a Forum session at the recent Washington meeting, the topics listed below were suggested as subjects for possible studies. This is a "raw" list; there was only very limited discussion of each topic, or of what specific aspects might be suitable for a study of the type we envisage. The next step is to carry out feasibility studies to define the problem more precisely and decide in each instance whether it is desirable to proceed with a formal study.

The subjects listed are not new; most of them are under continuing analysis within the government and by defense contractors. Nonetheless, we proceed from the premise that it can be highly useful to have an independent, fresh look at these questions, carried out by groups of people with diverse technical skills and experience, free of institutional bias and on an unclassified basis so that the results can be disseminated broadly.

We are soliciting volunteers to participate in this effort, beginning with the feasibility studies. If you are interested, please write to me, indicating which of the proposed studies you want to work on, and what relevant experience you have. (Direct experience in weapons-related work is not a requirement.) You may choose several subjects, in the expectation that not all of them will actually lead to a study. If you do list more than one, please rank them in the order of your interest. If you are willing to be an organizer or leader of a particular study group, indicate that as well. If you have ideas concerning what direction the study should take, what aspects of the problem should be emphasized, and so on, include them in your reply. Finally, if you want to suggest another good topic that is not on our list, feel free to do so.

From the responses the coordinating committee will ascertain which subjects command the greatest interest and will designate provisional study groups, taking into account interests, experience, and geography. The groups will undertake the feasibility studies and draft proposals for actual studies in those areas judged to be sufficiently promising.

One matter which will be discussed with the POPA subcommittee on studies is the possibility of organizing formal funded studies under the aegis of POPA similar in scale to previous POPA studies, reports of which have appeared in Reviews of Modern Physics. This is, however, not the only possible format.

The tentative list of subjects follows. (Please note that there is considerable overlap and several of the topics could be combined.)

- ► Reliability of large-scale systems
- ▶ Bias errors in ballistic missile accuracy
- ▶ "Window of vulnerability"
- ▶ Ballistic missile defense
- ▶ Cruise missiles
- ▶ Anti-satellite weapons
- ▶ Will anti-submarine warfare make the submarine deterrent vulnerable?
- ► Impact of new technologies: stablizing or destabilizing?
- ▶ C³I (command, control, communication, and intelligence)
- ► Electromagnetic pulse
- Verification of arms-control agreements
- Laser and particle-beam weapons



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- Can conventional weapons break the addiction to nuclear war?
- Long-range solutions to the arms race
- ▶ Mechanisms for terminating nuclear war
- ▶ Civil defense
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- Nuclear proliferation
- Survey of national attitudes on nuclear war and related questions

Please try to get your replies to me by 15 September 1982. Shortly after that date the study groups will be constituted and will begin work.

> LEO SARTORI Behlen Laboratory of Physics University of Nebraska-Lincoln Lincoln, NE 68588

The members of the ad hoc committee on arms-control studies of the APS Forum on Physics and Society are: Leo Sartori, chairman (University of Nebraska-Lincoln), B. R. Cooper (West Virginia University), L. C. Hebel (Xerox Palo Alto Research Center), M. Sakitt (Brookhaven National Laboratory), A. Saperstein (Wayne State University), D. Schroeer (University of North Carolina) and P. Zimmerman (Louisiana State University).

Letters protested

This is to protest most vehemently the printing of gross politically motivated letters in such a most excellent scientific publication as PHYSICS TODAY. The pollution of scientific purity by such political diatribes as that of Lincoln Wolfenstein (April, page 95) is not only infuriating but most destructive, because other readers whose budgets are in danger may actually "buy" the mi-nority arguments he advances. To call Reagan's program "anti-intellectual" is a preposterous smear tactic that has no place whatever in a scientific journal and is insulting to the great majority of physicists who realize fully that the greatest anti-intellectual threat to this nation is the mentality that believes throwing bread and circuses to the indolent masses while our security vanishes, is constructive national action.

6/82

WILLIAM B. ELMER Andover, Massachusetts

What letters to publish?

Several readers have recently expressed their concern about the content and forum for letters in PHYSICS TODAY. Specifically, objections have been raised for printing letters which do not deal exclusively with "pure" physics, but rather social, moral, political and other anthropological questions.

I am happy to report that my research efforts have resulted in a fantastic breakthrough which I promise will solve this problem once and for all. However, before I reveal my solution, I would like to share with you several reasons why I think the lively rhetorical smorgasbord should continue in the letters in PHYSICS TODAY.

To begin with, physics is too serious a matter to be left to physicists. Ever since the nuclear genie escaped from the atomic pile bottle inside the Chicago stadium, the genie began to spin a web of fibers of social, political and moral responsibility. The price of new knowledge and discoveries is the shared responsibility for its consequences. We must listen to and share all reasonable views concerning all aspects dealing with physics. The physical condition of our planet and the mental state of our people require it.

Another reason I would like to discuss has to do with compassion and decency. There are many persecuted scientists in communist countries who look forward to reading letters to the editor as a major source of hope and strength to help them get through their daily rigors of painful desperation. Surely, if we, as scientists, have a fundamental commitment to contribute to society, then there can be no greater contribution we can make than to fulfill our responsibility to alleviate human suffering.

Another reason I think we ought to continue is reader interest. I am willing to bet \$100.00 with any reader (the money will go to a charity or some educational purpose) that if we took a survey on the subject of letter writing, a majority of readers would prefer the current forum.

Oh yes! And now my solution. Anyone who doesn't like a subject in a letter, don't read it. Skip it!

ALLAN KIRON Washington, D.C.

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