

The APS Council and the DEW study

The following is an open letter to Val Fitch, president of The American Physical Society:

We are writing you an open letter to take exception to the APS Council's statement on the Strategic Defense Initiative released to the press on 24 April 1987. [See *PHYSICS TODAY*, June, page 45.]

As members of the APS Study Group on the Science and Technology of Directed Energy Weapons [see *PHYSICS TODAY*, May, page S1], we object to the council's statement to the press being explicitly joined to a selected summary of our study's finding. The council's note that its concerns "go beyond the issues of directed-energy weapons covered in the study" does not eliminate the possibility of confusion caused by half a page of study findings being followed on the same page by the council's statement. We object to being included in the council's statements on matters neither we nor they studied.

The purpose of the APS study was to provide a technical basis for understanding directed-energy weapons and to promote more informed dialogue concerning their applications to strategic defense. We are concerned that the council's statement obscures this purpose, and urge APS members to refer to the actual contents of the report.

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7/87

I write to place on record my concern about the statement made by the APS Council when the report on the study of directed-energy weapons was released. That report, by a study group led by Nicolaas Bloembergen and Kumar Patel, was a consensus report. It confined itself to physical and technical facts and avoided excessive political and management statements.

It is appropriate for individual physicists, or even groups of physicists, to have opinions on the report's political implications. But it is important to keep those opinions separate from the report because other values and interests enter on which reasonable men may differ. It is unwise to release a politically oriented statement within six months of the report's appearance, before others have had a chance to read the report themselves. Doing so tends to downgrade the report itself.

In another controversial area, reactor safety, I was luckier as chairman of the APS study group on radionuclide release from severe accidents at nuclear power plants. [See *PHYSICS TODAY*, May 1985, page 67.] Like Bloembergen and Patel's group, we were very careful in what we said and did not say;

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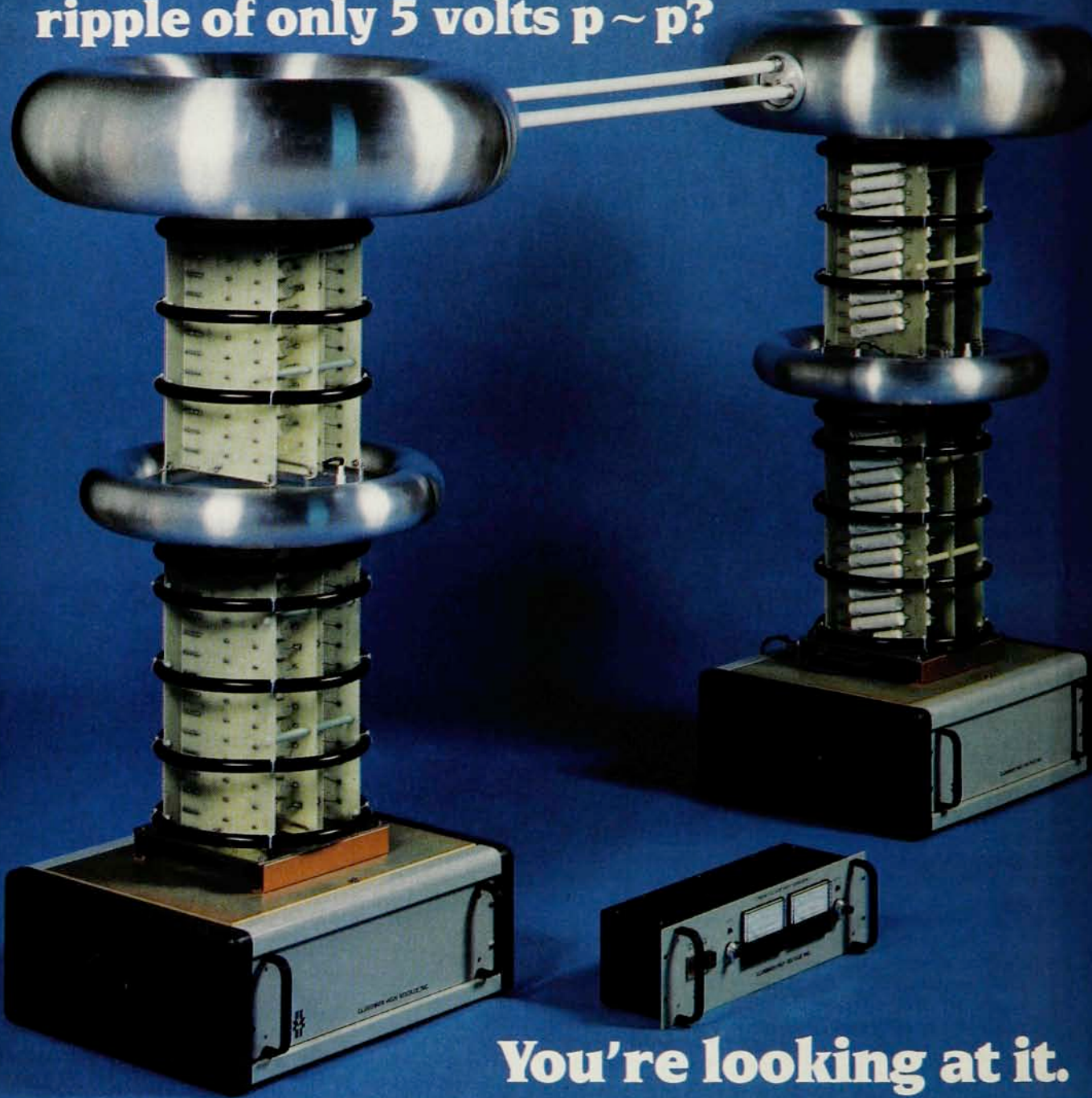
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fortunately the APS Council was not interested enough to make a statement.

I did, on behalf of the study group, report to the Nuclear Regulatory Commission. Four times the chairman of the NRC asked whether he should change emergency planning requirements. Each time I replied that the committee had not considered that matter in detail and deliberately did not want to give an opinion, although individuals, including myself, had opinions that we would be happy to provide personally the next day. I deliberately did not publicly state any views on nuclear power not included in the study group's report for another six months. As a result the report itself was widely read.

The APS Council is therefore not much worse than the Nuclear Regulatory Commission in not understanding clearly the important distinctions between assessment and management. But the NRC has such a bad reputation that that provides little consolation. It is, however, fortunate that several of my contacts in Washington have paid attention to the DEW study group's report but not to the statement of the APS Council.

RICHARD WILSON
Harvard University

7/87

Cambridge, Massachusetts

FITCH REPLIES: I sympathize with DEW study group members in their concern that the APS Council's statement on SDI might be confused with their own definitive report. Fortunately, there appears to be no evidence that this has happened in the press: While the DEW study received extensive coverage and generated much comment, the council statement appears to have been lost in its wake. I have seen only one reference to the statement itself—by Flora Lewis in the 7 July 1987 *New York Times*.

The Council of The American Physical Society planned for more than two years to issue a statement about SDI; such a statement was the subject of discussion at every meeting. It was always decided to wait for the DEW study's release before issuing anything, and that the statement was made public so soon after the study was released was an effect of one of the infrequent council meetings occurring shortly after the Pentagon approved the report's release. In retrospect, it might have been better if the council had not restated some of the conclusions of the study panel. It was always intended that the DEW study stand clearly alone.

I would like to take this opportunity

to thank the DEW study panel publicly for their important report. It emphasizes the large amount of research still to be done before a judgment on directed-energy weapons can be made, and indirectly points the directions in which research money should be spent to be most effective. Most importantly, the report is as objective as humanly possible. As such, it will make a substantive contribution to the formulation of policy, and has considerably raised the level of discussion. The committee members have performed a monumental service for our country.

With respect to Richard Wilson's comments, when people are intent on discrediting a report for their own purposes there is scarcely no end to the mischief possible. I agree that the timing of the council statement may have made it easier.

VAL L. FITCH

The American Physical Society
New York, New York

8/87

The DEW study goes public

I have just received the announcement of the publication of the report of the APS Study Group on Directed Energy Weapons [see PHYSICS TODAY, May, page S1], with a cover letter by William W. Havens Jr. That letter asserts, among other things, that the study "is based on full access to all the facts." If that is in fact the case, please send me a copy forthwith, and bill me accordingly. But if, as I suspect, the Soviets have not cooperated fully in disclosing all their pertinent plans, I reserve the privilege of returning the report for a full refund.

As a member of the APS since 1944, as an APS Fellow since 1958 and as a former staff member at Los Alamos who in the early 1950s heard Hans Bethe assert that "if we don't build an H-bomb, the Soviets won't either," I have developed profound skepticism about the judgment of many members of the physics community in dealing with critical decisions on weapons development. One can predict with virtual certainty where everyone will stand (including myself!) based on the assumptions each person has made regarding the nature of our adversary.

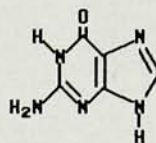
Unfortunately, I cannot be even-handed on the score of prejudgment, because of the enormous asymmetry in the risks that are being taken. If I am wrong about the feasibility of SDI, we could merely fail to achieve a particular goal. But if the other side is wrong, and the Soviets achieve an effective defense, then we would soon be where

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