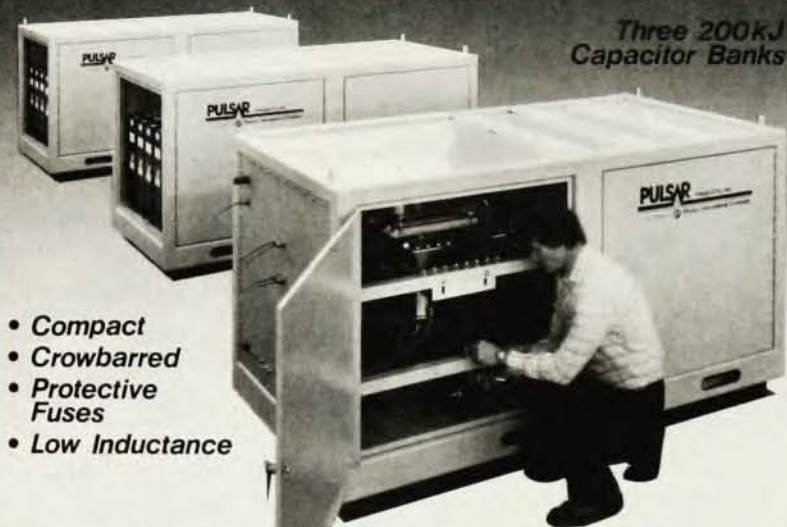


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letters

needed "to wipe out altogether" their enemy. No, I do not believe "that they can be deterred from such a catastrophic course of action" by ever more nuclear arms. Rather the opposite! Under the present circumstances having more nuclear weapons does not give more strength, but instead increases the vulnerability by raising the likelihood of preventive attack, quite apart from the threat posed by your own stocks of nuclear materials.

The Soviets lost 20 million people in WWII and they are determined not to let that ever happen again. When Doomsday comes, it will not be because of a "gamble for world domination" but as a consequence of mutual mistrust.

HENK WIND

6/82

Founex, Switzerland

High-school physics decline

Only about 10 percent of high-school graduates now take physics, and the percentage is still declining. Unless something is done, physics will follow the path of Latin to extinction. I believe the decline is due to two chief causes:

► High schools have only a minimal science requirement

► Universities offer no incentive to take physics

For college prep people, the first is largely the result of the second. Let's face it: College physics policies are more than slightly to blame for the decline of high-school physics. Most existing high-school physics courses and teachers are at least passable. But students lack the incentive to take physics when they can take "Law Enforcement" or "Marriage" courses instead.

Incentive is lacking because colleges offer no premium for high-school physics. We must reserve our traditional first-year college physics courses for those who have passed high-school physics with at least a C. Others would be required first to take a one-semester descriptive course from a text such as Hewitt's. That would acquaint them with physics while providing incentive for high-school physics. Other benefits would also result.

How can this be accomplished? One possibility is the following: The APS could circulate a resolution to this effect among the colleges and universities, to be signed by those who agree to implement it within two years. A list of signatories would be made available to all colleges. They, in turn, would then publicize this list together with the new requirement to all high schools from which each normally draws its students.

Other approaches are also possible. But colleges must do something *at once* to provide incentive for high-school physics.

FREDERICK BUECHE
University of Dayton
Dayton, Ohio

6/82

Page charges once more

I wish to comment on David Lazarus' apologia/justification for APS/AIP page charges in April (page 9).

The data that Lazarus presents show that library subscription page costs for APS/AIP journals are lower by a factor of 3-5 than those of the publications of, say, the Institute of Physics. Presumably such lower subscription costs are due wholly or in part to the payment of publication page charges to APS/AIP. Although relatively low subscription page costs appear attractive in a library budget, considered in isolation, the corresponding true cost to an institution, or to the scientific world in general, must include publication charges that subsidize subscriptions. Relative efficiencies in the dissemination of information can only be assessed by comparison of true costs.

Lazarus seems to imply that individual subscriptions are inherently desirable. I doubt that this is true on a broad view. I suspect that individual subscribers need to have available typically less than about 10% of the information they receive by subscription. My suspicion could be tested by survey, but if it is even approximately correct it indicates a substantial waste of resources. With the present necessity for some degree of specialization in research, and with the current volume of published scientific literature, surely the most important desideratum in receiving and retaining information should be selectivity. In this connection, a well-organized reprint collection containing articles of genuine interest is evidently much more efficient than a shelf of *Physical Review* and the like, containing predominantly never-to-be-read articles.

R. G. Ross
University of East Anglia
Norwich, UK

5/82

THE AUTHOR COMMENTS: Lower subscription prices for APS/AIP journals are a direct consequence of honoring of voluntary page charges. No special "magic" is available in our editorial and production processing which is not also available to, say, the Institute of Physics. The total of page charges should be placed in its proper context. As only a single example, but one available to me, the total bill for page charges for papers in condensed-matter physics at the University of Illinois (it is lower in elementary particle physics,

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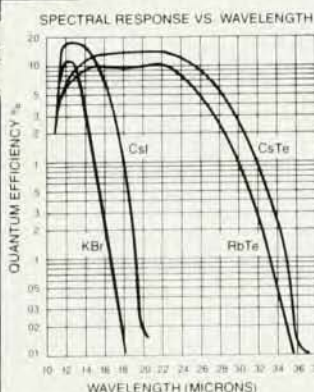
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