

letters

- Can conventional weapons break the addiction to nuclear war?
- Long-range solutions to the arms race
- Mechanisms for terminating nuclear war
- Civil defense
- International physics community and arms control
- 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

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* * *

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. Schroeder (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 minority 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.

WILLIAM B. ELMER

6/82 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.

6/82

Unemployment: a new solution

It is a cruel myth that we must choose between inflation and unemployment. Unemployment can easily be decoupled from the market forces now manipulated to arrest inflation. By legislative action, we can establish a negative feedback loop of the form

$$L = 40(1 - ku)$$

where u = the current unemployment rate (officially reported), L = the legal length of the work week in hours to be allowed for the next month, and k = the feedback coefficient. A value of $k = 3.0$ would attribute equal significance (1.0 each) to officially reported unemployment, to unreported unemployment, and to system inertia.

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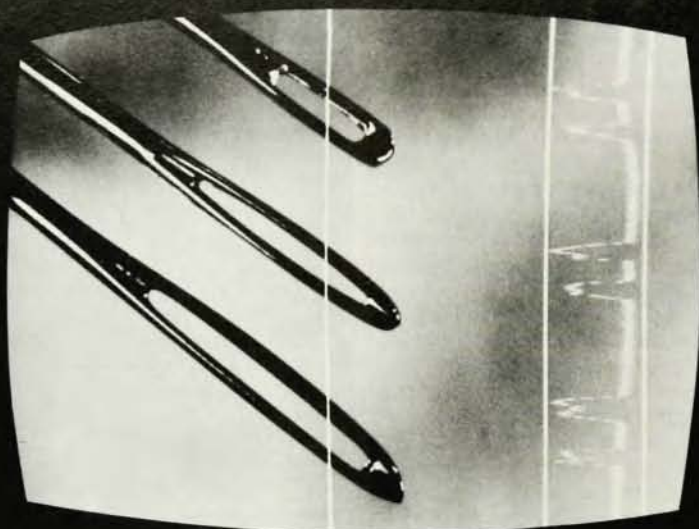
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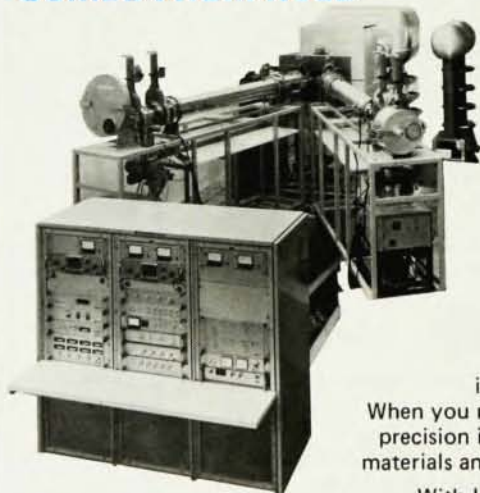
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letters

Law must further require that employers pay double- or triple-time for hours worked beyond L . This requirement can easily be made self-policing. Since salary rates below L would be unaffected, practically all weekly gross incomes would be reduced by the same factor $(1 - ku)$ as L . Just as feedback loops stabilize the flight of the inherently unstable space shuttle, so too the present feedback loop can stabilize employment in an inherently unstable economy.

Under the proposed system, employers could maintain or increase productivity only by hiring or technological innovation, and innovation would no longer cause hardship. As a specific example, suppose $u = 10\%$ and $k = 3.0$. This would allow $L = 28$ hours per week. At this level both private and public employers would feel enormous pressure to hire, to re-distribute work among employees, to transform long-term plans into short-term plans, and to move projects from back burner to front burner. Only in these ways could L be increased. *The net effect of this proposal would be an equitable and long-overdue re-distribution of employment.* As u diminishes, the appropriate response is to increase k , so as to hold L nearly constant while forcing u to diminish still further. As u approaches zero, k can be made very large without harmful effect (other perhaps than the shanghaiing of workers from the unemployment lines by employers!). By such "fine tuning" it may be possible to eliminate unemployment completely for all time. Thereafter, with $u = 0$, the formula would automatically restore the 40-hour week.

The very essence of the present situation is that there is not enough necessary and socially beneficial work to go around under a 40-hour week. Our society therefore supports entire parasite classes and parasite industries. Prominent among these is the rapidly emerging mugging industry. A re-distribution of necessary and socially beneficial work is imperative. The present distribution is both cruel and unusual. A feedback-controlled workweek is the obvious, fairest, and least painful of ways in which to accomplish this re-distribution.

LEONARD M. BALL
Costa Mesa, California

4/82

Refusenik degrees revoked

The Royal Society of Canada has just completed its Centenary Meetings (30 May-3 June) in Ottawa. On its program was an entire session devoted to "The Critical Century, Human Rights," which dealt with its various aspects

pertaining to Canada. Nevertheless, this is such an important international issue that more attention must be paid to the implementation of human rights worldwide.

It is not an oversimplification to say that had human rights existed in Argentina, attention would have been paid by the dictatorial rulers to the demands of their people for "bread and work" rather than indulge, à la Mussolini, in a tragic war over the Falklands. If human rights existed in the USSR and the goal were to improve the lot of the Soviet citizen, enormous funds would not be squandered on weapons of mass destruction, that are threatening our very existence on this planet. Instead, the USSR, which poses as a paragon of human rights, sends its dissidents and refuseniks into exile (Sakharov), jails (Scharansky), concentration camps (Orlov), and insane asylums (Davletov), for daring to ask that their rights be granted in accordance with the Helsinki agreement.

The latest abhorrent example is the revoking of academic degrees of refuseniks, some of whom have devoted a lifetime in science and technology, simply because they requested to emigrate to Israel. A stenographic transcript of the cynical proceedings of a kangaroo court composed of academics from Moscow University, which stripped V. G. Melamed of his PhD in Physics-Mathematical Sciences, appeared in *Nature* (Vol. 297, 6 May 1982) and illustrates the deliberately pernicious methods used to dehumanize and oppress our colleagues, such as Melamed. Surely, we must protest such degrading and inhuman acts by writing or wiring, as individuals or societies, President Leonid Brezhnev and President A. P. Alexandrov, the USSR Academy of Sciences, before the revoking of degrees becomes a veritable plague in the USSR.

I. I. GLASS
University of Toronto
Downsview, Ontario

6/82

The refusenik vs. the rector

Anatoly Logunov is right! I second his request (May, page 119). A physics journal should stick to the facts. There are two sides to every story, as you are fond of saying, and the same holds for the opportunists in the USSR. I am surprised that Logunov did not suggest you clean up your own mess first—perhaps he did but his letter was shortened so that there may be more space for the tirades of Brailovskys, Azbels, Dikiis, Freidlins, Freimans, Irlins, Reitmans and Vasilevskis—none of them Russians but all of them having had their education paid in its entirety by

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