LETTERS

Defense Options

R. Jeffrey Smith (News and Comment, 6 Apr., p. 32) attributes to the "Hoffman panel" enthusiasm for "the attractions of limited systems designed expressly for the defense of weapons, not people." Defending weapons rather than people is not a choice we considered. The issue that gave rise to our panel (and to the Fletcher panel) was a redirection of the research and development (R&D) program on ballistic missile defense to take advantage of emerging technologies. We in the policy group considered the long-term consequences of exercising future defense deployment options that might result from such a program. Until R&D clarifies the technical possibilities, those options cannot be specified in detail; and Smith notes that we did not do so. A general attribute of the systems we considered, however, was their ability to provide a geographically widespread defense. Even the terminal layer of the defenses under consideration would afford broader coverage than systems we have pursued in the past. It would be quite different from the various "hard point" defense systems discussed in connection with Minuteman and MX defense, for example.

The technologies under consideration offer the prospect of protection for either population or military installations (and may allow the defender considerable latitude at the time of an attack to choose the combination to be protected). Therefore, we do not now face a sharp choice between defending weapons and defending people. The relevant question is whether and how future defense systems can contribute to our various national security objectives, including both the deterrence of war and the protection of our people in the event of war.

Smith correctly attributes to the panel the view that substantially less-than-leakproof defenses can contribute to deterrence. He refers to our conclusion that superimposing vulnerable or easily saturated defenses on vulnerable offensive systems may undermine stability. But he neglects our parallel conclusion that *appropriately* designed defenses could increase stability by reducing the vulnerability of our offensive systems and otherwise diminishing the incentives to preemption. In reaching this conclusion, we rejected the notion often espoused by critics of defenses that movement away from total vulnerability of the U.S. population is necessarily destabilizing. As noted by Smith, I believe history refutes the view that paranoia about U.S. attack has dominated Soviet policy. Soviets willing to risk the various crises they fomented during the period of U.S. nuclear superiority (including the Berlin blockades and the Berlin Wall demarche) are unlikely to believe that any reduction in the current vulnerability of our people will predispose the United States to nuclear attack in a crisis.

Smith also notes my personal skepticism that we can count on defenses working well enough to preclude vast destruction of people in the event that the Soviets devote the bulk of their force to the destruction of people. Such a fixation on a strategy of mutual suicide, while a theme of Soviet propaganda, seems distant from Soviet military thinking and practice. Against more likely Soviet attack objectives, strong (but far from leakproof) defenses could both enhance deterrence of war and provide a substantial measure of protection for our people in the event of attack. The potential contribution by future defenses to each of these objectives will depend on the outcome of the R&D program. That outcome should be not prejudged in terms of a presumed conflict between defending weapons and defending people or the improbable feasibility of a strawman "leakproof defense."

FRED S. HOFFMAN
Pan Heuristics,
Post Office Box 9695,
4640 Admiralty Way,
Marina del Rey, California 90291

Hoffman states that his panel never considered the choice of defending weapons, not people. This does not square with the panel's written report. A 12-page official summary recommends three ballistic missile defense options, each involving the defense of military assets—not people. Nowhere does the report list the virtues of protecting cities. In fact, it states that even a highly effective missile defense would permit "catastrophic damage" of cities and explicitly contrasts this with the limited damage that would result from an attack on defended weapons. The report explicitly states that "in combination with other measures, defenses can contribute to reducing the prelaunch vulnerability of our offensive forces," and repeats this statement several times. It also clearly distinguishes between weapon and city defense, noting that a defense of weapons would force the Soviets to concentrate their assault, thereby "diverting weapons that might otherwise be directed against cities." During several long conversations, Hoffman stressed these points to me and argued then, as he does above, that a Soviet attack on cities was in any event highly unlikely.

—R. JEFFREY SMITH

Smoking and Longevity

The Miller-Gerstein study (*1*) of the longevity of nonsmoking men and women was discussed in a News and Comment article by Constance Holden last year (9 Sept., p. 1034). After talking with a number of those commenting on our study and reviewing their reports, we remain convinced of our conclusion; most of the male-female longevity difference (MFLD) among adults age 30 and over (after removal of the slight effect of traumatic deaths) can be accounted for by smoking.

Two major studies (*2, 3*) reported a smaller effect of smoking on MFLD in the past decade. The State Mutual Life Assurance Company study (*2*) included former smokers in the nonsmoking category and nonsmokers, former smokers, and smokers in the smoking category (*4*). The National Center for Health Statistics study (*3*) made use of the National Mortality Study Questionnaire, which did not identify former smokers. Thus, it is very likely that former smokers were placed in the nonsmoking category in both studies. These differences in classifications could easily explain the 3- to 4-year difference between our estimates of MFLD and theirs, as an overlap of the smoking and nonsmoking categories tends to reduce the apparent variation in longevity due to smoking.

The Framingham study (*5*) and the Kaiser-Permanente study (*6*), also mentioned in the article, used sampling techniques and analysis that were different from ours. Therefore, comparisons with our study are inappropriate. These studies also have the same type of classification problems as the studies noted above.

Greater credence should be given to the two studies noted in our report which deal with nonsmoking populations [the Irish in Sleive Loughner, Ireland (*7*), and the Amish in Lancaster County, Pennsylvania (*8*)]. These are ideal populations in which to examine MFLD without the confounding factor of smoking. Both studies in these purely nonsmoking populations show that the men tend to live as long or longer than the women.

Health specialists are aware of the