Letters

Patriot's Success Rate

Eliot Marshall's News & Comment article "Patriot's effectiveness challenged" (8 May, p. 791), in my view, stands in stark contrast to Daniel E. Koshland, Jr.'s editorial "Credibility in science and the press" (1 Nov., p. 629). Koshland states that "a policy of routinely revealing sources and records would improve the credibility of the press . . .," yet Marshall does little of that. He quotes "one senior Pentagon scientist," "two senior Pentagon experts," "a Pentagon spokesman," and a "Pentagon missile expert." All are anonymous, yet readers are expected to accept their comments at face value.

The fact is that Patriot's rate of success in Israel was about 44%. In this figure, "success" is defined as an intercept that either exploded Scud warheads in the air or destroyed their ability to explode when they hit the ground (what is commonly referred to as creating a "dud"). Therefore 56% of the intercepts were unsuccessful. The video tapes cited in Marshall's article are of those unsuccessful intercepts. They are not being studied to tarnish Patriot's reputation, but to help ascertain how to further enhance Patriot's effectiveness against future threats.

The success rate in Saudi Arabia was much higher (on the order of 90%). Attempting to discredit Patriot's outstanding performance in Saudi Arabia flies in the face of evaluations done by the U.S. Army that have since been independently confirmed by the Ballistic Research Laboratory.

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Response: I would have preferred to name every source I quoted, although only two critics agreed to go on the record: Reuven Pedatzur of the Jaffee Institute and Theodore Postol of MIT. But their criticism has not prompted Raytheon or the government to release photographic evidence supporting the claim that the Patriot achieved a 90% warhead kill rate in Saudi Arabia and a 44% success rate in Israel. Regarding such evidence, Skelly explained to me in a phone conversation that videos of the Patriot-Scud encounters are considered "classified." This secrecy still applies, although during the war, the Department of Defense aired many videos of weapons striking Iraq.—ELIOT MARSHALL

NSF-Funded Research Centers

The short ScienceScope item about the Cornell Nanofabrication Laboratory (18 Oct., p. 365) contains several implications that should not go unchallenged. George Hazelrigg, National Science Foundation's (NSF's) division chief for electrical and communications systems, is reported as saying that no university should come to think that it has an entitlement to an NSF-funded research center. Of the many university groups I am familiar with who have NSF block grants, none has made the assumption that it has an "entitlement" to the grant. These programs are periodically reviewed by independent review panels, and the university groups consider the review procedure to be a serious matter.

Even more disturbing is the implication, attributed by Hazelrigg to the National Science Board, that there should be a "finite life to these things." The imposition of a finite lifetime for an NSF program, rather than a judgment based on research quality and suitability of the university structure for the carrying out of the research program, is completely inappropriate. There appears to be an increasing tendency to assume that because a program has been successful for a period of time it is outmoded. One should not place greater weight on satisfying political pressures or concepts of geographic distribution than on peer review and other measures of quality. Our nation can ill afford to follow such a misguided sense of "fairness" in the award of research monies.

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Air Pollution and Mortality

Frederick W. Lipfert and Samuel C. Morris (Letters, 9 Aug., p. 606), in their critique of the article by Alan D. Krupnick and Paul R. Portney (26 Apr., p. 522), take issue with our cross-sectional mortality analysis (*1*), upon which Krupnick and Portney rely. Lipfert and Morris criticize both the data and the model specifications we used, implying that our results are flawed because we omitted factors they list. We find this a curious criticism, as subsequent work, some by Lipfert himself, has shown that these factors do not significantly change our reported results. For example, with regard to sulfate artifact, a cross-sectional analysis by