unconscious, irrational competitive drives into directions other than warfare." Our lack of knowledge of these "drives" is so great that if a tiny fraction of NASA money were put into psychological and social research, we would gain immeasurably more in preventing future war than from anything likely to come out of space.

Next he argues that " 'space science' . . . stimulates support for science in general. . . . The sheer size of the space effort has made 'unreasonably' expensive ventures 'reasonable.' " He advocates, in effect, that a scientist who wants more money for his own project should support the astronomical budget of NASA, for how could a government administrator turn down a request for a paltry $10 million for a telescope when NASA receives 500 times as much! Is this not intellectual dishonesty? Moreover, the argument works in reverse: as congressmen are becoming less enamored of NASA and cutting its funds, the rest of science is beginning to suffer. Moral: Let not science be the tail to NASA's kite. Let not scientists hack at the public till; let them rely on the worth of their projects to gain public support.

The use of space technology for scientific research has not reduced by one iota its use as a handmaiden to the military, and in my opinion the only scientific research arising out of space technology, out of NASA, is a byproduct of the military usages of the space program. Rosa's letter points up the need for a thoroughgoing review of our whole national scientific program. Our resources in men and money are not unlimited. Scientists themselves should have more of a voice than they have at present in the general direction of scientific research in this country. We scientists are allowing our talents to be propelled in directions not of our own choosing, or even of the national good, but those of the "industrial-military complex" of which Eisenhower spoke so feelingly.

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Research Funds—Cost Accounting

In reading F. R. Fosberg's letter [*Science* **142**, 150 (11 Oct. 1963)] I was sympathetic with the implied thesis —research funds for research purposes only. Notwithstanding, I wonder how many scientists face up to the economics of research contracts and grants.

On a relative basis, the incremental indirect costs resulting from research may not be significant. For example, the cost of maintaining university libraries may be increased little if at all by the fact that research is carried on, even though research involves use of the libraries. Nevertheless, cost recoveries are governed not by marginal (or incremental) concepts but by so-called "absorption-costing" concepts. The latter permit cost recoveries to be based on proportion of use. Thus, 10 percent of the cost of maintaining libraries may be recovered through overhead if it can be established that research accounts for 10 percent of the use of libraries.

In many instances, indirect cost allowances in the aggregate must be material. Without them, I suspect that many universities would not be able to balance their annual budgets. In this respect, the very existence of some universities may be dependent upon indirect cost allowances. Thus, indirect cost allowances may be a significant factor in assuring that there will be a facility in which research can be conducted.

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Motivational Research on Our Subscribers ($N = 1$)

According to my understanding, *Science* is intended to appeal to most people interested in science, laymen and savants alike. That this is not quite the case in actuality is rather obvious from the nature of the highly specialized reports (usually empirical results in biological studies). I myself, being closer to flying utensils than to hypophysectomized white rats, and only slightly interested in hypertension and neurotic behavior, started analyzing my ego recently in order to determine the reason for the accomplished fact of a renewed subscription. After about 2 days of reflection it dawned upon me that my narcissistic needs were at least partially supplied by the Letters section. If the editors continue to exercise, or, still better, even improve a little, their present judgment in selecting the very best morsels for publication, they might even succeed in overthrowing my pet hypothesis: the principal reason for the abysmal distance between scientists and humanists is found in the inability of the former to laugh at themselves.

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Scientists and Causes: Test Bans and Traffic Jams

I must disagree with the fatherly advice that D. S. Greenberg addresses to American scientists [*Science* **142**, 1635 (27 Dec. 1963)]: A test-ban treaty has been signed. Therefore we should "swing away from national preoccupation with international affairs" and give our attention to the "serious problems that afflict this country at home" such as "the hideous traffic problems that are wrecking American cities." He dispenses this advice while powerful and noisy hate groups beat the drums to dump the United Nations and scrap the test-ban treaty.

These same rabid advocates of "get tough" international policies are also opposed to sane solutions to domestic problems—civil rights, aid to education, Medicare (I am not informed on the Goldwater position on traffic problems).

Greenberg submits no evidence that Congress has either the will or the capacity to work for a world without war. His advice to scientists to abandon their efforts for disarmament and to stick to their scientific tasks only aids the militarists and the Goldwater politicians.

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Greenberg asks: "Where are the scientists going from here if they wish to continue to devote their after-hours energies to public problems?" He implies that they will go nowhere. He suggests that scientists could "rock any board of education with a well-drawn and well-publicized brief on the deficiencies of secondary education." It is my impression that few boards of education can be rocked by scientists or any other pressure group; it is likewise my impression that many scientists have contributed in many ways to attempts to improve secondary education.

This is not to disagree with Greenberg's thesis and some of his conclu-