letters

Space Forces

In a recent guest comment (June, page 9), Freeman J. Dyson addressed the subject of strategic space weaponry, including problems with laser death-rays and other so-called "Star Wars" weapons which have been proposed. This is a grave and important issue and it is distressing that someone of Dyson's stature found it necessary to address it with juvenescent rhetoric and distortions (e.g., the first 25% of the editorial was a heated, sarcastic attack on space weapon concepts which have been discussed by various parties but are not being promoted by our government as realistic systems, and a flippant dismissal of the MX system as "folly"). The space forces concept in Dyson's "defense dominated future" is, in fact, very similar to an approach under active consideration in Government circles, which has been termed[1] Global Ballistic Missile Defense I. Dyson's defensive space force, like the GBMD I, is based on concepts developed in the BAMBI project and on the use of existing technology. The approaches differ in their purposes: Dyson's space force is a system of the future established to police a world in which nuclear weapons are already banned, presumably through peaceful negotions; GBMD I proponents envision the system as a reasonably effective defense against nuclear attack, to be put into operation now, with or without Soviet cooperation.

These opposing views highlight a fundamental difference in judging the Soviet threat which seems to lie at the heart of many strategic weapon debates. Dyson's approach presupposes that the Soviet government is essentially benign and shares with us the goal of a world of free, self-fulfilling individuals living in peace. From this viewpoint, nuclear weapons can be "legally banned" through patient negotiation and accommodation, and unilateral strengthening of our own defenses becomes a war-like act. GBMD I proponents, on the other hand, see the Soviets as aggressively and unrelentingly expansionistic, bent on foisting a sensless, destructive economic system and a dictatorial government on other peoples through force, guile and the use of surrogates, and open to negotiation only when their opponent is invulnerable. It would vastly improve the quality of debate if Dyson and others who addresss these matters would acknowledge this dichotomy of views and explicitly state and defend their own positions regarding the Soviet threat.

In regard to this subject, it is my opinion that the APS Council's attempt to avoid the issue of the Soviet threat and "transcend partisan politics" in its 1983 public statement on nuclear arms limitation placed APS squarely in the camp of those who view the Soviets as benign. The resulting statement was therefore highly political, contrary to stated goals.

Reference

1. For example, D. O. Graham, "We Must Defend America," Regnery Gateway, Chicago, 1983, pages 58–65.

JACK F. BUTLER
7/84 *Lexington, Massachusetts*

•

Dyson's suggestions in his guest comment, that we should eventually deploy some "defensive" space forces is not compelling. Why should we eliminate ground-based nuclear weapons just to have their similar ugliness appear in space? Surely we cannot suppose that defensive space weapons will be used strictly for defensive purposes.

If our goal is to reduce and eventually eliminate terrestial nuclear weapons, we may justifiably deploy reconnaissance satellites to detect violations of arms-control treaties. However, the business of enforcement can, and should, remain on the ground. If we can handle the supremely difficult task of disarmament, then the task of enforcement will be a simple chore by comparison.

GEORGE MAEDA
6/84 *Holmdel, New Jersey*

Unions on campus

This note concerns unionism in academia, as discussed in recent letters in PHYSICS TODAY, especially those of Edward Harrison (January, page 11) and Charles Nissam-Sabat (June, page 11).