

Editorial

Productivity and national security

Unless you were an *Executive Intelligence Review* subscriber at the time, you probably had no idea last winter than an intensive discussion was under way within the U.S. government and armed forces as to the desirability and feasibility of a directed-energy beam national defense which would enable the United States to destroy nuclear warheads in flight. Since the autumn of 1982, *EIR* has made this possibility the focus of the military and scientific intelligence we present.

At the same time, we have identified the economic consequences of such a defense program.

In our Dec. 28, 1982 Special Report on the subject, Military Editor Steven Bardwell, one of the world's leading plasma physicists, wrote:

"The national security of the United States, in the classic sense as national security was understood by the great military leaders at the founding of this country, will be determined for the next several decades by the decision to be made in the coming year on the development of directed energy beam weapons. Beam weapons will shape the military boundary conditions affecting foreign policy, but even more importantly, will determine the economic health of the nation without which no national defense system is possible."

Bardwell went on to describe "the coming of the plasma age," enumerating the technological problems which must be solved to create beam weapons capable of destroying ballistic missiles from near-earth orbit. Namely: sensing and target acquisitions, demanding the perfection of sensors, telescopes, and other detectors; data processing, demanding new breakthroughs in circuit integration and computer algorithms; precision optics; magnetics, materials, and pulsed power.

That is in addition, of course, to high-energy lasers and space engineering capabilities of launching and

maintaining equipment in space.

Bardwell stated: "A qualitative examination of these technologies shows that if they were available in the form required for a beam weapon, then the technologies available to the civilian sector would usher in a new state of industrial processes, which are almost totally dependent at present on the narrow range of the electromagnetic spectrum.

"The characteristic feature of these new technologies is that they access the full range of the electromagnetic spectrum, from x-rays to microwaves. For the first time, it becomes economic to perform chemical, industrial, and agricultural processes using finely tuned electromagnetic energy rather than "brute force" infrared energy. The impact of this general change can hardly be overestimated."

First, fusion energy, the harbinger of the plasma age, which requires the same physics and engineering breakthroughs involved in beam weaponry, and which Japan projects can be on line in the mid-1990s, produces clean, cheap energy using sea water as its fuel source, in intensities a hundred times those available at present. Secondly, plasma torch processing can make astronomical increases in the natural resource base of the world economy. Metalworking, chemical processing, and food processing with the new technologies would be transformed, on a mass production scale.

The science and technology are well within reach, assuming that the government spends on securing peace and economic recovery what it has spent in the past on fighting wars—wars that occurred in the first place because the U.S. passively allowed the "geopoliticians" and "fiscal conservatives" to wreck nations and dictate policy.

Those are the stakes in the current budget debate.