EIRSpecialReport

America has the science to develop beam weapons

by Paul Gallagher, Executive Director, Fusion Energy Foundation

Before President Reagan's March 23 commitment to energy beam weapons, the prospect of a breakdown of the unstable balance of terror known as MAD (mutually assured destruction) was throwing the United States and its European allies into a crisis, centered around the planned "Euromissiles" deployment. The President's speech, at one stroke, transformed the end of MAD from a pameless fear, into a great technological policy goal of the U.S. republic. Citizens have since been debating and discussing this goal with rising national excitement; it has set off rising expectations among American allies around the world.

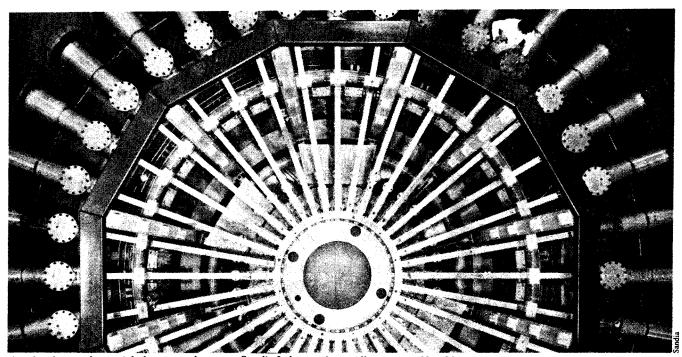
The driving force behind President Reagan's achievement is the unleashing of "American technological optimism," so feared and despised by generations of sociologists and environmentalists, to solve the growing threat of superpower thermonuclear confrontation.

The President has begun to reveal to the world the true frontiers of science and technology today—the physics and engineering of high-power, high-velocity "directed energy beams" and fusion plasmas—which have been kept in a "national security" pit of secrecy throughout the MAD era, precisely because they could end it. He called on the scientists who developed these advanced nuclear and related technologies to "turn their great talents now to . . . give us the means of rendering these nuclear weapons impotent and obsolete."

The most immediate and enthusiastic response came from the Fusion Energy Foundation, whose previously critical but offstage role in developing a Mutually Assured Survival policy became much more prominent following President Reagan's announcement. The FEF's broad "Manhattan Project" approach to true scientific and technological breakthroughs for deployable "beam-weapons" was most clearly reflected in the President's proposal.

Interviewed on national television in the days following March 23, FEF research director Uwe Parpart-Henke and I told American scientists and citizens that Reagan's policy could be not only supported but implemented for full strategic protection from ICBMs in 10 to 12 years; that crude first-stage ground-based lasers for "point defense" and to deal with small or accidental launches, could come in

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Overhead view of a particle-beam accelerator at Sandia Laboratories in Albuquerque, New Mexico, where it is used in inertial confinement fusion energy experiments. Particle-beam weapons are among those foreseen by the President's program.

half that time. An AP wirephoto of an FEF artist's sketch of such a system, accompanying an interview with Parpart-Henke, appeared in newspapers across the United States.

Lyndon H. LaRouche, Jr., who launched the FEF's public campaign for a beam-weapons strategy, was interviewed by Armed Forces Network radio and by Italian television and press; he emphasized that first-stage ABM deployment, and a powerful technological impact of a beam-weapon program on the industrial economies, could take place within five years. FEF plasma physicist Dr. Steven Bardwell's technical white paper on beam weapons, published by EIR, has become recognized as the most competent non-classified treatment of the field.

The media have scrambled into print and on the air with the proverbial "one-liners" from physicists claiming that beam-weapon ABM defense is technically impossible. But the same physicists have refused public debate on the subject with beam-weapons proponents, claiming that such debate on technological feasibility was either beneath them, or not possible due to classification regulations! One student-faculty group in the Boston University physics department sent out invitations to scores of scientists and military figures for such a debate. Beam-weapons advocates accepted; nearly 20 opponents refused, including Drs. Kosta Tsipis, Henry Kendall, Richard Garwin, and Curt Gottfried, all members of the anti-nuclear Union of Concerned Scientists, and former government arms experts Drs. Jack Ruina, Ashton Carter, and Marvin Weinberger.

The most vehement opposition to the President's initiative came in a nationally televised outburst by former World

Bank president Robert S. McNamara, the Vietnam War-era Secretary of Defense who promulgated the MAD doctrine. McNamara's "nuclear freeze" is a desperate attempt to *preserve MAD* by reversing already-realized technological progress and negotiating "pledges" not to use nuclear weapons. Thus, conventional wars, most notably meatgrinder "population wars" such as Vietnam, will become "safe to fight."

Americans will choose "technological optimism." The impact of the new technologies associated with directedenergy beam weapons would be comparable to the introduction of electricity. Several related technologies are already available in prototype. These include MHD electricity production (direct conversion of the motion of a high-temperature fossil-fuel plasma into electricity, with double the efficiency of conventional electric power production), laser machine tools, magnetically-levitated trains, and revolutionary methods of separating chemical isotopes. Under an R&D program scaled up to the level of the NASA program, a level which is now envisioned, technologies which currently present a risk or a marginal advantage over existing processes can become as prevalent as computers over the past 15 years. We could develop an entirely new energy industry, a new rail industry, a new machining industry, a new chemical industry, and a complete revolution in materials processing.

The federal government must do roughly what it did in the 1939-44 period. Key sections of industry, starting with the defense-goods sector, must fuel the re-capitalization of the entire capital goods sector, using the best available technologies, and preparing to absorb the impact of the large R&D efforts around "beam-weapons" development.

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