(3) to take appropriate measures, modeled on the National Defense Education Act as originally adopted, to ensure the provision of adequate scientific and engineering manpower for the development of these weapons systems and the civilian energy and space technologies that will emerge from applications of this research and development;

(4) to take the necessary steps to ensure the fullest participation of the private sector, colleges, and universities; other government agencies; and allied Nations in the directed energy-beam weapon development program, recognizing that defensive technologies do not pose a threat to the national security of the United States and that these technologies will not be classified, except as they overlap offensive weapons technologies; and

(5) to consider these technologies, therefore, unclassified until reviewed by a panel including the Department of Defense, the Department of Energy, and the National Aeronautics and Space Administration, which, at its discretion, may restrict access.

Section 3. The Secretary of the Department of Defense is directed:

(1) to conduct a review jointly with the Department of Energy and National Aeronautics and Space Administration, of the directed energy-beam weapon program and provide, within one year, a program for the most rapid development of this technology, based on the readiness of the technology, rather than budgetary considerations;

(2) to conduct an in-depth review of military strategy to replace the doctrine of Mutually Assured Destruction (MAD) and all aspects of "deterrence" doctrine;

(3) to provide the Department of State with the necessary information and guidance to design a renewed "Atoms for Peace" program based on the export of advanced fission and fusion technologies for peaceful uses;

(4) to provide the Arms Control and Disarmament Agency with the necessary information and guidance to prepare a new proposal to the government of the Soviet Union for negotiation of a mutual agreement for the development of defensive weapons by both Nations that would ensure that no third power would ever use the weapon of nuclear blackmail;

(5) to work with the Department of Energy and the National Aeronautics and Space Administration to ensure the transfer of technology in all applicable areas to the civilian sector; and

(6) to work with the Department of Energy to ensure optimal progress in inertial and magnetic nuclear fusion programs.

Section 4. There is hereby authorized to be appropriated to the Secretary, for the fiscal year ending September 30, 1984, $300 million inclusive of any funds otherwise authorized to the Secretary for the purpose of research, development, and demonstration of directed energy-beam weapons for ballistic missile defense, and for each succeeding fiscal year such sums as may hereafter be provided in annual authorization acts.

LaRouche open letter poses policy choice

The following open letter was written by Lyndon H. LaRouche, Jr. in response to a Boston Globe *editorial.*

Re: Editorial, Beam-Weapons November 14, 1982

Dear Sir:

I am delighted that your newspaper has offered a policy of open debate on the issue of deploying space-based antimissile beam-weapons. Since I am one of the principal co-authors of this policy, if you mean what your editorial avows to be your present policy, you would wish to receive and publish summary arguments from me.

The history of beam-weapons feasibility began in 1859, with the publication of a paper, "On the Propagation of Plane Waves of Finite Amplitude," by Göttingen University Professor Bernhard Riemann. Riemann examined from an advanced standpoint, the principles of hydrodynamics first known to have been discovered by Leonardo da Vinci, applying this to predict, in particular, the generation of accousticial shock-waves such as "sonic booms."

Since then, that paper has had many applications apart from aerohydrodynamics. Erwin Schroedinger's development of his treatment of the electron, isentropic compression to effect thermonuclear ignition, and various other applications are notable.

In any coherent wave-generation, the same principle elaborated by Riemann applies. In treating the range systems, from ordinary lasers, through x-ray lasers, and so-called particle-beam systems, we produce shock-like effects, ranging from the ablative action of military laser-weapons, to the more pronounced, bullet-like shock of beams of higher energy-flux density. All such systems are generically subsumed by the term "beam-weapons."

Although it is feasible to develop beam-weapons systems which might "punch through" the atmosphere, the simplest and most readily feasible systems are those deployed either in space-orbit of our planet, or in more sophisticated, mobile space conveyances. The near-term feasibility of developing and deploying such anti-missile defensive weapons-systems is well established, on condition that a NASA-like effort is implemented. Our objective should be to assure annihilation of the proverbial 99 + 44/100ths percent of all incoming nuclear missiles.

The history of such a proposed policy begins during the Summer of 1977, during a brief collaboration between my associate, Dr. Steven Bardwell, and a former Air Force Intelligence chief, Major-General (ret.) George Keegan. We evaluated that the Soviet Union was moving toward development and deployment of such weapons-systems, and proposed independently of one another that the U.S.A. must move quickly to develop and deploy such systems.

The next, crucial development in advancing this policy was an address I delivered to a Washington, D.C. seminar of the Executive Intelligence Review on February, 1982. On this occasion, with representatives of both the Pentagon and Soviet agencies present, I proposed that beam-weapons development become the keystone of both changes in U.S.A. strategic policy and in U.S.-Soviet strategic-arms negotiations. Both superpowers, I proposed, must independently develop such systems in parallel, agreeing to use this means to end the age of thermonuclear terror, the age of Mutually Assured Destruction (MAD).

I restated the same policy in greater detail in a published paper issued by the National Democratic Policy Committee. Dr. Bardwell complemented this policy-paper with his own report on the matter. These papers circulated widely beginning Spring 1982, and soon overshadowed the competing, "High Frontier," proposal of the Heritage Foundation. More recently, according to this own public report of the matter, Dr. Edward Teller was persuaded to support this policy by "some of my younger colleagues." Meanwhile, the Soviet Union is committed to a parallel endeavor.

The proverbial genie is "out of the bottle."

The crucial policy-issue is summarily this. Through the combined effects of a "post-industrial" devolution and the currently worsening new economic depression, there is a rapidly widening imbalance in the in-depth strategic capabilities of the two superpowers. This is aggravated by intensification of North-South conflicts and a tendency to separate Europe from the U.S.A., combined with a worsening situation in the Middle East.

The illusory objections

In opposition to my own estimate of the situation, a significant part of leading Anglo-American policy-influentials are gambling upon an early disintegration of the "Soviet Empire"—an onrush of insurrections spilling out of Eastern Europe, through the Ukraine and Caucasus, into the "Islamic heartland" of Soviet Central Asia. Persons of this view propose two things: (1) Reliance upon a hardcore of the superpowers' existing thermonuclear arsenals, and (2) build-up of sophisticated "conventional weaponry" in terms of reduced military forces targeting regional conflicts in the developing sector—so-called "NATO out-of-area-deployment."

Our opposing view, shared among a growing number of "think tanks," is that the projected internal break-up of the "Soviet Empire" is a doubly dangerous pipe-dream. Attempts to foster bloody shirts in Eastern Europe will merely enrage the Soviet leadership, and will frighten Europe into accelerating its process of distancing from commitment to U.S. policies. Meanwhile, unless we reverse our accelerating drift into a "post-industrial society," the strategic imbalance will become monstrous. We will be forced to rely increasingly on the blackmail potential of our thermonuclear arsenal. In such a scenario, the otherwise unthinkable nuclear war becomes a virtually certain outcome of aggravated strategic miscalculations.

My view, shared by an increasing number currently, is that we must effect a twofold shift in strategic policy. First, we must introduce a qualitatively new factor of "war-postponement" into the strategic-weapons equation: anti-missile beam-weapons. Second, we must develop policies of durable war-avoidance. Dr. Teller has ably stated the relevant key points.

Away from 'post-industrial' society

The sticking-point is that beam-weapons-centered policies require a sudden reversal of the "post-industrial" drift. As leading British opponents of a beam-weapons policy stress, their essential objection is not to beam-weapons as such; their stated objection is that development and deployment of beam-weapons means a reorientation of the U.S. to becoming once again a high-technology agro-industrial power, reversing every step into the "post-industrial era" effected beginning President Johnson's "Great Society."

If the "Soviet Empire" were about to disintegrate, then a continued "post-industrial" decline of the West could be tolerable. So, the emotional energy of commitment to "post-industrial society" policies becomes the force of wishful thinking concerning the Soviet prospects.

It is a fair estimate, that for each dollar spent on NASA research-and-development, the U.S. civilian economy benefitted from the spill-over of NASA technologies to the amount of more than ten dollars in increased per-capita productivity. Similarly, although military-goods expenditures are economically pure waste, the spill-over of relativistic-physics technologies into the civilian economy from beam-weapons development is perhaps the only practicable means at hand for lifting our economy out of the spiral of depressed rubble it is becoming.

Concretely, the per-capita wealth and productivity of nations depends chiefly upon both the number of per-capita kilowatt-hours of energy-throughput, and the quality, energy-flux-density, of the heat-sources employed for production. The civilian application of the kinds of technologies embodied in beam-weapons development represents the greatest technological breakthrough, potentially, in the history of mankind: a cheapening of and power to organize applied energy, to such effect that all previous notions of limits of natural resources are exploded.

Sincerely Yours,

Lyndon H. LaRouche, Jr.