Beam weapons mean a return to the Carnot-Scharnhorst tradition

The following is Lyndon H. LaRouche's speech to the EIR *conference, "Beam Weapons—the Implications for Western Europe," at the Hotel Bristol, Bonn, West Germany, on Oct. 5, 1983.*

During the present U.S. fiscal year, 1983-84, the government will probably spend between $5 and $10 billion on the first phase of the beam-weapons development program announced by President Reagan on March 23, 1983. As measured in 1983 dollars, it is probable that the government will expend between $30 and $40 billion for the same effort during each of the four years after the Fiscal Year 1984. Under those conditions, I can confidently forecast that the United States will be able to deploy a first-generation strategic ABM defensive system before 1988.

Today, I wish to concentrate on a subject which has been of relatively greater concern to European allies than to the U.S. Department of Defense so far. Flag-officers and others in France and the Federal Republic have frequently said to me and to my associates, as we discussed beam-weapon defense over the month before March 23, as well as more recently: "If beam weapons succeed, then the umbrella of nuclear deterrence is gone. Does this not leave Western Europe exposed to attack from the East?" My answer during the past, and today, is that we would be very foolish to develop only a strategic ABM defense without also rebuilding air, naval, and ground forces around tactical employment of high-powered laser-weapons. In other words, we face the challenge of a revolution in all aspects of war-fighting doctrine more profound than that which Lazare Carnot and his collaborators effected beginning 1793-94 around the pivot of massed fire of mobile field-artillery. Either we march under recently prevailing military doctrine, as the Prussian forces marched to defeat at the battle of Jena, or we apply the general-staff tradition of Carnot and Scharnhorst to the technological and logistical domain which the impact of beam weapons and related technology implies for the years immediately before us.

The new U.S. strategic doctrine requires us to abandon all of the categories of military policy thinking which have dominated U.S. and NATO doctrines during the recent 20 years, especially since 1969. Rather than attempting to fit new weapons systems into the categories established by the deterrence doctrine, we must scrap the categories associated with deterrence, and replace those categories with new conceptions appropriate to the kinds of technologies which will dominate the actual or potential battlefields of the period immediately ahead. It is of the utmost urgency that military professionals and relevant circles of scientists work this point through, and that those professionals quickly re-educate the political command of our respective nations in the military implications of the new technologies.

I shall devote the greater portion of this brief report to the subject of comparing the impact of the development of the deterrence doctrine with the return to 19th-century military tradition implicit in the new defensive technologies. Before doing so, I turn now to a few words on the subject of a proposal called "High Frontier." Once we brush aside the blunders and confusion spread by promotion of "High Frontier," the technological issues bearing on the new doctrine become clearer.

The history of High Frontier

Let us leave out of consideration today matters of global magnetohydrodynamic effects, such as electromagnetic pulse, and limit ourselves to high-powered laser-weapons and their cousins, particle-beam weapons. No principle is ignored by limiting our attention to this leading, included aspect of beam weapons development.

A beam-weapon is essentially a pulse of less than 10,000 kilowatts power shot at or near the speed of light, 300,000

kilometers per second, against a missile moving at about 3 kilometers per second. A pulse a fraction of a millisecond in duration, in the short wave-length part of the laser spectrum or particle-beam spectrum, is sufficient to destroy the targeted missile if it strikes a vulnerable spot. Fortunately, we have the basic technology in sensing devices, in data-processing instrumentation technology, in improved gyroscopes, to be able, within the relatively very near future, to target a missile in the upper portion of its ballistic orbit at distances as great as between 4,000 and 5,000 kilometers.

Many persons in the United States, such as MIT's Dr. Costas Tsipis, have denied this technology's effectiveness. Soviet officials who are experts in developing and deploying such systems, such as [Soviet] Academician Velikhov and Major-General Basov, have lied publicly in saying that such systems are not workable. In the Soviet case, these are honorable lies, published for reason of state, not for personal advantage otherwise. In the case of certain circles in the United States, the lying from scientists on this subject is of a different character. These falsifiers, including Dr. Hans Bethe, have been continuously associated with a faction of U.S. atomic-weapons scientists working under the late Bertrand Russell since 1946, the political faction among such scientists also associated with the late Dr. Robert Oppenheimer and Dr. Leo Szilard. These are, not accidentially, the same scientists who, like the famous real-life Dr. Strangelove, Leo Szilard, created the doctrine of Mutually Assured Destruction (MAD) back during the late 1950s, and who insist on maintaining the unchallengeable superiority of thermonuclear missiles today. They have been, and continue to be politically opposed to any variety of developments which would make thermonuclear missiles technologically obsolete.

Among those who ostensibly agree that anti-missile strategic defensive systems should be deployed, the strong opposition to beam-weapons development comes from fellows such as retired Air Force Gen. Albion Knight and retired Lt.-Gen. Daniel Graham. These fellows insist that ABM defenses must be limited to a design now 20 years old—which is to say, 20 years obsolete: the deployment of nuclear and related anti-missile rockets emplaced on battle-stations floating in earth-orbit. This was a design appropriate for its time, developed under the Eisenhower administration as a post-Sputnik effort.

Soviet Marshal V. D. Sokolovskii referred to General Graham's sort of High Frontier technology in the first, 1962 edition of his *Military Strategy*, in which the Marshal premised future war-winning capabilities of Soviet forces on leaping ahead of rocket anti-missile defenses, to develop weapons-systems based on laser and other products of new physical principles. The Soviet Union today is emplacing radar and other systems preparatory to deploying strategic ABM beam-weapons systems as well as SAM-10s for both point-defense and for longer-range terminal defense. They are now moving on a crash-program to put such a war-winning beam-weapon defensive capability into place.

Against such new Soviet capabilities, including anti-satellite-system capabilities, High Frontier is a replay of the Prussian army's deployment into Jena against Napoleon Bonaparte. It is technology 20 years old, and nearly 20 years technologically obsolete. It is like pitting the French Army of Napoleon III against the Prussian forces armed with improved artillery at Sedan. Two classical principles of traditional military science are sufficient to make the point. A weapon which fires at nearly 100,000 times the speed of High Frontier weapons, and can destroy its targets with a pulse of less than 10,000 kilowatts' power, represents a superiority of orders of magnitude in both firepower and mobility over any missile or anti-missile rocket which could ever be designed. In the recent 200 years of European culture's experience with warfare, there has been no more consistent folly than political and military commands which have insisted on using only off-the-shelf technologies against adversaries deploying more advanced technologies of warfare.

In such matters, superiority in warfighting capability lies with those powers and alliances which have the political will to mobilize what we call today "crash programs" of combined development of the economy and frontier technologies of military application. This was the case with the work of Lazare Carnot and his collaborators from 1793 through 1814, with that great "crash program" known as the Ecole Polytechnique. This is the model we of the United States used beginning in 1815, centering around the improvement of West Point military academy under Commandant Sylvanus Thayer. This is also the case of the Prussian military staff's collaboration with the scientific work coordinated by Alexander von Humboldt and the contribution to the development of the German economy by Friederich List. This is the example of the 1939-43 economic mobilization of the United States. This is the case of the Manhattan Project and NASA's pre-1967 research and development effort. There are valuable lessons still to be learned from the work of Dr. Adolf Busemann and others at Peenemunde. New weapons systems are dispensable, but these systems can not do their job, nor can we deploy them adequately unless the in-depth logistical strength required is also developed with the kind of emphasis which the term "crash program" implies.

This brings our discussion to the main subject of this report.

Postwar U.S. and NATO policy

It is a matter of documented record, a massively and conclusively documented record, that the strategic policies of the United States and NATO, since 1946, have been steered by a concert of trans-Atlantic influences centered around the figure of Bertrand Russell. This policy has had two general, opposing phases.

In the October 1946 issue of the *Bulletin of the Atomic Scientists*, Bertrand Russell began publicly his demand for a

"preventive nuclear war" against the Soviet Union. Russell's policy—and that of the Oppenheimer faction among the atomic scientists—was to establish a world government with monopoly on the possession and use of nuclear arsenals. Russell's proposal for war against Russia was based on the goal of crushing Russia before it could acquire nuclear arsenals. Thus, Russell hoped to establish the kind of racialist "international socialist" empire which he, H. G. Wells, and others had outlined in great detail in books published during the 1920s.

The Soviet development of first fission and then H-bomb arsenals made preventive nuclear war less attractive to Russell's humanitarian and pacifist instincts. So, beginning in 1957, Russell and his accomplices modified their strategy under the auspices of the Pugwash Conference, a conference series through which Russell's circle pre-negotiated U.S. and NATO strategic policies with representatives of the Soviet government before introducing those policies to the U.S. government and NATO. Under the auspices of Pugwash and similar back-channels, Russell and company proposed to Moscow that the world be divided between two world-empires, one Anglo-American-Swiss-, and the other Soviet-ruled.

All the essential features of this proposal were set forth in the keynote address of the Second Pugwash Conference, held in Quebec during 1958. The address was by Dr. Leo Szilard, the address on which the film "Dr. Strangelove" was based. Szilard proposed that both superpowers develop thermonuclear arsenals adequate to obliterate the other, and presented this wicked scheme as the basis for preventing general warfare between the two superpowers. Szilard did not propose global peace; he proposed that warfare be limited to local wars, including limited nuclear war fought in Europe. This was, remember, in 1958, with Soviet representatives participating. From the beginning, the Soviet government has always been informed that nuclear deterrence, the doctrine defended by President Yuri Andropov today, meant probable limited nuclear war in Europe. Szilard also proposed a "New Yalta" agreement, redrawing the political map of the world between the proposed two empires.

Szilard's doctrine was put into effect in the United States immediately following the assassination of President John F. Kennedy, put into effect with a leading role by Henry A. Kissinger throughout the 1960s in Pugwash and related back-channels, as well as McGeorge Bundy, Robert S. McNamara, and others associated with the influential Gov. W. Averell Harriman and the New York Council on Foreign Relations. By 1967, President Johnson had taken the first steps toward destroying the NASA research-and-development build-up, and toward ruining the U.S. and NATO economies into the increasingly impotent wreckage of "post-industrial societies," or what Zbigniew Brzezinski during the late 1960s named "technetronic society." The nuclear deterrence dogma, local-wars dogma, and Malthusian destruction of the OECD economies have been inseparable policies over the entirety of the past 20 years. It is for that reason that we find prominent circles within the Atlantic Alliance's political-intelligence establishment cooperating with the Soviet Union in funding and steering the Nuclear Freeze, Malthusian, and anti-technology counterculture movements of the past 14 years.

These agreements between Western and Soviet circles through such back-channels as Pugwash and IIASA should not be thought of as alliances, of course. At the same time that Western forces of Russell's orbit collaborate with the Soviet leadership against traditionalists in the West, Russell's circles are plotting to destroy the Soviet empire from within, and the Soviet leadership is plotting to take advantage of our growing weakness to prove itself unchallenged in world affairs. So, quite lawfully, what Russell and Szilard have proposed as "détente" and permanent war-avoidance have brought us now to the brink of a thermonuclear war sometime during the near future. Unless everything which Pugwash has represented is ejected from U.S. and NATO policy now, I believe that early thermonuclear war is inevitable. I seek to prevent such a war, but only implementation of the new strategic doctrine promulgated by the President on March 23 could provide the world the possibility of avoiding such war.

Within that setting, let us focus now on the two crucial military-policy features of the Pugwash Conference strategic doctrine of deterrence and post-industrial society.

The doctrine of nuclear deterrence has always depended on the presumption that political forces in the West would prevent the governments of the United States and its allies from developing those kinds of weapons systems which would make thermonuclear ballistic missiles technologically obsolete. Back during the early 1960s, this meant preventing anti-missile systems of the kind which General Graham proposes 20 years of obsolescence later. Since the beginning of the 1970s, anti-missile systems have meant what Marshal Sokolovskii first proposed publicly in 1962: not rocket anti-missile systems, but anti-missile systems based on new physical principles. Ballistic thermonuclear missiles have never been technologically absolute weapons; only the political influence of Pugwash Conference and allied circles have made those weapons ultimate weapons. They have never been irresistable, ultimate weapons-systems.

The second of the two points is the point which concerns us most emphatically in this report today. If we accept the presumption that neither power could survive a total strategic barrage by thermonuclear missiles, we accept the proposition that there is no continued war-fighting after the moment the initial heavy-artillery barrage by thermonuclear weapons is completed. This is underlined by the fact that every NATO exercise comes to a halt at the point the war game escalates to the nuclear threshold. So, for decades, the Federal Republic of Gemany has had no strategic military function within

the alliance except to be exterminated at the onset of any general warfighting. It is not astonishing that a certain degree of cultural pessimism infects the population and command of the Federal Republic. The forces of the Federal Republic and U.S. armed forces in Germany have functioned only as a political tripwire for thermonuclear war, not as part of an in-depth war-fighting capability for general warfare. It is a condition which is the height of absurdity from thousands of years of military history.

It has been the corollary of this absurd doctrine that all military forces except the thermonuclear triad have no function in general warfare, but are merely so-called conventional forces for fighting wars other than nuclear wars. So, the absurd division between strategic and conventional forces has entered the lexicon of modern defense-policy of the governments of the alliance and of NATO.

Once we pose the feasibility of implementing the President's new strategic doctrine of March 23, we must instantly discard the recently habituated practice of dividing military capabilities between strategic and conventional. We are at once projected back into what has been traditional military doctrine since Carnot and Scharnhorst. We are back to the principles of the general staff. The logistical capabilities of nations for fighting war in depth, and development of a full range of military capabilities in depth, become the urgent categories of defense-policy planning. Together with rapid development of new categories of weapons systems, we must reverse nearly 15 years of drift into the ruin of a "post-industrial society," and develop a high-technology agro-industrial basis in national economies and world trade adequate to support military capabilities in depth.

The case of the 1982 war in the South Atlantic underscores the folly of the present doctrine for deployment of so-called conventional varieties of naval, air, and ground forces. Given the domain of nuclear weapons under a regime of effective strategic ABM defense systems, the vulnerability of naval craft, high-priced military aircraft, and costly armored vehicles to relatively cheap missiles, means that the profile of such military forces presently is already implicitly obsolete. We must think immediately of the kinds of naval, air, and ground forces required for combat within the new technological domain of war-fighting regimes.

Do we wish large flotillas of warships, chugging about the seas and oceans as targets for missile attacks? Or do we require a combination of high-speed, nuclear-powered freighters which can be effective warfighting machines with a little thought to the subject? Do we require emphasis on fast hydrofoil patrol craft as a basic unit of surface warcraft? Do we send military aircraft costing tens of millions of dollars into the ephemeral life-expectancies of the anti-aircraft missile domain, or do we arm all flights of aircraft with effective laser weapons of anti-missile defense? How useful is a heavy tank against the anti-tank missiles deployed by an infantryman? True, we need ABC-resistant armored vehicles of great mobility and firepower, perhaps using ceramic hulls of a type which can be worked only by machine tools employing high-powered lasers. More generally, we need to redesign the arms of warfare according to the requirements of the technological regimes in which war-fighting will actually occur.

So far, the President's new strategic doctrine has properly emphasized what deterrence defined as strategic arms of war-fighting. Unfortunately, defense-contractors and governments have not yet grasped the fact that the same range of technologies is imperative for what we call today conventional warfighting capabilities. It should be obvious that high-powered lasers of sorts which may or may not be most appropriate for anti-ballistic-missile defense are already immediately applicable, with a small amount of appropriate engineering work, to tactical requirements. It ought to be clear, also, that the same general research and development is required for tactical weapons-systems development. The two branches of work, of both strategic and tactical systems, ought to be undertaken as a unified effort.

What I would like to sell as a proposed policy, and I would hope with support from friends in the Federal Republic, France, and Italy, is the establishment of a general staff function within the alliance, to steer cooperation in development of both strategic and tactical systems. I propose a classical general-staff planning function to assume responsibility for all of the areas I have indicated here: technologies, logistical development, and developing the new conceptions of the various tactical arms and their coordinated deployment required under the kinds of warfighting regimes implicitly emerging today.

I would hope these preparations would prevent war, not lead to war. Once the Soviet leadership is persuaded that the combined economic potentials of the OECD nations and enlarged capital-goods trade with developing nations is being mobilized rapidly around the new technologies, and on condition that we continue to offer Moscow the Mutually Assured Survival which the President offered on March 23, no rational military commander in the Soviet leadership could reach any conclusion but that it were foolish to project thermonuclear confrontation, and it were in the interests of the Soviet state to accept the President's offer to negotiate Mutually Assured Survival. To achieve peace, if peace is still possible at this advanced stage of deterioration of the situation, we must restore the credibility of the alliance as an in-depth capability of defense, and must give Western Europe efficient military options for surviving a conflict should a conflict erupt.

As a public figure and presidential candidate of the United States, I cannot and will not accept the proposition that Western Europe is merely an expendable gambit pawn in my country's strategic equation. With aid of new technologies, and with the support of voices in Europe to this effect, I believe we can at last make the assured survival of the nations of Western Europe a reality.