

## LaRouche on Princeton, Hubble achievements

*Lyndon LaRouche commented on the fusion breakthroughs at Princeton and the success of the Hubble Space Telescope mission in his weekly radio interview "EIR Talks" on Dec. 15, 1993.*

I'm very happy, as a lot of other people are, about the Princeton results. But I'm unhappy about other things.

This was a policy issue which I discussed with a number of people, including the late Harold Grad back in the 1970s, when the tokamak policy was being pushed through the relevant government bureaucracy at that time. I thought that this idea of concentrating for a breakthrough on the tokamak-type reactor was a terrible mistake and would slow us down greatly; that we ought to keep a broader-based experimental program.

It's like the problem of the Texas business, the supercollider. It's not really a wrong thing to do, and it was a terrible thing to shut it down once we were committed to it and had the investment in it. But it was the wrong approach to focus everything on one or two big systems which have a lot of, shall we say, "political sex appeal" on Capitol Hill, because they are big systems for some

part of the country, and to fail to see that science does not base itself largely on big systems, but on crucial experiments which sometimes are very small, like the so-called solid-state fusion experiments, which are small experiments. And many of the great discoveries of mankind, have come through these small experiments.

In the area of fusion processes and related matters, there are a lot of areas of research which would accelerate the benefit, which were neglected in order to fulfill the bureaucratically made decision to proceed with a choice of one mainline, big system. . . .

And we should say, if we want to be a great nation again—not be a junkpile—we're going to have to go for broad-based experimental work. . . probably doubling—at least—the percentile of our labor force which is coming out of qualified science training programs in universities. We're going to have to go back to something like the Sputnik program of the 1958-68 period in education, to get the people who actually know a little geometry out of the high schools so we have somebody who is teachable in physics, when they get to college.

If we don't do that, we're not going to be able to do this; and we should take this inspirational moment of achievement at Princeton in the Tokamak and in the Hubble repair operation, and say, all right, let's stop being stupid. Let's go back to doing the kinds of things which enabled us to put a man on the Moon; and then we'll be a great nation again.

technologies which would come from the program. The Soviets admitted that they themselves were working to unilaterally develop just such systems for an anti-missile defense shield, but they also understood that the backwardness of Russian culture, coupled with their corrupt, bureaucratic, stagnant economic system would not permit a similar stimulus to work for them. Instead they chose the option of an accelerated arms race, détente to the contrary.

Things were little better in the West. While British Prime Minister Margaret Thatcher did everything in her power to reverse the Reagan initiative, a campaign which culminated in the Reykjavik summit of 1986, the so-called supporters of the SDI within the U.S. military-industrial establishment sought to divert the program to the use of off-the-shelf technology, in place of advanced systems such as laser, electron, and plasma beam defenses. Illusions about the success of the condominium and failure to recognize the potential dangers of a revival of Russian imperialism after the collapse of the U.S.S.R., turn the SDI into a dead letter. Perhaps it will be revived under the impetus of a policy change in Russia typified by the Russians' "Trust" offer to President Bill Clinton made public on April 1, 1992, to have a collaborative SDI program along the lines of the initial LaRouche proposal.

A similar opportunity for the Reagan administration existed in 1986, when the National Commission on Space, led by former NASA administrator Thomas O. Paine, issued its report on space initiatives which had been commissioned by the U.S. Congress. This called for a 50-year program to establish a colony on Mars. While President Reagan nominally endorsed the initiative, he succumbed to the despair that enveloped the nation in the wake of the tragic explosion of the Space Shuttle Challenger in January 1986.

In contrast, continuation and expansion of the Kennedy space program was a centerpiece of LaRouche's policy guidelines for America, for which he had been actively campaigning for years. While LaRouche welcomed the 1986 Paine report, he suggested specific amendments: LaRouche believed that a 100,000-person science city could be established on Mars within a 40-year timeframe. Such a city, he suggested, should be primarily directed to astronomical investigations, and should be ringed by a network of telescopes in space—like the Hubble.

In this he was even more ambitious than Tom Paine, who had assumed that within 50 years a smaller outpost would be possible, but that to establish a city with 100,000 residents would require a century. Moreover, Paine's commission ad-