SDI charts revolution in science, industry

by Paul Gallagher

In a series of surprise announcements calculated to shatter vodka glasses all over Moscow, President Reagan's anti-missile defense program, the Strategic Defense Initiative, has set itself the goal of pulling 30,000 U.S. scientists and engineers into "consortia" to force breakthroughs in crucial areas of science and high technology. With the formation, announced the first week of February, of a Division of Innovative Science and Technology within the SDI project headed by Lt. Gen. James Abrahamson, the planners of the beam-defense program are setting their sights even higher than building a defense against nuclear missile attack—they aim to create a scientific and technological revolution for our entire society.

This is the "science driver" idea of using the beam-defense program to restart the U.S. industrial engine with the productivity leap of a "laser revolution"—specifically the LaRouche policy for the SDI which was debated quietly within the National Security Council several times during 1984.

These discussions were fueled by a July 1982 *EIR* Special Report, *The Economic Impact of Relativistic Beam Technologies*. It was these NSC debates which drew out the *Washington Post* and *New Republic* magazine into 20,000-word attacks on LaRouche's feared influence on the Reagan administration's strategic defense policy.

Abrahamson's revelations

The entire U.S. press has now blacked out or "missed" the new revelations on what it derisively calls "Star Wars," but the new, $100-million science and technology breakthrough program of SDI was announced and discussed at length by SDI Director Abrahamson himself on Feb. 8 in a keynote speech to the American Astronautical Association. Abrahamson introduced Dr. James Ionson, who had been brought in from NASA to head the SDI Division of Innovative Science and Technology. Ionson immediately made clear that "this mission is a fertile ground of revolutionary technologies."

Specifically, Abrahamson and Ionson made clear that the SDI will:

- Mobilize scientific talent to develop entirely new types of high-frequency lasers, super efficient, including some not yet even tested in the laboratory.
- Find out how to use these lasers and particle beams in tuneable form to master "molecular engineering" of new crystalline and metallic materials, as well as new microbiology techniques.
- Do it explicitly on the "Apollo" model of open, unclassified research radiating out from firms, universities, and labs.

If the currently requested SDI budget of $3.8 billion is passed by Congress, Ionson and Abrahamson will announce by May the first 50 sites for this "consortia" research; 5% or more of the total budget will be funding completely open research and development, and the total SDI program will be heading for employment of 30,000 scientists and engineers, according to others familiar with the new plans. This is more than three times as many scientists and engineers as were employed by the World War II Manhattan Project at its height.

Any congressman who plans to vote against this budget by claiming, "We can't afford the money for SDI," might now be charitably considered a fool by his labor, farm, student, minority, and other constituents.

European leaders grasped the new thrust much faster than the U.S. press. They heard about it the same day from Defense Secretary Caspar Weinberger, just prior to the annual Europe-wide Wehrkunde ("Military Strategy") meeting. At that meeting, West German Chancellor Kohl responded with his first open, outright endorsement of the SDI, and said, "It is Bonn's vital interest that Germany, as a highly industrialized nation, participate in the technology," and that German industry doesn't fall behind the pace of research and development.

In making his Feb. 8 announcement, Abrahamson stressed that the SDI "is already reporting technological breakthroughs across the board, coming from the labs and industry across this country all during the past year." One dramatic announcement made at the Feb. 8 meeting was that a method of generating and propagating an anti-missile charged particle beam in low-earth orbit had been demonstrated by Lawrence Livermore Laboratory, through a concept known as "Project Antigone." As recently as last year, the Fletcher Committee, formed to assess anti-missile technologies for President Reagan, told the President that charged particle beams—the most lethal of anti-missile beams—"would not play" in space.

Immediately after last week's announcements, sources familiar with the SDI made clear that Reagan wants to use the program to unleash the "science driver" on the U.S. industrial base and those of its allies, which will be fully included as they sign on, as Germany and Japan have done.

"For the first time in U.S. history," said one defense research official, "the President is making science and technology in itself a tool of state policy. Reagan sees SDI as the steam engine of progress. . . . And if the $3.8 billion budget

gets through Congress . . . history has never seen such a concentration of skilled manpower on one R&D project." At least 5% of the work will be pure innovation at the frontiers of energy, power, radiation, communications, molecular engineering, and microbiology technologies; SDI officials emphasize that this work will be unclassified and will be wide open. "It is designed to bring out the basic innovative juices of American know-how," said one. "Never has such an open-ended science program been presented to Congress."

If the SDI budget does go through, this U.S. scientific powerhouse will be linked directly to the plasma physics, computer, and laser labs of Europe and Japan. The Soviets, in their endless denunciations and threats against "Star Wars," have all along known it was precisely such an earthbound technological revolution in the West which might face them. This explains the Soviet-backed wave of terrorism which has murdered several of the European leaders of this "laser revolution" in past weeks.

The wire in the sky: What is Project Antigone?

Laser beams can destroy nuclear missiles. But charged particle beams would be a thousand times more effective in destroying missile warheads. That was considered academic as recently as the late 1983 Fletcher Panel study for the President: Unlike neutral particle beams already under development, charged particle beams could not be based in space, because their positive ions and negative electrons have mutual electrostatic repulsion, causing the beam to fly apart within a few feet in the vacuum in space.

No longer. Lawrence Livermore scientists have found a way, now being developed in Project Antigone. The concept is to create a "wire in the sky," a plasma channel generated by a pulse of laser light. It acts like a wire in that it will charge-neutralize the particle beam, permitting its focused propagation through space. Livermore Antigone experiments have used a laser pulse to produce a plasma channel through benzene gas in an accelerating vacuum chamber.

Laser beams can destroy their missile targets by burning or blowing a hole in them—they deposit their energy on the surface of the target. But charged particle beams deposit their energy deep within its interior, destroying a missile's delicate electronics. This target penetration cannot be shielded against; it is possible to "tune" the beam energy to penetrate any target to a desired depth. Antigone, in short, has the advantage of "electronic kill."

Behind the brawl in the Democratic Party

by Warren J. Hamerman

Paul Kirk, the old Kennedy hand, was muscled into the chairmanship of the Democratic National Committee by the same combination of Lane Kirkland and the Harriman grouping which forced the candidacy of Walter Mondale down the throats of an unwilling Democratic Party last year. Kirk may have an even rougher ride as chairman than did the bungler Charles Manatt, because the Democratic Party is literally coming apart at the seams since the humiliating defeat of Mondale-Ferraro last November.

At the DNC meeting where Kirk was elected, the disintegration of the party was out in the open. Kirk himself was elected only after Californian Nancy Pelosi, who had the backing of New York State Gov. Mario Cuomo, was arm-twisted out of running by the Kirkland and Harriman forces. Southerners and Westerners had rallied behind North Carolina's former governor and another long-standing Kennedy operative, Terry Sanford. Behind all the byzantine maneuvering typically used to kick up dust and camouflage the real policy issues in the Democratic Party, there is one unmistakeable clue as to the meaning of the Kirk chairmanship.

After Kirk was elected, his first policy move was to announce his commitment to revive the notorious Democratic Advisory Council (DAC) under a new name. The DAC was created in 1956 by Averell Harriman and John Kenneth Galbraith as a specific vehicle for abruptly transferring party policy formation away from elected party officials and traditional constituencies, and making it the private fiefdom of the Eastern Liberal Establishment through their agents in the large Wall Street investment houses and the "octopus" law firms of Lower Manahattan and Washington, D.C. In short, Harriman's DAC was the battering ram which was used to dismantle the legacy of Franklin D. Roosevelt in Democratic Party policymaking. Kirk's intention to resuscitate the DAC coheres with the intended gear-up of the Project '87 plan to "restructure" U.S. constitutional government. The Committee for Constitutional Reform of Lloyd Cutler, et al., will begin their first major public statements of the Project '87 campaign in the spring of 1985.