

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 unmistakable 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 Manhattan 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.