In Defense of "Star Wars"

Reagan Administration officials tell laser scientists that defense initiative is misunderstood

In March 1983 President Reagan called for a crash program to develop a spaceage defense system against nuclear missiles. Two years later, administration and Department of Defense (DOD) officials are worrying whether they can sustain a long-term drive to develop systems for destroying enemy missiles before warheads are deployed. Just how the Administration's Strategic Defense Initiative (SDI) is perceived over time, officials say, may have as much to do with it succeeding as mastering the program's technical challenges.

The President's ultimate goal is to render ineffective the Soviet Union's growing fleet of offensive nuclear weapons and to compel them to negotiate an arms reduction agreement. Right now Congress is behind the White House, and is expected to increase funding for the SDI or "Star Wars" research program from \$1.39 billion in fiscal year 1985 to more than \$2 billion in 1986. But there appears to be a growing uneasiness among White House and defense officials about how the public and even industry view the SDI.

This concern was reflected most recently at a symposium on lasers and particle beams held at the University of Rochester 17–19 April by Fusion Power Associates, an industry trade group. Administration speakers addressing a friendly group of 185 participants from government, industry, national laboratories, and academia repeatedly sought to clarify the purpose of SDI and the Administration's goals.

"There is a great amount of confusion within the public and the press about what the role of our program is," says Louis C. Marquet, director of DOD's directed energy office. "The goal of the program is not to build a perfect defense system. The goal of the current Strategic Defense Initiative is to bring to the table the technical issues," says Marquet, that are needed to assess the feasibility of building such a defense system.

But administration officials fear their program goals are being misconstrued by unfounded charges that such a defensive system will be too costly and technically unworkable. Their concerns are not entirely unreal, says John E. Mansfield, a staffer for the House Armed Services Committee. "I have my worries that we might be locked into some prejudices." From a cost and technology standpoint, Marquet emphasizes that the SDI effort is looking beyond existing technology to assess the possibilities for using ground-based lasers and/or space-based guided munitions, lasers, or particle beams. The focus, he adds, is to produce a concept that will discourage the Soviets from simply trying to build more missiles to overcome the SDI system. "If we can't do that," exclaims Marquet. "We won't build the system."

Another notion administration officials are trying to dispel is that SDI is a program aimed at protecting offensive missile systems. That idea has been fanned in part by the media's Star Wars label, DOD officials say. Indeed, after two years, concedes George A. Keyworth, II, director of the White House Office of Science and Technology Policy, "ambiguity over SDI's goals remains in people's minds."

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Keyworth contends that SDI's image as an offensive system is fostered by three general misconceptions: that "threatening deterrents" must be a major goal of the SDI; that the system is meant to protect intercontinental ballistic missile silos; and that it is designed to protect European targets against tactical ballistic missiles. The President in recent weeks, he says, has sought to counter such misinformation. And in trying to set the record straight for industry and academia Keyworth cites the president's own words: "We seek to render obsolete the balance of terror or mutual assured destruction as it is called, and replace it with a system incapable of initiating armed conflict or causing mass destruction, and yet effective in preventing war.'

In addition, Keyworth pointedly told conference participants that the chances are slim for nuclear-pumped x-ray laser technology being adopted for the defense system. Although, he says DOD will continue to explore the technology, if for no other reason than because the Soviets have a similar program. "I think it is unlikely that the American people will maintain full and enduring support for these systems," says Keyworth, "if they continue to rely upon nuclear weapons as defensive means when there is no assurance that the defense weapon is not potentially as damaging as the threat that they confront."

Credibility is crucial to the survivability of the SDI program, says Gerald Yonas, chief scientists for SDI. "The real problem is how do you get from here to there. How do you get support for a long-term R&D program," Yonas observes. Not only does the purpose of SDI need to be understood, but DOD will have to demonstrate progress. "We have a responsibility in such a program to report achievements, they have to be real and have to be significant on the road to our long-term goal.

Furthermore, if the program is to be credible, it must remain flexible in the near term. "We can't afford to be wedded to any one concept. . . . We have to be willing to take our pet project and dump it." In fact, concept supporters of the program wish they could dump the media's Star Wars label and the administration's even more obscure SDI designation.

Both could prove deadly to the defense effort, advises Robert L. Sproull, president emeritus of the University of Rochester, a pioneering institution in laser technology. "We have to find a better name, something better than the Strategic Defense Initiative." The program should not be cast aside simply due to a public relations goof, he says. "If it (the program) becomes discredited, it will be a loss for the country and the world."

But a new package in itself, observes Sproull, will not assure that SDI can hang on through the next decade. "We have to raise the level of discourse," he says. And, this heightened debate, Sproull adds, must be coupled with arms control talks.

"Basically, I don't think we really have much choice. If we can't create the technology to make defense a reality, I am afraid we are faced with a continuing offensive weapons buildup," says DOD's Yonas. "And I share with Bob Sproull the notion that if we just continue to build those offensive weapons they will eventually be used and that's something none of us want."