emphasized that the present Soviet ASAT—which employs a conventional explosive—can destroy important U.S. satellites in low-earth orbit, that existing Soviet ground-based lasers may have some ASAT capability, and that eventually the Soviets may launch a space-based laser ASAT. "In view of these Soviet activities we think it is disingenuous for the Soviet Union to accuse the United States of militarizing space," he said. "The purpose of the U.S. system and the reason we're testing is to help maintain a deterrence in space and to deter threats to U.S. and allied systems."

But others are skeptical about the significance of the Soviet program. Last year, for example, the Boeing Aircraft Corporation, which makes the U.S. ASAT, told Congress that only nine of 21 Soviet ASAT tests had been successful. The Soviets "are having substantial problems" with a new ASAT sensor system, "and in fact may be considering scrapping it," they said. Brown believes that "virtually the entire intelligence community sees this as a tempest in a teapot. They have already spent several billion dollars dealing with this problem." Security restrictions prevent him from explaining how, but others say that the United States is developing the capability to replace satellites in low-earth orbit quickly, and that new satellites are being deployed with considerable manuevering capability, as well as protection against nuclear effects such as electromagnetic pulse. According to Robert Cooper, director of the Defense Advanced Research Projects Agency, the United States has also developed a fairly lightweight graphite material capable of shielding against "exceedingly capable laser systems."

As to the future, Michael May, an associate director of Lawrence Livermore National Laboratory, says that although it cannot be ruled out, he knows of "no evidence that the Soviet Union is working on a space-based laser ASAT." May, who directed a 1980 study on satellite survivability for the Defense Science Board, believes that "the necessary and appropriate response to Soviet ASAT threats, whatever technology the Soviet Union uses, is to make sure that our systems survive, or at least that a very large-scale, very visible attack would be needed to disable them. Developing an ASAT of our own is not an appropriate response." He disagrees with the Administration's position that compliance with ASAT limitations is impossible to verify, as do such experts as Sidney Drell, Raymond Garthoff, Richard Garwin, and Carl Kaysen (*Science*, 18 May 1984, p. 693).

Significantly, Reagan listed an additional new rationale for the program in his letter to Congress: a "growing threat posed by present and prospective Soviet satellites, which, while not weapons themselves, are designed to support directly the USSR's terrestial forces in the event of conflict." Previously, the U.S. ASAT was intended primarily to threaten satellites that conduct reconnaissance and eavesdroppping over the oceans; now, its target set explicitly includes "satellites which provide targeting data and other information useful in supporting Soviet land forces."

Lurking in the background is still another rationale: the need to use the program as a test-bed for the President's Strategic Defense Initiative, or "Star Wars" program. As the Air Force acknowledged last March, the program "has begun to establish a technical base for rocket propelled interceptor motors, sensors, control systems, and operational implementation"—all of which will play a role in ballistic missile defense (BMD). Donald Kerr, the director of the Los Alamos National Laboratory, has noted that due to the substantial intermingling of the technologies, "the negotiation of a restrictive ASAT treaty . . . might pose insurmountable obstacles to the development of many of the most promising BMD technologies." Many suspect that this is the most important motivation for the President's announcement.

In any event, Speakes acknowledges that the U.S. test will probably cause the Soviets to begin more research and testing of their own. "But it also sets into motion an incentive for them to negotiate, and that's what we're seeking," he says. Brown believes that it is Reagan who needs an incentive, and he hopes to supply it later this year, by inserting an ASAT test ban in the 1986 defense appropriations bill.—**R. JEFFREY SMITH**

NIH to Award 2200 New Grants

The check, as they say, is in the mail. The budget for the National Institutes of Health has finally been settled for fiscal year 1985, which ends on 30 September, and as soon as the Office of Management and Budget (OMB) actually deposits the check, NIH will award 2200 new grants to researchers who have been waiting for a resolution to the impasse that has had NIH on hold since January.

In an unusually intense budget fight this year, the Reagan Administration maneuvered to reduce NIH grants to 5000 from a congressionally authorized figure of approximately 6500 (*Science*, 1 February, p. 498). By ordering NIH to forward fund some grants for 3 years, OMB tried to cut a generous congressioinal budget by 1500 grants. In an ensuing political and legal battle, which included a decision by the U.S. Comptroller General that the OMB's forward funding directive was illegal, NIH finally prevailed, thanks in large part to the persistent efforts of Senator Lowell P. Weicker, Jr. (R–Conn.), who led the fight to preserve increased funding (*Science*, 24 May, p. 970). In the House, strong NIH funding was backed by appropriations subcommittee chairman William Natcher (D–Ky.), among others.

The final bill provides funds for 6200 new and competing research grants, as well as for 533 research centers, which was the original figure that OMB tried to take down to only 500. In addition, the bill provides funds for the Alcohol, Drug Abuse and Mental Health Administration sufficient for at least 550 new and competing awards.

NIH officials have been preparing for months for the resolution of the budget battle, so each of the 11 institutes is ready to go with lists of approved grants to be paid by the end of the month. In years past, the grant target has always been approximate but this year they expect to fund 6200 grants on the nose. As NIH director James B. Wyngaarden observed, "Congress has told us to award no fewer than 6200 and OMB has instructed us to award no more." Although there will be some variation among institutes, it is anticipated that the priority score payline will be in the 160 to 170 range.

With the budget for fiscal year 1985 finally fixed, the challenge for fiscal year 1986 begins. Expectations are that NIH again will be in a position to fund 6200 grants, especially given Congress's clear commitment to a real increase in the research budget.—**BARBARA J. CULLITON**