## Senate Creates Pressure for ASAT Negotiations

Over the Pentagon's strenuous opposition, the U.S. Senate recently paved the way to a resumption of direct negotiations with the Soviet Union on a treaty limiting the deployment of weapons designed to destroy satellites.

For the past several years, negotiations on such a treaty have been blocked by the Pentagon's desire to test and deploy a sophisticated new antisatellite weapon, or ASAT, by its desire to use the ASAT program as a test-bed for the technology needed in an antiballistic missile system, and by its contention that no ASAT limitation could be adequately verified (*Science*, 18 May, p. 693).

On 12 June, however, the Senate rejected these arguments and declared that no further ASAT tests can be conducted until the Administration tries to negotiate the strictest possible ASAT limitations "consistent with national security interests." In addition. the Senate said that any tests must be "necessary to avert clear and irrevocable harm to the national security," that the tests cannot "irreversibly" and "gravely" impair prospects for negotiations, or violate a 1972 treaty banning development of weapons capable of destroying ballistic missiles. If the provision survives a pending House-Senate conference, Congress will have 30 days to review the evidence behind these pledges before the tests can go forward.

Taking note of the Senate vote, and of a recent offer by Soviet president Konstantin Chernenko for prompt ASAT negotiations, a senior Reagan Administration arms control official predicted flatly several days later that "U.S.-Soviet negotiations on this topic will be under way before the election." The principal topic of conversation will probably be a ban on tests of ASAT's capable of operating at very high altitudes, where each side has parked its most vital satellites. Such an agreement would effectively allow each side to continue testing and deployment of low altitude ASAT's now in existence or under development. Although some Pentagon officials favor an even more narrow agreement, encompassing only peacetime "rules of the road"

in space and a modest exchange of ASAT data, the President's closest national security advisers believe that this would be a relatively meaningless gesture and that a broader agreement should be sought if negotiations are to be conducted at all.

The Senate requirements were enacted after a lengthy debate that pitted the Defense Department against a variety of scientific and arms control groups, including the Federation of American Scientists, the Council for a Livable World, Common Cause, and the Union of Concerned Scientists. The highlight was an extraordinary 2hour secret session in which the Senate was briefed by analysts from the Central Intelligence Agency on current and potential Soviet ASAT weapons. Although arranged by Administration supporters, the so-called "threat briefing" failed to convince a majority of the senators that the Soviets are capable of secretly constructing viable ASAT's in violation of a limited agreement.

The measure, which was passed by 61 to 28 as an amendment to the 1985 defense authorization bill, resulted from a compromise between Senators Larry Pressler (R–S.D.), Paul Tsongas (D–Mass.), Sam Nunn (D– Ga.), and John Warner (R–Va.). Pressler and Tsongas favored somewhat tougher requirements, Warner favored none, and Nunn fashioned a compromise.—**R. JEFFREY SMITH** 

## Navy Scuttles Disposal Plan for Nuclear Subs

The Navy has abandoned a controversial plan to scuttle up to 100 obsolete nuclear submarines off the California and North Carolina coasts over the next 20 to 30 years. Instead, the Navy announced last month that it will bury the reactor compartments, which will remain highly radioactive for decades, in low-level waste sites at government facilities in Washington and South Carolina, and either sink the nonradioactive hulks at sea or sell them for scrap.

The original plan to scuttle the entire vessels in deep water some 200 miles offshore was criticized by environmental groups, the California state legislature, and the U.S. Environmental Protection Agency. Although the Navy intended to remove the spent fuel from the reactors, there was concern that radioactivity from the reactor vessels would find its way into marine life. Environmental groups were also apprehensive that the plan would lead to a resumption of ocean dumping of low-level radioactive wastes, a practice abandoned by the United States in 1970.

Nine nuclear-powered submarines have already been decommissioned and are awaiting disposal. Another 100 are expected to be retired from the fleet over the next 30 years.

-COLIN NORMAN

## UCLA Plans to Dismantle Its Research Reactor

The University of California at Los Angeles (UCLA) gave up a 4-year struggle to renew the license for its research reactor on 14 June. UCLA Chancellor Charles Young announced that the reactor, a 1960 Argonaut, would be dismantled.

An antinuclear group, the Committee to Bridge the Gap, has battled the university in legal proceedings since 1980, claiming that the reactor posed unacceptable risks as a potential source of radiation and a target for terrorist attacks. Daniel Hirsch, president of the committee, said: "After 5 vears, we've won. Now I hope that other universities will take the steps themselves" to improve safety and security measures. Hirsch has lobbied to have all university reactors switch from using high-enriched (bomb-grade) fuel to low-enriched uranium.

In making its announcement, however, UCLA said the reactor was being closed purely for economic reasons. Not enough nuclear engineering students or faculty members use it to justify the cost, Young said. UCLA reports that usage of the reactor has declined 90 percent in the last 5 years and that only one professor now uses it for research.

Young said that "the dedision was in no way substantially influenced by" the imbroglio over safety. "There is no danger whatsoever from the operation of the reactor," Young added, and "no security problem." However, because