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

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there is "a perception of a security problem, we decided to do some things that would ease that perception." For example, the university agreed to keep the reactor shut down during the Olympic Games in order to limit the consequences of a terrorist attack. The litigation over relicensing has cost between \$150,000 and \$250,000—the price of "harassment," in Young's view.

According to UCLA's plan, the reactor will be dismantled at a cost of \$300,000 to \$1 million over the next 5 years.—ELIOT MARSHALL

GAO Dismisses Bank

Street Protest

The General Accounting Office (GAO), after a lengthy review, has denied a protest by Bank Street College of Education, which claimed that the National Institute of Education (NIE) improperly awarded a contract for a new educational technology center to Harvard University (*Science*, 27 January, p. 378).

The GAO dismissed all of Bank Street's complaints. Chief among them was that NIE did not give Bank Street sufficient information about cost estimates during the competitive bidding process. Bank Street also said that NIE director Manuel Justiz improperly disregarded the recommendation of the project review board, but GAO responded that the director has the ultimate contracting authority and acted legally.

Bank Street issued a statement on the decision criticizing the "enormous discretion" permitted in the NIE review process, and suggesting that "both the NIE decision-making process and the GAO order... are a denial of fundamental concepts of due process." The college is "reviewing its options for further action."

-CONSTANCE HOLDEN

French Take Steps for European Space Station

Paris. The French government announced on 15 June that it is inviting other European nations to subscribe

to an expanded program of collaborative space research and development aimed at making Europe fully competitive with the United States in space technology by the beginning of the next century.

The two central components in the French proposal, which if fully accepted would result in a 50 percent increase in the European space budget over the next 10 years, are the development of a new cryogenic motor, known as HM-60, and preliminary studies of a more powerful version of the Ariane launcher, whose technical promise was amply filled by its first fully commercial launch last month.

The current version of Ariane is capable of putting into geosynchronous orbit payloads up to 4.5 tonnes. The new version, called Ariane V, would be able to increase this to 15 to 20 tonnes, sufficient to launch a small reusable space vehicle known as Hermes.

France is proposing that it provide 55 percent of the estimated \$500 million development cost of the engine and of the \$1.4 billion cost of Ariane V, and is hoping to persuade other European countries to pick up the remainder through the European Space Agency (ESA).

The German government is thought to have already agreed in principle to contribute a further 25 percent of the overall engine and launcher costs. However, this decision will rest on its ability to convince other ESA members to support European participation in the space program currently being planned by the U.S. National Aeronautics and Space Administration.

French Minister of Industry and Research, Laurent Fabius, said that he considered these to be the first steps toward the eventual construction of a European space station.

The French will also support a radar observation satellite, known as ERS-1, supported by other ESA members. This would also be funded through the European agency.

The French proposal for broad government funding of the new launcher, which is predicted to reduce the cost of commercial satellite launches by 30 to 40 percent, comes a week after a rival U.S. company, Transpace Carriers, Inc., had accused European governments of providing unfair subsidies to its space industry. In particular, Transpace has complained to President Ronald Reagan of the fact that ESA has offered free launch facilities to Arianespace, the company which was set up to exploit the commercial use of Ariane, as well as the current practice—due to expire in 1987—under which foreign companies can be offered satellite launches at what is claimed to be less than cost.

Transpace's complaints are currently being studied by the Office of U.S. Trade Representatives in Washington, although they are not being taken too seriously in Europe in view of major government subsidies provided to the U.S. space program through NASA in the past.

-DAVID DICKSON

New Chief for OSHA

A Texas tax lawyer is expected to be named chief of the federal agency that regulates worker safety and health. Robert A. Rowland, 52, is expected to be nominated to head the Occupational Safety and Health Administration (OSHA).

Like his predecessor, Thorne Auchter, a Florida contractor, Rowland helped manage Reagan's 1980 campaign at the state level. (Auchter resigned in March to join a Kansas construction company.)

Rowland came to Washington in 1981 from Austin after the Administration appointed him chairman of a federal commission that adjudicates disputes between OSHA and companies that contest agency penalties for violations. Rowland's track record at the commission indicates that he is very conservative and, according to Margaret Seminario of the AFL-CIO, has repeatedly ruled in favor of industry.

Bert Cottine, a lawyer who was appointed to the commission by former President Jimmy Carter and served 2 years under Rowland's chairmanship, says that Rowland, although "extremely personable," is "unfamiliar with medical and scientific issues of occupational safety and health outside of his limited experience at the commission."

Rowland's nomination, which has not been officially announced, is subject to Senate confirmation.

-MARJORIE SUN