NAS Calls for Arms Talks

The National Academy of Sciences has added its voice to a growing sentiment in favor of prompt negotiations with the Soviet Union on nuclear weapons. In a resolution approved at its recent annual meeting in Washington, the Academy called on President Reagan and Congress to intensify "without preconditions and with a sense of urgency" efforts to reach an agreement limiting the number of nuclear weapons and delivery systems.

The resolution, which was drafted in the Academy's Committee on International Security and Arms Control, was approved after a discussion of weapons trends and arms control problems. Marvin Goldberger, president of the California Institute of Technology and chairman of the committee, noted that "members of the Academy have had a long involvement in weapons design and production, as well as arms control issues. Consequently, the Academy has a special obligation to heighten awareness of the implications of these weapons."

Interest in arms control within the Academy has been increasing for some time, Goldberger said. The topic came up repeatedly during a series of regional meetings convened by Academy president Frank Press last year. Members of the Academy's committee have met twice with their counterparts on a Soviet Committee on Peace and Disarmament Research, and plan a third meeting in Moscow later this year.

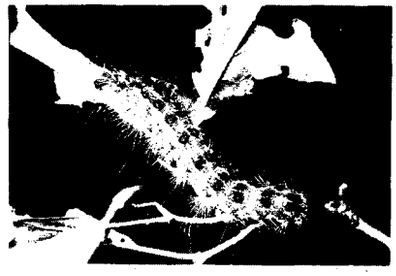
In its preamble, the resolution states that any use of nuclear weapons is likely to escalate into a general nuclear war, and that "science offers no prospect of effective defense against nuclear war and mutual destruction." It calls for continued adherence to existing arms control treaties, including the unratified SALT II agreement.

The vote preceded by several days the opening of a series of hearings on nuclear arms control by the Senate Committee on Foreign Relations. The chairman, Senator Charles Percy (R–Ill.), noted as he opened the hearings that the general public is becoming increasingly anxious "that we may well witness the horror of a nuclear war in our own lifetime" and that "some leaders in both governments may believe that nuclear war might somehow be winnable or survivable."

The hearings, which resume this week, are intended to air the merits and drawbacks of various arms control resolutions pending in the Senate, including a proposal for a nuclear weapons freeze.—***R. Jeffrey Smith***

USDA Retreats on Gypsy Moth Front

The gypsy moth got the good news on 27 April, when Assistant Secretary of Agriculture John Crowell told a House subcommittee that the government can no longer afford to wage chemical attacks on insects in the



fashion that has prevailed for the last two decades. In this year's budget, the Department of Agriculture (USDA) proposes to slash its share of the joint federal-state effort in the war on insects from 50 to 12.5 percent.

Earlier this year, Representative Joseph McDade, a Republican from Pennsylvania, asked the USDA to reconsider its austere new budget. Pennsylvania is one of the most heavily infested breeding grounds of the gypsy moth. Would it be possible, McDade asked, to declare the northeastern United States a gypsy moth emergency zone just for this year? If it were, the $5 million which has been withheld from the pesticidal war chest could be released.

The USDA and the Office of Management and Budget refused to go along. At hearings on 27 April before the House interior appropriations subcommittee, of which McDade is the ranking Republican member, the decision was reaffirmed. Crowell said that if an exception were made for the gypsy moth, then the USDA would have to declare an emergency for the spruce budworm and perhaps other insects. Despite a "vigorous exchange" on the issue, according to McDade's press secretary, the USDA stood firm.

The importance of all this, ethologically speaking, is that the most powerful human enterprise—the U.S. government—has surrendered to the insect battalions. Each year since its appearance in the New World in 1869, the gypsy moth has grown more populous. By 1981 it was capable of defoliating 10 million acres of forest in one summer. Observers of its habits predict (*Science*, 28 August 1981, p. 991) that the moth will expand its territory again this year and probably each year for the remainder of the century, unless humans discover an inexpensive new method of stopping it.

—Eliot Marshall

Edwards Defends Budget Cuts at DOE

Secretary of Energy James Edwards, who is leaving soon to serve as dean of the School of Medicine at the University of South Carolina, appeared before the American Physical Society recently to explain his controversial legacy in the field of energy research. "I've wanted this opportunity because I realize that morale at some of the laboratories could be higher," Edwards told the assembled scientists on 27 April in Washington. "I realize that there is some uncertainty about this Administration's commitment to science."

The budget cuts experienced by energy researchers are primarily in demonstration projects that the government had no business subsidizing, Edwards said. "And many of them made no economic sense. There were poorly managed programs that we've either restructured or terminated."

This Administration, he said, is getting back to basics. By basics, Edwards means research that assists the nuclear power industry. "We are putting behind an era of stop-and-go policymaking; an era where, in a few short years, we went from exalting nuclear power to calling it a 'last resort'; an era where some of the national laboratories were flooded at the

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end of the fiscal year with solar and conservation research money they were unable or basically unwilling to handle."

In recent years, Edwards said, some of the laboratories have lost their identity. "They have become embroiled in highly political battles that pitted solar programs against the traditional priorities. Labs spent more money but the quality of their work did not always increase in tandem."

Although the labs should concentrate on basic research, Edwards said, they could do more applied work on military projects. "Our weapons development program involves extensive activity in 'practical' fields, including electronics." In short, nuclear energy and nuclear weapons are in, and alternative energy is out.

The contradictions and confusion of Edwards' tenure are wrapped up in his comments about the future of the national laboratories. "I want to propose today that we make better use of many of these skills by encouraging private industry to make more use of the labs," Edwards said. "We have to be careful, of course, that the labs don't wind up devoting too much of their time to applied work, and we have to be sure that the government doesn't wind up back in the business of subsidizing business. But consistent with the missions of the labs, we'd like to make optimum use of this nation's skills." Maybe his successor can figure that one out.

—R. Jeffrey Smith

Peace Academy Gaining Momentum

A proposal to establish a national peace academy, which has been floating around Capitol Hill for years, is now gaining increased attention. The Senate Committee on Labor and Human Resources is considering a bill reported out of a subcommittee on 28 April, and the House plans hearings on a similar bill this month.

Proponents of the academy have long contended that the time is ripe for the establishment of a federally chartered entity to provide a national focus for conflict resolution. Prominent among the advocates are economist Kenneth Boulding of the University of Colorado, and Harvard law professor Roger Fisher. Fisher heads Harvard's negotiation project, which offers training to groups around the world, including the Naval War College and the NATO Defense University.

Only a handful of universities currently offer degrees on conflict management, but peace academy supporters point out that individuals with such training have helped resolve many domestic conflicts, including the Indian take-over at Wounded Knee and the occupation of two buildings in Washington, D.C., by Hanafi Muslims in 1977.

James Laue, director of the Center for Metropolitan Studies at the University of Missouri testified last month before the Senate subcommittee on education, arts and humanities that the hostage crisis in Iran probably could have been resolved sooner if mediators had been available who could have operated outside of rigid official channels. He said the failure of United Nations Secretary Kurt Waldheim's mission to Iran was in part due to the fact that no one had developed liaison with the students who were holding the hostages.

Former hostage Moorhead Kennedy, who heads a new peace institute at New York's Cathedral of St. John the Divine, added that the State Department "tended to lump foreign happenings in traditional categories—political, economic, and military," and "had obviously not paid sufficient attention to the influence of religion and related psychological factors. . . ."

Fisher later explained to *Science* that trained negotiators can complement and supplement official communications. The government has a natural resistance to allowing participation by outsiders. But, said Fisher, they can play an invaluable role in developing informal channels of communication as well as in doing basic work in developing options. They have much more flexibility, he says, because they are not bound by official positions, they do not have to worry about face-saving, and they are expendable.

Fisher himself was consulted during the course of the Iranian hostage negotiations and he personally intervened—as an individual trusted by both sides—to cut through a last-minute snag involving funds transfer hours before the hostages' release.

The proposed academy would be a federally chartered nonprofit corporation engaged in research, training for people both within and outside the government, and information. It would also act as a clearinghouse for programs around the country and offer resident fellowships to foreign leaders. Bills call for a 2-year authorization of $31 million. President Reagan has declined to support the legislation "because of current budgetary restraints."***—Constance Holden***

GAO Points Up Military Use of Shuttle

A recent report by the General Accounting Office (GAO) has confirmed what planetary scientists have long feared: that the National Aeronautics and Space Administration (NASA), an ostensibly civilian research agency, will soon be spending a large portion of its time serving the needs of the Department of Defense. The GAO examined NASA's budget request for research and development in fiscal year 1983 and discovered that more than 20 percent benefited the Pentagon exclusively.

The bulk of this subsidy is accounted for by military use of the space shuttle. Although the shuttle was initially developed to serve a large proportion of commercial and scientific customers, 49 percent of its flights over the next 3 years are now allocated to Defense Department missions. "This is bad news for those who are concerned over cutbacks in NASA's space science activities," says Senator William Proxmire (D–Wis.), who requested the study.

The value of NASA's work for the Pentagon has not been pinpointed before because the space agency avoids connecting overall shuttle costs with individual flights. It also claims that the shuttle benefits the entire nation, no matter who uses it.

According to Proxmire, one consequence of the bureaucratic book-juggling is that the Pentagon is not forced to weigh the value of the shuttle against competing military ventures. It is probably a lot easier to support a major federal project when somebody else is paying for it.

—R. Jeffrey Smith