

Furthermore, in dealing with the family, you must consider whether they will act in the patient's interest or their own. Some people will give consent because they can't wait to inherit the patient's money. Sometimes, it is the other way. There have been families that have said, 'You must keep the patient alive until his brother or whomever dies for the sake of our inheritance.' "

In choosing passive euthanasia, Haemmerli believes that irreversibility of the patient's condition is the most important point. In his address to the Council of Europe, he suggested that irreversible loss of brain function be accepted as the definition of human, as opposed to biological, death. It is, he says, a definition that would extend already existing definitions of brain death. Those definitions, written with organ transplantation in mind, deal with total brain death, which includes destruction of brain functions that control the autonomic nervous system; there is no spontaneous breathing, but the body is kept on a respirator long enough for donor organs to be secured. "Probably more frequent in everyday practice, however, are patients whose brains have died but who have pre-

served their spontaneous respiration," says Haemmerli. The feeding and drugs that keep these people alive are, in his opinion, just as artificial a means of supporting life as is a respirator.

Acknowledging that irreversibility is difficult to determine, Haemmerli says, "What is important . . . is an adequate period of observation. . . . In the case of heart arrest an observation period of less than an hour is enough. . . . In the case of failure of the brain function with continued spontaneous respiration, weeks and often months are necessary."

Once the determination of irreversible brain loss has been made, Haemmerli sees no distinction between pulling the plug on a respirator and withholding antibiotics or nutrients. In his hospital, he says, it is unlikely there would ever be a Karen Quinlan because they would not get caught up in the semantics of whether pulling the plug is a special sort of "act" just because it is so physical and easy to visualize. Haemmerli would pull the plug because he would think it "pointless" not to, not because he would think of himself as practicing euthanasia.

"Lawyers and other persons alien to medicine often find it hard to grasp this concept of pointlessness," Haemmerli told the Council. "For the doctor there is 'point' in any therapy which seems to him likely to succeed. . . . But if it is unsuccessful and if no other therapeutic possibilities exist, then the treatment begun clearly becomes pointless."

It is apparent that some changes are going to have to be made in order to come to grips with the terrible dilemma that medical technology has created. It may be true that what is needed is a new definition of the physician's duty, as well as a definition of death that distinguishes between "human" death and "biological" death. There is little doubt that such definitions will be difficult to formulate and initially controversial, particularly to individuals who may see them as undermining the value of life and opening the way to abuse. Nevertheless, they will have to come. As Haemmerli says, "All discussion and any new definitions and conclusions resulting from it should satisfy two simple criteria: common sense and the humanitarian principle."—BARBARA J. CULLITON

Arms Control Agency: New Law Seeks to End Its Period of "Eclipse"

Several amendments to the Arms Control and Disarmament Act that were signed into law without fanfare on 29 November could have a significant impact on decision-making about weapons systems.

The amendments are designed to strengthen the hand of the Arms Control and Disarmament Agency (ACDA) in its dealings with the Defense Department and to provide Congress with better information by which to analyze the merits of major military programs.

Among other things, they require that proposals for major—or potentially major—weapons systems be accompanied by an "arms control impact" statement analyzing the impact that such a weapons program would have on arms control and disarmament policy and negotiations. The goal is to get an early warning to Congress and the public about such weapons systems as the Submarine Launched Cruise Missile, which has become a major stumbling block to further arms control agreements between the United States and the Soviet

Union. The amendments also give ACDA enhanced status within the executive branch, a greater ability to mount public relations campaigns, and a more explicit responsibility for keeping Congress informed.

No one is claiming the amendments portend an end to the upward spiraling arms race. But, taken as a whole, the amendments strike many arms control advocates as a surprising and hopeful step forward in the effort to inject an arms control viewpoint into high-level debate over national security issues. Adrian S. Fisher, dean of the Georgetown University Law Center and former deputy director of ACDA, calls the amendments "the most important legislative change in the structure of arms control matters since passage of [the original arms control legislation] itself."

The amendments were motivated by a feeling that ACDA, after a promising start in the 1960's, has "recently gone into somewhat of an eclipse," as a report by the House Committee on International Rela-

tions put it. The agency has always been something of a midget in the league populated by such giants as the Defense Department and the Energy Research and Development Administration, which inherited the nuclear weapons programs of the former Atomic Energy Commission.

ACDA was created in 1961 as part of an effort to make arms control a central goal of national policy, but from the start it was deliberately kept small and circumscribed by making it a subordinate unit of the State Department and by placing it under the guidance of a General Advisory Committee designed to ensure that no long-haired pacifists gained the power to undermine our military strength. The budget for ACDA has generally hovered around \$10 million a year; the staff has recently numbered about 200.

During the 1960's ACDA played the key role in negotiating the nuclear Non-Proliferation Treaty and other arms control agreements. It also developed a systems analysis capability that is judged unique outside of the Pentagon. But in the 1970's, particularly under the Nixon Administration, the agency suffered several setbacks: it was stripped of a major role in SALT (Strategic Arms Limitation Talks); its budget was cut sharply for one year, though it has since rebounded; and its senior staff was depleted by forced resignations.

"An awful lot of very good people were fired," Fisher told a House hearing in 1974. "There was a purge in this agency, there is no question about it." He described the purge as part of an effort by Nixon's White House staffers to gain "personal control" over other areas of the executive branch. Another witness, Donald G. Brennan, of the Hudson Institute, an occasional consultant to ACDA, said he understood that "the people on the White House staff who were responsible for the purge were reacting against what they perceived to be an excessively liberal activism within the agency's upper reaches in the preceding year or two or three."

Whatever the reasons, the agency's current status is viewed as something of a disappointing low by many of its supporters in Congress. As Clement J. Zablocki (D-Wisc.), the key House figure behind the amendments, expressed it earlier this year: "I recently was at a briefing in the executive branch and, seeing the National Security Council chart, I asked: 'Where is the Arms Control and Disarmament Agency?' I couldn't even see a slot for it. And the briefer said: 'Oh, it must be here somewhere.' We finally found it in [small] type way down at the bottom."

An analysis of the agency's achievements and problems was prepared in 1974 for Zablocki's Subcommittee on National Security Policy and Scientific Developments by George Berdes, the subcommittee's staff consultant, and Philip Farley, former deputy director of ACDA. Their two principal criticisms were (i) that ACDA "has not played a sufficiently imaginative and independent adversary role within the executive branch, and has not carried its disagreements often or vigorously to the Congress and public;" and (ii) that ACDA, and the entire executive branch for that matter, "have not subjected defense proposals (weapons systems, deployments, and strategies or policies) to a sufficiently balanced, rigorous, and analytic adversary process, both as to their impact on arms control and foreign relations and as to their intrinsic merits."

They also questioned the "special skills, experience, or motivation" of many of the agency's top officers, expressed doubts about the effectiveness of the agency's research program, and noted that ACDA generally "takes the executive branch party line" in public discussions.

These and other alleged weaknesses were argued over at hearings before the House subcommittee in 1974 and 1975 and at similar hearings before the Senate Foreign Relations Committee. There were also quiet negotiations between Congress and the executive branch. In the process,

some of the original proposals for amending the 1961 act so as to strengthen ACDA got watered down to win broader acceptance. Ultimately, the House approved its version of the amendments on 9 July 1975 by an overwhelming vote of 382 to 28, and the Senate approved a weaker version on 11 September by 76 to 8. Then, surprisingly, the House-Senate conference committee, convened to reconcile the two bills, took what arms control advocates consider the toughest provisions from each

and combined them into a "highest common denominator bill."

The most controversial provision of the act as it became law is the one which requires that an "arms control impact" statement be filed every time a government agency—most often this would be the Defense Department or the Energy Research and Development Administration—submits a legislative or budgetary proposal to Congress for an important weapons system or other military program. Such im-

Private Colleges Holding Their Own

Private colleges and universities have not become the disaster area that everyone was predicting in the late 1960's, according to a report released by the Association of American Colleges.* The AAC, in the first of a series of annual reports it plans on the state of private higher education, says a survey of 100 institutions, excluding the larger research universities, shows that while things are not exactly rosy, the private sector is "still a viable and sturdy part of the American system of higher education."

The general picture is one of gradual, but not alarming, financial erosion, and the chief problem for most institutions is maintaining enrollment in the face of intense competition with public institutions.

The study, headed by educational economist Howard R. Bowen, was conducted to ameliorate the lack of reliable data relating to the health of the independent sector. It covers the academic years 1969-70 to 1973-74.

Among the findings:

- Student enrollment, after a gain in the late 1960's, has held "remarkably steady," although there has been a shift toward higher numbers of students in graduate and professional courses.

- SAT scores of entering students are lower, but in line with the nationwide increase in student ignorance and illiteracy.

- Student bodies have abandoned the disruptive behavior of the 1960's, are generally more mature and highly motivated. Their main problems are rising alcohol consumption, nonpayment of bills, and, as one respondent put it, "sex folkways disenchanting to donors."

- Faculty salaries have gone up 33 percent, a little behind the cost of living. Faculty-student ratios have declined slightly.

- Competition with the public sector, both for funds and for students, has become "less gentlemanly," and promises to intensify.

- Investments in clerical and support services have increased disproportionately to investments in curriculum improvement, largely because of annoying amounts of paperwork attendant upon government support and intrusion.

- The 10 predominantly Negro institutions in the sample have made the most rapid progress in revenues because of increased government aid.

- Additions and expansions to academic programs are overwhelmingly more numerous than deletions and retrenchments.

- Small liberal arts colleges are having the hardest time of it, both in terms of enrollments and finances.

The report says a remarkably small number of schools—16 accredited ones out of a total of 866—went defunct in the 5-year period, and although 27 percent of the sample are in "serious trouble," it is not predicted that all are headed for extinction.

The AAC hopes to add major research universities and professional schools to its future surveys, and intends to confront the question as to whether private institutions are in jeopardy of losing their uniqueness in their struggle to remain competitive.—C.H.

*The report is available for \$1 from the AAC, 1818 R Street, NW, Washington, D.C. 20009.

impact statements are required for every program involving nuclear arms, all programs whose estimated costs exceed \$50 million a year or \$250 million in all, and any other program deemed by the National Security Council to have a significant impact on arms control and disarmament policy. That last clause is intended to cover programs of potential arms control importance whose dollar costs would otherwise not qualify them for scrutiny.

The impact statement was opposed by the Ford Administration and by leading "hawks" in Congress who feared, as Senator Strom Thurmond (R-S.C.) put it, that "this provision may needlessly delay or obstruct crucial defense programs." Some hawks were particularly concerned that the "doves" might be able to sue the Defense Department for alleged deficiencies in the impact statements, thus blocking military programs in much the same way as environmentalists have used the courts to block projects whose environmental impact statements are deemed inadequate.

Thus, to secure the acquiescence of the hawks, a clause was inserted that "no court shall have any jurisdiction" to review the impact analysis. Berdes believes the legislation would never have passed without this concession. "We had to put it in," he said. "The resistance in the executive branch was absolutely catastrophic. They were thrashing about from all the walls." Fisher believes the concession is no overwhelming loss, since courts often decline to inject themselves into national security issues anyway.

In its final form, the act now requires any government agency that is preparing any legislative or budgetary proposal for the programs covered to provide the director of ACDA with "full and timely access to detailed information" on "a continuing basis." The director of ACDA is to analyze the likely impact of these programs on arms control and make recommendations to the National Security Council, the Office of Management and Budget, and the agency proposing the program. If the proposing agency submits a request to Congress for authorizing or appropriating legislation, then it must include an "impact statement." The precise form of the statement—and the question of whether it would be classified or not—is left vague, though the assumption is that at least an unclassified version will be made public. Finally, if specified committees request it, the director of ACDA must advise them of the arms control implications of the programs for which impact statements have been submitted. The law may not be as tough as its advocates originally hoped, but in the opinion of Fisher it's "a major step forward."

The goal of this detailed and complicated procedure is to ensure that the originating agency—usually the Defense Department—gives thought to arms control implications early in the process of devising new programs, and that both ACDA and Congress get warning of significant new programs early enough to do something about it. In the development of past weapons programs, according to Fisher, "generally ACDA would find out about it by the grapevine and try to bull their way in, sometimes successfully, and sometimes not."

Arms control specialists speculate that a requirement for an impact statement might well have changed our government's assessment of the desirability of pursuing development of particular weapons systems. At a recent meeting of the Arms Control Association, for example, Richard Garwin, of IBM, suggested that the Defense Department had not adequately analyzed the arms control impact of Multiple Independently Targeted Re-Entry Vehicles, Submarine Launched Cruise Missiles, or high-powered laser weapons. In each case, he suggested, the impact of the new weapon on the arms race is apt to render the weapon counterproductive.

Some members of the association were skeptical that the mere existence of an impact statement would change congressional voting patterns on big weapons systems. But Garwin suggested that if a congressman receives an "official" statement warning of an adverse impact on the arms race, he is more apt to be swayed than if he received the information some other way.

In addition to the impact statement, the new amendments try to enhance the effectiveness of ACDA by requiring it to submit an expanded annual report to Congress analogous to the annual "posture statement" submitted by the Secretary of Defense; by repealing language that had previously been interpreted as inhibiting the agency's ability to conduct a public information program; and by making the ACDA director a principal adviser to the National Security Council, a status comparable to that of the Joint Chiefs of Staff and the director of the Central Intelligence Agency. An effort to make the ACDA director a full member of the Security Council was abandoned in the course of legislative compromise.

Few observers believe the changes guarantee that ACDA will assume a more vigorous and important role. For one thing, most specialists agree that the key factor in slowing the arms race must be strong leadership from the President, a level far above ACDA's head. However, Berdes detects a feeling in Congress that ACDA "has become awfully timid," particularly "in con-

trast to the behemoth [the Pentagon] on the other side of the river." Thus the amendments are intended as "a heart transplant" to a weak and somewhat reluctant patient, in hopes that he may at least get started on the road to recovery.

—PHILIP M. BOFFEY

APPOINTMENTS

Charles D. Cook, chairman, pediatrics department, Yale University School of Medicine, to chairman, pediatrics department, Downstate Medical Center, State University of New York, Brooklyn. . . **Sidney D. Rosenberg**, dean, school of allied medical professions, University of Pennsylvania, to dean, College of Health Related Professions, Wichita State University. . . **Creighton A. Burk**, chief geologist, Mobil Oil Corporation, to director, Marine Science Institute, University of Texas, Austin. . . **Marcus M. Mason**, president, Mason Research Institute, Worcester, to director, Contract and Research Development, Worcester Foundation for Experimental Biology. . .

RECENT DEATHS

Thurman B. Givan, 87; former professor of clinical pediatrics, Long Island College of Medicine; 23 October.

George C. Griffith, 77; professor emeritus of medicine, University of Southern California School of Medicine; 26 October.

Orin Halvorson, 78; former chairman of bacteriology, University of Minnesota; 20 October.

Leigh Hoadley, 80; professor emeritus of zoology, Harvard University; 6 November.

Norman Kaplan, 52; chairman, sociology and anthropology department, Northeastern University; 14 October.

William B. Kemp, 85; former director, agriculture experiment station, University of Maryland; 15 October.

John E. Klimas, Jr., 48; professor of biology, Fairfield University; 28 October.

Thomas L. Popejoy, 72; former president, University of New Mexico; 24 October.

Frederick A. Wolf, 90; professor emeritus of botany, Duke University; 7 November.

Erratum: On the order form for tours and concerts (28 Nov., p. 873), the time for tour 2-B should be 10:30 a.m.

Erratum: In column 2 of Products and Materials (12 Dec., p. 1120), the device referred to as "Animal Bedding Disposable Cabinet" should be "Animal Bedding Disposal Cabinet."