agencies. The report estimates that by 1962 some 2000 scientists, including 400 Academicians, were in these councils, and that perhaps 7000 scientists and specialists, in all, were involved in the work of the councils and their subsections and commissions.

The report does not give much information to answer two major questions: (i) Is the reorganization of science paying dividends? (ii) Will the committee really coordinate all Soviet science or just the nonmilitary part?

On the latter point the report admits that "what role the new scientific research coordination committee will play in the military oriented programs is not yet clear. The signs at present do not point to more than a "participating" role in the coordination and direction of the work.

The report makes a major point when it notes that "the reorganization of the Soviet scientific research and development effort clearly owes much to the outstanding successes scored in the fields of atomic energy, guided missiles and space research—success attributed to the pooling of resources and the combined efforts of scientists, engineers and designers." The high-priority military and space programs have been getting the best of everything in terms of both materials and manpower, and, as the report points out, the rigidities of the Soviet staffing system and the shortage of capable people in the middle and lower echelons of science and administration have limited the efficacy of R&D in the nonpriority fields. And now in this reorganization, the Soviets hope to maximize results in what might loosely be called civilian technology by applying what they learned in paying Paul by robbing Peter.

—JOHN WALSH

## ACDA: Criticism of Arms Agency Increases, but Congress Grows Friendly and Outlook Brightens

The short and not-so-happy life of the Arms Control and Disarmament Agency (ACDA) has entered a new stage. No longer caught midway in a strenuous tug-of-war between passionate enemies and devoted friends, the agency has lately been beset by critics from all sides. The principal distinction now is that some of the critics are friendly—that is, well-disposed toward ACDA but disappointed by its performance—while the others are hostile—antagonistic to the idea of an agency dedicated to negotiating an arms control or disarmament agreement with the Russians.

The friendly criticism is by no means new. Soon after the agency was established, in September 1961, government officials, liberal politicians, scientists, and others who had pressed for the creation of an "agency for peace," in the vague expectation that it would bring an immediate revolutionary shift in U.S. foreign policy, began to voice their disappointment with ACDA. Their private lament has become increasingly popular: in recent weeks, the New York *Times* and the *Reporter* have carried articles enumerating the causes of the agency's malaise, and both within the agency and elsewhere in government it is increasingly easy to get people to put aside what they are doing to shed a tear or two over ACDA's sad plight.

Now, as earlier, much of the criticism centers on the agency's bureaucratic structure of four main bureaus plus seven other compartments for its staff of 187. The people filling the top slots, beginning with the agency's director, William C. Foster, are frequently accused of having greater talent for appropriate gestures than for constructive action, and of pursuing respectability with greater zeal than they pursue disarmament. The combination of convoluted bureaucracy and unenthusiastic leaders is held responsible for the disgruntlement of middle-level staff people, and for a slow-starting and unimaginative research program.

Most of these complaints are fair enough, and all illuminate some of the agency's more serious problems and defects. But as the criticism has increased, the agency has been changing—albeit slowly, and in uncertain directions—and not all the criticism has kept pace with the changes. Perhaps the most fundamental change is that the fierce political passions the agency once excited in Congress have begun to dwindle. This in itself has disappointed some of the agency's more fervent outside supporters, and is interpreted by them as an emblem of the agency's compromises and lack of zeal in hammering away at its controversial responsibilities. But just as there will be no test-ban treaty without the acquiescence of the Senate, there will be no Arms Control and Disarmament Agency without congressional appropriations. In all fundamental ways, the agency is shaped by Congress; an affable relationship is the prerequisite for any fruitful activity. Congress's increasingly neutral view of the agency is not to be regarded with scorn.

The agency has just cleared the first of four congressional hurdles—the passage of new authorization legislation by the Senate. The Senate bill now goes to the House (where the authorizing committee, Foreign Affairs, has not yet scheduled hearings), and there still remains the matter of actual appropriation by both Houses, but the scope of the agency for the next 2 years will probably not be very different from what the Senate has proposed.

ACDA's request for an expanded budget and for modified security regulations was carefully inspected by the Senate Foreign Relations Committee (*Science*, 19 April) and passed by the Senate in approximately the form the committee recommended. The result was a bit different from what the agency wanted. Instead of the $15 million the agency had requested for fiscal 1964, the Senate voted a $20 million authorization covering fiscal 1964 and 1965—still a sizable jump from the agency's fiscal 1963 budget of $6.5 million. By making the authorization cover 2 years, the Senate reaffirmed its right to stand watch over the agency's activities. The move was a compromise between the permanent authorization requested by the agency and the annual review that some senators felt was necessary, but in fact the matter is a relatively trivial one. The 2-year authorization means that the Foreign Relations Committee, as well as the Appropriations Committee, will continue to have a voice in the agency's affairs.

The security changes went through as requested and will bring regulations governing ACDA contractors into line with those governing Pentagon and Atomic Energy Commission contractors. The changes are expected to reduce the delays that have frequently beset the process of letting contracts.

The Senate also initiated a few changes in the agency, interesting in that they reveal what some of the irritants have been. The Foreign Relations Committee was annoyed by a particularly vigorous lobbying campaign in support of the agency's request, which began even before the bill was formally under consideration. The pressures seemed excessive and were attributed by the committee to secret encouragement from within the agency. The result was a cautionary amendment prohibiting the agency from using its funds to promote its own legislation through

Congress. Another amendment prohibited the agency from signing research contracts with foreign institutions (one small contract had been let to the Institute for Strategic Studies, in London). In a third amendment, the Senate, noting that the agency had disposed of its research funds in a great rush of contracting at the end of the fiscal year, voted that it could obligate no more than 20 percent of its funds in the last month of any fiscal year—an accounting rather than an ideological knuckle-rap. And finally, acceding to some of the more far-fetched fears that the agency's activities have produced, the Senate went out of its way to spell out that ACDA could do nothing to interfere either with the right of individuals to bear arms or with the regular treaty-making power of the Senate. The sum of the committee actions and the Senate debate was that the agency was thoroughly scrutinized and tidied up a bit. In general, however, the fire of 2 years ago was gone, and it was clear that the agency has become a fixture.

Being a fixture has its liabilities, as the agency's critics will be quick to point out. But for an agency whose diplomatic mission is so sensitive, and whose political position has been so shaky, the waning of congressional hostility is bound to produce a certain degree of welcome stability. In fact, the cease-fire with Congress, however tenuous and informal, together with Ambassador Harriman's mission to Moscow in search of a limited test-ban treaty, has already had some effect within the agency. Much of the supporting work for the Harriman talks has been done by the agency; ACDA's deputy director Adrian Fisher, Franklin Long, of the science bureau, and Nedville Nordness, the chief public affairs adviser, are members of the negotiating party; and the agency's director, William C. Foster, has been among the high-level officials helping the President shape the U.S. position—a fact notable only because on some other important occasions Foster has been overlooked. And, independent of the recharging effect of the new negotiations, so different in style and tone from the dreary haggling at Geneva, other aspects of ACDA's work that earlier seemed about to wilt and die have begun to bloom in recent months, suggesting that some of the recent criticism, if not unjustified, has been at least misdirected.

The charge most frequently brought against the agency as proof of its failings is that "everybody is leaving," with its evocations of wise rats swarming from a sinking ship. It is certainly true that there have been large turnovers, that the agency has had serious difficulty in attracting people of high quality, and that several of the most dedicated and talented supporters of disarmament measures on its staff have left or are leaving. But many remain, and of those who have gone, not all have left in disgust or disillusionment over the agency's inability to initiate and secure constructive arms control or disarmament proposals. Franklin Long, for example, head of the agency's Bureau of Science and Technology and of its research council, is leaving to fulfill responsibilities to his graduate students in chemistry at Cornell. Others, not only in the science bureau but scattered throughout the agency, have been on leave from industry or universities and have always been committed to return.

The fact that many people are leaving is not, of itself, a clearcut disaster for the agency. Most of the members of the science bureau staff, although transient, came to the agency of their own volition, but this is not the general rule in the agency's other sections. The International Relations Bureau, the Economics Bureau, and the specialized offices have been staffed to a large extent by foreign service officers who landed at the agency through assignment rather than conviction. The Weapons Evaluation and Control Bureau has many military officers who are there on the same basis. As Senator Clark has pointed out, "I do not want to say anything in derogation of the public careers of these fine gentlemen, but I will say that they will not be missed. The hearts of very few of them have been in the real work of the agency."

One exception to the malaise with which staffing and organizational problems have affected the agency is the Bureau of Science and Technology. The difference between the science bureau and some of ACDA's other operations suggest that lack of firm direction from the top of an agency may create opportunities as well as obstacles for talented staff members. The staff consists of about a dozen men, either scientists or with technical backgrounds, all there because they want to be. By civil service standards they are well paid (several earning between $16,000 and $20,000) under a government dispensation for technical personnel. The combination of interest and reward has been a productive one.

The effectiveness of the science bureau staff has pushed its activities somewhat beyond what a glance at the organizational chart might suggest. In addition to backup work on technical proposals (their formal assignment), the scientists have had an active role in an in-house summer study on arms control and European security, and the bureau supervises between a third and a half of the agency's contract research. Three prominent scientists—Freeman Dyson of the Institute for Advanced Study, Matthew Meselson of Harvard, and Raymond Birge of the University of California—have joined the staff for all or part of the summer. The bureau has in general been successful in gaining the support of the scientific community, as consultants on specific problems if not on a full-time basis.

The last few months have also produced new signs of life in the agency's much-criticized research program. Eleven research contracts or grants (amounting to nearly half the agency's research funds for fiscal 1963) were signed in May and June, bringing the agency's total up to 25 contracts and eight grants and considerably reducing what earlier threatened to be a monumental surplus. There has also been a continual branching out from the agency's initial preoccupation with the technical aspects of arms control inspection and verification measures (although that field is still represented), and the research program now includes political studies as well. The new group of contracts includes the first agency-sponsored research in the behavioral sciences —a small private grant and a large-scale summer study (the latter involving about 30 behavioral and social scientists) concerned with factors affecting Soviet attitudes toward disarmament.

The Arms Control and Disarmament Agency has serious defects, but if it is not about to become a model for textbooks on government, neither is it about to collapse in disgrace. The agency is less than 2 years old, its shape is not finally fixed, and—its critics to the contrary—it hardly seems ready for burial. Now that political pressures have lessened and that some of the budgetary restrictions have been removed, there is both reason to hope that the agency's performance will improve and some evidence that it has already begun to do so.

—ELINOR LANGER