

News and Comment

World Atom Agency: Cold War Has Dimmed Once Bright Hopes, but IAEA Still Manages To Carry on

Vienna. Like a tree growing in unfriendly soil, the International Atomic Energy Agency (IAEA) is visibly stunted as it starts its sixth year, but it is very much alive and far more robust than anyone had a right to expect.

The agency, which developed from former President Eisenhower's Atoms for Peace proposal, is, of course, at the mercy of the two major nuclear powers, neither of which has taken any special pains to foster its growth. While the United States has given the agency considerably more support and respect than the Soviet Union has, both countries have demonstrated that they do not consider IAEA to be in the mainstream of international atomic matters. At the same time, the behavior of both suggests that they think it a good idea to have IAEA in existence, and, hopefully, the United States is showing increased interest in enhancing the role of the agency. The Soviets, meanwhile, have been steadfastly maintaining a moderately cooperative attitude.

Prospects for the agency's future thus range from oblivion to the possibility, viewed with guarded hope, that should a Soviet-American nuclear arrangement be worked out, IAEA would play a significant role in policing it. In the prevailing chill of the Cold War, and in the light of France's and China's determination to acquire nuclear arsenals, the peace-keeping role for IAEA is so obscured by uncertainties as to be indefinable. But through thick and thin during the past half-decade the Soviet Union and the United States have shown a willingness to keep the Cold War from obliterating the agency. Whatever the motives may be, the effect has been to maintain a bridge between the American and the Russian nuclear establishments, for IAEA, though relatively unpublicized, is the only organ-

ization where scientists from the two nations regularly work side by side. At present there are some 30 American and 15 Soviet scientists here at the agency's headquarters, well mixed together in about a dozen sections. As has been the case elsewhere, they get along extremely well. According to Henry Seligman, who became IAEA's deputy director general of research and isotopes after heading the isotope division at Britain's Harwell atomic establishment, "there are fewer personal difficulties in this organization than in any other I've known. I think the people here are so afraid that differences may be misinterpreted, that they bend over backwards to get along."

Establishment and Accomplishments

IAEA, a 77-nation specialized agency of the United Nations, came into existence during the brief East-West thaw of the mid-1950s, charged, optimistically, with spreading the peaceful benefits of atomic energy and making certain that the results did not contribute to the spread of nuclear weapons. To get the agency off to a good start the United States announced that it would make available 5000 kilograms of U^{235} for IAEA to distribute—and keep under surveillance—in the promotion of atomic energy. The Soviet Union pledged 50 kilograms, and the United Kingdom offered another 20.

It soon became apparent, however, that there were serious deficiencies in both the scientific and the political assumptions underlying establishment of the agency. IAEA's role was linked to the unrealistic expectation that the widespread use of atomic energy was just a few years off. On the basis of this belief, it was expected that the agency, in return for helping to bring atomic power to the nonnuclear nations, would exact the right to conduct inspections to guarantee that the materials and technology it supplied were not being diverted to the production of weapons-

grade plutonium. The optimistic forecasts about the arrival of atomic power have not been borne out, thus the agency has been prevented from assuming a guardianship role (so far it has distributed just 70 kilograms of U^{235}), and in the instances where atomic power has been achieved, this has been accomplished without IAEA assistance. Furthermore, after the agency had been set up, neither the United States nor the Soviet Union showed any enthusiasm for bringing it into the programs under which they provide nuclear training and materials for other nations. On the American side at least, this situation has arisen partially because underdeveloped nations have come to regard IAEA guardianship as reflecting adversely on their trustworthiness. In the competition between East and West for scientific ties with the new nations, IAEA has thus been left out. The United States, for example, has about 40 bilateral agreements under which it alone is responsible for maintaining safeguards over the materials it provides. IAEA, meanwhile, has provided materials for research reactors in Norway, Yugoslavia, Finland, and Pakistan, and along with responsibility for supplying the materials, has acquired the right to conduct inspections. However, outside of these nations, whose nuclear intentions have not aroused any noticeable concern, the agency has been politically as well as technically blocked from assuming a role of responsibility for keeping atomic energy peaceful. As a result, to justify its existence and keep itself in view for possibly better days, it has turned itself into an extremely busy and significant service organization for dealing with such problems of atomic energy as health and safety regulation, waste management, legal concepts, and isotope standardization.

In working on these problems the agency, in its short history, has sponsored nearly 1800 fellowships, has provided short courses for 1500 trainees, has organized 50 scientific conferences and seminars, and has awarded 140 research contracts among its member states. Its staff now numbers 600 persons, including 230 professionals. It operates a small laboratory on the outskirts of Vienna, and it is associated with the operation of the Norwegian Institute for Atomic Research and the French Oceanographic Institute, in Monaco.

Just where IAEA goes from here is a question to which there is no ready

answer. The agency's sixth annual conference, which opened this week at its headquarters here, is anticipating some concrete indication that the Kennedy Administration will attempt to give IAEA a more significant role in both spreading and safeguarding nuclear technology. There are numerous problems, however, involved in making this role meaningful, for whatever American intentions may be, the task of safely internationalizing atomic energy was politically undermined years ago by East-West hostility. It would seem that any attempt to place IAEA in the role of international guardian would be no more than a nostalgic stab at recapturing the chance that slipped away in the early days of atomic energy when the Baruch plan for the international control of atomic materials was rejected by the Soviet Union.

In an effort to show that inspection does not hurt, and also to give IAEA experience in developing inspection procedures, the United States recently opened four small experimental reactors to IAEA inspectors. The Soviets, to no one's surprise, failed to respond in a similar fashion, as did the French, who, in promoting their own atomic weapons program, have turned their backs on the agency's inspection role. More disturbing is the fact that India, in shopping for a 300,000-kilowatt reactor, has told the United States that it refuses to accept IAEA safeguards as a condition for obtaining the reactor from American sources. The Indians have said they would accept a bilateral inspection agreement with the United States, but the Administration, without having made a final decision, has shied away from this proposal, mainly because it would undercut IAEA at a time when the U.S. wishes to boost the agency's stature. IAEA officials state flatly that the agency's inspection role would probably be harmed beyond the possibility of resurrection if the United States were to supply a power reactor to an underdeveloped nation without insisting on IAEA safeguards. India, meanwhile, has made it known that the French Government is interested in supplying the reactor, a prospect which stirs very gloomy forecasts about the possibility of preventing the spread of nuclear weapons.

Russian policy toward the agency supports the theory that the Soviets think it possible that, sometime in the distant future, IAEA may become a useful instrument in international rela-

tions. At present they support the agency to an extent that helps keep it going, but they do not do anything to enlarge its activities, nor do they do anything to cut them back. They pay their regular assessment of about \$1.7 million a year but refuse to contribute to the agency's voluntary budget, which helps finance fellowships and laboratory operations. The Soviets originally fought against the establishment of an agency laboratory, but when it was finally established, with an American contribution of \$600,000, they contributed a bit of equipment, and recently they supplied a physicist for the laboratory staff. (They have regularly supplied their share of personnel for the administrative jobs that occupy most of the agency's staff.) Last fall when the Soviet representative, V. S. Emelyanov, then head of the Soviet civilian atomic energy program, stormed out of the general conference because a Swede, and not a candidate of the Communists' choice, was elected general director, the Soviet staff members stayed on and maintained their usually good relations with their colleagues, Western and otherwise. When Emelyanov quietly returned in February, there was no noticeable reaction among the Soviets. As one Western official put it, "They've never done anything to sabotage the agency, and they've never done anything to expand it. They just seem interested in continuing its existence."

The Smyth Report

The belief that the Kennedy Administration plans increased support for the agency comes from its general endorsement of the so-called Smyth Report of last May. The report, a review of U.S. relations with the IAEA, was made at the request of the State Department by a committee headed by Henry D. Smyth, chairman of the research board at Princeton University and U.S. representative to the IAEA. A principal conclusion of Smyth's committee was that, with economic nuclear power almost a reality, the Administration should seek to enlarge the agency's role to enable it to provide safeguards against the diversion of nuclear materials to military purposes. "Without effective worldwide controls, either political, or technical or both," the committee warned, "nuclear products of nuclear power plants can be readily diverted to the manufacture of atomic weapons: the answer to the safeguards problem," it concluded, "lies in a vig-

orous and technically competent international organization."

The Smyth report went a long way toward raising the morale of the people who staff the agency, but they harbor no illusions about the ability of the agency to prevent the spread of atomic weapons. The French are well on the way toward achieving a nuclear arsenal; they have not paid attention to United States opposition, and they certainly are not inclined to recognize the authority of the IAEA. The Chinese are beyond the reach of the agency, and rumors continue to circulate about Israeli nuclear efforts and joint Franco-German undertakings.

In an interview, Sigvard Eklund, director general of IAEA, said, "It is very late. Perhaps five years are left before nuclear weapons get out of hand." Eklund was not optimistic, but like many on the agency's staff, he saw hope in the fact that both the United States and the Soviet Union have continued to support the existence of the agency. He acknowledged that that is a rather slim basis for hope, but unfortunately, it is the only one available.

—D. S. GREENBERG

Announcements

The Institute of International Education reports that the number of **foreign students, faculty members, and scholars** in the United States totaled 72,113 in the 1961-62 academic year; this is an increase of 8.15 percent over the previous year. The survey, in the 1962 issue of *Open Doors*, also reveals an increase of 27 percent in the number of U.S. citizens abroad, to a total of 22,263.

Of the 58,085 foreign students—a 10 percent increase over last year—11 percent were from Canada. The number of African students, although only 7 percent of the total number of foreign students, increased by 39 percent, totaling 3930. Twenty-two percent of the foreign students enrolled in engineering, 19 percent in the humanities, 16 percent in the natural and physical sciences, and 14 percent in the social sciences. Other major fields were business administration, medicine, education, and agriculture.

For the fifth consecutive year the University of California had the largest number of foreign students, 2534. Howard University had the highest percent-