

New Institute Passes First Test in Congress

Proposal for agency to foster science and technology in LDC's going well save for a slight falling out among its friends

A Carter Administration proposal for a new mechanism to help less developed countries (LDC's) help themselves to apply science and technology to problems of development is moving through the legislative mill. At this point, the most audible sounds of discord are coming from the idea's advocates rather than its opponents.

The proposal to create an Institute for Scientific and Technological Cooperation (ISTC)* within a reorganized governmental foreign aid structure cleared its first major hurdle during debate on the foreign aid authorization bill in the House on 9 April. An amendment which would have stripped the ISTC provision from the bill was rejected 236 to 136. The size of the margin seems to indicate firm support in the House for the Administration version of ISTC and suggests that a section creating an institute should survive in the bill's final form.

Differences among the idea's supporters center on the degree of independence ISTC should be granted. The question of how ISTC would relate to a reorganized aid agency is one issue. More controversial is the question of the status and composition of the policy-making body for the proposed new institute.

In Congress, the most active advocates of a governing board with maximum independence have been Senator Adlai E. Stevenson (D-Ill.) and Representative George E. Brown (D-Calif.). Stevenson is sponsor of a bill which in its governance provision goes substantially further than those in the Administration-backed measure approved by the House. The Senate is not scheduled to begin action on the foreign aid bill containing the ISTC proposal until early May. Stevenson is expected to press his own views in the matter, but it is not yet clear what tack other influential senators will take on the governance issue.

The debate over governance among supporters of ISTC can be seen as a dis-

pute over means to accomplish ends which are generally agreed upon. The ISTC proposal is the product of a long discussion inside and outside government on how to remedy U.S. shortcomings in using science and technology in the country's foreign aid program (*Science*, 16 June 1978). Those most prominently involved in the discussion have been members of the so-called foreign policy establishment who are concerned with the more effective deployment of science and technology in the cause of development. The debate on governance in ISTC has caused something of a rift in the group whose members are drawn from academe, foundations and other nonprofit organizations, and from industry.

The case for maximum independence for ISTC is being expressed most forcefully in Washington these days by the Council on Science and Technology for Development. This new, private, nonprofit organization grew out of talk at the time of the 1976 elections among a small group of like-minded people interested in development problems who wanted to

studies in the area implied by the council's name and would also draw on the interests and expertise of its members to comment on policy issues. Membership has increased from 20 plus to more than 50. The council eschews government funding and has been successful in gaining foundation support for its activities.

The council's current president is Franklin Long of Cornell and its executive director is Charles S. Dennison, a former international business executive who has been involved in development policy matters. Active members of the council include Ivan L. Bennett, vice president for health affairs, NYU; Lewis M. Branscomb, chief scientist, IBM; and Rodney Nichols, executive vice president of Rockefeller University.

Although opinion varies on details among members of the council, Dennison says that there is general agreement on the basic case for ISTC. The Agency for International Development (AID) has been notably unsuccessful in employing science and technology in its program, and it is seen as essential that the United States use its comparative strengths in

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see the new Administration reappraise the use of science and technology in foreign policy, particularly in respect to the developing countries.

A letter from the group, which included comments foreshadowing the idea of the institute, was sent to President-elect Jimmy Carter and other high-level Administration appointees over the signature of Frederick Seitz, then president of Rockefeller University. The response from Secretary of State Cyrus Vance encouraged the group to form the Council on Science and Technology for Development. The idea was to create an organization that would act as a small, specialized think tank commissioning policy

science, engineering, medicine, and management in the cause of development.

ISTC is regarded as providing a means of breaking out of a paternalistic relationship with developing countries and establishing a genuinely collaborative one. It is first necessary for the United States to regain credibility with the LDC's. To do this, ISTC must establish a reputation for professional excellence; to get off on the right foot the new institute must have a director of unquestioned professional eminence. Most important, the argument goes, ISTC must be insulated from the AID bureaucracy. A large-scale transfer of AID programs

*Previously the Foundation for International Technological Cooperation. This latest name change reportedly came at the behest of House Government Operations Committee chairman Jack Brooks (D-Texas) who disliked the almsgiving connotation of "foundation."

and personnel must be resisted; ISTC would fare best if it started small and built slowly.

This emphasis on independence generates the demand that ISTC have a strong governing board. As envisioned, the board would exercise authority over programs as well as act as arbiter of policy. It, rather than the ISTC director, would have ultimate power, at least formally, to run the agency. Such a board, made up of mostly distinguished outsiders, is seen as a guarantor that ISTC would not be bullied in the bureaucracy. The model often cited is the National Science Board, which is the policy body of the

National Science Foundation (NSF).

As discussions reached the hearings stage in Congress, a prominent spokesman for the view that ISTC should be an independent agency with a strong board has been H. Guyford Stever, former director of the NSF and President's science adviser. Stever says his own experience in government made him conclude that "you need the drive of a [strong] board to carry you through" in a venture concerned with long-term results as ISTC is, because "everyday pressures" are exerted to deal with short-term problems. A strong board "also helps you assure quality in your own organization,"

says Stever. In respect to making ISTC a free-standing agency Stever recently has modified his views, acknowledging that there could be some merit in ISTC's operating in a new aid structure.

The Administration, starting with roughly the same premises about the need for ISTC, evolved a design for an institute with differing governance arrangements. This design resulted from work which began before President Carter publicly espoused the idea in a speech in Caracas in March 1978. The President's science adviser, Frank Press, had been a strong advocate of the institute idea and successfully commended it to the President. Press had been in touch with the group responsible for the Seitz letter and shared many of its views. Early staff work on the institute was carried on within Press's Office of Science and Technology Policy (OSTP) under the guidance of Eugene Skolnikoff, an MIT political scientist with expertise in international scientific affairs. An old Washington hand, Skolnikoff has been assisting Press part time on projects for the White House. By summer, Press established a planning office for the institute under Ralph Smuckler, dean of international studies programs at Michigan State. And subsequently, an OSTP advisory committee on the institute was set up under the chairmanship of David Bell, executive vicepresident of the Ford Foundation and a former director of AID, and with several members with links to the Council on Science and Technology for Development.

The Administration blueprint puts the institute within the proposed International Development Cooperation Administration (IDCA), which would replace AID under a reorganization plan submitted to Congress on 11 April. White House planners have styled the policy-making body for ISTC the Council on International Scientific and Technological Cooperation which would stand in an advisory relationship to the director of the institute.

The concept of an advisory council rather than a governing board for ISTC has ignited the critics. However, Administration planners emphasize that it is essential that the institute have the capacity to coordinate development of R & D activities in government mission agencies effectively. A free-standing institute might find itself isolated in a way that would prevent it from playing a successful coordinating role. And a governing board which might exercise supererogatory powers could well increase that isolation. There is the danger also, that a strong governing board could ham-

Approval Sought for Nitrite Plan

Acting after a protracted internal dispute, the Carter Administration has asked Congress to sanction its plan to phase out the use of nitrite as a food additive. The plan, which was announced last fall after the disclosure of new evidence that nitrite is a carcinogen (*Science*, 8 September 1978), would permit a phaseout as soon as comparable preservatives become available, perhaps within 3 years.

If Congress approves the plan, it would cover nitrite-cured meats, fish, and poultry that together account for roughly 7 percent of the U.S. food supply. The approval would take the form of an amendment to current food laws, which require that an additive be immediately banned if it is established as a carcinogen.

The Administration rejected such a ban because of nitrite's significant benefit, namely that it retards the growth of botulism spores in unrefrigerated processed meats. A precipitous ban would be confusing to consumers, the Administration says, and costly to manufacturers, who have no comparable substitutes immediately at hand. Measuring such economic costs is controversial, but a provision permitting economic considerations was included in the Administration proposal at the insistence of the White House and the Council on Wage and Price Stability.

The decision to seek congressional approval for the phaseout was the outcome of a bitter internal fight, which pitted Attorney General Griffin Bell against Secretary of Health, Education, and Welfare Joseph Califano. Remembering well the consumer outrage over the proposed saccharin ban, Califano decided shrewdly last fall to spread the responsibility for a nitrite phaseout around the Administration. He asked Bell to review the proposal, and presumably, to give it his legal approval.

In a decision reached several months ago, however, Bell decided that the phaseout was not legal. His reading of the food law was that the Food and Drug Administration (FDA) and the Department of Agriculture had to fish or cut bait: if nitrite was a carcinogen, it had to be banned right away, under the provisions of either the Delaney clause or a more general provision against additives to food that render it "injurious to health." Califano, sure of both the phaseout proposal and his own legal expertise, met with Bell directly, but it was to no avail. The White House refused to overturn Bell's decision. The result was the request for Congressional approval.

Although Congress is likely to agree to a moratorium on the ban, it may delay it beyond the period of 3 years that the Administration estimates is necessary for the development of reasonable nitrite alternatives. As opposed to the additive saccharin, nitrite has proved benefits, and most observers are predicting that the saccharin moratorium will soon be extended for more than another year. Publicly, FDA officials are optimistic that the nitrite proposal will pass as proposed, but privately they acknowledge that congressional tinkering is likely. —R.J.S.

string the institute director in his dealings with his own staff and with LDC representatives with whom the institute might be involved in projects.

Some of those who have been engaged in planning for the institute are candid in saying that strong cases can be made on both sides of the governance question. They also concede that the draft provisions on governance which originally went to the Hill were regrettably bland. They note that these provisions were strengthened in several important respects during the House Foreign Affairs Committee's consideration of the legislation. For example, the council was given an executive committee which will meet more frequently than the parent body. The terms on which the institute director will consult the council on programs and policy were made very specific. And the council was charged with making a detailed annual report which will become part of the institute's report to Congress. The committee report reinforces the council's hand by writing into the legislative history of the bill the House's specific intent that "the Council be a strong and informed body that will play an ac-

tive role in the affairs of the Institute."

The planners argue that the institute, under the Administration design, would have a desirable balance of autonomy and capacity to coordinate. Perhaps more important than the governance issue, they say, is the matter of assuring that ISTC is protected from the perils of "lateral clearance"—that is the approval of programs by other agencies—and also shielded from transfers of unsuitable programs and personnel. And inevitably there is the matter of money. ISTC is assigned \$25 million in budgeted funds, but this is to come from the total aid budget and will require economies elsewhere. The funds are not being provided separately as originally intended by the Administration.

The strengthening changes in the ISTC governance portions of the House bill were welcomed by Congressman Brown who spoke generally in favor of the ISTC on the floor. Senator Stevenson says he will continue to work for a more independent governing body in the Senate. The Council on Science and Technology for Development still appears unsatisfied with the modified governance provi-

sions. The council will hold its annual meeting in Washington on 23 April and will discuss a recently completed assessment of ISTC's progress. That assessment will be available to the Senate when it takes up the foreign aid bill.

The general prospects of the institute appear promising unless unforeseen disaster overtakes foreign aid legislation. ISTC governance remains a possible point of conflict. But Congress is likely to focus on sections of the legislation involving much grander sums of money and far more controversial issues. And there is a tendency for legislators at this stage of the session to begin to lose patience with administrative niceties.

The debate over governance, however, has already had the effect of pushing the institute in the direction of greater autonomy, which most observers feel is desirable. The debate has also been interesting from the quite different standpoint that the airing of the disagreement in public can be interpreted as a sign of the importance assigned to the ISTC proposal by influential people who customarily make their points on policy without making waves.—JOHN WALSH

NASA Says FAA Understates Air Crash Risk

But ironically, the report could hurt FAA's efforts to expand air traffic controls around the nation

The number of near crashes of airplanes at busy airports could be 12 times higher than the Federal Aviation Administration (FAA) says it is, according to a draft study by the National Aeronautics and Space Administration (NASA). The study implies that pilots fly more safely when they are on their own than when they are guided by air traffic controllers. A copy of the study, which is now being circulated in government agencies for comment, but has not been publicly released, was obtained by *Science*.

"This runs contrary to our understanding of near collision trends and to the accident experience [data] of the FAA," FAA administrator Langhorne Bond told *Science*. "We're not just going to comment on this; we're going to set up a committee or working group to study the problem."

The FAA, which operates all air traffic control facilities in the United States, is

engaged in a controversial bid to drastically increase air traffic control at airports around the country. It would also bring planes now flying at intermediate altitudes on their own under the control of ground radar. The plan would increase the budget and authority of the FAA. Private pilots and their associations, who feel the FAA overregulates them already, are strongly opposed to it and have testified on the subject before Congress.

The study found that in "terminally controlled areas" (TCA's), where all air traffic is controlled from the ground, near midair collisions (NMAC's) occur at a rate of 24.3 per million operations, whereas the FAA official figure is two per million operations. This makes the FAA estimate 12 times lower than the NASA one.

In airports using voluntary ground control systems, known as terminal radar

service areas (TRSA's), the NASA study found 17.4 NMAC's per million operations. The FAA official figure is four per million operations for the TRSA's.

There are fewer NMAC's from 10,000 to 18,000 feet, where air traffic is not now controlled, than either below 10,000 or above 18,000 feet, where it is, the study found. The FAA says, however, that the risk of collision goes down when planes fly higher. At present, most commercial planes fly above 18,000 feet when en route to their destinations and are controlled during their flight. The report speculates that lack of pilot vigilance is the reason for the increased danger in traffic-controlled areas. When pilots fly under ground control, they assume the controller knows more than they do, so they spend less time watching for other traffic. As for the apparent increased risk around airports, "it is unfortunately true that these are also the terminal areas