American Academy to Be U.S. Member at IIASA

The American Academy of Arts and Sciences will take over on 1 January as the national member organization for the United States in the International Institute for Applied Systems Analysis (IIASA) outside Vienna. The American Academy replaces the U.S. National Academy of Sciences, which opted to withdraw when the Reagan Administration decided to end federal funding of U.S. membership. The decision, reflecting a chilling of Soviet-U.S. relations, was attributed chiefly to the Administration view that the United States was deriving less benefit from membership than the Soviet Union and that IIASA operations posed some threat to U.S. security interests (*Science*, 2 April 1982, p. 35).

The American Academy's council fulfilled expectations by formally approving the proposal to assume membership on 3 November. Funds from private foundations and industry are being sought to finance U.S. participation next year. Backers say they are optimistic that a goal of $1.5 million will be achieved. The IIASA council has indicated it will allow reduced dues from the United States next year in view of the circumstances. In the decade since IIASA was founded, the Soviet Union and United States have each provided about a quarter of the IIASA's budget, with the rest split among the other member nations, now numbering 15. The Soviets are expected to continue to pay a $2.3 million share next year.

To direct its involvement in IIASA the American Academy has established a committee chaired by Professor Harvey Brooks of Harvard.

—JOHN WALSH

Aeronautics Is Not Like Synfuels, Keyworth Says

The Reagan Administration's oft-repeated policy of cutting out government R & D programs that private industry should be funding might be expected to put an end to much of the aeronautics work now supported by the National Aeronautics and Space Administration (NASA). But last week, George A. Keyworth, II, Reagan's science adviser, announced that the Administration will continue to fund a major program of research and technology development in civilian aeronautics. It has been persuaded of the merits of such a program by a 6-month policy review headed by the Office of Science and Technology Policy (OSTP).*

Keyworth announced the new policy in a speech to the Aero Club of Washington on 9 November. He said that the Administration was once "very close to substantially changing the federal role in aeronautics," by cutting back on nonmilitary research. But it has now decided not to wield the ax because the policy review concluded that continued federal investment in civilian aeronautics research will pay substantial technological dividends, he said.

Why is aeronautics being treated differently from, say, synfuels, which the Administration has decided should be left largely to private industry? One reason, according to the policy review, is that aeronautics research has military as well as civilian applications; the national security benefits of developing alternative energy resources are evidently considered less important. Another reason is that American leadership in aeronautics technology is under challenge from Europe and Japan, where governments directly underwrite a great deal of R & D. The U.S. electronics industry, which has long been arguing for more government incentives to counter a technological challenge from Japan, should find the latter reason interesting.

In declaring its future support for aeronautics R & D, the Administration is stepping out of a fight with Congress. The Office of Management and Budget has tried to trim NASA's aeronautics R & D budget in the past 2 years, but Congress has put some of the money back in, arguing, as the Administration now does, that the programs are important to keep the U.S. aircraft industry at the cutting edge of new technology.

Aeronautical Research and Technology Policy, OSTP, November 1982. Other agencies involved in the review were the Office of Management and Budget, the Council of Economic Advisors, the Department of Defense, NASA, the Department of Transportation, and the Department of Commerce.

In keeping with the Administration's concerns about technology transfer, the policy review urges NASA and the Department of Defense to review their policies for controlling the dissemination of unclassified information that could have military applications. At the same time, it suggests that NASA develop a clearinghouse for the collection and dissemination to the U.S. government and industry of unclassified documents on aeronautics research carried out in other countries. In other words, while the United States clamps down on its own technology transfer, it should make maximum use of what's available abroad.

—COLIN NORMAN

NASA Looks for Thomas Edisons

As the National Aeronautics and Space Administration (NASA) tries to build a case for a permanent, manned space station, agency officials are anxious to protect themselves from a criticism often leveled at the space shuttle: that the hardware was designed and built before the agency really got around to consulting the shuttle users.

So this time NASA has commissioned the eight largest aerospace firms to identify user needs and architectural options for the space station; the agency's own science and applications offices are drawing up lists of what they could do on a station; and all of NASA's outside advisory committees have been asked to give advice. The traditional constituencies have been engaged. Now, who has been left out?

"The Thomas Edisons," says Stephen Holt, a member of NASA's space station task force. "The people with bright ideas, who follow the space program closely, but who are not in the traditional constituencies." Most of the people in the space establishment have been around a long time, he says. They talk to each other constantly, and their ideas tend to equilibrate. So there has been some concern among the NASA advisers themselves that a few truly innovative ideas for a space station are being missed.

With this in mind, the task force has

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gotten about $200,000 to go out and look for these hypothetical Edisons. "The idea is to award modest grants to about 16 people," says Holt. "We want a three-page proposal on an idea appropriate to the scientific or technical utilization of a space station, a curriculum vitae—we're looking for people with technical capability, so that will exclude high school students—and a plan to develop the idea within 6 months."

"It's not clear yet what we're after," he adds, "except perhaps fresh people who don't know yet what can't be done."—**M. Mitchell Waldrop**

Chinese Decry Dishonesty in Scientific Research

If misery loves company, then American scientists may find some comfort in the fact that researchers in China are trying to grapple with the problem of scientific misconduct.

According to several publications from China, scientists there are wrestling with cases of misbehavior that are similar to ones that reddened the face of the American scientific community during the past few years. The Chinese journals cite troubles, for example, with fabrication of data and unfair claims to authorship. Some China watchers speculate that the government's unrelenting drive to upgrade science and technology, which is one of the goals of the "Four Modernizations," might have led to the problems.

An article in the *Journal of Dialectics of Nature* reveals that some Chinese scientists also suffer from the "publication-by-the-pound" syndrome. The article said that "many people think only of getting hold of a small topic in pursuit of 'keeping the news pouring out,' and still others intentionally break up an article into smaller pieces." It said that some scientists "even do not hesitate to resort to falsification or giving false information about achievements. . . . These petit bourgeois workstyles which are reappearing in scientific labor are diametrically opposed to the demands of scientific and academic modernizations."

The official Chinese news agency *Xinhua* reported last March that the National Defense Scientific and Technological Commission party committee has set down standards for scientists working in defense research. The committee, for example, said, "Never permit fabricated experiments, records, rigged experiment data and false reports on research achievements; welcome others to surpass oneself instead of being jealous of their abilities, . . . and strive to do more with less money in scientific research." White House science adviser George Keyworth might be inclined to echo the commission's admonition when scientists apparently complain of lack of funds. Hardworking scientists "used their heads . . . and solved difficulties."

According to a recent issue of *Beijing Review*, a Chinese political magazine, "Some people stoop to deception by doctoring data and research results in their pursuit of personal fame and gain. . . . Some even resort to plagiarism." It reported that a Chinese scientific journal last year began running a regular column on ethics in science at the request of four members of the Chinese Academy of Sciences. These researchers also prompted more than 100 researchers and technicians to draft a code of ethics for the Peking scientific community.

The *Beijing Review* article detailed one example of misconduct in which a Hunan University professor demanded that a junior faculty member share the authorship of a book, although he had only suggested some revisions of the manuscript and proofread the galleys. The junior colleague "gave in to this unreasonable demand." After an investigation, the professor was "criticized in the university and helped to put his misbehavior in the right perspective."

The article went on to laud the conduct of another scientist whose actions contrast with usual practice among Western researchers. The scientist was a candidate this year for a major Chinese mathematics award, but told authorities that a second scientist had achieved the same results 3 months earlier. The results of the first scientist, however, were published before those of the other man. The first scientist said that the other man deserved the recognition because he had completed the work first. Authorities awarded the honor accordingly. The article said that the scientist's honesty "became the talk of the Chinese mathematics circles."—**Marjorie Sun**

Acid Rain Map Stirs Controversy

The Environmental Protection Agency (EPA) recently received some unwanted assistance from the Izaak Walton League, an environmental organization headquartered in Arlington, Virginia. At a well-publicized press conference, the League distributed copies of an EPA map showing areas of the United States that are highly vulnerable to the adverse effects of acid rain. EPA subsequently sought to downplay its importance.

According to the League, the map shows that "significantly larger portions of the United States are vulnerable to acid rain damage than previously believed." It shows, for example, that the alkalinity of lakes in many portions of the South and the Southeast is fairly low, which means that they may be incapable of neutralizing some highly acid rain.

The location and severity of the pollutant's effects are contentious issues right now, with environmentalists and citizens in the Northeast pressing for tighter controls on emissions of its precursors, sulfur dioxide and nitrogen oxides (*Science*, 17 September, p. 1118). "These findings change the nature of the politics of the acid rain debate," said League official Paul Hansen because they suggest acid rain can potentially wreak havoc in regions outside the Northeast.

Needless to say, this was not a popular interpretation at EPA headquarters. A spokesman, Byron Nelson, accused the League of perpetrating a "major disservice" through "the most blatant misrepresentation to date of environmental research reports." He pointed out that the data were hardly new, having been drawn from alkalinity surveys over the last 10 years. And he said that it was simply untrue that low alkaline areas are threatened with serious harm. Finally, Nelson said, it was unnecessary for the League to distribute the report. It was available, he said, to anyone who requested it.—**R. Jeffrey Smith**