Shultz Signals Backing for Science Attachés

New plan aims at expanding role and status of science officers, getting them into the policy and career mainstream at State

Secretaries of State sooner or later seem to experience a revelation about the importance of science and technology to foreign policy. In June, the current Secretary, George Shultz, signed a cable giving stronger than usual backing to the integration of science and technology into diplomacy and added a special boost for the science counselors and attachés who serve in U.S. embassies overseas.

They can use it. Although the attaché program dates back some 30 years, the science officers remain outsiders among the elect in U.S. diplomacy. Their problem mirrors that of their home office in the State Department, the Bureau of Oceans and International Environment and Scientific Affairs (OES)—the problem of finding a regular place in the policy-making process.

With Shultz's blessing, the current management of OES has launched a campaign to integrate science and technology into the policy process. A major aim of the drive, launched by the head of OES, Assistant Secretary of State James Malone, is to change the odd-men-out status of the science officers by giving them a firmer footing in the Foreign Service.

In his communication to all hands at State and its associated agencies, Shultz said, "This message constitutes my personal endorsement of the importance of S&T [science and technology] in our foreign policy and my own commitment to enhancing its impact in foreign affairs. I urge you to take full advantage of the experience and insights offered by both full-time and part-time Science Officers, the vanguard of our S&T foreign relations." Lest there be a tendency to simply read and file, ambassadors will be asked in another cable for details of what they have done to carry through on the directive.

The department now has 36 full-time science officers in posts abroad; in about 100 other posts, Foreign Service officers (FSO's) are assigned part-time duties as science reporting officers. Shultz's use of "science officer," incidentally, reflects a conscious attempt at a change in nomenclature. The term attaché—as in military attaché or commercial attaché—implies that the science officer is something other than a full-fledged diplomat and Malone and others are pushing the term science officer for parity with the familiar FSO functional titles of political officer or economic officer.

The ambiguity about the attachés' role goes back to the beginning. The program started small in the early 1950's, with attachés assigned to posts in Western European countries and expected mainly to assist in the repair of international scientific activities disrupted by World War II. The program was suspended for a while in the middle 1950's because of a federal funding squeeze, but was revived at the time of the sputnik flap.

In the 1960's, problems associated with nuclear energy, the environment, and technology loomed larger in U.S. foreign policy. The department created a separate office to handle science and technology, which administered the attaché program. The attachés spent less time on international science and more on reporting on scientific developments in the countries to which they were assigned and on advising the ambassador and embassy staff on science and technology matters, if and when they were asked. The attachés were also expected to act as hosts and travel agents for visiting firemen from U.S. industry, academe, federal agencies, and Congress.

Assistant Secretary James Malone

Sees momentum for science officer program.

By the 1970's, the attachés' responsibilities diversified further as more of them were assigned to Soviet bloc nations and less developed countries (LDC's). Attachés in the industrialized countries found themselves increasingly concerned with technology issues. The functions of U.S. attachés in Moscow and other socialist country capitals changed as the détente roller coaster rose and fell. In the LDC's, attachés were often heavily involved in the management of cooperative programs in science and technology.

During this period, however, neither the working circumstances nor the career prospects of the attachés and counselors improved much. In the 1960's the more exalted rank of counselor had been opened to senior science officers, giving them higher pay and somewhat enhanced status. But in most embassies, science officers still lead rather isolated existences. And when posted back to Washington, few have been placed in very satisfactory jobs in OES or elsewhere. No attaché has attained an ambassadorship or DCM (deputy chief of mission) assignment that Foreign Service officers see as crowning a career. And none has become an assistant secretary of state or deputy assistant secretary, a lesser but still coveted post in Washington. In career terms, therefore, the attaché corps and OES, not surprisingly, have been perceived by the Foreign Service as a dead end.

Like his predecessors in the OES job, Malone recognizes that changing the status of the science officers requires a transformation of institutional attitudes in the State Department. The crucial point is that an officer's involvement in science and technology issues not be regarded negatively when decisions on assignments and promotions are made. This has not been the case in the past. This means serious behavior modification in State's personnel system.

Malone and his deputies insist that the personnel people are now sympathetic. The action plan calls for a start to be made on the ground floor by encouraging the recruitment at the entry level of more FSO's with the technical background and motivation required to spend at least part of their careers as science officers. The next necessary step is for the personnel office to create a pattern of assignments in the first several years of a science officer's career that will give him a mixture of standard Foreign Service experience and preparation for responsibilities as a science officer both in Washington and abroad.

In the past, a majority of science attachés have not come through the conventional Foreign Service selection process but have been technically qualified, relatively senior people recruited from other government agencies, industry, or universities who arrived through "lateral entry." OES officials expect

that some science officers will continue to be recruited to meet specific circumstances, but the implication is that officers who start with standard Foreign Service credentials are likely to fare better in the personnel system.

The plan aims at creating a "new" science officer program that will attract capable people and offer them rewarding, mainline State Department careers. On the agenda are such actions as making the selection and training of science reporting officers a less hit-or-miss proposition and a serious effort at consciousness raising with personnel officers.

Attaining the larger objectives of the program requires the infusion of science and technology literacy through the department and the action plan calls for initiatives on several other fronts. The reformers see the Foreign Service Institute, the department's main training mechanism, as providing an important opportunity to exert leverage. In the works are a strengthening of the treatment of science and technology in State's standard introductory and midcareer courses. In the latter course, which lasts several months, the institute is working with M.I.T. to develop a science and technology segment based on a case-history approach designed to give FSO's insight into dealing with science and technology issues in an operational setting. In the past, science and technology has been mainly left to lectures by visiting dignitaries. The institute will also underwrite longer term training relevant to science and technology assignments—typically a year at a university—for two people each year.

The action plan agenda also includes a number of initiatives to improve the effectiveness of relations between the State Department and other government technical agencies. And OES also promises to tidy up its own backyard by upgrading its support for science officers overseas, which has frequently been criticized. OES will also advance the cause if it improves its record of giving senior management posts to science officers when they are on home assignments.

Little in the action plan is novel. The difficulties of integrating science and technology into foreign relations and of creating a bigger niche for the science attachés have vexed successive Administrations. Many of the initiatives in the action plan have been recommended in previous studies of the problem, and the lack of effective action has bred skepticism. One observer, for example, wryly paraphrased the reformers as saying, "We're doing it for the first time, again." What could make a difference this time is that the plan is a comprehensive one and, as Malone points out, is designed to work from the inside by eventually changing the way that science and technology is viewed by those within the system.

The strongest factor in favor of the initiative, however, is Shultz's declaration of interest. As Malone says, that created "momentum." The Foreign Service view of the world and value system are hard to change, but if the Secretary speaks, and particularly if he and his successors keep saying the same thing, the diplomats do listen.

—JOHN WALSH

Pork Barrel Scorecard

Northwestern University is the latest U.S. seat of higher learning to benefit from having political friends in high places. Thanks in no small measure to the efforts of Representative Sidney Yates (D–Ill.), the university is about to have a national lab built close to its campus that will act as an interface between its scientists and private industry.

A catchall appropriations bill, passed by the 98th Congress with virtually its dying breath, contains $16 million for the lab, which will be funded by the Department of Energy. The lab, which will include research on tribology, ceramics, metal fatigue, and polymer chemistry, will be the anchor for a science park that Northwestern and the city of Evanston hope will attract high-technology industry into the area (*Science*, 28 September, p. 1454).

The university approached Yates, who represents Evanston and chairs a key appropriations subcommittee, with a proposal for the facility and $26 million was included in an appropriations bill passed by the House in August. The legislation did not make it all the way through Congress, however, and it seemed for a while that the lab would not get funded this year. But the facility enjoyed sufficient political support for $16 million to be included in the continuing appropriations bill—a measure designed to fund government agencies for which Congress did not approve a regular appropriations bill—which was passed by Congress on 11 October.

Northwestern thus joins several other universities that have found direct appeals to Congress to be a quick way to raise money for scientific facilities. Those approved by Congress this year include:

- A $7-million grant to Florida State University to establish a supercomputer center. The center is expected to cost a total of $63 million, of which the federal government will pay 70 percent;
- $19 million for an engineering center at Boston University;
- A $2.9-million planning grant to the University of Oregon for a new science facility. Congress also directed the Department of Energy to request construction funds for the facility next year;
- $8.9 million to complete construction of a vitreous state laboratory at Catholic University. This project was first approved by Congress last year in a pork barrel amendment proposed on the floor of the House of Representatives; and
- A second installment of $3 million for new chemistry labs at Columbia University, which was also first approved last year.

This year's crop of grants follows an equally abundant season last year when, in addition to providing $5 million each to Catholic and Columbia, Congress approved the following:

- A $20.4-million grant to Oregon Health Sciences University for an information center;
- $15 million to the University of New Hampshire for a space and marine sciences building;
- $7.5 million to Boston College for a new library; and
- $820,000 to Georgetown University for a feasibility study for a fuel cell demonstration project.

That amounts to almost $100 million over 2 years for projects that have not gone through the usual peer review procedures—or, as the universities that have the funds prefer to state it, $100 million for university facilities at a time when federal programs for academic construction have dried up.

—COLIN NORMAN