White House Science Adviser: You Can Go Home Again

Two years after former President Richard Nixon gave the White House science adviser his walking papers, President Ford has decided to reestablish the job. In a briefing for eight congressmen* on 22 May, Ford said he intended to send to Capitol Hill next month legislation that would create a new Executive Office position of science and technology adviser to the President. According to some of those present at the briefing, the new science adviser Ford favors would be subject to Senate confirmation; would have status "comparable to" Cabinet rank; would have a staff of 10 to 15 persons and a budget of around $1.5 million; and would be an independent adviser with direct access to the President. No candidates for the job were discussed, and Ford was understood not to have anyone in particular in mind for the nomination.

The immediate reaction of those attending the briefing was described by participants as "favorable" and "friendly." So was the response from prominent figures in the scientific community who have been urging—and lobbying for—reinstatement of a high-level science post in the White House ever since Nixon abolished the Office of Science and Technology in June 1973. James R. Killian, for one, a science adviser to President Eisenhower, said he would be "elated by this concept if it comes about. . . . It should be very heartening to those in the scientific community who feel that the President could greatly benefit by this kind of advice."

Killian, significantly, headed a special panel of the National Academy of Sciences which last summer, in a whirl of publicity, urged then-President Nixon to establish a Council on Science and Technology modeled on the lines of the present Council of Economic Advisers and backed by a staff of 25 to 30. Although Ford has evidently rejected the council approach and is talking about a staff only half the size of the one suggested by the academy panel, Killian evinced no disappointment. "This seems to accomplish most of the objectives we were concerned about," Killian told *Science*.

Similarly, Jerome Wiesner, the president of the Massachusetts Institute of Technology and the first director of the OST as science adviser to President Kennedy, said that, on the basis of a brief description of the Ford proposal, "it looks like a very positive step of the kind we'd all been hoping for."

Jeremy J. Stone, the executive director of the 6500-member Federation of American Scientists, was not unreserved in his praise, but said that he was "pleased and gratified that the President seems to recognize the importance of having a science adviser at his ear . . . [the staff] seems small, but this is a vindication of the principle that we've been urging."

A Shift away from NSF

Details of the science advisory legislation Ford will propose have not been disclosed, and in fact there's no indication that the White House has actually drafted a bill yet. But in basic outline, the idea broached by Ford clearly means a shift away from the arrangement left behind by the Nixon Administration. When the OST was abolished, the title of President's science adviser was conferred on H. Guyford Stever, the director of the National Science Foundation. Stever then organized two small staffs to carry on with the OST's work—the Energy Policy Office and the Science and Technology Policy Office. Stever, the consummate team player, has gamely maintained throughout that this was a workable way (if not the optimum one) to give the government the technical advice it needed. Indeed, the two policy groups have made valuable contributions to the federal budget process among other things. But critics of this arrangement (who emphasize they have no brief against Stever) contend that the duality of the job is an unreasonable burden on one person and that the NSF director, as a subcabinet officer, lacks the political clout and proximity to the President to bring effective order to science policy. Another oft-made objection to the present scheme of things is that Stever's purview does not include military R & D.

According to those who attended the Ford briefing, the President's concept is a close facsimile to the old OST, at least as it originated in the early 1960's. Senator Frank Moss (D–Utah), chairman of the Aeronautical and Space Sciences Committee, said the new advisory post would be "an independent office in the Executive reporting directly to the President." Representative Charles Mosher (R–Ohio), ranking minority member of the Science and Technology Committee, wondered, along with fellow committeeman Ray Thornton (D–Ark.), whether the new science adviser would play a role in budgetary matters and include military R & D. In both cases the answer was affirmative. "It was very clear that military R & D would be within the science adviser's purview," Mosher said. "And he will have a budgetary role, although not binding authority."

There is, however, apparently no thought of recreating the President's Science Advisory Committee (PSAC), the appointive group that oversaw many of the landmark studies of social and technological issues produced through the years by the OST. "There was no reference to a PSAC at the moment," Mosher said. "Nothing was said to rule it out, but the stress was on forming ad hoc committees."

Precisely what will happen to the present arrangement in the NSF is also uncertain. Although the director's job will revert to just that, some observers, among them Nixon's second and last science adviser, Edward E. David, Jr., think it likely that the two policy offices built up by Stever will remain in the NSF as a "backup" to the White House science staff. Stever was not immediately available for comment.

Ford's decision to reestablish the science adviser's post follows months of on-and-off discussions within the White House staff as well as considerable jostling over the format of the job. Ford seems to have accepted months ago the basic premise that a President needs science advice close at hand and, last December, asked Vice President Rockefeller to supply some recommendations as to how this could best be done. In spite of more pressing problems (including the investigation of the Central Intelligence Agency) Rockefeller's staff did come up with a proposal last February that paralleled the Killian panel's idea of a council. This, according to one close observer of the process, was rejected at least partly because the Domestic Council and the National Security Council—having nurtured their own networks of outside advice since the fall of the OST—were chary about having to depend on a new, centralized source of science expertise. How the new proposal—one of several subsequently worked up by the Domestic Council—will

*Attending the Ford science policy briefing were Senators J. Glenn Beall (R–Md.), Barry Goldwater (R–Ariz.), Paul Laxalt (R–Nev.), and Frank Moss (D–Utah); Representatives Charles Mosher (R–Ohio), James Symington (D–Mo.), Olin Teague (D–Tex.), and Ray Thornton (D–Ark.); Vice President Nelson Rockefeller; Donald Rumsfeld, White House chief of staff; James Cannon, executive director of the Domestic Council. Senators Edward Kennedy (D–Mass.) and John Tunney (D–Calif.) were among several invited but unable to attend.

solve this problem is unclear. It may be, however, that the NSC and Domestic Council will simply retain their own ad hoc systems of science advice and will call on the new adviser only for supplementary help.

Such details remain to be worked out in the legislation. At the moment, there are wide differences between the concept Ford is proposing and bills before the House and Senate science committees, which emphasize the council format. These differences are certainly one reason Ford invited the congressmen in for consultation, and the gesture was plainly appreciated. Senator Moss noted that Ford had said he could have established a science advisory office by executive order, but that he preferred the legislative route and a congressional charter for the job. "In arguing for one science adviser, rather than a council, he particularly stressed that the science adviser would have the authority, the responsibility that he needed," Moss said. Comments on the session were uniformly positive, and no one expressed objections to the Ford plan. Thornton added that he was "impressed that the President apparently had given a good bit of thought to the question" and indicated a "degree of flexibility as to the specifics."

The briefing ended on a conciliatory note, with neither the science committee leadership nor the President indicating rigid adherence to a particular format for the science adviser's office. "From the beginning," noted Representative Olin Teague (D–Tex.), the House committee chairman, "we have said we're not going to try to create a science adviser to the President that he didn't want. We are going to create one he does want and will use."

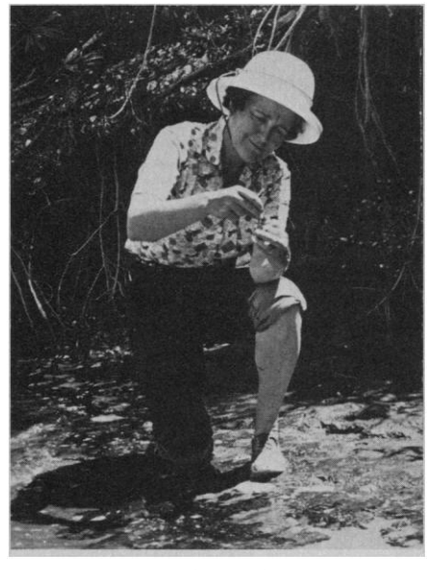
The House Science and Technology Committee has scheduled hearings for 10 June on the Teague-Mosher Science Policy and Organization Act of 1975 (*Science*, 21 March), and the leadoff witness will be Nelson Rockefeller with the Administration's proposal. Committee members see little chance that the House could complete action on a science advisory bill before the August recess, and it could be well into the winter, perhaps early 1976, before a new science adviser actually moves in. In the view of David, Wiesner, Killian, and others, however, *who* moves in is more important that when. For one lesson of the OST decade was that a science adviser is only effective to the extent that the President is willing to listen.—ROBERT GILLETTE

Ruth Patrick: Hard Work Brings Its Own (and Tyler) Reward

Ecologist Ruth Patrick has been fascinated with the flora and fauna of streams ever since she was a tadpole, so to speak, in Topeka, Kansas. She recalls that when she was small, and had been good, she would be unleashed from her nurse and allowed to climb up on her father to peer through his treasured little microscope. Every Sunday Ruth and her sister would go on field trips with their father to woods and streams to collect and classify specimens. Father Frank Patrick was a lawyer, but his heart was with diatoms, the family of microscopic algae renowned for their beauty and ecological significance. It was his dearest wish that his daughters grow up to be scientists.

Ruth Patrick, who this year won the world's largest prize for scientific achievement—the $150,000 John and Alice Tyler Ecology Award—has abundantly fulfilled her father's dream. Now chairman of the board of The Academy of Natural Sciences in Philadelphia, with which she has been associated since 1937, Patrick labored in relative obscurity for a long time. But within the past half-dozen or so years she has been much sought after both as an ecologist and an ecologist who is a woman. Since few people match this description, she has had her hands full.

Patrick's life has been remarkable in that it has followed without deviation the course she set in childhood. Her stolid values and her belief in God, in hard work, and in service to others have apparently left no room for doubt or despair to impede her way. Such a life is conceivable for someone born, as she was, in 1907—more recent times seem unlikely spawning grounds for such consistency.



Ruth Patrick

Ruth Patrick attended Coker College in South Carolina. Her mother had wanted her to go to an eastern woman's college where a proper social milieu seemed better assured than at the state university—Patrick chose Coker because she didn't want to go to Vassar or Smith and therefore refused to take college board entrance examinations. Summers were spent being "broadened" at such places as Cold Spring Harbor, where she met her husband, Charles Hodge IV of Philadelphia. Patrick, who retained her maiden name in honor of her father who underwrote her education, proceeded to the University of Virginia where she obtained her doctorate. She had a habit of being first in her class in scientific research. A perennial optimist, she found it somewhat annoying not to be able to land a good job immediately upon graduation in the midst of the Depression, but she eventually wound up teaching at the Pennsylvania School of Horticulture. She developed an immediate association with the Philadelphia Academy, and in 1945 went there full time.

The woman and the institution seem to have been well suited to each other. The academy, formed in 1812, is the oldest institution in the Western Hemisphere that has been engaged in continuous studies of plants and animals, according to Patrick. Its staff, now numbering around 150, has a sound reputation for studies of stream ecology. "I deeply loved what it stood for," says Patrick, and being part of its heritage was very important to her. The academy, for its part, pretty much let her write her own ticket. In 1947 she established and became director of the academy's limnology department.

She became chairman of the board in