science news

OF THE WEEK

Moving science out of the White House

The most extensive changes in science-Government structure since Eisenhower's administration eliminate OST and PSAC. NSF to monitor civilian science.

It will be a January long remembered by participants and observers in the science and Government scene. Following by three weeks the sudden resignation of the President's science adviser, Edward E. David Jr. (SN: 1/13/73, p. 20), the Administration was preparing to announce this week an extensive reorganization of the way science is handled at the top levels of Government. It will be the most fundamental restructuring since the Eisenhower Administration.

The White House Office of Science and Technology and the President's Science Advisory Committee will be abolished. The National Science Foundation and its director, H. Guyford Stever, will come into new prominence. Stever, although remaining at NSF, will be considered the President's science adviser. NSF will be given the task of monitoring the country's civilian research and development efforts.

Stever will report not directly to the President but through Presidential assistant and Treasury Secretary George P. Schultz.

NSF was expected to establish some sort of a science policy office to carry out its new tasks. Indications were that at most only a few ost staff members would transfer to NSF and that NSF



Stever: Into a greater prominence.

could expect no large increase in either staff or budget.

This, at least, was the broad outline of the science reorganization. Changes in the status of OST and PSAC had been rumored for the past several weeks, but the first firm report of an Administration decision was carried by the Washington Post last weekend.

Official sources early this week were not commenting pending an Administration announcement, but unofficial sources in Congress and in the agencies confirmed the plan's general outline.

The Administration announcement was originally planned for Monday but was postponed. Congressional science leaders had been briefed on the plan last Friday.

OST staff members were told early this week not to anticipate being picked up by other agencies and to begin hustling for new jobs, a source told SCIENCE NEWS. It was said they would have until about June. Meetings were going on early this week at NSF to decide how best Stever and his agency would handle the new duties.

Initial reaction to the reports ranged from acceptance as a foreordained practicality to concern, shock and even outrage. Most considered it a downgrading of science within the Government. "It's a thumb in the eye of university science," one source said. Rep. John W. Davis (D-Ga.), chairman of the House Subcommittee on Science, Research and Development, was quoted as saying, "I'm afraid that in the President we've got . . . too little vision on things like science." He expressed concern that Schultz is not "a technological man" and said it would be disastrous to undervalue the importance of scientific and technological advice. His office said he would have no further comment until after the official Administration announcement.

A Washingtonian long involved in programs to stimulate the use of science in developing countries expressed disbelief: "For years we have been advising these countries to place their science office right up under the Prime Minister; now we take ours out of the White

House."

Others felt NSF was a natural place for the task of monitoring civilian science; in fact, it officially had that role in its original charter until ost was established in 1962. But staff members of other science agencies expressed uneasiness about the prospect of having NSF review their budgets and programs.

Just as there was great curiosity about what the changes would mean for NSF and for science as a whole, there was a mixture of opinion on the abolishment of OST and PSAC. In general, the elimination of OST, a permanent science office with a staff of 50, was criticized more than was the axing of PSAC.

PSAC was established during the Eisenhower Administration to provide high-level scientific advice on important national problems, especially weapons programs. Although it continued as an important advisory committee throughout the 1960's, its influence in recent years, especially during the Nixon Administration, had waned. Many reasons are given, often colored by political views. Some said its original role, arising out of the needs of the Cold War, was no longer necessary. Others pointed out that it has traditionally been a bastion of Eastern liberal academia, that some PSAC members have been hostile to the Administration, and that PSAC has too frequently voiced views in conflict with Administration policy. Others have said that what a President needs is not independent advice and outside opinion, especially from university scientists "grinding their own axes," but hard, detailed, dispassionate analysis. At any rate, President Nixon was said to have paid little recent attention to PSAC.

ost was established in 1962, and although it never attained quite the prominence and influence at the White House that the scientific community had hoped, it did serve as an important focal point for science at the Presidential level and for continuing staff work on a variety of scientific and technological questions. Under David's directorship, it had taken on the task of studying and working toward solu-

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tions of the energy crisis, for example.

Several studies in recent years had recommended a larger budget and an expanded role for ost, and as late as last fall there were reports that ost was going to be enlarged.

Despite their declining influence, both OST and PSAC have been major symbols of the prestige and importance of science at the highest levels of Government. The demise of OST, with its permanent staff and "White House" aura, is not an easy pill for scientists to swallow. Says one pro-Administration governmental source: "It was a good thing to do away with PSAC—it was a drag. But it was a mistake to do away with OST."

Still others point out that the restructuring, although probably of great long-range importance, is of less immediate concern to scientists in the United States than are the effects of Administration impoundments of already appropriated funds of sciencebased Government agencies (SN: 12/ 2/72, p. 358). Some of the program cutbacks resulting from these stringencies have already been announced (SN: 1/13/73, pp. 21, 22). Others so far have not. There are any number of horror stories around Washington about how drastic these effects—on oceanography, medical education, graduate training, physics research, to name a few affected areas-may be. The new budget and a forthcoming report promised Congress next week on the funds withheld may bring that situation into better light.

Meanwhile, the American scientific community is awaiting with no little trepidation further details of the restructuring and some means of assessing the expected effects on science.

A roving lunokhod explores the moon

Soviet scientists are in the moonbusiness again—exploring a region just north of the Apollo 17 landing site. The unmanned Luna 21, launched by the Soviet Union Jan. 8, soft-landed on the moon Jan. 16 in the crater Le Monnier about 225 kilometers north of the Apollo 17 landing site. The moon-probe turned out to be another lunokhod, the second automated rover the Soviets have placed on the moon. Lunokhod 1 landed in Mare Imbrium in November 1970 (SN: 11/21/70, p. 397) and operated for 10 and one-half months traveling some 10 kilometers across the lunar surface.

Lunokhod 2 weighs about 1,800 pounds, 185 pounds heavier than its predecessor. It is equipped with a magnetometer, a television camera and a French "corner reflector" for laser measurements of the earth-moon distance. The rover also has instruments to test the density and mechanical properties of the soil as well as its chemical composition. The eightwheeled rover resembles a bathtub (according to Izvestia) and has a wheelbase of a little more than seven feet. A. Gurshtein, a Soviet astronomer writing in Pravda, expressed confidence that the data from Luna 21 would supplement information gathered from the Apollo 17 mission. "Thus for the first time in the history of exploration of the moon, Soviet and American spacecraft have made soft landings so close to each other. . . . The experiment thus demonstrates once again that the exploration of the moon and of the planets of the solar system is now



U.S.S.R. Embassy Lunokhod 2: A remote-control rover.

entering a stage in which coordination of efforts between countries is assuming increasing importance."

Le Monnier crater is 48 kilometers wide and lies on the boundary between Mare Serenitatis and the Taurus mountains. Television pictures showed a series of low peaks of the Taurus mountains on the horizon about six kilometers from the landing spot. The rover landed between two small craters in a smooth region inside the basin. In the foreground are small craters and massive rocks split in two. The photos show a hilly plain extending as far as the horizon.

During one of its first days of exploration, the lunokhod covered 1,148 meters in the course of six hours, moving southeastward toward the contact between the mare and the highlands, according to Tass. It was about 1,050 meters from the landing stage. There is some speculation that the Soviets may eventually guide the rover out of the crater toward the highlands.

On the second day of operation, ground controllers averted an accident. When the rover was initially activated, it headed straight toward the landing module, Luna 21, which had brought it to the surface. The operators managed to stop the rover in time to prevent a collision. Lunokhod then took pictures of the landing craft. Tass also reported that the soil over which the rover went was diverse in its mechanical characteristics.

A last message from LBJ

The National Space Club's Salute to Apollo this week in Washington attracted many of the notables associated with the Apollo effort. But the reception had just begun when the 1,000-plus attendees learned of the death of one of the invited guests—former President Lyndon B. Johnson, who as chairman of the National Aeronautics and Space Council and later as President had been a strong early supporter of the space program.

The saddened audience was read the following message from Mr. Johnson, dated earlier that day:

Few restrictions on my time have troubled me more than those which prevent my being present at the . . . Salute to Apollo. Through this message, however, I would like to commend all those space pioneers who have made the Apollo miracle a living reality. It has been more, so much more, than an amazing adventure into the unexplored and the unknown. The Apollo program has been and will endure as a monument to many things—to the personal courage of some of the finest men our nation has produced—to the technological and managerial capability which is the genius of our system—and to a successful cooperation among nations which has proved to us all what can be done when we work together with our eyes on a glorious goal.

I rate Apollo as one of the real wonders of the world, and I am proud that my country, through the exercise of great ability and daring leadership, has given it as a legacy to mankind. My personal regards to all friends of Apollo.

Sincerely, Lyndon B. Johnson