News and Comment

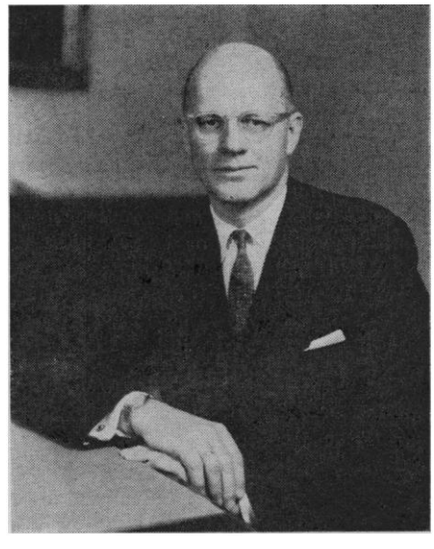
National Academy: Seitz Elected to Full-Time, 6-Year Presidency Amidst Signs of Greater Activity

There are stirrings at the National Academy of Sciences which suggest that that prestigious, ponderous, and often little-understood institution is pointing toward a more active role in the internal affairs of the scientific community and in relations between science and government.

The most significant indication is that, starting next July, the 102-year-old Academy—which now has a $15 million budget, 700 full-time employees, and 5000 outside consultants—will depart from its tradition of having a part-timer serve as president. The new full-time head will be Frederick Seitz, 53, who for the past 3 years has been dividing his time between the Academy presidency and the University of Illinois, where he was head of the physics department at the time of his election to the Academy position and later dean of the graduate college and vice president for research.

The shift from part time to full time is in itself of little significance, since Seitz has spent the bulk of his time at the Academy during the past year. The significance rather lies in the fact that the shift to a full-time role indicates that the collective leadership of the Academy, represented in its 11-man council, has at last accepted the argument that the Academy should seek to exert greater influence in the management of American science and in the relationship between science and the federal government. Various persons within the leadership of the Academy have been arguing this for years—with the proposal for a full-time presidency as a symbol of the issue—but it wasn't until last fall that the Academy's traditional conservatism yielded to the proposal. And it was just last week, following the regular mail ballot of the membership, that Seitz was elected to a 6-year term.

If past performance is any indication, whatever happens from here on in will not happen quickly, since the Academy traditionally has placed great value on slow and careful approach to its concerns. But with no outside professional diversions and a 6-year term ahead of him, Seitz is in a position to utilize the prestige and resources of the Academy in areas that it has heretofore ignored or only touched upon lightly. For example, Seitz, as well as many other scientists, is becoming increasingly concerned about the regional squabbles that have been sprouting over the location and employment of federally financed research facilities. He says that his thoughts at the moment are of a preliminary nature, but he believes it would be useful to develop some sort of institutional means whereby universities throughout the nation could consult and cooperate on this problem. He also feels that the scientific community can exert a greater influence on the complex problems involved in conserving the nation's natural resources. And, as far as the internal affairs of the Academy are concerned, he would like to develop some means for providing recognition for the social sciences. This is a problem that the Academy is approaching with extreme caution, since it has not yet fully solved the problem of adapting its structure for recognition of interdisciplinary work in the physical sciences.



Frederick Seitz

Seitz also looks forward to an increasingly vigorous role for the Academy's Committee on Science and Public Policy, which was established 2 years ago under the chairmanship of George B. Kistiakowsky, of Harvard. The committee, which produced an influential study calling for a larger federal role in population planning, has become the Academy's channel for advisory service for Congress. This is an area of activity that the Academy previously shunned, out of fear that its reputation for disinterested advice might become entangled in partisan politics. That fear is not altogether dissipated, but under Kistiakowsky the committee has entered into an agreement to make several studies for the subcommittee on Science, Research, and Development of the House space committee, and the way is now open to provide similar services for other congressional committees.

One effect of this new relationship with Congress is that the Academy is now getting to be known on Capitol Hill. There are still many members who don't quite understand what or where it is, and now and then one encounters generally knowledgeable members or staff assistants who confuse it with the National Science Foundation or the AAAS. But in the committees that deal with research and development there is now an awareness that there's an Academy downtown and that it can be called upon to make studies and recommendations on scientific and engineering matters.

While Seitz feels that the Academy should be more willing to depart from the tradition that it provides advice only when called upon, it seems likely that he will generally hold to the basic principle that has guided the Academy since its founding. This is that the Academy has no role to play in operational programs—it doesn't want to run anything, and, with a few minor exceptions that it has agreed to at the insistence of government departments, it doesn't. (These exceptions include the Atomic Bomb Casualty Commission, which it operates in Japan to study the effects of the atomic attacks on Hiroshima and Nagasaki, and certain aspects of the Soviet-American ex-

Manpower for Space: Too Much or Too Little?

Critics of the space program often charge that NASA absorbs an excessive proportion of the nation's scientists and engineers; supporters assert that the proportion represents a reasonable share of the manpower available for various purposes. Whether NASA's share is a lot or a little depends on one's view of the political, economic, and technical significance of the space effort. In any case, some pertinent figures were offered last week by NASA Administrator James E. Webb, in an address to the Military Electronics Convention in Los Angeles.

NASA, according to Webb, now utilizes the equivalent full-time services of 5.4 percent of the nation's approximately 1.5 million scientists and engineers. Within this total figure, it utilizes about 10 percent of the "sub-group" that is characterized as "research and development scientists and engineers." During the past 3 years, NASA has absorbed 27 percent of the increase in the overall pool of scientists and engineers. In the R&D subgroup, it has absorbed 39 percent of the increase. It is anticipated that, during the next 3 years, NASA will require only 1.5 percent of the overall growth and only 2.3 percent of the growth in the R&D subgroup. It is also expected that, during the next 3-year period, utilization of the overall manpower pool will drop from 5.4 to 4.8 percent, and utilization of the R&D subgroup, from 10 to 9 percent.

change program. Both these cases involve complex international sensitivities that seemed best handled by a prestigious scientific organization that is remote from the conduct of hostilities.)

But as Seitz noted in the July-August issue of the Academy's *News Report*, the Academy "has stood steadfastly by . . . two goals." These are, "to provide the Federal Government with a source of reasonably reliable advice formulated under the guidance of a body of outstanding scientists and engineers with a diversity of interests in technology," and "to foster basic science in our country much more officially than had previously been the case . . . by giving recognition to good scientists and their work. . . ."

Strict adherence to these goals isn't likely to help dissipate the feeling of exasperation that many persons in the science-government area display when they discuss the Academy. A typical comment from this quarter is, "All that prestige sitting there and they never *do* anything with it!" And even from within the high councils of the Academy one hears comments such as, "Every time there has been a national crisis that required the mobilization of science and technology, the White House has chosen to bypass the Academy. When sputnik came," the critic continued, "the White House didn't look to the Academy; instead it revitalized the President's Science Advisory Committee and acquired a full-time science adviser."

The relevance of these observations is subject to debate, since they rest on the assumption that it would be advantageous for the Academy to trade its sheltered redoubt for a place on the front lines of science and government. At this point it is not certain that such a shift would be advantageous or even possible. Because of its position above the fray, the Academy is assured that, when it speaks, people will at least listen. In its population report, it literally said nothing that hadn't been said for 10 years by the veterans of the population planning campaign, but when the Academy spoke, the press and Congress reacted as though basic truth was being unveiled. The same impact is clearly beyond the attainment of the many science-related organizations that regularly produce policy studies and recommendations. Their reports often hit the public area, only to disappear without a splash.

Furthermore, at this point it is even doubtful that the Academy could move into an activist role without precipitating a great row. During the past 6 or 7 years, an influential science advisory apparatus has developed within the executive branch, and it has gone on to form alliances with the legislative branch and the scientific community at large. Desirable or not, it is a little late for the Academy to offer itself as the principal representative of the scientific community in relations with the federal government. At one time, members of the scientific community looked upon the Academy as their Washington embassy, but now they have found many friends to look after their needs in the Capital. Executive agencies still ask the Academy for advice, and it is the task of fulfilling these requests that occupies the Academy staff and their consultants. But the executive agencies feel increasingly confident of their own scientific abilities, and it is not uncommon for them to use the Academy for only routine purposes or to seek its imprimatur when they want to acquire some insulation for a politically controversial move. NASA, for example, can tell its critics that the space program has been developed in consultation with the National Academy of Sciences. But NASA has goals and responsibilities that go beyond mere scientific research, and it seeks the advice of lots of organizations, and understandably uses its discretion in choosing the advice it will follow.

Against this background, what can the Academy do if it desires to exert greater influence? Obviously, it cannot do anything that will be immediately forceful. But it is sitting on a vast amount of prestige, and if this rare commodity is skillfully exploited, the Academy can become an increasingly influential force. When it speaks, the country listens. The questions now are, What will it choose to speak about, and how vigorously? Many high-ranking Academy members are, for example, extremely displeased with the space program, but they rarely reveal their views publicly. Many are distressed by the pork-barrel influence that is seeping into the decisions of federal research and development agencies, but they don't often talk about it in the open. Whether they want to invoke the Academy's prestige on these and other issues—and possibly lose some of it in the hostilities that are sure to ensue—remains to be seen.—D. S. GREENBERG

Lysenko: Soviet Science Writes Finis to Geneticist's Domination of Nation's Biological Research

During the past few weeks the Soviet scientific community has been performing the last administrative rites in the long and baleful Lysenko affair.

According to press reports, Trofim