

tend to have the Environmental Science Services Administration take a leading role in this program." Johnson's reply has not been made public, but it is understood to have been one of encouragement.

Last week Robert M. White, administrator of ESSA, confirmed the report that his agency plans cloud-seeding experiments in the Northeast next summer. These would be a step toward larger experiments of the kind rec-

ommended by the MacDonald panel.

The reports by the panel and the NSF commission were prepared partly at the request of the Interdepartmental Committee for Atmospheric Sciences (ICAS), which is chaired by Herbert Hollomon, Assistant Secretary of Commerce for Science and Technology. Hollomon, a prime mover in the establishment of ESSA last summer, can be expected to use the reports in order to push harder for a larger weather

modification effort. NSF director Leland J. Haworth, to whom the commission reported, agrees generally with the reports' objectives, although his views as to precisely what should be done have not been disclosed.

All in all, chances of the weather modification program's gathering momentum seem good. Contrary to the old saw, a decade hence people may be doing more to the weather than just talking about it.—LUTHER J. CARTER

LBJ and Hornig: Close Ties Exist as Science Adviser Starts Third Year

Two years ago this week, Donald F. Hornig, on leave from the chairmanship of the Princeton chemistry department, became director of the Office of Science and Technology (OST) and science adviser to President Johnson. How has he been doing?

The answer is difficult to determine with any precision, since the advisory role involves a confidential relationship with the President, and OST, though subject to congressional scrutiny and public inquiry, tends to operate out of sight. But it is at least clear that President Johnson, a notoriously difficult boss, is well pleased with the man who advises him on science and technology. Hornig is to stay on for at least another year, and it is said that the President wants him to regard the position in even longer-range terms. The science post is physically and politically outside the inner sanctum of the White House (Hornig and his staff are in the Executive Office Building, adjacent to the White House). But it is still very close to the center of power, especially since Johnson enthusiastically regards science and technology as potent tools for his social and economic designs. And one measure of his regard for his personal counselor in this area is that, in length of service, Hornig is now one of the most senior men in the President's official family.

Increasingly, on a variety of matters, including some that might not conform to the popular vision of what science advisers do, the President has turned to Hornig. Last November, when the great Northeast power failure occurred, Hornig was one of the first officials called by the President, who was then in Texas. Johnson wanted a quick assessment of what had gone wrong, and of how steps to correct it were proceeding. Hornig spent the night on the telephone, collecting information and channeling it to the Texas White House.

In another area, physical protection of the President, the White House requested Hornig's office to make a study and produce recommendations. With the several security agencies scrapping among themselves, OST was regarded as a capable and disinterested source of advice. Hornig has also become a sort of internationally roving presidential emissary for science and technology. The President has great faith in the use of science and technology to encourage international cooperation, and in the course of his service Hornig has repeatedly gone abroad, to the Soviet Union, Western Europe, Korea, and elsewhere.

Hornig's performance is often compared to that of his predecessor, Jerome B. Wiesner, who served under Kennedy. But Hornig isn't Wiesner, and

Johnson isn't Kennedy, and comparisons don't have very much validity. Wiesner, who was informally associated with Kennedy before 1961, seemed to have a zest for the capital's political atmosphere, and, furthermore, worked for a President who wasn't jealous about sharing the public limelight. Hornig, on the other hand, was appointed by Kennedy when Wiesner decided to return to M.I.T. and took office amid the great uncertainty that surrounded all presidential affairs during the period after the assassination. Hornig is not a "political type," and the President he serves tends to favor an official family that stays off center stage.

During the first 6 or so months of Hornig's term, it appears, the President and the White House inner circle had an unclear notion of how they might employ OST, and there were some matters involving science and technology where the politicians were acting without talking to OST. Such a case occurred when Johnson dedicated the new National Geographic Society headquarters building, and proclaimed—to the astonishment of OST and the horror of the Society—that the Society should become the coordinator for a great international program of scientific cooperation. Nothing further has been heard of the idea.

In those early days of the Johnson administration, some of the science staff members complained that they were bored, and that OST was underemployed or involved with trivia. But a transition has taken place, and as Hornig begins his third year of service, OST and its surrounding bodies—the President's Science Advisory Committee and the Federal Council for Science and Technology—are heavily involved in policy formulation, coordination of the technical aspects of the Great Society programs, and troubleshooting in a variety of areas.—D.S.G.