New Role for NASA Research Center

It was a little like the last act of a melodrama last week with the Administration foiling the foreclosers when it announced that the Department of Transportation (DOT) would take over NASA's Electronics Research Center in Cambridge, Mass., which the space agency vacates on 30 June.

The $36-million facility, located in downtown Cambridge near M.I.T. in a complex of still unfinished buildings, will be renamed the Transportation Development Center. DOT Secretary John A. Volpe, a former governor of Massachusetts, indicated that his new center would undertake advanced research in automated air traffic control, electronic guidance systems for highways, and antipollution research.

Since it began operating in September 1965, the center, which has administered research contracts with industry, universities and other government laboratories (the research budget last year was $31.6 million), and performed some inhouse research, built up to about 825 employees, some 420 of them professionals. Volpe said that a majority of the present employees would be retained. It is understood that more than 100 members of the staff have left since NASA on 29 December announced its projected closedown, some to take jobs at other NASA locations. Less than a fifth of those departing were professionals.

In taking over the Cambridge center DOT is following the logic that moved NASA to locate there in the first place—that an agency that depended so heavily on electronics would profit from propinquity to M.I.T., Harvard, and the electronics industry arrayed around Route 128.

The decision to locate the center in the Boston area actually precipitated one of the few political storms in NASA's relatively tranquil period of growth in the early 1960's. By 1963 Congress had developed a conviction that federal military and space contracts and government science installations spelled prosperity for a region and that Massachusetts, perhaps second only to California, had won an unfairly large share of economically progenitive research funds.

So aroused were the legislators that the bill authorizing the electronics research center carried an unprecedented requirement that funds could not be expended until NASA submitted a detailed study of the claims of areas competing for the center in order to justify the space agency's choice to Congress and constituents.

Locational politics, in fact, seem not to have been a decisive factor in the choice of Boston. NASA administrator James Webb argued that NASA electronics at that stage were an outgrowth of military and commercial technology and that NASA needed to look beyond the lunar landing program to interplanetary flights which would require new dimensions of sophistication in electronic systems. He believed that Boston was the only area where such over-the-horizon research could be done.

Webb was assuming that NASA funding would continue at a level of $5 or $6 billion a year or more. The downward plane of spending for space has slowed the demand for advanced electronics and this seems to have strongly influenced the NASA decision under budgetary duress last fall to close the center. In fact, at least since the present director of the center, James C. Elms, took over in 1967, the tendency in center research has been away from absorption in exotic advanced projects and toward research with more immediate applications, including automatic airplane landing controls. Elms is to stay on as director.

If the NASA and DOT proponents are right it may not require so wild a transition to bring space electronics research down to earth and deploy it against problems of air traffic control and collision avoidance, pollution, and urban transit and highway traffic control. There seems to be a fair amount of optimism that the technical problems of developing effective control systems will yield to electronics research, but DOT, which plans a budget of about $20 million next year for the center, is likely to encounter the practical problems of getting research funds equal to the task.—J.W.

that the Ash Council was still at work.

Since that disappointment, there has been growing sentiment within the Lennon and Hollings subcommittees for trying to push NOAA legislation through Congress and dump it on the President's desk. It would not be the first time Congress had taken the initiative in marine affairs. In 1966, Lennon and Magnuson guided to passage bills that created the Cabinet-level Marine Science Council and authorized formation of the Stratton Commission. At the time, the Johnson Administration opposed both proposals. Many coastal-state legislators now fear that there will be no meaningful reorganization of oceanographic activities unless Congress again forces the issue.

For the present, however, the congressional maneuvers and rhetoric seem designed primarily to pressure the Administration into a compromise. The advocates of a NOAA would definitely accept something less, provided the new plan enhanced the status of oceanography and permitted central management. Hollings and others even concede that the nation eventually will need a major department on environmental matters, including the ocean agencies. But they reject the Ash Council's concept of such a department, fearing that the council's emphasis is on holding down budget requests rather than on planning for a strong national ocean program.

In any case, NOAA backers insist that their single-agency proposal would also serve the cause of economy. They say a NOAA would initially require only slightly more than the $800 million a year the component agencies are now spending. The Stratton Commission recommended a $2 billion annual budget for NOAA by 1980, assuming creation of the suggested programs and an annual growth rate of 7 percent. But this is now generally considered an unlikely goal, in view of budget prospects. Advocates of the single agency argue that its major immediate contribution would be improved management, which would enable the nation to get more from its limited funds for oceanography. For example, a NOAA might bring about greater sharing of ships, data buoys, and other equipment.

The budget squeeze came as oceanographers were on the verge of unprecedented opportunities to develop and use new undersea technology, to replace ships of World War II vintage, and to launch ambitious new research efforts. "In developing technology, we are now—by comparison—roughly