

tended that they should be free of the usual rotation-of-duty requirements and not have separate lines of reporting.

5. In addition to the recommendations above, we have given consideration to the possible establishment of a new kind of Government research and development establishment, which might be called a Government Institute. Such an Institute would provide a means for reproducing within the Government structure some of the more positive attributes of the nonprofit corporation. Each Institute would be created pursuant to authority granted by the Congress and be subject to the supervision of a Cabinet officer or agency head. It would, however, as a separate corporate entity directly managed by its own Board of Regents, enjoy a considerable degree of independence in the conduct of its internal affairs. An Institute would have authority to operate its own career merit system, as the Tennessee Valley Authority does, would be able to establish a compensation system based on the comparability principle, and would have broad authority to use funds and to acquire and dispose of property.

The objective of establishing such an instrumentality would be to achieve in the administration of certain research and development programs the kind of flexibility which has been obtained by Government corporations while retaining, as was done with the Government corporation, effective public accountability and control.

We regard idea as promising and recommend that the Bureau of the Budget study it further, in cooperation with some of the agencies having major research and development programs. It may well prove to be a useful additional means for carrying out governmental research and development efforts.

6. It would seem, based on the results of this review, that it would be possible and desirable to make more use of existing governmental facilities and avoid the creation of duplicate facilities. This is not as easy a problem as it might seem. It is ordinarily necessary for a laboratory, if it is to provide strong and competent facilities, to have a major mission and a major source of funding. This will limit the extent to which it is possible to make such facilities available for the work of other agencies. Nevertheless, in some cases and to some extent it is clearly possible to do this and a continuing scrutiny is necessary in order to make sure that the facilities which the Government has are used to their fullest extent.

7. Finally, together with the better use of existing facilities, the Government must also make better use of its existing scientific and engineering personnel. This implies not only a careful watch over work assignments, but also a continual upgrading of the capabilities of Federal personnel through education and training. At the present time, technology is changing so rapidly that on-the-job scientists and engineers find themselves out of date after a decade or so out of the university. To remedy this, the Government must strengthen its educational program for its own personnel, to the extent of sending them back to the university for about an academic year every decade. This program, necessary as it is, will only become attractive if the employee is ensured job security on his return from school and if his parent organization is allowed to carry him on its personnel roster.