

creasingly serious in recent years as increases in Federal pay have been concentrated primarily at the lower end of the pay scale—resulting in the anomalous situation that many officials of Government responsible for administering major elements of Federal research and development programs are paid substantially smaller salaries than personnel of universities, of business corporations, or of not-for-profit organizations who carry out subordinate aspects of those research and development programs. We cannot stress too strongly the importance of rectifying this situation, and hope the Congress will take at this session the action which the President has recommended to reform Federal civilian pay scales.

Second, it is necessary for even the best qualified governmental managers to obtain technical advice from specialists. Such technical advice can be obtained from men within the Government or those outside. When it is obtained from persons outside of Government, special problems of potential conflict of interest are raised which were dealt with in the President's recent memorandum entitled "Preventing Conflicts of Interest on the Part of Advisers and Consultants to the Government."

We believe it highly important for the Government to be able to turn to technical advice from its own establishment as well as from outside sources. One major source of this technical knowledge is the Government-operated laboratory or research installation and, as is made clear later in this report, we believe major improvements are needed at the present time in the management and staffing of these installations. A strong base of technical knowledge should be continually maintained within the Government service and available for advice to top management.

Third, we need to be particularly sensitive to the cumulative effects of contracting out Government work. A series of actions to contract out important activities, each wholly justified when considered on its own merits, may when taken together begin to erode the Government's ability to manage its research and development programs. These must be a high degree of awareness of this danger on the part of all governmental officials concerned. Particular attention must be given to strengthening the Government's ability to provide effective technical supervision in the letting and carrying out of contracts, and to developing more adequate measures for performance evaluation.

Determining the assignment of research and development work

As indicated above, we consider it necessary and desirable to use a variety of arrangements to obtain the scientific and technical services needed to accomplish public purposes. Such arrangements include: direct governmental operations through laboratories or other installations; operation of Government-owned facilities by contractors; grants and contracts with universities and entities associated with universities; contracts with not-for-profit corporations wholly or largely devoted to performing work for Government; and contracts with private business corporations. We also feel that innovation is still needed in these matters, and each agency should be encouraged to seek new and better arrangements to accomplish its purposes. Choices among available arrangements should be based primarily on two factors: