

developing regions, and thus lead to a more uniform distribution of Federal R&D funds. Without making a value judgment as to desirability, it is clear that complete uniformity would, of course, require establishment of R&D centers in regions or States that presently do not have such centers.

*Question 4. A sharp line is drawn between those Government laboratories that are directly operated and those that are contractor operated. In terms of your experience, what are the principal characteristics of each mode of operation and the difference between them that are significant to utilization of Government laboratories?*

Answer. AEC's experience, as well as my direct personal experience, is limited almost entirely to contractor-operated Government laboratories.

Major differences between an in-house Government laboratory and a Government-owned, contractor-operated laboratory, in my opinion, arise primarily from the fact that the staff of Government-owned, contractor-operated laboratories, such as the AEC major laboratories, are not Federal employees. Personnel policies appear to be at the heart of the matter. Government promulgated policies tend to be Government-wide and attempt to cover all agencies and all cases. Thus they may be more restrictive or limiting than necessary or desirable for individual cases. When one can establish personnel policies for thousands, rather than millions, and for predominantly scientific, technical and management personnel as compared to other categories, one can have policies that specifically attract and retain the type of personnel required. Policies can in some cases also be consistent with those of academic institutions and thus permit and facilitate a desirable amount of turnover among scientific and professional personnel.

There is of course another important characteristic that should be considered, i.e., the relationship of the Government agency to the laboratory. The give and take of the contractor relationship as it exists in our major laboratories produces a climate, I believe, that is conducive to innovative approaches for differing task assignments.

*Question 5. What authority do your laboratory directors have to deal directly with other agencies that may wish to engage their research and development services?*

Answer. Directors of AEC's multiprogram laboratories are free to deal directly with other agencies for the purpose of identifying R&D which they might perform for another agency. Prior to submitting a formal proposal for such work, however, it must be reviewed by AEC staff to determine that proposed use of Commission-owned facilities is within the legislative authorities of AEC and that the proposed work will not interfere with the effective conduct of AEC programs. An actual transfer of funds normally requires a formal agreement between AEC and the sponsoring agency.

*Question 6. In what ways are the directors of your large, multiprogram laboratories kept informed of the scientific and technological content of new or changed Government functions, such as those of the Department of Transportation or the Department of Housing and Urban Development? What incentives are there for your laboratory directors to give thought to such matters in addition to their primary responsibilities to your programs?*

Answer. To a significant extent this information is acquired by laboratory directors by their own initiative and in proportion to their interest and those of their staffs. As outlined in my testimony, AEC has transmitted information on programs of national interest and new and changed agency authority to directors of its multiprogram laboratories. We have also transmitted to them and to their staff relevant information arising from our conversations with other federal agencies regarding effective use of resources at our multiprogram laboratories for national goals.

As mentioned in my testimony, AEC's General Manager has asked directors of our multiprogram laboratories to identify programs which they might undertake in the area of pollution abatement and control. In this he referred to Chairman Seaborg's letters to the Secretaries of major federal departments and to Mr. Hollifield's interest in the effective use of the multiprogram laboratories in the national pollution control effort. The direct benefits to the laboratory programs outlined in my testimony provide additional incentive.

*Question 7. While the present Laboratories Committee of the Federal Council for Science and Technology is concerned with Government laboratories as such, with the exception of Dr. Astin its members are not working laboratory directors. What advantages and disadvantages do you see in having a small council of Fed-*