

In addition, there are several broader conclusions that we have reached from our experience.

*First.*—Our experience in the creation of new laboratories has made it clear that this is an extremely difficult and complex process, and one that cannot be entered into lightly. The basic requirements for success appear to be a strong and clear purpose for the laboratory, significant future beyond the immediate set of problems which inspired the need, and challenging missions and objectives which serve to attract and hold the competent people who constitute the real capability of any institution. Even under these circumstances, constant management reinforcement of resources of the laboratory will be needed to assure the formation of the "critical mass" which makes a laboratory self-sustaining and productive.

*Second.*—Agency and laboratory management cannot assume that the existence of effectiveness assures its maintenance. The creation of new and useful contributions to technology by a laboratory can be lost very quickly if the laboratory is incapable of continuously renewing its objectives in a way which meets real national needs. Laboratories must be free enough and flexible enough to take advantage of research "targets of opportunity" as they present themselves. New missions are important in that they serve as the challenge around which a laboratory can organize its efforts.

*Third.*—It has become increasingly apparent that new technology almost inevitably has significant application outside of the environment in which it was created, and the creator of technology has a real responsibility to make the results of his work known to others who might benefit from it. In NASA, we feel that this cannot be a passive responsibility, and we have actively sought to initiate contacts with many agencies. Not all agencies are able to have laboratory capability of their own, nor is it necessary that they should have. One of the key factors in the ultimate effective utilization of the Federal laboratory capability is that agencies acquire at least enough technical competence to recognize their own needs for research and development support and to establish contact with the existing laboratory capabilities which can be used to solve these kinds of problems.

*Fourth.*—NASA has found that a laboratory capability and a real need for laboratory support can almost always be brought together. This has proved to be true in ways ranging from informal consultation to interchange of people all the way up to the joint conduct of major R. & D. programs. The solution to many of the problems which this subcommittee has identified in its past hearings, such as more and better information about Government-wide research capability, better budgeting and accounting practices, better interagency coordination, could speed up and improve the process, but the agencies involved must take the initiative in their own behalf.

That completes what I had prepared, Mr. Chairman.

Mr. DADDARIO. Thank you, Mr. Finger.

Mr. Mosher.

Mr. MOSHER. Not at this point.

Mr. DADDARIO. Mr. Brown?

Mr. BROWN. While you have been talking, I have been running through my mind a method of conceptualizing the role of the laboratories. I would just ask your comment on this because I have not really