

(4) You need people who can couple R. & D. results to your mission.

When a new agency begins to attack a major national problem, and begins to build the necessary R. & D. capability, it is probably necessary for it to depend primarily on other agencies and private contractors for a few years.

But I cannot overemphasize the fact that we must exercise considerable care in assigning nonagency missions to existing labs. In our review of our own DOD labs, we found generally that those which tried "to cover the waterfront" were much less productive and of lower quality than those which were focused toward a well-defined meaningful agency problem. A key objective for our new weapon centers is a specifically defined, challenging mission. The question of balance for any single laboratory must be a decision shared by both the laboratory director and his management agency. I really don't think we should attempt to set an arbitrary figure or a range. Each laboratory director must examine his own local situation to determine the level of effort he can perform for other agencies using local criteria to make this decision.

In general for busy productive laboratories with clear-cut missions, I would say the following principle applies to interagency lab support: The greater the match between the actual technical work that needs to be performed and the performer's ongoing programs, the more the laboratory can assimilate. Dr. McLean's example of his work for the Bureau of Fisheries on sonar signatures for schools of fish illustrates this point. For such cases, laboratories might be able to absorb 15 to 20 percent.

In specialized test facilities, like computer centers or wind tunnels, the percentage could be much higher depending on the capacity of the facility. On the other hand, we must recognize that each agency will have some labs that are highly specialized; for these, as much as a 10-percent diversification might be unwise or even impossible.

In summary, I believe that if the motivation and need are there, people will know or find the capabilities and unique facilities and competence in Federal laboratories. We certainly encourage others to use any of our available capability. The cross-servicing of major programs should be thought out very carefully in advance, however, so that the primary mission of a laboratory is not so diluted that performance for either their parent agency or its customer, or both, is not degraded. Modifications to our system for accounting for manpower and manpower ceilings are in need of critical review if we are to make optimum use of our in-house capacity.

There are a number of advantages in using existing Federal laboratories instead of establishing new ones: (1) avoidance of unnecessary duplication; (2) overall reduction in costs; and (3) the ready availability of expertise. There are a number of disadvantages also: (1) dilution of laboratory mission; (2) the lack of close coupling between the performing laboratory and the customer agency; and (3) the resultant lack of R. & D. continuity and experience in the new agency or program. The tradeoff among considerations such as these must be weighed carefully in determining the most appropriate course of action to be taken.