

goal is further delayed. If we want to avoid these difficulties and have a participative type of operation, we should, as managers, try to do every job with an organization which is at the optimum, and this usually means the smallest size for its effective completion. If we increase beyond the optimum size, however, the forces become such as to automatically justify further increases in size.

I have proposed that as a management tool every important job should be undertaken by two organizations having a factor of ten difference in size.

6. *What criteria should govern:*

A. *How much independent money a laboratory director should have?*

B. *The appraisal of what the Director has accomplished with funds previously authorized to him?*

a. Of the various methods of supplying independent research funds, I favor the one which assigns a certain percentage, say 5%, of the total budget of the laboratory for this purpose. This should not be an automatic level for all laboratories but should vary according to the original and significant work that is accomplished by a laboratory.

b. The independent programs are reviewed after the fact, and future allocation of new funds is made on the basis of judgments on the success of each laboratory's past programs. In my opinion, therefore, the most valid appraisal of a director's use of independent research funds is the degree to which the laboratory secures development projects from the parent, or other sponsoring organization, based on information and demonstrations made possible by independent research.

7. *Does your laboratory have ceilings for its personnel? If so, how are these ceilings set and who does it? What flexibility do you have for assignments within a ceiling? How feasible is it for you to obtain a change in personnel ceiling to accommodate work for another agency?*

Civilian personnel ceilings are set for the laboratory by the Director of Navy Laboratories who receives a total allocation of billets for Navy laboratory operations from the office of Civilian Manpower Management. The Navy ceiling, of course, is derived from overall DOD and Executive Establishment limitations. Hirings are made based upon funds available to support a certain employment level within the established ceiling. Increases to the ceiling depend upon a number of factors including need, total employment level within the Department of the Navy, and ceiling points available within the system for reallocation. Typically, the laboratory ceiling is not adjusted for performance particular projects, whether these are Navy sponsored or for another agency. Rather, the laboratory is expected to adjust its total resources, which should in the long run, represent the optimum size and skills mix to perform a broad spectrum of work to meet priority needs. I might repeat that there is value in a workload consistently higher than the laboratory can handle, since the pressure of taking on additional interesting work tends to force out low interest and low pay-off programs and promotes the early transfer of work to industry. However, with an accounting system where an efficient operation can be judged and rewarded, the need for manpower ceilings as a control could be removed and greater flexibility obtained.

I feel that the need for ceilings will decrease in proportion as our ability to correlate manpower and costs and performance improves. If the accounting and evaluation can be such as to make this possible, then one ceiling on money should provide the local managers with more flexibility.

Mr. DADDARIO. I apologize that we will not be able to hear you today Mr. Finger, but I hope you will be able to come back tomorrow and be our first witness.

Mr. Finger has done fine work for NASA and the AEC, and we are pleased to have him as a witness. We are sorry that we have to hold you over to tomorrow.

Our other witnesses tomorrow will be Dr. William H. Pickering, Director of the Jet Propulsion Laboratory, and Phillip S. Hughes, Deputy Director of the Bureau of the Budget.

This committee will be adjourned until 10 a.m. tomorrow at this same place.

(Whereupon, at 12:25 p.m., the subcommittee adjourned to reconvene at 10 a.m., Thursday, March 28, 1968.)