large structure of multidisciplinary laboratories, we should seek to use them in the best national interests.

The present laboratories can be reoriented, if necessary, to match new needs. Broadening the interdisciplinary base and changing the professional mix of talents is an entirely reasonable and practical procedure in view of the ever-growing demands on the national resources. But to do so effectively, a proper effort must be made to assess the capabilities of the existing laboratories and to evaluate the new problems to determine what contributions they might make. Such an assessment can be made only if adequate seed money or discretionary resources are made available before a laboratory's primary mission has been completed. Some such procedure is necessary if we are to achieve optimum utilization of the existing Federal laboratory system.

Thank you, Mr. Chairman.

Mr. DADDARIO. Dr. Pickering, you point out, as has been done by others, that technology cannot be relied on to overcome all of the problems that have been caused or aggravated by technology, and that you bring in the political, economic, and social considerations.

You then speak about the utilization of present laboratories, and the fact that there are some extremely competent national laboratories.

You then get to the point where they must be evaluated. We have touched on this with others, and how to evaluate them is a pretty difficult problem.

What do you think about it? How do we go about this rating process?

Dr. PICKERING. Mr. Chairman, again I think that discretionary or seed effort in new areas may be the key. In other words, if you invite a laboratory to develop its capabilities in certain other areas to a limited extent, I think it will be quickly evident as to whether or not that laboratory will come up with useful new ideas.

For example, if you asked JPL to build submarines I couldn't tell you that we could build good submarines.

On the other hand, if you told me that you wanted JPL to build submarines and asked for a study effort over the next 6 months to determine what we could do, after a 6-month study an assessment of the JPL capability could be made against the total national competence for building submarines. This could then lead to a useful evaluation as to whether, in fact, JPL could help.

Mr. DADDARIO. That is sensible, but it still doesn't eliminate the need to have some kind of an evaluation process at this stage of the game. I do not think that every laboratory would deserve this discretionary authority. If we were to establish a policy that a certain number who we knew had the ability and the competence and would use this discretionary authority to raise their quality even higher, could have the funds, then the rating requirements would still be necessary.

Dr. PICKERING. Yes. I think that there is a certain element in the internal development of the laboratory itself to be considered. If I may reflect on our own experience in the transfer from Army to NASA, a year or two before the transition it was becoming evident to us at the laboratory that the mission we were performing for the Army was becoming a less valuable match to our capabilities.

In other words, we had accomplished certain things for the Army. But in looking to the future it was not at all obvious where we were