

Mr. DADDARIO. They were not criticizing. They were saying we are not using our capabilities in this regard as efficiently as we could. Many of the problems of this day and age come upon us more rapidly now than ever before, and we must quickly develop the capability to meet them.

Pollution is an area where knowledge must be applied more rapidly before the situation becomes more dangerous than it presently is. This is what the discussion was about and I do not want to infer that it was a matter of criticism, but rather it concerned better use of our resources.

Dr. PICKERING. I think this is a matter of priorities. What have these resources been used for, these applied science laboratories? Have they been used for missions which have been regarded as the most urgent priority by the Congress?

Now, if the assessment of priorities places other problems first then I believe the mission-oriented teams can be reoriented toward new priorities even though the new priorities involve skills outside the purely physical sciences.

Mr. DADDARIO. Would you add to that, taking the situation as you see it, that we ought to be developing this competence in a broader way?

Dr. PICKERING. Yes, sir. I have some more to say about this later on in my testimony.

Mr. DADDARIO. All right.

Dr. PICKERING. Having touched on the complete redirection of a laboratory to a new mission, let me turn to a partial redirection, including such questions as the use by one Government agency of capabilities of a laboratory funded by another agency, and the utilization of a mission-oriented laboratory in seeking solutions to social problems.

The Jet Propulsion Laboratory has a long history in moderate-sized funding from agencies other than the principal sponsor. For example, for many years, the wind tunnels at JPL were partially funded by the three branches of the military services. At present, the Laboratory is carrying out tasks for the Department of Defense, and we hope also to perform work for the National Institutes of Health. Our experience here strongly suggests that where all of the involved agencies concur, implementation is feasible.

Whether the redirection be complete and permanent, or partial and temporary, preliminary technical work of "seed" effort in the new mission is required. Accordingly, seed work on a modest scale in areas outside of the primary laboratory mission is a justifiable investment. In JPL's experience, Explorer was such a seed project, enabling the Laboratory to make an orderly transition to the new NASA mission.

A new mission may be stimulated by a high-level policy decision from above, or a new technical idea from below; in either case, discretionary funds for such activities are required. In fact, some discretionary funds within the primary mission are generally needed to realize the fullest potential of a mission-oriented laboratory. The application of such resources should be within broad policy limits established by mutual agreement with the sponsoring agency, but should otherwise reflect the independent thought and judgment of the laboratory management and staff. At present, JPL has no such discretionary funds and all tasks are specified by contract.