

solutions to vital problems and offering technical judgments highly relevant to the needs of top level planners and decision-makers.

While these words may at first sound much too general to have much meaning, they truly represent the goals and the "job description" for the office. It interacts on a continual basis with the Service Directors of Laboratories and with the Offices of the Assistant Secretaries (R&D). It is considered the "Washington Representative" of the in-house laboratories and it tries to represent their positions and points of view at the corporate level. It is a "champion" for laboratories within the DoD.

The scope of activity varies from minutia to major problems directly affecting the productivity of technical organizations. During the earlier phase of its development it concentrated on the development of a quantitative data base for laboratories which would give DDR&E insight into current and planned operations of these organizations and to provide a sounder basis for action. Working with our Army counterparts, it assisted in the development and approval of an Army 10-year plan for its laboratories. Its activities in refining the "weapon center concept" helped the Navy develop and place into operation an organizational plan, which we expect will pay many important dividends in the future of the Navy. Its close working relationship with the Air Force has resulted in a number of innovations which have strengthened the Air Force's in-house capability. Much of its effort is motivational and indirect. An important role is acting as the "conscience" of the R&D community of the DoD, the pre-testers of new ideas and innovations about laboratories.

It is the focal point for special studies aimed at improving the productivity, environment and utilization of laboratories. As a result of its recommendations, a number of laboratories has been phased out, consolidated or rejuvenated. It has been the interface with the Civil Service Commission in attempting to set the required personnel climate for technical organizations. It has played an important part in helping to define the role of laboratories in transition of laboratory-developed systems and equipment from development to production. These are but a few examples of the kinds of activities in which it is involved.

We should not leave the impression that the Office of Laboratory Management is the sole source of improvements in our in-house laboratory system, as this is far from the truth. It takes many people and organizations to achieve the goals established for improving the DoD laboratories. Its principal job is to provide the required degree of leadership and "coaching" which will assure that we are going in the right direction and at the proper pace.

Progress in the solution of laboratory problems has been gratifying during the past two years. Solutions to problems once thought to be unattainable are on the horizon, or well in hand. We seem to have gained a great deal of momentum particularly in the past six months which will have tremendous impact upon our Defense capabilities in the years ahead. It is the job of the Office of Laboratory Management to see that our progress continues.

Mr. DADDARIO. Thank you, Dr. MacArthur. It is a very excellent statement and your discussion about it has been extremely helpful.

Mr. Brown?

Mr. BROWN. How do you distinguish, if you do distinguish, between these two ambiguous terms of basic research and applied research as far as the laboratories are concerned?

Dr. MACARTHUR. Sure. Well, basic research, we define it as that research that is carried out to develop new knowledge.

Applied research is research that is carried out to solve a problem.

Now, though we don't think that research should be carried on for research's sake in the Department of Defense, we do support basic research that is relevant to our needs. That is, we support basic research that develops new knowledge in areas of prime interest to us and so research can be both basic and relevant.

Mr. BROWN. Basic and relevant to a mission?

Dr. MACARTHUR. Or a technological problem, because in many mission areas we have technological problems and the only way we can solve them is by having more basic knowledge in that particular area