

I also know of many other cases of transfers of people at the laboratory level from Defense to other agencies in which they have assisted in the exploitation of Defense-developed technology.

Such situations are not limited solely to Government personnel. Contractors of the DOD, industry, nonprofits and universities are excellent sources of expertise and performance for new agencies and new programs also.

A number of our Federal contract research centers are being used by civilian agencies to help define some of their problems. Many aerospace companies are actively planning or performing programs utilizing their defense systems and technology background for HEW, HUD, DOT, OEO, et cetera. Others are working in the field of oceanography in support of Commerce and Interior needs, applying technology and know-how derived from Defense-supported program.

Such technology transfer mechanisms far transcend technology transfer through information centers. As was mentioned last year in DOD testimony before the Subcommittee on Science and Technology of the Senate's Select Committee on Small Business, there is a high degree of mobility from Defense connected industry to nondefense organizations. Our estimate is that this approaches 10,000 scientists and engineers each year. I believe that newer agencies can, with the proper motivation and judicious actions, take full advantage of these natural dynamics in the technical work force and even influence them more in the direction of their more urgent needs.

Mr. DADDARIO. You mention people of high competence who move from one department to another and between Government and industry and how the knowledge that they have developed can be directly applicable. It appears that when these men work in the Defense Department laboratories the development of weapons systems is the important thing, but that they develop a knowledge which, in fact, can be helpful in solving some of our social and economic problems even though this is not fundamentally the Defense Department's business.

What do you do about taking advantage of this knowledge that is developed, the social and economic uses to which it can be put, and how to properly utilize it and not let it wander simply because its birth is not given in an agency which can support it?

I do get concerned about this because I think the Department of Defense has developed an ability to apply knowledge quicker and to apply technology which could be directed to the solution of many of our other problems.

Dr. MACARTHUR. Let me answer that question this way.

First of all, let me deal with the work done under Department of Defense sponsorship outside the Department of Defense by the private sector which is 68 percent in private industry. I don't think there is any problem there. When we are talking about defense technology developed by industry which is applicable to the problems that other agencies have in terms of attaining their national goals because the private sector is very competitive, the situation takes care of itself. These nondefense agencies, once they define their problems, the defense industries who have the necessary expertise will exploit it to solve the problems. Industry will move quickly because it means more contracts and money for them.