

Overregulation—a problem for research

We recommend for your attention the unique document "Science at the Bicentennial" recently published by the National Science Board. Based upon responses solicited from 600 directors of research, the report does an excellent job of bringing into perspective the problem areas that are seriously hindering the effectiveness of scientific research in the US (see our news report, page 93). The major headings of these areas are for the most part familiar to our ears—dependability of funding, manpower policy, the public's attitude towards science and pressure to do applied research. One area covered in the NSB report that has not been discussed at length in public (or even previously mentioned on this page) is the problem of government overregulation in research. This problem was mentioned as a serious one by research directors of the three main types of laboratories—industry, university and government.

In industry, overregulation by the government causes industrial laboratories to abandon basic research in favor of "defensive research" aimed at demonstrating that new products comply with government regulations. In a paper at the recent meeting of the Corporate Associates of the American Institute of Physics, Paul Chenea, vice president in charge of the research laboratories at General Motors, noted that nearly 50% of GM's research budget is spent to ensure that GM's products are in compliance with 84 government regulatory agencies. The total cost of compliance for GM, which in addition to research includes engineering, testing, auditing and reporting, comes to \$1.3 billion per year. The costs of compliance efforts for industry as a whole when passed on to the consumer amount to an estimated \$2000 per family annually.

On the university campus the problem is that increased demands for financial accountability, ever more complex employment regulations, affirmative action, procurement procedures and so on are now taking so much time and effort that faculty members are becoming discouraged from seeking individual grants. The feeling is that only university departments that attract enough government funding to hire a full-time business administrator can realistically accept government support.

The complaint of directors of government laboratories is the increasing tendency of funding agencies to "micromanage" their research programs. John Naugle, acting associate administrator of NASA, observes that management techniques are being used on basic research that were developed for highly mission-oriented projects. In addition to second guessing the judgment of the scientist doing

the research, this overmanagement by the funding agencies is beginning to eat up significant fractions of the funds provided to the government laboratories.

In some instances existing regulations are simply unsound and should be amended as soon as possible. Thus the Environmental Protection Agency is charged with enforcing a statutory environmental limit on the concentration of ozone that happens to be below the natural background level in many areas of the country. But most often each regulation by itself (environmental protection, financial accountability to the taxpayer, affirmative action to safeguard minority rights, and so on) would appear to be reasonable and desirable. The problem is that the cumulative impact of countless well-intentioned regulations becomes an overwhelming administrative burden that is increasingly handicapping the nation's research effort. Especially at a time when real-dollar funds for basic research have leveled off or are declining, the corrosive effects of overregulation must be regarded with serious concern.

The logical first step to a solution would be a review of the problem by the new President's Committee on Science and Technology. We understand that the Committee is committed to conduct such a review and we would urge that it be carried out with a high priority.

—Harold L. Davis