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Strength in Union?

Several recent events in the Department of Defense have brought into focus a dispute over who is to review the weapons' development programs of the three military departments. The dispute was between what might be termed a science judgment, centered in the Office of the Assistant Secretary of Defense (Research and Development), and an engineering judgment, centered in the Office of the Assistant Secretary of Defense (Engineering). In February, the offices of the two secretaries were merged into a single office (Research and Engineering) and, in April, the first man to occupy the new position submitted his resignation. What are the causes that led up to these events? What are the dangers in having separate offices? In having a combined office?

One cause of these events has been the ever larger sums of money needed for developing the ever more formidable weapons. Some idea of present costs can be gained by extrapolation from figures that are no longer classified. Consider, for example, the cost of developing the different airframes (not including engines, fire control systems, and similar items) in the heavy bomber series: 1935, one prototype B-17, \$660,000; 1943, four prototype B-29 bombers, \$8.8 million; and 1952, two prototype intercontinental B-52 bombers, \$55.5 million.

A result of the greater expenditure for weapons has been that the current Research and Development fund of \$1.7 billion, which was reviewed by the Research and Development Office, has not proved enough. Consequently, the Department of Defense has turned to funds nominally allotted for other purposes, including, for example, \$3.5 billion from the Procurement and Production fund. This manner of financing, in turn, has raised the problem of who should review the development projects funded by this additional money, indeed, of who should review all development spending.

Clearly, both science and engineering judgments are needed. The problem is how to bring them together. With the earlier separate offices, one for Research and Development and one for Engineering, there was the danger that each office would offer its own reviews, that recommendations would conflict, and that conflicts would be resolved by a third party. There is evidence that in a number of cases this is just what happened, and that the role of mediator was played both by the Assistant Secretary of Defense (Controller) and by the Director of the Bureau of the Budget. To be sure, conflicts must be resolved, but it is by no means clear why fiscal judgments should be sought in the evaluation of development projects at this stage.

With the present single office for Research and Engineering, whatever the motivation for the union, one result may be to keep technical matters in technical hands. However, there is the new danger that instead of science and engineering judgments being rendered independently, one viewpoint may come to rule out the other. The first Assistant Secretary for the new office, Frank D. Newbury, formerly Assistant Secretary for Engineering, is not noted for his ability to get along with scientists. We hope that his successor—assuming Newbury's recent resignation is accepted—will have the orientation and ability necessary to achieve a proper balance between science and engineering.—J. T.