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Science Advice for the Executive Branch

President Ford has indicated that he will establish some kind of science advisory group in the Executive Branch. As yet the exact structure of the apparatus is uncertain, and scientists and engineers have made various proposals concerning it. Some of the suggestions have included establishment of a cabinet post, restoration of the earlier advisory system, creation of a council for science and technology, and formation of an office of research and engineering management.

In considering the advisory structure there are some general considerations that should be taken into account. For its part the scientific community should realize that the needs of the nation and the needs of the President take precedence over the needs of science. One of the major factors in the destruction of the earlier apparatus was that too many people, including scientists, perceived the President's science adviser as science's man in the White House. A second factor was the tendency of members of the President's Science Advisory Committee to criticize publicly the President's position in various matters.

For their part, too, the politicians need to have some sober thoughts. Many of the most pressing problems that this country faces and will encounter during the coming decades have substantial, crucial ingredients of science and technology. They are problems of a long-term nature that require planning and an understanding of technological limitations and opportunities.

But during the last decade, and especially the past 2 years, the decision-makers seem to have been chosen for their ignorance of technological matters. The country has been run by a combination of politicians, public relations types, management experts, and economists. Politicians are mainly drawn from the legal professions; they understand human nature and how to exploit public opinion. Public relations types are partial to the view that facts are not relevant; rather, what is important is what the public believes is true. Management experts consider that it is unnecessary to have deep knowledge about the matter they are deciding; they can get the facts from others. The record of economists during the past 2 years speaks for itself.

It would appear that the current level of decision-making might be improved if there were a slight infusion of some of the competences and values that many scientists and engineers share. We don't want to be the whole stew but we do suggest that a little sprinkling of the salt of facts and enduring values might be useful.

In establishing a new science apparatus, it would help if the planners considered thoughtfully the various functions that need to be filled and how they might be served. There should be an advocate or advocates of science, but they should be outside the White House. Presumably the function could be filled by the director and the board of the National Science Foundation. There should be a body, for example an office of research and engineering management (suggested by Edward E. David, Jr.), to evaluate and coordinate the research and development activities of government. This body should have a role in budgetary decisions. There should be a group responsible for long-term planning and capable of identifying the R&D efforts that should be sponsored now if needs a decade away are to be met. Finally, it would be desirable for the group of advisers surrounding the President to interact with one or more persons with broad scientific and technical backgrounds and administrative experience. In the past, the tendency has been to saddle one person with some or all of these functions. An attempt should be made to separate the functions and to bring into government some of the abundant talent that has lately gone unused.—PHILIP H. ABELSON