

Preface

In 1958, I joined the White House staff that was created to assist the President's Science Advisory Committee and Dr. James R. Killian, the newly appointed Special Assistant to the President for Science and Technology. In common with most significant innovations in government, the new office was imbued with a strong sense of experimentation, of moving into fresh areas of national policy interest, of establishing patterns and precedents that would govern the role of science in national affairs for many years to come.

No doubt our view of our impact on the government bureaucracy, to say nothing of the originality of our ideas, was exaggerated. Still, the scientific elements of major policy issues had never before been represented in peacetime at the Presidential level; thus the limits and the opportunities of what could be done were untested and potentially enormous. Some of the experience and results of what actually took place, as well as an evaluation of the office (now

the Office of Science and Technology) are presented in the pages following, but that is only an incidental purpose of this book.

For the nearly five years I served on the staff, working within the White House structure, with government departments and agencies, and with the scientific community at large, my major responsibility was a concern for many of the interactions between science and the nation's foreign affairs. During that period, which proved to be an exhilarating learning experience, it became apparent that the role of science in foreign affairs was both more significant and more subtle than was generally appreciated at the time either among scientists or among those in the foreign affairs community. Scientists tended to focus primarily on international scientific activities, to the neglect of the many other more direct interactions between science and foreign policy. Or else they became heavily involved in specific issues in military, disarmament, or similar areas and had little opportunity to generalize to other foreign policy interests. Nonscientists with foreign policy responsibility were all too often unaware of the relevance of scientific elements to their major concerns or thought of the role of the scientist or engineer as that of an expert to be called in from time to time to advise on narrowly defined questions.

These attitudes seemed to me to be deficient for what I believed to be the growing relevance of science and technology to many of the central areas of foreign policy; this deficiency could have serious consequences in the future. The idea of a book to lay out my conception of the relationship of science to foreign affairs and to evaluate existing policy machinery formed at

that time. The need for such an analysis was emphasized when I realized that there was astonishingly little in print that seemed to me to have the proper focus or the requisite quality. When M.I.T. offered an opportunity to come to Cambridge to write such a book and, at the same time, present some experimental courses in the subject, I decided to make the attempt.

M.I.T.'s science and public policy program in its Political Science Department offered a natural and, in fact, unsurpassed home for the necessary research and writing and also for experimenting with new courses. Professor Robert C. Wood, now on leave as Under Secretary of the Department of Housing and Urban Development in Washington but at that time engaged in launching the science and public policy program, invited me to the Institute and offered creative help, criticism, and encouragement throughout the work; quite clearly it would not have been accomplished, perhaps not even undertaken, without his support.

The Rockefeller Foundation, and especially Dr. George Harrar, provided the means to make my early stay possible. Dr. Harrar's personal interest was also instrumental in convincing me at the beginning that the task should be undertaken. In the later stages of the work, the Center for Space Research at M.I.T., funded by NASA, provided the necessary unfettered support. The willingness, and even enthusiasm, of the Space Agency and the M.I.T. Center to encourage social scientists to examine objectively relevant social and political issues is a hopeful sign for our future ability to cope with the implications of a rapidly advancing technology.

For my early exposure to the subject, and for continuing personal advice and inspiration, I have three remarkable men to thank: Dr. James R. Killian, Professor George Kistiakowsky, and M.I.T. Provost Jerome Wiesner, the first three of the President's Special Assistants for Science and Technology. I worked under all three in Washington and with them subsequently in Cambridge, and have enormous respect for their very different but unique competences. Their friendship is highly valued.

Many others, particularly on the President's Science Advisory Committee and in the Department of State, have contributed to this work—some knowingly, some unwittingly—some who will be in agreement with the ideas expressed, and some opposed. Not all can be credited, but I cannot fail to mention Dr. Detlev W. Bronk, who was chairman of the first PSAC Panel on Science and Foreign Affairs, and Dr. Jerrold Zacharias, with both of whom I worked on many different problems, not always in perfect agreement, but always with a high measure of excitement and originality. Also, several of my colleagues on the staff in the White House were instrumental in helping to develop my ideas, most notably David Z. Beckler, Spurgeon M. Keeny, David Z. Robinson, George W. Rathjens, and Robert N. Kreidler.

I want also to thank Mr. Howard J. Lewis of the National Academy of Sciences and my colleagues at M.I.T., William Kaufmann, Ithiel de Sola Pool, and Norman Padelford, who read and criticized early drafts of the manuscript. Judith Lang was responsible with high skill and good humor for the extensive typing and related work involved, and my wife and family

suffered without complaint the long hours at various stages of the work. But, of course, I am alone responsible for what is contained within.

EUGENE B. SKOLNIKOFF

Cambridge, Massachusetts
September 1966