

THE MATHEMATICS PROGRAM OF THE OFFICE OF NAVAL RESEARCH

The Mathematics Branch of the Office of Naval Research (ONR) has now been in operation for over a year. During that time support of mathematical research in the United States has been extended primarily to universities; and it seems appropriate to give to the members of the American Mathematical Society some account of the philosophy which has determined the mathematical research projects which ONR is sponsoring. The effectiveness of the program in strengthening mathematical research in the United States is largely dependent upon the cooperation of the mathematical community. This cooperation has been generously offered by many mathematicians during the past year; and it is hoped that the present account will inform a wider mathematical public of ONR's activities. It should perhaps be explained immediately that ONR has no statutory power to make grants, or award fellowships; so that all the activity which is here reported takes the form of contracts between the Navy and the university or other research institution.

The Office of Naval Research is committed primarily to the support of fundamental research in the sciences, as contrasted with development, or with applications of known scientific results—the types of activity in which scientists were largely engaged during the war. This is a basic policy decision which recognizes that the United States must be strong scientifically if it is to be strong militarily. It is natural, however, that the most obvious types of mathematical research which would seem to warrant Navy support would be research in applied directions such as those set forth in the recent report of the Society's Special Committee on Applied Mathematics.¹ And it is a fact that over 4/5 of the annual mathematics expenditure is in support of research in "applied mathematics," mathematical statistics, numerical analysis and computing devices. This last category includes a rather large expense for the construction of an electronic digital computer, and for the partial support of the National Applied Mathematics Laboratories which are currently being set up by the National Bureau of Standards. It includes also almost the entire support of the computing group formerly known as Mathematical Tables Proj-

¹ *Instruction and research in applied mathematics*, prepared by the Special Committee on Applied Mathematics and approved by the Council of the American Mathematical Society, Bull. Amer. Math. Soc. vol. 53 (1947) pp. 639-640.