# THE UNIVERSITY OF MICHIGAN RESEARCH INSTITUTE ANN ARBOR



APPLICATIONS OF SIGNAL DETECTABILITY THEORY TO PSYCHOPHYSICAL RESEARCH: A BIBLIOGRAPHY

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## APPLICATIONS OF SIGNAL DETECTABILITY THEORY TO PSYCHOPHYSICAL RESEARCH: A BIBLIOGRAPHY

#### 1. INTRODUCTION

The recent rapid growth of research in signal detectability theory has stimulated an increasing interest in this approach to the problems of psychophysics and human decision-making. A rough count as an index of research activity shows more bibliography entries for 1959 than for the five years, 1950-54 inclusive. The present bibliography is an attempt to bring together references to current research and theoretical efforts, mathematical foundations, and work in related areas. It was originally put together for the participants in a tutorial conference on signal detectability theory held in Tucson, Arizona, in January, 1960. It might be considered a quick catching of breath and a look over the shoulder, for the pace promises to quicken.

The bibliography is divided into four main sections. The first lists books, handbook chapters, and chapters in symposia which are concerned with detectability theory, and which are enclosed in hard covers. This is followed by the most important section which lists papers which have appeared in technical journals. These include theoretical as well as empirical contributions. Because of the importance of current work, references to abstracts of papers presented at professional

meetings are included in a third section. Many appear as later dated entries in the list of journal articles. The final section is devoted to technical reports and memoranda of limited circulation. A number of important papers are unfortunately available only in this form. Many of these can be obtained through the Armed Services Technical Information Agency.

An attempt was made to give complete coverage of psychophysical studies conducted within, or related to, the framework of signal detectability theory. Much of this research has its roots in a background of mathematical and statistical theory related to engineering problems in signal detection. Important and representative references to this background are included with no attempt at completeness.

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