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Report of BAMIRAC

**CUMULATIVE INDEX NO. 1**  
**to the**  
**AMRAC PROCEEDINGS**

**Volumes I-IV**

**Meetings of January 1960-MAY 1961**

Prepared for the  
Advanced Research Projects Agency  
as a part of  
Project DEFENDER



INFRARED LABORATORY

*Institute of Science and Technology*

THE UNIVERSITY OF MICHIGAN

September 1961

Contract SD-91

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Ann Arbor, Michigan

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## PREFACE

BAMIRAC, The Ballistic Missile Radiation Analysis Center, is a facility of The University of Michigan's Institute of Science and Technology supported under Contract SD-91, as a part of Project DEFENDER, by the Advanced Research Projects Agency, Department of Defense. Contract SD-91 is a follow-on of Contract AF 19(604)-7350.

BAMIRAC is intended to function as a center for all technical information which may be significant in any way in the formulation of defense measures against missile and space-vehicle systems. This information encompasses phenomenology, theory, and technology pertaining to the fundamental phenomena associated with ballistic missiles and space vehicles. BAMIRAC collects and processes information concerned with electromagnetic and acoustic radiation emanating from or caused by ICBM's or IRBM's during their entire trajectory from launch to impact. The information includes field measurements, laboratory studies, and theoretical studies, and is available at the BAMIRAC reference library for use by representatives from all organizations presenting a properly authorized request. BAMIRAC conducts analyses in which experimental and theoretical results are evaluated and examined for correlations. Some theoretical and experimental investigations are carried out, and the results are combined with the technical information obtained from outside sources. In its capacity as a technical information center, BAMIRAC disseminates information by such means as: abstracts, indexes, bibliographies; technical reports and journal articles; technical meetings; and the Proceedings of the Anti-Missile Research Advisory Council.

BAMIRAC is under the technical direction of the Infrared Laboratory. It draws also, however, upon the capabilities of the Computation Department of the Institute of Science and Technology, and upon those of the Aircraft Propulsion Laboratory of the Department of Aeronautical and Astronautical Engineering within The University of Michigan's College of Engineering.

This index was compiled by  
Frances Harvell  
under the supervision of  
Richard Jamron

## FOREWORD

The Proceedings of AMRAC (Anti-Missile Research Advisory Council) have been published by the Institute of Science and Technology of The University of Michigan through the efforts of BAMIRAC (Ballistic Missile Radiation Analysis Center), as a service to ARPA (Advanced Research Projects Agency) in connection with its Project DEFENDER. ARPA sponsors the AMRAC meetings through the Army Rocket and Guided Missile Agency. This latter organization has the prime responsibility for the technical and administrative matters relating to these meetings.

VOLUME I contains papers presented at a meeting of the Anti-Missile Research Advisory Council held at San Diego, California, on 19 and 20 January 1960. The purpose of the meeting was to present a semiannual report on current programs investigating the RF and Optical characteristics of ballistic missile flight.

VOLUME II contains papers presented at a meeting of the Council held at Seattle, Washington, on 21 and 22 July 1960. The purpose of the meeting was to present a semiannual report on current programs investigating the RF and Optical characteristics of ballistic missile flight.

VOLUME III contains papers presented at a meeting at Boston, Massachusetts, on 16, 17, and 18 November 1960. The primary objective of this meeting was the presentation of data on system-related topics.

VOLUME IV contains papers presented at a meeting held at Colorado Springs, Colorado, on 8, 9, and 10 May 1961. At this meeting a review of very recent data obtained from ARPA anti-missile research programs was presented.

This cumulative index has been prepared as a service to users of the Proceedings and will be supplemented as future volumes are published. Two listings are included, the first by author name and the second by name of contracting organization.





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**ABSTRACT**

This publication is a cumulative index, by authors and originating agencies, to the articles contained in the four published volumes of the Proceedings of AMRAC (Anti-Missile Research Advisory Council). It will be supplemented as future volumes of the Proceedings are published.



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## RADIATION LABORATORY

K. M. Siegel; "The University of Michigan Radiation Laboratory Research Effort on Passive Microwave Radiation and Scattering Matrices" (SECRET); Vol. I, p. 25.

## WESTINGHOUSE ELECTRIC CORPORATION

O. J. Jacomini; "Synthetic Spectrum Radar" (SECRET); Vol. II, p. 365.



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<p>AD Div 6/3 and 6/6</p> <p>Inst. of Science and Technology, U. of Mich., Ann Arbor CUMULATIVE INDEX NO. I TO THE AMRAC PROCEED- INGS, VOLUMES I-IV. Sep 61. 28 p.</p> <p>(Rept. no. 4613-1-X)      Unclassified report (Contract SD-91)</p> <p>This publication is a cumulative index, by author and originating agency, to the articles contained in the four published volumes of the <u>Proceedings of AMRAC</u> (Anti-Missile Research Advisory Council). It will be supplemented as future volumes of the <u>Proceedings</u> are published.</p>	<p>AD Div 6/3 and 6/6</p> <p>Inst. of Science and Technology, U. of Mich., Ann Arbor CUMULATIVE INDEX NO. I TO THE AMRAC PROCEED- INGS, VOLUMES I-IV. Sep 61. 28 p.</p> <p>(Rept. no. 4613-1-X)      Unclassified report (Contract SD-91)</p> <p>This publication is a cumulative index, by author and originating agency, to the articles contained in the four published volumes of the <u>Proceedings of AMRAC</u> (Anti-Missile Research Advisory Council). It will be supplemented as future volumes of the <u>Proceedings</u> are published.</p>	<p>UNCLASSIFIED</p> <p>I. Title: Advanced Research Projects Agency II. Project DEFENDER Title: III. Contract SD-91</p>	<p>UNCLASSIFIED</p> <p>I. Title: Advanced Research Projects Agency II. Project DEFENDER Title: III. Contract SD-91</p>
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Guided missile research  
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Optical detection  
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# AIIM SCANNER TEST CHART # 2

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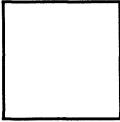
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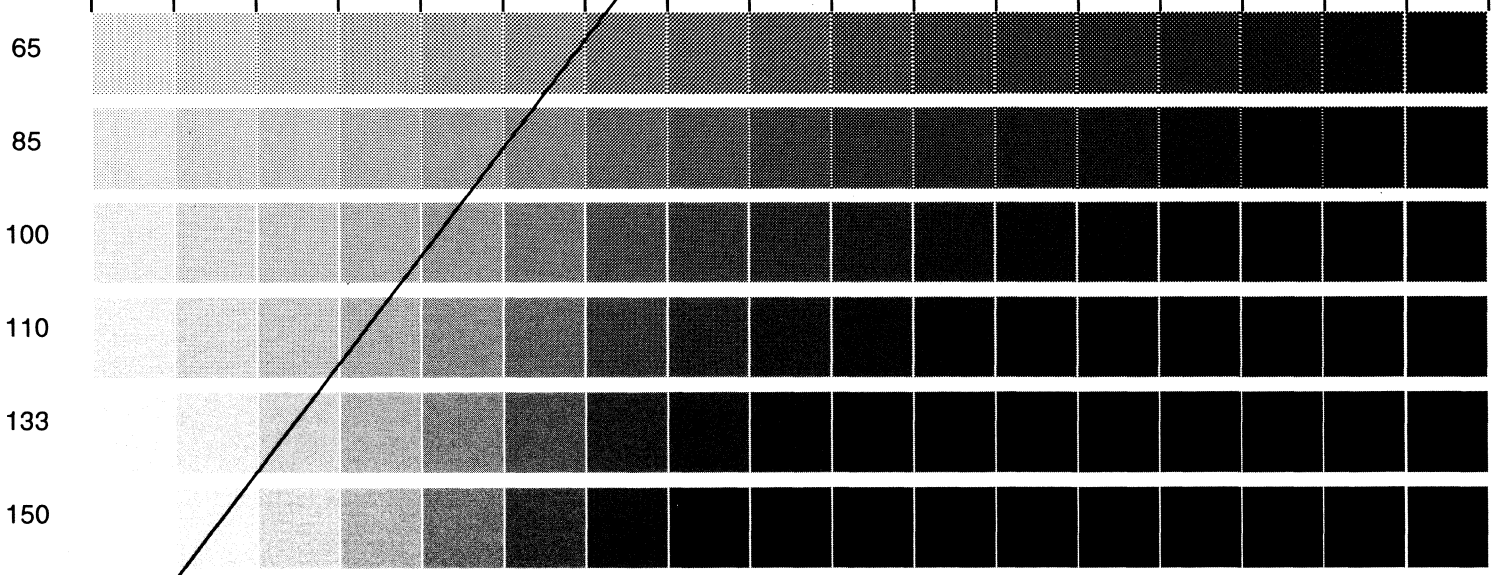
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