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<table>
<thead>
<tr>
<th>Role</th>
<th>Name and Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Chairman</td>
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</tr>
<tr>
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</tr>
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</tr>
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</tr>
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</tr>
<tr>
<td>Publications</td>
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</tr>
<tr>
<td>Hotel Arrangements</td>
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</tr>
<tr>
<td>Public Relations</td>
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</tr>
<tr>
<td>Finance</td>
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</tr>
<tr>
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</tr>
<tr>
<td>Exhibits</td>
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</tr>
<tr>
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</tr>
<tr>
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</tr>
<tr>
<td>Public Relations Consultant</td>
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</tr>
<tr>
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</tr>
</tbody>
</table>
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FOREWORD

The technical papers included in these Proceedings represent all the technical presentations made at the Western Joint Computer Conference. In addition, there is included a message from the Chairman of the National Joint Computer Committee, Dr. Morris Rubinooff. We are proud of the excellent contributions recorded here, so many of which directly support the 1961 WJCC theme “Extending Man's Intellect.” Also, we are happy that we have been able to make these Proceedings available at the time of the Conference, thus enhancing the benefits of the Conference to registrants and making available the information in a timely manner.

It should be recognized, however, that the papers presented herein have not been selected by the usual procedures wherein a paper is refereed as to its appropriateness and edited for its content. Neither the NJCC nor the WJCC Committee can take responsibility for the accuracy of the facts or opinions expressed. We are confident, however, that the overwhelming majority of the papers presented here are responsible in all ways. Many papers were called but few were chosen; we are happy to record them here for the continuing advance and lasting annals of information processing technology.

WALTER F. BAUER
General Chairman
1961 Western Joint Computer Conference
MESSAGE FROM NJCC CHAIRMAN

This is an historic occasion. The close of this 1961 Western Joint Computer Conference will signal the change-over in administration of Joint Computer Conferences from the National Joint Computer Committee to the American Federation of Information Processing Societies (AFIPS), with broader scope and greater flexibility. As you know, AFIPS is a society of societies organized to represent through a single body the professional societies of the American computer and data processing world. The enthusiastic response to the formation of AFIPS is highly gratifying and lends encouragement, confidence and a sense of mission to those whom you have charged with conducting its activities.

There are times when the path to the future is best appreciated through a re-examination of the past. I would like to quote from a letter dated December 15, 1959, written by the late Chairman of NJCC, Professor Harry Goode, who contributed so much both to NJCC and to the birth of AFIPS:

"I believe the major objective in the formation of the society is to provide for information flow in all other instances than those provided for by the individual societies to their members.

"There are four types of such flow:

(1) Information flow between members of information processing societies nationally.

(2) Information flow between our national information processing society and foreign information processing societies.

(3) Information flow between societies in the information processing profession and other professions.

(4) Information flow from the information processing societies to the general and educational public.

"If we can recognize a firm set of objectives such as these (which of course need to be rewritten into a proper set of words), then what the society is to do is relatively clear-cut.

"The functions follow immediately from the objectives:

(1) Act as the American representative body on matters related to computing application and design, in a broad area of computational and information processing sciences.

(2) Advance the field by stimulating research into new aspects of computer sciences emphasizing the cross-pollination of ideas among member societies.

(3) Prepare, publish, and disseminate information of a tutorial nature to laymen, high school teachers and students, government offices and officials, etc.

(4) Maintain relations among American and foreign technical societies through conferences and symposia, cooperation with other societies in organizing sessions at their conferences, provide reference material to other societies on the computational sciences.

(5) Maintain membership in the International Federation of Information Processing Societies (IFIPS).

(6) Aid in certain actions of member societies involving participation and cooperation by more than one society.

(7) Sponsor the JCC's."

The Constitution of AFIPS reflects these views in their entirety. With your frequently demonstrated cooperation and support, the Board of Governors of AFIPS will continue to conduct our successful Joint Computer Conferences and to represent the United States in our International Federation, IFIPS. As new societies join the Federation, it will gradually provide the hoped-for broad representation of the American information processing profession. We will seek to establish AFIPS as the information center on data processing including not only bibliographies of written material, but also a calendar of events of computer activities in the United States and throughout the world, a roster of individuals active in information processing, and a current file of developments in progress or recently consummated. We plan to establish a speakers' bureau to carry information on the information processing field to educational institutions and professional societies. We plan to establish a public information committee which, through the media of personal contacts, press releases and tutorial articles, will make available to laymen, to government agencies, to affiliated and member societies and to the profession as a whole, the present status and the probable future of information processing in the United States.

I trust that with your continued cooperation and support our efforts will meet with a long string of successes.

Respectfully submitted,

Morris Rubinoff, Chairman
National Joint Computer Committee
# TABLE OF CONTENTS

## DIGITAL SIMULATION

1.1 “Simulation: A Survey” by H. H. Harman, System Development Corp. ........................................................ 1

1.2 “Management Games and Computers” by J. M. Kibbee, Remington Rand UNIVAC .................. 11

1.3 “An On-Line Management System Using English Language” by A. Vazsonyi, Ramo-Wooldridge...... 17

1.4 “Application of Digital Simulation Techniques to Highway Design Problems” by A. Glickstein,
     S. L. Levy, Midwest Research Institute ................................................................. 39

1.5 “The Use of Manned Simulation in the Design of an Operational Control System” by M. A. Geisler,
     W. A. Steger, The RAND Corp. ................................................................................. 51

## MICROSYSTEM ELECTRONICS

2.1 “A Survey of Microsystem Electronics” by Peter B. Meyers, Semiconductor Products Division of
     Motorola, Inc ............................................................................................................ 63

2.2 “Testing of Micrologic Elements” by R. Anderson, Fairchild Semiconductor Corp .................. 75

2.3 “Interconnection Techniques for Semiconductor Networks” by J. S. Kilby, Texas Instruments, Inc.. 87

2.4 “Microsystem Computer Techniques” by E. Luedicke, A. Medwin, Radio Corporation of America 95

## MODELING HUMAN MENTAL PROCESSES

3.1 “Modeling Human Mental Processes” by H. A. Simon, Carnegie Institute of Technology .......... 111

3.2 “The Simulation of Verbal Learning Behavior” by E. Feigenbaum, University of California ....... 121

3.3 “Simulation of Behavior in the Binary Choice Experiment” by J. Feldman, University of California 133

3.4 “Programming a Model of Human Concept Formulation” by C. I. Hovland, E. B. Hunt, Yale University 145

## RECENT ADVANCES IN COMPUTER CIRCUITS

4.1 “Parallelism in Computer Organization Random Number Generation in the Fixed Plus Variable Computer
     System” by M. Aoki, G. Estrin, University of California, T. Tang, National Cash Register Co .......... 157

4.2 “The CELLSCAN System—a Leucocyte Pattern Analyzer” by Kendall Preston, Jr., Perkin-Elmer Corp .. 173

4.3 “Application of Computers to Circuit Design for UNIVAC LARC” by G. Kaskey, N. S. Prywes,
     H. Lukoff, Remington Rand UNIVAC ........................................................................ 185

4.4 “Wide Temperature Range Coincident Current Core Memories” by R. S. Weisz, N. Rosenberg, Ampex
     Computer Products Co. .............................................................................................. 207

## PROBLEM SOLVING AND LEARNING MACHINES

5.1 “Descriptive Languages and Problem Solving” by Marvin Minsky, Massachusetts Institute of Technology 215

5.2 “Baseball: An Automatic Question-Answerer” by Bert F. Green, Jr., Alice K. Wolf, Carol Chomsky,
     Kenneth Lauthery, Massachusetts Institute of Technology ........................................ 219

5.3 “A Basis for a Mathematical Theory of Computation” by John McCarthy, Massachusetts Institute
     of Technology ........................................................................................................... 225

## INFORMATION RETRIEVAL

6.1 “Information Retrieval: State of the Art” by Don R. Swanson, Ramo-Wooldridge ......................... 239

6.2 “Technical Information Flow Pattern” by M. M. Kessler, Massachusetts Institute of Technology ... 247

6.3 “A Screening Method for Large Information Retrieval Systems” by Robert T. Moore, Princeton University 259

## AUTOMATA THEORY AND NEURAL MODELS

7.1 “What Is an Intelligent Machine?” by W. Ross Asby, University of Illinois ................................. 275

7.2 “Analysis of Perceptrons” by H. D. Block, Cornell University ..................................................... 281

7.3 “Physiology of Automata” by Murray L. Babcock, University of Illinois .................................... 291
### TABLE OF CONTENTS, continued

#### NEW HYBRID ANALOG-DIGITAL TECHNIQUES

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Authors/Institutions</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.1</td>
<td>“Combined Analog-Digital Computing Elements”</td>
<td>Hermann Schmid, Link Division, General Precision, Inc.</td>
<td>299</td>
</tr>
<tr>
<td>8.2</td>
<td>“Optimization of Analog Computer Linear System Dynamic Characteristics”</td>
<td>C. H. Single, E. M. Billington, Beckman Instruments, Inc.</td>
<td>315</td>
</tr>
<tr>
<td>8.3</td>
<td>“Design and Development of a Sampled-Data Simulator”</td>
<td>J. E. Reich, J. J. Perez, Space Technology Laboratories, Inc.</td>
<td>341</td>
</tr>
<tr>
<td>8.4</td>
<td>“Digital Clock Delay Generators and Run Counter for a Repetitive Analog Computer”</td>
<td>T. Brubaker, H. Eckes, University of Arizona</td>
<td>353</td>
</tr>
</tbody>
</table>

#### LARGE COMPUTER SYSTEMS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Authors/Institutions</th>
<th>Page</th>
</tr>
</thead>
</table>

#### AUTOMATIC PROGRAMMING

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Authors/Institutions</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.2</td>
<td>“A First Version of UNCOL”</td>
<td>T. B. Steel, Jr., System Development Corporation</td>
<td>371</td>
</tr>
<tr>
<td>10.3</td>
<td>“A Method of Combining ALGOL and COBOL”</td>
<td>J. E. Semmet, Sylvania Electric Products</td>
<td>379</td>
</tr>
<tr>
<td>10.4</td>
<td>“ALGY—An Algebraic Manipulation Program”</td>
<td>M. D. Bernick, E. D. Callender, J. R. Sanford, Philco Corporation</td>
<td>389</td>
</tr>
<tr>
<td>10.5</td>
<td>“A New Approach to the Functional Design of a Digital Computer”</td>
<td>R. S. Barton, Computer Consultant</td>
<td>393</td>
</tr>
<tr>
<td>10.6</td>
<td>“The JOVIAL Checker”</td>
<td>M. Wilkerson, System Development Corporation</td>
<td>397</td>
</tr>
</tbody>
</table>

#### MEMORY DEVICES AND COMPONENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Authors/Institutions</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.1</td>
<td>“Factors Affecting Choice of Memory Elements”</td>
<td>Claude F. King, Logicon, Inc.</td>
<td>405</td>
</tr>
<tr>
<td>11.2</td>
<td>“A Nondestructive Readout Film Memory”</td>
<td>R. J. Petschauer, R. D. Turnquist, Remington Rand UNIVAC</td>
<td>411</td>
</tr>
<tr>
<td>11.3</td>
<td>“Tunnel Diode Storage Using Current Sensing”</td>
<td>E. R. Beck, D. A. Savitt, A. E. Whiteside, Bendix Corp.</td>
<td>427</td>
</tr>
<tr>
<td>11.4</td>
<td>“The Development of a New Nondestructive Memory Element”</td>
<td>A. W. Vinal, Federal Systems-IBM</td>
<td>443</td>
</tr>
<tr>
<td>11.5</td>
<td>“High-Speed Optical Computers and Quantum Transition Memory Devices”</td>
<td>L. C. Clapp, Sylvania Electronic Systems</td>
<td>475</td>
</tr>
</tbody>
</table>

#### APPLIED ANALOG TECHNIQUES

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Authors/Institutions</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.2</td>
<td>“The Spectral Evaluation of Iterative Differential Analyzer Integration Techniques”</td>
<td>M. Gilliland, Beckman Instruments</td>
<td>507</td>
</tr>
</tbody>
</table>

#### PATTERN RECOGNITION

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Authors/Institutions</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.2</td>
<td>“A Pattern Recognition Program that Generates, Evaluates and Adjusts its Own Operators”</td>
<td>L. Uhr, University of Michigan, C. Vossler, System Development Corp.</td>
<td>555</td>
</tr>
<tr>
<td>13.3</td>
<td>“An Experimental Program for the Selection of Disjunctive ‘Hypotheses’”</td>
<td>M. Kochen, IBM Corp.</td>
<td>571</td>
</tr>
<tr>
<td>13.4</td>
<td>“Time-Analysis of Logical Processes in Man”</td>
<td>U. Neisser, Brandeis University</td>
<td>579</td>
</tr>
</tbody>
</table>
### TABLE OF CONTENTS, continued

#### COMPUTERS IN CONTROL

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Author(s)</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1</td>
<td>“Computer-Based Management Control”</td>
<td>A. J. Rowe, Hughes Aircraft Co.</td>
<td>587</td>
</tr>
<tr>
<td>14.3</td>
<td>“Real-Time Management Control at Hughes Aircraft”</td>
<td>D. R. Pardee, Hughes Aircraft Co.</td>
<td>603</td>
</tr>
<tr>
<td>14.4</td>
<td>“The 465L (SACCS) Computer Application”</td>
<td>P. D. Hildebrandt, System Development Corp.</td>
<td>609</td>
</tr>
</tbody>
</table>

#### THE “HUMAN” SIDE OF ANALOG SYSTEMS

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Author(s)</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.1</td>
<td>“The Computer Simulation of a Colonial, Socio-Economic Society”</td>
<td>W. D. Howard, General Motors Corp.</td>
<td>613</td>
</tr>
<tr>
<td>15.3</td>
<td>“Analog-Digital Hybrid Computers in Simulation with Humans and Hardware”</td>
<td>O. F. Thomas, Simulation and Computer Center, U.S. Naval Ordnance Test Station</td>
<td>639</td>
</tr>
</tbody>
</table>

#### LIST OF EXHIBITORS

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Author(s)</th>
<th>Page</th>
</tr>
</thead>
</table>