

DIVISION 6 - LINCOLN LABORATORY
 MASSACHUSETTS INSTITUTE OF TECHNOLOGY
 LEXINGTON 73, MASSACHUSETTS

Compilation of R Series Memoranda in Division 6 Document Room,
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<u>No.6R</u>	<u>Title</u>	<u>Date</u>	<u>Author</u>	<u>Cls.</u>
<p>R Reports 1-89 are from the Servomechanisms Laboratory. Only the Document Room Master File of these Ditto copies is available. They deal mainly with problems of component evaluation. Since most of this material is now available elsewhere (as in the Radiation Laboratory's "Components Handbook 1949" with up-to-date component characteristics from the Standard's Office) we are treating these documents as out of print and obsolescent.</p>				
*R-90-1	The Binary System of Numbers	2-29-52	M. Mamm	U
R-91	CANCELLED			
R-92	Cambridge Thermionic Company Coil Forms, Inductance-Tuned	2-1-46	H. C. Lang	U
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R-100	Method of Cock-pit Mounting and Actuation Mechanism	3-4-45	J. B. Swett	U
R-101	Low-Frequency Computer Demon- strator	7-26-46	J. J. O'Brien	U

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R-102	CANCELLED			
R-103	Discussion of Functions in Aircraft Equations of R-64-1, and R-98, by Aerodynamics Group	7-25-46	H. Fahnestock	U
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R-107	Photo-tube Matrix for Conversion of Stored Data to Video Signals	11-26-46	J. O. Ely	U
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*R-109	Gate Circuits	12-17-46	D. H. Brown	U
R-110	Electrostatic Storage Tubes	1-13-47	J. W. Forrester	U
R-111	Overload and Temperature Test on Sylvania IN34 Germanium-Crystal Diodes	1-22-47	R. L. Ellis	U
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R-115	Electronic Digital Computer Development at M.I.T.	2-17-47	J. W. Forrester	U
R-116	Electronic Digital Computers	3-3-47	J. W. Forrester	U
R-117	Characteristics of Littelfuse, No. 21107, and General Electric NE-51, Neon Lamps	1-1-47	R. L. Ellis	U
R-118	Static Characteristics of RCA 6AG7 Vacuum Tubes	2-18-47	C. W. LeBlanc	U
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*R-120	Deflection Circuits for Electrostatic Storage Tubes	11-7-47	J. O. Ely	U
R-121	Driver for Digit Transfer Bus	5-9-47	G. G. Hoberg	U
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R-125	Flight Simulation, Discussion of	7-29-47	C. R. Wieser	U
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R-132	Storage Tube Secondary Electron Control with a Magnetic Field	10-16-47	J. R. MacDonald	U
R-133	Timing of Whirlwind I	12-15-47	E. I. Blumenthal G. G. Hoberg	C
R-134	Five-Digit Multiplier	12-3-48	N. H. Taylor	U
R-135	History of Secondary Emission	3-30-48	H. L. Heydt	U
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*R-137	Life-Testing of Surfaces Suitable for Electrostatic Storage Tubes	5-7-48	H. L. Heydt	U

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*R-145	The Register Panel (A-C Coupled)	12-7-48	R. R. Rathbone	U	
*R-146	The Coder	5-25-49	R. R. Rathbone	U	
R-147	The Pulse Standardizer	4-11-49	R. R. Rathbone	U	
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R-151	The Gate Panel	8-17-49	R. R. Rathbone	U	
*R-152	Binary Counter Application of the Whirlwind Flip-Flop	10-20-48	H. Kenosian	U	
*R-153	Electrostatic Storage Tubes for Digital Computers and Other Information-Processing Systems	1-26-49	J. W. Forrester	U	
R-154	Outlook for Electronic Digital Computers-The Scope of the Engineering Involved	2-16-49	J. W. Forrester	U	

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R-155	Application of Digital Computers to Simulation of the Anti-Submarine Problem	3-30-49	R. A. Nelson R. R. Everett J. W. Forrester	C
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R-159	High-Speed Pulse Recording on Magnetic Tape	4-6-49	E. S. Rich	U
*R-160	Performance of A 1024 - Position Deflection-Voltage Generator	4-18-49	J. O. Ely	U
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R-162	Trouble Location in a Large-Scale Electronic Digital Computer	4-12-49	G. C. Sumner	U
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R-164	Video Amplifier and Cathode-Follower Probe	6-8-49	R. L. Massard R. R. Rathbone	U
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R-167	A Low-Speed Analogue for Analysis of Flip-Flops	6-8-49	J. M. Hunt	U
R-168	A Dual-Triode Capacitively-Coupled Flip-Flop	6-15-49	M. H. Hayes	U
*R-169	The Solution of Power-Network Problems on Large-Scale Digital Computers	6-29-49	P. Fox	U
R-170	Analysis and Design of Sampled-Data Control Systems	6-30-49	W. K. Linvill	U

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R-171	The Register Panel (D-C Coupled)	7-25-49	H. Kenosian R. R. Rathbone	U
R-172	The Study of Non-Linear Servomechanisms with the Aid of an Automatic Digital Computer	9-26-49	J. E. Pierson	U
*R-173-2	List of Laboratory Reports of Current Interest	9-25-51	J. N. Ulman	U
R-174	Mosaic Characteristics of the MIT Storage Tube	1-23-50	C. L. Corderman	U
*R-175	Measurements on Electron Beams in Storage Tubes	3-15-50	J. H. McCusker	U
R-176	Devices for Conversion between Analog Quantities and Binary Pulse-Coded Numbers	3-15-50	A. K. Susskind R. L. Sisson	U
R-177	A Method of Test Checking an Electronic Digital Computer	3-15-50	G. Cooper	U
*R-178	Marginal Checking as an Aid to computer Reliability	3-28-50	N. H. Taylor	U
R-179	Vacuum Tube Life Experience	6-29-50	H. B. Frost	U
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R-181	Digital Computers in Control Systems	4-27-50	C. R. Wieser	U
R-182	New Developments in Pulsed Circuit Test Equipment	4-27-50	R. R. Rathbone	U
R-183	M.I.T. Electrostatic Storage Tube	4-27-50	H. Klemperer S. H. Dodd P. Youtz	U
*R-184	Computer Experience in Extending Tube Life	4-27-50	E. S. Rich	U
*R-185	Marginal Checking: Preventive Maintenance for Electronic Equipment	4-27-50	G. C. Sumner	U
R-186	An Investigation of the Possibilities for Improving Pentode-Gate-Tube Circuits	4-26-50	C. A. Rowland	U

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R-188	Air Traffic Control	6-8-50	D. R. Israel	U
*R-189	Error Correction in Orbital Flight	6-13-50	A. Orden	U
R-190	Study of Automatic Control by Digital Computers	7-17-50	T. J. Christman, Lieut. U. S. Navy	C
R-191	Study of a System for Following a Flight Progress Schedule	8-1-50	W. K. Linvill	U
*R-192	A Coincident-Current Magnetic Memory Unit	9-8-50	W. N. Papiian	U
R-193	Selected Descriptive Material Whirlwind I Computer(2 Volumes)	11-10-50	C.W. Adams	U
*R-194	Experience with Receiving-Type Vacuum Tubes on the Whirlwind Computer Project	1-8-51	E. S. Rich	U
*R-195	Initial Testing of a Computer Electrostatic Storage System	4-23-51	R. W. Read	U
*R-196	Programming for Whirlwind I	6-11-51	H. Saxenian	U
R-197	The Gate and Delay Unit (Model 2)	9-1-51	R. L. Best R. R. Rathbone	U
*R-198	A Study of the Holding Beam in the M.I.T. Electrostatic Storage Tube	9-10-51	J. O. Ely	U
*R-199-1	The Digital Computer Laboratory of the Massachusetts Institute of Technology	10-1-53	J. W. Forrester	U
R-200	Electronic Digital Machines for High-Speed Information Searching	8-24-51	P. R. Bagley	U
*R-201	Applications and Procedures for the Whirlwind I Computer	11-1-51	C. W. Adams	U
R-202	National Selection of Vacuum Tube Types for Computer Applications	12-12-51	H. B. Frost	U

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*R-203	The Application of a High-Speed Digital Computer to the Present-Day Air Traffic Control System	1-15-52	D. R. Israel	U
*R-204	A Head for Static Reading of Magnetic Recordings	1-15-52	D. H. A. Hageman	U
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R-207	The Use of a Transconductance Bridge in the Measurement of a Cathode Interface Impedance	3-13-52	H. B. Frost	U
*R-208	The Digital Computer as a Control Element	4-2-52	C. R. Wieser	U
R-209	Whirlwind I -- A High-Speed Electronic Digital Computer	5-14-52		U
R-210	Computer Program Synthesis Based on Statistical Communication Theory	9-8-52	A. Katz	U
*R-211	A Magnetic Matrix Switch and Its Incorporation into a Coincident-Current Memory	6-6-52	K. H. Olsen	U
R-212	Ferroelectrics for Digital Information Storage and Switching	6-5-52	D. A. Buck	U
R-213	Excerpts on the Difference Engines of Fehr Georg Scheutz and Edvard Scheutz	6-15-52	R. R. Rathbone	U
*R-214	A High-Speed Counter Employing Transistors	7-15-52	J. F. Jacobs	U
*R-215	Standard Test Equipment	9-1-52	R. L. Best W. G. Drogue R. R. Rathbone L. Sutro	U
R-216	The 16 x 16 Metallic-Core Memory Array, Model I	9-25-52	B. Widrowitz	U
*R-217	Design of Low-Power Pulse Transformers Using Ferrite Cores	11-3-52	R. D. Robinson	U

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*R-218	The Applications of "L" Cathodes to Electron Guns	3-5-53	T. S. Greenwood	U
*R-219	Electronic Selection and Control of Read-Record Heads of Magnetic-Tape Units	12-15-52	J. A. O'Brien	U
*R-220	Analysis and Design of a Digital-to-Analog Decoder	12-1-52	R. L. Walquist	U
*R-221	Whirlwind I Design Logic	4-1-53	M. Mann R. Rathbone J. Bennett	U
*R-222	Design of Sampled-Data Systems by Extension of Conventional Techniques	7-3-53	R. Sittler W. Linvill	U
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R-231	Contract N5ori-06002: Work through June, 1951	7-1-51	J. Dodd R. Nelson A. Katz	C
R-232	Information Sorting in the Application of Electronic Digital Computers to Business Operations	5-24-54	H. H. Seward	U
*R-233	The M.I.T. Systems of Automatic Coding: Comprehensive, Summer Session, and Algebraic	7-12-54	C. W. Adams	U

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*R-235	Multi-Coordinate Selection Systems for Magnetic-Core Storage	8- -54	R. S. DiNolfo	U
*R-236	Magnetostriction in Ferrites Possessing a Square Hysteresis Loop	1-17-54	P. K. Baltzer	U

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