

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

Compilation of E Series Memoranda in Division 6 Document
 Room, Building O-129.

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| E-231 | Purpose and Operation of Research Tube RT51 | 4-28-49 | H. Rowe | U |

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| E-232 | Results of Tests on RT47, RT47-1 and RT50, Beam Analyzer Tubes | 5-2-49 | J. McCusker | U |
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| E-236 | Storage Tube ST87: Construction, Processing and Initial Testing | 5-3-49 | M. Florencourt | U |
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| E-244 | Storage Tube ST93: Construction, Processing and Initial Testing | 5-19-49 | M. Florencourt | U |
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| E-248 | A Low-Speed Analogue for Analysis of Flip-Flops (Abstract of R-167) MS Thesis Report | 6-22-49 | J. Hunt | U |
| E-249 | Deposit of Film in the Glass Necks of Storage Tubes | 6-10-49 | W. Pickett | U |
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| E-254 | Analysis and Design of Sampled-Data Control Systems (Abstract of R-170) A Doctorate Thesis Report | 6-23-49 | W. Linvill | U |
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| E-263 | Modification of 2:1-4:1 Binary Frequency Divider | 7-25-49 | H. Kenosian | U |

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| E-277 | Storage Tube ST109 and 110: Construction, Processing and Initial Testing | 8-11-49 | M. Florencourt | U |
| E-278 | Equipment for Special Display | 8-11-49 | E. Rich | U |
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| E-280 | Storage Tube ST103: Construction, Processing and Initial Testing | 8-19-49 | M. Florencourt | U |

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| E-284 | High Velocity Electron Gun--- Assembly A-160 | 8-30-49 | G. Kaplan | U |
| E-285 | Electron Adding Gun HG3-2 -- Assembly A-150 | 8-29-49 | G. Kaplan | U |
| E-286 | Investigation of the Stabilizing Curve of the Storage tube with the High-Speed, Write-Read Unit | 8-29-49 | N. Zimbel J. Rochefort | U |
| E-287 | Methods of Cutting Mica | 8-31-49 | I. Paulsen | U |
| E-288 | Signal Plate Driver | 9-2-49 | G. Hoberg | U |
| E-289 | Gun Driver | 9-2-49 | G. Hoberg | U |
| E-290 | A Built-In Monitor System for WWI Electrostatic Storage Circuits | 9-2-49 | G. Hoberg | U |
| E-291 | Storage Registers for WWI | 9-14-49 | R. Everett S. Dodd | U |
| E-292 | Storage Tube ST113 and ST115: Construction, Processing and Initial Testing | 9-12-49 | M. Florencourt | U |
| E-293 | Standard Test Equipment: Evalua- tion | 9-22-49 | H. Kenosian | U |
| E-294 | Read-Gate Generator and Holding- Gate Generator | 9-2-49 | G. Hoberg | U |
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| E-298 | Test Program Number IV, Counting in AC | 10-13-49 | C. Adams | U |

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| E-299 | Test Program Number V, Shifting in AC | 10-13-49 | C. Adams | U |
| E-300 | Display Program Number I: Family of Parabolas and Powers of X | 10-17-49 | G. Cooper | U |
| E-301 | Notes on Making Tungsten Springs | 9-28-49 | I. Paulsen | U |
| E-302 | Storage Tube Deflection Pattern | 10-5-49 | C. Adams | U |
| E-303 | Voltage Calibrator | 9-9-49 | H. Kenosian | U |
| E-304 | Display Program Number II: Second Order Differential Equation | 10-25-49 | G. Cooper | U |
| E-305 | Results of Tests on RT59 | 10-19-49 | H. Rowe | U |
| E-306 | Basing Procedure | 10-21-49 | R. Angus | U |
| E-307 | Development of Storage Tube Circuits | 10-27-49 | S. Dodd | U |
| E-308 | Temporary Deactivation of Storage Tube Cathodes under Stand-by Conditions | 10-31-49 | Storage Tube Group Compiled by H. Klemperer | U |
| E-309 | Initial Testing and Reconstruction of ST114 and ST114-R1 | 10-26-49 | M. Florencourt | U |
| E-310 | Automatic Control Box for TV Demonstrator | 10-31-49 | M. Florencourt | U |
| E-311 | The Study of Non-Linear Servomechanisms with the Aid of an Automatic Digital Computer | 11-28-49 | S. Pierson | U |
| E-312 | Calibration of Vacuum Measurements in Storage Tubes | 12-2-49 | H. Rowe | U |
| E-313 | Temporary Operation of Switch Check: and Test Program Number VI Switch Check | 12-2-49 | C. Adams | U |
| E-314 | Display Program Number III -- Target-Seeking Simulation | 12-8-49 | C. Adams | U |
| E-315 | Test Results on RT66 and RT 91 | 12-12-49 | H. Rowe | U |
| E-316 | The Significance of a Shorter Beam-Length for the Whirlwind Storage Tube -- Part I: Experimental Results with RT64 | 12-21-49 | H. Klemperer H. Rowe | U |

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| E-317 | Flip-Flop Balance Checking in WWI | 2-23-50 | G. Sumner | U |
| E-318 | Tests on 3J1 Cathode Ray Tube | 12-30-49 | H. Rowe | U |
| E-319 | The Significance of a Shorter Beam Length for the Whirlwind Storage Tube - - Part II: Fundamental Limitations on Spot Size and Current Density | 1-3-50 | H. Klemperer | U |
| E-320 | Display Program Number IV: Non-Homogeneous Second Order Differential Equation | 1-30-50 | C. Adams | U |
| E-321 | Storage of Pulse-Coded Information (Abstract of MS Thesis Report) | 1-10-50 | A. Lephakis | U |
| E-322 | Tests on ST110 | 1-18-50 | R. Sisson | U |
| E-323 | Standard Operating Conditions for 100-Series Whirlwind Electrostatic Storage Tubes | 1-19-50 | S. Dodd R. Everett | U |
| E-324 | Characterics of 5UP and 7 GP Electron Guns | 1-24-50 | H. Rowe | U |
| E-325 | Mosaic Characteristics of the MIT Storage Tube | 1-26-50 | C. Corderman | U |
| E-326 | Power Distribution, Variable-Voltage Circuits, WWI | 1-25-50 | H. Lee | U |
| E-327 | Standard Tests for Storage Tubes, Second Revision | 1-25-50 | M. Florencourt | U |
| E-328 | Pulse Transformers and Interstage Coupling in Whirlwind I | 1-31-50 | C. Rowland | U |
| E-329 | Techniques for Using Standard Automatic Subroutines | 2-10-50 | C. Adams | U |
| E-330 | Single Doppler Station | 2-27-50 | P. Franklin | C |
| E-331 | Doppler Stations | 3-2-50 | P. Franklin | C |
| E-332 | Forming End-of-Block Spaces on Film in Normal Operation | 3-21-50 | C. Adams R. Mayer | U |
| E-333 | Whirlwind I Order Code as of March, 1950 | 3-24-50 | C. Adams | U |

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| E-334 | Doppler Station | 3-22-50 | P. Franklin | C |
| E-335 | Operation of the WWI Storage Tube Power Supply Control System | 3-22-50 | G. Watt | U |
| E-336 | Secondary Emission from Beryllium Surfaces at low Incident Electron Energies (Abstract of MS Thesis Report) | 4-3-50 | H. Rowe | U |
| E-337 | Accelerated Life Test for Cathode Interface in Receiving Type Tubes (A paper presented at the M.I.T. Conference on Physical Electronics March 30, 1950.) | 4-3-50 | E. Rich | U |
| E-338 | Test Results of L9B and F8B Productions of 7AD7 Tubes | 4-11-50 | H. Frost | U |
| E-339 | Single Doppler Station | 4-7-50 | P. Franklin | C |
| E-340 | Current Density Distribution and Spot Diameter in Cathode Ray Beam | 4-17-50 | A. Tanguay H. Rowe | U |
| E-341 | Single Doppler Station | 4-18-50 | P. Franklin | C |
| E-342 | An Investigation of the Possibilities for Improving Pentode-Gate-Tube Circuits (Abstract of MS Thesis Report) | 4-26-50 | C. Rowland | U |
| E-343 | Computer Input-Tape Preparation | 5-25-50 | F. Foss | U |
| E-344 | A Method of Test Checking an Electronic Digital Computer (Abstract of MS Thesis Report) | 6-1-50 | G. Cooper | U |
| E-345 | The Transition Region between Negative and Positive Regions on Storage Tube Surfaces | 6-15-50 | H. Rowe | U |
| E-346 | Measurements on Electron Beams in Storage Tubes (Summary of R-175 A MS Thesis Report) | 6-6-50 | J. McCusker | U |
| E-347 | CANCELLED | | | |
| E-348 | Winding Tungsten Springs -- SA-33325 | 6-9-50 | I. Paulsen | U |

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| E-351 | Winding Tungsten Heaters -- SB-40170 | | I. Paulsen | U |
| E-352 | Compensation of Deflection De- focusing in Storage Tubes | 6-15-50 | H. Klemperer | U |
| E-353 | Signal-Plate Assembly for ST25 | 4-13-48 | R. Shaw | U |
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| E-360 | Vacuum Tube Life Experience (Abstract and Appendix of P-179) | 8-8-50 | H. Frost | U |
| E-361 | Additions to the Whirlwind I Order Code (October 1949 to August 1950) | 8-10-50 | C. Adams | U |
| E-362 | Storage Devices in Computing Systems, Text of an M.I.T. E.E. Department, Colloquium Talk | 5-3-50 | R. Everett | U |
| E-363 | Washing Procedures - Series W | 8-15-50 | T. Parkins J. Palermo | U |
| E-364 | Construction of Beryllium Eva- poration Boiler | 11-29-50 | T. Parkins R. Adams | U |
| E-365 | Part I: Construction of a Collector Screen for the WWI Storage Tube Part II: Construction of a Mesh Mask for the Beryllium Evapora- tion Tube | 10-31-50 | R. Shaw T. Parkins | U |

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| E-367 | Construction of a Beryllium-Evaporation Target Assembly | 8-17-50 | J. Palermo | U |
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| E-379 | A Coincident-Current Magnetic Memory Unit (Abstract of R-192, A MS Thesis Report) | 9-11-50 | W. Papian | U |
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| E-384 | An Investigation of the Effect of Angle of Beam Incidence and Beam Deflection on Electrostatic Storage Tube Performance (Abstract of MS Thesis Proposal) | 9-25-50 | K. McVicar | U |
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| E-389 | Construction of a WWI Storage Assembly | 10-31-50 | J. Palermo | U |
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| E-391 | Operation Matrix: Change Procedure | 10-26-50 | R. Mayer | U |
| E-392 | Crystal Diode Investigation -- Initial Results | 11-2-50 | F. Irish | U |
| E-393 | Marginal Checking System, WWI | 12-6-50 | R. Hunt | U |
| E-394 | Built-In Checking of Control Switch and Operation Matrix | 12-22-50 | H. Ziegler | U |
| E-395 | Cathode Interface Impedance and its Effects in Aged Vacuum Tubes | 1-2-51 | H. Frost | U |
| E-396 | Crystal Diode Life Experience in WWI Computer Circuits (Paper Delivered at Conference on Electron Tubes for Computers at Atlantic City, New Jersey December 11, 12, 1950) | 1-2-51 | H. Frost | U |
| E-397 | Some Basic Relay Pulse Circuits of General Interest | 1-18-51 | C. Watt | U |
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| E-399 | Comparison Between IN56A and D-359 Crystals | 2-21-51 | E. Rich | U |

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| E-402 | Circuitry, Relay Timing, and Operation of WWI Tape Output Equipment | 4-10-51 | J. Hanson | U |
| E-403 | Television Demonstration Unit, Part I | 9-20-51 | M. Mann | U |
| E-404 | Plan for the Second Bank of Storage | 4-4-51 | R. Read | U |
| E-405 | Initial Testing of a Computer Electrostatic Storage System (Abstract of R-195, a MS Thesis) | 4-23-51 | R. Read | U |
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| E-407 | Electrolytic Corrosion as a Possible Future Source of Trouble Affecting WWI Reliability | 6-25-51 | J. Hanson | U |
| E-408 | Transistor Conference, June 12, 1951 | 7-3-51 | J. A. O'Brien | U |
| E-409 | Rational Selection of Vacuum Tube Types for Computer Applications | 7-6-51 | H. Frost | U |
| E-410 | The Complementary Circuit Method for Determination of Interface Resistance | 7-23-51 | H. Frost | U |
| E-411 | Additional ES Test Programs | 7-24-51 | G. Cooper | U |
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| E-413 | Selection Systems for Magnetic Core Storage | 8-7-51 | R. Everett | U |
| E-414 | Tracking a Target Moving in a Straight Line with Constant Velocity | 8-13-51 | K. Bush | C |
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| E-418 | The Development of an R-F Readout System for Electrostatic Storage Tubes - Part I General Considerations | 10-2-51 | W. Nolan | U |
| E-419 | The Development of an R-F Readout System for Electrostatic Storage Tubes - Part The Initial WWI System | 9-4-51 | W. Nolan | U |
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| E-423 | A Check List on the Construction of a Beryllium Evaporation Boiler | 9-4-51 | T. Parkins R. Adams | U |
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| E-428 | Proposed New Order <u>dm</u> (<u>gm</u>), Difference of Magnitudes | 10-5-51 | R. Mayer | U |
| E-429 | Proposed New Orders <u>cl</u> (<u>qc</u>), Cycle Left | 10-8-51 | R. Mayer | U |
| E-430 | Order <u>sf</u> , Proposed Modification Involving AR | 10-8-51 | R. Mayer | U |
| E-431 | 500-Volt Power Supplies Used in the Whirlwind Computer | 10-17-51 | W. Nolan | U |

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| E-432 | A Study of the Holding Beam in the M.I.T. Electrostatic Storage Tube (Abstract of R-198, A MS Thesis Proposal) | 10-24-51 | J. Ely | U |
| E-433 | Electronic Digital Machines for High-Speed Information Searching (Abstract of R-200, A MS Thesis Proposal) | 12-1-51 | P. Bagley | U |
| E-434 | Burroughs Test Equipment | 10-31-51 | R. Best | U |
| E-435 | Study of a Transistor Blocking Oscillator | 11-23-51 | J. Jacobs, N. Jones, D. Brown | U |
| E-436 | Bibliography on Components and Circuit Fabrication Techniques | 12-12-51 | B. Paine | U |
| E-437 | Procedure for Fabricating Delay Lines from Bulk Cable | 11-29-51 | J. Hanson | U |
| E-438 | Binary Counting with Magnetic Cores | 12-6-51 | D. Buck | U |
| E-439 | Location of Operations <u>dm</u> (<u>cm</u>) and <u>cl</u> (<u>gl</u>); Permanent Operation <u>ex.</u> | 12-20-51 | R. Mayer C. Adams | U |
| E-440 | MMI Operating Speed | 12-21-51 | R. Mayer | U |
| E-441 | Standardized Transistor Parameter Measurements | 1-3-52 | N. Jones J. Jacobs | U |
| E-442 | Analysis of Vacuum Tube Failure Data | 1-18-52 | H. Frost L. Sutro | U |
| E-443 | Interface Formation in 6AG7 Tubes | 1-25-52 | H. Frost | U |
| E-444 | Changes in Design of the rc and rd Orders | 1-31-52 | E. Rich | U |
| E-445 | Improvements to the Model 2 Crystal Tester | 2-1-52 | B. Paine | U |
| E-446 | Operations O-5, Revisions | 2-4-52 | R. Mayer | U |
| E-447 | Transistor Parameter Variations | 2-5-52 | J. Jacobs N. Jones | U |
| E-448 | Variation of Transistor Collector Resistance Due to Self Heating | 2-5-52 | J. Jacobs N. Jones | U |

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| E-449 | The Cadac Computer | 2-15-52 | E. Emerson A. Werlin | U |
| E-450 | Whirlwind I Terminal Equipment (Talk Given at Digital Computer Laboratory Seminar on January 25, 1952) | 2-21-52 | E. Rich | U |
| E-451 | Variation of Transistor Collector Resistance with Collector Vol- tage | 3-3-52 | R. Callahan N. Jones | U |
| E-452 | Relay and Contact Life Test | 3-3-52 | R. Hunt | U |
| E-453 | Error Diagnosis Subroutines for Use with Standard Single Length Programs | 3-17-52 | D. Combelic | U |
| E-454 | Nondestructive Sensing of Magnetic Cores | 3-24-52 | W. Frank D. Buck | U |
| E-455 | Change in Standard Transistor Collector Current Rise and Fall Time Measurement | 3-23-52 | N. Jones | U |
| E-456 | Block Diagram of Control for Printers and Paper Tape Units for the Final In-Out System | 4-2-52 | P. Stephan | U |
| E-457 | Current-Density Distribution in the Fringe Region of a Focused Electron Beam | 4-8-52 | C. Corderman | U |
| E-458 | The Use of Boolean Algebra in Logical Design | 4-15-52 | I. Reed R. Jeffrey | U |
| E-459 | CANCELLED | | | |
| E-460 | The Ferroelectric <i>switch</i> System | 4-16-52 | D. Buck | U |
| E-461 | A High-Speed Two-Transistor Flip-Flop | 4-24-52 | R. Callahan J. Jacobs | U |
| E-462 | Design of a Digital Computer by Boolean Algebra | 5-20-52 | I. Reed R. Jeffrey | U |
| E-463 | Introduction to the Theory of Semiconductors I, Some Remarks on Quantum Mechanics | 6-24-52 | D. Eckl | U |
| E-464 | A Squareness Ratio for Coincident- Current Memory Cores | 7-17-52 | D. Brown | U |

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| E-465 | CANCELLED | | | |
| E-466 | Operation of the In-Out Element | 2-26-54 | E. Rich G. Young | U |
| E-467 | CANCELLED | | | |
| E-468 | Introduction to the Theory of Semi-conductors II, A Brief Discussion of Statistical Mechanics | 7-28-52 | D. Eckl | U |
| E-469 | Visual Display Facilities in the Final WWI Input-Output System | 8-5-52 | J. Forgie | U |
| E-470 | Paper on Ferromagnetic and Ferromagnetic Memory Devices <i>electric</i> | 8-6-52 | W. Papian | U |
| E-471 | Reliability of Multiple Computers | 8-13-52 | R. Everett | C |
| E-472 | The Mirror: A Proposed Simplified Symbol for Magnetic Circuits | 8-14-52 | R. Mayer | U |
| E-473 | Input Program, September, 1952 | 8-21-52 | C. Adams | U |
| E-474 | Introduction to the Theory of Semiconductors III, Conduction in Metals: The Field-Free Case | 8-28-52 | D. Eckl | U |
| E-475 | A Magnetic-Core Gate and its Application in a Stepping Register | 10-30-52 | G. Briggs | U |
| E-476 | CANCELLED | | | |
| E-477 | Magnetic and Dielectric Amplifiers | 8-28-52 | D. Buck | U |
| E-478 | Seac Logic and Circuits | 7-31-52 | R. Best J. Jacobs | U |
| E-479 | Basic Conversion Program, September, 1952 | 9-4-52 | M. Rotenberg | U |
| E-480 | Experience with General Electric G11A Transistors | 9-17-52 | J. Jacobs | U |
| E-481 | Toggle Switch Inputs and Indicator Light Outputs as External Units | 9-17-52 | G. Young | U |
| E-482 | Operation of Magnetic Tape Units | 9-11-52 | B. Morris | U |

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| E-483 | Results of Transistor Thermal Experiments | 9-17-52 | R. Schmidt | U |
| E-484 | Policy on Outside Users of Whirlwind I | 9-29-52 | C. Adams | U |
| E-485 | Transistor Test Equipment | 10-14-52 | E. Cohler | U |
| E-486 | Data Screening; Division 6 Quarterly Report of August, 1952 | 9-30-52 | R. Walquist | C |
| E-487 | Notes on the Logical Design of the IBM 701 Computer | 10-8-52 | R. Mayer | C |
| E-488 | Delta _{ns} In Ceramic Array #1 | 10-14-52 | E. Guditz | U |
| E-489 | Oscilloscope Calibrator | 10-15-52 | B. Smulowicz | U |
| E-490 | An Octal-Decimal Slide Rule | 10-14-52 | R. Mayer | U |
| E-491 | Hysteresis Loop Characteristics of MF-1118 for Different Temperatures | 10-16-52 | C. Morrison | U |
| E-492 | Introduction to the Theory of Semiconductors IV, Quantum States in Crystals. The Bound Electron Case | 10-22-52 | B. Eckl | U |
| E-493 | CANCELLED | | | |
| E-494 | Modification of the Dumont 304-H Oscilloscope to Reduce Drift Encountered in WWI Display | 10-29-52 | D. Neville | U |
| E-495 | CANCELLED | | | |
| E-496 | Instructions and Specifications for the Manufacture of 3:1 and 1:1, 0:1 Microsecond Pulse Transformers on Ferrite Ring Cores | 11-3-52 | R. Hunt | U |
| E-497 | External Control Box for WWI Display Oscilloscopes | 11-5-52 | D. Neville | U |
| E-498 | An Electronic Holding Circuit | 11-12-52 | J. A. O'Brien | U |
| E-499 | Operation of the Block Transfer Orders | 11-13-52 | B. Morriss | U |
| E-500 | Switch-Core Analysis I | 11-4-52 | A. Katz E. Guditz | U |

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| E-501 | Pretest Procedures for 700-Series Storage Tubes | 11-20-52 | C. Corderman D. Fisher | U |
| E-502 | Computer Program Synthesis Based on Statistical Communication Theory (Abstract of R-210, A MS Thesis Proposal) | 11-20-52 | A. Katz | U |
| E-503 | A Magnetic Matrix Switch and Its Incorporation into a Coincident-Current Memory (Abstract of R-211, A MS Thesis Proposal) | 11-20-52 | K. Olsen | U |
| E-504 | Ferroelectrics for Digital Information Storage and Switching (Abstract of R-212, A MS Thesis Proposal) | 11-20-52 | D. Buck | U |
| E-505 | A High-Speed Counter Employing Transistors (Abstract of R-214, A MS Thesis Proposal) | 11-20-52 | J. Jacobs | U |
| E-506 | Effects of Ions in the M.I.T. Electrostatic Storage Tube (Abstract of MS Thesis Proposal) | 11-24-52 | H. Jacobowitz | U |
| E-507 | Triggering Requirements for a Single Transistor Flip-Flop | 1-28-53 | N. Pribble | U |
| E-508 | A High-Speed Flip-Flop Circuit Using Junction Transistors (Abstract of a MS Thesis Proposal) | 11-24-52 | A. Heien | U |
| E-509 | Comparison of Single Address Order Times for Computers Using IBM, NBS, and WW Types of Arithmetic Elements with Magnetic Memory | 12-9-52 | J. Jacobs | C |
| E-510 | Design of Low-Power Pulse Transformers Using Ferrite Cores (Abstract of R-217, A MS Thesis Proposal) | 11-24-52 | R. Robinson | U |
| E-511 | The Four-Digit Transistor Accumulator | 12-4-52 | R. Callahan D. Eckl | U |
| E-512 | A Method for Acceptance Testing of Ferrite Core Production Lots | 12-4-52 | P. Blatzer | U |
| E-513 | CANCELLED | | | |

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| E-514 | Electronic Selection and Control of Read-Record Heads of Magnetic-Tape Units (Abstract of R-219, A MS Thesis Report) | 12-15-52 | J. A. O'Brien | U |
| E-515 | The Technique for Evaporation of a Beryllium Mosaic | 12-16-52 | T. Clough | U |
| E-516 | Comprehensive System of Service Routines (CS): Errata, Clarifications and Cautions. | 4-28-53 | H. Uchiyama | U |
| E-517 | A Transistor Pulse Standardizer | 1-21-53 | E. Cohler | U |
| E-518 | New Metallic Cores from Magnetic Metals | 1-2-53 | A. Hughes | U |
| E-519 | General Ceramic Materials, MF-1348B and MF-1359B | 1-5-53 | D. Brown | U |
| E-520 | The WWI Auxiliary Magnetic Drum System | 1-9-53 | J. Forgie | U |
| E-521 | The Low-Speed 2 ⁶ Counter, Model II | 1-29-53 | H. Platt | U |
| E-522 | Non-Linear Recursive Filters | 1-15-53 | G. Cooper | U |
| E-523 | Core Drivers -- Model V and Model VI | 2-10-53 | H. Boyd | U |
| E-524 | CANCELLED | | | |
| E-525 | Normalized Flip-Flop Chart | 2-17-53 | H. Boyd | U |
| E-526 | High-Speed (5965) Flip-Flop | 2-24-53 | H. Boyd | U |
| E-527 | Whirlwind Power Supply Control System Additions for the Control of Power to the M.I.T.E., Buffer Drum and Auxiliary Drum Systems | 2-19-53 | G. Sandy | U |
| E-528 | Proposal for a High-Speed Random-Access Buffer Storage of Small Capacity | 2-24-53 | M. Epstein | C |
| E-529 | Matrix Driving with Unidirectional Pulses | | D. Buck | U |
| E-530 | Magnetic Materials for High-Speed Pulse Circuits (Presented at A.I. E.E. Winter General Meeting, New York January, 1953) | 2-27-53 | D. Brown | U |

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| E-531 | Driving Current Margins on Memory Test Setup I* | 3-6-53 | S. Fine | U |
| E-532 | Nucleation of Domains of Reverse Magnetisation and Switching Characteristics of Magnetic Materials | 3-9-53 | N. Menyuk J. Goodenough | U |
| E-533 | Effect of Current Pulse Duration on the Pulse Response of M. T. C. Memory Cores | 3-10-53 | P. Baltzer | U |
| E-534 | Transistor Grounded-Collector Coupling Circuit | 3-23-53 | S. Olsen W. Klein | U |
| E-535 | Programmed Generation of Marginal Checking Voltage | 3-13-53 | K. Olsen R. Mayer | C |
| E-536 | Diagnostic Programs and Marginal Checking in the Whirlwind I Computer (Text of Paper Presented at the New York Convention of the Institute of Radio Engineers on March 24, 1953) | 3-26-53 | N. Daggett E. Rich | U |
| E-537 | 1953 Test Storage Input Program | 4-7-53 | J. Frankovich | U |
| E-538 | CANCELLED | | | |
| E-539 | An Approach to a Rationale in Ferrite Synthesis: Evaluation of Magnetic Moments | 4-28-53 | L. Gold | U |
| E-540 | A Fast Core-Tube Register | 4-27-53 | K. Olsen R. Pfaff | U |
| E-541 | Transistor Collector Characteristic Curve Plotter | 11-8-53 | L. Riley I. Aronson D. Eckl | U |
| E-542 | Timing Diagrams for MTC Control | 5-5-53 | R. Hopkins | U |
| E-543 | Final Specifications of the High-Speed Flip-Flop | 5-12-53 | H. Boyd | U |
| E-544 | Circuit for Measuring Switch Time, Rise Time, Etc. (Switch-Time Comparator) | 5-11-53 | B. Gurley | U |
| E-545 | CANCELLED | | | |
| E-546 | Inspection Trip of Computers on the Atlantic Seaboard | 5-25-53 | W. Ayer | C |

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| E-547 | Proposed High Input-Impedance Trigger Circuitry for High-Speed WWII Flip-Flop | 5-22-53 | B. Remis | U |
| E-548 | Preliminary Report -- Temperature Effects in MTC-Type Ferrite Cores | 6-26-53 | J. Childress | U |
| E-549 | Basic Conversion Program | 7-2-53 | H. Briscoe | U |
| E-550 | Open-Circuit Impedance Represen- tation of Transistors | 7-9-53 | N. Jones | U |
| E-551 | CANCELLED | | | |
| E-552 | CANCELLED | | | |
| E-553 | CANCELLED | | | |
| E-554 | CANCELLED | | | |
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| E-556 | A Study of a Two Transistor Flip- Flop | 4-24-53 | E. Cohler | U |
| E-557 | The Design of a Two Transistor Saturating Flip-Flop | 7-9-53 | E. Cohler | U |
| E-558 | 556 Drum Input Program, May, 1953 | 5-26-53 | F. Helwig | U |
| E-559 | A Free Energy Model for the Hysteresis Loop | 6-16-53 | A. Loeb | U |
| E-560 | Status of XD-1 Internal Logical Design | 8-17-53 | R. Mayer | C |
| E-561 | Differential Video Probe | 6-19-53 | H. Zieman | U |
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| E-563 | CANCELLED | | | |
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| E-2000 | Introduction to Coding: Part I of II Parts | 9-29-49 | D. Israel | U |
| E-2001 | Approach Patterns | 10-6-49 | W. Welchman | U |
| E-2002 | CANCELLED | | | |
| E-2003 | A Coded Program for the Private- Line | 10-19-49 | D. Israel | U |
| E-2004 | Notes on Aircraft Navigation and Guidance | 11-22-49 | W. Welchman | U |
| E-2005 | Information Required about Air- craft Likely to Fly in an All- Weather System after 1962 | 11-29-49 | W. Welchman | U |
| E-2006 | Approach Sequencing | 12-1-49 | P. Franklin | U |
| E-2007 | Suggestion for Further Study of Azimuth Controlled Approach | 12-30-49 | W. Welchman | U |
| E-2008 | Implications of Present System of Air Traffic Control | 2-15-49 | D. Israel | U |
| E-2009 | Approach from High Altitudes | 2-17-50 | W. Welchman | U |
| E-2010 | Azimuth Progress Control | 1-23-50 | A. Orden | U |
| E-2011 | Programming for Helix Approach | 3-16-50 | D. Israel | U |
| E-2012 | Characteristics of Private-Line Communications | 3-24-50 | F. Foss | U |
| E-2013 | Devices for Conversion Between Analog Quantities and Binary Pulse-Coded Numbers (Abstract of MS Thesis Proposal and R-176) | 6-6-50 | A. Susskind R. Sisson | U |
| E-2014 | Computer Programming for Airport Approach Along a Whiffle-tree Type of Path System | 6-20-50 | A. Orden | U |
| E-2015 | Error Correction in Orbital Flight | 7-13-50 | A. Orden | U |
| E-2016 | Air Traffic Control | 7-17-50 | D. Israel | U |
| E-2017 | Treatment of Digital Control Systems and Numerical Processes in the Frequency Domain (Pro- posal for Sc.D. Thesis) | 12-5-50 | J. Salzer | U |

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| E-2018 | Subroutines Useful in Coordinate Conversion | 1-10-51 | J. Salzer | U |
| E-2019 | Analysis of Instability in the Numerical Solution of a Differential Equation | 3-15-51 | J. Salzer W. Welchman | U |
| E-2020 | Sampled-Data Control Systems Studied Through Comparison of Sampling with Modulation | 5-2-51 | W. Linvill | U |
| E-2021 | Navigational Definitions | 4-3-51 | C. Gaudette | U |
| E-2022 | Air Intercept Using a Whirlwind Type Computer | 5-25-51 | R. Everett | C |
| E-2023 | A First Proposal for the Computer System with Cape Cod Muldar Experiment | 6-22-51 | R. Walquist | C |
| E-2024 | Light Gun | 6-28-51 | H. Kirshner | U |