

CONTENTS

<i>The L3 Coaxial Carrier System, R. H. Klie</i>	1
<i>Inventing and Patenting at Bell Laboratories, Ralph Bown</i>	5
<i>The Englewood Story, E. L. Getz</i>	11
<i>Color Timing System for Filter Center, L. E. Van Damme</i>	17
<i>"Nerve-Type" Transmission Line, R. L. Taylor and H. M. Straube</i>	21
<i>Testing Telephone Usefulness</i>	25
<i>Continuously Recorded Relay Measurements, E. G. Walsh</i>	27

THE COVER — Heart of the new coaxial cable system — R. H. Klie and O. L. Williams measure the gain of an L3 line amplifier. The first of a series of articles describing this system appears on the opposite page.

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RECORD

CONTENTS

<i>Solderless Wrapped Connections, J. J. Kuhn, Sr.</i>	41
<i>Making Tubes for Research, J. R. Pierce</i>	46
<i>Automatic Alternate Routing of Telephone Traffic, C. Clos</i>	51
<i>Dr. Kelly Discusses "The Contributions of Industrial Research to National Security"</i>	58
<i>Bell and Lights for Civil Defense, R. D. Williams</i>	59
<i>A New Single-Frequency Signaling System, A. Weaver</i>	62
<i>Governors for Dials, W. Piferd</i>	69
<i>Nike Added to Nation's Defense Arsenal</i>	74

THE COVER — Nike launching section with missiles raised to firing position. U. S. Army Ordnance technicians are performing a last minute electrical checkout on the missile in the foreground.

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RECORD

CONTENTS

<i>Television and the Bell System, J. M. Barstow</i>	81
<i>Spectrophotometric Analysis, C. L. Luke</i>	88
<i>Emergency Transfer for Essential Services, J. H. Craig</i>	92
<i>Telephone Set for Hazardous Areas</i>	96
<i>A Shock Tester for Small Apparatus, F. W. Stubner</i>	98
<i>Locating Conductor Faults with Sound Whistler, A. Majlinger</i>	102
<i>Wire Line Entrance Links for TD-2, J. W. Beyer</i>	108
<i>Wire Abrasion Tester</i>	111
<i>Highlights from the AT & T Annual Report</i>	114
<i>Western Electric Has Record Year</i>	116

THE COVER— At Bell Telephone Laboratories, H. P. Kelly measures the performance characteristics of amplifiers used in transmitting standard and color television signal.

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RECORD

CONTENTS

<i>A New Type Open-Wire Line for Rural Areas, R. C. Watling</i>	121
<i>A Digital Code Wheel, J. J. J. Kernahan</i>	126
<i>New Gas Flow Indicator</i>	132
<i>A Mechanical Traveling-Wave Oscillator, C. C. Cutler</i>	134
<i>Amplifiers for the L3 Coaxial System, O. L. Williams</i>	139
<i>Aluminum Die-Castings for NI Carrier, L. Pedersen</i>	144
<i>Electronic Test Set for Signaling Systems, W. W. Fritschi</i>	148
<i>No. 5 Crossbar Opens the Door to Nationwide Customer Dialing, R. E. Hersey</i>	153
<i>New 12-Channel Bank for Broadband Carrier</i>	157
<i>Transistorized Rural Carrier Trial Starts</i>	158

THE COVER — Many developments, such as the new type open-wire line (opposite page), designed for rural telephone service, are tested at the Chester Field station. Here, for example, D. M. Mitchel and J. D. Apgar (on pole) measure wire sag.

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RECORD

CONTENTS

<i>Preference Research, J. E. Karlin and R. K. Potter</i>	161
<i>Rural Distribution Wire, C. C. Lawson</i>	167
<i>Precision Potentiometers for Analog Computers, D. G. Blattner</i>	171
<i>Dr. Kelly Surveys Military and Civilian Uses of Atomic Power at Centennial Science Forum</i>	178
<i>Cast Resin Terminal Strips, R. Morse</i>	179
<i>Mechanical Problems of Electron Tubes for L3 Carrier, E. J. Walsh</i>	183
<i>Ladders and Fungi</i>	188
<i>No. 5 Crossbar — Marker and Transverter Testing, C. W. Haas</i>	190

THE COVER — A simulated radio relay system in the microwave systems laboratory is used by Bell Telephone Laboratories engineers to study TD-2 operation. Here W. C. Anderson (shown at the left) and B. L. Reynolds test one of the repeaters.

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RECORD

CONTENTS

<i>A Foreword on Transistors, J. B. Fisk</i>	201
<i>P-N Junctions and the Junction Transistor, M. Sparks</i>	203
<i>Dr. Kelly Receives Industrial Research Medal for 1954</i>	208
<i>Type-O Carrier</i> <i>System Objectives, B. C. Griffith and H. Kahl</i>	209
<i>System Description, R. D. Fracassi</i>	215
<i>A New Multifrequency Receiver, B. J. Yokelson</i>	221
<i>Contact Phenomena in Sealed Containers, R. H. Gumley</i>	226
<i>Measuring Overhead Wire Clearances</i>	231
<i>The Bell Solar Battery</i>	232
<i>The 1954 Share Owners' Meeting</i>	236

THE COVER — Inventors of the Bell Solar Battery, left to right, G. L. Pearson, D. M. Chapin and C. S. Fuller.

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RECORD

CONTENTS

<i>Centralized Automatic Message Accounting, M. E. Maloney</i>	241
<i>Dr. Kelly Gives Schwab Lecture Before American Iron and Steel Institute</i>	244
<i>Quality Control and the L3 System, B. J. Kinsburg</i>	245
<i>Continuous Scanner for Televising Film, R. E. Graham</i>	250
<i>Cold-Resin Gas Dams for Telephone Cables, J. A. Ratta</i>	257
<i>Detached Contact Schematics, J. W. Gorgas</i>	261
<i>No. 5 Crossbar Tandem Revertive - Pulse Incoming Register, J. W. Brubaker</i>	268
<i>Order Wire and Alarm Facilities for Type - N Carrier, R. L. Case</i>	272
<i>Panel System Maintenance, J. H. Sailliard</i>	277

THE COVER — At the Vesey tandem office in New York City, a switchboard currently being installed as part of Centralized Automatic Message Accounting equipment (opposite page) is here being inspected by W. A. Turczyn, New York Telephone Company (left), and C. Clos, Bell Telephone Laboratories.

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RECORD

CONTENTS

<i>Echo and its Effects on the Telephone User, G. M. Phillips</i>	281
<i>Semiconductors: Characteristics and Devices, G. L. Pearson</i>	285
<i>Telephone Poles End 25-Year Test in Colorado</i>	290
<i>Precision Transformers for the L3 System, C. W. Thulin</i>	292
<i>Senders for the 4A Toll System, M. E. Esternaux</i>	295
<i>Varistor Measuring Techniques, R. R. Blair</i>	301
<i>Regulated-Frequency Power Supply for Time-of-Day Machine, H. M. Owendoff</i>	308
<i>Automatic Progression Trunk-Test Circuit, H. D. Cahill</i>	313

THE COVER — Echo suppressor equipment (opposite page) developed at Bell Telephone Laboratories and shown installed in the Long Lines No. 1 office in New York. A. F. Richardson, Long Lines Engineer (left), and G. M. Phillips, Bell Laboratories, observe relay operation.

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RECORD

CONTENTS

<i>Electronic Computers and Telephone Switching, W. D. Lewis</i>	321
<i>Measuring Telephone Traffic, D. H. Barnes</i>	326
<i>A New Sound Integrator, R. T. Jenkins</i>	331
<i>Improved Silicon Carbide Varistors, C. J. Frosch</i>	336
<i>Type-O Channel Circuits, O. R. Garfield</i>	341
<i>A Noise-Figure Test Set for the TD-2 Radio System, D. H. Hesselgrave</i>	346
<i>Slow Release Wire-Spring Relay, O. C. Worley</i>	351
<i>An Improved Splicer's Test Point</i>	356

THE COVER — A new sound integrator (page 331) rotates around a 500-type telephone set in an acoustic room at Murray Hill to measure sound power and quality of the telephone's ring. J. D. Hubbell monitors sound output.

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RECORD

CONTENTS

<i>DIAD — An Experimental Telephone Office, W. A. Malthaner and H. E. Vaughan</i>	361
<i>A Universal Telephone Ringer, W. Kalin</i>	366
<i>Centralized AMA Switchboard, F. H. Martin</i>	371
<i>New Techniques for Measuring Forces and Wear, W. P. Mason</i>	375
<i>Dr. Kelly Warns of Urgent Need for Complete Continental Air Defense System</i>	379
<i>70 - Megacycle IF Pads, A. S. May</i>	380
<i>Open - Wire Swing Test</i>	383
<i>New Ultra-High Frequency Transistor Developed at the Laboratories</i>	384
<i>Regulation of the L3 Coaxial System, F. J. Braga and C. J. Custer</i>	385
<i>The 100-Pen Recorder, C. H. Erving, Jr.</i>	389
<i>Line Insulation Test Circuit, F. E. Blount</i>	393

THE COVER — Engineers of the Bell Telephone Laboratories Transmission Systems Development Department observing performance of regulating networks for the L3 carrier system (see page 381). Left to right, J. H. Jamison, O. L. Williams, and J. L. Sullivan check resistance values of thermistors mounted on breadboard models in background.

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CONTENTS

Redundancy in Television, E. R. Kretzmer

401

A New Cable Splice Closure, W. C. Kleinfelder

405

Radio Programs on N1 Carrier, A. V. Wurmser

410

First Transatlantic Telephone Cable Scheduled for 1956

415

Metals with Whiskers, S. M. Arnold

417

Improved Design of B-Type Relay, F. A. Zupa

421

Growth of TD-2 Radio Relay

424

A Comparator for Precise Transfer Conductance Measurements, C. H. Young

427

Decoders and Markers in 4A Toll Crossbar, C. G. Morrison

431

THE COVER — Members of the Television Research Department study redundancy (see page 401) in an effort to find better methods of transmitting TV information. W. A. Anderson (right) adjusts brightness on TV monitor while A. M. Darbie prepares to select a scanning line from picture for detailed presentation on oscilloscope.

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CONTENTS

<i>Switching at Its Boldest, J. Meszar</i>	441
<i>Casting and Potting Resins, W. J. Clarke</i>	447
<i>Miniaturized Transmission Transformers, A. C. Ekvall</i>	452
<i>Microwave Testing with Millimicrosecond Pulses, A. C. Beck</i>	457
<i>A Long-Lived Packaged Amplifier for Aircraft, J. G. Matthews</i>	462
<i>A New Intertoll Trunk-Testing Circuit, R. C. Nance</i>	467
<i>Code Translation in No. 5 Crossbar, J. A. Ceonzo</i>	471
<i>Polyethylene Cable Guard</i>	475

THE COVER — A simple pouring operation, yet it symbolizes many new Bell Laboratories developments (see page 447). The plastic hardens around tiny electronics components, including transistors, to give a small and rugged plug-in unit.

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