

CANADIAN PACIFIC has installed a Digitronics Corp. tape converter at its Windsor Station headquarters in Montreal. The new machine converts information received from the field on teletype paper tape to magnetic tape for processing on the high speed computer, converts processed information on magnetic tape to paper tape for relay via teletype to other offices, and can select out information from one reel of magnetic tape and reproduce it on another.

CHESAPEAKE & OHIO has signed a contract with Smith-Corona Marchant Inc., for leasing of teleprinter machines and switching equipment, to be used for a car reporting system. The Kleinschmidt printers will be installed at 130 on-line offices and yards, as well as the Car Location Information Center at Huntington, W. Va. The lease arrangement, covering a period of seven years, is expected to cost in excess of \$1 million. A feature of the equipment is the Tele-switcher, which monitors the circuits and automatically controls transmission and reception of car reporting information between the on-line offices and CLIC. The circuits for this car reporting network are to be provided by the railway.

CHICAGO & EASTERN ILLINOIS has ordered equipment from General Railway Signal Co. for the installation of 46 miles of Type K2 CTC between Danville and Watseka, Ill. The existing sectional-type control machine at Danville will be expanded to handle the new territory.

CHICAGO TRANSIT AUTHORITY awarded a contract for \$102,508 to Union Switch & Signal for signal equipment to modernize the Kimball terminal interlocking system.

NORTHERN PACIFIC has expanded its dispatcher-to-train radio system to include the main line territory between Missoula and Helena, Mont. Through a network of 14 base stations, the train dispatcher at Missoula maintains contact with radio-equipped freight trains moving over the 120-mile stretch between these cities. The new radio control system supplements existing communications facilities and the present centralized traffic control. The NP now has dispatcher-to-train radio in operation on more than 500 miles of its main line. The system is scheduled to be further extended this year between Helena and Livingston under control of the

Missoula dispatcher. A new radio shop will be set up at Missoula.

NEW YORK CENTRAL has installed red and white octagonal Stop signs at 313 crossings of secondary highways in the state of Michigan. These signs are at crossings protected only with the conventional crossbuck signs. Since the Stop signs were installed three years ago, only 10 accidents have occurred at the 313 crossings. In the five-year period before the installations 57 serious accidents had occurred at the crossings. Reason for the improved safety is two-fold; first, the octagonal red and white Stop sign, familiar to motorists, is new at rail-highway crossings and therefore attracts their attention; second, Michigan law requires that motorists encountering such signs come to a complete stop before proceeding.

COLLINS RADIO CO., Texas Division, will hold a series of microwave and carrier communication system engineering symposiums to acquaint management and communications men with these subjects. An exhibit will accompany the symposium, consisting of one RF frequency diversity terminal and 12 channels of carrier equipment. In addition to symposiums held in February at Los Angeles, San Francisco and Sacramento, Calif., meetings are scheduled as follows:

## Reader Writes

It is noted in the article on the merger of the Communications and Signal Sections, AAR, (RS&C Jan 1961 page 26) that it is stated that the new Section does not have a research and development committee.

Just to set the record straight, the new Communication and Signal Section does have a Special Committee on Research Assignments for the purpose of collaborating with the AAR Research Center. Each of the 10 Standing Committees has an assignment as follows:

Report to the Special Committee on Research Assignments any projects considered proper for submission to AAR Research Center.

L. E. Kearney, Engineer  
Communications and Signals  
Communication and Signal  
Section, AAR.

NEW YORK CITY TRANSIT AUTHORITY has placed an order for almost \$8 million with Union Switch & Signal for automatic signaling and interlocking equipment to be installed on the Lexington Avenue Line of the IRT subway.

CANADIAN PACIFIC has placed an order with Union Switch & Signal for interlocking equipment to be installed at South Junction, near Montreal. The interlocking will be remotely controlled from a section of an existing Style C machine at Hampstead, Que.

AUTOMATION AND COMPUTER will be the subject of a May 18-19 conference of the Land Transportation Committee of the American Institute of Electrical Engineers at Cleveland, Ohio. Field trips are planned to the C&O computer center and the Cleveland Transit System.

RAILWAY SIGNAL and COMMUNICATIONS SUPPLIERS ASSN. is the name of the new suppliers group formed from the merger of the Signal Appliance Assn. and the Railway Communications Suppliers Assn. The new chairman is W. A. Edwards, Kerite Co.; vice-chairman is R. F. McCall, Motorola Inc.; and secretary-treasurer is Walter H. Allen, Frog Switch & Mfg. Co. The executive committee of the new organization includes the chairman, vice-chairman, secretary-treasurer and the following men: E. H. Coker, New York Telephone Co.; C. W. Henricks, Union Switch & Signal Division of WABCo.; D. L. Killigrew, Corning Glass Works; L. C. McGee, R. W. Neill Co.; J. W. Porter, General Railway Signal Co.; W. W. Price, Bendix Radio Division, Bendix Corp.; P. J. Salerno, T. George Stiles Co.; W. J. Savage, Primary Battery Division, Thomas A. Edison Industries.

## Trade Publications

TESTING EQUIPMENT. A new, illustrated catalog, 10-1.3, describes instruments for testing railway signal and telephone equipment. Included are dielectric breakdown test sets ranging from heavy duty types with AC or DC potentials to 150-kv. through mobile, bench and hand-carried portable models. These instruments afford facilities for testing motors, generators, cables and bushings, transformers and switchgear. Meg-

(Please turn to page 44)



# The KERITE cables on the cover

... were designed without any of the accurate methods now used to determine conductor size. They were overloaded throughout their lives, and although they were installed in brass pipes and operated at 11,000 volts, they were protected only with a non-conducting cotton braid.

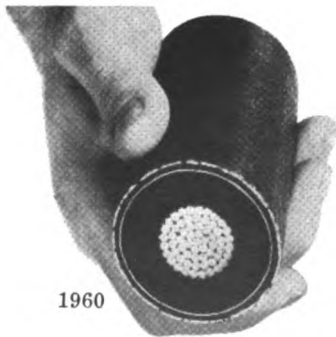


1909

In 1946, one lead was removed, reeled, and shipped to the Kerite factory for investigation.

In spite of 36 years of thermal abuse, almost constant electrical discharge at its surface, and the physical handling involved in its removal and shipment, the minimum 60-cycle A.C. breakdown was above 90 KV with the average 10 KV higher.

Kerite engineers have pioneered improvements in almost every element of generator cable... but the consistently high qualities and long life of the Kerite insulation remain the same.



1960

THE KERITE CO.  
30 Church St.  
New York 7, N. Y.  
Sales offices in principal cities.



See Adv. on Front Cover

## NEWS BRIEFS

(Continued from page 42)

ohmmeters with ranges to five million megohms are offered for determining insulation resistance of motors, generators, and other telephone and railroad electrical equipment. **Associated Research, Inc., Dept. RSC, 3777 W. Belmont Ave., Chicago 18, Ill.**

**RAILROAD GLASSWARE.** Information on a wide range of glass lenses and reflectors for railroad use is given in a new six-page brochure. The illustrated fold-out booklet also covers Corning's lamp lenses and globes. Optical qualities and prismatic patterns are detailed in charts and drawings. Information includes sizes, focus data, colors, and recommended applications. **Corning Glass Works, Dept. RSC, Corning, N.Y.**

**TELEPHONE CATALOG.** Over 2,500 items have been included in a case bound, cloth covered 1961 Telephone Equipment and Supplies catalog. It contains listings on hardware, tools, wood, cable and wire, cords, insulators, protective equipment, power, testing equipment, telephone booths, and many other items. Also included is a section on telephone equipment—telephones, telephone accessories, PABX equipment, and dial equipment. **Automatic Electric Corp., Railroad Sales Dept. RSC, Northlake, Ill.**

**RECTIFIERS.** The following bulletins are now available: No. 6.315 on 20 and 35 amp silicon rectifier stacks; No. 6.304-1 (20 amp), No. 6.305-2 (35 amp), and 6.307 (70 amp) on 1N series silicon rectifier units. Maximum peak inverse voltage is 400 volts, and maximum temperature is 150 degrees C. **Fansteel Metallurgical Corp., Dept. RSC, North Chicago, Ill.**

**ELECTRONIC MONITORING.** The B1020 system uses continuous scanning so that only one direction of transmission is required. The remote terminal monitors the condition of a number of functions or points at a remote location and transmits a corresponding code to a headquarters location. Here this coded information is decoded, checked and displayed. The system can monitor any condition that can be represented by an electrical contact closure **Lynch Carrier Systems Inc., Dept. RSC, 695 Bryant St., San Francisco 7, Calif.**

**RECTIFIERS.** A new, color illustrated, eight page catalog has been published by Syntron Co., describing its complete line of certified silicon and selenium rectifiers. Specifications

### DISPATCHERS! MAINTENANCE MEN!

**WANTED:** Three qualified Train Dispatchers. Must be thoroughly familiar with Centralized Traffic Control. Also, one qualified CTC Maintenance Man. System located in Liberia, West Africa. Two-year contracts. Write **Box 124, Railway Signaling and Communications, 30 Church St., New York 7, N. Y.**

are given for silicon diodes and stacks, selenium rectifiers and stacks, and cartridge rectifiers. Catalog No. 100. **Syntron Co., Semiconductor Div., Dept. RSC, Homer City, Pa.**

**ELECTRICAL TAPES.** A 4-page brochure, "Reference Data for Design Engineers," has an easy-to-read property chart covering all "Scotch" brand electrical tapes. It lists typical properties, standard slitting tolerances, standard lengths, etc., of 31 tapes, ranging from paper to silicone rubber. **Minnesota Mining & Mfg. Co., Dept. WO-482-RSC, 900 Bush Ave., St. Paul 6, Minn.**

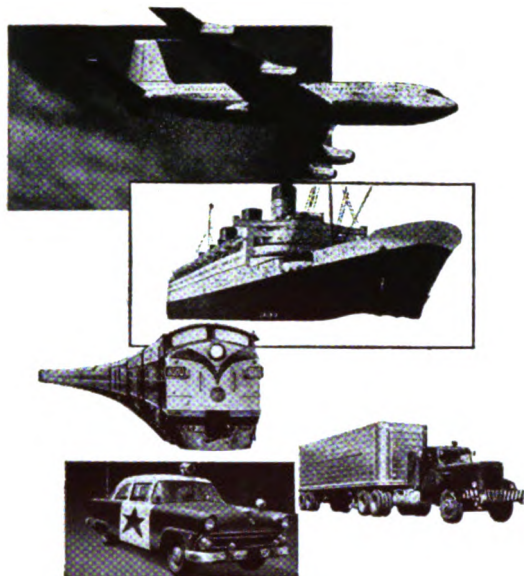
**COMPUTER CHART.** A chart which covers the characteristics of 43 U. S.-built computers contains 12 accordion folded pages. Information includes: average monthly rental, storage capacity and type, word size, instruction addresses, magnetic tape data, peripheral equipment, special features, etc. **Charles W. Adams Associates, Dept. RSC, 142 The Great Road, Bedford, Mass.**

**TUBE SUBSTITUTION HANDBOOK, Vol. 2.** This directory of receiving tubes includes 1,644 types, with over 2,500 substitutions. Three more sections list 186 industrial and 494 European substitutes for American receiving tubes; and 453 American receiving tube substitutions for European types. Accompanying each individual section are instructions to guide the reader in making proper tube substitutions, in addition to suggesting how to cross-reference between sections for other substitutes. Catalog **TUB-2, \$1.50. Howard W. Sams & Co., Inc., Dept. RSC, 2201 East 46th St., Indianapolis 6, Ind.**

**LICENSE HANDBOOK.** Second-Class Radiotelephone License Handbook, by Edward M. Noll, provides the reader with the information he needs to pass the FCC second-class radio-telephone license examination. In addition, it acquaints him with the duties and responsibilities of the license holder so he can efficiently maintain and operate two-way radio equipment after receiving his license. Six

(Please turn to page 46)

RAILWAY SIGNALING and COMMUNICATIONS



Replace  
with  
the  
best...

**RCA POWER TUBES**

from your RCA  
Industrial  
Tube Distributor



For reliable 2-way radio communications, always replace with RCA Power Tubes from your local RCA Industrial Tube Distributor. For more than a quarter-century RCA Power Tubes have been the standard of quality in communications equipment. Wherever you look in commercial radio, the military services or industry, you'll find RCA Power Tubes doing the critical jobs... delivering top performance. It makes sound business sense to invest in the long-life economy of RCA Power Tubes in your essential 2-way radio equipment.

Your RCA Industrial Tube Distributor carries a complete line of RCA tubes for fixed and mobile communications equipment. Give him a call whenever you need replacement tubes. He'll always give you fast, efficient service.



ANOTHER WAY RCA SERVES YOU THROUGH ELECTRONICS  
**RADIO CORPORATION OF AMERICA**

Electron Tube Division

Harrison, N. J.

**NEWS BRIEFS**

*(Continued from page 44)*

chapters of questions and answers cover Elements I, II and III, which must be passed before a second-class radiotelephone license can be obtained. Price \$3.95. Howard W. Sams & Co., Inc., Dept. RSC, 2201 East 46th St., Indianapolis 6, Ind.

**Railroad Personnel**



William S. Pipas



Bernard W. Molis

**GULF, MOBILE & OHIO.** William S. Pipas, assistant superintendent signals, has been named superintendent of signals at Bloomington, Ill., to succeed the late Harry C. Sampson. Mr. Pipas was born at Nokomis, Ill., December 26, 1924. He was graduated from Virginia Polytechnic Institute in 1950 with a B.S. degree in electrical engineering and began work in the signal department of the Illinois Central. He was promoted to assistant engineer in 1952, to supervisor of signals at Jackson, Miss., in 1954, and to field signal engineer in 1956. He left that road early in 1957 to become assistant superintendent of signals of the GM&O.

**DENVER & RIO GRANDE WESTERN.** Bernard W. Molis, superintendent of signals and communications, has been appointed assistant chief engineer. He retains supervision of the signal department. Mr. Molis was born in Muscatine, Iowa, September 10, 1893. He began his railroad career with the Rock Island in 1911 as a signal helper and was construction engineer with that road when he joined the D&RGW as signal engineer in 1926. In 1957 his jurisdiction was extended to include communications, his title being changed to superintendent of signals and communications.

Merrill F. Black, assistant superintendent of signals and communications, has been appointed superintendent of communications. Mr. Black was born in Renfrew, Ont., September 1, 1913. He began as a signal helper of the Canadian National and subsequently was a signal maintainer on the Toronto Terminal Railway. In 1944 he went to Hawaii as a signal foreman.

*(Please turn to page 48)*

RAILWAY SIGNALING and COMMUNICATIONS



**NEWS BRIEFS**

(Continued from page 46)

for the Oahu Railway & Land Co., but later in the same year became assistant to the signal engineer of the D&RGW. In 1948 he became a sales engineer in the signal bond department of the American Steel & Wire Co., returning to the D&RGW in 1956 as assistant signal engineer. In 1958 he was appointed assistant superintendent of signals and communications.

**MISSOURI PACIFIC.** John W. Chowning, signal supervisor at Mon-

roe, La., and Paul C. Swinney, supervisor communications at Little Rock, Ark., have retired.



Merrill F. Black

**Supply Trade News**

**ANACONDA WIRE & CABLE CO.** Konrad Loebl, formerly in the Cincinnati district sales office, has been promoted to manager—railroad sales, at Chicago, succeeding Edward J. I. Davies.

**OKONITE CO.** Has established new branch offices in Denver, Colo., and Charleston, W. Va. James F. Angle, Rocky Mountain district manager, is in charge of the Denver office and also continues to supervise the Salt Lake City office. John P. Oblinger, who formerly served the West Virginia area from Bluefield, Va., is now located at Charleston.

**MOTOROLA INC.** Ralph F. Anderson, who has been with the Motorola sales force since 1945, has been appointed southeastern railroad sales manager.

**C&S PRODUCTS CO.** Appointed Fleming Engineering Co., Inc., Fort Worth, Tex., as sales representatives for Semper-Seal cable splices and blocking compound products in Texas and Oklahoma.

**GENERAL RAILWAY SIGNAL CO.** Has acquired a controlling interest in Cardion Electronics, Inc. Westbury, N.Y. The company designs and manufactures electronic control and communication equipment.

**LENKURT ELECTRIC CO.** Has formed a new project group to step up its microwave products development program. Maurice H. Kebby, formerly commercial products chief engineer, has been named project manager of the new group.

**RADIATION INCORPORATED.** Has appointed Eric J. Isbister vice-president—engineering, at Melbourne, Fla., and Clifford W. Kropp manager of the Philadelphia district office.

**ELECTRIC STORAGE BATTERY CO.** William W. Smith has been named manager of engineering and development of the Nickel-Alkaline Battery Division, West Orange, N.J., succeeding J. Donald Moulton, retired. Mr. Smith was manager of alkaline battery development for the Exide Industrial Division at Philadelphia.

**SYNTRON CO.** Harold W. Bigelow has been named midwest district sales manager for the Semiconductor Division, at Chicago, succeeding Homer E. Lytle, promoted to assistant sales manager—distributor marketing, at Homer City, Pa.



*air depolarized*

**AD SALAMMONIAC DRY CELLS**

save users **LABOR • TIME • MONEY**

**LIGHT WEIGHT  
HIGH CAPACITY  
LONG LIFE**

Designed for  
Telephone & Telegraph Service  
featuring  
*Extremely Long Shelf Life*



**AD 526 TM  
ADR-2**  
(#6 size)  
up to 85 amp. hr.



**AD 524  
AD 135**  
up to  
150 amp. hr.

- Argentina—LE CARBONE LORRAINE, Erezcano 3051/53 Buenos Aires, Argentina
- Belgium—LE CARBONE S.A.B., 124 Bd. du Jubilee, Brussels, Belgium
- Brazil—CARBONO LORENA S.A.—Rua Barao, Itapetininga 273 Sao Paulo, Brazil
- Canada—CIPEL (CANADA) LIMITED—Valleyfield, Quebec, Canada
- England—LE CARBONE (GREAT BRITAIN) LTD.—Portslade, England
- France—CIPEL, Argenteuil (S&O) France
- Germany—CARBONE A.G., Bonames, Frankfurt/Main, Germany
- Italy—SOCIETA "PILE CARBONIO," via Rasori 20, Milan, Italy
- Spain—CIPEL, Juan Bravo, Madrid, Spain
- Sweden—SVENSKA A.B. LE CARBONE, Sundbyberg, Sweden
- U.S.A.—THE CARBONE CORPORATION, Boonton, N. J.



sales representatives throughout the world