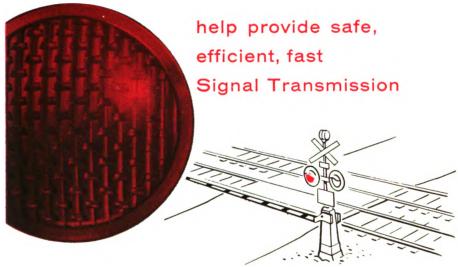


signal lenses







Kopp signal lenses, roundels and lantern globes are engineered to meet the precise requirements of railroad signaling. Carefully controlled custom-manufacturing, rigid testing and meticulous inspection assure highest quality and dependable uniformity. All Kopp signal glassware is manufactured in accordance with A.A.R. Signal Section specifications.

Available at leading manufacturers of lamps, lanterns and signaling equipment.



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News Briefs

C & S SECTION will meet in 19 at the Royal York Hotel in Toron Ont., on October 2-4. AAR approx has been received for the new cobined Communication and Sign Section to meet this fall.

AN ELECTRONIC INTER-LOCKING will be installed on the British Railways early this summer. The circuits employ transistors, semi-conductor diodes and ferrite cores in a technique described in the September 1960 Railway Signaling and Communications, page 19. The only relays used are track relays. The control panel will be of the entrance-exit pushbutton type.

NORTHERN PACIFIC has received ICC approval to install CTC between Livingston and Laurel, Mont., 99 miles, to be controlled from Glendive, Mont. This will replace the existing automatic block signal system.

ROCK ISLAND has installed a new communications line between Goodland, Kan., and Limon, Colo. 107 miles. The new line is an all-aluminum alloy conductor developed by Kaiser Aluminum and Chemical Sales, Inc. A pair of lines (two wires) was installed, involving 214 miles of six-gauge aluminum wire, protected by a 2/64-in. polyethylene covering.

LOUISVILLE & NASHVILLE will install five additional electronic hotbox detectors on its lines in Kentucky. Recently six were put in operation on the main line between Nashville, Tenn., and Montgomery, Alaand one has been in operation near Paris, Ky., since 1959.

KANSAS CITY SOUTHERN has ordered equipment from General Rails way Signal Co. for the installation of 69 miles of Type K2 CTC between Sallisaw, Okla., and Gentry, Ark. As existing sectional-type control machine at Heavener, Okla., will be expanded to handle the new territory GRS electronic overlay track circuit will be used for automatic release of electric switch locks.

CANADIAN NATIONAL has or dered equipment from General Rail way Signal Co. for the installation of 223 miles of Type K2 CTC between (Continued on page 32)

NEWS BRIEFS

(Continued from page 30)

Portage La Prairie, Man., and Melville, Sask. A pushbutton control machine will be located in Winnipeg. A 54-mile carrier link will transmit CTC codes to a converter location at Portage La Prairie. Another 277-mile carrier link will extend to Melville.

PENNSYLVANIA. An electronically controlled system to sort parcels is being installed in Pennsylvania Station, New York, to speed up the sorting and gathering of parcels too large to sack. The machine can handle in a

minute 25 boxes, cartons, crates, pails—or any other type of parcel. Rated capacity of the system is 36,000 parcels a day. The electronic sorting system designed and manufactured by Stewart-Warner Corp. is the third in the country and the second purchased by the PRR. The first installation was at 30th Street Station, Philadelphia, two years ago (RS&C, July 1958, page 18).

WASHINGTON TERMINAL CO. now has three automatic call distributors at Union Station. One handles calls seeking information and the others handle calls for space reservations on trains of the Terminal

Company's five tenant railroads and their connections. The bureaus hav their own phone-number listings fo calls which go through the distributor that route incoming calls to informa tion and reservation clerks. On each of the distribution boards are whit lights to indicate operators available to receive calls, green lights to indicat operators in contact with callers, and red lights to indicate calls waiting t be answered. A recorded-announce ment feature comes into play if a relight is not cleared in 20 seconds. Th announcement advises the caller that all clerks are busy, and assures him that his inquiry will be handled i turn. Checks indicate that practicall no calls are held in excess of 21/2 to minutes, even in the busiest period The distributors are rented from the local telephone company.

Trade Publications

CONTROL CABLES. New catalon No. 210 presents specifications, size of wire and insulation, as well as application and construction information on communication wire, lighting cables, control cables, protection cables and flexible cords, from single conductor to multi-conductor. Superior Cable Corp., Dept. RSC, Hickory N. C.

AMPLIFIERS. A booklet describing the various amplifiers, pre-amplifiers, and panels and cabinets for them is now available. The eight-pagpamphlet provides detailed specifications of the units listed. R. W. Nei Co., Dept. RSC, 4320 Montrose Ave Chicago 41, Ill.

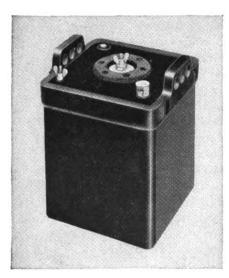
WIRE MARKERS. A bulletin listing some 400 different miniatur Perma-Code wire markers is not available. It contains application in formation and specifications for varous styles and marking. W. H. Brad Co., Dept. RSC, 727 W. Glendal Ave., Milwaukee 9, Wis.

TWO-WAY RADIO. General Electric Co. has published a series of new bulletins on its Progress Line two way radio equipment, containing it formation on mobile communication units with transistor power supplied vibrator-dynamotor power supplied and low battery drain transistorized Progress Line. General Electric Communications Products Dept., P.C. Box 4197, Dept. RSC, Lynchbung Va.

AIR CELL BATTERIES. Catalo section R-9555 presents data on volume age rating, ampere-hour capacity recommended maximum current (Continued on page 34)



AD PRIMARY CELLS



Save users

LABOR, TIME, MONEY

Maximum discharge rates:
1.0 amp. continuous
2.5 amp. max. intermittent
Approximately one gallon of water
for 2500 watt hours.
No washing of jars.
No mixing of caustic.
Only one stores item.

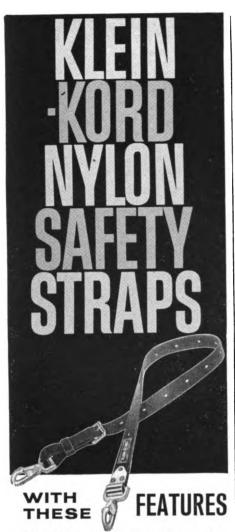
Railway track circuits light signals—electrical aids to navigation, Telephone exchange batteries, etc.

ad 608a

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.

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Klein developed the first fabric safety strap and have pioneered in every development. The recently introduced Klein-Kord Nylon Safety Strap offers these features:

LONGER LIFE—Superior construction, woven from filament nylon. Stretch has been almost eliminated.

PLY ADMESION—The multiple plies of strongly woven pre-dipped nylon are frictionized in neoprene and vulcanized.

FLEXIBILITY — Klein-Kord Nylon Safety Straps are extremely flexible and assure maximum comfort and greater strength. When tested in use, these straps are capable of a test load of 2750 pounds, far in excess of any load they will be called upon to support in service.

QUALITY HARDWARE—All buckles and snaps are drop-forged and tested by Klein in their own

forge shop.

WRITE FOR BULLETIN 560 ASK YOUR SUPPLIER

Foreign Distributor:



NEWS BRIEFS

(Continued from page 32)

drain for both continuous and intermittent service, dimensions, and dry weight of air depolarized primary batteries. National Carbon Co., Dept. RSC, 270 Park Ave., New York 17, N.Y.

Railroad Personnel

HOUSTON BELT & TERMI-NAL. Thomas C. Morris has been appointed signal engineer, succeeding Charles E. Murray, retired.

SOO LINE. Bernard F. McGowan has been named assistant chief engineer, signals and communications of the new Soo Line, formed through the merger of the Minneapolis, St. Paul & Sault Ste. Marie, the Wisconsin Central, and the Duluth, South Shore & Atlantic. Mr. McGowan was signal engineer of the MStP&SSM and superintendent communications and signals of the DSS&A.

CHICAGO, BURLINGTON & QUINCY. D. H. Thomsen, signal supervisor at Alliance, Neb., has been promoted to assistant to chief signal engineer, Burlington Lines, at Chicago, succeeding P. H. Foley, resigned. William Schreiber, assistant signal supervisor at Red Oak, Iowa, has succeeded Mr. Thomsen. R. W. Sanders, assistant to superintendent of communications and signals, Colorado & Southern, has succeeded Mr. Schreiber, and M. M. Shultz, CTC maintainer at Alliance, has succeeded Mr. Sanders at Denver, Colo. I. D. Sundberg has been promoted to general signal foreman, replacing B. J. Foley, retired.

UNION PACIFIC. Carl Otis Jett, system communications engineer at Omaha, has been appointed assistant superintendent communications, succeeding John E. Fitzpatrick, retired. H. E. Froyd, traffic supervisor, communications department, at Los Angeles, has been named to replace Mr. Jett.

Mr. Jett was born in Jackson, Ky., June 25, 1908. He attended the University of Kentucky and George Washington University and was employed by the Bell System and TVA as an electrical engineer. During World War II he was with the Army Service Forces, in charge of maintenance of radar, telephones and all types of signal and communication equipment. He came to the UP in 1946 as system telephone and telegraph engineer.

WANTED RAILWAY SIGNAL SYSTEM CIRCUIT DESIGNER

Minimum requirements—High school education and two years' experience in circuit design. Company offers excellent employee benefit program. Salary open. Send resume to: Box 123, Railway Signaling and Communications, 30 Church Street, New York 7, N. Y.





Carl Otis Jett

Michael L. Mannion

BESSEMER & LAKE ERIE. Michael L. Mannion, whose appointment as signal engineer was reported in the January issue of RS&C, was born in Greenville, Pa., April 6, 1920 He attended the University of Pittsburgh and entered railroad service in the maintenance of way department of the B&LE in August 1939. From 1943 to 1948 he was in the engineering department of Union Switch & Signal, except for one year of Army service. From 1948 to 1956 Mr. Mannion was signal and communications engineer of the Clinchfield, then for two years he was methods engineer of the B&O, and prior to his appointment as signal engineer of the B&LE was in transportation marketing for Remington Rand Univac.

Obituary

HARRY C. SAMPSON, 70, superintendent signals of the Gulf, Mobile & Ohio, died at his home in Bloom-



Harry C. Sampson

ington, Ill., on January 3. Mr. Sampson began his railroad career in Gardner, Ill., in 1909 and served in man capacities in the signal department of the Chicago & Alton, and later the (Continued on page 36)

RAILWAY SIGNALING and COMMUNICATION

NEW FROM GraybaR



Now — a G-E MOBILE RADIO designed specifically for locomotive and caboose communications. It is built to withstand rugged use. It delivers high signal power. It's compatible with G-E Progress Line automotive two-way radio systems, and provides the same high reliability and low service cost inherent in that equipment. Only G-E MOBILE RADIO provides so many of these big service and operating features.

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LOOK AT THE



PRODUCT STORY

Designed to A.A.R. Specification 12-10 Paragraph C-9.

Interchangeable — Receiver and transmitter chassis for locomotive and caboose are interchangeable with those of Progress Line mobile units and space station equipment.

Plenty of audio power - 8 watts. This

permits you to hear clearly despite noise in cab or caboose.

 $\begin{array}{ll} \textbf{Channel selection} - \textbf{Two frequency is} \\ \textbf{standard. Four channel is optional.} \end{array}$

Transmitter power output — 25 watts.

Voltage input — 117 volt AC 60-cycle;
12 volt DC; or 64 volt DC through rotary
converter.

968

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OFFICES AND WAREHOUSES IN OVER 130 PRINCIPAL CITIES

NEWS BRIEFS

(Continued from page 34)

Alton. In 1928 he was appointed superintendent signals and telegraph. When the Alton became a part of the GM&O in 1947, he was made superintendent of signals. Mr. Sampson developed and had the patent on the automatic electric short-arm railroadhighway grade crossing gate signal. For several years he was a member of the AAR Joint Committee on Grade Crossing Protection. In 1944 he was appointed the AAR's representative on the Joint Committee on Uniform Traffic Control Devices and cooperated with this committee in compiling the 1948 issue of the Manual on Uniform Traffic Control Devices for streets and highways.

FRANK O. HIGGINS, JR., 38, signal supervisor of train control, Louisville & Nashville, at Louisville, Ky., died January 14.

Supply Trade News

GENERAL ELECTRIC CO. Edwin L. Davis has been appointed sales manager of industrial products for the receiving tube department, at Owensboro, Ky.

CANADIAN MOTOROLA ELECTRONICS CO. John F. Hooper has been appointed manager of Canadian sales of Motorola mobile communications equipment, and Gust Landstrom assistant manager, with headquarters at Toronto.

RADIATION INCORPORATED. Ben B. Covington has been appointed manager of the company's Melbourne district office, located at Orlando, Fla.

WHEEL CHECKERS has appointed Servo Corp. of America as railroad sales representative for its broken flange detector.

NATIONAL CARBON CO. Rolf Lindenhayn, Jr., has been appointed western division manager of brush and railroad products, at San Francisco, succeeding H. D. Van Artsdale, assigned to a new position with Union Carbide International Co. Mr. Lindenhayn was formerly an electrode products salesman for National Carbon at Cincinnati.

COLLINS RADIO CO. Formed a new Communication and Data Processing Division to provide electronic data processing services to industry. It will offer subscribers direct access

(Continued on page 38)

NEWS BRIEFS

(Continued from page 36)

to an "on-line, real-time" data processing service which will enable large and small businesses to channel information directly into large computers to process business and scientific data.

ELECTRIC STORAGE BATTERY CO. Has formed a new sales and service organization—Exide Industrial Marketing Division—which combines the nation-wide Exide industrial sales and service engineering facilities with those of the former Edison Storage Battery Division of Thomas A. Edison Industries, now the Nickel-Alkaline Division of ESB. The new marketing organization is headed by C. J. Moore, vice-president—marketing.

WESTINGHOUSE AIR BRAKE CO. George W. Baughman, vice-president of Union Switch & Signal Division, has been appointed to the president's staff at company headquarters in Pittsburgh, Pa. Mr. Baughman joined the engineering department of US&S in 1923 and since then has been issued over 90 patents in the railway signaling field. In 1944 he was appointed assistant chief engineer in charge of electronics, and in 1945 chief engineer. He was made assistant vice-president in charge of railway signal engineering in 1950 and a vice-president of US&S in 1951.

LENKURT ELECTRIC CO. As reported in the January issue of RS&C, Lenkurt has taken over its product distribution formerly handled by Automatic Electric Sales Corp. Edward G. Hall, western district sales manager, has been promoted to general commercial sales manager and the following district sales managers have been appointed: Robert E. Graham, western district; Marion C. Royalty, southwestern district; Bliss K. McCann, central dis-



George W. Baughman



Ralph D. Pyle



Edward G. Hall



Charles R. Fisher

trict, and F. B. Swett, southeastern district.

COPPERWELD STEEL CO. Ralph D. Pyle has been promoted to chief electrical engineer of the Wire and Cable Division, at Glassport, Pa. A graduate of Carnegie Institute of Technology in 1931, Mr. Pyle worked as a civilian employee for the U.S. Corps of Engineers until he joined Copperweld's engineering department in 1937. His work included supervision of the vibration laboratory for the study of electrical conductor performance.

STROMBERG-CARLSON. Charles R. Fisher has been appointed manager of product engineering for the Telecommunication Division. Mr. Fisher began with Stromberg-Carlson in 1949 as a test engineer and was manager of the digital communications laboratory at the time of his recent appointment.

GENERAL RAILWAY SIGNAL CO. As reported in the January issue of RS&C, John W. Porter has been appointed executive vice-president; Louis T. Freed, sales manager, United States and Canadian sales; and Howard C. Palmer, western manager.

Mr. Porter, a graduate of Nottingham University and Regent Street Polytechnic in London, started his railway career with the London & North Eastern in 1930. He was later with the London Passenger Transport Board and Siemens & General Electric Railway Signal Co., Ltd. After serving as a major in the Royal Corp of Signals from 1939 to 1945, he returned to Siemens. In 1946 he was appointed signal engineer, and later coordination engineer to the general manager of the New Zealand Government Railways, and assisted in a international survey of railway electrification. Joining GRS, he became export manager in 1951, director of foreign sales in 1953, general sale manager in 1955, and vice-presidentsales, in 1958.

Mr. Freed, born in Albia, Iowstarted his railway career in 1926 if the signal construction forces of the Chicago, Burlington & Quincy, bein promoted, successively, from main tainer to signal draftsman to circularing engineer. In 1946 he joined GRS as sales engineer at Chicago, being appointed assistant resident manage there in 1954, later assistant wester manager, and in 1957 he was mad western manager.

Mr. Palmer, born in Angelia N. Y., received an electrical engineer ing degree from Northeastern Un versity and later continued his studie at the University of Rochester. I 1937 he joined GRS, working in the commercial department on the production of circuit plans and later be came a circuit designer. He serve in World War II for nearly five year attaining the rank of major in th Signal Corps. Returning to GRS, h was later transferred to Chicago where he assisted in installation engi neering. In 1950 he was appointe sales engineer there and in 1956, as sistant western manager.

UNION SWITCH & SIGNAL DIVISION—Westinghouse Air Brak Co. E. J. Agnew, manager of technica services, has been appointed manager engineering administration. R. H. Tunell, section head of the code control section, and C. B. Shields, engineering supervisor, have been name consulting engineers—equipment engineering, and D. D. Huffman, engineering supervisor, has been promoted to section engineer—signaling—domestic.

SALES ENGINEERS RAILROAD PRODUCTS DIVISION

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