

NEWS BRIEFS

ST. LOUIS-SAN FRANCISCO will spend about \$1 million for the construction of a microwave system and the installation of IBM 1401-7070 computer equipment. The microwave system will be installed between St. Louis and Springfield, Mo., with construction starting in about six months. The data processing equipment is to be in service early in the second quarter of 1963.

UNION TERMINAL has ordered signal and interlocking equipment from Union Switch & Signal division of WAB Co., for installation at its Dallas, Tex., terminal.

LOUISVILLE & NASHVILLE will spend \$134,362 for consolidation of

CTC points at Mobile, Ala. Montgomery-Flomaton, Ala., CTC is now controlled from a board at Georgiana, Ala.; and Flomaton-New Orleans CTC is now controlled from a board at Mobile. Under the new consolidation, over 300 miles of mainline will be under the control of the CTC board at Mobile.

JAPANESE NATIONAL RAILWAYS have successfully tested a crewless electric train. Operating on a 0.8-mile circular track, test results revealed the error ranging from two to one seconds per run, which requires 17 min., 30 sec. to complete.

DEAD-MAN CONTROL on locomotives has been developed by a

RF&P Signal Gang Has 2,341 Safe Work Days



RF&P signal gang: standing (left to right)—H. J. Gatewood, signalman; J. M. Terry, lead signalman; W. E. George, lead signalman; N. S. Anderson, assistant signalman; J. D. Atkins, signalman; E. F. Landram, foreman; and kneeling (left to right)—E. M. Terry, signalman; and C. D. Beasley, Jr., signalman.

The Richmond signal gang of the Richmond, Fredericksburg & Potomac worked 2,341 days without a lost-time accident as of March 1 this year. Credit is due to not only the men in the gang (picture above), but their foreman E. F. Landram, and assistant supervisor signals and communications P. C. Poates (not available for the above photo), to whom they report.

As on all railroads, safety is conscientiously applied on the RF&P. V. P. Shepardson, assistant chief engineer—signals and communications, says: "Our safety program includes a

safety committeeman in each gang, chosen by the members of the gang to serve in this capacity for three months. Each gang has a short safety meeting each week. Once each month, a safety meeting is held with a guest speaker, usually a specialist from another gang, the safety supervisor or a member of the engineering department."

The men discuss work clothes, pole climbing, line work, use of hand tools, relay testing, wrenches and ladders, rope, chains and tackles, and similar subjects concerned with tools and practices.

Swiss firm to sound a warning horn when the engineer fails to respond to certain duties within a given distance. If no controls are operated over a distance of one mile, power is cut and the brakes are automatically applied.

NORTHERN PACIFIC and Union Pacific have received ICC approval to install an NX interlocking in lieu of an existing interlocking at 15th street, and automatic block signal system in the vicinity of the Tacoma, Wash., passenger depot.

SOUTHERN has received ICC approval to install a traffic control system on about 41 miles of two main tracks and about 39 miles of single main track, all between Orange and Monroe, Va.

ATLANTIC COAST LINE has received ICC permission to install a traffic control system on about 15 miles of each of two main tracks, and on approximately 22 miles of single main track, all between South Pembroke, N.C., and Pee Dee, S.C. Control will be from a machine at Rocky Mount, N.C., and will include control of interlockings at South Dillon and Pee Dee, S.C.

AIEE-IRE merger plans have been approved by the boards of directors of both organizations. Voting members are to receive proxy forms May 5-10, 1962. If approved by voting members the merged society will become effective Jan. 1, 1963, as the Institute of Electrical and Electronic Engineers.

CANADIAN PACIFIC has ordered equipment from Union Switch & Signal division of WABCo., for the installation of CTC on 51 miles of track between Indian Head and Broadview, Sask. Control will be from an addition to an existing TCC machine at Moosejaw, Sask.

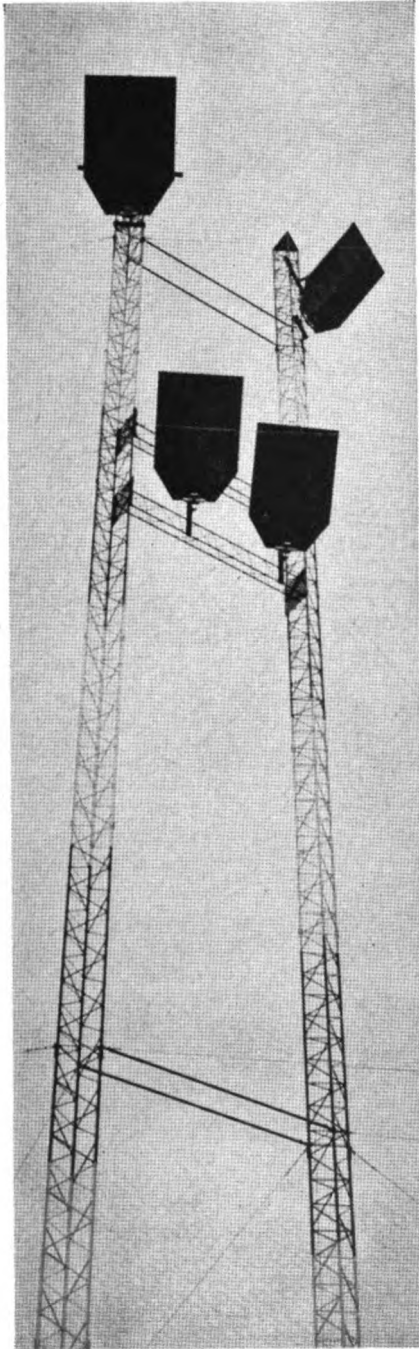
Railroad Personnel

SEABOARD AIR LINE has awarded a \$104,000 contract to Motorola for two-way radio equipment, including 73 engine radios and 60 "Handie-Talkie" portable radiophones.

CANADIAN PACIFIC G. C. Gunning, assistant signal engineer at Winnipeg, has been appointed signal engineer for the Prairie region, with the same headquarters, succeeding W. Abell, retired.

QUEBEC CARTIER. Vincent Hill has been appointed superintendent of communications and signals of the new
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NEWS BRIEFS

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railway under construction north from Port Cartier, Que., for the Quebec Cartier Mining Co. Mr. Hill was formerly branch manager of the Algoma Central Telephone Co., Ltd., Wawa, Ont.



Robert T. Rivers

● **SOUTHERN.** Robert T. Rivers, whose appointment as communications engineer at Washington, D.C., was announced in RS&C February 1962, is a native of Fairburn, Ga. He began his career with the Southern as a lineman at Atlanta, Ga., and later served there as a telephone maintainer. He was last assigned to Chattanooga, Tenn., as general supervisor communications. Roland A. Howell, who succeeded Mr. Rivers, was born at Atlanta, Ga. Entering the service of the Southern as a fireman, he was later a telephone maintainer, communications foreman, assistant supervisor communications and assistant communications engineer at Chattanooga.

● **PENNSYLVANIA.** W. F. Messner has been appointed assistant office engineer, communications and signals, at Pittsburgh, Pa.

● **CANADIAN NATIONAL.** J. D. Goss, assistant superintendent—plant, Moncton, N.B., has been appointed outside plant superintendent for CN Telecommunications, Western region, at Winnipeg.

● **CENTRAL OF GEORGIA.** J. B. Dumas, signal maintainer at Griffin, Ga., has been promoted to signal foreman.

Current Publications

(Also see page 31)

● **STRANDED WIRE.** Bethalume strand is aluminum coated steel wire available in 3-wire or 7-wire construction. Folder 777 describes the wire, gives its physical properties and advantages. This wire can be used as messenger strand, guy strand or as an overhead ground or static wire for

lightning protection to electrical transmission lines. *Bethlehem Steel Co. (CP-14)*

● **ACSR CORE WIRE.** Aluminum coated core wire, known as Bethalume is now added to Bethlehem's line of core wires (Folder 778), which includes Bethanized (zinc coating by electrolytic process) and hot-dip galvanized (zinc coated) core wires. They are available in sizes 0.1878 to 0.0661" inclusive. *Bethlehem Steel Co. (CP-15)*

● **OSCILLOSCOPES.** "Troubleshooting With the Oscilloscope" is designed to provide practical instruction in the use of the oscilloscope in servicing electronic circuits. The book tells how to use the 'scope correctly, what test signals are needed, the type of waveform to expect, and how to interpret the waveform. \$2.50. *Howard W. Sams & Co., Inc. (CP-16)*

● **RECTIFIER.** A technical bi-monthly publication contains information on rectifier applications in railway service. *Fansteel Metallurgical Corp. (CP-17)*

● **TRANSISTOR CIRCUITS.** Vol. 4. Basic Electronics series, makes extensive use of 4-color diagrams to explain transistor circuit operation. In addition to the physics of transistors and the three basic configurations, oscillator, amplifier and detector circuits are covered. Catalog No. BET-1, price \$2.95. *Howard W. Sams & Co., Inc. (CP-18)*

● **MESSAGE CIRCUIT DIALING.** Bulletin T-5018R/1M/761/BB gives a complete description with specifications and work order sheets for operating a message circuit on a dial basis permitting automatic selective signaling between waystations on a message line. Type 60 selectors with 3½-cycle ringing can be used or an all-tone system. A total of 60 stations can be used on one pair of wires in either system. *General Dynamics/Tel-ecomunication. (CP-19)*

● **TELEPRINTER TESTERS.** A line of versatile instruments for continuous monitoring, on an in-service basis, of telegraph and data circuits, are described with specifications in a series of information sheets Nos. 1001, 1002, 1004, 1005 (portable telegraph signal transmission measuring sets), 1201, 1300 and 1301. *Atlantic Research Corp. (CP-20)*

● **MICROWAVE ANTENNAS.** Bulletin 620 includes descriptions, illustrations, drawings, and specifications of parabolas for 5800-7750 mc, 450-470
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mc, 890-960 mc and 1700-2200 mc. Also included are antenna mounts, radomes for spun parabolas and dual polarized adapters for 5,800-7750 mc. *Mark Products Co. (CP-21)*

● **ANTENNAS.** Bulletin 600 is a condensed catalog with ordering information, specifications, drawings and photographs for VHF antennas, cable systems, microwave antennas, radome covers and antenna mounting hardware. *Mark Products Co. (CP-22)*

● **INSULATION.** du Pont's wire and cable casebook 8, 1st quarter 1962, describes Hypalon synthetic rubber (chlorosulfonated polyethylene) and its use as wire jacketing and insulation. Electrical, mechanical and physical properties of the insulation are also given. *E. I. du Pont de Nemours & Co., Inc. (CP-23)*

● **SINGLE-SIDEBAND.** Thirteen chapters in this new book range from the origins of single sideband, through equipment, to tests, measurements and trends in single sideband communications. Schematics, circuit diagrams and illustrations are plentiful in this 320-page hard cover book, No. ISH-1, price \$6.95. *Howard W. Sams & Co., Inc. (CP-24)*

● **ELECTRONIC FORMULAS.** "The Handbook of Electronic Tables and Formulas", a Photofact publication, includes electronic formulas and laws from Ohm's Law to modulation and decibels, constants and standards, symbols and codes, mathematical tables and formulas of use to electronic personnel, electronic design, service and installation data, and miscellaneous conversion and physical data. A feature of the book is a full-color foldout showing FCC frequency allocations. \$3.95. *Howard W. Sams & Co., Inc. (CP-25)*

● "ELECTRONICS MATH SIMPLIFIED," provides instruction in mathematics that is directly related to electronics theory. All examples are electronic in nature. The course begins with fractions, and proceeds through logarithms, trigonometry, and other mathematical subjects that are required for work with electronics. Practice exercises are included, with answers in the back of the book. Photofact publication No. MAT-1, \$4.95. *Howard W. Sams & Co. (CP-26)*

● **MODERN DICTIONARY OF ELECTRONICS** provides the defini-

tions for over 10,000 words and terms in current use in electronics. Many new terms, such as nanosecond and gigacycle are defined, along with phrases such as "available signal to noise ratio." Many words and terms are cross-referenced. A guide shows the correct pronunciations for almost 1,000 electronic words that are most often mispronounced. Terms are illustrated where necessary to clarify the meanings. Your RS&C editor considers it a most worthwhile book. 384 pages, hardbound, \$6.95. Photofact publication catalog No. DIC-1. *Howard W. Sams & Co. (CP-27)*

● **COMPUTER BASICS** is a 5-volume study of electronic computers, developed originally by the U. S. Navy. The series assumes no prior knowledge of computer systems. They are written to be understood by any

This Was News 50 and 25 Years Ago

The Signal Engineer, May 1912. Caledonian Railway installs new signaling at 13-track, stub-end central station in Glasgow, Scotland. Rush hour traffic will peak to 60 trains per hour, and daily traffic totals 550 regular trains. Junction of two 4-track lines is controlled by a mechanical interlocking, while station plant is electro-pneumatic interlocking with 337 working levers.—Erie will double-track its 157 miles of mainline in Indiana and install automatic block signals—New York, New Haven & Hartford plans to install 110 miles of 2-track and four miles of 4-track AC operated automatic signaling between South Framingham-New Bedford, East Providence-Fall River, Mass., and Hartford-Waterbury, Conn.

Railway Signaling, May 1937. Delaware River Bridge line of Philadelphia Transit has CTC control of interlocking facilities. Double-track line extends from Market and 8th Streets, Philadelphia to Broadway in Camden, N.J. System must allow for 6-car trains to leave the Philadelphia end during rush hours on 90-sec. headway.—Chicago, Burlington & Quincy to install CTC between Denver and Akron, Colo., on 112 miles of single track.—Michigan Central installs barriers at a highway crossing near Jackson, Mich., which handles 3,000 motor vehicles. Traffic lights and flashing-light signals also installed. Barrier in right-hand lane is locked at 10¼" above pavement, while barrier in left lane is unlocked but raises to 6" height, so that motorists leaving the crossing can easily depress it.

reader with some background in basic electronics. A working knowledge of algebra and trigonometry will contribute to greater understanding. Five volumes, 1,250 pages, \$22.50. Photofact publication catalog No. CSP-5 *Howard W. Sams & Co., Inc. (CP-2)*

Supply Trade News

● **GENERAL RAILWAY SIGNALING CO.** John W. Porter, executive vice president, has been elected a director of the company.

● **AMERICAN BRAKE SHOE CO.** Robert N. Post, sales representative in the New York area, has been appointed district sales manager for the Railroad Products Division, at Denver. He succeeded B. E. Dunbar, transferred to St. Louis as district sales manager there.

● **BENDIX RADIO** division of Bendix Corp., has sold its railroad radio and mobile communications business to Union Switch & Signal division, WABCo. Products include transistorized radio units: 72-volt DC for locomotives, 12-volt DC for cabooses and vehicles, 117-volt AC base station (and dispatcher radio control), and portable packsets. Bendix Radio will operate the business until June 1, 1962.

● **SERVO CORP. OF AMERICA.** Has announced four new additions to its Railroad Products Division staff. They include James E. McMahon, Jr., manager, railway signaling; Joseph Jagod assistant to the general manager; Michael Zara, export manager; and Robert Howell, staff consultant to the Division.

● **LENKURT ELECTRIC CO.** Al F. Culbertson, director of engineering has been elected vice-president—engineering.

● **OKONITE CO.** Walter W. Harmond has been appointed district manager at Philadelphia, Pa.

● **HUBBARD & CO.** William Featherstone, product sales manager at Emeryville, Calif., has been appointed division sales manager, West Coast division, with the same headquarters.

● **BISHOP MFG. CO.** has appointed Gene Goodman & Associates, Memphis, Tenn., and R. C. Hauk, Metairie La., as sales representatives.

● **GENERAL ELECTRIC CO.** M. C. McRae has been appointed system sales manager for GE's regional two-way radio office at Tallahassee, Fla. covering the southeastern states.