

NEWS BRIEFS

● **BRITISH RAILWAYS** are using closed-circuit television to inspect overhead equipment on electric railways. A special inspection train has been built for the mainline, now being electrified, between London and the North-West. The train is being used to check, before power is switched on, that the overhead equipment has been assembled correctly. It is also used for routine inspections of live equipment, signal installations and the inside of bridges and tunnels.

The train has three coaches: two observation coaches with seats for the inspecting engineers and a central coach fitted with a pantograph, which is kept in contact with the overhead wire and carries a height gauge and a scale that indicates the horizontal position of the wire. The coach also contains two television cameras: one is permanently focused on the height gauge; the other can be moved by an operator sitting in an observation dome and usually follows the pantograph head on the contact wire. Each camera is connected to monitor screens in both observation coaches. The train

normally moves at about 10 mph.

● **CHICAGO TRANSIT AUTHORITY** awarded a \$157,475 contract to Union Switch & Signal division of WABCO for automatic interlocking equipment to be installed at the Logan Square terminal.

● **FLORIDA EAST COAST** ordered four hotbox detectors from General Railway Signal Co. at a cost of about \$49,000. They will be installed at Port Orange, Sharpes, Oak Hill and Lake Harbor Branch, Fla.

● **GREAT NORTHERN** has received ICC approval to install a traffic control system between Nolan and Juanita, N.D., about 58 miles. Control will be from the dispatcher's office at Minot.

● **LOUISVILLE & NASHVILLE** will install six additional hotbox detectors which will set wayside signals to stop when an overheated journal is detected. Detectors for southbound trains will be installed near Calhoun and Evergreen, Ala. A detector to

check northbound trains will be installed near Bay St. Louis, Miss., and bi-directional detectors will be installed between Bay Minette and Perdido, Ala., between Gautier and Orange Grove, Miss., and near Park City, Ky.

L&N will add eight additional classification tracks to its automatic yard at Atlanta, Ga.

● **MAINE CENTRAL** has placed a \$30,000 contract with General Railway Signal Co. for CTC equipment, type J, to control five locations between Yarmouth Jct. and Riverside, Maine.

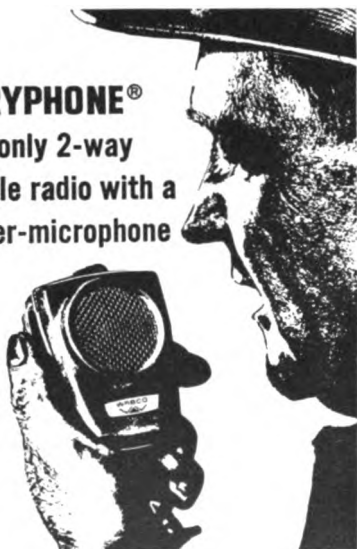
● **MISSOURI PACIFIC** will add an 8-track classification group to its automatic yard at North Little Rock, Ark., \$923,000; and modify CTC installations from North Dupo, Ill. to Bixby, from Little Rock to McGehee, Ark., and from McGehee to Alexandria, La., at a total cost of \$2,131,000.

● **NEW YORK CENTRAL** has ordered type J CTC equipment from General Railway Signal Co. to be installed in territory between Wade and Oklahoma, Ohio.

NYC has begun work on the modernization of Sharon yard near Cincinnati, Ohio. In addition to track construction and realignment in the hump

(Please turn to page 39)

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UNION SWITCH & SIGNAL DIVISION
PITTSBURGH, PA. 15218/Westinghouse Air Brake Company

This Was News 50 and 25 Years Ago

The Signal Engineer, August, 1914. Chicago, Milwaukee & St. Paul is completing installation of AC automatic block signals on five sections of double-track aggregating a total of 458 miles. The automatic signaling with normal indication, approach, route and section locking, is carried through 17 mechanical and 5 electric interlocking plants.—Philadelphia Rapid Transit has installed trolley contact control signaling on single-track portions of its line between Philadelphia and Chester, Pa., 14 miles.—Oregon-Washington Railroad & Navigation installs an all-electric interlocking at East Portland, Ore. The plant has 38 signals, 12 switches, 18 derails, 4 double-slip switches with movable point frogs and bridge alignment for a lift bridge across the Willamette river.—Buffalo, Rochester & Pittsburgh installs a mechanical interlocking at Ashford, N.Y. Installation comprises: 7 power-operated high signals; 4 pipe-connected train-order signals; 7 wire-connected dwarf signals; 5 pipe-connected derails; 9 pipe-connected switches; 9 pipe-connected facing point locks; 3 annunciators; 6

indicators; and 5 track circuits for route locking.

Railway Signaling, August, 1939. Pennsylvania respaces automatic signals in the East River tunnels in New York City, makes changes at two interlocking plants and installs a temporary World's Fair interlocking on the Long Island at the World's Fair site near Flushing. Trains are scheduled to serve the Fair every 10 minutes during the major portion of each 24 hr period.—Chicago, Burlington & Quincy rebuilds complete retarders by applying wear-resisting, hard-facing metal to pins and worn surfaces by means of a welding process.—Canadian Pacific installs automatic crossing protection devices at 13 streets in Chatham, Ont.—Chicago, Indianapolis & Louisville installs automatic protection at its crossings with Highway U.S. 30 at Dyer, Ind. Twenty scheduled trains plus 40 switching movements and passage of 8,000 motor vehicles daily necessitate time-element and stick relay cut-outs superimposed upon the normal interlocking relay control schemes. **RS&C**

(Continued from page 10)

area, grade changes will be made to improve humping operations. Sharon yard was equipped with retarders in 1928. New communications to be installed include talk-back and paging speakers, telephones, teletypes and two-way radio including three two-channel systems for car inspectors and switch crews plus a single-channel system for general yard operations.

● **NEW YORK CITY TRANSIT AUTHORITY** has awarded a contract to Motorola, Inc., \$400,000, for a radio system to provide two-way communications with train motormen and TA police officers throughout an 8-mile section of the IRT line between Bowling Green and 125th Street on Lexington Avenue in Manhattan. The test project will eventually cost \$750,000 of which the Federal Housing and Home Finance Agency is providing \$500,537.

Facilities in the system will include two special dispatching consoles: one located in the TA's control room in Grand Central tower, the other in the TA police headquarters offices at 370 Jay St., Brooklyn. Connected to the consoles by wire line will be six base station facilities, each consisting of two transmitters and two receivers and located in underground relay rooms along the IRT route. To insure maximum communications in the subway, the base stations will tie into a 70,000-ft wire line. Use of the line will enable radiation and reception of radio waves with train and portable radios.

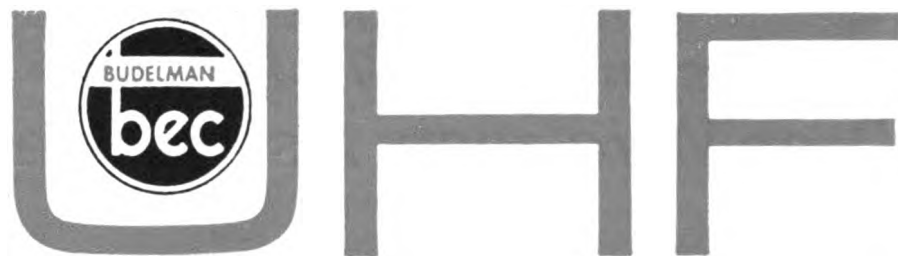
Radio equipment for motormen will include 150 two-way units designed for interchangeable use in 300 train cabs. Upon completing a run, the motorman will remove the Dispatcher radio from its bracket and insert the unit into a similar mounting in the new control position. Another 16 radios will be purchased as spares.

TA policemen at subway stations will be equipped with lightweight, fully transistorized HT series Handie-Talkie portable radios. A total of 33 units will be used.

The train-to-wayside radio system is expected to be completed within 10 months, and the police radio system within 6 months.

● **NORTHERN PACIFIC** and Chicago, Burlington & Quincy have received ICC approval to install a traffic control system on one main track between Huntley and Billings, Mont., 11 miles. Portions of second main track are to be removed, while the

(Please turn to page 41)



FIXED RADIO EQUIPMENT
450 Mc/s • 960 Mc/s • 2000 Mc/s

FOR EXPANDING COMMUNICATIONS

36 paired channels (72 frequencies) plus 4 non-paired channels, of which six are available for omni-directional transmission, are available in the 950-962 Mc/s band for point-to-point communications, telemetry, remote control, data transmission and base station control—plus 10 low-power Business Radio channels and 49 Citizens Radio channels in the 450-470 Mc/s band available for fixed service, as well as considerable unallocated channel space in the 1700-2300 Mc/s bands.

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FIXED LINKS

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TRANSPORTABLE LINKS

Temporary or emergency communications facilities can be set up quickly with a pair of BEC UHF radio terminals installed in trucks, vans or transportable shelters, licensed as fixed or mobile stations.

BASE STATION CONTROL

Mobile radio system range can be increased by installing base stations at high locations away from noise sources — use BEC 960-Mc/s band single-frequency, push-to-talk radio terminals or full-duplex terminals for full base station remote control and telemetering. Baseband capacity for voice, order wire and control tones. For multi-point control of a base station or pick-up of data on a programmed or interrogation basis, omnidirectional antennas can be used.

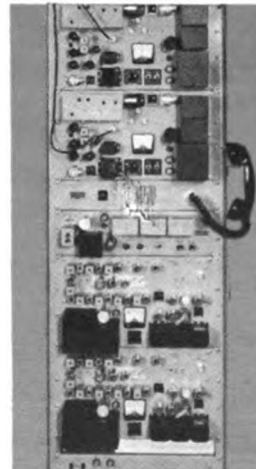
BUDELMAN UHF/FM MULTIPLEX RADIO

Terminals are compatible with standard FDM telephone carrier and tone signaling equipment.

Transmitter and receiver are crystal controlled for 0.0005% frequency stability. Designed for continuous operation, 24 hours per day, 365 days per year.

BEC equipment is used by railroads, pipe lines, industry, state police, telephone companies . . . and in many military applications, BEC off-the-shelf equipment is used in lieu of more costly MIL-spec equipment.

Write today, or call (203) 348-9231 for "Planning UHF Radio Links" and full data on Budelman UHF and microwave radio and multiplex, the complete communications equipment line.



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NEWS BRIEFS

(Continued from page 39)

remainder will be converted to sidings.

● **READING** has ordered interlocking equipment, including a route control machine, from Transcontrol Corp. The new machine will control 45 switches and 90 signals. Included in the new controls will be eight interlockings and two sections of CTC, all in the Philadelphia suburban area.

● **SANTA FE** has ordered 11 hotbox detectors from Servo Corp. of America. AT&SF now has 22 Servo detectors.

● **SEABOARD AIR LINE** has received ICC approval to install CTC on approximately 119 miles of single main track between McClenny and Tallahassee, Fla.

● **SOO LINE** has ordered hotbox detectors from General Railway Signal Co. to be installed at Lake Villa, Ill., Regal and Elbow Lake, Minn., and Cathay, N.D.

● **SOUTHERN PACIFIC** has mounted a microphone on a pole at several

highway crossings in the San Francisco suburban territory. After stopping at the station, the engineer of the commuter train sounds the air horn. The microphone picks up the sound, actuates the crossing protection equipment which had been cut out when the train had stopped short of the crossing to make the station stop. (See RS&C, October 1954, page 27, for article about RF&P installation.)

Railroad Personnel

● **ATLANTIC COAST LINE:** The following have been appointed assistant engineers, communication and signaling: **B. Leon** with headquarters at Jacksonville, Fla.; **F. M. Craven**, headquartered at Waycross, Ga.; and **W. I. North**, to be headquartered at Rocky Mount, N.C. **T. J. Platt**, supervisor of signals at Savannah, Ga., has retired.

The following men have been appointed supervisors communication and signaling: **L. M. Smith**, with headquarters at Rocky Mount, N.C.; **W. P. Robinson**, headquartered at Florence, S.C.; **R. B. Cook**, to be headquartered at Manchester, Ga.; **C. Bacon** with headquarters at Waycross, Ga.; and **W. E. Holleyhead** to be headquartered

at Tampa, Fla.

● **CANADIAN NATIONAL TELECOMMUNICATIONS:** **J. B. Lauzon** has been appointed outside plant supervisor with headquarters at Moncton, N.B.

● **NICKEL PLATE:** **C. H. Oppelt** has been appointed assistant signal supervisor at Fort Wayne, Ind., succeeding **Lee F. Harshbarger**, retired.

● **SOUTHERN:** **L. C. Brown**, signal and electrical superintendent at Cincinnati, Ohio, has been transferred to Atlanta, Ga., in the same capacity.

● **SOUTHERN PACIFIC:** **Charles P. Darrough** has been appointed public projects engineer-signal.

Supply Trade News

● **FEMCO INC.:** **T. B. Thompson**, vice-president-engineering and marketing has been elected executive vice-president and general manager, a newly created position. Before joining Femco, Mr. Thompson was vice-president-engineering, Union Switch & (Please turn to page 42)

All respect the Hayes Derail

On most of the leading American roads the protection of the main track by Hayes Derails is standard practice.

On some other roads, however, it is argued that a sure derailment should not be caused to avoid a possible but improbable accident.

The error in this reasoning is obvious. A derailment at a derail is rare and it usually means that only a pair of wheels drops off the rails. The cost of rerailing is negligible. On the other hand the "possible but improbable accident" does occur. Sometimes there have been serious results.



The main track needs positive protection. No available means of providing this protection should be omitted. This is a basic need of the first importance for safe operation. Signals and track circuits have their field but no signal nor track circuit can provide the positive protection which a Hayes Derail gives.

Hayes Track Appliance Co., Richmond, Indiana

NEWS BRIEFS

(Continued from page 41)

Signal, division of WABCO. Earlier he was signal engineer, Illinois Central. (See RS&C, August 1963, page 46).

● **GENERAL RAILWAY SIGNAL CO.:** **Thomas P. Marple**, field sales representative at New York has been appointed market research assistant with headquarters at Rochester, N.Y. Mr. Marple has a BS degree in electrical engineering from Duke University. He joined GRS as a circuit designer in 1952. A year later he was appointed assistant to the general construction foreman. In 1957 he was appointed a field sales engineer in the New York office.

● **MARQUARDT CORP.:** **Howard C. Palmer** has been appointed midwest regional manager. Mr. Palmer was born in Angelica, N.Y., and graduated from Northeastern University with an electrical engineering degree. In 1937, he joined General Railway Signal Co. working in the commercial department on circuit design. Following five years in the U.S. Signal Corps during World War II, he rejoined GRS, later being transferred to the Chicago sales office. In 1950, he was appointed sales engineer there, and six years later promoted to assistant western manager. He was appointed western manager in 1961, his most recent position.

● **OKONITE CO.:** **Donald R. Dickerson** has joined the Milwaukee, Wis., sales office staff.

● **PREFORMED LINE PRODUCTS CO.** will construct a new production plant at Tucker, Ga., which is expected to be in operation July 1, 1965.

● **STROMBERG-CARLSON**, a division of General Dynamics: The following men have been appointed transmission sales engineers: **Donald F. Mitchell**, with headquarters at Kansas City, Mo.; **Gerard E. Lenz**, with headquarters at Chicago, Ill.; and **Joseph A. Rash**, to be headquartered at Rochester, N.Y. **Donald L. Hoffman** and **Robert T. Smith** have been appointed



H. C. Palmer



D. F. Mitchell



G. E. Lenz



J. A. Rash



D. L. Hoffman



R. T. Smith



W. A. Wood



P. J. DeIvernois, Jr.

industrial sales engineers at Rochester.

Mr. Mitchell, an electrical engineering graduate of Clarkson College of Technology, has been a project and design engineer with S-C.

Mr. Lenz, with work experience in the telephone industry, was most recently a senior sales engineer with Lenkurt Electric Co. Prior to that he was a staff engineer with Automatic

Electric Sales Corp.

Mr. Rash joined S-C in 1961 following service in the Far East Signal Command in the U.S. Army. He attended City College in New York, majoring in electrical engineering.

Mr. Hoffman, a graduate of the Rochester Institute of Technology, had been with S-C, since 1955, first as an installer, and later as a systems engineer.

Mr. Smith came to S-C in 1961 after receiving an electrical engineering degree from Rochester Institute of Technology. He worked in the electronic manufacturing laboratory.

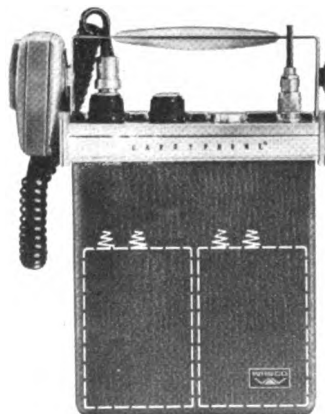
● **UNION SWITCH & SIGNAL** division of WABCO: **W. A. Wood** has been appointed senior consulting engineer in the project engineering department. **Philip J. DeIvernois, Jr.** has been appointed section engineer, classification yard and commercial section.

Mr. Wood graduated from Rutgers University in 1924 with a BS degree in civil engineering. He joined US&S in March 1925 in construction work, and a year later was assigned to the project engineering department. He held various positions in the department, becoming consulting engineer in 1958. He was appointed section engineer, classification yard section in Dec. 1959, the position he held at the time of his present appointment.

Mr. DeIvernois joined US&S in February, 1947. Most of his experience has been in the classification yard section, where he has held various positions. In September 1961, he was appointed senior engineer, his most recent position.

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... 2-way portable radios. Operating cost is only \$21.00 a year or one cent per hour based on a 40-hour work-week. (Lantern batteries last up to 80 hours on an EIA Use Cycle—10% transmit, 10% receive, 80% standby.) Changing batteries is fast, simple, and foolproof with no stocking problems. Besides being the smallest and lightest 2-way portable, CARRYPHONE radio offers an exclusive 5-ounce speaker-microphone and other battery packs for AA and C batteries. Compare this to your operating costs.



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T. B. Thompson



T. P. Marple