

NEWS BRIEFS

● FCC is asking for information from microwave users concerning reliability and other operating data.

The FCC has asked for answers to these specific questions: "(1) In what terms should 'reliability' be specified? In terms of total operable time per year? Per worst month? Per 24-hour day? In terms of probable circuit continuity? Of error rate? Of message circuit deterioration? In what way are these or other dimensions of reliability related?"

"(2) In a microwave link involving an RF channel, which comprises a multiplicity of individual message circuits, should a specification of reliability apply to the composite RF channel or to an individual message circuit? What data are available indicating the reliability of either?"

"(3) In a multi-hop route, what is the reliability of a single hop? How is this single hop reliability related to the reliability of such routes?"

"(4) Of the various techniques for improving reliability, what order of

improvement can be obtained from each?"

"(5) How is the reliability of a microwave circuit related to the frequency band on which it operates? What natural characteristics may diminish the reliability on one microwave band relative to that obtainable on another?"

"(6) What kinds of data, what engineering information and what systems design parameters should be supplied the Commission by applicants requesting additional frequency assignments to permit them to achieve higher reliability?"

"(7) Define the reliability criteria upon which the need for frequency diversity should be determined."

● FCC inquiry into the domestic telegraph service has brought out this interesting sidelight. When asking for information from "the General Services Administration, chairman Rosel H. Hyde of the FCC telephone and telegraph committees requested an assessment of the effect of a rejection of

the Telpak tariff by the FCC, a description in detail of GSA's proposal for industry-wide full interconnection between carriers," states *Telecommunications Reports*.

● DETROIT, TOLEDO & IRONTON has ordered 45 transistorized Motorola radios and seven base station radios from Motorola, Inc. The Motrac radios are to be installed on diesel locomotives, and will operate off either 60 or 12-volt power sources.

● MISSOURI PACIFIC has installed an automated freight handling facility at its Miller street freight house in St. Louis. The system uses an underground tow-line which moves platform carts containing less-than-carload freight to pre-determined locations in the house through the use of General Electric Co. automatic controls. The entire system is under control of a binary computer which receives and stores impulses from coding devices on the carts, then automatically guides them to proper destinations.

● READING has begun a 5-year capital expenditures program, which includes among others, the following interest to signalmen: An A&B expenditure of \$1,597,050 is to be spent for remote control of interlocking towers. Annual savings for such expenses are estimated to be \$53,870 for 1963, \$134,155 for 1964, \$201,050 for 1965, \$286,650 for 1966, and \$348,150 for 1967. After this five year period, total recurring annual savings are estimated to be \$348,150, providing a 22% return on the investment. An A&B expenditure of \$868,305 for automatic crossing protection is expected to provide a 42% return (\$369,840) after five years. Annual savings per year are: \$50,984 for 1963, \$126,560 for 1964, \$297,540 for 1965, \$369,840 for 1966 and \$369,840 for 1967.

● SOO LINE has begun construction work on an 81-mile CTC project between Schiller Park, Ill. (Chicago) and Waukesha, Wis. The \$479,000 installation will have eight passing sidings controlled from the dispatcher's CTC control machine at Stevens Point, Wis. This 81-mile project is an extension to an existing 58-mile CTC territory between Waukesha and North Fond du Lac, Wis.

Installation of automatic base radio stations at five locations will enable dispatchers at Minneapolis, Minn., and Stevens Point, Wis., to talk directly with crews of trains operating between these points. This addition to dispatcher-controlled radio will cost an estimated \$57,000.

(Please turn to page 75)

This Was News 50 and 25 Years Ago

The Signal Engineer, October 1913. Panama Railroad has 35 miles or about 75% of its mainline equipped with automatic block signals. All signals, except interlocking and manual block, operate normally clear. The controls for automatic (64) and semi-automatic (11) signals are similar to the typical circuits used in the U.S. The movement from 45 deg. to 90 deg. is actuated by polarized line circuits. Style B signals are supported on double cases, which have proved to be a convenient home for small bugs of various sizes and colors which attack the insulation on the wiring. This problem was solved by placing two live frogs in each style B signal case to devour the bugs. In this country frogs exist during the entire year, so that it is no particular hardship to secure them.—Railway Signal Association's 18th annual meeting was held at Nashville, Tenn., Oct. 14-16. Attendance on the first day was about 350. A special train from New York brought over 100 members and guests, and almost 100 came from Chicago in special cars. Both trains were met at the station by a brass band. RSA had 1,209 members and a satisfactory financial condition.

Railway Signaling, October 1938. Missouri Pacific installs centralized traffic control on a 27-mile section of single track extending between sections of double track on a division handling as many as 63 trains daily. The project is on the Illinois division south of East St. Louis, between Flinton and Raddle Jct.—St. Louis-San Francisco has installed an automatic interlocking at a crossing of its single-track line with a double-track line of the AT&SF at Winfield, Kan. Special circuitry including the use of time element relays are utilized in the plant which includes switches within home signal limits and in clearing sections, and also where switching moves and stations stops are encountered.—Chicago, Rock Island & Pacific installs automatic crossing gates at Ashland avenue in Chicago. Special controls are required on account of interlockings and station limits. New counter-shaft for the gate is driven by a modified signal mechanism. About 120 trains are operated daily by the railroad. Over 14,000 automobiles and trucks cross the tracks daily, as well as 828 street cars running on a double-track trolley line. **RSC**

NEWS BRIEFS

(Continued from page 75)

ceived ICC approval to install 23 colorlight signals and remove 25 semaphore signals between Lake Park and Dilworth, Minn., about 27 miles.

● **CHICAGO & NORTH WESTERN** and Elgin, Joliet & Eastern have received ICC approval to replace a manual interlocking with an automatic plant at Upton, Ill. The ICC order directs the roads to remove the interlocking machine from the tower at the crossing and arrange for automatic approach clearing of home signals on both railroads.

Current Publications

● **COMMUNICATIONS.** A new four-page bulletin outlines a number of two-way communication systems: carrier, used when mobile equipment is involved; and audio, for communication between fixed locations throughout a plant. *Femco Inc. (CP-46).*

● **MOBILE RADIO.** Bulletin ECR-1034, describes a new compact economy FM two-way radio for vehicles. Transistorized power supply minimizes maintenance. Frequency ranges: 27-50 mc and 150-174 mc. Tables give electronic, electrical and mechanical characteristics of the compact 15-watt Pacer. *General Electric Communication Products Department. (CP-47).*

● **ANTENNAS.** Catalog 598, issue 2, describes two-way mobile radio base station antennas and Spir-O-Foam cable connectors and accessories. Also included are radiation patterns, specifications, impedance curves and other technical data. Antennas are available for 25-100 mc, 144-174 mc and 450-470 mc. *Prodelin Inc. (CP-48)*

● **VOLTMETERS.** A new folder surveys a line of frequency selective voltmeter and wave analyzers. Two individual bulletins describes the models 125B and 126A frequency selective voltmeters. *Sierra Electronic Division of Philco (CP-49).*

Railroad Personnel

● **ATLANTIC COAST LINE.** R. M. Rosensteel, assistant engineer, communications and signaling, is appointed signal engineer with headquarters at Jacksonville, Fla. L. M. McLean, communication inspector, is appointed general supervisor communication and signaling. J. M. White, Jr., assistant communication engineer, is promoted to communication engineer. J. L. Mears, Jr., is appointed assistant super-



W. G. Salmonson



Rayburn L. Stephens

visor communication and signaling at Jacksonville, Fla.

● **GULF, MOBILE & OHIO.** W. D. Archer, assistant superintendent communications, is appointed chief signal and communications officer with headquarters at Bloomington, Ill. He succeeds W. S. Pipas, superintendent signals, who has been transferred to the transportation department.

● **GRAND TRUNK WESTERN.** H. F. Kelly, engineering technician, CNT, Toronto, is appointed assistant superintendent, inside plant and traffic with headquarters at Battle Creek, Mich.

● **LONG ISLAND.** Otto E. Bashauer, assistant engineer of communications, has been promoted to engineer of communications succeeding B. O. Hege-wisch, retired.

● **FLORIDA EAST COAST.** Rayburn L. Stephens, superintendent communications and signals, has retired after 37 years, 8 months with the railroad. Mr. Stephens was born in Dry Ridge, Ky., on Aug. 6, 1898 and was graduated from Piqua, Ohio high school. He began railway service as a laborer in signal construction on the Cincinnati, Hamilton & Dayton (now B&O) in 1917. Subsequently he worked on the Grand Trunk Western, and spent several years in signal construction work for the General Railway Signal Co., and Union Switch & Signal Co. He came to the FEC in December, 1925 as a signal foreman. He held various positions in the signal department being made signal inspector in 1939, and signal and electrical inspector in 1947. He was promoted to superintendent communications and signals in 1957.

Supply Trade News

● **GENERAL ELECTRIC CO.** Frank L. Harper has been appointed manager for telecommunications sales at Redwood City, Calif. D. E. Ranniger has been appointed district representative for telecommunications sales in Dallas, Tex.

● **LENKURT ELECTRIC CO.** Robert

E. Ryman has joined Lenkurt in its Washington, D.C., office as a sales engineer.

● **MOORE ASSOCIATES, INC.** Jack E. Risso has joined the marketing staff as sales engineer. Julius E. Seling has been appointed to the applications engineering staff.

● **NATIONAL ACCESSORIES CO., INC.** Winfield G. Salmonson has been appointed chief engineer. Mr. Salmonson, an electrical engineering graduate of Drexel Institute of Technology, retired from the Pennsylvania in March 1963, as manager of operating rules after 44 years of service. He began railroad work in the telegraph and signal department. Advancing to supervisor of telegraph and signals, he worked on the Pennsylvania's electrification project in the 1930's. In 1939 he was promoted to engineer of telegraph and signals at Chicago, advancing to superintendent telegraph and signals at New York in 1947. Two years later he was promoted to assistant chief engineer, communications and signals, with headquarters in Philadelphia. In 1957, Mr. Salmonson was appointed manager, operating rules.

● **NATIONAL CARBON CO.** Its name has been changed to Carbon Products Division of Union Carbide Corp.

● **OHIO BRASS CO.** W. Robert Cress has been appointed general sales manager. After graduating from Ohio State University in 1948, Mr. Cress has been an electrical engineer in the O-B high-voltage laboratory, and then a sales engineer and district sales manager at Cincinnati and Chicago. J. R. Hays, district sales manager at Cincinnati is transferred to Chicago, replacing Mr. Cress.

● **OKONITE CO.** Ben T. Bartlett has been appointed manager, western region. A graduate of the University of Kentucky with a B.S. degree in electrical engineering, Mr. Bartlett has been a sales representative at Cincinnati, and since 1959, he has been district manager at Syracuse, N.Y.

Donald C. Huber has been appointed assistant advertising and sales promotion manager.

● **U.S. INSTRUMENT CORP.** Adam A. Jorgensen has been appointed chief circuit engineer. An electrical engineering graduate of the Technical University of Denmark, Mr. Jorgensen was formerly associated with Stromberg-Carlson Co., and Automatic Electric Co.