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 pro for industry-wide full interconne between carriers," states *Teleco nications Reports.*

● DETROIT, TOLEDO & IRONT has ordered 45 transistorized Mo radios and seven base station ra from Motorola, Inc. The Motrac u are to be installed on diesel loco tives, and will operate off either 6 12-volt power sources.

● MISSOURI PACIFIC has insta an automated freight handling fac at its Miller street freighthouse in Louis. The system uses an under- floor tow-line which moves platf carts containing less-than-carl freight to pre-determined locations the house through the use of Gen Electric Co. automatic controls. entire system is under control o binary computer which receives stores impulses from coding devi on the carts, then automatically gui them to proper destinations.

● READING has begun a 5-year c ital expenditures program, which cludes among others, the followin interest to signalmen: An A&B expo of $1,597,050 is to be spent for mote control of interlocking tow Annual savings for such expenses estimated to be $53,670 for 19 $134,155 for 1964, $201,050 for 19 $286,650 for 1966, and $348,150 1967. After this five year period, total recurring annual savings are timated to be $348,150, providing 22% return on the investment. An A&I expenditure of $868,305 for automati crossing protection is expected to pro vide a 42% return ($369,840) afte five years. Annual savings per yea are: $50,984 for 1963, $126,560 fo 1964, $297,540 for 1965, $369,840 fo 1966 and $369,840 for 1967.

● SOO LINE has begun construction work on an 81-mile CTC project be tween Schiller Park, Ill. (Chicago and Waukesha, Wis. The $479,000 installation will have eight passing sid ings controlled from the dispatcher' CTC control machine at Stevens Point Wis. This 81-mile project is an exten sion to an existing 58-mile CTC terri tory 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 dispatch er-controlled radio will cost an esti mated $57,000.

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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**

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Two hotbox detectors are to be installed at Sheridan and Hewitt, Wis., which will report overheated journals or dragging brakes to the Stevens Point dispatcher's office. When alerted by a high reading on the print-out tape, the dispatcher will notify the train crew by radio to stop and inspect the train. The detectors, known as Wheel Thermo Scanners, are furnished by General Railway Signal Co. The installation will cost approximately $40,000, and will be ready for service in December.

● AMF has awarded a $139,510 contract to General Electric Co. to design and manufacture a coordinated propulsion and block signal control system for the monorail which American Machine & Foundry Co., is designing and building for the New York World's Fair 1964-65. The monorail will consist of two parallel 4,000 ft closed loops with six two-car trains operating—three on one loop going one way and three on the other loop going in the opposite direction.

The automatic controls to be built by GE will incorporate both electrical and electronic principles in each train, with a master set in the loading-unloading station for the whole system and a block signal control similar to those used in modern mass transit operations. Each train will also be equipped with an over-ride control which could be operated by the attendant. The control system will govern train arrival and departure in the station and open doors for passengers leaving and entering the monorail.

● SIGNAL HEARING before the ICC, Ex Parte 171, concerning signal rules, standards and instructions, will probaby be resumed October 17 when final briefs are due to be filed with the Commission. Parties to the hearing are ICC's Bureau of Safety and Service, Section of Railroad Safety; Association of American Railroads; and the Railway Labor Executives' Association.

● PENNSYLVANIA has received ICC approval to install traffic control to replace existing automatic block signaling and rearrange present automatic cab signal system so as to provide for operation by traffic control supplemented by automatic cab signals for either direction operation on present No. 2 eastward freight track between Lewistown and Mount Union, Pa., about 25 miles. These changes are in connection with removal of portions of present westward freight track No. 3, and changing the remaining sections into storage tracks.

● WESTERN MARYLAND has received ICC approval to install traffic control on various sections of single and double track, and modify short sections of existing CTC, all between Colmar and Connellsville, Pa., about 67 miles.

● BOSTON & MAINE, Central Vermont and Rutland have received ICC approval to install a traffic control system on 103 miles of line between Holyoke, Mass., and Windsor, Vt. In double-track territory, sections of second main track are to be removed, and other portions will remain in service as sidings.

● NORFOLK & WESTERN has received ICC approval to install a traffic control system in lieu of existing automatic block-signal system arranged for movements with the current of traffic on two tracks between Hull and Matewan, W. Va., about 35 miles.

● NORTHERN PACIFIC has re-

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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 supervisor communication and signaling at Jacksonville, Fla.

W. G. Salmonson

Rayburn L. Stephens

● 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. Hegewisch,** 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.