

making is a clear invitation to discrimination among customers, and if its use is proper at all, it can only be after searching regulatory scrutiny."

**Western Union in filing against Telpak** says it is unable to compete with the tariff as it is being applied. This is where the question of diversity routing entered the case. Specifically, Western Union stated: "Upon information and belief, representatives of the telephone company have offered to furnish the total channel requirements of users of private wire service, some of whom are presently customers of Western Union, between any two service points and to apply the Telpak tariff schedules to the total channel requirement despite the fact that such channels are over a diversity of routes between two service points and could not, or would not, be combined into a single broadband electrical path.

"In effect, the representation is that, to conform to the requirements of the customers, the Telpak tariff will be applied to the existing channel facilities however dispersed, whether or not over one or multiple routes, between any two service points when such Telpak tariff schedules will produce lower charges.

"If such practices be permitted, when it is reasonable to expect that the USAF will cancel a major part of its existing leased circuitry with Western Union, that other branches of the government will no longer obtain the channels used in their private wire service from Western Union, and that other customers of Western Union will obtain their facility requirements from the telephone company in order to obtain the benefit of rates improperly and unlawfully calculated under the Telpak tariff."

Concerning its contracts with the Bell System to furnish electrical paths for telegraph service, Western Union said that under the contracts, "notwithstanding the almost complete elimination of the distinction between voice and record grade channels in the private wire service field resulting from recent developments, Western Union is prohibited from furnishing voice service even though such service is alternate and but incidental to the record usage."

The FCC has approved of leases for telegraph purposes by international telegraph carriers of voice channels in submarine telephone cables. In this connection, says Telecommunications Reports, the Commission has referred to the lessening distinction between voice and record services stemming from data services, alternate record-voice, and similar developments in the

field.

Western Union contends: "The effect and extent of such prohibition is that Western Union has had numerous requests involving such service which it was unable to furnish because it was necessary that Western Union utilize facilities procured from the telephone company and the telephone company refused to permit even alternate voice usage of such facilities. The result was that the circuitry requirements were obtained by the customer from the telephone company rather than Western Union."

The telegraph company is in the process of extending its microwave system to provide nation-wide service, but feels that by not being able to provide voice as well as non-voice service, "continued construction of its microwave beam system is in serious jeopardy."

Concerning rates, Western Union's filing stated: "Upon information and belief, the Telpak rate levels are open to question. The cost data which the telephone company used in support of the Telpak rates appeared to be heavily weighted with the lower cost of new, advanced types of facility plant, whereas it appears that precisely the same plant as is now in use will continue to be employed, the only difference being a drastic cut in charges."

Specifically, Western Union asked the Commission for an order "directing [AT&T] to cease and desist from furnishing to the using public the components of a broadband leased channel (1) over a variety of routes, some of which may be specifically designated by the customer while others are established for the convenience of the telephone company, (2) over a variety of routes where the customer requests a diversity of routes without the specific designation of any one route or, (3) using a variety of frequency bands on the same route, at rates contained in tariff schedules" under tariff No. 250, the Telpak tariff.

AT&T's purpose in offering Telpak is not to stifle competition, the telephone company said in a statement issued the day following Western Union's filing. Details of this statement and further coverage of the events in the Telpak tariff controversy will be present in next month's issue.

(Previous coverage of the Telpak tariff was presented in the May issue of *Railway Signaling and Communications*, pages 21, 24-25.)

**CONTINUED NEXT MONTH**

**SIGNALING**  
COMMUNICATIONS

## News Briefs

**CHICAGO, BURLINGTON & QUINCY** is extending CTC from Spanish Lake to North Market Street interlocking (St. Louis), eliminating one main track, and is installing dragging equipment detectors at Riverside, Montgomery, Aurora and Galesburg, Ill., and broken wheel detectors at Galesburg, Ill., and Lincoln, Neb., hump yards.

**NORTHERN PACIFIC's** major current projects include installation of CTC between Laurel and Livingston, Mont., and between Spokane and Kootenai, Wash., at a cost of \$3,349,000; installation of remote control system for yard at Tacoma, Wash., \$528,400; signal and wiring replacement, Perham to Lake Park, Minn., \$112,500; and improvement of telephone and communications facilities, Pasco to Yakima, Wash., \$52,560.

**ILLINOIS CENTRAL** is installing CTC and converting double track to single track over 40 miles between Ballard and Fulton, Ky., at a cost of \$810,000. It is expected to be completed by the spring of 1962.

**ATCHISON, TOPEKA & SANTA FE** has received ICC approval for discontinuance of interlockings, signal changes and signal system modifications in connection with the installation of CTC on two main tracks between Chalender and Crookton, Ariz., and removal of one main track between Chalender and Ash Fork, and two main tracks between Ash Fork and Crookton, all between Maine, Ariz., and MP 432.4 west of Seligman, Ariz., about 70 miles.

**GREAT NORTHERN** has received ICC approval to install CTC on one main track in lieu of automatic block signaling on this track, between Pacific Jct. and Chester, Mont., 60 miles, to be controlled from Havre.

**CROSSBUCK OBSOLETE?** In Michigan, where three major railroads have 556 secondary crossings protected by the standard traffic "STOP" signs, accidents were reduced by 85% annually and fatalities reduced 98%. The standard stop signs have a greater recognition value for motorists. George Wyatt, general attorney for the Michi-

(Please turn to page 46.)



No. 1959-AR

No. 1958-AR

## NEW KLEIN Replaceable Gaff Adjustable Climbers

These new Klein Replaceable Gaff Climbers assure maximum quality and safety. We recommend leg irons be replaced after three sets of gaffs have been used.

The easily replaceable gaff is held in position by a self-locking screw. Full impact is absorbed by the gaff and leg iron. No load is transmitted to the screw.

Adjustable to 14½, 15, 15½, 16, 16½, 17, 17½, 18, 18½ and 19 inches. Made in matched pairs, right and left. Available with triangular ring at ankle or riveted ankle loop. Aluminum finish. Every climber individually tested.

### WRITE FOR BULLETIN 559

Bulletin 559, giving full information on Klein Replaceable Gaff Adjustable Climbers, will be sent on request.

### ASK YOUR SUPPLIER

Foreign Distributor: International Standard Electric Corp., New York.



## NEWS BRIEFS

(Continued from page 43.)

gan Railroad Association and the New York Central, helped create and pass a bill through the state legislature that permitted counties to erect stop signs at secondary railroad crossings. The program has been approved by eight counties, and the railroads are working with other county authorities to obtain approval.

GREAT BRITAIN'S first highway crossing protected by automatic half-roadway gates ("barriers") went into service on February 5 this year. Operation and physical design is generally similar to that employed in this hemisphere. Alternate flashing red lights and a two-tone gong provide a warning for eight seconds before the gates begin to descend. The descent of the gates takes another eight seconds, reaching the horizontal position five seconds before the arrival of the fastest train. A steady red light is provided at the tip and center of the gate arm. The gong ceases operation when the gates are horizontal. An indicator with the legend, "Second Train Coming," is illuminated if a second train approaches on the other track. Actuation is by track circuits and treadles. A telephone is provided at each gate mechanism, connected to the nearest signal tower, so that motorists can get in touch with the signalman if there is any undue delay. Previously, all gate installations were manually controlled from a signal tower.

DENVER & RIO GRANDE WESTERN has ordered sixty 64/12 Motrac railroad radios from Motorola, for use on diesel locomotives and cabooses.

ELECTRONIC RESERVATION SYSTEM has been withdrawn by Teleregister Corp., the manufacturer, from the Santa Fe, New York Central and New Haven. Design and development work, begun in 1955 (RS&C August 1956, page 25) took considerably longer than anticipated, a Teleregister spokesman reported.

The system consisted of keysets with pushbuttons at the ticket counter, which were connected via communications circuits to a magnetic drum and data processing equipment. The push-buttons were designed to request and reserve Pullman space and chair-car seats in a matter of seconds.

Santa Fe placed the system in service in 1959. New Haven operated the system in tandem with its manual reservation system. New York Central never "accepted" the system, although units were in Grand Central Terminal, New York, for training of clerks.

## Railroad Personnel



Bert O. Brown



Vinton L. Guthrie

CANADIAN PACIFIC. Bert O. Brown, assistant engineer in the chief engineer's office, has been appointed signal engineer of the Atlantic Region at Montreal, succeeding H. W. Trautwick, promoted (RS&C, May 1961, page 44). Mr. Brown was born February 28, 1909, in Sutton, Que., and received his education at Sutton Academy. He joined the CPR in April 1927, in the construction department at Montreal. Two years later he transferred to the signal department and held various positions until his appointment in 1956 as signal supervisor with the Quebec district. He was appointed assistant engineer in the chief engineer's office in 1959.

NORTHERN PACIFIC. Vinton L. Guthrie, whose appointment as assistant signal engineer of the lines between Mandan, N. D., and Paradise, Mont., was announced in RS&C, May 1961, page 44, was born in Reedpoint, Mont., November 19, 1899. He attended Montana State College for one year and completed an ICS course in electrical engineering. Mr. Guthrie has been employed in the signal department of the NP since August 1923.

ATCHISON, TOPEKA & SANTA FE. W. E. Benson, signal supervisor at Fort Worth, Texas, and J. W. Sparks, signal supervisor at Temple, Texas, have retired.

PENNSYLVANIA. F. H. Molar, assistant supervisor, communications and signals at Pittsburgh, Pa., has been named supervisor, communications and signals at Canton, Ohio.

ERIE-LACKAWANNA. John R. Heisler, chief signal engineer, Cleveland, retired April 30, and has been succeeded by Oliver G. Carey, signal engineer. Willis E. Bell has been appointed assistant signal engineer at Cleveland, his former position of assistant to chief signal engineer having been abolished. Robert

(Please turn to page 48.)

## NEWS BRIEFS

(Continued from page 46.)

S. Willis, communications supervisor, New York division, at Hoboken, N. J., has retired. **Edward J. Manolt** has been named communications supervisor, and **Edward F. Dempsey**, assistant communications supervisor of Terminal and New York divisions, Hoboken.

A graduate of Syracuse University, Mr. Heisler joined the former Delaware, Lackawana & Western in 1919 as an apprentice. He advanced to signal supervisor in 1943 and became signal engineer in 1947. Following the merger of the Erie and Lackawanna last October he was named chief signal engineer. A photograph of Mr. Heisler appeared in RS&C, December 1960, p 49.

Mr. Carey was born at Sandy Lake, Pa., August 20, 1905. After graduating from high school he took courses with the ICS and Railway Educational Bureau. Mr. Carey started with the former Erie as a signal helper in 1925. He advanced to signal maintenance foreman in 1936, to signal supervisor in 1941, and supervisor of communications and signals at Hornell, N. Y., in January 1956. In July of that year he was appointed general signal inspector of construction at Cleveland and in December 1956 assistant general superintendent, communications and signals, Cleveland. During the consolidation of departments following the merger, Mr. Carey was appointed signal engineer.

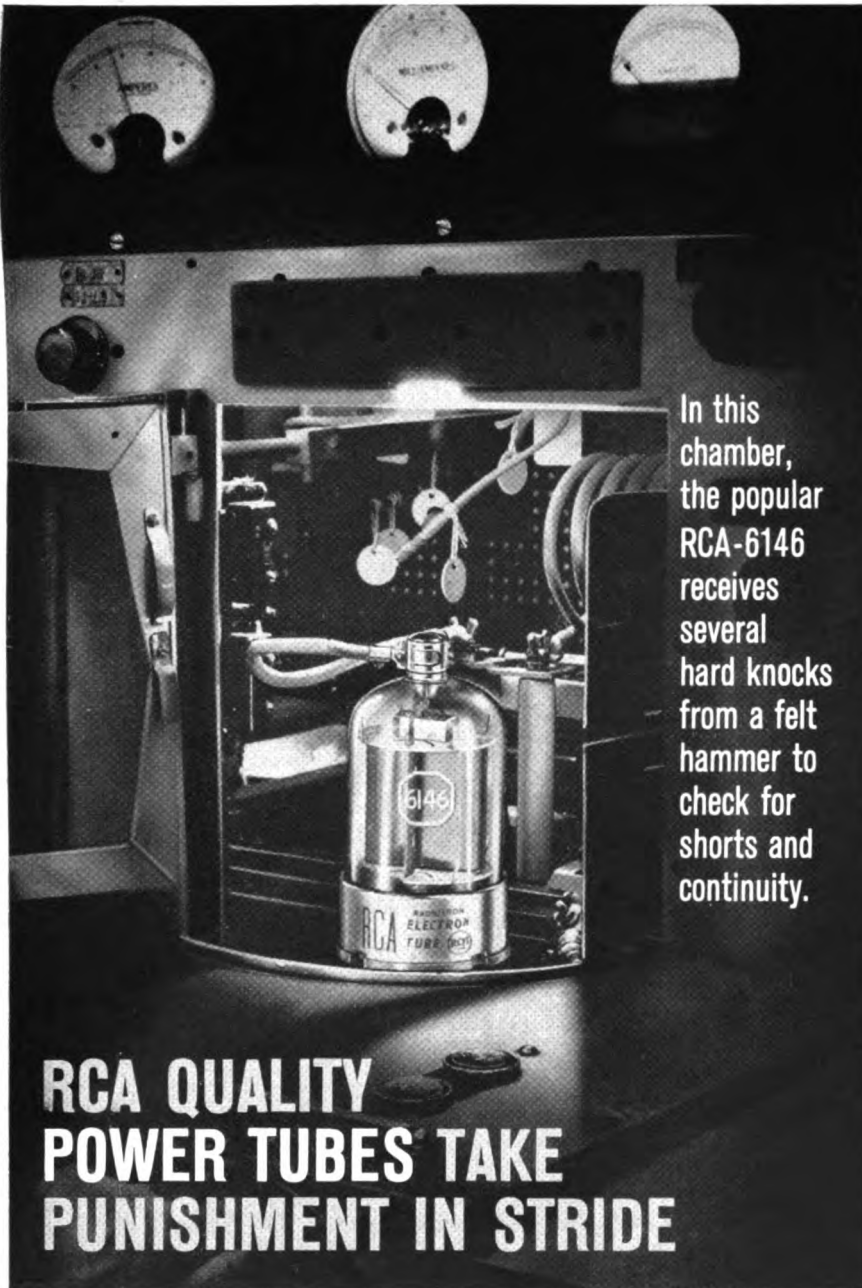
Mr. Bell was born in Latrobe, Pa., July 14, 1918. He was graduated from Carnegie Institute of Technology in 1942 and served with the U. S. Army Signal Corps during World War I. He started with the former Lackawanna as a special engineer in 1944 at Hoboken. Later he worked as signal foreman, assistant supervisor, supervisor of construction and signal supervisor, all in the Buffalo area. He was appointed assistant to the signal engineer at Hoboken in 1958 and was transferred to Cleveland following the merger.

### Current Publications

**LINE WIRE.** Bulletin 203 describes the manufacture and properties of Copperply wire, an electroplated copper covered steel wire for line conductors and guy wires. **National Standard Co., Dept. RSC, Niles, Mich.**

**COAX CONNECTORS.** Bulletin 108 describes a new factory controlled application of a dry adherent lubricant.

(Please turn to page 50.)



In this chamber, the popular RCA-6146 receives several hard knocks from a felt hammer to check for shorts and continuity.

# RCA QUALITY POWER TUBES TAKE PUNISHMENT IN STRIDE

The hard knocks received in the short and continuity test above are but a small part of the ordeal every RCA power tube must undergo before it can leave our plant.

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*For technical information on specific types, see your Authorized RCA Distributor.*

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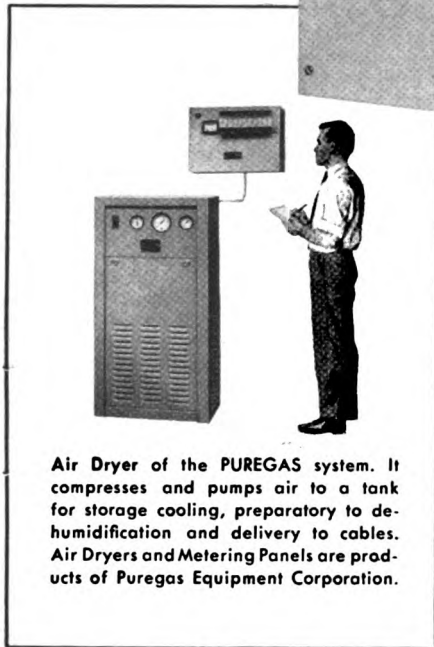
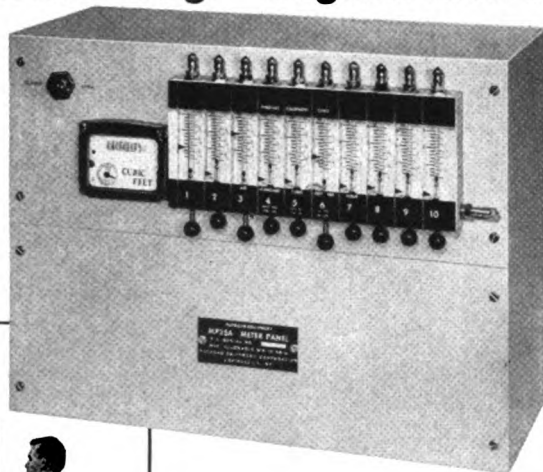


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Metering Panel of the PUREGAS Continuous Feed Pressure System. From a convenient central location it monitors, measures and distributes the flow of dry air to the cables.



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OFFICES AND WAREHOUSES IN OVER 130 PRINCIPAL CITIES

## NEWS BRIEFS

(Continued from page 48.)

cant to bullet type coaxial connectors. It was designed to eliminate coaxial transmission line failures caused by galling of contact surfaces on the inner conductor connector, resulting from the differential expansion. The product is called Prodelub No. 8. Prodelub Inc., Dept. RSC, Kearny, N. J.

COAX CONNECTORS. An eight-page brochure covering connectors for air dielectric, Styroflex and Foamflex coaxial cables is now available for distribution. A price list is included. Phelps Dodge Copper Products Co., Dept. RSC, 300 Park Ave., New York 22, N. Y.

GENERATORS. A single, 8 1/2 by 11-in. catalog sheet lists Onan's entire line of electric generating plants, both gasoline and diesel. It covers the range from 500 watts to 230 kw. Typical units are pictured with a brief description. Onan Division, Dept. RSC, 2515 University Ave., S.E., Minneapolis 14, Minn.

TABLES AND FORMULAE. A 32-page booklet of that title is available which contains much mathematical and electrical data of use to the engineer. It is the fourth in a series which has included "Relay Terminals," "Basic (telephone) Circuits," and "Conversion Factors." Automatic Electric Sales Corp., Dept. RSC, Northlake, Ill.

GLASS PROPERTIES. Bulletin B-83 describes mechanical, electrical, optical, thermal and other "Properties of Selected Commercial Glasses." Corning Glass Works, Dept. RSC, Corning, N. Y.

GLASS HISTORY. A 68-page illustrated booklet, "This Is Glass," reviews the history of glass and details the basic types. It is available on request. Corning Glass Works, Dept. RSC, Corning, N. Y.

EDUCATIONAL BOOKS. The following publications are of possible educational value to signal and communications men: "Transformers," No. 166-37, treats transformers used in electronic and audio equipment in an analytical manner; "Filters and Attenuators," No. 166-36, deals with the types, function, circuitry, and application of these components; "Citizens Band Radio," No. 273, was written for the user, prospective buyer and service technician, and places particular emphasis on single and multiple.

(Please turn to page 52)

## NEWS BRIEFS

(Continued from page 50.)

channel transceivers and receivers; "How to Locate and Eliminate Radio and TV Interference," No. 158 is revised and brought up to date to reflect the latest techniques and components. **John F. Rider Publisher, Inc., Dept. RSC, 116 West 14th St., New York, N. Y.**

### Supply Trade News

**PARSONS DIVISION, KOEHRING CO.** has appointed **Harris Truck & Equipment Co.,** Tremonton, Utah, a distributor in the inter-mountain area for the Parsons line of ladder and wheel type trenchers.

**WESTINGHOUSE AIR BRAKE CO.** **Robb W. James,** general manager, Union Switch & Signal—Division of WABCo., has been elected vice-president of the parent company.

**GENERAL RAILWAY SIGNAL CO.** As reported in the May issue of RS&C, **Hall E. Downey** has been appointed sales promotion and advertis-



Hall E. Downey



James J. Van Horn

ing manager. A graduate of the State College for Teachers at Albany, N. Y., he left high school teaching to accept a civilian position as supervisor of instruction for the AAF Technical Training Command at Goldsboro, N. C. He joined GRS as a copywriter in 1944, becoming copy supervisor in 1951 and advertising manager in 1953, the position he held at the time of his recent appointment.

**WESTERN RAILROAD SUPPLY CO.,** Division of Western Industries, Inc. **James J. Van Horn** has been appointed chief engineer, signal and communications section. Prior to joining WRRS he was with Union Switch & Signal—Division of WABCo. Mr.

## WANTED

Signal engineer for sales engineering. Must be thoroughly familiar with signal system design. Will pay high salary to right man. Box 125, Railway Signaling and Communications, Church St., New York 7, N. Y.

Van Horn was born in Philadelphia, Pa., September 1902, and was graduated from Villanova College in 1924 with a B.S. degree in electrical engineering. He started with Union Switch & Signal in 1922 and was employed in the engineering department until 1928 when he became sales engineer in the Pittsburgh district office. He was appointed assistant district manager there in 1951 and district manager in 1955. He was subsequently executive assistant to the vice-president—way sales and manager of sales anal-

**THOMAS A. EDISON INDUSTRIES,** Primary Battery Division reported in the May issue of RS&C, **William J. Savage** has retired as vice-president and division manager and has been succeeded by **M. I. Rayner** assistant division manager. **Walter E. Olson** has been appointed acting general sales manager, **Alfred W. Frank** eastern regional manager, at Bloomfield, N. J., and **James R. Long,** western regional manager, at Chicago.

Mr. Savage was born in Waterbury, Conn., April 29, 1896. Throughout his entire business career he has been closely associated with the primary battery and railway signaling fields. He joined the Primary Battery Division of the Edison Company as a battery testman in 1915. Advancing through the service and sales departments, he was appointed vice-president and division manager in 1958.

Mr. Rayner, who has succeeded Mr. Savage, was appointed assistant division manager in September 1960. A biographical sketch of his career appeared in RS&C, October 1960, page 63.

Mr. Olson was born in Orange, N. J., February 8, 1913, and attended Rutgers University extension course for four years. He joined the Primary Battery Division in 1931 as an assembler, later advancing to foreman. In 1937 he was appointed service engineer in the Chicago district office; in 1949, sales engineer at Bloomfield, N. J.; and in 1950 was promoted to the position of district manager, which he held until his present appointment.

Mr. Frank and Mr. Long, prior to their recent appointments, were district managers at Bloomfield and Chicago, respectively.



## Editor's Corner

**Wrecks:** RS&C's policy with regard to publishing articles on train wrecks is to publish only those ICC accident investigation reports that illustrate some significant point of the rules, practice, or technology. In recent years we have reported only three previous to those in this issue. These have involved a train order (March 1959), an emergency release of an electric lock (April 1960), and a track circuit at an interlocking (September 1960). There is no intent to cast ignominy upon the railroad involved. Generally, the practices which led to these accidents are widely employed. This is particularly true of the two accidents reported herein.

Only recently the ICC allowed the maximum for both Slow Speed and Restricted Speed to be increased to 20 mph from 15 mph. Perhaps this is too fast for Restricted Speed. It seems evident that too little emphasis is placed upon the distinction between Slow Speed and Restricted Speed. This opinion stems not only from the accidents here reported, but from observation of operating practices on a number of railroads. Clearly,

the difference is "prepared to stop short of train, obstruction . . ." etc.

At the investigation of the accident at Sugar Land the engineer of X619W testified that he could not see the cars standing on the siding until his headlight illuminated them, at which point he was some 350 ft. away. Considering that this train consisted of five locomotive units and 165 cars, some mechanical people have said that it is doubtful if this train could have been stopped if it was going only 5 mph at the time the danger became apparent.

It would appear that our correspondent had a point in suggesting that Yard Speed ("a speed that will permit stopping within one-half the range of vision") be the required speed for a train entering a non-track-circuited siding. Certainly some action should be taken to eliminate this potential hazard before the too-thin film of luck gives out for other railroads.

*Bob Barber*

Associate Editor