switch, and 16 signals at a junction of the main line with the Ballston Spa branch. Type B plug-in relays, Type SA searchlight signals, and Model 5C switch machines will be used in this installation.

The Spokane, Portland & Seattle has ordered equipment from the General Railway Signal Company for the installation of absolute permissive block signaling between Wishram, Wash., and Pasco, 125 mi.

The Chicago, Rock Island & Pacific has placed on order with the Union Switch & Signal Company for materials to install automatic block signals on 104 mi. of single track between Vinton, Ia. and Manly. The order includes Style H-2 searchlight signals, relays, rectifiers, transformers, switch circuit controllers and housings. The construction work will be done by railroad forces.

The Southern has ordered equipment from the General Railway Signal Company to provide radio communication among 8 locomotives and a fixed station at New Orleans, La. This equipment will operate at a frequency of 161.49 megacysles.

## TRADE PUBLICATIONS

Carrier telegraph equipment-Radio Engineering Products, Ltd., 4305 Iberville Street, Montreal, Que., Canada, has issued two bulletins-one on their Type 40C1 voice-frequency carrier telegraph equipment for 1 to 18 channels, and the other on their Type-140A1 carrier supply equipment and associated apparatus. Copies are available upon request.

Printing telegraph—The Teletype Corporation, 1400 Wrightwood Avenue, Chicago 14, has announced a booklet on the streamlining of the Union Pacific's coastto-coast Teletype communication system and why and how it was done. A copy is available upon request.

Telephone wire—The Whitney Blake Company, New Haven 14, Conn., has a 12-page Bulletin No. Tel-1, printed in color, on their line of telephone wire. A copy is available upon request.

Anti-corrosive paints-Subox, Inc., Fairmount Plant, Hackensack, N. J., has announced an 8-page bulletin, printed in color, covering their line of anti-corrosive paints, a copy of which is available upon request.

Sound-powered telephones—The United States Instrument Company, 409 Broad Street, Summit, N. J., has announced Catalog 400-A on their new line of soundpowered telephones. A copy of the brochur is available upon request.

High-heat electrical tape—The Minnesota Mining & Manufacturing Company, 900 Fauquier Street, St. Paul 6, Minn., has announced a new four page brochure, printed in color, on an electrical tape that will stand temperatures up to 300 deg. F. The tape, "Scotch" brand electrical tape No. 27, is used alone, without other insulating materials. It has a glass backing that is fireproof, and a thermosetting adhesive that sets at 250 deg. F. in two hours, or 300 deg. F. in one hour. It contains no sulphur which might promote corrosion. Copies of the pamphlet may be had by writing to the company, and samples of the tape are also available.

## APPLICATIONS TO I. C. C.

The Interstate Commerce Commission has recently received application from the railroads for important signaling changes, as follows:

U. P. (BS-Ap-No. 10826) Application for approval of the following proposed modifications of automatic block signal system between Summit and North Platte, Neb., a distance of approximately 279 mi., and interlockings at Fremont, Columbus, Central City and Grand Island at crossings of Nebraska division of Union Pacific with Omaha and Lincoln divisions of Chicago, Burlington & Quincy, and west of Fremont, at crossing of Union Pacific with Nebraska division of Chicago and North Western. Installation of 3-indication continuous automatic cab signal system with coded track circuits, 6 3-indication color-light high signals, 429 4-indication color-light high signals, 4 4-indication searchlight high signals, 2 2-unit color-light and 2 2-unit searchlight high signals, 2 searchlight dwarf signals, 19 color-light dwarf signals, and 3 inoperative dwarf signals, and removal of 249 semaphore high signals, 179 3-indication color-light signals, 17 3-indication searchlight high signals, 17 color-light dwarf signals, 2 searchlight dwarf signals, 2 4-indication color-light signals, 3 2-unit color-light and 2 2-unit searchlight high signals. Purpose: To comply with orders of the Commission and to provide adequate stopping distances.

N. & W. (BS-Ap-No. 10851) Application for approval of the following proposed modifications of automatic block signal system between Bluestone and Elkhorn, W. Va., a distance of approximately 11 mi., and interlocking at Bluestone, on the Pocahontas division. Installation of 4 power-operated switches, 4 controlled signals, 8 automatic signals and 1 electric lock on hand operated switch on new line between Cooper Tunnel and Lick Branch, and 9 electric locks on handoperated switches between Lick Branch and Elkhorn, change of aspects of signal 3814 and removal of 14 controlled high signals, 1 dwarf signal, 4 electric locks on hand-operated switches and 8 automatic signals, on old line between Cooper and Elkhorn; installation of 6 position-light high signals, change of 2-poweroperated switches to electrically locked hand-operated switches, change of aspects of home signal 40LA-B and westward approach signal, removal of 1 positionlight home signal and 12 semaphore home signals, and all interlocking facilities at

Bluestone interlocking; and arranging  $f_{0T}$  controlling switches and signals on new line and at Bluestone from C. T. C. type machine in dispatcher's office, at Bluefield. Purpose: To replace worn equipment and to provide signal facilities on new line between Cooper Tunnel and Elkhorn and additional facilities between Lick Banch and Elkhorn.

Sou. (BS-Ap-No. 10655) Application for approval of the following proposed modifications of staff block system between Duncan and New Albany, a distance of approximately five mile, and manual block signal system between Milltown and New Albany, Ind., a distance of approximately 27.4 miles, on the St. Louis Division. Installation of automatic block signal system, in lieu of manual block signal and staff block systems, with 34 color-light automatic signals arranged with APB control, and removal of staff block machines. Purpose: To promote safety and facilitate operation.

## F. C. C. AUTHORIZATIONS

The following authorizations to railroads for yard, terminal and road radio installations were granted by the Federal Communications Commission between September 12 and October 14:

Carbon County Railway. Yard and terminal, one mobile unit, initial.

A. T. & S. F. (1) Yard and terminal, Chicago, one fixed station, modification of license to cover permit for replacement of base transmitter; (2) yard and terminal, Los Angeles, Cal., one fixed station, license to cover permit; and (3) mobile, permit to add 20 additional mobile units and additional frequencies.

S. A. L. Yard and terminal, two installations: (1) Miami, Fla., one fixed station, initial; and (2) one mobile unit, initial.

Erie. Train, one fixed station, initial, seven installations: (1) Newburgh Junction, N. Y.; (2) Corning, N. Y.; (3) Campbell Hall, N. Y.; (4) Sholola, Pa.; (5) Mast Hope, Pa.; (6) Hankins, N. Y.; and (7) Horseheads, N. Y. Also, mobile temporary authorization to install and operate 10 mobile units until December 28, 1949; and frequencies changed on existing stations at 13 points; (1) Ontario, Ohio; (2) Polk, Ohio; (3) Silver Creek, Ohio; (4) Tallmadge, Ohio; (5) Leavittsburgh, Ohio; (6) Pymatuning, Pa.; (7) Meadville, Pa.; (8) Cambridge Springs, Pa.; (9) Corry, Pa.; (10) Falconer, N. Y.; (11) West Salamanca, N. Y.; (12) Randolph, N. Y.; and (13) Youngstown, Ohio.

I. C. Yard and terminal, Jefferson Parish, La., one fixed station, initial.

Sou. Yard and terminal, Atlanta, Ga., one fixed station, experimental base station, cancelled September 13 by request of railroad.

Chattahooche Valley. Mobile, renewal of license to cover two mobile units.

B. A. R. (1) Train, two fixed stations, initial; and (2) train (mobile), 35 mobile units, initial.