



Questions and discussion are included in class sessions on the Terminal Railroad of St. Louis

Survey Shows . . .

## Progress in Signal Education

GOOD PROGRESS is being reported in the adoption of visual-aid methods of educating signal department employees, using equipment recommended at the 1956 convention of the Signal Section by the special committee of which E. B. Platt, Illinois Central, is chairman.

Up to September 1, a total of 27 railroads had purchased the special projectors for projecting the transparencies on screens, and had purchased the transparency plates for the three chapters that have been completed, which are:

- (1) Non-coded D.C. Track Circuits (24 frames with transparencies and script)
- (2) Fundamentals of Electricity Part I (25 frames with transparencies and script)
- (3) D.C. Relays, Part I—Wall and Shelf types (34 frames with transparencies and scripts)

The committee has been working on additional chapters which will be available soon. The transparencies, as well as screens and projectors, can be purchased by writing to the Secretary of the Signal Section. The way in which the transparencies present information, was explained in an article on Page 34 of the February 1957 issue of *Railway Signaling and Communications*.

To assemble information on how the railroads are using, or plan to use, this visual-aid education program, *Railway Signaling and Communications* sent inquiries to the signal engineers of the 27 railroads which have purchased the equipment and transparencies for the first three chapters. Answers were received from 23 of these roads.

### Where Are Classes Held?

In terminals where several men can assemble at some location with a minimum of travel time, meetings can be held in interlocking towers or other buildings available.

For use on extended territories on the line of road, some railways, such as the Norfolk & Western, the Southern Pacific and the Union Pacific are to use special instruction cars that are to be spotted on spur tracks at locations where one, two or more maintainers and other signal men can attend classes with a minimum of travel.

Other roads intend to conduct classes in buildings on line of road, such as waiting rooms, freight houses or railroad offices, at the locations where signal men have their headquarters. Several roads, including the Frisco, the Wabash and the Pennsylvania, plan to con-

duct classes for signal construction crews in the cars used as living quarters by these crews.

### Who Conducts the Classes?

To be of maximum benefit, the classes should be conducted by a man well informed on the subject, who has ability to encourage discussion. On some roads the signal engineer, general inspector, or assistant signal engineer, is to conduct the classes. For example on the TRR A of St. L, the signal engineer is doing this, and on the Union Pacific, the assistant signal engineer. On the Missouri Pacific, the assistant engineer signals helps to organize and conduct the first class on each division: the future classes to be conducted by division men, such as the supervisor. In some instances leading maintainers, adapted for teaching, are conducting the classes efficiently.

### How Often Are Classes Held?

On many of the railroads which reported, no schedules have been established for frequency of classes. As applying for the first three chapters, some roads, such as the Milwaukee are to hold classes as frequently as possible at various places

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## Roads Using Visual Aid Program

Atchison, Topeka & Santa Fe  
Canadian Pacific  
Central of Georgia  
Chesapeake & Ohio  
Chicago & North Western  
Chicago & Western Indiana  
Chicago, Milwaukee, St. Paul & Pacific  
Delaware & Hudson  
Missouri Pacific  
Monon  
Norfolk & Western  
Ontario Northland  
Pennsylvania  
Reading  
Richmond, Fredericksburg & Potomac  
St. Louis-San Francisco  
St. Louis Southwestern  
Seaboard Air Line  
Soo Line  
Southern  
Southern Pacific  
Terminal R.R. Assn. of St. Louis  
Texas & New Orleans  
Texas & Pacific  
Union Pacific  
Wabash  
Western Maryland

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all along the railroad, until all men have seen and studied these chapters. In this period, meetings may be held once a week or more frequently. The Ontario Northland is holding classes three times each week, in the morning and in the evening. The Norfolk & Western and the Reading are planning for classes twice a week. Other roads such as the Richmond Fredericksburg & Potomac, St. Louis Southwestern, and the St. Louis-San Francisco are to hold meetings at each location or headquarters once each month.

In order to conduct classes simultaneously at more than one location, and thus expedite the program, some of the larger railroads have purchased more than one projector and sets of transparencies, for example the Pennsylvania has nine, the Missouri Pacific three, and the Canadian Pacific intends to buy enough to cover the entire railroad within a reasonable time.

The time of day that classes are to be held, depends on local circumstances, such as locations of headquarters. One practice is to hold classes in the evening, for example, starting at 7 p.m., open to all signal department men.

In some instances, classes are held partly during working hours and partly afterward, for example from 4:30 p.m. to 5:30 p.m. In other cases classes are to be held entirely on company time, for example 4 p.m. to 5 p.m.

In answer to the question "Is attendance voluntary?", eight roads

reported "Yes," and six "No"; other roads have not decided this question.

## Do Signal Men Take Interest In Attending the Meetings?

The answer to this question was "Yes" from all the railroads which returned the list of questions. Likewise all roads reported that the men were encouraged to ask questions and enter into discussions concerning the subject of the meeting.

Most of the road reported that

they do not now give examinations, based on the information presented in the classes. Exceptions are that some roads do now, or intend to, give examinations to assistant signalmen or others who are seeking to qualify for promotions or for original employment in signal work.

All of the 18 roads heard from reported that the men are deriving benefit from this visual-aid program of education, and that the classes are to be continued and expanded as fast as other chapters are available.

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## Signaling Exhibitors

The manufacturers named below are exhibiting their products at an exhibition held in conjunction with the annual meeting of the Signal Section, AAR, September 19, 20 and 21 at the Conrad Hilton Hotel,



W. J. Savage

in Chicago. This exhibition is under the auspices of the Signal Appliances Association, of which W. J. Savage, Director of Sales, Thomas A. Edison Industries, is chairman.

American Brake Shoe Co.  
Railroad Products Division  
Chicago, Ill.

Anaconda Wire & Cable Company  
New York, N.Y.

Barber-Greene Co.  
Aurora, Ill.

James G. Biddle Co.  
Philadelphia, Pa.

Buckeye Telephone Supply Co.  
Columbus, Ohio

Copperweld Steel Co.  
Pittsburgh, Pa.

Corning Glass Works  
Corning, N.Y.

Current Controls Corporation  
Chicago, Ill.

Electric Storage Battery Company  
Philadelphia, Pa.

Fansteel Metallurgical Corp.  
North Chicago, Ill.

General Electric Co.  
Bridgeport, Conn.

Gould-National Batteries  
Trenton, N.J.

LeMarche Mfg. Co.  
Schiller Park, Ill.

Line Material Industries  
Milwaukee, Wis.

National Carbon Co.  
New York, N.Y.

National Electric Products Corp.  
Pittsburgh, Pa.

National Telephone Supply Co.  
Cleveland 3, Ohio

Nife Incorporated  
Copiague, New York

Motorola Communication &  
Electronics, Inc.  
Chicago, Ill.

Permali, Inc.  
Mount Pleasant, Pa.

Permacrete Products Co.  
Columbus, Ohio

Pocket List of Railroad Officials  
New York, N.Y.

The Rails Company  
Maplewood, N.J.

The Rail Joint Company  
New York, N.Y.

Rust-Oleum Corporation  
Evanston, Ill.

Transcontrol Corporation  
Port Washington, N.Y.

Transport Products Corporation  
Louisville, Ky.

Western Railroad Supply Company  
Chicago, Ill.