

E. B. Platt, IC, chairman of special committee on training of signal employees, reports on visual aids program progress

aids for training signalmen: (1) non-coded d.c. track circuit; (2) fundamentals of electricity, part 1; (3) direct current relays, part 1; (4) railroad-highway grade crossing protection; (5) meters, their use and care; (6) primary batteries; (7) block signal systems; and (8) block signal circuits.

This special committee prepared these lessons, which consist of slides with accompanying text so that photographs, diagrams and charts can be projected upon a screen for class room instruction. At present, 31 railroads have purchased these visual aid series.

Lessons now being prepared include: (1) storage batteries; (2) fundamentals of electricity, part 2; (3) direct current relays, part 2 (plug-in); (4) coded track circuits; (5) installation and maintenance of model 5 switch machines; and (6) installation and maintenance of type M switch machines.

A \$300,000 wreck resulted when an engineer and head brakeman failed to observe a yellow signal, the only restrictive signal they had passed during 65 minutes. How this wreck occurred was dramatically presented in a sound, colored motion picture titled "Trouble at Troublesome." Based upon facts of an actual wreck, the movie showed that a D&RGW freight train on the main passed a yellow signal at normal speed and ran into the side of another freight train entering the far end of a passing siding. The movie was a grim reminder that no matter how many times a train crew makes a run, they must be ever alert for something different.

## Signal Inspection Act

## . . . reviewed by G. W. Spangler

It is not necessary for a railroad to obtain ICC approval to install a signal system or devices in territory where no such system or devices are now in service, so stated G. W. Spangler, chief of signals and train control branch, ICC. Continuing he said that the theory has been that the installation of any modern safety device where none existed was a step in the right direction, and in any case the new installation would have to meet the requirements of the ICC. Mr. Spangler reminded the assembled signal engineers that failure to comply with the Signal Inspection Act carries penalties: "any carrier which violates any of the provisions of the Act or which fails to comply with any of the orders, rules, regulations, standards or instructions, made, prescribed or approved thereunder is liable to a penalty of \$100 for each such violation and \$100 for each and every day such violation, refusal or neglect continues."

When an inspector from the signal and train control branch of the ICC finds a defect or violation on a railroad, the road is notified by a form and report of the defect. Generally, the road is given time to correct the defect, but if the condition is not corrected, legal steps may be instituted against the railroad.

Mr. Spangler then briefly discussed paragraphs 5 and 6 of the instructions regarding the filing of applications for signal changes under the Signal Inspection Act. He said that "part (a) of paragraph 6 provides that application is not required to be filed for the relocation or addition of a signal, except when the proposed location is to the left of the track governed. Part (b) relieves the carriers from filing an application for a modification which is required in order to comply with any sections of the Rules, Standards and Instructions, including relocation or removal of signals to provide adequate stopping distances for authorized speeds.

"Part (c) provides that an application is not required for installation, relocation or removal of signals and for interlocked switches, derails, movable-point frogs, or electric locks occasioned by extension, shortening or elimination of a passing siding, other track changes, or by a line relocation, not involving change in type of system . . . An application should not be required to permit modifications in signal facilities necessary to make the signal facilities conform to new track arrangements.

"This section should not be interpreted that where one track of a double track line is to be retired, the signals on the remaining track can be removed or that they can continue to operate for movements in one direction only, without filing an application. Also, changing the designation of a track from a main track to a side track does not permit removing the signals from such track without filing an application."

## Yard Switches for Slow Speed Moves

## . . . reported by Committee 2

WEDNESDAY, SEPT. 17, 1958. R. W. Troth, STL-SF, chairman, committee on controlled signaling and interlockings, said that the subcommiteee chairmen would present their individual reports. V. P. Shepardson, RF&P, subcommittee A chairman reported on switch operating mechanism for slow speed train movements. He said this requisite covers electric and electro-pneumatic type yard switches not used in the hump area. A revision suggested by A. T. Johnston, US&S, was made concerning the load requirements of the mechanism to bring them into line with spring switches rather than mainline power switches. The revision is that the mechanism shall exert a force on the No. 1 rod with the switch full normal or full reverse of not less than 1,000 lb. The time of operation by power was reduced from 15 sec. to 6 sec. This report as revised was accepted for submission to letter ballot.

H. A. Maynard, B&O, chairman of subcommittee B reported on a mechanical time release, which with minor

