

WHAT'S THE ANSWER?



Directional Approach Lighting

"What, if anything, has been done to make approach lighting effective only when trains are approaching, and not when receding from, a signal?"

Directional Lighting Not Desirable Under A. P. B. System That Permits Opposite-Direction Signals to Clear

By C. B. CARGILE

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I FAVOR the practice, in A.P.B. signaling, of allowing reverse-traffic intermediate signals at double locations to clear behind trains. In standard practice single intermediate signals for reverse traffic are held at stop. In permitting reverse-traffic signals to clear, more complete flexibility in train operation under full signal protection is secured. The dangerous condition illustrated as Fig. D in B. W. Molis' letter in the August issue of *Railway Signaling* may be provided against by providing a permanent overlap for signal 2 past signal 3, and for signal 7 past signal 6. This would stop the train in the yard at signal 2 before the approaching train passed signal 3, thus giving protection and avoiding unnecessary delay.

A railroad is built for the operation of trains; and signals, particularly on a single-track line, should allow every flexibility in train operation that is consistent with safety. Wherever there are tracks and switches, trains will use them under certain conditions for every movement that it is possible for them to make, regardless of rules; and it is when making these unusual moves that signals often prevent serious accidents.

For the reasons just stated, I would say, in answer to the current question, regarding the desirability of directional control of approach-lighted signals, that I have always considered that a train should light the signal from which it is receding, as well as the one which it is approaching. A light out is equivalent to a red signal, and cutting these lights out in the rear of trains would often cause delays in train operation.

Applicable Only to Intermediate Signals

By G. W. TROUT

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I HAVE never gone into the matter with the idea of overcoming the lighting of a signal when a train is receding from it, as such an arrangement could be applied only to intermediate signals between two passing tracks. Headblock locations must necessarily light for

TO BE ANSWERED IN A LATER ISSUE

(1) *Is a breather of any value in preventing frost formation and vapor condensation on the internal parts of relays? How may these troubles best be eliminated?*

(2) *What may be done, in designing or maintaining signal circuits, to eliminate inductive interference, with a-c. or d-c. signal line circuits, that is caused by adjacent power transmission lines?*

(3) *Is the use of either a series or a floater track relay at the battery end of a d-c. track circuit sufficiently reliable for non-vital circuits such as approach lighting, directional relay control, back-locking, annunciator circuits, etc? Which is to be preferred? Why?*

(4) *What indications are necessary or desirable on the control machine of a centralized traffic control system?*

(5) *What type of bonding should be used in road or street crossings?*

(6) *What is the proper method of applying aluminum paint in order to secure a smooth even finish?*

either an approaching or a receding train. Furthermore, there is some benefit to trainmen if they are able to read the indication of intermediate signals after they have passed them, as it will give them information as to the approach of following trains.

Carl T. Smith, assistant signal supervisor, Boston & Maine, expresses the opinion that any expenditure for additional equipment that might be necessary to secure directional control would not be justified, in view of the comparatively small savings that would be effected. He adds that when making monthly night-time inspections from locomotives it is helpful to find the reverse-traffic signals lighted behind the train.

Maintainers' Territories

"Is the unit system of defining maintenance districts satisfactory? What are its limitations, advantages, disadvantages?"

Wabash Uses Man-Hour Rather Than Equipment Unit as Basis

By H. J. FOALE

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DURING recent months when the management of the railroad has been making reductions in operating expenses, we found it desirable to devise an explanation of the work performed by each maintainer,