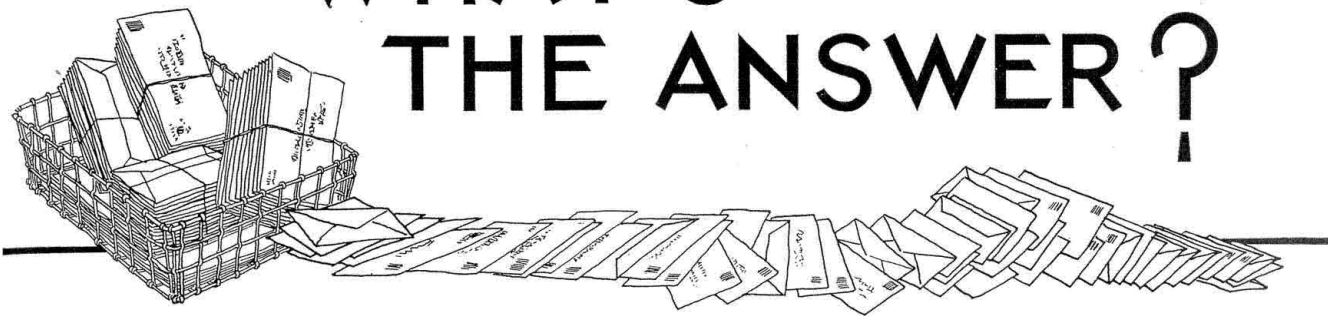
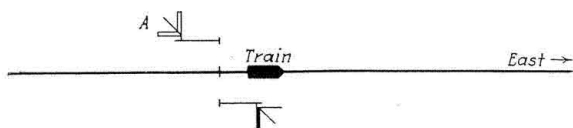


WHAT'S THE ANSWER?



Should Signal Clear?

"In A. P. B. signaling do you consider it advisable to permit the signals, governing traffic in the opposite direction to that in which a train is moving, to clear up as soon as the train in question passes? I.e., referring to the sketch:



Do your circuits permit signal A to clear as soon as the eastward train passes the insulating joints?"

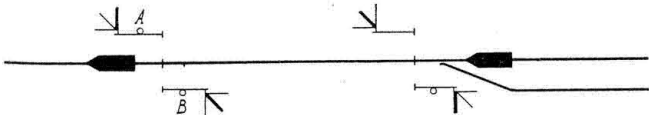
Advantages Favor Holding Signals at Stop

By CHAS. W. BELL
Union Switch & Signal Company, Swissvale, Pa.

THERE being little of real value to be gained by permitting opposite-direction intermediate signals to clear behind a train in an A. P. B. system, it seems evident that a carrier should avail itself of the advantages incident to not permitting these signals to assume an indication other than the most restrictive.

The principal advantages concern the set-up wherein two opposing adjacent signals are prevented from displaying caution indications simultaneously. Such a condition can exist when the signals in question are permitted to clear, as shown in the sketch.

In the event of signal A failing to clear after movement in the established direction, this failure resulting in signal A's stick relay remaining energized, a caution indication will be displayed on the absolute



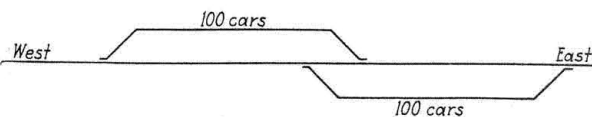
Condition, incident to affirmative side of this question, in which adjacent opposing signals are both at caution

signal until the fault is eliminated. After movement in the established direction has been completed to the next passing siding, and block is still in trouble, a movement in the opposite direction may be authorized under flag protection. This train will proceed through the block under flag protection until the caution indication on signal B is received when the flag protection will, in all probability, be dispensed with. This train may then move under indication of signal B simultaneously with a possible movement past the absolute signal.

Although a definite direction of traffic has been established by the train proceeding through the block, as shown, and appreciating that back-up

TO BE ANSWERED IN A LATER ISSUE

(1) How would you signal a lap siding, such as that shown in the sketch, in A. P. B. territory?



Show signal control limits. What method of operation would you recommend?

(2) Has any satisfactory means been found to prevent the neutral armature of a polar relay from dropping when the polar armature reverses? What has been done to prevent the red flash incident to this condition in color-light signaling? Is this red flash considered a serious defect?

(3) In approach-lighted territory, how do you convey a leaving-signal indication to a train standing on a siding?

(4) What colors do you use for the indications of dwarf signals? Is red preferred to purple for the stop indication? Where and why?

moves are quite effectively covered by rule, nevertheless, the caution indication on the opposite-direction signal is at variance with the rule, and would seem an inviting temptation for infraction of the back-up regulation. Thus, there is a second possibility of opposing moves being made simultaneously under the caution signals.

In the case of siding-to-siding blocks wherein single intermediates are used, the opposite-direction signal is always prevented from clearing, in the most commonly accepted A. P. B. circuit, by reason of its control being carried over the stick relay of the intermediate signal in the established direction, and which relay, of course, is not released until the train has passed the next signal in the established direction. Conformity in the signaling arrangement, whereby intermediate signals always display the same indication under like circumstances, is of some value.

Northern Pacific Affirmative

By C. A. CHRISTOFFERSON
Signal Engineer, Northern Pacific, St. Paul, Minn.

IN the condition you have set up in the sketch, we permit the signal in the opposite direction from that in which the train is going, to clear up after the train has passed the insulated joints. We can see no good reason why it should not clear up.

If this question has come up in connection with a work train working in a block and backing up, I

