What's the Answer?

Approach Lighting

What are the advantages of continuously lighted signals in CTC or automatic block territory compared with approach lighted signals?

When Economy Outweighs First Cost

By J. W. Curran
System Chief Signal Inspector
New York Central
Cleveland, Ohio

Our practice is to approach light wayside signals wherever economic advantages outweigh initial expense of providing the approach lighting. Approach lighting, therefore, has general application except in territory of heavy traffic density, such as our suburban New York area, at large interlockings, and at special locations.

The economic advantages of approach lighting are increased primary battery life, increased lamp bulb life, savings in commercial power and savings resulting from the use of smaller capacity storage batteries to provide desired standby service. Other advantages include reduction in failures because of lamp burn-out, and the aid to maintenance-of-way employees in determining when trains are approaching.

Advantages Are Economic

By John I. Kirsch
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Communications and Signals
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The advantages of approach lighting are principally economic, resulting from power savings and reduction in lamp replacements. Signal systems equipped with emergency stand-by battery supply will operate longer in case of normal power emergencies, if the wayside signals are approach lighted.

We use both systems, continuously lighted and approach lighted wayside signals, depending upon the cost of providing approach lighting compared with the savings realized.

Continuously lighted signals are used where the cost of reliable power is low, or the cost of installing approach lighting is uneconomical. If available power supply is unreliable, or the cost of power is determined by published tariffs, it is generally economical to use approach lighting. Frequently, facilities are inherent in a signal system that can provide approach lighting at little cost, such as approach control of cab signal systems, the use of foreign current protective circuits, and traffic circuits in standard code Rule No. 261 territory.

Like Continuous Lighting

By J. H. Craig
Signal Maintainer
Missouri Pacific
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The engineman certainly is not concerned and usually doesn't know whether a signal is continuous or approach lighted. Thus, with approach lighting, the train is far enough away so that the signal is lighted before it is observed by the engineman. Approach lighted signals are not much help in the operation of track motor cars and definitely no help at all unless the motor car is in approach to the signal. If that signal is approach lighted through only a short block, the time is quite short, maybe too short, for the motor car operator to remove his car from the track before a train arrives.

On the other hand, continuously lighted signals have an advantage for the motor car operator who is traveling in either direction. When a motor car operator, if he is a signalman, sees a signal turn from green to red, he knows that a train is approaching. He knows the approximate location of that train and can govern his further movement accordingly.

Four Advantages

By D. H. Green
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Canadian National
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The advantages, if any, of approach lighting wayside signals are reduced power consumption, lengthened lamp life, and lowered first cost. In some instances, continuously lighted signals could cause confusion to the engineman, where he may inadvertently accept "proceed" signal beyond the restricting signal which governs his movement.

Our practice is to consider each installation on its own merits. Where power is not a factor and the possibility of confusion does not exist, we often continuously light our signals.

Automobile Radio

For two-way radio in automobiles, what are the advantages of having the complete unit (radio set, controls, mike and speaker) mounted under the dashboard as compared with having the radio set in the trunk compartment and the speaker, controls and mike only on the dash?

Radio in Trunk is 30 Watts

By Allen H. Fox
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We do not use the dashboard type of radio. In order to reduce the number of types to stock, we get the same size and style (30 watts) as used in diesels and cabooses, except with the 6-volt or 12-volt power supply, depending on the battery voltage in the automobile. Controls, mike and speaker are all, of course, at the dash.

Beside the advantage of uniformity and high power, there is the advantage of easier servicing in that it is less inconvenient to remove a set from a standard mounting in the trunk than to have to loosen bolts, screws, etc., to get a set out from under the dash.

Advantages for Each Method

By George B. Blatt
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Communications Engineer
Reading Company
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For two-way radio in automobiles, several advantages accrue using a single package unit mounted under the dashboard. Installation time is less because separate mounting and cabling from radio set to speaker, microphone and control unit is eliminated. Mounting the radio unit, terminating two battery wires and mounting antenna, completes the work. Radio set maintenance time is reduced by using concentrated equipment. On maintenance calls, vehicle out-of-service time is reduced