What's the Answer?

Location of Signal Heads

Where searchlight or color-light signal heads are side-of-mast mounted, as applying to single "arm" signals on which the units are vertically above one another, do you mount the heads on the track or field side of the mast?

Field Side on Burlington

By J. E. Johnson
General Signal Supervisor
Chicago, Burlington & Quincy
Chicago, Ill.

On the Burlington, the side-of-mast units are mounted on the field side. This practice seems to have been a carry-over from the semaphore signal where the day indication was displayed to the right of the mast. The only time we deviate from the field side mounting is where obstructions or clearance make it necessary to mount the unit on the track side of the mast in an effort to improve the visibility of the signal.

By mounting the unit on the field side, it often permits shorter runs of cables to the signal and, in some cases, reduces the expense of banking around the signal foundation when such is located on fill.

Field Side of Mast

By G. W. Stultz
Signal Supervisor
Canadian National
Moncton, N. B.

On the Atlantic Region it has been standard practice to install side-of-mast signal heads on the field side of the mast as it gives a greater clearance for high, wide loads. Also they are in a less hazardous position in case of shifting loads, and are out of the way of snow plows throwing large blocks of snow and ice.

Where we use a medium approach signal with two units, the top unit on the field side and lower unit on track side, we have experienced several cases where the lower unit has been damaged by snow being thrown against them by passing snow plows.

Field Side

By A Signal Foreman

I think it is more economical to mount heads on the field side of the mast. Also this enables you to install the mast nearer the rail. Field-side mounting will cut down on the length of cable between the signal and the rail, or between the signal and an adjacent signal.

Mounting on the track side of the mast will give you better alignment to the track, but I don't believe this is worth the difference in cost. I do not know of any difficulty in observing aspects where the heads were field mounted.

Track Side

By R. I. Becksted
Signal Engineer
Canadian Pacific
Toronto, Ont.

In all our recent installations, we are using searchlight-type signals and the units, whether one or two, are mounted on the side of the mast on the track side. The reason for this is to have the light as near as possible in direct vision of the engineman so as to receive full benefit of the beam of light.

Track Side

By G. K. Thomas
Signal Engineer System
Atchison, Topeka & Santa Fe
Topeka, Kan.

Where searchlight or unit-type color-light signal heads are side-of-mast mounted on high ground signals, the units are located vertically above one another, and the heads are on the track side of the mast. This is done in order to provide maximum clearance for the signal structure from track, while at the same time bringing the signal light as close to the track as feasible, so as to present the strongest possible beam of light to the engineman sitting in his accustomed location in the cab of an approaching locomotive.

To Be Answered In a Later Issue

1. If a track relay will not pick up on account of excessive ballast leakage due to wet ballast, what means can be employed temporarily, with safety, to energize the relay and thus prevent train stops and delays?

2. How do you test the various types of lightning arresters in use on your railroad to determine whether they are in condition to operate when needed?

3. What means do your employ to maintain electric locks, line control relays, and signal operating circuits in an energized condition while replacing or renewing a battery?

4. What is the quickest and most effective means you have found to clean and polish communication jack plugs on switchboards and patch cords?

5. In yard loudspeaker systems, how do you protect the paging and talk-back speakers against possible damage from lightning?

6. Are there any radio tubes on the market, which are specially designed to withstand more severe shock and rough handling than usual, such as might be encountered in railroad radio work, even though the equipment is thoroughly shock mounted?

7. What types of antennas are available for use on mobile railroad radio units such as locomotives and cabooses, and for use on fixed wayside stations? Please give the characteristics or reasons why each can be used to advantage. Which types are most effective, mechanically or electrically?

If you have a question, answer or kink you think would be of interest and help to others in the field, please write. Your comments will be welcomed—Editor.