



Use of tape lines to determine proper location of anchor or stub

with "A," to the proposed location of the anchor or guy stub.

The pull (lead) of the guy is determined by the available space between the anchor and pole to be guyed.

Any good specification on pole line construction will have tables covering the strength of guying required at corner poles carrying open wire cables, or open wire and cable at various leads.

DIFFERENTIATION BETWEEN SIGNALS

"From the standpoint of simplicity and least expense, what is the best way you have found to differentiate between absolute and permissive signals of the light type?"

By Number Plates and "A" Markers

By D. H. STEINER

Superintendent Signals & Communications
Chicago, Indianapolis & Louisville
Lafayette, Ind.

IT has been our practice to make a differentiation between automatic signals (absolute and permissive) and interlocking signals. This has been done by number plating all automatic signals, and by having no designation on interlocking signals.

We have further differentiated between absolute and permissive automatic signals of the searchlight type, by using an "A" marker mounted on the pole immediately below the searchlight signal. No difficulty has been experienced, and it would seem that this method takes care of the situation most economically.

Number Plates

By E. LOCKHART

Superintendent Telegraph & Signals
Virginian, Princeton, W. Va.

THE Virginian uses a number plate to designate permissive signals, and the absence of any number plate makes the signal an absolute signal. All of our absolute signals mounted

on masts also have a red marker light, mounted vertically and 5 ft. below the light indication where there is only one operative unit. Where two or more operative units

are mounted on the same mast, no additional marker is used.

The marker is placed on single-unit high signals as an extra precaution in case of a burned-out lamp in the upper arm, and does not play any part in distinguishing between an absolute and permissive signal. Dwarf signals are used for slow-speed moves, and single-unit dwarfs do not have the marker.

Triangular Markers

By E. B. DEMERITT

Signal Engineer
Central of Georgia, Macon, Ga.

I believe we have the simplest and least expensive method of differentiating between an absolute and a permissive light signal. We use a 14-in. black triangular metallic marker, attached to the pole 5 ft. below the signal head, to indicate a permissive signal. An absolute signal is indicated by the absence of this marker.

If anyone should remove the triangular marker, the signal would then be an absolute signal, so we are on the safe side. At the same time, we avoid the additional expense incurred by some roads in using an additional light to indicate the absolute signal.

SUBMARINE CABLE TERMINATION

"How do you terminate and connect to open pole line submarine type telephone and telegraph cables at the shore ends of the cable?" Please furnish simple sketch if practicable.

Signal Terminal Boxes and Aerial Cable

By J. M. FRANCIS

Supervisor Telegraph & Telephone
Norfolk & Western, Roanoke, Va.

WE have only one installation of submarine communication cable on our railroad, and have just finished renewing the approaches to it. This cable is laid under the channel of

the Elizabeth River at our draw-bridge No. 5, Norfolk, Va., and is terminated in Raco terminal boxes at each end of the draw span. The circuits then extend along the bridge structure in aerial cable, spun to stainless messenger, to standard Western Union cable protection on "H" fixtures on the shores.

The installation is straight-forward, and no special measures are taken at the submarine-cable terminals. Standard Raco signal-type terminal boxes were used at the ends of the cable, because we think this type of terminal box will stand up better under the bad corrosive conditions encountered at this location. We do not use arresters in these boxes, but depend on the carbon blocks and fuses in the Western Union pole boxes at the junction of the open-wire lines and the approach cables.

