

INSTRUMENT CASE PLATFORMS

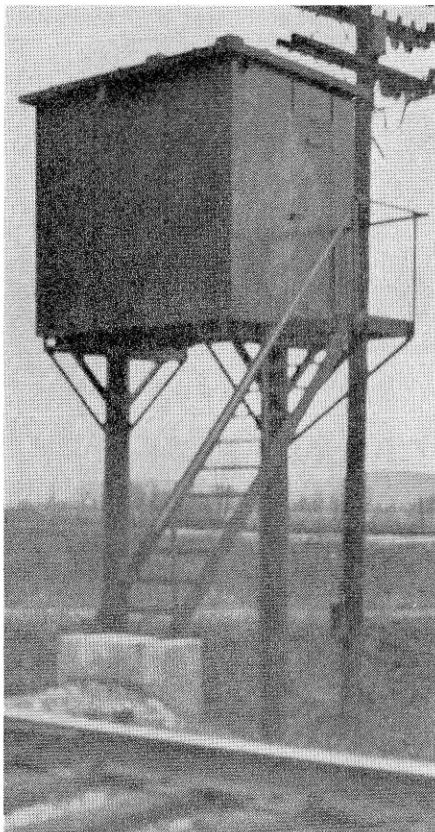
"Do you install platforms at the front or rear of signal instrument cases to enable easy access to apparatus in the cases? If so, what kind of platforms do you employ, and what type of material have you found to be most effective in minimizing the accumulation of water and ice and the possibility of men slipping on the platforms?"

Grated Metal Platforms

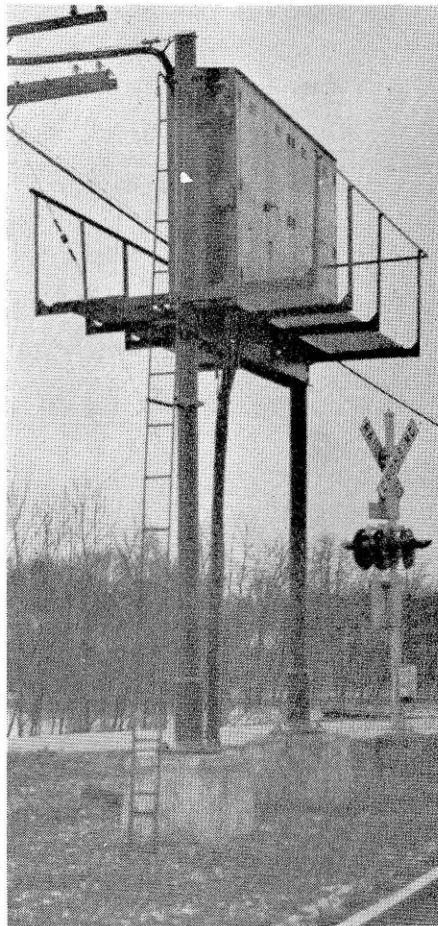
By A. M. WEEKS

General Supervisor Signal Construction
Chesapeake District, Chesapeake & Ohio
Richmond, Va.

THE tendency towards concentration of equipment and the requirements of additional equipment for modern signaling make the use of larger instrument cases necessary. In most cases, the height of the case is increased, as well as the length, to provide the additional space required. The increased



Bungalow elevated for flood protection. Note steps, platform and hand rail



Elevated instrument case with grated metal platforms. Note hand rails

height makes it necessary to have a place to stand practically level with the bottom of the case, in order to work comfortably on the upper section of the case. It is necessary to set the foundations for the instrument case far enough above the roadbed to take care of any possible raises over a period of years, and it is customary to set the bottom of the case far enough above the ground level, so that it can receive the proper maintenance. A platform of some description is thus necessary to provide a working level at the proper height.

Box car running boards have received lots of attention in the past to provide a non-slip surface under the worst conditions of ice and water, with the result that metal grating platform sections have been developed which are readily adaptable as platforms for signal instrument cases. These platform sec-

To Be Answered In a Later Issue

(1) What procedures should be followed in testing a two-wire metallic telephone line circuit with a voltmeter for (a) an open on one side, (b) a cross with another line, (c) ground on one side, (d) a short, (e) foreign voltage to ground on one side, and (f) foreign voltage between the wires?

(2) In the operation of high-speed self-propelled single-car trains, or short wheel-based Diesel-electric locomotives running alone, have you experienced any tendency towards improper operation of track circuits? If so, please explain the nature thereof, and give your suggestions for correction of the condition.

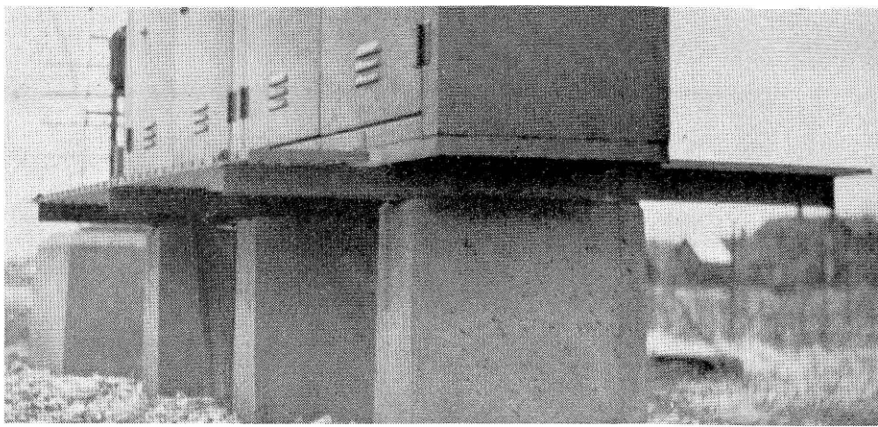
(3) In planning telephone, telegraph, printer, loudspeaker and radio communications for flat and hump-type freight classification yards, what principal factors should be taken into consideration?

(4) In your coded C.T.C. systems, do you have automatic recall of indication code on transmission of each control code? Why?

(5) What are the functions and differences between "high-pass", "band-pass" and "low-pass" filters in carrier communication systems? Please explain.

(6) What methods do you employ to clean dirt and finger marks from the panels of C.T.C. control and panel-type interlocking machines?

If you have a question you would like to have answered, or, if you would like to answer any of the above questions, your comments will be welcomed. Address: "What's the Answer?" Department, Railway Signaling and Communications, 79 West Monroe Street, Chicago 3, Ill.



Grated-metal platforms, supported by angle irons, at instrument case on the ground

tions are available in 12 and 24-in. widths, with lengths up to 6 ft. Common sizes of angle iron can be easily adapted for use in a support for these platform sections. In practice, the angle iron is fastened to the foundation, extending out far enough on each side of the foundation to act as a support for the platform, which can be fastened to the support angle iron with hook bolts or clamps. Anchor bolts are usually cast into the foundation, if concrete is used, with the proper location and spacing to make the platform level and to locate it at the proper height with respect to the instrument case.

Where channel iron has been used to adapt existing foundations to a different type of housing, special fabrication of the angle iron to provide a channel section under the instrument case must be used, or else channel iron substituted for the angle iron. This is necessary to permit the required adjustment of bolt spacing between the existing foundation and the required spacing for the type housing to be installed. The same type of channel iron and cross-angle or channel-iron construction can be used where an elevated mounting is required to protect against flood conditions. In this case, standard signal masts can be used to provide the necessary elevation, with the channel irons bolted to the masts at the proper height. However, where elevated mountings are necessary, the additional precaution of providing a hand railing should be taken to prevent a man from accidentally stepping off the platform.

Platforms should be 24 in. wide on the instrument side of the case, while 12-in. width sections can be used on the opposite side, except in the case of elevated mountings, where hinged doors are provided

on both sides to the instrument cases. Hand rails must be located so that doors can be opened, and the width of the door will determine the width of the platform. The same metal grating sections can be used to provide a landing for metal instrument houses by providing an angle-iron bed to support the grating sections.

Further Comment on C. & O. Practice

By E. T. GARRISON
Supervisor of Signals
Chesapeake & Ohio, Richmond, Va.

PLATFORMS are installed at the front and rear of our signal instrument cases, which enables easy access, as well as retaining a level footing, regardless of the contour of the ground and, in many cases, saves cribbing. We have eliminated the use of wood platforms, which eliminated all snow and ice hazards, as well as saving a considerable amount on platform renewals, due to rotting out.

The platform that we have practically adopted as a standard item

is a non-slip running board—known as galvanized grating—which can be obtained electrically welded or mechanically assembled, with the top edges serrated. This grating is furnished in standard widths, lengths and grating openings, and can be obtained from various manufacturers, such as the Blaw-Knox Division of the Blaw-Knox Company, Pittsburgh, Pa. The gratings can be furnished in suitable lengths for either single or double locations, and are easily attached by fastening angle irons to bolts set in the side of the concrete foundations. The angle irons extend from the desired width of the platform in the front to the desired width of the platform in the rear, and the grating is easily fastened to the angle iron bearing pieces by means of galvanized hook bolts.

Portable Steps Used

By B. E. ARIAS
Superintendent of Electricity & Telegraph
National Railways of Mexico
Mexico D.F., Mexico

WE do not install platforms at the front or rear of signal cases, the top of the case foundations being 6 in. above the rail head. However, our maintainers carry on their motor cars a Pullman-type portable step, which enables easy access to apparatus in the cases.

Per A.A.R. Manual

By F. W. CONSTABLE
Signal Supervisor
New York Central System
Weehawken, N. J.

OUR equipment is the same as shown in A.A.R. Signal Section Manual No. 3, Drawings 1363A, 1364D, 1365D, etc.

TEMPORARY CHANGE OF SIGNAL CONTROLS

"Where 'slow' orders are in effect on account of track or bridge repairs, is it the practice on your road to temporarily change the controls of wayside signals to 'remind' enginemen of the slow orders?"

Not General Practice

By A. M. CRAWFORD
Superintendent Telegraph & Signals
Pennsylvania, Pittsburgh, Pa.

IT is not the general practice on the Pennsylvania to "remind" enginemen of slow orders by chang-

ing the controls of wayside signals, because the location of the wayside signals may not fit the location of the track or bridge repairs necessitating the slow order, and the signal indications provided do not generally convey the information required. This information may be