Technical Planning Board for presenting the railroads case to this Commission. John L. Niesse, assistant general superintendent of telegraph and telephone of the New York Central and the official representative of the Communications Section, A.A.R., is chairman of Committee 7. This committee, through the Communications Section of the A.A.R., is the official representative of the railroads, and will continue to co-operate with the Federal Communications Commission in the development of operating procedures and engineering practices as well as rules and standards.

## The Post-War Importance of Signaling

DURING the war, the amount of traffic handled by railway competitors has been infinitesimal in comparison to the tonnage and the number of passengers moved by rail. In one case after another the railways have had to step in and take over important traffic formerly handled by competing agencies of transportation, notably coastwise and transcontinental movements which the ships could not handle. The shippers of the country have notably short memories, however, and in the post-war period they will undoubtedly be influenced by service and cost more than by their recollections of what the railways did during the war while the other agencies of transportation fell down on the job. As soon as railway competitors are again in shape to make a bid for the nation's traffic, the shippers will certainly consider routing their freight by truck, waterways or even by air, and unless the railways supply the necessary service to meet such competition their tonnage figures are likely to take a distinct nose dive which will be much greater relatively than the overall decline in traffic brought about by the ending of the war.

A recent survey of the opinion of railway presidents indicates, however, that they do not intend to sit idly by and permit railway traffic to dwindle, without making strenuous efforts to hold on to it. Plans have already been formulated for the scheduling of freight and passenger trains at higher speeds than ever before. At the same time, much more attention will have to be paid to operating costs than in war-time when certain practices which would be uneconomical and even wasteful in peacetime were necessarily indulged in in order that the huge traffic might be handled expeditiously. The signaling departments of the railways have a distinct responsibility and an opportunity in this connection that should not be overlooked. One of the most important ways in which the speed of trains can be increased without anything like an equivalent increase in operating costs is by the installation of modern signaling on the road, and through the elimination of terminal delays by the construction of modern interlocking plants and the increased use of car retarders in large classification yards.

Signal engineers should not wait until they are hurried into producing plans for such new facilities by their managements. It is true that, during the war, signal engineers have been extremely busy with the work of maintaining the existing signal systems under the exigencies and handicaps of heavy war-time traffic, but the time has arrived when considerable thought should be given by signal engineers to plans for post-war signaling improvements.



The Western Maryland has a special car equipped to instruct locomotive enginemen and firemen how to fire locomotives, use the airbrakes, and to understand signal aspects and indications. The signal instruction panel is 2 ft. 1 in. high and 4 ft. 1.5 in. long, and is made of 16-gage sheet steel mounted on an angle-iron frame. The miniature color-light signals are painted in black on a gray background. Each color-light signal "arm" is controlled by a three-position miniature C.T.C. type lever. The blades on the semaphore signals are operated mechanically by push rod connections to the levers for these signals. The upper-quadrant symbols represent automatic block signals and the lower-quadrant symbols represent train order signals. The instruction panel as a whole is hinged at one end so that it can be swung out, as shown in the picture, when being used for instruction purposes, or can be swung back against the wall when not needed. The man shown in the picture giving instructions is S. M. Roth, supervisor of locomotive performance, who is in charge of the instruction car.