

Application of GPS to Train Control System for Secondary Lines

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In order to lower the cost for the on-board location and velocity detection function of the train control system using radio communications for secondary lines, the GPS positioning performance in the case of the joint use of MSAS (MTSAT Satellite-based Augmentation System) was investigated, and the applicability was examined. From the results of the test carried out on the test track in the premises of the Railway Technical Research Institute, it was shown that there was a possibility of locating the position of the vehicle on the track in case it is running under the open sky, by using horizontal protection level. As a result, we have had the prospect that the system equipped only with the on-board function, but without using the ground installations, could be built.