

## **On-board Train Positioning System Combining Tachometer Generators with Inertial Sensors and GNSS**

Takayasu KITANO    Yukihiro NAKASAWA    Yuki OTA  
Shigeru TANIGUCHI    Koji IWATA    Haruo YAMAMOTO

We have been developing an on-board positioning system with combination of tachometer generators and inertial sensors to recognize the position of a vehicle. The system is capable of correcting the train position in general line where curves and points exist at certain intervals. However, in the case of long straight line sections, the position correction by detecting curves cannot be possible, and it is necessary to correct the position by balises. In this paper, we propose a position correction method for the developed vehicle position detection system, which can be applied to straight lines by utilizing GNSS positioning.