

# RADIO BEACON SYSTEM AS POSITION NAVIGATION SYSTEM

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The principle disadvantage of the existing inertial and odometrical systems is accumulation of errors in time. That is why it is necessary to complex them with position systems that have not such problems.

Satellite navigation system (GPS, GLONASS) without differential correction cannot be used for navigation inside buildings because possible signal loss and poor accuracy.

The review of existing radio navigation systems have been done, mathematical apparatus and software on Pascal for the most suitable method for using on the small surface-mounted mobile object have been developed.

It is possible to obtain accuracy about 1 m in case of using three radio beacons with location finder with resolution of  $1^\circ$  that is better than GPS without differential correction.