

# OPTIMAL DESIGNING OF PRECISION SMALL-SIZE NON-PLATFORM INERTIAL NAVIGATION SYSTEMS FOR HIGHLY MANOEUVRABLE MOVING OBJECTS

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The paper presents the results of work on creating a small-size precision non-platform inertial navigation system (NINS) operating under extreme conditions. Special attention is given to elements of methodology and process of designing NINS that were created as a necessary development tool. A new approach to designing NINS calculator is proposed, based on mutual optimization of algorithms and processor architectures.

*Non-platform inertial navigation system, quaternion, Euler vector, methodical and computational errors, function-oriented processor.*

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