DOI: 10.37102/1992-4429_2024_47_01_03

RESEARCH DESIGN OF UNCREWED BOATS

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System for research computer-aided design (RIAP) of unmanned boats (UB) developed at the Pacific Higher Naval College after S.O. Makarov is intended for scientific research in the field of UB with a replaceable modular payload tactical and technical characteristics analysis. The method for organizing initial data in a research computer-aided design system for an unmanned boat, used in software implemented in the Visual Basic for Application language, is discussed. The methodology for calculating the main parameters of the UB project with the fulfillment of specified requirements has been developed. The mathematical model of an unmanned boat using evaluation functions of several groups of private criteria is presented.

Keywords: unmanned boat, marine robotic complex, research computer-aided design system, load element, modular payload, unmanned boat modeling, functional mathematical model

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