

USING AUTONOMOUS UNDERWATER VEHICLES FOR POTENTIALLY DANGEROUS UNDERWATER OBJECTS INVESTIGATION IN THE KARA SEA

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The paper considers a technology for surveying potentially dangerous underwater objects in the Kara Sea, which was used in the operation of the autonomous underwater vehicle (AUV) "Pilgrim" during the expedition onboard the R/V "Akademik Mstislav Keldysh" (cruise #85) in 2021. The proposed technology addresses the issues of mission planning, preparation of software and algorithmic support, AUV control, processing and analysis of the received data. It also focuses on the organization of joint work of remotely operated and towed vehicles and the organization of AUV diving and interaction with the mothership's crew. The paper describes problems that arose during the discussed work and proposes their solutions. The main results obtained in the process of performing the assigned tasks by the AUV are presented.

Keywords: autonomous underwater vehicle, potentially dangerous underwater objects, environmental monitoring, marine expedition, software.

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