

# MOBILE TEST SITE FOR MEASURING THE PRIMARY HYDROACOUSTIC FIELD OF UNDERWATER VEHICLES

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Annotation. The paper proposes to promptly measure the primary hydroacoustic field (PGF) of underwater vehicles (PA) using a mobile polygon based on a hydroacoustic buoy with a directional antenna. The conditions under which the measurement accuracy will meet the specified requirements are justified. It is shown that the accuracy of determining the distance between the PA and the buoy has the greatest influence on the accuracy of measurements. An algorithm for determining this distance is given, based on the use of the measured bearings of the PA and the known speed of the PA. A formalized method of measuring the GWP of the PA is described, including, among other things, calibration of the receiving path of the buoy. The results of testing the technique in the conditions of Lake Ladoga by measuring the GWP of a boat repeatedly passing by a hydroacoustic buoy with a directional antenna at speeds of 6 and 22 knots are presented. The accuracy of determining the GWP according to the results of testing was 2-3 dB.

**Keywords:** underwater vehicle, primary hydroacoustic field, hydroacoustic buoy, method of measuring the primary hydroacoustic field.

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