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EXPERIMENTAL STUDY OF THE SOUND FIELD OF MOVING SOURSE

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This paper presents spectral processing of experimental data obtained by a diversity receiving system based on combined receivers. In the experiments the distance between the moving object and the receiving system, the positioning horizon of the moving underwater object, and the positioning horizon of the receiving system were varied. The goal of the analysis is to determine the signal components of a low-noise object and other characteristics of the source's sound field in shallow water conditions and in the presence of nearby shipping noise using scalar, vector, and tensor descriptions of the sound field.

Keywords: combined receiver, shallow water, power spectral density, intensity vector, signal processing.

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