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EVALUATION OF THE FOCUSING PROPERTIES OF SPECIFIC BOTTOM TOPOGRAPHY OF SHALLOW SEA BY MEASUREMENTS OF ITS CHARACTERISTICS IN THE NEAR ZONE

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ABSTRACT

The relevance of this topic is determined by the need to locate stationary tools of the acoustic monitoring of the aquatic environment in places of the seafood harvesting, development of a shelf zone, basing of ships and different classes vessels.

The purpose of this article is to analyze the possibilities of the Kirchhoff-Helmholtz method by evaluation of focusing properties of some areas of shallow sea by making measurements in the nearest field.

The material is based on the results of theoretical analysis and research works made by the Pacific Higher Naval School S.O. Makarov (Department of Physics and technical disciplines). Researches were made in laboratory and field conditions in the Peter the Great Bay (Japanese sea) in 2013. The results of these researches confirm the feasibility of using Kirchhoff-Helmholtz method to evaluate the focusing properties of the shallow sea areas with specific relief and to choose the place for installation of stationary hydroacoustic monitoring equipment.

Keywords: Method Kirchhoff-Helmholtz, area of shallow sea with specific terrain, model of the investigated area, the measuring hydrophone.

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