

ANALYSIS OF ELECTROMAGNETIC FIELD LEVELS IN SHIPS

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Electromagnetic radiation is known negative effects on humans and environment. The investigation of these effects has always been the subject of many researches. In this study, the sources of electromagnetic field generated in two marine vessels used for seismic researches were detected and their magnetic field levels with 50 Hz frequency by using an extra low frequency (ELF) field strength meter were measured. The variation of the magnetic field level with increasing the vessel speeds was investigated. The measurement results obtained from the vessels are compared with international standards on non-ionizing electromagnetic radiation protection. At the end of the study, some suggestions were presented to reduce higher values in the measurement results according to the standards.



Figure 1: Hopa -1 Tug

Keywords: Vessel, electromagnetic radiation; field measurement, human health, environment effects

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