Available Volumes | Japanese   >> Publisher Site

Author: _____ ADVANCED   Volume   Page

Keyword: _____ Search   _____ _____ Go

Add to Favorite Articles   Add to Favorite Publications   Register Alerts   My J-STAGE HELP

TOP > **Available Volumes** > **Table of Contents** > **Abstract**

[PDF (714K)] [References]

Crew Workload Analysis of Berthing Operation

Ryo Kakuta, Hideyuki Ando, Hiroyuki Yamato, Keiko Miyazaki and Keiji Miyawaki

Summary: The present paper proposes a crew workload analysis method of berthing operation. The method helps identifying the cause of crew workload variation based on the analysis of multiple data obtained from berthing operation. It consists of mental workload analysis, crew behavior analysis and ship movement analysis. Mental workload is estimated from heart rate variability measured by physiological sensor. Crew behavior is recorded by handy and fixed video cameras to analyze frequency of behavior and response time. Ship movement is measured with two GPS receivers to calculate turning and distance to pier. Based on these data, mental workload is compared with other measures. The method is applied to three berthing operations and the causes of workload change during berthing operation are partly cleared.

[PDF (714K)] [References]

Download Meta of Article[Help]

RIS

BibTeX

To cite this article:

Ryo Kakuta, Hideyuki Ando, Hiroyuki Yamato, Keiko Miyazaki and Keiji Miyawaki: Crew Workload Analysis of Berthing Operation , Journal of the Japan Society of Naval Architects and Ocean Engineers, (2007), Vol. 6, pp.289-295 .