

## <u>TOP > Available Volumes > Table of Contents > Abstract</u>

ONLINE ISSN : 1881-1760 PRINT ISSN : 1880-3717

## Journal of the Japan Society of Naval Architects and Ocean Engineers

Vol. 2 (2005) pp.229-235

[Image PDF (1210K)] [References]

## Development of the hull-form of catamaran by using CFD and experiment

Hideaki Miyata, Jin Yamasaki, Antonin Coliche<sup>3)</sup>, Takashi Kawai and Hiromichi Akimoto

3) Ecole Centrale Nantes

(Accepted October 13, 2005)

**Summary:** Wake wash is one of the serious problems for high speed ships, because it may cause damage on the coastal aquaculture using rafts or nets. Since some important parts of high speed ships are catamaran, a CFD code for the catamaran ship is developed. It can properly evaluate wave resistance of both symmetric and asymmetric demi-hulls with consideration on wake wash. The code is applied to the development of a catamaran type commuter ship operated for domestic services. Wave resistance and wake wash characteristics are demonstrated to be improved by the numerical simulation. The towing tank experiment for the evaluation of wave resistance and wake wash is carried out for the verification. It is clarified that the improved hull form shows lower resistance with smaller wake wash at higher Froude number when the displacement is reduced by 30%.

[Image PDF (1210K)] [References]

Download Meta of Article[Help] RIS BibTeX

To cite this article:

Hideaki Miyata, Jin Yamasaki, Antonin Coliche, Takashi Kawai and Hiromichi Akimoto: Development of the hull-form of catamaran by using CFD and experiment, Journal of the Japan Society of Naval Architects and Ocean Engineers, (2005), Vol. 2, pp.229-235.



