# STUDY ON CATAMARAN DESIGN TOWARDS REDUCTION OF WAKE WASH

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Study on catamaran design towards reduction of wake wash / Abdul Halim Md Ali.

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# STUDY ON CATAMARAN DESIGN TOWARDS REDUCTION OF WAKE WASH

By ABDUL HALIM BIN MD ALI

A thesis submitted in partial fulfillment of the requirements for the award of the degree of Bachelor of Applied Science (Maritime Technology)

DEPARTMENT OF MARITIME TECHNOLOGY FACULTY OF MARITIME STUDIES AND MARINE SCIENCE UNIVERSITI MALAYSIA TERENGGANU 2013



DEPARTMENT OF MARITIME TECHNOLOGY FACULTY OF MARITIME STUDIES AND MARINE SCIENCE UNIVERSITI MALAYSIA TERENGGANU

#### **DECLARATION AND VERIFICATION REPORT**

#### FINAL YEARS RESEARCH PROJECT

It is hereby declared and verified that, this research report entitled:

**STUDY ON CATAMARAN DESIGN TOWARDS REDUCTION OF WAKE WASH** by **ABDUL HALIM BIN MD ALI**, Matric No. **UK 20903** has been examined and all errors identified have been corrected. This report is submitted to the Department of Maritime Technology as partial fulfillment towards obtaining the **BACHELOR OF APPLIED SCIENCE (MARITIME TECHNOLOGY)**, Faculty of Maritime Study and Marine Science, University Malaysia Terengganu.

Verified by:

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Date: 16/1/13

## DECLARATION

I hereby declare that this thesis entitle "Study on Catamaran Design Towards Reduction of Wake Wash" is my own research except as cited in the references.

> Signature : Name ÷ Matrix No. : UK 20903 Date

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Abdul Halim Bin Md Ali : 13<sup>rd</sup> January 2013

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#### ABSTRACT

Presently the multihull market is the fastest growing segment of the entire boating industry. To fulfill the demands, multihull high speed vessels have become a popular choice of transport such as catamaran and Small Waterplane Area Twin Hulls (SWATH) vessel because of their comfort levels are higher compared to monohull. The increasing demand for high speed vessel for commercial and military purpose led to the increasing number of catamaran in waterways.The impact of the increasing demands of catamaran causing a serious environmental damage. The bank erosion issues especially in river and canals occur due to the large wake wash motion produced when the catamaran passes.

## ABSTRAK

Pada ini pasaranmultihulladalahsegmen masa paling pesat berkembangdaripadakeseluruhan industry perkapalan. Untuk memenuhi permintaan, multihullberkelajuan tinggitelahmenjadi satupilihanyangpopular kapal untuk pengangkutanseperticatamarandanSmall Waterplane Area Twin Hulls (SWATH) keselesaannbyaadalahlebih berbandingkepadamonohull. keranatahap tinggi permintaan Peningkatan untukkapalkelajuan tinggiuntuktujuan komersildan tenteramembawa kepadapeningkatan bilangancatamarandi perairan. Kesan daripada peningkatan permintaan ke atas penggunaan katamaran telah menyebabkan kerosakan alam sekitar yang teruk. Isu kakisan sering berlaku di sungai dan terusan berlaku disebabkan oleh kesan daripada riak air yang terhasil daripada pergerakan katamaran itu sendiri.