Stabilit of coastal fishing vessel (B class) in Terengganu based on inclinning and rolling tests / Mohd Faizrus Anwar Roslan.

Lihat sebelah

STABILITY OF COASTAL FISHING VESSEL (B CLASS) IN TERENGGANU BASED ON INCLINING AND ROLLING TESTS

Mohd Faizrus Anwar bin Roslan

This project report is submitted in partial fulfillment of the requirement of the degree of Bachelor of Applied Science (Fisheries Science)

FACULTY OF AGROTECHNOLOGY AND FOOD SCIENCE
UNIVERSITY MALAYSIA TERENGGANU

2007

This project report should be cited as:

Roslan, M.F.A. 2007. Stability of Coastal Fishing Vessel (B Class) in Terengganu Based on Inclining and Rolling Tests. Undergraduate thesis, Bachelor of Applied Science (Fisheries Science), Faculty of Agrotechnology and Food Science, University Malaysia Terengganu, Terengganu Darul Iman. 50p.

ACKNOWLEDGEMNTS

Bismillahirahmanirahim

Thanks to All Mighty Allah on blessing, inayah and rahmat this project has been successful finished although lots of obstacles happen during the conducted of this project. First of all, I would like to thanks to my main supervisor, Assoc. Prof. Dr. Khalid bin Samo and my second supervisor, Assoc. Prof. Dr. Sakri bin Ibrahim for their supervision, assistance, comments, and guidance that this project is able to run and finished in time. My apparition goes to my project coordination, En. Shahreza bin Mohd Shariff for his idea and his help through the period time. To my family, my father Roslan bin Talib and my mother Rusnah binti Mohamed for their full support, spiritual support and encouragement to me to finish this project, your encouragements is everything for me and I love you so much. Moreover, to all my friends especially to Miss Nahzatul Shima binti Abd. Wahab, Mr. Ady Dhamiri bin Mohd Haniff, Mr. Khairul Anuar bin Kamaruddin, Mr. Saiful Hasni bin Saat and Mr. Mohd Azman bin Yusoff for all of their commitment and helped to me especially in conduction all the measurements and tests for the vessel, and their ideas to me during the period time, all of your support would not be forgotten in my memory forever. Thanks to all staff from Netloft Unit, Freshwater Hatchery Unit, Institute of Aquaculture Tropica (AKUATROP) and Scuba Unit for lending all of the apparatus needed to successful the project.

My appreciation also goes to the fishing vessel owner, En. Nafiz for his permission to use his vessel as the subject of my studies, the entire worker in the yard and the crew of the TRF 629 for their helped regarding the vessel construction and measurement, and also their helped in conduction the tests of the vessel. Last but not least, to those who have contributed to this project, whether direct and indirectly to this project, thanks so much for your time and commitment for this project.

ABSTRACT

This project has been conducted to determine the stability of local fishing vessel (coastal fishing vessel under B class) in Terengganu. One local fishing vessel under B class designed to operate purse seine net was chosen as a subject. All data on the vessel were collected while it was being refurbish (modified ie. To increase its length and breadth) at repair yard at Kampung Batin, Seberang Takir, Terengganu Darul Iman. First, the lines plan of the vessel were be generated and the displacement of the vessel calculated using the 1st of 2nd Simpsons Rules. The calculated displacement of the vessel was 29.25 metric tons. The GM value of the vessel was determined using Inclining and Rolling Tests. For the Inclining Test, the GM value of the vessel was computed to be 1.30 m and for the Rolling Test the GM value was 1.32 m. There are no significant different between the GM value for Inclining Test and the GM value for the Rolling Test. From these tests, we can conclude that the vessel was stable and safe for operation (based on recommended criteria from IMO which is GM at least 0.35 m).