

**STUDIES ON TECHNICAL CHARACTERISTICS OF THE
HULL FORMS FOR TRADITIONAL FISHING BOAT**

DOKANAER KASTO AK MUNING

**FACULTY OF APPLIED SCIENCE AND TECHNOLOGY
UNIVERSITI PUTRA MALAYSIA TERENGGANU
TERENGGANU
1998**

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Studies on technical characteristics of the hull forms for traditional fishing boat / Dokanaer Kasto s/o Muning.

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KOLEJ UNIVERSITI SAINS & TEKNOLOGI MALAYSIA
21030 KUALA TERENGGANU

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By

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**This project report is submitted in partial fulfilment of the
requirements for the degree of Bachelor of Fisheries Science**

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To Tuan Haji Sulong bin Draman, “Thank you for the permission to measure your boat and hope you can build a lot more good fishing boats for the fishermen and to all the boatbuilders out there”.

Abstract

Very few studies on traditional fishing boat in Kuala Terengganu has been conducted. This study through compilation of basic hull offsets data by using direct measurement, photographic and flexible wire techniques attempts to investigate the technical characteristics, in particular the hull forms of the traditional boat in K. Terengganu. Standard boat design criteria including block coefficient (C_b), prismatic coefficient (C_p), mid area coefficient (C_m), displacement and dimensional ratios were used to define technical characteristic of the hull forms. All of the traditional fishing boats were constructed using the design and building skills passed through generations without the used of a single design plan. The decreasing number of traditional boatbuilders, suggests that the building skills are diminishing. This project also attempts to draw up the lines plan drawing of the hull forms from the new construction and/or from the completed boats under repair. Results of investigation showed that the values of C_b is 0.41 and C_p is 0.45 and this were far smaller compared to the modern designs with values below 0.5. Lines plan of the traditional boat had been generated and a purpose built computer program had been developed to assist in the computations of the technical parameters of the boat under studies.

Abstrak

Amat sedikit kajian ke atas bot nelayan tradisional di Kuala Terengganu yang telah dilakukan. Kajian ini melalui himpunan data offset asas lambung bot(hull) dengan menggunakan kaedah mengukur terus, teknik foto dan dawai yang boleh di bengkokkan cuba untuk meninjau ciri-ciri teknikal, terutamanya bentuk lambung bot tradisional di Kuala Terengganu. Kriteria rekabentuk bot yang umum/piawai termasuk pekali blok, pekali prismatik, pekali luas tengah, isipadu sesaran dan kadar dimension yang digunakan untuk menerangkan ciri-ciri teknikal bentuk lambung. Kesemua bot nelayan tradisional dibina mengikut rekabentuk dan kemahiran membina yang diwarisi daripada generasi yang sebelumnya tanpa penggunaan walau satu pun pelan rekabentuk. Penurunan jumlah bilangan pembina bot tradisional menunjukkan yang kemahiran membina bot semakin berkurangan. Projek ini juga cuba untuk melukis lukisan pelan garisan untuk bentuk lambung bot daripada daripada bot yang baru dibina dan/atau daripada bot yang siap dibaiki. Hasil keputusan daripada kajian menunjukkan yang nilai C_b adalah 0.41 dan nilai C_p adalah 0.45 dan ini adalah kecil berbanding dengan nilai untuk bot moden iaitu dalam lingkungan 0.5. Pelan garisan untuk bot nelayan tradisional telah dibuat dan satu aturcara komputer telah dibuat untuk membantu dalam pengiraan berkenaan dengan parameter teknikal bot dalam kajian.