

**LIFEJACKETS: THE STUDY TO DETERMINE THE  
COMPLIANCE OF LIFEJACKETS USED BY PASSENGER  
FERRIES IN MALAYSIA TO INTERNATIONAL CONVENTION  
FOR THE SAFETY OF LIFE AT SEA (SOLAS) 1974**

**MOHD FIRDOS BIN AYOB**

**FACULTY OF MARITIME STUDIES AND MARINE SCIENCE  
UNIVERSITY OF MALAYSIA, TERENGGANU**

**2012**



**LIFEJACKETS: THE STUDY TO DETERMINE THE  
COMPLIANCE OF LIFEJACKETS USED BY PASSENGER  
FERRIES IN MALAYSIA TO INTERNATIONAL CONVENTION  
FOR THE SAFETY OF LIFE AT SEA (SOLAS) 1974**

**MOHD FIRDOS BIN AYOB**

**FACULTY OF MARITIME STUDIES AND MARINE SCIENCE  
UNIVERSITY OF MALAYSIA, TERENGGANU**

**2012**

**LIFEJACKETS: THE STUDY TO DETERMINE THE COMPLIANCE OF  
LIFEJACKETS USED BY PASSENGER FERRIES IN MALAYSIA TO  
INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA (SOLAS)  
1974**

**By**

**MOHD FIRDOS BIN AYOB**

**Research Report submitted as partial fulfilment of  
the requirement for the degree of  
Bachelor of Science (Nautical Science and Maritime Transportation)**

**DEPARTMENT OF NAUTICAL SCIENCE AND MARITIME TRANSPORTATION  
FACULTY OF MARITIME STUDIES AND MARINE SCIENCE  
UNIVERSITY OF MALAYSIA, TERENGGANU**

**2012**



DEPARTMENT OF NAUTICAL SCIENCE AND MARITIME TRANSPORTATION  
FACULTY OF MARITIME STUDIES AND MARINE SCIENCE  
UNIVERSITI MALAYSIA TERENGGANU

DECLARATION AND VERIFICATION REPORT

FINAL YEAR RESEARCH PROJECT

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

**The Study to Determine the Compliance of Lifejackets Used By Passenger Ferries in Malaysia to International Convention for the Safety of Life At Sea (Solus) 1974,** by Mohd Firdos Bin Ayob, Student ID: UK 16722 has been examined and all errors identified have been corrected. This report is submitted to the Department of Nautical Science and Maritime Transportation as partial fulfilment towards obtaining the Degree of **Bachelor of Science (Nautical Science and Maritime Transportation)**, Faculty of Maritime Studies and Marine Science, University of Malaysia, Terengganu (UMT).

Verified by:

  
.....

Principal Supervisor

Name : En Ahmad Faizal Bin Ahmad Fuad

Official stamp : ..... Date : 19/06/2012

.....  
AHMAD FAIZAL BIN AHMAD FUAD  
Lecturer  
Department of Nautical Science and Maritime Transportation  
FACULTY OF MARITIME STUDIES AND MARINE SCIENCE  
UNIVERSITI MALAYSIA TERENGGANU (UMT)  
21030 KUALA TERENGGANU

  
.....

Head of Department

Department of Nautical Science and Maritime Transportation

Name : Captain Mohd Naim Fadzil

Official stamp : ..... Date : 19/06/2012

.....  
CAPT. MOHD NAIM BIN FADZIL, CMILT  
Kapten  
Jabatan Sains Nautika dan Pengangkutan Maritim  
FAKULTI PENGAJIAN MARITIM DAN SAINS MARIN  
UNIVERSITI MALAYSIA TERENGGANU (UMT)  
21030 KUALA TERENGGANU

## DECLARATION

I hereby declare that this research report entitled **The Study to Determine the Compliance of Lifejackets Used by Passenger Ferries in Malaysia to International Convention for the Safety of Life at Sea (SOLAS) 1974** is the result of my own research except as cited in the references.

Signature :   
Name : Mohd Firdos Bin Ayob  
Matric No. : UK16722  
Date : 19/06/2012

## **ACKNOWLEDGEMENTS**

First of all, with the completion of this project, I would like to express my gratitude to Allah for His blessing that assists me throughout the project.

Secondly, I would like to extend my sincere gratitude and my appreciation to my beloved supervisor, En Ahmad Faizal Bin Ahmad Fuad for his guidance, advice and information during my project. Special thanks to my co supervisor, Captain Noor Apandi Bin Osnin for his guidance, criticism and information given.

I would also like to thank to all nautical students that always helped me during my project and cooperation given until the project is completed. Also special thanks to my friends that always gave advices and support when I am facing problems during my project.

Last but not least, I would like to thank my parents and relatives for making this a reality and success in my life. They are the pacemaker of my life.

Thanks to all.

**LIFEJACKETS: THE STUDY TO DETERMINE THE COMPLIANCE OF  
LIFEJACKETS USED BY PASSENGER FERRIES IN MALAYSIA TO  
INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA  
(SOLAS) 1974**

**ABSTRACT**

Nowadays, there were varieties of lifejackets model that widely use all over Malaysia especially amongst passenger ferries. The problems arise here when there are no verification has been done on the declaration of compliances by the manufacturer of the lifejackets. Therefore, the non-compliance lifejackets may pose risk to the safety of user especially during emergency. To overcome this problem the test regarding lifejackets must be carried out in order to determine the compliance of lifejackets used by passenger ferries in Malaysia to International Convention for the Safety of Life at Sea (SOLAS) 1974 to ensure the safety of the user. This study mainly focused on the test that will be conducted as stated in LSA Code. The lifejackets sample was chosen all over Malaysia whereas the passenger ferries operated. All the lifejacket was tested with the selective method of the code. Several lifejackets model are unable to fulfil the requirement of the LSA Code. This study may contribute and provide the most standard lifejacket to be used amongst passenger ferries in Malaysia.

# **PENENTUAN JAKET KESELAMATAN YANG DIGUNAKAN OLEH FERI PENUMPANG DI MALAYSIA KEATAS KONVENSYEN ANTARABANGSA KESELAMATAN DIRI DI LAUT (SOLAS)**

## **ABSTRAKS**

Pada masa sekarang, terdapat berbagai jenis jenama jaket keselamatan yang digunakan secara meluas di seluruh Malaysia terutamanya dikalangan feri penumpang. Masalah yang timbul ialah, tiada sebarang pengesahan dilakukan bagi mengistiharkan jaket keselamatan tersebut memenuhi piawaian sama ada oleh pengeluar itu sendiri. Oleh sebab tu, jaket keselamatan yang tidak memenuhi piawaian hanya akan mengundang risiko keatas pengguna itu sendiri terutamanya semasa kecemasan berlaku. Bagi menangani permasalahan ini, ujian keatas jaket keselamatan perlu dilakukan bertujuan menentukan jaket keselamatan yang digunakan oleh feri penumpang di Malaysia memenuhi piawaian yang telah ditetapkan konvensyen antarabangsa bagi memastikan keselamatan penggunanya. Kajian ini lebih bertumpu kepada ujian yang dilaksanakan bertepatan kaedah yang terdapat dalam kod. Sampel-sampel jaket keselamatan diambil di seluruh Malaysia dimana feri penumpang beroperasi. Kesemua jaket keselamatan diuji dengan kaedah yang telah dipilih yang terdapat dalam kod. Terdapat sesetengah jaket keselamatan tidak memenuhi cirri-ciri yang ditetapkan oleh badan antarabangsa selepas ujian dilakukan. Kajian ini berupaya menyumbang kepada jaket keselamatan yang terbaik yang dapat digunapakai dikalangan feri penumpang.