UNIVERSITI TEKNOLOGI MARA

HULL DESIGN AND STABILITY: TRADITIONAL MALAY BOAT FOR TOURISM

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ABSTRACT

This project aims to incorporate innovative new materials into the construction of traditional Malay boats to improve their stability and suitability for the tourism sector. Traditional Malay boats are renowned for their exquisite craftsmanship and enduring cultural significance. However, these boats face significant challenges in meeting modern safety and performance criteria. The main issues lie in the traditional materials and construction techniques used, which may not provide the necessary stability and structural integrity required for safe and efficient tourist transport.

The objective of this project is to incorporate advanced materials including light weight composite, high strength alloys, and modern polymers into the construction of these boats to enhancing their structural efficiency and stability while maintaining the cultural and traditional appearance of traditional Malay boats. The approach entails a detailed review of the current materials and construction methods of the traditional Malay boat construction. The study will subsequently determine and examine the potential of new materials that can improve performance characteristics.

The research will focus on critical aspects such as hull design, buoyancy, and weight distribution to ensure that the enhanced boats can withstand varying water conditions and passenger loads. Through this approach, the project aims to make traditional Malay boats more suitable for modern tourism transportation.

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