UNIVERSITI TEKNOLOGI MARA

PRODUCTION DEVOLOPMENT OF ECO-FRIENDLY SWATH

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ABSTRACT

This dissertation of eco-friendly Small Waterplane Area Twin Hull (SWATH) boat for sustainable recreational activities is focusing on developing a design and construction of its model. The SWATH design advantages are its improved stability, decreased wave impact, and energy efficiency. This technology is known with slim twin hulls which is a promising substitute for traditional monohull designs. Using Computer Aided Design software like PolyCAD and Rhinoceros 3D have been utilized in the design development. In addition, the construction process utilizing a cutting-edge fabrication methods like 3D printing. The prototype's outcomes show that 3D printing is a reliable method for producing highly accurate and effective vessel designs. For some reasons, there's few problems related to constructed model are also covered in this dissertation along with recommendations for enhancements for subsequent projects. A more sustainable future for recreational boating can be achieve by this study which highlights the potential of green technologies for a range of marine engineering applications.

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