

ABSTRACT

This study discusses the design of a jet ski body as a means of water tourism at Marina Beach Bengkalis. This research is motivated by the potential for marine tourism development at Marina Beach Bengkalis and the need for water rides that suit the characteristics of local waters. The objectives of this study are to determine the main dimensions, design, analyze the stability, and build a fiberglass jet ski body that is suitable for water tourism activities. The methods used include literature studies, collecting comparative jet ski data, determining the main dimensions using the linear regression method, designing designs using Maxsurf and AutoCAD software, stability analysis, the jet ski body manufacturing process, finishing, and trials at Marina Beach Bengkalis. Based on the design results, the main dimensions of the jet ski body are obtained with an overall length (LOA) of 2.30 m, width (B) 0.881 m, height (H) 1.051 m, and draft (T) 0.15 m. The results of the analysis using Maxsurf Stability show that the jet ski body design has good stability characteristics and meets the operational feasibility criteria. Test results at Marina Beach, Bengkalis, showed that the jet ski body floated and operated well, had a stable balance, and was capable of maneuvering with good control response. Therefore, the designed jet ski body has the potential to be used as a water recreation facility at Marina Beach, Bengkalis.

Keywords: Jet Ski Body, Design, Fiberglass, Linear Regression, Stability.