

**STABILITAS STATIS DAN DINAMIS KAPAL LATIH DAN
PENELITIAN STELLA MARIS**
(*Static and Dynamic Stability of The Research Training Vessel Stella Maris*)

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ABSTRACT

This paper explains the quality of static stability of The Research Training Vessel Stella Maris from the variation of vertical centre of gravity (G) and variation of draft values point of view. This explanation started with the influence of the main dimension ratios, and then continued by the explanation of the hydrostatic parameters and ended with the main explanation of the static stability of the ship. The analysis result of the main dimension ratios shows that few ratios give different effect to few abilities of the ship. The analysis result of the hydrostatic parameters gives informations about static body descriptions of Stella Maris and also the properness of its design. The result shows that her static stability has been fulfilled the international safety rules by International Maritime Organization (IMO). The critical value of static stability from the variation of KG is at KG 2,1 m, meanwhile there is no critical value for all draft variation. The critical value for the draft could be above the maximum draft in this analysis.

Keywords : static stability, hydrostatic parameters, main dimention ratios

ABSTRAK

Tulisan ini menjelaskan tentang kualitas stabilitas statis Kapal Latih dan Penelitian (KLP) Stella Maris berdasarkan variasi titik pusat gravitasi (KG) dan variasi *draft* kapal. Pembahasan diawali dari pengaruh rasio dimensi utama, yang kemudian dilanjutkan dengan pembahasan tentang parameter hidrostatis dan diakhiri dengan pembahasan utama mengenai stabilitas statis kapal. Hasil analisis terhadap rasio dimensi utama KLP Stella Maris menunjukkan bahwa beberapa rasio tersebut memberikan pengaruh yang berbeda terhadap beberapa kemampuan kapal. Hasil analisis parameter hidrostatis memberikan informasi tentang keragaan KLP Stella Maris secara statis serta kelayakan desainnya. Hasil

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