Small-Craft Power Prediction

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Abstract

A valid performance prediction technique for small craft is an invaluable tool not only for the naval architect, but also for the operators and builders. This presentation describes the methodology for making speed-power predictions for hard-chine craft of the types found in the offshore, military, and recreational applications. The distinct advantage of this method is that existing technical data have been organized into a logical approach and areas of limited data have been overcome by the presentation of engineering factors based on model tests and full-scale trials of specific hull forms. This speed-power prediction method accounts for hull proportions, loading, appendage configuration, propeller characteristics (including cavitation), and resistance augmentation due to rough water.

References