

# Vulnerability Analysis of an All-Electric Warship

by

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Submitted to the Department of Mechanical Engineering on May 7, 2010 in  
Partial

Fulfillment of the Requirements for the Degrees of

Naval Engineer

and

Master of Science in Engineering and Management

## **Abstract**

Traditional design processes usually rely on cost as the metric the designer uses to select among different alternatives. Sometimes when costs cannot be calculated we use weight, volume and efficiency as surrogates for cost. However minimizing costs does not necessarily give us the best design for a particular mission; this is particularly true for military ships. Proposals to include such considerations as quality of service and survivability as metrics to be used in a multi objective design process or as constraints have appeared in the literature. A tool that analyzes survivability of distributed systems at early stage design does not exist. In this thesis we develop a metric for survivability suitable for early stage design of destroyers.

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