Integrated Patrol Craft Design

LCDR(s) Andrew J. Gillespy, USN

Richard W. Kimball
Thesis Supervisor

Early stage ship design and assessment continues to be a challenge for naval architects and ocean engineers. The complex and multifaceted interactions between the different components of the ship and the broad spectrum of disciplines required in ship design make it difficult to fully realize the effects of any one change on the entire system. The initial design of smaller patrol craft is especially difficult due to the lack of design tools able to deal with ships of small size operating the semi-planing region. This paper puts forth a method for narrowing the design space for patrol craft design. Using a systems approach, a program was created and tested to aide designers in the initial design and assessment of patrol craft.