عنوان مقاله:
Surface-Effect-Ship (SES) Radar Cross-Section Reduction (RCSR) Analysis

محل انتشار:
شش‌مین همایش بین‌المللی سواحل، بنادر و سازه‌های دریایی (سال:1383)

تعداد صفحات اصل مقاله: 7 صفحه

نویسندگان:
A. Mohammadian - Malek-Ashtar University of Technology (Shiraz Marine Research Institute)
A.R. Mallahzadeh - Shiraz University
H. Heidar - Malek-Ashtar University of Technology

خلاصه مقاله:
Development of increasingly sophisticated Radar detection systems threatens to reduce the mission effectiveness of many type of modern weapons platforms (such as Surface-Effect-Ship (SES)). Strong attention is now being given to methods of increasing Survivability by reducing detectability with Radar Cross-Section Reduction (RCSR). Surface-Effect-Ship (SES) is a Fast ship that Operate in the near shore, so that with considering the probability of tracking this ship in short operational range from shore, the RCSR of this ship became a great vital task. In this paper the method of RCSR of this kind of marine vehicles with "shaping method" is studied. First A certain SES vehicle is analyzed and the maximizing points in RCS plot is determined. Then by shaping technique, the hulls and superstructure and nose of this SES is modified to reduce the magnitude of these maximizing points. The reduction in RCS by this method is seen to be at least 1,000.89 dBsm at $\varphi = 60^\circ$ and 19,940.7 dBsm at $\varphi = 72^\circ$ which are approximately 2.1% and 98% in RCS reduction respectively.

کلمات کلیدی:
Marine Vehicles, Surface-Effect-Ship (SES), shaping, Radar Cross-Section (RCS), RCSR.

لینک ثابت نتیجه مقاله در پایگاه سیویلیکا:
https://www.civilica.com/Paper-ICOPMAS06-ICOPMAS06_037.html

این صفحه به محتوی تاییدیه نمایه سازی مقاله در پایگاه استنادی سیویلیکا در باشند. در هر حالتی به منظور تایید اصلی این گواهی می‌توانید وضعیت ثبت مقاله را از طریق لینک فوق به صورت آنلاین کنترل نمایید.