

[1]谢宇鹏,严建钢,周继广,等.反辐射导弹对舰载雷达系统捕捉能力研究[J].弹箭与制导学报,2012,6:21-24.

XIE Yupeng, YAN Jiangang, ZHOU Jiguang, et al. The Research on Acquisition Probability of ARM to Ship-borne Radar System[J]., 2012, 6: 21-24.

[点击复制](#)

## 反辐射导弹对舰载雷达系统捕捉能力研究(PDF)

《弹箭与制导学报》 [ISSN:1673-9728/CN:61-1234/TJ] 期数: 2012年第6期 页码: 21-24 栏目: 导弹与制导技术 出版日期: 2012-12-25

Title: The Research on Acquisition Probability of ARM to Ship-borne Radar System

作者: [谢宇鹏<sup>1</sup>](#); [严建钢<sup>1</sup>](#); [周继广<sup>2</sup>](#); [宋艳波<sup>1</sup>](#)

1 海军航空工程学院, 山东烟台 264001;

2 海军驻南昌地区航空军代室, 南昌 330024

Author(s): [XIE Yupeng<sup>1</sup>](#); [YAN Jiangang<sup>1</sup>](#); [ZHOU Jiguang<sup>2</sup>](#); [SONG Yanbo<sup>1</sup>](#)

1 Naval Aeronautical and Astronautical University, Shandong Yantai 264001, China;

2 Navy Military Representative Department, Nanchang 330024, China

关键词: [ARM](#); [舰载雷达](#); [被动雷达导引头](#); [捕捉概率](#)

Keywords: [ARM](#); [ship-borne radar](#); [passive radar seeker](#); [acquisition probability](#)

分类号: TJ761.1

DOI: -

文献标识码: A

摘要: 舰载雷达系统包含的舰载雷达数量多、类型不一而且分布密集,在反辐射导弹(ARM)反舰作战时,对不同类型的捕捉能力决定了ARM的制导和命中精度。根据舰载雷达的工作方式、辐射信号空间分布特点和ARM导引头信号分选机理,建立了ARM对舰载雷达系统的攻击模型,该模型可用于求解ARM对不同舰艇各型舰载雷达的捕捉概率。仿真结果表明,在采用随机工作方式下,ARM难以捕捉发射功率相对小、但波束稳定的制导雷达,而对搜索周期短、发射功率大的舰载搜索雷达有较高的捕捉概率。

Abstract: The ship-borne radar system is composed of various radars which are densely distributed. The acquisition ability of ARM to various types of ship-borne radar target determines guidance and hit accuracy error of ARM. Based on working modes of ARM, the distribution characteristic of radiation signals and signal sorting principles of ARM, attacking models of ARM to ship-borne radar

### ❖ [导航/NAVIGATE](#)

[本期目录/Table of Contents](#)

[下一篇/Next Article](#)

[上一篇/Previous Article](#)

### ❖ [工具/TOOLS](#)

[引用本文的文章/References](#)

[下载 PDF/Download PDF\(537KB\)](#)

[立即打印本文/Print Now](#)

[推荐给朋友/Recommend](#)

### ❖ [统计/STATISTICS](#)

[摘要浏览/Viewed](#)

[全文下载/Downloads](#) 87

[评论/Comments](#) 38

[RSS](#) [XML](#)

system were built, which can be used to calculate acquisition probability of ARM to various types of ship-borne radar. The simulation results show that if ARM adopts random working mode, it's easier to acquire searching radar with larger transmit power and smaller search cycle, but hard to acquire the guidance radar.