



中文核心期刊 中国指挥与控制学会会刊 中国科技论文统计源期刊
中国科学引文数据库来源期刊 军事学核心期刊 中文科技期刊数据库
中国学术期刊(光盘版)收录期刊 RCCSE中国核心学术期刊 美国
《剑桥科学文摘》美国《乌利希期刊指南》英国《科学文摘》收录期刊

ISSN 1002-0640

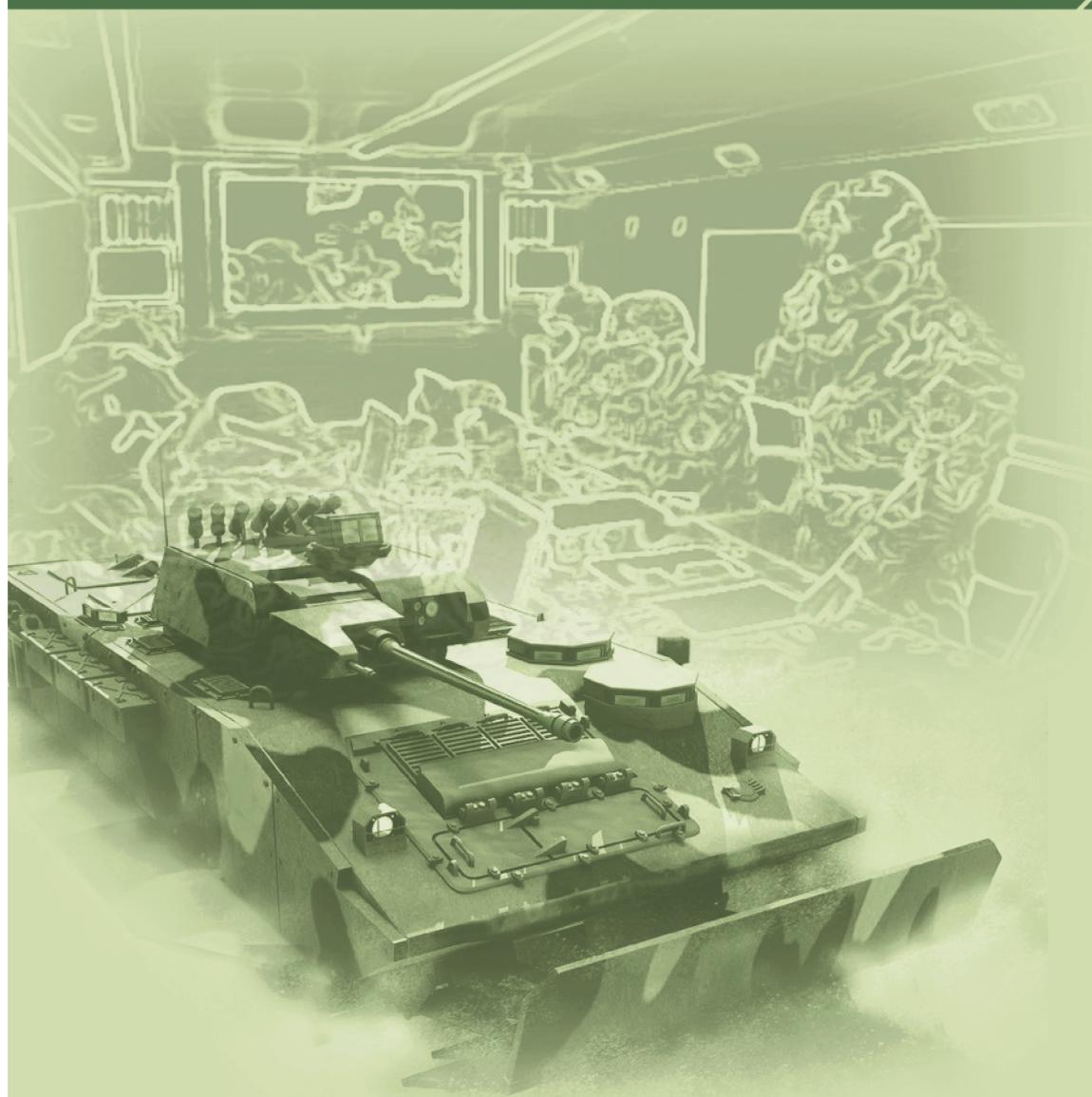
CN 14-1138/TJ

火力与指挥控制

FIRE CONTROL & COMMAND CONTROL

2020.7

第45卷 VOL45
第7期 No.7



ISSN 1002-0640



北方自动控制技术研究所主办

火力与指挥控制

HUOLI YU ZHIHUI KONGZHI

本刊名由张爱萍将军题写

第 45 卷 第 7 期 (总第 304 期)

月刊 1976 年创刊 国内外公开发行

目次

综述	基于 SRWNN-FTSM 的舰载火箭炮火控系统研究 李俊杰,侯远龙,高 强,李佳恬,何禹锐(99)
基于“作战云”的“云作战”问题探析 姜 斌,梁 敏,霍 贝(1)	基于犹豫度特征改进的新的直觉模糊相似度 韩 琦,李为民,罗 骁(105)
未来士兵系统作战概念研究 原大川,张钟铮,段志强,吕桂琴,许 涛(6)	航空装备保障效能典型参数评估方法 张 坤,贾雨轩,焦 毅(110)
理论研究	基于 GA-Elman 神经网络的水下集群作战效能评估 朱 民,卢 骞,丁元明(115)
基于伪随机线性调频的双序列跳频通信系统 唐志强,全厚德,孙慧贤,崔佩璋(14)	无人机协同下远程火箭炮作战能力评估 姜进晶,汪民乐,姜 斌(120)
基于信息融合的多星搜索动目标问题 夏 忠,张海龙,靳 鹏(20)	武器装备体系的经济可承受性成熟度评估 魏东涛,刘晓东,吴诗辉(126)
动态模糊 Petri 网下的 Ad hoc 风险评估 陈赵懿,高秀峰,王 帅,韩月明(26)	工程实践
基于动态调节时间的导弹编队逆最优控制算法 胡朝晖,黄 伟(31)	基于模糊 TOPSIS 的陆军合成营战场态势感知效能评估 马鹏杰,吴松涛(132)
基于 ERA 和 PT 的舰艇编队多作战想定下效能评价 张有山,黄 强,张博孜,许小卫,谢新连(35)	训练空域管理安全性的灰色综合评价 甘旭升,丁黎颖,刘 飞,周志华(136)
突发威胁下的无人机动态航迹规划研究 陈 侠,赵妙琰(43)	装甲车载电台外场试验评价方法 张又明,刘瑞之,季文龙,马殿哲,梅青文(143)
地空导弹装备战时维修保障效能评估研究 闫永玲,张庆波,李国立(51)	图像目标检测技术在坦克火控系统中的应用 戴文君,常天庆,张 雷,杨国振,郭理彬(147)
未知新生目标强度的多目标概率假设密度滤波算法 高 丽,张欢庆(56)	基于终端自组网的军事移动信息服务模式 郑寇全,徐莎莎,姚 旭,惠军华(153)
航母作战部署的舰载机出动架次优化研究 谢 君,郝翎钧,祝泽亚(62)	基于前方交会的无人机对目标定位方法 孙世宇,张 岩,李建增,胡永江,赵文栋(159)
专家信度优化的装备效能评估方法 李发明,党李成,左钦文,李 昂,梅 刚(66)	试验技术
C4ISR 系统结构模型及其网络化效能分析 贺正求,张叶琳,王利华,徐忠富(73)	装备维修保障仿真实验的理论问题与技术框架 杨英杰,杨万成,李慧梅,封会娟,杨纯艳(167)
基于改进支持向量回归机的天基信息系统效能评估 胡 笛,李浩悦,李 健(78)	航天试验装备维修保障资源配置效率评价研究 杨 超,侯兴明,廖兴禾,秦海峰,许 庆(172)
基于北斗卫星反射信号的弹载探测器高度测量方法 李文娟,赵瑞玉,杨浩澜(83)	基于集成 Bootstrap 方法的导弹试验鉴定精度综合评定 顾炎极,刘大鹏,任 光,李成娟,李宗华(177)
弹道导弹多弹协同作战规划技术 宦国杨,薛新华,王政伟(88)	针对武器制导数据链的典型干扰场景建模方法 邵 堃,雷迎科,罗路为(182)
步兵分队指挥对抗模拟训练系统总体设计 聂文兵,冯 进(93)	下期要目(131) 投稿须知(188)

本期责任编辑 王丽华,王海云

[期刊基本参数] CN14-1138/TJ * 1976 * m * A4 * 188 * zh * P * ¥60.00 * 1 500 * 33 * 2020-07

Fire Control & Command Control

Vol. 45 No. 7 Jul. 2020

Contents

SURVEY

- A Probe into the Problem of "Cloud Combat" Based on "Battle Cloud" JIANG Bin, LIANG Min, HUO Bei(1)
Future Soldier System Combat Concept Research YUAN Da-chuan, ZHANG Zhong-zheng, DUAN Zhi-qiang, LYU Gui-qin, XU Tao(6)

THEORY RESEARCH

- Binary-sequence Frequency Hopping Communication System Based on Pseudo-random LFM
..... TANG Zhi-qiang, QUAN Hou-de, SUN Hui-xian, CUI Pei-zhang(14)
Research on Moving Target Problem of Multi-satellite Search Based on Information Fusion XIA Zhong, ZHANG Hai-long, JIN Peng(20)
Risk Assessment of Ad Hoc Based on Dynamic Fuzzy Petri Net CHEN Zhao-yi, GAO Xiu-feng, WANG Shuai, HAN Yue-ming(26)
Inverse Optimal Control Algorithm of Missile Formation Based on Dynamic Tuning Time HU Zhao-hui, HUANG Wei(31)
Operational Effectiveness Evaluation on Multi-scenario for Naval Formation Based on ERA and PT
..... ZHANG You-shan, HUANG Qiang, ZHANG Bo-zi, XU Xiao-wei, XIE Xin-lian(35)
Research on Dynamic Track Planning of UAVs Under Sudden Threat CHEN Xia, ZHAO Miao-yan(43)
The Study on the Effectiveness Evaluation of Surface-to-air Missile Wartime Maintenance Support
..... YAN Yong-ling, ZHANG Qing-bo, LI Guo-li(51)
Multi-target Probability Hypothesis Density Filtering Algorithm of Unknown Newborn Target Intensity GAO Li, ZHANG Huan-qing(56)
Optimizing Sorties of Aircraft for a Carrier in Transit XIE Jun, HAO Ling-jun, ZHU Ze-ya(62)
Equipment Effectiveness Evaluation Method Based on Expert Reliability Optimization
..... LI Fa-ming, DANG Li-cheng, ZUO Qin-wen, LI Ang, MEI Gang(66)
Model and Effectiveness Analysis for C4ISR System Structure HE Zheng-qiu, ZHANG Ye-lin, WANG Li-hua, XU Zhong-fu(73)
Research on Effectiveness Evaluation of Space-based Information System Based on the Improved SVR HU Di, LI Hao-yue, LI Jian(78)
A Burst Height Measurement Method of Missile-borne Detector Based on Reflected Signal from Beidou Satellite
..... LI Wen-juan, ZHAO Rui-yu, YANG Hao-lan(83)
Research on Cooperative Engagement Application of Multiple Ballistic Missiles HUAN Guo-yang, XUE Xin-hua, WANG Zheng-wei(88)
Study on Overall Design of Command Confrontation Simulation Training System for Infantry Unit NIE Wen-bing, FENG Jin(93)
Research on Shipborne Artillery Fire Control System Based on SRWNN-FTSM
..... LI Jun-jie, HOU Yuan-long, GAO Qiang, LI Jia-tian, HE Yu-kun(99)
A New Intuitionistic Fuzzy Similarity Based on the Improvement of Hesitancy Degree Feature HAN Qi, LI Wei-min, LUO Xiao(105)
Typical Parameters Evaluation Method of the Aviation Equipment Support Effectiveness
..... ZHANG Kun, JIA Yu-xuan, JIAO Yi(110)
Effectiveness Evaluation for Underwater Unmanned Swarm Combat Based on GA-Elman Neural Network
..... ZHU Min, LU Qian, DING Yuan-ming(115)
Operational Capability Assessment of Long-range Rocket Gun with UAV Cooperation JIANG Jin-jing, WANG Min-le, JIANG Bin(120)
Evaluation of Affordability Maturity of Weapon Systems WEI Dong-tao, LIU Xiao-dong, WU Shi-hui(126)

ENGINEERING PRACTICE

- Effectiveness Evaluation of Battlefield Situational Awareness for the Army's Synthetic Camp Based on Fuzzy TOPSIS
..... MA Peng-jie, WU Song-tao(132)
Research on Grey Comprehensive Evaluation of Training Airspace Management Safety
..... GAN Xu-sheng, DING Li-ying, LIU Fei, ZHOU Zhi-hua(136)
Research on Field Experiment and Evaluation of Armored Vehicle-mounted Radio
..... ZHANG You-ming, LIU Rui-zhi, JI Wen-long, MA Dian-zhe, MEI Qing-wen(143)
Application of Image Target Detection Technology in Tank Fire Control System
..... DAI Wen-jun, CHANG Tian-qing, ZHANG Lei, YANG Guo-zhen, GUO Li-bin(147)
Military Mobile Information Service Mode Based on Terminal Ad-hoc Network ZHENG Kou-quan, XU Sha-sha, YAO Xu, XI Jun-hua(153)
UAV Target Location Based on Forward Intersection SUN Shi-yu, ZHANG Yan, LI Jian-zeng, HU Yong-jiang, ZHAO Wen-dong(159)

TEST TECHNIQUE

- Theoretical Problems and Technical Framework of Equipment Maintenance Support Simulation Experiment
..... YANG Ying-jie, YANG Wan-cheng, LI Hui-mei, FENG Hui-juan, YANG Chun-yan(167)
Research on the Evaluation of Resource Allocation Efficiency of Space Test Equipment Maintenance Support
..... YANG Chao, HOU Xing-ming, LIAO Xing-he, QIN Hai-feng, XU Qing(172)
Comprehensive Assessment of Accuracy of Missile in Test and Evaluation Based on Ensemble Bootstrap Method
..... GU Yan-ji, LIU Da-peng, REN Guang, LI Cheng-juan, LI Zong-hua(177)
Modeling Method of Typical Jamming Scene for Weapon Guidance Data Link SHAO Kun, LEI Ying-ke, LUO Lu-wei(182)