

## 目 次

### 综 述

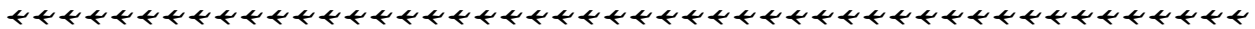
- S5000F 介绍及在民用飞机运行可靠性分析反馈中的应用…… 冯蕴雯,路成,薛小锋,马小骏(147)  
高空长航时飞翼无人机用涡扇发动机关键技术 …………… 温占永,段娅(159)

### 论 文

- 纵列式直升机双旋翼气动特性分析…………… 陈建炜,朱清华,王坤,朱振华,申遂愿(167)  
螺旋桨滑流对自转旋翼气动特性影响分析…………… 吴伟伟,马存旺,孙凯军(176)  
空中发射初始状态对运载火箭有效载荷的影响 …………… 蔡恒欲,林立辉,刘士阳,叶正寅(184)  
基于过渡工作过程的航空发动机气路分析方法…………… 杨锐,张鑫,屠秋野,陈飞阳,郑康(191)  
训练空域动态规划问题数值模拟仿真算法研究 …………… 张建祥,甘旭升,孙静娟,杨国洲(199)  
无人机地理围栏越界探测算法改进与分析…………… 谢东岑,梁晓龙,张佳强,付其喜,张凯(207)

### 工程应用

- 天翼 1 无人机电动化改造可行性分析 …………… 邹宁,姚小轶,梁爽,杜圣超(214)  
太阳能无人机高效螺旋桨气动设计…………… 李星辉,李权,张健(220)  
导弹气动特性在亚跨音速下的风洞试验研究 …………… 彭博,岑梦希(226)  
我国适航规定轻型水陆两栖飞机部分的修订建议…………… 董一巍,吕玥莹,殷春平(231)  
旋转天平试验预弯接头干扰研究 …………… 张永升,刘丹,黄浩,陆伟,张秋实,王乾威(239)  
双轨火箭橇全时程动力学仿真分析研究 …………… 顾凯旋,龚明生,王磊,熊闯(245)  
多接头大载荷机翼载荷处理方法…………… 王鑫涛,夏龙,刘兴科(251)  
亚声速条件下总压探针临壁效应的数值研究…………… 郑光华,王肖,郭林,惠呈程,吕文召(256)  
涡桨飞机发动机进气道排除异物特性数值研究 …………… 王利敏,张彦军,米百刚,杨梅花(264)  
多窗口传输协议及其在航空电子系统大数据传输中的应用…………… 谭博(272)  
不同酚醛树脂对芳纶纸蜂窝性能的影响…………… 谌广昌,刘杰,纪双英,李瑞敏,陈普会(279)  
民用飞机高升力系统设计中安全性评估方案研究 …………… 张光炯,孙军帅(286)



## CONTENTS

### Review

- Introduction of S5000F Specification and Its Application on Operational Reliability Analysis and Feedback of Civil Aircraft ..... FENG Yunwen, LU Cheng, XUE Xiaofeng, MA Xiaojun (147)
- Key Technologies of Turbofan Engine for High Altitude Long Endurance Fly-wing UAV ..... WEN Zhanyong, DUAN Ya (159)

### Paper

- Aerodynamic Characteristics Analysis of Twin-rotor in Tandem Helicopter ..... CHEN Jianwei, ZHU Qinghua, WANG Kun, ZHU Zhenhua, SHEN Suiyuan (167)
- Analysis on the Propeller Slipstream Interference with Autorotating Rotor Aerodynamic Characteristics ..... WU Weiwei, MA Cunwang, SUN Kaijun (176)
- Effect of Initial State of Air-launch on Payload of Launch Vehicle ..... CAI Hengyu, LIN Lihui, LIU Shiyang, YE Zhengyin (184)
- Aero-engine Gas Path Analysis Method during Transient Process ..... YANG Kun, ZHANG Xin, TU Qiuye, CHEN Feiyang, ZHENG Kang (191)
- Numerical Simulation Algorithm Study on Dynamic Programming of Training Airspace ..... ZHANG Jianxiang, GAN Xusheng, SUN Jingjuan, YANG Guozhou (199)
- Improvement and Analysis for Geo-fence Violation Detection Algorithm of Unmanned Aerial Vehicle ..... XIE Dongcen, LIANG Xiaolong, ZHANG Jiaqiang, FU Qixi, ZHANG Kai (207)

### Engineering Application

- Feasibility Analysis on Electric Transformation of SW1 Unmanned Aerial Vehicle ..... ZOU Ning, YAO Xiaoyi, LIANG Shuang, DU Shengchao (214)
- Aerodynamic Design of a High Efficient Solar Powered UAV Propeller ..... LI Xinghui, LI Quan, ZHANG Jian (220)
- Research on Wind Tunnel Test of Aerodynamic Characteristics of Missile under Subtransonic Velocity ..... PENG Bo, CEN Mengxi (226)
- Suggestions on the Revision of the Light Amphibious Aircraft Section of Airworthiness Regulations in China ..... DONG Yiwei, LÜ Yuexuan, YIN Chunping (231)
- Investigation on the Interference of Pre-bending Support Joint in Rotary Balance Test ..... ZHANG Yongsheng, LIU Dan, HUANG Hao, LU Wei, ZHANG Qiushi, WANG Qianwei (239)
- Study on Full Time Dynamics Simulation of Two-track Rocket Sled ..... GU Kaixuan, GONG Mingsheng, WANG Lei, XIONG Chuang (245)
- Multi-joint and Large Load Wing Load Processing Method ..... WANG Xintao, XIA Long, LIU Xingke (251)
- Numerical Investigation of Near Wall Effect of Total Pressure Probe Based on CFD under Subsonic Velocity ..... ZHENG Guanghua, WANG Xiao, GUO Lin, HUI Chengcheng, LÜ Wenzhao (256)
- Numerical Simulation on Excluding Foreign Objects from Engine Inlet of Turboprop Aircraft ..... WANG Limin, ZHANG Yanjun, MI Baigang, YANG Meihua (264)
- Multiple Window Protocol and Its Application in Large Data Transfer of Avionics System ..... TAN Bo (272)
- Effect of Different Phenolic Resins on Mechanical Properties of Meta-aramid Paper Honeycomb ..... CHEN Guangchang, LIU Jie, JI Shuangying, LI Ruimin, CHEN Puhui (279)
- Research on the Safety Assessment Scheme Applied to Civil Aircraft High Lift System ..... ZHANG Guangjiong, SUN Junshuai (286)