



航空学报 » 2004, Vol. 25 » Issue (2) :121-124 DOI:

论文

最新目录 | 下期目录 | 过刊浏览 | 高级检索

<< Previous Articles | Next Articles >>

### 涡扇发动机炮式启动条件的理论与试验研究

陈玉春<sup>1</sup>, 陈宝延<sup>2</sup>, 陆尧<sup>1</sup>, 张金良<sup>2</sup>

1. 西北工业大学航空动力与热力工程系, 陕西西安 710072; 2. 航天机电集团公司31所, 北京 100074

### Theoretic and Experimental Research on Cartridge Starting Condition of Turbofan Engine

CHEN Yu-chun<sup>1</sup>, CHEN Bao-yan<sup>2</sup>, LU Yao<sup>1</sup>, ZHANG Jin-liang<sup>2</sup>

1. Department of Aeroengine Engineering, Northwestern Polytechnical University, Xi'an 710072, China; 2. The 31st Research Institute, Beijing 100074, China

摘要

参考文献

相关文章

Download: PDF (246KB) HTML OKB Export: BibTeX or EndNote (RIS) Supporting Info

**摘要** 在涡扇发动机炮式启动数学模型中考虑了埋入式进气道特性以及飞行条件对启动条件的影响因素,对与埋入式进气道联合工作的某型涡扇发动机启动条件进行了理论和试验研究。研究了不同飞行马赫数和不同攻角对发动机启动可靠性的影响。通过理论计算结果与试验数据的对比表明,存在着对涡扇发动机炮式启动可靠性起决定性的条件——临界马赫数和临界攻角。提出的启动条件成功地解决了某涡扇发动机的可靠启动问题。

**关键词:** 埋入式进气道 涡扇发动机 炮式启动 启动条件

**Abstract:** A model of cartridge starting of turbofan engines is developed by accounting for the effect of characteristics of the embedded inlet and flying condition. The theoretic and experimental investigation has been done for seeking the reliability condition of cartridge starting of turbofan engines, which is matched with the embedded inlet. The simulation results and testing data indicate that there are a critical Mach number and a critical attack angle, either of which has a decisive influence on the reliability of cartridge starting of turbofan engines.

**Keywords:** embedded inlet turbofan engine cartridge starting cartridge starting condition

Received 2003-02-27; published 2004-04-25

#### 引用本文:

陈玉春;陈宝延;陆尧;张金良. 涡扇发动机炮式启动条件的理论与试验研究[J]. 航空学报, 2004, 25(2): 121-124.

CHEN Yu-chun; CHEN Bao-yan; LU Yao; ZHANG Jin-liang. Theoretic and Experimental Research on Cartridge Starting Condition of Turbofan Engine[J]. Acta Aeronautica et Astronautica Sinica, 2004, 25(2): 121-124.

#### Service

- ▶ 把本文推荐给朋友
- ▶ 加入我的书架
- ▶ 加入引用管理器
- ▶ Email Alert
- ▶ RSS

#### 作者相关文章

- ▶ 陈玉春
- ▶ 陈宝延
- ▶ 陆尧
- ▶ 张金良