## High-level Flight Simulator's Key Technique

## **Organizers:**

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High-level flight simulator with its high-fidelity simulated effect plays a key role in flight training field, simulator's Authority and Operator puts forward high requirements on flight simulator. Meeting simulator's level qualification standard is only the basic requirements for high-level flight simulator, besides, simulator's expandable training capability, man-machine interaction, reliability, maintainability etc. are the important indexes to measure the high-level flight simulator's quality. High-level flight simulator key technique has been hot topic studied in flight simulation field internationally . This special topic is to jointly demonstrate and share high-level flight simulator key technique theoretic study and engineering application progress and achievements with relevant experts, scholars, engineers in the world.

The subject of this special topic includes, but not limited to followings:

- 1) Simulator qualification and development standard study
- 2) Flight simulation training system and management
- 3) Simulator data package development
- 4) Engineering simulator development and its application
- 5) Flight simulation modeling
- 6) Aircraft system and airborne avionics simulation
- 7) Expandable envelop modeling and training
- 8) Visual system design and development
- 9) Simulator simulation platform and generic software development
- 10) High-reliability interface system design
- 11) Simulator structure design
- 12) Motion cue and sound simulation

## 高等级飞行模拟机关键技术

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高等级飞行模拟机以其高逼真度的仿真效果在飞行训练领域发挥着关键作用,模拟机的监管方(Authority)和运营人(Operators)对高等级飞行模拟机提出了很高的要求。

满足模拟机等级鉴定标准仅是高等级模拟机的基本要求,除此之外,模拟机的扩展训练能力、人机交互、可靠性、可维护性等也是衡量高等级飞行模拟机品质的重要指标。高等级飞行模拟机关键技术一直是国际上飞行仿真领域的研究热点。本专题旨在与世界范围内相关专家、学者、工程师一道,共同展示和分享高等级飞行模拟机关键技术的理论研究以及工程应用的进展和成果。

本专题论文主题包含但不限于:

- 1) 模拟机鉴定及开发标准研究;
- 2) 飞行模拟训练体系及管理;
- 3) 模拟机数据包开发;
- 4) 工程模拟机研制及其应用;
- 5) 飞行仿真建模;
- 6) 飞机系统及机载航电仿真;
- 7) 扩展包线建模及训练;
- 8) 视景系统设计及开发;
- 9) 模拟机仿真平台及通用软件开发;
- 10) 高可靠接口系统设计:
- 11) 模拟机结构设计;
- 12) 动感和声音仿真等。