



基于风险的持续适航管理 Risk-based Continued Airworthiness Management

民航局适航司
CAAC-AAD
2019.11



内容

Content

适航管理与航空安全

Airworthiness Management and Aviation Safety

基于风险的持续适航管理

Risk-based Continued Airworthiness Management

全面修订CCAR 21

CCAR 21 Revising

AMOS平台建设

AMOS Construction



内容

Content

适航管理与航空安全

Airworthiness Management and Aviation Safety

基于风险的持续适航管理

Risk-based Continued Airworthiness Management

全面修订CCAR 21

CCAR 21 Revising

AMOS平台建设

AMOS Construction



适航管理与航空安全

Airworthiness Management and Aviation Safety

航空器安全是飞行安全的基础。

Aircraft safety is the basis of flight safety.

航空器安全管理，尤其是航空器持续运行的安全管理，在全世界具有通用性。

Aircraft safety management, especially safety management on aircraft continued operation, has the same philosophy.

国家制度不同，各民航当局的管理体制和管理方式也有所差异。

Different national system has different management system and management method in civil aviation.



适航管理与航空安全

Airworthiness Management and Aviation Safety

航空器持续适航管理 Continued Airworthiness Management:

- 其重要性是全球民航业的共识
Global consensus on its importance
- 基于设计、生产和运行实践的动态管理过程
Dynamic management process based on the practices of design, production, and operation
- 实践经验来自于全球民航业
Practices comes from all the authorities and industries in the world
- 不同的管理体制，造就不同的最佳实践
Different national systems lead to different best practices
- 经验和教训产生再认识
Experience and lessons produce new understanding.



内容

Content

适航管理与航空安全

Airworthiness Management and Aviation Safety

基于风险的持续适航管理

Risk-based Continued Airworthiness Management

全面修订CCAR 21

CCAR 21 Revising

AMOS平台建设

AMOS Construction



基于风险的持续适航管理

Risk-based Continued Airworthiness Management

ICAO附件19：作为国家安全方案的组成部分，各国必须要求在其管辖下的附件8规定的负责航空器型号设计或制造的机构实施安全管理体系。

ICAO Annex 19: As part of its SSP, each State shall require that the organizations responsible for the type design or manufacture of aircraft, in accordance with Annex 8 under its authority implement an SMS.

Doc 9859：安全风险是安全管理一个主要组件，包括危险源识别、安全风险评估、安全风险缓解和风险接受。

Doc 9859: Safety Risk Management (SRM) is a key component of safety management and includes hazard identification, safety risk assessment, safety risk mitigation and risk acceptance.



基于风险的持续适航管理

Risk-based Continued Airworthiness Management

体系监管+产品评估 System Oversight + Product Assessment

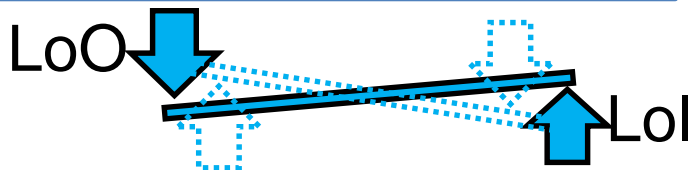
体系SYSTEM

- 体系监管程度
Level of Oversight (LoO)
- 体系监管
System Oversight
- 体系风险
System Risk

产品PRODUCT

- 技术介入程度
Level of Involvement (LoI)
- 技术评估
Technical Assessment
- 产品安全风险
Product Risk

好的体系降低产品的技术介入程度。
Good system reduces LoI.



内容

Content

适航管理与航空安全

Airworthiness Management and Aviation Safety

基于风险的持续适航管理

Risk-based Continued Airworthiness Management

全面修订CCAR 21

CCAR 21 Revising

AMOS平台建设

AMOS Construction



全面修订CCAR 21

CCAR 21 Revising

WHY

- 总结经验促进行业发展

Absorb experiences and lessons to promote industrial development

PRINCIPLE

- 基于风险，基于能力，精准管理

Risk-based, capability-based, precise management

KEYPOINTS

- 增加体系要求
Add requirements for systems
- 增加适航审核机构
Add Airworthiness Verification Unit
- 增加报告要素，如干扰飞机正常操纵的软件系统的故障、失效或缺陷
Add reporting elements, such as any failure, Malfunction and Defection on Software that interferes the aircraft's normal operation

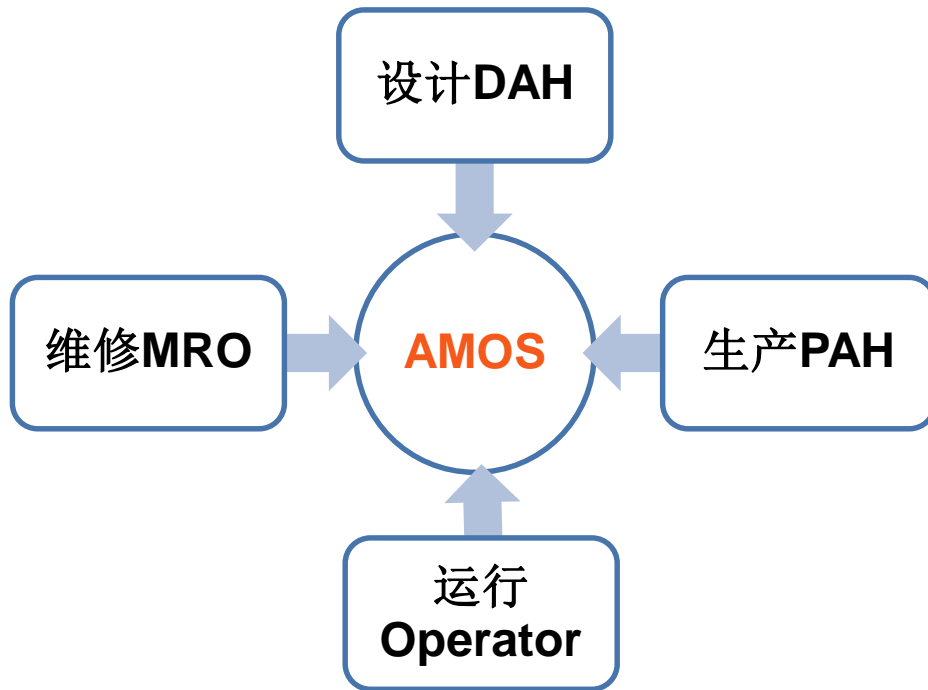


AMOS平台建设

Platform Construction

AMOS

- **A**irworthiness
- **M**anagement
- **O**peration
- **S**ystem



THANKS

