



中国民用航空局

Civil Aviation Administration of China

2018 COSCAP Meeting - Hang Zhou

AEG - Bridge from Aircraft Development to Operation



May 17, 2018

XUE Shijun (sj_xue@caac.gov.cn)
Flight Standards Department, CAAC

Topics:

- AEG Overview
- CAAC AEG Management System
- Recommendations to All CAs

→ AEG Overview

→ Function

↳ Set-up Bridge between Type Certification and Operation

- ✓ Work together with manufacturer during TC process
- ✓ Give operational input to A/C type design
- ✓ Provide A/C type design output to operation



→ AEG Overview

→ Responsibilities

↳ Major Responsibilities

- ✓ Establishing Pilot Qualification Specification
- ✓ Establishing Maintenance Personnel Qualification Specification
- ✓ Approve Master Minimum Equipment Lists (MMEL)
- ✓ Approve Scheduled Maintenance Requirements (SMR)
- ✓ Accept Operational and Continued Airworthiness Instruction (Technical publications)

↳ In addition, AEG also:

- ✓ Support TC process
- ✓ Support operational approval process
- ✓ Support incident or accident investigation

→ AEG Overview

→ Similar Activities internationally

↘ United States

✓ FAA: AEG

↘ European Union

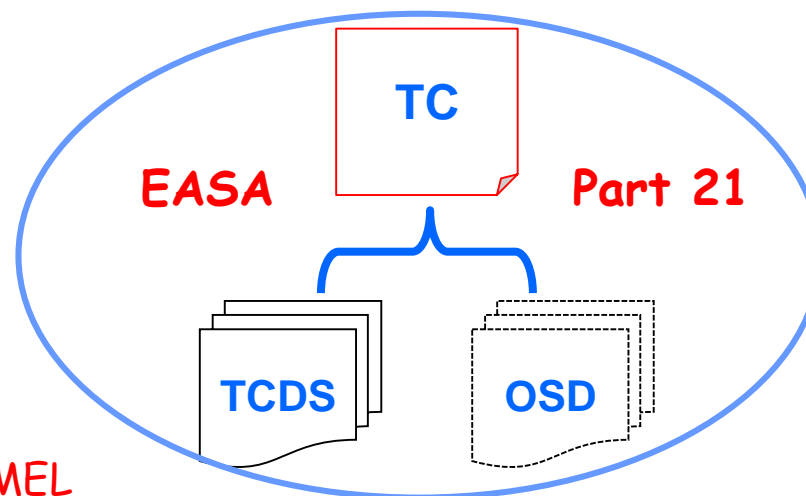
✓ EASA: OSD/MRB

↘ Canada

✓ TCCA: OEB/MRB/MMEL

↘ Brazil

✓ ANAC: AEG(OEB)/MRB/MMEL



Transport
Canada

→ AEG Overview

→ One of Conditions for Aircraft Enter Into Service

↘ Airworthiness Certification

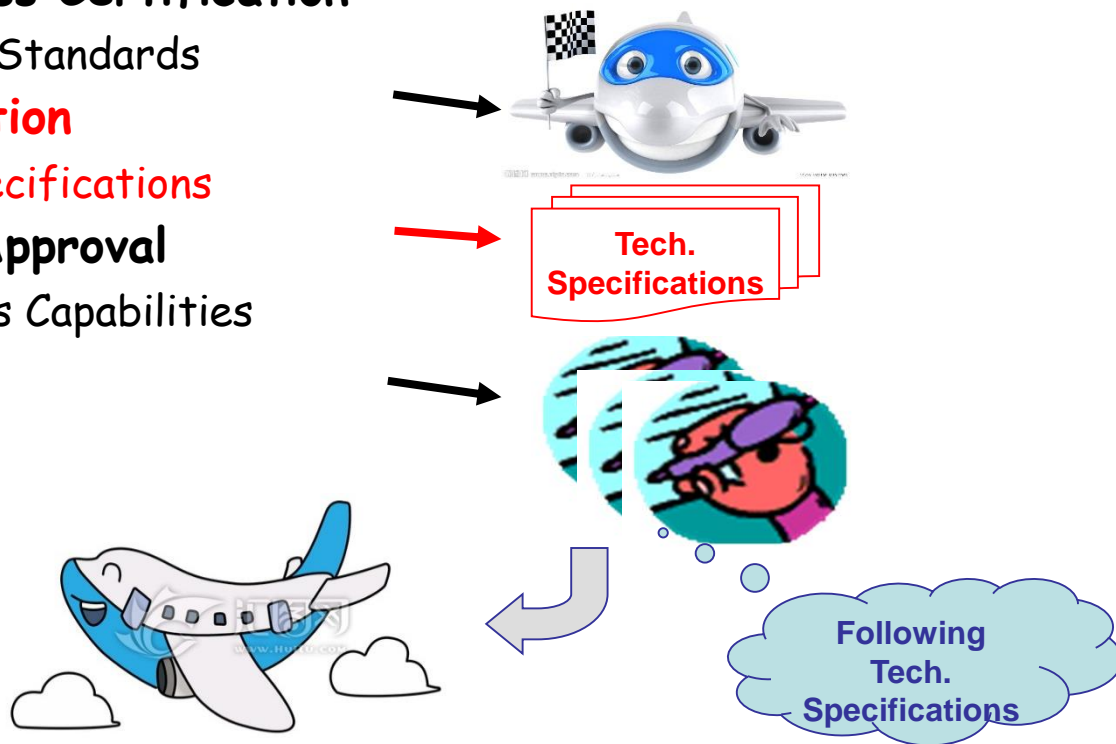
✓ Products Standards

↘ **AEG Evaluation**

✓ **Tech. Specifications**

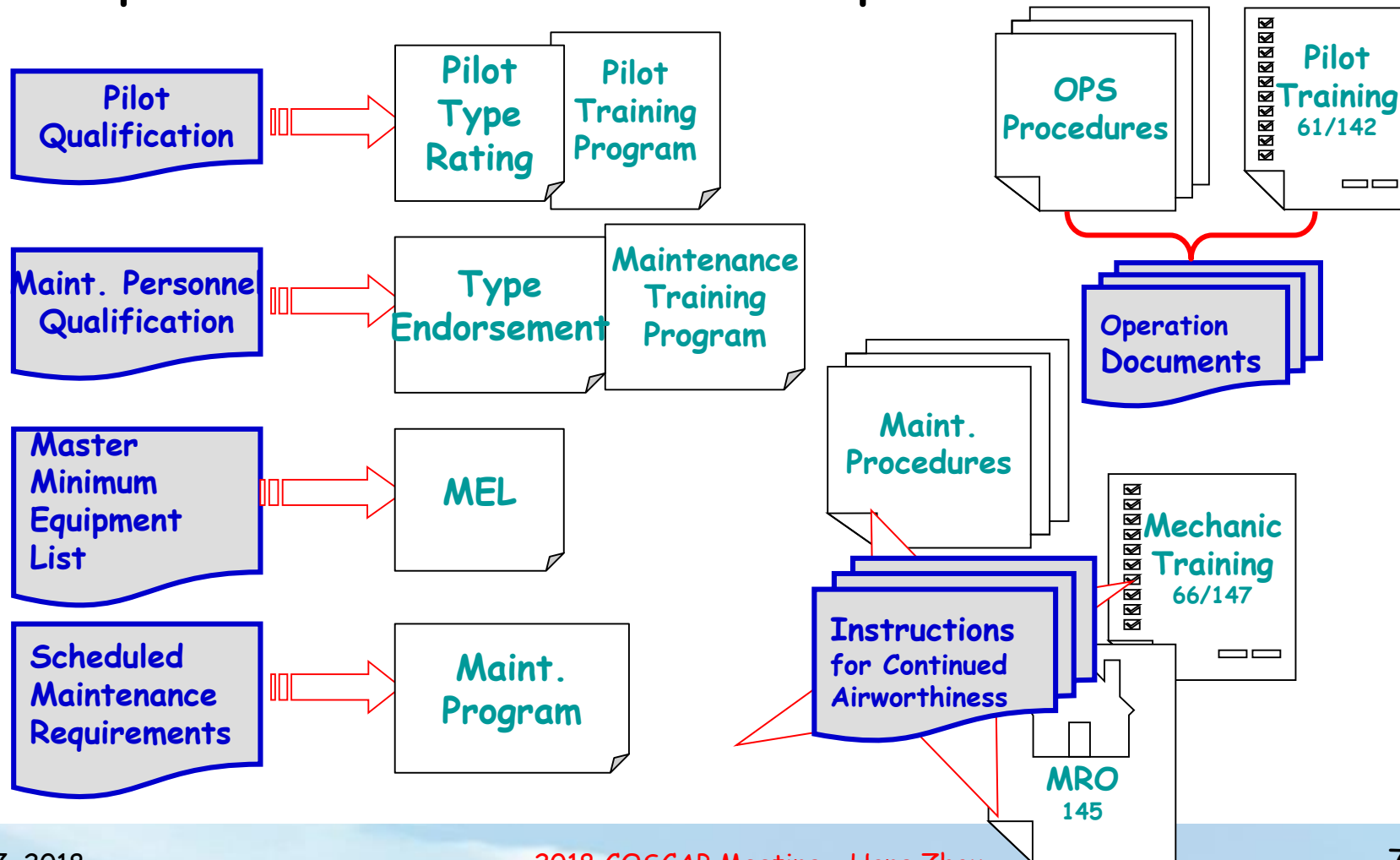
↘ Operation Approval

✓ Operators Capabilities



→ AEG Overview

→ Adopt AEG Evaluation Conclusion in Operation Certification



→ AEG Overview

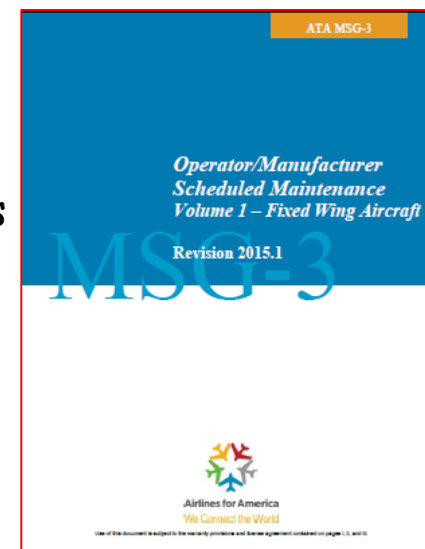
→ International Policy Board

↘ IMRBPB

- ✓ Organized since 1994, with 10 authority members
- ✓ With industry support (MPIG)
- ✓ Harmonization for
 - ATA MSG-3
 - International MRB Process Standard

↘ IOEPB

- ✓ Organized since 2011, with 5 authority members
- × Without industry support
- × Harmonization for Operation Evaluation
 - Now only Pilot Qualification Process



→ CAAC AEG Management System

→ Regulation Basis



简体中文 | 繁体中文 | ENGLISH | 移动客户端 | 怀旧版

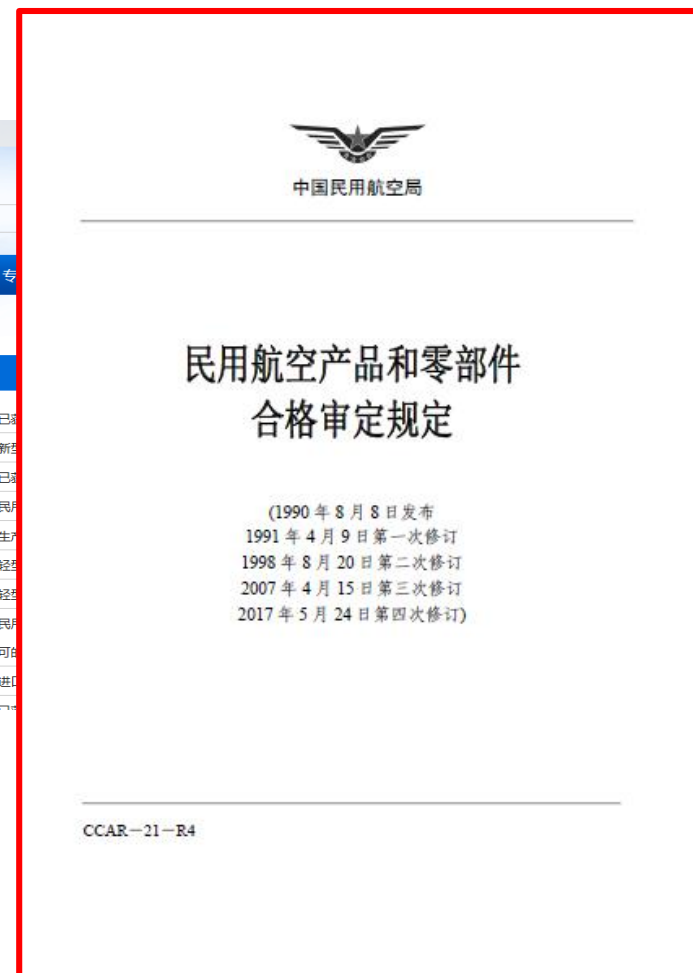
中国民用航空局
Civil Aviation Administration of China

首页 | 新闻中心 | 信息公开 | 办事大厅 | 安全监管 | 互动交流

首页->信息公开->民航规章->正文

主题分类：民航规章
发文单位：政策法规司
名称：民用航空产品和零部件合格审定规定
有效性：有效
CCAR部号：CCAR-21-R4
发布日期：2017-05-24

CCAR-21 R4
Chapter 15
§21.501 Applicability
§21.503 Evaluation project
§21.505 Application
§21.507 Evaluation conclusion
§21.509 Continued evaluation



中国民用航空局

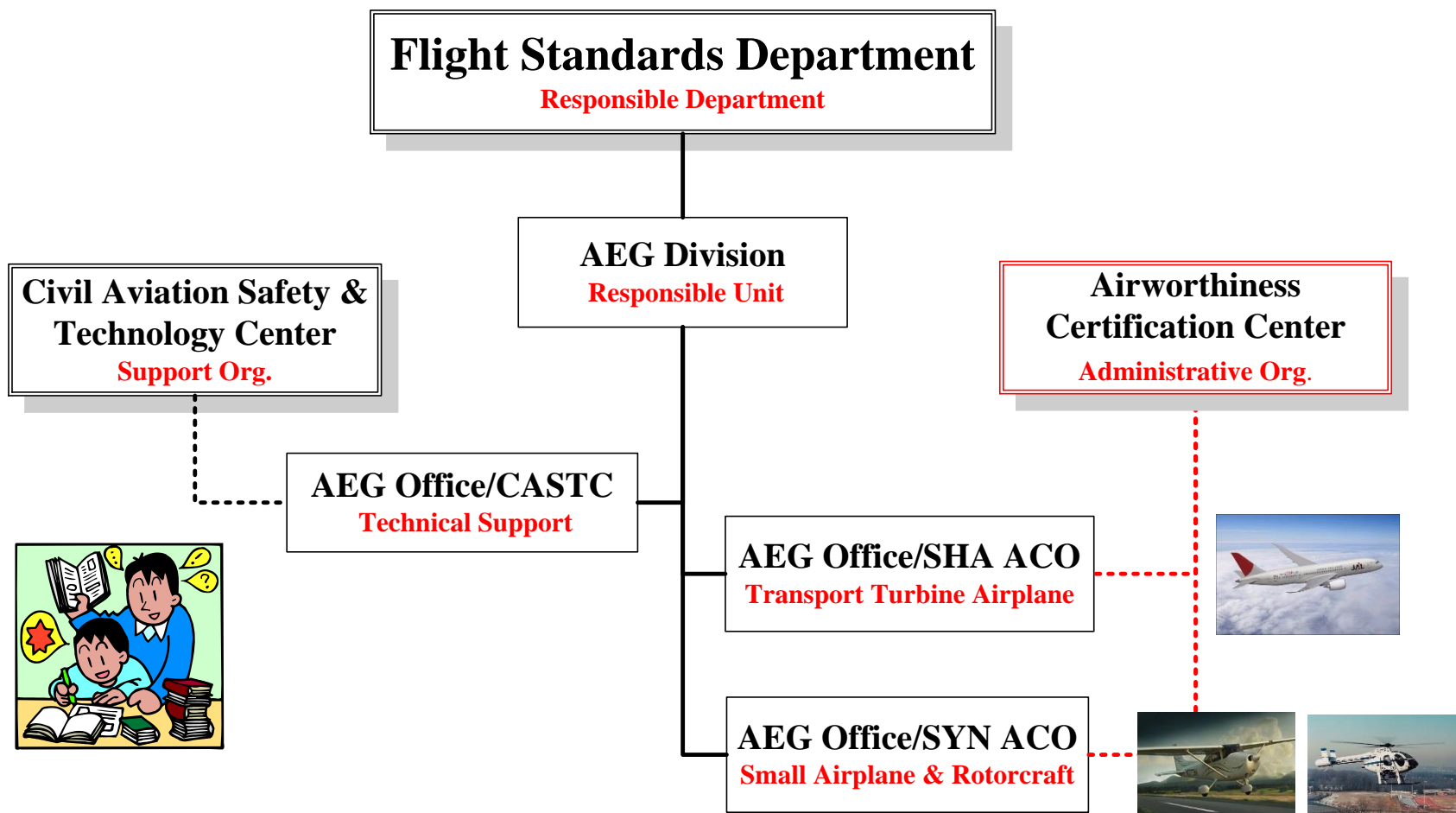
民用航空产品和零部件
合格审定规定

(1990年8月8日发布
1991年4月9日第一次修订
1998年8月20日第二次修订
2007年4月15日第三次修订
2017年5月24日第四次修订)

CCAR-21-R4

→ CAAC AEG Management System

→ Organizations



→ CAAC AEG Management System

→ General Process

↘ Initiated by TC Project

- Confirm AEG Evaluation Subjects

↘ Parallel with TC Process

- Participate first TCB Meeting: then organize project team and technical board
- Evaluation conducted majorly by technical board meeting
- Relay on TC progress: Engineering Analysis, Flight Test

↘ Support and coordination with TC process

- Participate on cockpit certification, flight manual approval
- Coordinate with Certification Maintenance Requirements

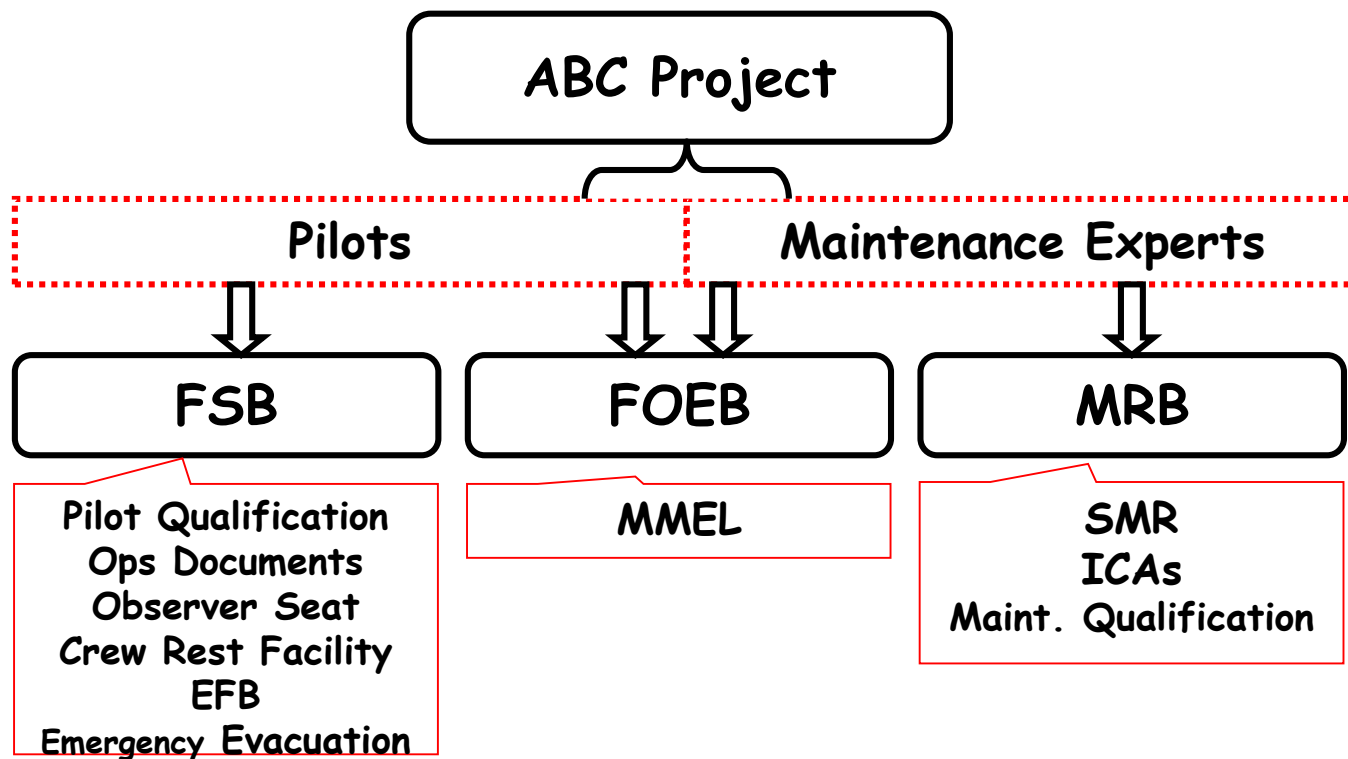
↘ Milestones

- Before TC: Complete major evaluation tasks, ICAs approval or acceptance as one of the input for issue TC
- Before EIS: Publish AEG Report

→ CAAC AEG Management System

◆ Project Team and Technical Board

→ Assigned by Flight Standards Department



→ CAAC AEG Management System

→ AEG Evaluation Report

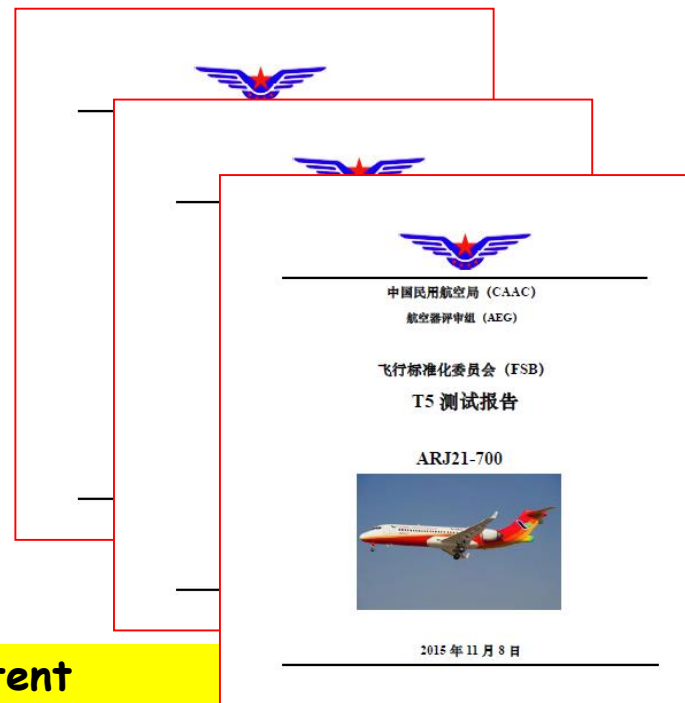


Table of Content

- Section 1: Pilot Qualification Specification
- Section 2: Maintenance Personnel Qualification Specification
- Section 3: Master Minimum Equipment List
- Section 4: Scheduled Maintenance Requirements
- Section 5: Operation Documents and ICAs
- Section 6: Operational Compliance Checklist
- Section 7: Other Items
- Appendix: Point of Contact

→ Recommendations to All CAs

→ When as a certification authority for exporting aircraft

↳ Establishing AEG evaluation system

- Organization
- Experts
- Standards: Adopt international standards
- Process specifications: Adopt international common practice

↳ Publishing AEG evaluation conclusion

- By official public website, and/or
- OEM distribution system

→ Recommendations to All CAs

→ When as a state of operation for imported aircraft

↘ Ask for AEG evaluation conclusions made by Certification Authority

- FAA: FSB Report, MMEL, MRBR, ICAs
- EASA: OSD (FCD, MCD, MMEL, CCD), MRBR
- CAAC: AEG Report
- TCCA: OE Report, MMEL, MRBR
- ANAC: OEB Report, MMEL, MRBR

↘ Reference AEG evaluation conclusion in operational approvals

- Pilot/Maintenance Personnel License endorsement
- Pilot/Maintenance training program
- Operation Approval (including MEL, Maintenance Schedule approval)
- MRO approval



谢谢!

Thank you for your attention!

<http://aeg.caac.gov.cn/>