

Civil Aviation Administration of China (CAAC)

Aircraft Evaluation Group (AEG)

Aircraft Evaluation Report

For

A380-800

Rev.0 Date: 10/July/2012

Manufacturer: AIRBUS

Revision Record & Approval

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Prepared and Reviewed by:

Xue Shi Jun

Director, Aircraft Evaluation Division

Flight Standards Department of Civil Aviation administration of China

Approved by:

Zhou Kai Xuan

Deputy Director General

Flight Standards Department of Civil Aviation administration of China

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Foreword

A380-800 series aircraft was first type certificated by European Aviation Safety Agency (EASA) in December 2006, which is Model A380-841/-842 with Rolls-Royce engines installation, and then A380-861 with GP engines installation was type certificated in December 2007. A380-800 type certificate was validated by CAAC airworthiness department in December 2009.

A380-800 was first evaluated by CAAC AEG in December 2009, and AEG evaluation determinations (CAAC Letter AEG-A380-2010001 to 2010006) were issued in March, 2010.

This report was first drafted in February 2012 as CAAC AEG transform all the previous CAAC Letters into one comprehensive document, but does not result in any change to the AEG evaluation determinations made in 2009.

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Section 1: Pilot Type Rating and Qualification Specification

1.1 Statement and Explanation

This section is the formal notification that CAAC AEG has conducted Flight Standardization Board (FSB) evaluation for Airbus A380-800 type airplane based on the EASA/JAA Joint Operational Evaluation Board (OEB) Report (FCL/OPS Subgroup) published by EASA, which specifies the pilot type rating, training, checking, and currency specifications for the flight crews.

Hereby, the provisions in this section can be used, as the basis, by Chinese operators to develop their pilot qualification and training program for above airplane.

Alternate means of compliance to the requirements of CCAR 61, 91, 121, other than as specified in the provisions of this section, must be approved by Flight Standards Department of CAAC. If alternate compliance is sought, operators will be required to establish that proposed alternate means provide an equivalent level of safety to the provisions of this section, and analysis, demonstrations, proof of concept testing, differences documentation, or other evidence may be required.

Find EASA OEB Report here:

http://easa.europa.eu/certification/experts/OEB-reports.php

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1.2 Pilot Type Rating and Licence Endorsement

Upon the FSB evaluation, the Pilot Type Rating for A380-800 is listed as following:

Manufacturer	Aircraft Type	Pilot Type Rating
AIRBUS	A380-800	A380

License endorsement:

"A380" for getting a type rating from A380-800 and checking records should also be shown.

1.3 ODR and MDR

Operator Difference Requirement (ODR) and Master Difference Requirement (MDR) tables have been given by EASA OEB Report of the A380-800 FCL/OPS Subgroup.

- Note 1: The MDR table covers A320/330/340 since Cross Crew Qualification (CCQ) and Mixed Fleet Flying (MFF) programs were developed by Airbus and evaluated by EASA OEB.
- Note 2: For ODR tables of CCQ, the base aircraft is as bellow, and A380-800 engine difference also covered in each ODR:
 - A330 to A380-800: A330-200 Enhance
 - A340 to A380-800: A340-300 Enhance
 - -A320 Family to A380-800: A320
- Note 3: The ODR table related to Low Visibility operations is a generic document covers all Airbus family.
- Note 4: The ODR tables are available upon request to Airbus or CAAC AEG.

1.4 Specification for Training

The following Type Rating Training Course proposed by Airbus for A380-800 is included in Airbus Document A380 Flight Crew Training Program, and has to be considered as a minimum:

- -A380 Standard Transition Course
- -A380 CCQ Courses
- Note 1: Since level "B" differences training between the A380-840 (RR) and the A340-860 (EA), Airbus A380 RR-EA familiarization course is adequate to cover differences when transitioning from the A380-840 to the A380-860.

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- Note 2: Minimum 3 months and 150 hours experiences on the base aircraft are required for Pilots who are designated to commence the CCQ course.
- Note 3: Low visibility training module is not a requirement for type rating training, but it is included as an optional module.
- Note 4: Training courses are available upon request to Airbus.

Training areas of special emphasis for the A380 standard course, which also apply throughout the Airbus fly by wire family are as follows:

a) Fly by wire

- Knowledge of flight characteristics and the degree of flight envelope protection provided by the various flight control laws for pitch, roll and yaw control.
- Procedural and handling consequences following multiple failures that result in alternate and/or direct law.
- Knowledge of the use of side stick controller with a special emphasis on the relationship between the two controllers and the transfer of control.

b) Use of Flight Management System

- Knowledge of the various modes of automation
- Knowledge and skills related to MFD / FCU use
- Recognition of mode awareness and transition modes through the FMA
- CRM issue linked to automation (task sharing and crosschecks)

c) Use of ECAM

- Knowledge of appropriate use of ECAM in conjunction with system failures
- Crew discipline for ECAM actions: respect of the depicted procedure, crosscheck of irreversible actions, aircraft status analysis

d) Auto Thrust system

- Knowledge of the thrust control system in conjunction with the "non moving throttles"
- Recognition of all messages associated to Auto Thrust failure, engagement and disconnection

Specifications for particular emphasis elements specific to the A380 and that should also be highlighted in the standard course and more specifically during the CCQ program are as following:

a) CRM

 Strict respect of SOP's when using FMS and OIS to avoid both pilots head down.

b) FMS / MFD

- New interface using the KCCU.
- Knowledge and use of new specific FMS features such as FLS function.
- Knowledge of back up systems associated with the MFD such as software control of the FCU.

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c) ECAM

- Use of normal electronic checklists.
- Management of not sensed failures using abnormal / emergency procedures and the distinction between sensed and non-sensed procedures

d) Use of OIS

- Take-off and landing performance computation in normal operations.
- Performance computation associated with ECAM aircraft status in abnormal/emergency conditions caused by aircraft systems failure(s).
- Use of electronic library with a particular emphasis on how to use the MEL.
- Cross check of vital data and gross error checks.

Line Flying Under Supervision (LIFUS) should be conducted following A380 type rating course, and recommendation is as follows:

- In the case of an Standard Transition Course: a minimum of 10 sectors including a line check is recommended, meaning 8 sectors plus 2 sectors line check (Where there is a change of operating conditions or route structure this should also be taken into account and may need the addition of sectors to cover these elements).
- Pilots completing the A380 CCQ course may undertake a reduced number of sectors based upon ODR tables, and recommend as following:

Base training (aircraft) or Zero Flight Time Training (Simulator)			
	Sectors – CCQ: A330 Sectors – CCQ: A320		A380 Line checks
	or A340 to A380	to A380	
LIFUS Standard	4 Sectors	6 Sectors	2 Sectors
	(3 PF + 1 PNF)	(5 PF + 1 PNF)	(1 PF + 1 PNF)
See Note 1 below	2 Sectors		
	(1 PF + 1 PNF)		

- Note 1: The number of sectors may need to be increased if mission and operational procedures are assessed to be different (e.g. oceanic, polar vs. short haul domestic routes/operations) and if those elements are not covered during the sectors flown under the "LIFUS Standard" requirement.
- Note 2: A sector is defined to be a flight comprising take-off, departure, cruise of not less than 15 minutes, arrival, approach and landing phases.
- Note 3: Under Zero Flight Time Training (ZFTT), LIFUS must be commenced within 21 days after the skill test.

1.5 Specification for Checking

As required by CCAR Part 61 and 121, and In addition to the mandatory items from the skill test the following features must be checked:

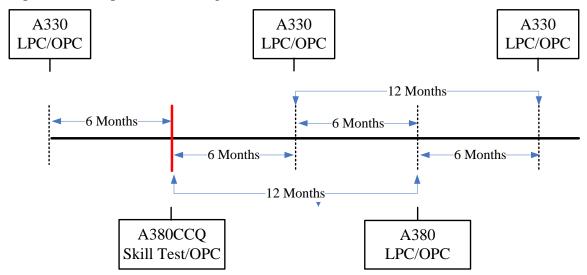
- Use of side-stick controller

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- Knowledge of the various modes of automation
- Knowledge and skills related to the use of MFD/ KCCU / FCU and crosschecks using the FMA
- Use of ECAM: electronic checklists, abnormal/emergency not sensed procedures
- Use of auto thrust system
- Use of OIS
- Use of FLS landing system.

Note 1: A proficiency check conducted on one A380 variant is valid for both variants, provided that the differences have been covered during the recurrent training, as per the approved ODR tables.

For mixed fleet flight for operations of more than one type, an alternate recurrent training and checking program can be established upon the approval by POI. Examples of the recommend implementation plan as following:



- Note 1: Typically prerequisites for flying more than one type consists of a consolidation period following the initial line check on the new type of 50 flying hours or 20 sectors, to be achieved solely on aircraft of the new type rating.
- Note 2: Concerning the recurrent training for low visibility operations, full credit applies between types, provided that low visibility training is conducted during recurrent training every 6 months and covers the all differences in accordance with low visibility ODR tables.

1.6 Specification for Currency

Currency is as required by CCAR Part 61 and 121.

Under Mixed Fleet Flyingt, the proposed currency requirement scheme is an acceptable one

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and will require approval by POI:

MFF Aircraft types	Currency Requirements	
	-3 take-offs and landing in either (A330 or A340) or	
(A330 or A340) and A380	A380	
	- 1 take-off and landing in each type every 45 days.	

1.7 Specification for Flight Simulation Training Devices

When this report has been finalized, the Flight Simulation Training Devices qualified in accordance with CCAR Part 60 are available for Airbus A380.

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Section 2: Master Minimum Equipment List

2.1 Statement and Explanation

This section is the formal notification that CAAC AEG has conducted Flight Operation Evaluation Board (FOEB) evaluation for Airbus A380-800 airplane based on the Airbus A380 Master Minimum Equipment List accepted by EASA, which outlines the items of equipment that may be inoperative and yet maintain an acceptable level of safety by appropriate conditions and limitations.

Hereby, the MMEL and its future revisions accepted by EASA can be used, as the basis, by Chinese operators to develop their Minimum Equipment List (MEL) for above airplanes.

Find EASA MMEL List and signed pages here:

http://easa.europa.eu/certification/experts/MMELs-list.php

MMEL document distribution:

By AirbusWorld website.

Note: For revised MMEL items with boldface in revision highlights, it is considered as more restrict revisions and operators should incorporate into MEL within 60 days as required by AC-121/135-49.

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2.2 CAAC Supplemental

Not applicable.

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Section 3: Maintenance Review Board Report

3.1 Statement and Explanation

This section is the formal notification that CAAC AEG has conducted Maintenance Review Board (MRB) evaluation for Airbus A380-800 airplane based on the Airbus A380 Maintenance Review Board Report (MRBR) approved by EASA, which outlines the initial minimum maintenance requirements to be used in the development of an approved operator's maintenance program for the airframe, engines, systems and components.

Hereby, the MRBR and its future revisions approved by EASA can be used, as the basis, by Chinese operators to develop their maintenance program for above airplanes.

Note: Airworthiness Limitations Sections (ALS) for A380 is not included in the MRBR, but should also be included in the operator's maintenance program. The ALS includes:

- Part 1: Safe Life Airworthiness Limitation Items (SLALI)
- Part 2: Damage-Tolerant Airworthiness Limitation Items (DT ALI)
- Part 3: Certification Maintenance Requirements (CMR)
- Part 4: Ageing Systems Maintenance (ASM)
- Part 5: Fuel Airworthiness Limitations (FAL)
- Part 6: Aircraft Information System Security (AISS)

Find EASA Approved MRBR List here:

http://easa.europa.eu/certification/products/docs/mrbr/EASA-Approved_MRBR.pdf

MRBR distribution:

By AirbusWorld website.

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3.2 CAAC Supplemental

Not applicable.

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Section 4: Operational and Continued Airworthiness Instructions

4.1 Statement and Explanation:

This section is the formal notification that CAAC AEG has conducted evaluation of the operational and continued airworthiness instructions for Airbus A380-800 airplane based on the relevant policies and procedures of Airbus.

Hereby, the Operational & Continued Airworthiness Instructions document listed in the attachment was found acceptable by CAAC AEG, and will give the necessary guidance for properly operating and maintaining the Airbus A380-800 airplane within the approved operating conditions and limitations.

The CAAC AEG recommended that the Airbus C@DETS training would be necessary for proper use of these documents by airline staffs that will be required to referencing the documents for the Airbus A380-800 Airplane operation.

This acceptance may not assure the accuracy and applicability of the content in each document, it is the aircraft owner's or operator's responsibility to report any defect or discrepancy in the documents to the aircraft manufacturer, or report to CAAC AEG by mail box: aeg@caac.gov.cn.

Operational & Continued Airworthiness Instructions distribution:

By AirbusWorld website, except engine manuals are distributed by engine manufacturer directly to operators.

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4.2 List of Operational and Continued Airworthiness Instructions

Manual	Reference No.	Description	Revision/Date
FCOM		A380 Flight Crew Operating Manual	As revised
QRH	-	A380 Quick Reference Handbook	As revised
WBM		A380 Weight & Balance Manual	As revised
CCOM		A380 Cabin Crew Operating Manual	As revised
FCTM		A380 Flight Crew Training Manual	As revised
MPD		A380 Maintenance and Planning	As revised
		Document	
AMM		A380 Aircraft Maintenance Manual	As revised
IPC		A380 Illustrated Parts Catalog	As revised
WDM		A380 Wiring Diagram Manuals	As revised
		(including ASM, AWM, AWL,	
		ESPM)	
TEM		A380 Tool and Equipment Manual	As revised
TSM		A380 Trouble Shooting Manual	As revised
NTM		A380 Non destructive Testing	As revised
		Manual	
SRM		A380 Structural Repair Manual	As revised
CMMM		A380 Component Maintenance As revised	
		Manual - Manufacturer	

- Note 1: The acceptance of above manuals is not affected due to customization.
- Note 2: The acceptance of above manual doesn't means that the other applicable technical publication for A380 couldn't be used by Chinese operators.
- Note 3: Information of Component Maintenance Manual provided by vendors can be found in the AirbusWorld website.

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Section 5: CCARs Compliance Checklist

5.1 Statement and Explanation:

This section is the formal notification that CAAC AEG has developed the compliance checklist for Airbus A380-800 airplane based on the following aircraft configuration:

- EASA Type Certificate Data Sheet NO. A.110, Revision 25, Issue 05.0

The checklist is provided as an aid to identify those specific requirements of rules for which compliance has already been demonstrated for the type design. The checklist also notes the requirements of rules which remain to be demonstrated compliance by the operators.

When the aircraft configuration differs from the above stated aircraft configuration, it is the responsibility of the operator and its CAAC Principle Inspector (PI) to evaluate those differences and develop the compliance to the relevant requirements of rules.

It also remains the responsibility of the operator and it's PI to evaluate the corrective actions for those items not satisfactorily addressing compliance in the checklist prior to approval of the appropriate operation.

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5.2 CCAR-91R2 Compliance Checklist

Articles/Subject	Compliance	Remark/Limitation
§91.401 Civil aircraft: Certifications required	Complies with Fuel venting and exhaust emissions	Other requirements should be checked by PI.
	requirements	
§91.403 Instrument and Equipment for VFR operation	Complies	
§91.405 Instrument and Equipment for IFR operation	Complies	
§91.407 Instruments and Equipments for night and	Complies	1. Requirements for lights in passenger compartments
over-the-top operation		should be further checked by PI for cabin layout
		customization.
		2. Requirements in operation should be checked by PI.
§91.409 Mach number indicator	Complies	
§91.411 Radio communication equipment	Complies	Requirements in operation should be checked by PI.
§91.413 Navigation equipment	Complies	Requirements in operation should be checked by PI.
§91.415 Emergency and life-saving equipment	Complies	Requirements for emergency and life-saving equipment
		in passenger compartments should be further checked
		by PI for cabin layout customization.
§91.417 Additional emergency and Life equipments for	Complies	Requirements for life jacket or equivalent individual
over water operation		flotation device should be further checked by PI for
		cabin layout customization.
§91.419 Additional emergency and Life-saving	Not applicable	
equipment for rotorcraft over water flights		
§91.421 Additional emergency and Life-saving	Complies	1. Marine pyrotechnical signals & signal mirror in each
equipment for flights over designated land areas		raft.
		2. Requirements for life-saving equipment should be
		further checked by PI for cabin layout customization.
§91.423 Oxygen equipment-operation at high altitude	Complies	Requirements for cabin oxygen should be checked by

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Articles/Subject	Compliance	Remark/Limitation
		PI depending on the Operator's route profiles.
§91.425 Equipment for operation in icing conditions	Complies	
§91.427 ATC transponder and altitude reporting	Complies	Requirements in operation should be checked by PI.
equipment		
§91.429 Altitude alerting system or device:	Complies	Requirements in operation should be checked by PI.
Turbojet-powered civil airplanes.		
§91.431 Weather radar	Complies	Requirements in operation should be checked by PI.
§91.433 Flight recorder	Complies	Requirements in operation should be checked by PI.
§91.435 Emergency locator transmitter	Complies	Requirements in operation should be checked by PI.
§91.437 Terrain awareness and warning system.	Complies	Requirements in operation should be checked by PI.
§91.439 Traffic Alert and Collision Avoidance	Complies	Requirements in operation should be checked by PI.
equipment and use		
§91.441 Radiation indicator	Not applicable	The A380 maximum operating altitude is 43000ft.
Appendix B Category II Operations: Manual,	Complies	Requirements in operation should be checked by PI.
Instruments, Equipment, and Maintenance		
Appendix C Operations within airspace designated as	Complies	Requirements in operation should be checked by PI.
Minimum Navigation Performance Specification		
Airspace.		
Appendix D Operations in Reduced Vertical Separation	Complies	Requirements in operation should be checked by PI.
Minimum(RVSM)		

5.3 CCAR-121R3 Compliance Checklist

Articles/Subject	Compliance	Remark/Limitation
§121.153 Aircraft certification and equipment	Complies	A380 certified for transport category airplane
requirements		

Articles/Subject	Compliance	Remark/Limitation
§121.155 Single-engine airplanes prohibited	Not applicable	
§121.157 Airplane limitations: Type of route	Complies	
§121.161 Demonstration of Emergency Evacuation	Complies	It is the responsibility of PI for conduct simulated
Procedures		ditching demonstration by operator
§121.213 Space of passenger seats	Not checked	It should be checked by PI for Cabin Layout
		customization.
§121.215 Carriage of cargo in passenger compartments	Not applicable	Cabin layout configuration only dedicated to passengers
§121.217 Carriage of cargo in cargo compartments	Not applicable	Cargo compartments are not accessible during flight
§121.301 General	Complies	Requirements in operation should be checked by PI.
§121.305 Airplane instruments and equipment	Complies	
§121.307 Engine instruments	Complies	
§121.308 Lavatory fire protection	Complies	
§121.309 Emergency equipment	Complies	1. Requirements should be further checked by PI for
		cabin layout customization.
		2. Requirements in operation should be checked by PI.
§121.310 Additional emergency equipment	Complies	Requirements should be further checked by PI for cabin
		layout customization.
§121.311 Seats, safety belts, and shoulder harnesses	Complies	Requirements in operation should be checked by PI.
§121.312 Materials for compartment interiors	Complies	
§121.313 Miscellaneous equipment	Complies	
§121.314 Cargo and baggage compartments	Complies	
§121.315 Cockpit check list	Complies	Covered by FCOM
		Requirements in operation should be checked by PI.
§121.316 Fuel tanks	Complies	
§121.317 Passenger notification	Complies	1. Requirements should be further checked by PI for

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Articles/Subject	Compliance	Remark/Limitation
		cabin layout customization.
		2. Requirements in operation should be checked by PI.
§121.318 Public address system	Complies	Requirements should be further checked by PI for cabin
		layout customization.
§121.319 Crewmember interphone system	Complies	Requirements should be further checked by PI for cabin
		layout customization.
§121.320 Altitude holding and warning system	Complies	
§121.323 Instruments and equipment for operations at	Complies	
night		
§121.325 Instruments and equipment for operations	Complies	
under IFR		
§121.327 Supplemental oxygen for life support:	Not applicable	
Reciprocating engine powered airplanes		
§121.329 Supplemental oxygen for life support: turbine	Complies	1. Requirements for cabin oxygen should be checked by
engine powered airplanes		PI depending on the Operator's route profiles.
		2. Requirements in operation should be checked by PI.
§121.331 Supplemental oxygen for emergency descent	Not applicable	
and for first aid for reciprocating engine powered		
airplanes with pressurized cabins		
§121.333 Supplemental oxygen for emergency descent	Complies	1. Requirements for cabin oxygen should be checked by
and for first aid for turbine engine powered airplanes		PI depending on the Operator's route profiles.
with pressurized cabins		2. Requirements in operation should be checked by PI.
§121.335 Oxygen Equipment standards	Complies	
§121.337 Protective breathing equipment	Complies	1. Requirements for cabin should be checked by PI
		depending on the Operator's route profiles.

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Articles/Subject	Compliance	Remark/Limitation
		2. Requirements in operation should be checked by PI.
§121.339 Emergency equipment for over water	Complies	Requirements in operation should be checked by PI.
operations		
§121.341 Equipment for operations in icing conditions	Complies	
§121.342 Pitot heat indication systems	Complies	
§121.343 Flight recorders	Complies	Requirements in operation should be checked by PI.
§121.344 Quick Access Recorder or equivalent	Complies	Removed to §121.352 in CCAR-121R4.
equipment		
§121.345 Radio equipment	Complies	Requirements in operation should be checked by PI.
§121.346 Air ground two way data link communication	Complies	
system		
§121.347 Radio equipment for operations under VFR	Complies	
over routes navigated by piloting		
§121.349 Radio equipment for operations under IFR or	Complies	Requirements in operation should be checked by PI.
for operations under VFR over routes not navigated by		
piloting		
§121.351 Radio equipment for extended over water	Complies	Requirements in operation should be checked by PI.
operations and for certain other operations		
§121.352 Quick Access Recorder or equivalent	Complies	Requirements in operation should be checked by PI.
equipment		
§121.353 Emergency equipment for operations over	Complies	1. Marine pyrotechnical signals & signal mirror in each
uninhabited terrain areas		raft.
		2. Requirements for life-saving equipment should be
		further checked by PI for cabin layout customization.
§121.354 Terrain awareness and warning system	Complies	

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Articles/Subject	Compliance	Remark/Limitation
§121.355 Equipment for operations use specialized	Complies	
means of navigation		
§121.356 Airborne Collision Avoidance System	Complies	
(ACAS)		
§121.357 Airborne weather radar equipment	Complies	Requirements in operation should be checked by PI.
requirements		
§121.358 Low altitude windshear system equipment	Complies	
requirements		
§121.359 Cockpit voice recorders	Complies	Requirements in operation should be checked by PI.
§121.360 Ground proximity warning / glide slope	Complies	Requirements in operation should be checked by PI.
deviation alerting system		
§121.361 Language requirement for placards and	Complies	Require further check by PI before operation
markings		
§121.589 Forward Observer's seat for En route	Complies	
inspections		
§121 Appendix B First Aid Kits and Emergency	Complies	Requirements should be further checked by PI for cabin
Medical Kits		layout customization.
§121 Appendix H Extended range operation with two	Not applicable	
engine airplanes (ETOPS)		
§121 Appendix I Doppler Radar and Inertial	Complies	Requirements in operation should be checked by PI.
Navigation System (INS)		

5.4 CCAR-135 Compliance Checklist

Not applicable.

Section 6: Other Evaluation Items

6.1 Forward Observer Seat

Based on the compliance statement submitted by Airbus, CAAC AEG concluded that the seat referred to as the "third occupant seat" (center seat) of Airbus A380-800 is considered to have met the requirements of AC-121-28. The seats referred to as the "fourth and fifth occupant seats" (left and right seats) may be used by CAAC inspectors at their discretion.

Modifications to the above facilities from the original specifications will need approval by the responsible Principle Inspector (PI) of CAAC, additional analysis, demonstrations, proof of concept testing, differences documentation, or other evidence may be required.

6.2 Flight Crew Sleeping Quarters

The Flight Crew Rest Compartment (FCRC) is an option that can be installed in A380-800 airplane.

Based on the compliance statement submitted by Airbus, CAAC AEG concluded that the FCRC facilities in the main deck of Airbus A380-800 is considered to have met the requirements of AC-121-008, however specific operational approval for an operator to use the FCRC is still required, and following requirements should be considered:

- (1) Only approved crewmembers, trained in FCRC evacuation procedures, may occupy the FCRC. Clear definition of "crewmembers" allowed to occupy the FCRC must be specified in the operational approval. As a minimum, prior to occupying the FCRC, crewmembers must be familiarized with the conditions for occupancy and the safety provisions and equipment of the FCRC facility.
- (2) Written procedures should be developed by Operators regarding rescue and evacuation pertaining to occupants of the FCRC compartment.
- (3) FCRC familiarization must also be included in Cabin Crew training and additional responsibilities for ensuring the FCRC, if occupied, are evacuated during an airplane evacuation.

Modifications to the above facilities from the original specifications will need approval by the responsible Principle Inspector (PI) of CAAC, additional analysis, demonstrations, proof of concept testing, differences documentation, or other evidence may be required.

6.3 Electronic Flight Bag

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This paragraph is the formal statement that CAAC AEG has evaluated the Class 3 Electronic Flight Bag (EFB) - On board Information System (OIS) of Airbus A380-800 airplane based on the EASA JOEB Report of the A380-800 EFB Subgroup, and concluded that the compliance, at the manufacturer level, of OIS for operational use in A380-800, but for operator to use the OIS without paper backup, the specific operational approval is still required.

Modifications to either the software or hardware from the original specifications will need re-approval by Flight Standards Department of CAAC, additional analysis, demonstrations, proof of concept testing, differences documentation, or other evidence may be required.

- Note 1:Dual OIS is the baseline configuration for A380-800, and Knowledge about OIS and use of its documentation and performance applications is fully integrated into, the A380 type rating courses.
- Note 2: EASA JOEB Report of the A380-800 EFB Subgroup identifies and list the Airbus proposed Software applications, Standard Operating Procedures, Administration Procedures and Administrator Training, Operational compliance summary for operating Airplane using the OIS.

Find EASA JOEB Report of A380 EFB Subgroup here: http://easa.europa.eu/certification/experts/OEB-reports.php

6.4 Head-up Display/Enhanced Flight Vision System

Not applicable.

6.5 Emergency Evacuation Demonstration

The A380-800 airplane full capacity emergency evacuation demonstration (for maximum passenger capacity of 853, with 538 passenger seats installed on the main deck and 315 passenger seats installed on the upper deck) has been conducted during type certification process, and The JOEB A380-800 Cabin Crew Subgroup evaluation was conducted up to the time of the issue of the A380-800 Type Certificate.

As concluded by reference to the JOEB Report of the A380-800 Cabin Crew Subgroup, CAAC AEG considers A380-800 has been shown to be in compliance with the full capacity emergency evacuation demonstration during the type certification process.

Note 1:As the output of emergency evacuation demonstration, Airworthiness Related procedures were established and approved by EASA (detailed reference to EASA JOEB Report of the A380-800 Cabin Crew Subgroup), it should be considered the base of operator to develop their own procedures.

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Note 2: EASA JOEB Report of the A380-800 Cabin Crew Subgroup also establishes the A380-800 cabin crew type, recommendations for cabin crew training, and information relative to the number and composition of cabin crew.

Find EASA JOEB Report of A380 Cabin Crew Subgroup here:

http://easa.europa.eu/certification/experts/OEB-reports.php

6.6 Additional Operational Recommendations

Aircraft evacuation at the airport gate

Operators should therefore ensure that they have contingency plans in place, which have been agreed with the airport operator. These contingency plans should include procedures for evacuation at the gate where some exits may be obstructed by ground equipment and where it may be necessary or preferable to evacuate the passengers back into the airport terminal.

Refuelling with passengers on board

Refuelling with passengers on board is not recommended but where this is necessary for operational reasons, operators should have contingency plans in place to stop the refuelling and, if necessary disembark or evacuate the passengers from the aircraft in the event of a fuel spillage or fumes in the aircraft.

Pre-departure external check

Pre-departure external check should be carried out by a suitably qualified person after catering and cleaning and any other ground servicing has finished, to avoid any unnoticed damage that caused by ground equipment coming into contact with the aircraft structure.

Operation from 45 metre runways

The A380 has been certified for operations on 45m wide runways, however, operators should ensure that taxiway routes to be used are suitable for the A380 and have been cleared as such by the airfield operator.

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Appendix: CAAC AEG Team and Point of Contact

A.1: CAAC AEG Team (Initial Evaluation):

Mr. Xue Shi Jun Director, Aircraft Evaluation Division, Flight Standards

Department

Mr. Sun Ying Jun Deputy Director, AEG Office of Shanghai Aircraft

Airworthiness Certification Center

Ms. Fan Jing Zhu Engineer, AEG Office of Shanghai Aircraft Airworthiness

Certification Center

Mr. Li Chun Sheng Engineer, AEG Office of Civil Aviation Safty and Technology

Center

<u>Capt. Zheng Gang</u> Pilot, AEG Office of Civil Aviation Safety and Technology

Center

CAAC AEG Team (Transform Report):

Mr. Xue Shi Jun Director, Aircraft Evaluation Division, Flight Standards

Department

Ms. Fan Jing Zhu Engineer, AEG Office of Shanghai Aircraft Airworthiness

Certification Center

Mr. Li Chun Sheng Engineer, AEG Office of Civil Aviation Safty and Technology

Center

A.2: Airbus Point of Contact

Ms. Régine VADROT Head of Operational Certification Engineering - Product

Integrity (EAV)

Ms. Bo Juan Airbus China

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