Civil Aviation Administration of China (CAAC)

Aircraft Evaluation Group (AEG)

Aircraft Evaluation Report

For

A320 Family

(A318/319/320/321 Series)

Revision 4 **Date: January 31, 2024**

Manufacturer: AIRBUS

Revision Record & Approval

No.	Section	Highlight	Date	Prepare	Review	Approve
Initial	All	Initial Evaluation for A320-271n and Catch-up for A318/319/320/321	July 29, 2016	LI Xiaolei	XUE Shijun	HU Zhenjiang
1	All	Supplemental Evaluation for A321-271N	June 8, 2018	XUE Shijun	XUE Shijun	HU Zhenjiang
2	All	Supplemental Evaluation for A321 ACF and Up to 3 ACT	April 16, 2020	WANG Jin	ZHANG Lingzhi	ZHU Tao
3	ALL	Supplemental Evaluation for A319-151N, A319-153N and A320-272N	October 21, 2021	WANG Jin	ZHANG Lingzhi	HAN Guangzu
4	All	Supplemental Evaluation for A319-171N, A320-253N and A320-273N	January 31, 2024	LI Xiaolei	XUE Shijun	HAN Guangzu

Prepared by:

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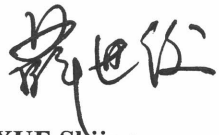

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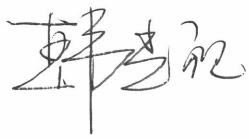
Approved by:



HAN Guangzu
Director General
Flight Standards Department of Civil Aviation Administration of China

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Foreword

The Airbus A320 Family include A318, A319, A320 and A321 series airplanes under the same TC，according to configurations of series, engine type and thrust setting as following:

- A318-111, 112
- A319-111, 112, 115, 131, 132, 133,151N, 153N, 171N
- A320-214, 215, 216, 231, 232, 233, 251N, 271N, 252N, 253N, 272N, 273N
- A321-111, 112, 131, 211, 212, 213, 231, 232, 271N, 272N, 251N, 252N, 253N, 251NX, 252NX, 253NX, 271NX, 272NX.

Note: *The last three digital number represent:*

- *First Number: Means series. "1" represent 100 series; "2" represent 200 series.*
- *Second Number: "1" represent CFM56 engine; "2" represent PW6100 engine; "3" represent V2500 engine, "5" represent LEAP-1A engine, "7" represent PW1100 engine.*
- *"N" means neo," NX" means neo with modification of ACF (Aircraft Cabin Flex) and optional Modification of Up to 3ACT (Additional Centre Tanks).*
- *Third Number: Thrust ratings.*

The A320 is a short/medium range twin - engine subsonic commercial transport aircraft with first introduced innovative features of:

- Fly-by-wire flight controls
- Side-stick controller

"A320neo" is the commercial term for re-engine program of A319, A320 and A321 series airplanes, including PW1100G (Fan Gear Driven System) and CFMI LEAP-1A engine. Correspondingly, all the above A319, A320 and A321 series airplanes before A320neo called A320ceo.

The first type of A320 Family was A320-211 approved by French DGAC in November 1988, then type certification transferred to JAA in January 1990. The EASA TCDS for A320 firstly issued in December 2005 to include all previous DGAC/JAA approved A318, A319, A320, A321 series as grandfathered policy, and keep approve the new modification and variant.

In January of 2016, the initial CAAC AEG evaluation of A320 was for the introduction of A320neo, and catch-up also involved for A320ceo since all the links for the whole A320 Program. Initial version of this report was formalized based on initial A320neo evaluation and catch-up for A320ceo. When initial version of this report finalized, only configuration A320-271N (A320 with PW1100G engines) approved by EASA and validated by CAAC Aircraft Airworthiness Department.

In 2018, AEG supplemental evaluation was conducted to A320 series airplanes to including A321-271N (A321 with PW1133G-JM engines) and A320-251N (A320 with CFMI LEAP-1A engines). In addition, EFB application upgraded to include standalone eQRH were also included. Revision 1 of this report was finalized for the supplemental evaluation.

In July of 2019, the supplemental evaluation was conducted to A321 neo with modification of Aircraft Cabin Flex (ACF) and optional modification of up to 3 Additional Centre Tanks (ACT), including A321-251NX, 252NX, 253NX,271NX, 272NX. Revision 2 of this report was finalized for the supplemental evaluation. In addition, A320-252N, A321-272N, 251N, 252N, 253N are also covered by this evaluation.

In 2017 and 2018, the A320 HUD training evaluation was conducted by CAAC AEG. In November of 2018, the conclusion of Memorandum letter was issued and is also covered by the revision 2 of this report. Revision 2 of this report includes a new Section 8, which provides more information to the operator about product support by provided by the OEM.

In May of 2021, the supplemental evaluation was conducted to cover the A319-151N, A319-153N and A320-272N. Revision 3 of this report was finalized for the supplemental evaluation.

In 2022， the supplemental evaluation was conducted to cover the A319-171N, A320-253N，A320-273N, ACJ320 NEO (reference aircraft: A320-251N/-271N/-272N) and ACJ319 NEO (reference aircraft: A319-153N). The revising of Maintenance Training Specification document complying with the CAAC maintenance type training policy change, is also covered by this evaluation. Revision 4 of this report was finalized for above supplemental evaluation.

Note: "ACJ" is Airbus Corporate Jets, "ACJ319 NEO" and "ACJ320 NEO "are commercial designation only.

Section 1: Operational information related to Aircraft Type Design

1.1 Statement and Explanation:

This section includes the operation related information for Airbus A318, A319, A320 and A321 series airplanes based on the following aircraft configuration documents:

- EASA Type Certificate Data Sheet No. EASA.A.064 – Issue49
- Airplane Flight Manual (Envelope AFM)

The information is provided as an aid to support operation approval but should not be considered operation approval. If operator is required to show compliance, it remains the responsibility of the Principal Inspector (PI) for operator to approve the appropriate operation.

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

1.2 A320 Series (-211, 212, 214, 215, 216, 231, 232, 233, 251N, 271N, 252N,272N, 253N, 273N)

(1) General Information

Item		Type Related Information	Reference
1.1	Category	Transport category airplane	TCDS
1.2	Dimensions	Principal dimensions of A320 Aircraft: - Length: 37,57 m - Width: 34,10 m (if MOD 160500 or 160080 is installed) 35,80 m - Height: 11,76 m	TCDS
1.3	Engines	**A320-211:** Two CFMI CFM 56-5A1 jet engines (MOD 20141), or CFM 56-5A1/F jet engines (MOD 23755) **A320-212:** Two CFMI CFM 56-5A3 jet engines (MOD 22093) **A320-214:** Two CFMI CFM 56-5B4 jet engines (MOD 24251), or CFM 56-5B4/2 jet engines (MOD 24405) **A320-215:** Two CFMI CFM 56-5B5/P jet engines (MOD 25800) **A320-216:** Two CFMI CFM 56-5B6/P jet engines (MOD 25800) **A320-231:** Two IAE V2500-A1 jet engines (MOD 20165) **A320-232:** Two IAE V2527-A5 jet engines (MOD 23008) **A320-233:** Two IAE V2527E-A5 jet engines (MOD 25068) **A320-251N：** Two CFMI LEAP-1A26 jet engines (MOD 161003) **A320-252N：** Two CFMI LEAP-1A24 jet engines (MOD 162680) **A320-271N：** Two IAE PW1127G-JM Geared Turbo Fan jet engines (MOD 161000) **A320-272N:** Two IAE PW1124G1-JM Geared Turbo Fan jet engines (MOD 163955) **A320-253N:** Two CFMI LEAP-1A29 jet engines (MOD 161860) **A320-273N:** Two PW PW1129G-JM Geared Turbo Fan jet engines	TCDS

<table>
<tr><th colspan="2">Item</th><th>Type Related Information</th><th>Reference</th></tr>
<tr><td></td><td></td><td>(MOD 162512)</td><td></td></tr>
<tr><td>1.4</td><td>APU</td><td>One GARRETT AIRESEARCH GTCP 36-300 (A), or
Pratt & Whitney Rzeszow S.A. APS 3200 (option), or
Honeywell International 131-9[A] (option)</td><td>TCDS</td></tr>
<tr><td>1.5</td><td>Propellers</td><td>N/A</td><td></td></tr>
<tr><td>1.6</td><td>Maximum Operating Altitude</td><td>Maximum operating altitude:
39 100 ft. (pressure altitude)
39 800 ft. (pressure altitude) if modification 30748 is embodied
41 000 ft. (pressure altitude) if modification 162744 is embodied
Refer to the appropriate EASA approved Airplane Flight Manual</td><td>TCDS</td></tr>
<tr><td>1.7</td><td>Approach category</td><td>Category C</td><td></td></tr>
<tr><td>1.8</td><td>Maximum Certified Weights</td><td>A320-211/212/214/215/216/231/232/233 (BASIC):
Max. Take-off Weight: 73 500
Max. Landing Weight: 64 500
Max. Zero Fuel Weight: 60 500
A320-251N/271N/252N/272N /253N/273N (BASIC):
Max. Take-off Weight: 73 500
Max. Landing Weight: 66 300
Max. Zero Fuel Weight: 62 800
Note: The exact certified weight may change due to different modification embodied, reference TCDS for detail.</td><td>TCDS</td></tr>
<tr><td>1.9</td><td>Minimum Flight Crew</td><td>Two (2): Pilot and Co-pilot</td><td>TCDS</td></tr>
<tr><td>1.10.</td><td>Maximum Occupants</td><td>The maximum number of passengers approved for emergency evacuation:
<table>
<tr><th>MPSC</th><th>Cabin configuration</th><th>Modification</th><th>Minimum CC</th></tr>
<tr><td>195</td><td>C*-III-III-C*</td><td>156723, 158708 or 158819</td><td>4</td></tr>
<tr><td>180</td><td>C-III-III-C</td><td>---</td><td>4</td></tr>
<tr><td>165</td><td>C*-III-C*</td><td>164024</td><td>4</td></tr>
<tr><td>150</td><td>C-III-III-C</td><td>150364</td><td>3</td></tr>
<tr><td>145</td><td>C-III-C</td><td>150016 or 35177</td><td>3</td></tr>
</table>
Note: C* is the over-performing exit according to modification 156723/158708/158819</td><td>TCDS</td></tr>
<tr><td>1.11.</td><td>Baggage/ Cargo</td><td>Fwd: Max. Loading 3402 kg</td><td>TCDS</td></tr>
</table>

Item		Type Related Information	Reference
	Compartment	Aft: Max. Loading 4536 kg Rear (bulk): Max. Loading 1497 kg *Note: Even above Baggage/ Cargo Compartment certification basis was initially as Class D and only optional with Class C, but all manufactured now are with Class C.*	
1.12	Serial Numbers Eligibility	Not specified.	

(2) Kind of Operation

Item		Information	Reference
2.1	Visual Flight Rules(VFR)	Approved as basic type design	AFM
2.2	Instrument Flight Rules (IFR)	Approved as basic type design	AFM
2.3	Night and over-the-top	Approved as basic type design	AFM
2.4	Icing conditions	Approved as basic type design	AFM
2.5	Extended Overwater Operation	Ditching approved as basic type design. The aircraft has 2 HF as basic type design. *For life jacket, life raft and emergency locator transmitter (ELT) installation, it is the responsibility of the operators to show compliance and checked by Principal Inspector (PI).*	AFM
2.6	Extended Range Operation	Capable for ETOPS 120 min (MOD 36666) or 180 min (MOD 32009) when configured, maintained and operated in accordance with the ETOPS Configuration, Maintenance and Procedures (CMP) document.	TCDS

(3) Communication, Navigation and Surveillance

Item		Information	Reference
3.1	ATC transponder	2 mode S ATC Transponders installed.	AFM
3.2	Data Link Communication	An Air Traffic Services Unit (ATSU) is installed and has the capacity to host FANS A+ software for ATC data communications. The ATSU has the capacity for software, high speed dataloading and the capability for VHF data link mode 2 function.	AFM
3.3	Satellite Communication (SATCOM)	The optional "SATCOM Cockpit Voice for ATC" application has been demonstrated to comply with airworthiness requirements.	AFM
3.4	RVSM	The airplane is certified capable of RVSM operations	AFM

Item		Information	Reference
3.5	Performance Based Navigation	The airplane meets the performance and function criteria or these Required Navigation Performance (RNP)operations: - Approach: RNP AR, RNP APCH, Baro-VNAV - Terminal: RNAV 1, RNAV 2, RNP 1 - En-route: RNAV 1, RNAV 2, RNAV 5 - Oceanic and Remote Area: RNP 4	AFM
3.6	Low visibility operation	The airplane and the installed weather equipment to support low-weather minima operations to Category I/II/III Approach.	AFM
3.7	Weather radar	WXR system with 1/2 transceivers is installed with predictive windshear activated	AFM
3.8	Terrain awareness and warning system（TAWS）	The Ground Proximity Warning System (GPWS) generates aural and visual warnings, when one of the following conditions occurs between radio heights 30 ft and 2 450 ft. - Mode 1: Excessive rate of descent - Mode 2: Excessive terrain closure rate - Mode 3: Altitude loss after takeoff, or go-around - Mode 4: Unsafe terrain clearance when not in landing configuration - Mode 5: Too far below glideslope.	AFM
3.9	Traffic Alert and Collision Avoidance equipment	TCAS 7.1 was introduced as aircraft standard since January 2013. TCAS 7.0 was installed before 2013.	AFM
3.10	Low altitude windshear system equipment	Weather Radar with Predictive WindShear detection function.	AFM
3.11	ADS-B	ATC Transponder provides ADS-B OUT parameters.	
3.12	HUD	Option HUD installation available.	

(4) Recording Equipment

Item		Information	Reference
4.1	Flight recorder	The aircraft is equipped with Flight Data Recorder (FDR) and Cockpit Voice Recorder (CVR). The CVR provides recording capability for ATC data link communication.	AFM
4.2	Quick Access Recorder	The QAR is a customer option. All relevant data can be stored by means of a PCMCIA card.	AFM

1.3 A321 Series (-111, 112, 131, 211, 212, 213, 231, 232, 271N, 271NX, 272N, 272NX 251N, 251NX, 252N, 252NX, 253N, 253NX)

(1) General Information

Item		Type Related Information	Reference
1.1	Category	Transport category airplane	TCDS
1.2	Dimensions	Principal dimensions of A321 Aircraft: - Length: 44,51 m - Width: 34,10 m (If mod 160023 installed) 35,80m - Height: 11,76 m	TCDS
1.3	Engines	**A321-111:** Two CFMI CFM 56-5B1 jet engines (MOD 23083), or CFM 56-5B1/2 jet engines (MOD 24404) **A321-112:** Two CFMI CFM 56-5B2 engines (MOD 23152) **A321-131:** Two IAE V2530 - A5 jet engines (MOD 22989) **A321-211:** Two CFMI CFM 56-5B3/P jet engines (MOD 26359 + 25800), or CFM 56-5B3/2P jet engines (MOD 27640) **A321-212:** Two CFMI CFM 56-5B1 jet engines (MOD 23083), or CFM 56-5B1/2 jet engines (MOD 24404) **A321-213:** Two CFMI CFM 56-5B2 engines (MOD 23152) **A321-231:** Two IAE V2533-A5 jet engines (MOD 25643) **A321-232:** Two IAE V2530 - A5 jet engines (MOD 22989). **A321-271N/A321-271NX** Two IAE PW1133G-JM Geared Turbo Fan jet engines (MOD 161002) **A321-251N/A321-251NX** Two CFMI LEAP-1A32 jet engines (MOD 161005) **A321-253N/A321-253NX** Two CFMI LEAP-1A33 jet engines (MOD 161006) **A321-272N/A321-272NX** Two IAE PW1130G-JM Geared Turbo Fan jet engines (MOD 162038) **A321-252N/A321-252NX**	TCDS

<table>
<tr><th colspan="2">Item</th><th>Type Related Information</th><th>Reference</th></tr>
<tr><td></td><td></td><td>Two CFMI LEAP-1A30 jet engines (MOD 162681)</td><td></td></tr>
<tr><td>1.4</td><td>APU</td><td>One GARRETT AIRESEARCH GTCP 36-300 (A), or
Pratt & Whitney Rzeszow S.A. APS 3200 (option), or
Honeywell International 131-9[A] (option)</td><td>TCDS</td></tr>
<tr><td>1.5</td><td>Propellers</td><td>N/A</td><td></td></tr>
<tr><td>1.6</td><td>Maximum Operating Altitude</td><td>Maximum operating altitude:.
- 39 100 ft (pressure altitude)
- 39 800 ft (pressure altitude) if modification 30748 is embodied</td><td>TCDS</td></tr>
<tr><td>1.7</td><td>Approach category</td><td>Category C or D based on MLW</td><td></td></tr>
<tr><td>1.8</td><td>Maximum Certified Weights</td><td>A321--111, 112, 131 (BASIC):
Max. Take-off Weight: 83 000
Max. Landing Weight: 73 500
Max. Zero Fuel Weight: 69 500
A321--211, 212, 213, 231, 232 (BASIC):
Max. Take-off Weight: 89 000
Max. Landing Weight: 75 500
Max. Zero Fuel Weight: 71 500
A321-271N, 272N, 251N, 252N, 253N (BASIC):
Max. Take-off Weight: 89 000
Max. Landing Weight: 77 300
Max. Zero Fuel Weight: 73 300
A321-271NX, 272NX, 251NX, 252NX, 253NX (BASIC):
Max. Take-off Weight: 89 000
Max. Landing Weight: 77 300
Max. Zero Fuel Weight: 73 300
Note: The exact certified weight may change due to different modification embodied, reference TCDS for detail.</td><td>TCDS</td></tr>
<tr><td>1.9</td><td>Minimum Flight Crew</td><td>Two (2): Pilot and Co-pilot</td><td>TCDS</td></tr>
<tr><td>1.10.</td><td>Maximum Occupants</td><td>The maximum number of passengers approved for emergency evacuation:
<table>
<tr><th>MPSC</th><th>Cabin configuration</th><th>Modification</th><th>Minimum CC</th></tr>
<tr><td>230</td><td>C*-C-C-C*</td><td>157272(1) or 159536(1)</td><td>5</td></tr>
<tr><td>220</td><td>C-C-C-C</td><td>---</td><td>5</td></tr>
<tr><td>200</td><td>C-C-C-C</td><td>---</td><td>4</td></tr>
<tr><td>200</td><td>C*-(III-III)+-0-C*</td><td>160908(1) (2)</td><td>4</td></tr>
<tr><td>244</td><td>C*-(III-III)+-C-C*</td><td>160766(1) (3)</td><td>5</td></tr>
</table></td><td>TCDS</td></tr>
</table>

<table>
<tr><th colspan="2">Item</th><th>Type Related Information</th><th>Reference</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>180</td><td>C-(III-III)$^{+}$-0-C</td><td>160908$^{(2)}$ and 162227</td><td>4</td></tr>
<tr><td>235</td><td>C-(III-III)$^{+}$-C-C</td><td>160766 $^{(3)}$ and 162227</td><td>5</td></tr>
<tr><td>224</td><td>C*-(0-III)$^{+}$-C-C* Or C*-(III-0)$^{+}$-C-C*</td><td>160906$^{(2)(3)}$</td><td>5</td></tr>
<tr><td>200</td><td>C-(0-III)$^{+}$-C-C Or C-(III-0)$^{+}$-C-C</td><td>160906(2)(3) and 162227</td><td>4</td></tr>
<tr><td>204</td><td>C-(0-III)$^{+}$-C-C Or C-(III-0)$^{+}$-C-C</td><td>160906$^{(2)(3)}$ and 162227</td><td>5</td></tr>
<tr><td>169</td><td>C*-(0-III)$^{+}$-0-C* Or C*-(III-0)$^{+}$-0-C*</td><td>160907$^{(2)(3)}$</td><td>4</td></tr>
<tr><td>149</td><td>C-(0-III)$^{+}$-0-C Or C-(III-0)$^{+}$-0-C</td><td>160907$^{(2)(3)}$ and 162227</td><td>3</td></tr>
</table>
Note:
(1) C* is the overperforming Type C exit
(2) 0 is a plugged door
(3) C* is the overperforming Type C and (III-III)$^{+}$ or III^{+} are the overperforming Type III (double or single)
</td><td></td></tr>
<tr><td>1.11.</td><td>Baggage/ Cargo Compartment</td><td>A321-111, 112, 131, 211/-212/-213/-231/-232/-271N/-272N/-251N/-252N/-253N
Fwd: Max. Load 5670 kg
Aft: Max. Load 5670kg
Rear (bulk): Max. Load 1497 kg
A321-271NX, 272NX, 251NX, 252NX, 253NX:
Fwd: Max. Load 5670 kg
Aft: Max. Load 5670kg
Rear (bulk): Max. Load 800 kg
Note: Even above Baggage/ Cargo Compartment certification basis was initially as Class D and only optional with Class C, but all manufactured now are with Class C.</td><td>TCDS</td></tr>
<tr><td>1.12</td><td>Serial Numbers Eligibility</td><td>Not specified.</td><td></td></tr>
</table>

(2) Kind of Operation

Item		Information	Reference
2.1	Visual Flight	Approved as basic type design	AFM

Item		Information	Reference
	Rules(VFR)		
2.2	Instrument Flight Rules (IFR)	Approved as basic type design	AFM
2.3	Night and over-the-top	Approved as basic type design	AFM
2.4	Icing conditions	Approved as basic type design	AFM
2.5	Extended Overwater Operation	Ditching approved as basic type design. The aircraft has 2 HF as basic type design. *For life jacket, life raft and emergency locator transmitter (ELT) installation, it is the responsibility of the operators to show compliance and checked by Principal Inspector (PI).*	AFM
2.6	Extended Range Operation	Capable for ETOPS 120 min (MOD 36666) or 180 min (MOD 32009) when configured, maintained and operated in accordance with the ETOPS Configuration, Maintenance and Procedures (CMP) document.	TCDS

(3) Communication, Navigation and Surveillance

Item		Information	Reference
3.1	ATC transponder	2 mode S ATC Transponders installed.	AFM
3.2	Data Link Communication	An Air Traffic Services Unit (ATSU) is installed and has the capacity to host FANS A+ software for ATC data communications. The ATSU has the capacity for software, high speed dataloading and the capability for VHF data link mode 2 function.	AFM
3.3	Satellite Communication (SATCOM)	The optional "SATCOM Cockpit Voice for ATC" application has been demonstrated to comply with airworthiness requirements.	AFM
3.4	RVSM	The airplane is certified capable of RVSM operations	AFM
3.5	Performance Based Navigation	The airplane meets the performance and function criteria or these Required Navigation Performance (RNP)operations: - Approach: RNP AR, RNP APCH, Baro-VNAV - Terminal: RNAV 1, RNAV 2, RNP 1 - En-route: RNAV 1, RNAV 2, RNAV 5 - Oceanic and Remote Area: RNP 4	AFM
3.6	Low visibility operation	The airplane and the installed weather equipment to support low-weather minima operations to Category I/II/III Approach.	AFM
3.7	Weather radar	WXR system with 1/2 transceivers is installed with predictive windshear activated	AFM

Item		Information	Reference
3.8	Terrain awareness and warning system（TAWS）	The Ground Proximity Warning System (GPWS) generates aural and visual warnings, when one of the following conditions occurs between radio heights 30 ft and 2 450 ft. - Mode 1: Excessive rate of descent - Mode 2: Excessive terrain closure rate - Mode 3: Altitude loss after takeoff, or go-around - Mode 4: Unsafe terrain clearance when not in landing configuration - Mode 5: Too far below glideslope.	AFM
3.9	Traffic Alert and Collision Avoidance equipment	TCAS 7.1 was introduced as aircraft standard since January 2013. TCAS 7.0 was installed before 2013.	AFM
3.10	Low altitude windshear system equipment	Weather Radar with Predictive WindShear detection function.	AFM
3.11	ADS-B	ATC Transponder provides ADS-B OUT parameters.	
3.12	HUD	Option HUD installation available.	

(4) Recording Equipment

Item		Information	Reference
4.1	Flight recorder	The aircraft is equipped with Flight Data Recorder (FDR) and Cockpit Voice Recorder (CVR). The CVR provides recording capability for ATC data link communication.	AFM
4.2	Quick Access Recorder	The QAR is a customer option. All relevant data can be stored by means of a PCMCIA card.	AFM

1.4 A319 Series (-111, 112, 115, 131, 132, 133,151N, 153N, 171N)

(1) General Information

Item		Type Related Information	Reference
1.1	Category	Transport category airplane	TCDS
1.2	Dimensions	Principal dimensions of A321 Aircraft: - Length: 33.84 m - Width: 34.10 m (if MOD 160500 is installed) 35.80 m - Height: 11.76 m	TCDS
1.3	Engines	**A319-111:** Two CFMI CFM 56-5B5 jet engines (MOD 24932) **A319-112:** Two CFMI CFM 56-5B6 jet engines (MOD 25287), or CFM 56-5B6/2 jet engines (MOD 25530) **A319-115:** Two CFMI CFM 56-5B7 jet engines (MOD 27567) **A319-131:** Two IAE V2522-A5 jet engines (MOD 26152) **A319-132:** Two IAE V2524-A5 jet engines (MOD 26298) **A319-133:** Two IAE V2527M-A5 jet engines (MOD 27568) A319-151N: Two CFMI LEAP-1A24 jet engines (MOD 161004) A319-153N: Two CFMI LEAP-1A26 jet engines (MOD 165511), or LEAP-1A26E1 jet engines (MOD 166794) **A319-171N:** Two PW PW1124G-JM Geared Turbo Fan jet engines (MOD 161001)	TCDS
1.4	APU	One GARRETT AIRESEARCH GTCP 36-300 (A), or Pratt & Whitney Rzeszow S.A. APS 3200 (option), or Honeywell International 131-9[A] (option)	TCDS
1.5	Propellers	N/A	
1.6	Maximum Operating Altitude	Maximum operating altitude: - 39 100 ft (pressure altitude) - 41 000 ft (pressure altitude) if modification 28162 is embodied (A319-112/-115/-132/-133 only) - 39 800 ft (pressure altitude) if modification 30748 is embodied	TCDS
1.7	Approach category	Category C	

<table>
<tr><th colspan="2">Item</th><th>Type Related Information</th><th>Reference</th></tr>
<tr><td>1.8</td><td>Maximum Certified Weights</td><td>A319-111/112/115/131/132/133 (BASIC):
Max. Take-off Weight: 64 000
Max. Landing Weight: 61 000
Max. Zero Fuel Weight: 57 000
A319-151N/153N/171N (BASIC)
Max. Take-off Weight: 64 000
Max. Landing Weight: 62 800
Max. Zero Fuel Weight: 58 800</td><td>TCDS</td></tr>
<tr><td>1.9</td><td>Minimum Flight Crew</td><td>Two (2): Pilot and Co-pilot</td><td>TCDS</td></tr>
<tr><td>1.10.</td><td>Maximum Occupants</td><td>The maximum number of passengers approved for emergency evacuation:
<table>
<tr><th>MPSC</th><th>Cabin configuration</th><th>Modification</th><th>Minimum CC</th></tr>
<tr><td>160</td><td>C-III-III-C</td><td>32208</td><td>4</td></tr>
<tr><td>160</td><td>C*-III-C*</td><td>159535 or 159533</td><td>4</td></tr>
<tr><td>150</td><td>C-III-III-C,</td><td>32208 and 150365</td><td>3</td></tr>
<tr><td>150</td><td>C*-III-C*</td><td>157777</td><td>3</td></tr>
<tr><td>145</td><td>C-III-C</td><td>---</td><td>3</td></tr>
</table>
Note: C* is the over-performing exit according to modification 157777, 159533 or 159535</td><td>TCDS</td></tr>
<tr><td>1.11.</td><td>Baggage/ Cargo Compartment</td><td>Fwd: Max. Loading 2268 kg
Aft: Max. Loading 3021kg
Rear (bulk): Max. Loading 1497 kg
Note: Even above Baggage/ Cargo Compartment certification basis was initially as Class D and only optional with Class C, but all manufactured now are with Class C.</td><td>TCDS</td></tr>
<tr><td>1.12</td><td>Serial Numbers Eligibility</td><td>Not specified.</td><td></td></tr>
</table>

(2) Kind of Operation

Item		Information	Reference
2.1	Visual Flight Rules(VFR)	Approved as basic type design	AFM
2.2	Instrument Flight Rules (IFR)	Approved as basic type design	AFM
2.3	Night and over-the-top	Approved as basic type design	AFM
2.4	Icing conditions	Approved as basic type design	AFM

Item		Information	Reference
2.5	Extended Overwater Operation	Ditching approved as basic type design. The aircraft has 2 HF as basic type design. *For life jacket, life raft and emergency locator transmitter (ELT) installation, it is the responsibility of the operators to show compliance and checked by Principal Inspector (PI).*	AFM
2.6	Extended Range Operation	Capable for ETOPS 120 min (MOD 36666) or 180 min (MOD 32009) when configured, maintained and operated in accordance with the ETOPS Configuration, Maintenance and Procedures (CMP) document.	TCDS

(3) Communication, Navigation and Surveillance

Item		Information	Reference
3.1	ATC transponder	2 mode S ATC Transponders installed.	AFM
3.2	Data Link Communication	An Air Traffic Services Unit (ATSU) is installed and has the capacity to host FANS A+ software for ATC data communications. The ATSU has the capacity for software, high speed dataloading and the capability for VHF data link mode 2 function.	AFM
3.3	Satellite Communication (SATCOM)	The optional "SATCOM Cockpit Voice for ATC" application has been demonstrated to comply with airworthiness requirements.	AFM
3.4	RVSM	The airplane is certified capable of RVSM operations	AFM
3.5	Performance Based Navigation	The airplane meets the performance and function criteria or these Required Navigation Performance (RNP)operations: - Approach: RNP AR, RNP APCH, Baro-VNAV - Terminal: RNAV 1, RNAV 2, RNP 1 - En-route: RNAV 1, RNAV 2, RNAV 5 - Oceanic and Remote Area: RNP 4	AFM
3.6	Low visibility operation	The airplane and the installed weather equipment to support low-weather minima operations to Category I/II/III Approach.	AFM
3.7	Weather radar	WXR system with 1/2 transceivers is installed with predictive windshear activated	AFM
3.8	Terrain awareness and warning system（TAWS）	The Ground Proximity Warning System (GPWS) generates aural and visual warnings, when one of the following conditions occurs between radio heights 30 ft and 2 450 ft. - Mode 1: Excessive rate of descent - Mode 2: Excessive terrain closure rate - Mode 3: Altitude loss after takeoff, or go-around - Mode 4: Unsafe terrain clearance when not in landing	AFM

Item		Information	Reference
		configuration - Mode 5: Too far below glideslope.	
3.9	Traffic Alert and Collision Avoidance equipment	TCAS 7.1 was introduced as aircraft standard since January 2013. TCAS 7.0 was installed before 2013.	AFM
3.10	Low altitude windshear system equipment	Weather Radar with Predictive WindShear detection function.	AFM
3.11	ADS-B	ATC Transponder provides ADS-B OUT parameters.	
3.12	HUD	Option HUD installation available.	

(4) Recording Equipment

Item		Information	Reference
4.1	Flight recorder	The aircraft is equipped with Flight Data Recorder (FDR) and Cockpit Voice Recorder (CVR). The CVR provides recording capability for ATC data link communication.	AFM
4.2	Quick Access Recorder	The QAR is a customer option. All relevant data can be stored by means of a PCMCIA card.	AFM

1.5 A318 Series (-111, 112)

(1) General Information

Item		Type Related Information	Reference
1.1	Category	Transport category airplane	TCDS
1.2	Dimensions	Principal dimensions of A321 Aircraft: - Length: 31.45 m - Width: 34.10 m - Height: 12.79 m	TCDS
1.3	Engines	**A318-111:** Two CFMI CFM 56-5B8/P jet engines (MOD 32028) **A318-112:** Two CFMI CFM 56-5B9/P jet engines (MOD 32029)	TCDS
1.4	APU	**A318-111/-112:** One HONEYWELL AIRESEARCH (formerly GARRETT) GTCP 36-300 (A), or Pratt & Whitney Rzeszow S.A. APS 3200 (option), or Honeywell International 131-9[A] (option)	TCDS
1.5	Propellers	N/A	
1.6	Maximum Operating Altitude	Maximum operating altitude: - 39 800 ft (pressure altitude) - 41 100 ft (pressure altitude) if modification 39195 is embodied	TCDS
1.7	Approach category	Category C	
1.8	Maximum Certified Weights	**A318-111, 112 (BASIC):** Max. Take-off Weight: 59 000 Max. Landing Weight: 56 000 Max. Zero Fuel Weight: 53 000	TCDS
1.9	Minimum Flight Crew	Two (2): Pilot and Co-pilot	TCDS
1.10.	Maximum Occupants	The maximum number of passengers approved for emergency evacuation: MPSC: 136 / Cabin configuration: C-III-C / Modification: -- / Minimum CC: 3	TCDS
1.11.	Baggage/ Cargo Compartment	Fwd: Max. Loading 1614 kg Aft: Max. Loading 2131kg Rear (bulk): Max. Loading 1372 kg *Note: Even above Baggage/ Cargo Compartment certification basis was initially as Class D and only optional with Class C, but all manufactured now are with Class C.*	TCDS
1.12	Serial Numbers Eligibility	Not specified.	

(2) Kind of Operation

Item		Information	Reference
2.1	Visual Flight Rules(VFR)	Approved as basic type design	AFM
2.2	Instrument Flight Rules (IFR)	Approved as basic type design	AFM
2.3	Night and over-the-top	Approved as basic type design	AFM
2.4	Icing conditions	Approved as basic type design	AFM
2.5	Extended Overwater Operation	Ditching approved as basic type design. The aircraft has 2 HF as basic type design. *For life jacket, life raft and emergency locator transmitter (ELT) installation, it is the responsibility of the operators to show compliance and checked by Principal Inspector (PI).*	AFM
2.6	Extended Range Operation	Capable for ETOPS 120 min (MOD 36666) or 180 min (MOD 32009) when configured, maintained and operated in accordance with the ETOPS Configuration, Maintenance and Procedures (CMP) document.	TCDS

(3) Communication, Navigation and Surveillance

Item		Information	Reference
3.1	ATC transponder	2 mode S ATC Transponders installed.	AFM
3.2	Data Link Communication	An Air Traffic Services Unit (ATSU) is installed and has the capacity to host FANS A+ software for ATC data communications. The ATSU has the capacity for software, high speed dataloading and the capability for VHF data link mode 2 function.	AFM
3.3	Satellite Communication (SATCOM)	The optional “SATCOM Cockpit Voice for ATC” application has been demonstrated to comply with airworthiness requirements.	AFM
3.4	RVSM	The airplane is certified capable of RVSM operations	AFM
3.5	Performance Based Navigation	The airplane meets the performance and function criteria or these Required Navigation Performance (RNP)operations: - Approach: RNP AR, RNP APCH, Baro-VNAV - Terminal: RNAV 1, RNAV 2, RNP 1 - En-route: RNAV 1, RNAV 2, RNAV 5 - Oceanic and Remote Area: RNP 4	AFM
3.6	Low visibility operation	The airplane and the installed weather equipment to support low-weather minima operations to Category I/II/III	AFM

Item		Information	Reference
		Approach.	
3.7	Weather radar	WXR system with 1/2 transceivers is installed with predictive windshear activated	AFM
3.8	Terrain awareness and warning system（TAWS）	The Ground Proximity Warning System (GPWS) generates aural and visual warnings, when one of the following conditions occurs between radio heights 30 ft and 2 450 ft. - Mode 1: Excessive rate of descent - Mode 2: Excessive terrain closure rate - Mode 3: Altitude loss after takeoff, or go-around - Mode 4: Unsafe terrain clearance when not in landing configuration - Mode 5: Too far below glideslope.	AFM
3.9	Traffic Alert and Collision Avoidance equipment	TCAS 7.1 was introduced as aircraft standard since January 2013. TCAS 7.0 was installed before 2013.	AFM
3.10	Low altitude windshear system equipment	Weather Radar with Predictive WindShear detection function.	AFM
3.11	ADS-B	ATC Transponder provides ADS-B OUT parameters.	
3.12	HUD	Option HUD installation available.	

(4) Recording Equipment

Item		Information	Reference
4.1	Flight recorder	The aircraft is equipped with Flight Data Recorder (FDR) and Cockpit Voice Recorder (CVR). The CVR provides recording capability for ATC data link communication.	AFM
4.2	Quick Access Recorder	The QAR is a customer option. All relevant data can be stored by means of a PCMCIA card.	AFM

Section 2: Pilot Type Rating and Qualification Specification

2.1 Statement and Explanation

This section is the formal notification that the CAAC AEG has conducted Pilot Qualification Specification (PQS) evaluation of A318, A319, A320 and A321 series airplanes based on the EASA Operation Suitability Data (OSD) process and determination for flight crew, which specifies the pilot type rating, training, checking, and currency specifications for flight crews.

Hereby, the provisions in this section can be used as the basis for Chinese operators to develop their pilot qualification and training program for A318, A319, A320 and A321 series airplanes.

Alternate means of compliance to the requirements of CCAR 61, 91, 135 and 121, other than specified in the provisions of this section, must be approved by Flight Standards Department of the CAAC. If an alternate means of compliance is sought, operators will be required to show the CAAC that the proposed alternate means of compliance will provide an equivalent level of safety to the provisions of this section. This may be accomplished by submitting analysis, demonstrations, proof of concept testing, differences in documentation, and other supporting evidences to the CAAC.

Find EASA OSD here:
The A320 Operational Suitability Data (OSD) for Flight Crew (Refer to EASA approved document A320 OSD-Flight Crew, Doc reference No. **SA01RP1536744**) may request from Airbus point of contact: Ops-suitability.support@airbus.com, and also published on AirbusWorld website.

2.2 Pilot Type Rating and Licence Endorsement

Upon the PQS evaluation, the Pilot Type Rating for A318, A319, A320 and A321 series airplanes is listed as follows:

Manufacturer	Aircraft Type	Pilot Type Rating
AIRBUS	A318 (-111, 112, 121, 122)	A320
	A319 (-111, 112, 113, 114, 115, 131, 132, 133, 151N, 153N, 171N)	
	A320 (-211, 212, 214, 215, 216, 231, 232, 233, 251N, 252N, 271N, 272N, 253N, 273N)	
	A321 (-111, 112, 131, 211, 212, 213, 231, 232, 271N, 272N, 251N, 252N, 253N, 251NX, 252NX, 253NX, 271NX, 272NX.)	

Note: *Airbus Corporate Jet A319CJ covered by above A319 (-111, 112, 113, 114, 115, 131, 132, 133).*

Airbus Corporate Jet ACJ320 NEO is covered by A320-251N,271N,272N.

Airbus Corporate Jet ACJ319 NEO is covered by A319-153N.

License endorsement:

"A320" is the type rating designation for getting a type rating from any A318, A319, A320 and A321 series airplanes. Checking records should also be shown for the specific airplane series.

2.3 ODR and MDR

All of the Sample Operator Differences Requirements (ODR) tables are included in a specific document "A320 Family Operator Difference Requirement Tables and Training Areas of Special Emphasis Flight Crew", reference **SA01RP1712258**, which is OSD documents approved by EASA. This document includes the ODR tables between A320 Series and the ODR tables for modifications embodied on A320 family.

The ODR tables from other Airbus family aircraft types are provided in the document "Operator Difference Requirement Tables for Cross Crew Qualification to A320 Family Flight Crew" reference **SA01RP1911559**, which is OSD documents approved by EASA.

Note 1: *The difference level between* A318, A319, A320 and A321 series airplanes *are covered A318-319-320-321 ODR table, and may chose by operator depending on the need of mix fleet operation.*
Note 2: *All of the ODR Tables documents are available by request to AIRBUS and on AirbusWorld.*

Master Differences Requirements (MDR) tables for A318, A319, A320 and A321 series airplanes have been given as follows:

MDR Table

A320 Family		FROM AIRPLANE			
		A318	**A319**	**A320**	**A321**
TO AIRPLANE	**A318**	--	**B/A/B**	**B/A/B**	**B/A/B**
	A319	**B/A/B**	--	**B/A/A**	**B/A/B**
	A320	**B/A/B**	**B/A/B**	--	**B/A/B**
	A321	**B/A/B**	**B/A/B**	**B/A/B**	--

The MDR for Airbus family reference to CCQ/MFF MDR Table in bellow:

CCQ/MFF MDR Table

Airbus Family		FROM				
		A320	**A330**	**A340**	**A350**	**A380**
TO	**A320**	---	E/E/D	E/E/D	E/E/D	*E/E/D*

	A330	E/E/D	---	B/E/C	D/D/C	*TBD*
	A340	E/E/D	E/E/C	---	*TBD*	*TBD*
	A350	E/E/D	D/D/C	D/E/C	---	C/E/C
	A380	E/E/D	E/E/D	E/E/D	*E/E/D*	---

2.4 Specification for Training

The Type Rating Training Courses proposed by AIRBUS for A318, A319, A320 and A321 series airplanes are as follows and they have to be considered as the basis when developing pilot training program.

- A320 Flight Crew Training Program - A320 Transition Course General;
- A320 Flight Crew Training Program - CCQ A330/A340 TO A320 COURSE;
- A320 Flight Crew Training Program - CCQ A380 TO A320 COURSE
- A320 Flight Crew Training Program - A350 TO A320 CCQ

Note 1: *Due to only level B differences between A318, A319, A320, A321 series airplanes and for some specific configuration or operation, there are no difference training course developed and published for the difference training, but AIRBUS has provided the System Knowledge Module (SKM) by CBT or e-learning, and it is considered as one means of difference training to comply with the corresponding ODR tables.*

Note 2: *For the A319, a dedicated familiarization course has been set up to cover the differences between the A319 and the A319CJ.*

Note 3: *The above training courses are available from Airbus.*

CCQ

For CCQ course, the pilot prerequisite: qualified and current on the base aircraft with a minimum of 3 months and 150 flying hours on the base aircraft.

For pilots qualified in A330, A340，A380 or A350 low visibility operations when transitioning to the A320, a minimum of one low visibility approach and landing (as PF) should be included in CCQ course

HUD

The HUD training course was developed by Airbus and are approved by CAAC as below:

- CAAC Training Syllabus Special Authorization CATI (SA CAT I SKM CAAC, SA CAT I FCID CAAC)
- CAAC Training Syllabus CATII HUD-A320 (CAT II HUD SKM CAAC, CAT II HUD FCID CAAC)
- CAAC Training Syllabus Special Authorization CATII (SA CAT II SKM CAAC, SA CAT II FCID CAAC)
- CAAC Training Syllabus LVTO HUD- A320 A350 A380 (LVTO HUD SKM CAAC, LVTO HUD FCID CAAC)

The above training syllabus are available from Airbus.

Specifications for particular emphasis elements

Specifications for particular emphasis elements during training are covered by OSD document A320 OSD-Flight Crew, Doc reference No. SA01RP1536744.

More information for Training could refer to the EASA approved OSD documents.

2.5 Specification for Checking

As required by CCAR Part 61, 135 and 121.

Proficiency checks performed on any A320 series aircraft are valid for all variants, provided that the differences are addressed during recurrent training as per ODR tables. This does not relieve operators from line check requirements specific to route and airport qualification as required.

If qualified on the A330, A340 or A380, after CCQ, a full proficiency check on the A320 is required.

For operations of A320 and A330, A340 or A380 Mixed Fleet Flying, more information for checking could refer to the EASA approved OSD documents.

2.6 Specification for Currency

As required by CCAR Part 61, 135 and 121.

Take-off and Landing performed on any A320 family aircraft is valid for all variants.

For operations of A320 and A330, A340 or A380 Mixed Fleet Flying, more information for recent experience requirements could refer to the EASA approved OSD documents.

2.7 Specification for Flight Simulation Training Devices

The Flight Simulation Training Devices qualified in accordance with CCAR Part 60 are available for A320.

As only level B differences between A318, A319, A320, A321 series airplanes, proficiency checks can be conducted on any approved A320 family aircraft simulator (FFS).

Section 3: Maintenance License and Training Specification

3.1 Statement and Explanation

This section is the formal notification that the CAAC AEG has conducted Maintenance Personnel Qualification Specification (MPQS) Evaluation for A318, A319, A320 and A321 series airplanes based on the documentation provided by Airbus.

Thus, the provisions in this section can be used as the basis for Chinese operators to develop their maintenance personnel qualification and training program for A318, A319, A320 and A321 series airplanes.

Alternate means of compliance other than specified in the provisions of this section must be approved by Flight Standards Department of the CAAC.

3.2 Maintenance License Endorsement

Upon the AEG evaluation, the maintenance license endorsement for A318, A319, A320 and A321 series airplanes is listed as follows:

Manufacturer	Aircraft Type/Model	License Endorsement
AIRBUS	A318 (-111, 112, 121, 122)	A320
	A319 (-111, 112, 113, 114, 115, 131, 132, 133,151N, 153N,171N)	
	A320 (-211, 212, 214, 215, 216, 231, 232, 233, 251N, 252N, 271N, 272N, 253N, 273N)	
	A321 (-111, 112, 131, 211, 212, 213, 231, 232, 271N, 272N, 251N, 252N, 253N, 251NX, 252NX, 253NX, 271NX, 272NX.)	

Note 1: *Airbus Corporate Jet A319CJ covered by above A319 (-111, 112, 113, 114, 115, 131, 132, 133*,151N, 153N*).*

Airbus Corporate Jet ACJ320 NEO is covered by A320-251N,271N,272N.

Airbus Corporate Jet ACJ319 NEO is covered by A319-153N.

Note 2: *The endorsement of "A320" covers A318/A319/A320/A321 with CFMI CFM 56 series engines, A319/A320/A321 with IAE V2500 series engines, A320/A321 with PW1100 series engines, and A320/A321 with LEAP-1A engines, but excludes A318 with PW6100 series engines as not certified by CAAC Airworthiness Department.*

License endorsement:

"A320" is the type endorsement for any A318, A319, A320 and A321 series airplanes with any type of engines installation as stated above, but CCAR-147 training certificate with specific engine type should be shown and match the airframe and engines combination authorized as a maintenance certifying staff.

3.3 Specification for Training

The Maintenance Training Specification (MTS) proposed by Airbus for A318, A319, A320 and A321 series airplanes is as follows. Operators and maintenance training providers should consider this specification as a baseline when developing maintenance training program:

- A318/A319/A320/A321 Type Endorsement and Maintenance Training Specification, Issue 8 and as revised.

Note 1: *The above MTS document includes both theoretical and practical training for Full Type Training, Differences Type Training, and Recurrent Training.*

Note 2: *The Full Courses applicable to A318/A319/A320/A321 Airplanes with any of CFM 56, V2500, PW1100 and LEAP-1A engines, but must specify one type of engines for training and indicated in CCAR-147 training certificate.*

Note 3: *For the airplane options, it is the operator's responsibility to identify the details based on their actual configurations, the necessary differences training may be conducted by the operator or its contracted maintenance organization.*

Note 4: *The above MTS document is available by request to Airbus and on AirbusWorld.*

Section 4: Master Minimum Equipment List

4.1 Statement and Explanation

This section is the formal notification that CAAC AEG has conducted Master Minimum Equipment List (MMEL) evaluation for A318, A319, A320 and A321 series airplanes based on the A318/A319/A320/A321 MASTER MINIMUM EQUIPMENT LIST (MMEL) approved 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 published by EASA can be used as a basis for operators to develop their Minimum Equipment List (MEL) for the above stated A318, A319, A320 and A321 series airplanes.

Find EASA MMEL here:
The A318/A319/A320/A321 MMEL is available on AirbusWorld website and EASA approval reference included.

Note: *As Airbus MMEL Documentary Unit (DU) instead of traditional MMEL format, the operator should carefully study each DU identification (Ident.) and the "Applicable to" field that lists the aircraft (MSN) to which the DU applies, including Airbus Corporate Jet A319CJ.*

4.2 CAAC Supplemental

Not applicable.

Section 5: Scheduled Maintenance Requirements

5.1 Statement and Explanation

This section is the formal notification that CAAC AEG has conducted Scheduled Maintenance Requirements (SMR) evaluation for A318, A319, A320 and A321 series airplanes based on the Maintenance Review Board Report (MRBR) for Airbus A318/A319/A320/A321 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 for operators to develop their maintenance program for the above stated A318, A319, A320 and A321 series airplanes.

MRBR distribution:

The Airbus A318/A319/A320/A321 MRBR is available on AirbusWorld website, and EASA approval status could be find in following EASA website:

http://easa.europa.eu/easa-and-you/aircraft-products/manufacturer-scheduled-maintenance-requirements

Note: *There may some Temporary Revisions (TRs) for Airbus A318/A319/A320/A321 MRBR which may also need to be checked and referenced when operators to develop their maintenance program.*

5.2 CAAC Supplemental

Not applicable.

Section 6: Operational and Continued Airworthiness Instructions

6.1 Statement and Explanation:

This section is the formal notification that CAAC AEG has conducted evaluation of the operational and continued airworthiness instructions for A318, A319, A320 and A321 series airplanes and the related Airbus policies and procedures.

Hereby, the Operational and Continued Airworthiness Instructions documents listed below were found acceptable by the CAAC AEG that they give the necessary guidance for operating and maintaining the A318, A319, A320 and A321 series airplanes within the approved operating conditions and limitations.

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

Operational & Continued Airworthiness Instructions distribution:
The operational and continued airworthiness documents are available on AirbusWorld website.

6.2 List of Operational and Continued Airworthiness Instructions (A318/319/320/321)

Manual	Reference No.	Description	Revision/Date
FCOM	--	Flight Crew Operating Manual	As revised
FCTM	--	Flight Crew Training Manual	As revised
CCOM	--	Cabin Crew Operating Manual	As revised
QRH	--	Quick Reference Handbook	As revised
MPD	--	Maintenance Planning Document	As revised
AMM	--	Aircraft Maintenance Manual	As revised
ARM		Aircraft Recovery Manual	As revised
ASM	--	Aircraft Schematic Manual	As revised
AWL		Aircraft Wiring List	As revised
AWM	--	Aircraft Wiring Manual	As revised
CMM	--	Component Maintenance Manual	As revised
IPC	--	Illustrated Parts Catalog	As revised
NTM	--	Non Destructive Testing Manual	As revised
TSM	--	Trouble Shooting Manual	As revised
WBM	--	Weight & Balance Manual	As revised
TEM	--	Tool and Equipment Manual	As revised

Note 1: *The acceptance of the above manuals is not affected by change in document reference numbers*

due to customization.

Note 2: *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 A318, A319, A320 and A321 series airplanes operation.*

Note 3: *The following documents were approved during the type certification process for A318, A319, A320 and A321 series airplanes, and must be followed by Chinese operators for operation and maintenance within approved limitations:*

- *Airplane Flight Manual (AFM), including Master Configuration Deviation List.*
- *Airworthiness Limitations Section (ALS) including Safe Life Airworthiness Limitation Items, Damage Tolerant Airworthiness Limitation Items, Certification Maintenance Requirements, Ageing Systems Maintenance (ASM) limitations, Fuel Airworthiness Limitations.*
- *Structural Repair Manual (SRM)*
- *ETOPS Configuration, Maintenance, and Procedures (CMP)*

Note 4: *Some non-type-specific airplane manuals (e.g., Standard Manual, Consumable Materials List. etc.) may also need to be referenced by the operator. Please check AirbusWorld website for more information.*

Note 5: *Airbus issues SB and OEB as the need arises to quickly transmit technical and operational information.*

Note 6: *The Engine manuals are developed and distributed by the engine manufacturer; please reference the Engine TCDS for more information.*

Note 7: *Information of Component Maintenance Manual provided by vendors can be found in the AirbusWorld website.*

Section 7: Other Evaluation Items

7.1 Forward Observer Seat

The first observer seat is unchanged for the A320 series airplanes. The CAAC AEG considers the seat could be used for conducting enroute inspections as already approved.

Based on the compliance statement submitted by Airbus, CAAC AEG concluded that the seat referred to as the "third occupant seat" of Airbus A320 series airplanes is considered to have met the requirements of CAAC AC-121-28.

Modifications to the above facilities from the original specifications will need approval by the responsible Principal Inspector (PI) of the CAAC and requires submittal of the following to the CAAC: additional analysis, demonstrations, proof of concept testing, differences documentation, or other supporting evidence as required.

7.2 Flight Crew Sleeping Quarters

Not applicable.

7.3 Electronic Flight Bag

This paragraph is the formal statement that CAAC AEG has evaluated the “portable EFB” with software application “FlySmart-with Airbus for iPad” or “FlySmart with Airbus for Windows” of Airbus A320 series airplanes based on the EASA EFB Evaluation Report, and concluded that the compliance, at the manufacturer level, of the “portable EFB” for operational use in A320 series airplanes, but for operator to use the “portable EFB” 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: *The “portable EFB” can be either an EFB class 1 or class 2 depending on the solution chosen by the operator.*

Note 2: *Some newly produced A320 series airplanes (e.g. A320neo) may require updated to specific software versions.*

Note 3: *eQRH is a single software application for the Windows and iPad devices enabling the display of and interaction with the operator’s QRH manual, including for consultation of abnormal and emergency procedures. Airbus publishes the eQRH User and Compliance Manual (ref. X4611RP1705952), which contains important considerations and recommendations for the use of*

the eQRH application should take into account by operators.

Note 4: *The EFB administration, Airbus has developed documents L46PR0609952 (FlySmart Administrator Roles Definition), X46RP1200843 (FlySmart for iPad_Administration Workflows) and X060PR0916051 (FlySmart Windows Administration Workflows). Operators are responsible to appoint a suitable person as administrator and set up workflows accordingly.*

Note 5: *Flight Crew eLearning developed by Airbus to assist operators in its pilot training, and recommended to be followed.*

Note 6: *For Any new version on the EFB applications, EASA has authorized Airbus to imply a complementary evaluation to verify that it has no adverse effect.*

Note 7: *Above EFB related supporting documents, including EASA EFB Evaluation Report, are available by request to Airbus.*

Find EASA EFB Evaluation Report:
http://www.easa.europa.eu/document-library/operational-suitability-data

7. 4 Emergency Evacuation Demonstration

The A318, A319, A320 and A321 series airplanes already have large number of fleet in operation, and the A320neo has no change in cabin evacuation system.

A321NX airplane evacuation capability compliance was showed by using compatibility analysis and partial evacuation test instead of conducting a full-scale demonstration, and approved by EASA during type certification process.

The A320 OPERATIONAL SUITABILITY DATA CABIN CREW (Doc. SA01RP1534113) developed by Airbus and approved by EASA, it may be referenced by Chinese operators for ensure cabin safety and developing their cabin crew training program.

The ODR table for Cabin Crew identifies the differences pertinent to cabin crew in terms of aircraft configuration, aircraft systems and any design-related elements that would impact normal and/or emergency operations. And ODR table also provides the basis for development of customized cabin crew differences training by operators. For A320Famliy, all ODR tables for Cabin Crew are available in a single OSD document titled “A320Family Operator Difference Requirement Tables – Cabin Crew” and referenced SA01RP1800465.

The document titled “A320Family Cabin Aspects of Special Emphasis”, reference SA01RP1804598, includes the Cabin Aspects of Special Emphasis (CASE) identified during the A320Family type certification process.

More information about Cabin Crew could refer to A320 OSD-Cabin Crew document approved by EASA.

Find EASA OSD here:

The A320 Operational Suitability Data for Cabin Crew is available on AirbusWorld website or contact, SUPPORT, Ops-Suitability ops-suitability.support@airbus.com

Section 8: OEM Product Support Information

8.1 Flight Training

Airbus Training Services has CAAC approval for Flight Training in the following training facilities:

- Beijing Hua-Ou Aviation Training Centre
- Airbus Training Centre Europe in Toulouse
- Airbus Asia Training Centre in Singapore

Flight Training includes A300, A310, A320, A330, A340 and A350 type rating training.

Airbus operators can contact the assigned Airbus Customer Support Director for support related to flight training.

8.2 Maintenance Training

Airbus Training Services has CAAC approval for Part 147 Maintenance Training in the following training facilities:

- Beijing Hua-Ou Aviation Training Centre
- Airbus Training Centre Europe in Toulouse
- Airbus Maintenance Training Centre Europe in Hamburg

Maintenance Training includes A320, A330, A340, A350, A380 aircraft types for Maintenance Engineer type II and Avionics type II.

Airbus operators can contact the assigned Airbus Customer Support Director for support related to maintenance training.

8.3 Technical Publication

Airbus Technical Data Publication includes:

- The Flight Ops Data Package includes Flight Operations manuals: AFM, CCOM, FCOM, FCTM, QRH, MMEL, and WBM.
- The Maintenance Data Package encompasses the supply of several manuals, drawings and solutions. All deliverables included in the package are available on-line via AirbusWorld.

Whenever Airbus provides updates of Technical Data online, an e-mail notification is sent to all AirbusWorld users that have signed up to receive notifications.

Airbus operators can contact the assigned Airbus Customer Support Director for support related to technical publication.

Urgent Instructions are provided by an Alert Operators Transmission (AOT), which is a communication means to provide fleetwide urgent airworthiness approved Instructions to Customers.

Urgent Information are provided by an Operators Information Transmission (OIT), which is issued to communicate quickly to Customers in-service events or findings reported to Customer Support that have an implication on the Airbus fleet operations. There are four OIT categories (Incident/Advice, Advice, Service Bulletin, General Information).

8.4 First Aircraft Deliver Support

Airbus provides Technical support, such as Recommended Spare Parts List, Recommended Tool and equipment List for first delivery. Additional support or service information may be requested from the Customer Support Director.

8.5 Maintenance Support

Airbus provides approved repair solutions and other engineering solutions beyond the instructions published in the Airbus documentation. Additional support or service information may be requested from the Customer Support Director.

8.6 Quick Response of Service Issues

The AIRBUS Technical AOG Centre (AIRTAC) is part of Airbus Customer Services Engineering Support department. AIRTAC manage technical AOG requests for the whole Airbus fleet, 24/7, 365 days a year. The missions of AIRTAC are:

- To provide a technical solution to any technical Structure and/or System AOG questions/issues in the shortest possible timeframe,
- To be an entry point for notifying AIRBUS of aircraft accidents or incidents.

TechRequest is the preferred tool of communication to submit requests to AIRTAC. TechRequest is a collaborative platform used between customers and Airbus, and internally within Airbus. It enables all the relevant parties to properly track and handle AOG situations.

TechRequest allows the customer to categorize the queries urgency according to 3 levels: AOG, Critical or Regular. All new queries classified AOG in TechRequest are automatically routed to AIRTAC. All new queries classified Critical and Regular in TechRequest are automatically routed towards the concerned engineering & maintenance department.

Appendix: CAAC AEG Team and Point of Contact

A1: CAAC AEG Team for initial Evaluation

XUE Shijun	Director, AEG Division, Flight Standards Department
LI Xiaolei	Engineer, AEG Office, Civil Aviation Safety & Technology Center
LIAO Hongwei	Pilot, AEG Office, Civil Aviation Safety & Technology Center
HUANG Jun	Engineer, AEG Office, Shanghai Aircraft Airworthiness Certification Center

A2: CAAC AEG Team for Supplemental Evaluation February 2018

XUE Shijun	Director, AEG Division, Flight Standards Department
LI Xiaolei	Engineer, AEG Office, Civil Aviation Safety & Technology Center

A3: CAAC AEG Team for Supplemental Evaluation July 2019

WANG Jin	Director, AEG office, Civil Aviation Safety & Technology Center
LI Xiaolei	Engineer, AEG Office, Civil Aviation Safety & Technology Center
LIAO Hongwei	Pilot, AEG Office, Civil Aviation Safety & Technology Center
FAN Jingzhu	Deputy Director, AEG Office, Shanghai Aircraft Airworthiness Certification Center

A4: CAAC AEG Team for Supplemental Evaluation May 2021

WANG Jin	Deputy Director, AEG Division, Flight Standards Department
FAN Jingzhu	Deputy Director, AEG Office, Shanghai Aircraft Airworthiness Certification Center
Li Xiaolei	Engineer, AEG Office, Civil Aviation Safety & Technology Center
LIAO Hongwei	Pilot, AEG Office, Civil Aviation Safety & Technology Center

A5: CAAC AEG Team for Supplemental Evaluation 2023

WANG Jin	AEG Division, Flight Standards Department
Li Xiaolei	Aircraft Evaluation Center of CAAC

B1 & B2: Airbus Point of Contact

Regine Vadrot	Head of Training Operational Certification, Product Integrity
Caroline Keegan	Operational Suitability Manager
Stella Liu Hui	Government Affairs Director, Airbus (China)

B3: Airbus Point of Contact

DE KERGOMMEAUX Grégoire	Operational Suitability Manager
KEEGAN Caroline	Senior Airworthiness Advisor, Airbus China
CHENG Haoyang	Airworthiness & Certification, Airbus China

B4: Airbus Point of Contact

Pierre MIRAND	Ops Certification
CHENG Haoyang	Airworthiness & Certification, Airbus China

B5: Airbus Point of Contact

Pierre MIRAND	Ops Certification
CHENG Haoyang	Airworthiness & Certification, Airbus China