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Washington, DC

Flight Standardization Board Report

Revision: 8
Date: XX/XX/XXXX

Manufacturer Airbus SAS

Type Certificate Data Sheet (TCDS)	TCDS Identifier	Marketing Name	Pilot Type Rating
A46NM	A330-200 Series	A330-200	A-330
A46NM	A330-200 Freighter Series	A330-200F	A-330
A46NM	A330-300 Series	A330-300	A-330
A46NM	A330-900 Series	A330neo	A-330

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1. RECORD OF REVISIONS

Revision Number	Section(s)	Date
Original	All	10/02/1996
1	All	04/27/2001
2	All	10/26/2005
3	All	05/30/2012
4	1, 6, Appendix 1	07/31/2013
5	5, 6, Appendix 1	06/10/2016
6	All	04/17/2019
7	3, 5, 9.3, 10.2, Appendices 3 and 5	07/26/2019
8	All	XX/XX/XXXX

2. INTRODUCTION

The Aircraft Evaluation Division (AED) is responsible for working with aircraft manufacturers and modifiers, during the development and Federal Aviation Administration (FAA) certification of new and modified aircraft to determine:

- 1) The pilot type rating,
- 2) Flightcrew member training, checking, and currency requirements, and
- 3) Operational suitability.

This report lists those determinations for use by:

- 1) FAA employees who approve training programs,
- 2) FAA employees and designees who certify airmen, and
- 3) Aircraft operators and training providers, to assist them in developing their flightcrew member training, checking and currency.

3. HIGHLIGHTS OF CHANGE

The purpose of this revision is to update the Appendix 3, Differences Tables to a more comprehensive content structure and to update the Airbus Flightcrew Difference Requirement (DR) Table references. This revision converts this document to the new Flight Standardization Board Report (FSBR) format and complies with Section 508. Change bars are not included in this document because the entire report is revised and updated.

4. BACKGROUND

The Air Carrier Branch, AED (AFS-110) formed an Flight Standardization Board (FSB) that evaluated the Airbus A330 as defined in FAA Type Certificate Data Sheet (TCDS) #A46NM. The initial evaluation was conducted during October 1993, using the methods described in FAA Advisory Circular (AC) 120-53, Crew Qualification and Pilot Type Rating Requirements for Transport Category Aircraft Operated Under FAR Part 121. A subsequent evaluation was conducted from 1994 to 1995 to evaluate related aircraft differences training with the Airbus A320 and Airbus A340, as well as the differences training with the A330-

200 variation. This led to issuance of the original A320/A330/A340 combined FSB report, subsequently revised as needed.

In 2012, an additional evaluation was conducted to evaluate the differences training between the A330-200 and the A330-200F, leading to another revision of the A320/A330/A340 combined FSB report.

In October 2016, the A330 FSB conducted an evaluation of the related aircraft differences training from the A350 to the A330. The evaluation was conducted using the methods described in the current edition of AC 120-53, Guidance for Conducting and Use of Flight Standardization Board Evaluations.

In April 2018, the A330 FSB conducted an evaluation of the differences training between the A330-300 and the A330-900. The evaluation was conducted using the methods described in the current edition of AC 120-53.

5. ACRONYMS

• 14 CFR	Title 14 of the Code of Federal Regulations
• AC	Advisory Circular
• AC	Alternating Current
• ACFT	Aircraft
• ACS	Airman Certification Standards
• AED	Aircraft Evaluation Division
• AMU	Audio Management Unit
• AP	Autopilot
• ASCT	Approved Simulator Course of Training
• ATA	Air Transport Association
• A/THR	Auto/Thrust
• ATP	Airline Transport Pilot
• ATSAW	Airborne Traffic Situational Awareness
• AV	Audiovisual Presentation
• BCM	Backup Control Module
• BRK	Brakes
• CAT	Category
• CB	Circuit Breaker
• CFR	Code of Federal Regulations
• CG	Center of Gravity
• CONF	Configuration (Flaps/Slats)
• CPT	Cockpit Procedures Trainer
• CVR	Cockpit Voice Recorder
• DC	Direct Current
• DR	Difference Requirement
• DT	Differences Table
• EASA	European Union Aviation Safety Agency

• ECAM	Electronic Centralized Aircraft Monitoring
• ECL	Electronic Checklist
• ECP	ECAM Control Panel
• EFIS	Electronic Flight Instrument System
• EMER ELEC	Emergency Electrical
• ESS	Essential Bus
• FAA	Federal Aviation Administration
• FAC	Flight Augmentation Computer
• FCU	Flight Control Unit
• FD	Flight Director
• FE	Flight Envelope
• FFS	Full Flight Simulator
• FG	Flight Guidance
• FLT CHAR	Flight Characteristics
• FM	Flight Management
• FMA	Flight Mode Annunciator
• FMS	Flight Management System
• FSB	Flight Standardization Board
• FSTD	Flight Simulation Training Device
• FTD	Flight Training Device
• GBAS	Ground-Based Augmentation System
• GLS	GBAS Landing System
• GPWS	Ground Proximity Warning System
• HO	Handout
• HUD	Head-Up Display
• ICBI	Interactive Computer-Based Instruction
• ILS	Instrument Landing System
• KCCU	Keyboard Cursor Control Unit
• LOC	Localizer
• LOFT	Line-Oriented Flight Training
• MAG	Magnetic
• MCDU	Multipurpose Control and Display Unit
• MDCC	Main Deck Cargo Compartment
• MDR	Master Differences Requirements
• MEL	Minimum Equipment List
• MLG	Main Landing Gear
• MSN	Model Serial Number
• NAS	National Airspace System
• NWS	Nose Wheel Steering
• OE	Operating Experience
• OEI	One-Engine Inoperative
• OIS	Onboard Information System
• pb sw	Push Button Switch
• PC	Proficiency Check

- PF Pilot Flying
- PIC Pilot in Command
- PM Pilot Monitoring
- POI Principal Operations Inspector
- PRESS Pressurization
- PROC CHNG Procedural Change
- PSCU Proximity Switch Control Unit
- PTT Part Task Trainer
- QRH Quick Reference Handbook
- RTO Rejected Takeoff
- SIC Second in Command
- SRS Speed Reference System
- SU Stand-Up Instruction
- TASE Training Areas of Special Emphasis
- TC Type Certificate
- TCAS Traffic Alert and Collision Avoidance System
- TCBI Tutorial Computer-Based Instruction
- TCDS Type Certificate Data Sheet
- THS Trimmable Horizontal Stabilizer
- V_1 Takeoff Decision Speed
- V_{LS} Lowest Selectable Speed
- V_R Rotation Speed
- VENT Ventilation

6. DEFINITIONS

These definitions are for the purposes of this report only.

6.1 Base Aircraft. An aircraft identified for use as a reference to compare differences with another aircraft.

6.2 Current. A crewmember meets all requirements to operate the aircraft under the applicable operating part.

6.3 Differences Tables. Describes the differences between a pair of related aircraft, and the minimum levels operators must use to conduct differences training and checking of flightcrew members. Differences levels range from A to E.

6.4 Master Differences Requirements (MDR). Specifies the minimum levels of training and checking required between a pair of related aircraft, derived from the highest level in the Differences Tables.

6.5 Mixed Fleet Flying. The operation of a base aircraft and one or more related aircraft for which credit may be taken for training, checking, and currency events.

- 6.6 Operational Evaluation.** The AED process to determine pilot type rating, minimum flightcrew member training, checking and currency requirements, and unique or special airman certification requirements (e.g., specific flight characteristics, no-flap landing).
- 6.7 Operational Suitability.** The AED determination that an aircraft or system may be used in the National Airspace System (NAS) and meets the applicable operational regulations (e.g., Title 14 of the Code of Federal Regulations (14 CFR) parts 91, 121, 133, and 135).
- 6.8 Qualified.** A flightcrew member holds the appropriate airman certificate and ratings as required by the applicable operating part.
- 6.9 Related Aircraft.** Any two or more aircraft of the same make with either the same or different type certificates (TC) that have been demonstrated and determined by the Administrator to have commonality.
- 6.10 Seat-Dependent Tasks.** Maneuvers or procedures using controls that are accessible or operable from only one flightcrew member seat.
- 6.11 Special Emphasis Area.** A training requirement unique to the aircraft, based on a system, procedure, or maneuver, which requires additional highlighting during training. It may also require additional training time, specialized flight simulation training devices (FSTD) or training equipment.
- 6.12 Specific Flight Characteristics.** A maneuver or procedure with unique handling or performance characteristics that the FSB has determined must be checked.

7. PILOT TYPE RATING

- 7.1 Type Rating.** The Airbus A330-200, A330-200 Freighter, A330-300, and A330-900 type rating designation is A-330.
- 7.2 Common Type Ratings.** In accordance with the provisions of FAA Order 8900.1, Flight Standards Information Management System, and the current edition of AC 120-53, the A-350 type rating and the A-330 type rating are separate type ratings that have been determined to be common.
- 7.3 Military Equivalent Designations.** Military aircraft that qualify for the A-330 type rating can be found on the faa.gov website under “Pilots & Airmen,” “Airmen Certification,” “Pilot Certificate Aircraft Type Designations.” This webpage is kept up-to-date and can be found at <https://registry.faa.gov/TypeRatings/>.

8. RELATED AIRCRAFT

- 8.1 Related Aircraft on Same TCDS.** The A330-200, A330-200 Freighter, A330-300, and A330-900 Series are related aircraft on the same TCDS.

NOTE: All references to the A330-200 Freighter Series aircraft are hereafter in this report referred to as A330-200F, unless otherwise stated.

8.1 Related Aircraft on Different TCDS.

- The A318 is related to the A330.*
- The A319 is related to the A330.*
- The A320 is related to the A330.*
- The A321 is related to the A330.*
- The A340 is related to the A330.
- The A350 is related to the A330.

* All references to the A318, A319, A320, or A321 are hereafter in this report referred to as A320 or A320 Family, unless otherwise stated.

9. PILOT TRAINING

9.1 Airman Experience. Airmen receiving initial A330 training should have previous operational experience in multi-engine transport turbojet aircraft, transport category avionics (e.g., EFIS, and FMS). Pilots without this experience may require additional training.

To receive A330 transition training (related aircraft differences training), A320, A340, and A350 pilots must have specific minimum pre-qualification requirements as follows:

Case 1. For transition from the A320 to the A330:

- Qualified and current in the A320, and
- A minimum of 300 hours PIC and/or SIC line experience on the A320, or
- Specific line experience approved by the POI in coordination with the Air Carrier Branch, AED (AFS-110).

Case 2. For transition from the A340 to the A330:

- Qualified and current in the A340.

Case 3. For transition from the A350 to the A330:

- Qualified and current in the A350.

NOTE: Airmen qualified, but no longer current in the base aircraft (A320, A340, or A350, as appropriate) must reestablish currency in the base aircraft before beginning a transition course to the A330.

9.2 Special Emphasis Areas.

9.2.1 Pilots must receive special emphasis on the following areas during initial, upgrade, transition, differences, and recurrent ground training:

- a) Flight characteristics and the degree of flight envelope protection provided by the various flight control laws for both pitch and roll control, and the normal

events which result in changes in the various modes within these laws for the various phases of flight.

- b) Use of the sidestick controller, and the relationship between the two sidestick controllers, and transfer of controls.
- c) Mode awareness and mode transitions (e.g., FMA, FCU, configuration), regardless of whether initiated by the flightcrew or by a system response to design logic.
- d) Normal, alternate, and emergency braking systems and the means to transition from one system to the other.
- e) When utilized, awareness and knowledge of Continuous Descent Approach concepts (e.g., FMS vertical profile principles, DES guidance modes, and use of FLAP 1/2 pseudo waypoints).

9.2.2 Pilots must receive special emphasis on the following areas during A330-200F initial, upgrade, transition, differences, and recurrent ground training:

- a) Knowledge of appropriate procedures following cabin depressurization regarding the survey of the courier area and the communication with occupants.
- b) Knowledge of appropriate emergency procedures following a main deck cargo compartment smoke alert regarding the fire protection and commanded depressurization.

9.2.3 Pilots must receive special emphasis on, and perform the following areas during initial, upgrade, transition, differences, and recurrent flight training:

- a) Flight characteristics and the degree of flight envelope protection provided by the various flight control laws for both pitch and roll control, and the normal events which result in changes in the various modes within these laws for the various phases of flight.
- b) Use of the sidestick controller, the relationship between the two sidestick controllers, and transfer of controls.
- c) Mode awareness and mode transitions (e.g., FMA, FCU, configuration), regardless of whether initiated by the flightcrew or by a system response to design logic.
- d) Automatic thrust control system, including thrust lever position, use of speed trend information, and the FMA/FCU annunciations related to the various modes of normal/abnormal operation.

- e) Steep turns trained in normal law by intentional exceedance of roll stability thresholds using the sidestick controller to achieve the desired bank angle.
- f) Airplane upset recovery in modes other than normal law.
- g) Stall prevention and recovery from an impending stall trained in normal, alternate, and direct law.

NOTE: Flight envelope protections are designed to prevent an aircraft from stalling in normal law; however, the aircraft may experience buffet indicative of an impending stall. In alternate and direct law, the aircraft can stall.

- h) Manual TCAS procedure used in the event of an AP/FD TCAS (when utilized) failure.

9.3 Specific Flight Characteristics. Maneuvers/procedures required to be checked as referenced in the ATP and Type Rating for Airplane Category ACS and/or 14 CFR part 121 appendix F.

There are no specific flight characteristics.

9.4 Seat-Dependent Tasks. There are no seat-dependent tasks.

9.5 Regulatory Training Requirements Which Are Not Applicable to the A330.

9.5.1 Part 121, Appendix E:

- a) Tuck and Mach buffet. A330 does not exhibit any Mach tuck tendency and therefore no training is required for this maneuver. Demonstration of the aircraft's overspeed protection capabilities are an acceptable substitution.
- b) Operation of systems and controls at the Flight Engineer (FE) station. The FE is not required for the operation of the aircraft.
- c) Recovery from specific flight characteristics that are peculiar to the airplane type. No specific flight characteristics are identified for the A330.

9.6 Flight Simulation Training Devices (FSTD). There are no specific systems, procedures, or maneuvers that are unique to the A330 that require a specific FSTD for training.

9.7 Training Equipment. There are no specific systems or procedures that are unique to the A330 that require specific training equipment.

9.8 Differences Training Between Related Aircraft. See Appendix 2, Master Differences Requirements (MDR) Table, and Appendix 3, Differences Tables.

9.8.1 Differences Training - Same TCDS:

- Pilots must receive differences training between the A330-200, A330-200F, A330-300, and A330-900 Series aircraft.

9.8.2 Related Aircraft Differences Training - Different TCDS:

- Pilots must receive related aircraft differences training between the A320 and A330.
- Pilots must receive related aircraft differences training between the A340 and A330.
- Pilots must receive related aircraft differences training between the A350 and A330.

9.9 Recurrent Training for Designated Related Aircraft in Mixed Fleet Operations - Different TCDS. For mixed fleet flying operations of designated related aircraft on different TCDS, an alternating plan for recurrent flight training and checking may be developed. See Appendix 6, Related Aircraft on Different TCDS Training and Checking Plans for Mixed Fleet Flying Operations, for examples.

10. PILOT CHECKING

10.1 Landing from a No-Flap or Nonstandard Flap Approach. The probability of flap extension failure on the A330 is not extremely remote due to system design. Therefore, demonstration of a no-flap approach and landing during pilot certification or a 14 CFR part 121, § 121.441 proficiency check is required. Refer to FAA Order 8900.1, Volume 5, Airman Certification, when the test or check conducted in an aircraft versus an FFS.

The control laws to be used for a no-flap landing are the control laws dictated by the particular failure condition simulated (e.g., by a dual hydraulic failure). Due to system logic, if the maneuver is conducted in an aircraft, a CONF 1 approach to a missed approach will be used. If in the aircraft, systems must not be deactivated to create the failed condition. If the maneuver is conducted in an FFS, the approach should be continued to a landing.

10.2 Specific Flight Characteristics. Maneuvers/procedures required to be checked as referenced in the ATP and Type Rating for Airplane Category ACS and/or 14 CFR part 121 appendix F.

There are no specific flight characteristics.

10.3 Seat-Dependent Tasks. There are no seat-dependent tasks.

10.4 Other Checking Items. Not applicable.

10.5 Flight Simulation Training Devices (FSTD). There are no specific systems or procedures that are unique to the A330 that require a specific FSTDs for checking.

10.6 Equipment. There are no specific systems or procedures that are unique to the A330 that require specific equipment.

10.7 Differences Checking Between Related Aircraft. See Appendices 2 and 3.

10.7.1 Differences checking between related aircraft on same TCDS:

- There are no differences checking required between the A330-200, A330-200F, A330-300, and A330-900.

10.7.2 Differences checking between related aircraft on different TCDS:

- Pilots must receive differences checking between the A320 and A330. The level of checking is specified in the relevant Differences Table.
- Pilots must receive differences checking between the A330 and A340. The level of checking is specified in the relevant Differences Tables.
- Pilots must receive differences checking between the A330 and A350. The level of checking is specified in the relevant Differences Tables.

NOTE: Examples of related aircraft differences checks after related aircraft differences training are included in Appendix 5, Type Rating Checks After Related Aircraft Differences Training.

10.8 Recurrent Checking for Designated Related Aircraft in Mixed Fleet Operations - Different TCDS. For mixed fleet flying operations of designated related aircraft on different TCDS, an alternating plan for recurrent training and checking may be developed. See Appendix 6, Related Aircraft on Different TCDS Training and Checking Plans for Mixed Fleet Flying Operations, for examples.

11. PILOT CURRENCY

There are no additional currency requirements for either the A330-200, A330-200F, A330-300, or A330-900 other than those already specified in 14 CFR part 61 or 121, as applicable. Meeting the currency requirements in either the A330-200, A330-200F, A330-300, or A330-900 satisfies all currency requirements for either of the other aircraft.

11.1 Differences Currency Between Related Aircraft on Different TCDS.

11.1.1 Mixed Fleet Flying on A320 and A330.

Pilots must receive differences currency for mixed fleet flying of the A320 and A330 in the relevant airplanes or approved FFS every 90 days as follows:

- a) Three takeoffs total as pilot flying (PF):
 - In either the A320 or A330, or
 - In a combination of the A320 and A330, and

- b) Three landings total as PF:
 - One manually flown in the A320,
 - One manually flown in the A330,
 - One manually flown or AP flown in either the A320 or A330, and
- c) Two line segments (see subparagraph 11.1.5 for line segment currency criteria):
 - One completed in the A320, and
 - One completed in the A330.

11.1.2 Mixed Fleet Flying on A330 and A340.

Pilots must receive differences currency for mixed fleet flying of the A330 and A340 in the relevant airplanes or approved FFS every 90 days as follows:

- a) Three takeoffs total as PF:
 - In either the A330 or A340, or
 - In a combination of the A330 and A340, and
- b) Three landings total as PF, one of which is manually flown:
 - In either the A330 or A340.

11.1.3 Mixed Fleet Flying on A330 and A350.

Pilots must receive differences currency for mixed fleet flying of the A330 and A350 in the relevant airplanes or approved FFS every 90 days as follows:

- a) Three takeoffs total as PF:
 - In either the A330 or A350, or
 - In a combination of the A330 and A350, and
- b) Three landings total as PF, one of which is manually flown:
 - In either the A330 or A350, and
- c) Two line segments (see subparagraph 11.1.5 for line segment currency criteria):
 - One completed in the A330, and
 - One completed in the A350.

NOTE: Because of numerous cockpit systems and procedures differences between the A330 and the A350 aircraft (e.g., the onboard information system (OIS), FMS, electronic checklist (ECL), keyboard cursor control unit (KCCU), cockpit setup, and preflight procedures), the FSB has recommended that line segment currency is to be maintained as per this section.

11.1.4 Mixed Fleet Flying on A320, A330, and A340.

Pilots must receive differences currency for mixed fleet flying of the A320, A330, and A340 in the relevant airplanes or approved FFS every 90 days as follows:

- a) Three takeoffs total as PF:
 - In either the A320, A330, or A340, or
 - In a combination of the A320, A330, and A340, and
- b) Three landings total as PF:
 - One manually flown in the A320,
 - One manually flown in the A330, and
 - One manually flown in the A340, and
- c) Two line segments (see subparagraph 11.1.5 for line segment currency criteria):
 - One completed in the A320, and
 - One completed in the A330 or A340.

11.1.5 Line Segment Currency.

For the purposes of this report, line segment currency consists of the completion of all procedural phases of a flight from cockpit preflight through postflight but does not require flight maneuvers such as takeoff and landing. A pilot performing the duties of either required flightcrew member position may count the performance of those duties toward the completion of a line segment. A line segment may be completed in one flight, or by cumulatively completing the necessary phases in more than one flight. A line segment may also be completed in a qualified FFS or FTD, Level 5 or higher, using a line flight scenario where all segment procedural phases are completed.

11.2 Related Aircraft Operating Experience (OE) - Different TCDS. Separate OE applies to the A330 and other designated related aircraft (e.g., an A330 and A340 aircraft). For FSB OE recommendations, see Appendix 4, Qualification and Currency Plans for Related Aircraft Transition.

12. OPERATIONAL SUITABILITY

The A330-200, A330-200F, A330-300, and A330-900 are operationally suitable for operations under 14 CFR parts 91 and 121. The FSB determined operational compliance by conducting an evaluation of aircraft N670UW (MSN315). The list of operating rules evaluated is on file at the Air Carrier Branch, AED (AFS-110).

13. MISCELLANEOUS

13.1 Observer Seat. The A330 center observer seat (referred to as the third occupant seat), as installed by TCDS #A46NM, has been evaluated and determined to meet requirements of 14 CFR § 121.581(a) and the current edition of FAA AC 120-83, Flight Deck Observer Seat and Associated Equipment, for use by the FAA for the purpose of conducting enroute inspections. The third occupant seat is considered as the primary observer seat.

13.2 Aircraft Approach Category. (Reference 14 CFR part 97, § 97.3):

The A330 is considered Category C aircraft for the purposes of determining “straight-in landing weather minima.”

13.3 Emergency Evacuation. An emergency evacuation demonstration was successfully completed on the A330-200 Series and A330-300 Series by analysis based on a similar configuration and passenger capacity as is approved for the A300. These demonstrations were conducted in compliance with 14 CFR part 25, § 25.803(c) and were thus credited compliance with 14 CFR § 121.291(a). Refer to TCDS #A46NM for the maximum passenger seating capacity certified for various passenger door configurations.

NOTE: The A330-200F has a maximum capacity of 12 supernumeraries in the cabin area. An emergency evacuation demonstration is not a requirement under 14 CFR part 121 for this aircraft configuration.

13.4 Ditching Demonstration. A full-scale ditching demonstration, in accordance with 14 CFR part 121 and FAA Order 8900.1, has been completed.

13.5 Normal Landing Flaps. The A330 normal “final landing flap settings” per 14 CFR § 91.126(c) are CONF 3 and CONF FULL.

APPENDIX 1. DIFFERENCES LEGEND

Training Differences Legend

Differences Level	Type	Training Method Examples	Conditions
A	Self-Instruction	<ul style="list-style-type: none"> Operating manual revision (handout (HO)) Flightcrew operating bulletin (HO) 	<ul style="list-style-type: none"> Crew has already demonstrated understanding on base aircraft (e.g., updated version of engine). Minor or no procedural changes required. No safety impact if information is not reviewed or is forgotten (e.g., different engine vibration damping mount). Once called to attention of crew, the difference is self-evident.
B	Aided Instruction	<ul style="list-style-type: none"> Audiovisual presentation (AV) Tutorial computer-based instruction (TCBI) Stand-up instruction (SU) 	<ul style="list-style-type: none"> Systems are functionally similar. Crew understanding required. Issues need emphasis. Standard methods of presentation required.
C	Systems Devices	<ul style="list-style-type: none"> Interactive (full-task) computer-based instruction (ICBI) Cockpit Procedures Trainers (CPT) Part task trainers (PTT) Level 4 or 5 flight training device (FTD 4-5) 	<ul style="list-style-type: none"> Training can only be accomplished through systems training devices. Training objectives focus on mastering individual systems, procedures, or tasks versus highly integrated flight operations or “real-time” operations. Training devices are required to assure attainment or retention of crew skills to accomplish more complex tasks usually related to aircraft systems.
D	Maneuvers Devices	<ul style="list-style-type: none"> Level 6 or 7 flight training device (FTD 6-7) Level A or B full flight simulator (FFS A-B) 	<ul style="list-style-type: none"> Training can only be accomplished in flight maneuver devices in a real-time environment. Training requires mastery of interrelated skills versus individual skills. Motion, visual, control-loading, and specific environmental conditions may be required.
E	Level C/D FFS or Aircraft	<ul style="list-style-type: none"> Level C or D full flight simulator (FFS C-D) Aircraft (ACFT) 	<ul style="list-style-type: none"> Motion, visual, control-loading, audio, and specific environmental conditions are required. Significant full-task differences that require a high fidelity environment. Usually correlates with significant differences in handling qualities.

Checking Differences Legend

Differences Level	Checking Method Examples	Conditions
A	None	None
B	<ul style="list-style-type: none"> • Oral or written exam • Tutorial computer-based instruction (TCBI) self-test 	Individual systems or related groups of systems.
C	<ul style="list-style-type: none"> • Interactive (full-task) computer-based instruction (ICBI) • Cockpit Procedures Trainers (CPT) • Part task trainers (PTT) • Level 4 or 5 flight training device (FTD 4-5) 	<ul style="list-style-type: none"> • Checking can only be accomplished using systems devices. • Checking objectives focus on mastering individual systems, procedures, or tasks.
D	<ul style="list-style-type: none"> • Level 6 or 7 flight training device (FTD 6-7) • Level A or B full flight simulator (FFS A-B) 	<ul style="list-style-type: none"> • Checking can only be accomplished in flight maneuver devices in a real-time environment. • Checking requires mastery of interrelated skills versus individual skills. • Motion, visual, control-loading, and specific environmental conditions may be required.
E	<ul style="list-style-type: none"> • Level C or D full flight simulator (FFS C-D) • Aircraft (ACFT) 	Significant full-task differences that require a high fidelity environment.

APPENDIX 2. MASTER DIFFERENCES REQUIREMENTS (MDR) TABLE

These are the minimum levels of training and checking required, derived from the highest level in the Differences Tables in Appendix 3. Differences levels are arranged as training/checking.

Related Aircraft MDR Table – Same TCDS

To Related Aircraft ↓	From Base Aircraft →	A330-200	A330-200F	A330-300	A330-900
A330-200		Not applicable	Not evaluated	B/A	Not evaluated
A330-200F		B/A	Not applicable	Not evaluated	Not evaluated
A330-300		B/A	Not evaluated	Not applicable	Not evaluated
A330-900		Not evaluated	Not evaluated	B/A	Not applicable

Related Aircraft MDR Table – Different TCDS

To Related Aircraft ↓	From Base Aircraft →	A320	A330	A340	A350
A330		E/E	(1) Same TCDS	C/C	D/D

NOTE: (1) See Related Aircraft MDR Table – Same TCDS above.

APPENDIX 3. DIFFERENCES TABLES

This Design Differences table, from the Airbus A330-200 Series to the A330-200 Freighter Series, was developed by the Flight Standardization Board (FSB) based on the detailed Difference Requirement (DR) Tables proposed by Airbus. The FSB evaluation took place in January 2010. The Differences Table lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

NOTE: The differences Remarks are very generally stated. For a detailed overview of item-specific training/checking differences, refer to the Airbus Difference Requirement (DR) Tables as referenced at the end of this appendix.

FROM BASE AIRCRAFT: A330-200 TO RELATED AIRCRAFT: A330-200F	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	General	Dimensions.	No	No	A	A
	Cabin	Maximum passenger capacities.	No	No	A	A
	Cargo	Cargo compartments: Available payload.	No	No	A	A
	Limitations	Weight. CG limits. APU start altitude. Passenger briefing.	No	Yes	A	A

FROM BASE AIRCRAFT: A330-200 TO RELATED AIRCRAFT: A330-200F	DESIGN Systems	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 20 Airframe	Nose landing gear: Bay, fairing, and doors.	No	No	A	A
	ATA 21 Air Conditioning	Ventilation.	No	No	B	A
	ATA 21 Air Conditioning	Controls and indicating.	No	Yes	B	A
	ATA 23 Communications	Controls and indicating.	No	No	B	A
	ATA 25 Equipment/Furnishings	General: Cabin configuration, doors. Controls and indicating: MDCC aural alerts and lighted signs.	No	No	B	A
	ATA 26 Fire Protection	General: Smoke detection, equipment. Controls and indicating.	No	Yes	B	A
	ATA 28 Fuel	Architecture. Controls and indicating.	No	No	B	A
	ATA 33 Lights	Controls and indicating.	No	No	A	A

FROM BASE AIRCRAFT: A330-200 TO RELATED AIRCRAFT: A330-200F	DESIGN Systems	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 35 Oxygen	Architecture. Controls and indicating.	No	No	B	A
	ATA 38 Water/Waste	Architecture. Controls and indicating.	No	No	A	A
	ATA 52 Doors	General architecture. Controls and indicating.	No	No	A	A
	Engines	General architecture. Power ratings. Controls and indicating.	No	No	B	A

This Maneuver Differences Table, from the Airbus A330-200 Series to the A330-200 Freighter Series, was developed by the FSB based on the detailed DR Tables proposed by Airbus. The FSB evaluation took place in January 2010. The Differences Table lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

NOTE 1: The differences Remarks are very generally stated. For a more detailed overview of item-specific training/checking differences, refer to the Airbus Difference Requirement (DR) Tables as referenced at the end of this appendix.

NOTE 2: Criteria used to identify differences, as indicated in the Maneuver Differences Table, does not take into consideration training differences that may exist between related aircraft for maneuvers required by Title 14 of the Code of Federal Regulations (14 CFR) part 121, § 121.423.

FROM BASE AIRCRAFT: A330-200 TO RELATED AIRCRAFT: A330-200F	MANEUVER Normal Operations	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	Before Start	Doors.	No	No	A	A
	Engine Start	Engine controls and indication.	No	Yes	B	A
	Taxi	Nose landing gear architecture.	No	No	A	A
	Takeoff	Controls and indication, thrust controls.	No	Yes	B	A
	Parking	Doors.	No	Yes	A	A

FROM BASE AIRCRAFT: A330-200 TO RELATED AIRCRAFT: A330-200F	MANEUVER Abnormal Operations	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	Miscellaneous	Cabin occupant communications.	No	No	A	A
	ATA 26 Fire Protection	Smoke and fumes procedures.	No	Yes	A	A
	ATA 52 Doors	DOOR main cargo (in flight).	No	Yes	A	A

This Design Differences Table, from the Airbus A330-200 Series to the A330-300 Series, was developed by the FSB based on the detailed DR Tables proposed by Airbus. The Differences Table lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

NOTE: The differences Remarks are very generally stated. For a detailed overview of item-specific training/checking differences, refer to the Airbus Difference Requirement (DR) Tables as referenced at the end of this appendix.

FROM BASE AIRCRAFT: A330-200 TO RELATED AIRCRAFT: A330-300	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	General	Dimensions.	No	No	A	A
	Cabin	Maximum passenger capacities.	No	No	A	A
	Limitations	Weights. Center of gravity envelope. Speeds.	Yes	No	A	A

FROM BASE AIRCRAFT: A330-200 TO RELATED AIRCRAFT: A330-300	DESIGN Systems	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 27 Flight Controls	Rudder surface	No	No	A	A
	ATA 70 Engines	General architecture. Power ratings. Controls and indicating.	No	No	B	A

This Maneuver Differences Table, from the Airbus A330-200 Series to the A330-300 Series, was developed by the FSB based on the detailed DR Tables proposed by Airbus. The Differences Table lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

NOTE 1: The differences Remarks are very generally stated. For a more detailed overview of item-specific training/checking differences, refer to the Difference Requirement (DR) Tables as referenced at the end of this appendix.

NOTE 2: Criteria used to identify differences, as indicated in the Maneuver Differences Table, does not take into consideration training differences that may exist between related aircraft for maneuvers required by Title 14 of the Code of Federal Regulations (14 CFR) part 121, § 121.423.

FROM BASE AIRCRAFT: A330-200 TO RELATED AIRCRAFT: A330-300	MANEUVER Normal Operations	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	Engine Start	Engine controls and indications.	No	Yes	B	A
	Taxi	Nose landing gear architecture.	No	No	A	A
	Takeoff	Controls and indication, thrust controls.	No	Yes	B	A

This Design Differences Table, from the Airbus A330-300 Series to the A330-900 Series, was developed by the FSB based on the detailed DR Tables proposed by Airbus. The Differences Table lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

NOTE: The differences Remarks are very generally stated. For a detailed overview of item-specific training/checking differences, refer to the Airbus Difference Requirement (DR) Tables as referenced at the end of this appendix.

FROM BASE AIRCRAFT: A330-300 TO RELATED AIRCRAFT: A330-900	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	General	Dimensions.	No	No	A	A
	Cabin	Maximum passenger capacities.	No	No	A	A
	Limitations	General. Weight. Crosswind and tailwind.	No	No	A	A

FROM BASE AIRCRAFT: A330-300 TO RELATED AIRCRAFT: A330-900	DESIGN Systems	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 28 Fuel	Center tank. Fuel tank inerting system.	No	No	A	A
	ATA 30 Ice and Rain Protection	General. Anti-ice valve.	No	No	A	A
	ATA 36 Pneumatic	General Architecture.	No	No	A	A
	ATA 70 Engines	General architecture. Controls and indicating. Limitations.	No	No	B	A

This Maneuver Differences Table, from the Airbus A330-300 Series to the A330-900 Series, was developed by the FSB based on the detailed DR Tables proposed by Airbus. The Differences Table lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

NOTE 1: The differences Remarks are very generally stated. For a more detailed overview of item-specific training/checking differences, refer to the Airbus Difference Requirement (DR) Tables as referenced at the end of this appendix.

NOTE 2: Criteria used to identify differences, as indicated in the Maneuver Differences Table, does not take into consideration training differences that may exist between related aircraft for maneuvers required by Title 14 of the Code of Federal Regulations (14 CFR) part 121, § 121.423.

FROM BASE AIRCRAFT: A330-300 TO RELATED AIRCRAFT: A330-900	MANEUVER Normal Operations	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	General	Manual continuous ignition.	No	Yes	A	A
	Preparation	Exterior walkaround.	No	Yes	B	A
	Engine Start	After start.	No	Yes	A	A
	Takeoff	Controls and indication, thrust settings.	No	Yes	A	A
	Parking	Engine cool-down.	No	Yes	A	A
	Supplementary Procedure	Manual engine start.	No	Yes	A	A

FROM BASE AIRCRAFT: A330-300 TO RELATED AIRCRAFT: A330-900	MANEUVER Abnormal Operations	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 70 Engines	Engine controls and indications.	No	Yes	A	A

This Design Differences table, from the Airbus A320 to the A330, was developed by the FSB based on the detailed DR Tables proposed by Airbus. The Differences Table lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

NOTE 1: The differences Remarks are very generally stated. For a detailed overview of item-specific training/checking differences, refer to the Airbus Difference Requirement (DR) Tables as referenced at the end of this appendix.

NOTE 2: “Yes (P)” entered in the “FLT CHAR” (Flight Characteristics) column indicates that the difference in flight characteristics only pertains to performance and not handling characteristics.

FROM BASE AIRCRAFT: A320 TO RELATED AIRCRAFT: A330	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	General	Range.	No	No	A	A
	General	Dimensions.	Yes	No	A	A
	Cabin	Maximum passenger capacities.	No	No	A	A
	Cargo	Maximum Cargo Loads.	No	No	A	A
	Limitations	Weights. Center of gravity envelope. Speeds.	Yes	Yes	B	B

FROM BASE AIRCRAFT: A320 TO RELATED AIRCRAFT: A330	DESIGN Systems	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 21 Air Conditioning	Design: Pack bay ventilation.	No	No	A	A
	ATA 21 Air Conditioning	Controls and indicating: Cabin temperature control.	No	Yes	A	A
	ATA 21 Air Conditioning	Controls and indicating: Zone and pack controller, ECAM.	No	No	B	B
	ATA 21 Air Conditioning	Design: Trim air, packs, outflow valves, avionics ventilation, pack bay ventilation, cargo ventilation. Controls and indicating: Cabin temperature, ECAM, outflow valves, VENT panel layout.	No	Yes	B	B
	ATA 21 Air Conditioning	Controls and indicating: AIR and PRESS panel layout.	No	Yes	C	C
	ATA 22 Autoflight	Design: FMGES architecture, A/THR. Controls and indicating: FMGES.	No	No	A	A
	ATA 22 Autoflight	Design: FE, FM.	No	No	B	B

FROM BASE AIRCRAFT: A320 TO RELATED AIRCRAFT: A330	DESIGN Systems	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 22 Autoflight	Design: FACs, FMGES architecture, FG, FM, AP/FD.	No	Yes	B	B
	ATA 22 Autoflight	Design: FMGES architecture, FG. Controls and indicating: FMGES.	No	Yes	C	C
	ATA 23 Communications	Controls and indicating: Call panel.	No	No	A	A
	ATA 23 Communications	Design: CVR.	No	Yes	B	B
	ATA 23 Communications	Controls and indicating: AMU.	No	Yes	C	C
	ATA 24 Electrical Power	Design: AC generation, DC generation, emergency generation. Controls and indicating.	No	Yes	B	B
	ATA 24 Electrical Power	Design: Emergency generation.	Yes	Yes	B	B
	ATA 24 Electrical Power	Controls and indicating.	No	Yes	C	C

FROM BASE AIRCRAFT: A320 TO RELATED AIRCRAFT: A330	DESIGN Systems	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 25 Equipment/Furnishings	Design: Cockpit general arrangement.	No	No	A	A
	ATA 25 Equipment/Furnishings	Design: Pilot eye height (see Maneuvers DT).	Yes	No	A	A
	ATA 25 Equipment/Furnishings	Design: RESET panels/CB panels.	No	Yes	B	B
	ATA 26 Fire Protection	Design: Avionics fire detection.	No	No	A	A
	ATA 26 Fire Protection	Design: Engine fire extinguishing, cargo fire extinguishing. Controls and indicating: Engine fire test, avionics fire detection.	No	Yes	B	B
	ATA 26 Fire Protection	Controls and indicating: APU fire.	No	Yes	C	C
	ATA 27 Flight Controls	Design: BCM architecture, yaw damper function.	No	No	A	A

FROM BASE AIRCRAFT: A320 TO RELATED AIRCRAFT: A330	DESIGN Systems	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 27 Flight Controls	Architecture: Speed brakes, speeds, aileron droop, turbulence damping function. Flight control laws: Normal law, ground mode. Control monitoring: ECAM. Flaps and slats: Slat surfaces, hydraulic distribution.	No	No	B	B
	ATA 27 Flight Controls	Flight control surfaces. Flaps and slats: T/O CONF, LDG CONF.	Yes	No	B	B
	ATA 27 Flight Controls	Architecture: Hydraulic supply. Flaps and Slats: Landing memo. THS: Automatic settings on ground.	No	Yes	B	B
	ATA 27 Flight Controls	Control monitoring: Overhead panel.	No	Yes	C	C

FROM BASE AIRCRAFT: A320 TO RELATED AIRCRAFT: A330	DESIGN Systems	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 27 Flight Controls	Flaps and slats: Flap load relief system.	Yes	Yes	D	D
	ATA 28 Fuel	Controls and indicating: ECAM.	No	No	B	B
	ATA 28 Fuel	Design: Tanks, fuel pumps, fuel transfer, all engine out.	No	Yes	B	B
	ATA 28 Fuel	Tanks: Trim tank and CG control.	Yes	Yes	C	A
	ATA 28 Fuel	Controls and indicating: Transfer to inner, layout.	No	Yes	C	C
	ATA 29 Hydraulic Power	Design: Engine pumps, electric pumps, ram air turbine, fire shutoff valves. Controls and indicating: ECAM.	No	Yes	B	B
	ATA 29 Hydraulic Power	Design: Electric pumps.	Yes (P)	No	B	B
	ATA 29 Hydraulic Power	Controls and indicating: Overhead panel.	No	Yes	C	C

FROM BASE AIRCRAFT: A320 TO RELATED AIRCRAFT: A330	DESIGN Systems	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 30 Ice and Rain Protection	Design: Ice detection system.	No	No	A	A
	ATA 30 Ice and Rain Protection	Design: Wing anti-ice.	No	No	B	B
	ATA 31 Indicating/Recording Systems	HUD (optional).	No	Yes	B	A
	ATA 31 Indicating/Recording Systems	Design: PFD, ND. Controls and indicating: ECP, EFIS controls.	No	No	B	B
	ATA 31 Indicating/Recording Systems	Design: DMC architecture. Controls and indicating: DMC, EFIS controls, ECAM.	No	Yes	B	B
	ATA 31 Indicating/Recording Systems	Controls and indicating: Switching.	No	Yes	C	B

FROM BASE AIRCRAFT: A320 TO RELATED AIRCRAFT: A330	DESIGN Systems	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 31 Indicating/Recording Systems	Design: Computer reset panel.	No	Yes	C	C
	ATA 32 Landing Gear	Design: Landing gear, hydraulic system, brakes.	No	No	A	A
	ATA 32 Landing Gear	Design: Brakes/NWS. Controls and indicating: ECAM, Landing gear panel.	No	No	B	B
	ATA 32 Landing Gear	Design: Main gear, gravity extension control.	No	Yes	B	B
	ATA 32 Landing Gear	Controls and indicating: Brakes/NWS.	No	No	C	C
	ATA 32 Landing Gear	Controls and indicating: Gravity extension control.	No	Yes	C	C
	ATA 33 Lights	Controls and indicating: Panel brightness.	No	No	A	A
	ATA 33 Lights	Controls and indicating: Emergency cabin lighting.	No	No	B	B

FROM BASE AIRCRAFT: A320 TO RELATED AIRCRAFT: A330	DESIGN Systems	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 33 Lights	Controls and indicating: Side consols, ceiling lights, dome, land switch.	No	No	C	C
	ATA 34 Navigation	Design: ADF, weather radar.	No	No	A	A
	ATA 34 Navigation	Controls and indicating: GPWS.	No	Yes	A	A
	ATA 34 Navigation	Controls and indicating: MAG/TRUE pb sw.	No	Yes	C	C
	ATA 35 Oxygen	Design: Cockpit O2.	No	No	A	A
	ATA 35 Oxygen	Design: Cabin O2 generators.	No	Yes	A	A
	ATA 36 Pneumatic	Design: Generation, distribution. Controls and indicating: Cross bleed.	No	No	A	A
	ATA 36 Pneumatic	Controls and indicating: ECAM.	No	No	B	B

FROM BASE AIRCRAFT: A320 TO RELATED AIRCRAFT: A330	DESIGN Systems	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 36 Pneumatic	Design: Generation.	No	Yes	B	B
	ATA 36 Pneumatic	Controls and indicating: Overhead panel.	No	Yes	C	C
	ATA 45 Central Maintenance System	Design: CFDS/CMS.	No	No	A	A
	ATA 49 Airborne Auxiliary Power	Design: APU. Limitations: Altitudes.	No	Yes	B	B
	ATA 52 Doors	Design: Door configurations.	No	No	B	B
	ATA 52 Doors	Design: PSCU, ECAM, pressurization.	No	Yes	B	B
	ATA 52 Doors	Controls and indications: Doors and slides operation (type A).	No	Yes	C	C
	ATA 70 Engines	General: Models.	Yes	Yes	B	B

This Maneuver Differences Table, from the Airbus A320 to the A330, was developed by the FSB based on the detailed DR Tables proposed by Airbus. The Differences Table lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

NOTE 1: The differences Remarks are very generally stated. For a more detailed overview of item-specific training/checking differences, refer to the Airbus Difference Requirement (DR) Tables as referenced at the end of this appendix.

NOTE 2: Criteria used to identify differences, as indicated in the Maneuver Differences Table, does not take into consideration training differences that may exist between related aircraft for maneuvers required by Title 14 of the Code of Federal Regulations (14 CFR) part 121, § 121.423.

NOTE 3: “Yes (P)” entered in the “FLT CHAR” (Flight Characteristics) column indicates that the difference in flight characteristics only pertains to performance and not handling characteristics.

FROM BASE AIRCRAFT: A320 TO RELATED AIRCRAFT: A330	MANEUVER Normal Operations	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	Preparation	Visual inspection.	No	Yes	B	B
	Preparation	Preflight, flight planning.	No	No	B	B
	Surface Operation	Starting: Sequence.	No	Yes	B	B
	Surface Operation	Taxi: Eye height, turn radius.	Yes	No	D	D
	Surface Operation	Taxi: One engine taxi.	No	No	A	A
	Surface Operation	Pre-takeoff checks.	No	No	C	C

FROM BASE AIRCRAFT: A320 TO RELATED AIRCRAFT: A330	MANEUVER	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	Normal Operations					
	Takeoff	Flap load relief, performance.	No	No	A	A
	Takeoff	Rotation, target pitch.	Yes	No	B	B
	Takeoff	Ground law, crosswind.	Yes	No	E	E
	In Flight Operation	Climb: Rate.	Yes (P)	No	A	A
	In Flight Operation	Enroute navigation.	No	Yes	C	C
	In Flight Operation	Descent: Rate.	Yes (P)	No	A	A
	In Flight Maneuver	High angle of attack: Direct law.	Yes	No	D	A
	In Flight Maneuver	Traffic patterns: Inertia, turn radius.	Yes	No	D	D
	En Route Terminal Ops	Non precision IFR approaches.	No	No	C	A
	En Route Terminal Ops	Visual segment landing special performance.	No	Yes	D	A

FROM BASE AIRCRAFT: A320 TO RELATED AIRCRAFT: A330	MANEUVER Normal Operations	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	En Route Terminal Ops	Visual segment landing: Traffic pattern, non-precision approach, circling, CAT I approach with and without crosswind.	Yes	No	E	E
	Surface Operation	Post landing checks.	No	No	C	C
	Surface Operation	Parking.	Yes	No	B	B
	Surface Operation	Shutdown.	No	No	B	B

FROM BASE AIRCRAFT: A320 TO RELATED AIRCRAFT: A330	MANEUVER Abnormal Operations	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	Surface Operation	Starting.	No	No	A	A
	Surface Operation	Emergency evacuation.	No	Yes	D	D
	RTO	Rejected takeoff/ engine failure before V ₁ with and without crosswind: Performance.	Yes (P)	No	B	B
	RTO	Rejected takeoff/ low visibility.	No	No	D	D
	RTO	Rejected takeoff/engine failure before V ₁ with and without crosswind: Reverser actuation logic.	Yes	No	E	E
	Takeoff	Engine failure with and without crosswind: SRS and Beta target.	No	No	A	A
	Takeoff	Engine failure with and without crosswind: Pitch attitude/lateral control.	Yes	No	B	A
	Takeoff	Engine failure with and without crosswind: V ₁ /V _R split.	Yes (P)	No	B	B

FROM BASE AIRCRAFT: A320 TO RELATED AIRCRAFT: A330	MANEUVER Abnormal Operations	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	In Flight Operation	Climb or cruise with failure of critical power plant: Drift down, cruise management.	Yes	No	A	A
	In Flight Operation	Initial climb after takeoff and climb or cruise with failure of critical power plant: Performance.	Yes (P)	No	B	B
	In Flight Operation	Enroute navigation.	No	Yes	C	C
	In Flight Operation	Maximum rate of descent: Performance.	Yes (P)	No	D	A
	In Flight Maneuver	All engine flame out.	Yes (P)	Yes	D	A
	In Flight Maneuver	Total loss of electrical power, emergency electrical configuration.	Yes	Yes	D	A
	En Route Terminal Ops	Approaches – One engine failed: Go around/missed approach.	No	No	A	A
	En Route Terminal Ops	Slat/flaps malfunction: V _{LS} computation.	Yes	No	B	A

FROM BASE AIRCRAFT: A320 TO RELATED AIRCRAFT: A330	MANEUVER Abnormal Operations	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	En Route Terminal Ops	Visual segment.landing, rejected landings.	Yes	No	E	A
	En Route Terminal Ops	Visual segment and landing: Landing with TRIM malfunction. Landing: Alternate law/direct law.	Yes	Yes	E	E
	Surface Operation	Shutdown.	No	No	A	A

This Design Differences Table, from the Airbus A340 to the A330, was developed by the FSB based on the detailed DR Tables proposed by Airbus. The Differences Table lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

NOTE 1: The differences Remarks are very generally stated. For a detailed overview of item-specific training/checking differences, refer to the Airbus Difference Requirement (DR) Tables as referenced at the end of this appendix.

NOTE 2: “Yes (P)” entered in the “FLT CHAR” (Flight Characteristics) column indicates that the difference in flight characteristics only pertains to performance and not handling characteristics.

FROM BASE AIRCRAFT: A340 TO RELATED AIRCRAFT: A330	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	General	Range. Dimensions.	No	No	A	A
	Cabin	Maximum passenger capacities.	No	No	A	A
	Limitations	Weights. Center of gravity limits. Speeds. Altitude.	Yes (P)	No	B	B

FROM BASE AIRCRAFT: A340 TO RELATED AIRCRAFT: A330	DESIGN Systems	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 21 Air Conditioning	Ventilation.	No	No	A	A
	ATA 24 Electrical Power	Design: TRs, emergency generation. Controls and indicating: ECAM.	No	No	B	B
	ATA 24 Electrical Power	Design: AC generation, AC ESS. Operations: Land recovery.	No	Yes	B	B
	ATA 24 Electrical Power	Controls and indicating: Overhead panel.	No	Yes	C	C
	ATA 27 Flight Controls	Design: THS.	No	Yes	B	A
	ATA 27 Flight Controls	Design: Slats/flaps, aileron droop. Controls and indicating: ECAM.	No	No	B	B
	ATA 28 Fuel	Design: Wing tank pumps, XFEED, system operation. Controls and indicating: ECAM.	No	Yes	B	B

FROM BASE AIRCRAFT: A340 TO RELATED AIRCRAFT: A330	DESIGN Systems	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 28 Fuel	Controls and indicating: Overhead panel.	No	Yes	C	C
	ATA 29 Hydraulic Power	Design: Engine pumps, reversers. Controls and indicating: ECAM.	No	No	B	B
	ATA 29 Hydraulic Power	Design: RAT.	No	Yes	B	B
	ATA 29 Hydraulic Power	Controls and indicating: Overhead panel.	No	Yes	C	C
	ATA 30 Ice and Rain Protection	Design: Probe and window heat.	No	No	A	A
	ATA 31 Indicating/Recording Systems	Controls and indicating: Engine parameters, flight phase definition, T/O Memo.	No	No	A	A
	ATA 32 Landing Gear	Design: MLG. Controls and indicating: Indications.	No	No	A	A

FROM BASE AIRCRAFT: A340 TO RELATED AIRCRAFT: A330	DESIGN Systems	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 36 Pneumatic	Design: Generation, distribution. Controls and indicating: ECAM.	No	No	B	B
	ATA 36 Pneumatic	Controls and indicating: Cross Bleed.	No	Yes	C	C
	ATA 70 Engines	General: Models.	Yes (P)	Yes (P)	B	B

This Maneuver Differences Table, from the Airbus A340 to the A330, was developed by the FSB based on the detailed DR Tables proposed by Airbus. The Differences Table lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

NOTE 1: The differences Remarks are very generally stated. For a more detailed overview of item-specific training/checking differences, refer to the Airbus Difference Requirement (DR) Tables as referenced at the end of this appendix.

NOTE 2: Criteria used to identify differences, as indicated in the Maneuver Differences Table, does not take into consideration training differences that may exist between related aircraft for maneuvers required by Title 14 of the Code of Federal Regulations (14 CFR) part 121, § 121.423.

NOTE 3: “Yes (P)” entered in the “FLT CHAR” (Flight Characteristics) column indicates that the difference in flight characteristics only pertains to performance and not handling characteristics.

FROM BASE AIRCRAFT: A340 TO RELATED AIRCRAFT: A330	MANEUVER Normal Operations	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	Preparation	Visual inspection: Engines.	No	Yes	B	A
	Preparation	Flight planning: Performance, limitations, weight and balance.	No	No	A	A
	Surface Operation	Starting.	No	No	A	A
	Surface Operation	Taxi.	No	Yes	B	B
	Takeoff	Rotation, target pitch, V _I /V _R split.	No	No	B	B

FROM BASE AIRCRAFT: A340 TO RELATED AIRCRAFT: A330	MANEUVER Normal Operations	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	Takeoff	Performance: Light weight takeoff, derated takeoff.	Yes (P)	No	E	E
	In Flight Operation	Climb: Performance.	No	No	A	A
	In Flight Operation	Descent: Performance.	No	No	A	A
	En Route Terminal Ops	Rejected landings: Target pitch attitude.	No	No	A	A
	Surface Operation	Shutdown.	No	No	A	A

FROM BASE AIRCRAFT: A340 TO RELATED AIRCRAFT: A330	MANEUVER Abnormal Operations	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	Surface Operation	Starting: External power.	No	No	A	A
	RTO	Following fire: Engine shutdown.	No	No	A	A
	RTO	Rejected takeoff/ engine failure before V ₁ with and without crosswind: Performance, V ₁ /V _R split.	Yes (P)	No	B	B
	Takeoff	Engine failure with and without crosswind: Target pitch attitude.	No	No	B	B
	In Flight Operation	Climb or cruise with failure of critical power plant: Drift down, cruise management.	Yes	No	A	A
	In Flight Operation	Initial climb after takeoff and climb with failure of critical power plant: Performance.	No	No	A	A
	In Flight Operation	Maximum rate of descent: Performance.	No	No	A	A

FROM BASE AIRCRAFT: A340 TO RELATED AIRCRAFT: A330	MANEUVER Abnormal Operations	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	En Route Terminal Ops	Visual segment inn any abnormal emergency aircraft configuration: Engine out. Approaches: Approach engine failed, go around engine failed.	Yes (P)	No	A	A
	En Route Terminal Ops	Visual segment landing: Rejected landings.	No	No	B	B
	Surface Operation	Shutdown.	No	No	A	A

This Design Differences Table, from the Airbus A350 to the A330, was developed by the FSB based on the detailed DR Tables proposed by Airbus. The FSB evaluation took place in September 2016. The Differences Table lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

NOTE 1: The differences Remarks are very generally stated. For a more detailed overview of item-specific training/checking differences, refer to the Airbus Difference Requirement (DR) Tables as referenced at the end of this appendix.

NOTE 2: “Yes (P)” entered in the “FLT CHAR” (Flight Characteristics) column indicates that the difference in flight characteristics only pertains to performance and not handling characteristics.

FROM BASE AIRCRAFT: A350 TO RELATED AIRCRAFT: A330	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	General	Range. Dimensions.	No	No	A	A
	Cockpit	Cockpit novelties.	No	No	A	A
	Cabin	Maximum passenger capacities.	No	No	A	A
	Cargo	Maximum cargo loads.	No	No	A	A
	Limitations	Weights. Center of gravity envelope. Speeds.	No	No	A	A

FROM BASE AIRCRAFT: A350 TO RELATED AIRCRAFT: A330	DESIGN Systems	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 21 Air Conditioning	Pressurization – semi-automatic mode.	No	Yes	B	A
	ATA 21 Air Conditioning	Controls and indicating: Air conditioning control, cabin pressure controls.	No	Yes	B	B
	ATA 22 Autoflight	Description: Flight director and manual engagement.	No	Yes	A	A
	ATA 22 Autoflight	Description: Guidance modes, lateral. Controls and indicating: Navigation controls.	No	Yes	B	A
	ATA 22 Autoflight	Description: General, navigation functions and FMS landing system.	No	Yes	B	B
	ATA 22 Autoflight	Description: System monitoring and control.	No	Yes	C	A
	ATA 22 Autoflight	Controls and indicating: FMS general controls.	No	Yes	C	B

FROM BASE AIRCRAFT: A350 TO RELATED AIRCRAFT: A330	DESIGN Systems	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 23 Communications	Description: Cockpit equipment.	No	Yes	A	A
	ATA 23 Communications	Description: Communication management.	No	No	B	A
	ATA 23 Communications	Controls and indicating: Communication information display.	No	Yes	B	A
	ATA 23 Communications	Controls and indicating: Communication controls.	No	Yes	C	B
	ATA 24 Electrical Power	Description: AC generation, DC generation, emergency generation, electrical network, system monitoring and control. Controls and indicating: Network information display.	No	No	B	A
	ATA 24 Electrical Power	Controls and indicating: Communication information display, network and generator controls, emergency controls.	No	Yes	B	A

FROM BASE AIRCRAFT: A350 TO RELATED AIRCRAFT: A330	DESIGN Systems	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 25 Equipment/Furnishings	Cockpit windows: Controls and indicating (window handles).	No	Yes	B	A
	ATA 25 Equipment/Furnishings	Emergency equipment: Cockpit emergency exits and means.	No	Yes	B	B
	ATA 26 Fire Protection	Controls and indicating: APU fire extinguishing controls and cargo smoke and fire controls.	No	Yes	A	A
	ATA 27 Flight Controls	Flaps and slats: Description of overview, actuation, and automations and protections. Flight envelope: Operating and characteristic speeds.	No	No	A	A
	ATA 27 Flight Controls	Controls and indicating: Flight and management controls.	No	Yes	A	A
	ATA 27 Flight Controls	Controls and indicating: Information displays of pitch trim, rudder trim, flight controls, and flaps and slats.	No	No	B	A

FROM BASE AIRCRAFT: A350 TO RELATED AIRCRAFT: A330	DESIGN Systems	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 27 Flight Controls	Description: Reconfiguration control laws, abnormal attitude law, and reconfiguration control laws backup. Controls and indicating: Speed brake information display.	No	Yes	B	A
	ATA 27 Flight Controls	Controls and indicating: Pitch trim controls.	No	Yes	C	B
	ATA 28 Fuel	Description: Tanks, engine feed, and APU feed.	No	No	A	A
	ATA 28 Fuel	Description: Fuel transfer and system monitoring and control.	No	No	B	A
	ATA 28 Fuel	Controls and indicating: Fuel management controls.	No	Yes	B	A
	ATA 29 Hydraulic Power	Description: Generation and engine pumps. Controls and indicating: Hydraulic information display.	No	No	B	A

FROM BASE AIRCRAFT: A350 TO RELATED AIRCRAFT: A330	DESIGN Systems	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 29 Hydraulic Power	Description: Generation and ram air turbine. Controls and indicating: Hydraulic management controls.	No	Yes	B	A
	ATA 30 Ice and Rain Protection	Design: Slats.	No	No	A	A
	ATA 31 Indicating/Recording Systems	Description: System monitoring and control, display management computer.	No	No	B	A
	ATA 31 Indicating/Recording Systems	Description: Display units, display reconfiguration, system monitoring and control (ECAM, display management computer), Primary flight data display (approach guidance, non-precision approach, backup scales), ECAM information display. Controls and indicating: Recorders controls, EFIS controls, ECAM controls.	No	Yes	B	A

FROM BASE AIRCRAFT: A350 TO RELATED AIRCRAFT: A330	DESIGN Systems	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 31 Indicating/Recording Systems	Description: ECAM information display (check list).	No	Yes	B	B
	ATA 32 Landing Gear	Controls and indicating: Braking controls.	No	Yes	A	A
	ATA 32 Landing Gear	Description: Power supply, braking functions (automatic braking).	No	No	B	A
	ATA 32 Landing Gear	Description: Braking modes. Controls and indicating: Braking information display, brake to vacate information display.	No	Yes	B	A
	ATA 33 Lights	Controls and indicating: Exterior lights control.	No	Yes	A	A
	ATA 34 Navigation	Controls and indicating: ATSAW controls, traffic information display.	No	No	B	A

FROM BASE AIRCRAFT: A350 TO RELATED AIRCRAFT: A330	DESIGN Systems	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 34 Navigation	Surveillance: Terrain awareness and warning. Controls and indicating: Terrain awareness and warning controls.	No	Yes	B	A
	ATA 34 Navigation	Controls and indicating: ADIRS management controls.	No	Yes	B	B
	ATA 34 Navigation	Controls and indicating: TCAS and transponder controls.	No	Yes	C	A
	ATA 34 Navigation	Controls and indicating: Radio navigation controls.	No	Yes	C	C
	ATA 35 Oxygen	Design.	No	No	A	A
	ATA 35 Oxygen	Design.	No	No	A	A

FROM BASE AIRCRAFT: A350 TO RELATED AIRCRAFT: A330	DESIGN Systems	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 42 Integrated Modular Avionics	Design.	No	No	A	A
	ATA 46 Information Systems	Controls and indicating: Messages display.	No	Yes	B	B
	ATA 47 Inert Gas System	Design: Fuel tanks used.	No	No	A	A
	ATA 49 Airborne Auxiliary Power	Design: Architecture.	No	Yes	A	A
	ATA 52 Doors	General. Controls and indicating.	No	Yes	B	B
	ATA 70 Engines	Design: Model, thrust ratings, thrust reversers.	Yes (P)	No	B	A
	ATA 70 Engines	Description: FADEC (power management, engine power setting). Controls and indicating: Engine controls.	No	Yes	B	A

This Maneuver Differences Table, from the Airbus A350 to the A330, was developed by the FSB based on the detailed DR Tables proposed by Airbus. The FSB evaluation took place in September 2016. The Differences Table lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

NOTE 1: The differences Remarks are very generally stated. For a more detailed overview of item-specific training/checking differences, refer to the Airbus Difference Requirement (DR) Tables as referenced at the end of this appendix.

NOTE 2: Criteria used to identify differences, as indicated in the Maneuver Differences Table, does not take into consideration training differences that may exist between related aircraft for maneuvers required by Title 14 of the Code of Federal Regulations (14 CFR) part 121, § 121.423.

FROM BASE AIRCRAFT: A350 TO RELATED AIRCRAFT: A330	MANEUVER Normal Operations	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	Preparation	Safety exterior inspection/exterior walkaround. Flight planning/preflight: Use of QRH for flight planning, MCDU, RMP, MEL.	No	Yes	C	C
	Engine Start	Start and after start: Parameters display.	No	No	B	B
	Engine Start	Start and after start: Flows, trim setting control and display, use of QRH.	No	Yes	C	C

FROM BASE AIRCRAFT: A350 TO RELATED AIRCRAFT: A330	MANEUVER	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	Normal Operations					
	Taxi	General.	No	No	B	B
	Takeoff Checks	Checklists: Use of QRH.	No	Yes	C	C
	Takeoff	Normal: Use of QRH.	No	Yes	C	C
	Climb	Use of MCDU.	No	Yes	C	C
	Cruise	Buffet margin.	No	No	B	B
	Cruise	Use of MCDU.	No	Yes	C	C
	Cruise	Automation (AP, ATHR).	No	Yes	D	D
	Descent	Use of MCDU.	No	Yes	C	C
	Approach	General: Use of FD.	No	Yes	B	B
	Approach	General: Use of MCDU.	No	Yes	C	C
	Visual Segment Landing	Normal: MLG touch-down cues.	No	No	B	B
	Go-Around	No soft go-around function.	No	No	B	B

FROM BASE AIRCRAFT: A350 TO RELATED AIRCRAFT: A330	MANEUVER Normal Operations	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	Missed Approach	Use of MCDU.	No	No	C	C
	Post Landing Checks	Checklists: Use of QRH.	No	Yes	C	C
	Parking/Engine Shutdown	Checklists: Use of QRH.	No	Yes	C	C

FROM BASE AIRCRAFT: A350 TO RELATED AIRCRAFT: A330	MANEUVER Abnormal Operations	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	General	Management of not sensed procedures: Use of QRH.	No	Yes	D	D
	Takeoff	Engine failure after V ₁ : Pitch target.	No	No	B	B
	Go Around	Engine failure after instrument approach.	No	No	B	B
	Landing	Landing with jammed horizontal stabilizer in out-of-trim position. Landing with flaps jammed.	No	Yes	A	A
	ATA 24 Electrical Power	EMER ELEC: Land recovery pb sw.	No	Yes	C	C
	ATA 26 Fire Protection	Smoke/Fumes Removal: Use of QRH, aircraft systems.	No	Yes	C	C
	ATA 27 Flight Controls	Direct law: pitch trim setting, ATHR. Direct/Pitch mechanical backup.	No	Yes	D	D

FROM BASE AIRCRAFT: A350 TO RELATED AIRCRAFT: A330	MANEUVER Abnormal Operations	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 34 Navigation	ACAS event: Manual FD disengage procedure, AP/FD TCAS Option.	No	No	A	A
	ATA 34 Navigation	Unreliable airspeed indication: Back-up speed scale procedure, use of QRH.	No	Yes	C	C
	ATA 70 Engines	Engine failure: ECAM procedure.	No	Yes	C	C

Airbus Difference Requirement (DR) Tables and Training Areas of Special Emphasis (TASE) for Flight Crew are available from Airbus. Listed below are document references to applicable EASA Approved DR Tables and TASE documents provided by Airbus.

NOTE: Information within these reference documents is provided as a more detailed overview of related aircraft design and maneuver differences as specified in this appendix. Other DR Table and TASE information contained therein that is not specifically addressed in this appendix should not be construed as accepted by the FSB.

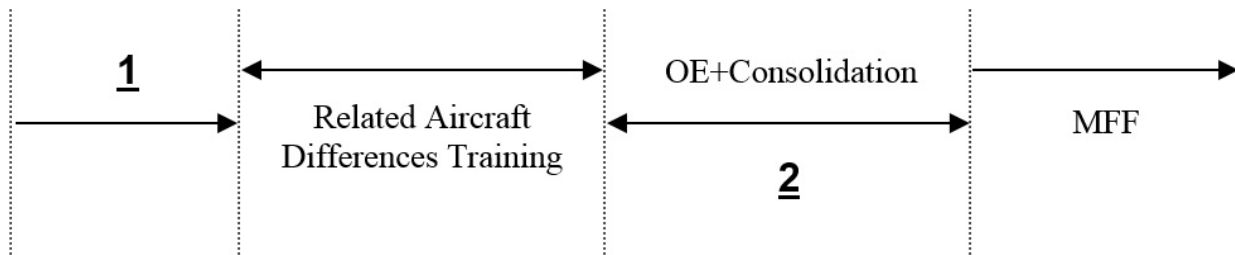
Flightcrew DR Tables between A330 Series variations on same TCDS:

- A330 DR Table and TASE - A330-200F reference G01RP1543092 as found in document reference G01RP1713249.
- A330 DR Table and TASE - A330-200 to A330-300 reference LR01D17019925 as found in document reference G01RP1713249.
- A330 DR Table and TASE - A330ceo to A330neo reference LR01D17022823 as found in document reference G01RP1713249.
- A330 DR Table and TASE - A330-200 to A330-300 reference LR01D17019925 as found in document reference G01RP1713249.

Flightcrew DR Tables between A330 and related aircraft on different TCDS:

- A330 DR Table and TASE - A320 to A330-200 reference G01RP1543087 as found in document reference G01RP1914273.
- A330 DR Table and TASE - A340-300 to A330-200 reference G01RP1543100 as found in document reference G01RP1914273.
- A330 DR Table and TASE - A350-900 to A330-200 reference G01RP1631821.

APPENDIX 4. QUALIFICATION AND CURRENCY PLANS FOR RELATED AIRCRAFT TRANSITION



From the A320 to the A330 Aircraft

1. Prerequisite as defined under paragraph 9.1, Case 1.
2. Following related aircraft differences training from the A320 to the A330 aircraft, a minimum of two line operating cycles of Operating Experience (OE), one as pilot flying (PF) and one as pilot monitoring (PM), on the A330 is recommended. It is also recommended that a minimum of 50 hours of line operating flight time for consolidation of knowledge and skills is completed within 90 days on the A330 aircraft before starting mixed fleet flying.

From the A340 to the A330 Aircraft

Because of the commonality between the A340 and A330 aircraft, immediate related aircraft differences training onto the second aircraft may be conducted following completion of qualification on the first one, in accordance with approved Master Differences Requirements (MDR) and Differences Tables.

1. Prerequisite as defined under paragraph 9.1, Case 2.
2. Following related aircraft differences training from the A340 to the A330 aircraft, a minimum of two line operating cycles of OE, one as PF and one as PM, on the A330 is recommended. It is also recommended that a minimum of 50 hours of consolidation flying within 90 days is required on one type of aircraft. OE and consolidation flying must be conducted on one type only, but the type may be either the A340 or the A330. Following the consolidation period, two additional line operating cycles of OE are required on the other type of aircraft before starting mixed fleet flying.

From the A350 to the A330 Aircraft

1. Prerequisite as defined under paragraph 9.1, Case 3.
2. Following related aircraft differences training from the A350 to the A330 aircraft, a minimum of 12 hours of OE and a minimum of two line operating cycles, one as PF and one as PM, on the A330 is recommended. It is also recommended that a minimum of 25 hours of line operating flight time for consolidation of knowledge and skills is completed within 45 days on the A330 aircraft before starting mixed fleet flying.

APPENDIX 5. TYPE RATING CHECKS AFTER RELATED AIRCRAFT DIFFERENCES TRAINING

Example of a Related Aircraft Proficiency Check (PC) for an A330 Type Rating from an A320

EVALUATION SUMMARY

The evaluation flight profile includes those procedures and representative maneuvers that will be evaluated in an FFS with emphasis on the differences between the A320 and the A330. The sequence of events and the abnormal and emergency procedures used may be modified at the discretion of the evaluator.

ORAL AND/OR WRITTEN TEST

- In accordance with 14 CFR part 121 and ACS, as appropriate.

PRACTICAL TEST (FFS)

- GROUND OPERATIONS:
 - Taxi.
- TAKEOFFS:
 - Normal.
 - Crosswind.
 - Heavy.
 - Instrument.
 - Rejected with engine failure before V₁.
 - With engine failure after V₁.
 - Flap load relief.
- INSTRUMENT PROCEDURES:
 - Area departure, climb, cruise, and descent.
- LANDINGS:
 - Normal.
 - Crosswind.
 - Rejected/flare law.
 - With OEI.
 - With slat/flaps malfunction.
 - Alternate/direct law.
- NORMAL, ABNORMAL, AND EMERGENCY PROCEDURES:
 - As appropriate per approved differences requirements.

Example of a Related Aircraft Proficiency Check for an A330 Type Rating from an A340

EVALUATION SUMMARY

The practical test is not required as per results of the Aircraft Evaluation Division evaluation.

ORAL AND/OR WRITTEN TEST

- In accordance with part 121 and ACS, as appropriate.

Example of a Related Aircraft Proficiency Check for an A330 Type Rating from an A350

EVALUATION SUMMARY

The evaluation flight profile includes those procedures and representative maneuvers that will be evaluated in an FFS or Level 6 or greater FTD with emphasis on the differences between the A330 and the A350. The sequence of events and the abnormal and emergency procedures used may be modified at the discretion of the evaluator.

ORAL AND/OR WRITTEN TEST

- In accordance with part 121 and ACS, as appropriate.

PRACTICAL TEST (MINIMUM LEVEL 6 FTD OR FFS)

- GROUND OPERATIONS:
 - Preflight and flight planning.
 - Engine start and after start.
- TAKEOFF:
 - Automation: BRK RTO on FMA.
- INSTRUMENT PROCEDURES:
 - Area departure, climb, cruise, and descent.
 - ILS (GLS) approach.
 - Non-precision approach.
- NORMAL, ABNORMAL, AND EMERGENCY PROCEDURES:
 - As appropriate per approved differences requirements (flight controls).
- SYSTEMS: *
 - Communication controls and indicating.
 - FMS and MCDU.
 - Braking indicating.
 - Navigation controls and indicating.
 - Use of QRH.
 - Radar.
 - FD.

* Systems section procedures are usually performed in conjunction with other procedures or maneuvers.

APPENDIX 6. RELATED AIRCRAFT ON DIFFERENT TCDS TRAINING AND CHECKING PLANS FOR MIXED FLEET FLYING OPERATIONS

The tables below provide examples of alternating training and checking plans for mixed fleet flying operations (A320 and A330, A330 and A340, A330 and A350, A320 and A330 and A340) after related aircraft differences training and qualification. The components of these plans consist of an Approved Simulator Course of Training (ASCT) with a Proficiency Check (PC) and an ASCT Line-Oriented Flight Training (LOFT) with a PC.

NOTE: Recurrent differences training for variations of aircraft having the same type certificate (TC) are to be addressed during recurrent training.

Examples of Alternating ASCT/LOFT/PC Plan for Two Designated Related Aircraft Types

A320 and A330 Example

	Year 1		Year 2		Year 3		Year 4	
Period	6 months	6 months	6 months	6 months	6 months	6 months	6 months	6 months
Checking	A330 PC	A320 PC	A330 PC	A320 PC	A330 PC	A320 PC	A330 PC	A320 PC
Training	A320 ASCT	A330 LOFT	A320 LOFT	A330 ASCT	A320 ASCT	A330 LOFT	A320 LOFT	A330 ASCT

A330 and A340 Example

	Year 1		Year 2		Year 3		Year 4	
Period	6 months	6 months	6 months	6 months	6 months	6 months	6 months	6 months
Checking	A340 PC	A330 PC	A340 PC	A330 PC	A340 PC	A330 PC	A340 PC	A330 PC
Training	A330 ASCT	A340 LOFT	A330 LOFT	A340 ASCT	A330 ASCT	A340 LOFT	A330 LOFT	A340 ASCT

A330 and A350 Example

	Year 1		Year 2		Year 3		Year 4	
Period	6 months	6 months	6 months	6 months	6 months	6 months	6 months	6 months
Checking	A350 PC	A330 PC	A350 PC	A330 PC	A350 PC	A330 PC	A350 PC	A330 PC
Training	A330 ASCT	A350 LOFT	A330 LOFT	A350 ASCT	A330 ASCT	A350 LOFT	A330 LOFT	A350 ASCT

Examples of Alternating ASCT/PC Plan for Three Designated Related Aircraft Types

A320 and A330 and A340

Example 1

	Year 1		Year 2		Year 3		Year 4	
Period	6 months	6 months	6 months	6 months	6 months	6 months	6 months	6 months
Checking	A320 PC	A330 PC	A320 PC	A340 PC	A320 PC	A330 PC	A320 PC	A340 PC
* Additional Check Items		A340 (Level E)		A330 (Level B)		A340 (Level E)		A330 (Level B)
Training	A320 ASCT	A340 ASCT	A320 ASCT	A330 ASCT	A320 ASCT	A340 ASCT	A320 ASCT	A330 ASCT

* Additional check item: As A330 and A340 are different type ratings, an additional check at Level B or Level E, as defined by Differences Tables, is required under an alternate recurrent plan for three types.

Example 2

	Year 1		Year 2		Year 3		Year 4	
Period	6 months	6 months	6 months	6 months	6 months	6 months	6 months	6 months
Checking	A320 PC	A340 PC	A320 PC	A340 PC	A320 PC	A340 PC	A320 PC	A340 PC
* Additional Check Items		A330 (Level B)		A330 (Level B)		A330 (Level B)		A330 (Level B)
Training	A320 ASCT	A340 ASCT	A320 ASCT	A330 ASCT	A320 ASCT	A340 ASCT	A320 ASCT	A330 ASCT

* Additional check item: As A330 and A340 are different type ratings, an additional check at Level B, as defined by Differences Tables, is required under an alternate recurrent plan for three types.