European Union Aviation Safety Agency

EASA

TYPE-CERTIFICATE DATA SHEET

No. EASA.IM.A.003

for
BOEING 777

Type Certificate Holder:
The Boeing Company

737 Logan Ave N
Renton, WA 98057-000
United States of America

For Models: 777-200
777-200LR
777-300
777-300ER
777F

TABLE OF CONTENT

SECTION 1: GENERAL (ALL VARIANTS)

1. Data Sheet No:
   TCDS.IM.A.003

2. Airworthiness Category:
   Large Transport Airplanes, JAR 25

3. Performance Category:
   A

4. Certifying Authority:
   (Address) Federal Aviation Authority (USA)
   Seattle Aircraft Certification Office,
   1601 Lind Avenue S.W.
   Renton, WA 98055-4056
   United States of America

5. Type Certificate Holder:
   (Address) The Boeing Company
   1901 Oakesdale Avenue SW
   Seattle, WA 98057-2623
   United States of America

6. ETOPS:
   The Models 777-200, 777-200LR, 777-300ER and 777F Airplane-Engine combinations have been evaluated in accordance with AMC 20-6, Rev.2, Chapter 3, Section 7.2.2(ii), and found suitable for ETOPS operations when configured, maintained and operated in accordance with Boeing Document D044W054, which provides time-limited system capabilities of 222 minutes or greater. This finding does not constitute approval to conduct ETOPS operations

   The following table provides details on the ETOPS approvals.

Variant	Engine Type	JAA 120 Min Approval Date	JAA 180 Min Approval Date	Note
-200	PW 4077 / 4084	12.06.95	14.06.99	Cannot be operated if registered in EU member states. See Note 2.
	GE90-76B	22.10.96	27.05.97	
	Trent 875 / 877	15.04.97	27.05.97	
	Trent 884		27.05.97	Increased Gross Weight (IGW) possible version of the –200 Variant only. Refer to AFM for approved Weights Limitations of each S/N Cannot be operated if registered in EU member states. See Note 2.
	PW 4090		13.07.99	
	PW 4090-3		10.12.01	
	GE90-85B / -90B	06.02.97	22.08.97	
	GE90-94B		09.11.00	
	Trent 892 / 892B	18.04.97	19.02.98	
	Trent 895		01.02.00	
-200LR	GE90-110B1		02.02.06	
	GE90-115B		02.02.06	
-300	PW 4090		10.12.01	Cannot be operated if

	PW 4098		10.12.01	registered in EU member states. See Note 2.
	Trent 892		29.06.98	
-300ER	GE90-115B		16.03.04	
F	GE90-110B1		06.02.09	
	GE90-115B			

Note 1: The aircraft must conform to the appropriate Configuration Maintenance and Procedures requirements.

Note 2: EASA adopted FAA ADs 2022-06-10 and 2022-06-11 that require powerplant design changes not validated by EASA. Therefore, 777-200/777-300 with PW4000 aircraft-engine configurations cannot be operated if registered in EU member states.

SECTION 2: (-200 VARIANT)

I. General

1. Aircraft:

   Boeing 777-200

2. JAA Validation Application Date:
   (Reference date for EASA validation)

   10 August 1990

3. EASA/JAA Validation Date:
   (JAA recommendation)

   19 April 1995

II. Certification Basis

1. Reference Application Date for FAA Certification:

   18 June 1990

2. Certification Date:

   19 April 1995

   FAA Type Certification Data Sheet No. T00001SE

3. FAA Certification Basis:

   Part 25 of the Federal Aviation Regulations. Amendment 25-1 through 25-82, except for:
   FAR 25.571(e)(1) which remains at Amendment 25-71 level.
   Part 36, as amended at the time of certification.
   Part 34, as amended at the time of certification.

   For details of Exemptions, Special Conditions and Equivalent Safety Findings granted by FAA, refer to FAA TCDS T00001SE.

4. .JAA Airworthiness Requirements:

   JAR 25 Change 13
   Orange Paper 90/1
   Orange Paper 91/1
   JAR AWO Change 1
   NPA 25 BCD-236, Vibration, Buffet and Aero-Elastic Stability Requirements, dated November 22, 1990
   NPA 25B-217, Reduced and De-rated Take Off Thrust Procedures, dated May 1992.
   CRI J-1 APU instruments (NPA 25B-1305, May 1990)

5. Special Conditions:

CRI A-9	Adopted FAA Special Conditions: - Limit Engine Torque Loads for Sudden Engine Stoppage
CRI C-2	Interaction of Systems and Structures (ref. NPA 25C-199)
CRI C-3	Design Manoeuvre Requirements

SECTION 2: (-200 VARIANT) - continued

CRI C-4	Design Dive Speed Definitions
CRI C-5	Stalling Speeds for Structural Design
CRI C-6	Loading Conditions for an Aircraft with a Folding Wing-tip
CRI C-23	Rapid Decompression
CRI C-25	Flight Test Loads Survey
CRI D-1	Landing Gear Warning
CRI D-2	Elect. Flight Control Unusual Features not addressed by existing JARs
CRI D-3	Control Signal Integrity
CRI D-5	Protection from External High Intensity Radiated Fields
CRI D-6	Lightning Protection Requirements
CRI D-7	Special Condition Folding Wing-tip - Elect. Systems Interfaces
CRI D-9	Braking Performance
CRI D-16	Towbarless Towing
CRI D-GEN01 PTC	Fire Resistance of Thermal Insulation Material Affected requirement CS25.856 & Appendix F
CRI D-GEN02 PTC	Application of heat release and smoke density requirements to seat materials. Affected Requirement CS 25.853(d) Appendix F Part IV & V Part 21 §21A.16B
CRI D-GEN8	Installation of Oblique Seats
CRI D-GEN10	Installation of suite type seating
CRI F-GEN-11	Non-rechargeable Lithium Batteries Installations
CRI E-4	Engine Unbalance due to Fan Blade loss
CRI F-4	Cockpit Voice Recorder
CRI F-5	Flight Data Recorder
CRI F-15	Global Position (GPS) Installation Approval
CRI K-1	(Part 2) JAR-AWO, Ch. 1
CRI D-252	Lightning Protection Indirect Effects (IGW version)
CRI H-01	Enhanced Airworthiness Programme for Aeroplane Systems - ICA on EWIS
CRI E-08	Flammability Reduction System

6. Exemptions Granted:

CRI D-19	Front Row HIC (Time-limited Exemption – expired 1 January 1997)	(25.562(c)(5), 785(a))
CRI E-3	Trust Reverser Testing	(25.934)
CRI E-6	Fire Resistance of Power Door Opening System Flex Hose Assembly (GE90)	(25.1183(a))

Note: The following CRIs addressing partial exemptions relate to modified requirements.

CRI C-15	Jacking Loads	(25.X 519)
CRI D-14	Hydraulic System Proof Pressure Testing	(25.1435(b)(1))

7. Equivalent Safety Findings:

CRI D-10	Thrust Reversers	(25.933(a))
CRI D-11	Hydraulics Components Strut Aft Fairing	(25.1182(a))
CRI D-13	Airsystems, Proof and Burst Pressure Tests	(25.1438)
CRI D-18	Position Lights	(25.1889(b)(3))
CRI D-21	Stowage of Emergency Equipment	(25.1411(a),(b)(1))
CRI D-22	Compliance to Towbarless Towing	(25X745(d))
CRI E-1	Fan Cowl Flammable Fluid Zone	(25.863(a))
CRI E-2	Turbine Overheat Detection (Rolls Royce Trent)	(25.1203(d))
CRI F-6	Use of ADIRU acceleration data in place of	

SECTION 2: (-200 VARIANT) - continued

	data from CG	(25.1459(a)(2))
CRI F-7	External Position Light System	(25.1387(b)(c))
CRI F-8	Flight Controls DC Power System	(25.1351(b)(5))
CRI F-9	Oxygen Outlets in Galley Work Areas	(25.1447(c)(3))
CRI F-10	Slide/Raft Pressure vessels	(25.X1436)
CRI F-12	Airplane Overspeed Warning	(25.1303(c)(1))
CRI F-14	Flammability of Fibre Optic Cables	(25.1359)
CRI F-16	Purser Station Seat	(25.785(d) and (f))
CRI F-GEN9-1	Minimum Mass Flow of Supplemental Oxygen "Component Qualification"	(25.1443(c))
CRI F-GEN9-3	Crew Determination of Quantity of Oxygen in Passenger Oxygen System	(25.1441(c))
CRI G-GEN2	Engine and APU Fire Switch Handle Design	(25.1555(d)(1))
CRI J-2	APU Automatic Shutdown	(25.B.1305)

8. JAA Environmental Standards:

Noise: ICAO Annex 16, Volume I
Fuel Venting & Emissions: ICAO Annex 16, Volume II

III. Technical Characteristics and Operational Limitations

1. Type Design Definition:

Boeing Drawing No. 001W0001, Final Assembly-777, Rev. AA, dated January 26, 1996 and later approved changes. Refer to CRI A-6 for change procedure and configuration control.

2. Description:

Two turbofan engines, medium to long range twin aisle large transport passenger aeroplane.

3. Dimensions:

Length	63.7 m	(209 ft 1 in)
Span	60.9 m	(199 ft 11 in)
Height	18.4 m	(60 ft 6 in)
Wing Area	427.8 m^2	(4605 ft^2)

4. Engines:

Two (2) Pratt & Whitney PW4000 Turbofan Engines
Models installed: PW4077, 4084, 4090, or 4090-3
Joint Data Sheet No.: JAA/E/94-008
Limitations: See Engine Data Sheet No.: JAA/E/94-008

EASA adopted FAA ADs 2022-06-10 and 2022-06-11 that require powerplant design changes not validated by EASA. Therefore, 777-200/777-300 with PW4000 aircraft-engine configurations cannot be operated if registered in EU member states.

Two (2) General Electrical GE90 Turbofan Engines
Models installed: GE90-76B, -85B, -90B or -94B
Joint Data Sheet No.: JAA/E/95-11
Limitations: See Engine Data Sheet No.: JAA/E/95-11

Two (2) Rolls-Royce RB211 Trent Turbofan Engines
Models installed: Trent 875, 877, 884, 892, 892B, or 895

Joint Data Sheet No.: JAA/E/95-009
Limitations: See Engine Joint Data Sheet No.: JAA/E/95-009

5. Auxiliary Power Unit:

Honeywell (formerly Allied Signal) Model 331-500

SECTION 2: (-200 VARIANT) - continued

Limitations: Refer to the APU TCDS / TSO.

6. Propellers: N/A

7. Fuel:

Refer to applicable approved manuals

8. Oil:

Refer to applicable approved manuals

9. Air Speeds:

See Airplane Flight Manual

10. Maximum Operating Altitude:

13,140 m (43,100 ft) pressure altitude

11. All Weather Capability:

Cat 3

12. Maximum Certified Weights:

	Pounds	Kilograms
MTW	547,000	248,115
MTOW	545,000	247,207
MLW	445,000	201,848
MZFW	420,000	190,508

a. 200 IGW Version Maximum Certified Weights:

	Pounds	Kilograms
MTW	658,000	298,463
MTOW	656,000	297,556
MLW	470,000	213,188
MZFW	442,000	200,487

13. Centre of Gravity:

See Airplane Flight Manual

14. Datum:

See Weights and Balance Manual

15. Mean Aerodynamic Cord.

See Weights and Balance Manual

16. Levelling Means:

See Airplane Flight Manual

17. Minimum Flight Crew:

Two (2): Pilot and Co-pilot

18. Maximum Seating Capacity:

The maximum number of passengers approved for emergency evacuation is 440. See interior layout drawing for the maximum passenger capacities approved for each aeroplane when delivered.

Note: The enhanced cabin crew procedures must be employed by the Operator for the high density configuration.

SECTION 2: (-200 VARIANT) – continued

19. Exits:

Number	Type	Size mm (inches)
4 per side	A	1067x1829 (42x72)

20. Baggage/Cargo Compartment:

Location	Class	Volume (m^3)
Forward	C	70.4 - 80.5
Aft	C	47.0 - 62.6
Bulk	C	17.0

21. Wheels and Tyres:

Nose Assy (Qty 2)
Wheel and Tyre: 42 x 17.0R18
Main Assy (Qty 12)
Wheel and Tyre: 50 x 20.0R22
Speed Rating: 235 MPH

22. Fuel Tank Flammability Reduction System (FRS):

Aircraft which have made there first flight after 31 December 2011 must be equipped with a fuel tank Flammability Reduction System (EASA SIB 2010-10)

Flammability Reduction Systems have been installed on aircraft line numbers 772 and on or as modification per Service Bulletin 777-47-0002. Airworthiness Limitations for the FRS are contained in Section 9 of the applicable Maintenance Planning Document.

This system shall remain installed and operative and can only be dispatched inoperative in accordance with the provisions of the MMEL

23. Minimum Cabin Crew:

In accordance with the following;

Installed Passenger Seats	Minimum Cabin Crew
401 to 440	9
400 or fewer	8

NOTE: The above minimum cabin crew numbers are those demonstrated by the type certificate holder for conventional cabin layouts. A lower number may be acceptable in the case of a cabin layout with compensating features agreed by the Agency. In such a case, the lower minimum cabin crew number must be documented in an EASA approved major design change or Supplemental Type Certificate (STC).

SECTION 2: (-200 VARIANT) - continued

IV. Operating and Service Instructions

1. Flight Manual:

Boeing Document D631W001.J00
(PW Installation),
Boeing Document D631W001.J01
(GE Installation) and
Boeing Document D631W001.J02
(RR Trent Installation)

Note 1: The AFM for a JAA customer will have a dedicated identification, replacing the denominator J01, J02, or J03.

Note 2: EASA adopted FAA ADs 2022-06-10 and 2022-06-11 that require powerplant design changes not validated by EASA. Therefore, 777-200/777-300 with PW4000 aircraft-engine cannot be operated if registered in EU member states.

2. Mandatory Maintenance Instructions:

CMRs, ALI's, Life Limited Parts
Maintenance Planning Data Document Section 9
Boeing Document D622W001), and later revisions thereof

3. Service Letters and Service Bulletins:

As published by Boeing and approved by FAA.

4. Required Equipment:

These are identified as Import Requirements in CRI A-10.

The following requirements must be complied with if the optional equipment listed below is installed:

CRI C-6	Loading Conditions for an Aircraft with a Folding Wing-tip.	
CRI D-20	Assist Space Deviation	(25.813(b))
CRI D-251	Lower Lobe Crew Rest Compartment	
CRI F-16	Purser Station Seat	(25.785(d) and (f))
CRI F-17	Placards Pivoting Arm Video Units	(25.561(d) et al)
CRI F-253	MMR Qualification and Installation	(25.1301 et al)
CRI F-254	EGPWS Airworthiness Approval	(25.1301 et al)
CRI F-255	EGPWS Alerting Design	

V. OPERATIONAL SUITABILITY DATA (OSD)

The Operational Suitability Data elements listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate [original TC number] as per Commission Regulation (EU) 748/2012 as amended by Commission Regulation (EU) No 69/2014.

1. Master Minimum Equipment List

a) Master Minimum Equipment List D630W003-ESEM approved at revision 3 dated July 24, 2015 (or later approved revisions) as per the defined Operational Suitability Data Certification Basis: JAR-MMEL / MEL Amendment 1, section 1 Subpart A & B.
b) Required for entry into service by EU operator

SECTION 2: (-200 VARIANT) – continued

2. Flight Crew Data

a) The Flight Crew data D015Z033-01, Revision New, dated December 10, 2015 (or later approved revisions) as per the defined Operational Suitability Data Certification Basis: CS-FCD, initial Issue.
b) Required for entry into service by EU operator.
c) Pilot Type Rating: "B777/787".

Note: These data cover the models B787-8, -9 and B777-200, -300 and -777F series aircraft. Differences are addressed in D015Z033-01.

3. Cabin Crew Data

a) The Cabin Crew data (CCD reference D6-85797, Operational Suitability Data-Cabin Crew Data - Boeing 777/787) approved at revision A (or later approved revisions) as per the defined Operational Suitability Data Certification Basis: CS-CCD, Initial Issue.
b) Required for entry into service by EU operator.
c) The aircraft models: B777-200; B777 -200LR; B777-300; B777-300ER are determined to be variants to the B777-200ER aircraft model.

VI. Part 26 compliance information

For all models, compliance with point 26.300(a) of Part 26 is demonstrated by complying with points

- 26.301 Compliance Plan for (R)TC holders
- 26.302 Fatigue and damage tolerance evaluation
- 26.303 Limit of Validity
- 26.304 Corrosion prevention and control programme
- 26.305 Validity of the continuing structural integrity programme
- 26.306 Fatigue critical baseline structure
- 26.307 Damage tolerance data for existing changes to fatigue critical structure
- 26.308 Damage tolerance data for existing repairs to fatigue critical structure
- 26.309 Repair Evaluation Guidelines

VII. Notes

1. Cabin Interior and Seating Configurations must be approved.

2. An Increased Gross Weight version of the Model -200 was approved by JAA on 22 January 1997 (date of application 16 June 1995). Key differences relative to the original -200 are noted in the preceding sections.

SECTION 3 (- 300 VARIANT)

I. General

1. Aircraft:
   Boeing 777-300

2. JAA Validation Application Date:
   (Reference date for EASA validation)
   15 September 1995

3. EASA/JAA Validation Date:
   (JAA recommendation)
   4 May 1998

II. Certification Basis

1. Reference Application Date for FAA Certification:
   15 September 1995

2. Certification Date:
   4 May 1998

   FAA Type Certification Data Sheet No. T00001SE

3. FAA Certification Basis:

   Part 25 through Amendment 25-86 except for:
   FAR 25.201 which remains at Amendment 25-83 level,
   FAR 25.203 which remains at Amendment 25-83 level,
   FAR 25.571(e)(1) which remains at Amendment 25-71 level (remains from 777-200 certification basis),
   FAR 25.335(d) which remains at Amendment 25-85 level, and
   FAR 25.853(d)(3) which remains at Amendment 25-82 level.
   Part 36, as amended at the time of certification.
   Part 34, as amended at the time of certification.

   For details of Exemptions, Special Conditions and Equivalent Safety Findings granted by FAA, refer to FAA TCDS T00001SE.

4. EASA/JAA Airworthiness Requirements:

   JAR 25 Change 14, effective 27 May 1994, except JAR ACJ 25.963(g), which remains at Change 13
   JAR AWO Change 1, effective 29 November 1985
   Orange Paper AWO 91/1, effective 28 November 1991

The following reversion from the defined certification basis has been accepted:

CRI C-301Fuel Tank Access Covers
JAR ACJ 25.963(g), Fuel Tanks (Acceptable Means of Compliance)

SECTION 3: (-300 VARIANT) – continued

5. JAA Special Conditions:

Special Conditions particular to 777-300:

CRI D-301	Doors/Escape Slide Evacuation Capability
CRI D-302	Lightning Protection Indirect Effects

Special Conditions applicable to 777-200 and remaining unchanged for 777-300:

(Novel Features)

CRI C-2	Interaction of Systems and Structure (ref. NPA 25C-199)
CRI C-3	Design Manoeuvre Requirements
CRI C-4	Design Dive Speed Definitions
CRI C-5	Stalling Speeds for Structural Design
CRI C-6	Loading Conditions for an Aircraft with a Folding Wing Tip
CRI D-2	Elect. Flight Control Unusual Features not addressed by existing JARs
CRI D-3	Control Signal Integrity (also partly Interpretative Material)
CRI D-16	Towbarless Towing
CRI D-251	Lower Lobe Crew Rest Compartment
CRI F-15	Global Position (GPS) Installation Approval (ref. 25.1301, 25.1329)
CRI F-253	Multi Mode Receivers (MMR)

(General Experience)

CRI C-25	Flight Test Loads Survey
CRI D-5	Protection from External High Intensity Radiated Fields
CRI D-6	Lightning Protection Requirements
CRI D-9	Braking Performance
CRI E-4	Engine Unbalance due to Fan Blade loss
CRI F-4	Cockpit Voice Recorder
CRI F-5	Flight Data Recorder

a. EASA Special Conditions

CRI D-GEN01 PTC	Fire Resistance of Thermal Insulation Material Affected requirement CS25.856 & Appendix F
CRI D-GEN02 PTC	Application of heat release and smoke density requirements to seat materials. Affected Requirement CS 25.853(d) Appendix F Part IV & V Part 21 §21A.16B
CRI D-GEN8	Installation of Oblique Seats
CRI D-GEN10	Installation of suite type seating
CRI F-GEN-11	Non-rechargeable Lithium Batteries Installations
CRI H-01	Enhanced Airworthiness Programme for Aeroplane Systems - ICA on EWIS
CRI E-08	Flammability Reduction Systems

6. JAA Exemptions:

The following Requests for Exemption have been granted:

CRI E-3	Thrust Reverser Testing	(25.934)
CRI E-6	Fire resistance of PDOS flex hose	(25.1183(a))

SECTION 3: (-300 VARIANT) - continued

Note: The following CRIs addressing partial exemptions relate to modified requirements.

CRI C-15	Jacking loads	(25X519)
CRI D-14	Hydraulic System Proof Pressure Testing	(25.1435(b)(1))

7. Equivalent Safety Findings:

Particular to the 777-300

CRI F-302	Off Wing Escape Slide / Bottle Loss	(25.801)

Applicable to both 777-200 and 777-300:

CRI D-10	Thrust Reversers	(25.933(a))
CRI D-11	Hydraulics Components Strut Aft Fairing	(25.1182(a))
CRI D-13	Airsystems, Proof and Burst pressure tests	(25.1438)
CRI D-18	Aircraft Position Lights	(25.1389(b))
CRI D-21	Stowage of Emergency Equipment	(25.1411(a),(b)(1))
CRI D-22	Compliance to Towbarless Towing	(25X745(d))
CRI E-1	Fan Cowl Flammable Fluid Zone	(25.1181(a)(6))
CRI E-2	Turbine Overheat Detection (RR800 Trent)	(25.1203(d))
CRI F-6	Use of ADIRU acceleration data in place of data for CG	(25.1459(a)(2))
CRI F-7	External Position Light System	(25.1387(b)(c))
CRI F-8	Flight Controls DC Power System	(25.1351(b)(5))
CRI F-9	Oxygen Outlets in Galley Work Areas	(25.1447(c)(3))
CRI F-10	Slide/Raft Inflation Gas Cylinders	(25X1436)
CRI F-12	Airplane Overspeed Warning	(25.1303(c)(1))
CRI F-14	Flammability of Fibre Optic Cables	(25.1359)
CRI F-16	Purser Station Seat	(25.785(d) and (f))
CRI F-GEN9-1	Minimum Mass Flow of Supplemental Oxygen “Component Qualification”	(25.1443(c))
CRI F-GEN9-3	Crew Determination of Quantity of Oxygen in Passenger Oxygen System	(25.1441(c))
CRI G-GEN2	Engine and APU Fire Switch Handle Design	(25.1555(d)(1))
CRI J-2	APU Automatic Shutdown	(25.B.1305))

8. JAA Environmental Standards:

Noise: ICAO Annex 16, Volume I
Fuel Venting & Emissions: ICAO Annex 16, Volume II

III. Technical Characteristics and Operational Limitations

1. Production Basis:

Production under Type Certificate

2. Design Standard:

Defined by Boeing Top Drawing No. 001W0001, Final Assembly-777, Rev BW, dated 18 March 1998, and later approved changes (See also JAA CRI A-6 Issue 1).

SECTION 3: (-300 VARIANT) - continued

3. Description:

Two turbofan engines, medium to long range twin aisle large transport passenger aeroplane.

4. Dimensions:

Length	73.8 m	(242 ft 4 in)
Span	60.9 m	(199 ft 11 in)
Height	18.5 m	(60 ft 8 in)
Wing Area	427.8 m^2	(4605 ft^2)

5. Engines:

Two (2) Pratt & Whitney PW4000 Turbofan Engines
Models installed: PW4090 or 4098
Joint Data Sheet No.: JAA/E/94-008
Limitations: See Engine Data Sheet No. JAA/E/94-008

EASA adopted FAA ADs 2022-06-10 and 2022-06-11 that require powerplant design changes not validated by EASA. Therefore, 777-200/777-300 with PW4000 aircraft-engine configurations cannot be operated if registered in EU member states

Two (2) Rolls-Royce RB211 Trent Turbofan Engines
Models installed: Trent 892
Joint Data Sheet No.: JAA/E/95-009
Limitations: See Engine Joint Data Sheet No. JAA/E/95-009

6. Auxiliary Power Unit:

Honeywell (formerly Allied Signal) Model 331-500
Limitations: Refer to the APU TCDS / TSO

7. Propellers: N/A

8. Fuel:

Refer to applicable approved manuals

9. Oil:

Refer to applicable approved manuals

10. Air Speeds:

See Airplane Flight Manual

11. Maximum Operating Altitude:

13,140 m (43,100 ft) pressure altitude

12. All Weather Capability:

Cat 3

13. Maximum Certified Weights:

	Pounds	Kilograms
MTW	662,000	300,278
MTOW	660,000	299,370
MLW	524,000	237,682

MZFW	495,000	224,528

14. Centre of Gravity:

See Airplane Flight Manual

15. Datum:

See Weights and Balance Manual

SECTION 3: (-300 VARIANT) - continued

16. Mean Aerodynamic Cord:

7.08 m (278.5 in)

17. Levelling Means:

See Airplane Flight Manual

18. Minimum Flight Crew:

Two (Pilot and Co-pilot) for all types of flight

19. Maximum Seating Capacity:

The maximum number of passengers approved for emergency evacuation is 550. See interior layout drawing for the maximum passenger capacities approved for each aeroplane when delivered.

20. Exits:

Number	Type	Size mm (inches)
5 per side	A	1067x1829 (42x72)

21. Baggage/Cargo Compartment:

Location	Class	Volume (m^3)
Forward	C	94.0 – 107.4
Aft	C	70.5 - 89.5
Bulk	C	17.0

22. Wheels and Tyres:

Nose Assy (Qty 2)
Wheel and Tyre: 42 x 17.0R18
Main Assy (Qty 12)
Wheel and Tyre: 50 x 20.0R22
Speed Rating: 235 MPH

23. Fuel Tank Flammability Reduction System (FRS):

Aircraft which have made there first flight after 31 December 2011 must be equipped with a fuel tank Flammability Reduction System (EASA SIB 2010-10)

Flammability Reduction Systems have been installed on aircraft line numbers 772 and on or as modification per Service Bulletin 777-47-0002. Airworthiness Limitations for the FRS are contained in Section 9 of the applicable Maintenance Planning Document.

This system shall remain installed and operative and can only be dispatched inoperative in accordance with the provisions of the MMEL

SECTION 3: (-300 VARIANT) - continued

24. Minimum Cabin Crew:

In accordance with the following;

Installed Passenger Seats	Minimum Cabin Crew
501 to 550	11
500 or fewer	10

NOTE: The above minimum cabin crew numbers are those demonstrated by the type certificate holder for conventional cabin layouts. A lower number may be acceptable in the case of a cabin layout with compensating features agreed by the Agency. In such a case, the lower minimum cabin crew number must be documented in an EASA approved major design change or Supplemental Type Certificate (STC).

IV. Operating and Servicing Instructions

1. Flight Manual: Boeing Document D631W002.J00 (PW Installation), Boeing Document D631W002.J01 (GE Installation), and Boeing Document D631W002.J02 (RR Trent Installation)

Note 1: The AFM for a JAA customer will have a dedicated identification, replacing the denominator J01, J02 or J03.
Note 2: EASA adopted FAA ADs 2022-06-10 and 2022-06-11 that require powerplant design changes not validated by EASA. Therefore, 777-200/777-300 with PW4000 aircraft-engine configurations cannot be operated if registered in EU member states

2. Mandatory Maintenance Instructions:

CMRs, ALI's, Life Limited Parts
Maintenance Planning Data Document Section 9 (Boeing Document D622W001), and later revisions thereof.

3. Service Letters and Service Bulletins:

As published by Boeing and approved by FAA.

4. Required Equipment: These are identified as Import Requirements in CRI A-10.

The following requirements must be complied with if the optional equipment listed below is installed:

CRI C-6	Loading Conditions for an Aircraft with a Folding Wing-tip.	
CRI D-20	Assist Space Deviation	(25.813(b))
CRI D-251	Lower Lobe Crew Rest Compartment	
CRI F-16	Purser Station Seat	(25.785(d) and (f))
CRI F-17	Placards Pivoting Arm Video Units	(25.561(d) et al)
CRI F-253	MMR Qualification and Installation	(25.1301 et al)

CRI F-254	EGPWS Airworthiness Approval	(25.1301 et al)
CRI F-255	EGPWS Alerting Design.	

SECTION 3: (-300 VARIANT) - continued

V. OPERATIONAL SUITABILITY DATA (OSD)

The Operational Suitability Data elements listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate [original TC number] as per Commission Regulation (EU) 748/2012 as amended by Commission Regulation (EU) No 69/2014.

1. Master Minimum Equipment List

a) Master Minimum Equipment List D630W003-ESEM approved at revision 3 dated July 24, 2015 (or later approved revisions) as per the defined Operational Suitability Data Certification Basis: JAR-MMEL / MEL Amendment 1, section 1 Subpart A & B.
b) Required for entry into service by EU operator

2. Flight Crew Data

a) The Flight Crew data D015Z033-01, Revision New, dated December 10, 2015 (or later approved revisions) as per the defined Operational Suitability Data Certification Basis: CS-FCD, initial Issue.
b) Required for entry into service by EU operator.
c) Pilot Type Rating: "B777/787".

Note: These data cover the models B787-8, -9 and B777-200, -300 and -777F series aircraft. Differences are addressed in D015Z033-01.

3. Cabin Crew Data

a) The Cabin Crew data (CCD reference D6-85797, Operational Suitability Data-Cabin Crew Data - Boeing 777/787) approved at revision A (or later approved revisions) as per the defined Operational Suitability Data Certification Basis: CS-CCD, Initial Issue.
b) Required for entry into service by EU operator.
c) The aircraft models: B777-200; B777 -200LR; B777-300; B777-300ER are determined to be variants to the B777-200ER aircraft model.

VI. Part 26 compliance information

For all models, compliance with point 26.300(a) of Part 26 is demonstrated by complying with points
- 26.301 Compliance Plan for (R)TC holders
- 26.302 Fatigue and damage tolerance evaluation
- 26.303 Limit of Validity
- 26.304 Corrosion prevention and control programme
- 26.305 Validity of the continuing structural integrity programme
- 26.306 Fatigue critical baseline structure
- 26.307 Damage tolerance data for existing changes to fatigue critical structure
- 26.308 Damage tolerance data for existing repairs to fatigue critical structure
- 26.309 Repair Evaluation Guidelines

VII. Notes

1. Cabin Interior and Seating Configuration must be approved.

SECTION 4: (- 300ER VARIANT)

I. General

1. Aircraft:

   Boeing 777-300ER

2. JAA Validation Application Date:
   (Reference date for EASA validation)

   13 December 1999

3. JAA Validation Date:
   (JAA recommendation)

   16 March 2004

4. EASA TC Date:

   16 March 2004

II. Certification Basis

1. Reference Application Date for FAA Certification:

   13 December 1999

2. Certification Date:

   16 March 2004

   FAA Type Certification Data Sheet No. T00001SE

3. FAA Certification Basis:

   Part 25 through Amendment 25-98 except for:
   FAR 25.831(a) and (g) which remains at Amendment 25-86
   FAR 25.841(a), which remains at Amendment 25-86
   FAR 25.853(d)(3), which remains at Amendment 25-82
   FAR 25.772 and 795, at Amendment 25-106
   Part 36, as amended at the time of certification.
   Part 34, as amended at the time of certification.

   For details of Exemptions, Special Conditions and Equivalent Safety Findings granted by FAA, refer to FAA TCDS T00001SE.

4. JAA Airworthiness Requirements:

   JAR 25 Change 14, effective 27 May 1994
   Orange Paper 96/1, effective 19 April 1996
   JAR AWO Change 2, effective 1 August 1996, as defined in CRI A-LR-1.

5. JAA Special Conditions:

CRI E-LR-4	Fuel Tank Safety	JAR 25.981 et al
CRI G-LR-1	E-ETOPS	FAA SC, JAA IL-20
CRI K-LR-2	High Altitude Autoland	NPA AWO 2&5

SECTION 4: (-300ER VARIANT) – continued

Special Conditions applicable to the 777-300ER, and remaining unchanged from the 777-200:

(Novel Features)

CRI C-2	Interaction of Systems and Structure (ref. NPA 25C-199)
CRI C-3	Design Manoeuvre Requirements
CRI D-2	Elect. Flight Control Unusual Features not addressed by existing JARs
CRI D-3	Control Signal Integrity (also partly Interpretative Material)
CRI F-15	Global Position (GPS) Installation Approval (ref. 25.1301, 25.1329)
CRI G-2	Airplane Flight Manual

(General Experience)

CRI C-25	Flight Test Loads Survey
CRI D-5	Protection from External High Intensity Radiated Fields
CRI D-6	Lightning Protection Requirements
CRI F-4	Cockpit Voice Recorder
CRI F-5	Flight Data Recorder

Special Conditions applicable to 777-300ER, and remaining unchanged from the 777-300:

CRI D-301	Doors/Escape Slide Evacuation Capability
CRI D-302	Lightning Protection Indirect Effects

a. EASA Special Conditions

CRI D-GEN01 PTC	Fire Resistance of Thermal Insulation Material Affected requirement CS25.856 & Appendix F
CRI D-GEN02 PTC	Application of heat release and smoke density requirements to seat materials. Affected Requirement CS 25.853(d) Appendix F Part IV & V Part 21 §21A.16B
CRI D-GEN8	Installation of Oblique Seats
CRI D-GEN10	Installation of suite type seating
CRI F-GEN-11	Non-rechargeable Lithium Batteries Installations
CRI H-01	Enhanced Airworthiness Programme for Aeroplane Systems - ICA on EWIS
CRI E-08	Flammability Reduction Systems

6. JAA “Elect to Comply” Airworthiness Standards:

For the B777-300ER, the following standards are applicable, partly based on the Elect to Comply Standards for the B 777-200/300:

B-LR-1	Use of 1g Stall Speed	(25.103) et al
B-LR-2	Accelerate/Stop Distance and Braking Performance (wet and contaminated runway)	(JAR 25, Ch 15, 25.101,101,105, 107, 109,113,115, 735,1533 X1591)
C-LR-10	Vibration, Buffet and Aero-elastic Stability Requirements	(NPA 25 BCD-236)
C-LR-12	Landing Gear Safe Lives – Fatigue Scatter Factors	(25.571, ACJ 25.571(a))
D-LR-1	Doors	(NPA 25D-218 Rev 2 and 3)

SECTION 4: (-300ER VARIANT) – continued

D-LR-9	Towbarless Towing	(INT/POL/25/13 Rev 2 and 3)
	Composite Aircraft Structure – Change of Materials	(NPA 25D-256)
	Loads Requirements	(NPA 25C-260)
	Shock Absorption Tests	(NPA 25CD-279)
	Discrete Gust Rule Changes	(NPA 25C-282)
J-1	APU Instruments	(NPA 25B-1305, May 1990)

7. JAA Exemptions:

The following Requests for Exemption have been granted:

CRI E-3	Thrust Reverser Testing	(25.934)
CRI E-6	Fire resistance of PDOS flex hose	(25.1183(a))

The following CRI addresses a partial exemption due to modified requirements.

CRI D-14	Hydraulic System Proof Pressure Testing	(25.1435(b)(1))

8. Equivalent Safety Findings:

Equivalent Safety Findings particular to the B777-300ER:

CRI B-LR-3	Stalling	(25.201, 203)
CRI C-LR-1	Design Dive Speed	(25.335)
CRI C-LR-9	Material Strength Properties and Design Values	(25.613)
CRI C-LR-11	Fuel Tank Access Covers	(25.963(g), ACJ 25.963(g), AC 25.963-1)
CRI D-GEN7	Flammability Testing Hierarchy	(25.853(a))
CRI D-LR-4	Position Lights	(25.1389)
CRI D-LR-6	Door Sill Reflectance	(25.811(f))
CRI D-LR-8	Ventilation (AC Packs Off)	(25.831(a))
CRI F-LR-1	Dedicated Reset Switch Overspeed Warning	(25.1303(c)(1), AMJ 25.1322)
CRI F-LR-3	Exterior Exit Markings	(25.8111(f))
CRI F-LR-4	Slide Raft Pressure Vessels	(25X1436)

Equivalent Safety Findings applicable to the 777-300ER and remaining unchanged from the 777-200:

CRI D-10	Thrust Reversers	(25.933(a))
CRI D-11	Hydraulics Components Strut Aft Fairing	(25.1182(a))
CRI D-13	Airsystems, Proof and Burst pressure tests	(25.1438)
CRI D-21	Stowage of Emergency Equipment	(25.1411(a),(b)(1))
CRI E-1	Fan Cowl Flammable Fluid Zone	(25.1181(a)(6))
CRI E-7(ptc)	Reinforced Cockpit Door	(25.772, 25.795)
CRI F-6	Use of ADIRU acceleration data in place of data for CG	(25.1459(a)(2))
CRI F-8	Flight Controls DC Power System	(25.1351(b)(5))
CRI F-9	Oxygen Outlets in Galley Work Areas	(25.1447(c)(3))
CRI F-12	Airplane Overspeed Warning	(25.1303(c)(1))

SECTION 4: (-300ER VARIANT) – continued

CRI F-14	Flammability of Fibre Optic Cables	(25.1359)
CRI F-GEN9-1	Minimum Mass Flow of Supplemental Oxygen "Component Qualification"	(25.1443(c))
CRI F-GEN9-3	Crew Determination of Quantity of Oxygen in Passenger Oxygen System	(25.1441(c))
CRI G-GEN2	Engine and APU Fire Switch Handle Design	(25.1555(d)(1))
CRI J-2	APU Automatic Shutdown	(25.B.1305)

Equivalent Safety Findings applicable to the 777-300ER, and remaining unchanged from the 777-300:

CRI F-302	Off Wing Escape Slide / Bottle Loss	(25.810(d))

9. JAA Environmental Standards:

Noise: ICAO Annex 16, Volume I
Fuel Venting & Emissions: ICAO Annex 16, Volume II

III. Technical Characteristics and Operational Limitations

1. Production Basis:

Production under Type Certificate

2. Design Standard:

The baseline Type Certified configuration is defined by ASCT (ID No. 2DmWP00000423), Revision A, for WD501and ASCT (ID No. 2DmWP00000429), Revision A, for WD502 and ASCT (ID No. 2DmWP00000466), Revision A, for WD521.

3. Description:

Two turbofan engines, medium to long range twin aisle large transport passenger aeroplane.

4. Dimensions:

Length	73.8 m	(242 ft 4 in)
Span	64.8 m	(212 ft 7 in)
Height	18.5 m	(60 ft 8 in)
Wing Area	427.8 m^2	(4605 ft^2)

5. Engines:

Two (2) General Electrical GE90 Turbofan Engines
Models installed: GE90-115B,
EASA Type-Certificate No.: EASA.IM.E.002
Limitations: See Engine Data Sheet No. EASA.IM.E.002

6. Auxiliary Power Unit: Honeywell (formerly Allied Signal) Model 331-500
Limitations: Refer to the APU TCDS / TSO

7. Propellers: N/A

8. Fuel: Refer to applicable approved manuals

SECTION 4: (-300ER VARIANT) - continued

9. Oil: Refer to applicable approved manuals

10. Air Speeds: See Airplane Flight Manual

11. Maximum Operating Altitude: 13,140 m (43,100 ft) pressure altitude

12. All Weather Capability: Cat 3

13. Maximum Certified Weights:

	Pounds	Kilograms
MTW	752,000	341,101
MTOW	750,000	340,194
MLW	554,000	251,290
MZFW	529,000	239,950

a. Optional Increased Weights:

	Pounds	Kilograms
MTW	777,000	352,441
MTOW	775,000	351,534

14. Centre of Gravity: See Airplane Flight Manual

15. Datum: See Weights and Balance Manual

16. Mean Aerodynamic Cord (MAC):

7.08 (278.5 in)

17. Levelling Means: See Airplane Flight Manual

18. Minimum Flight Crew: Two (Pilot and Co-pilot) for all types of flight

19. Maximum Seating Capacity:

The maximum number of passengers approved for emergency evacuation is 550. See interior layout drawing for the maximum passenger capacities approved for each aeroplane when delivered.

20. Exits:

Number	Type	Size mm (inches)
5 per side	A	1067x1829 (42x72)

21. Baggage/Cargo Compartment:

Location	Class	Volume (m^3)
Forward	C	94.0 – 107.4
Aft	C	70.5 - 89.5
Bulk	C	17.0

SECTION 4: (-300ER VARIANT) – continued

22. Wheels and Tyres:

Nose Assy (Qty 2)
Wheel and Tyre: 43 x 17.5R17
Main Assy (Qty 12)
Wheel and Tyre: 52 x 21.0R22
Speed Rating: 235 MPH

23. Fuel Tank Flammability Reduction System (FRS):

Aircraft which have made there first flight after 31 December 2011 must be equipped with a fuel tank Flammability Reduction System (EASA SIB 2010-10)

Flammability Reduction Systems have been installed on aircraft line numbers 772 and on or as modification per Service Bulletin 777-47-0002. Airworthiness Limitations for the FRS are contained in Section 9 of the applicable Maintenance Planning Document.

This system shall remain installed and operative and can only be dispatched inoperative in accordance with the provisions of the MMEL

24. Minimum Cabin Crew:

In accordance with the following;

Installed Passenger Seats	Minimum Cabin Crew
501 to 550	11
500 or fewer	10

NOTE: The above minimum cabin crew numbers are those demonstrated by the type certificate holder for conventional cabin layouts. A lower number may be acceptable in the case of a cabin layout with compensating features agreed by the Agency. In such a case, the lower minimum cabin crew number must be documented in an EASA approved major design change or Supplemental Type Certificate (STC).

IV. Operating and Servicing Instructions

1. Flight Manual:

Boeing Document D631W002.J01
(GE Installation)

Note: The AFM for a JAA customer will have a dedicated identification, replacing the denominator J01

2. Mandatory Maintenance Instructions:

CMRs, ALI's, Life Limited Parts
Maintenance Planning Data Document Section 9 (Boeing Document D622W001), and later revisions thereof.

SECTION 4: (-300ER VARIANT) - continued

3. Service Letters and Service Bulletins:

As published by Boeing and approved by FAA.

4. Required Equipment:

These are identified as Import Requirements in CRI A-LR-10.

The following requirements must be complied with if the optional equipment listed below is installed:

CRI D-20	Assist Space Deviation	(25.813(b))
CRI F-16	Purser Station Seat	(25.785(d) and (f))
CRI F-17	Placards Pivoting Arm Video Units	(25.561(d) et al)
CRI F-253	MMR Qualification and Installation	(25.1301 et al)
CRI F-254	EGPWS Airworthiness Approval	(25.1301 et al)
CRI F-255	EGPWS Alerting Design.	

V. OPERATIONAL SUITABILITY DATA (OSD)

The Operational Suitability Data elements listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate [original TC number] as per Commission Regulation (EU) 748/2012 as amended by Commission Regulation (EU) No 69/2014.

1. Master Minimum Equipment List

a) Master Minimum Equipment List D630W003-ESEM approved at revision 3 dated July 24, 2015 (or later approved revisions) as per the defined Operational Suitability Data Certification Basis: JAR-MMEL / MEL Amendment 1, section 1 Subpart A & B.
b) Required for entry into service by EU operator

2. Flight Crew Data

a) The Flight Crew data D015Z033-01, Revision New, dated December 10, 2015 (or later approved revisions) as per the defined Operational Suitability Data Certification Basis: CS-FCD, initial Issue.
b) Required for entry into service by EU operator.
c) Pilot Type Rating: "B777/787".

Note: These data cover the models B787-8, -9 and B777-200, -300 and -777F series aircraft. Differences are addressed in D015Z033-01.

3. Cabin Crew Data

a) The Cabin Crew data (CCD reference D6-85797, Operational Suitability Data-Cabin Crew Data - Boeing 777/787) approved at revision A (or later approved revisions) as per the defined Operational Suitability Data Certification Basis: CS-CCD, Initial Issue.
b) Required for entry into service by EU operator.
c) The aircraft models: B777-200; B777 -200LR; B777-300; B777-300ER are determined to be variants to the B777-200ER aircraft model.

VI. Part 26 compliance information

For all models, compliance with point 26.300(a) of Part 26 is demonstrated by complying with points
- 26.301 Compliance Plan for (R)TC holders
- 26.302 Fatigue and damage tolerance evaluation
- 26.303 Limit of Validity
- 26.304 Corrosion prevention and control programme
- 26.305 Validity of the continuing structural integrity programme
- 26.306 Fatigue critical baseline structure
- 26.307 Damage tolerance data for existing changes to fatigue critical structure
- 26.308 Damage tolerance data for existing repairs to fatigue critical structure
- 26.309 Repair Evaluation Guidelines

VII. Notes

1. Cabin Interior and Seating Configuration must be approved.

SECTION 5: (- 200LR VARIANT)

I. General

1. Aircraft:

   Boeing 777-200LR

2. JAA Validation Application Date:
   (Reference date for EASA validation)

   13 December 1999

3. EASA Validation Date:

   02 February 2006

4. EASA TC Date:

   02 February 2006

II. Certification Basis

1. Reference Application Date for FAA Certification:

   13 December 1999

2. Certification Date:

   02 February 2006

   FAA Type Certification Data Sheet No. T00001SE

3. FAA Certification Basis:

   Part 25 through Amendment 25-100 except for:
   FAR 25.831(a) and (g) which remains at Amendment 25-86
   FAR 25.841(a), which remains at Amendment 25-86
   FAR 25.853(d)(3), which remains at Amendment 25-82
   Part 36, as amended at the time of certification.
   Part 34, as amended at the time of certification.

   For details of Exemptions, Special Conditions and Equivalent Safety Findings granted by FAA, refer to FAA TCDS T00001SE.

4. JAA Airworthiness Requirements:

   JAR 25 Change 15, effective 1 October 2000
   JAR AWO Change 2, effective 1 August 1996, as defined in CRI A-LR-1.

5. JAA Special Conditions:

CRI E-LR-4	Fuel Tank Safety	JAR 25.981 et al
CRI G-LR-1	E-ETOPS	FAA SC, JAA IL-20
CRI K-LR-2	High Altitude Autoland	NPA AWO 2&5

Special Conditions applicable to the 777-200LR/300ER, and remaining unchanged from the 777-200:

<u>(Novel Features)</u>

CRI C-2	Interaction of Systems and Structure (ref. NPA 25C-199)
CRI C-3	Design Manoeuvre Requirements
CRI D-2	Elect. Flight Control Unusual Features not addressed by existing JARs

SECTION 5: (-200LR VARIANT) - continued

CRI D-3	Control Signal Integrity (also partly Interpretative Material)
CRI F-15	Global Position (GPS) Installation Approval (ref. 25.1301, 25.1329)
CRI G-2	Airplane Flight Manual

(General Experience)

CRI C-25	Flight Test Loads Survey
CRI D-5	Protection from External High Intensity Radiated Fields
CRI D-6	Lightning Protection Requirements
CRI F-4	Cockpit Voice Recorder
CRI F-5	Flight Data Recorder

Special Conditions applicable to 777-200LR/300ER, and remaining unchanged from the 777-300:

CRI D-302	Lightning Protection Indirect Effects

a. EASA Special Conditions

CRI D-GEN01 PTC	Fire Resistance of Thermal Insulation Material Affected requirement CS25.856 & Appendix F
CRI D-GEN02 PTC	Application of heat release and smoke density requirements to seat materials. Affected Requirement CS 25.853(d) Appendix F Part IV & V Part 21 §21A.16B
CRI D-GEN8	Installation of Oblique Seats
CRI D-GEN10	Installation of suite type seating
CRI F-GEN-11	Non-rechargeable Lithium Batteries Installations
CRI H-01	Enhanced Airworthiness Programme for Aeroplane Systems - ICA on EWIS
CRI E-08	Flammability Reduction Systems

6. JAA “Elect to Comply” Airworthiness Standards:

For the B777-200LR/300ER, the following standards are applicable, partly based on the Elect to Comply Standards for the B 777-200/300:

B-LR-1	Use of 1g Stall Speed	(25.103) et al
B-LR-2	Accelerate/Stop Distance and Braking Performance (wet and contaminated runway)	(JAR 25, Ch 15, 25.101,105, 107, 109,113,115, 735,1533 and X1591)
C-LR-10	Vibration, Buffet and Aero-elastic Stability Requirements	(NPA 25 BCD-236)
C-LR-12	Landing Gear Safe Lives – Fatigue Scatter Factors	(25.571, ACJ 25.571(a))
D-LR-1	Doors	(NPA 25D-218 Rev 2 and 3)
D-LR-9	Towbarless Towing	(INT/POL/25/13 Issue 1
	Composite Aircraft Structure – Change of Materials	(NPA 25D-256)
	Loads Requirements	(NPA 25C-260)
	Shock Absorption Tests	(NPA 25CD-279)
	Discrete Gust Rule Changes	(NPA 25C-282)
J-1	APU Instruments	(NPA 25B-1305, May 1990)

SECTION 5: (-200LR VARIANT) – continued

7. JAA Exemptions:

The following Requests for Exemption have been granted:

CRI E-3	Thrust Reverser Testing	(25.934)
CRI E-6	Fire resistance of PDOS flex hose	(25.1183(a))

The following CRI addresses a partial exemption due to modified requirements.

CRI D-14	Hydraulic System Proof Pressure Testing	(25.1435(b)(1))

8. Equivalent Safety Findings:

Equivalent Safety Findings particular to the B777-200LR/300ER:

CRI B-LR-3	Stalling	(25.201, 203)
CRI C-LR-1	Design Dive Speed	(25.335)
CRI C-LR-9	Material Strength Properties and Design Values	(25.613)
CRI C-LR-11	Fuel Tank Access Covers	(25.963(g), ACJ 25.963(g), AC 25.963-1)
CRI D-GEN7	Flammability Testing Hierarchy	(25.853(a))
CRI D-LR-4	Position Lights	(25.1389)
CRI D-LR-6	Door Sill Reflectance	(25.811(f))
CRI D-LR-8	Ventilation (AC Packs Off)	(25.831(a))
CRI F-LR-1	Dedicated Reset Switch Overspeed Warning	(25.1303(c)(1), AMJ 25.1322)
CRI F-LR-3	Exterior Exit Markings	(25.8111(f))
CRI F-LR-4	Slide Raft Pressure Vessels	(25X1436)

Equivalent Safety Findings applicable to the 777-200LR/300ER and remaining unchanged from the 777-200:

CRI D-10	Thrust Reversers	(25.933(a))
CRI D-11	Hydraulics Components Strut Aft Fairing	(25.1182(a))
CRI D-13	Airsystems, Proof and Burst pressure tests	(25.1438)
CRI D-21	Stowage of Emergency Equipment	(25.1411(a),(b)(1))
CRI E-1	Fan Cowl Flammable Fluid Zone	(25.1181(a)(6))
CRI E-7(ptc)	Reinforced Cockpit Door	(25.772, 25.795)
CRI F-6	Use of ADIRU acceleration data in place of data for CG	(25.1459(a)(2))
CRI F-8	Flight Controls DC Power System	(25.1351(b)(5))
CRI F-9	Oxygen Outlets in Galley Work Areas	(25.1447(c)(3))
CRI F-12	Airplane Overspeed Warning	(25.1303(c)(1))
CRI F-14	Flammability of Fibre Optic Cables	(25.1359)
CRI F-GEN9-1	Minimum Mass Flow of Supplemental Oxygen “Component Qualification”	(25.1443(c))
CRI F-GEN9-3	Crew Determination of Quantity of Oxygen in Passenger Oxygen System	(25.1441(c))
CRI G-GEN2	Engine and APU Fire Switch Handle Design	(25.1555(d)(1))
CRI J-2	APU Automatic Shutdown	(25.B.1305)

9. JAA Environmental Standards:

SECTION 5: (-200LR VARIANT) – continued

Noise: ICAO Annex 16, Volume I
Fuel Venting & Emissions: ICAO Annex 16, Volume II

SECTION 5: (-200LR VARIANT) – continued

III. Technical Characteristics and Operational Limitations

1. Production Basis:

Production under Type Certificate

2. Design Standard:

The baseline Type Certified configuration is defined by ASCT (ID No. 2DmWP000005112), Revision A, for WD001and ASCT (ID No. 2DmWP00000528), Revision A, for WD002.

3. Description:

Two turbofan engines, medium to long-range twin aisle large transport passenger aeroplane.

4. Dimensions:

Length	63.7 m	(209 ft 1 in)
Span	64.8 m	(212 ft 7 in)
Height	18.5 m	(60 ft 8 in)
Wing Area	427.8 m^2	(4605 ft^2)

5. Engines:

Two (2) General Electrical GE90 Turbofan Engines
Models installed: GE90-115B or GE90-110B1
EASA Type-Certificate No.: EASA.IM.E.002
Limitations: See Engine Data Sheet No. EASA.IM.E.002

6. Auxiliary Power Unit:

Honeywell (formerly Allied Signal) Model 331-500
Limitations: Refer to the APU TCDS / TSO

7. Propellers:

N/A

8. Fuel:

Refer to applicable approved manuals

9. Oil:

Refer to applicable approved manuals

10. Air Speeds:

See Airplane Flight Manual

11. Maximum Operating Altitude:

13,140 m (43,100 ft) pressure altitude

12. All Weather Capability:

Cat 3

13. Maximum Certified Weights:

	Pounds	Kilograms
MTW	752,000	341,101
MTOW	750,000	340,194
MLW	492,000	223,167
MZFW	461,000	209,106

SECTION 5: (-200LR VARIANT) – continued

a. Optional Increased Weights:

	Pounds	Kilograms
MTW	768,800	348,721
MTOW	766,800	347,814

14. Centre of Gravity:

See Airplane Flight Manual

15. Datum:

See Weights and Balance Manual

16. Mean Aerodynamic Cord (MAC):

7.08 m (278.5 in)

17. Levelling Means:

See Airplane Flight Manual

18. Minimum Flight Crew:

Two (Pilot and Co-pilot) for all types of flight

19. Maximum Seating Capacity:

The maximum number of passengers approved for emergency evacuation is 440. See interior layout drawing for the maximum passenger capacities approved for each aeroplane when delivered.

20. Exits:

Number	Type	Size mm (inches)
4 per side	A	1067x1829 (42x72)

21. Baggage/Cargo Compartment:

Location	Class	Volume (m^3)
Forward	C	70.4 – 80.5
Aft	C	47.0 – 62.6
Bulk	C	17.0

22. Wheels and Tyres:

Nose Assy (Qty 2)
Wheel and Tyre: 43 x 17.5R17
Main Assy (Qty 12)
Wheel and Tyre: 52 x 21.0R22
Speed Rating: 235 MPH

23. Fuel Tank Flammability Reduction System (FRS): Aircraft which have made there first flight after 31 December 2011 must be equipped with a fuel tank Flammability Reduction System (EASA SIB 2010-10)

SECTION 5: (-200LR VARIANT) – continued

Flammability Reduction Systems have been installed on aircraft line numbers 772 and on or as modification per Service Bulletin 777-47-0002. Airworthiness Limitations for the FRS are contained in Section 9 of the applicable Maintenance Planning Document.

This system shall remain installed and operative and can only be dispatched inoperative in accordance with the provisions of the MMEL

24. Minimum Cabin Crew:

In accordance with the following;

Installed Passenger Seats	Minimum Cabin Crew
401 to 440	9
400 or fewer	8

NOTE: The above minimum cabin crew numbers are those demonstrated by the type certificate holder for conventional cabin layouts. A lower number may be acceptable in the case of a cabin layout with compensating features agreed by the Agency. In such a case, the lower minimum cabin crew number must be documented in an EASA approved major design change or Supplemental Type Certificate (STC).

IV. Operating and Servicing Instructions

1. Flight Manual: Boeing Document D631W001.J01L

Note: The AFM for a JAA customer will have a dedicated identification, replacing the denominator J01

2. Mandatory Maintenance Instructions:

CMRs, ALI's, Life Limited Parts
Maintenance Planning Data Document Section 9 (Boeing Document D622W001), and later revisions thereof.

3. Service Letters and Service Bulletins:

As published by Boeing and approved by FAA.

4. Required Equipment: These are identified as Import Requirements in CRI A-LR-10.

The following requirements must be complied with if the optional equipment listed below is installed:

CRI D-20	Assist Space Deviation	(25.813(b))
CRI F-16	Purser Station Seat	(25.785(d) and (f))
CRI F-17	Placards Pivoting Arm Video Units	(25.561(d) et al)
CRI F-253	MMR Qualification and Installation	(25.1301 et al)
CRI F-254	EGPWS Airworthiness Approval	(25.1301 et al)
CRI F-255	EGPWS Alerting Design.	

SECTION 5: (-200LR VARIANT) – continued

V. OPERATIONAL SUITABILITY DATA (OSD)

The Operational Suitability Data elements listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate [original TC number] as per Commission Regulation (EU) 748/2012 as amended by Commission Regulation (EU) No 69/2014.

1. Master Minimum Equipment List

a) Master Minimum Equipment List D630W003-ESEM approved at revision 3 dated July 24, 2015 (or later approved revisions) as per the defined Operational Suitability Data Certification Basis: JAR-MMEL / MEL Amendment 1, section 1 Subpart A & B.
b) Required for entry into service by EU operator

2. Flight Crew Data

a) The Flight Crew data D015Z033-01, Revision New, dated December 10, 2015 (or later approved revisions) as per the defined Operational Suitability Data Certification Basis: CS-FCD, initial Issue.
b) Required for entry into service by EU operator.
c) Pilot Type Rating: "B777/787".

Note: These data cover the models B787-8, -9 and B777-200, -300 and -777F series aircraft. Differences are addressed in D015Z033-01.

3. Cabin Crew Data

a) The Cabin Crew data (CCD reference D6-85797, Operational Suitability Data-Cabin Crew Data - Boeing 777/787) approved at revision A (or later approved revisions) as per the defined Operational Suitability Data Certification Basis: CS-CCD, Initial Issue.
b) Required for entry into service by EU operator.
c) The aircraft models: B777-200; B777 -200LR; B777-300; B777-300ER are determined to be variants to the B777-200ER aircraft model.

VI. Part 26 compliance information

For all models, compliance with point 26.300(a) of Part 26 is demonstrated by complying with points
- 26.301 Compliance Plan for (R)TC holders
- 26.302 Fatigue and damage tolerance evaluation
- 26.303 Limit of Validity
- 26.304 Corrosion prevention and control programme
- 26.305 Validity of the continuing structural integrity programme
- 26.306 Fatigue critical baseline structure
- 26.307 Damage tolerance data for existing changes to fatigue critical structure
- 26.308 Damage tolerance data for existing repairs to fatigue critical structure
- 26.309 Repair Evaluation Guidelines

VII. Notes

1. Cabin Interior and Seating Configuration must be approved.

SECTION 6: (F Freighter VARIANT)

I. General

1. Aircraft:

   Boeing 777F Freighter

2. EASA Validation Application Date:
   (Reference date for EASA validation)

   18 March 2005

3. EASA Validation Date:

   06 February 2009

4. EASA TC Date:

   06 February 2009

II. Certification Basis

1. Reference Application Date for FAA Certification:

   18 March 2005

2. Certification Date:

   06 February 2006

   FAA Type Certification Data Sheet No. T00001SE

3. FAA Certification Basis:

   Part 25 through Amendment 25-117 except for:
   FAR 25.841(a), which remains at Amendment 25-86
   Part 36, as amended at the time of certification.
   Part 34, as amended at the time of certification.

   For details of Exemptions, Special Conditions and Equivalent Safety Findings granted by FAA, refer to FAA TCDS T00001SE.

4. EASA/JAA Airworthiness Requirements:

   For Significant Related Changes and/or affected features/functions:
   - CS25-0 (Initial Issue)
   - CS-AWO.

   For Secondary changes, Not affected areas and Unrelated changes and/or affected features/functions:
   - EASA's 777-200LR TCDS
   - (JAR 25 Change 15
     JAR AWO, Ch 2.)

Reversions:
The following reversions as defined by the respective 777F CRIs, have been identified and accepted as part of the EASA/JAA Validation of the Boeing 777F and are requested by Boeing and agreed by EASA for the certification basis for the validation of the Boeing 777F:

SECTION 6: (F Freighter VARIANT) – continued

From Regulation/ Amdt	Title	To Amendment Level	System
25.1301 / CS25-0	Function and installation	JAR 25-15	ECS: CPCS, CACTCS, Air Distribution, Smoke Detection & Fire Protection Payloads: Crew Oxygen System Electrical Subsystems: Main Deck Cargo Lighting System, Main Deck Alerting System, Main Deck Cargo Door Lighting System Aero: Stability & Control
25.1309 / CS25-0	Equipment, systems, and installations	JAR 25-15	
25.1310 / CS25-0	Power source capacity and distribution	JAR 25-15	
25.1438 / CS25-0	Pressurization and Pneumatic Systems	JAR 25-15	ECS: CPCS, Pneumatics

EASA Special Conditions:

Special Conditions specific to the B777F

D-01(777F)	Fuselage Doors (Main Deck Cargo Door)	CS-25.783 (NPA25D-301 iss 1)
D-02(777F)	Courier Compartment	CS-25.857 (e)
D-03(777F)	Class E Cargo compartment, Fire Protection of Essential Systems	JAR 25.855
D-04(777F)	Fire resistance of Thermal Insulation Material	CS 25.853(a), CS 25.855(d), CS-25.856(a)
F-02(777F)	Access to Class E Compartments in Flight (FAA Exemption)	CS-25.857(e)
H-01	Enhanced Airworthiness Programme for Aeroplane Systems - ICA on EWIS	
E-8	Flammability Reduction Systems	

Special Conditions applicable to the 777-200LR and effective for B777F:
Special Condition CRIs previously applicable to the 777-200LR effective for the 777F as follows:

A-9	Limit Engine Torque Loads for sudden Engine Stoppage	
C-3	Design Manoeuvre Requirements	25.331(c), 25.349(a), 25.351
C-25	Flight Test Loads Survey	25.301(b)
D-2	Elect. Flt Ctrl Unusual Features not addressed by existing JARs	
D-3	Control Signal Integrity (also partly Interpretative Material	

D-5	Protection from External High Intensity Radiated Fields	25.1309(a), 25.1431
D-302	Lightning Protection Indirect Effects	25.581, 25X899, 25.954, 25.1309
G-LR-1	ETOPS	
G-2	Airplane Flight Manual	
E-LR-4	Fuel Tank Safety	JAR 25.981 et al
F-4	Cockpit Voice Recorder	
F-5	Flight Data Recorder	
F-15	Global Position (GPS) Installation Approval	(ref 25.1301, 25.1309)
F-GEN-11	Non-rechargeable Lithium Batteries Installations	CS 25.601, 25.863, 25.1353(c)
K-LR-2	High Altitude Autoland	NPA AWO 2 & 5

Note1: CRI C-02 is not applicable due to Boeing Elect to Comply with CS25 amendement.

5. EASA/JAA “Elect to Comply” Airworthiness Standards:

Elect to comply particular to B777F:
Boeing has elected to Comply with CS25 in place of JAR-25, for a number of Secondary Changes, and Unrelated Changes not-significant or Secondary/Concurrent Changes as shown in the immediate table below.

CS 25 requirement	Requirement Title	Amendment level	Change
.251(e)	Vibration and buffeting	CS25-0	Aero – Performance & Handling Characteristics
.777(a)(c)	Cockpit Controls	CS25-0	ECS-Cargo Conditioning
.831(b)	Ventilation	CS25-0	ECS EE & IFE Equip Cooling
.831(b)(c)	Ventilation	CS25-0	ECS-Cargo Conditioning ECS-EE & IFE Equip Cooling
.853(a)	Compartment Interiors	CS25-0	SATCOM Sys – Thales ARINC 781 & Chelton Antenna Potable / Waste Water & Vacuum Waste Systems
.863	Flammable fluid fire protection	CS25-0	Propulsion-Installations
.863(a)	Flammable fluid fire protection	CS25-0	Hyd. Isolation Valve Bonding Elec-Equip Install
.863(b)(3)	Flammable fluid fire protection	CS25-0	Hyd. Isolation Valve Bonding Elec-Equip Install
.869(a)(1)	Fire protection: systems	CS25-0	Potable / Waste Water & Vacuum Waste Systems Supernumerary Oxygen Sys ECS-EE & IFE Equip Cooling

CS 25 requirement	Requirement Title	Amendment level	Change
.869(a)(4)	Fire protection: systems	CS25-0	Upper Gust Suppression Pres. Transducer – Elec-Wiring/Equip Install Fuels - Elec-Wiring/Equip Install
.869(b)	Fire protection: systems	CS25-0	Potable / Waste Water & Vacuum Waste Systems
.899	Electrical bonding and protection against static electricity	CS25-0	Upper Gust Suppression Pres. Transducer – Flight Contols - Electronics
.899(a)(3)	Electrical bonding and protection against static electricity	CS25-0	Upper Gust Suppression Pres. Transducer – Avionics-EMC
.1301(a)	Function and Installations	CS25-0	Hyd. Isolation Valve Bonding Elec-Wiring/Equip Install Upper Gust Suppression Pres. Transducer – Elec-Wiring/Equip Install Upper Gust Suppression Pres. Transducer – Flight Contols - Electronics Fuels - Elec-Wiring/Equip Install
.1301(b)	Function and installation	CS25-0	Hyd. Isolation Valve Bonding Elec-Equip Install Upper Gust Suppression Pres. Transducer – Elec-Wiring/Equip Install Upper Gust Suppression Pres. Transducer – Flight Contols - Electronics Fuels - Elec-Wiring/Equip Install
.1301(c)	Function and installation	CS25-0	Hyd. Isolation Valve Bonding Elec-Equip Install Upper Gust Suppression Pres. Transducer – Elec-Wiring/Equip Install Fuels - Elec-Wiring/Equip Install

CS 25 requirement	Requirement Title	Amendment level	Change
.1309(a)	Equipment, systems and installations	CS25-0	Hyd. Isolation Valve Bonding Elec-Equip Install Upper Gust Suppression Pres. Transducer – Elec-Wiring/Equip Install Upper Gust Suppression Pres. Transducer – Flight Contols - Electronics Fuels - Elec-Wiring/Equip Install
.1309(a)(2)	Equipment, systems and installations	CS25-0	Potable / Waste Water & Vacuum Waste Systems
.1309(b)	Equipment, systems and installations	CS25-0	Upper Gust Suppression Pres. Transducer – Flight Contols - Electronics
.1316	System lightning protection	CS25-0	Upper Gust Suppression Pres. Transducer – Avionics-EMC
.1322	Warning, Caution and Advisory Lights	CS25-0	ECS-Cargo Conditioning ECS-EE IFE Equip Cooling
.1322(b), (d)	Warning, Caution and Advisory Lights	CS25-0	ECS-Cargo Conditioning
.1353(a)	Electrical Equipment and Installations	CS25-0	Fuels - Elec-Wiring/Equip Install
.1353(b)	Electrical equipment and installations	CS25-0	Fuels - Elec-Wiring/Equip Install
.1353(d)	Electrical equipment and installations	CS25-0	Potable / Waste Water & Vacuum Waste Systems Supernumerary Oxygen Sys
.1353(e)	Electrical equipment and installations	CS25-0	Potable / Waste Water & Vacuum Waste Systems Supernumerary Oxygen Sys
.1357(a)	Circuit protective devices	CS25-0	Fuels - Elec-Wiring/Equip Install
.1357(c)	Circuit protective devices	CS25-0	Fuels - Elec-Wiring/Equip Install
.1357(e)	Circuit protective devices	CS25-0	ECS-Cargo Conditioning Supernumerary Oxygen Sys ECS-EE & IFE Equip Cooling

CS 25 requirement	Requirement Title	Amendment level	Change
.1357(g)	Circuit protective devices	CS25-0	Potable / Waste Water & Vacuum Waste Systems
.1360(a)	Precautions against injury	CS25-0	ECS-Cargo Conditioning Potable / Waste Water & Vacuum Waste Systems Supernumerary Oxygen Sys ECS EE & IFE Equip Cooling – Electrical
.1431(a)	Electronic equipment	CS25-0	Flight Deck Audio. Personnel Address Sys – Cabin Systems. ARINC 629 Data Bus Sys Supernumerary Oxygen Sys ECS-EE & IFE Equip Cooling
.1431(b)	Electronic Equipment	CS25-0	Flight Deck Audio
.1431(c)	Electronic equipment	CS25-0	Personnel Address Sys-Cabin Systems ARINC 629 Data Bus Sys. Potable / Waste Water & Vacuum Waste Systems ECS-EE & IFE Equip Cooling Supernumerary Oxygen Sys
.1431(d)	Electronic equipment	CS25-0	Personnel Address Sys – Cabin Systems. Potable / Waste Water & Vacuum Waste Systems Supernumerary Oxygen Sys ECS-EE & IFE Equip Cooling
.1447(c)(2)(ii)	Equipment standards for oxygen dispensing units	CS25-0	Flight Deck Audio

CS 25 requirement	Requirement Title	Amendment level	Change
.1457(c)(5)	Cockpit Voice Recorders	CS25-0	Flight Deck Audio
.1555(a)	Control Markings	CS-25-0	ECS-Cargo Conditioning

In addition, Boeing proposes to comply with CS 25 Amdt 1 for the following regulations for all changed and affected structure as shown in the following table:

CS 25 requirement	Requirement Title	Amendment level	Change
.302	Interaction of systems and structures	CS25-1	Structures – Loads
.305(e)(f)	Strength and deformation	CS25-1	Structures – Loads
.341	Gust and turbulence loads	CS25-1	Structures – Loads
.343	Design fuel and oil loads	CS25-1	Structures – Loads, Flutter
.345	High lift devices	CS25-1	Structures – Loads
.371	Gyroscopic loads	CS25-1	Structures – Loads
.373	Speed control devices	CS25-1	Structures – Loads
.391	Control surface loads: general	CS25-1	Structures – Loads
.613(b)(f)	Material strength properties and Material Design Values	CS25-1	Structures – Fuselage, Wing, Empennage, Landing Gear, Nacelle & Strut, System Stress
.629	Aeroelastic stability requirements	CS25-1	Structures – Loads, Flutter
.981 (a)	Fuel Tank Ignition Prevention	CS25-1	Propulsion-Fuels

Elect to comply applicable to B777-200LR remaining valid for B777F:

The following standards are applicable based on the Elect to Comply Standards for the B777-200LR:

B-LR-1	Use of 1 g Stall Speed	JAR 25.103 et al
B-LR-2	Accelerate/Stop Distance and Braking Performance (wet and contaminated runway)	JAR25, Ch 15 25.101,105,107,109,113,115,735,1533 and X1591
D-LR-1	Doors	NPA 25D-218 Rev 2 and 3
D-LR-9	Towbarless Towing	INT/POL/25/13 Issue 1
J-1	APU Instruments	NPA 25B-1305, May 1990

6. EASA/JAA Exemptions:

The following Requests for Exemption have been granted on the B777-200LR and are also granted on the B777F:

E-3	Thrust Reverser Testing	25.934
E-6	Fire resistance of PDOS flex hose	25.1183(a)

D-14	Hydraulic System Proof Pressure Testing	25.1435(b)(1)

7. EASA Equivalent Safety Findings:

Equivalent Safety Findings particular to the B777F:

D-05(777F)	Smoke detection on lower lobe (class C) cargo compartment	CS.855(i), CS 25.857, CS 25.858(a)
D-05 (757-300)	Passenger Information Signs	JAR 25.791(a)

Equivalent Safety Findings applicable to the B777F and remaining unchanged from the B777-200LR/300ER:

B-LR-3	Stalling	JAR 25.201, 203 (from A-LR-1, page 7)
C-LR-1	Design Dive Speed	JAR 25.335(b)
C-LR-11	Fuel Tank Access Covers	JAR 25.963(g) ACJ 25.963(g) AC 25.963-1
D-10	Thrust Reversers	JAR 25.933(a)
D-11	Hydraulic Components in Strut Aft Fairing	JAR 25.1182(a)
D-13	Airsystems, Proof and Burst pressure tests	JAR 25.1438
D-LR-4	Position Lights	JAR 25.1389
D-LR-6	Door sill Reflectance	JAR 25.811(f)
E-1	Fan Cowl Flammable Fluid Zone	JAR 25.1181(a)(6)
F-6	Use of ADIRU acceleration data in place of data for CG	JAR 25.1459(a)(2)
F-8	ESF for Flight Controls DC Power Systems	JAR 25.1351(b)(5)
F-9	Oxygen outlets in galley work area	JAR 25.1447(c)(3)
F-10	Slide/Raft Inflation Gas Cylinders	JAR 25X1436
F-12	Overspeed Warning Aural	CS 25.1303 (c)(1)
F-LR-1	Dedicated Reset Switch Overspeed Warning	CS 25.1303(c)(1); AMJ 25.1322
F-LR-3	Exterior Exit Markings	JAR 25.811(f)
F-LR-4	Slide Raft Pressure Vessels	JAR 25X1436
G-GEN2	Engine and APU Fire Switch Handle Design	JAR 25.1555(d)(1)
J-2	APU Automatic Shutdown	JAR 25B.1305

Notes:
B777-200LR CRI C-LR-9 “Material Strength Properties and Design Values” is not required due do compliance with CS25-1 for 25.613(b),(f)

8. EASA Environmental Standards:

Noise: ICAO Annex 16, Volume I
Fuel Venting & Emissions: ICAO Annex 16, Volume II

SECTION 6: (F Freighter VARIANT) – continued

III. Technical Characteristics and Operational Limitations

1. Production Basis:

Production under Type Certificate

2. Design Standard:

The Amended Type Certified configuration is defined by the "777F Master Drawing List," Rev D as enclosed in Boeing Internal Letter B-H320-2009-00178, dated 2-Feb-2009

3. Description:

Two turbofan engines, medium to long-range twin aisle large transport passenger aeroplane.

4. Dimensions:

Length	63.7 m	(209 ft 1 in)
Span	64.8 m	(212 ft 7 in)
Height	18.5 m	(60 ft 8 in)
Wing Area	427.8 m^2	(4605 ft^2)

5. Engines:

Two (2) General Electrical GE90 Turbofan Engines
Models installed: GE90-110B1, GE90-115B
EASA Type-Certificate No.: EASA.IM.E.002
Limitations: See Engine Data Sheet No. EASA.IM.E.002

6. Auxiliary Power Unit:

Honeywell (formerly Allied Signal) Model 331-500
Limitations: Refer to the APU TCDS / TSO

7. Propellers: N/A

8. Fuel:

Refer to applicable approved manuals

9. Oil:

Refer to applicable approved manuals

10. Air Speeds:

See Airplane Flight Manual

11. Maximum Operating Altitude:

13,140 m (43,100 ft) pressure altitude

12. All Weather Capability:

Cat 3

13. Maximum Certified Weights:

	Pounds	Kilograms
MTW	768,800	348,721
MTOW	766,800	347,814
MLW	575,000	260,815
MZFW	547,000	248,115

14. Centre of Gravity:

See Airplane Flight Manual

SECTION 6: (F Freighter VARIANT) – continued

15. Datum:

See Weights and Balance Manual

16. Mean Aerodynamic Cord (MAC):

7.08 m (278.5 in)

17. Levelling Means:

See Airplane Flight Manual

18. Minimum Flight Crew:

Two (Pilot and Co-pilot) for all types of flight

19. Main Deck Occupancy:

The total number of persons carried, including flight crew (2 on-duty flight crew and 2 off-duty flight crew), is limited to 15.

Under the Special Condition CRI D-02, 11persons may occupy the area just aft of the flight deck provided a seating configuration is installed that is approved for occupancy during taxi, takeoff, flight and landing. In conjunction with an approved seating configuration and the provisions of the Special Condition CRI D-02, these persons may be authorized to occupy the main deck.

20. Exits:

Number	Type	Size mm (inches)
2 per side	I	1067x1829 (42x72)

21. Baggage/Cargo (usable) Compartment:

Location	Class	Volume (m^3)
Main deck	E	518
Lower Forward deck	C	102
Lower Aft deck	C	77
Lower Bulk	C	17

SECTION 6: (F Freighter VARIANT) – continued

22. Wheels and Tyres:

Nose Assy (Qty 2)
Wheel and Tyre: 43 x 17.5R17
Main Assy (Qty 12)
Wheel and Tyre: 52 x 21.0R22
Speed Rating: 235 MPH

23. Fuel Tank Flammability Reduction System (FRS): Aircraft which have made there first flight after 31 December 2011 must be equipped with a fuel tank Flammability Reduction System (EASA SIB 2010-10)

Flammability Reduction Systems have been installed on aircraft line numbers 772 and on or as modification per Service Bulletin 777-47-0002. Airworthiness Limitations for the FRS are contained in Section 9 of the applicable Maintenance Planning Document.

This system shall remain installed and operative and can only be dispatched inoperative in accordance with the provisions of the MMEL

IV. Operating and Servicing Instructions

1. Flight Manual:

Boeing Document D631W001

Note: The AFM for an EASA customer will have a dedicated identification, replacing the denominator J01F

2. Mandatory Maintenance Instructions:

CMRs, ALI's, Life Limited Parts
Maintenance Planning Data Document Section 9 (Boeing Document D622W001), and later revisions thereof.

3. Service Letters and Service Bulletins:

As published by Boeing and approved by FAA.

4. Required Equipment:

The following requirements must be complied with if the optional equipment listed below is installed:

CRI F-17	Placards Pivoting Arm Video Units	(25.561(d) et al)
CRI F-253	MMR Qualification and Installation	(25.1301 et al)
CRI F-254	EGPWS Airworthiness Approval	(25.1301 et al)
CRI F-255	EGPWS Alerting Design.	

V. OPERATIONAL SUITABILITY DATA (OSD)

The Operational Suitability Data elements listed below are approved by the European Union Aviation Safety Agency under the EASA Type Certificate [original TC number] as per Commission Regulation (EU) 748/2012 as amended by Commission Regulation (EU) No 69/2014.

SECTION 6: (F Freighter VARIANT) – continued

1. Master Minimum Equipment List

a) Master Minimum Equipment List D630W003-ESEM approved at revision 3 dated July 24, 2015 (or later approved revisions) as per the defined Operational Suitability Data Certification Basis: JAR-MMEL / MEL Amendment 1, section 1 Subpart A & B.
b) Required for entry into service by EU operator

2. Flight Crew Data

a) The Flight Crew data D015Z033-01, Revision New, dated December 10, 2015 (or later approved revisions) as per the defined Operational Suitability Data Certification Basis: CS-FCD, initial Issue.
b) Required for entry into service by EU operator.
c) Pilot Type Rating: "B777/787".

Note: These data cover the models B787-8, -9 and B777-200, -300 and -777F series aircraft. Differences are addressed in D015Z033-01.

3. Cabin Crew Data – Not required per COMMISSION REGULATION (EU) No 69/2014 of 27 January 2014.

VI. Part 26 compliance information

For all models, compliance with point 26.300(a) of Part 26 is demonstrated by complying with points

- 26.301 Compliance Plan for (R)TC holders
- 26.302 Fatigue and damage tolerance evaluation
- 26.303 Limit of Validity
- 26.304 Corrosion prevention and control programme
- 26.305 Validity of the continuing structural integrity programme
- 26.306 Fatigue critical baseline structure
- 26.307 Damage tolerance data for existing changes to fatigue critical structure
- 26.308 Damage tolerance data for existing repairs to fatigue critical structure
- 26.309 Repair Evaluation Guidelines

VII. Notes

1. Supernumerary Area Configuration must be approved.

SECTION 7: CHANGE RECORD (STARTS WITH ISSUE 08)

TCDS Issue No	TCDS Date	TCDS Changes	TC Date
8.0	03/02/10	Page 3: Addition of Roll Royce engine Trent 884 as Increase Gross Weight possible version as this was omitted in previous TCDS. Increase Gross Weight note modified to refer systematically to AFM for approved weight limitations of each S/N Page 7: §12.1 Modification of the title. Was "-200 IGW version" updated to "-200 IGW version Maximum Certified Weights"	06/02/09
9.0	20/07/11	Section 1, Sub-section 6: Updated ETOPS approval information. Section 6, Sub-section 4: EASA/JAA Airworthiness Requirements, added Reversions table, copy-paste from CRI-A01 Section 9.2, plus added Pneumatics for 25.1438, as per CRI A-01 Note under Section 9.2. Multiple sections / pages: .Addition of Reversions from CRI A-01 as originally documented during EASA validation to provide view of the items for which a reversion exist". .Added CRI D-GEO02 PTC. .Corrected Maximum Certified Weights & Optional / Increased Weights.	
10.0.	10/07/12	-Added CRI H-01 "ICA on EWIS" on pages 5,10,16,22,28 -Updated "Table of Content" on page 2	N/A
11.0	1/10/2012	-Added CRI E-08 "Flammability Reduction systems" ; pages 5, 11, 17, 23 and 27 - Added maintenance and operational information on installed Flammability Reduction Systems; pages 8, 14, 20, 26 and 38 -Corrected CRI D-252 and CRI D-302 entries for 777-300 and 777F; pages 11 and 30 -Optional Increased Weight correction; page 19 -Added Appendix to publish selected special conditions that are part of the applicable certification basis	
12.0	05 Feb13	-Clarification / simplification of environmental requirements; pages 6,12,19,24,36 -Correction of Mandatory Maintenance Requirement references; pages 8,14,21,27,38 -Incorporation of GE90-115B engine model applicable to 777F; pages 3, 36 -Update of type certificate holder address; pages 1,3	N/A
13.0	15 Dec15	– Update of type certificate holder address; pages 1,3 – Added information on Minimum Cabin Crew; pages 8,16, 23,30 – Update of APU approval holder to Honeywell (formerly Allied Signal) Model 331-500; pages 6,14,21,28,40 – Added Special Condition D-GEN01 PTC, updated text for Special Condition D-GEN02 PTC; pages 5,12,19,26, – Added Special Condition F-GEN10; pages	N/A

		5,12,19,26,34 – Added Equivalent Safety Finding F-GEN9-1, F-GEN9-3; pages 6,13,21,27 – Added Section V – OPERATIONAL SUITABILITY DATA (OSD); pages 9,17,24,31,42 – Renumbered previous Section V to Section VI – Update of Appendix to TCDS	
14.0	28 March 2018	– CRI F-GEN-11 replaces the CRI F-GEN10 PTC on Non-rechargeable Lithium Batteries Installations – The OSD ceritifcation bases are defined directly in the TCDS (the references to the OSD CRIs are removed)	N/A
15.0	10 Dec. 2018	– Addition of generic ESF CRIs D-GEN7 and G-GEN2	N/A
16.0	30 Jul. 2020	– Addition of generic SC CRIs D-GEN8 and D-GEN10	N/A
17.0	10 Aug. 2022	– 777 with PW4000 aircraft-engine configurations removed from EASA TCDS	N/A
17.1	16 Aug. 2022	– Added clarifications regarding PW4000 configurations	N/A
18.0	29 Nov. 2023	– Added CRI D-6, special condition on “Lightning Protection Requirements“to the -300ER and -200LR models	N/A
19.0	13 Dec. 2024	– Address updated. – Typos correction for 777F. – Part 26 compliance information added.	

-END OF TCDS IM.A.003-