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## TYPE-CERTIFICATE DATA SHEET FOR NOISE

**No. EASA.IM.A.196**

**for**

**Boeing 747**

**Type Certificate Holder:**

**The Boeing Company**

P.O. Box 3707

Seattle, WA 98124-2207

USA

For models:

747-100	747-400BCF
747-200B	747-400F
747-200C	747-8
747-200F	747-8F
747-300	747SP
747-400	



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Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-100**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**      Engine Type Designation<sup>1</sup>      **JT9D-3**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **2**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14009	<b>333,400</b>	<b>265,351</b>	-	-	-	-	-	-	<b>2</b>

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<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-100**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**      Engine Type Designation<sup>1</sup>      **JT9D-3A**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **2**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14010	<b>333,400</b>	<b>265,351</b>	-	-	-	-	-	-	<b>2</b>

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<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-100**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**      Engine Type Designation<sup>1</sup>      **JT9D-7**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **-100 "CN" nacelles**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **2**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14013	<b>333,400</b>	<b>265,351</b>	<b>100.6</b>	<b>108.0</b>	<b>108.6</b>	<b>108.0</b>	<b>107.2</b>	<b>108.0</b>	<b>3</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-100**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**      Engine Type Designation<sup>1</sup>      **JT9D-7A**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **-100 "CN" nacelles**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **2**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14014	<b>333,400</b>	<b>265,351</b>	<b>100.6</b>	<b>108.0</b>	<b>108.6</b>	<b>108.0</b>	<b>107.2</b>	<b>108.0</b>	<b>3</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-100**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**      Engine Type Designation<sup>1</sup>      **JT9D-7F**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **2**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14011	<b>333,400</b>	<b>265,351</b>	-	-	-	-	-	-	<b>2</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-100**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**      Engine Type Designation<sup>1</sup>      **JT9D-7J**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **2**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14012	<b>333,400</b>	<b>265,351</b>	-	-	-	-	-	-	<b>2</b>

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<sup>1</sup> See Note 1.





Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200B**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **CF6-50E**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **-200 "GB" nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14025	<b>377,842</b>	<b>285,763</b>	<b>100.9</b>	<b>102.8</b>	<b>102.9</b>	<b>105.9</b>	<b>107.0</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200B**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **CF6-50E1**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **-200 "GB" nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14026	<b>377,842</b>	<b>285,763</b>	<b>100.9</b>	<b>102.8</b>	<b>102.9</b>	<b>105.9</b>	<b>107.0</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200B**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **CF6-50E2**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **-200 "GB" nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14188	<b>377,842</b>	<b>285,763</b>	<b>101.7</b>	<b>102.8</b>	<b>102.6</b>	<b>105.9</b>	<b>106.5</b>	<b>105.0</b>	-
A6341	<b>377,842</b>	<b>265,351</b>	<b>101.7</b>	<b>102.8</b>	<b>102.6</b>	<b>105.9</b>	<b>105.7</b>	<b>105.0</b>	-
A6295	<b>377,842</b>	<b>255,826</b>	<b>101.7</b>	<b>102.8</b>	<b>102.6</b>	<b>105.9</b>	<b>105.4</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200B**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **CF6-50E2**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **-200 "GB" nacelle, Service Bulletin 747-27-2426 (Landing flap limited to 25 degrees)**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A10037	<b>377,842</b>	<b>285,763</b>	<b>101.7</b>	<b>102.8</b>	<b>102.6</b>	<b>105.9</b>	<b>104.5</b>	<b>105.0</b>	-
A10038	<b>377,842</b>	<b>278,959</b>	<b>101.7</b>	<b>102.8</b>	<b>102.6</b>	<b>105.9</b>	<b>104.3</b>	<b>105.0</b>	-
A15888	<b>377,842</b>	<b>265,351</b>	<b>101.7</b>	<b>102.8</b>	<b>102.6</b>	<b>105.9</b>	<b>104.1</b>	<b>105.0</b>	-
A15889	<b>377,842</b>	<b>255,826</b>	<b>101.7</b>	<b>102.8</b>	<b>102.6</b>	<b>105.9</b>	<b>103.9</b>	<b>105.0</b>	-
A10039	<b>371,945</b>	<b>285,763</b>	<b>101.7</b>	<b>102.7</b>	<b>102.1</b>	<b>105.8</b>	<b>104.5</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200B**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **CF6-80C2B1**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14027	<b>377,842</b>	<b>285,763</b>	<b>98.2</b>	<b>102.8</b>	<b>99.0</b>	<b>105.9</b>	<b>104.3</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200B**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**      Engine Type Designation<sup>1</sup>      **JT9D-3A**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **2**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14018	<b>377,842</b>	<b>285,763</b>	-	-	-	-	-	-	<b>4</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200B**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**      Engine Type Designation<sup>1</sup>      **JT9D-7**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **2**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14019	<b>377,842</b>	<b>285,763</b>	-	-	-	-	-	-	<b>4</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200B**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**      Engine Type Designation<sup>1</sup>      **JT9D-70A**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **“RSN” nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14017	<b>377,842</b>	<b>285,763</b>	-	-	-	-	-	-	<b>5</b>
A14023	<b>371,945</b>	<b>285,763</b>	<b>98.5</b>	<b>102.7</b>	<b>101.1</b>	<b>105.8</b>	<b>106.0</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.





Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200B**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**      Engine Type Designation<sup>1</sup>      **JT9D-7A**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **2**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14020	<b>377,842</b>	<b>285,763</b>	-	-	-	-	-	-	<b>4</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200B**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**      Engine Type Designation<sup>1</sup>      **JT9D-7F**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **2**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14021	<b>377,842</b>	<b>285,763</b>	-	-	-	-	-	-	<b>4</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200B**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**      Engine Type Designation<sup>1</sup>      **JT9D-7J**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **2**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14022	<b>377,842</b>	<b>285,763</b>	-	-	-	-	-	-	<b>4</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-200B**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**

Engine Type Designation<sup>1</sup>      **JT9D-7Q**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**-200 "Q" nacelle, Service Bulletin 747-27-2426 (Landing flap limited to 25 degrees)**

Noise Certification Basis

**ICAO Annex 16, Volume I**

Edition / Amendment

Chapter<sup>1</sup>

**3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14015	<b>377,842</b>	<b>285,763</b>	<b>103.5</b>	<b>102.8</b>	<b>103.1</b>	<b>105.9</b>	<b>104.4</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-200B**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**

Engine Type Designation<sup>1</sup>      **JT9D-7Q3**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**-200 "Q" nacelle, Service Bulletin 747-27-2426 (Landing flap limited to 25 degrees)**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14016	<b>377,842</b>	<b>285,763</b>	<b>103.5</b>	<b>102.8</b>	<b>103.1</b>	<b>105.9</b>	<b>104.4</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200B**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**      Engine Type Designation<sup>1</sup>      **JT9D-7R4G2**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **-300 "R" nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14024	<b>377,842</b>	<b>285,763</b>	<b>101.3</b>	<b>102.8</b>	<b>102.4</b>	<b>105.9</b>	<b>106.6</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-200B**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**

Engine Type Designation<sup>1</sup>      **RB211-524B2-19**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**Fixed lip nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **2**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14028	<b>377,842</b>	<b>285,763</b>	<b>96.1</b>	<b>108.0</b>	<b>107.0</b>	<b>108.0</b>	<b>107.7</b>	<b>108.0</b>	<b>3</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-200B**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**

Engine Type Designation<sup>1</sup>      **RB211-524C2-19**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**Fixed lip nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **2**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14029	<b>377,842</b>	<b>285,763</b>	<b>96.6</b>	<b>108.0</b>	<b>106.5</b>	<b>108.0</b>	<b>107.3</b>	<b>108.0</b>	<b>3</b>

<sup>1</sup> See Note 1.





Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-200B**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**

Engine Type Designation<sup>1</sup>      **RB211-524D4-19**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**“RRN” nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**

Edition / Amendment

Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14030	<b>377,842</b>	<b>285,763</b>	<b>99.7</b>	<b>102.8</b>	<b>104.1</b>	<b>105.9</b>	<b>104.9</b>	<b>105.0</b>	-
A14357	<b>371,945</b>	<b>285,763</b>	<b>99.7</b>	<b>102.7</b>	<b>103.4</b>	<b>105.8</b>	<b>104.9</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-200B**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**

Engine Type Designation<sup>1</sup>      **RB211-524D4-19**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**“RRN” nacelle, Service Bulletin 747-27-2426 (Landing flap limited to 25 degrees)**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14366	<b>377,842</b>	<b>285,763</b>	<b>99.7</b>	<b>102.8</b>	<b>104.1</b>	<b>105.9</b>	<b>102.8</b>	<b>105.0</b>	-
A14368	<b>371,945</b>	<b>285,763</b>	<b>99.7</b>	<b>102.7</b>	<b>103.4</b>	<b>105.8</b>	<b>102.8</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-200B**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**

Engine Type Designation<sup>1</sup>      **RB211-524D4-39**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**“RRN” nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**

Edition / Amendment

Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14032	<b>377,842</b>	<b>285,763</b>	<b>99.7</b>	<b>102.8</b>	<b>104.1</b>	<b>105.9</b>	<b>104.9</b>	<b>105.0</b>	-
A14361	<b>371,945</b>	<b>285,763</b>	<b>99.7</b>	<b>102.7</b>	<b>103.4</b>	<b>105.8</b>	<b>104.9</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-200B**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**

Engine Type Designation<sup>1</sup>      **RB211-524D4-39**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**“RRN” nacelle, Service Bulletin 747-27-2426 (Landing flap limited to 25 degrees)**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14367	<b>377,842</b>	<b>285,763</b>	<b>99.7</b>	<b>102.8</b>	<b>104.1</b>	<b>105.9</b>	<b>102.8</b>	<b>105.0</b>	-
A14369	<b>371,945</b>	<b>285,763</b>	<b>99.7</b>	<b>102.7</b>	<b>103.4</b>	<b>105.8</b>	<b>102.8</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200B**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524D4X-19**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **“RRN” nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14031	<b>377,842</b>	<b>285,763</b>	<b>99.9</b>	<b>102.8</b>	<b>103.9</b>	<b>105.9</b>	<b>104.9</b>	<b>105.0</b>	-
A14382	<b>371,945</b>	<b>285,763</b>	<b>100.0</b>	<b>102.7</b>	<b>103.3</b>	<b>105.8</b>	<b>104.9</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-200B**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**

Engine Type Designation<sup>1</sup>      **RB211-524D4X-19**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**“RRN” nacelle, Service Bulletin 747-27-2426 (Landing flap limited to 25 degrees)**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14388	<b>377,842</b>	<b>285,763</b>	<b>99.9</b>	<b>102.8</b>	<b>103.9</b>	<b>105.9</b>	<b>102.8</b>	<b>105.0</b>	-
A14389	<b>371,945</b>	<b>285,763</b>	<b>100.0</b>	<b>102.7</b>	<b>103.3</b>	<b>105.8</b>	<b>102.8</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200B**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524D4X-39**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **“RRN” nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14365	<b>377,842</b>	<b>285,763</b>	<b>99.9</b>	<b>102.8</b>	<b>103.9</b>	<b>105.9</b>	<b>104.9</b>	<b>105.0</b>	-
A14383	<b>371,945</b>	<b>285,763</b>	<b>100.0</b>	<b>102.7</b>	<b>103.3</b>	<b>105.8</b>	<b>104.9</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-200B**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**

Engine Type Designation<sup>1</sup>      **RB211-524D4X-39**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**“RRN” nacelle, Service Bulletin 747-27-2426 (Landing flap limited to 25 degrees)**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14390	<b>377,842</b>	<b>285,763</b>	<b>99.9</b>	<b>102.8</b>	<b>103.9</b>	<b>105.9</b>	<b>102.8</b>	<b>105.0</b>	-
A14391	<b>371,945</b>	<b>285,763</b>	<b>100.0</b>	<b>102.7</b>	<b>103.3</b>	<b>105.8</b>	<b>102.8</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.





Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200C**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **CF6-50E**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **-200 "GB" nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14043	<b>377,842</b>	<b>285,763</b>	<b>100.9</b>	<b>102.8</b>	<b>102.9</b>	<b>105.9</b>	<b>107.0</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200C**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **CF6-50E1**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **-200 "GB" nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14044	<b>377,842</b>	<b>285,763</b>	<b>100.9</b>	<b>102.8</b>	<b>102.9</b>	<b>105.9</b>	<b>107.0</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200C**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **CF6-50E2**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **-200 "GB" nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14045	<b>377,842</b>	<b>285,763</b>	<b>101.7</b>	<b>102.8</b>	<b>102.6</b>	<b>105.9</b>	<b>106.5</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200C**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**      Engine Type Designation<sup>1</sup>      **JT9D-3A**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **2**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14036	<b>377,842</b>	<b>285,763</b>	-	-	-	-	-	-	<b>4</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200C**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**      Engine Type Designation<sup>1</sup>      **JT9D-7**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **2**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14037	<b>377,842</b>	<b>285,763</b>	-	-	-	-	-	-	<b>4</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200C**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**      Engine Type Designation<sup>1</sup>      **JT9D-70A**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **“RSN” nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14035	<b>377,842</b>	<b>285,763</b>	-	-	-	-	-	-	<b>5</b>
A14041	<b>371,945</b>	<b>285,763</b>	<b>98.5</b>	<b>102.7</b>	<b>101.1</b>	<b>105.8</b>	<b>106.0</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200C**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**      Engine Type Designation<sup>1</sup>      **JT9D-7A**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **2**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14038	<b>377,842</b>	<b>285,763</b>	-	-	-	-	-	-	<b>4</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200C**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**      Engine Type Designation<sup>1</sup>      **JT9D-7F**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **2**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14039	<b>377,842</b>	<b>285,763</b>	-	-	-	-	-	-	<b>4</b>

<sup>1</sup> See Note 1.





Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200C**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**      Engine Type Designation<sup>1</sup>      **JT9D-7J**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **2**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14040	<b>377,842</b>	<b>285,763</b>	-	-	-	-	-	-	<b>4</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-200C**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**

Engine Type Designation<sup>1</sup>      **JT9D-7Q**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**-200 "Q" nacelle, Service Bulletin 747-27-2426 (Landing flap limited to 25 degrees)**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14033	<b>377,842</b>	<b>285,763</b>	<b>103.5</b>	<b>102.8</b>	<b>103.1</b>	<b>105.9</b>	<b>104.4</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-200C**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**

Engine Type Designation<sup>1</sup>      **JT9D-7Q3**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**-200 "Q" nacelle, Service Bulletin 747-27-2426 (Landing flap limited to 25 degrees)**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14034	<b>377,842</b>	<b>285,763</b>	<b>103.5</b>	<b>102.8</b>	<b>103.1</b>	<b>105.9</b>	<b>104.4</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200C**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**      Engine Type Designation<sup>1</sup>      **JT9D-7R4G2**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **-300 "R" nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14042	<b>377,842</b>	<b>285,763</b>	<b>101.3</b>	<b>102.8</b>	<b>102.4</b>	<b>105.9</b>	<b>106.6</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-200C**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**

Engine Type Designation<sup>1</sup>      **RB211-524B2-19**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**Fixed lip nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **2**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14046	<b>377,842</b>	<b>285,763</b>	<b>96.1</b>	<b>108.0</b>	<b>107.0</b>	<b>108.0</b>	<b>107.7</b>	<b>108.0</b>	<b>3</b>

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<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-200C**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**

Engine Type Designation<sup>1</sup>      **RB211-524C2-19**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**Fixed lip nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **2**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14047	<b>377,842</b>	<b>285,763</b>	<b>96.6</b>	<b>108.0</b>	<b>106.5</b>	<b>108.0</b>	<b>107.3</b>	<b>108.0</b>	<b>3</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-200C**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**

Engine Type Designation<sup>1</sup>      **RB211-524D4-19**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**“RRN” nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**

Edition / Amendment

Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14048	<b>377,842</b>	<b>285,763</b>	<b>99.7</b>	<b>102.8</b>	<b>104.1</b>	<b>105.9</b>	<b>104.9</b>	<b>105.0</b>	-
A14359	<b>371,945</b>	<b>285,763</b>	<b>99.7</b>	<b>102.7</b>	<b>103.4</b>	<b>105.8</b>	<b>104.9</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-200C**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**

Engine Type Designation<sup>1</sup>      **RB211-524D4-19**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**“RRN” nacelle, Service Bulletin 747-27-2426 (Landing flap limited to 25 degrees)**

Noise Certification Basis      **ICAO Annex 16, Volume I**

Edition / Amendment

Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14372	<b>377,842</b>	<b>285,763</b>	<b>99.7</b>	<b>102.8</b>	<b>104.1</b>	<b>105.9</b>	<b>102.8</b>	<b>105.0</b>	-
A14370	<b>371,945</b>	<b>285,763</b>	<b>99.7</b>	<b>102.7</b>	<b>103.4</b>	<b>105.8</b>	<b>102.8</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.





Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-200C**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**

Engine Type Designation<sup>1</sup>      **RB211-524D4-39**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**“RRN” nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**

Edition / Amendment

Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14364	<b>377,842</b>	<b>285,763</b>	<b>99.7</b>	<b>102.8</b>	<b>104.1</b>	<b>105.9</b>	<b>104.9</b>	<b>105.0</b>	-
A14362	<b>371,945</b>	<b>285,763</b>	<b>99.7</b>	<b>102.7</b>	<b>103.4</b>	<b>105.8</b>	<b>104.9</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-200C**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**

Engine Type Designation<sup>1</sup>      **RB211-524D4-39**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**“RRN” nacelle, Service Bulletin 747-27-2426 (Landing flap limited to 25 degrees)**

Noise Certification Basis      **ICAO Annex 16, Volume I**

Edition / Amendment

Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14373	<b>377,842</b>	<b>285,763</b>	<b>99.7</b>	<b>102.8</b>	<b>104.1</b>	<b>105.9</b>	<b>102.8</b>	<b>105.0</b>	-
A14371	<b>371,945</b>	<b>285,763</b>	<b>99.7</b>	<b>102.7</b>	<b>103.4</b>	<b>105.8</b>	<b>102.8</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200C**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524D4X-19**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **“RRN” nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14378	<b>377,842</b>	<b>285,763</b>	<b>99.9</b>	<b>102.8</b>	<b>103.9</b>	<b>105.9</b>	<b>104.9</b>	<b>105.0</b>	-
A14384	<b>371,945</b>	<b>285,763</b>	<b>100.0</b>	<b>102.7</b>	<b>103.3</b>	<b>105.8</b>	<b>104.9</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-200C**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**

Engine Type Designation<sup>1</sup>      **RB211-524D4X-19**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**“RRN” nacelle, Service Bulletin 747-27-2426 (Landing flap limited to 25 degrees)**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14392	<b>377,842</b>	<b>285,763</b>	<b>99.9</b>	<b>102.8</b>	<b>103.9</b>	<b>105.9</b>	<b>102.8</b>	<b>105.0</b>	-
A14393	<b>371,945</b>	<b>285,763</b>	<b>100.0</b>	<b>102.7</b>	<b>103.3</b>	<b>105.8</b>	<b>102.8</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200C**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524D4X-39**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **“RRN” nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14379	<b>377,842</b>	<b>285,763</b>	<b>99.9</b>	<b>102.8</b>	<b>103.9</b>	<b>105.9</b>	<b>104.9</b>	<b>105.0</b>	-
A14385	<b>371,945</b>	<b>285,763</b>	<b>100.0</b>	<b>102.7</b>	<b>103.3</b>	<b>105.8</b>	<b>104.9</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-200C**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**

Engine Type Designation<sup>1</sup>      **RB211-524D4X-39**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**“RRN” nacelle, Service Bulletin 747-27-2426 (Landing flap limited to 25 degrees)**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14394	<b>377,842</b>	<b>285,763</b>	<b>99.9</b>	<b>102.8</b>	<b>103.9</b>	<b>105.9</b>	<b>102.8</b>	<b>105.0</b>	-
A14395	<b>371,945</b>	<b>285,763</b>	<b>100.0</b>	<b>102.7</b>	<b>103.3</b>	<b>105.8</b>	<b>102.8</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200F**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **CF6-50E**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **-200 "GB" nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14058	<b>377,842</b>	<b>285,763</b>	<b>100.9</b>	<b>102.8</b>	<b>102.9</b>	<b>105.9</b>	<b>107.0</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200F**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **CF6-50E1**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **-200 "GB" nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14059	<b>377,842</b>	<b>285,763</b>	<b>100.9</b>	<b>102.8</b>	<b>102.9</b>	<b>105.9</b>	<b>107.0</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.





Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200F**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **CF6-50E2**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **-200 "GB" nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14060	<b>377,842</b>	<b>285,763</b>	<b>101.7</b>	<b>102.8</b>	<b>102.6</b>	<b>105.9</b>	<b>106.5</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200F**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**      Engine Type Designation<sup>1</sup>      **JT9D-3A**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **2**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14052	<b>377,842</b>	<b>285,763</b>	-	-	-	-	-	-	<b>4</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200F**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**      Engine Type Designation<sup>1</sup>      **JT9D-7**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **2**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14053	<b>377,842</b>	<b>285,763</b>	-	-	-	-	-	-	<b>4</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200F**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**      Engine Type Designation<sup>1</sup>      **JT9D-70A**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **“RSN” nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14051	<b>377,842</b>	<b>285,763</b>	-	-	-	-	-	-	<b>5</b>
A6592	<b>371,945</b>	<b>285,763</b>	<b>98.5</b>	<b>102.7</b>	<b>101.1</b>	<b>105.8</b>	<b>106.0</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200F**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**      Engine Type Designation<sup>1</sup>      **JT9D-7A**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **2**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14054	<b>377,842</b>	<b>285,763</b>	-	-	-	-	-	-	<b>4</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200F**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**      Engine Type Designation<sup>1</sup>      **JT9D-7F**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **2**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14055	<b>377,842</b>	<b>285,763</b>	-	-	-	-	-	-	<b>4</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200F**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**      Engine Type Designation<sup>1</sup>      **JT9D-7J**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **2**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14056	<b>377,842</b>	<b>285,763</b>	-	-	-	-	-	-	<b>4</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-200F**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**

Engine Type Designation<sup>1</sup>      **JT9D-7Q**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**-200 "Q" nacelle, Service Bulletin 747-27-2426 (Landing flap limited to 25 degrees)**

Noise Certification Basis

**ICAO Annex 16, Volume I**

Edition / Amendment

Chapter<sup>1</sup>

**3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14049	<b>377,842</b>	<b>285,763</b>	<b>103.5</b>	<b>102.8</b>	<b>103.1</b>	<b>105.9</b>	<b>104.4</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.





Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-200F**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**

Engine Type Designation<sup>1</sup>      **JT9D-7Q3**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**-200 "Q" nacelle, Service Bulletin 747-27-2426 (Landing flap limited to 25 degrees)**

Noise Certification Basis

**ICAO Annex 16, Volume I**

Edition / Amendment

Chapter<sup>1</sup>

**3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14050	<b>377,842</b>	<b>285,763</b>	<b>103.5</b>	<b>102.8</b>	<b>103.1</b>	<b>105.9</b>	<b>104.4</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200F**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**      Engine Type Designation<sup>1</sup>      **JT9D-7R4G2**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **-300 "R" nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14057	<b>377,842</b>	<b>285,763</b>	<b>101.3</b>	<b>102.8</b>	<b>102.4</b>	<b>105.9</b>	<b>106.6</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-200F**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**

Engine Type Designation<sup>1</sup>      **RB211-524B2-19**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**Fixed lip nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **2**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14061	<b>377,842</b>	<b>285,763</b>	<b>96.1</b>	<b>108.0</b>	<b>107.0</b>	<b>108.0</b>	<b>107.7</b>	<b>108.0</b>	<b>3</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-200F**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**

Engine Type Designation<sup>1</sup>      **RB211-524C2-19**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**Fixed lip nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **2**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14062	<b>377,842</b>	<b>285,763</b>	<b>96.6</b>	<b>108.0</b>	<b>106.5</b>	<b>108.0</b>	<b>107.3</b>	<b>108.0</b>	<b>3</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-200F**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**

Engine Type Designation<sup>1</sup>      **RB211-524D4-19**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**“RRN” nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**

Edition / Amendment

Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14063	<b>377,842</b>	<b>285,763</b>	<b>99.7</b>	<b>102.8</b>	<b>104.1</b>	<b>105.9</b>	<b>104.9</b>	<b>105.0</b>	-
A14360	<b>371,945</b>	<b>285,763</b>	<b>99.7</b>	<b>102.7</b>	<b>103.4</b>	<b>105.8</b>	<b>104.9</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-200F**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**

Engine Type Designation<sup>1</sup>      **RB211-524D4-19**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**“RRN” nacelle, Service Bulletin 747-27-2426 (Landing flap limited to 25 degrees)**

Noise Certification Basis      **ICAO Annex 16, Volume I**

Edition / Amendment

Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14376	<b>377,842</b>	<b>285,763</b>	<b>99.7</b>	<b>102.8</b>	<b>104.1</b>	<b>105.9</b>	<b>102.8</b>	<b>105.0</b>	-
A14374	<b>371,945</b>	<b>285,763</b>	<b>99.7</b>	<b>102.7</b>	<b>103.4</b>	<b>105.8</b>	<b>102.8</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-200F**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**

Engine Type Designation<sup>1</sup>      **RB211-524D4-39**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**“RRN” nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**

Edition / Amendment

Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14064	<b>377,842</b>	<b>285,763</b>	<b>99.7</b>	<b>102.8</b>	<b>104.1</b>	<b>105.9</b>	<b>104.9</b>	<b>105.0</b>	-
A14363	<b>371,945</b>	<b>285,763</b>	<b>99.7</b>	<b>102.7</b>	<b>103.4</b>	<b>105.8</b>	<b>104.9</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-200F**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**

Engine Type Designation<sup>1</sup>      **RB211-524D4-39**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**“RRN” nacelle, Service Bulletin 747-27-2426 (Landing flap limited to 25 degrees)**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14377	<b>377,842</b>	<b>285,763</b>	<b>99.7</b>	<b>102.8</b>	<b>104.1</b>	<b>105.9</b>	<b>102.8</b>	<b>105.0</b>	-
A14375	<b>371,945</b>	<b>285,763</b>	<b>99.7</b>	<b>102.7</b>	<b>103.4</b>	<b>105.8</b>	<b>102.8</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.





Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200F**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524D4X-19**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **“RRN” nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14380	<b>377,842</b>	<b>285,763</b>	<b>99.9</b>	<b>102.8</b>	<b>103.9</b>	<b>105.9</b>	<b>104.9</b>	<b>105.0</b>	-
A14386	<b>371,945</b>	<b>285,763</b>	<b>100.0</b>	<b>102.7</b>	<b>103.3</b>	<b>105.8</b>	<b>104.9</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-200F**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**

Engine Type Designation<sup>1</sup>      **RB211-524D4X-19**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**“RRN” nacelle, Service Bulletin 747-27-2426 (Landing flap limited to 25 degrees)**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14398	<b>377,842</b>	<b>285,763</b>	<b>99.9</b>	<b>102.8</b>	<b>103.9</b>	<b>105.9</b>	<b>102.8</b>	<b>105.0</b>	-
A14399	<b>371,945</b>	<b>285,763</b>	<b>100.0</b>	<b>102.7</b>	<b>103.3</b>	<b>105.8</b>	<b>102.8</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-200F**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524D4X-39**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **“RRN” nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14381	<b>377,842</b>	<b>285,763</b>	<b>99.9</b>	<b>102.8</b>	<b>103.9</b>	<b>105.9</b>	<b>104.9</b>	<b>105.0</b>	-
A14387	<b>371,945</b>	<b>285,763</b>	<b>100.0</b>	<b>102.7</b>	<b>103.3</b>	<b>105.8</b>	<b>104.9</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-200F**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**

Engine Type Designation<sup>1</sup>      **RB211-524D4X-39**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**“RRN” nacelle, Service Bulletin 747-27-2426 (Landing flap limited to 25 degrees)**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14396	<b>377,842</b>	<b>285,763</b>	<b>99.9</b>	<b>102.8</b>	<b>103.9</b>	<b>105.9</b>	<b>102.8</b>	<b>105.0</b>	-
A14397	<b>371,945</b>	<b>285,763</b>	<b>100.0</b>	<b>102.7</b>	<b>103.3</b>	<b>105.8</b>	<b>102.8</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-300**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **CF6-50E2**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **-200 "GB" nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14066	<b>377,842</b>	<b>285,763</b>	<b>101.7</b>	<b>102.8</b>	<b>102.6</b>	<b>105.9</b>	<b>106.5</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-300**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **CF6-50E2**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **-200 "GB" nacelle, Service Bulletin 747-27-2426 (Landing flap limited to 25 degrees)**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14065	<b>377,842</b>	<b>285,763</b>	<b>101.7</b>	<b>102.8</b>	<b>102.6</b>	<b>105.9</b>	<b>104.5</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-300**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **CF6-80C2B1**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A10195	<b>377,842</b>	<b>285,763</b>	<b>98.2</b>	<b>102.8</b>	<b>99.0</b>	<b>105.9</b>	<b>104.3</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-300**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**      Engine Type Designation<sup>1</sup>      **JT9D-7R4G2**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **-300 "R" nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A6591	<b>377,842</b>	<b>285,763</b>	<b>101.3</b>	<b>102.8</b>	<b>102.4</b>	<b>105.9</b>	<b>106.6</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.





Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-300**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**

Engine Type Designation<sup>1</sup>      **RB211-524B2-19**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**Fixed lip nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **2**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14067	<b>377,842</b>	<b>285,763</b>	<b>96.1</b>	<b>108.0</b>	<b>107.0</b>	<b>108.0</b>	<b>107.7</b>	<b>108.0</b>	<b>3</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-300**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**

Engine Type Designation<sup>1</sup>      **RB211-524C2-19**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**Fixed lip nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **2**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14068	<b>377,842</b>	<b>285,763</b>	<b>96.6</b>	<b>108.0</b>	<b>106.5</b>	<b>108.0</b>	<b>107.3</b>	<b>108.0</b>	<b>3</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-300**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**

Engine Type Designation<sup>1</sup>      **RB211-524D4-19**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**“RRN” nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14069	<b>377,842</b>	<b>285,763</b>	<b>99.7</b>	<b>102.8</b>	<b>104.1</b>	<b>105.9</b>	<b>104.9</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-300**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**

Engine Type Designation<sup>1</sup>      **RB211-524D4-39**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**“RRN” nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14070	<b>377,842</b>	<b>285,763</b>	<b>99.7</b>	<b>102.8</b>	<b>104.1</b>	<b>105.9</b>	<b>104.9</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup> **The Boeing Company**

Aircraft Type Designation<sup>1</sup> **747-400**

Engine Manufacturer<sup>1</sup> **General Electric Company**

Engine Type Designation<sup>1</sup> **CF6-80C2B1F**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**With N1 modifier**

Noise Certification Basis **ICAO Annex 16, Volume I**

Edition / Amendment

Chapter<sup>1</sup> **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A4495	<b>396,893</b>	<b>285,763</b>	<b>97.9</b>	<b>103.0</b>	<b>99.9</b>	<b>106.0</b>	<b>103.3</b>	<b>105.0</b>	-
A4494	<b>396,893</b>	<b>265,351</b>	<b>97.9</b>	<b>103.0</b>	<b>99.9</b>	<b>106.0</b>	<b>102.2</b>	<b>105.0</b>	-
A4493	<b>396,893</b>	<b>255,826</b>	<b>97.9</b>	<b>103.0</b>	<b>99.9</b>	<b>106.0</b>	<b>101.7</b>	<b>105.0</b>	-
A4490	<b>394,625</b>	<b>285,763</b>	<b>97.9</b>	<b>103.0</b>	<b>99.7</b>	<b>106.0</b>	<b>103.3</b>	<b>105.0</b>	<b>6</b>
A15163	<b>394,625</b>	<b>285,700</b>	<b>97.9</b>	<b>103.0</b>	<b>99.7</b>	<b>106.0</b>	<b>103.3</b>	<b>105.0</b>	-
A15212	<b>394,625</b>	<b>274,423</b>	<b>97.9</b>	<b>103.0</b>	<b>99.7</b>	<b>106.0</b>	<b>102.7</b>	<b>105.0</b>	-
A4489	<b>394,625</b>	<b>265,351</b>	<b>97.9</b>	<b>103.0</b>	<b>99.7</b>	<b>106.0</b>	<b>102.2</b>	<b>105.0</b>	<b>6</b>
A4488	<b>394,625</b>	<b>255,826</b>	<b>97.9</b>	<b>103.0</b>	<b>99.7</b>	<b>106.0</b>	<b>101.7</b>	<b>105.0</b>	<b>6</b>
A121201	<b>390,088</b>	<b>285,763</b>	<b>97.9</b>	<b>102.9</b>	<b>99.4</b>	<b>106.0</b>	<b>103.3</b>	<b>105.0</b>	-
A15459	<b>386,914</b>	<b>285,763</b>	<b>98.0</b>	<b>102.9</b>	<b>99.1</b>	<b>106.0</b>	<b>103.3</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup> **The Boeing Company**

Aircraft Type Designation<sup>1</sup> **747-400**

Engine Manufacturer<sup>1</sup> **General Electric Company**

Engine Type Designation<sup>1</sup> **CF6-80C2B1F**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**With N1 modifier**

Noise Certification Basis **ICAO Annex 16, Volume I**

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Chapter<sup>1</sup> **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A4485	<b>385,553</b>	<b>285,763</b>	<b>98.0</b>	<b>102.9</b>	<b>99.0</b>	<b>106.0</b>	<b>103.3</b>	<b>105.0</b>	<b>6</b>
A15164	<b>385,553</b>	<b>274,423</b>	<b>98.0</b>	<b>102.9</b>	<b>99.0</b>	<b>106.0</b>	<b>102.7</b>	<b>105.0</b>	-
A4484	<b>385,553</b>	<b>265,351</b>	<b>98.0</b>	<b>102.9</b>	<b>99.0</b>	<b>106.0</b>	<b>102.2</b>	<b>105.0</b>	<b>6</b>
A4483	<b>385,553</b>	<b>255,826</b>	<b>98.0</b>	<b>102.9</b>	<b>99.0</b>	<b>106.0</b>	<b>101.7</b>	<b>105.0</b>	<b>6</b>
A17899	<b>384,000</b>	<b>285,763</b>	<b>98.0</b>	<b>102.9</b>	<b>98.9</b>	<b>106.0</b>	<b>103.3</b>	<b>105.0</b>	-
A15165	<b>384,000</b>	<b>274,400</b>	<b>98.0</b>	<b>102.9</b>	<b>98.9</b>	<b>106.0</b>	<b>102.7</b>	<b>105.0</b>	-
A16610	<b>383,000</b>	<b>285,763</b>	<b>98.0</b>	<b>102.9</b>	<b>98.8</b>	<b>106.0</b>	<b>103.3</b>	<b>105.0</b>	-
A16611	<b>383,000</b>	<b>274,423</b>	<b>98.0</b>	<b>102.9</b>	<b>98.8</b>	<b>106.0</b>	<b>102.7</b>	<b>105.0</b>	-
A16612	<b>383,000</b>	<b>265,351</b>	<b>98.0</b>	<b>102.9</b>	<b>98.8</b>	<b>106.0</b>	<b>102.2</b>	<b>105.0</b>	-
A15166	<b>380,455</b>	<b>265,351</b>	<b>98.0</b>	<b>102.8</b>	<b>98.6</b>	<b>105.9</b>	<b>102.2</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup> **The Boeing Company**

Aircraft Type Designation<sup>1</sup> **747-400**

Engine Manufacturer<sup>1</sup> **General Electric Company**

Engine Type Designation<sup>1</sup> **CF6-80C2B1F**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**With N1 modifier**

Noise Certification Basis **ICAO Annex 16, Volume I**

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Chapter<sup>1</sup> **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A4480	<b>377,842</b>	<b>285,763</b>	<b>98.0</b>	<b>102.8</b>	<b>98.4</b>	<b>105.9</b>	<b>103.3</b>	<b>105.0</b>	<b>6</b>
A4479	<b>377,842</b>	<b>265,351</b>	<b>98.0</b>	<b>102.8</b>	<b>98.4</b>	<b>105.9</b>	<b>102.2</b>	<b>105.0</b>	<b>6</b>
A4478	<b>377,842</b>	<b>255,826</b>	<b>98.0</b>	<b>102.8</b>	<b>98.4</b>	<b>105.9</b>	<b>101.7</b>	<b>105.0</b>	<b>6</b>
A4475	<b>376,481</b>	<b>285,763</b>	<b>98.0</b>	<b>102.8</b>	<b>98.3</b>	<b>105.9</b>	<b>103.3</b>	<b>105.0</b>	<b>6</b>
A4474	<b>376,481</b>	<b>265,351</b>	<b>98.0</b>	<b>102.8</b>	<b>98.3</b>	<b>105.9</b>	<b>102.2</b>	<b>105.0</b>	<b>6</b>
A4473	<b>376,481</b>	<b>255,826</b>	<b>98.0</b>	<b>102.8</b>	<b>98.3</b>	<b>105.9</b>	<b>101.7</b>	<b>105.0</b>	<b>6</b>
A4470	<b>371,945</b>	<b>285,763</b>	<b>98.0</b>	<b>102.7</b>	<b>97.9</b>	<b>105.8</b>	<b>103.3</b>	<b>105.0</b>	<b>6</b>
A4469	<b>371,945</b>	<b>265,351</b>	<b>98.0</b>	<b>102.7</b>	<b>97.9</b>	<b>105.8</b>	<b>102.2</b>	<b>105.0</b>	<b>6</b>
A15167	<b>371,945</b>	<b>265,300</b>	<b>98.0</b>	<b>102.7</b>	<b>97.9</b>	<b>105.8</b>	<b>102.2</b>	<b>105.0</b>	<b>-</b>
A4468	<b>371,945</b>	<b>255,826</b>	<b>98.0</b>	<b>102.7</b>	<b>97.9</b>	<b>105.8</b>	<b>101.7</b>	<b>105.0</b>	<b>6</b>

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup> **The Boeing Company**

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Engine Type Designation<sup>1</sup> **CF6-80C2B1F**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**With N1 modifier**

Noise Certification Basis **ICAO Annex 16, Volume I**

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Chapter<sup>1</sup> **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A4465	<b>362,873</b>	<b>285,763</b>	<b>98.1</b>	<b>102.7</b>	<b>97.1</b>	<b>105.7</b>	<b>103.3</b>	<b>105.0</b>	<b>6</b>
A4464	<b>362,873</b>	<b>265,351</b>	<b>98.1</b>	<b>102.7</b>	<b>97.1</b>	<b>105.7</b>	<b>102.2</b>	<b>105.0</b>	<b>6</b>
A4463	<b>362,873</b>	<b>255,826</b>	<b>98.1</b>	<b>102.7</b>	<b>97.1</b>	<b>105.7</b>	<b>101.7</b>	<b>105.0</b>	<b>6</b>
A120319	<b>340,000</b>	<b>285,763</b>	<b>98.3</b>	<b>102.4</b>	<b>95.2</b>	<b>105.3</b>	<b>103.3</b>	<b>105.0</b>	<b>6</b>
A4462	<b>317,514</b>	<b>285,763</b>	<b>98.5</b>	<b>102.2</b>	<b>93.3</b>	<b>104.9</b>	<b>103.3</b>	<b>105.0</b>	<b>6</b>
A4461	<b>317,514</b>	<b>265,351</b>	<b>98.5</b>	<b>102.2</b>	<b>93.3</b>	<b>104.9</b>	<b>102.2</b>	<b>105.0</b>	<b>6</b>
A4460	<b>317,514</b>	<b>255,826</b>	<b>98.5</b>	<b>102.2</b>	<b>93.3</b>	<b>104.9</b>	<b>101.7</b>	<b>105.0</b>	<b>6</b>
A4459	<b>272,155</b>	<b>265,351</b>	<b>98.8</b>	<b>101.6</b>	<b>89.6</b>	<b>104.0</b>	<b>102.2</b>	<b>104.9</b>	<b>6</b>
A4458	<b>272,155</b>	<b>255,826</b>	<b>98.8</b>	<b>101.6</b>	<b>89.6</b>	<b>104.0</b>	<b>101.7</b>	<b>104.9</b>	<b>6</b>

<sup>1</sup> See Note 1.





Type Certificate Holder<sup>1</sup> **The Boeing Company**

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Engine Manufacturer<sup>1</sup> **General Electric Company**

Engine Type Designation<sup>1</sup> **CF6-80C2B1F**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**Without N1 modifier**

Noise Certification Basis **ICAO Annex 16, Volume I**

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EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A4531	<b>396,893</b>	<b>285,763</b>	<b>98.2</b>	<b>103.0</b>	<b>99.8</b>	<b>106.0</b>	<b>103.3</b>	<b>105.0</b>	-
A4530	<b>396,893</b>	<b>265,351</b>	<b>98.2</b>	<b>103.0</b>	<b>99.8</b>	<b>106.0</b>	<b>102.2</b>	<b>105.0</b>	-
A4529	<b>396,893</b>	<b>255,826</b>	<b>98.2</b>	<b>103.0</b>	<b>99.8</b>	<b>106.0</b>	<b>101.7</b>	<b>105.0</b>	-
A4526	<b>394,625</b>	<b>285,763</b>	<b>98.3</b>	<b>103.0</b>	<b>99.7</b>	<b>106.0</b>	<b>103.3</b>	<b>105.0</b>	<b>6</b>
A4525	<b>394,625</b>	<b>265,351</b>	<b>98.3</b>	<b>103.0</b>	<b>99.7</b>	<b>106.0</b>	<b>102.2</b>	<b>105.0</b>	<b>6</b>
A4524	<b>394,625</b>	<b>255,826</b>	<b>98.3</b>	<b>103.0</b>	<b>99.7</b>	<b>106.0</b>	<b>101.7</b>	<b>105.0</b>	<b>6</b>
A15460	<b>386,914</b>	<b>285,763</b>	<b>98.3</b>	<b>102.9</b>	<b>99.1</b>	<b>106.0</b>	<b>103.3</b>	<b>105.0</b>	-
A4521	<b>385,553</b>	<b>285,763</b>	<b>98.3</b>	<b>102.9</b>	<b>99.0</b>	<b>106.0</b>	<b>103.3</b>	<b>105.0</b>	<b>6</b>
A4520	<b>385,553</b>	<b>265,351</b>	<b>98.3</b>	<b>102.9</b>	<b>99.0</b>	<b>106.0</b>	<b>102.2</b>	<b>105.0</b>	<b>6</b>
A4519	<b>385,553</b>	<b>255,826</b>	<b>98.3</b>	<b>102.9</b>	<b>99.0</b>	<b>106.0</b>	<b>101.7</b>	<b>105.0</b>	<b>6</b>

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup> **The Boeing Company**

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Engine Manufacturer<sup>1</sup> **General Electric Company**

Engine Type Designation<sup>1</sup> **CF6-80C2B1F**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**Without N1 modifier**

Noise Certification Basis **ICAO Annex 16, Volume I**

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EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A4516	<b>377,842</b>	<b>285,763</b>	<b>98.3</b>	<b>102.8</b>	<b>98.3</b>	<b>105.9</b>	<b>103.3</b>	<b>105.0</b>	<b>6</b>
A4515	<b>377,842</b>	<b>265,351</b>	<b>98.3</b>	<b>102.8</b>	<b>98.3</b>	<b>105.9</b>	<b>102.2</b>	<b>105.0</b>	<b>6</b>
A4514	<b>377,842</b>	<b>255,826</b>	<b>98.3</b>	<b>102.8</b>	<b>98.3</b>	<b>105.9</b>	<b>101.7</b>	<b>105.0</b>	<b>6</b>
A14746	<b>376,481</b>	<b>285,763</b>	<b>98.3</b>	<b>102.8</b>	<b>98.2</b>	<b>105.9</b>	<b>103.3</b>	<b>105.0</b>	<b>6</b>
A14747	<b>376,481</b>	<b>265,351</b>	<b>98.3</b>	<b>102.8</b>	<b>98.2</b>	<b>105.9</b>	<b>102.2</b>	<b>105.0</b>	<b>6</b>
A14748	<b>376,481</b>	<b>255,826</b>	<b>98.3</b>	<b>102.8</b>	<b>98.2</b>	<b>105.9</b>	<b>101.7</b>	<b>105.0</b>	<b>6</b>
A4511	<b>371,945</b>	<b>285,763</b>	<b>98.4</b>	<b>102.7</b>	<b>97.9</b>	<b>105.8</b>	<b>103.3</b>	<b>105.0</b>	<b>6</b>
A4510	<b>371,945</b>	<b>265,351</b>	<b>98.4</b>	<b>102.7</b>	<b>97.9</b>	<b>105.8</b>	<b>102.2</b>	<b>105.0</b>	<b>6</b>
A4509	<b>371,945</b>	<b>255,826</b>	<b>98.4</b>	<b>102.7</b>	<b>97.9</b>	<b>105.8</b>	<b>101.7</b>	<b>105.0</b>	<b>6</b>
A4506	<b>362,873</b>	<b>285,763</b>	<b>98.4</b>	<b>102.7</b>	<b>97.1</b>	<b>105.7</b>	<b>103.3</b>	<b>105.0</b>	<b>6</b>

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup> **The Boeing Company**

Aircraft Type Designation<sup>1</sup> **747-400**

Engine Manufacturer<sup>1</sup> **General Electric Company**

Engine Type Designation<sup>1</sup> **CF6-80C2B1F**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**Without N1 modifier**

Noise Certification Basis **ICAO Annex 16, Volume I**

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Chapter<sup>1</sup> **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A4505	<b>362,873</b>	<b>265,351</b>	<b>98.4</b>	<b>102.7</b>	<b>97.1</b>	<b>105.7</b>	<b>102.2</b>	<b>105.0</b>	<b>6</b>
A4504	<b>362,873</b>	<b>255,826</b>	<b>98.4</b>	<b>102.7</b>	<b>97.1</b>	<b>105.7</b>	<b>101.7</b>	<b>105.0</b>	<b>6</b>
A120320	<b>340,000</b>	<b>285,763</b>	<b>98.6</b>	<b>102.4</b>	<b>95.1</b>	<b>105.3</b>	<b>103.3</b>	<b>105.0</b>	<b>6</b>
A4502	<b>317,514</b>	<b>265,351</b>	<b>98.8</b>	<b>102.2</b>	<b>93.2</b>	<b>104.9</b>	<b>102.2</b>	<b>105.0</b>	<b>6</b>
A4500	<b>272,155</b>	<b>265,351</b>	<b>99.1</b>	<b>101.6</b>	<b>89.6</b>	<b>104.0</b>	<b>102.2</b>	<b>104.9</b>	<b>6</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **CF6-80C2B5F**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **With N1 modifier**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14711	<b>396,893</b>	<b>285,763</b>	<b>100.2</b>	<b>103.0</b>	<b>96.6</b>	<b>106.0</b>	<b>103.3</b>	<b>105.0</b>	-
A14712	<b>396,893</b>	<b>274,423</b>	<b>100.2</b>	<b>103.0</b>	<b>96.6</b>	<b>106.0</b>	<b>102.7</b>	<b>105.0</b>	-
A4558	<b>396,893</b>	<b>265,351</b>	<b>100.2</b>	<b>103.0</b>	<b>96.6</b>	<b>106.0</b>	<b>102.2</b>	<b>105.0</b>	-
A14713	<b>396,893</b>	<b>260,362</b>	<b>100.2</b>	<b>103.0</b>	<b>96.6</b>	<b>106.0</b>	<b>102.0</b>	<b>105.0</b>	-
A4554	<b>394,625</b>	<b>285,763</b>	<b>100.2</b>	<b>103.0</b>	<b>96.4</b>	<b>106.0</b>	<b>103.3</b>	<b>105.0</b>	<b>6</b>
A14714	<b>394,625</b>	<b>274,423</b>	<b>100.2</b>	<b>103.0</b>	<b>96.4</b>	<b>106.0</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A14715	<b>394,625</b>	<b>265,351</b>	<b>100.2</b>	<b>103.0</b>	<b>96.4</b>	<b>106.0</b>	<b>102.2</b>	<b>105.0</b>	<b>6</b>
A14716	<b>394,625</b>	<b>260,362</b>	<b>100.2</b>	<b>103.0</b>	<b>96.4</b>	<b>106.0</b>	<b>102.0</b>	<b>105.0</b>	<b>6</b>
A4552	<b>394,625</b>	<b>255,826</b>	<b>100.2</b>	<b>103.0</b>	<b>96.4</b>	<b>106.0</b>	<b>101.7</b>	<b>105.0</b>	<b>6</b>
A14719	<b>385,553</b>	<b>285,763</b>	<b>100.3</b>	<b>102.9</b>	<b>95.7</b>	<b>106.0</b>	<b>103.3</b>	<b>105.0</b>	<b>6</b>

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **CF6-80C2B5F**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **With N1 modifier**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14720	<b>385,553</b>	<b>274,423</b>	<b>100.3</b>	<b>102.9</b>	<b>95.7</b>	<b>106.0</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A4548	<b>385,553</b>	<b>265,351</b>	<b>100.3</b>	<b>102.9</b>	<b>95.7</b>	<b>106.0</b>	<b>102.2</b>	<b>105.0</b>	<b>6</b>
A14721	<b>385,553</b>	<b>260,362</b>	<b>100.3</b>	<b>102.9</b>	<b>95.7</b>	<b>106.0</b>	<b>102.0</b>	<b>105.0</b>	<b>6</b>
A4544	<b>377,842</b>	<b>285,763</b>	<b>100.3</b>	<b>102.8</b>	<b>95.1</b>	<b>105.9</b>	<b>103.3</b>	<b>105.0</b>	<b>6</b>
A14723	<b>377,842</b>	<b>274,423</b>	<b>100.3</b>	<b>102.8</b>	<b>95.1</b>	<b>105.9</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A14724	<b>377,842</b>	<b>265,351</b>	<b>100.3</b>	<b>102.8</b>	<b>95.1</b>	<b>105.9</b>	<b>102.2</b>	<b>105.0</b>	<b>6</b>
A14725	<b>377,842</b>	<b>260,362</b>	<b>100.3</b>	<b>102.8</b>	<b>95.1</b>	<b>105.9</b>	<b>102.0</b>	<b>105.0</b>	<b>6</b>
A4542	<b>377,842</b>	<b>255,826</b>	<b>100.3</b>	<b>102.8</b>	<b>95.1</b>	<b>105.9</b>	<b>101.7</b>	<b>105.0</b>	<b>6</b>
A14727	<b>376,481</b>	<b>285,763</b>	<b>100.3</b>	<b>102.8</b>	<b>95.0</b>	<b>105.9</b>	<b>103.3</b>	<b>105.0</b>	<b>6</b>
A14728	<b>376,481</b>	<b>274,423</b>	<b>100.3</b>	<b>102.8</b>	<b>95.0</b>	<b>105.9</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-400**

Engine Manufacturer<sup>1</sup>      **General Electric Company**

Engine Type Designation<sup>1</sup>      **CF6-80C2B5F**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**With N1 modifier**

Noise Certification Basis      **ICAO Annex 16, Volume I**

Edition / Amendment

Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A4538	<b>376,481</b>	<b>265,351</b>	<b>100.3</b>	<b>102.8</b>	<b>95.0</b>	<b>105.9</b>	<b>102.2</b>	<b>105.0</b>	<b>6</b>
A14729	<b>376,481</b>	<b>260,362</b>	<b>100.3</b>	<b>102.8</b>	<b>95.0</b>	<b>105.9</b>	<b>102.0</b>	<b>105.0</b>	<b>6</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup> **The Boeing Company**

Aircraft Type Designation<sup>1</sup> **747-400**

Engine Manufacturer<sup>1</sup> **Pratt & Whitney**

Engine Type Designation<sup>1</sup> **PW4056**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**FB2T fan blades**

Noise Certification Basis **ICAO Annex 16, Volume I**

Edition / Amendment

Chapter<sup>1</sup> **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14889	<b>396,893</b>	<b>285,763</b>	<b>99.7</b>	<b>103.0</b>	<b>101.6</b>	<b>106.0</b>	<b>104.3</b>	<b>105.0</b>	-
A4599	<b>396,893</b>	<b>265,351</b>	<b>99.7</b>	<b>103.0</b>	<b>101.6</b>	<b>106.0</b>	<b>103.5</b>	<b>105.0</b>	-
A14890	<b>396,893</b>	<b>255,826</b>	<b>99.7</b>	<b>103.0</b>	<b>101.6</b>	<b>106.0</b>	<b>103.1</b>	<b>105.0</b>	-
A4595	<b>395,532</b>	<b>285,763</b>	<b>99.7</b>	<b>103.0</b>	<b>101.6</b>	<b>106.0</b>	<b>104.3</b>	<b>105.0</b>	-
A14893	<b>395,532</b>	<b>265,351</b>	<b>99.7</b>	<b>103.0</b>	<b>101.6</b>	<b>106.0</b>	<b>103.5</b>	<b>105.0</b>	-
A4593	<b>395,532</b>	<b>255,826</b>	<b>99.7</b>	<b>103.0</b>	<b>101.6</b>	<b>106.0</b>	<b>103.1</b>	<b>105.0</b>	-
A14896	<b>394,625</b>	<b>285,763</b>	<b>99.7</b>	<b>103.0</b>	<b>101.5</b>	<b>106.0</b>	<b>104.3</b>	<b>105.0</b>	<b>6</b>
A4589	<b>394,625</b>	<b>265,351</b>	<b>99.7</b>	<b>103.0</b>	<b>101.5</b>	<b>106.0</b>	<b>103.5</b>	<b>105.0</b>	<b>6</b>
A14897	<b>394,625</b>	<b>255,826</b>	<b>99.7</b>	<b>103.0</b>	<b>101.5</b>	<b>106.0</b>	<b>103.1</b>	<b>105.0</b>	<b>6</b>
A4585	<b>385,553</b>	<b>285,763</b>	<b>99.7</b>	<b>102.9</b>	<b>100.9</b>	<b>106.0</b>	<b>104.3</b>	<b>105.0</b>	<b>6</b>

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-400**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**

Engine Type Designation<sup>1</sup>      **PW4056**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**FB2T fan blades**

Noise Certification Basis      **ICAO Annex 16, Volume I**

Edition / Amendment

Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14900	<b>385,553</b>	<b>265,351</b>	<b>99.7</b>	<b>102.9</b>	<b>100.9</b>	<b>106.0</b>	<b>103.5</b>	<b>105.0</b>	<b>6</b>
A14901	<b>385,553</b>	<b>255,826</b>	<b>99.7</b>	<b>102.9</b>	<b>100.9</b>	<b>106.0</b>	<b>103.1</b>	<b>105.0</b>	<b>6</b>
A14904	<b>377,842</b>	<b>285,763</b>	<b>99.8</b>	<b>102.8</b>	<b>100.1</b>	<b>105.9</b>	<b>104.3</b>	<b>105.0</b>	<b>6</b>
A4579	<b>377,842</b>	<b>265,351</b>	<b>99.8</b>	<b>102.8</b>	<b>100.1</b>	<b>105.9</b>	<b>103.5</b>	<b>105.0</b>	<b>6</b>
A14905	<b>377,842</b>	<b>255,826</b>	<b>99.8</b>	<b>102.8</b>	<b>100.1</b>	<b>105.9</b>	<b>103.1</b>	<b>105.0</b>	<b>6</b>
A4575	<b>371,945</b>	<b>285,763</b>	<b>99.8</b>	<b>102.7</b>	<b>99.5</b>	<b>105.8</b>	<b>104.3</b>	<b>105.0</b>	<b>6</b>
A14908	<b>371,945</b>	<b>265,351</b>	<b>99.8</b>	<b>102.7</b>	<b>99.5</b>	<b>105.8</b>	<b>103.5</b>	<b>105.0</b>	<b>6</b>
A4573	<b>371,945</b>	<b>255,826</b>	<b>99.8</b>	<b>102.7</b>	<b>99.5</b>	<b>105.8</b>	<b>103.1</b>	<b>105.0</b>	<b>6</b>
A14911	<b>362,873</b>	<b>285,763</b>	<b>99.9</b>	<b>102.7</b>	<b>98.6</b>	<b>105.7</b>	<b>104.3</b>	<b>105.0</b>	<b>6</b>
A4569	<b>362,873</b>	<b>265,351</b>	<b>99.9</b>	<b>102.7</b>	<b>98.6</b>	<b>105.7</b>	<b>103.5</b>	<b>105.0</b>	<b>6</b>

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup> **The Boeing Company**

Aircraft Type Designation<sup>1</sup> **747-400**

Engine Manufacturer<sup>1</sup> **Pratt & Whitney**

Engine Type Designation<sup>1</sup> **PW4056**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**FB2T fan blades**

Noise Certification Basis **ICAO Annex 16, Volume I**

Edition / Amendment

Chapter<sup>1</sup> **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14944	<b>362,873</b>	<b>255,826</b>	<b>99.9</b>	<b>102.7</b>	<b>98.6</b>	<b>105.7</b>	<b>103.1</b>	<b>105.0</b>	<b>6</b>
A4567	<b>317,514</b>	<b>285,763</b>	<b>100.3</b>	<b>102.2</b>	<b>93.9</b>	<b>104.9</b>	<b>104.3</b>	<b>105.0</b>	<b>6</b>
A4566	<b>317,514</b>	<b>265,351</b>	<b>100.3</b>	<b>102.2</b>	<b>93.9</b>	<b>104.9</b>	<b>103.5</b>	<b>105.0</b>	<b>6</b>
A4565	<b>317,514</b>	<b>255,826</b>	<b>100.3</b>	<b>102.2</b>	<b>93.9</b>	<b>104.9</b>	<b>103.1</b>	<b>105.0</b>	<b>6</b>
A4564	<b>272,155</b>	<b>265,351</b>	<b>100.7</b>	<b>101.6</b>	<b>89.5</b>	<b>104.0</b>	<b>103.5</b>	<b>104.9</b>	<b>6</b>
A4563	<b>272,155</b>	<b>255,826</b>	<b>100.7</b>	<b>101.6</b>	<b>89.5</b>	<b>104.0</b>	<b>103.1</b>	<b>104.9</b>	<b>6</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup> **The Boeing Company**

Aircraft Type Designation<sup>1</sup> **747-400**

Engine Manufacturer<sup>1</sup> **Pratt & Whitney**

Engine Type Designation<sup>1</sup> **PW4056**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**SB PW4ENG72-132, SB PW4ENG72-262 (Package B / Phase I (FB2B fan blades, Optimised fan exit guide vanes, Circumferential groove rub strip (CG)))**

Noise Certification Basis **ICAO Annex 16, Volume I**

Edition / Amendment

**Edition 3 / Amendment 7**

Chapter<sup>1</sup>

**3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14914	<b>396,893</b>	<b>285,763</b>	<b>98.5</b>	<b>103.0</b>	<b>99.3</b>	<b>106.0</b>	<b>103.0</b>	<b>105.0</b>	-
A1458	<b>396,893</b>	<b>265,351</b>	<b>98.5</b>	<b>103.0</b>	<b>99.3</b>	<b>106.0</b>	<b>102.5</b>	<b>105.0</b>	-
A14915	<b>396,893</b>	<b>255,826</b>	<b>98.5</b>	<b>103.0</b>	<b>99.3</b>	<b>106.0</b>	<b>102.3</b>	<b>105.0</b>	-
A1454	<b>395,532</b>	<b>285,763</b>	<b>98.5</b>	<b>103.0</b>	<b>99.1</b>	<b>106.0</b>	<b>103.0</b>	<b>105.0</b>	-
A14918	<b>395,532</b>	<b>265,351</b>	<b>98.5</b>	<b>103.0</b>	<b>99.1</b>	<b>106.0</b>	<b>102.5</b>	<b>105.0</b>	-
A1452	<b>395,532</b>	<b>255,826</b>	<b>98.5</b>	<b>103.0</b>	<b>99.1</b>	<b>106.0</b>	<b>102.3</b>	<b>105.0</b>	-
A14921	<b>394,625</b>	<b>285,763</b>	<b>98.5</b>	<b>103.0</b>	<b>99.1</b>	<b>106.0</b>	<b>103.0</b>	<b>105.0</b>	<b>6</b>
A1448	<b>394,625</b>	<b>265,351</b>	<b>98.5</b>	<b>103.0</b>	<b>99.1</b>	<b>106.0</b>	<b>102.5</b>	<b>105.0</b>	<b>6</b>
A14922	<b>394,625</b>	<b>255,826</b>	<b>98.5</b>	<b>103.0</b>	<b>99.1</b>	<b>106.0</b>	<b>102.3</b>	<b>105.0</b>	<b>6</b>
A1444	<b>385,553</b>	<b>285,763</b>	<b>98.5</b>	<b>102.9</b>	<b>98.2</b>	<b>106.0</b>	<b>103.0</b>	<b>105.0</b>	<b>6</b>

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup> **The Boeing Company**

Aircraft Type Designation<sup>1</sup> **747-400**

Engine Manufacturer<sup>1</sup> **Pratt & Whitney**

Engine Type Designation<sup>1</sup> **PW4056**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**SB PW4ENG72-132, SB PW4ENG72-262 (Package B / Phase I (FB2B fan blades, Optimised fan exit guide vanes, Circumferential groove rub strip (CG)))**

Noise Certification Basis **ICAO Annex 16, Volume I**

Edition / Amendment

**Edition 3 / Amendment 7**

Chapter<sup>1</sup>

**3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14925	<b>385,553</b>	<b>265,351</b>	<b>98.5</b>	<b>102.9</b>	<b>98.2</b>	<b>106.0</b>	<b>102.5</b>	<b>105.0</b>	<b>6</b>
A1442	<b>385,553</b>	<b>255,826</b>	<b>98.5</b>	<b>102.9</b>	<b>98.2</b>	<b>106.0</b>	<b>102.3</b>	<b>105.0</b>	<b>6</b>
A14933	<b>377,842</b>	<b>285,763</b>	<b>98.6</b>	<b>102.8</b>	<b>97.4</b>	<b>105.9</b>	<b>103.0</b>	<b>105.0</b>	<b>6</b>
A1438	<b>377,842</b>	<b>265,351</b>	<b>98.6</b>	<b>102.8</b>	<b>97.4</b>	<b>105.9</b>	<b>102.5</b>	<b>105.0</b>	<b>6</b>
A14934	<b>377,842</b>	<b>255,826</b>	<b>98.6</b>	<b>102.8</b>	<b>97.4</b>	<b>105.9</b>	<b>102.3</b>	<b>105.0</b>	<b>6</b>
A1434	<b>371,945</b>	<b>285,763</b>	<b>98.6</b>	<b>102.7</b>	<b>96.8</b>	<b>105.8</b>	<b>103.0</b>	<b>105.0</b>	<b>6</b>
A14937	<b>371,945</b>	<b>265,351</b>	<b>98.6</b>	<b>102.7</b>	<b>96.8</b>	<b>105.8</b>	<b>102.5</b>	<b>105.0</b>	<b>6</b>
A1432	<b>371,945</b>	<b>255,826</b>	<b>98.6</b>	<b>102.7</b>	<b>96.8</b>	<b>105.8</b>	<b>102.3</b>	<b>105.0</b>	<b>6</b>
A14940	<b>362,873</b>	<b>285,763</b>	<b>98.7</b>	<b>102.7</b>	<b>95.9</b>	<b>105.7</b>	<b>103.0</b>	<b>105.0</b>	<b>6</b>
A1428	<b>362,873</b>	<b>265,351</b>	<b>98.7</b>	<b>102.7</b>	<b>95.9</b>	<b>105.7</b>	<b>102.5</b>	<b>105.0</b>	<b>6</b>

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup> **The Boeing Company**

Aircraft Type Designation<sup>1</sup> **747-400**

Engine Manufacturer<sup>1</sup> **Pratt & Whitney**

Engine Type Designation<sup>1</sup> **PW4056**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**SB PW4ENG72-132, SB PW4ENG72-262 (Package B / Phase I (FB2B fan blades, Optimised fan exit guide vanes, Circumferential groove rub strip (CG)))**

Noise Certification Basis **ICAO Annex 16, Volume I**

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Chapter<sup>1</sup>

**3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14941	<b>362,873</b>	<b>255,826</b>	<b>98.7</b>	<b>102.7</b>	<b>95.9</b>	<b>105.7</b>	<b>102.3</b>	<b>105.0</b>	<b>6</b>
A1426	<b>317,514</b>	<b>285,763</b>	<b>99.0</b>	<b>102.2</b>	<b>91.2</b>	<b>104.9</b>	<b>103.0</b>	<b>105.0</b>	<b>6</b>
A14942	<b>317,514</b>	<b>265,351</b>	<b>99.0</b>	<b>102.2</b>	<b>91.2</b>	<b>104.9</b>	<b>102.5</b>	<b>105.0</b>	<b>6</b>
A1424	<b>317,514</b>	<b>255,826</b>	<b>99.0</b>	<b>102.2</b>	<b>91.2</b>	<b>104.9</b>	<b>102.3</b>	<b>105.0</b>	<b>6</b>
A14943	<b>272,155</b>	<b>265,351</b>	<b>99.5</b>	<b>101.6</b>	<b>87.2</b>	<b>104.0</b>	<b>102.5</b>	<b>104.9</b>	<b>6</b>
A1422	<b>272,155</b>	<b>255,826</b>	<b>99.5</b>	<b>101.6</b>	<b>87.2</b>	<b>104.0</b>	<b>102.3</b>	<b>104.9</b>	<b>6</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup> **The Boeing Company**

Aircraft Type Designation<sup>1</sup> **747-400**

Engine Manufacturer<sup>1</sup> **Pratt & Whitney**

Engine Type Designation<sup>1</sup> **PW4056-3**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**SB PW4ENG72-262 (Phase III (FB2C fan blades, Optimised fan exit guide vanes, Interrupted circumferential groove rub strip (ICG)))**

Noise Certification Basis **ICAO Annex 16, Volume I**

Edition / Amendment

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Chapter<sup>1</sup>

**3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14144	<b>396,893</b>	<b>285,763</b>	<b>98.4</b>	<b>103.0</b>	<b>98.6</b>	<b>106.0</b>	<b>102.8</b>	<b>105.0</b>	-
A14145	<b>396,893</b>	<b>265,351</b>	<b>98.4</b>	<b>103.0</b>	<b>98.6</b>	<b>106.0</b>	<b>102.3</b>	<b>105.0</b>	-
A14146	<b>396,893</b>	<b>255,826</b>	<b>98.4</b>	<b>103.0</b>	<b>98.6</b>	<b>106.0</b>	<b>102.2</b>	<b>105.0</b>	-
A14147	<b>395,532</b>	<b>285,763</b>	<b>98.4</b>	<b>103.0</b>	<b>98.5</b>	<b>106.0</b>	<b>102.8</b>	<b>105.0</b>	-
A14148	<b>395,532</b>	<b>265,351</b>	<b>98.4</b>	<b>103.0</b>	<b>98.5</b>	<b>106.0</b>	<b>102.3</b>	<b>105.0</b>	-
A14149	<b>395,532</b>	<b>255,826</b>	<b>98.4</b>	<b>103.0</b>	<b>98.5</b>	<b>106.0</b>	<b>102.2</b>	<b>105.0</b>	-
A14150	<b>394,625</b>	<b>285,763</b>	<b>98.5</b>	<b>103.0</b>	<b>98.4</b>	<b>106.0</b>	<b>102.8</b>	<b>105.0</b>	<b>6</b>
A14151	<b>394,625</b>	<b>265,351</b>	<b>98.5</b>	<b>103.0</b>	<b>98.4</b>	<b>106.0</b>	<b>102.3</b>	<b>105.0</b>	<b>6</b>
A14152	<b>394,625</b>	<b>255,826</b>	<b>98.5</b>	<b>103.0</b>	<b>98.4</b>	<b>106.0</b>	<b>102.2</b>	<b>105.0</b>	<b>6</b>
A14153	<b>385,553</b>	<b>285,763</b>	<b>98.5</b>	<b>102.9</b>	<b>97.6</b>	<b>106.0</b>	<b>102.8</b>	<b>105.0</b>	<b>6</b>

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup> **The Boeing Company**

Aircraft Type Designation<sup>1</sup> **747-400**

Engine Manufacturer<sup>1</sup> **Pratt & Whitney**

Engine Type Designation<sup>1</sup> **PW4056-3**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**SB PW4ENG72-262 (Phase III (FB2C fan blades, Optimised fan exit guide vanes, Interrupted circumferential groove rub strip (ICG)))**

Noise Certification Basis **ICAO Annex 16, Volume I**

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Chapter<sup>1</sup>

**3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14154	<b>385,553</b>	<b>265,351</b>	<b>98.5</b>	<b>102.9</b>	<b>97.6</b>	<b>106.0</b>	<b>102.3</b>	<b>105.0</b>	<b>6</b>
A14155	<b>385,553</b>	<b>255,826</b>	<b>98.5</b>	<b>102.9</b>	<b>97.6</b>	<b>106.0</b>	<b>102.2</b>	<b>105.0</b>	<b>6</b>
A14156	<b>377,842</b>	<b>285,763</b>	<b>98.5</b>	<b>102.8</b>	<b>96.8</b>	<b>105.9</b>	<b>102.8</b>	<b>105.0</b>	<b>6</b>
A14157	<b>377,842</b>	<b>265,351</b>	<b>98.5</b>	<b>102.8</b>	<b>96.8</b>	<b>105.9</b>	<b>102.3</b>	<b>105.0</b>	<b>6</b>
A14158	<b>377,842</b>	<b>255,826</b>	<b>98.5</b>	<b>102.8</b>	<b>96.8</b>	<b>105.9</b>	<b>102.2</b>	<b>105.0</b>	<b>6</b>
A14159	<b>371,945</b>	<b>285,763</b>	<b>98.6</b>	<b>102.7</b>	<b>96.2</b>	<b>105.8</b>	<b>102.8</b>	<b>105.0</b>	<b>6</b>
A14160	<b>371,945</b>	<b>265,351</b>	<b>98.6</b>	<b>102.7</b>	<b>96.2</b>	<b>105.8</b>	<b>102.3</b>	<b>105.0</b>	<b>6</b>
A14161	<b>371,945</b>	<b>255,826</b>	<b>98.6</b>	<b>102.7</b>	<b>96.2</b>	<b>105.8</b>	<b>102.2</b>	<b>105.0</b>	<b>6</b>
A14162	<b>362,873</b>	<b>285,763</b>	<b>98.6</b>	<b>102.7</b>	<b>95.2</b>	<b>105.7</b>	<b>102.8</b>	<b>105.0</b>	<b>6</b>
A14163	<b>362,873</b>	<b>265,351</b>	<b>98.6</b>	<b>102.7</b>	<b>95.2</b>	<b>105.7</b>	<b>102.3</b>	<b>105.0</b>	<b>6</b>

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup> **The Boeing Company**

Aircraft Type Designation<sup>1</sup> **747-400**

Engine Manufacturer<sup>1</sup> **Pratt & Whitney**

Engine Type Designation<sup>1</sup> **PW4056-3**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**SB PW4ENG72-262 (Phase III (FB2C fan blades, Optimised fan exit guide vanes, Interrupted circumferential groove rub strip (ICG)))**

Noise Certification Basis **ICAO Annex 16, Volume I**

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Chapter<sup>1</sup>

**3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14164	<b>362,873</b>	<b>255,826</b>	<b>98.6</b>	<b>102.7</b>	<b>95.2</b>	<b>105.7</b>	<b>102.2</b>	<b>105.0</b>	<b>6</b>
A14165	<b>317,514</b>	<b>285,763</b>	<b>98.9</b>	<b>102.2</b>	<b>90.6</b>	<b>104.9</b>	<b>102.8</b>	<b>105.0</b>	<b>6</b>
A14166	<b>317,514</b>	<b>265,351</b>	<b>98.9</b>	<b>102.2</b>	<b>90.6</b>	<b>104.9</b>	<b>102.3</b>	<b>105.0</b>	<b>6</b>
A14167	<b>317,514</b>	<b>255,826</b>	<b>98.9</b>	<b>102.2</b>	<b>90.6</b>	<b>104.9</b>	<b>102.2</b>	<b>105.0</b>	<b>6</b>
A14168	<b>272,155</b>	<b>265,351</b>	<b>99.3</b>	<b>101.6</b>	<b>86.6</b>	<b>104.0</b>	<b>102.3</b>	<b>104.9</b>	<b>6</b>
A14169	<b>272,155</b>	<b>255,826</b>	<b>99.3</b>	<b>101.6</b>	<b>86.6</b>	<b>104.0</b>	<b>102.2</b>	<b>104.9</b>	<b>6</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup> **The Boeing Company**

Aircraft Type Designation<sup>1</sup> **747-400**

Engine Manufacturer<sup>1</sup> **Pratt & Whitney**

Engine Type Designation<sup>1</sup> **PW4056-3**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**SB PW4ENG72-262, PRR 80451-105 (Phase III (FB2C fan blades, Optimised fan exit guide vanes, Interrupted circumferential groove rub strip (ICG), Noise reduction inlet (NRI)))**

Noise Certification Basis **ICAO Annex 16, Volume I**

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Chapter<sup>1</sup>

**3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14651	<b>396,893</b>	<b>285,763</b>	<b>98.1</b>	<b>103.0</b>	<b>97.4</b>	<b>106.0</b>	<b>101.8</b>	<b>105.0</b>	-
A14652	<b>396,893</b>	<b>265,351</b>	<b>98.1</b>	<b>103.0</b>	<b>97.4</b>	<b>106.0</b>	<b>101.1</b>	<b>105.0</b>	-
A14653	<b>396,893</b>	<b>255,826</b>	<b>98.1</b>	<b>103.0</b>	<b>97.4</b>	<b>106.0</b>	<b>100.8</b>	<b>105.0</b>	-
A14654	<b>394,625</b>	<b>285,763</b>	<b>98.2</b>	<b>103.0</b>	<b>97.2</b>	<b>106.0</b>	<b>101.8</b>	<b>105.0</b>	<b>6</b>
A14655	<b>394,625</b>	<b>265,351</b>	<b>98.2</b>	<b>103.0</b>	<b>97.2</b>	<b>106.0</b>	<b>101.1</b>	<b>105.0</b>	<b>6</b>
A14656	<b>394,625</b>	<b>255,826</b>	<b>98.2</b>	<b>103.0</b>	<b>97.2</b>	<b>106.0</b>	<b>100.8</b>	<b>105.0</b>	<b>6</b>
A14657	<b>385,553</b>	<b>285,763</b>	<b>98.2</b>	<b>102.9</b>	<b>96.5</b>	<b>106.0</b>	<b>101.8</b>	<b>105.0</b>	<b>6</b>
A14658	<b>385,553</b>	<b>265,351</b>	<b>98.2</b>	<b>102.9</b>	<b>96.5</b>	<b>106.0</b>	<b>101.1</b>	<b>105.0</b>	<b>6</b>
A14689	<b>385,553</b>	<b>255,826</b>	<b>98.2</b>	<b>102.9</b>	<b>96.5</b>	<b>106.0</b>	<b>100.8</b>	<b>105.0</b>	<b>6</b>
A14690	<b>377,842</b>	<b>285,763</b>	<b>98.3</b>	<b>102.8</b>	<b>95.7</b>	<b>105.9</b>	<b>101.8</b>	<b>105.0</b>	<b>6</b>

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup> **The Boeing Company**

Aircraft Type Designation<sup>1</sup> **747-400**

Engine Manufacturer<sup>1</sup> **Pratt & Whitney**

Engine Type Designation<sup>1</sup> **PW4056-3**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**SB PW4ENG72-262, PRR 80451-105 (Phase III (FB2C fan blades, Optimised fan exit guide vanes, Interrupted circumferential groove rub strip (ICG), Noise reduction inlet (NRI)))**

Noise Certification Basis **ICAO Annex 16, Volume I**

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Chapter<sup>1</sup>

**3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14691	<b>377,842</b>	<b>265,351</b>	<b>98.3</b>	<b>102.8</b>	<b>95.7</b>	<b>105.9</b>	<b>101.1</b>	<b>105.0</b>	<b>6</b>
A14692	<b>377,842</b>	<b>255,826</b>	<b>98.3</b>	<b>102.8</b>	<b>95.7</b>	<b>105.9</b>	<b>100.8</b>	<b>105.0</b>	<b>6</b>
A14693	<b>371,945</b>	<b>285,763</b>	<b>98.3</b>	<b>102.7</b>	<b>95.2</b>	<b>105.8</b>	<b>101.8</b>	<b>105.0</b>	<b>6</b>
A14694	<b>371,945</b>	<b>265,351</b>	<b>98.3</b>	<b>102.7</b>	<b>95.2</b>	<b>105.8</b>	<b>101.1</b>	<b>105.0</b>	<b>6</b>
A14695	<b>371,945</b>	<b>255,826</b>	<b>98.3</b>	<b>102.7</b>	<b>95.2</b>	<b>105.8</b>	<b>100.8</b>	<b>105.0</b>	<b>6</b>
A14696	<b>362,873</b>	<b>285,763</b>	<b>98.3</b>	<b>102.7</b>	<b>94.3</b>	<b>105.7</b>	<b>101.8</b>	<b>105.0</b>	<b>6</b>
A14697	<b>362,873</b>	<b>265,351</b>	<b>98.3</b>	<b>102.7</b>	<b>94.3</b>	<b>105.7</b>	<b>101.1</b>	<b>105.0</b>	<b>6</b>
A14698	<b>362,873</b>	<b>255,826</b>	<b>98.3</b>	<b>102.7</b>	<b>94.3</b>	<b>105.7</b>	<b>100.8</b>	<b>105.0</b>	<b>6</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup> **The Boeing Company**

Aircraft Type Designation<sup>1</sup> **747-400**

Engine Manufacturer<sup>1</sup> **Pratt & Whitney**

Engine Type Designation<sup>1</sup> **PW4056-3B**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**SB PW4ENG72-132, SB PW4ENG72-262 (Phase III (FB2B fan blades, Optimised fan exit guide vanes, Interrupted circumferential groove rub strip (ICG)))**

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Chapter<sup>1</sup>

**3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14928	<b>396,893</b>	<b>285,763</b>	<b>98.6</b>	<b>103.0</b>	<b>99.7</b>	<b>106.0</b>	<b>103.2</b>	<b>105.0</b>	<b>6</b>
A1418	<b>396,893</b>	<b>265,351</b>	<b>98.6</b>	<b>103.0</b>	<b>99.7</b>	<b>106.0</b>	<b>102.8</b>	<b>105.0</b>	<b>6</b>
A14929	<b>396,893</b>	<b>255,826</b>	<b>98.6</b>	<b>103.0</b>	<b>99.7</b>	<b>106.0</b>	<b>102.6</b>	<b>105.0</b>	<b>6</b>
A1414	<b>395,532</b>	<b>285,763</b>	<b>98.6</b>	<b>103.0</b>	<b>99.5</b>	<b>106.0</b>	<b>103.2</b>	<b>105.0</b>	<b>6</b>
A14946	<b>395,532</b>	<b>265,351</b>	<b>98.6</b>	<b>103.0</b>	<b>99.5</b>	<b>106.0</b>	<b>102.8</b>	<b>105.0</b>	<b>6</b>
A1412	<b>395,532</b>	<b>255,826</b>	<b>98.6</b>	<b>103.0</b>	<b>99.5</b>	<b>106.0</b>	<b>102.6</b>	<b>105.0</b>	<b>6</b>
A14949	<b>394,625</b>	<b>285,763</b>	<b>98.6</b>	<b>103.0</b>	<b>99.5</b>	<b>106.0</b>	<b>103.2</b>	<b>105.0</b>	<b>6</b>
A1408	<b>394,625</b>	<b>265,351</b>	<b>98.6</b>	<b>103.0</b>	<b>99.5</b>	<b>106.0</b>	<b>102.8</b>	<b>105.0</b>	<b>6</b>
A14950	<b>394,625</b>	<b>255,826</b>	<b>98.6</b>	<b>103.0</b>	<b>99.5</b>	<b>106.0</b>	<b>102.6</b>	<b>105.0</b>	<b>6</b>
A1404	<b>385,553</b>	<b>285,763</b>	<b>98.6</b>	<b>102.9</b>	<b>98.6</b>	<b>106.0</b>	<b>103.2</b>	<b>105.0</b>	<b>6</b>

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup> **The Boeing Company**

Aircraft Type Designation<sup>1</sup> **747-400**

Engine Manufacturer<sup>1</sup> **Pratt & Whitney**

Engine Type Designation<sup>1</sup> **PW4056-3B**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**SB PW4ENG72-132, SB PW4ENG72-262 (Phase III (FB2B fan blades, Optimised fan exit guide vanes, Interrupted circumferential groove rub strip (ICG)))**

Noise Certification Basis **ICAO Annex 16, Volume I**

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Chapter<sup>1</sup>

**3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14953	<b>385,553</b>	<b>265,351</b>	<b>98.6</b>	<b>102.9</b>	<b>98.6</b>	<b>106.0</b>	<b>102.8</b>	<b>105.0</b>	<b>6</b>
A1402	<b>385,553</b>	<b>255,826</b>	<b>98.6</b>	<b>102.9</b>	<b>98.6</b>	<b>106.0</b>	<b>102.6</b>	<b>105.0</b>	<b>6</b>
A1399	<b>377,842</b>	<b>285,763</b>	<b>98.7</b>	<b>102.8</b>	<b>97.8</b>	<b>105.9</b>	<b>103.2</b>	<b>105.0</b>	<b>6</b>
A1398	<b>377,842</b>	<b>265,351</b>	<b>98.7</b>	<b>102.8</b>	<b>97.8</b>	<b>105.9</b>	<b>102.8</b>	<b>105.0</b>	<b>6</b>
A1397	<b>377,842</b>	<b>255,826</b>	<b>98.7</b>	<b>102.8</b>	<b>97.8</b>	<b>105.9</b>	<b>102.6</b>	<b>105.0</b>	<b>6</b>
A1394	<b>371,945</b>	<b>285,763</b>	<b>98.7</b>	<b>102.7</b>	<b>97.2</b>	<b>105.8</b>	<b>103.2</b>	<b>105.0</b>	<b>6</b>
A1393	<b>371,945</b>	<b>265,351</b>	<b>98.7</b>	<b>102.7</b>	<b>97.2</b>	<b>105.8</b>	<b>102.8</b>	<b>105.0</b>	<b>6</b>
A1392	<b>371,945</b>	<b>255,826</b>	<b>98.7</b>	<b>102.7</b>	<b>97.2</b>	<b>105.8</b>	<b>102.6</b>	<b>105.0</b>	<b>6</b>
A1389	<b>362,873</b>	<b>285,763</b>	<b>98.8</b>	<b>102.7</b>	<b>96.3</b>	<b>105.7</b>	<b>103.2</b>	<b>105.0</b>	<b>6</b>
A1388	<b>362,873</b>	<b>265,351</b>	<b>98.8</b>	<b>102.7</b>	<b>96.3</b>	<b>105.7</b>	<b>102.8</b>	<b>105.0</b>	<b>6</b>

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup> **The Boeing Company**

Aircraft Type Designation<sup>1</sup> **747-400**

Engine Manufacturer<sup>1</sup> **Pratt & Whitney**

Engine Type Designation<sup>1</sup> **PW4056-3B**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**SB PW4ENG72-132, SB PW4ENG72-262 (Phase III (FB2B fan blades, Optimised fan exit guide vanes, Interrupted circumferential groove rub strip (ICG)))**

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**3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A1387	<b>362,873</b>	<b>255,826</b>	<b>98.8</b>	<b>102.7</b>	<b>96.3</b>	<b>105.7</b>	<b>102.6</b>	<b>105.0</b>	<b>6</b>
A1386	<b>317,514</b>	<b>285,763</b>	<b>99.2</b>	<b>102.2</b>	<b>91.5</b>	<b>104.9</b>	<b>103.2</b>	<b>105.0</b>	<b>6</b>
A1385	<b>317,514</b>	<b>265,351</b>	<b>99.2</b>	<b>102.2</b>	<b>91.5</b>	<b>104.9</b>	<b>102.6</b>	<b>105.0</b>	<b>6</b>
A1384	<b>317,514</b>	<b>255,826</b>	<b>99.2</b>	<b>102.2</b>	<b>91.5</b>	<b>104.9</b>	<b>102.3</b>	<b>105.0</b>	<b>6</b>
A1383	<b>272,155</b>	<b>265,351</b>	<b>99.6</b>	<b>101.6</b>	<b>87.2</b>	<b>104.0</b>	<b>102.6</b>	<b>104.9</b>	<b>6</b>
A1382	<b>272,155</b>	<b>255,826</b>	<b>99.6</b>	<b>101.6</b>	<b>87.2</b>	<b>104.0</b>	<b>102.3</b>	<b>104.9</b>	<b>6</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524G2-19**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A4670	<b>396,893</b>	<b>285,763</b>	<b>98.0</b>	<b>103.0</b>	<b>99.2</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A4669	<b>396,893</b>	<b>265,351</b>	<b>98.0</b>	<b>103.0</b>	<b>99.2</b>	<b>106.0</b>	<b>102.7</b>	<b>105.0</b>	-
A4668	<b>396,893</b>	<b>255,826</b>	<b>98.0</b>	<b>103.0</b>	<b>99.2</b>	<b>106.0</b>	<b>102.4</b>	<b>105.0</b>	-
A4665	<b>394,625</b>	<b>285,763</b>	<b>98.1</b>	<b>103.0</b>	<b>99.0</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A4664	<b>394,625</b>	<b>265,351</b>	<b>98.1</b>	<b>103.0</b>	<b>99.0</b>	<b>106.0</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A4663	<b>394,625</b>	<b>255,826</b>	<b>98.1</b>	<b>103.0</b>	<b>99.0</b>	<b>106.0</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A4660	<b>385,553</b>	<b>285,763</b>	<b>98.1</b>	<b>102.9</b>	<b>98.3</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A4659	<b>385,553</b>	<b>265,351</b>	<b>98.1</b>	<b>102.9</b>	<b>98.3</b>	<b>106.0</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A4658	<b>385,553</b>	<b>255,826</b>	<b>98.1</b>	<b>102.9</b>	<b>98.3</b>	<b>106.0</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A8955	<b>381,017</b>	<b>285,763</b>	<b>98.1</b>	<b>102.8</b>	<b>98.0</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524G2-19**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A121630	<b>381,000</b>	<b>263,000</b>	<b>98.1</b>	<b>102.8</b>	<b>98.0</b>	<b>106.0</b>	<b>102.6</b>	<b>105.0</b>	<b>6</b>
A121631	<b>378,000</b>	<b>269,000</b>	<b>98.1</b>	<b>102.8</b>	<b>97.8</b>	<b>105.9</b>	<b>102.8</b>	<b>105.0</b>	<b>6</b>
A4655	<b>377,842</b>	<b>285,763</b>	<b>98.1</b>	<b>102.8</b>	<b>97.8</b>	<b>105.9</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A4654	<b>377,842</b>	<b>265,351</b>	<b>98.1</b>	<b>102.8</b>	<b>97.8</b>	<b>105.9</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A4653	<b>377,842</b>	<b>255,826</b>	<b>98.1</b>	<b>102.8</b>	<b>97.8</b>	<b>105.9</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A4650	<b>371,945</b>	<b>285,763</b>	<b>98.2</b>	<b>102.7</b>	<b>97.4</b>	<b>105.8</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A4649	<b>371,945</b>	<b>265,351</b>	<b>98.2</b>	<b>102.7</b>	<b>97.4</b>	<b>105.8</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A4648	<b>371,945</b>	<b>255,826</b>	<b>98.2</b>	<b>102.7</b>	<b>97.4</b>	<b>105.8</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A121247	<b>364,000</b>	<b>285,763</b>	<b>98.2</b>	<b>102.7</b>	<b>96.8</b>	<b>105.7</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A4645	<b>362,873</b>	<b>285,763</b>	<b>98.2</b>	<b>102.7</b>	<b>96.7</b>	<b>105.7</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup> **The Boeing Company**

Aircraft Type Designation<sup>1</sup> **747-400**

Engine Manufacturer<sup>1</sup> **Rolls-Royce**

Engine Type Designation<sup>1</sup> **RB211-524G2-19**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**None**

Noise Certification Basis **ICAO Annex 16, Volume I**

Edition / Amendment

Chapter<sup>1</sup> **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A4644	<b>362,873</b>	<b>265,351</b>	<b>98.2</b>	<b>102.7</b>	<b>96.7</b>	<b>105.7</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A4643	<b>362,873</b>	<b>255,826</b>	<b>98.2</b>	<b>102.7</b>	<b>96.7</b>	<b>105.7</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A121619	<b>362,552</b>	<b>285,763</b>	<b>98.2</b>	<b>102.7</b>	<b>96.7</b>	<b>105.7</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A4642	<b>317,514</b>	<b>285,763</b>	<b>98.6</b>	<b>102.2</b>	<b>92.8</b>	<b>104.9</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A4641	<b>317,514</b>	<b>265,351</b>	<b>98.6</b>	<b>102.2</b>	<b>92.8</b>	<b>104.9</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A4640	<b>317,514</b>	<b>255,826</b>	<b>98.6</b>	<b>102.2</b>	<b>92.8</b>	<b>104.9</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A4639	<b>272,155</b>	<b>265,351</b>	<b>98.9</b>	<b>101.6</b>	<b>89.1</b>	<b>104.0</b>	<b>102.7</b>	<b>104.9</b>	<b>6</b>
A4638	<b>272,155</b>	<b>255,826</b>	<b>98.9</b>	<b>101.6</b>	<b>89.1</b>	<b>104.0</b>	<b>102.4</b>	<b>104.9</b>	<b>6</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-400**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**

Engine Type Designation<sup>1</sup>      **RB211-524G2-19, RB211-524G2-T-19**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**Engine intermix**

Noise Certification Basis      **ICAO Annex 16, Volume I**

Edition / Amendment

Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A121454	<b>396,893</b>	<b>285,763</b>	<b>98.0</b>	<b>103.0</b>	<b>99.2</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A121534	<b>381,017</b>	<b>285,763</b>	<b>98.1</b>	<b>102.8</b>	<b>98.0</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	6
A121627	<b>381,000</b>	<b>263,000</b>	<b>98.1</b>	<b>102.8</b>	<b>98.0</b>	<b>106.0</b>	<b>102.6</b>	<b>105.0</b>	6
A121638	<b>378,000</b>	<b>269,000</b>	<b>98.1</b>	<b>102.8</b>	<b>97.8</b>	<b>105.9</b>	<b>102.8</b>	<b>105.0</b>	6
A121615	<b>364,000</b>	<b>285,763</b>	<b>98.2</b>	<b>102.7</b>	<b>96.8</b>	<b>105.7</b>	<b>103.4</b>	<b>105.0</b>	6
A121621	<b>362,552</b>	<b>285,763</b>	<b>98.2</b>	<b>102.7</b>	<b>96.7</b>	<b>105.7</b>	<b>103.4</b>	<b>105.0</b>	6

<sup>1</sup> See Note 1.





Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524G2-T-19**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A8176	<b>396,893</b>	<b>285,763</b>	<b>98.0</b>	<b>103.0</b>	<b>99.2</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A8178	<b>396,893</b>	<b>265,351</b>	<b>98.0</b>	<b>103.0</b>	<b>99.2</b>	<b>106.0</b>	<b>102.7</b>	<b>105.0</b>	-
A8180	<b>396,893</b>	<b>255,826</b>	<b>98.0</b>	<b>103.0</b>	<b>99.2</b>	<b>106.0</b>	<b>102.4</b>	<b>105.0</b>	-
A8186	<b>394,625</b>	<b>285,763</b>	<b>98.1</b>	<b>103.0</b>	<b>99.0</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A8188	<b>394,625</b>	<b>265,351</b>	<b>98.1</b>	<b>103.0</b>	<b>99.0</b>	<b>106.0</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A8190	<b>394,625</b>	<b>255,826</b>	<b>98.1</b>	<b>103.0</b>	<b>99.0</b>	<b>106.0</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A8196	<b>385,553</b>	<b>285,763</b>	<b>98.1</b>	<b>102.9</b>	<b>98.3</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A8198	<b>385,553</b>	<b>265,351</b>	<b>98.1</b>	<b>102.9</b>	<b>98.3</b>	<b>106.0</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A8200	<b>385,553</b>	<b>255,826</b>	<b>98.1</b>	<b>102.9</b>	<b>98.3</b>	<b>106.0</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A8956	<b>381,017</b>	<b>285,763</b>	<b>98.1</b>	<b>102.8</b>	<b>98.0</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524G2-T-19**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A121632	<b>381,000</b>	<b>263,000</b>	<b>98.1</b>	<b>102.8</b>	<b>98.0</b>	<b>106.0</b>	<b>102.6</b>	<b>105.0</b>	<b>6</b>
A121633	<b>378,000</b>	<b>269,000</b>	<b>98.1</b>	<b>102.8</b>	<b>97.8</b>	<b>105.9</b>	<b>102.8</b>	<b>105.0</b>	<b>6</b>
A8206	<b>377,842</b>	<b>285,763</b>	<b>98.1</b>	<b>102.8</b>	<b>97.8</b>	<b>105.9</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A8208	<b>377,842</b>	<b>265,351</b>	<b>98.1</b>	<b>102.8</b>	<b>97.8</b>	<b>105.9</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A8210	<b>377,842</b>	<b>255,826</b>	<b>98.1</b>	<b>102.8</b>	<b>97.8</b>	<b>105.9</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A8216	<b>371,945</b>	<b>285,763</b>	<b>98.2</b>	<b>102.7</b>	<b>97.4</b>	<b>105.8</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A8218	<b>371,945</b>	<b>265,351</b>	<b>98.2</b>	<b>102.7</b>	<b>97.4</b>	<b>105.8</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A8220	<b>371,945</b>	<b>255,826</b>	<b>98.2</b>	<b>102.7</b>	<b>97.4</b>	<b>105.8</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A121248	<b>364,000</b>	<b>285,763</b>	<b>98.2</b>	<b>102.7</b>	<b>96.8</b>	<b>105.7</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A8226	<b>362,873</b>	<b>285,763</b>	<b>98.2</b>	<b>102.7</b>	<b>96.7</b>	<b>105.7</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524G2-T-19**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A8228	<b>362,873</b>	<b>265,351</b>	<b>98.2</b>	<b>102.7</b>	<b>96.7</b>	<b>105.7</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A8230	<b>362,873</b>	<b>255,826</b>	<b>98.2</b>	<b>102.7</b>	<b>96.7</b>	<b>105.7</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A121620	<b>362,552</b>	<b>285,763</b>	<b>98.2</b>	<b>102.7</b>	<b>96.7</b>	<b>105.7</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A8232	<b>317,514</b>	<b>285,763</b>	<b>98.6</b>	<b>102.2</b>	<b>92.8</b>	<b>104.9</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A8234	<b>317,514</b>	<b>265,351</b>	<b>98.6</b>	<b>102.2</b>	<b>92.8</b>	<b>104.9</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A8236	<b>317,514</b>	<b>255,826</b>	<b>98.6</b>	<b>102.2</b>	<b>92.8</b>	<b>104.9</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A8238	<b>272,155</b>	<b>265,351</b>	<b>98.9</b>	<b>101.6</b>	<b>89.1</b>	<b>104.0</b>	<b>102.7</b>	<b>104.9</b>	<b>6</b>
A8240	<b>272,155</b>	<b>255,826</b>	<b>98.9</b>	<b>101.6</b>	<b>89.1</b>	<b>104.0</b>	<b>102.4</b>	<b>104.9</b>	<b>6</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524G3-19**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14103	<b>396,893</b>	<b>285,763</b>	<b>98.0</b>	<b>103.0</b>	<b>99.2</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A14087	<b>396,893</b>	<b>265,351</b>	<b>98.0</b>	<b>103.0</b>	<b>99.2</b>	<b>106.0</b>	<b>102.7</b>	<b>105.0</b>	-
A14071	<b>396,893</b>	<b>255,826</b>	<b>98.0</b>	<b>103.0</b>	<b>99.2</b>	<b>106.0</b>	<b>102.4</b>	<b>105.0</b>	-
A14105	<b>394,625</b>	<b>285,763</b>	<b>98.1</b>	<b>103.0</b>	<b>99.0</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A14089	<b>394,625</b>	<b>265,351</b>	<b>98.1</b>	<b>103.0</b>	<b>99.0</b>	<b>106.0</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A14073	<b>394,625</b>	<b>255,826</b>	<b>98.1</b>	<b>103.0</b>	<b>99.0</b>	<b>106.0</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A14107	<b>385,553</b>	<b>285,763</b>	<b>98.1</b>	<b>102.9</b>	<b>98.3</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A14091	<b>385,553</b>	<b>265,351</b>	<b>98.1</b>	<b>102.9</b>	<b>98.3</b>	<b>106.0</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A14075	<b>385,553</b>	<b>255,826</b>	<b>98.1</b>	<b>102.9</b>	<b>98.3</b>	<b>106.0</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A121634	<b>381,000</b>	<b>263,000</b>	<b>98.1</b>	<b>102.8</b>	<b>98.0</b>	<b>106.0</b>	<b>102.6</b>	<b>105.0</b>	<b>6</b>

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524G3-19**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A121635	<b>378,000</b>	<b>269,000</b>	<b>98.1</b>	<b>102.8</b>	<b>97.8</b>	<b>105.9</b>	<b>102.8</b>	<b>105.0</b>	<b>6</b>
A14109	<b>377,842</b>	<b>285,763</b>	<b>98.1</b>	<b>102.8</b>	<b>97.8</b>	<b>105.9</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A14093	<b>377,842</b>	<b>265,351</b>	<b>98.1</b>	<b>102.8</b>	<b>97.8</b>	<b>105.9</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A14077	<b>377,842</b>	<b>255,826</b>	<b>98.1</b>	<b>102.8</b>	<b>97.8</b>	<b>105.9</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A14111	<b>371,945</b>	<b>285,763</b>	<b>98.2</b>	<b>102.7</b>	<b>97.4</b>	<b>105.8</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A14095	<b>371,945</b>	<b>265,351</b>	<b>98.2</b>	<b>102.7</b>	<b>97.4</b>	<b>105.8</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A14079	<b>371,945</b>	<b>255,826</b>	<b>98.2</b>	<b>102.7</b>	<b>97.4</b>	<b>105.8</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A121249	<b>364,000</b>	<b>285,763</b>	<b>98.2</b>	<b>102.7</b>	<b>96.8</b>	<b>105.7</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A14113	<b>362,873</b>	<b>285,763</b>	<b>98.2</b>	<b>102.7</b>	<b>96.7</b>	<b>105.7</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A14097	<b>362,873</b>	<b>265,351</b>	<b>98.2</b>	<b>102.7</b>	<b>96.7</b>	<b>105.7</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524G3-19**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14081	<b>362,873</b>	<b>255,826</b>	<b>98.2</b>	<b>102.7</b>	<b>96.7</b>	<b>105.7</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A121623	<b>362,552</b>	<b>285,763</b>	<b>98.2</b>	<b>102.7</b>	<b>96.7</b>	<b>105.7</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A14115	<b>317,514</b>	<b>285,763</b>	<b>98.6</b>	<b>102.2</b>	<b>92.8</b>	<b>104.9</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A14099	<b>317,514</b>	<b>265,351</b>	<b>98.6</b>	<b>102.2</b>	<b>92.8</b>	<b>104.9</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A14083	<b>317,514</b>	<b>255,826</b>	<b>98.6</b>	<b>102.2</b>	<b>92.8</b>	<b>104.9</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A14101	<b>272,155</b>	<b>265,351</b>	<b>98.9</b>	<b>101.6</b>	<b>89.1</b>	<b>104.0</b>	<b>102.7</b>	<b>104.9</b>	<b>6</b>
A14085	<b>272,155</b>	<b>255,826</b>	<b>98.9</b>	<b>101.6</b>	<b>89.1</b>	<b>104.0</b>	<b>102.4</b>	<b>104.9</b>	<b>6</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-400**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**

Engine Type Designation<sup>1</sup>      **RB211-524G3-19, RB211-524G3-T-19**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**Engine intermix**

Noise Certification Basis      **ICAO Annex 16, Volume I**

Edition / Amendment

Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A121639	<b>381,000</b>	<b>263,000</b>	<b>98.1</b>	<b>102.8</b>	<b>98.0</b>	<b>106.0</b>	<b>102.6</b>	<b>105.0</b>	<b>6</b>
A121628	<b>378,000</b>	<b>269,000</b>	<b>98.1</b>	<b>102.8</b>	<b>87.8</b>	<b>105.9</b>	<b>102.8</b>	<b>105.0</b>	<b>6</b>
A121616	<b>364,000</b>	<b>285,763</b>	<b>98.2</b>	<b>102.7</b>	<b>96.8</b>	<b>105.7</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A121625	<b>362,552</b>	<b>285,763</b>	<b>98.2</b>	<b>102.7</b>	<b>96.7</b>	<b>105.7</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524G3-T-19**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14104	<b>396,893</b>	<b>285,763</b>	<b>98.0</b>	<b>103.0</b>	<b>99.2</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A14088	<b>396,893</b>	<b>265,351</b>	<b>98.0</b>	<b>103.0</b>	<b>99.2</b>	<b>106.0</b>	<b>102.7</b>	<b>105.0</b>	-
A14072	<b>396,893</b>	<b>255,826</b>	<b>98.0</b>	<b>103.0</b>	<b>99.2</b>	<b>106.0</b>	<b>102.4</b>	<b>105.0</b>	-
A14106	<b>394,625</b>	<b>285,763</b>	<b>98.1</b>	<b>103.0</b>	<b>99.0</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A14090	<b>394,625</b>	<b>265,351</b>	<b>98.1</b>	<b>103.0</b>	<b>99.0</b>	<b>106.0</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A14074	<b>394,625</b>	<b>255,826</b>	<b>98.1</b>	<b>103.0</b>	<b>99.0</b>	<b>106.0</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A14108	<b>385,553</b>	<b>285,763</b>	<b>98.1</b>	<b>102.9</b>	<b>98.3</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A14092	<b>385,553</b>	<b>265,351</b>	<b>98.1</b>	<b>102.9</b>	<b>98.3</b>	<b>106.0</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A14076	<b>385,553</b>	<b>255,826</b>	<b>98.1</b>	<b>102.9</b>	<b>98.3</b>	<b>106.0</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A121636	<b>381,000</b>	<b>263,000</b>	<b>98.1</b>	<b>102.8</b>	<b>98.0</b>	<b>106.0</b>	<b>102.6</b>	<b>105.0</b>	<b>6</b>

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524G3-T-19**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A121637	<b>378,000</b>	<b>269,000</b>	<b>98.1</b>	<b>102.8</b>	<b>97.8</b>	<b>105.9</b>	<b>102.8</b>	<b>105.0</b>	<b>6</b>
A14110	<b>377,842</b>	<b>285,763</b>	<b>98.1</b>	<b>102.8</b>	<b>97.8</b>	<b>105.9</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A14094	<b>377,842</b>	<b>265,351</b>	<b>98.1</b>	<b>102.8</b>	<b>97.8</b>	<b>105.9</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A14078	<b>377,842</b>	<b>255,826</b>	<b>98.1</b>	<b>102.8</b>	<b>97.8</b>	<b>105.9</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A14112	<b>371,945</b>	<b>285,763</b>	<b>98.2</b>	<b>102.7</b>	<b>97.4</b>	<b>105.8</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A14096	<b>371,945</b>	<b>265,351</b>	<b>98.2</b>	<b>102.7</b>	<b>97.4</b>	<b>105.8</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A14080	<b>371,945</b>	<b>255,826</b>	<b>98.2</b>	<b>102.7</b>	<b>97.4</b>	<b>105.8</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A121250	<b>364,000</b>	<b>285,763</b>	<b>98.2</b>	<b>102.7</b>	<b>96.8</b>	<b>105.7</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A14114	<b>362,873</b>	<b>285,763</b>	<b>98.2</b>	<b>102.7</b>	<b>96.7</b>	<b>105.7</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A14098	<b>362,873</b>	<b>265,351</b>	<b>98.2</b>	<b>102.7</b>	<b>96.7</b>	<b>105.7</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524G3-T-19**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14082	<b>362,873</b>	<b>255,826</b>	<b>98.2</b>	<b>102.7</b>	<b>96.7</b>	<b>105.7</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A121624	<b>362,552</b>	<b>285,763</b>	<b>98.2</b>	<b>102.7</b>	<b>96.7</b>	<b>105.7</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A14116	<b>317,514</b>	<b>285,763</b>	<b>98.6</b>	<b>102.2</b>	<b>92.8</b>	<b>104.9</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A14100	<b>317,514</b>	<b>265,351</b>	<b>98.6</b>	<b>102.2</b>	<b>92.8</b>	<b>104.9</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A14084	<b>317,514</b>	<b>255,826</b>	<b>98.6</b>	<b>102.2</b>	<b>92.8</b>	<b>104.9</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A14102	<b>272,155</b>	<b>265,351</b>	<b>98.9</b>	<b>101.6</b>	<b>89.1</b>	<b>104.0</b>	<b>102.7</b>	<b>104.9</b>	<b>6</b>
A14086	<b>272,155</b>	<b>255,826</b>	<b>98.9</b>	<b>101.6</b>	<b>89.1</b>	<b>104.0</b>	<b>102.4</b>	<b>104.9</b>	<b>6</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524H2-19**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A4736	<b>396,893</b>	<b>285,763</b>	<b>98.8</b>	<b>103.0</b>	<b>98.0</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A4735	<b>396,893</b>	<b>265,351</b>	<b>98.8</b>	<b>103.0</b>	<b>98.0</b>	<b>106.0</b>	<b>102.7</b>	<b>105.0</b>	-
A4734	<b>396,893</b>	<b>255,826</b>	<b>98.8</b>	<b>103.0</b>	<b>98.0</b>	<b>106.0</b>	<b>102.4</b>	<b>105.0</b>	-
A4731	<b>394,625</b>	<b>285,763</b>	<b>98.8</b>	<b>103.0</b>	<b>97.8</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A4730	<b>394,625</b>	<b>265,351</b>	<b>98.8</b>	<b>103.0</b>	<b>97.8</b>	<b>106.0</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A4729	<b>394,625</b>	<b>255,826</b>	<b>98.8</b>	<b>103.0</b>	<b>97.8</b>	<b>106.0</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A4726	<b>385,553</b>	<b>285,763</b>	<b>98.8</b>	<b>102.9</b>	<b>97.2</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A4725	<b>385,553</b>	<b>265,351</b>	<b>98.8</b>	<b>102.9</b>	<b>97.2</b>	<b>106.0</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A4724	<b>385,553</b>	<b>255,826</b>	<b>98.8</b>	<b>102.9</b>	<b>97.2</b>	<b>106.0</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A4721	<b>377,842</b>	<b>285,763</b>	<b>98.9</b>	<b>102.8</b>	<b>96.7</b>	<b>105.9</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524H2-19**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A4720	<b>377,842</b>	<b>265,351</b>	<b>98.9</b>	<b>102.8</b>	<b>96.7</b>	<b>105.9</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A4719	<b>377,842</b>	<b>255,826</b>	<b>98.9</b>	<b>102.8</b>	<b>96.7</b>	<b>105.9</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A4716	<b>371,945</b>	<b>285,763</b>	<b>98.9</b>	<b>102.7</b>	<b>96.3</b>	<b>105.8</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A4715	<b>371,945</b>	<b>265,351</b>	<b>98.9</b>	<b>102.7</b>	<b>96.3</b>	<b>105.8</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A4714	<b>371,945</b>	<b>255,826</b>	<b>98.9</b>	<b>102.7</b>	<b>96.3</b>	<b>105.8</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A4711	<b>362,873</b>	<b>285,763</b>	<b>99.0</b>	<b>102.7</b>	<b>95.7</b>	<b>105.7</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A4710	<b>362,873</b>	<b>265,351</b>	<b>99.0</b>	<b>102.7</b>	<b>95.7</b>	<b>105.7</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A4709	<b>362,873</b>	<b>255,826</b>	<b>99.0</b>	<b>102.7</b>	<b>95.7</b>	<b>105.7</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A4708	<b>317,514</b>	<b>285,763</b>	<b>99.3</b>	<b>102.2</b>	<b>92.1</b>	<b>104.9</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A4707	<b>317,514</b>	<b>265,351</b>	<b>99.3</b>	<b>102.2</b>	<b>92.1</b>	<b>104.9</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524H2-19**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A4706	<b>317,514</b>	<b>255,826</b>	<b>99.3</b>	<b>102.2</b>	<b>92.1</b>	<b>104.9</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A4705	<b>272,155</b>	<b>265,351</b>	<b>99.7</b>	<b>101.6</b>	<b>88.7</b>	<b>104.0</b>	<b>102.7</b>	<b>104.9</b>	<b>6</b>
A4704	<b>272,155</b>	<b>255,826</b>	<b>99.7</b>	<b>101.6</b>	<b>88.7</b>	<b>104.0</b>	<b>102.4</b>	<b>104.9</b>	<b>6</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524H2-T-19**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A8244	<b>396,893</b>	<b>285,763</b>	<b>98.8</b>	<b>103.0</b>	<b>98.0</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A8245	<b>396,893</b>	<b>265,351</b>	<b>98.8</b>	<b>103.0</b>	<b>98.0</b>	<b>106.0</b>	<b>102.7</b>	<b>105.0</b>	-
A8246	<b>396,893</b>	<b>255,826</b>	<b>98.8</b>	<b>103.0</b>	<b>98.0</b>	<b>106.0</b>	<b>102.4</b>	<b>105.0</b>	-
A8252	<b>394,625</b>	<b>285,763</b>	<b>98.8</b>	<b>103.0</b>	<b>97.8</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A8254	<b>394,625</b>	<b>265,351</b>	<b>98.8</b>	<b>103.0</b>	<b>97.8</b>	<b>106.0</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A8256	<b>394,625</b>	<b>255,826</b>	<b>98.8</b>	<b>103.0</b>	<b>97.8</b>	<b>106.0</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A8262	<b>385,553</b>	<b>285,763</b>	<b>98.8</b>	<b>102.9</b>	<b>97.2</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A8264	<b>385,553</b>	<b>265,351</b>	<b>98.8</b>	<b>102.9</b>	<b>97.2</b>	<b>106.0</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A8266	<b>385,553</b>	<b>255,826</b>	<b>98.8</b>	<b>102.9</b>	<b>97.2</b>	<b>106.0</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A8272	<b>377,842</b>	<b>285,763</b>	<b>98.9</b>	<b>102.8</b>	<b>96.7</b>	<b>105.9</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524H2-T-19**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A8274	<b>377,842</b>	<b>265,351</b>	<b>98.9</b>	<b>102.8</b>	<b>96.7</b>	<b>105.9</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A8276	<b>377,842</b>	<b>255,826</b>	<b>98.9</b>	<b>102.8</b>	<b>96.7</b>	<b>105.9</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A8282	<b>371,945</b>	<b>285,763</b>	<b>98.9</b>	<b>102.7</b>	<b>96.3</b>	<b>105.8</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A8284	<b>371,945</b>	<b>265,351</b>	<b>98.9</b>	<b>102.7</b>	<b>96.3</b>	<b>105.8</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A8286	<b>371,945</b>	<b>255,826</b>	<b>98.9</b>	<b>102.7</b>	<b>96.3</b>	<b>105.8</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A8292	<b>362,873</b>	<b>285,763</b>	<b>99.0</b>	<b>102.7</b>	<b>95.7</b>	<b>105.7</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A8294	<b>362,873</b>	<b>265,351</b>	<b>99.0</b>	<b>102.7</b>	<b>95.7</b>	<b>105.7</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>
A8296	<b>362,873</b>	<b>255,826</b>	<b>99.0</b>	<b>102.7</b>	<b>95.7</b>	<b>105.7</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A8298	<b>317,514</b>	<b>285,763</b>	<b>99.3</b>	<b>102.2</b>	<b>92.1</b>	<b>104.9</b>	<b>103.4</b>	<b>105.0</b>	<b>6</b>
A8300	<b>317,514</b>	<b>265,351</b>	<b>99.3</b>	<b>102.2</b>	<b>92.1</b>	<b>104.9</b>	<b>102.7</b>	<b>105.0</b>	<b>6</b>

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524H2-T-19**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A8302	<b>317,514</b>	<b>255,826</b>	<b>99.3</b>	<b>102.2</b>	<b>92.1</b>	<b>104.9</b>	<b>102.4</b>	<b>105.0</b>	<b>6</b>
A8304	<b>272,155</b>	<b>265,351</b>	<b>99.7</b>	<b>101.6</b>	<b>88.7</b>	<b>104.0</b>	<b>102.7</b>	<b>104.9</b>	<b>6</b>
A8306	<b>272,155</b>	<b>255,826</b>	<b>99.7</b>	<b>101.6</b>	<b>88.7</b>	<b>104.0</b>	<b>102.4</b>	<b>104.9</b>	<b>6</b>

<sup>1</sup> See Note 1.





Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400BCF**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **CF6-80C2B1F**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **With N1 modifier**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14730	<b>394,625</b>	<b>295,742</b>	<b>97.9</b>	<b>103.0</b>	<b>99.7</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A14731	<b>394,625</b>	<b>288,031</b>	<b>97.9</b>	<b>103.0</b>	<b>99.7</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A14732	<b>385,553</b>	<b>295,742</b>	<b>98.0</b>	<b>102.9</b>	<b>99.0</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A14733	<b>385,553</b>	<b>288,031</b>	<b>98.0</b>	<b>102.9</b>	<b>99.0</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A14734	<b>377,842</b>	<b>295,742</b>	<b>98.0</b>	<b>102.8</b>	<b>98.4</b>	<b>105.9</b>	<b>103.8</b>	<b>105.0</b>	-
A14735	<b>377,842</b>	<b>288,031</b>	<b>98.0</b>	<b>102.8</b>	<b>98.4</b>	<b>105.9</b>	<b>103.4</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400BCF**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **CF6-80C2B1F**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **Without N1 modifier**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14738	<b>394,625</b>	<b>295,742</b>	<b>98.3</b>	<b>103.0</b>	<b>99.7</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A14739	<b>394,625</b>	<b>288,031</b>	<b>98.3</b>	<b>103.0</b>	<b>99.7</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A14740	<b>385,553</b>	<b>295,742</b>	<b>98.3</b>	<b>102.9</b>	<b>99.0</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A14741	<b>385,553</b>	<b>288,031</b>	<b>98.3</b>	<b>102.9</b>	<b>99.0</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A14742	<b>377,842</b>	<b>295,742</b>	<b>98.3</b>	<b>102.8</b>	<b>98.3</b>	<b>105.9</b>	<b>103.8</b>	<b>105.0</b>	-
A14743	<b>377,842</b>	<b>288,031</b>	<b>98.3</b>	<b>102.8</b>	<b>98.3</b>	<b>105.9</b>	<b>103.4</b>	<b>105.0</b>	-
A14744	<b>376,481</b>	<b>295,742</b>	<b>98.3</b>	<b>102.8</b>	<b>98.2</b>	<b>105.9</b>	<b>103.8</b>	<b>105.0</b>	-
A14745	<b>376,481</b>	<b>288,031</b>	<b>98.3</b>	<b>102.8</b>	<b>98.2</b>	<b>105.9</b>	<b>103.4</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400BCF**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **CF6-80C2B5F**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **With N1 modifier**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14717	<b>394,625</b>	<b>295,742</b>	<b>100.2</b>	<b>103.0</b>	<b>96.4</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A14718	<b>385,553</b>	<b>295,742</b>	<b>100.3</b>	<b>102.9</b>	<b>95.7</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A14722	<b>377,842</b>	<b>295,742</b>	<b>100.3</b>	<b>102.8</b>	<b>95.1</b>	<b>105.9</b>	<b>103.8</b>	<b>105.0</b>	-
A14726	<b>376,481</b>	<b>295,742</b>	<b>100.3</b>	<b>102.8</b>	<b>95.0</b>	<b>105.9</b>	<b>103.8</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400BCF**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**      Engine Type Designation<sup>1</sup>      **PW4056**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **FB2T fan blades**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14894	<b>394,625</b>	<b>295,742</b>	<b>99.7</b>	<b>103.0</b>	<b>101.5</b>	<b>106.0</b>	<b>104.7</b>	<b>105.0</b>	-
A14895	<b>394,625</b>	<b>288,031</b>	<b>99.7</b>	<b>103.0</b>	<b>101.5</b>	<b>106.0</b>	<b>104.4</b>	<b>105.0</b>	-
A14898	<b>385,553</b>	<b>295,742</b>	<b>99.7</b>	<b>102.9</b>	<b>100.9</b>	<b>106.0</b>	<b>104.7</b>	<b>105.0</b>	-
A14899	<b>385,553</b>	<b>288,031</b>	<b>99.7</b>	<b>102.9</b>	<b>100.9</b>	<b>106.0</b>	<b>104.4</b>	<b>105.0</b>	-
A14902	<b>377,842</b>	<b>295,742</b>	<b>99.8</b>	<b>102.8</b>	<b>100.1</b>	<b>105.9</b>	<b>104.7</b>	<b>105.0</b>	-
A14903	<b>377,842</b>	<b>288,031</b>	<b>99.8</b>	<b>102.8</b>	<b>100.1</b>	<b>105.9</b>	<b>104.4</b>	<b>105.0</b>	-
A14906	<b>371,945</b>	<b>295,742</b>	<b>99.8</b>	<b>102.7</b>	<b>99.5</b>	<b>105.8</b>	<b>104.7</b>	<b>105.0</b>	-
A14907	<b>371,945</b>	<b>288,031</b>	<b>99.8</b>	<b>102.7</b>	<b>99.5</b>	<b>105.8</b>	<b>104.4</b>	<b>105.0</b>	-
A14909	<b>362,873</b>	<b>295,742</b>	<b>99.9</b>	<b>102.7</b>	<b>98.6</b>	<b>105.7</b>	<b>104.7</b>	<b>105.0</b>	-
A14910	<b>362,873</b>	<b>288,031</b>	<b>99.9</b>	<b>102.7</b>	<b>98.6</b>	<b>105.7</b>	<b>104.4</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-400BCF**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**

Engine Type Designation<sup>1</sup>      **PW4056**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**SB PW4ENG72-132, SB PW4ENG72-262 (Package B / Phase I (FB2B fan blades, Optimised fan exit guide vanes, Circumferential groove rub strip (CG)))**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      **Edition 3 / Amendment 7**      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14919	<b>394,625</b>	<b>295,742</b>	<b>98.5</b>	<b>103.0</b>	<b>99.1</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A14920	<b>394,625</b>	<b>288,031</b>	<b>98.5</b>	<b>103.0</b>	<b>99.1</b>	<b>106.0</b>	<b>103.1</b>	<b>105.0</b>	-
A14923	<b>385,553</b>	<b>295,742</b>	<b>98.5</b>	<b>102.9</b>	<b>98.2</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A14924	<b>385,553</b>	<b>288,031</b>	<b>98.5</b>	<b>102.9</b>	<b>98.2</b>	<b>106.0</b>	<b>103.1</b>	<b>105.0</b>	-
A14931	<b>377,842</b>	<b>295,742</b>	<b>98.6</b>	<b>102.8</b>	<b>97.4</b>	<b>105.9</b>	<b>103.4</b>	<b>105.0</b>	-
A14932	<b>377,842</b>	<b>288,031</b>	<b>98.6</b>	<b>102.8</b>	<b>97.4</b>	<b>105.9</b>	<b>103.1</b>	<b>105.0</b>	-
A14935	<b>371,945</b>	<b>295,742</b>	<b>98.6</b>	<b>102.7</b>	<b>96.8</b>	<b>105.8</b>	<b>103.4</b>	<b>105.0</b>	-
A14936	<b>371,945</b>	<b>288,031</b>	<b>98.6</b>	<b>102.7</b>	<b>96.8</b>	<b>105.8</b>	<b>103.1</b>	<b>105.0</b>	-
A14938	<b>362,873</b>	<b>295,742</b>	<b>98.7</b>	<b>102.7</b>	<b>95.9</b>	<b>105.7</b>	<b>103.4</b>	<b>105.0</b>	-
A14939	<b>362,873</b>	<b>288,031</b>	<b>98.7</b>	<b>102.7</b>	<b>95.9</b>	<b>105.7</b>	<b>103.1</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-400BCF**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**

Engine Type Designation<sup>1</sup>      **PW4056-3**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**SB PW4ENG72-262 (Phase III (FB2C fan blades, Optimised fan exit guide vanes, Interrupted circumferential groove rub strip (ICG)))**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      **Edition 3 / Amendment 7**      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14964	<b>394,625</b>	<b>295,742</b>	<b>98.5</b>	<b>103.0</b>	<b>98.4</b>	<b>106.0</b>	<b>103.0</b>	<b>105.0</b>	-
A14965	<b>394,625</b>	<b>288,031</b>	<b>98.5</b>	<b>103.0</b>	<b>98.4</b>	<b>106.0</b>	<b>102.8</b>	<b>105.0</b>	-
A14966	<b>385,553</b>	<b>295,742</b>	<b>98.5</b>	<b>102.9</b>	<b>97.6</b>	<b>106.0</b>	<b>103.0</b>	<b>105.0</b>	-
A14967	<b>385,553</b>	<b>288,031</b>	<b>98.5</b>	<b>102.9</b>	<b>97.6</b>	<b>106.0</b>	<b>102.8</b>	<b>105.0</b>	-
A14968	<b>377,842</b>	<b>295,742</b>	<b>98.5</b>	<b>102.8</b>	<b>96.8</b>	<b>105.9</b>	<b>103.0</b>	<b>105.0</b>	-
A14969	<b>377,842</b>	<b>288,031</b>	<b>98.5</b>	<b>102.8</b>	<b>96.8</b>	<b>105.9</b>	<b>102.8</b>	<b>105.0</b>	-
A14970	<b>371,945</b>	<b>295,742</b>	<b>98.6</b>	<b>102.7</b>	<b>96.2</b>	<b>105.8</b>	<b>103.0</b>	<b>105.0</b>	-
A14971	<b>371,945</b>	<b>288,031</b>	<b>98.6</b>	<b>102.7</b>	<b>96.2</b>	<b>105.8</b>	<b>102.8</b>	<b>105.0</b>	-
A14972	<b>362,873</b>	<b>295,742</b>	<b>98.6</b>	<b>102.7</b>	<b>95.2</b>	<b>105.7</b>	<b>103.0</b>	<b>105.0</b>	-
A14973	<b>362,873</b>	<b>288,031</b>	<b>98.6</b>	<b>102.7</b>	<b>95.2</b>	<b>105.7</b>	<b>102.8</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-400BCF**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**

Engine Type Designation<sup>1</sup>      **PW4056-3**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**SB PW4ENG72-262, PRR 80451-105 (Phase III (FB2C fan blades, Optimised fan exit guide vanes, Interrupted circumferential groove rub strip (ICG), Noise reduction inlet (NRI)))**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      **Edition 3 / Amendment 7**      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14974	<b>394,625</b>	<b>295,742</b>	<b>98.2</b>	<b>103.0</b>	<b>97.2</b>	<b>106.0</b>	<b>102.1</b>	<b>105.0</b>	-
A14975	<b>394,625</b>	<b>288,031</b>	<b>98.2</b>	<b>103.0</b>	<b>97.2</b>	<b>106.0</b>	<b>101.9</b>	<b>105.0</b>	-
A14976	<b>385,553</b>	<b>295,742</b>	<b>98.2</b>	<b>102.9</b>	<b>96.5</b>	<b>106.0</b>	<b>102.1</b>	<b>105.0</b>	-
A14977	<b>385,553</b>	<b>288,031</b>	<b>98.2</b>	<b>102.9</b>	<b>96.5</b>	<b>106.0</b>	<b>101.9</b>	<b>105.0</b>	-
A14978	<b>377,842</b>	<b>295,742</b>	<b>98.3</b>	<b>102.8</b>	<b>95.7</b>	<b>105.9</b>	<b>102.1</b>	<b>105.0</b>	-
A14979	<b>377,842</b>	<b>288,031</b>	<b>98.3</b>	<b>102.8</b>	<b>95.7</b>	<b>105.9</b>	<b>101.9</b>	<b>105.0</b>	-
A14980	<b>371,945</b>	<b>295,742</b>	<b>98.3</b>	<b>102.7</b>	<b>95.2</b>	<b>105.8</b>	<b>102.1</b>	<b>105.0</b>	-
A14981	<b>371,945</b>	<b>288,031</b>	<b>98.3</b>	<b>102.7</b>	<b>95.2</b>	<b>105.8</b>	<b>101.9</b>	<b>105.0</b>	-
A14982	<b>362,873</b>	<b>295,742</b>	<b>98.3</b>	<b>102.7</b>	<b>94.3</b>	<b>105.7</b>	<b>102.1</b>	<b>105.0</b>	-
A14983	<b>362,873</b>	<b>288,031</b>	<b>98.3</b>	<b>102.7</b>	<b>94.3</b>	<b>105.7</b>	<b>101.9</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-400BCF**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**

Engine Type Designation<sup>1</sup>      **PW4056-3, PW4056-1C**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**SB PW4ENG72-262 (Engine intermix. All engines with Phase III (FB2C fan blades, Optimised fan exit guide vanes, Interrupted circumferential groove rub strip (ICG)))**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      **Edition 3 / Amendment 7**      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A122753	<b>394,625</b>	<b>295,742</b>	<b>98.5</b>	<b>103.0</b>	<b>98.4</b>	<b>106.0</b>	<b>103.0</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.





Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-400BCF**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**

Engine Type Designation<sup>1</sup>      **PW4056-3B**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**SB PW4ENG72-132, SB PW4ENG72-262 (Phase III (FB2B fan blades, Optimised fan exit guide vanes, Interrupted circumferential groove rub strip (ICG)))**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      **Edition 3 / Amendment 7**      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14947	<b>394,625</b>	<b>295,742</b>	<b>98.6</b>	<b>103.0</b>	<b>99.5</b>	<b>106.0</b>	<b>103.6</b>	<b>105.0</b>	-
A14948	<b>394,625</b>	<b>288,031</b>	<b>98.6</b>	<b>103.0</b>	<b>99.5</b>	<b>106.0</b>	<b>103.3</b>	<b>105.0</b>	-
A14951	<b>385,553</b>	<b>295,742</b>	<b>98.6</b>	<b>102.9</b>	<b>98.6</b>	<b>106.0</b>	<b>103.6</b>	<b>105.0</b>	-
A14952	<b>385,553</b>	<b>288,031</b>	<b>98.6</b>	<b>102.9</b>	<b>98.6</b>	<b>106.0</b>	<b>103.3</b>	<b>105.0</b>	-
A14954	<b>377,842</b>	<b>295,742</b>	<b>98.7</b>	<b>102.8</b>	<b>97.8</b>	<b>105.9</b>	<b>103.6</b>	<b>105.0</b>	-
A14955	<b>377,842</b>	<b>288,031</b>	<b>98.7</b>	<b>102.8</b>	<b>97.8</b>	<b>105.9</b>	<b>103.3</b>	<b>105.0</b>	-
A14956	<b>371,945</b>	<b>295,742</b>	<b>98.7</b>	<b>102.7</b>	<b>97.2</b>	<b>105.8</b>	<b>103.6</b>	<b>105.0</b>	-
A14957	<b>371,945</b>	<b>288,031</b>	<b>98.7</b>	<b>102.7</b>	<b>97.2</b>	<b>105.8</b>	<b>103.3</b>	<b>105.0</b>	-
A14958	<b>362,873</b>	<b>295,742</b>	<b>98.8</b>	<b>102.7</b>	<b>96.3</b>	<b>105.7</b>	<b>103.6</b>	<b>105.0</b>	-
A14959	<b>362,873</b>	<b>288,031</b>	<b>98.8</b>	<b>102.7</b>	<b>96.3</b>	<b>105.7</b>	<b>103.3</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-400BCF**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**

Engine Type Designation<sup>1</sup>      **RB211-524G2-19**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**None**

Noise Certification Basis      **ICAO Annex 16, Volume I**

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Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14789	<b>394,625</b>	<b>295,742</b>	<b>98.1</b>	<b>103.0</b>	<b>99.0</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A14790	<b>394,625</b>	<b>288,031</b>	<b>98.1</b>	<b>103.0</b>	<b>99.0</b>	<b>106.0</b>	<b>103.5</b>	<b>105.0</b>	-
A14791	<b>385,553</b>	<b>295,742</b>	<b>98.1</b>	<b>102.9</b>	<b>98.3</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A14792	<b>385,553</b>	<b>288,031</b>	<b>98.1</b>	<b>102.9</b>	<b>98.3</b>	<b>106.0</b>	<b>103.5</b>	<b>105.0</b>	-
A14793	<b>377,842</b>	<b>295,742</b>	<b>98.1</b>	<b>102.8</b>	<b>97.8</b>	<b>105.9</b>	<b>103.8</b>	<b>105.0</b>	-
A14794	<b>377,842</b>	<b>288,031</b>	<b>98.1</b>	<b>102.8</b>	<b>97.8</b>	<b>105.9</b>	<b>103.5</b>	<b>105.0</b>	-
A14795	<b>371,945</b>	<b>295,742</b>	<b>98.2</b>	<b>102.7</b>	<b>97.4</b>	<b>105.8</b>	<b>103.8</b>	<b>105.0</b>	-
A14796	<b>371,945</b>	<b>288,031</b>	<b>98.2</b>	<b>102.7</b>	<b>97.4</b>	<b>105.8</b>	<b>103.5</b>	<b>105.0</b>	-
A14797	<b>362,873</b>	<b>295,742</b>	<b>98.2</b>	<b>102.7</b>	<b>96.7</b>	<b>105.7</b>	<b>103.8</b>	<b>105.0</b>	-
A14798	<b>362,873</b>	<b>288,031</b>	<b>98.2</b>	<b>102.7</b>	<b>96.7</b>	<b>105.7</b>	<b>103.5</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400BCF**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524G2-T-19**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14799	<b>394,625</b>	<b>295,742</b>	<b>98.1</b>	<b>103.0</b>	<b>99.0</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A14800	<b>394,625</b>	<b>288,031</b>	<b>98.1</b>	<b>103.0</b>	<b>99.0</b>	<b>106.0</b>	<b>103.5</b>	<b>105.0</b>	-
A14801	<b>385,553</b>	<b>295,742</b>	<b>98.1</b>	<b>102.9</b>	<b>98.3</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A14802	<b>385,553</b>	<b>288,031</b>	<b>98.1</b>	<b>102.9</b>	<b>98.3</b>	<b>106.0</b>	<b>103.5</b>	<b>105.0</b>	-
A14803	<b>377,842</b>	<b>295,742</b>	<b>98.1</b>	<b>102.8</b>	<b>97.8</b>	<b>105.9</b>	<b>103.8</b>	<b>105.0</b>	-
A14804	<b>377,842</b>	<b>288,031</b>	<b>98.1</b>	<b>102.8</b>	<b>97.8</b>	<b>105.9</b>	<b>103.5</b>	<b>105.0</b>	-
A14805	<b>371,945</b>	<b>295,742</b>	<b>98.2</b>	<b>102.7</b>	<b>97.4</b>	<b>105.8</b>	<b>103.8</b>	<b>105.0</b>	-
A14806	<b>371,945</b>	<b>288,031</b>	<b>98.2</b>	<b>102.7</b>	<b>97.4</b>	<b>105.8</b>	<b>103.5</b>	<b>105.0</b>	-
A14807	<b>362,873</b>	<b>295,742</b>	<b>98.2</b>	<b>102.7</b>	<b>96.7</b>	<b>105.7</b>	<b>103.8</b>	<b>105.0</b>	-
A14808	<b>362,873</b>	<b>288,031</b>	<b>98.2</b>	<b>102.7</b>	<b>96.7</b>	<b>105.7</b>	<b>103.5</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-400BCF**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**

Engine Type Designation<sup>1</sup>      **RB211-524G3-19**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**None**

Noise Certification Basis      **ICAO Annex 16, Volume I**

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Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14809	<b>394,625</b>	<b>295,742</b>	<b>98.1</b>	<b>103.0</b>	<b>99.0</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A14810	<b>394,625</b>	<b>288,031</b>	<b>98.1</b>	<b>103.0</b>	<b>99.0</b>	<b>106.0</b>	<b>103.5</b>	<b>105.0</b>	-
A14811	<b>385,553</b>	<b>295,742</b>	<b>98.1</b>	<b>102.9</b>	<b>98.3</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A14812	<b>385,553</b>	<b>288,031</b>	<b>98.1</b>	<b>102.9</b>	<b>98.3</b>	<b>106.0</b>	<b>103.5</b>	<b>105.0</b>	-
A14813	<b>377,842</b>	<b>295,742</b>	<b>98.1</b>	<b>102.8</b>	<b>97.8</b>	<b>105.9</b>	<b>103.8</b>	<b>105.0</b>	-
A14814	<b>377,842</b>	<b>288,031</b>	<b>98.1</b>	<b>102.8</b>	<b>97.8</b>	<b>105.9</b>	<b>103.5</b>	<b>105.0</b>	-
A14815	<b>371,945</b>	<b>295,742</b>	<b>98.2</b>	<b>102.7</b>	<b>97.4</b>	<b>105.8</b>	<b>103.8</b>	<b>105.0</b>	-
A14816	<b>371,945</b>	<b>288,031</b>	<b>98.2</b>	<b>102.7</b>	<b>97.4</b>	<b>105.8</b>	<b>103.5</b>	<b>105.0</b>	-
A14817	<b>362,873</b>	<b>295,742</b>	<b>98.2</b>	<b>102.7</b>	<b>96.7</b>	<b>105.7</b>	<b>103.8</b>	<b>105.0</b>	-
A14818	<b>362,873</b>	<b>288,031</b>	<b>98.2</b>	<b>102.7</b>	<b>96.7</b>	<b>105.7</b>	<b>103.5</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400BCF**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524G3-T-19**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A15033	<b>394,625</b>	<b>295,742</b>	<b>98.1</b>	<b>103.0</b>	<b>99.0</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A15034	<b>394,625</b>	<b>288,031</b>	<b>98.1</b>	<b>103.0</b>	<b>99.0</b>	<b>106.0</b>	<b>103.5</b>	<b>105.0</b>	-
A15035	<b>385,553</b>	<b>295,742</b>	<b>98.1</b>	<b>102.9</b>	<b>98.3</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A15036	<b>385,553</b>	<b>288,031</b>	<b>98.1</b>	<b>102.9</b>	<b>98.3</b>	<b>106.0</b>	<b>103.5</b>	<b>105.0</b>	-
A15037	<b>377,842</b>	<b>295,742</b>	<b>98.1</b>	<b>102.8</b>	<b>97.8</b>	<b>105.9</b>	<b>103.8</b>	<b>105.0</b>	-
A15038	<b>377,842</b>	<b>288,031</b>	<b>98.1</b>	<b>102.8</b>	<b>97.8</b>	<b>105.9</b>	<b>103.5</b>	<b>105.0</b>	-
A15039	<b>371,945</b>	<b>295,742</b>	<b>98.2</b>	<b>102.7</b>	<b>97.4</b>	<b>105.8</b>	<b>103.8</b>	<b>105.0</b>	-
A15040	<b>371,945</b>	<b>288,031</b>	<b>98.2</b>	<b>102.7</b>	<b>97.4</b>	<b>105.8</b>	<b>103.5</b>	<b>105.0</b>	-
A15041	<b>362,873</b>	<b>295,742</b>	<b>98.2</b>	<b>102.7</b>	<b>96.7</b>	<b>105.7</b>	<b>103.8</b>	<b>105.0</b>	-
A15042	<b>362,873</b>	<b>288,031</b>	<b>98.2</b>	<b>102.7</b>	<b>96.7</b>	<b>105.7</b>	<b>103.5</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**

Aircraft Type Designation<sup>1</sup>      **747-400BCF**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**

Engine Type Designation<sup>1</sup>      **RB211-524H2-19**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**None**

Noise Certification Basis      **ICAO Annex 16, Volume I**

Edition / Amendment

Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14819	<b>394,625</b>	<b>295,742</b>	<b>98.8</b>	<b>103.0</b>	<b>97.8</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A14820	<b>394,625</b>	<b>288,031</b>	<b>98.8</b>	<b>103.0</b>	<b>97.8</b>	<b>106.0</b>	<b>103.5</b>	<b>105.0</b>	-
A14821	<b>385,553</b>	<b>295,742</b>	<b>98.8</b>	<b>102.9</b>	<b>97.2</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A14822	<b>385,553</b>	<b>288,031</b>	<b>98.8</b>	<b>102.9</b>	<b>97.2</b>	<b>106.0</b>	<b>103.5</b>	<b>105.0</b>	-
A14823	<b>377,842</b>	<b>295,742</b>	<b>98.9</b>	<b>102.8</b>	<b>96.7</b>	<b>105.9</b>	<b>103.8</b>	<b>105.0</b>	-
A14824	<b>377,842</b>	<b>288,031</b>	<b>98.9</b>	<b>102.8</b>	<b>96.7</b>	<b>105.9</b>	<b>103.5</b>	<b>105.0</b>	-
A14825	<b>371,945</b>	<b>295,742</b>	<b>98.9</b>	<b>102.7</b>	<b>96.3</b>	<b>105.8</b>	<b>103.8</b>	<b>105.0</b>	-
A14826	<b>371,945</b>	<b>288,031</b>	<b>98.9</b>	<b>102.7</b>	<b>96.3</b>	<b>105.8</b>	<b>103.5</b>	<b>105.0</b>	-
A14827	<b>362,873</b>	<b>295,742</b>	<b>99.0</b>	<b>102.7</b>	<b>95.7</b>	<b>105.7</b>	<b>103.8</b>	<b>105.0</b>	-
A14828	<b>362,873</b>	<b>288,031</b>	<b>99.0</b>	<b>102.7</b>	<b>95.7</b>	<b>105.7</b>	<b>103.5</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400BCF**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524H2-T-19**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14829	<b>394,625</b>	<b>295,742</b>	<b>98.8</b>	<b>103.0</b>	<b>97.8</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A14830	<b>394,625</b>	<b>288,031</b>	<b>98.8</b>	<b>103.0</b>	<b>97.8</b>	<b>106.0</b>	<b>103.5</b>	<b>105.0</b>	-
A14831	<b>385,553</b>	<b>295,742</b>	<b>98.8</b>	<b>102.9</b>	<b>97.2</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A14832	<b>385,553</b>	<b>288,031</b>	<b>98.8</b>	<b>102.9</b>	<b>97.2</b>	<b>106.0</b>	<b>103.5</b>	<b>105.0</b>	-
A14833	<b>377,842</b>	<b>295,742</b>	<b>98.9</b>	<b>102.8</b>	<b>96.7</b>	<b>105.9</b>	<b>103.8</b>	<b>105.0</b>	-
A14834	<b>377,842</b>	<b>288,031</b>	<b>98.9</b>	<b>102.8</b>	<b>96.7</b>	<b>105.9</b>	<b>103.5</b>	<b>105.0</b>	-
A14835	<b>371,945</b>	<b>295,742</b>	<b>98.9</b>	<b>102.7</b>	<b>96.3</b>	<b>105.8</b>	<b>103.8</b>	<b>105.0</b>	-
A14836	<b>371,945</b>	<b>288,031</b>	<b>98.9</b>	<b>102.7</b>	<b>96.3</b>	<b>105.8</b>	<b>103.5</b>	<b>105.0</b>	-
A14837	<b>362,873</b>	<b>295,742</b>	<b>99.0</b>	<b>102.7</b>	<b>95.7</b>	<b>105.7</b>	<b>103.8</b>	<b>105.0</b>	-
A14838	<b>362,873</b>	<b>288,031</b>	<b>99.0</b>	<b>102.7</b>	<b>95.7</b>	<b>105.7</b>	<b>103.5</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup> **The Boeing Company**

Aircraft Type Designation<sup>1</sup> **747-400F**

Engine Manufacturer<sup>1</sup> **General Electric Company**

Engine Type Designation<sup>1</sup> **CF6-80C2B1F**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**With N1 modifier**

Noise Certification Basis **ICAO Annex 16, Volume I**

Edition / Amendment

Chapter<sup>1</sup> **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A4498	<b>396,893</b>	<b>302,092</b>	<b>97.9</b>	<b>103.0</b>	<b>99.9</b>	<b>106.0</b>	<b>104.1</b>	<b>105.0</b>	-
A4497	<b>396,893</b>	<b>295,742</b>	<b>97.9</b>	<b>103.0</b>	<b>99.9</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A4496	<b>396,893</b>	<b>285,763</b>	<b>97.9</b>	<b>103.0</b>	<b>99.9</b>	<b>106.0</b>	<b>103.2</b>	<b>105.0</b>	-
A14756	<b>395,532</b>	<b>302,092</b>	<b>97.9</b>	<b>103.0</b>	<b>99.8</b>	<b>106.0</b>	<b>104.1</b>	<b>105.0</b>	-
A14757	<b>395,532</b>	<b>295,742</b>	<b>97.9</b>	<b>103.0</b>	<b>99.8</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A14758	<b>395,532</b>	<b>285,763</b>	<b>97.9</b>	<b>103.0</b>	<b>99.8</b>	<b>106.0</b>	<b>103.2</b>	<b>105.0</b>	-
A14759	<b>394,625</b>	<b>302,092</b>	<b>97.9</b>	<b>103.0</b>	<b>99.7</b>	<b>106.0</b>	<b>104.1</b>	<b>105.0</b>	-
A4492	<b>394,625</b>	<b>295,742</b>	<b>97.9</b>	<b>103.0</b>	<b>99.7</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A4491	<b>394,625</b>	<b>285,763</b>	<b>97.9</b>	<b>103.0</b>	<b>99.7</b>	<b>106.0</b>	<b>103.2</b>	<b>105.0</b>	-
A14760	<b>385,553</b>	<b>302,092</b>	<b>97.9</b>	<b>102.9</b>	<b>99.0</b>	<b>106.0</b>	<b>104.1</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup> **The Boeing Company**

Aircraft Type Designation<sup>1</sup> **747-400F**

Engine Manufacturer<sup>1</sup> **General Electric Company**

Engine Type Designation<sup>1</sup> **CF6-80C2B1F**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**With N1 modifier**

Noise Certification Basis **ICAO Annex 16, Volume I**

Edition / Amendment

Chapter<sup>1</sup> **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A4487	<b>385,553</b>	<b>295,742</b>	<b>97.9</b>	<b>102.9</b>	<b>99.0</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A4486	<b>385,553</b>	<b>285,763</b>	<b>97.9</b>	<b>102.9</b>	<b>99.0</b>	<b>106.0</b>	<b>103.2</b>	<b>105.0</b>	-
A14761	<b>376,481</b>	<b>302,092</b>	<b>98.0</b>	<b>102.8</b>	<b>98.2</b>	<b>105.9</b>	<b>104.1</b>	<b>105.0</b>	-
A4477	<b>376,481</b>	<b>295,742</b>	<b>98.0</b>	<b>102.8</b>	<b>98.2</b>	<b>105.9</b>	<b>103.8</b>	<b>105.0</b>	-
A4476	<b>376,481</b>	<b>285,763</b>	<b>98.0</b>	<b>102.8</b>	<b>98.2</b>	<b>105.9</b>	<b>103.2</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400F**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **CF6-80C2B1F**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **Without N1 modifier**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14749	<b>396,893</b>	<b>302,092</b>	<b>98.2</b>	<b>103.0</b>	<b>99.5</b>	<b>106.0</b>	<b>104.1</b>	<b>105.0</b>	-
A4533	<b>396,893</b>	<b>295,742</b>	<b>98.2</b>	<b>103.0</b>	<b>99.5</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A4532	<b>396,893</b>	<b>285,763</b>	<b>98.2</b>	<b>103.0</b>	<b>99.5</b>	<b>106.0</b>	<b>103.2</b>	<b>105.0</b>	-
A14751	<b>395,532</b>	<b>302,092</b>	<b>98.2</b>	<b>103.0</b>	<b>99.4</b>	<b>106.0</b>	<b>104.1</b>	<b>105.0</b>	-
A14752	<b>395,532</b>	<b>295,742</b>	<b>98.2</b>	<b>103.0</b>	<b>99.4</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A14753	<b>395,532</b>	<b>285,763</b>	<b>98.2</b>	<b>103.0</b>	<b>99.4</b>	<b>106.0</b>	<b>103.2</b>	<b>105.0</b>	-
A14750	<b>394,625</b>	<b>302,092</b>	<b>98.2</b>	<b>103.0</b>	<b>99.3</b>	<b>106.0</b>	<b>104.1</b>	<b>105.0</b>	-
A4528	<b>394,625</b>	<b>295,742</b>	<b>98.2</b>	<b>103.0</b>	<b>99.3</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A4527	<b>394,625</b>	<b>285,763</b>	<b>98.2</b>	<b>103.0</b>	<b>99.3</b>	<b>106.0</b>	<b>103.2</b>	<b>105.0</b>	-
A14754	<b>385,553</b>	<b>302,092</b>	<b>98.3</b>	<b>102.9</b>	<b>98.6</b>	<b>106.0</b>	<b>104.1</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400F**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **CF6-80C2B1F**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **Without N1 modifier**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A4523	<b>385,553</b>	<b>295,742</b>	<b>98.3</b>	<b>102.9</b>	<b>98.6</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A4522	<b>385,553</b>	<b>285,763</b>	<b>98.3</b>	<b>102.9</b>	<b>98.6</b>	<b>106.0</b>	<b>103.2</b>	<b>105.0</b>	-
A14755	<b>376,481</b>	<b>302,092</b>	<b>98.3</b>	<b>102.8</b>	<b>97.8</b>	<b>105.9</b>	<b>104.1</b>	<b>105.0</b>	-
A4518	<b>376,481</b>	<b>295,742</b>	<b>98.3</b>	<b>102.8</b>	<b>97.8</b>	<b>105.9</b>	<b>103.8</b>	<b>105.0</b>	-
A4517	<b>376,481</b>	<b>288,031</b>	<b>98.3</b>	<b>102.8</b>	<b>97.8</b>	<b>105.9</b>	<b>103.2</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400F**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **CF6-80C2B5F**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **With N1 modifier**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A18158	<b>412,769</b>	<b>302,092</b>	<b>100.0</b>	<b>103.0</b>	<b>97.8</b>	<b>106.0</b>	<b>104.1</b>	<b>105.0</b>	-
A14650	<b>412,769</b>	<b>296,195</b>	<b>100.0</b>	<b>103.0</b>	<b>97.8</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A4562	<b>396,893</b>	<b>302,092</b>	<b>100.2</b>	<b>103.0</b>	<b>96.6</b>	<b>106.0</b>	<b>104.1</b>	<b>105.0</b>	-
A14762	<b>396,893</b>	<b>295,742</b>	<b>100.2</b>	<b>103.0</b>	<b>96.6</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A14787	<b>396,893</b>	<b>285,763</b>	<b>100.2</b>	<b>103.0</b>	<b>96.6</b>	<b>106.0</b>	<b>103.3</b>	<b>105.0</b>	-
A14763	<b>396,893</b>	<b>274,423</b>	<b>100.2</b>	<b>103.0</b>	<b>96.6</b>	<b>106.0</b>	<b>102.7</b>	<b>105.0</b>	-
A14764	<b>396,893</b>	<b>265,351</b>	<b>100.2</b>	<b>103.0</b>	<b>96.6</b>	<b>106.0</b>	<b>102.2</b>	<b>105.0</b>	-
A14765	<b>396,893</b>	<b>260,362</b>	<b>100.2</b>	<b>103.0</b>	<b>96.6</b>	<b>106.0</b>	<b>102.0</b>	<b>105.0</b>	-
A14766	<b>394,625</b>	<b>302,092</b>	<b>100.2</b>	<b>103.0</b>	<b>96.4</b>	<b>106.0</b>	<b>104.1</b>	<b>105.0</b>	-
A4556	<b>394,625</b>	<b>295,742</b>	<b>100.2</b>	<b>103.0</b>	<b>96.4</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400F**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **CF6-80C2B5F**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **With N1 modifier**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14767	<b>394,625</b>	<b>285,763</b>	<b>100.2</b>	<b>103.0</b>	<b>96.4</b>	<b>106.0</b>	<b>103.3</b>	<b>105.0</b>	-
A14768	<b>394,625</b>	<b>274,423</b>	<b>100.2</b>	<b>103.0</b>	<b>96.4</b>	<b>106.0</b>	<b>102.7</b>	<b>105.0</b>	-
A14769	<b>394,625</b>	<b>265,351</b>	<b>100.2</b>	<b>103.0</b>	<b>96.4</b>	<b>106.0</b>	<b>102.2</b>	<b>105.0</b>	-
A14770	<b>394,625</b>	<b>260,362</b>	<b>100.2</b>	<b>103.0</b>	<b>96.4</b>	<b>106.0</b>	<b>102.0</b>	<b>105.0</b>	-
A14771	<b>385,553</b>	<b>302,092</b>	<b>100.3</b>	<b>102.9</b>	<b>95.7</b>	<b>106.0</b>	<b>104.1</b>	<b>105.0</b>	-
A14780	<b>385,553</b>	<b>295,742</b>	<b>100.3</b>	<b>102.9</b>	<b>95.7</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A14772	<b>385,553</b>	<b>285,763</b>	<b>100.3</b>	<b>102.9</b>	<b>95.7</b>	<b>106.0</b>	<b>103.3</b>	<b>105.0</b>	-
A14773	<b>385,553</b>	<b>274,423</b>	<b>100.3</b>	<b>102.9</b>	<b>95.7</b>	<b>106.0</b>	<b>102.7</b>	<b>105.0</b>	-
A14774	<b>385,553</b>	<b>265,351</b>	<b>100.3</b>	<b>102.9</b>	<b>95.7</b>	<b>106.0</b>	<b>102.2</b>	<b>105.0</b>	-
A14775	<b>385,553</b>	<b>260,362</b>	<b>100.3</b>	<b>102.9</b>	<b>95.7</b>	<b>106.0</b>	<b>102.0</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup> **The Boeing Company**

Aircraft Type Designation<sup>1</sup> **747-400F**

Engine Manufacturer<sup>1</sup> **General Electric Company**

Engine Type Designation<sup>1</sup> **CF6-80C2B5F**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**With N1 modifier**

Noise Certification Basis **ICAO Annex 16, Volume I**

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Chapter<sup>1</sup> **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14788	<b>377,842</b>	<b>302,092</b>	<b>100.3</b>	<b>102.8</b>	<b>95.1</b>	<b>105.9</b>	<b>104.1</b>	<b>105.0</b>	-
A14776	<b>377,842</b>	<b>285,763</b>	<b>100.3</b>	<b>102.8</b>	<b>95.1</b>	<b>105.9</b>	<b>103.3</b>	<b>105.0</b>	-
A14777	<b>377,842</b>	<b>274,423</b>	<b>100.3</b>	<b>102.8</b>	<b>95.1</b>	<b>105.9</b>	<b>102.7</b>	<b>105.0</b>	-
A14778	<b>377,842</b>	<b>265,351</b>	<b>100.3</b>	<b>102.8</b>	<b>95.1</b>	<b>105.9</b>	<b>102.2</b>	<b>105.0</b>	-
A14779	<b>377,842</b>	<b>260,362</b>	<b>100.3</b>	<b>102.8</b>	<b>95.1</b>	<b>105.9</b>	<b>102.0</b>	<b>105.0</b>	-
A14786	<b>376,481</b>	<b>302,092</b>	<b>100.3</b>	<b>102.8</b>	<b>95.0</b>	<b>105.9</b>	<b>104.1</b>	<b>105.0</b>	-
A14781	<b>376,481</b>	<b>295,742</b>	<b>100.3</b>	<b>102.8</b>	<b>95.0</b>	<b>105.9</b>	<b>103.8</b>	<b>105.0</b>	-
A14782	<b>376,481</b>	<b>285,763</b>	<b>100.3</b>	<b>102.8</b>	<b>95.0</b>	<b>105.9</b>	<b>103.3</b>	<b>105.0</b>	-
A14783	<b>376,481</b>	<b>274,423</b>	<b>100.3</b>	<b>102.8</b>	<b>95.0</b>	<b>105.9</b>	<b>102.7</b>	<b>105.0</b>	-
A14784	<b>376,481</b>	<b>265,351</b>	<b>100.3</b>	<b>102.8</b>	<b>95.0</b>	<b>105.9</b>	<b>102.2</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400F**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **CF6-80C2B5F**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **With N1 modifier**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14785	<b>376,481</b>	<b>260,362</b>	<b>100.3</b>	<b>102.8</b>	<b>95.0</b>	<b>105.9</b>	<b>102.0</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400F**  
(Commercial Designation      )

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **CF6-80C2B5F**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **With N1 modifier**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A4546	<b>377,842</b>	<b>295,742</b>	<b>100.3</b>	<b>102.8</b>	<b>95.1</b>	<b>105.9</b>	<b>103.8</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.





Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400F**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**      Engine Type Designation<sup>1</sup>      **PW4056**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **FB2T fan blades**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14984	<b>396,893</b>	<b>302,092</b>	<b>99.7</b>	<b>103.0</b>	<b>101.4</b>	<b>106.0</b>	<b>104.9</b>	<b>105.0</b>	-
A14985	<b>396,893</b>	<b>295,742</b>	<b>99.7</b>	<b>103.0</b>	<b>101.4</b>	<b>106.0</b>	<b>104.7</b>	<b>105.0</b>	-
A4601	<b>396,893</b>	<b>285,763</b>	<b>99.7</b>	<b>103.0</b>	<b>101.4</b>	<b>106.0</b>	<b>104.3</b>	<b>105.0</b>	-
A14986	<b>395,532</b>	<b>302,092</b>	<b>99.7</b>	<b>103.0</b>	<b>101.3</b>	<b>106.0</b>	<b>104.9</b>	<b>105.0</b>	-
A4597	<b>395,532</b>	<b>295,742</b>	<b>99.7</b>	<b>103.0</b>	<b>101.3</b>	<b>106.0</b>	<b>104.7</b>	<b>105.0</b>	-
A14987	<b>395,532</b>	<b>285,763</b>	<b>99.7</b>	<b>103.0</b>	<b>101.3</b>	<b>106.0</b>	<b>104.3</b>	<b>105.0</b>	-
A14988	<b>394,625</b>	<b>302,092</b>	<b>99.7</b>	<b>103.0</b>	<b>101.2</b>	<b>106.0</b>	<b>104.9</b>	<b>105.0</b>	-
A14989	<b>394,625</b>	<b>295,742</b>	<b>99.7</b>	<b>103.0</b>	<b>101.2</b>	<b>106.0</b>	<b>104.7</b>	<b>105.0</b>	-
A4591	<b>394,625</b>	<b>285,763</b>	<b>99.7</b>	<b>103.0</b>	<b>101.2</b>	<b>106.0</b>	<b>104.3</b>	<b>105.0</b>	-
A14990	<b>385,553</b>	<b>302,092</b>	<b>99.7</b>	<b>102.9</b>	<b>100.4</b>	<b>106.0</b>	<b>104.9</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400F**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**      Engine Type Designation<sup>1</sup>      **PW4056**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **FB2T fan blades**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A4587	<b>385,553</b>	<b>295,742</b>	<b>99.7</b>	<b>102.9</b>	<b>100.4</b>	<b>106.0</b>	<b>104.7</b>	<b>105.0</b>	-
A14991	<b>385,553</b>	<b>285,763</b>	<b>99.7</b>	<b>102.9</b>	<b>100.4</b>	<b>106.0</b>	<b>104.3</b>	<b>105.0</b>	-
A14992	<b>376,481</b>	<b>302,092</b>	<b>99.8</b>	<b>102.8</b>	<b>99.5</b>	<b>105.9</b>	<b>104.9</b>	<b>105.0</b>	-
A14993	<b>376,481</b>	<b>295,742</b>	<b>99.8</b>	<b>102.8</b>	<b>99.5</b>	<b>105.9</b>	<b>104.7</b>	<b>105.0</b>	-
A14994	<b>376,481</b>	<b>285,763</b>	<b>99.8</b>	<b>102.8</b>	<b>99.5</b>	<b>105.9</b>	<b>104.3</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup> **The Boeing Company**

Aircraft Type Designation<sup>1</sup> **747-400F**

Engine Manufacturer<sup>1</sup> **Pratt & Whitney**

Engine Type Designation<sup>1</sup> **PW4056**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**SB PW4ENG72-132, SB PW4ENG72-262 (Package B / Phase I (FB2B fan blades, Optimised fan exit guide vanes, Circumferential groove rub strip (CG)))**

Noise Certification Basis **ICAO Annex 16, Volume I**

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Chapter<sup>1</sup>

**3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14995	<b>396,893</b>	<b>302,092</b>	<b>98.5</b>	<b>103.0</b>	<b>99.3</b>	<b>106.0</b>	<b>103.6</b>	<b>105.0</b>	-
A1461	<b>396,893</b>	<b>295,742</b>	<b>98.5</b>	<b>103.0</b>	<b>99.3</b>	<b>106.0</b>	<b>103.3</b>	<b>105.0</b>	-
A1460	<b>396,893</b>	<b>285,763</b>	<b>98.5</b>	<b>103.0</b>	<b>99.3</b>	<b>106.0</b>	<b>103.0</b>	<b>105.0</b>	-
A14996	<b>395,532</b>	<b>302,092</b>	<b>98.5</b>	<b>103.0</b>	<b>99.2</b>	<b>106.0</b>	<b>103.6</b>	<b>105.0</b>	-
A1456	<b>395,532</b>	<b>295,742</b>	<b>98.5</b>	<b>103.0</b>	<b>99.2</b>	<b>106.0</b>	<b>103.3</b>	<b>105.0</b>	-
A14997	<b>395,532</b>	<b>285,763</b>	<b>98.5</b>	<b>103.0</b>	<b>99.2</b>	<b>106.0</b>	<b>103.0</b>	<b>105.0</b>	-
A14998	<b>394,625</b>	<b>302,092</b>	<b>98.5</b>	<b>103.0</b>	<b>99.1</b>	<b>106.0</b>	<b>103.6</b>	<b>105.0</b>	-
A14999	<b>394,625</b>	<b>295,742</b>	<b>98.5</b>	<b>103.0</b>	<b>99.1</b>	<b>106.0</b>	<b>103.3</b>	<b>105.0</b>	-
A1450	<b>394,625</b>	<b>285,763</b>	<b>98.5</b>	<b>103.0</b>	<b>99.1</b>	<b>106.0</b>	<b>103.0</b>	<b>105.0</b>	-
A15000	<b>385,553</b>	<b>302,092</b>	<b>98.5</b>	<b>102.9</b>	<b>98.2</b>	<b>106.0</b>	<b>103.6</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup> **The Boeing Company**

Aircraft Type Designation<sup>1</sup> **747-400F**

Engine Manufacturer<sup>1</sup> **Pratt & Whitney**

Engine Type Designation<sup>1</sup> **PW4056**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**SB PW4ENG72-132, SB PW4ENG72-262 (Package B / Phase I (FB2B fan blades, Optimised fan exit guide vanes, Circumferential groove rub strip (CG)))**

Noise Certification Basis **ICAO Annex 16, Volume I**

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Chapter<sup>1</sup>

**3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A1446	<b>385,553</b>	<b>295,742</b>	<b>98.5</b>	<b>102.9</b>	<b>98.2</b>	<b>106.0</b>	<b>103.3</b>	<b>105.0</b>	-
A15001	<b>385,553</b>	<b>285,763</b>	<b>98.5</b>	<b>102.9</b>	<b>98.2</b>	<b>106.0</b>	<b>103.0</b>	<b>105.0</b>	-
A15002	<b>376,481</b>	<b>302,092</b>	<b>98.6</b>	<b>102.8</b>	<b>97.3</b>	<b>105.9</b>	<b>103.6</b>	<b>105.0</b>	-
A15003	<b>376,481</b>	<b>295,742</b>	<b>98.6</b>	<b>102.8</b>	<b>97.3</b>	<b>105.9</b>	<b>103.3</b>	<b>105.0</b>	-
A15004	<b>376,481</b>	<b>285,763</b>	<b>98.6</b>	<b>102.8</b>	<b>97.3</b>	<b>105.9</b>	<b>103.0</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup> **The Boeing Company**

Aircraft Type Designation<sup>1</sup> **747-400F**

Engine Manufacturer<sup>1</sup> **Pratt & Whitney**

Engine Type Designation<sup>1</sup> **PW4056-3**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**SB PW4ENG72-262 (Phase III (FB2C fan blades, Optimised fan exit guide vanes, Interrupted circumferential groove rub strip (ICG)))**

Noise Certification Basis **ICAO Annex 16, Volume I**

Edition / Amendment

**Edition 3 / Amendment 7**

Chapter<sup>1</sup>

**3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A15016	<b>396,893</b>	<b>302,092</b>	<b>98.4</b>	<b>103.0</b>	<b>98.7</b>	<b>106.0</b>	<b>103.1</b>	<b>105.0</b>	-
A14170	<b>396,893</b>	<b>295,742</b>	<b>98.4</b>	<b>103.0</b>	<b>98.7</b>	<b>106.0</b>	<b>103.0</b>	<b>105.0</b>	-
A14171	<b>396,893</b>	<b>285,763</b>	<b>98.4</b>	<b>103.0</b>	<b>98.7</b>	<b>106.0</b>	<b>102.7</b>	<b>105.0</b>	-
A15017	<b>395,532</b>	<b>302,092</b>	<b>98.4</b>	<b>103.0</b>	<b>98.6</b>	<b>106.0</b>	<b>103.1</b>	<b>105.0</b>	-
A14172	<b>395,532</b>	<b>295,742</b>	<b>98.4</b>	<b>103.0</b>	<b>98.6</b>	<b>106.0</b>	<b>103.0</b>	<b>105.0</b>	-
A14173	<b>395,532</b>	<b>285,763</b>	<b>98.4</b>	<b>103.0</b>	<b>98.6</b>	<b>106.0</b>	<b>102.7</b>	<b>105.0</b>	-
A15018	<b>394,625</b>	<b>302,092</b>	<b>98.4</b>	<b>103.0</b>	<b>98.5</b>	<b>106.0</b>	<b>103.1</b>	<b>105.0</b>	-
A14174	<b>394,625</b>	<b>295,742</b>	<b>98.4</b>	<b>103.0</b>	<b>98.5</b>	<b>106.0</b>	<b>103.0</b>	<b>105.0</b>	-
A14175	<b>394,625</b>	<b>285,763</b>	<b>98.4</b>	<b>103.0</b>	<b>98.5</b>	<b>106.0</b>	<b>102.7</b>	<b>105.0</b>	-
A15019	<b>385,553</b>	<b>302,092</b>	<b>98.5</b>	<b>102.9</b>	<b>97.6</b>	<b>106.0</b>	<b>103.1</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup> **The Boeing Company**

Aircraft Type Designation<sup>1</sup> **747-400F**

Engine Manufacturer<sup>1</sup> **Pratt & Whitney**

Engine Type Designation<sup>1</sup> **PW4056-3**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**SB PW4ENG72-262 (Phase III (FB2C fan blades, Optimised fan exit guide vanes, Interrupted circumferential groove rub strip (ICG)))**

Noise Certification Basis **ICAO Annex 16, Volume I**

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**Edition 3 / Amendment 7**

Chapter<sup>1</sup>

**3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14176	<b>385,553</b>	<b>295,742</b>	<b>98.5</b>	<b>102.9</b>	<b>97.6</b>	<b>106.0</b>	<b>103.0</b>	<b>105.0</b>	-
A14177	<b>385,553</b>	<b>285,763</b>	<b>98.5</b>	<b>102.9</b>	<b>97.6</b>	<b>106.0</b>	<b>102.7</b>	<b>105.0</b>	-
A15020	<b>376,481</b>	<b>302,092</b>	<b>98.5</b>	<b>102.8</b>	<b>96.6</b>	<b>105.9</b>	<b>103.1</b>	<b>105.0</b>	-
A15021	<b>376,481</b>	<b>295,742</b>	<b>98.5</b>	<b>102.8</b>	<b>96.6</b>	<b>105.9</b>	<b>103.0</b>	<b>105.0</b>	-
A15022	<b>376,481</b>	<b>285,763</b>	<b>98.5</b>	<b>102.8</b>	<b>96.6</b>	<b>105.9</b>	<b>102.7</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup> **The Boeing Company**

Aircraft Type Designation<sup>1</sup> **747-400F**

Engine Manufacturer<sup>1</sup> **Pratt & Whitney**

Engine Type Designation<sup>1</sup> **PW4056-3**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**SB PW4ENG72-262, PRR 80451-105 (Phase III (FB2C fan blades, Optimised fan exit guide vanes, Interrupted circumferential groove rub strip (ICG), Noise reduction inlet (NRI)))**

Noise Certification Basis **ICAO Annex 16, Volume I**

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Chapter<sup>1</sup>

**3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A15023	<b>396,893</b>	<b>302,092</b>	<b>98.1</b>	<b>103.0</b>	<b>97.5</b>	<b>106.0</b>	<b>102.3</b>	<b>105.0</b>	-
A14699	<b>396,893</b>	<b>295,742</b>	<b>98.1</b>	<b>103.0</b>	<b>97.5</b>	<b>106.0</b>	<b>102.1</b>	<b>105.0</b>	-
A14700	<b>396,893</b>	<b>285,763</b>	<b>98.1</b>	<b>103.0</b>	<b>97.5</b>	<b>106.0</b>	<b>101.8</b>	<b>105.0</b>	-
A15024	<b>394,625</b>	<b>302,092</b>	<b>98.1</b>	<b>103.0</b>	<b>97.3</b>	<b>106.0</b>	<b>102.3</b>	<b>105.0</b>	-
A14701	<b>394,625</b>	<b>295,742</b>	<b>98.1</b>	<b>103.0</b>	<b>97.3</b>	<b>106.0</b>	<b>102.1</b>	<b>105.0</b>	-
A14702	<b>394,625</b>	<b>285,763</b>	<b>98.1</b>	<b>103.0</b>	<b>97.3</b>	<b>106.0</b>	<b>101.8</b>	<b>105.0</b>	-
A15025	<b>385,553</b>	<b>302,092</b>	<b>98.2</b>	<b>102.9</b>	<b>96.4</b>	<b>106.0</b>	<b>102.3</b>	<b>105.0</b>	-
A14703	<b>385,553</b>	<b>295,742</b>	<b>98.2</b>	<b>102.9</b>	<b>96.4</b>	<b>106.0</b>	<b>102.1</b>	<b>105.0</b>	-
A14704	<b>385,553</b>	<b>285,763</b>	<b>98.2</b>	<b>102.9</b>	<b>96.4</b>	<b>106.0</b>	<b>101.8</b>	<b>105.0</b>	-
A120160	<b>377,842</b>	<b>302,092</b>	<b>98.2</b>	<b>102.8</b>	<b>95.7</b>	<b>105.9</b>	<b>102.3</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup> **The Boeing Company**

Aircraft Type Designation<sup>1</sup> **747-400F**

Engine Manufacturer<sup>1</sup> **Pratt & Whitney**

Engine Type Designation<sup>1</sup> **PW4056-3**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**SB PW4ENG72-262, PRR 80451-105 (Phase III (FB2C fan blades, Optimised fan exit guide vanes, Interrupted circumferential groove rub strip (ICG), Noise reduction inlet (NRI)))**

Noise Certification Basis **ICAO Annex 16, Volume I**

Edition / Amendment

**Edition 3 / Amendment 7**

Chapter<sup>1</sup>

**3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A120161	<b>377,842</b>	<b>295,742</b>	<b>98.2</b>	<b>102.8</b>	<b>95.7</b>	<b>105.9</b>	<b>102.1</b>	<b>105.0</b>	-
A120162	<b>377,842</b>	<b>285,763</b>	<b>98.2</b>	<b>102.8</b>	<b>95.7</b>	<b>105.9</b>	<b>101.8</b>	<b>105.0</b>	-
A15026	<b>376,481</b>	<b>302,092</b>	<b>98.3</b>	<b>102.8</b>	<b>95.6</b>	<b>105.9</b>	<b>102.3</b>	<b>105.0</b>	-
A15027	<b>376,481</b>	<b>295,742</b>	<b>98.3</b>	<b>102.8</b>	<b>95.6</b>	<b>105.9</b>	<b>102.1</b>	<b>105.0</b>	-
A15028	<b>376,481</b>	<b>285,763</b>	<b>98.3</b>	<b>102.8</b>	<b>95.6</b>	<b>105.9</b>	<b>101.8</b>	<b>105.0</b>	-
A120163	<b>371,945</b>	<b>302,092</b>	<b>98.3</b>	<b>102.7</b>	<b>95.2</b>	<b>105.8</b>	<b>102.3</b>	<b>105.0</b>	-
A120164	<b>371,945</b>	<b>295,742</b>	<b>98.3</b>	<b>102.7</b>	<b>95.2</b>	<b>105.8</b>	<b>102.1</b>	<b>105.0</b>	-
A120165	<b>371,945</b>	<b>285,763</b>	<b>98.3</b>	<b>102.7</b>	<b>95.2</b>	<b>105.8</b>	<b>101.8</b>	<b>105.0</b>	-
A120166	<b>362,873</b>	<b>302,092</b>	<b>98.3</b>	<b>102.7</b>	<b>94.3</b>	<b>105.7</b>	<b>102.3</b>	<b>105.0</b>	-
A120167	<b>362,873</b>	<b>295,742</b>	<b>98.3</b>	<b>102.7</b>	<b>94.3</b>	<b>105.7</b>	<b>102.1</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup> **The Boeing Company**

Aircraft Type Designation<sup>1</sup> **747-400F**

Engine Manufacturer<sup>1</sup> **Pratt & Whitney**

Engine Type Designation<sup>1</sup> **PW4056-3**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**SB PW4ENG72-262, PRR 80451-105 (Phase III (FB2C fan blades, Optimised fan exit guide vanes, Interrupted circumferential groove rub strip (ICG), Noise reduction inlet (NRI)))**

Noise Certification Basis **ICAO Annex 16, Volume I**

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Chapter<sup>1</sup>

**3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A120168	<b>362,873</b>	<b>285,763</b>	<b>98.3</b>	<b>102.7</b>	<b>94.3</b>	<b>105.7</b>	<b>101.8</b>	<b>105.0</b>	-
A120169	<b>334,977</b>	<b>302,092</b>	<b>98.5</b>	<b>102.4</b>	<b>91.9</b>	<b>105.2</b>	<b>102.3</b>	<b>105.0</b>	-
A120170	<b>334,977</b>	<b>295,742</b>	<b>98.5</b>	<b>102.4</b>	<b>91.9</b>	<b>105.2</b>	<b>102.1</b>	<b>105.0</b>	-
A120171	<b>334,977</b>	<b>285,763</b>	<b>98.5</b>	<b>102.4</b>	<b>91.9</b>	<b>105.2</b>	<b>101.8</b>	<b>105.0</b>	-
A120172	<b>317,514</b>	<b>302,092</b>	<b>98.7</b>	<b>102.2</b>	<b>90.3</b>	<b>104.9</b>	<b>102.3</b>	<b>105.0</b>	-
A120173	<b>317,514</b>	<b>295,742</b>	<b>98.7</b>	<b>102.2</b>	<b>90.3</b>	<b>104.9</b>	<b>102.1</b>	<b>105.0</b>	-
A120174	<b>317,514</b>	<b>285,763</b>	<b>98.7</b>	<b>102.2</b>	<b>90.3</b>	<b>104.9</b>	<b>101.8</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup> **The Boeing Company**

Aircraft Type Designation<sup>1</sup> **747-400F**

Engine Manufacturer<sup>1</sup> **Pratt & Whitney**

Engine Type Designation<sup>1</sup> **PW4056-3B**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**SB PW4ENG72-132, SB PW4ENG72-262 (Phase III (FB2B fan blades, Optimised fan exit guide vanes, Interrupted circumferential groove rub strip (ICG)))**

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Chapter<sup>1</sup>

**3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A15005	<b>396,893</b>	<b>302,092</b>	<b>98.6</b>	<b>103.0</b>	<b>99.7</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A15006	<b>396,893</b>	<b>295,742</b>	<b>98.6</b>	<b>103.0</b>	<b>99.7</b>	<b>106.0</b>	<b>103.5</b>	<b>105.0</b>	-
A1420	<b>396,893</b>	<b>285,763</b>	<b>98.6</b>	<b>103.0</b>	<b>99.7</b>	<b>106.0</b>	<b>103.2</b>	<b>105.0</b>	-
A15007	<b>395,532</b>	<b>302,092</b>	<b>98.6</b>	<b>103.0</b>	<b>99.6</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A1416	<b>395,532</b>	<b>295,742</b>	<b>98.6</b>	<b>103.0</b>	<b>99.6</b>	<b>106.0</b>	<b>103.5</b>	<b>105.0</b>	-
A15008	<b>395,532</b>	<b>285,763</b>	<b>98.6</b>	<b>103.0</b>	<b>99.6</b>	<b>106.0</b>	<b>103.2</b>	<b>105.0</b>	-
A15009	<b>394,625</b>	<b>302,092</b>	<b>98.6</b>	<b>103.0</b>	<b>99.5</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A15010	<b>394,625</b>	<b>295,742</b>	<b>98.6</b>	<b>103.0</b>	<b>99.5</b>	<b>106.0</b>	<b>103.5</b>	<b>105.0</b>	-
A1410	<b>394,625</b>	<b>285,763</b>	<b>98.6</b>	<b>103.0</b>	<b>99.5</b>	<b>106.0</b>	<b>103.2</b>	<b>105.0</b>	-
A15011	<b>385,553</b>	<b>302,092</b>	<b>98.6</b>	<b>102.9</b>	<b>98.6</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup> **The Boeing Company**

Aircraft Type Designation<sup>1</sup> **747-400F**

Engine Manufacturer<sup>1</sup> **Pratt & Whitney**

Engine Type Designation<sup>1</sup> **PW4056-3B**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**SB PW4ENG72-132, SB PW4ENG72-262 (Phase III (FB2B fan blades, Optimised fan exit guide vanes, Interrupted circumferential groove rub strip (ICG)))**

Noise Certification Basis **ICAO Annex 16, Volume I**

Edition / Amendment

**Edition 3 / Amendment 7**

Chapter<sup>1</sup>

**3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A1406	<b>385,553</b>	<b>295,742</b>	<b>98.6</b>	<b>102.9</b>	<b>98.6</b>	<b>106.0</b>	<b>103.5</b>	<b>105.0</b>	-
A15012	<b>385,553</b>	<b>285,763</b>	<b>98.6</b>	<b>102.9</b>	<b>98.6</b>	<b>106.0</b>	<b>103.2</b>	<b>105.0</b>	-
A15013	<b>376,481</b>	<b>302,092</b>	<b>98.7</b>	<b>102.8</b>	<b>97.7</b>	<b>105.9</b>	<b>103.8</b>	<b>105.0</b>	-
A15014	<b>376,481</b>	<b>295,742</b>	<b>98.7</b>	<b>102.8</b>	<b>97.7</b>	<b>105.9</b>	<b>103.5</b>	<b>105.0</b>	-
A15015	<b>376,481</b>	<b>285,763</b>	<b>98.7</b>	<b>102.8</b>	<b>97.7</b>	<b>105.9</b>	<b>103.2</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup> **The Boeing Company**

Aircraft Type Designation<sup>1</sup> **747-400F**

Engine Manufacturer<sup>1</sup> **Pratt & Whitney**

Engine Type Designation<sup>1</sup> **PW4062A**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**Phase III (FB2C fan blades), Noise reduction inlet (NRI)**

Noise Certification Basis **ICAO Annex 16, Volume I**

Edition / Amendment

**Edition 7 / Amendment 11-B**

Chapter<sup>1</sup>

**3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A121338	<b>412,769</b>	<b>302,092</b>	<b>100.6</b>	<b>103.0</b>	<b>96.6</b>	<b>106.0</b>	<b>102.3</b>	<b>105.0</b>	-
A121378	<b>412,769</b>	<b>296,195</b>	<b>100.6</b>	<b>103.0</b>	<b>96.6</b>	<b>106.0</b>	<b>102.1</b>	<b>105.0</b>	-
A121339	<b>412,769</b>	<b>295,742</b>	<b>100.6</b>	<b>103.0</b>	<b>96.6</b>	<b>106.0</b>	<b>102.1</b>	<b>105.0</b>	-
A121340	<b>412,769</b>	<b>285,763</b>	<b>100.6</b>	<b>103.0</b>	<b>96.6</b>	<b>106.0</b>	<b>101.8</b>	<b>105.0</b>	-
A121341	<b>396,893</b>	<b>302,092</b>	<b>100.7</b>	<b>103.0</b>	<b>95.2</b>	<b>106.0</b>	<b>102.3</b>	<b>105.0</b>	-
A121342	<b>396,893</b>	<b>295,742</b>	<b>100.7</b>	<b>103.0</b>	<b>95.2</b>	<b>106.0</b>	<b>102.1</b>	<b>105.0</b>	-
A121343	<b>396,893</b>	<b>285,763</b>	<b>100.7</b>	<b>103.0</b>	<b>95.2</b>	<b>106.0</b>	<b>101.8</b>	<b>105.0</b>	-
A121344	<b>394,625</b>	<b>302,092</b>	<b>100.8</b>	<b>103.0</b>	<b>95.0</b>	<b>106.0</b>	<b>102.3</b>	<b>105.0</b>	-
A121345	<b>394,625</b>	<b>295,742</b>	<b>100.8</b>	<b>103.0</b>	<b>95.0</b>	<b>106.0</b>	<b>102.1</b>	<b>105.0</b>	-
A121346	<b>394,625</b>	<b>285,763</b>	<b>100.8</b>	<b>103.0</b>	<b>95.0</b>	<b>106.0</b>	<b>101.8</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup> **The Boeing Company**

Aircraft Type Designation<sup>1</sup> **747-400F**

Engine Manufacturer<sup>1</sup> **Pratt & Whitney**

Engine Type Designation<sup>1</sup> **PW4062A**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**Phase III (FB2C fan blades), Noise reduction inlet (NRI)**

Noise Certification Basis **ICAO Annex 16, Volume I**

Edition / Amendment

**Edition 7 / Amendment 11-B**

Chapter<sup>1</sup>

**3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A121347	<b>385,553</b>	<b>302,092</b>	<b>100.8</b>	<b>102.9</b>	<b>94.5</b>	<b>106.0</b>	<b>102.3</b>	<b>105.0</b>	-
A121348	<b>385,553</b>	<b>295,742</b>	<b>100.8</b>	<b>102.9</b>	<b>94.5</b>	<b>106.0</b>	<b>102.1</b>	<b>105.0</b>	-
A121349	<b>385,553</b>	<b>285,763</b>	<b>100.8</b>	<b>102.9</b>	<b>94.5</b>	<b>106.0</b>	<b>101.8</b>	<b>105.0</b>	-
A121350	<b>377,842</b>	<b>302,092</b>	<b>100.9</b>	<b>102.8</b>	<b>93.9</b>	<b>105.9</b>	<b>102.3</b>	<b>105.0</b>	-
A121351	<b>377,842</b>	<b>295,742</b>	<b>100.9</b>	<b>102.8</b>	<b>93.9</b>	<b>105.9</b>	<b>102.1</b>	<b>105.0</b>	-
A121352	<b>377,842</b>	<b>285,763</b>	<b>100.9</b>	<b>102.8</b>	<b>93.9</b>	<b>105.9</b>	<b>101.8</b>	<b>105.0</b>	-
A121353	<b>371,945</b>	<b>302,092</b>	<b>101.0</b>	<b>102.7</b>	<b>93.5</b>	<b>105.8</b>	<b>102.3</b>	<b>105.0</b>	-
A121354	<b>371,945</b>	<b>295,742</b>	<b>101.0</b>	<b>102.7</b>	<b>93.5</b>	<b>105.8</b>	<b>102.1</b>	<b>105.0</b>	-
A121355	<b>371,945</b>	<b>285,763</b>	<b>101.0</b>	<b>102.7</b>	<b>93.5</b>	<b>105.8</b>	<b>101.8</b>	<b>105.0</b>	-
A121356	<b>362,873</b>	<b>302,092</b>	<b>101.0</b>	<b>102.7</b>	<b>92.7</b>	<b>105.7</b>	<b>102.3</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup> **The Boeing Company**

Aircraft Type Designation<sup>1</sup> **747-400F**

Engine Manufacturer<sup>1</sup> **Pratt & Whitney**

Engine Type Designation<sup>1</sup> **PW4062A**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**Phase III (FB2C fan blades), Noise reduction inlet (NRI)**

Noise Certification Basis **ICAO Annex 16, Volume I** Edition / Amendment **Edition 7 / Amendment 11-B** Chapter<sup>1</sup> **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A121357	<b>362,873</b>	<b>295,742</b>	<b>101.0</b>	<b>102.7</b>	<b>92.7</b>	<b>105.7</b>	<b>102.1</b>	<b>105.0</b>	-
A121358	<b>362,873</b>	<b>285,763</b>	<b>101.0</b>	<b>102.7</b>	<b>92.7</b>	<b>105.7</b>	<b>101.8</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400F**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524G2-19**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A4673	<b>396,893</b>	<b>302,092</b>	<b>98.0</b>	<b>103.0</b>	<b>100.8</b>	<b>106.0</b>	<b>104.0</b>	<b>105.0</b>	-
A4672	<b>396,893</b>	<b>295,742</b>	<b>98.0</b>	<b>103.0</b>	<b>100.8</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A4671	<b>396,893</b>	<b>285,763</b>	<b>98.0</b>	<b>103.0</b>	<b>100.8</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A14844	<b>395,532</b>	<b>302,092</b>	<b>98.0</b>	<b>103.0</b>	<b>100.6</b>	<b>106.0</b>	<b>104.0</b>	<b>105.0</b>	-
A14845	<b>395,532</b>	<b>295,742</b>	<b>98.0</b>	<b>103.0</b>	<b>100.6</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A14846	<b>395,532</b>	<b>285,763</b>	<b>98.0</b>	<b>103.0</b>	<b>100.6</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A14839	<b>394,625</b>	<b>302,092</b>	<b>98.1</b>	<b>103.0</b>	<b>100.6</b>	<b>106.0</b>	<b>104.0</b>	<b>105.0</b>	-
A4667	<b>394,625</b>	<b>295,742</b>	<b>98.1</b>	<b>103.0</b>	<b>100.6</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A4666	<b>394,625</b>	<b>285,763</b>	<b>98.1</b>	<b>103.0</b>	<b>100.6</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A14840	<b>385,553</b>	<b>302,092</b>	<b>98.1</b>	<b>102.9</b>	<b>99.8</b>	<b>106.0</b>	<b>104.0</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400F**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524G2-19**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A4662	<b>385,553</b>	<b>295,742</b>	<b>98.1</b>	<b>102.9</b>	<b>99.8</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A4661	<b>385,553</b>	<b>285,763</b>	<b>98.1</b>	<b>102.9</b>	<b>99.8</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A14841	<b>376,481</b>	<b>302,092</b>	<b>98.1</b>	<b>102.8</b>	<b>99.0</b>	<b>105.9</b>	<b>104.0</b>	<b>105.0</b>	-
A14842	<b>376,481</b>	<b>295,742</b>	<b>98.1</b>	<b>102.8</b>	<b>99.0</b>	<b>105.9</b>	<b>103.8</b>	<b>105.0</b>	-
A14843	<b>376,481</b>	<b>285,763</b>	<b>98.1</b>	<b>102.8</b>	<b>99.0</b>	<b>105.9</b>	<b>103.4</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.





Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400F**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524G2-T-19**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A8170	<b>396,893</b>	<b>302,092</b>	<b>98.0</b>	<b>103.0</b>	<b>100.8</b>	<b>106.0</b>	<b>104.0</b>	<b>105.0</b>	-
A8172	<b>396,893</b>	<b>295,742</b>	<b>98.0</b>	<b>103.0</b>	<b>100.8</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A8174	<b>396,893</b>	<b>285,763</b>	<b>98.0</b>	<b>103.0</b>	<b>100.8</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A14847	<b>395,532</b>	<b>302,092</b>	<b>98.0</b>	<b>103.0</b>	<b>100.6</b>	<b>106.0</b>	<b>104.0</b>	<b>105.0</b>	-
A14848	<b>395,532</b>	<b>295,742</b>	<b>98.0</b>	<b>103.0</b>	<b>100.6</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A14849	<b>395,532</b>	<b>285,763</b>	<b>98.0</b>	<b>103.0</b>	<b>100.6</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A14850	<b>394,625</b>	<b>302,092</b>	<b>98.1</b>	<b>103.0</b>	<b>100.6</b>	<b>106.0</b>	<b>104.0</b>	<b>105.0</b>	-
A8182	<b>394,625</b>	<b>295,742</b>	<b>98.1</b>	<b>103.0</b>	<b>100.6</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A8184	<b>394,625</b>	<b>285,763</b>	<b>98.1</b>	<b>103.0</b>	<b>100.6</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A14851	<b>385,553</b>	<b>302,092</b>	<b>98.1</b>	<b>102.9</b>	<b>99.8</b>	<b>106.0</b>	<b>104.0</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400F**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524G2-T-19**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A8192	<b>385,553</b>	<b>295,742</b>	<b>98.1</b>	<b>102.9</b>	<b>99.8</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A8194	<b>385,553</b>	<b>285,763</b>	<b>98.1</b>	<b>102.9</b>	<b>99.8</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A14852	<b>376,481</b>	<b>302,092</b>	<b>98.1</b>	<b>102.8</b>	<b>99.0</b>	<b>105.9</b>	<b>104.0</b>	<b>105.0</b>	-
A14853	<b>376,481</b>	<b>295,742</b>	<b>98.1</b>	<b>102.8</b>	<b>99.0</b>	<b>105.9</b>	<b>103.8</b>	<b>105.0</b>	-
A14854	<b>376,481</b>	<b>285,763</b>	<b>98.1</b>	<b>102.8</b>	<b>99.0</b>	<b>105.9</b>	<b>103.4</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400F**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524G3-19**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14142	<b>396,893</b>	<b>302,092</b>	<b>98.0</b>	<b>103.0</b>	<b>100.8</b>	<b>106.0</b>	<b>104.0</b>	<b>105.0</b>	-
A14130	<b>396,893</b>	<b>295,742</b>	<b>98.0</b>	<b>103.0</b>	<b>100.8</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A14118	<b>396,893</b>	<b>288,031</b>	<b>98.0</b>	<b>103.0</b>	<b>100.8</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A14855	<b>395,532</b>	<b>302,092</b>	<b>98.0</b>	<b>103.0</b>	<b>100.6</b>	<b>106.0</b>	<b>104.0</b>	<b>105.0</b>	-
A14856	<b>395,532</b>	<b>295,742</b>	<b>98.0</b>	<b>103.0</b>	<b>100.6</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A14857	<b>395,532</b>	<b>285,763</b>	<b>98.0</b>	<b>103.0</b>	<b>100.6</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A14858	<b>394,625</b>	<b>302,092</b>	<b>98.1</b>	<b>103.0</b>	<b>100.6</b>	<b>106.0</b>	<b>104.0</b>	<b>105.0</b>	-
A14132	<b>394,625</b>	<b>295,742</b>	<b>98.1</b>	<b>103.0</b>	<b>100.6</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A14120	<b>394,625</b>	<b>288,031</b>	<b>98.1</b>	<b>103.0</b>	<b>100.6</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A14859	<b>385,553</b>	<b>302,092</b>	<b>98.1</b>	<b>102.9</b>	<b>99.8</b>	<b>106.0</b>	<b>104.0</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400F**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524G3-19**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14134	<b>385,553</b>	<b>295,742</b>	<b>98.1</b>	<b>102.9</b>	<b>99.8</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A14122	<b>385,553</b>	<b>288,031</b>	<b>98.1</b>	<b>102.9</b>	<b>99.8</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A14860	<b>376,481</b>	<b>302,092</b>	<b>98.1</b>	<b>102.8</b>	<b>99.0</b>	<b>105.9</b>	<b>104.0</b>	<b>105.0</b>	-
A14861	<b>376,481</b>	<b>295,742</b>	<b>98.1</b>	<b>102.8</b>	<b>99.0</b>	<b>105.9</b>	<b>103.8</b>	<b>105.0</b>	-
A14862	<b>376,481</b>	<b>285,763</b>	<b>98.1</b>	<b>102.8</b>	<b>99.0</b>	<b>105.9</b>	<b>103.4</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400F**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524G3-T-19**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14143	<b>396,893</b>	<b>302,092</b>	<b>98.0</b>	<b>103.0</b>	<b>100.8</b>	<b>106.0</b>	<b>104.0</b>	<b>105.0</b>	-
A14131	<b>396,893</b>	<b>295,742</b>	<b>98.0</b>	<b>103.0</b>	<b>100.8</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A14119	<b>396,893</b>	<b>288,031</b>	<b>98.0</b>	<b>103.0</b>	<b>100.8</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A14863	<b>395,532</b>	<b>302,092</b>	<b>98.0</b>	<b>103.0</b>	<b>100.6</b>	<b>106.0</b>	<b>104.0</b>	<b>105.0</b>	-
A14864	<b>395,532</b>	<b>295,742</b>	<b>98.0</b>	<b>103.0</b>	<b>100.6</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A14865	<b>395,532</b>	<b>285,763</b>	<b>98.0</b>	<b>103.0</b>	<b>100.6</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A14866	<b>394,625</b>	<b>302,092</b>	<b>98.1</b>	<b>103.0</b>	<b>100.6</b>	<b>106.0</b>	<b>104.0</b>	<b>105.0</b>	-
A14133	<b>394,625</b>	<b>295,742</b>	<b>98.1</b>	<b>103.0</b>	<b>100.6</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A14121	<b>394,625</b>	<b>288,031</b>	<b>98.1</b>	<b>103.0</b>	<b>100.6</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A14867	<b>385,553</b>	<b>302,092</b>	<b>98.1</b>	<b>102.9</b>	<b>99.8</b>	<b>106.0</b>	<b>104.0</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400F**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524G3-T-19**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A14135	<b>385,553</b>	<b>295,742</b>	<b>98.1</b>	<b>102.9</b>	<b>99.8</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A14123	<b>385,553</b>	<b>288,031</b>	<b>98.1</b>	<b>102.9</b>	<b>99.8</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A14868	<b>376,481</b>	<b>302,092</b>	<b>98.1</b>	<b>102.8</b>	<b>99.0</b>	<b>105.9</b>	<b>104.0</b>	<b>105.0</b>	-
A14869	<b>376,481</b>	<b>295,742</b>	<b>98.1</b>	<b>102.8</b>	<b>99.0</b>	<b>105.9</b>	<b>103.8</b>	<b>105.0</b>	-
A14870	<b>376,481</b>	<b>285,763</b>	<b>98.1</b>	<b>102.8</b>	<b>99.0</b>	<b>105.9</b>	<b>103.4</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup> **The Boeing Company**

Aircraft Type Designation<sup>1</sup> **747-400F**

Engine Manufacturer<sup>1</sup> **Rolls-Royce**

Engine Type Designation<sup>1</sup> **RB211-524H2-19**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>

**None**

Noise Certification Basis **ICAO Annex 16, Volume I**

Edition / Amendment

Chapter<sup>1</sup> **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A4739	<b>396,893</b>	<b>302,092</b>	<b>98.8</b>	<b>103.0</b>	<b>99.7</b>	<b>106.0</b>	<b>104.0</b>	<b>105.0</b>	-
A4738	<b>396,893</b>	<b>295,742</b>	<b>98.8</b>	<b>103.0</b>	<b>99.7</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A4737	<b>396,893</b>	<b>288,031</b>	<b>98.8</b>	<b>103.0</b>	<b>99.7</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A14871	<b>395,532</b>	<b>302,092</b>	<b>98.8</b>	<b>103.0</b>	<b>99.6</b>	<b>106.0</b>	<b>104.0</b>	<b>105.0</b>	-
A14872	<b>395,532</b>	<b>295,742</b>	<b>98.8</b>	<b>103.0</b>	<b>99.6</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A14873	<b>395,532</b>	<b>285,763</b>	<b>98.8</b>	<b>103.0</b>	<b>99.6</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A14874	<b>394,625</b>	<b>302,092</b>	<b>98.8</b>	<b>103.0</b>	<b>99.5</b>	<b>106.0</b>	<b>104.0</b>	<b>105.0</b>	-
A4733	<b>394,625</b>	<b>295,742</b>	<b>98.8</b>	<b>103.0</b>	<b>99.5</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A4732	<b>394,625</b>	<b>288,031</b>	<b>98.8</b>	<b>103.0</b>	<b>99.5</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A14875	<b>385,553</b>	<b>302,092</b>	<b>98.8</b>	<b>102.9</b>	<b>98.8</b>	<b>106.0</b>	<b>104.0</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400F**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524H2-19**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A4728	<b>385,553</b>	<b>295,742</b>	<b>98.8</b>	<b>102.9</b>	<b>98.8</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A4727	<b>385,553</b>	<b>288,031</b>	<b>98.8</b>	<b>102.9</b>	<b>98.8</b>	<b>106.0</b>	<b>103.5</b>	<b>105.0</b>	-
A14876	<b>376,481</b>	<b>302,092</b>	<b>98.9</b>	<b>102.8</b>	<b>98.0</b>	<b>105.9</b>	<b>104.0</b>	<b>105.0</b>	-
A14877	<b>376,481</b>	<b>295,742</b>	<b>98.9</b>	<b>102.8</b>	<b>98.0</b>	<b>105.9</b>	<b>103.8</b>	<b>105.0</b>	-
A14878	<b>376,481</b>	<b>285,763</b>	<b>98.9</b>	<b>102.8</b>	<b>98.0</b>	<b>105.9</b>	<b>103.4</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.





Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400F**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524H2-T-19**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A8241	<b>396,893</b>	<b>302,092</b>	<b>98.8</b>	<b>103.0</b>	<b>99.7</b>	<b>106.0</b>	<b>104.0</b>	<b>105.0</b>	-
A8242	<b>396,893</b>	<b>295,742</b>	<b>98.8</b>	<b>103.0</b>	<b>99.7</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A8243	<b>396,893</b>	<b>288,031</b>	<b>98.8</b>	<b>103.0</b>	<b>99.7</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A14879	<b>395,532</b>	<b>302,092</b>	<b>98.8</b>	<b>103.0</b>	<b>99.6</b>	<b>106.0</b>	<b>104.0</b>	<b>105.0</b>	-
A14880	<b>395,532</b>	<b>295,742</b>	<b>98.8</b>	<b>103.0</b>	<b>99.6</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A14881	<b>395,532</b>	<b>285,763</b>	<b>98.8</b>	<b>103.0</b>	<b>99.6</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A14882	<b>394,625</b>	<b>302,092</b>	<b>98.8</b>	<b>103.0</b>	<b>99.5</b>	<b>106.0</b>	<b>104.0</b>	<b>105.0</b>	-
A8248	<b>394,625</b>	<b>295,742</b>	<b>98.8</b>	<b>103.0</b>	<b>99.5</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A8250	<b>394,625</b>	<b>288,031</b>	<b>98.8</b>	<b>103.0</b>	<b>99.5</b>	<b>106.0</b>	<b>103.4</b>	<b>105.0</b>	-
A14883	<b>385,553</b>	<b>302,092</b>	<b>98.8</b>	<b>102.9</b>	<b>98.8</b>	<b>106.0</b>	<b>104.0</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-400F**

Engine Manufacturer<sup>1</sup>      **Rolls-Royce**      Engine Type Designation<sup>1</sup>      **RB211-524H2-T-19**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A8258	<b>385,553</b>	<b>295,742</b>	<b>98.8</b>	<b>102.9</b>	<b>98.8</b>	<b>106.0</b>	<b>103.8</b>	<b>105.0</b>	-
A8260	<b>385,553</b>	<b>288,031</b>	<b>98.8</b>	<b>102.9</b>	<b>98.8</b>	<b>106.0</b>	<b>103.5</b>	<b>105.0</b>	-
A14884	<b>376,481</b>	<b>302,092</b>	<b>98.9</b>	<b>102.8</b>	<b>98.0</b>	<b>105.9</b>	<b>104.0</b>	<b>105.0</b>	-
A14885	<b>376,481</b>	<b>295,742</b>	<b>98.9</b>	<b>102.8</b>	<b>98.0</b>	<b>105.9</b>	<b>103.8</b>	<b>105.0</b>	-
A14886	<b>376,481</b>	<b>285,763</b>	<b>98.9</b>	<b>102.8</b>	<b>98.0</b>	<b>105.9</b>	<b>103.4</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-8**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **GEnx-2B67**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      **Edition 5 / Amendment 9**      Chapter<sup>1</sup>      **4**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A16761	<b>447,695</b>	<b>312,071</b>	<b>94.0</b>	<b>103.0</b>	<b>94.5</b>	<b>106.0</b>	<b>100.4</b>	<b>105.0</b>	<b>7</b>
A118970	<b>442,252</b>	<b>312,071</b>	<b>94.0</b>	<b>103.0</b>	<b>94.0</b>	<b>106.0</b>	<b>100.4</b>	<b>105.0</b>	<b>7</b>
A16762	<b>442,252</b>	<b>309,349</b>	<b>94.0</b>	<b>103.0</b>	<b>94.0</b>	<b>106.0</b>	<b>100.4</b>	<b>105.0</b>	<b>7</b>
A16763	<b>439,984</b>	<b>306,174</b>	<b>94.0</b>	<b>103.0</b>	<b>93.8</b>	<b>106.0</b>	<b>100.3</b>	<b>105.0</b>	<b>7</b>
A16764	<b>430,912</b>	<b>306,174</b>	<b>94.0</b>	<b>103.0</b>	<b>93.1</b>	<b>106.0</b>	<b>100.3</b>	<b>105.0</b>	<b>7</b>
A16765	<b>412,769</b>	<b>295,288</b>	<b>94.1</b>	<b>103.0</b>	<b>91.7</b>	<b>106.0</b>	<b>100.1</b>	<b>105.0</b>	<b>7</b>
A16766	<b>396,893</b>	<b>295,288</b>	<b>94.2</b>	<b>103.0</b>	<b>90.5</b>	<b>106.0</b>	<b>100.1</b>	<b>105.0</b>	<b>7</b>
A16767	<b>385,553</b>	<b>285,763</b>	<b>94.3</b>	<b>102.9</b>	<b>89.8</b>	<b>106.0</b>	<b>99.9</b>	<b>105.0</b>	<b>7</b>
A16768	<b>362,873</b>	<b>285,763</b>	<b>94.4</b>	<b>102.7</b>	<b>88.2</b>	<b>105.7</b>	<b>99.9</b>	<b>105.0</b>	<b>7</b>
A16769	<b>340,194</b>	<b>272,155</b>	<b>94.6</b>	<b>102.4</b>	<b>86.7</b>	<b>105.3</b>	<b>99.6</b>	<b>105.0</b>	<b>7</b>

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-8**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **GEnx-2B67**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      **Edition 5 / Amendment 9**      Chapter<sup>1</sup>      **4**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A16770	<b>317,514</b>	<b>272,155</b>	<b>94.8</b>	<b>102.2</b>	<b>85.3</b>	<b>104.9</b>	<b>99.6</b>	<b>105.0</b>	<b>7</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-8**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **GEnx-2B67/P**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      **Edition 6 / Amendment 10**      Chapter<sup>1</sup>      **4**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A119356	<b>447,695</b>	<b>312,071</b>	<b>93.9</b>	<b>103.0</b>	<b>94.4</b>	<b>106.0</b>	<b>100.3</b>	<b>105.0</b>	-
A120099	<b>442,252</b>	<b>312,071</b>	<b>93.9</b>	<b>103.0</b>	<b>93.9</b>	<b>106.0</b>	<b>100.3</b>	<b>105.0</b>	-
A119357	<b>442,252</b>	<b>309,349</b>	<b>93.9</b>	<b>103.0</b>	<b>93.9</b>	<b>106.0</b>	<b>100.2</b>	<b>105.0</b>	-
A119358	<b>439,984</b>	<b>306,174</b>	<b>94.0</b>	<b>103.0</b>	<b>93.7</b>	<b>106.0</b>	<b>100.2</b>	<b>105.0</b>	-
A119359	<b>430,912</b>	<b>306,174</b>	<b>94.0</b>	<b>103.0</b>	<b>93.0</b>	<b>106.0</b>	<b>100.2</b>	<b>105.0</b>	-
A119360	<b>412,769</b>	<b>295,288</b>	<b>94.1</b>	<b>103.0</b>	<b>91.7</b>	<b>106.0</b>	<b>99.9</b>	<b>105.0</b>	-
A119361	<b>396,893</b>	<b>295,288</b>	<b>94.2</b>	<b>103.0</b>	<b>90.5</b>	<b>106.0</b>	<b>99.9</b>	<b>105.0</b>	-
A119362	<b>385,553</b>	<b>285,763</b>	<b>94.2</b>	<b>102.9</b>	<b>89.8</b>	<b>106.0</b>	<b>99.7</b>	<b>105.0</b>	-
A119363	<b>362,873</b>	<b>285,763</b>	<b>94.4</b>	<b>102.7</b>	<b>88.3</b>	<b>105.7</b>	<b>99.7</b>	<b>105.0</b>	-
A119364	<b>340,194</b>	<b>272,155</b>	<b>94.6</b>	<b>102.4</b>	<b>86.8</b>	<b>105.3</b>	<b>99.4</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-8**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **GEnx-2B67/P**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      **Edition 6 / Amendment 10**      Chapter<sup>1</sup>      **4**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A119365	<b>317,514</b>	<b>272,155</b>	<b>94.8</b>	<b>102.2</b>	<b>85.3</b>	<b>104.9</b>	<b>99.4</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-8**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **GEnx-2B67B**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      **Edition 5 / Amendment 9**      Chapter<sup>1</sup>      **4**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A16786	<b>447,695</b>	<b>312,071</b>	<b>94.0</b>	<b>103.0</b>	<b>94.5</b>	<b>106.0</b>	<b>100.4</b>	<b>105.0</b>	<b>7</b>
A118971	<b>442,252</b>	<b>312,071</b>	<b>94.0</b>	<b>103.0</b>	<b>94.0</b>	<b>106.0</b>	<b>100.4</b>	<b>105.0</b>	<b>7</b>
A16787	<b>442,252</b>	<b>309,349</b>	<b>94.0</b>	<b>103.0</b>	<b>94.0</b>	<b>106.0</b>	<b>100.4</b>	<b>105.0</b>	<b>7</b>
A16788	<b>439,984</b>	<b>306,174</b>	<b>94.0</b>	<b>103.0</b>	<b>93.8</b>	<b>106.0</b>	<b>100.3</b>	<b>105.0</b>	<b>7</b>
A16789	<b>430,912</b>	<b>306,174</b>	<b>94.0</b>	<b>103.0</b>	<b>93.1</b>	<b>106.0</b>	<b>100.3</b>	<b>105.0</b>	<b>7</b>
A16790	<b>412,769</b>	<b>295,288</b>	<b>94.1</b>	<b>103.0</b>	<b>91.7</b>	<b>106.0</b>	<b>100.1</b>	<b>105.0</b>	<b>7</b>
A16791	<b>396,893</b>	<b>295,288</b>	<b>94.2</b>	<b>103.0</b>	<b>90.5</b>	<b>106.0</b>	<b>100.1</b>	<b>105.0</b>	<b>7</b>
A16792	<b>385,553</b>	<b>285,763</b>	<b>94.3</b>	<b>102.9</b>	<b>89.8</b>	<b>106.0</b>	<b>99.9</b>	<b>105.0</b>	<b>7</b>
A16793	<b>362,873</b>	<b>285,763</b>	<b>94.4</b>	<b>102.7</b>	<b>88.2</b>	<b>105.7</b>	<b>99.9</b>	<b>105.0</b>	<b>7</b>
A16794	<b>340,194</b>	<b>272,155</b>	<b>94.6</b>	<b>102.4</b>	<b>86.7</b>	<b>105.3</b>	<b>99.6</b>	<b>105.0</b>	<b>7</b>

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-8**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **GEnx-2B67B**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      **Edition 5 / Amendment 9**      Chapter<sup>1</sup>      **4**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A16795	<b>317,514</b>	<b>272,155</b>	<b>94.8</b>	<b>102.2</b>	<b>85.3</b>	<b>104.9</b>	<b>99.6</b>	<b>105.0</b>	<b>7</b>

<sup>1</sup> See Note 1.





Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-8**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **GEnx-2B67B, GEnx-2B67/P**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **Engine intermix**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      **Edition 6 / Amendment 10**      Chapter<sup>1</sup>      **4**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A119366	<b>447,695</b>	<b>312,071</b>	<b>94.0</b>	<b>103.0</b>	<b>94.5</b>	<b>106.0</b>	<b>100.4</b>	<b>105.0</b>	-
A120179	<b>442,252</b>	<b>312,071</b>	<b>94.0</b>	<b>103.0</b>	<b>94.0</b>	<b>106.0</b>	<b>100.4</b>	<b>105.0</b>	-
A119367	<b>442,252</b>	<b>309,349</b>	<b>94.0</b>	<b>103.0</b>	<b>94.0</b>	<b>106.0</b>	<b>100.4</b>	<b>105.0</b>	-
A119368	<b>439,984</b>	<b>306,174</b>	<b>94.0</b>	<b>103.0</b>	<b>93.8</b>	<b>106.0</b>	<b>100.3</b>	<b>105.0</b>	-
A119369	<b>430,912</b>	<b>306,174</b>	<b>94.0</b>	<b>103.0</b>	<b>93.1</b>	<b>106.0</b>	<b>100.3</b>	<b>105.0</b>	-
A119370	<b>412,769</b>	<b>295,288</b>	<b>94.1</b>	<b>103.0</b>	<b>91.7</b>	<b>106.0</b>	<b>100.1</b>	<b>105.0</b>	-
A119371	<b>396,893</b>	<b>295,288</b>	<b>94.2</b>	<b>103.0</b>	<b>90.5</b>	<b>106.0</b>	<b>100.1</b>	<b>105.0</b>	-
A119372	<b>385,553</b>	<b>285,763</b>	<b>94.3</b>	<b>102.9</b>	<b>89.8</b>	<b>106.0</b>	<b>99.9</b>	<b>105.0</b>	-
A119373	<b>362,873</b>	<b>285,763</b>	<b>94.4</b>	<b>102.7</b>	<b>88.3</b>	<b>105.7</b>	<b>99.9</b>	<b>105.0</b>	-
A119374	<b>340,194</b>	<b>272,155</b>	<b>94.6</b>	<b>102.4</b>	<b>86.8</b>	<b>105.3</b>	<b>99.6</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-8**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **GEnx-2B67B, GEnx-2B67/P**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **Engine intermix**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      **Edition 6 / Amendment 10**      Chapter<sup>1</sup>      **4**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A119375	<b>317,514</b>	<b>272,155</b>	<b>94.8</b>	<b>102.2</b>	<b>85.3</b>	<b>104.9</b>	<b>99.6</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-8F**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **GEnx-2B67**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      **Edition 5 / Amendment 9**      Chapter<sup>1</sup>      **4**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A17625	<b>447,695</b>	<b>346,090</b>	<b>94.0</b>	<b>103.0</b>	<b>94.5</b>	<b>106.0</b>	<b>100.9</b>	<b>105.0</b>	<b>7</b>
A17906	<b>447,695</b>	<b>345,183</b>	<b>94.0</b>	<b>103.0</b>	<b>94.5</b>	<b>106.0</b>	<b>100.9</b>	<b>105.0</b>	<b>7</b>
A16598	<b>442,252</b>	<b>345,183</b>	<b>94.0</b>	<b>103.0</b>	<b>94.0</b>	<b>106.0</b>	<b>100.9</b>	<b>105.0</b>	<b>7</b>
A17626	<b>439,984</b>	<b>344,276</b>	<b>94.0</b>	<b>103.0</b>	<b>93.8</b>	<b>106.0</b>	<b>100.9</b>	<b>105.0</b>	<b>7</b>
A16597	<b>430,912</b>	<b>339,740</b>	<b>94.0</b>	<b>103.0</b>	<b>93.1</b>	<b>106.0</b>	<b>100.9</b>	<b>105.0</b>	<b>7</b>
A16596	<b>412,769</b>	<b>317,514</b>	<b>94.1</b>	<b>103.0</b>	<b>91.7</b>	<b>106.0</b>	<b>100.5</b>	<b>105.0</b>	<b>7</b>
A16595	<b>396,893</b>	<b>312,071</b>	<b>94.2</b>	<b>103.0</b>	<b>90.5</b>	<b>106.0</b>	<b>100.4</b>	<b>105.0</b>	<b>7</b>
A16594	<b>385,553</b>	<b>309,349</b>	<b>94.3</b>	<b>102.9</b>	<b>89.8</b>	<b>106.0</b>	<b>100.4</b>	<b>105.0</b>	<b>7</b>
A16593	<b>362,873</b>	<b>295,288</b>	<b>94.4</b>	<b>102.7</b>	<b>88.2</b>	<b>105.7</b>	<b>100.1</b>	<b>105.0</b>	<b>7</b>
A16592	<b>340,194</b>	<b>285,763</b>	<b>94.6</b>	<b>102.4</b>	<b>86.7</b>	<b>105.3</b>	<b>99.9</b>	<b>105.0</b>	<b>7</b>

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-8F**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **GEEx-2B67**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      **Edition 5 / Amendment 9**      Chapter<sup>1</sup>      **4**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A16591	<b>317,514</b>	<b>272,155</b>	<b>94.8</b>	<b>102.2</b>	<b>85.3</b>	<b>104.9</b>	<b>99.6</b>	<b>105.0</b>	<b>7</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-8F**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **GEnx-2B67, GEnx-2B67/P**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **Engine intermix**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      **Edition 6 / Amendment 10**      Chapter<sup>1</sup>      **4**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A120388	<b>447,695</b>	<b>350,626</b>	<b>94.0</b>	<b>103.0</b>	<b>94.5</b>	<b>106.0</b>	<b>101.0</b>	<b>105.0</b>	-
A120389	<b>447,695</b>	<b>346,090</b>	<b>94.0</b>	<b>103.0</b>	<b>94.5</b>	<b>106.0</b>	<b>101.0</b>	<b>105.0</b>	-
A120390	<b>442,252</b>	<b>345,183</b>	<b>94.0</b>	<b>103.0</b>	<b>94.0</b>	<b>106.0</b>	<b>101.0</b>	<b>105.0</b>	-
A120391	<b>439,984</b>	<b>344,276</b>	<b>94.0</b>	<b>103.0</b>	<b>93.8</b>	<b>106.0</b>	<b>101.0</b>	<b>105.0</b>	-
A120392	<b>430,912</b>	<b>339,740</b>	<b>94.0</b>	<b>103.0</b>	<b>93.1</b>	<b>106.0</b>	<b>100.9</b>	<b>105.0</b>	-
A120393	<b>412,769</b>	<b>317,514</b>	<b>94.1</b>	<b>103.0</b>	<b>91.7</b>	<b>106.0</b>	<b>100.5</b>	<b>105.0</b>	-
A120394	<b>396,893</b>	<b>312,071</b>	<b>94.2</b>	<b>103.0</b>	<b>90.5</b>	<b>106.0</b>	<b>100.4</b>	<b>105.0</b>	-
A120395	<b>385,553</b>	<b>309,349</b>	<b>94.3</b>	<b>102.9</b>	<b>89.8</b>	<b>106.0</b>	<b>100.4</b>	<b>105.0</b>	-
A120396	<b>362,873</b>	<b>295,288</b>	<b>94.4</b>	<b>102.7</b>	<b>88.3</b>	<b>105.7</b>	<b>100.1</b>	<b>105.0</b>	-
A120397	<b>340,194</b>	<b>285,763</b>	<b>94.6</b>	<b>102.4</b>	<b>86.8</b>	<b>105.3</b>	<b>99.9</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-8F**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **GEnx-2B67, GEnx-2B67/P**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **Engine intermix**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      **Edition 6 / Amendment 10**      Chapter<sup>1</sup>      **4**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A120398	<b>317,514</b>	<b>272,155</b>	<b>94.8</b>	<b>102.2</b>	<b>85.3</b>	<b>104.9</b>	<b>99.6</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-8F**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **GEnx-2B67/P**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      **Edition 6 / Amendment 10**      Chapter<sup>1</sup>      **4**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A120387	<b>447,695</b>	<b>350,626</b>	<b>93.9</b>	<b>103.0</b>	<b>94.4</b>	<b>106.0</b>	<b>101.0</b>	<b>105.0</b>	-
A119376	<b>447,695</b>	<b>346,090</b>	<b>93.9</b>	<b>103.0</b>	<b>94.4</b>	<b>106.0</b>	<b>100.9</b>	<b>105.0</b>	-
A119377	<b>442,252</b>	<b>345,183</b>	<b>93.9</b>	<b>103.0</b>	<b>93.9</b>	<b>106.0</b>	<b>100.9</b>	<b>105.0</b>	-
A119378	<b>439,984</b>	<b>344,276</b>	<b>94.0</b>	<b>103.0</b>	<b>93.7</b>	<b>106.0</b>	<b>100.9</b>	<b>105.0</b>	-
A119379	<b>430,912</b>	<b>339,740</b>	<b>94.0</b>	<b>103.0</b>	<b>93.0</b>	<b>106.0</b>	<b>100.8</b>	<b>105.0</b>	-
A119380	<b>412,769</b>	<b>317,514</b>	<b>94.1</b>	<b>103.0</b>	<b>91.7</b>	<b>106.0</b>	<b>100.4</b>	<b>105.0</b>	-
A119381	<b>396,893</b>	<b>312,071</b>	<b>94.2</b>	<b>103.0</b>	<b>90.5</b>	<b>106.0</b>	<b>100.3</b>	<b>105.0</b>	-
A119382	<b>385,553</b>	<b>309,349</b>	<b>94.2</b>	<b>102.9</b>	<b>89.8</b>	<b>106.0</b>	<b>100.2</b>	<b>105.0</b>	-
A119383	<b>362,873</b>	<b>295,288</b>	<b>94.4</b>	<b>102.7</b>	<b>88.3</b>	<b>105.7</b>	<b>99.9</b>	<b>105.0</b>	-
A119384	<b>340,194</b>	<b>285,763</b>	<b>94.6</b>	<b>102.4</b>	<b>86.8</b>	<b>105.3</b>	<b>99.7</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-8F**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **GEEx-2B67/P**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      **Edition 6 / Amendment 10**      Chapter<sup>1</sup>      **4**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A119385	<b>317,514</b>	<b>272,155</b>	<b>94.8</b>	<b>102.2</b>	<b>85.3</b>	<b>104.9</b>	<b>99.4</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.





Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-8F**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **GEEx-2B67B**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      **Edition 5 / Amendment 9**      Chapter<sup>1</sup>      **4**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A16779	<b>430,912</b>	<b>344,276</b>	<b>94.0</b>	<b>103.0</b>	<b>93.1</b>	<b>106.0</b>	<b>101.0</b>	<b>105.0</b>	<b>7</b>
A16780	<b>412,769</b>	<b>339,740</b>	<b>94.1</b>	<b>103.0</b>	<b>91.7</b>	<b>106.0</b>	<b>100.9</b>	<b>105.0</b>	<b>7</b>
A16781	<b>396,893</b>	<b>317,514</b>	<b>94.2</b>	<b>103.0</b>	<b>90.5</b>	<b>106.0</b>	<b>100.5</b>	<b>105.0</b>	<b>7</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-8F**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **GEnx-2B67B**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      **Edition 6 / Amendment 10**      Chapter<sup>1</sup>      **4**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A120671	<b>447,695</b>	<b>350,626</b>	<b>94.0</b>	<b>103.0</b>	<b>94.5</b>	<b>106.0</b>	<b>101.0</b>	<b>105.0</b>	<b>7</b>
A17627	<b>447,695</b>	<b>346,090</b>	<b>94.0</b>	<b>103.0</b>	<b>94.5</b>	<b>106.0</b>	<b>101.0</b>	<b>105.0</b>	<b>7</b>
A16760	<b>442,252</b>	<b>345,183</b>	<b>94.0</b>	<b>103.0</b>	<b>94.0</b>	<b>106.0</b>	<b>101.0</b>	<b>105.0</b>	<b>7</b>
A17628	<b>442,252</b>	<b>344,276</b>	<b>94.0</b>	<b>103.0</b>	<b>93.8</b>	<b>106.0</b>	<b>101.0</b>	<b>105.0</b>	<b>7</b>
A121219	<b>430,912</b>	<b>339,740</b>	<b>94.0</b>	<b>103.0</b>	<b>93.1</b>	<b>106.0</b>	<b>100.9</b>	<b>105.0</b>	<b>7</b>
A121220	<b>412,769</b>	<b>317,514</b>	<b>94.1</b>	<b>103.0</b>	<b>91.7</b>	<b>106.0</b>	<b>100.5</b>	<b>105.0</b>	<b>7</b>
A121221	<b>396,893</b>	<b>312,071</b>	<b>94.2</b>	<b>103.0</b>	<b>90.5</b>	<b>106.0</b>	<b>100.4</b>	<b>105.0</b>	<b>7</b>
A16782	<b>385,553</b>	<b>309,349</b>	<b>94.3</b>	<b>102.9</b>	<b>89.8</b>	<b>106.0</b>	<b>100.4</b>	<b>105.0</b>	<b>7</b>
A16783	<b>362,873</b>	<b>295,288</b>	<b>94.4</b>	<b>102.7</b>	<b>88.2</b>	<b>105.7</b>	<b>100.1</b>	<b>105.0</b>	<b>7</b>
A16784	<b>340,194</b>	<b>285,763</b>	<b>94.6</b>	<b>102.4</b>	<b>86.7</b>	<b>105.3</b>	<b>99.9</b>	<b>105.0</b>	<b>7</b>

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-8F**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **GE<sub>nx</sub>-2B67B**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **None**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      **Edition 6 / Amendment 10**      Chapter<sup>1</sup>      **4**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A16785	<b>317,514</b>	<b>272,155</b>	<b>94.8</b>	<b>102.2</b>	<b>85.3</b>	<b>104.9</b>	<b>99.6</b>	<b>105.0</b>	<b>7</b>

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-8F**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **GEEx-2B67B, GEEx-2B67/P**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **Engine intermix**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      **Edition 6 / Amendment 10**      Chapter<sup>1</sup>      **4**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A119386	<b>447,695</b>	<b>350,626</b>	<b>94.0</b>	<b>103.0</b>	<b>94.5</b>	<b>106.0</b>	<b>101.0</b>	<b>105.0</b>	-
A121222	<b>447,695</b>	<b>346,090</b>	<b>94.0</b>	<b>103.0</b>	<b>94.5</b>	<b>106.0</b>	<b>101.0</b>	<b>105.0</b>	-
A119387	<b>442,252</b>	<b>345,183</b>	<b>94.0</b>	<b>103.0</b>	<b>94.0</b>	<b>106.0</b>	<b>101.0</b>	<b>105.0</b>	-
A119388	<b>439,984</b>	<b>344,276</b>	<b>94.0</b>	<b>103.0</b>	<b>93.8</b>	<b>106.0</b>	<b>101.0</b>	<b>105.0</b>	-
A119389	<b>430,912</b>	<b>339,740</b>	<b>94.0</b>	<b>103.0</b>	<b>93.1</b>	<b>106.0</b>	<b>100.9</b>	<b>105.0</b>	-
A119390	<b>412,769</b>	<b>317,514</b>	<b>94.1</b>	<b>103.0</b>	<b>91.7</b>	<b>106.0</b>	<b>100.5</b>	<b>105.0</b>	-
A119391	<b>396,893</b>	<b>312,071</b>	<b>94.2</b>	<b>103.0</b>	<b>90.5</b>	<b>106.0</b>	<b>100.4</b>	<b>105.0</b>	-
A119392	<b>385,553</b>	<b>309,349</b>	<b>94.3</b>	<b>102.9</b>	<b>89.8</b>	<b>106.0</b>	<b>100.4</b>	<b>105.0</b>	-
A119393	<b>362,873</b>	<b>295,288</b>	<b>94.4</b>	<b>102.7</b>	<b>88.3</b>	<b>105.7</b>	<b>100.1</b>	<b>105.0</b>	-
A119394	<b>340,194</b>	<b>285,763</b>	<b>94.6</b>	<b>102.4</b>	<b>86.8</b>	<b>105.3</b>	<b>99.9</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.

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Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747-8F**

Engine Manufacturer<sup>1</sup>      **General Electric Company**      Engine Type Designation<sup>1</sup>      **GEnx-2B67B, GEnx-2B67/P**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels<sup>1</sup>      **Engine intermix**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      **Edition 6 / Amendment 10**      Chapter<sup>1</sup>      **4**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A119395	<b>317,514</b>	<b>272,155</b>	<b>94.8</b>	<b>102.2</b>	<b>85.3</b>	<b>104.9</b>	<b>99.6</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747SP**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**      Engine Type Designation<sup>1</sup>      **JT9D-7F**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **-100 "CN" nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A121212	<b>318,421</b>	<b>215,456</b>	<b>103.7</b>	<b>102.2</b>	<b>102.0</b>	<b>104.9</b>	<b>104.3</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



Type Certificate Holder<sup>1</sup>      **The Boeing Company**      Aircraft Type Designation<sup>1</sup>      **747SP**

Engine Manufacturer<sup>1</sup>      **Pratt & Whitney**      Engine Type Designation<sup>1</sup>      **JT9D-7F**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels<sup>1</sup>      **-200 "CN" nacelle**

Noise Certification Basis      **ICAO Annex 16, Volume I**      Edition / Amendment      Chapter<sup>1</sup>      **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off <sup>1</sup> (kg)	Landing <sup>1</sup> (kg)	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	Level <sup>1</sup>	Limit	
A121211	<b>318,421</b>	<b>215,456</b>	<b>102.2</b>	<b>102.2</b>	<b>101.1</b>	<b>104.9</b>	<b>103.8</b>	<b>105.0</b>	-

<sup>1</sup> See Note 1.



### **CS-36 Amendment level**

ICAO, Annex 16, Volume I Amendment level	7	8	9	10	11-B	12	13
Corresponding CS-36 Amendment level	Initial	1	2	3	4	5	6

### **TCDSN EASA.IM.A.196 Notes**

1. In cases where it is appropriate to issue a noise certificate, items so marked shall be included on EASA Form 45.
2. This variant does not comply with the standards of ICAO Annex 16, Volume I, Chapter 3. Examples of this variant may not be registered and operated within the EU. Noise levels for this variant are not established.
3. This variant is considered to comply only with the standards of ICAO Annex 16, Volume I, Chapter 2. Examples of this variant may not be registered and operated within the EU.
4. This variant is considered to comply only with the standards of ICAO Annex 16, Volume I, Chapter 2. Examples of this variant may not be registered and operated within the EU. Noise levels for this variant are not established.
5. Noise levels for this variant are not established. Please contact [noise@easa.europa.eu](mailto:noise@easa.europa.eu) if you wish to register this variant.
6. Valid also for 747-400 BCF (Boeing Converted Freighter).
7. With or without thrust reverser non-acoustic titanium heat shield





## Change Record

<b>Issue</b>	<b>Date</b>	<b>Changes</b>
Issue 1	05 March 2010	Initial Issue
Issue 2	03 June 2010	For B747-200 and B747-300 models with RB211-524D4 engines, certification basis changed from Chapter 2 to Chapter 3, lateral and flyover noise levels, and nacelle description revised.
Issue 3	14 September 2010	Revised, including changed lateral and flyover noise levels for 747-400 with CF6-80C2B1F engines with N1 modifier
Issue 4	20 January 2010	Revised
Issue 5	20 January 2011	Revised
Issue 6	19 August 2011	Model B747-8F added.
Issue 7	15 December 2011	Addition of model B747-8 and addition of engine type GEnx-2B67B to model B747-8F.
Issue 8	09 April 2013	Revised
Issue 9	09 April 2013	Revised
Issue 10	05 February 2014	Addition of GEnx-2B67/P engine and addition of record numbers A15459 and A15460
Issue 11	30 April 2014	Revised
Issue 12	13 November 2014	Revised
Issue 13	01 September 2015	Harmonized records regarding MTOM and MLM, added records A119386 and A120671, revised approach noise level of records A16760, A17627, A17628, A16779-16781 and A119386-A119388.
Issue 14	05 April 2016	Added records A121201, A121211 and A121211
Issue 15	28 October 2016	Added records for 747-400F fitted with PW4062A
Issue 16	24 November 2016	Revised
Issue 17	27 June 2017	Revised
Issue 18	30 November 2022	Added record A122753

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