



RiverOak Strategic Partners

# Revised 2.4 Noise Mitigation Plan (Tracked)

TR020002/D3/2.4/T

Examination Document

<b>Project Name:</b>	Manston Airport Development Consent Order
<b>Application Ref:</b>	TR020002
<b>Submission Deadline:</b>	3
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# RIVEROAK STRATEGIC PARTNERS

## MANSTON AIRPORT NOISE MITIGATION PLAN

RiverOak Strategic Partners Limited ('RiverOak') has always been aware that the issue of noise created by the operation of a redeveloped Manston Airport would be one of the issues of principal concern for the residents of the districts of Thanet and Canterbury. This has been borne out in both informal and statutory consultation to date. RiverOak understands those concerns and wishes to offer a range of commitments on future noise related activities at the airport in the form of a Noise Mitigation Plan. The commitments are designed to provide clarity to residents and reduce their concerns to the extent possible. While it is not obligatory to offer a Noise Mitigation Plan when an application for a Development Consent Order is made, it is RiverOak's belief that it is right to do so. It is also right that those potentially affected by noise were given a chance to comment upon the provisions of the plan during the statutory consultation period before it was finalised and included in RiverOak's application. The following text represents the second draft of the Noise Mitigation Plan which has been amended in response to the comments of consultees in the pre-application process.

The main measures, in section 1 below, use 'quota counts', common at other UK airports, where aircraft are given an independently assessed score known as a quota count according to how noisy they are, and then a quota is imposed. Thus there is a control of the total amount of noise from aircraft rather than the total number of aircraft. The noisiest aircraft (with quota count 8 or 16) are also banned from night flying altogether. The night time period quota figure has been arrived at based on a typical mix of aircraft operating within the noise levels that have been environmentally assessed, rather than taking the noisiest possible aircraft. [There is also a cap on annual air transport movements.](#)

Thirteen further measures are then proposed, including a noise insulation scheme for residential and noise-sensitive commercial properties likely to be affected by noise, a noise related residential relocation scheme, and fines for individually noisy aircraft or those that stray from approved flightpaths without good reason, to be spent by the Community Consultative Committee which will be established and receive funding from the airport operator under the plan.

# NOISE MITIGATION PLAN

## 1 Aircraft quota count and movement restrictions

1.1 Aircraft taking off or landing at the airport are described in this plan as follows:

- 1.1.1 Exempt aircraft;
- 1.1.2 Aircraft having a quota count of 0.25;
- 1.1.3 Aircraft having a quota count of 0.5;
- 1.1.4 Aircraft having a quota count of 1;
- 1.1.5 Aircraft having a quota count of 2;
- 1.1.6 Aircraft having a quota count of 4;
- 1.1.7 Aircraft having a quota count of 8;
- 1.1.8 Aircraft having a quota count of 16.

1.2 Exempt aircraft for the purposes of paragraph 1.1.1 are those aircraft which on the basis of their noise data are classified at less than 84 EPNdB and indicated as exempt in Part 2 of Appendix 1 to this Plan. The provisions of paragraphs 1.4 – 1.8 inclusive do not apply to the taking off or landing of such aircraft.

1.3 Subject to paragraph 1.2, the quota count of an aircraft on taking off or landing is to be calculated on the basis of the noise classification for that aircraft on take-off or landing as appropriate as follows:

Noise Classification	Quota Count
84 - 86.9 EPNdB	0.25
87 – 89.9 EPNdB	0.5
90 - 92.9 EPNdB	1
93 – 95.9 EPNdB	2
96 – 98.9 EPNdB	4
99 – 101.9 EPNdB	8
Greater than 101.9 EPNdB	16

- 1.4 An aircraft cannot take-off or be scheduled to land during the Night Time Period where:
- 1.4.1 the operator of that aircraft has not provided (prior to its take-off or prior to its scheduled landing time as appropriate) sufficient information to enable the airport operator to verify its noise classification and thereby its quota count; or
  - 1.4.2 the operator claims that the aircraft is an exempt aircraft within paragraph 1.2, but the aircraft is not indicated as such an aircraft in Part 2 of Appendix 1 to this plan.
- 1.5 Any aircraft which has a quota count of 8 or 16 cannot take-off or land at the airport during the Night Time Period.
- 1.6 The airport will be subject to an annual quota during the Night Time Period of 3028. Each take-off or landing at the airport during the Night Time Period is to count towards this annual quota.
- 1.7 Emergency flights and flights operated by relief organisations for humanitarian reasons will not count towards the quota set in paragraph 1.6.

4.71.8 [The airport will be subject to a total annual air transport movement limit of 26,468.](#)

## **2 Noise insulation scheme – residential properties**

- 2.1 A noise insulation scheme for residential properties will be offered by the airport operator to help avoid significant adverse effects on health and quality of life. The scheme will take into account both day time and night time noise exposure. Eligibility for the scheme is consistent with current and emerging Government policy.
- 2.2 Where, upon application to the airport operator, the freehold owner of a residential property is deemed eligible for assistance under the noise insulation scheme, they will receive £4,000 towards acoustic insulation.
- 2.3 Only one application will be considered per property.
- 2.4 Residential properties with habitable rooms within the 63dB LAeq (16 hour) day time contour will be eligible for the payment detailed in paragraph 2.2
- 2.5 Residential properties which are not eligible under paragraph 2.4 but which have bedrooms which fall within the 55dB LAeq (8 hour) contour will be eligible for the payment detailed in paragraph 2.2.

## **3 Noise insulation scheme – noise-sensitive buildings**

The airport operator will provide reasonable levels of noise insulation and ventilation for schools and community buildings within the 60 dB LAeq (16 hour) day time contour.

## **4 Relocation**

- 4.1 A relocation assistance scheme will be offered by the airport operator to enable those homeowners exposed to the highest levels of airport related noise to move away from the airport.



- 4.2 A successful applicant to the relocation assistance scheme will receive £5,000 plus 1.5% of the sale price of the property up to a maximum of £12,500.
- 4.3 Only one application will be considered per property.
- 4.4 Owners of residential properties within the 69 dB LAeq (16 hour) contour will be eligible for the payment detailed in paragraph 4.2 if:
- 4.4.1 they are the freehold owner of the property when applying (if the applicant currently lives elsewhere the property in question must be the only residential property that they own in the UK);
  - 4.4.2 they plan to move to a quieter area outside the 69 dB LAeq (16 hour) contour for the airport;
  - 4.4.3 they will not retain a beneficial interest in, or a right to occupation of, the property after moving; and
  - 4.4.4 they have owned, or have been living in the property continually since the Development Consent Order authorising the redevelopment of Manston Airport came into force.

## **5 Training flights**

Other than General Aviation training that is based at Manston Airport, there will be no routine training flights.

## **6 Engine testing**

There will be no open field testing of jet engines during the Night Time Period ~~except where operationally urgent and carried out within a designated test area.~~

## **7 Reverse thrust**

The airport operator will establish a policy which minimises the use of reverse thrust except where operationally essential.

## **8 Aircraft approach**

Aircraft operators will be encouraged to keep noise disturbance to a minimum by operating a low power/low drag procedure subject to ATC speed control requirements and the maintenance of safe operation of the aircraft.

## **9 Runway Operation**

When weather conditions allow, and taking into account other operational and safety considerations including runway utilisation, the airport operator will seek to operate take-offs

from Runway 28 and landings on Runway 10 subject to such operations being in accordance with CAA guidance and the aircraft operator's own limitations and safety management systems.

## **10 Wake turbulence**

The airport operator will implement the Wake Turbulence Policy at Appendix 2 to this plan.

## **11 Aircraft noise monitoring**

11.1 Permanent fixed noise monitoring terminals will be located under each of the aircraft departure flight paths at a distance of 6.5km from the start of take-off roll.

11.2 During the Day Time Period the operator of any departing aircraft that exceeds 90 dB LASmax at the relevant noise monitoring terminal will be subject to a penalty of £750 and a further penalty of £150 for each additional decibel exceeded above 90 dB LASmax.

11.3 During the Night Time Period the operator of any departing aircraft that exceeds 82 dB LASmax at the relevant noise monitoring terminal will be subject to a penalty of £750 and further penalties of £150 for each additional decibel exceeded above 82 dB LASmax.

## **12 Off-track Flight**

12.1 The airport operator will install a NTK system which will track aircraft in flight.

12.2 Through the Airspace Change Process the airport operator will seek to establish NPRs which will be designed to avoid overflying of densely populated areas.

12.3 The airport operator will require each aircraft operator to ensure that 95% of all departures within a calendar year remain within the NPR.

12.4 Any aircraft operator which fails to meet the target in paragraph 12.3 and subsequently fails to work collaboratively with the airport operator after being notified of persistent departures outside of the NPRs will be subject to a track keeping penalty of £500 per aircraft departure.

## **13 Community Consultative Committee**

13.1 The airport operator will establish a Community Consultative Committee in accordance with section 35 of the Act and with the guidance contained in "Guidelines for Airport Consultative Committees" (Department for Transport, 17 April 2014).

13.2 The Community Consultative Committee will have an independent chair and secretary who will be paid by the airport operator.

13.3 The Community Consultative Committee will meet quarterly in suitable premises on the airport and the agenda and minutes of each meeting will be published.

## **14 Community Trust Fund**

- 14.1 The airport operator will establish a Community Trust Fund into which all penalties applied under paragraphs 11 and 12 of this plan will be paid.
- 14.2 The proceeds of the fund established under paragraph 14.1 will be applied to community projects within the 50 dB LAeq (16 hour) day time contour and 40 dB LAeq (8 hour) contours by the Community Consultative Committee established under paragraph 14 of this plan.
- 14.3 The airport operator will contribute £50,000 per annum to the Community Trust Fund.

## **15 Interpretation**

- 15.1 For the purposes of this plan:

'the Act' means the Civil Aviation Act 1982;

'the airport' means Manston Airport'

'airport operator' means the person for the time being having the management of Manston Airport;

'Airspace Change Process' means the process by which airspace change sponsors apply to the Civil Aviation Authority for a permanent change to UK airspace design;

['air transport movement' means a landing or a take-off of an aircraft which excludes those associated with General Aviation;](#)

'ATC' means air traffic control;

'Annex 16' means Annex 16 (Volume 1 – Aircraft Noise) to the Convention on International Civil Aviation signed on behalf of the United Kingdom at Chicago on December 1944;

'appropriate air traffic control unit' has the meaning ascribed to it by the Air Navigation Order 2009;

'Day Time Period' means the period from 0700 hours to 2300 hours;

'EPNdB' means effective perceived noise in decibels;

'General Aviation' means all civil aviation operations other than scheduled air services and non-scheduled air transport operations for remuneration or hire;

'LAeq (8 hour) contour' means equivalent continuous sound level of aircraft noise during the average 'summer night'. This is based on the daily average aircraft movements that take place between 2300 and 0700 local time during the 92-day period from 16 June to 15 September inclusive;

'LAeq (16 hour) day time contour' means equivalent continuous sound level of aircraft noise in the 16 hour average 'summer day'. This is based on the daily average aircraft movements that

take place between 0700 and 2300 local time during the 92-day period from 16th June to 15th September inclusive;

'LASmax' means the maximum A-weighted sound level measured during an aircraft fly-by event;

'low power/low drag procedure' means a noise abatement technique for arriving aircraft in which the pilot delays the extension of wing flaps and undercarriage until the final stages of the approach;

'maximum certificated landing weight' means the maximum landing weight authorised in the certificate of airworthiness;

'maximum certificated take-off weight' means the maximum take-off weight authorised in the certificate of airworthiness;

'NPR' means a specific flight path which aircraft with a maximum take-off weight in excess of 5700 kg are to follow up until an altitude of 4,000 ft or as directed by ATC;

'Night Time Period' means the period from 2300 hours to 0700 hours;

an aircraft is deemed to have taken off or landed during the Night Time Period if the time recorded by the appropriate ATC control unit as 'airborne' or 'landed' respectively falls within that period;

'NTK' means Noise and Track Keeping System;

'noise classification' means the noise level band in EPNdB, for take-off or landing, as the case may be, for the aircraft in question, as defined in Part 2 of Appendix 1 to this Notice;

'quota' means the maximum permitted sum of the quota counts of all aircraft taking off from or landing at the airport during the relevant period;

'quota count' means the amount of the quota assigned to one take-off or to one landing by the aircraft in question, this number being related to its noise classification as specified in paragraph 2.3 of this plan; and

'start of take-off roll' means the point at which an aircraft which is aligned with the runway centreline begins to move forward with the intent to take-off.

## APPENDIX 1

### NOISE CLASSIFICATION

#### PART 1

- 1 The noise classification for an aircraft on take-off or landing as appropriate means
  - 1.1 for the purposes of landing:
    - 1.1.1 in the case of an aircraft certificated to the standards of Chapter 2, 3, 4 or 5 of Annex 16 (or the equivalent standards): the certificated approach noise level of the aircraft at its maximum certificated landing weight, minus 9 EPNdB; and
    - 1.1.2 in the case of a propeller aircraft with a maximum take-off weight not exceeding 5,700 kg and any other aircraft not certificated to the standards of Chapter 2, 3, 4 or 5 of Annex 16 (or the equivalent standards): the noise level indicated in relation to that aircraft in the noise data supplied for this purpose to the CAA.
  - 1.2 for the purposes of take-off:
    - 1.2.1 where the aircraft is certificated to the standards of Chapter 3, 4 or 5 of Annex 16 (or the equivalent standards): half the sum of the flyover and the sideline noise levels in EPNdB as measured at the certification points specified in that Annex during the noise certification of the aircraft at its maximum certificated take-off weight;
    - 1.2.2 where the aircraft is certificated to the standards of Chapter 2 of Annex 16 (or the equivalent standards): half the sum of the flyover and the sideline noise levels in EPNdB as measured at the certification points specified in that Annex during the noise certification of the aircraft at its maximum certificated take-off weight, plus 1.75 EPNdB; and
    - 1.2.3 where the aircraft is a propeller aircraft with a maximum take-off weight not exceeding 5,700 kg or any other aircraft not certificated to the standards of Chapter 2, 3 or 5 of Annex 16 (or the equivalent standards): the noise level indicated in relation to that aircraft in the noise data supplied for this purpose to the CAA.
  - 1.3 Subject to paragraph 1 of this Schedule, the current noise classifications for aircraft on take-off or landing as appropriate are indicated in the tables in Part 2 of this Schedule, which are not exhaustive.

- 1.4 In paragraph 1 of this Appendix, 'the equivalent standards' means:
- 1.4.1 in the case of Chapter 2 of Annex 16: FAR 36, Stage 2;
  - 1.4.2 in the case of Chapter 3 of Annex 16: FAR 36, Stage 3;
  - 1.4.3 in the case of Chapter 4 of Annex 16: FAR 36, Stage 4;
  - 1.4.4 in the case of Chapter 5 of Annex 16: FAR 36, Stage 2 and 3.

## PART 2

**Note:** Aircraft are listed alphabetically in the following arrivals and departures tables according to type. The engine type and any acoustical or other treatment necessary to enable the aircraft to achieve its noise classification are also indicated. Each of the entries in the columns headed EXEMP (i.e. EXEMPT), QC/0.25, QC/0.5, QC/1, QC/2, QC/4, QC/8 and QC/16 indicates the maximum certificated landing or take-off weight (as appropriate) for that aircraft which will meet the QC rating. For example, a B747-400 with PW4056 engines and no acoustical treatment will be classified for departures as QC/2 if it has a maximum certificated take-off weight of up to and including 292.19 tonnes. However, it will be classified as QC/4 if its maximum certificated take-off weight is more than 292.19 tonnes but not more than 370.57 tonnes; or as QC/8 if its maximum certificated take-off weight is more than 370.57 tonnes but not more than 394.63 tonnes.



Part 2 - Noise classification according to type - ARRIVALS

ARRIVALS	Aircraft	Engine	Remarks	Maximum certificated landing weight - tonnes								
				Noise Level Band (EPNdB)								
				<84	84-86.9	87-89.9	90-92.9	93-95.9	96-98.9	99-101.9	>101.9	
Quota Count	EXEMP	QC/0.25	QC/0.5	QC/1	QC/2	QC/4	QC/8	QC/16				
Agusta A109S	PW207C					3.17						
Agusta A109A II	Allison 250-C20B					2.60						
Agusta A109E	PW206C						3.00					
Agusta A119	PT6B-37A					2.72						
Airbus A300B2-1C	CF6-50C,C2R								128.00			
Airbus A300B2-203	CF6-50C2	Mod 2150 (short nozzle)							130.00			
Airbus A300B2-203	CF6-50C2	Mod 3305,2150 (short nozzle)							130.00			
Airbus A300B2-203	CF6-50C2								130.00			
Airbus A300B2-320	JT9D-59A	Mod 3305							134.00			
Airbus A300B2-320	JT9D-59A								136.00			
Airbus A300B2K-3C	CF6-50C,C2R	Mod 3305,2150 (short nozzle)							130.00			
Airbus A300B2K-3C	CF6-50C,C2R								130.00			
Airbus A300B4-103	CF6-50C2	Mod 2150							133.00			
Airbus A300B4-103	CF6-50C2	Mod 3305,3373							133.00			
Airbus A300B4-103	CF6-50C2								133.00			
Airbus A300B4-120	JT9D-59A								133.00			
Airbus A300B4/C4/F4-203	CF6-50C2	Mod 2150 (short nozzle)							134.00			
Airbus A300B4/C4/F4-203	CF6-50C2	(long nozzle)							134.00			
Airbus A300B4-220	JT9D-59A								134.00			
Airbus A300B4-2C	CF6-50C2,C2R	Mod 3305,2150 (short nozzle)							134.00			
Airbus A300B4-2C	CF6-50C2,C2R	Mod 3373							134.00			
Airbus A300B4-2C	CF6-50C2,C2R								133.00			
Airbus A300B4-601	CF6-80C2A1							138.00				
Airbus A300B4-603	CF6-80C2A3							138.00				
Airbus A300B4-605R	CF6-80C2A5							140.00				
Airbus A300B4-620	JT9D-7R4H1							138.00				
Airbus A300B4-622	PW4158	Mod 8550 (JAS-kit)						138.00				
Airbus A300B4-622	PW4158							138.00				
Airbus A300B4-622R	PW4158	"B-package" equipped						140.00				
Airbus A300B4-622R	PW4158	Mod 8550 (JAS-kit)						140.00				
Airbus A310-203	CF6-80A3							121.50				
Airbus A310-203C	CF6-80A3	Mod 5327,5771 & 604						122.00				
Airbus A310-203C	CF6-80A3							122.00				
Airbus A310-204	CF6-80C2A2					122.00						
Airbus A310-221	JT9D-7R4D1							118.50				
Airbus A310-222	JT9D-7R4E1							121.50				
Airbus A310-304	CF6-80C2A2					123.00						
Airbus A310-308	CF6-80C2A8					123.00						
Airbus A310-322	JT9D-7R4E1							123.00				
Airbus A310-324	PW4152	Mod 8921 ("B-package")						123.01				
Airbus A310-324	PW4152							124.00				
Airbus A310-325	PW4156A							124.00				
Airbus A318-112	CFM56-5B9/P					57.50						
Airbus A319-111	CFM56-5B5					68.00						
Airbus A319-111	CFM56-5B5/P	Mod No 25800-SAC				68.00						
Airbus A319-111	CFM56-5B5/P	Mod. No 25800-SAC and 27772	58.00			62.50						
Airbus A319-112	CFM56-5B6					68.00						
Airbus A319-112	CFM56-5B6/P					68.00						
Airbus A319-114	CFM56-5A5					68.00						
Airbus A319-115	CFM56-5B7					62.50						
Airbus A319-132	IAE V2524-A5					62.50						
Airbus A319-133	IAE V2527M-A5					62.50						
Airbus A320-111	CFM56-5-A1					67.00						
Airbus A320-211	CFM56-5-A1					68.00						
Airbus A320-212	CFM56-5-A3	Eng mods 20775,21478				68.00						
Airbus A320-214	CFM56-5B4/P	Engine Mod No 25800 SAC				68.00						
Airbus A320-216	CFM56-5B6/P or CFM56-5B6/3					66.00						
Airbus A320-231	V2500-A1					68.00						
Airbus A320-231	V2500-A1Mod 22461	"BUMP" Rating				68.00						
Airbus A320-232	V2527-A5					64.50						
Airbus A320-251n	CFM LEAP-1A26					67.40						
Airbus A320-271n	PW1127G-JM					67.40						
Airbus A321-111	CFM56-5B1 or CFM56-5B1/2					80.00						
Airbus A321-112	CFM56-5B-2					80.00						
Airbus A321-131	V2530-A5					80.00						



Part 2 - Noise classification according to type - ARRIVALS

ARRIVALS	Aircraft	Engine	Remarks	Maximum certificated landing weight - tonnes									
				Noise Level Band (EPNdB)		Quota Count							
				<84	84-86.9	87-89.9	90-92.9	93-95.9	96-98.9	99-101.9	>101.9		
EXEMP	QC/0.25	QC/0.5	QC/1	QC/2	QC/4	QC/6	QC/16						
B727-300	RR Tay 651-54	Dee Howard QF modification			62.40								
B737-200ADV	JT8D-15 or -15A	NORDAM LGW-H hushkit			46.72								
B737-200/-200C(ADV)	JT8D-15/-17 & A engs. at -15 thr	NORDAM hushkit see STC SA5730NM			48.53								
B737-200/-200C(ADV)	JT8D-17 & A engs. at -17 thr	NORDAM hushkit see STC SA5730NM			48.53								
B737-200/-200C(ADV)	JT8D-9/-15/-17 & A engs at -9 thr	NORDAM hushkit see STC SA5730NM			48.53								
B737-200/200C NON ADV	JT8D-15/-17 & A engs. at -15 thr.	NORDAM hushkit see STC SA5730NM					47.63						
B737-200ADV	JT8D-15 or -15A	NORDAM LDV hushkit (STC ST00131SE)			48.53								
B737-300	CFM56-3B1						54.43						
B737-300	CFM56-3B2						54.89						
B737-300	CFM56-3C1						52.53						
B737-300	CFM56-3C1	Winglets					51.70						
B737-400	CFM56-3B2/3C1	Treated forward acoustic panel					56.25						
B737-400	CFM56-3B2/3C1	Hardwall forward acoustic panel					56.25						
B737-500	CFM56-3-B1	18500lb SLST					51.71						
B737-500	CFM56-3-B1	20000lb SLST					51.71						
B737-500	CFM56-3-B1(R)						49.90						
B737-500	CFM56-3-B2	18500lb SLST					51.71						
B737-500	CFM56-3-C1	18500lb SLST					51.71						
B737-500	CFM56-3-C1	20000lb SLST					51.71						
B737-600	CFM56-7B20	20000lb SLST		54.66									
B737-700	CFM56-7B20	20000lb SLST		60.78									
B737-700	CFM56-7B22	22000lb SLST		60.78									
B737-700	CFM56-7B24	24000lb SLST		60.78									
B737-700	CFM56-7B27	27000lb SLST				60.78							
B737-700-IGW	CFM56-7B27/3B3	Including STC ST 00830SE winglets				60.78							
B737-800	CFM56-7 at 7B24 Thrust Rating	With Winglets and with Flaps 40 Degrees				66.36							
B737-800	CFM56-7B24	24000lb SLST				66.36							
B737-800	CFM56-7B26	Winglets				66.36							
B737-800	CFM56-7B26	26000lb SLST				66.36							
B737-800	CFM56-7B27	27000lb SLST				66.36							
B737-800	CFM56-7B27	With Winglets and with Flaps 40 degrees				65.32							
B737-800	CFM56-7B27/B1	Winglets				66.36							
B737-900	CFM56-7B26	26000lb SLST				66.81							
B737-900ER	CFM56-7B27	Winglets				71.35							
B747-100/200/300	JT9D-7R4G2	with -300R nacelles								285.76			
B747-100/200/300	RB211-524B2									265.35			
B747-100/200/300	RB211-524C2									265.35			
B747-100/200/300	RB211-524D4								289.99	302.00			
B747-200	JT9D-70A									285.76			
B747-200	JT9D-7Q									304.48			
B747-200	RB211-524D4-19/22									285.76			
B747-200	RB211-524D4X-19/22									289.89	302.09		
B747-200/-300	CF6-50E/E1									285.76			
B747-200/-300	CF6-50E2									285.76			
B747-200B	CF6-50E									265.35			
B747-200B	RB211-524D4	RRN nacelles								285.76			
B747-200F	CF6-50E2									299.37			
B747-300	CF6-50E2									285.76			
B747-300	CF6-80C2B1								298.69	320.00			
B747-300	JT9D-7R4G2									285.76			
B747-300/200 B,C & F	CF6-50E									285.76			
B747-400	CF6-80C2B1F	with and without the N1 modifier								295.74			
B747-400	CF6-80C2B5F	With N1 modifier								296.00			
B747-400	PW4056	Package B/Phase 1 engine								285.76			
B747-400	PW4056	Package B/Phase 1 engine (FB2B)								285.76			
B747-400	PW4056 (-3)	Phase III (FB2C)								285.76			
B747-400	PW4056									295.08			
B747-400	PW4056 (-1C)	Package A/B Phase 1 (FB2C)								295.74			
B747-400	PW4056 (-3)	Applicable to S/N 26055 and 26056								285.76			
B747-400	PW4056 (-3)	Basic rating 56750lb Phase III(FB2C)								295.74			
B747-400	PW4056 (-3)	Phase III (FB2C) & Noise reduction inlet							285.76	295.74			
B747-400	PW4056 (-3)									285.76	302.09		
B747-400	RB211-524G									295.74			
B747-400	RB211-524H2									295.74			
B747-400D	CF6-80C2B1F	With N1 Modifier								270.80			

Part 2 - Noise classification according to type - ARRIVALS

ARRIVALS	Engine	Remarks	Noise Level Band (EPNdB)																	
			Quota Count	EXEMP	64-85.9	87-89.9	90-92.9	93-95.9	96-98.9	99-101.9	>101.9									
												Maximum certificated landing weight - tonnes	QC/0.25	QC/0.5	QC/1	QC/2	QC/4	QC/6	QC/16	
Aircraft	Engine	Remarks																		
B747-400D	CF6-80C2B1F								270.80											
B747-400F	CF6-80C2B1F								302.09											
B747-400F	CF6-80C2B5F								302.09											
B747-400F	CF6-80C2B5F	ERF, Engine includes N1 modifier							296.19											
B747-400F	PW4056(-1C)	Pkg A/B Ph I (FB2C) & Noise reduction inlet					285.76		302.08											
B747-400F	PW4056 (-3)	Phase III (FB2C)							302.09											
B747-400F	PW4062A								302.09											
B747-400SF	PW4056 (-3)	Phase III (FB2C)							295.74											
B747-8F	GEEx-2B67/B7B							346.09												
B747-SP	JT9D-7A								210.92											
B747-SP	JT9D-7F								215.46											
B747-SP	JT9D-7J								215.46											
B747-SP	RB211-524B2								204.12											
B747-SP	RB211-524D4													185.97						
B747-SP-Z5	RB211-524D4													215.45						
B747-SR	JT9D-7A													255.83						
B747SR/-100	CF6-45A2	With -200"GB" nacelles												255.83						
B747SR/-100/200/300	JT9D-3A	"100CN" nacelle										188.99		208.65						
B747SR/-100/200/300	JT9D-3A	"200CN" nacelle										199.19		235.87						
B747SR/-100/200/300	JT9D-7	"100CN" nacelle										198.99		235.87						
B747SR/-100/200/300	JT9D-7	"200CN" nacelle										206.64		244.94						
B747SR/-100/200/300	JT9D-7A	"100CN" nacelle										202.19		235.87						
B747SR/-100/200/300	JT9D-7A	"200CN" nacelle										213.79		255.83						
B747SR/-100/200/300	JT9D-7F	"100CN" nacelle										188.49		215.46						
B747SR/-100/200/300	JT9D-7F	"200CN" nacelle										198.39		235.87						
B747SR/-100/200/300	JT9D-7J	"200CN" nacelle										198.39		235.87						
B757-200	PW2037							93.89												
B757-200	PW2040							93.89												
B757-200	RB211-535C											95.25								
B757-200	RB211-535E4						95.26													
B757-300	RB211-535E4B						101.61													
B767-200	CF6-80A											131.60								
B767-200	JT9D-7R4D	Package "A" Eng. Install No BG700 series										120.00		131.54						
B767-200	JT9D-7R4D	Package "B" Eng. Install No BG800/BG900 series										118.00		131.54						
B767-200	JT9D-7R4E											136.07		163.30						
B767-200/-200 ER	CF6-80A2	50KLb rating										136.08								
B767-200/-200 ER	CF6-80C2B											136.08								
B767-200/-200 ER	CF6-80C2B2											136.08								
B767-200/-200 ER	CF6-80C2B2F2											131.50								
B767-200/-200 ER	CF6-80C2B4											136.08								
B767-200/-200 ER	CF6-80C2B4 F	N1 modifier										136.08								
B767-200/-200 ER	JT9D-4RE											119.34		136.05						
B767-200/-200 ER	JT9D-7R4D													122.47						
B767-200/-200 ER	JT9D-7R4E													136.08						
B767-200/-200 ER	JT9D-7R4E4													136.08						
B767-200/-200 ER	PW4050											125.90								
B767-200/-200 ER	PW4052 (FB2T)											136.08								
B767-200/-200 ER	PW4056 (FB2B)											136.08								
B767-200/-200 ER	PW4056 PHASEIII (FB2C)	With noise reduction inlet										136.08								
B767-200/-200 ER	PW4060											125.90								
B767-200/-200 ER	PW4060 PHASEIII (FB2C)	With noise reduction inlet										136.08								
B767-200/-200 ER	PW4060A											125.90								
B767-300	CF6-80C2B6F	With N1 modifier										140.40								
B767-300 & -300ER	CF6-80C2B2F											139.30								
B767-300 & -300ER	CF6-80C2B4											145.15								
B767-300 & -300ER	CF6-80C2B6											145.15								
B767-300 & -300ER	CF6-80C2B6 (fadec)											145.15								
B767-300 & -300ER	CF6-80C2B7F (fadec)											145.15		154.22						
B767-300 & -300ER	PW4056 (FB2B)													145.15						
B767-300 & -300ER	PW4056 PHASEIII (FB2C)	With noise reduction inlet										145.15								
B767-300 & -300ER	PW4060 (FB2B)													145.15						
B767-300 & -300ER	PW4060 PHASEIII (FB2C)	With noise reduction inlet										145.15								
B767-300 & -300ER	PW4062 PHASEIII (FB2C)	With noise reduction inlet										145.15								
B767-300 & -300ER	RB211-524G											134.59		145.15						
B767-300 & -300ER	RB211-524H											134.59		145.15						













Part 2 - Noise classification according to type - ARRIVALS

ARRIVALS	Aircraft	Engine	Remarks	Noise Level Band (EPNdB)	Maximum certificated landing weight - tonnes									
					Quota Count	<84	84-86.9	87-89.9	90-92.9	93-95.9	96-98.9	99-101.9	>101.9	
						EXEMP	QC/0 25	QC/0 5	QC/1	QC/2	QC/4	QC/8	QC/16	
MD-80	JT8D-217C					68.00								
MD-82	JT8D-217C					68.00								
MD-82	JT8D-219					68.00								
MD-83	JT8D-219					68.00								
MD-87	JT8D-217A					58.97								
MD-87	JT8D-217C					59.00								
MD-87	JT8D-219					59.00								
MD-88	JT8D-219					63.28								
MD-90-30	IAE V2525-D5					64.41								
MD 900 Explorer	PW 206A					2.84								
Mooney M20J	Lycoming IO-360-A3B6D					1.22								
Mooney M20K	Teledyne TSIO-360-GB1					1.32								
Partenavia P68B	LYC IO-360-A1B6					1.99								
Piaggio P-180	PW PT6A-66					4.94								
Pilatus PC-12/45	PT6A-67B		With Hartzell Prop HC-E4A-3D/E10477K			4.50								
Pilatus PC-12/47	PT6A-67B		With Hartzell Prop HC-E4A-3D/E10477K			4.50								
Piper PA-23-250	LYC IO-540-C4B5					2.36								
Piper PA-E23-250	LYC IO-540-C4B5					2.36								
Piper PA-28-161	LYC O-320-D3G		Sensenich 74DM6-0-60			1.06								
Piper PA-28-236	LYC O-540-J3A5D		Hartzell HC-F2YR-1F/F8468A-4R Propeller			1.36								
Piper PA-31-350	LYC TIO-540-J2BD					3.18								
Piper PA-31	LYC TIO-540-2AC					2.95								
Piper PA-34-200T	Lycoming TSIO-360-E		Seneca II			2.09								
Piper PA-34-200T	Teledyne TSIO-360-E		Seneca II			2.09								
Piper PA-34-220T	Continental TSIO-360-KB		Seneca III			2.13								
Piper PA-60-600P	LYC IO-540-S1A5I-P1A5					2.72								
Puma (ECF) SA330F/G	Turbomeca IVA									E				
Raytheon 390 Premier 1	Williams-Rolls FJ44-2A					5.26								
Rockwell Commander 690C	Garrett TPE 331-625-4K		Turbo Commander			4.68								
SAAB SF340A	GE CT7-5A					12.02								
SAAB SF340A	GE CT7-5A2						12.34							
SAAB SF340A	GE CT7-7E					12.02								
SAAB 2000	Allison AE 2100A					22.00								
Sabreliner 65	TFE 731-3R					9.89								
Sabreliner 80	CF760-2D-2							9.98						
Shorts SD330	P&W PT6A-45R					10.25								
Shorts SD360	P&W PT6A-65AR					11.84								
Shorts SD360	P&W PT6A-65R					11.84								
Shorts SD360-300	P&W PT6A-67R						12.02							
Sikorsky S76A	Allison 250-C30S									E				
Sikorsky S76B	P&W PT6B-36A									E				
Sikorsky S76C+	Turbomeca Arriel 2S1							5.31						
Sikorsky S-92A	GE-CT7-8										12.02			
SN-601 Corvette	JT15D-4					6.00								
Sukhoi RRU-95B	Sam146-1S17		Superjet 100			41.00								
Swearingen Merlin III	TPE331-11U-601G					E								
Transall C160	RR Tyne MK22					47.00								
TU-154M	D-30 Ku-154 (SAM)		With noise suppressors							80.00				
TU-204-100	PS-90A							88.20						
TU-204-120C	RR RB211-535E4					89.50								
TU-204C	PS-90A							91.50						
Yak-40	A1-25							14.70						
Yak-42	D-36		With noise suppressors							50.00				

E - QC estimated

Part 2 - Noise classification according to type - DEPARTURES

DEPARTURES	Engine	Remarks	Maximum certificated take-off weight - tonnes																	
			Noise Level Band (EPNdB)	<84	84-86.9	87-89.9	90-92.9	93-95.9	96-98.9	99-101.9	>101.9									
			Quota Count	EXEMP	QC/0.25	QC/0.5	QC/1	QC/2	QC/4	QC/8	QC/16									
Aircraft	Engine	Remarks																		
Agusta A109S	PW207C					3.17														
Agusta A109A II	Allison 250-C20B					2.60														
Agusta A109E	PW206C							3.00												
Agusta A119	PT6B-37A							2.72												
Airbus A300B2-1C	CF6-50C.C2R										142.00									
Airbus A300B2-203	CF6-50C2	Mod 2150 (short nozzle)									142.00									
Airbus A300B2-203	CF6-50C2	Mod 3305,2150 (short nozzle)									142.00									
Airbus A300B2-203	CF6-50C2										142.00									
Airbus A300B2-320	JT9D-59A	Mod 3305									157.50									
Airbus A300B2-320	JT9D-59A										142.00									
Airbus A300B2K-3C	CF6-50C.C2R	Mod 3305,2150 (short nozzle)									137.00									
Airbus A300B2K-3C	CF6-50C.C2R										142.00									
Airbus A300B4-103	CF6-50C2	Mod 2150									157.50									
Airbus A300B4-103	CF6-50C2	Mod 3305,3373									157.50									
Airbus A300B4-103	CF6-50C2										157.50									
Airbus A300B4-120	JT9D-59A										160.00									
Airbus A300B4/C4/F4-203	CF6-50C2	Mod 2150 (short nozzle)									165.00									
Airbus A300B4/C4/F4-203	CF6-50C2	(long nozzle)									165.00									
Airbus A300B4-220	JT9D-59A										165.00									
Airbus A300B4-2C	CF6-50C2.C2R	Mod 3305,2150 (short nozzle)									150.00									
Airbus A300B4-2C	CF6-50C2.C2R	Mod 3373									150.00									
Airbus A300B4-2C	CF6-50C2.C2R										157.50									
Airbus A300B4-601	CF6-80C2A1										165.00									
Airbus A300B4-603	CF6-80C2A3										165.00									
Airbus A300B4-605R	CF6-80C2A5										171.70									
Airbus A300B4-620	JT9D-7R4H1										165.00									
Airbus A300B4-622	PW4158	Mod 8550 (JAS-kit)									171.70									
Airbus A300B4-622	PW4158										171.70									
Airbus A300B4-622R	PW4158	"B-package" equipped A300-622 are equiv									171.70									
Airbus A300B4-622R	PW4158	Mod 8550 (JAS-kit)									158.49	171.70								
Airbus A310-203	CF6-80A3										142.00									
Airbus A310-203C	CF6-80A3	Mod 5327,5771 & 604									129.79	142.00								
Airbus A310-203C	CF6-80A3										133.19	142.00								
Airbus A310-204	CF6-80C2A2										144.79	160.00								
Airbus A310-221	JT9D-7R4D1										141.59	142.00								
Airbus A310-222	JT9D-7R4E1										141.99									
Airbus A310-304	CF6-80C2A2										144.69	157.00								
Airbus A310-308	CF6-80C2A8											164.00								
Airbus A310-322	JT9D-7R4E1											153.00								
Airbus A310-324	PW4152	Mod 8921 ("B-package")										157.00								
Airbus A310-324	PW4152											157.00								
Airbus A310-325	PW4156A											164.00								
Airbus A318-112	CFM56-5B9/P										64.50									
Airbus A319-111	CFM56-5B5											72.00								
Airbus A319-111	CFM56-5B5/P	Mod No. 25800-SAC										72.00								
Airbus A319-111	CFM56-5B5/P	Mod Nos 25800-SAC and 27772									66.50	75.50								
Airbus A319-112	CFM56-5B6											72.00								
Airbus A319-112	CFM56-5B6/P											73.50								
Airbus A319-114	CFM56-5A5										64.00	74.00								
Airbus A319-115	CFM56-5B7										62.00	76.50								
Airbus A319-132	IAE V2524-A5											75.50								
Airbus A319-133	IAE V2527M-A5										66.00	75.50								
Airbus A320-111	CFM56-5-A1											67.19	77.00							
Airbus A320-211	CFM56-5-A1											67.79	78.00							
Airbus A320-212	CFM56-5-A3	Eng mods 20775,21478										70.49	78.00							
Airbus A320-214	CFM56-5B4/P	Engine Mod. No. 25800 SAC										73.50	83.00							
Airbus A320-216	CFM56-5B6/P or CFM56-5B6/3											77.00								
Airbus A320-231	V2500-A1											74.89	77.00							
Airbus A320-231	V2500-A1Mod 22461	"BUMP" Rating										75.70	78.00							
Airbus A320-232	V2527-A5											77.00								
Airbus A320-251n	CFM LEAP-1A26										79.00									
Airbus A320-271n	PW1127G-JM										77.00	79.00								
Airbus A321-111	CFM56-5B1 or CFM56-5B1/2											76.05	90.00							
Airbus A321-112	CFM56-5B2											75.30	90.00							
Airbus A321-131	V2530-A5											83.30	90.00							

Part 2 - Noise classification according to type - DEPARTURES

DEPARTURES	Aircraft	Engine	Remarks	Maximum certificated take-off weight - tonnes															
				Noise Level Band (EPNdB)		84-86.9		87-89.9		90-92.9		93-95.9		96-98.9		99-101.9		>101.9	
				Quota Count	EXEMP	QC/0.25	QC/0.5	QC/1	QC/2	QC/4	QC/8	QC/16							
Airbus A321-211	CFM56-5B3/P	Engine Mod. 25800 SAC					85.00	95.00											
Airbus A321-211	CFM56-5B3/P	Engine Mods 25800 SAC and 27772					89.00	95.00											
Airbus A321-214	CFM56-5B-4	Single or double annular combustors				75.30	83.00												
Airbus A321-231	V2533-A5					75.00	95.00												
Airbus A321-232	V2530-A5					83.00	93.50												
Airbus A330-202	CF6-80E1A4	Engine rated at 70,000 lb							230.00										
Airbus A330-202	CF6-80E1A4	Winglets and with cutback							233.00										
Airbus A330-202	CF6-80E1A4B	Winglets and with Mod. 52776 - Thrust Bump							233.00										
Airbus A330-223	PW4168A or PW4170								238.00										
Airbus A330-301	CF6-80E1A2								230.00										
Airbus A330-302	CF6-80E1A4 or CF6-80E1A4/B								235.00										
Airbus A330-243	RR Trent 772B							165.00	250.00										
Airbus A330-342	RR Trent 772								230.00										
Airbus A330-343	RR Trent 772-60, 772B-60 or 772C-60								212.00	235.00									
Airbus A330-322	PW4168								217.00										
Airbus A340-211	CFM56-5C2								231.50	270.00									
Airbus A340-311	CFM56-5C2								233.99	270.00									
Airbus A340-312	CFM56-5C3								270.00										
Airbus A340-313	CFM56-5C4								276.50										
Airbus A340-313	CFM56-5C4	Engine Mod. 44260 - Thrust Bump							275.00	260.00									
Airbus A340-541	RR Trent 553								372.00										
Airbus A340-542	RR Trent 556A2-61								380.00										
Airbus A340-642	RR Trent 556								368.00										
Airbus A350-941	RR Trent XWB-84					240.00	275.00												
Airbus A380-841	RR Trent 970							490.00	569.00										
Airbus A380-842	RR Trent 972							490.00	569.00										
Airbus A380-851	EA GP7270 or GP7270E							490.00	569.00										
Airbus Helicopters AS365N2	Arriel 1C2							4.25											
Antonov 12 CUB	Ivchenko AI - 20K	'CUB' is the NATO designation							61.00										
Antonov 12 BK	Ivchenko AI - 20M								61.00										
Antonov 12 B	Ivchenko AI - 20M	AB-6B1 propeller										61.00							
Antonov 22	NIK-12MA	AV-90 propeller														250.00			
Antonov 26	Ivchenko AI - 24T										24.00								
Antonov 72	D-36-1A																		
Antonov 124-100	D-18T w/SAW							34.80											
Antonov 225	D-18T	With acoustic treatment															392.00		
ATR42-200	P&W PW120	Full Power	15.75																
ATR42-300	P&W PW120	Full Power	17.00																
ATR42-320	P&W PW121	Full Power	16.80																
ATR72-101/-102	P&W PW124	Full Power		19.99															
ATR72-201/-202	P&W PW124	Full Power		21.50															
ATR72-210	P&W PW127	Full Power	21.50																
ATR72-212A	P&W PW127F or PW127M	Hamilton Standard 56F-1 propeller	23.50																
B707-300B ADV/C	JT8D-7	Quiet Skies Stage 3 Hushkit										152.73							
B717-200	BR700-715A1-30	18,500 lb SLST				54.89													
B717-200	BR700-715C1-30	21,000 lb SLST				54.89													
B727-100 (FED EX.)	JT8D-7/A/B	With Boeing nacelle										76.88							
B727-100 (FED EX.)	JT8D-9 or -9A	With Burbank Aeronautical Corp. nac.										76.88							
B727-100RE	2x JT8D-217 / 1x JT8D-9/9A	VALSAN hushkit						56.70											
B727-17RE	2x JT8D-217 / 1x JT8D-9/9A	VALSAN hushkit										79.61							
B727-200	JT8D-15/A	FedEx Hushkit											86.36						
B727-200 (FED EX.)	JT8D-7/A/B	With Burbank Aeronautical Corp. nac.											80.93						
B727-200 (FED EX.)	JT8D-7B(A) (B)	With Boeing nacelle											78.30						
B727-200 (FED EX.)	JT8D-7B(A) (B)	With Burbank Aeronautical Corp. nac.											78.30						
B727-200 (FED EX.)	JT8D-9/A	With Burbank Aeronautical Corp. nac.										76.88							
B727-200	JT8D-7	STC SA4833NM											80.74						
B727-200	JT8D-9	STC SA4833NM											78.46						
B727-200	JT8D-17	STC ST00350AT & SA5839NM											88.36						
B727-200	JT8D-17R	STC SA5839NM											86.41						
B727-200RE	2x JT8D-217C / 1x JT8D-15	VALSAN hushkit										86.41							
B727-200RE	2x JT8D-217C / 1x JT8D-17	VALSAN hushkit										90.04							
B727-200RE	2x JT8D-217C / 1x JT8D-17A	VALSAN hushkit											95.03						
B727-200RE	2x JT8D-219 / 1x JT8D-7,7A or 7B	VALSAN hushkit											76.88						
B727-200RE	2x JT8D-217 / 1x JT8D-15	BFGoodrich Super27 modification											88.68						
B727-200	2x JT8D-217C & 1x JT8D-17	STC SA4363NM											88.67						



Part 2 - Noise classification according to type - DEPARTURES

DEPARTURES			Maximum certificated take-off weight - tonnes								
			Noise Level Band (EPNdB)	<84	84-86.9	87-89.9	90-92.9	93-95.9	96-98.9	99-101.9	>101.9
			Quota Count	EXEMP	QC/0.25	QC/0.5	QC/1	QC/2	QC/4	QC/8	QC/16
Aircraft	Engine	Remarks									
B727-300	RR Tay 651-54	Dee Howard QF modification					76.88				
B737-200ADV	JT8D-15 or -15A	NORDAM LGW-H hushkit						54.20			
B737-200/200C NON ADV	JT8D-15 & -15 A at -15 thr	NORDAM hushkit see STC SA5730NM					54.20				
B737-200/200C(ADV)	JT8D-15/-17 & A engs. at -15 thr	NORDAM hushkit see STC SA5730NM					56.14	57.70			
B737-200/200C(ADV)	JT8D-17 & A engs. at -17 thr	NORDAM hushkit see STC SA5730NM					55.91	57.61			
B737-200/200C(ADV)	JT8D-9/-15/-17 & A engs at -9 thr.	NORDAM hushkit see STC SA5730NM					56.08	56.47			
B737-200ADV	JT8D-15 or -15A	NORDAM LGW hushkit (STC ST00131SE)						56.47			
B737-300	CFM56-3B1					62.82					
B737-300	CFM56-3B2					63.28					
B737-300	CFM56-3C1	Engine rated at 20,000 lb				62.82					
B737-300	CFM56-3C1	Winglets				62.82					
B737-400	CFM56-3B2	Engine rated at 22,000 lb				63.80					
B737-400	CFM56-3C1	Treated forward acoustic panel				65.00	68.04				
B737-400	CFM56-3B2/3C1	Hardwall forward acoustic panel		56.68		68.04					
B737-500	CFM56-3-B1	18500lb SLST				60.24					
B737-500	CFM56-3-B1	20000lb SLST				63.05					
B737-500	CFM56-3-B1(R)	18500lb SLST				59.10					
B737-500	CFM56-3-B2	18500lb SLST				60.24					
B737-500	CFM56-3-C1	18500lb SLST				60.24					
B737-500	CFM56-3-C1	20000lb SLST				63.05					
B737-600	CFM56-7B20	20000lb SLST			57.61						
B737-700	CFM56-7B20	20000lb SLST				70.08					
B737-700	CFM56-7B22	22000lb SLST				70.08					
B737-700	CFM56-7B24	24000lb SLST				70.08					
B737-700	CFM56-7B27	27000lb SLST					77.56				
B737-700-IGW	CFM56-7B27/3B3	Including STC ST 00830SE winglets					77.56				
B737-800	CFM56-7 at 7B24 Thrust Rating	With Winglets and with cutback				71.44					
B737-800	CFM56-7B24	24000lb SLST				76.67	79.02				
B737-800	CFM56-7B26	Winglets				77.00	79.02				
B737-800	CFM56-7B26	28000lb SLST				74.98	79.02				
B737-800	CFM56-7B27	27000lb SLST				73.10	79.02				
B737-800	CFM56-7B27	With Winglets and with cutback					79.02				
B737-800	CFM56-7B27/B1	Winglets					79.02				
B737-900	CFM56-7B26	28000lb SLST					76.68				
B737-900ER	CFM56-7B27	Winglets					85.14				
B747-100/200/300	JT9D-7R4G2	With -300R nacelles							318.79	377.84	
B747-100/200/300	RB211-524B2									362.89	376.80
B747-100/200/300	RB211-524C2									368.99	377.80
B747-100/200/300	RB211-524D4									377.80	
B747-200	JT9D-70A									371.95	
B747-200	JT9D-7Q									377.80	
B747-200	RB211-524D4-19/22									372.00	
B747-200	RB211-524D4X-19/22									377.84	
B747-200/300	CF6-50E1									377.84	
B747-200/300	CF6-50E2									374.29	377.84
B747-200B	CF6-50E									351.50	
B747-200B	RB211-524D4	RRN nacelles								377.84	
B747-200F	CF6-50E2									371.90	377.80
B747-300	CF6-50E2									362.87	
B747-300	CF6-80C2B1							310.79	375.30		
B747-300	JT9D-7R4G2									377.84	
B747-300/200 B, C & F	CF6-50E										285.76
B747-400	CF6-80C2B1F	With N1 modifier						317.19	396.89		
B747-400	CF6-80C2B1F							315.00	392.50	396.89	
B747-400	CF6-80C2B5F	With N1 modifier							365.00		
B747-400	PW4056	Package B/Phase 1 engine								394.63	
B747-400	PW4056	Package B/Phase 1 engine (FB2B)								396.89	
B747-400	PW4056(-3)	Phase III engine (FB2C)								396.89	
B747-400	PW4056							292.19	370.57	394.63	
B747-400	PW4056 (-1C)	Package A/B Phase 1 (FB2C)								396.89	
B747-400	PW4056 (-3)	Applicable to S/N 26055 and 26056								394.63	
B747-400	PW4056 (-3)	Basic rating 56750lb Phase III(FB2C)								396.89	
B747-400	PW4056 (-3)	Phase III(FB2C) & Noise reduction inlet								396.89	
B747-400	RB211-524G							319.00	396.89		
B747-400	RB211-524H2							322.50	396.89		

Part 2 - Noise classification according to type - DEPARTURES

DEPARTURES	Noise Level Band (EPNdB)	Maximum certificated take-off weight - tonnes									
		<84	84-86.9	87-89.9	90-92.9	93-95.9	96-98.9	99-101.9	>101.9		
Aircraft	Engine	Remarks	Quota Count	EXEMP	QC/0.25	QC/0.5	QC/1	QC/2	QC/4	QC/8	QC/16
B747-400D	CF6-80C2B1F	With N1 modifier.						313.39	377.80		
B747-400D	CF6-80C2B1F							312.29			
B747-400F	CF6-80C2B1F								396.89		
B747-400F	CF6-80C2B5F								396.89		
B747-400F	CF6-80C2B5F	ERF, Engine includes N1 modifier							412.77		
B747-400F	PW4056 (-1C)	Pkg A/B Ph I (FB2C) & Noise reduction inlet							396.89		
B747-400F	PW4056 (-1C)								396.89		
B747-400F	PW4056 (-3)	Phase III (FB2C)							394.63		
B747-400F	PW4062A								412.77		
B747-400SF	PW4056 (-3)	Phase III (FB2C)							394.63		
B747-8F	GErx-2B67/67B						412.77	447.70			
B747-SP	JT9D-7A									317.95	318.43
B747-SP	JT9D-7F/7J									299.37	
B747-SP	RB211-524B2									315.70	
B747-SP	RB211-524D4									318.42	
B747-SP-Z5	RB211-524D4									319.32	
B747-SR	JT9D-7A									276.70	
B747SR/-100	CF6-45A2	With "200"GB" nacelles							311.60	340.19	
B747SR/-100/200/300	JT9D-3A	With "100CN" nacelles									322.05
B747SR/-100/200/300	JT9D-3A	With "200CN" nacelles									322.05
B747SR/-100/200/300	JT9D-7	With "100CN" nacelles									332.94
B747SR/-100/200/300	JT9D-7	With "200CN" nacelles							304.99		332.94
B747SR/-100/200/300	JT9D-7A	With "100CN" nacelles									332.90
B747SR/-100/200/300	JT9D-7A	With "200CN" nacelles							324.59		332.94
B747SR/-100/200/300	JT9D-7F	With "100CN" nacelles									340.20
B747SR/-100/200/300	JT9D-7F	With "200CN" nacelles							326.99		340.19
B747SR/-100/200/300	JT9D-7J	With "200CN" nacelles							324.69		351.53
B757-200	PW2037						112.40				
B757-200	PW2040						115.90				
B757-200	RB211-535C				101.79	108.90					
B757-200	RB211-535E4				115.80						
B757-300	RB211-535E4B					117.93					
B767-200	CF6-80A					154.89	159.21				
B767-200	JT9D-7R4D	Package "A" Eng Install No BG700 series				136.59	156.50				
B767-200	JT9D-7R4D	Package "B" Eng Install No BG800/BG900 series				134.99	156.65				
B767-200	JT9D-7R4E					136.19	166.50				
B767-200/-200 ER	CF6-80A2	50Klb rating					144.39	159.21			
B767-200/-200 ER	CF6-80C2B				140.29	159.21					
B767-200/-200 ER	CF6-80C2B2					163.29					
B767-200/-200 ER	CF6-80C2B2F					153.80					
B767-200/-200 ER	CF6-80C2B4					175.54					
B767-200/-200 ER	CF6-80C2B4F	N1 Modifier			143.29	163.50					
B767-200/-200 ER	JT9D-4RE					136.19	163.30				
B767-200/-200 ER	JT9D-7R4D					135.17					
B767-200/-200 ER	JT9D-7R4E					136.19	166.50				
B767-200/-200 ER	JT9D-7R4E4					135.19	159.20				
B767-200/-200 ER	PW4050						170.20				
B767-200/-200 ER	PW4052 (FB2T)					159.20					
B767-200/-200 ER	PW4056 (FB2B)					162.79	181.44				
B767-200/-200 ER	PW4056 PHASE III (FB2C)	With noise reduction inlet			152.50	179.17					
B767-200/-200 ER	PW4060						172.00				
B767-200/-200 ER	PW4060 PHASE III (FB2C)	With noise reduction inlet			147.00	179.17					
B767-200/-200 ER	PW4060A						169.30				
B767-300	CF6-80C2B6F	With N1 modifier				178.29	185.10				
B767-300 & -300ER	CF6-80C2B2F					151.90					
B767-300 & -300ER	CF6-80C2B4					175.49	184.60				
B767-300 & -300ER	CF6-80C2B6					175.09	184.60				
B767-300 & -300ER	CF6-80C2B6 (fadec)	With N1 modifier				177.69	184.60				
B767-300 & -300ER	CF6-80C2B7F (fadec)						186.88				
B767-300 & -300ER	PW4056 (FB2B)						184.60				
B767-300 & -300ER	PW4056 PHASE III (FB2C)	With noise reduction inlet			149.00	186.88					
B767-300 & -300ER	PW4060 (FB2B)						184.60				
B767-300 & -300ER	PW4060 PHASE III (FB2C)	With noise reduction inlet			144.00	182.50	186.88				
B767-300 & -300ER	PW4062 PHASE III (FB2C)	With noise reduction inlet				174.00	186.88				
B767-300 & -300ER	RB211-524G					170.89	184.61				

Part 2 - Noise classification according to type - DEPARTURES

DEPARTURES	Aircraft	Engine	Remarks	Noise Level Band (EPNdB)									
				Quota Count	Maximum certificated take-off weight - tonnes								
					<84	84-86.9	87-89.9	90-92.9	93-95.9	96-98.9	99-101.9	>101.9	
EXEMP	QC/0.25	QC/0.5	QC/1	QC/2	QC/4	QC/8	QC/16						
B767-300 & -300ER	RB211-524H						170.69	184.61					
B767-400ER	CF6-80C2B8F							204.12					
B777-200	GE90-76B					229.52	242.67						
B777-200	GE90-85B						286.90						
B777-200	GE90-90B							286.90					
B777-200	GE90-94B						263.08						
B777-200	PW4077	At 77,000 sea level static thrust					242.67	246.75					
B777-200	Trent 877							247.21					
B777-200	Trent 884							289.33	294.84				
B777-200	Trent 895							297.56					
B777-200	PW4099						231.97	293.93	297.56				
B777-200	Trent 890							286.90					
B777-300	Trent 892							299.37					
B777-300ER	GE90-115B/115BL							351.53					
B787-8	Trent 1000-A					192.96	227.93						
B787-8	Trent 1000-A/01						219.54	227.93					
B787-8	Trent 1000-A/01	With main landing gear plugs				199.58	227.93						
B787-8	Trent 1000-C/01						219.54	227.93					
B787-8	Trent 1000-C/01	With main landing gear plugs				199.58	227.93						
B787-8	Trent 1000-E/01						192.96						
B787-8	Trent 1000-E/01	With main landing gear plugs				192.96							
B787-8	GEEx-1B64G03					181.44	227.93						
B787-8	GEEx-1B64G04						208.65	227.93					
B787-8	GEEx-1B64G04	With main landing gear plugs				181.44	227.93						
B787-8	GEEx-1B70G04						208.65	227.93					
B787-8	GEEx-1B70G04	With main landing gear plugs				181.44	227.93						
B787-9	Trent 1000-J2					192.78	252.65						
B787-9	Trent 1000-K2					192.78	252.65						
B787-9	GEEx-1B70/P2G01						238.14	252.65					
BAe 1-11 Series 200	Spey 506-14, A, AW or D	With mod 5320 Parts A, D & E								36.30			
BAe 1-11 Series 300	Spey 511-14 or -14W	With mod 5320 Parts A, B, D & E								40.60			
BAe 1-11 Series 400	Spey 511-14 or -14W	With mod 5320 Parts A, B, D & E								40.60			
BAe 1-11 Series 475	Spey 512-14DW	With mod 5320 Parts A, B, D & E									44.68		
BAe 1-11 Series 500	Spey 512-14 DW	With mod 5320 Parts A, B, D & E									47.40		
BAe 1-11 Series 510	Spey 512-14 E	With mod 5320 Parts A, B, D & E									43.55		
BAe 125-1000A/-1000B	PW305/PW305B		14.06										
BAe 125-700A/-700B (HS)	TFE-731-3-1H	Reverse thrust mod 256991						11.57					
BAe 125-700A/-700B (HS)	TFE-731-3-1H					11.57							
BAe 125-700B	TFE-731-5R-1H							11.57					
BAe 125-800	TFE-731-5R-1H		12.43										
BAe 125-800	TFE-731-5R-1H	With DH Reverser mod 259283				12.43							
BAe 125-800A/800B	TFE-731-5R-1H	With DH Reverser mod 259283	12.43										
BAe 125-800A/800B	TFE-731-5R-1H		12.43										
BAe 125-800XP	TFE-731-5BR-1H		12.70										
BAe 125 Series 1-(521) (HS)	Viper 521										9.62		
BAe 125 Series 1 (HS)	Viper 520										9.44		
BAe 125 Series 1A (HS)	TFE-731-3-1H	Mod 252605					9.84						
BAe 125 Series 1A (HS)	TFE-731-3-1H	Mod 252606				9.62							
BAe 125 Series 1B/R-522 (HS)	Viper 522										10.07		
BAe 125 Series 1B/S-522 (HS)	Viper 522										9.84		
BAe 125 Series 1B-522 (HS)	Viper 522										9.62		
BAe 125 Series 1B (HS)	Viper 521										9.62		
BAe 125 Series 3A (HS)	TFE-731-3-1H	Mod 252603					9.84						
BAe 125 Series 3A/RA (HS)	TFE-731-3-1H	Mod 252600				10.71							
BAe 125 Series 3B (HS)	Viper 522										9.84		
BAe 125 Series 3B/RA (HS)	Viper 522										10.34		
BAe 125 Series 3B/RC (HS)	Viper 522										10.71		
BAe 125 Series 400A (HS)	TFE-731-3-1H	Mod 252550				10.71							
BAe 125 Series 400B (HS)	Viper 522										10.57		
BAe 125 Series 403B (HS)	Viper 522										10.71		
BAe 125 Series 600A (HS)	TFE-731-3-1H	Mod 252468				11.57							
BAe 125 Series 600A and B (HS)	Viper 601-22	Mod 252405						11.57					
BAe 125 Series 600B (HS)	Viper 601-22											11.57	
BAe 125 Series F3B (HS)	TFE-731-3-1H	Eng. mod 252603				9.84							
BAe 125 Series F3B/RA	TFE-731-3-1H	Eng. mod 252551				10.71							









Part 2 - Noise classification according to type - DEPARTURES

DEPARTURES	Engine	Remarks	Maximum certificated take-off weight - tonnes									
			Noise Level Band (EPNdB)		<84	84-86.9	87-89.9	90-92.9	93-95.9	96-98.9	99-101.9	>101.9
			Quota Count	EXEMP	QC/0 25	QC/0 5	QC/1	QC/2	QC/4	QC/6	QC/16	
Aircraft	Engine	Remarks										
Gulfstream G-IV SP	TAY 611-8		33.83									
Gulfstream G-V	BR700-710A1-10			41.05								
Gulfstream G-V SP (G550)	BR700-710C4-11			41.28								
Gulfstream G-VI (G650)	BR700-725A1-12		45.18									
Gulfstream 200	P&W PW305A		16.08									
Gulfstream G150	Honeywell TFE731-40-AR-200G			11.83								
Gulfstream G280	Honeywell AS907-2-1G		17.96									
Guppy	Allison 501 D22C	Hamilton Standard 54H60-123/7111B-2 propeller					E					
Hawker 750	TFE731-5BR		12.25									
Hawker 850XP	TFE731-5BR		12.70									
Hawker 900XP	TFE731-5BR		12.70									
Hawker 4000	PW308A		17.92									
IAI 1124	TFE 731-3-1G			10.50								
IAI Astra SPX	TFE 731-40R-200G			11.18								
IL-18D	IVA1-20M									64.00		
IL-62M	D-30Ku	With noise suppressors								167.00		
IL-62M	D-30Ku										167.00	
IL-76T(TD)	D-30KPD-30KP 2 ser.)											170.00
IL-76TD-90 VD	PS-90A-76							195.00				
IL-96-300	PS-90A									250.00		
Learjet 23	CJ610-1/4							5.67				
Learjet 24	CJ610-1/4								5.90			
Learjet 24/24D	CJ610-6							6.12				
Learjet 24D	CJ610-6								6.12			
Learjet 24E	CJ610-6							5.85				
Learjet 24F	CJ610-6							6.12				
Learjet 24F-A	CJ610-6							5.67				
Learjet 25	CJ610-6									6.80		
Learjet 25 B/C/D/F XR	CJ610-6/8A									7.39		
Learjet 28/29	CJ610-8A									6.80		
Learjet 31A	TFE 731-2-3B			7.71								
Learjet 35/36	TFE 731-2-2B			8.16								
Learjet 35A	TFE 731-2-2B		8.04									
Learjet 35A/36A	TFE 731-2-2B		8.30									
Learjet 35A	TFE 731-2C			8.89								
Learjet 45	TFE731-20		9.20									
Learjet 45	TFE731-20R		9.30									
Learjet 45	TFE731-20AR-1B		9.75									
Learjet 45	TFE731-20BR-1B		9.52									
Learjet 55	TFE 731-3A-2B				9.51							
Learjet 60	PW305A		10.48									
Learjet M55	TFE 731-3A	Std nozzle			9.75							
Learjet M55	TFE 731-3A	With Aeronca thrust reverser			9.57							
Learjet M55C	TFE 731-3A-3AR	With reverser			9.75							
Learjet M55C	TFE 731-3A-3AR -3B	With reverser			9.75							
Lockheed L1011-1	RB211-22B							195.05				
Lockheed L1011-100	RB211-22B									211.37		
Lockheed L1011-200	RB211-524B									211.34		
Lockheed L1011-385-1-14 & -15	RB211-22B(+SB 72-8700)									215.00		
Lockheed L1011-385-1 -15	RB211-22B									211.37		
Lockheed L1011-385-1 -15 193T	RB211-22B								204.10			
Lockheed L1011-385-3	RB211-524B4									231.32		
Lockheed L1011-50	RB211-22B								204.12			
Lockheed L1011-500	RB211-524B									224.98		
Lockheed L1011-500	RB211-524B3									228.60		
Lockheed L1011-500	RB211-524B4									231.33		
Lockheed 1329-23E (Jetstar)	TFE 731-31E					20.07						
Lockheed L 188A	Allison 501D-13					51.26						
Lockheed L 188C	Allison 501D-13					51.26	52.62					
Lockheed L382G Hercules	Allison 501-D22A	Military version C130					70.31					
MD-11	CF6-80C2D1F									280.30		
MD-11	PW4460									280.30		
MD-11 Freighter	PW4462									285.99		
MD-80	JT8D-209							63.50				
MD-80	JT8D-217							63.50	72.80			

Part 2 - Noise classification according to type - DEPARTURES

DEPARTURES	Aircraft	Engine	Remarks	Maximum certificated take-off weight - tonnes									
				Noise Level Band (EPNdB)	<84	84-85.9	87-89.9	90-92.9	93-95.9	96-98.9	99-101.9	>101.9	
				Quota Count	EXEMP	QC/0.25	QC/0.5	QC/1	QC/2	QC/4	QC/8	QC/16	
MD-80	JT8D-217A						63.50	72.80					
MD-80	JT8D-217C						63.50	72.80					
MD-82	JT8D-217C						67.80						
MD-82	JT8D-219						67.80						
MD-83	JT8D-219						63.50	72.80					
MD-87	JT8D-217A						67.80						
MD-87	JT8D-217C						67.80						
MD-87	JT8D-219						63.50	67.80					
MD-88	JT8D-219							72.58					
MD-90-30	IAE V2525-D5					70.76							
MD 900 Explorer	PW 206A			2.64									
Mooney M20J	Lycoming IO-360-A3B6D			1.22									
Mooney M20K	Teledyne TSIO-360-GB1			1.32									
Partenavia P68B	LYC IO-360-A1B6			1.99									
Piaggio P-180	PW PT6A-66			4.94									
Pilatus PC-12/45	PT6A-67B	With Hartzell Prop HC-E4A-3D/E10477K		4.50									
Pilatus PC-12/47	PT6A-67B	With Hartzell Prop HC-E4A-3D/E10477K		4.74									
Piper PA-23-250	LYC IO-540-C4B5			2.36									
Piper PA-E23-250	LYC IO-540-C4B5			2.36									
Piper PA-28-161	LYC O-320-D3G	Sensenich 74DM6-0-60		1.06									
Piper PA-28-236	LYC O-540-J3A5D	Hartzell HC-F2YR-1F/F#8468A-4R Propeller		1.36									
Piper PA-31-350	LYC TIO-540-J2BD			3.18									
Piper PA-31	LYC TIO-540-2AC			2.95									
Piper PA-34-200T	Lycoming TSIO-360-E	Seneca II		2.09									
Piper PA-34-200T	Teledyne TSIO-360-E	Seneca II		2.09									
Piper PA-34-220T	Continental TSIO-360-KB	Seneca III		2.13									
Piper PA-60-600P	LYC IO-540-S1A5/P1A5			2.72									
Puma (ECF) SA-330F/G	Turbomeca IVA								E				
Raytheon 390 Premier 1	Williams-Rolls FJ44-2A			5.67									
Rockwell Commander 690C	Garrett TPE 331-625-4K	Turbo Commander		4.68									
SAAB SF340A	GE CT7-5A	Full power			12.25								
SAAB SF340A	GE CT7-5A2			12.93									
SAAB SF340A	GE CT7-7E	Full power		12.25									
SAAB 2000	Allison AE 2100A			23.00									
Sabreliner 65	TFE 731-3R					10.89							
Sabreliner 80	CF700-2D-2						10.60						
Shorts SD330	P&W PT6A-45R				10.39								
Shorts SD360	P&W PT6A-65AR				12.00								
Shorts SD360	P&W PT6A-65R				12.00								
Shorts SD360-300	P&W PT6A-67R			12.29									
Sikorsky S76A	Allison 250-C30S								E				
Sikorsky S76B	P&W PT6B-36A								E				
Sikorsky S76C+	Turbomeca Arriel 2S1						5.31						
Sikorsky S-92A	GE-CT7-8									12.02			
SN-601 Corvette	JT15D-4			7.00									
Sukhoi RRJ-95B	Sam146-1S17	Superjet 100			45.88								
Swearingen Merlin III	TPE331-11U-601G			E									
Transall C160	RR Tyne MK22								49.15				
TU-154M	D-30 Ku-154 (SAM)	With noise suppressors								104.00			
TU-204-100	PS-90A							103.00					
TU-204-120C	RR RB211-535E4							103.00					
TU-204C	PS-90A							103.00					
Yak-40	A1-25					16.00							
Yak-42	D-36	With noise suppressors							54.00				

E - QC estimated

## APPENDIX 2

### WAKE TURBULENCE POLICY

Wake Turbulence is caused by spiralling movements of air from each wingtip on an aircraft. These movements are known as wake vortices and they trail behind the aircraft and descend as they rotate. Normally vortices will dissipate in the air. However on very rare occasions the vortices can strike roofs causing tiles to become displaced in the immediate vicinity of the airport.

Wake turbulence damage is usually verified by its pattern of damage. Only traditional slate or tiled roofs can be damaged and this damage is usually in the centre of the roof. The tiles are usually lifted and rotated, unlike damage usually caused by bad weather or winds.

The policy to be adopted for the airport will operate in the same way as established wake turbulence policies at other UK airports and can be summarised as follows:

- Anyone suspecting their property has been damaged by wake turbulence should call the airport operator immediately and if possible make a note of the time and date that the incident occurred. This will help to confirm whether the damage was caused by an aircraft.
- Within two days of the call, an independent surveyor accompanied by an experienced airport expert will visit to assess the damage.
- If urgent repairs are required immediately the property holder should take photographs of the damage to provide to the airport operator and the independent surveyor.
- If the damage is verified as being a result of wake turbulence caused by operations at the airport, arrangements will be made for repairs and in appropriate instances, for the roof to be strengthened.