Sydney Kingsford Smith

IATA/ICAO CODE: SYD/YSSY

CITY: Sydney COUNTRY: Australia

AIRPORT CONTACT

Information updated by the airport 5/2011

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Airport Web Site: www.sydneyairport.com.au
Web site for information about the airport curfew:

https://secure.infrastructure.gov.au/webforms/curfews/sydney.aspx (curfew)

ELEVATION: 21 ft.

RUNWAY INFORMATION					
Orientation	Length (m)	Displaced Threshold (m)	Glide Slope(deg)	Width (m)	
16R/34L	3962	-	-	45	
16L/34R	2438	-	-	45	
07/25	2530	-	-	45	

NOISE ABATEMENT PROCEDURES

New departure flight paths were in effect starting in December 1997 and arrivals implemented in 1998. These maximize flights over water and more widely spread the impact of noise across Sydney. (See preferential runway below for more information).

1. Fair Sharing - flights which must pass over residential areas will be more fairly shared across Sydney

The Targets

- to the South over Botany Bay 55%
- to the North 17%
- to the East 13%
- to the West 15%

- 2. Respite residents will have time off from fight movements.
- 3. Non Residential Flight Paths the plan will see as many flights as possible directed over the water and nonresidential areas.
- 4. Non Reciprocal Flight Paths whenever possible, residents will not be exposed to noise from both landings and departures.

The flight plan includes two new northerly departure tracks for jet aircraft using Runway 34 R and one new departure track for propeller aircraft. Jets with destinations such as Melbourne will use the new track (the 075 radial) which takes them over the coast south of Coogee (Flight path A). Jets headed for closer northern destinations such as Brisbane will use the new north east track (the 026 radial) which takes them over Sydney harbor (Flight path B). Non-jet aircraft headed for ports such as Newcastle, will fly towards the north over the city (Flight path C).

To Northwest, North and East Directions:

Jets departing for northern ports, such as Cairns and Darwin, will maintain a straight path until they reach a height of 1500 feet. They will then turn towards the northwest and track towards Richmond (Flight path D). Aircraft to easterly destination will then turn towards the east when they are 12 nautical miles from the airport.

To West and South Destinations:

Jet aircraft departing for ports such as Adelaide and Perth will maintain a straight path until they reach a height of 800 feet. They will then turn to the northwest and track towards Katoomba (Flight path E). Aircraft will make further turns towards their destinations at points outside the range of the map.

Generally, these departure bands are likely to be used at anytime of the non curfew period, particularly during the peak hours of operation. Additionally, some long-haul aircraft will take off to the north and use these flight paths when other, shorter-haul aircraft will be using other flight paths.

Aircraft types: Flight paths D and E - Up to long-haul Boeing 747.

Penalties for violating flight corridors (\$25K)

ICAO jet noise abatement climb procedures apply when using the following runways:

Runway 16R 2300-0600 HR local time (See AIP ENR 1-5 para 11.2.6 below) Runway 34L & 34R at other times (See AIP ENR 1-5 para 11.1.7 below)

- 11.1.5 Noise abatement departure procedures will be developed by the operator for each airplane type in accordance wit the requirements if ICAO Procedures for Air Navigation Services Aircraft Operations (PANS-OPS) Vol. I, Part V, Chapter 3 and are subject to approval by the Civil Aviation Safety Authority.
- 11.1.6 Noise abatement departure procedures must be used by jet propelled aircraft from the locations and runways identified under the NAPs published in DAP East and West. The departure procedure to be used on a specific departure should satisfy the noise abatement objectives of the airport operator in alleviating noise either close to the airport or distant from the airport. Examples of such procedures are given in PANS-OPS Vol. I, Part V, Chapter 3 (NAPD1 and NAPD2).

Note1: that NAPD1 and 2 are examples. The actual procedures developed by the operator for a specific aircraft type may vary from these examples provided the minimum requirement of the procedures are met.

- **Note 2:** The power settings to be used subsequent to the failure or shutdown of an engine or any other apparent loss of performance, at any stage in the takeoff or noise abatement climb, are at the discretion of the pilot-in-command, and noise abatement considerations no longer apply.
- 11.1.7 As an alternative to the procedures detailed in paragraph 11.1.6, operators of aircraft that have engines with a by-pass ratio greater than 3.5 may use the procedure below:
- a. climb at V2+10KT to V2+20KT or body angle limit speed; and
- b. maintain takeoff power to a height above the airport of 1,000FT:
- c. then maintaining a positive rate of climb, accelerate to zero flap minimum safe maneuvering speed (VZF) retracting flap on schedule;
- d. then reduce to normal climb power/thrust; and

Note: For airplanes with slow flap retraction, reduce power/thrust at an intermediate flap setting.

- e. continue climb at not greater than VZF+10KT to a height above the airport of 3,000FT
- f. accelerate smoothly to en route climb speed; and
- g. maintain runway heading unless required to do otherwise in accordance with a SID or specific ATC instruction.

CONTINUOUS DESCENT ARRIVAL (CDA) - NONE

AIRPORT CURFEWS

See Curfew at Sydney Airport Summary of Key Features.

The curfew at the airport <u>"The Sydney Curfew Act of 1995"</u>, and the Sydney Airport Curfew Regulations restrict aircraft movements between the hours of 2300 and 0600 local time. Additional restrictions apply, daily between 2245 and 2300 local time and on Saturday and Sunday between 0600 and 0700 and 2200 and 2300 local time. There are severe penalties for unauthorized operations and between the times and for failure to provide information or the provision of false information. (The Act provides for criminal prosecution and sentencing/fines up to AUD\$550,000 for curfew breaches).

The restrictions shown below apply to all aircraft including propeller driven aircraft over 34,000 KG. There are some concessions for specified classes of airplanes and those are listed in the paragraph titled "Concessions for International Aircraft".

Group of Aircraft that can Operate:

Only the following airplanes may take-off or land at the airport between 2300-0600 local time.

- 1. Propeller driven aircraft with a MTOW of 34,000KG or less that meet Chapter 3, 5, 6 or 10 noise levels in Annex 16 Chapter 3.
- 2. Other airplanes are: BAe 125-800B, Beech 400A, Beechjet 400A, Hawker 400XP, Canadiar Challenger 300/601/604, Cessna 680, Citation 500/525/550/560/650/750, Falcon 10/50/50EX/200/900C/900EX/2000/2000EX, *Global Express, *Global 5000, Gulfstream IV/SP/G300/G350/G400/G450/G500/G550, *Gulfstream V, Hawker 800XP/850XP/Horizon, HS 125-700B, Learjet 31A/35/36/40/45/A5XR/60, Legacy EMB-

- 135, Mitsubishi MU-300, Premier 1/1A and Westwind 1124.
- * Must have a maximum take-off weight of 34,000kgs or less.

Available Runways – ALL aircraft permitted to operate during the curfew period, and during the restricted times during the curfew period, must use the following runways, unless a dispensation for use of a different runway has been granted by the Minister of Infrastructure and Transport, or in the case of an emergency.

For Landing:

- 1. 2300-0600 (Daily) only runway 34L
- 2. 0600-0700 and 2200-2300(Sat and Sun), only runway 34L unless ATC assigns another runway.

For Takeoff:

- 1. 2300-0600(Daily) only 16R, south of the intersection of taxiway G.
- 2. 2245-2300(Daily) only 16R or 16L
- 3. 0600-0700 and 2200-2245(Sat and Sun) only runway 16R or 16L unless ATC assigns another runway.

Note: For airplanes that receive taxi clearance before the curfew period but depart after the commencement of the curfew, those airplanes may use the full length of the runway and are not required to reposition south of the intersection of Runway 16R and taxiway G.

4. If an airplane receives taxi clearance before 2300, it may takeoff on runway 16R even if the departure time is within the curfew period.

Exemptions:

Airplanes exempt from the curfew are being used for:

Search and rescue, medical emergency, natural disaster, pilot declared an in-flight emergency, airplane has insufficient fuel to fly to another airport, to ensure safety or security of an airplane or person or to avoid damage to property.

Dispensations:

Dispensation from the curfew period may be granted by the Delegate of the Minister for Transport for exceptional circumstances. Exceptional circumstances criteria are defined as (1) immediate in origin; (2) unforeseen; and (3) unable to be met by alternative arrangements. All 3 criteria must be met before a dispensation will be considered.

The Australian Government's Office of Transport Security is the Delegate for assessing dispensation applications. It is able to be contacted on 1300 307 288 or transport.security@infrastructure.gov.au

Reverse Thrust During the Curfew Period

Pilots of aircraft must use the minimum reverse thrust necessary for the safe operation of the aircraft. Pilots of aircraft shall not plan to land at the airport if any un serviceability in the aircraft would mean that reverse thrust greater than reverse idle must be used.

If the pilot of an aircraft uses reverse thrust that is greater than idle reverse thrust the operator mist, no later than 7 days after landing, give a reverse thrust return including the following details:

- the date and time
- the aircraft registration, operator and type
- the engine type and
- the reason why reverse thrust greater then at idle power was used

The return is to be lodged with Airservices Australia a the following address:

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Manager, Environment Monitoring Airservices Australia GPO Box 357 Canberra ACT 2601 or faxed to +61 2 6268 4201

Missed Approaches During the Curfew Period

If the pilot of an aircraft landing at the airport during a curfew period makes a missed approach, the operator must, no later than 7 days after the attempted landing, give a missed approach return including the following details:

- date and time
- the aircraft registration, operator and type
- the reason for the missed approach, including the wind conditions prevailing at the time and
- the downwind limits for landing as specified in the airplane's flight manual.

The return is to be lodged with Airservices Australia a the following address:

Manager, Environment Monitoring Airservices Australia GPO Box 357 Canberra ACT 2601 or faxed to +61 6268 4201

Classification of Aircraft

The operator is responsible for classifying an aircraft in accordance with ICAO Annex 16. Operators may obtain this information by writing to the Manager, Environment Monitoring at the address shown above.

Concessions for International Passenger Aircraft:

Operators of International Passenger aircraft are allowed to operate an airplane engaged in international operations if that airplane meets the noise level requirements of ICAO Annex 16 Chapter 3 and are engaged in transportation passengers or persons generally for hire or reward or from the airport, provided that the total number of flights for all operators does not exceed the following:

(a) no more than 24 landings between 0500-0600 local time in any one week Written applications for these quota allocations in accordance with Section 12 of the *Sydney Airport Curfew Act 1995* can be sent to:

Aircraft Noise Management Department of Infrastructure and Transport GPO Box 594 CANBERRA ACT 2601

Slot allocation to operate within the quota can be obtained from:

Airport Coordination Australia, Pty. Ltd. 3/1227 Sydney International Terminal PO Box 332

Mascot NSW 1460 Phone: (02) 9313 5469 FAX: (02) 9313 4210

Email: coordaus@magna.com.au

Designated Flight Corridors Introduction

The Air navigation (Airport Flight Corridors) Regulations regulate flight corridors used by jet aircraft at the airport. The Regulations contain provisions for penalties for contravention or failure to comply with the relevant designated flight corridor.

Use of Flight Corridors

Arriving and departing jet aircraft must fly within and not deviate from, the appropriate designated flight corridor for the runway, except when instructed or approved otherwise by ATC for safety reasons. During curfew hours, this requirement applies to al aircraft.

Designated Flight Corridors

The airport Jet Instrument Arrival and Departure flight corridors designated for the runways are promulgated in AIP Australia NAP pages 6-7

PREFERENTIAL RUNWAYS

The Preferential Runway System has been revised to "share noise". The following is the preferred runways during specific hours. Please note that this is complex and maps which show the "mode" are available upon request.

the "mode" are available u	apon request.		
Monday to Friday	1. Curfew - Departures 16R/Arrivals 34L (Mode 1)		
0600 to 0700	1. SODPROPS - Departures 16L/Arrivals 34L 2. Shoulder Curfew procedures - Departures 16L&R/Arrivals 34L (Mode 4) 3. Departures 25/Arrivals 34L&R (Mode 7) or Departures 16L&R/Arrivals 07 (Mode 14A) 4. 34 (Mode 9) or 16 (Mode 10) 5. 07 (Mode 12) or 25 (Mode 13)		
0700 to 2245/2300	1. SODPROPS - Departures 16L/Arrivals 34L 2. Departures 16L&R/Arrivals 07 (Mode 14A), or Departures 25/Arrivals 07 (Mode 7), or Departures 16L&R/Arrivals 25 (Mode 5) 3. 34 (Mode 9) or 16 (Mode 10) 4. 07 (Mode 12) or 25 (Mode 13)		
2245 to 2300	1. SODPROPS - Departures 16L or 16R (Mandatory)/Arrivals 34L 2. Departures 16L or 16R (Mandatory)/Arrivals 34L (Mode 4) unless there would be significant delays to either departing or arriving aircraft or traffic somplexity requires a variation or weather conditions preclude the use of 34L. 3. Departures 16L&R/Arrivals (Mode 5) or Departures 16L&R/Arrivals 07 (Mode 14A) 4. 16 (Mode 10)		
Saturday and Sunday			
2300 to 0600	1. Curfew - Departures 16L/Arrivals 34L (Mode 1)		
0600 to 0700 Saturday	1. SODPROPS - Departures 16L/Arrivals 34L 2. Shoulder Curfew procedures - Departures 16L&R/Arrivals 34L (Mode 4)		

0600 to 0800 Sunday	13. Departures 16L&R/Arrivals 25 (Mode 5), or Departures 16L&R/Arrivals 07 (Mode 14A) Departures 25/Arrivals 34L&R (Mode 7) 4. 34 (Mode 9) or 16 (Mode 10) 5. 07 (Mode 12) or 25 (Mode 13)	
0700 to 2200 Saturday	1. SODPROPS - Departures 16L/Arrivals 34L 2. Departures 16L&R/Arrivals 07 (Mode 14A), or	
0800 to 2200	Departures 25/Arrivals 34L&R (Mode 7) or Departures 16L&R/Arrivals 25 (Mode 5) 3. 34 (Mode 9) or 25 (Mode 10) 4. 07 (Mode 12 or 25 (Mode 13)	
2200 to 2245	1. SODPROPS - Departures 16L/Arrivals 34L 2. Departures 16L&R/Arrivlas 34L (Mode 4) unless there would be significant delays to either departing or arriving aircraft or traffic complexity requires a variation or weather conditions are not suitable 3. Departures 16L&R/Arrivals 25 (Mode 5), or 4. Departures 16L&R/Arrivals 07 (Mode 14A) or 5. Departures 25/Arrivals 34L&R (Mode 7) 6. 34 (Mode 9) or 16 (Mode 10) 7. 07 (Mode 12) or 25 (Mode 13)	
2245 to 2300	1. SODPROPS - Departure 16L or R (Mandatory)/Arrivals 34L 2. Departures 16L or R (Mandatory)/Arrivals 34L (Mode 4) unless there would be significant delays to either departing or arriving aircraft or traffic complexity requires a variation or weather conditions preclude the use of 34L. 3. Departures 16L&R/Arrivals (Mode 5) or Departures 16L&R/Arrivals 07 (Mode 14A) 4. 16 (Mode 10)	

OPERATING QUOTA

See curfews

ENGINE RUN-UP RESTRICTIONS - NONE

APU OPERATING RESTRICTIONS - NONE

NOISE BUDGET RESTRICTIONS - NONE

NOISE SURCHARGE - NONE

NOISE MITIGATION/LAND USE PLANNING PROGRAM INFORMATION

Type of Program	Date Implemented	Status
	1994	The Sydney Airport Noise Amelioration Programme (SANAP) has involved;
		- the voluntary acquisition of residential properties and one church within the 40 Australian Noise Exposure Forecast zone,

Sound Insulation (Residences and Public Buildings)		 the insulation of residences within the 30 ANEF zone (adjusted along 'natural' boundaries which are defined as streets, parks, culverts and commercial or industrial areas), and the insulation of public buildings (schools and colleges, preschools, hospitals/health care facilities and churches) within the 25 ANEF zone. The program achieved insulation of: 4083 residential properties; 151 residences and 1 public building acquired (4 residences refused offer); 27 schools; 29 child care centre's; 7 Nursing homes; and 36 Churches.
Purchase Assurance for Homeowners Located Within the Airport Noise Contours	none	_
Avigation Easements	none	1-
Zoning Laws	none	1-
Real Estate/Property Disclosure Laws	none	-
Acquire Land for Noise Compatibility to date	1994	- the voluntary acquisition of residential properties and one church within the 40 Australian Noise Exposure Forecast zone.
Population within each noise contour level relative to aircraft operations	none	-
Airport Noise Contour Overlay Maps	-	See Document
Total Cost of Noise Mitigation Programs to Date	1995-2004	\$421.2 million spent to June 2006 on both residential and public building insulation.
Source of Noise Mitigation Program Funding for Aircraft Noise	-	Aircraft Noise Levy Act 1995 \$421.2 million collected June 2006, Levy ceased on 1 July 2006.

NOISE MONITORING SYSTEM

<u>Click here</u> for all noise monitoring system information including a current map for the airport.

FLIGHT TRACK MONITORING SYSTEM

The airport has a flight track monitoring system

NOISE LEVEL LIMITS - NONE

CHAPTER 2 RESTRICTIONS

Chapter 2 airplanes are prohibited from operating at airports in Australia as of April 1, 2002.

CHAPTER 2 PHASEOUT

Australia Phase out of Chapter 2 airplanes complete as of April 1, 2002.

CHAPTER 3 RESTRICTIONS

Marginally compliant Chapter 3 airplanes restricted

Large, marginally noise compliant chapter 3 aircraft are restricted from operating at at Sydney, Brisbane, Melbourne, Perth, Adelaide, Hobart, Darwin, Cairns, Gold Coast, Essendon, Newcastle (Williamtown), Avalon and Canberra airports from 1 September 2010.

Further information on these noise operating restrictions is contained in AIP Australia (General – Section 1.2 – Sub section 1.14)