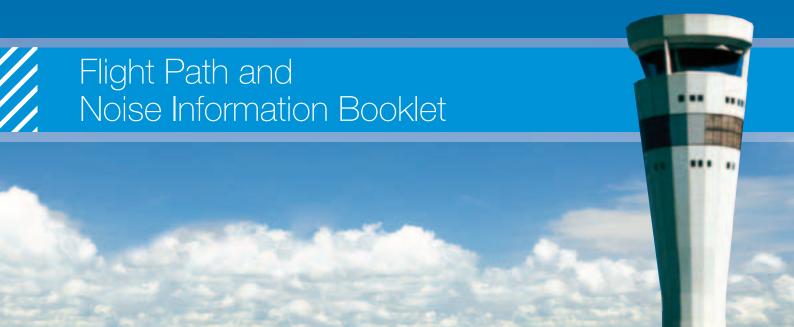


### New Parallel Runway Project

Illustrating flight paths planned to be used for the New Parallel Runway and likely noise effects

Prepared for the community by Brisbane Airport Corporation to complement information in the Draft Environmental Impact Statement and Major Development Plan for the New Parallel Runway project.





### The New Parallel Runway Project



This artist's impression has been prepared on behalf of Brisbane Airport Corporation (BAC) and relates to its proposal for a New Parallel Runway at Brisbane Airport.

This graphic is representative of the proposal at the time of producing the Draft EIS/MDP for public comment. It also illustrates conceptual future aviation facilities.

The clear overlay showing Brisbane suburban boundaries can be removed and used to place over the Flight Path and Noise Charts in this document.

Important Notice: This information has been prepared by, or on behalf of, Brisbane Airport Corporation Pty Limited (BAC). While care has been taken to ensure that the information is accurate and up-to-date, it is provided for information purposes only and is based upon BAC's knowledge at the date of preparing the information. You should be aware that some of the information (a) is illustrative or conceptual only; (b) includes statements as to future matters; and (c) has been based on informed opinions and assumptions. BAC makes no representation or warranty (a) as to the accuracy of this information; or (b) as to the likelihood of any future matter. You should not rely on this information to make any decision, and, to the extent permitted by law, you exclude BAC from all liability (including in negligence) for any use of, or reliance on, this information by any party.

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#### Introduction

Brisbane Airport Corporation (BAC) is proposing to build a new runway, located parallel to and 2,000 m west of the existing main runway, creating a runway system that will be able to cope with increasing demand generated by a growing population, an expanding business and industry sector, and growth in tourism. Conservative forecasting shows that in order to cope with this growth in demand, the New Parallel Runway (NPR) will need to be operational around 2015.

A new parallel runway, complementing the existing main runway, has been shown in Airport-related documents for more than 20 years. Now BAC has commenced detailed planning to ensure that the runway can be delivered by the time it will be needed.

As part of this planning process BAC has prepared a comprehensive Draft Environmental Impact Statement and Major Development Plan (Draft EIS/MDP) for public comment. This Draft EIS/MDP, which has been prepared in four volumes, carefully sets out the expected impacts of the NPR. The volumes focus on a wide range of environmental, social and economic aspects of the project, which have been prescribed in Guidelines set by the Australian Government and which are likely to be of interest to the community.

The Volumes which make up the Draft EIS/MDP include:

Volume A: Project Need and Background

Volume B: Airport and Surrounds

Volume C: Middle Banks, Moreton Bay

Volume D: Airspace

This Flight Path and Noise Information Booklet has been designed to complement the information contained in Volume D: Airspace of the Draft EIS/MDP relating to aircraft flight paths and likely noise effects.

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# About the Flight Path and Noise Information Booklet

This booklet contains information important to understanding flight paths and the likely noise effects of those flight paths on suburbs in Brisbane.

Through a range of illustrated maps known as **Flight Path and Noise Charts**, you will be able to look at flight paths used in 2005, which will continue to be used until the opening of the NPR in 2015. The proposed flight paths for the NPR, once in operation, will also be shown.

In addition to showing flight paths, the **Flight Path and Noise Charts** include valuable information about how the flight paths will be used by aircraft, as well as the likely noise effects, shown through the use of contour lines overlaid on each map.

While all information is overlaid on a map of Brisbane, the perforated clear page showing the boundaries of Brisbane suburbs can be removed from the front of this booklet and held over each **Flight Path and Noise Chart** so you can clearly see where your suburb is located in relation to the flight paths.

#### How the Flight Paths have been developed

The flight paths shown in this booklet have been produced by examining the published flight paths (usually shown as a single line on a map) and the spread of actual flight paths used by pilots. This information is then collected into paths which reflect where the majority of aircraft fly for a range of different circumstances that are outlined later in this booklet.

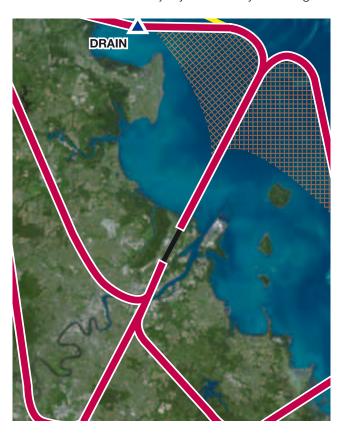


Figure 1: Published arrival flight paths.

#### **About published flight paths**

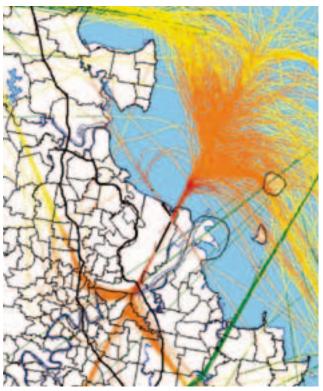
Flight paths are highways in the sky. They define three-dimensional routes that aircraft use to arrive at or depart from an Airport. They are developed in accordance with standards established by organisations including the International Civil Aviation Organization (ICAO), Civil Aviation Safety Authority (CASA) and the Airspace and Environment Regulatory Unit (AERU), and are carefully formulated to ensure the safe and efficient operation of aircraft.

Flight paths are the means through which air traffic is controlled and are based on Standard Arrival Routes, known as STARs, and Standard Instrument Departure Routes, known as SIDs. Together SIDs and STARs form the basis for the flight paths that are used by all pilots and airlines.

These flight paths are used by pilots to negotiate entry into and out of Brisbane airspace, under the direction of air traffic control. By using a number of navigational tools that are established for each flight path, pilots can fly into and out of Brisbane in adverse weather conditions, even if they have never flown to Brisbane before.

**Figure 1** shows how a published flight path appears.





**Figure 2:** This image depicts the spread of actual arrival flight paths. (Source: Airservices Australia)

**Figure 3:** This image shows how arrival and departure flight paths are depicted in this booklet.

#### **About actual flight paths**

While published flight paths can be depicted as single lines on a map as per **Figure 1**, they allow for variance, because it is not always possible for aircraft to follow a particular flight path precisely along the same line. In practice, individual flight paths tend to vary from the published flight path by up to several kilometres. This occurs for a range of reasons such as weather conditions, requirements for aircraft separation or through the use of approved visual approaches, typically used when weather conditions are good and traffic allows.

**Figure 2** illustrates how actual flight paths flown by pilots on arrival into Brisbane vary from a published flight path.

Note: More information on the principles used to develop flight paths can be found on the inside back cover of this booklet.

#### About the flight paths in this booklet

Therefore, to more accurately illustrate the potential area within which planes may fly into and out of Brisbane, information on the published flight paths is combined with the information on actual flight paths flown, to create the style of flight paths shown in this booklet.

Note: While existing flight paths will be used wherever possible, some changes will be required when the NPR is in operation. The flight paths for the NPR system in 2015 and 2035 that are shown in this booklet and in the Draft EIS/MDP have been developed using the proposed new flight paths and an understanding of how aircraft historically spread across these flight paths.

# Understanding the Flight Path and Noise Charts

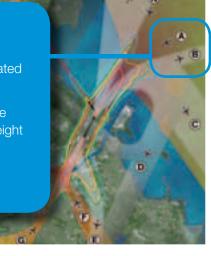
There are three primary elements to each Flight Path and Noise Chart. Here we have highlighted the primary elements using a sample Flight Path and Noise Chart.



### Flight paths – appearing as coloured zones overlaid on a map of Brisbane

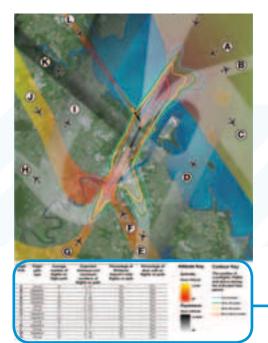
The flight paths in this booklet, each denoted by a capital letter, show three important pieces of information:

- Whether aircraft are using the flight path for arrival or departure, illustrated by the direction of the aircraft icon and the colour scheme of the path.
- The approximate height of aircraft as they come into or out of Brisbane shown through a colour gradient that can be interpreted by using a height legend on the chart.
- The potential extent or width of the flight path.





## Data Tables – appearing at the bottom of each Flight Path and Noise Chart



At the bottom of each Flight Path and Noise Chart you will find specific details about how the flight paths will be used, including:

- The average number of times per day that a plane uses or is likely to use the flight path.
- The expected minimum and maximum number of flights that are likely to use the flight path.
- The percentage of all jet aircraft flights that this path carries or is likely to carry during the period of time being reported on.
- The number of days within the period of time being reported on when the flight path experiences or is likely to experience no flights.





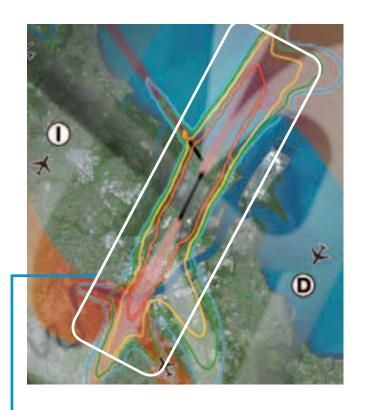
### N70 Noise Contours – appearing as contour lines overlaid on the flight paths

Over the past 10 years, a system of describing and predicting aircraft noise has been developed by the Australian Government's Department of Transport and Regional Services (DOTARS) in consultation with industry and the community. This work focused on finding ways to provide information in a form that can be more easily understood by the community, and which provided a comprehensive description of the nature of aircraft noise exposure at any point. The N70 contour or diagram was a product of this work.

An N70 diagram, illustrated as contour lines over a map of Brisbane, shows the area within which a stated number of flights generating noise of 70 decibels or more occur in a specified period of time.

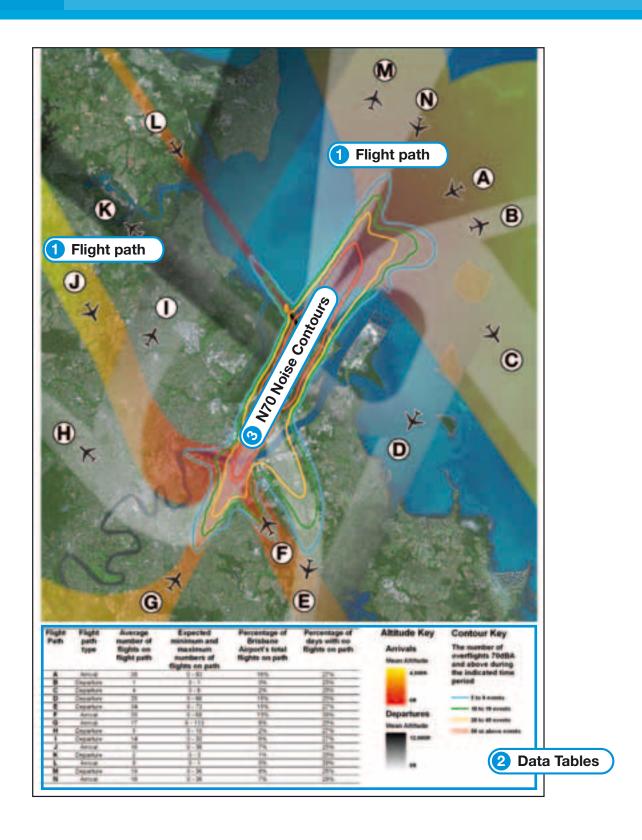
An aircraft noise event of 70 decibels is one that may disturb conversation, television viewing or using the telephone inside a house with open windows.

The N70 contour lines will show you where overflights generating noise of 70 decibels or more are likely to occur, the predicted number of such overflights that are likely to occur and the time period when these overflights are likely to occur.



The colour of the contour line relates directly to the number of flights generating noise of 70 decibels or more that are likely to occur within its boundaries. As you get closer to Brisbane Airport more events of 70 decibels or greater are experienced.

### Example Flight Path and Noise Chart





#### **Example**

Here we have interpreted the example Flight Path and Noise Chart, shown opposite:



#### Flight paths

By looking at the direction the aircraft icon is heading and the colour of the flight path in relation to the legend on the chart, you can see whether the flight path is used for arriving or departing aircraft. On this Flight Path and Noise Chart you can see that flight path A is used by aircraft arriving into Brisbane, while flight path B is used by aircraft departing Brisbane.

By following the change in the gradient of the colour on the flight path and by using the height legend, you can see the approximate height of aircraft on each flight path as they arrive at or depart from Brisbane Airport.

You can also see the area within the flight path that aircraft may fly by looking at the width of the path.

2

#### **Data Tables**

By following the data table at the bottom of the chart you can read across to see more information about what happened on each of the flight paths. The 'typical busy day' this flight path represents is a summer, weekday (Monday - Friday), day (6am to 6pm), which, in this booklet, is noted at the top of each page.

Using flight path A as an example, the data table sample shows you:

- An average of 38 aircraft used this arrival flight path.
- The expected range in the number of aircraft using this flight path is 0 83.
- 16 percent of all aircraft using flight paths into and out of Brisbane used this flight path.
- This flight path is expected not to be used 27 percent of the time.

3

#### **N70 Noise Contours and Contour Key**

The coloured Contour Lines show the geographic extent of noise of 70 decibels or more that is generated by aircraft, while the Contour Key (shown bottom right corner) shows the number of overflights of 70 decibels or more that are likely to occur within the contour line boundaries. By analysing the sample opposite you can see that:

- Between 5 and 9 overflights of 70 decibels or more occur in the area between the outer blue contour line and the green contour line.
- Between 10 and 19 overflights occur in the area between the green contour line and the yellow contour line.
- Between 20 and 49 overflights occur in the area between the yellow contour line and the red contour line.
- 50 or more overflights occur within the area bounded by the red contour line.

# About the Range of Flight Path and Noise Charts

#### About the range of Flight Path and Noise Charts that appear in this booklet

Flight paths and associated noise effects vary according to the season, the day of the week and the time of day. Therefore this booklet provides **Flight Path and Noise Charts** for 'typical busy days' for the following scenarios.

Summer (November – March)	Winter (April – October)
Weekday day (Monday to Friday 6am to 6pm)	Weekday day (Monday to Friday 6am to 6pm)
Weekday evening (Monday to Friday 6pm to 10pm)	Weekday evening (Monday to Friday 6pm to 10pm)
Weekday night (Monday to Friday 10pm to 6am)	Weekday night (Monday to Friday 10pm to 6am)
Weekend day (Saturday and Sunday 6am to 6pm)	Weekend day (Saturday and Sunday 6am to 6pm)
Weekend evening (Saturday and Sunday 6pm to 10pm)	Weekend evening (Saturday and Sunday 6pm to 10pm)
Weekend night (Saturday and Sunday 10pm to 6am)	Weekend night (Saturday and Sunday 10pm to 6am)

The 'typical busy day' scenarios outlined above are shown in this booklet for a range of years, which will enable you to compare flight paths, while also being able to see how the use of the flight paths and noise effects will change over time:

- 2005 (actual flight paths)
- 2015 (prior to the opening of the NPR)
- 2015 (after the opening of the NPR)
- 2035 (with the full runway system in operation)

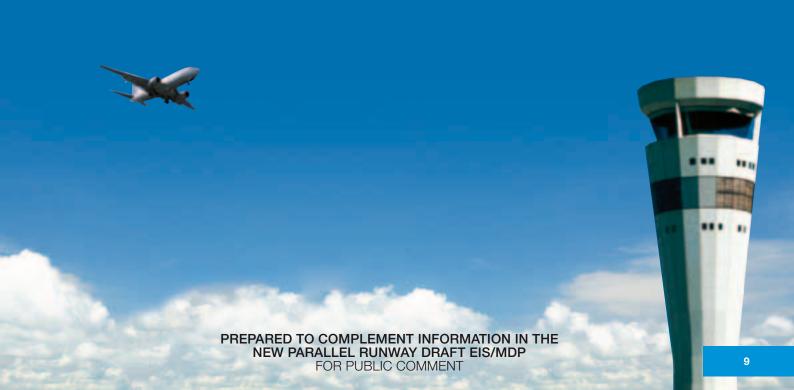
In all, there are 48 different **Flight Path and Noise Charts** in this booklet. In addition to those contained within this booklet, 'typical busy day' scenarios have also been generated for a number of other scenarios. These can be found in the Appendices to Volume D of the Draft EIS/MDP.



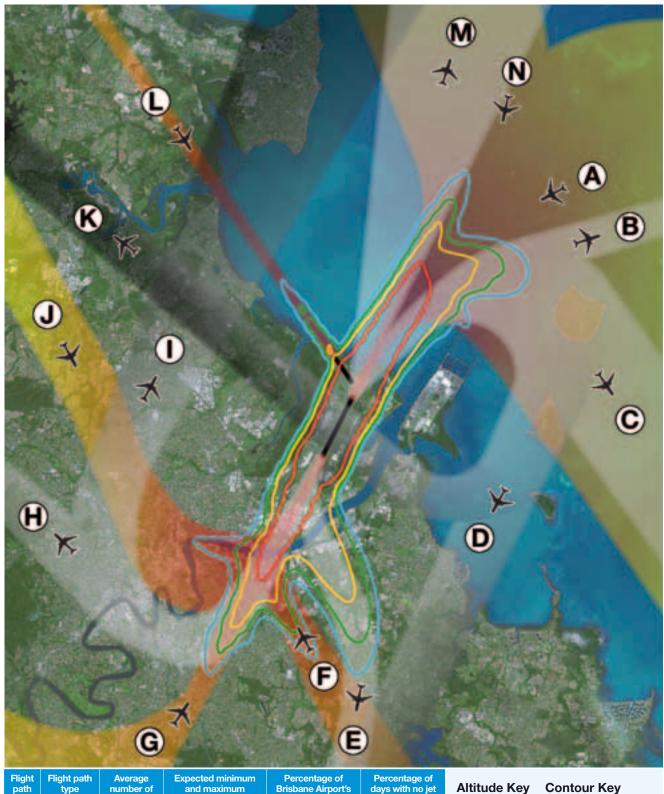
### Flight Path and Noise Charts

Illustrating flight paths planned to be used for the New Parallel Runway and likely noise effects:

- 2005 Current Runway
- 2015 without the NPR
- 2015 with the NPR
- 2035 with the NPR



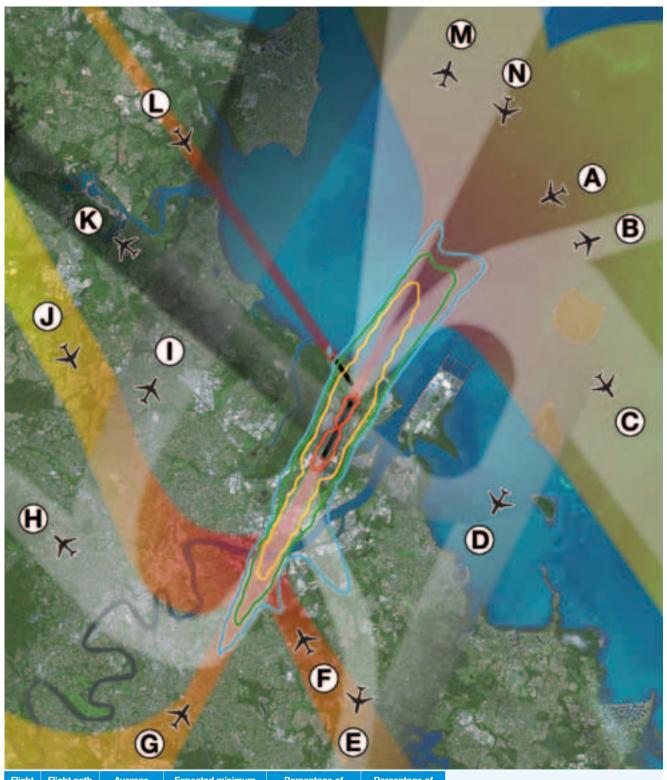
#### 2005 Current Runway — Summer Weekday Day Monday to Friday 6.00am – 6.00pm



Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals Mean Altitude	Contour Key The number of
Α	Arrival	38	0 - 83	16%	27%		overflights of 70dB(A) and above during the
В	Departure	1	0 - 1	0%	25%	4,500 ft	
С	Departure	4	0 - 8	2%	25%		indicated time period
D	Departure	35	0 - 66	15%	25%		
E	Departure	34	0 - 73	15%	27%	0 ft	5 to 9 overflights
F	Arrival	30	0 - 69	13%	30%	O II	10 to 19 overflights
G	Arrival	17	0 - 113	8%	25%	Departures	20 to 49 overflights
Н	Departure	5	0 - 10	2%	27%	Mean Altitude	ů .
I	Departure	14	0 - 30	6%	27%	12,000 ft	50 or more overflights
J	Arrival	16	0 - 36	7%	25%	12,000 11	Overnights
K	Departure	2	0 - 3	1%	25%		
L	Arrival	<1	0 - 1	<1%	29%		
M	Departure	19	0 - 36	8%	25%	0 ft	
N	Arrival	16	0 - 36	7%	28%	3.0	

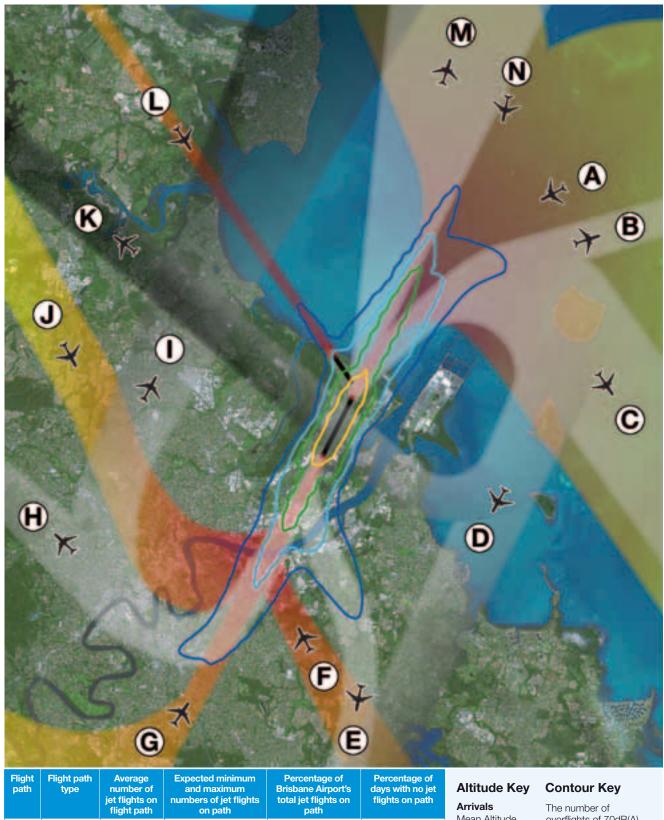
## 2005 Current Runway - Summer Weekday Evening Monday to Friday 6.00pm - 10.00pm



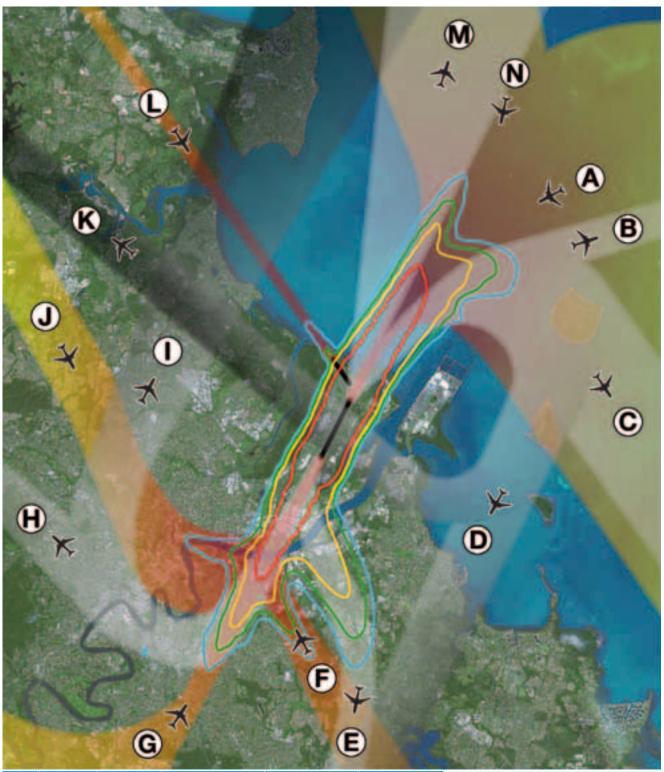


Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key	Contour Key The number of
Α	Arrival	10	0 - 27	14%	55%	Mean Altitude	overflights of 70dB(A)
В	Departure	<1	0 - 1	<1%	33%	4,500 ft	and above during the
С	Departure	1	0 - 2	2%	33%		indicated time period
D	Departure	13	0 - 20	18%	31%		
Е	Departure	8	0 - 22	11%	57%	O ft	5 to 9 overflights
F	Arrival	9	0 - 20	12%	44%	O IL	10 to 19 overflights
G	Arrival	10	0 - 36	14%	31%	Departures	20 to 49 overflights
Н	Departure	2	0 - 4	2%	55%	Mean Altitude	•
I	Departure	3	0 - 8	4%	56%	12,000 ft	50 or more overflights
J	Arrival	5	0 - 11	7%	31%	12,000 11	Overnights
K	Departure	1	0 - 2	2%	31%		
L	Arrival	<1	0 - 1	<1%	55%		
M	Departure	6	0 - 10	9%	31%	0 ft	
N	Arrival	4	0 - 11	5%	55%		

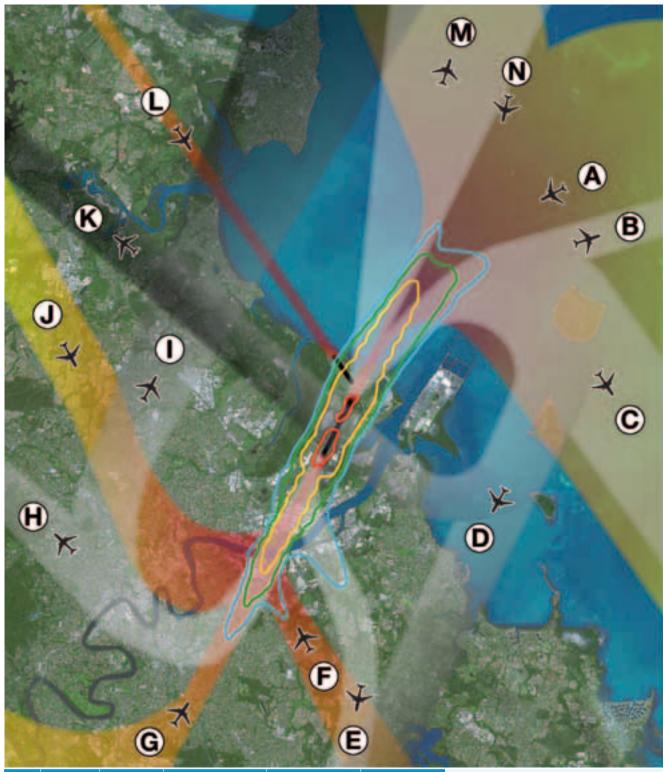
### 2005 Current Runway - Summer Weekday Night Monday to Friday 10.00pm - 6.00am



				STATE OF THE PARTY			
Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals	Contour Key The number of
Α	Arrival	4	0 - 6	15%	8%	Mean Altitude	overflights of 70dB(A)
В	Departure		Inactive at	this time		4,500 ft	and above during the
С	Departure		Inactive at	this time			indicated time period
D	Departure	3	0 - 8	12%	45%		
Е	Departure	5	0 - 8	21%	27%	O ft	2 to 4 overflights
F	Arrival	1	0 - 4	4%	55%	O IL	5 to 9 overflights
G	Arrival	1	0 - 9	5%	36%	Departures	10 to 19 overflights
Н	Departure	2	0 - 4	8%	20%	Mean Altitude	· ·
I	Departure	1	0 - 3	4%	52%	12,000 ft	20 to 49 overflights
J	Arrival	1	0 - 4	5%	37%	12,000 11	50 or more
K	Departure	1	0 - 2	5%	29%		overflights
L	Arrival	<1	0 - 1	<1%	23%		
М	Departure	3	0 - 6	12%	10%	0 ft	
N	Arrival	2	0 - 4	8%	22%	J	

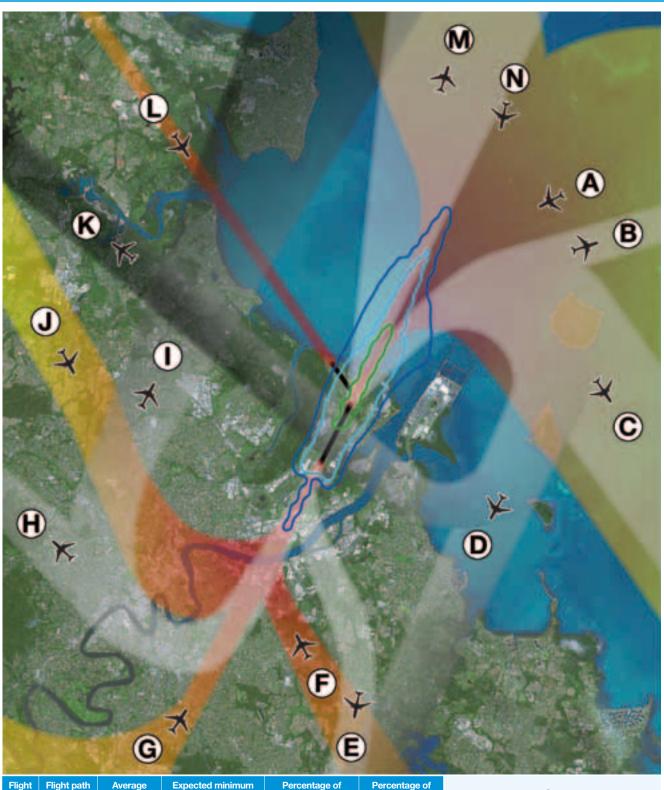


Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals	Contour Key The number of
Α	Arrival	33	0 - 75	14%	23%	Mean Altitude	overflights of 70dB(A)
В	Departure	1	0 - 1	<1%	27%	4,500 ft	and above during the indicated time period
С	Departure	3	0 - 6	2%	27%		indicated time period
D	Departure	34	0 - 63	15%	24%		
E	Departure	32	0 - 69	14%	23%	0 ft	5 to 9 overflights
F	Arrival	29	0 - 61	13%	27%	O IL	10 to 19 overflights
G	Arrival	14	0 - 103	6%	24%	Departures	20 to 49 overflights
Н	Departure	7	0 - 15	3%	23%	Mean Altitude	•
I	Departure	16	0 - 33	7%	23%	12,000 ft	50 or more overflights
J	Arrival	18	0 - 40	8%	25%	12,000 11	Overnights
K	Departure	3	0 - 6	1%	24%		
L	Arrival	1	0 - 1	<1%	25%		
M	Departure	22	0 - 41	10%	24%	O ft	
N	Arrival	19	0 - 40	8%	24%		



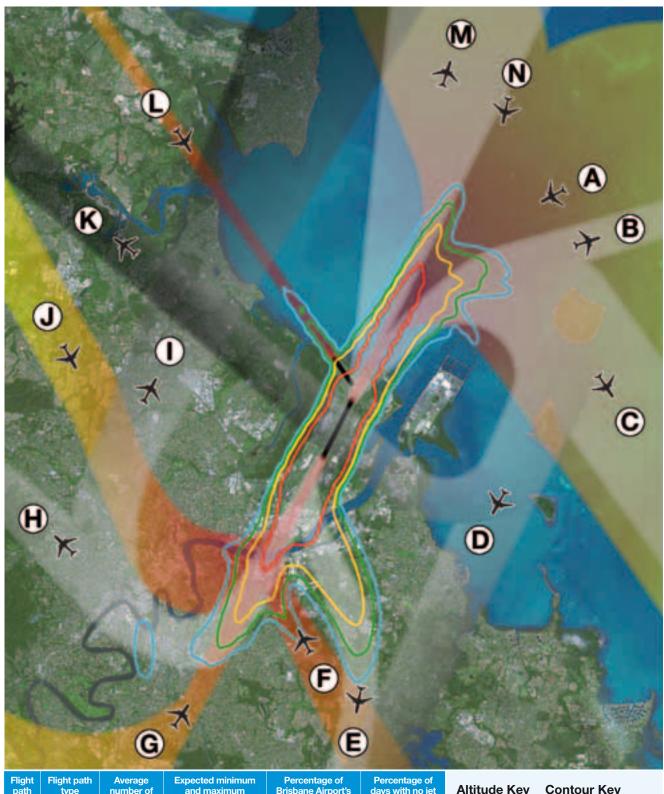
Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals Mean Altitude	Contour Key The number of
Α	Arrival	9	0 - 27	13%	56%		overflights of 70dB(A) and above during the
В	Departure	<1	0 - 1	<1%	34%	4,500 ft	
С	Departure	1	0 - 1	1%	34%		indicated time period
D	Departure	12	0 - 19	17%	32%		
E	Departure	7	0 - 20	10%	58%	0 ft	5 to 9 overflights
F	Arrival	10	0 - 20	14%	42%	O II	10 to 19 overflights
G	Arrival	7	0 - 34	10%	31%	Departures	20 to 49 overflights
Н	Departure	2	0 - 5	3%	56%	Mean Altitude	ŭ .
I	Departure	4	0 - 10	5%	56%	12,000 ft	50 or more overflights
J	Arrival	5	0 - 10	7%	32%	12,000 11	Overnights
K	Departure	1	0 - 2	2%	32%		
L	Arrival	<1	0 - 1	<1%	56%		
M	Departure	8	0 - 13	12%	32%	0 ft	
N	Arrival	3	0 - 10	5%	56%	3.1	

## 2005 Current Runway — Summer Weekend Night Saturday and Sunday 10.00pm – 6.00am



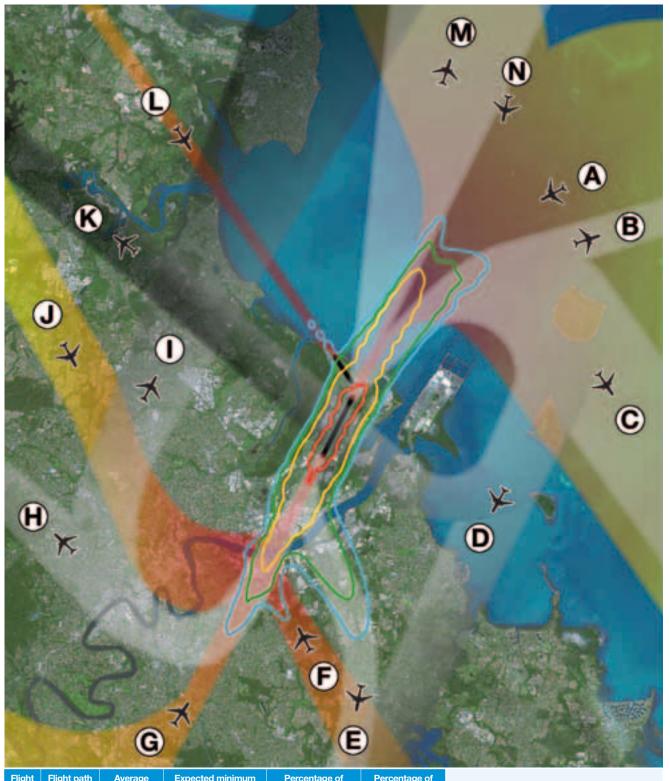
Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals	Contour Key The number of
Α	Arrival	3	1 - 4	24%	0%	Mean Altitude	overflights of 70dB(A) and above during the
В	Departure	<1	0 - 1	<1%	82%	4,500 ft	
С	Departure	1	0 - 1	6%	11%		indicated time period
D	Departure	2	0 - 3	16%	13%		
E	Departure	<1	0 - 4	4%	78%	O ft	2 to 4 overflights
F	Arrival	<1	0 - 2	2%	80%	O IL	5 to 9 overflights
G	Arrival	<1	0 - 5	3%	66%	Departures	10 to 19 overflights
Н	Departure	<1	0 - 2	1%	77%	Mean Altitude	ŭ
I	Departure	<1	0 - 1	1%	89%	12,000 ft	20 to 49 overflights
J	Arrival	1	0 - 3	5%	38%	12,000 11	50 or more
K	Departure	<1	0 - 1	2%	1%		overflights
L	Arrival	<1	0 - 1	<1%	51%		
M	Departure	3	0 - 3	20%	0%	0 ft	
N	Arrival	2	1 - 4	16%	0%	J	

### 2005 Current Runway - Winter Weekday Day Monday to Friday 6.00am - 6.00pm



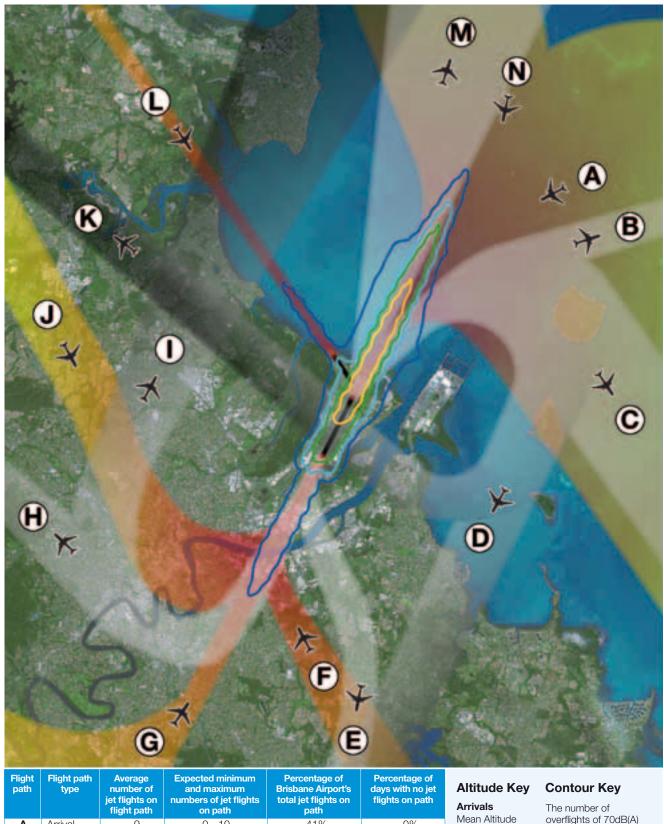
Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals Mean Altitude	Contour Key The number of
Α	Arrival	50	0 - 78	22%	9%		overflights of 70dB(A) and above during the
В	Departure	<1	0 - 1	<1%	53%	4,500 ft	
С	Departure	2	0 - 6	1%	53%		indicated time period
D	Departure	21	0 - 67	9%	42%		
E	Departure	50	0 - 73	22%	9%	0 ft	5 to 9 overflights
F	Arrival	20	0 - 64	9%	45%	O II	10 to 19 overflights
G	Arrival	7	0 - 108	3%	42%	Departures	20 to 49 overflights
Н	Departure	7	0 - 11	3%	9%	Mean Altitude	ů .
I	Departure	22	0 - 32	10%	9%	12,000 ft	50 or more overflights
J	Arrival	10	0 - 36	5%	42%	12,000 11	Overnights
K	Departure	1	0 - 3	1%	42%		
L	Arrival	1	0 - 1	<1%	9%		
M	Departure	13	0 - 39	6%	42%	0 ft	
N	Arrival	24	0 - 36	11%	9%	3.0	





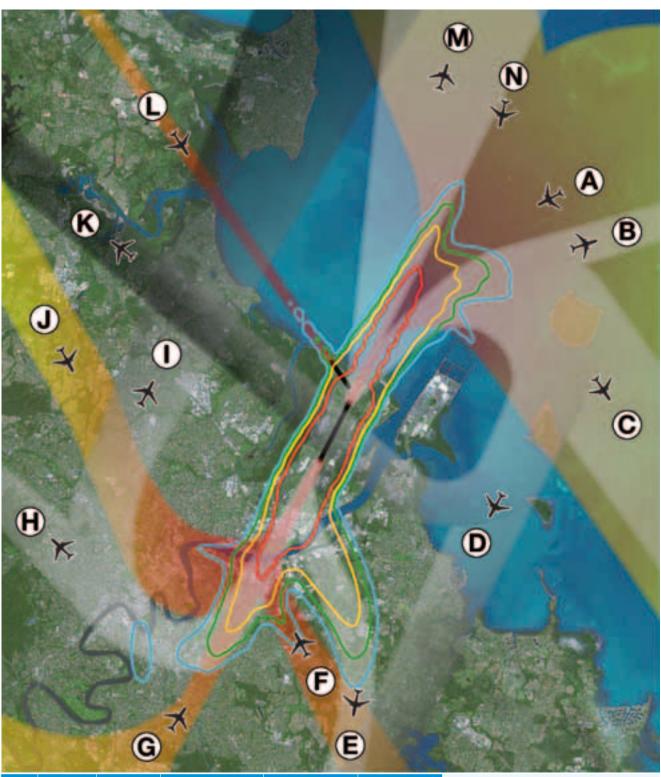
Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals	Contour Key The number of
Α	Arrival	17	0 - 32	19%	41%	Mean Altitude	overflights of 70dB(A)
В	Departure	<1	0 - 1	<1%	51%	4,500 ft	and above during the
С	Departure	2	0 - 4	2%	51%		indicated time period
D	Departure	12	0 - 27	14%	49%		
E	Departure	17	0 - 31	19%	41%	O ft	5 to 9 overflights
F	Arrival	11	0 - 26	12%	54%	O IL	10 to 19 overflights
G	Arrival	5	0 - 43	5%	49%	Departures	20 to 49 overflights
Н	Departure	2	0 - 4	3%	41%	Mean Altitude	•
I	Departure	4	0 - 7	4%	45%	12,000 ft	50 or more overflights
J	Arrival	6	0 - 13	6%	49%	12,000 11	Overnights
K	Departure	1	0 - 2	1%	49%		
L	Arrival	<1	0 - 1	<1%	41%		
M	Departure	4	0 - 9	5%	49%	0 ft	
N	Arrival	7	0 - 14	8%	41%		

### 2005 Current Runway - Winter Weekday Night Monday to Friday 10.00pm - 6.00am

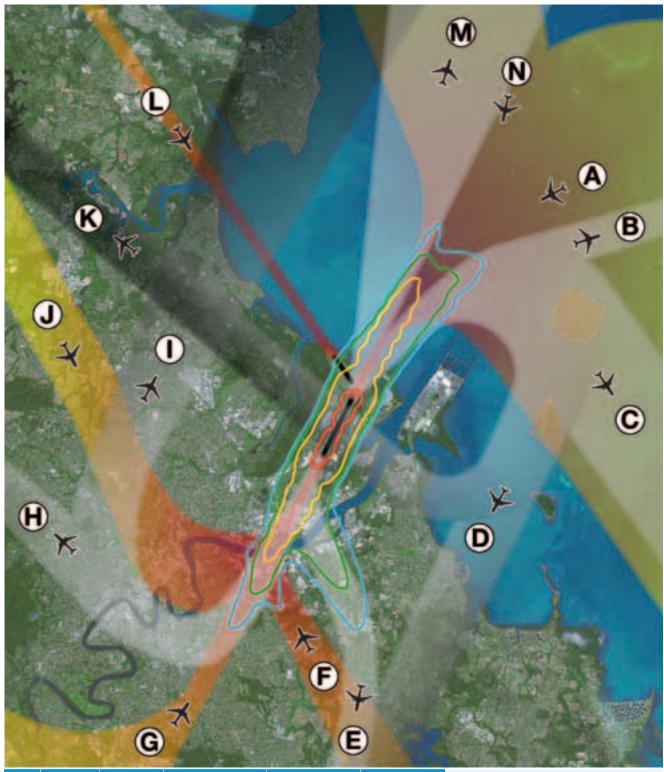


		F - 12 (10)		TATAL SECTION AND ADDRESS OF THE PARTY OF TH			THE MAKE
Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key	Contour Key The number of
Α	Arrival	9	0 - 10	41%	0%	Mean Altitude	overflights of 70dB(A)
В	Departure	<1	0 - 1	<1%	94%	4,500 ft	and above during the
С	Departure	1	0 - 1	4%	12%		indicated time period
D	Departure	1	0 - 1	4%	13%		
Е	Departure	<1	0 - 2	1%	86%	O ft	2 to 4 overflights
F	Arrival	1	0 - 8	3%	59%	O IL	5 to 9 overflights
G	Arrival	1	0 - 13	3%	56%	Departures	10 to 19 overflights
Н	Departure	<1	0 - 3	2%	36%	Mean Altitude	· ·
ı	Departure	1	0 - 2	3%	37%	12,000 ft	20 to 49 overflights
J	Arrival	1	0 - 4	3%	58%	12,000 11	50 or more
K	Departure	<1	0 - 2	1%	3%		overflights
L	Arrival	<1	0 - 1	<1%	36%		
M	Departure	4	0 - 5	18%	2%	0 ft	
N	Arrival	4	0 - 4	17%	1%	J 11	

### 2005 Current Runway — Winter Weekend Day Saturday and Sunday 6.00am – 6.00pm

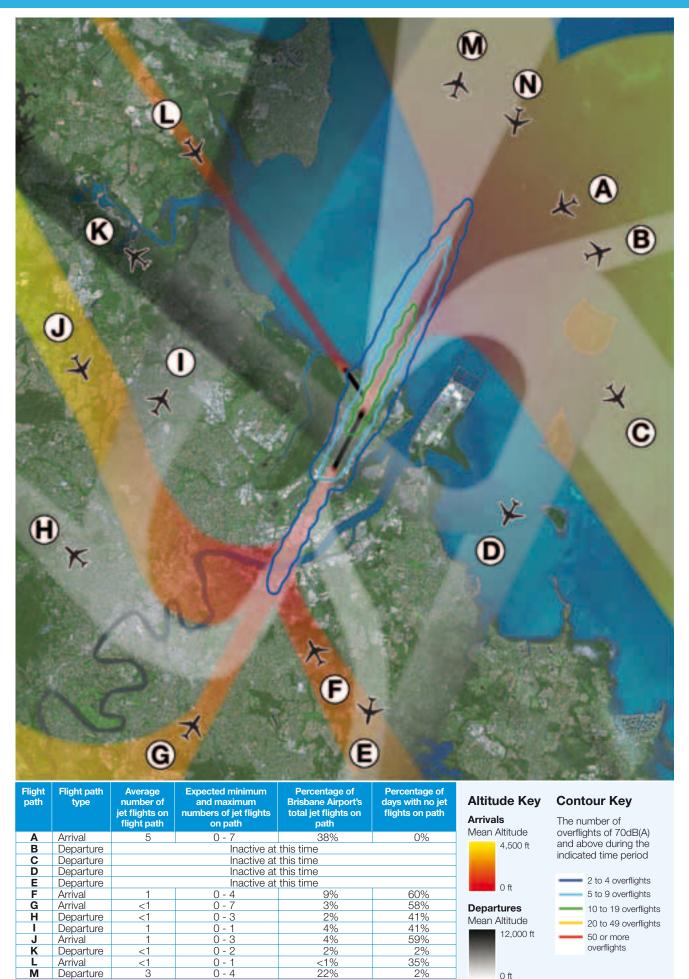


Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals	Contour Key The number of
Α	Arrival	46	0 - 76	20%	11%	Mean Altitude	overflights of 70dB(A)
В	Departure	<1	0 - 1	<1%	52%	4,500 ft	and above during the
С	Departure	2	0 - 6	1%	52%		indicated time period
D	Departure	24	0 - 67	10%	38%		
Е	Departure	47	0 - 73	21%	11%	O ft	5 to 9 overflights
F	Arrival	21	0 - 60	9%	40%	O IL	10 to 19 overflights
G	Arrival	6	0 - 96	3%	38%	Departures	20 to 49 overflights
Н	Departure	9	0 - 14	4%	11%	Mean Altitude	· ·
I	Departure	22	0 - 33	10%	11%	12,000 ft	50 or more overflights
J	Arrival	11	0 - 34	5%	38%	12,000 11	Overnights
K	Departure	2	0 - 5	1%	38%		
L	Arrival	1	0 - 1	<1%	11%		
M	Departure	14	0 - 41	6%	38%	0 ft	
N	Arrival	22	0 - 35	10%	11%	J	



Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals Mean Altitude	Contour Key The number of
Α	Arrival	14	0 - 29	19%	39%		overflights of 70dB(A)
В	Departure	<1	0 - 1	<1%	48%	4,500 ft	and above during the
С	Departure	2	0 - 4	3%	48%		indicated time period
D	Departure	11	0 - 24	15%	47%		
E	Departure	15	0 - 28	19%	39%	0 ft	5 to 9 overflights
F	Arrival	10	0 - 22	13%	50%	O II	10 to 19 overflights
G	Arrival	4	0 - 37	5%	47%	Departures	20 to 49 overflights
Н	Departure	2	0 - 4	3%	39%	Mean Altitude	ů .
I	Departure	3	0 - 6	4%	42%	12,000 ft	50 or more overflights
J	Arrival	5	0 - 10	6%	47%	12,000 11	Overnights
K	Departure	1	0 - 2	1%	47%		
L	Arrival	<1	0 - 1	<1%	39%		
M	Departure	4	0 - 8	5%	47%	0 ft	
N	Arrival	5	0 - 11	7%	39%	3.0	

## 2005 Current Runway — Winter Weekend Night Saturday and Sunday 10.00pm – 6.00am



15%

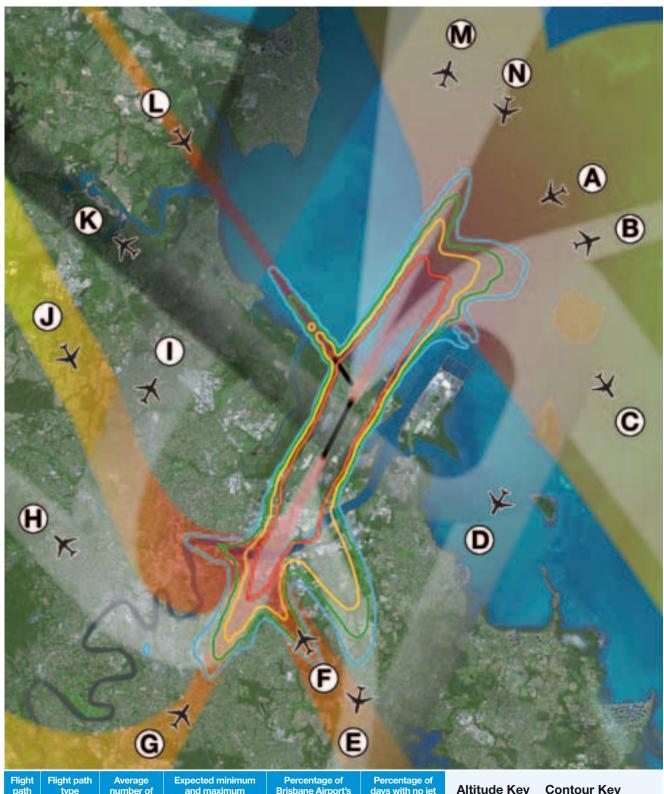
0 - 3

Arrival

0 ft

1%

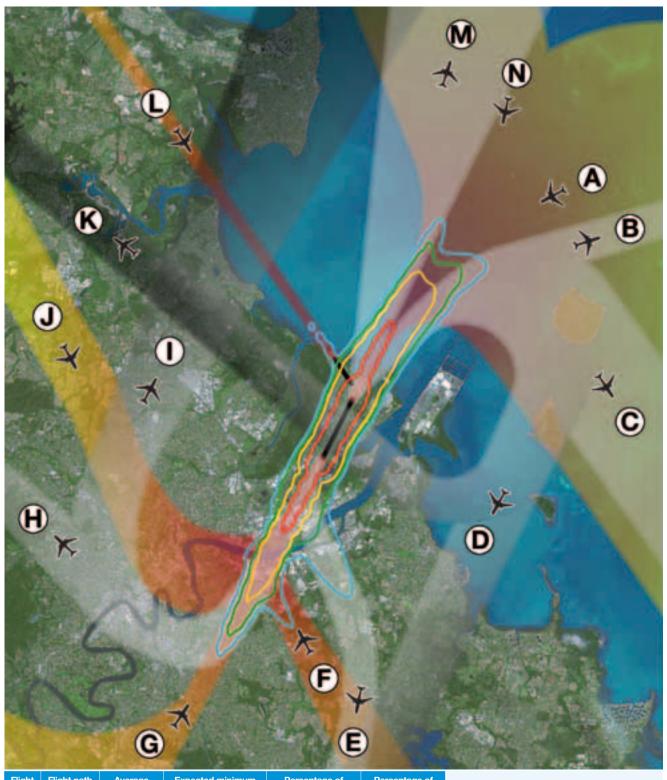
### 2015 Without the NPR — Summer Weekday Day Monday to Friday 6.00am — 6.00pm



Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals Mean Altitude	Contour Key The number of
Α	Arrival	60	0 - 133	16%	27%		overflights of 70dB(A)
В	Departure	1	0 - 2	<1%	25%	4,500 ft	and above during the
С	Departure	7	0 - 13	2%	25%		indicated time period
D	Departure	59	0 - 110	16%	25%		
E	Departure	56	0 - 122	15%	27%	0 ft	5 to 9 overflights
F	Arrival	46	0 - 108	12%	30%	O IL	10 to 19 overflights
G	Arrival	28	0 - 177	8%	25%	Departures	20 to 49 overflights
Н	Departure	9	0 - 19	2%	27%	Mean Altitude	ů .
	Departure	21	0 - 47	6%	27%		50 or more overflights
J	Arrival	23	0 - 53	6%	25%	12,000 ft	Overnights
K	Departure	3	0 - 6	1%	25%		
L	Arrival	1	0 - 2	<1%	28%		
M	Departure	31	0 - 57	8%	25%	0 ft	
N	Arrival	25	0 - 54	7%	28%	3.0	

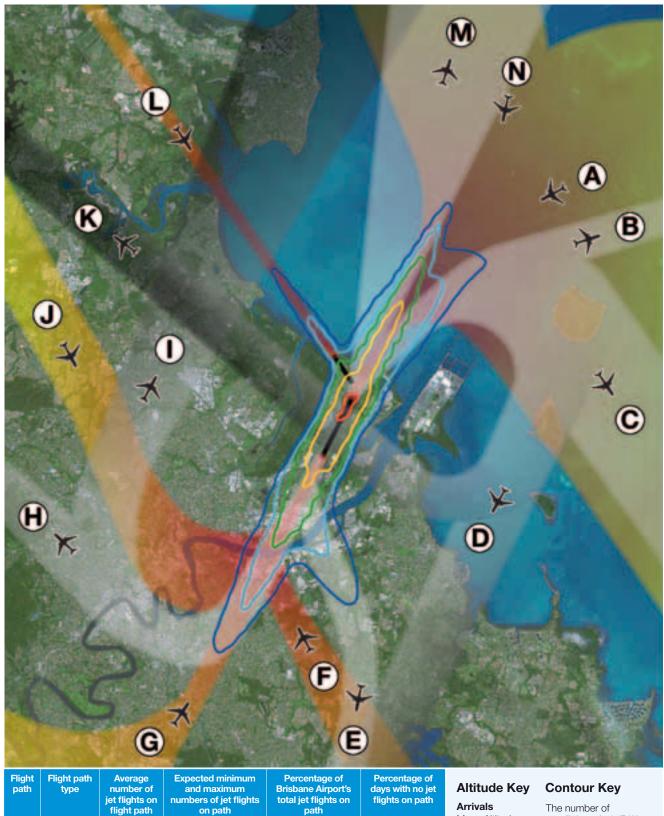
### 2015 Without the NPR — Summer Weekday Evening Monday to Friday 6.00pm — 10.00pm





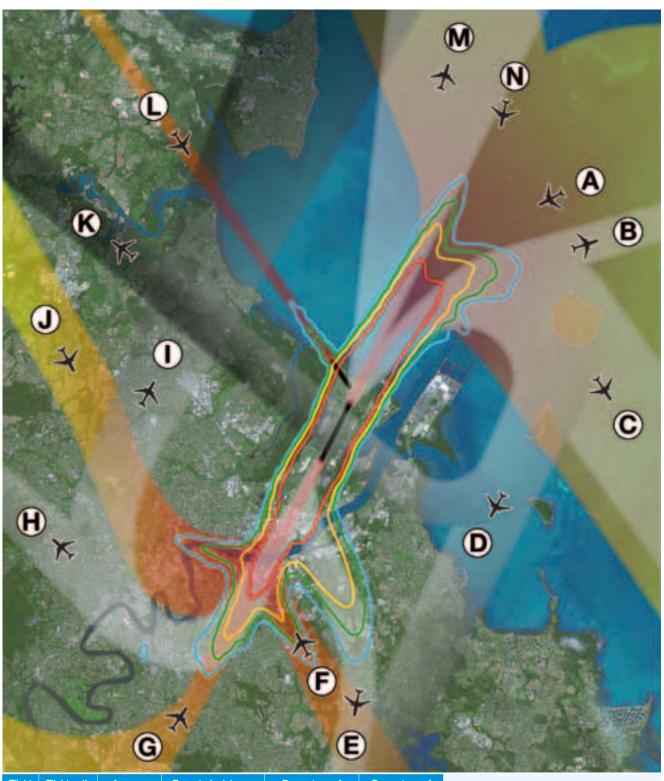
Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals	Contour Key The number of
Α	Arrival	16	0 - 46	15%	55%	Mean Altitude	overflights of 70dB(A)
В	Departure	<1	0 - 1	<1%	34%	4,500 ft	and above during the
С	Departure	1	0 - 1	1%	34%		indicated time period
D	Departure	19	0 - 30	17%	31%		
Е	Departure	11	0 - 30	10%	55%	O ft	5 to 9 overflights
F	Arrival	15	0 - 34	13%	44%	O IL	10 to 19 overflights
G	Arrival	16	0 - 57	14%	31%	Departures	20 to 49 overflights
Н	Departure	4	0 - 10	3%	55%	Mean Altitude	•
I	Departure	5	0 - 13	4%	56%	12,000 ft	50 or more overflights
J	Arrival	6	0 - 14	6%	31%	12,000 11	Overnights
K	Departure	3	0 - 5	3%	31%		
L	Arrival	<1	0 - 1	<1%	55%		
M	Departure	12	0 - 18	10%	31%	0 ft	
N	Arrival	5	0 - 15	4%	55%		

## 2015 Without the NPR — Summer Weekday Night Monday to Friday 10.00pm — 6.00am



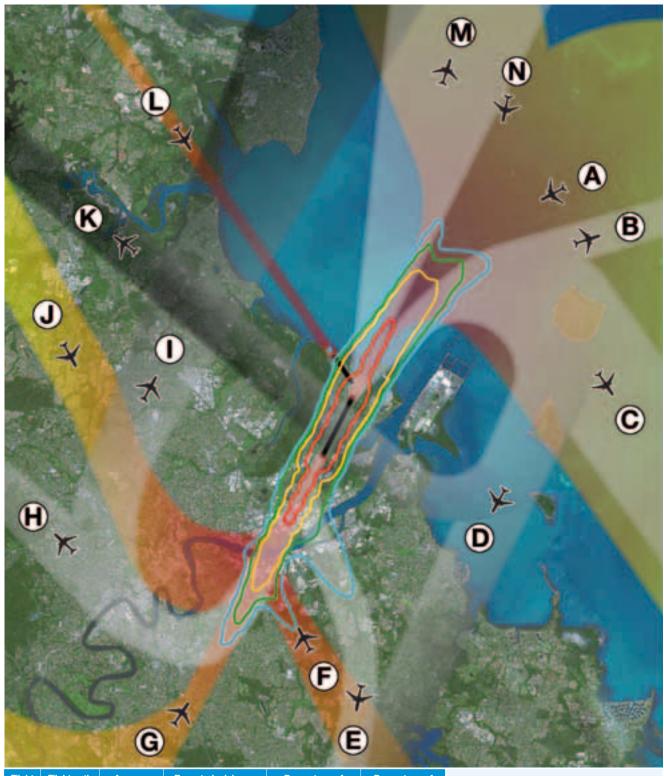
Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals Mean Altitude	Contour Key The number of
Α	Arrival	6	0 - 10	18%	8%		overflights of 70dB(A) and above during the
В	Departure		Inactive at	this time		4,500 ft	indicated time period
С	Departure		Inactive at	this time			indicated time period
D	Departure	4	0 - 11	13%	9%		
E	Departure	6	0 - 11	18%	21%	0 ft	2 to 4 overflights
F	Arrival	1	0 - 5	3%	54%	O II	5 to 9 overflights
G	Arrival	2	0 - 13	5%	36%	Departures	10 to 19 overflights
Н	Departure	3	0 - 6	8%	19%	Mean Altitude	· ·
	Departure	2	0 - 4	5%	20%		20 to 49 overflights
J	Arrival	1	0 - 5	4%	37%	12,000 ft	50 or more
K	Departure	2	0 - 3	4%	29%		overflights
L	Arrival	<1	0 - 1	<1%	22%		
M	Departure	4	0 - 9	12%	9%	0 ft	
N	Arrival	3	0 - 5	9%	8%	0 1.0	

## 2015 Without the NPR — Summer Weekend Day Saturday and Sunday 6.00am — 6.00pm



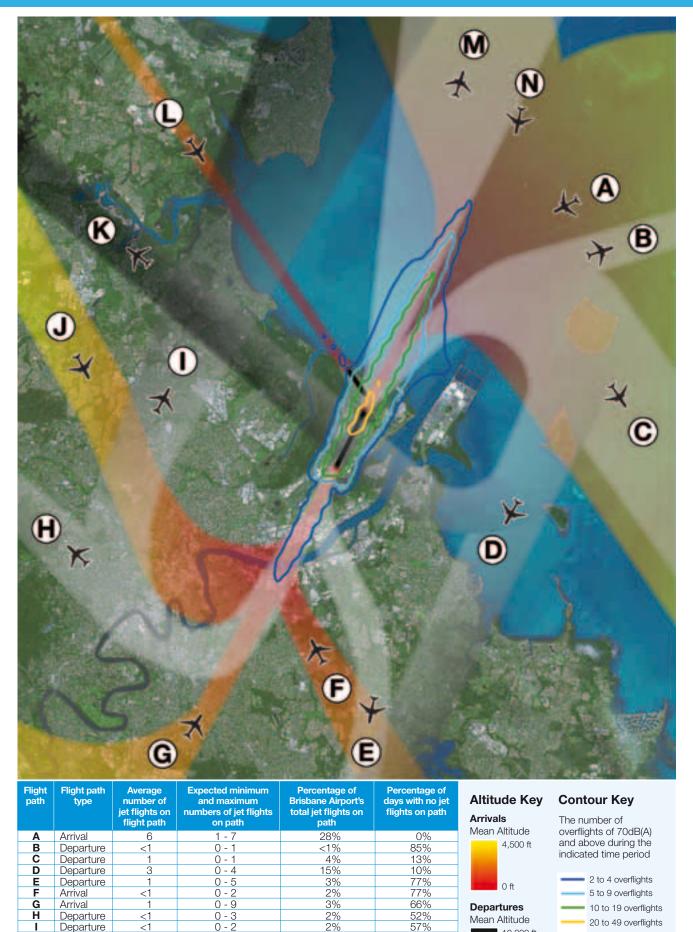
Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals Mean Altitude	Contour Key The number of
Α	Arrival	53	0 - 121	15%	23%		overflights of 70dB(A)
В	Departure	1	0 - 2	<1%	25%	4,500 ft	and above during the
С	Departure	6	0 - 10	2%	25%		indicated time period
D	Departure	54	0 - 100	15%	24%		
Е	Departure	51	0 - 110	14%	23%	O ft	5 to 9 overflights
F	Arrival	45	0 - 97	13%	27%	O IL	10 to 19 overflights
G	Arrival	23	0 - 160	6%	24%	Departures	20 to 49 overflights
Н	Departure	10	0 - 23	3%	23%	Mean Altitude	•
	Departure	22	0 - 49	6%	23%		50 or more overflights
J	Arrival	26	0 - 58	7%	24%	12,000 ft	Overliights
K	Departure	5	0 - 9	1%	24%		
L	Arrival	1	0 - 2	<1%	24%		
M	Departure	34	0 - 61	9%	24%	0 ft	
N	Arrival	28	0 - 59	8%	24%	3 10	

## 2015 Without the NPR — Summer Weekend Evening Saturday and Sunday 6.00pm — 10.00pm



Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals Mean Altitude	Contour Key The number of
Α	Arrival	16	0 - 45	14%	56%		overflights of 70dB(A)
В	Departure	<1	0 - 1	<1%	34%	4,500 ft	and above during the
С	Departure	1	0 - 1	1%	34%		indicated time period
D	Departure	19	0 - 30	17%	31%		
E	Departure	11	0 - 30	10%	56%	0 ft	5 to 9 overflights
F	Arrival	17	0 - 33	15%	42%	O II	10 to 19 overflights
G	Arrival	12	0 - 55	11%	31%	Departures	20 to 49 overflights
Н	Departure	4	0 - 11	4%	56%	Mean Altitude	ŭ .
- 1	Departure	5	0 - 15	5%	56%		50 or more overflights
J	Arrival	7	0 - 13	6%	31%	12,000 ft	Overnights
K	Departure	3	0 - 5	3%	32%		
L	Arrival	<1	0 - 1	<1%	56%		
M	Departure	13	0 - 20	11%	32%	0 ft	
N	Arrival	5	0 - 13	4%	56%	3 10	

### 2015 Without the NPR — Summer Weekend Night Saturday and Sunday 10.00pm — 6.00am



0 - 4

0 - 1

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20%

16%

38%

52%

0%

Arrival

Arrival

Arrival

Departure

Departure

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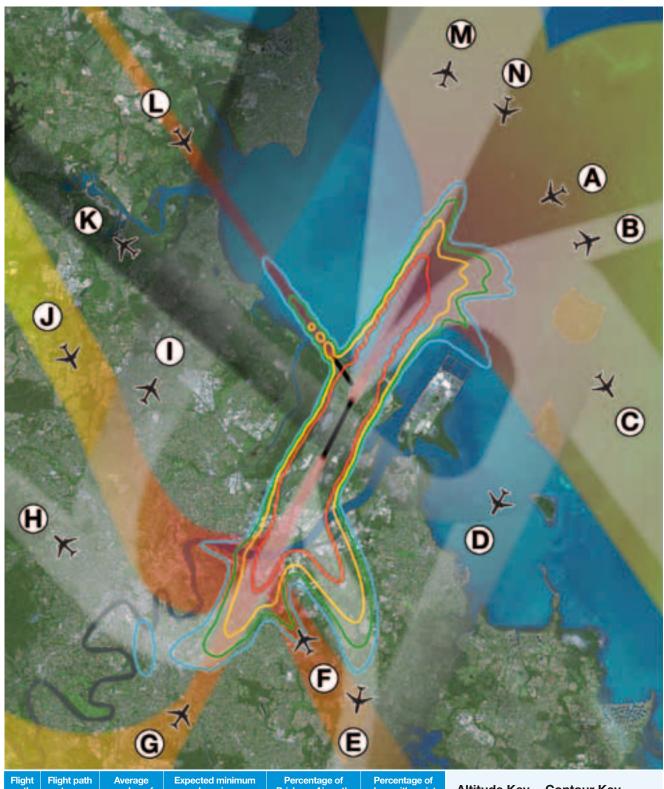
12,000 ft

0 ft

50 or more

overflights

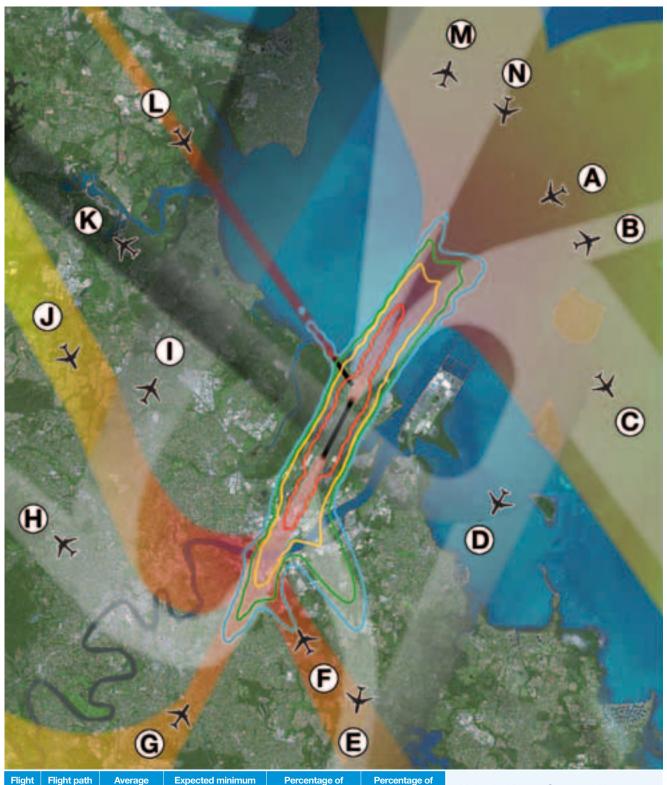
### 2015 Without the NPR — Winter Weekday Day Monday to Friday 6.00am — 6.00pm



Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals Mean Altitude	Contour Key The number of
Α	Arrival	83	0 - 127	23%	9%		overflights of 70dB(A)
В	Departure	<1	0 - 1	<1%	52%	4,500 ft	and above during the
С	Departure	2	0 - 9	1%	52%		indicated time period
D	Departure	36	0 - 111	10%	42%		
E	Departure	81	0 - 119	22%	9%	0 ft	5 to 9 overflights
F	Arrival	30	0 - 101	8%	45%	O II	10 to 19 overflights
G	Arrival	11	0 - 171	3%	42%	Departures	20 to 49 overflights
Н	Departure	14	0 - 20	4%	9%	Mean Altitude	ů .
	Departure	32	0 - 46	9%	9%		50 or more overflights
J	Arrival	15	0 - 53	4%	42%	12,000 ft	Overnights
K	Departure	2	0 - 7	1%	42%		
L	Arrival	1	0 - 2	<1%	9%		
M	Departure	18	0 - 57	5%	42%	0 ft	
N	Arrival	37	0 - 54	10%	9%	3.0	

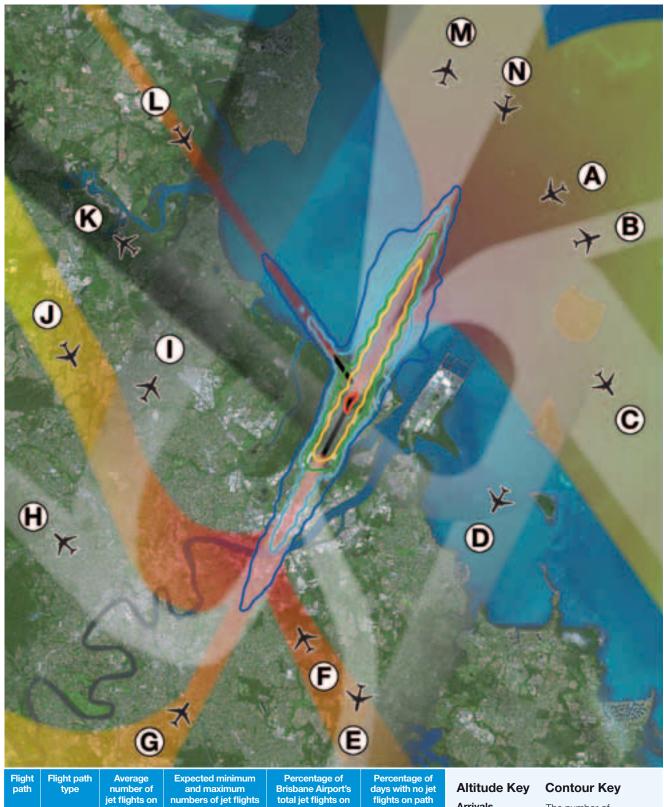
### 2015 Without the NPR — Winter Weekday Evening Monday to Friday 6.00pm — 10.00pm





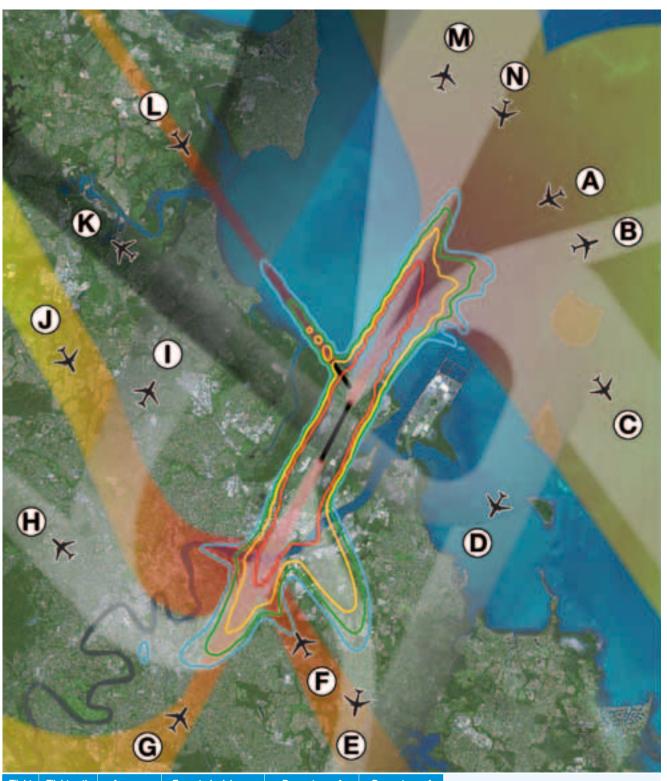
Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals	Contour Key The number of
Α	Arrival	25	0 - 50	20%	41%	Mean Altitude	overflights of 70dB(A)
В	Departure	<1	0 - 1	<1%	51%	4,500 ft	and above during the
С	Departure	2	0 - 4	2%	51%		indicated time period
D	Departure	19	0 - 41	15%	49%		
Е	Departure	24	0 - 45	19%	41%	O ft	5 to 9 overflights
F	Arrival	16	0 - 39	12%	54%	O IL	10 to 19 overflights
G	Arrival	7	0 - 63	6%	49%	Departures	20 to 49 overflights
Н	Departure	4	0 - 8	3%	41%	Mean Altitude	•
	Departure	6	0 - 11	4%	45%		50 or more overflights
J	Arrival	7	0 - 16	5%	49%	12,000 ft	Overnignts
K	Departure	2	0 - 4	1%	49%		
L	Arrival	<1	0 - 1	<1%	41%		
M	Departure	7	0 - 14	5%	49%	0 ft	
N	Arrival	9	0 - 17	7%	41%	J 10	

## 2015 Without the NPR — Winter Weekday Night Monday to Friday 10.00pm - 6.00am



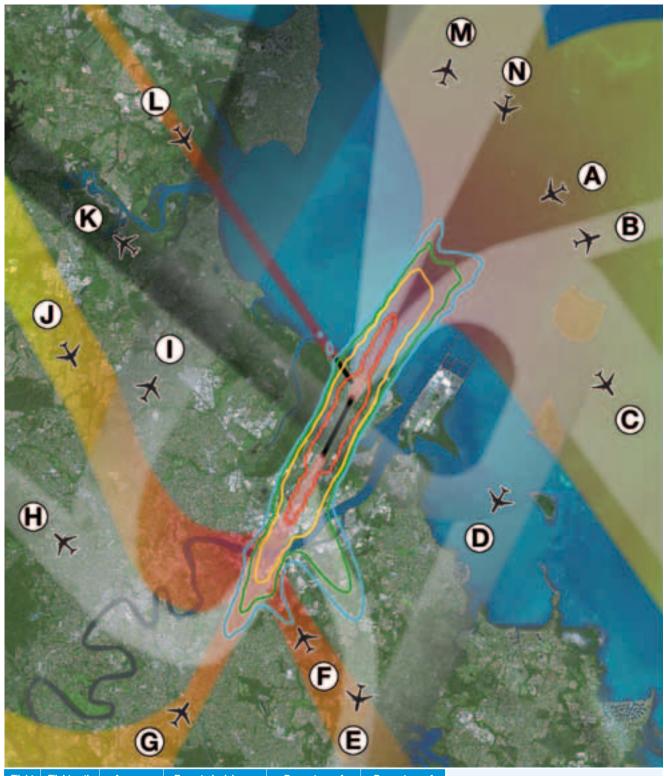
Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals Mean Altitude	Contour Key The number of
Α	Arrival	11	0 - 14	37%	0%		overflights of 70dB(A) and above during the
В	Departure	<1	0 - 1	<1%	94%	4,500 ft	
С	Departure	1	0 - 1	3%	12%		indicated time period
D	Departure	1	0 - 2	5%	10%		
E	Departure	<1	0 - 3	1%	74%	0 ft	2 to 4 overflights
F	Arrival	1	0 - 10	4%	59%	O II	5 to 9 overflights
G	Arrival	1	0 - 18	2%	56%	Departures	10 to 19 overflights
Н	Departure	1	0 - 6	3%	32%	Mean Altitude	Ŭ
	Departure	1	0 - 4	5%	33%		20 to 49 overflights
J	Arrival	1	0 - 6	2%	57%	12,000 ft	50 or more
K	Departure	<1	0 - 3	1%	3%		overflights
L	Arrival	<1	0 - 1	<1%	33%		
M	Departure	6	0 - 9	21%	3%	0 ft	
N	Arrival	5	0 - 6	16%	0%	0 1.0	

## 2015 Without the NPR — Winter Weekend Day Saturday and Sunday 6.00am — 6.00pm



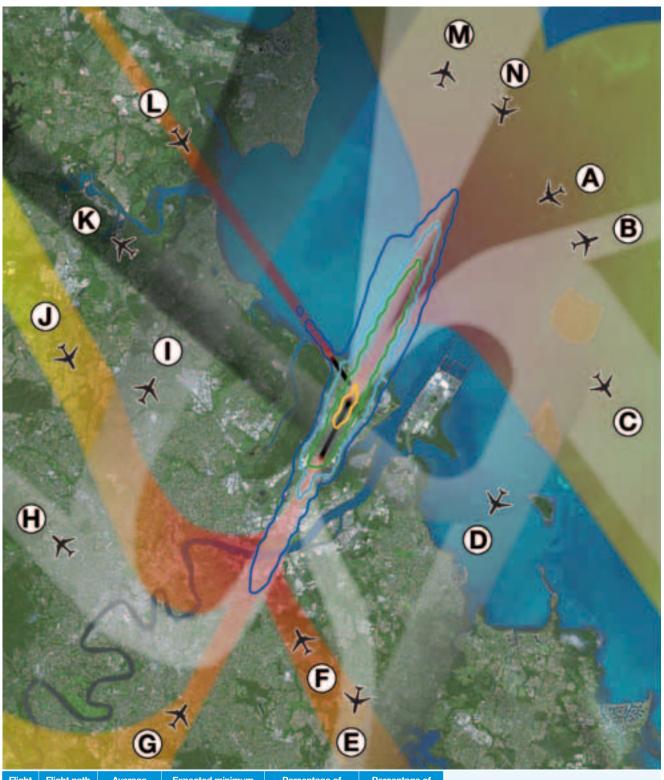
Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals	Contour Key The number of
Α	Arrival	76	0 - 124	22%	11%	Mean Altitude	overflights of 70dB(A)
В	Departure	<1	0 - 1	<1%	52%	4,500 ft	and above during the indicated time period
С	Departure	2	0 - 10	1%	52%		indicated time period
D	Departure	37	0 - 103	10%	38%		
E	Departure	73	0 - 112	21%	11%	O ft	5 to 9 overflights
F	Arrival	33	0 - 97	9%	40%	U IL	10 to 19 overflights
G	Arrival	10	0 - 155	3%	38%	Departures	20 to 49 overflights
Н	Departure	14	0 - 22	4%	11%	Mean Altitude	9
	Departure	31	0 - 48	9%	11%		50 or more overflights
J	Arrival	17	0 - 51	5%	38%	12,000 ft	Overnignts
K	Departure	3	0 - 8	1%	38%		
L	Arrival	1	0 - 2	<1%	11%		
M	Departure	21	0 - 60	6%	38%	0 ft	
N	Arrival	35	0 - 53	10%	11%	J 10	

### 2015 Without the NPR — Winter Weekend Evening Saturday and Sunday 6.00pm — 10.00pm



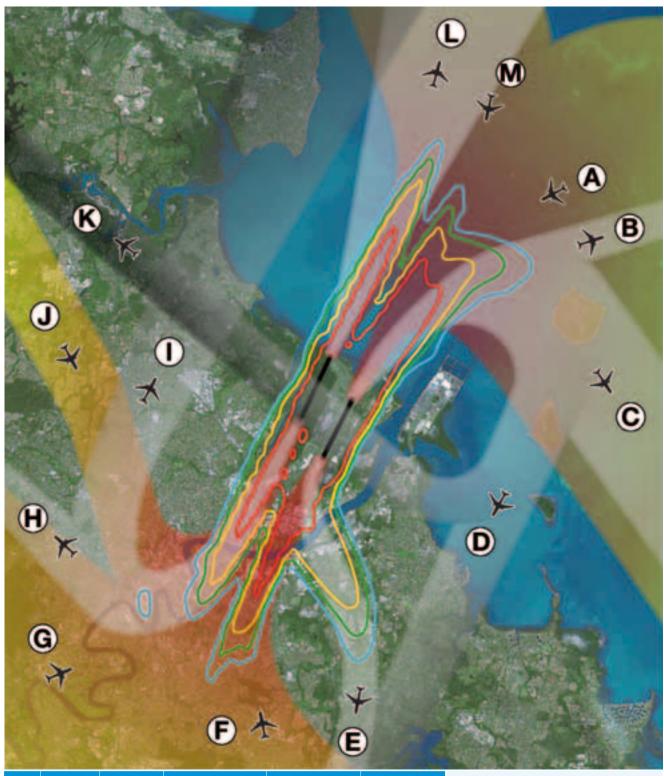
				THE RESERVE AND THE PERSON NAMED IN			The second secon
Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key	Contour Key The number of
Α	Arrival	23	0 - 46	20%	39%	Mean Altitude	overflights of 70dB(A)
В	Departure	<1	0 - 1	<1%	48%	4,500 ft	and above during the
С	Departure	2	0 - 4	2%	48%		indicated time period
D	Departure	17	0 - 35	14%	47%		
E	Departure	20	0 - 39	18%	39%	O ft	5 to 9 overflights
F	Arrival	15	0 - 35	13%	50%	O IL	10 to 19 overflights
G	Arrival	7	0 - 57	6%	47%	Departures	20 to 49 overflights
Н	Departure	5	0 - 9	4%	39%	Mean Altitude	ŭ .
ı	Departure	6	0 - 11	5%	42%		50 or more overflights
J	Arrival	6	0 - 13	5%	47%	12,000 ft	Overnights
K	Departure	2	0 - 4	2%	47%		
L	Arrival	<1	0 - 0	<1%	39%		
M	Departure	7	0 - 15	6%	47%	0 ft	
N	Arrival	7	0 - 14	6%	39%	310	

## 2015 Without the NPR — Winter Weekend Night Saturday and Sunday 10.00pm — 6.00am



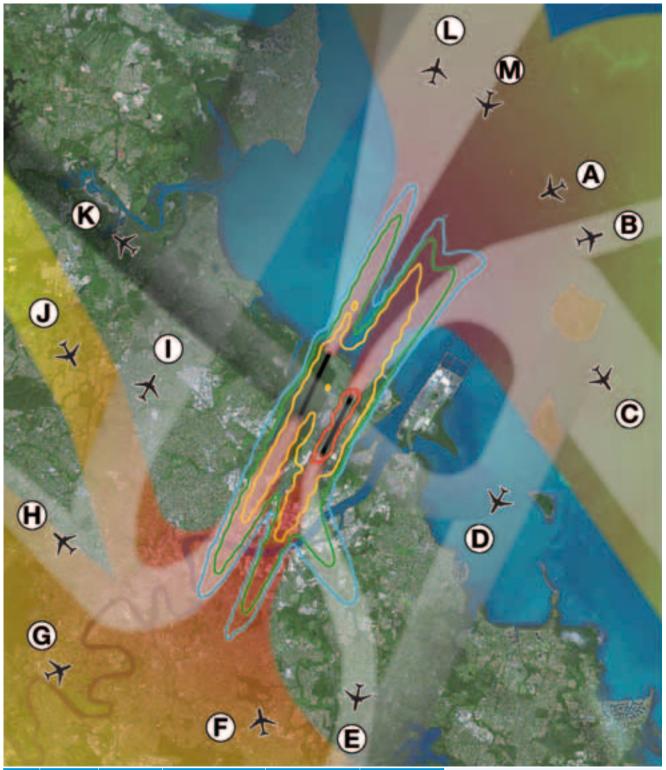
Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key  Arrivals	Contour Key The number of
Α	Arrival	6	0 - 8	31%	1%	Mean Altitude	overflights of 70dB(A)
В	Departure		Inactive at	this time		4,500 ft	and above during the
С	Departure		Inactive at	this time			indicated time period
D	Departure	1	0 - 1	4%	18%		
Е	Departure	<1	0 - 1	1%	82%	O ft	2 to 4 overflights
F	Arrival	1	0 - 5	7%	59%	O II	5 to 9 overflights
G	Arrival	1	0 - 8	3%	58%	Departures	10 to 19 overflights
Н	Departure	1	0 - 5	3%	35%	Mean Altitude	3
I	Departure	1	0 - 2	5%	38%	12,000 ft	20 to 49 overflights
J	Arrival	1	0 - 4	3%	58%	12,000 11	50 or more
K	Departure	<1	0 - 3	2%	1%		overflights
L	Arrival	<1	0 - 0	<1%	33%		
M	Departure	5	0 - 7	25%	1%	0 ft	
N	Arrival	3	0 - 4	16%	1%	3	

## 2015 With the NPR — Summer Weekday Day Monday to Friday 6.00am — 6.00pm



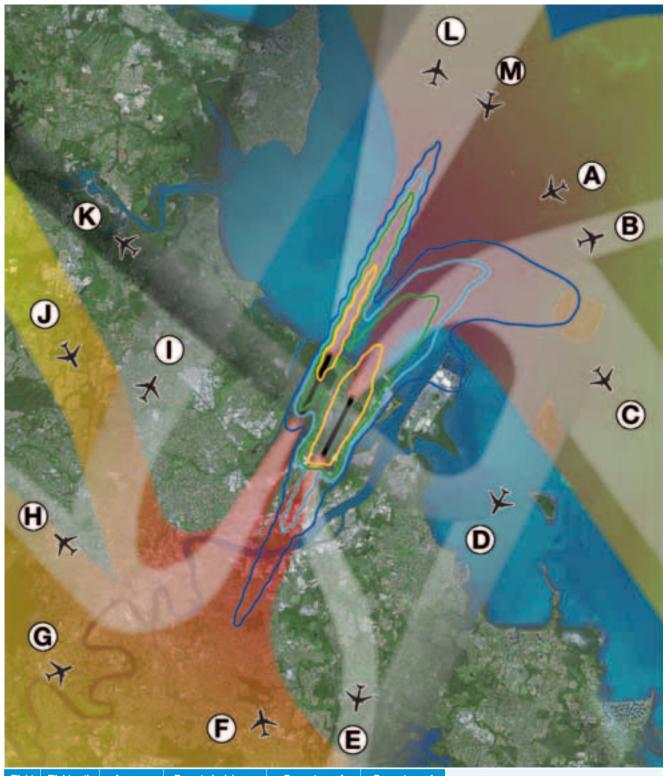
Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals Mean Altitude	Contour Key The number of
Α	Arrival	57	0 - 135	15%	22%		overflights of 70dB(A) and above during the
В	Departure	11	0 - 22	3%	7%	4,500 ft	indicated time period
С	Departure	7	0 - 13	2%	9%		indicated time period
D	Departure	64	0 - 110	17%	7%		5 to 9 overflights
Е	Departure	53	0 - 125	14%	22%	O ft	o a
F	Arrival	62	0 - 126	17%	23%	_	10 to 19 overflights
G	Arrival	7	0 - 69	2%	23%	Departures	20 to 49 overflights
Н	Departure	7	0 - 17	2%	23%	Mean Altitude	50 or more
I	Departure	18	0 - 46	5%	23%	12,000 ft	overflights
J	Arrival	22	0 - 53	6%	27%		
K	Departure	5	0 - 10	1%	8%		
L	Departure	22	0 - 42	6%	23%	0 ft	
M	Arrival	35	0 - 92	9%	17%	3 11	

## 2015 With the NPR — Summer Weekday Evening Monday to Friday 6.00pm — 10.00pm



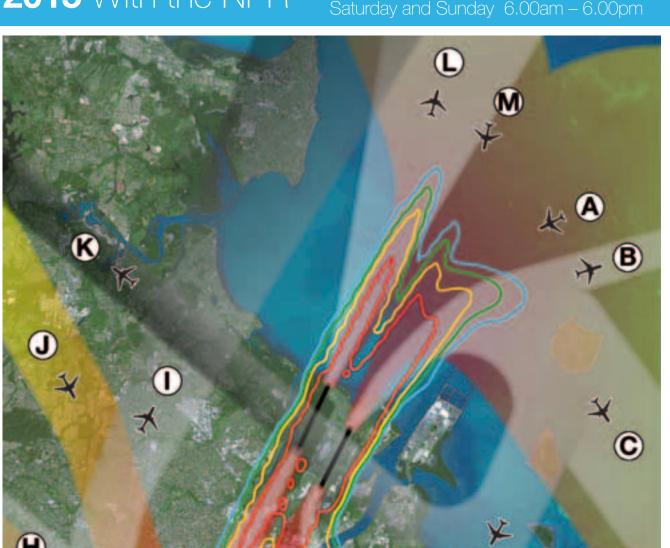
Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals Mean Altitude	Contour Key The number of
Α	Arrival	20	0 - 47	18%	44%		overflights of 70dB(A) and above during the
В	Departure	2	0 - 4	2%	26%	4,500 ft	indicated time period
С	Departure	<1	0 - 1	<1%	43%		indicated time period
D	Departure	16	0 - 30	15%	24%		5 to 9 overflights
E	Departure	14	0 - 31	13%	44%	O ft	· ·
F	Arrival	21	0 - 43	19%	39%	_	10 to 19 overflights
G	Arrival	4	0 - 22	4%	40%	Departures	20 to 49 overflights
Н	Departure	5	0 - 10	4%	45%	Mean Altitude	50 or more
I	Departure	6	0 - 13	5%	47%	12,000 ft	overflights
J	Arrival	5	0 - 14	5%	50%		
K	Departure	4	0 - 8	4%	43%		
L	Departure	6	0 - 12	6%	39%	O ft	
М	Arrival	8	0 - 21	7%	42%	J II	

# 2015 With the NPR — Summer Weekday Night Monday to Friday 10.00pm - 6.00am



Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals	Contour Key The number of
Α	Arrival	1	0 - 10	4%	76%	Mean Altitude	overflights of 70dB(A) and above during the
В	Departure	4	0 - 5	11%	3%	4,500 ft	indicated time period
С	Departure		Inactive at	this time			indicated time period
D	Departure	9	0 - 11	26%	2%		2 to 4 overflights
Е	Departure	2	0 - 11	5%	75%	O ft	· ·
F	Arrival	1	0 - 6	2%	76%	_	5 to 9 overflights
G	Arrival	1	0 - 8	2%	76%	Departures	10 to 19 overflights
Н	Departure	<1	0 - 6	1%	74%	Mean Altitude	20 to 49 overflights
I	Departure	1	0 - 4	1%	76%	12,000 ft	50 or more
J	Arrival		Inactive at	this time			overflights
K	Departure	5	0 - 5	13%	1%		
L	Departure	<1	0 - 4	1%	76%	0 ft	
M	Arrival	11	0 - 14	32%	1%	3 10	

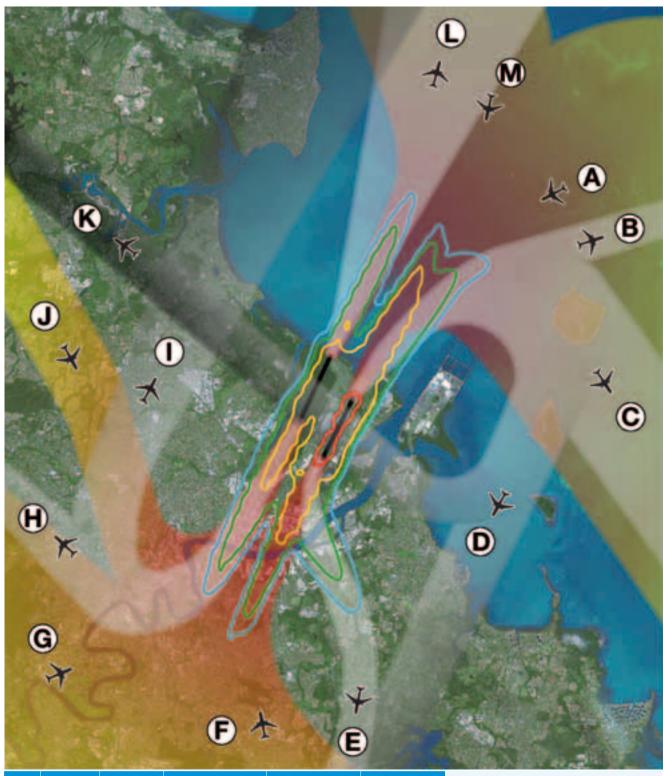
## 2015 With the NPR — Summer Weekend Day Saturday and Sunday 6.00am — 6.00pm



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Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals	Contour Key The number of
Α	Arrival	49	0 - 123	14%	19%	Mean Altitude	overflights of 70dB(A) and above during the
В	Departure	10	0 - 21	3%	7%	4,500 ft	indicated time period
С	Departure	6	0 - 10	2%	17%		indicated time period
D	Departure	60	0 - 100	17%	7%		5 to 9 overflights
E	Departure	46	0 - 112	13%	19%	0 ft	
F	Arrival	60	0 - 115	17%	23%	_	10 to 19 overflights
G	Arrival	7	0 - 70	2%	23%	Departures	20 to 49 overflights
Н	Departure	8	0 - 21	2%	20%	Mean Altitude	50 or more
I	Departure	19	0 - 49	5%	20%	12,000 ft	overflights
J	Arrival	25	0 - 58	7%	25%		
K	Departure	8	0 - 14	2%	8%		
L	Departure	24	0 - 45	7%	23%	0 ft	
М	Arrival	36	0 - 94	10%	13%	J It	

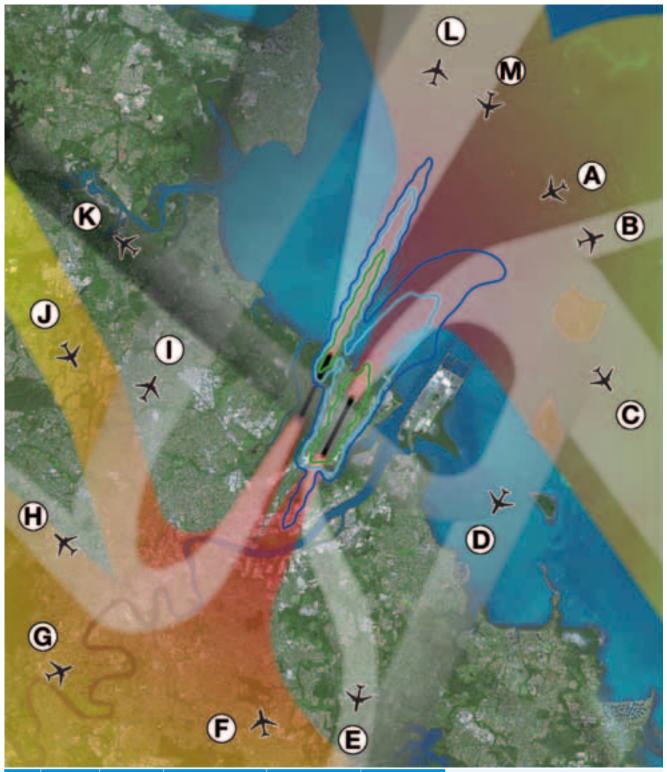
# 2015 With the NPR — Summer Weekend Evening Saturday and Sunday 6.00pm — 10.00pm



Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals Mean Altitude	Contour Key The number of
Α	Arrival	20	0 - 46	18%	42%		overflights of 70dB(A) and above during the
В	Departure	2	0 - 4	2%	27%	4,500 ft	indicated time period
С	Departure	<1	0 - 1	<1%	48%		indicated time period
D	Departure	15	0 - 30	14%	23%		5 to 9 overflights
Е	Departure	15	0 - 31	13%	40%	O ft	o a
F	Arrival	20	0 - 42	18%	40%	_	10 to 19 overflights
G	Arrival	3	0 - 21	3%	40%	Departures	20 to 49 overflights
Н	Departure	5	0 - 10	4%	42%	Mean Altitude	50 or more
I	Departure	7	0 - 15	6%	42%	12,000 ft	overflights
J	Arrival	5	0 - 13	4%	51%		
K	Departure	4	0 - 8	4%	24%		
L	Departure	7	0 - 14	6%	41%	0 ft	
M	Arrival	8	0 - 19	7%	40%	J II	

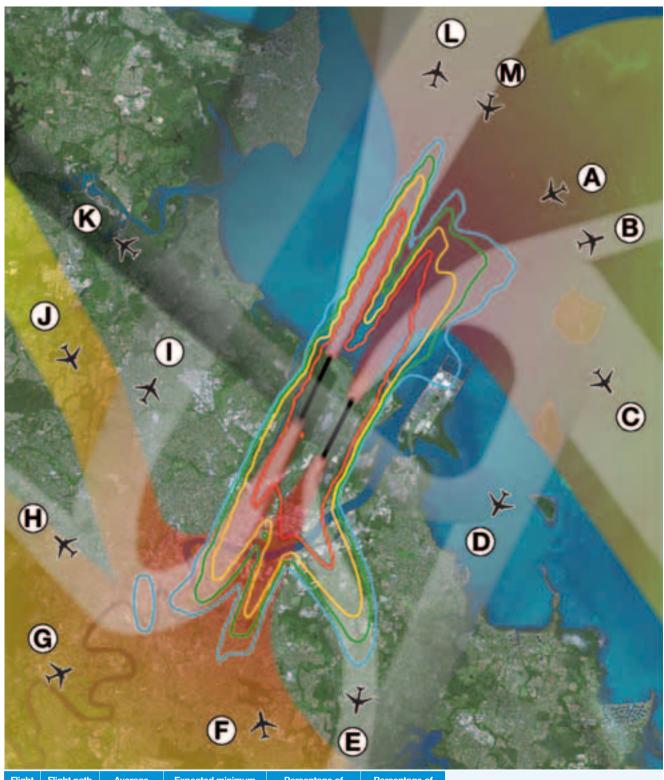
## 2015 With the NPR — Summer Weekend Night Saturday and Sunday 10.00pm - 6.00am





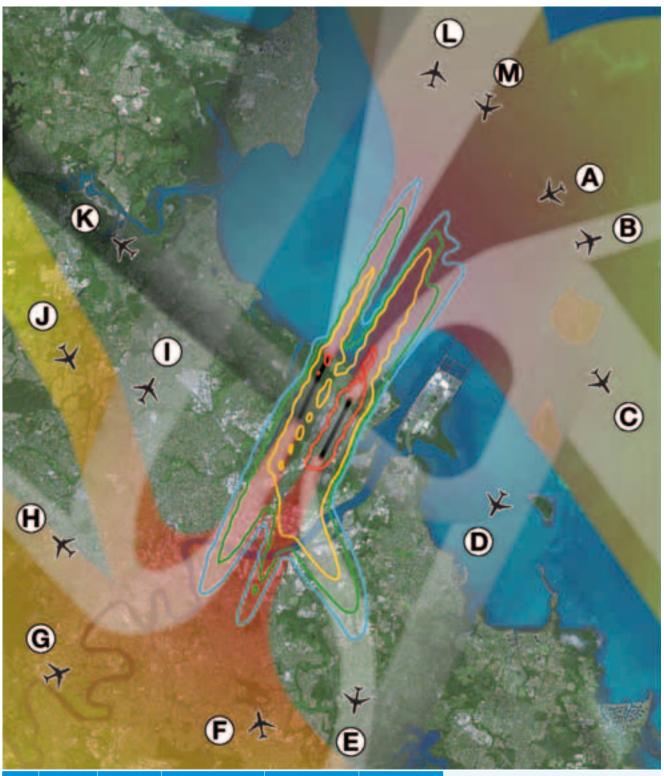
Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals Mean Altitude	Contour Key The number of
Α	Arrival	1	0 - 7	4%	77%		overflights of 70dB(A) and above during the
В	Departure	2	0 - 2	8%	10%	4,500 ft	indicated time period
С	Departure	1	0 - 1	4%	10%		indicated time period
D	Departure	4	0 - 4	17%	10%		2 to 4 overflights
Е	Departure	1	0 - 5	3%	80%	O ft	o o
F	Arrival	<1	0 - 2	2%	74%		5 to 9 overflights
G	Arrival	1	0 - 6	3%	74%	Departures	10 to 19 overflights
Н	Departure	<1	0 - 3	1%	86%	Mean Altitude	20 to 49 overflights
ı	Departure	<1	0 - 2	1%	89%	12,000 ft	50 or more
J	Arrival		Inactive at	this time			overflights
K	Departure	3	0 - 3	13%	1%		
L	Departure	<1	0 - 1	1%	77%	0 ft	
M	Arrival	9	3 - 11	44%	0%	J It	

### 2015 With the NPR - Winter Weekday Day Monday to Friday 6.00am - 6.00pm



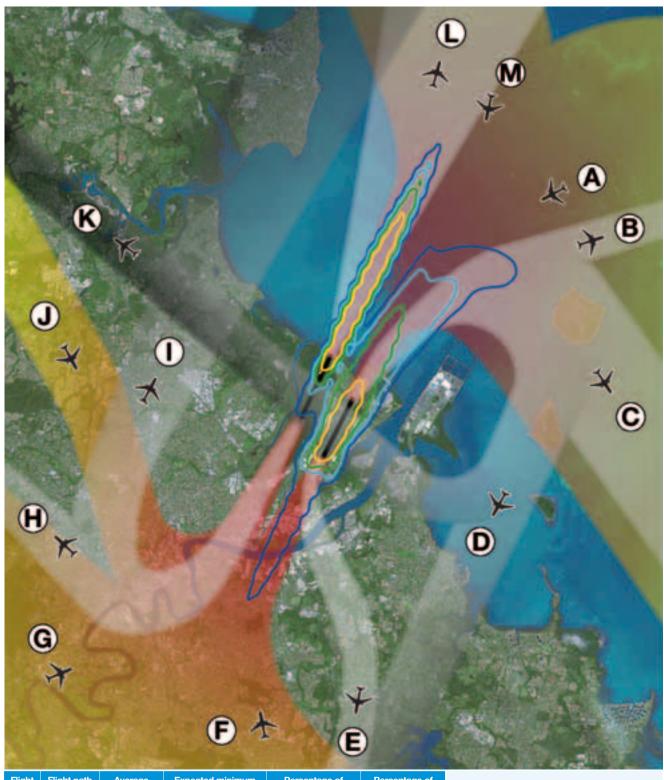
Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key	Contour Key The number of
Α	Arrival	72	0 - 129	20%	8%	Mean Altitude	overflights of 70dB(A) and above during the
В	Departure	10	0 - 29	3%	13%	4,500 ft	indicated time period
С	Departure	3	0 - 9	1%	29%		indicated time period
D	Departure	49	0 - 111	14%	11%		5 to 9 overflights
Е	Departure	69	0 - 121	19%	8%	O ft	
F	Arrival	34	0 - 120	9%	43%	_	10 to 19 overflights
G	Arrival	2	0 - 71	1%	43%	Departures	20 to 49 overflights
Н	Departure	11	0 - 18	3%	8%	Mean Altitude	50 or more
I	Departure	26	0 - 46	7%	8%	12,000 ft	overflights
J	Arrival	13	0 - 54	4%	46%		
K	Departure	4	0 - 11	1%	23%		
L	Departure	12	0 - 41	3%	44%	0 ft	
M	Arrival	56	0 - 117	15%	4%	3 11	

# 2015 With the NPR — Winter Weekday Evening Monday to Friday 6.00pm - 10.00pm



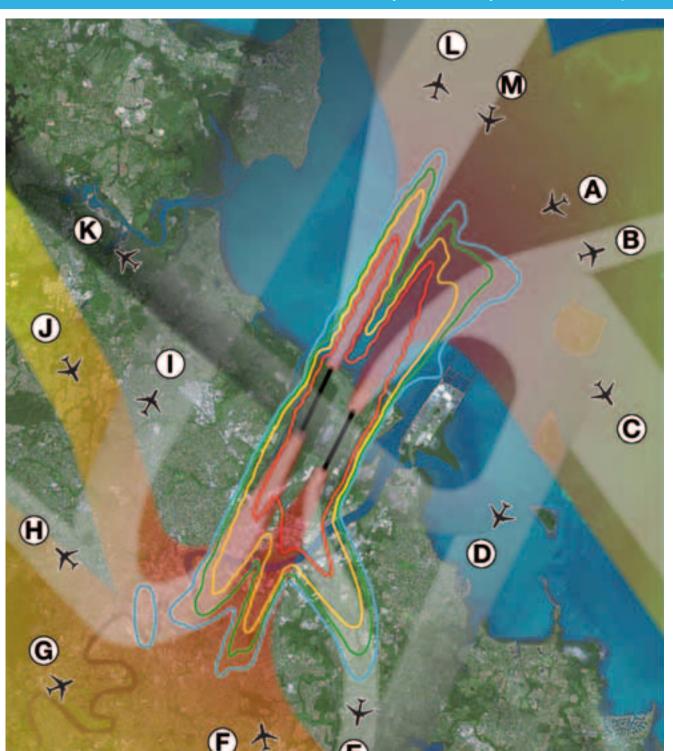
Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals Mean Altitude	Contour Key The number of
Α	Arrival	33	0 - 51	25%	22%		overflights of 70dB(A) and above during the
В	Departure	<1	0 - 2	<1%	63%	4,500 ft	indicated time period
С	Departure	1	0 - 4	1%	63%		indicated time penda
D	Departure	13	0 - 41	10%	42%		5 to 9 overflights
E	Departure	31	0 - 46	24%	21%	O ft	
F	Arrival	13	0 - 47	10%	60%		10 to 19 overflights
G	Arrival	1	0 - 24	1%	60%	Departures	20 to 49 overflights
Н	Departure	5	0 - 8	4%	22%	Mean Altitude	50 or more
I	Departure	7	0 - 10	6%	25%	12,000 ft	overflights
J	Arrival	4	0 - 17	3%	64%		
K	Departure	2	0 - 6	1%	45%		
L	Departure	3	0 - 11	2%	62%	0 ft	
M	Arrival	14	0 - 25	11%	18%	J It	

### 2015 With the NPR - Winter Weekday Night Monday to Friday 10.00pm - 6.00am



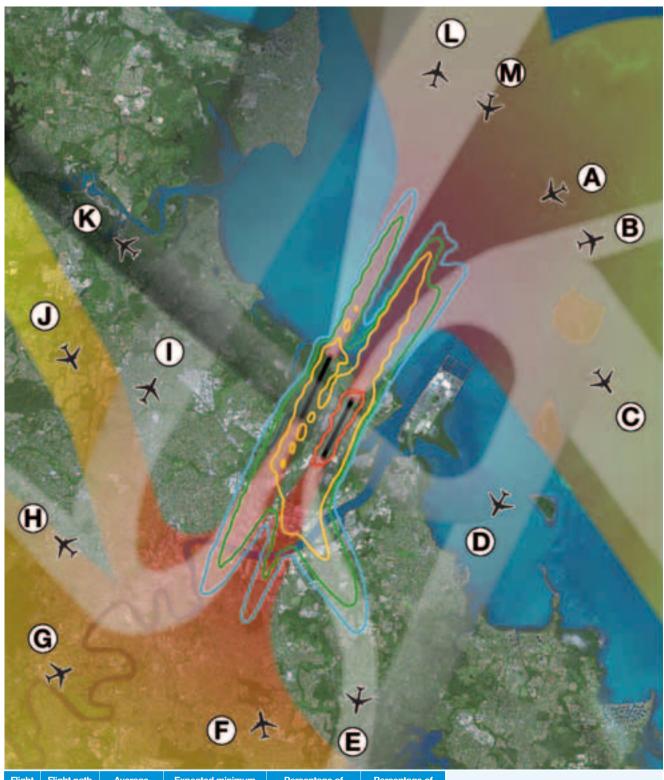
Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals Mean Altitude	Contour Key The number of
Α	Arrival	2	0 - 14	7%	63%		overflights of 70dB(A) and above during the
В	Departure	3	0 - 4	10%	4%	4,500 ft	indicated time period
С	Departure	1	0 - 1	3%	11%		indicated time period
D	Departure	2	0 - 2	5%	9%		2 to 4 overflights
Е	Departure	<1	0 - 3	1%	76%	O ft	· ·
F	Arrival	<1	0 - 11	1%	92%	_	5 to 9 overflights
G	Arrival	<1	0 - 8	1%	92%	Departures	10 to 19 overflights
Н	Departure	1	0 - 6	2%	63%	Mean Altitude	20 to 49 overflights
I	Departure	1	0 - 3	2%	68%	12,000 ft	50 or more
J	Arrival		Inactive at	this time			overflights
K	Departure	4	0 - 5	14%	3%		
L	Departure	<1	0 - 4	<1%	93%	0 ft	
M	Arrival	16	0 - 19	52%	0%	0 11	

# 2015 With the NPR — Winter Weekend Day Saturday and Sunday 6.00am – 6.00pm



Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals Mean Altitude	Contour Key The number of
Α	Arrival	74	0 - 126	21%	8%		overflights of 70dB(A) and above during the
В	Departure	10	0 - 31	3%	15%	4,500 ft	indicated time period
С	Departure	3	0 - 10	1%	37%		indicated time period
D	Departure	43	0 - 103	12%	14%		5 to 9 overflights
E	Departure	68	0 - 114	19%	8%	O ft	· ·
F	Arrival	35	0 - 117	10%	39%	_	10 to 19 overflights
G	Arrival	2	0 - 34	1%	39%	Departures	20 to 49 overflights
Н	Departure	12	0 - 20	3%	8%	Mean Altitude	50 or more
I	Departure	27	0 - 48	8%	8%	12,000 ft	overflights
J	Arrival	14	0 - 52	4%	41%		
K	Departure	5	0 - 13	1%	20%		
L	Departure	14	0 - 41	4%	39%	0 ft	
M	Arrival	47	0 - 98	13%	3%	J II	

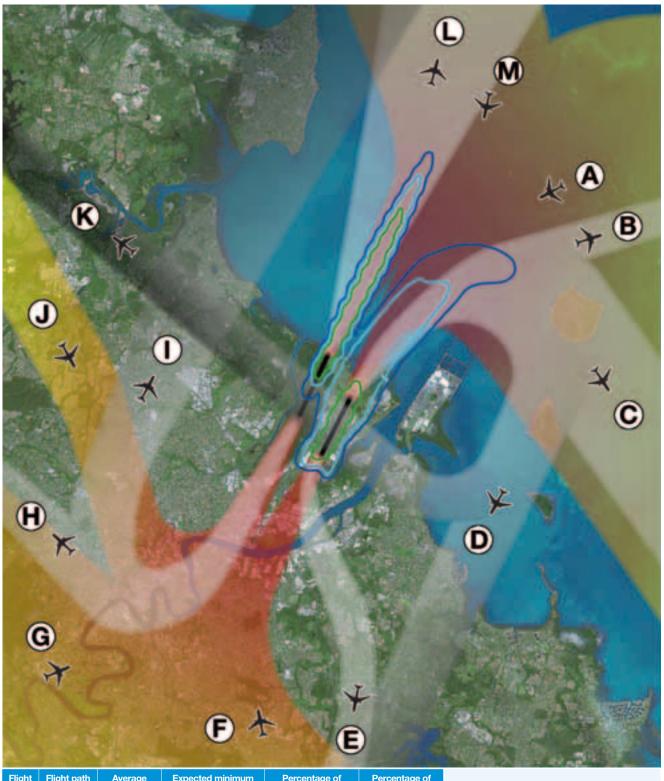
### 2015 With the NPR - Winter Weekend Evening Saturday and Sunday 6.00pm - 10.00pm



Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals Mean Altitude	Contour Key The number of
Α	Arrival	29	0 - 47	25%	22%		overflights of 70dB(A) and above during the
В	Departure	1	0 - 3	1%	61%	4,500 ft	indicated time period
С	Departure	1	0 - 4	1%	63%		indicated time period
D	Departure	12	0 - 35	10%	42%		5 to 9 overflights
Е	Departure	27	0 - 40	23%	22%	O ft	· ·
F	Arrival	13	0 - 43	11%	61%	_	10 to 19 overflights
G	Arrival	1	0 - 21	1%	61%	Departures	20 to 49 overflights
Н	Departure	6	0 - 9	5%	23%	Mean Altitude	50 or more
I	Departure	7	0 - 10	6%	24%	12,000 ft	overflights
J	Arrival	4	0 - 14	3%	66%		
K	Departure	3	0 - 7	2%	45%		
L	Departure	3	0 - 10	3%	62%	0 ft	
M	Arrival	10	0 - 18	9%	21%	3 11	

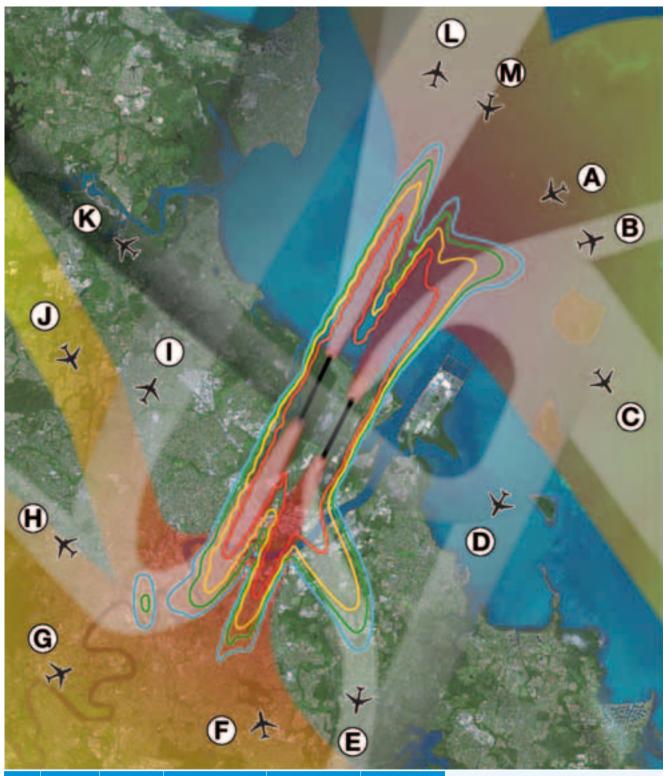
# 2015 With the NPR — Winter Weekend Night Saturday and Sunday 10.00pm — 6.00am





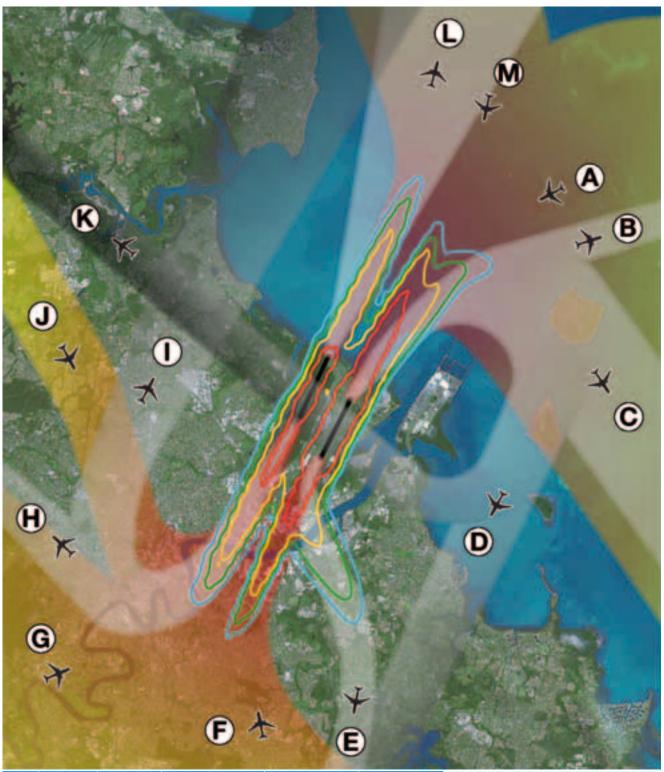
Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals	Contour Key The number of
Α	Arrival	1	0 - 9	6%	71%	Mean Altitude	overflights of 70dB(A) and above during the
В	Departure	2	0 - 2	9%	14%	4,500 ft	indicated time period
С	Departure		Inactive at	this time			indicated time period
D	Departure	1	0 - 1	4%	18%		2 to 4 overflights
Е	Departure	<1	0 - 1	1%	82%	O ft	0
F	Arrival	<1	0 - 4	2%	91%	_	5 to 9 overflights
G	Arrival	<1	0 - 4	1%	91%	Departures	10 to 19 overflights
Н	Departure	<1	0 - 5	2%	85%	Mean Altitude	20 to 49 overflights
I	Departure	<1	0 - 2	1%	92%	12,000 ft	50 or more
J	Arrival		Inactive at	this time			overflights
K	Departure	5	0 - 5	23%	1%		
L	Departure	<1	0 - 2	1%	94%	0 ft	
M	Arrival	10	1 - 12	52%	0%	3 10	

# 2035 With the NPR — Summer Weekday Day Monday to Friday 6.00am – 6.00pm



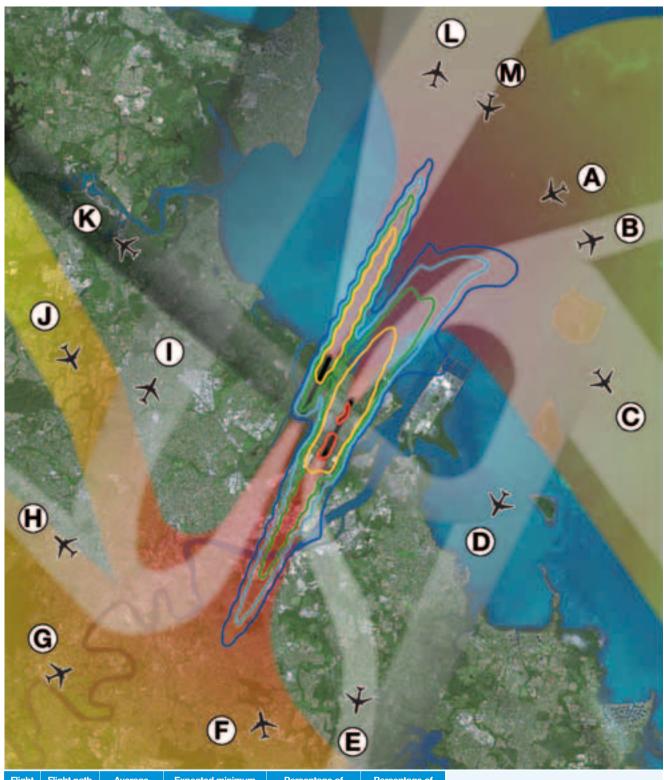
Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals Mean Altitude	Contour Key The number of
Α	Arrival	107	0 – 215	18%	19%		overflights of 70dB(A) and above during the
В	Departure	8	0 – 16	1%	25%	4,500 ft	indicated time period
С	Departure	6	0 – 13	1%	29%		indicated time period
D	Departure	88	0 – 184	15%	25%		5 to 9 overflights
Е	Departure	104	0 – 199	17%	19%	0 ft	· ·
F	Arrival	91	0 – 196	15%	26%	_	10 to 19 overflights
G	Arrival	13	0 – 133	2%	26%	Departures	20 to 49 overflights
Н	Departure	14	0 – 29	2%	20%	Mean Altitude	50 or more
I	Departure	38	0 – 76	6%	20%	12,000 ft	overflights
J	Arrival	36	0 – 95	6%	31%		
K	Departure	10	0 – 18	2%	27%		
L	Departure	37	0 – 74	6%	26%	0 ft	
M	Arrival	49	0 – 95	8%	20%	O II	

## 2035 With the NPR — Summer Weekday Evening Monday to Friday 6.00pm — 10.00pm



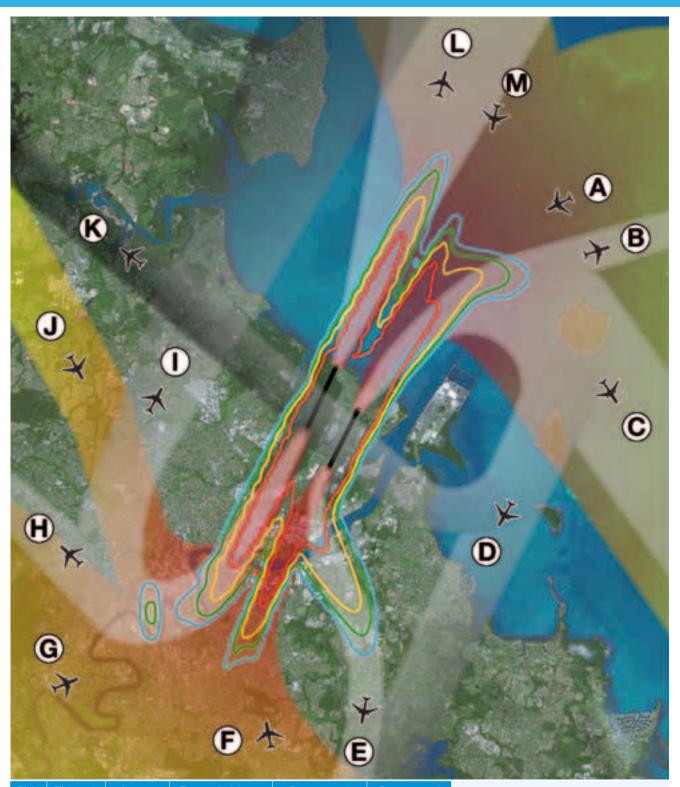
Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals	Contour Key The number of
Α	Arrival	42	0 - 90	18%	42%	Mean Altitude	overflights of 70dB(A) and above during the
В	Departure	2	0 - 5	1%	41%	4,500 ft	indicated time period
С	Departure	2	0 - 3	1%	41%		indicated time period
D	Departure	33	0 - 66	14%	41%		5 to 9 overflights
Е	Departure	35	0 - 70	15%	42%	O ft	· ·
F	Arrival	39	0 - 82	16%	41%	_	10 to 19 overflights
G	Arrival	10	0 - 54	4%	41%	Departures	20 to 49 overflights
Н	Departure	9	0 - 18	4%	42%	Mean Altitude	50 or more
I	Departure	14	0 - 28	6%	42%	12,000 ft	overflights
J	Arrival	13	0 - 37	5%	52%		
K	Departure	7	0 - 14	3%	43%		
L	Departure	14	0 - 28	6%	41%	0 ft	
M	Arrival	17	0 - 37	7%	42%	O It	

# 2035 With the NPR — Summer Weekday Night Monday to Friday 10.00pm - 6.00am

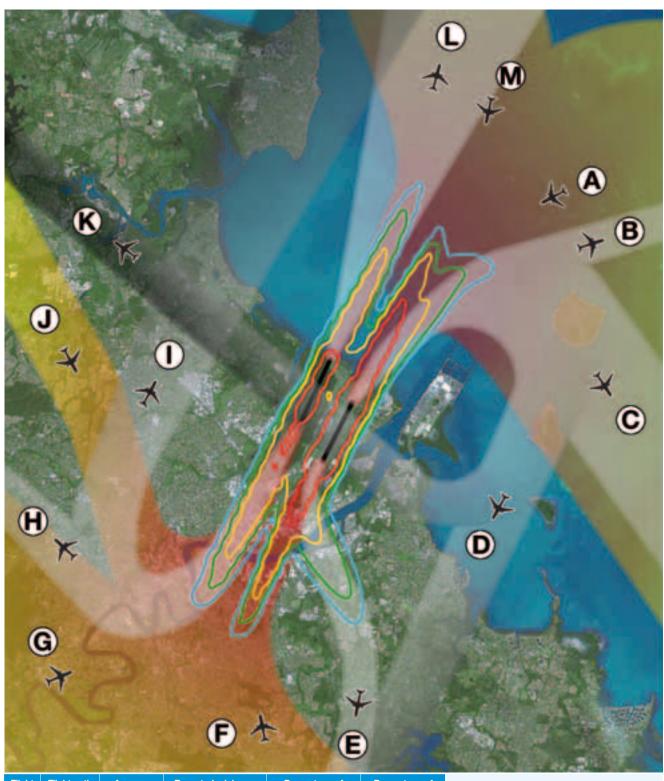


Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals	Contour Key The number of
Α	Arrival	5	0 - 21	8%	55%	Mean Altitude	overflights of 70dB(A) and above during the
В	Departure	3	0 - 7	6%	10%	4,500 ft	indicated time period
С	Departure		Inactive at	this time			indicated time penda
D	Departure	12	0 - 16	20%	5%		2 to 4 overflights
Е	Departure	4	0 - 16	6%	56%	O ft	•
F	Arrival	4	0 - 16	6%	58%		5 to 9 overflights
G	Arrival	3	0 - 14	5%	59%	Departures	10 to 19 overflights
Н	Departure	2	0 - 9	4%	55%	Mean Altitude	20 to 49 overflights
I	Departure	2	0 - 6	3%	56%	12,000 ft	50 or more
J	Arrival		Inactive at	this time			overflights
K	Departure	6	0 - 8	10%	6%		
L	Departure	1	0 - 6	2%	60%	0 ft	
M	Arrival	19	0 - 30	31%	1%	J II	

## 2035 With the NPR — Summer Weekend Day Saturday and Sunday 6.00am — 6.00pm

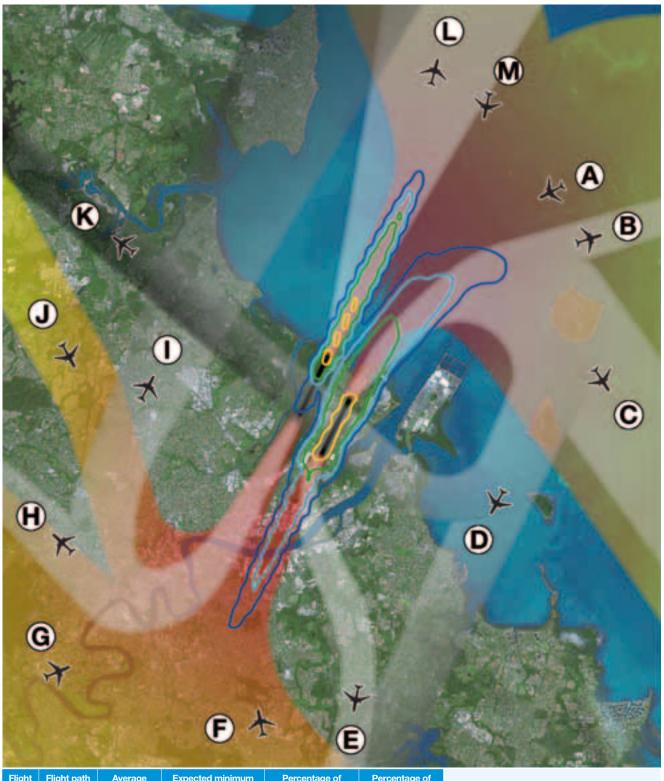


Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals	Contour Key The number of
Α	Arrival	96	0 - 209	16%	18%	Mean Altitude	overflights of 70dB(A) and above during the
В	Departure	7	0 - 16	1%	24%	4,500 ft	indicated time period
С	Departure	6	0 - 13	1%	31%		indicated time period
D	Departure	88	0 - 174	15%	23%		5 to 9 overflights
E	Departure	93	0 - 189	16%	18%	O ft	
F	Arrival	94	0 - 189	16%	25%		10 to 19 overflights
G	Arrival	12	0 - 132	2%	25%	Departures	20 to 49 overflights
Н	Departure	16	0 - 36	3%	18%	Mean Altitude	50 or more
I	Departure	33	0 - 71	6%	19%	12,000 ft	overflights
J	Arrival	40	0 - 96	7%	28%		
K	Departure	14	0 - 25	2%	24%		
L	Departure	37	0 - 71	6%	25%	O ft	
M	Arrival	48	0 - 100	8%	13%		



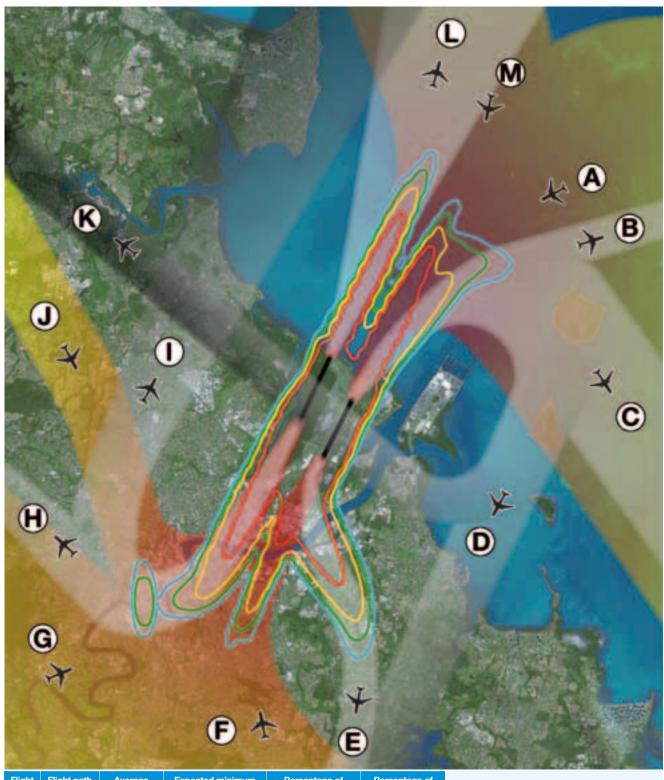
Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals	Contour Key The number of
Α	Arrival	42	0 - 86	19%	38%	Mean Altitude	overflights of 70dB(A) and above during the
В	Departure	3	0 - 6	1%	43%	4,500 ft	indicated time period
С	Departure	2	0 - 3	1%	45%		indicated time period
D	Departure	30	0 - 62	14%	42%		5 to 9 overflights
E	Departure	34	0 - 66	15%	38%	O ft	o a
F	Arrival	37	0 - 78	17%	42%	_	10 to 19 overflights
G	Arrival	6	0 - 46	3%	42%	Departures	20 to 49 overflights
Н	Departure	8	0 - 15	3%	38%	Mean Altitude	50 or more
I	Departure	16	0 - 30	7%	38%	12,000 ft	overflights
J	Arrival	12	0 - 31	5%	52%		
K	Departure	5	0 - 10	2%	45%		
L	Departure	14	0 - 30	7%	42%	0 ft	
M	Arrival	15	0 - 31	7%	38%	O II	





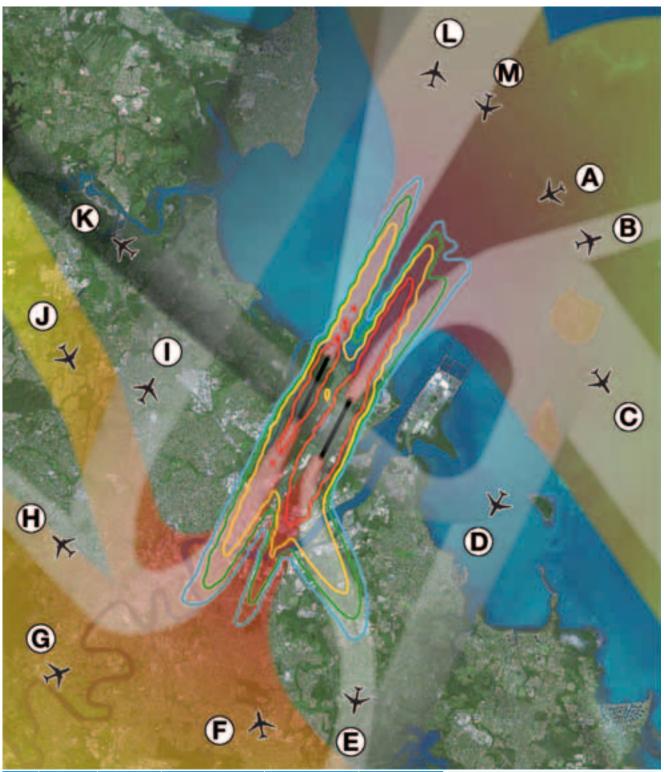
Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals Mean Altitude	Contour Key The number of
Α	Arrival	3	0 - 13	7%	59%		overflights of 70dB(A) and above during the
В	Departure	3	0 - 6	8%	13%	4,500 ft	indicated time period
С	Departure	1	0 - 1	2%	13%		indicated time period
D	Departure	4	0 - 5	10%	3%		2 to 4 overflights
Е	Departure	1	0 - 6	3%	61%	O ft	
F	Arrival	3	0 - 8	6%	59%		5 to 9 overflights
G	Arrival	3	0 - 13	7%	59%	Departures	10 to 19 overflights
Н	Departure	1	0 - 6	2%	66%	Mean Altitude	20 to 49 overflights
I	Departure	1	0 - 5	3%	69%	12,000 ft	50 or more
J	Arrival		Inactive at	this time			overflights
K	Departure	4	0 - 5	11%	1%		
L	Departure	1	0 - 4	3%	61%	O ft	
M	Arrival	14	1 - 22	36%	0%	O It	

## 2035 With the NPR - Winter Weekday Day Monday to Friday 6.00am - 6.00pm



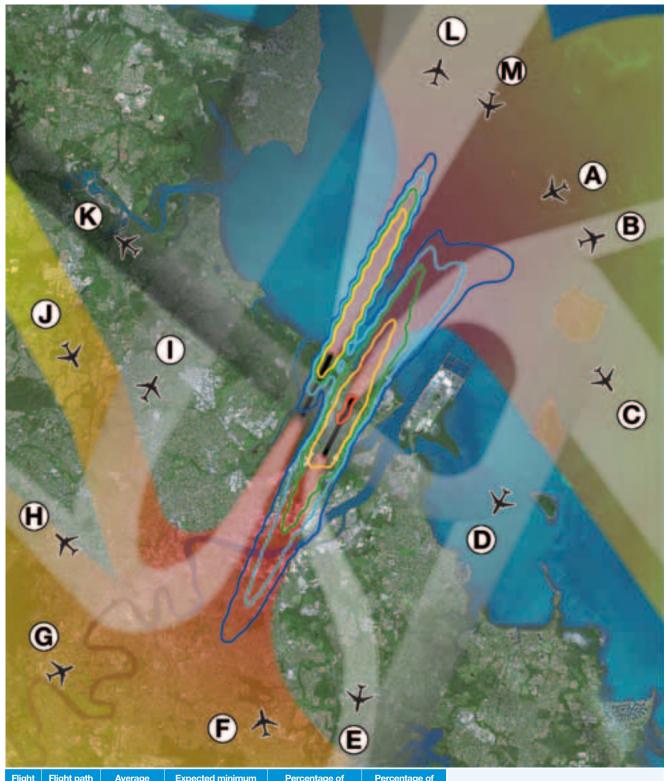
							TO THE REAL PROPERTY AND ADDRESS OF THE PERSON NAMED IN COLUMN TO
Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals	Contour Key The number of
Α	Arrival	142	0 - 212	24%	5%	Mean Altitude	overflights of 70dB(A) and above during the
В	Departure	5	0 - 16	1%	46%	4,500 ft	indicated time period
С	Departure	2	0 - 10	<1%	55%		indicated time period
D	Departure	52	0 - 187	9%	43%		5 to 9 overflights
E	Departure	144	0 - 198	24%	5%	0 ft	•
F	Arrival	53	0 - 192	9%	43%	_	10 to 19 overflights
G	Arrival	5	0 - 136	1%	43%	Departures	20 to 49 overflights
Н	Departure	21	0 - 31	4%	5%	Mean Altitude	50 or more
I	Departure	53	0 - 74	9%	5%	12,000 ft	overflights
J	Arrival	22	0 - 95	4%	47%		
K	Departure	6	0 - 20	1%	45%		
L	Departure	20	0 - 70	3%	44%	0 ft	
M	Arrival	69	0 - 95	12%	5%	O II	

# 2035 With the NPR — Winter Weekday Evening Monday to Friday 6.00pm - 10.00pm



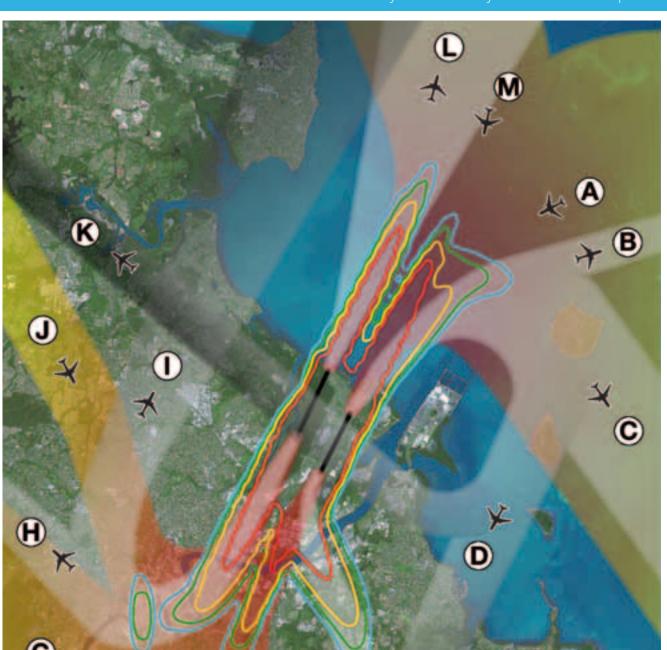
Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals Mean Altitude	Contour Key The number of
Α	Arrival	62	0 - 91	25%	21%		overflights of 70dB(A) and above during the
В	Departure	1	0 - 3	<1%	61%	4,500 ft	indicated time period
С	Departure	2	0 - 7	1%	61%		indicated time period
D	Departure	20	0 - 73	8%	60%		5 to 9 overflights
Е	Departure	59	0 - 81	24%	21%	O ft	· ·
F	Arrival	23	0 - 84	10%	60%	_	10 to 19 overflights
G	Arrival	2	0 - 50	1%	60%	Departures	20 to 49 overflights
Н	Departure	12	0 - 17	5%	21%	Mean Altitude	50 or more
I	Departure	18	0 - 25	7%	21%	12,000 ft	overflights
J	Arrival	9	0 - 36	4%	64%		
K	Departure	4	0 - 13	1%	64%		
L	Departure	8	0 - 27	3%	60%	0 ft	
M	Arrival	25	0 - 36	10%	21%	J II	

### 2035 With the NPR - Winter Weekday Night Monday to Friday 10.00pm - 6.00am



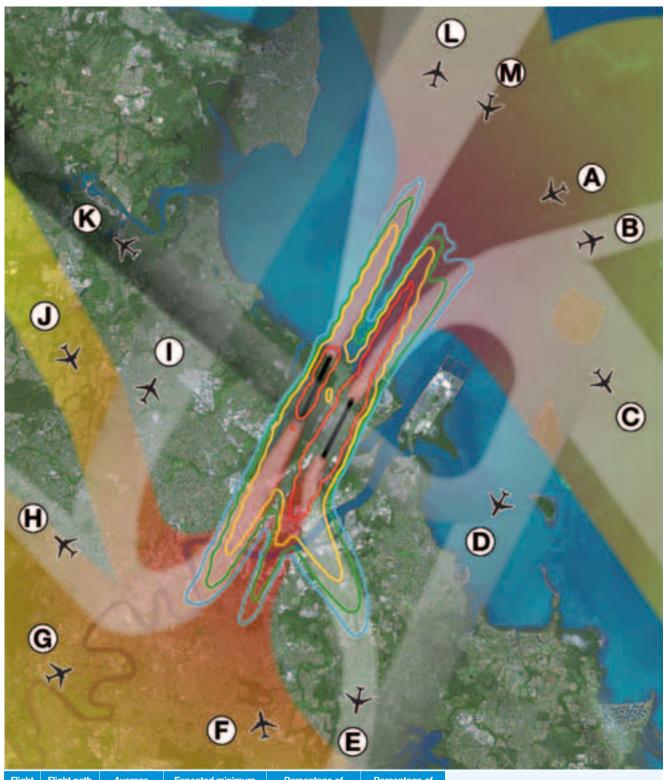
Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals Mean Altitude	Contour Key The number of
Α	Arrival	10	0 - 26	17%	15%		overflights of 70dB(A) and above during the
В	Departure	4	0 - 8	6%	13%	4,500 ft	indicated time period
С	Departure	1	0 - 1	1%	13%		indicated time period
D	Departure	4	0 - 7	7%	7%		2 to 4 overflights
E	Departure	3	0 - 8	5%	40%	O ft	o o
F	Arrival	2	0 - 22	3%	82%	_	5 to 9 overflights
G	Arrival	1	0 - 14	2%	82%	Departures	10 to 19 overflights
Н	Departure	2	0 - 8	4%	15%	Mean Altitude	20 to 49 overflights
- 1	Departure	3	0 - 7	5%	15%	12,000 ft	50 or more
J	Arrival		Inactive at	this time			overflights
K	Departure	5	0 - 7	9%	8%		
L	Departure	1	0 - 7	1%	83%	0 ft	
М	Arrival	23	0 - 36	39%	0%	J II	

# 2035 With the NPR — Winter Weekend Day Saturday and Sunday 6.00am – 6.00pm



Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals	Contour Key The number of
Α	Arrival	137	0 - 209	24%	5%	Mean Altitude	overflights of 70dB(A) and above during the
В	Departure	5	0 - 18	1%	40%	4,500 ft	indicated time period
С	Departure	2	0 - 11	<1%	55%		indicated time period
D	Departure	53	0 - 172	9%	38%		5 to 9 overflights
Е	Departure	129	0 - 185	23%	5%	O ft	•
F	Arrival	55	0 - 189	10%	41%	_	10 to 19 overflights
G	Arrival	3	0 - 67	1%	41%	Departures	20 to 49 overflights
Н	Departure	22	0 - 33	4%	5%	Mean Altitude	50 or more
I	Departure	48	0 - 71	8%	5%	12,000 ft	overflights
J	Arrival	24	0 - 91	4%	43%		
K	Departure	8	0 - 22	1%	42%		
L	Departure	21	0 - 67	4%	41%	0 ft	
M	Arrival	66	0 - 98	11%	3%	) I	

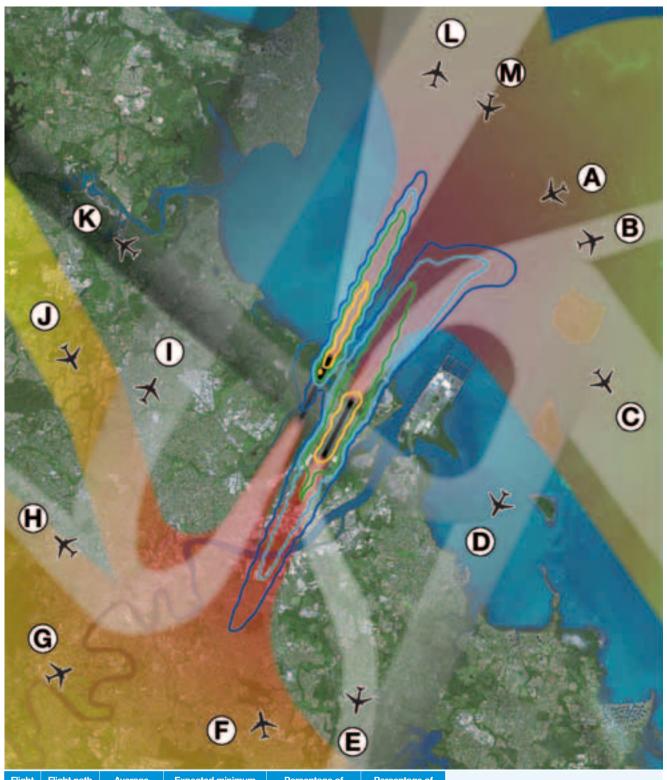
### 2035 With the NPR - Winter Weekend Evening Saturday and Sunday 6.00pm - 10.00pm



Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals	Contour Key The number of
Α	Arrival	55	0 - 84	25%	21%	Mean Altitude	overflights of 70dB(A) and above during the
В	Departure	1	0 - 4	1%	62%	4,500 ft	indicated time period
С	Departure	2	0 - 7	1%	62%		indicated time period
D	Departure	20	0 - 67	9%	62%		5 to 9 overflights
E	Departure	53	0 - 75	24%	21%	O ft	· ·
F	Arrival	23	0 - 77	10%	62%	_	10 to 19 overflights
G	Arrival	2	0 - 47	1%	62%	Departures	20 to 49 overflights
Н	Departure	10	0 - 14	5%	21%	Mean Altitude	50 or more
I	Departure	16	0 - 23	7%	21%	12,000 ft	overflights
J	Arrival	9	0 - 32	4%	65%		
K	Departure	3	0 - 11	1%	64%		
L	Departure	7	0 - 23	3%	62%	0 ft	
M	Arrival	22	0 - 32	10%	21%	0 11	

# 2035 With the NPR — Winter Weekend Night Saturday and Sunday 10.00pm - 6.00am





Flight path	Flight path type	Average number of jet flights on flight path	Expected minimum and maximum numbers of jet flights on path	Percentage of Brisbane Airport's total jet flights on path	Percentage of days with no jet flights on path	Altitude Key Arrivals	Contour Key The number of
Α	Arrival	7	0 - 18	16%	39%	Mean Altitude	overflights of 70dB(A) and above during the
В	Departure	2	0 - 6	5%	45%	4,500 ft	indicated time period
С	Departure		Inactive at	this time			indicated time penda
D	Departure	2	0 - 3	5%	8%		2 to 4 overflights
Е	Departure	1	0 - 3	3%	47%	O ft	o o
F	Arrival	2	0 - 12	4%	79%	_	5 to 9 overflights
G	Arrival	2	0 - 13	4%	79%	Departures	10 to 19 overflights
Н	Departure	1	0 - 8	3%	45%	Mean Altitude	20 to 49 overflights
I	Departure	3	0 - 5	6%	47%	12,000 ft	50 or more
J	Arrival		Inactive at	this time			overflights
K	Departure	6	0 - 7	14%	2%		
L	Departure	1	0 - 5	2%	82%	0 ft	
M	Arrival	16	1 - 26	38%	0%	J II	

### Notes and Explanations

### Other Sources of Information about Flight Paths and Noise Information

#### 1. Draft EIS/MDP

The four volumes that comprise the Draft EIS/MDP are available **free** on CD-ROM.

### 2. Transparent Noise Information Package (TNIP)

TNIP is a software application for your computer that provides access to aircraft noise information related to the NPR project. Available free of charge on CD-ROM, TNIP is preloaded with all the data from which the flight paths and N70 contours that appear in the Draft EIS/MDP and in this booklet have been drawn. Once the files are loaded, the user is presented with a screen showing Brisbane Airport and surrounding suburbs and a number of drop-down menus. By selecting from the menus either individually, or in groups, components such as N70 contours are generated over the map.

### For more information on TNIP, we recommend you visit:

www.dotars.gov.au/aviation/environmental/transparent\_noise/tnip.aspx

#### How to obtain this free information:

**Freecall** the New Parallel Runway Information Line on **1800 737 075** 

Email: info@bacnpr.com.au

**Reply Paid Post:** PO Box 1441, Milton BC Qld 4064 (no stamp required)

The four volumes that form the Draft EIS/MDP are available as printed documents and can be purchased through the above channels for \$180.00 (including GST and handling).

### How information regarding flight paths and noise effects has been prepared

Forecasting flight paths and noise information into the future has been carefully modelled. However, there are a number of uncertainties in forecasting that must be taken into account and about which the community should be aware.

#### **Weather Conditions**

The model used has drawn upon 10 years of Bureau of Meteorology data recorded at Brisbane Airport. The information has been validated by cross-referencing with air traffic control weather data, known as CATIS. CATIS data is collected via automatic weather stations also located on-airport. This information is used to determine whether a change of runway direction is required and to update pilots as required. In forecasting forward to 2015 or 2035 historical weather data has been used to predict future weather conditions.

#### **Traffic Forecasts**

The expected growth in air traffic is based on forecast growth in domestic and international passenger numbers. The expected number of flights for 2015 and 2035 is based on the determination of a 'typical busy day'.

#### Fleet Mix

The model used for determining the potential noise effects of aircraft has been based on today's aircraft fleet mix. However, the aircraft flying into and out of Brisbane will change over coming years. Aircraft technology continues to evolve with manufacturers introducing new and improved aircraft. For instance, the Boeing 787 Dreamliner, which will feature reduced emissions and a new airframe and engines for quieter take-offs and landings, will be introduced into the Qantas fleet in 2008. The use of these new aircraft, which are expected to deliver positive benefits to the community, has been taken into account in the modelling.

#### Aircraft Noise Profiles

The noise made by aircraft varies from plane to plane and can be different even for aircraft of the same type. Some allowance has been made for variance across aircraft.

#### Flight Path Allocation

The modelling has made assumptions in relation to the allocation of flight paths for arriving and departing aircraft. Accurate information is available for the 2005 year. However, the allocation of flight paths for 2015 and beyond can only be based on historical data relating to the likely points of origin and the destinations of aircraft.



### How changes to flight paths will be approved

The process for adoption and implementation of significant changes to the operation of Australia's airspace – such as changes required by the NPR – is a complex and rigorous process.

Based on current legislative requirements, it is expected that the approval of changes to airspace required for the NPR to be operated will be a sequential two-step process, as described below.

#### Step 1 - Approval of Draft EIS/MDP

The first step is approval of the Draft EIS/MDP, under the *Airports Act 1996* and the *Environment Protection and Biodiversity Conservation Act 1999*. In the Draft EIS/MDP, a comprehensive environmental assessment of the operational impacts of the project (predominantly concerned with noise and air issues) has been undertaken. Volume D of the Draft EIS/MDP contains that environmental assessment.

The assessment is based on a range of possible flight path options, approach and departure procedures and operating modes which have been prepared for BAC. The airspace design work is of an advanced technical level and will form the basis of the next step for adoption and implementation of airspace changes (beyond the EIS/MDP approval) outlined in Step 2.

The environmental assessment undertaken and presented in the Draft EIS/MDP will provide:

- The Australian Government Minister for the Environment and Heritage with sufficient information to decide whether to approve the EIS for the purposes of the *Environmental Protection* and *Biodiversity Act* 1999 (EPBC Act);
- The Minister for the Environment and Heritage with sufficient information to provide advice to the Australian Government Minister for Transport and Regional Services before that Minister can approve the MDP (this is a requirement of the EPBC Act);
- The Minister for Transport and Regional Services with sufficient information to decide whether to approve the MDP for the purposes of the Airports Act; and
- Sufficient details for BAC to obtain all State, Local and Australian Government approvals to enable the NPR to proceed to construction.

In addition, the EIS/MDP assessment will provide the Minister for the Environment and Heritage with information to provide advice to Airservices Australia before it can adopt and implement any changes to airspace which are likely to have a significant impact on the environment (again, a requirement of the EPBC Act).

## Step 2 – Approval by the Airspace and Environment Regulatory Unit (AERU) or its Airspace Regulator Successor

The second step in the process is approval for the adoption and implementation of the airspace changes by the Airspace and Environment Regulatory Unit (AERU), currently a division of Airservices Australia. The role of AERU is to exercise Airservices Australia's authority for airspace and environment responsibilities as defined with prescribed legislation including:

- Air Services Act 1995;
- Air Services Regulations 1995;
- EPBC Act 1999; and
- Air Navigation (Aircraft Noise) Regulation 1984.

However, official adoption of the changes required to allow the NPR to become operational cannot occur until the construction of the runway is approved and final detailed specifications (e.g. exact elevation, length, width, alignment, coordinates of thresholds and extent of navigation aids) are fully known. That will not happen until the new runway is close to completion. At this time, detailed procedures for the flight tracks are designed by experts who must be certified by the Civil Aviation Safety Authority (CASA) to undertake such design.

Those final detailed procedures, together with the new flight tracks to be operated after the NPR becomes operational, will be submitted to AERU for assessment. A detailed Safety Case and Environmental Assessment will be undertaken closer to the completion of the construction of the NPR. It is expected that AERU will take into account the detailed environmental assessment contained in this Draft EIS/MDP in making its assessment. Additionally, the detailed design of the new airspace just prior to the NPR becoming operational would be based on the flight tracks and procedures outlined in the EIS/MDP.

The AERU assessment is based on a number of criteria, including:

- Safety implications;
- ICAO obligations;
- Environment considerations;
- Consultation and cooperation;
- Government policy; and
- Promoting and fostering civil aviation.

If AERU decides to approve the airspace changes, advice is issued through the Aeronautical Information Service process, industry training, as required and made available on AERU's website.

### Notes and Explanations Continued

#### **Procedures for Defining Flight Paths**

The flight paths developed for Brisbane Airport both now and with the NPR have been developed in accordance with standards established by organisations including the International Civil Aviation Organization (ICAO) and the Airspace and Environment Regulatory Unit (AERU) which is part of Airservices Australia.

The following parameters are considered in the development of the flight paths:

#### Priority 1 - Safety

#### Priority 2 - Air Traffic Management Requirements

#### Priority 3 - Environment

Where all three areas conflict, the solution is, in the main, based on the above order of priority. However, for the purposes of noise abatement at sensitive times, such as night time, Priority 3 may have precedence over Priority 2.

The procedures that have been followed in developing the proposed flight path options and modes of operation for the NPR are:

- Safety is always paramount.
- Flight paths must be fit for purpose to enable traffic demand to be processed in a safe, orderly and expeditious manner.
- Existing flight paths will be maintained where possible.
- New flight paths or existing flight path changes to occur over water where possible, especially where aircraft are below 5,000 ft.
- Where it is not possible for new flight paths to be over water, flight paths to be concentrated over uninhabited areas where possible.
- If flight paths over residential areas are necessary, then residential areas overflown by aircraft to be minimised to the extent practicable.
- Residential areas overflown by departing aircraft should not to the extent practicable also be overflown by arriving aircraft.
- When comparing options, operations that are conducted at night or on weekends should be treated as being more sensitive than those that occur during the daytime on weekdays.
- Options that allow for a gradual change from current to future procedures should be given preference.
- Noise should be fairly shared whenever possible.
- No suburb, group or individual can demand or expect to be exempt from aircraft noise exposure.



#### For further information:

Freecall: 1800 737 075

Email: info@bacnpr.com.au

Web: www.brisbaneairport.com.au

Reply Paid Post: PO Box 1441,

Milton BC Qld 4064 (no stamp required)

Facsimile: 07 3367 1609

