

Before using this booklet,
please read the following
instructions

.....

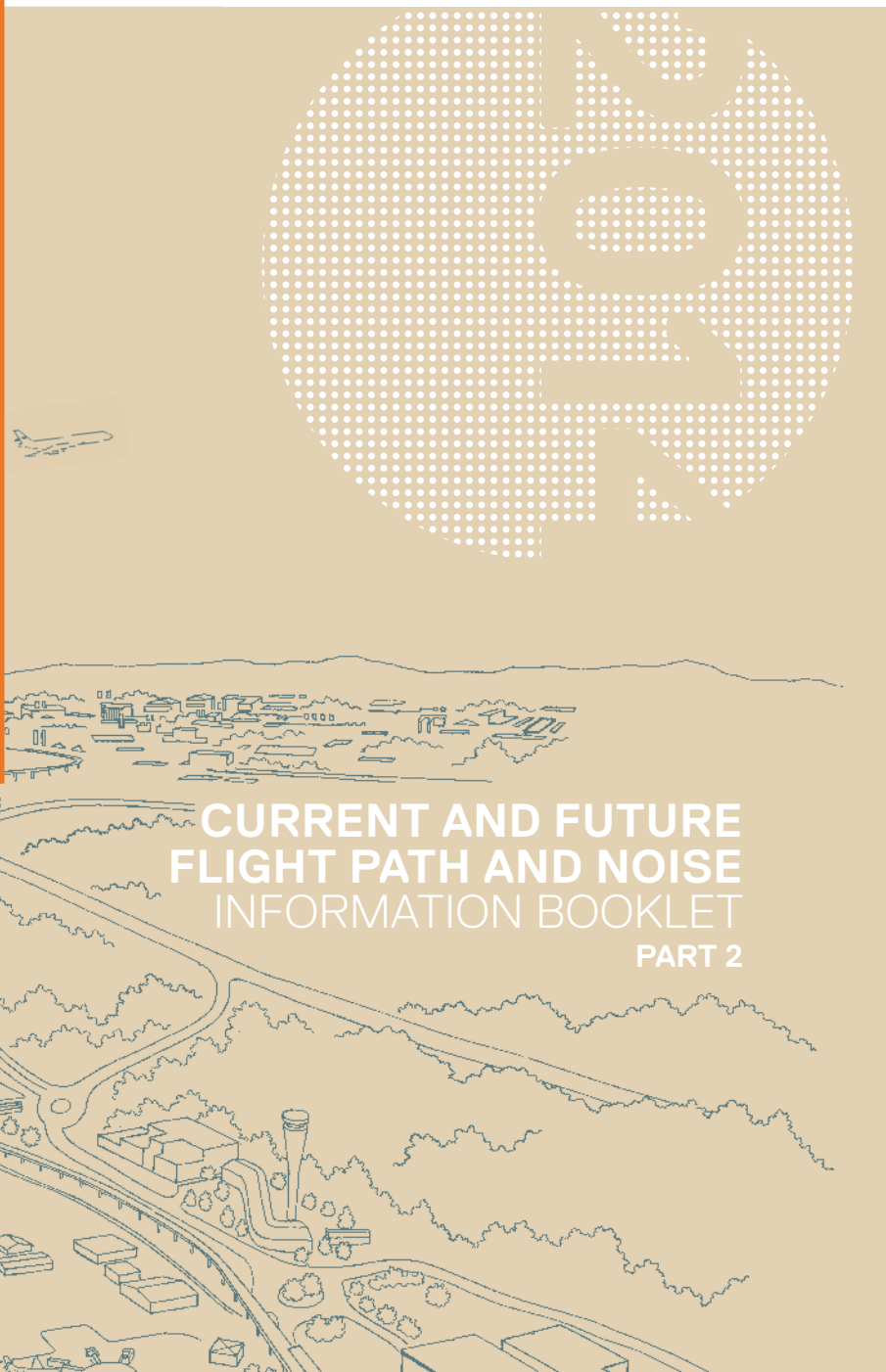
This document contains a number of flight path and noise information charts. By selecting the 'layers' icon* in the Acrobat Reader toolbar you are able to overlay a map of Brisbane suburbs onto each of the charts.

To turn off the layer, simply select the layers icon again.

The layers icon looks like this:



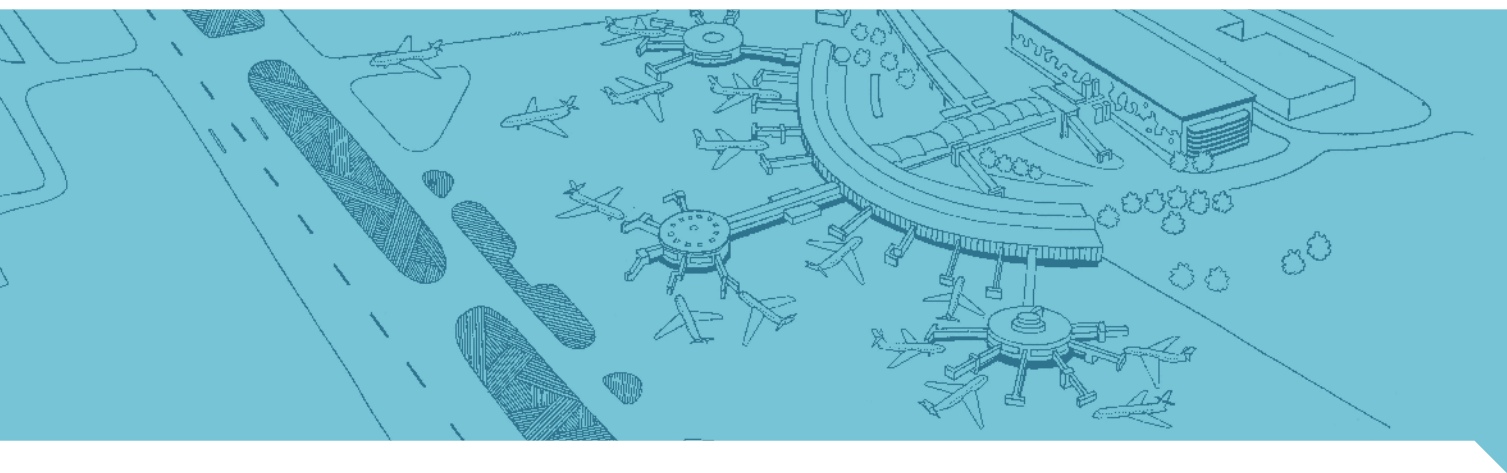
* This feature is available on Adobe Acrobat Reader 6 and upwards.



CURRENT AND FUTURE FLIGHT PATH AND NOISE INFORMATION BOOKLET PART 2




This section contains pages 48 to 86 of the Current and Future Flight Path and Noise Information Booklet.



ALTITUDE KEY

ARRIVALS

MEAN ALTITUDE







4,500 FT

0 FT


CONTOUR KEY

THE NUMBER OF OVERFLIGHTS OF 70dB(A) AND ABOVE DURING THE INDICATED TIME PERIOD

	5 TO 9 OVERFLIGHTS
	10 TO 19 OVERFLIGHTS
	20 TO 49 OVERFLIGHTS
	50 OR MORE OVERFLIGHTS

DEPARTURES

MEAN ALTITUDE

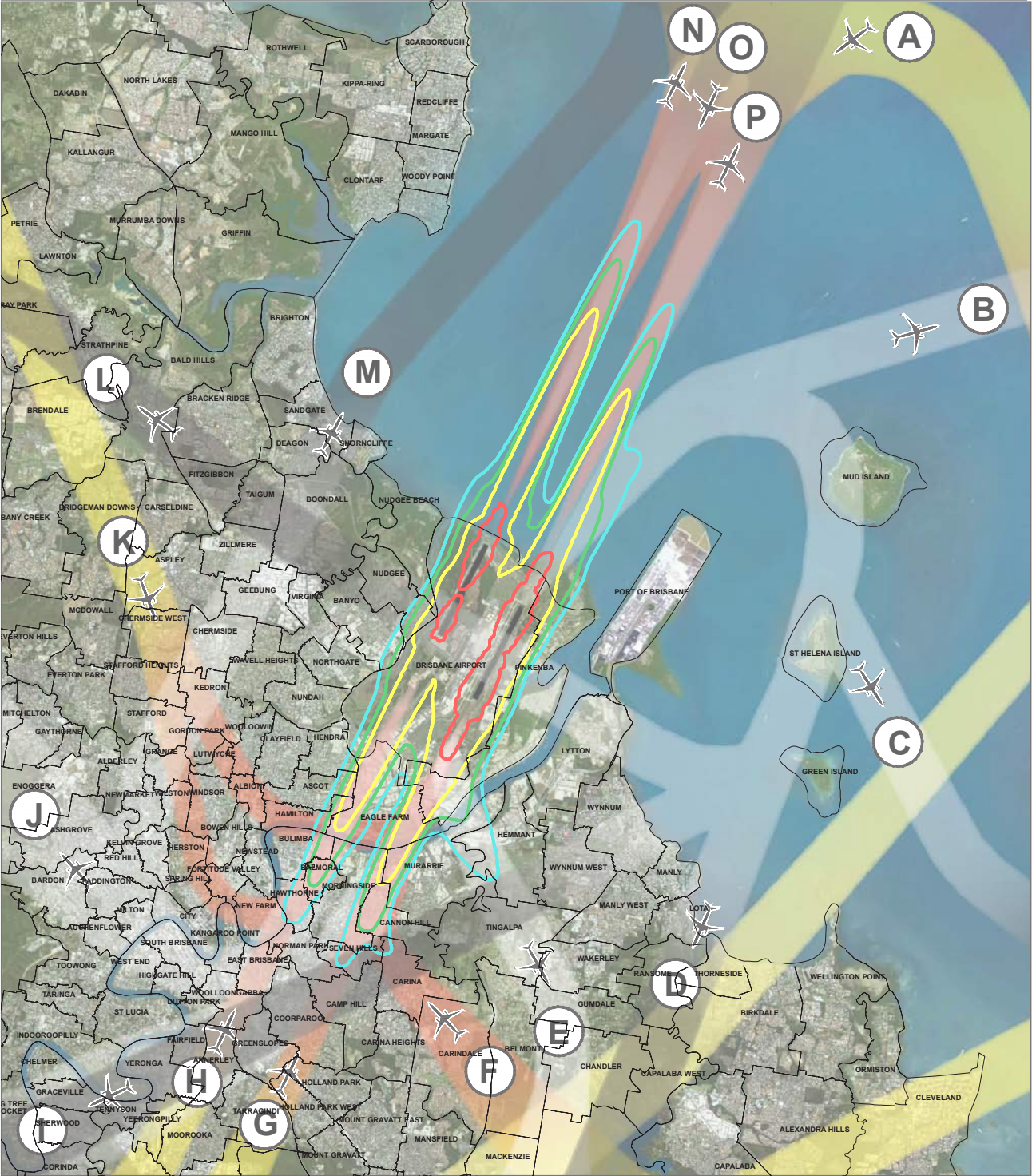


12,000 FT

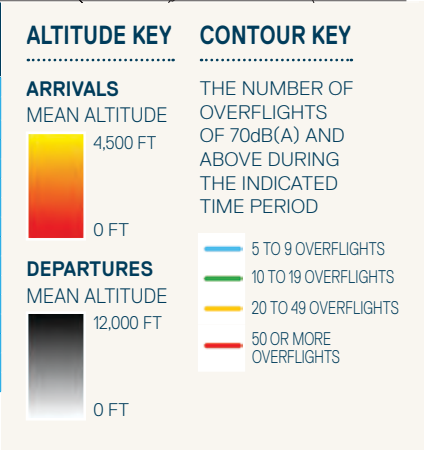
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48 Brisbane Airport Corporation

2034 SUMMER WEEKDAY EVENING WITH THE NPR – MONDAY TO FRIDAY 6PM – 11PM

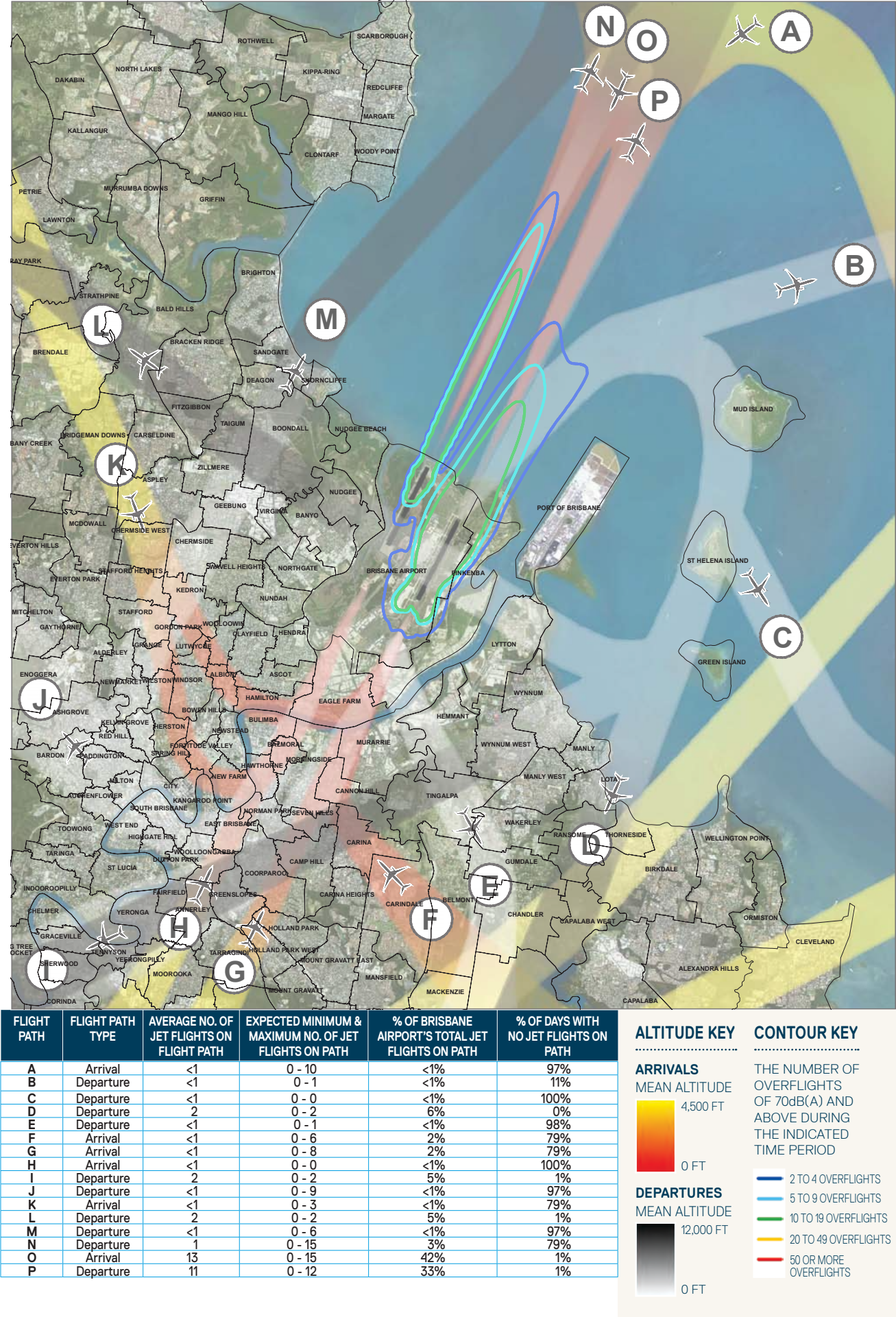


FLIGHT PATH	FLIGHT PATH TYPE	AVERAGE NO. OF JET FLIGHTS ON FLIGHT PATH	EXPECTED MINIMUM & MAXIMUM NO. OF JET FLIGHTS ON PATH	% OF BRISBANE AIRPORT'S TOTAL JET FLIGHTS ON PATH	% OF DAYS WITH NO JET FLIGHTS ON PATH
A	Arrival	29	0 - 54	15%	33%
B	Departure	<1	0 - 0	<1%	100%
C	Departure	<1	0 - 2	<1%	51%
D	Departure	20	0 - 46	10%	15%
E	Departure	19	0 - 34	10%	33%
F	Arrival	12	0 - 30	7%	49%
G	Arrival	11	0 - 27	6%	49%
H	Arrival	12	0 - 28	6%	49%
I	Departure	7	0 - 12	3%	33%
J	Departure	5	0 - 9	3%	34%
K	Arrival	12	0 - 28	6%	49%
L	Departure	<1	0 - 0	<1%	100%
M	Departure	13	0 - 24	7%	33%
N	Departure	13	0 - 31	7%	49%
O	Arrival	37	0 - 64	19%	30%
P	Departure	<1	0 - 2	<1%	51%



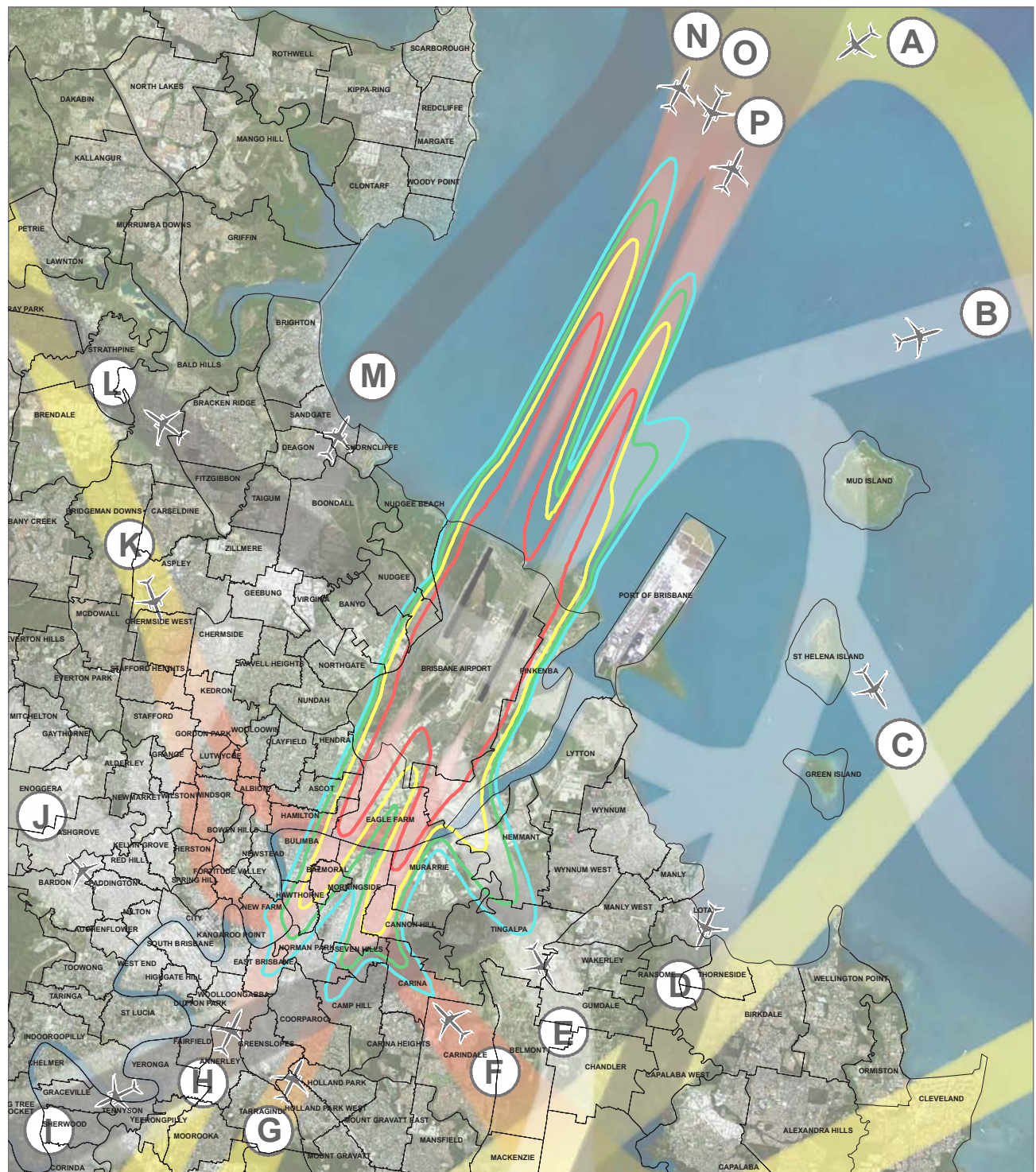
THESE FLIGHT PATHS REPRESENT WHERE THE MAJORITY OF AIRCRAFT WILL FLY, HOWEVER ALL AREAS COULD BE SUBJECTED TO SOME AIRCRAFT OVERFLIGHT.

2034 SUMMER WEEKDAY NIGHT WITH THE NPR – MONDAY TO FRIDAY 11PM – 5AM



THESE FLIGHT PATHS REPRESENT WHERE THE MAJORITY OF AIRCRAFT WILL FLY, HOWEVER ALL AREAS COULD BE SUBJECTED TO SOME AIRCRAFT OVERFLIGHT.

2034 SUMMER WEEKEND DAY WITH THE NPR – SATURDAY AND SUNDAY 6AM – 6PM



FLIGHT PATH	FLIGHT PATH TYPE	AVERAGE NO. OF JET FLIGHTS ON FLIGHT PATH	EXPECTED MINIMUM & MAXIMUM NO. OF JET FLIGHTS ON PATH	% OF BRISBANE AIRPORT'S TOTAL JET FLIGHTS ON PATH	% OF DAYS WITH NO JET FLIGHTS ON PATH
A	Arrival	49	0 - 121	10%	17%
B	Departure	<1	0 - 2	<1%	47%
C	Departure	2	0 - 6	<1%	38%
D	Departure	69	0 - 121	14%	2%
E	Departure	40	0 - 94	8%	17%
F	Arrival	29	0 - 68	6%	28%
G	Arrival	23	0 - 54	5%	28%
H	Arrival	26	0 - 58	5%	28%
I	Departure	14	0 - 28	3%	9%
J	Departure	8	0 - 20	2%	17%
K	Arrival	25	0 - 57	5%	28%
L	Departure	1	0 - 3	<1%	20%
M	Departure	46	0 - 112	9%	17%
N	Departure	57	0 - 126	12%	28%
O	Arrival	84	0 - 162	17%	6%
P	Departure	16	0 - 39	3%	13%

ALTITUDE KEY

ARRIVALS

MEAN ALTITUDE

4,500 FT



DEPARTURES

MEAN ALTITUDE

12,000 FT



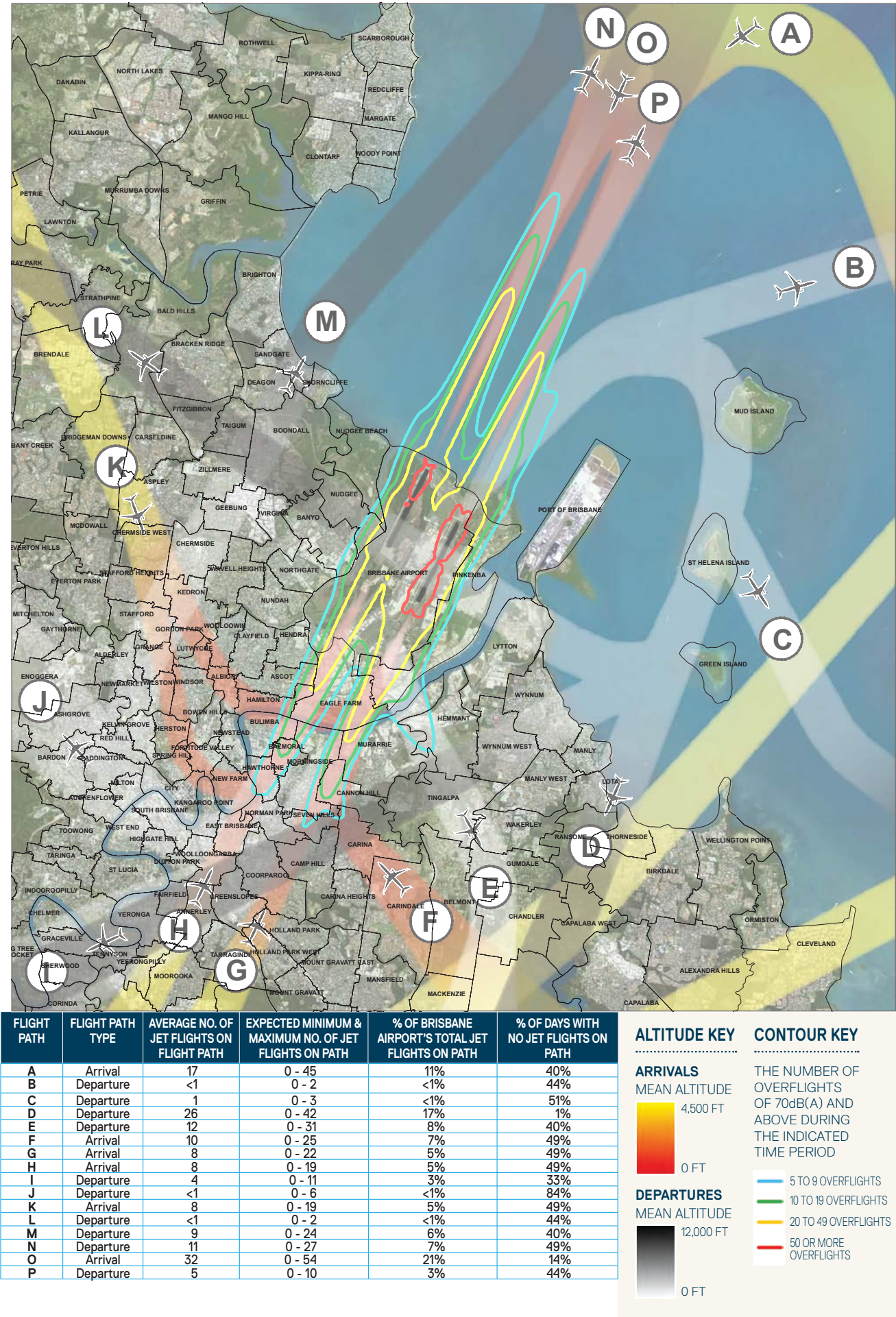
CONTOUR KEY

THE NUMBER OF OVERFLIGHTS OF 70dB(A) AND ABOVE DURING THE INDICATED TIME PERIOD

- 5 TO 9 OVERFLIGHTS
- 10 TO 19 OVERFLIGHTS
- 20 TO 49 OVERFLIGHTS
- 50 OR MORE OVERFLIGHTS

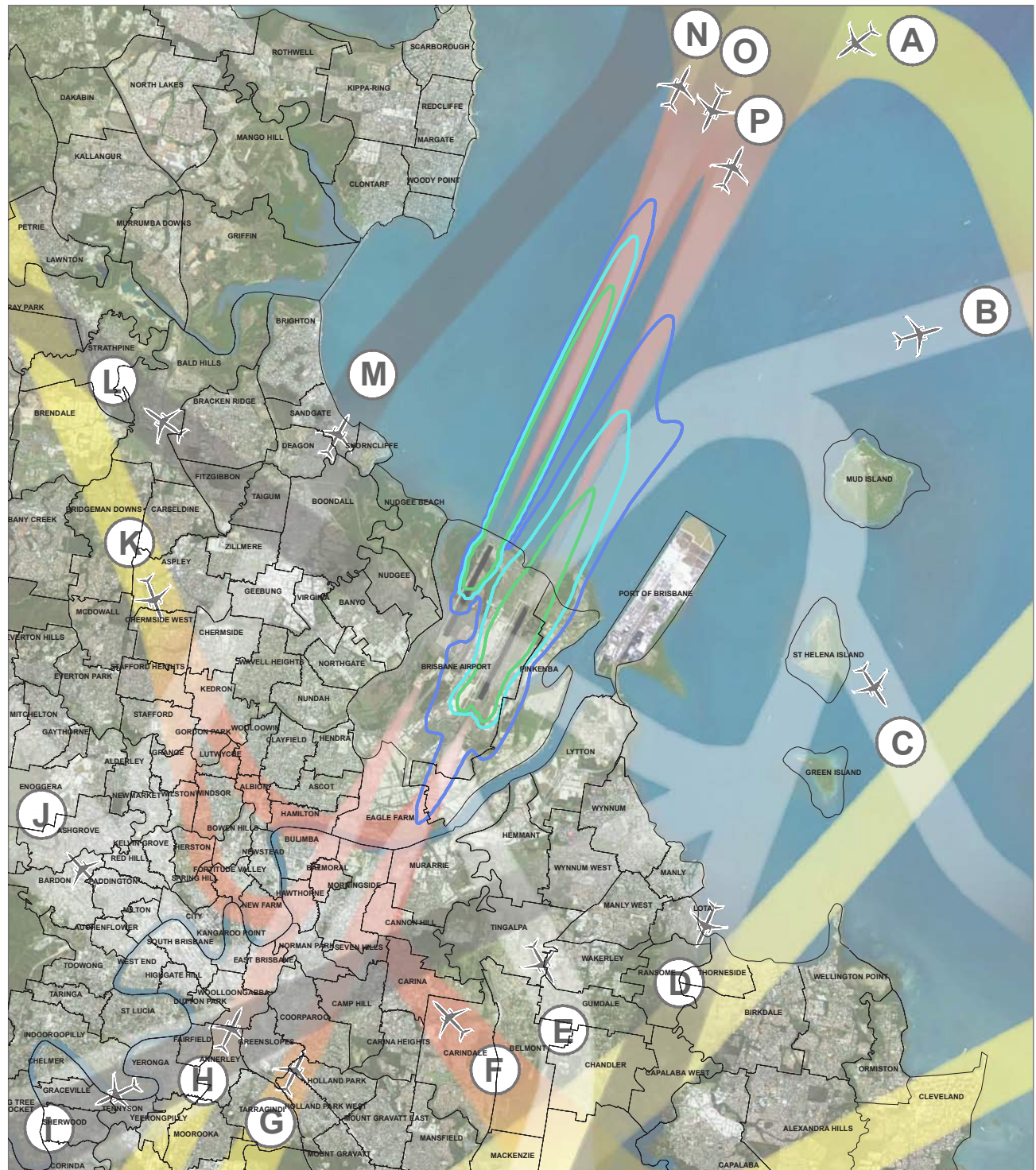
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2034 SUMMER WEEKEND EVENING WITH THE NPR – SATURDAY AND SUNDAY 6PM – 11PM



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2034 SUMMER WEEKEND NIGHT WITH THE NPR – SATURDAY AND SUNDAY 11PM – 6AM

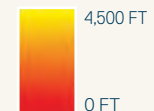


FLIGHT PATH	FLIGHT PATH TYPE	AVERAGE NO. OF JET FLIGHTS ON FLIGHT PATH	EXPECTED MINIMUM & MAXIMUM NO. OF JET FLIGHTS ON PATH	% OF BRISBANE AIRPORT'S TOTAL JET FLIGHTS ON PATH	% OF DAYS WITH NO JET FLIGHTS ON PATH
A	Arrival	<1	0 - 8	<1%	97%
B	Departure	<1	0 - 0	<1%	100%
C	Departure	<1	0 - 0	<1%	100%
D	Departure	3	0 - 3	9%	1%
E	Departure	<1	0 - 3	<1%	99%
F	Arrival	<1	0 - 5	<1%	80%
G	Arrival	<1	0 - 10	2%	79%
H	Arrival	<1	0 - 0	<1%	100%
I	Departure	2	0 - 3	6%	2%
J	Departure	<1	0 - 6	<1%	98%
K	Arrival	<1	0 - 5	1%	79%
L	Departure	2	0 - 2	6%	2%
M	Departure	<1	0 - 4	<1%	98%
N	Departure	1	0 - 10	3%	80%
O	Arrival	18	0 - 19	55%	0%
P	Departure	5	0 - 6	16%	2%

ALTITUDE KEY

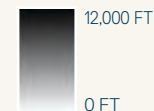
ARRIVALS

MEAN ALTITUDE



DEPARTURES

MEAN ALTITUDE



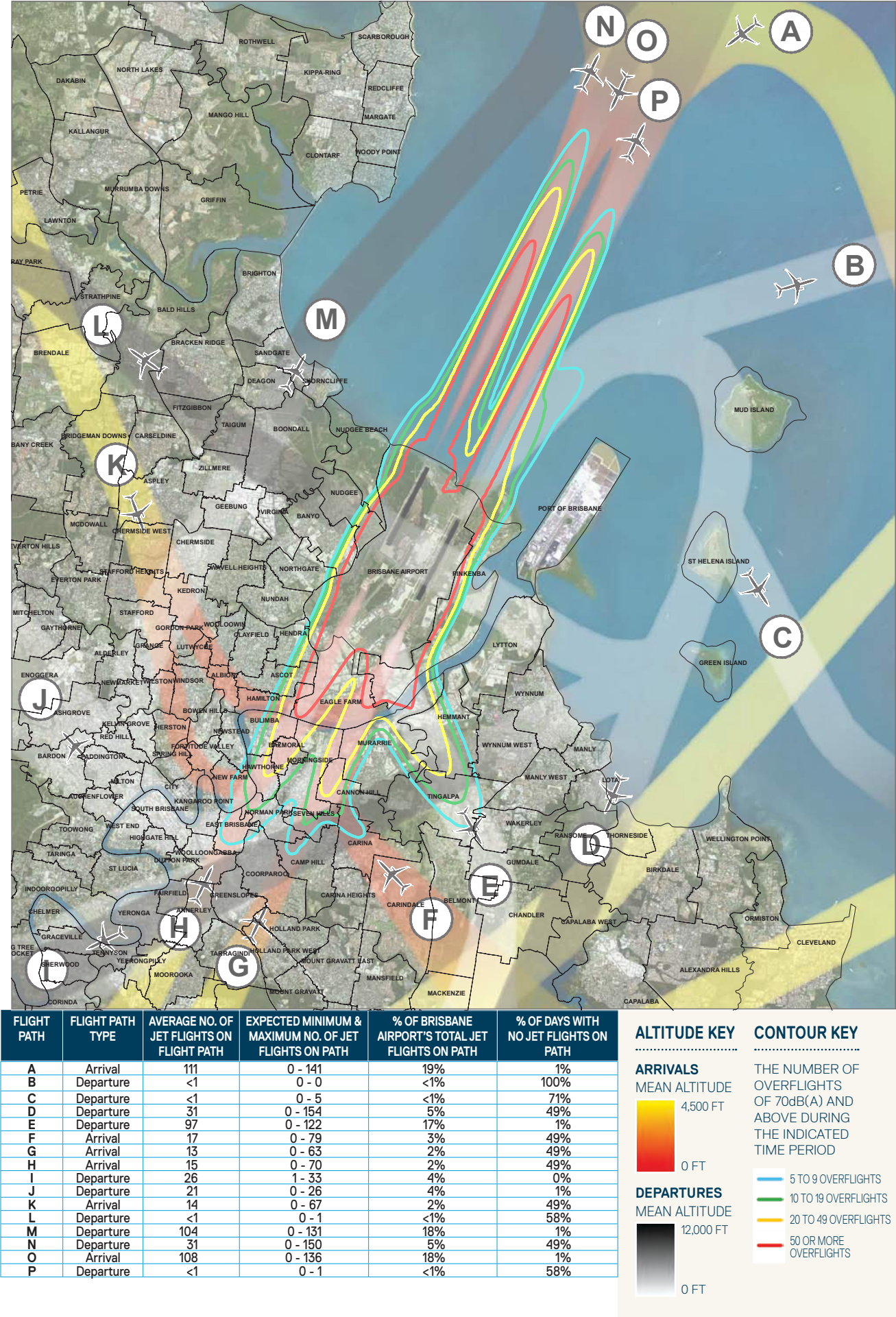
CONTOUR KEY

THE NUMBER OF OVERFLIGHTS OF 70dB(A) AND ABOVE DURING THE INDICATED TIME PERIOD



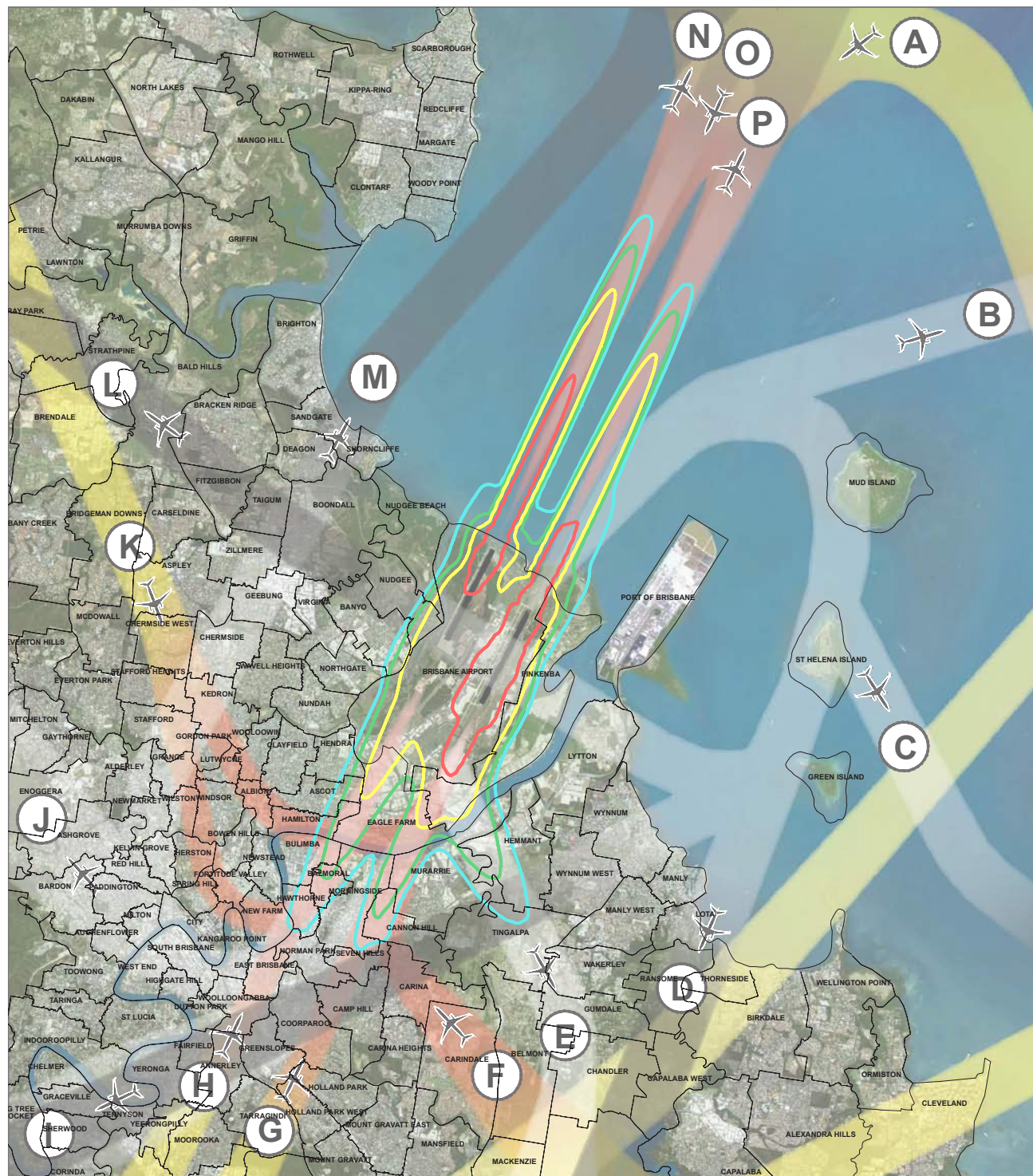
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2034 WINTER WEEKDAY DAY WITH THE NPR – MONDAY TO FRIDAY 6AM – 6PM



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2034 WINTER WEEKDAY EVENING WITH THE NPR – MONDAY TO FRIDAY 6PM – 11PM

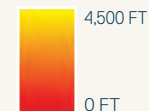


FLIGHT PATH	FLIGHT PATH TYPE	AVERAGE NO. OF JET FLIGHTS ON FLIGHT PATH	EXPECTED MINIMUM & MAXIMUM NO. OF JET FLIGHTS ON PATH	% OF BRISBANE AIRPORT'S TOTAL JET FLIGHTS ON PATH	% OF DAYS WITH NO JET FLIGHTS ON PATH
A	Arrival	43	0 - 59	21%	11%
B	Departure	<1	0 - 0	<1%	100%
C	Departure	<1	0 - 4	<1%	75%
D	Departure	10	0 - 50	5%	27%
E	Departure	30	0 - 38	15%	11%
F	Arrival	6	0 - 33	3%	73%
G	Arrival	5	0 - 30	2%	73%
H	Arrival	5	0 - 25	2%	73%
I	Departure	10	0 - 12	5%	11%
J	Departure	8	0 - 9	4%	11%
K	Arrival	5	0 - 27	2%	73%
L	Departure	<1	0 - 0	<1%	100%
M	Departure	21	0 - 27	11%	11%
N	Departure	6	0 - 32	3%	73%
O	Arrival	52	0 - 65	26%	8%
P	Departure	<1	0 - 1	<1%	39%

ALTITUDE KEY

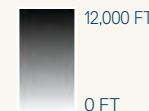
ARRIVALS

MEAN ALTITUDE



DEPARTURES

MEAN ALTITUDE



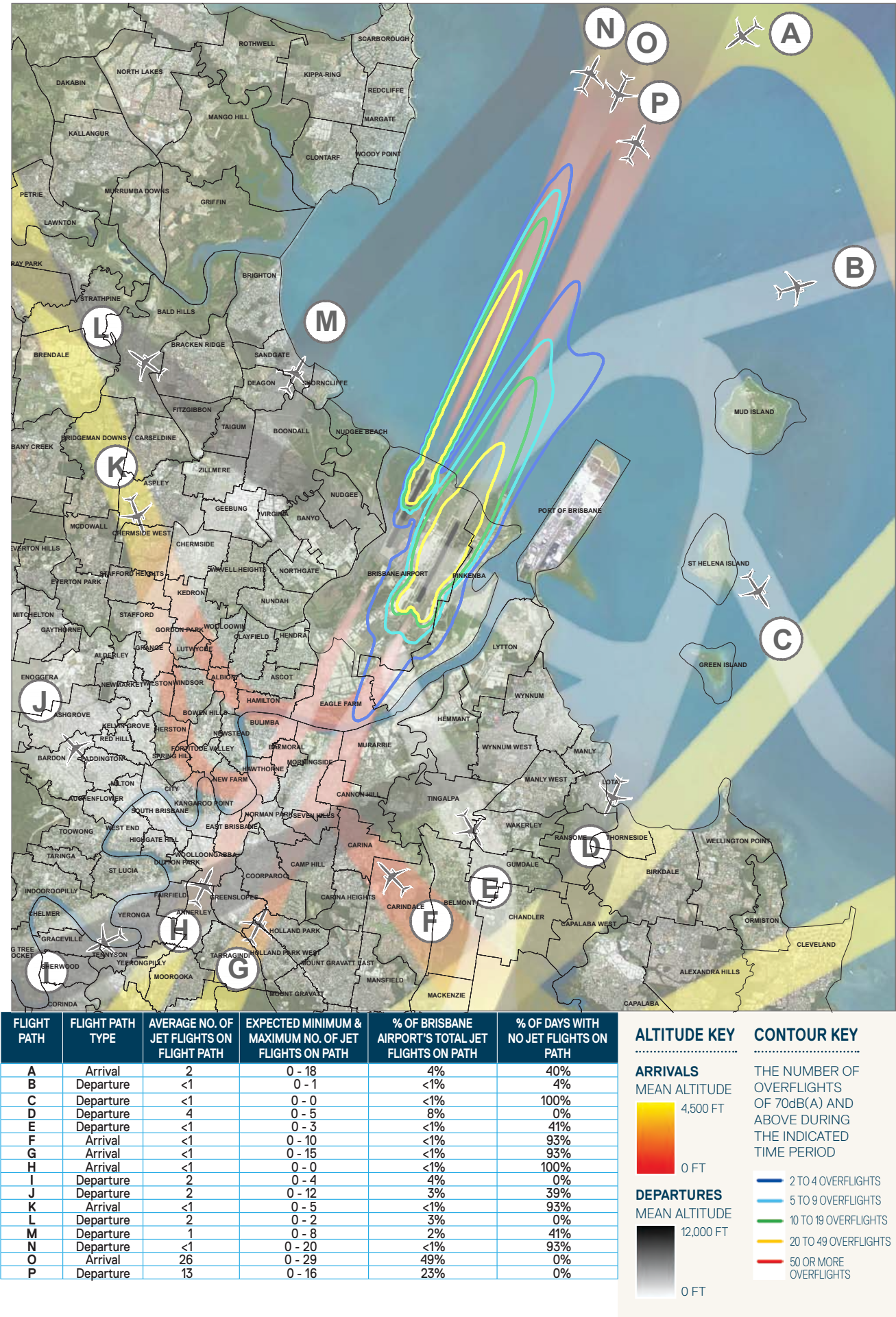
CONTOUR KEY

THE NUMBER OF OVERFLIGHTS OF 70dB(A) AND ABOVE DURING THE INDICATED TIME PERIOD



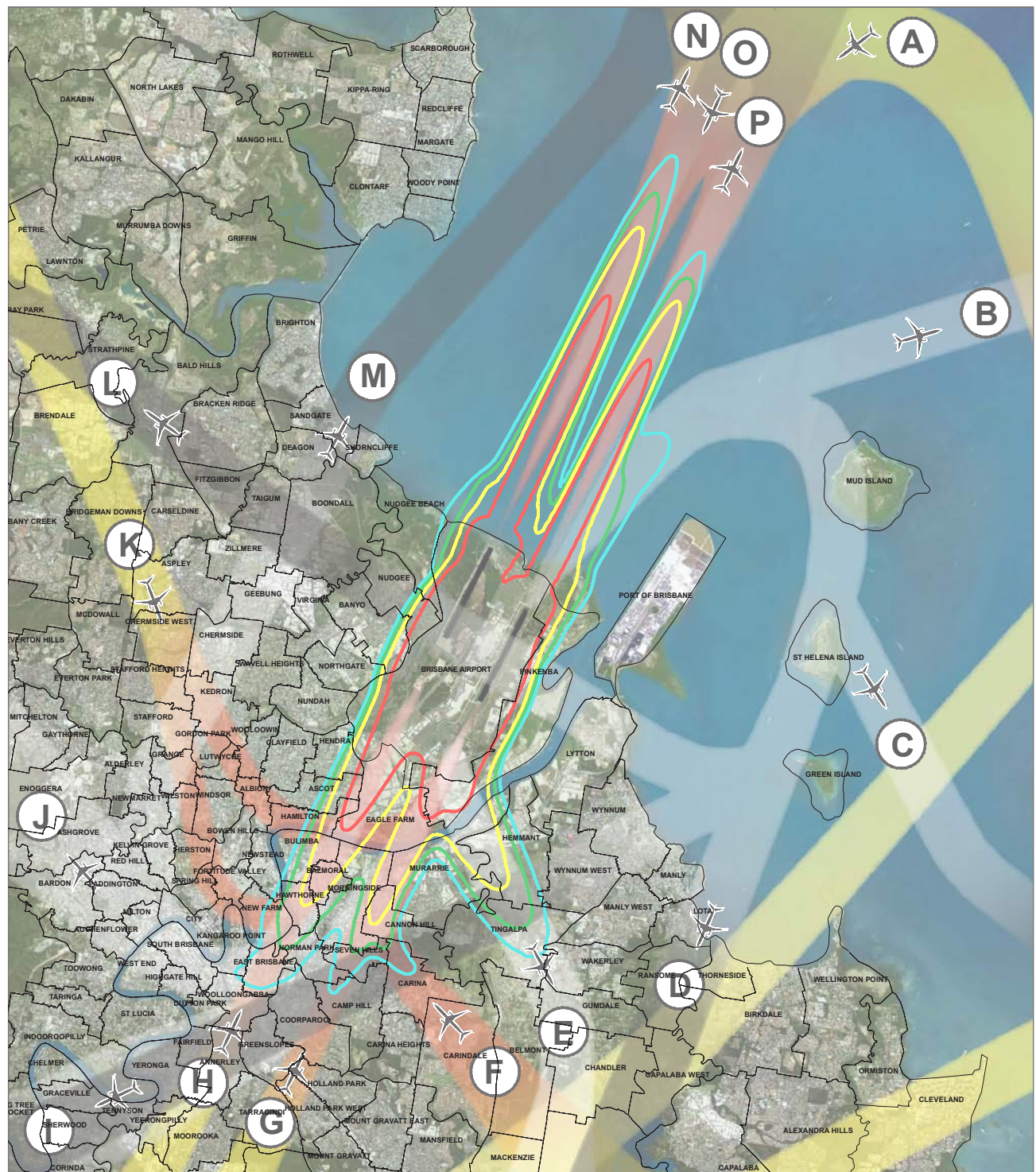
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2034 WINTER WEEKDAY NIGHT WITH THE NPR – MONDAY TO FRIDAY 11PM – 6AM



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2034 WINTER WEEKEND DAY WITH THE NPR – SATURDAY AND SUNDAY 6AM – 6PM

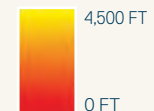


FLIGHT PATH	FLIGHT PATH TYPE	AVERAGE NO. OF JET FLIGHTS ON FLIGHT PATH	EXPECTED MINIMUM & MAXIMUM NO. OF JET FLIGHTS ON PATH	% OF BRISBANE AIRPORT'S TOTAL JET FLIGHTS ON PATH	% OF DAYS WITH NO JET FLIGHTS ON PATH
A	Arrival	89	0 - 117	19%	1%
B	Departure	<1	0 - 0	<1%	100%
C	Departure	1	0 - 6	<1%	54%
D	Departure	31	0 - 125	6%	36%
E	Departure	73	0 - 97	15%	1%
F	Arrival	15	0 - 66	3%	49%
G	Arrival	12	0 - 52	2%	49%
H	Arrival	13	0 - 56	3%	49%
I	Departure	21	0 - 28	4%	1%
J	Departure	17	0 - 21	3%	2%
K	Arrival	12	0 - 55	3%	49%
L	Departure	<1	0 - 0	<1%	100%
M	Departure	84	0 - 110	17%	1%
N	Departure	28	0 - 125	6%	49%
O	Arrival	86	0 - 113	18%	1%
P	Departure	1	0 - 3	<1%	64%

ALTITUDE KEY

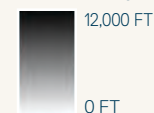
ARRIVALS

MEAN ALTITUDE



DEPARTURES

MEAN ALTITUDE



CONTOUR KEY

THE NUMBER OF OVERFLIGHTS OF 70dB(A) AND ABOVE DURING THE INDICATED TIME PERIOD



THESE FLIGHT PATHS REPRESENT WHERE THE MAJORITY OF AIRCRAFT WILL FLY, HOWEVER ALL AREAS COULD BE SUBJECTED TO SOME AIRCRAFT OVERFLIGHT.

FLIGHT PATH	FLIGHT PATH TYPE	AVERAGE NO. OF JET FLIGHTS ON FLIGHT PATH	EXPECTED MINIMUM & MAXIMUM NO. OF JET FLIGHTS ON PATH	% OF BRISBANE AIRPORT'S TOTAL JET FLIGHTS ON PATH	% OF DAYS WITH NO JET FLIGHTS ON PATH
A	Arrival	36	0 - 56	20%	13%
B	Departure	<1	0 - 0	<1%	100%
C	Departure	<1	0 - 4	<1%	75%
D	Departure	13	0 - 49	7%	19%
E	Departure	26	0 - 36	14%	13%
F	Arrival	6	0 - 31	3%	73%
G	Arrival	5	0 - 27	3%	73%
H	Arrival	4	0 - 22	2%	73%
I	Departure	10	0 - 13	6%	8%
J	Departure	4	0 - 8	2%	16%
K	Arrival	4	0 - 22	2%	73%
L	Departure	<1	0 - 1	<1%	29%
M	Departure	18	0 - 24	10%	13%
N	Departure	5	0 - 28	3%	73%
O	Arrival	47	0 - 62	26%	8%
P	Departure	2	0 - 3	1%	29%

CONTOUR KEY

THE NUMBER OF
OVERFLIGHTS
OF 70dB(A) AND
ABOVE DURING
THE INDICATED
TIME PERIOD

4.500

0 FT

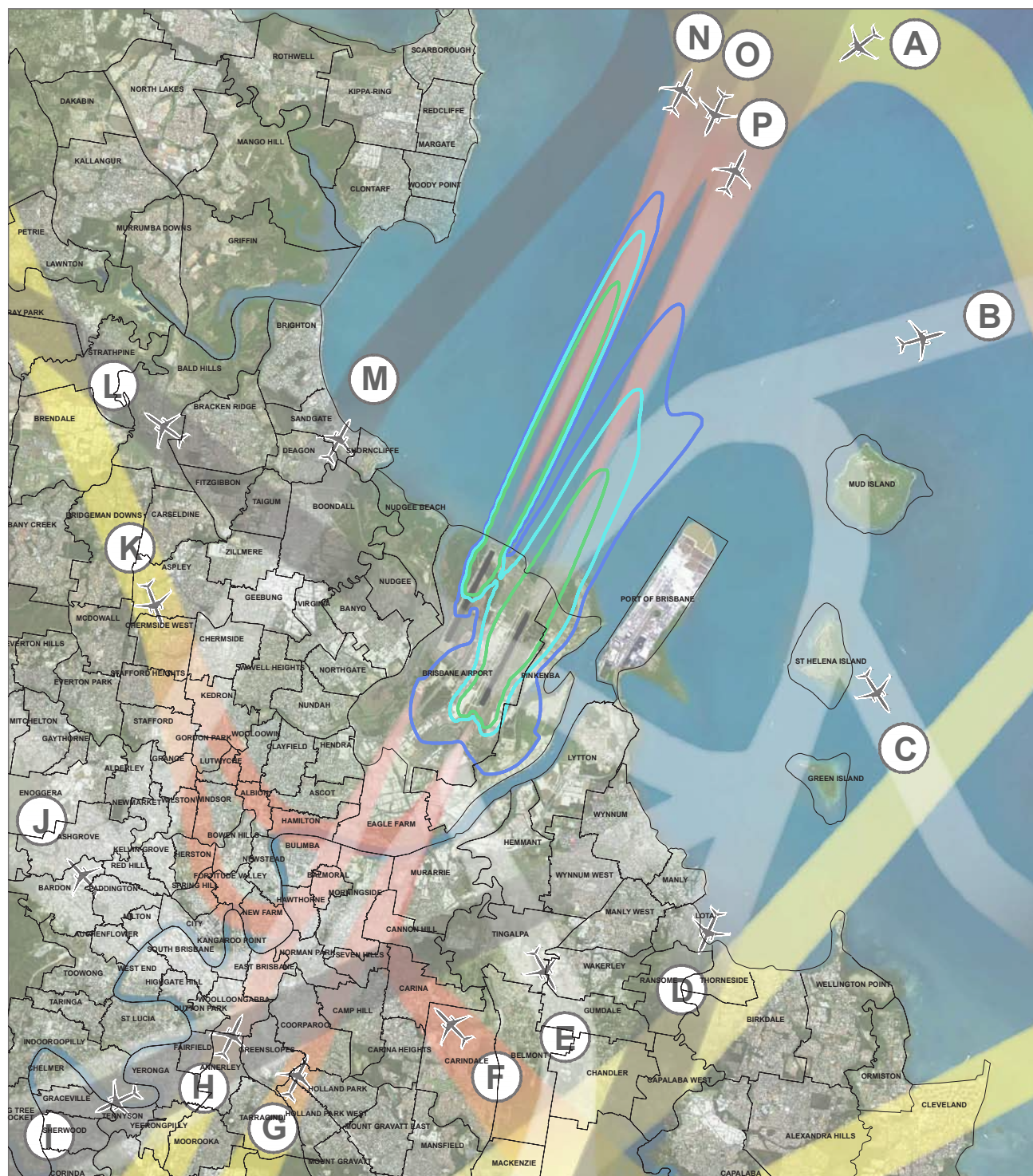
- 5 TO 9 OVERFLIGHTS
- 10 TO 19 OVERFLIGHTS
- 20 TO 49 OVERFLIGHTS
- 50 OR MORE OVERFLIGHTS

12,000

0 FT

58 Brisbane Airport Corporation

2034 WINTER WEEKEND NIGHT WITH THE NPR – SATURDAY AND SUNDAY 11PM – 6AM



FLIGHT PATH	FLIGHT PATH TYPE	AVERAGE NO. OF JET FLIGHTS ON FLIGHT PATH	EXPECTED MINIMUM & MAXIMUM NO. OF JET FLIGHTS ON PATH	% OF BRISBANE AIRPORT'S TOTAL JET FLIGHTS ON PATH	% OF DAYS WITH NO JET FLIGHTS ON PATH
A	Arrival	<1	0 - 10	<1%	96%
B	Departure	<1	0 - 1	1%	4%
C	Departure	<1	0 - 0	<1%	100%
D	Departure	<1	0 - 1	3%	1%
E	Departure	<1	0 - 1	<1%	99%
F	Arrival	<1	0 - 6	<1%	96%
G	Arrival	<1	0 - 10	<1%	95%
H	Arrival	<1	0 - 0	<1%	100%
I	Departure	2	0 - 3	6%	0%
J	Departure	<1	0 - 6	<1%	96%
K	Arrival	<1	0 - 4	<1%	95%
L	Departure	2	0 - 2	6%	0%
M	Departure	<1	0 - 5	<1%	96%
N	Departure	<1	0 - 11	<1%	94%
O	Arrival	19	0 - 19	60%	0%
P	Departure	6	0 - 7	21%	0%

ALTITUDE KEY

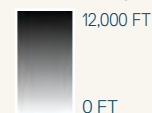
ARRIVALS

MEAN ALTITUDE



DEPARTURES

MEAN ALTITUDE



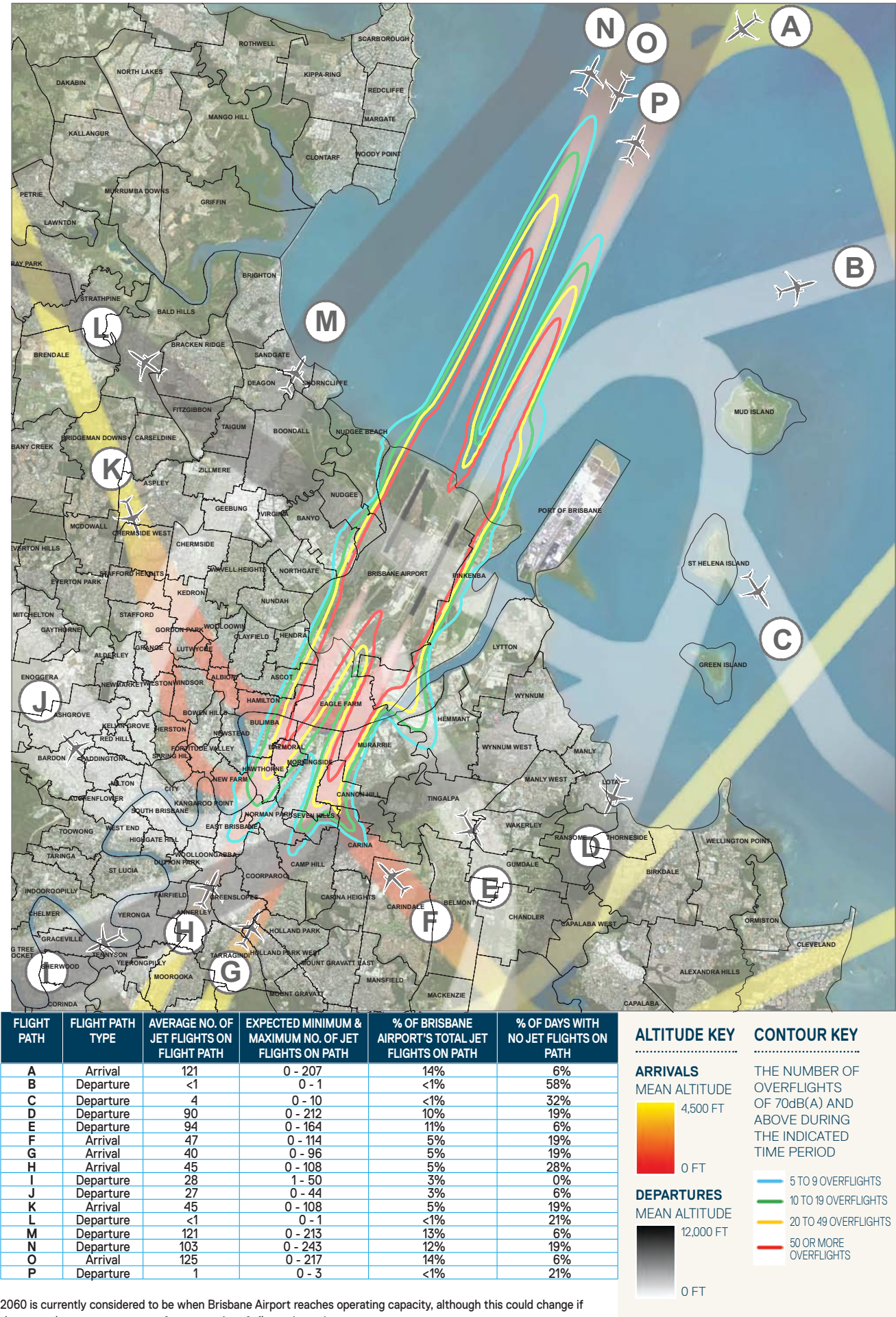
CONTOUR KEY

THE NUMBER OF OVERFLIGHTS OF 70dB(A) AND ABOVE DURING THE INDICATED TIME PERIOD



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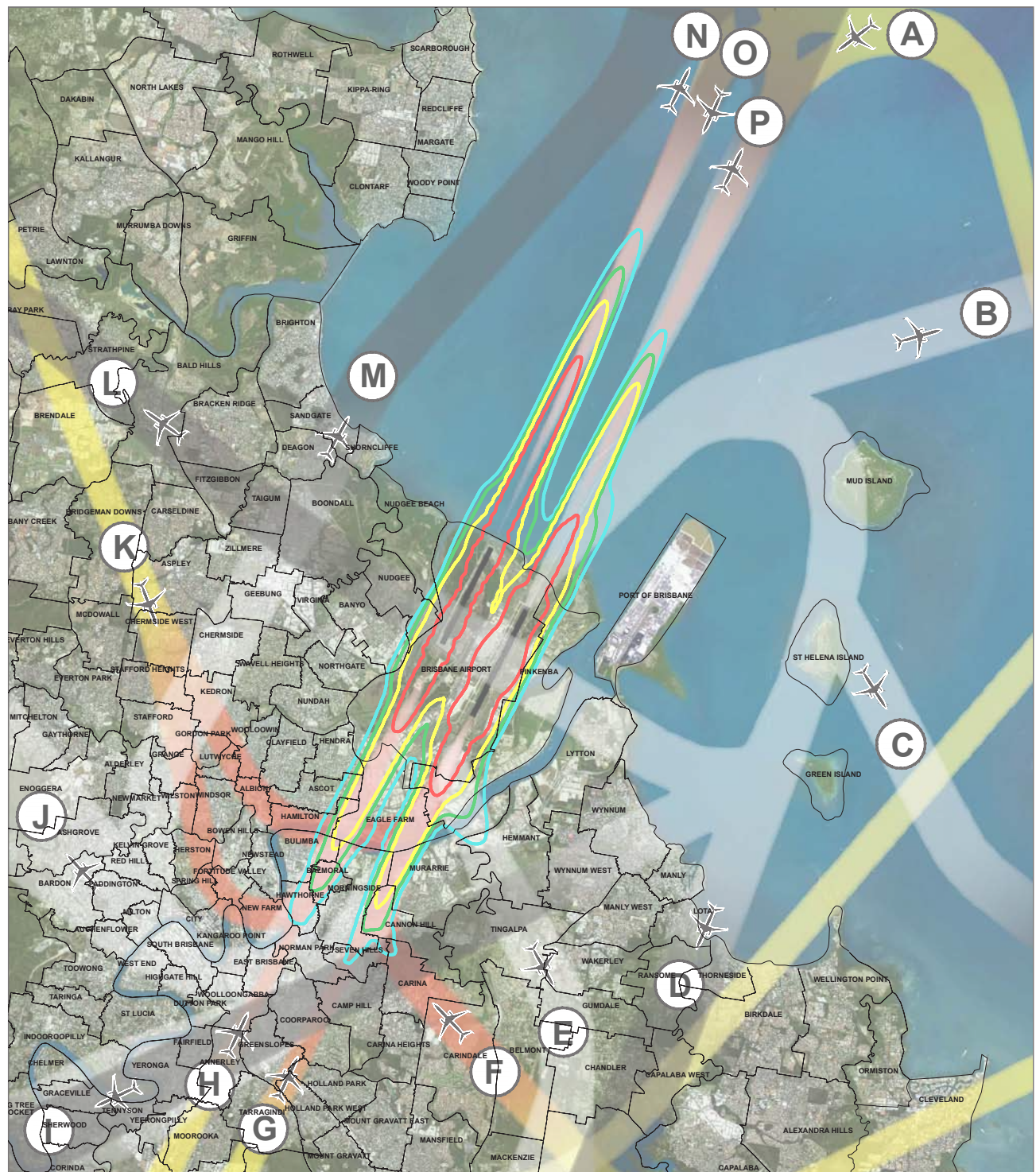
2060 SUMMER WEEKDAY DAY WITH THE NPR – MONDAY TO FRIDAY 5AM – 6PM



2060 is currently considered to be when Brisbane Airport reaches operating capacity, although this could change if there are changes to passenger forecasts, aircraft fleet mix or airspace management.

THESE FLIGHT PATHS REPRESENT WHERE THE MAJORITY OF AIRCRAFT WILL FLY, HOWEVER ALL AREAS COULD BE SUBJECTED TO SOME AIRCRAFT OVERFLIGHT.

2060 SUMMER WEEKDAY EVENING WITH THE NPR – MONDAY TO FRIDAY 6PM – 11PM

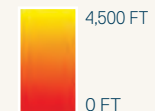


FLIGHT PATH	FLIGHT PATH TYPE	AVERAGE NO. OF JET FLIGHTS ON FLIGHT PATH	EXPECTED MINIMUM & MAXIMUM NO. OF JET FLIGHTS ON PATH	% OF BRISBANE AIRPORT'S TOTAL JET FLIGHTS ON PATH	% OF DAYS WITH NO JET FLIGHTS ON PATH
A	Arrival	39	0 - 74	14%	33%
B	Departure	<1	0 - 1	<1%	51%
C	Departure	<1	0 - 2	<1%	53%
D	Departure	29	0 - 67	10%	15%
E	Departure	27	0 - 48	10%	33%
F	Arrival	17	0 - 41	6%	49%
G	Arrival	16	0 - 40	6%	49%
H	Arrival	18	0 - 43	6%	49%
I	Departure	11	0 - 19	4%	30%
J	Departure	6	0 - 12	2%	34%
K	Arrival	19	0 - 46	7%	49%
L	Departure	<1	0 - 1	<1%	51%
M	Departure	21	0 - 39	7%	33%
N	Departure	20	0 - 49	7%	49%
O	Arrival	59	0 - 101	21%	30%
P	Departure	2	0 - 4	<1%	51%

ALTITUDE KEY

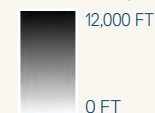
ARRIVALS

MEAN ALTITUDE



DEPARTURES

MEAN ALTITUDE



CONTOUR KEY

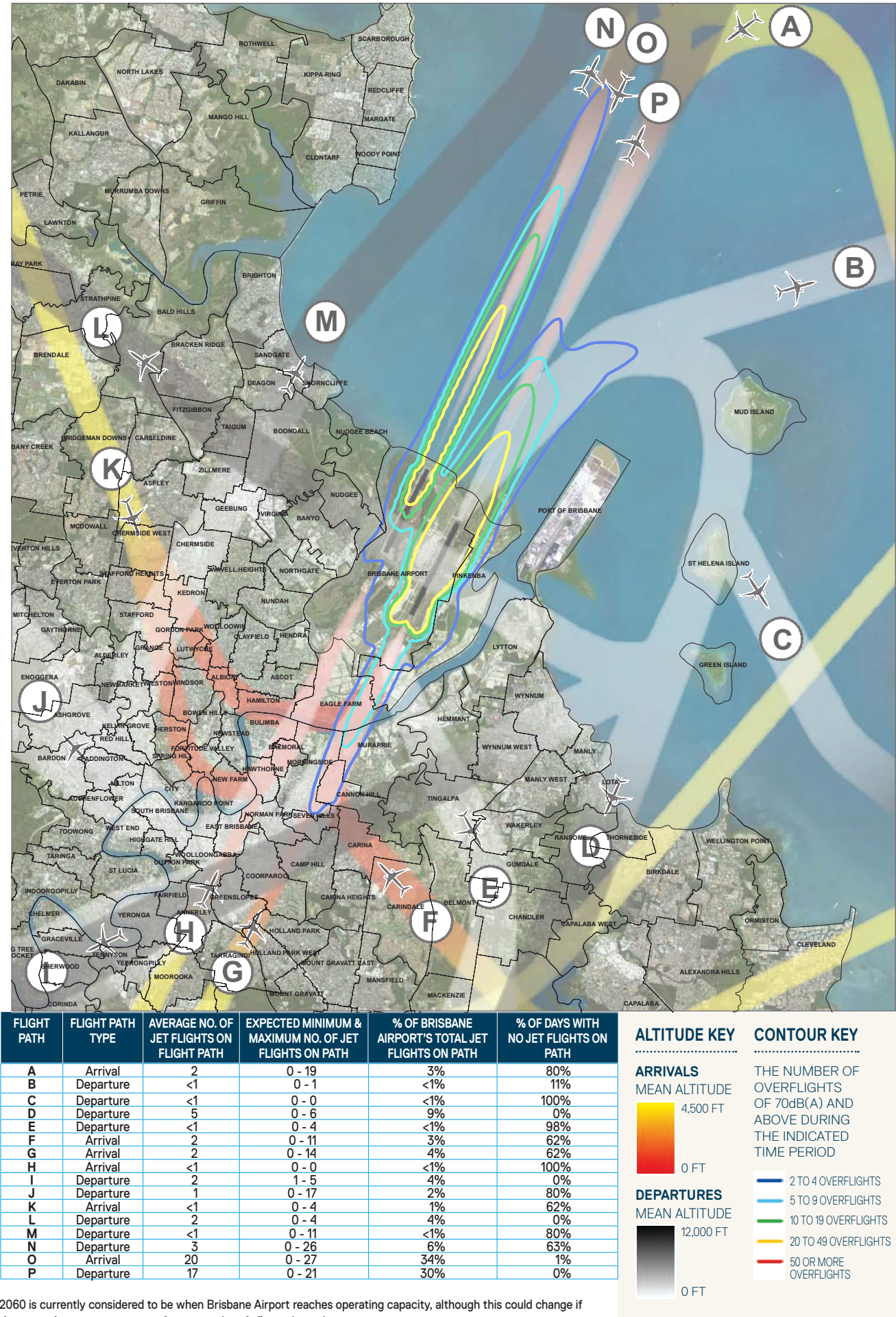
THE NUMBER OF OVERFLIGHTS OF 70dB(A) AND ABOVE DURING THE INDICATED TIME PERIOD



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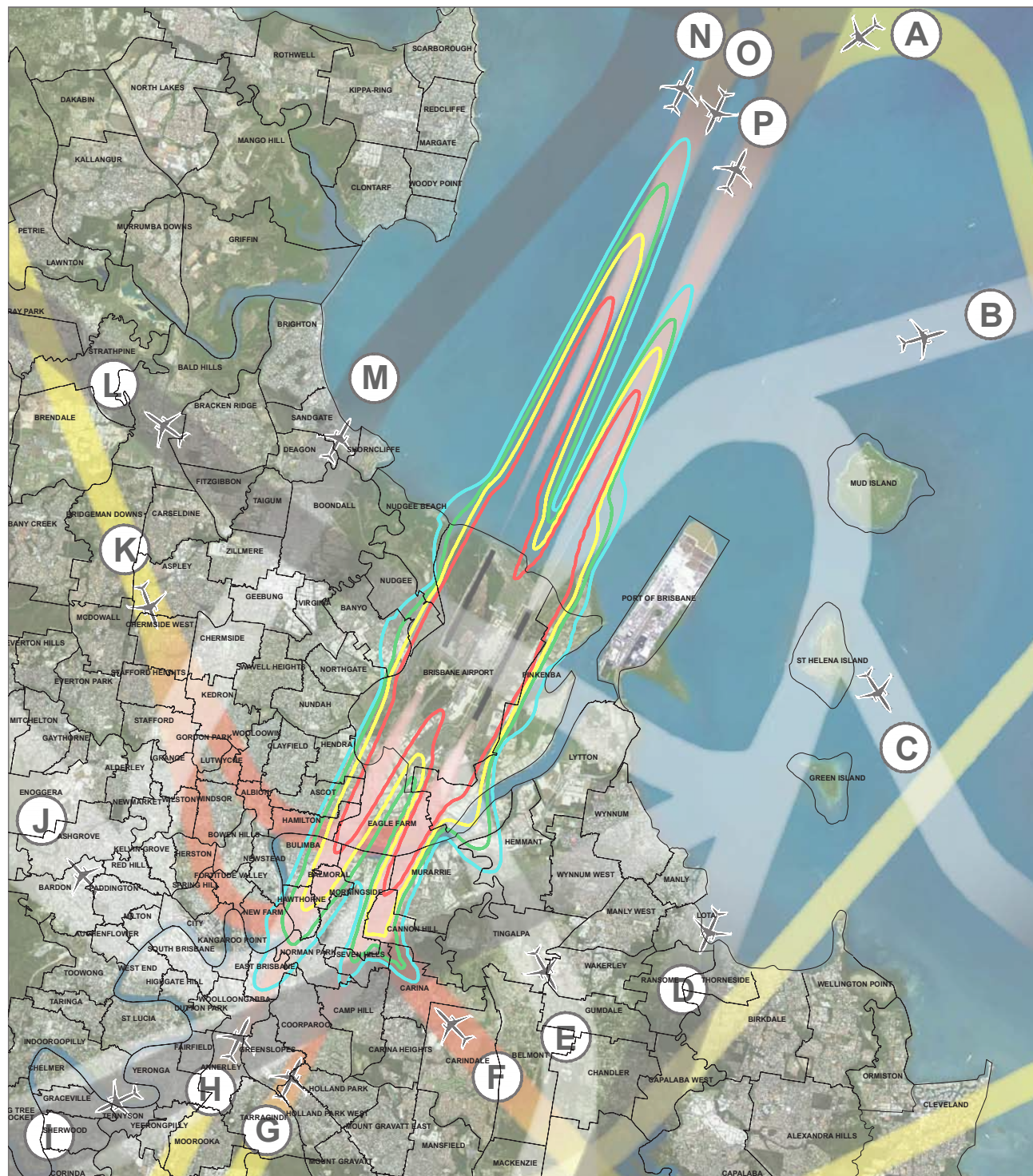
2060 SUMMER WEEKDAY NIGHT WITH THE NPR – MONDAY TO FRIDAY 11PM – 5AM



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2060 SUMMER WEEKEND DAY WITH THE NPR – SATURDAY AND SUNDAY 6AM – 6PM

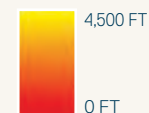


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A	Arrival	88	0 - 164	12%	9%
B	Departure	<1	0 - 0	<1%	100%
C	Departure	3	0 - 10	<1%	37%
D	Departure	79	0 - 175	11%	19%
E	Departure	72	0 - 132	10%	9%
F	Arrival	39	0 - 92	6%	28%
G	Arrival	31	0 - 73	4%	28%
H	Arrival	36	0 - 84	5%	28%
I	Departure	23	0 - 43	3%	9%
J	Departure	16	0 - 31	2%	17%
K	Arrival	35	0 - 82	5%	28%
L	Departure	<1	0 - 0	<1%	100%
M	Departure	90	0 - 168	13%	9%
N	Departure	87	0 - 189	12%	28%
O	Arrival	100	0 - 176	14%	6%
P	Departure	2	0 - 4	<1%	47%

ALTITUDE KEY

ARRIVALS

MEAN ALTITUDE



DEPARTURES

MEAN ALTITUDE



CONTOUR KEY

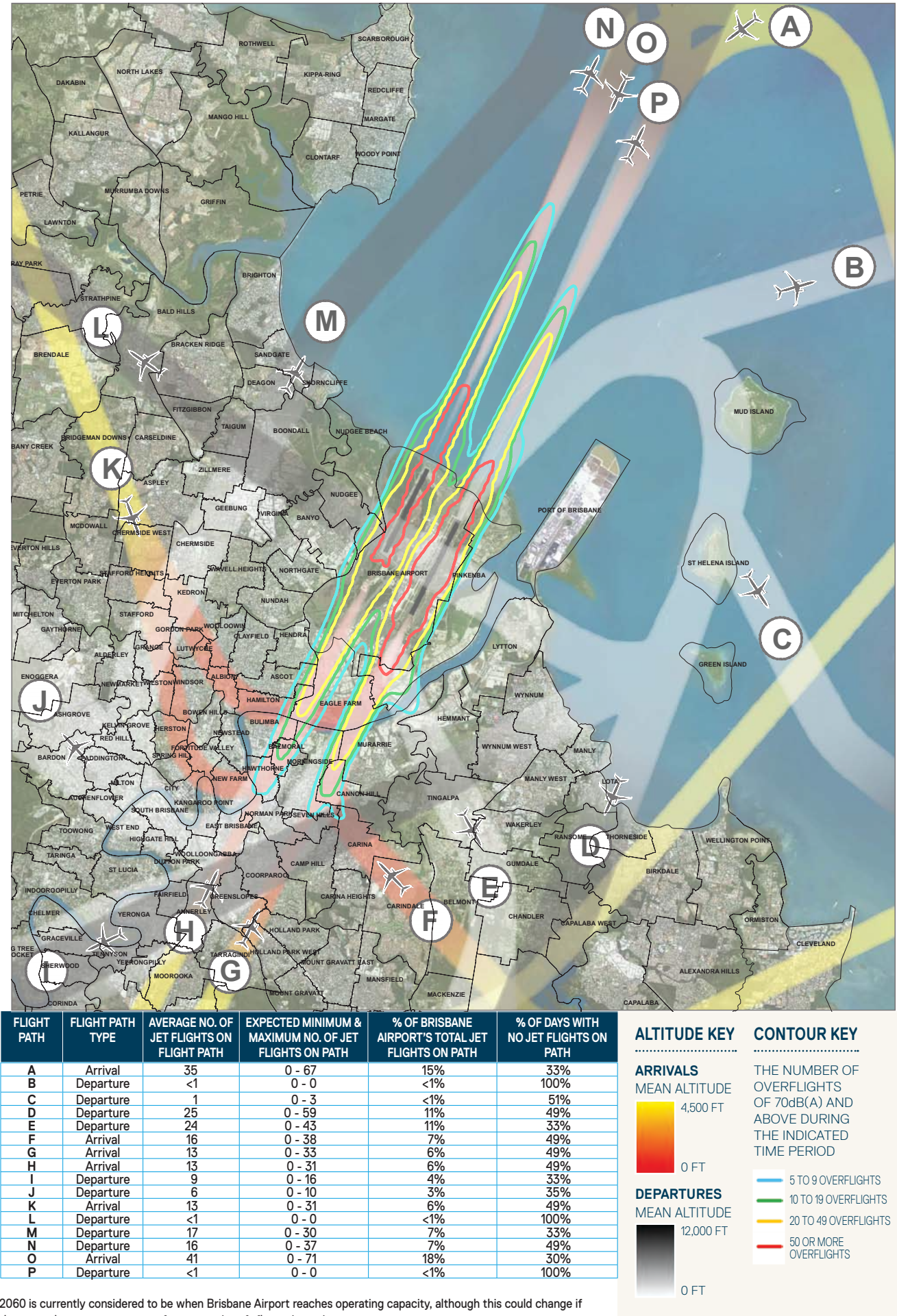
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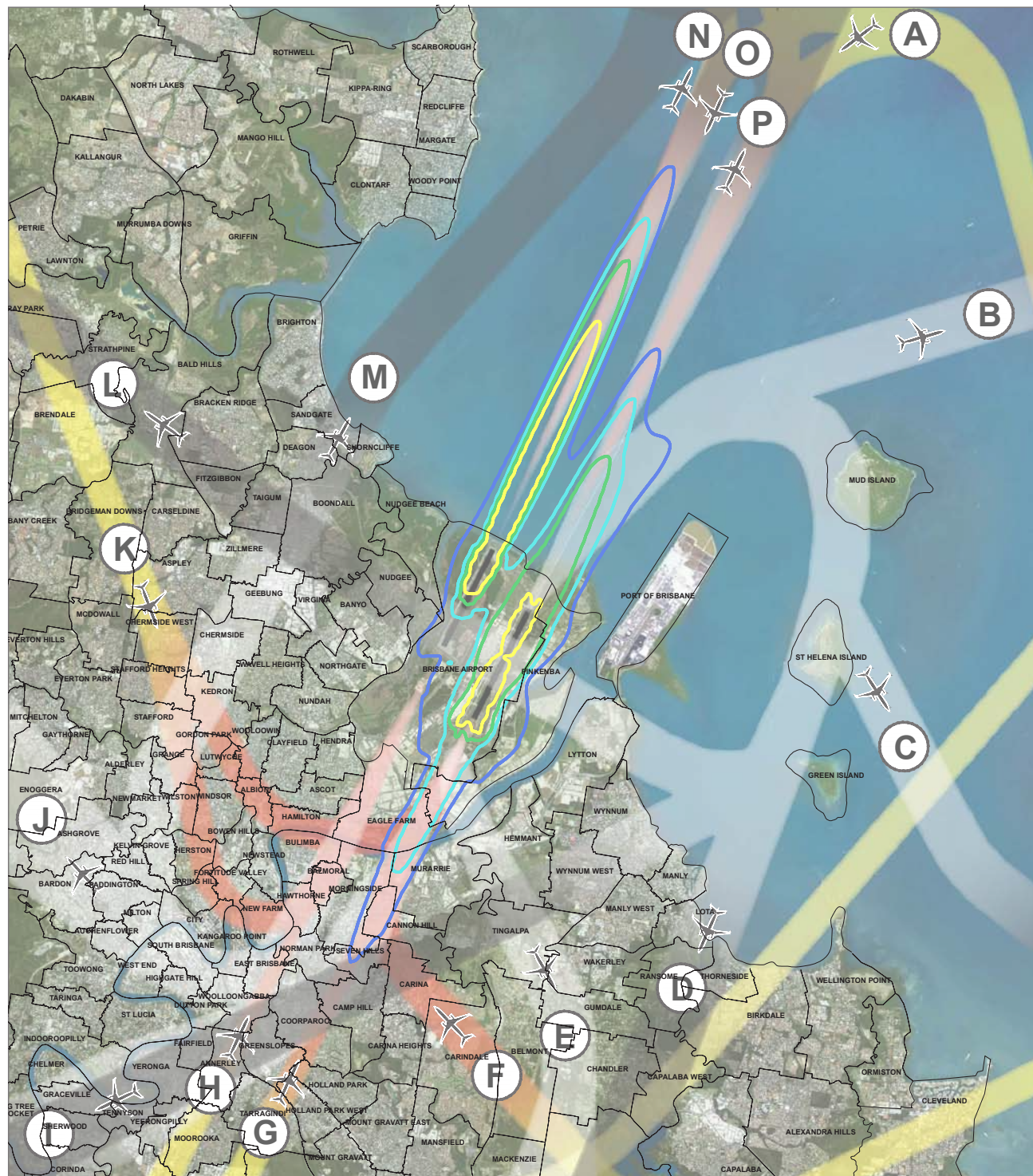
2060 SUMMER WEEKEND EVENING WITH THE NPR – SATURDAY AND SUNDAY 6PM – 11PM



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THESE FLIGHT PATHS REPRESENT WHERE THE MAJORITY OF AIRCRAFT WILL FLY, HOWEVER ALL AREAS COULD BE SUBJECTED TO SOME AIRCRAFT OVERFLIGHT.

2060 SUMMER WEEKEND NIGHT WITH THE NPR – SATURDAY AND SUNDAY 11PM – 6AM

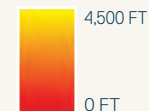


FLIGHT PATH	FLIGHT PATH TYPE	AVERAGE NO. OF JET FLIGHTS ON FLIGHT PATH	EXPECTED MINIMUM & MAXIMUM NO. OF JET FLIGHTS ON PATH	% OF BRISBANE AIRPORT'S TOTAL JET FLIGHTS ON PATH	% OF DAYS WITH NO JET FLIGHTS ON PATH
A	Arrival	4	0 - 18	7%	56%
B	Departure	<1	0 - 0	<1%	100%
C	Departure	<1	0 - 0	<1%	100%
D	Departure	3	0 - 4	5%	37%
E	Departure	1	0 - 4	2%	63%
F	Arrival	1	0 - 10	3%	63%
G	Arrival	3	0 - 17	5%	61%
H	Arrival	<1	0 - 0	<1%	100%
I	Departure	3	0 - 5	5%	3%
J	Departure	<1	0 - 11	2%	81%
K	Arrival	1	0 - 7	2%	61%
L	Departure	3	0 - 4	5%	3%
M	Departure	<1	0 - 6	1%	81%
N	Departure	4	0 - 17	7%	63%
O	Arrival	24	0 - 33	45%	1%
P	Departure	6	0 - 10	12%	3%

ALTITUDE KEY

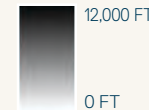
ARRIVALS

MEAN ALTITUDE



DEPARTURES

MEAN ALTITUDE



CONTOUR KEY

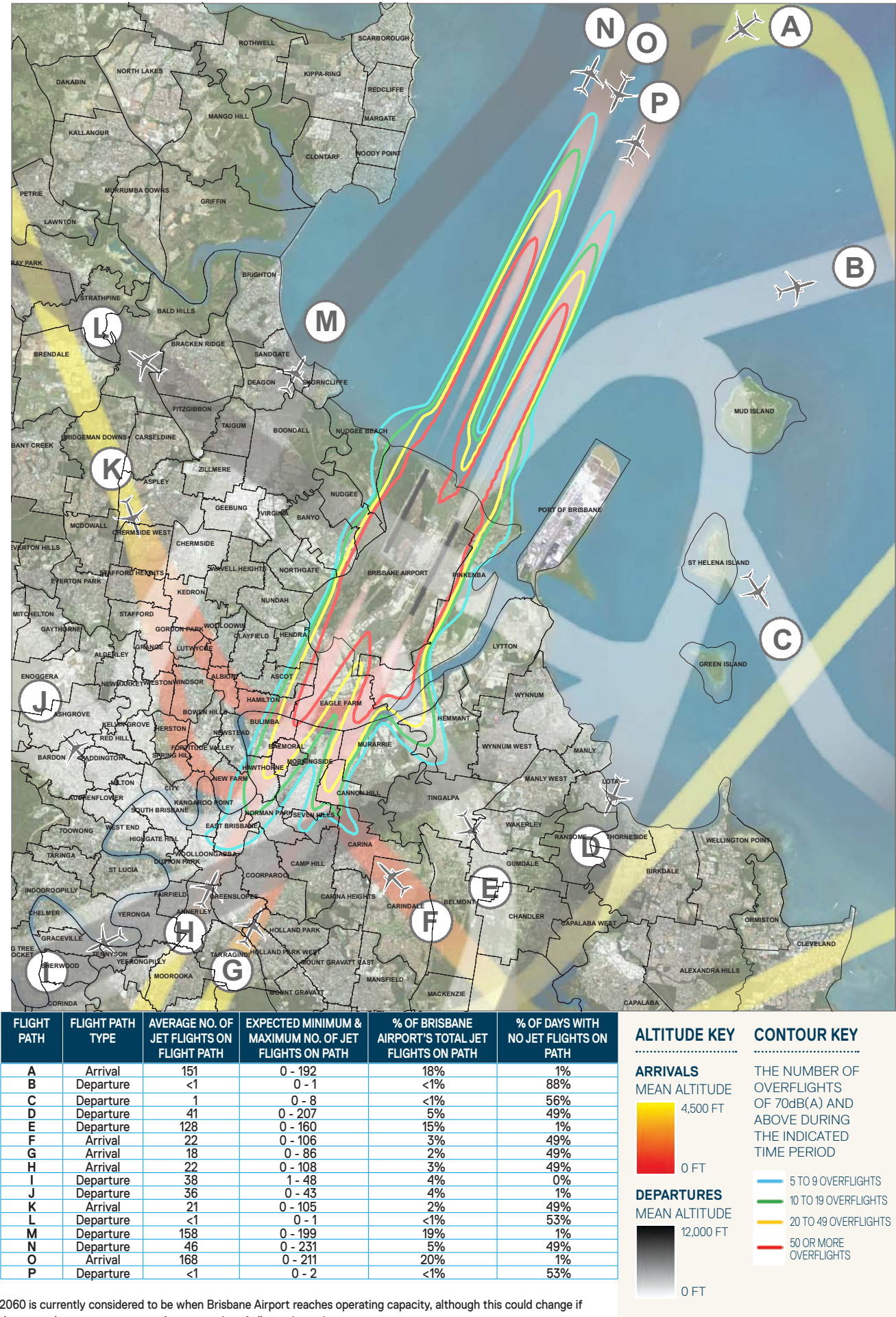
THE NUMBER OF OVERFLIGHTS OF 70dB(A) AND ABOVE DURING THE INDICATED TIME PERIOD



2060 is currently considered to be when Brisbane Airport reaches operating capacity, although this could change if there are changes to passenger forecasts, aircraft fleet mix or airspace management.

THESE FLIGHT PATHS REPRESENT WHERE THE MAJORITY OF AIRCRAFT WILL FLY, HOWEVER ALL AREAS COULD BE SUBJECTED TO SOME AIRCRAFT OVERFLIGHT.

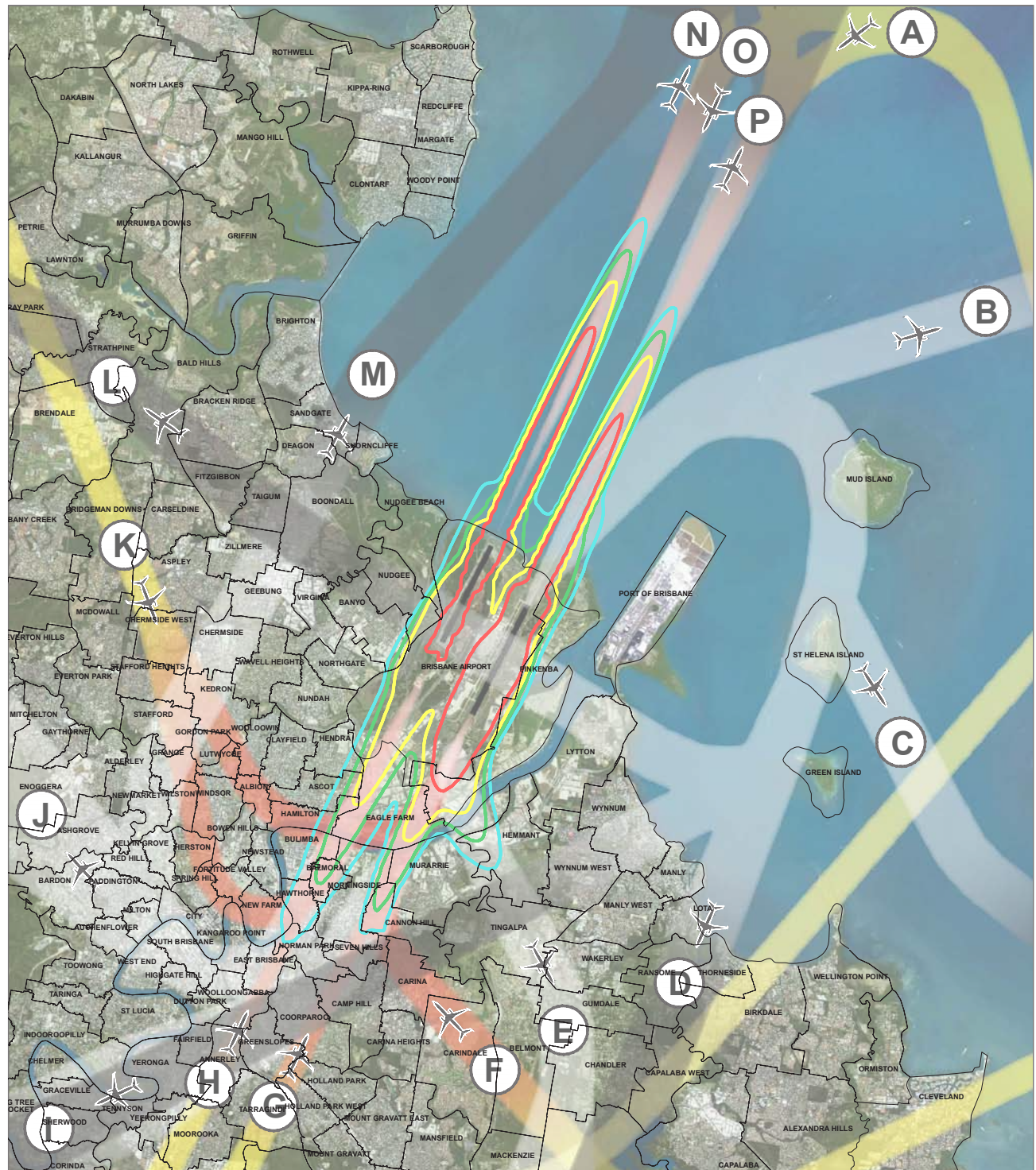
2060 WINTER WEEKDAY DAY WITH THE NPR – MONDAY TO FRIDAY 6AM – 6PM



2060 is currently considered to be when Brisbane Airport reaches operating capacity, although this could change if there are changes to passenger forecasts, aircraft fleet mix or airspace management.

THESE FLIGHT PATHS REPRESENT WHERE THE MAJORITY OF AIRCRAFT WILL FLY, HOWEVER ALL AREAS COULD BE SUBJECTED TO SOME AIRCRAFT OVERFLIGHT.

2060 WINTER WEEKDAY EVENING WITH THE NPR – MONDAY TO FRIDAY 6PM – 11PM

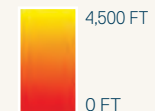


FLIGHT PATH	FLIGHT PATH TYPE	AVERAGE NO. OF JET FLIGHTS ON FLIGHT PATH	EXPECTED MINIMUM & MAXIMUM NO. OF JET FLIGHTS ON PATH	% OF BRISBANE AIRPORT'S TOTAL JET FLIGHTS ON PATH	% OF DAYS WITH NO JET FLIGHTS ON PATH
A	Arrival	61	0 - 85	21%	11%
B	Departure	<1	0 - 0	<1%	100%
C	Departure	<1	0 - 5	<1%	75%
D	Departure	16	0 - 79	5%	27%
E	Departure	46	0 - 58	16%	11%
F	Arrival	8	0 - 47	3%	73%
G	Arrival	7	0 - 43	2%	73%
H	Arrival	7	0 - 40	2%	73%
I	Departure	16	0 - 21	6%	8%
J	Departure	10	0 - 12	3%	12%
K	Arrival	7	0 - 42	3%	73%
L	Departure	<1	0 - 1	<1%	39%
M	Departure	28	0 - 37	10%	11%
N	Departure	8	0 - 44	3%	73%
O	Arrival	79	0 - 100	27%	8%
P	Departure	1	0 - 3	<1%	39%

ALTITUDE KEY

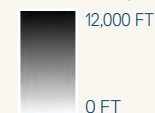
ARRIVALS

MEAN ALTITUDE



DEPARTURES

MEAN ALTITUDE



CONTOUR KEY

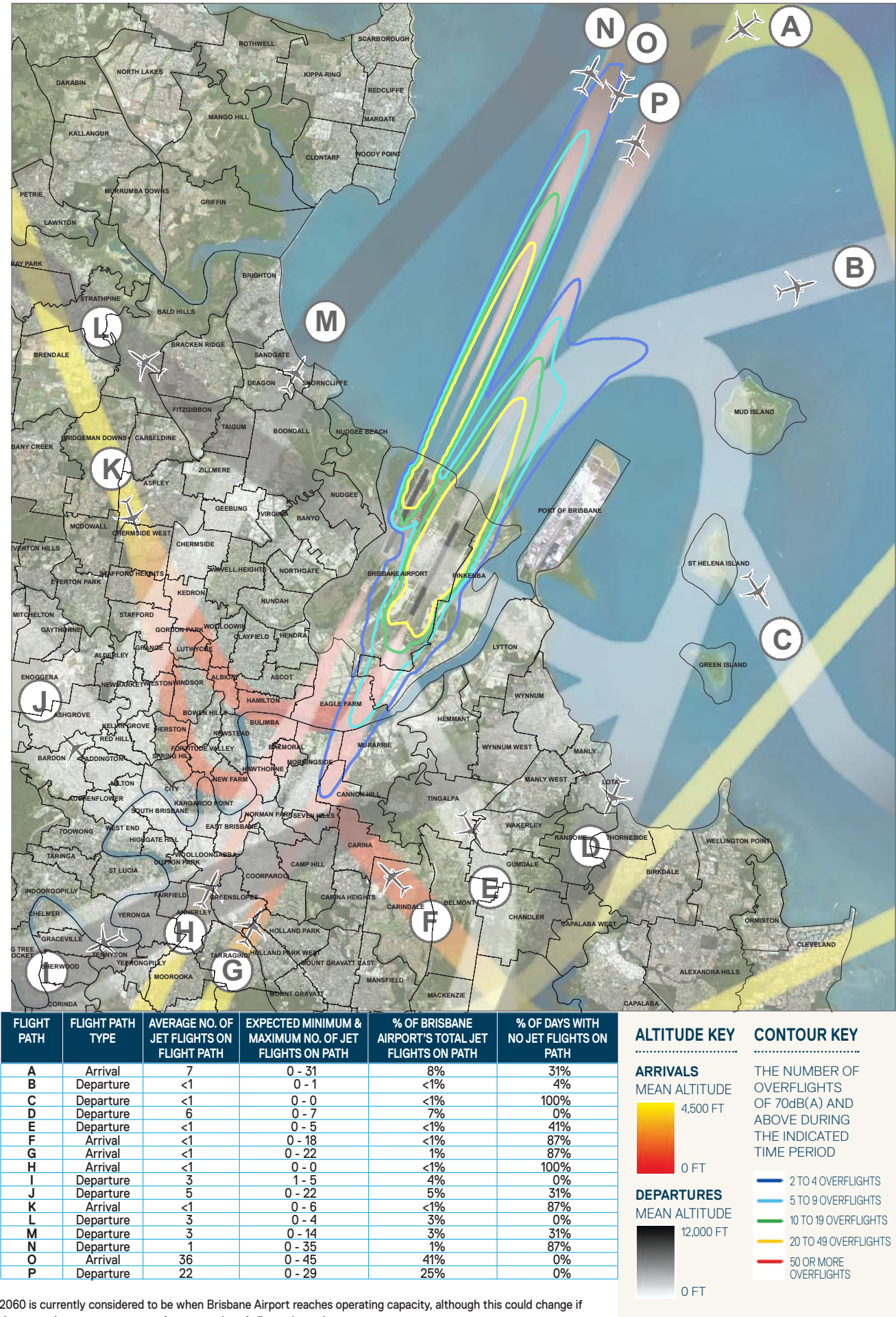
THE NUMBER OF OVERFLIGHTS OF 70dB(A) AND ABOVE DURING THE INDICATED TIME PERIOD



2060 is currently considered to be when Brisbane Airport reaches operating capacity, although this could change if there are changes to passenger forecasts, aircraft fleet mix or airspace management.

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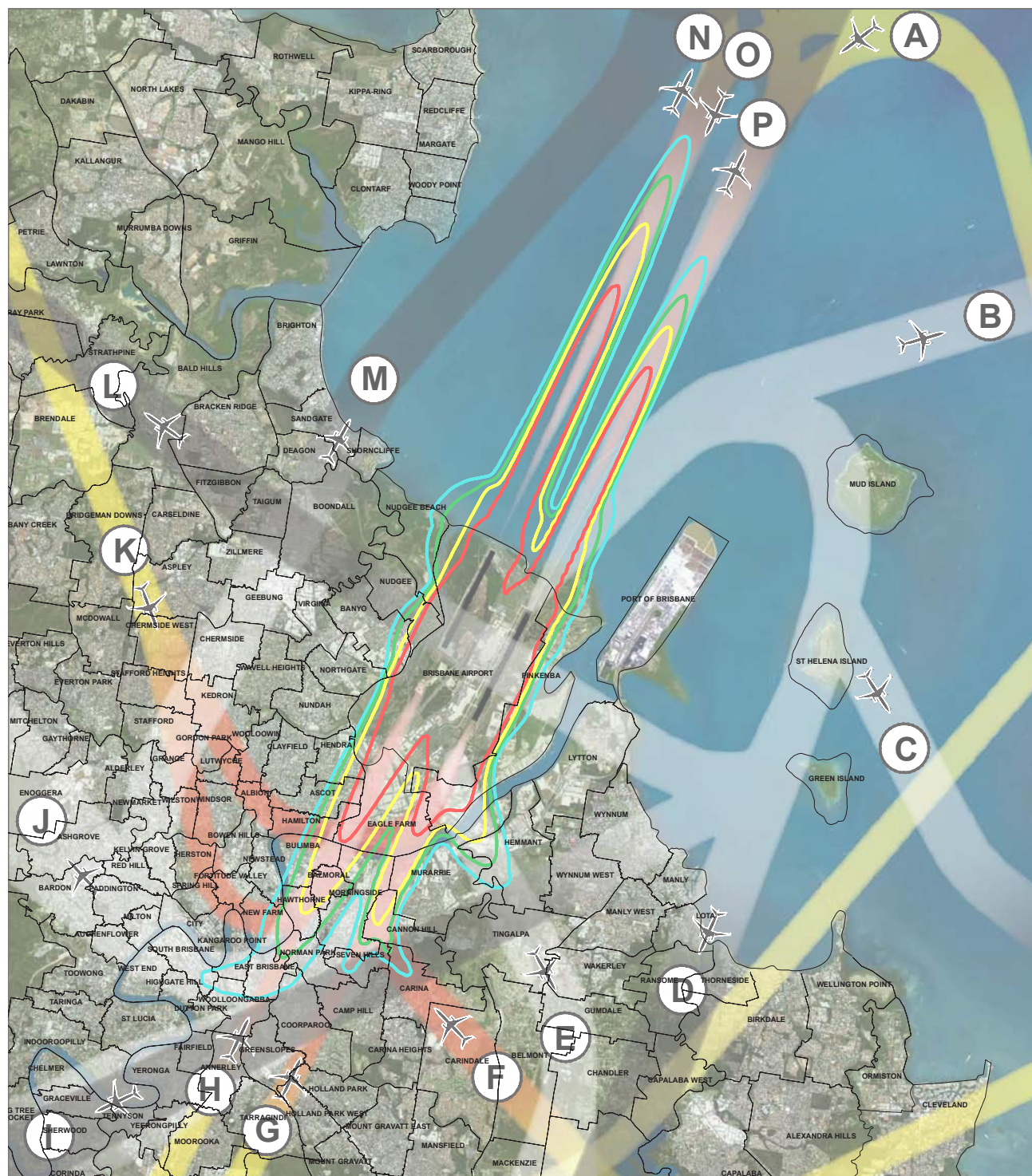
2060 WINTER WEEKDAY NIGHT WITH THE NPR – MONDAY TO FRIDAY 11PM – 6AM



2060 is currently considered to be when Brisbane Airport reaches operating capacity, although this could change if there are changes to passenger forecasts, aircraft fleet mix or airspace management.

THESE FLIGHT PATHS REPRESENT WHERE THE MAJORITY OF AIRCRAFT WILL FLY, HOWEVER ALL AREAS COULD BE SUBJECTED TO SOME AIRCRAFT OVERFLIGHT.

2060 WINTER WEEKEND DAY WITH THE NPR – SATURDAY AND SUNDAY 6AM – 6PM

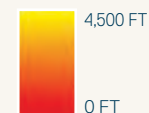


FLIGHT PATH	FLIGHT PATH TYPE	AVERAGE NO. OF JET FLIGHTS ON FLIGHT PATH	EXPECTED MINIMUM & MAXIMUM NO. OF JET FLIGHTS ON PATH	% OF BRISBANE AIRPORT'S TOTAL JET FLIGHTS ON PATH	% OF DAYS WITH NO JET FLIGHTS ON PATH
A	Arrival	122	0 - 161	17%	1%
B	Departure	<1	0 - 0	<1%	100%
C	Departure	1	0 - 8	<1%	56%
D	Departure	41	0 - 174	6%	36%
E	Departure	101	0 - 132	14%	1%
F	Arrival	21	0 - 90	3%	49%
G	Arrival	17	0 - 72	2%	49%
H	Arrival	18	0 - 84	3%	49%
I	Departure	32	0 - 42	5%	1%
J	Departure	25	0 - 32	4%	2%
K	Arrival	17	0 - 82	3%	49%
L	Departure	<1	0 - 0	<1%	100%
M	Departure	127	0 - 165	18%	1%
N	Departure	42	0 - 189	6%	49%
O	Arrival	132	0 - 170	19%	1%
P	Departure	2	0 - 5	<1%	64%

ALTITUDE KEY

ARRIVALS

MEAN ALTITUDE



DEPARTURES

MEAN ALTITUDE



CONTOUR KEY

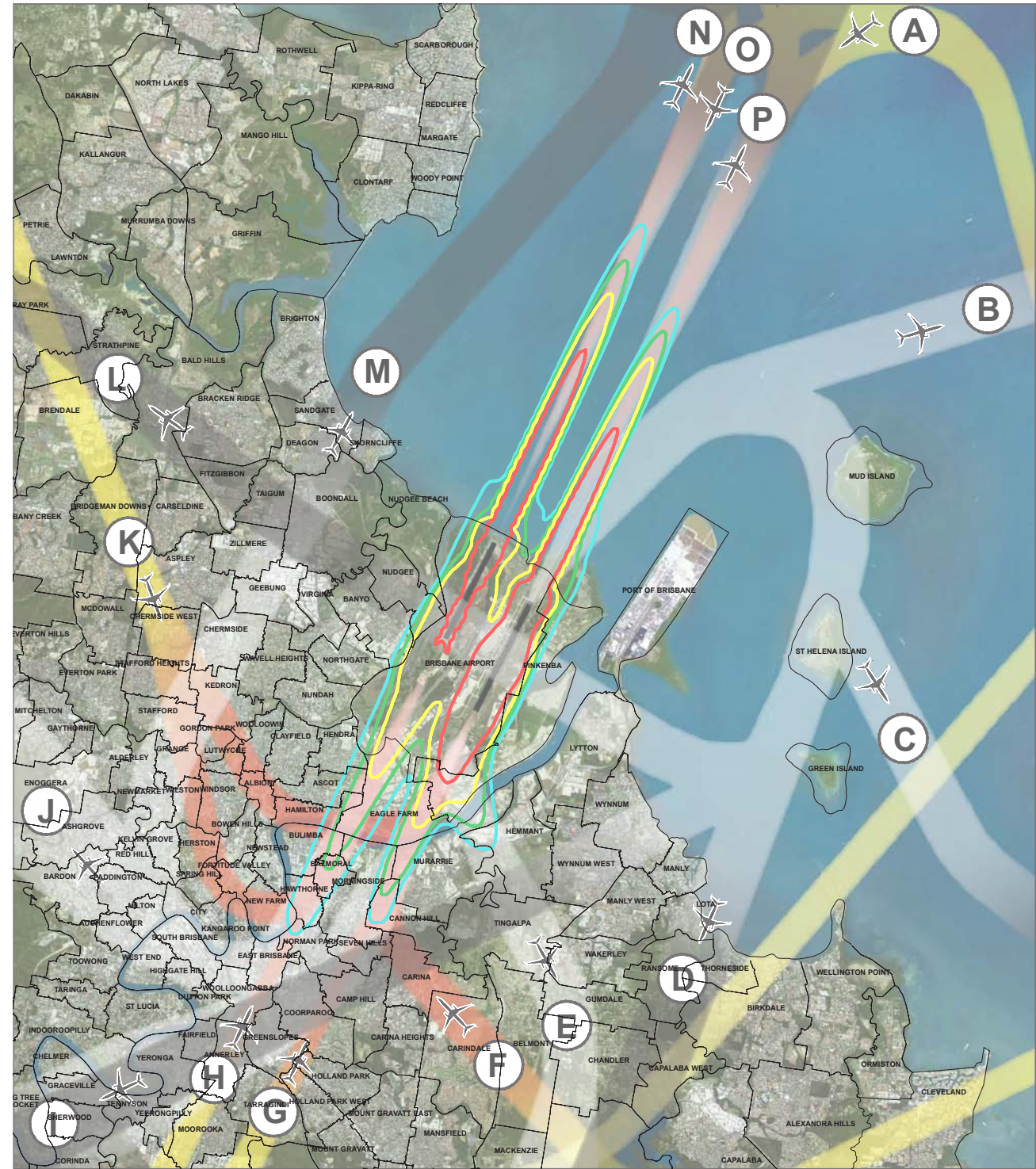
THE NUMBER OF OVERFLIGHTS OF 70dB(A) AND ABOVE DURING THE INDICATED TIME PERIOD



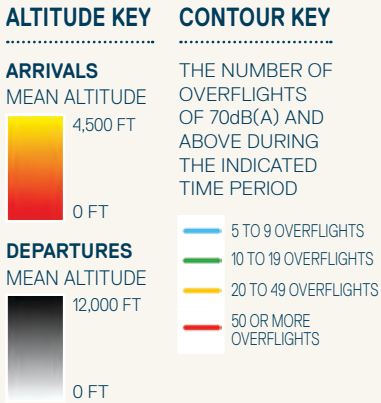
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2060 WINTER WEEKEND EVENING WITH THE NPR – SATURDAY AND SUNDAY 6PM – 11PM



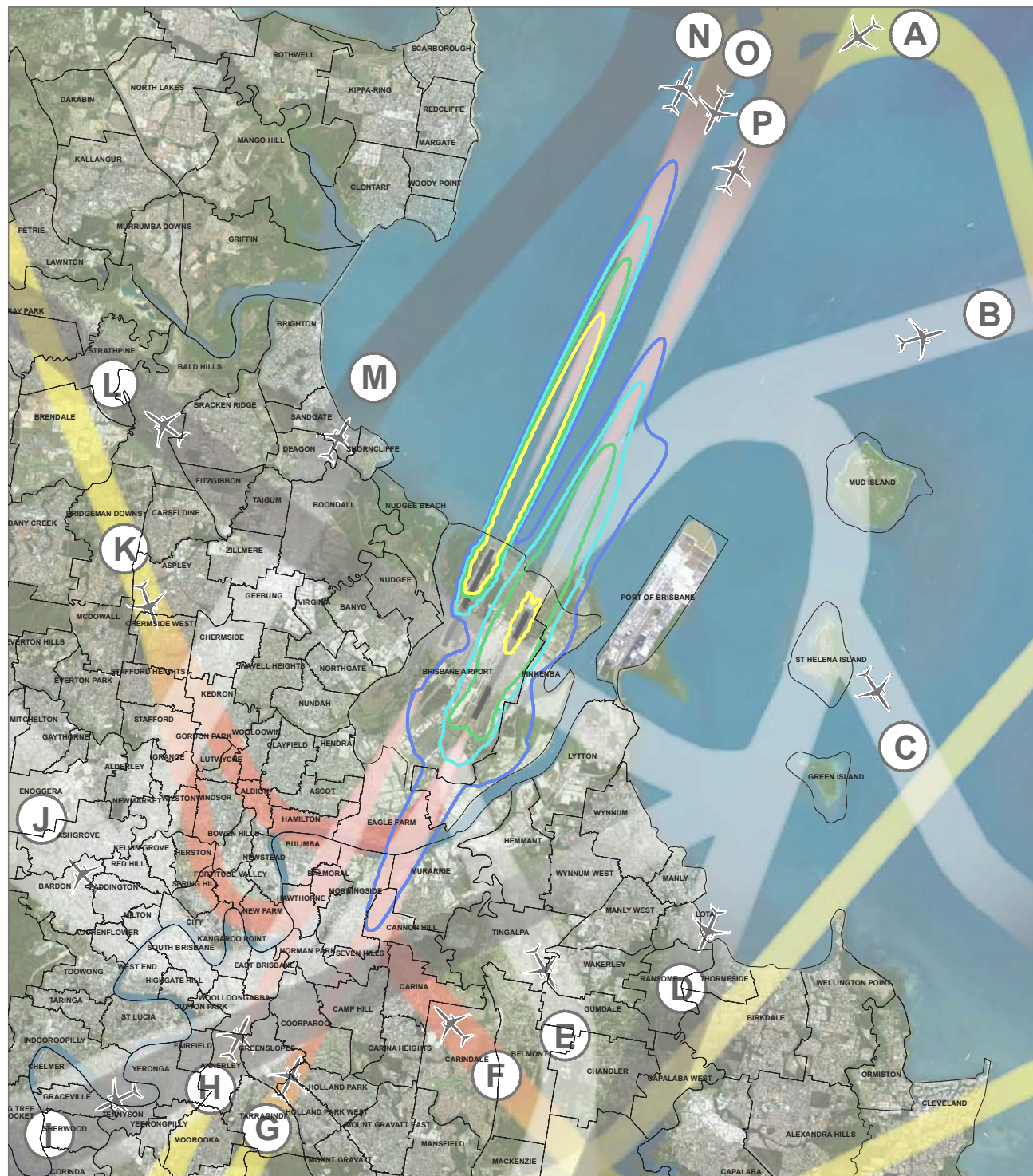
FLIGHT PATH	FLIGHT PATH TYPE	AVERAGE NO. OF JET FLIGHTS ON FLIGHT PATH	EXPECTED MINIMUM & MAXIMUM NO. OF JET FLIGHTS ON PATH	% OF BRISBANE AIRPORT'S TOTAL JET FLIGHTS ON PATH	% OF DAYS WITH NO JET FLIGHTS ON PATH
A	Arrival	55	0 - 75	22%	11%
B	Departure	<1	0 - 0	<1%	100%
C	Departure	1	0 - 5	<1%	75%
D	Departure	13	0 - 68	5%	27%
E	Departure	40	0 - 50	16%	11%
F	Arrival	7	0 - 42	3%	73%
G	Arrival	6	0 - 36	2%	73%
H	Arrival	6	0 - 31	2%	73%
I	Departure	15	0 - 19	6%	8%
J	Departure	9	0 - 11	3%	12%
K	Arrival	6	0 - 31	2%	73%
L	Departure	<1	0 - 1	<1%	39%
M	Departure	28	0 - 35	11%	11%
N	Departure	7	0 - 41	3%	73%
O	Arrival	58	0 - 74	23%	8%
P	Departure	<1	0 - 2	<1%	39%



2060 is currently considered to be when Brisbane Airport reaches operating capacity, although this could change if there are changes to passenger forecasts, aircraft fleet mix or airspace management.

THESE FLIGHT PATHS REPRESENT WHERE THE MAJORITY OF AIRCRAFT WILL FLY, HOWEVER ALL AREAS COULD BE SUBJECTED TO SOME AIRCRAFT OVERFLIGHT.

2060 WINTER WEEKEND NIGHT WITH THE NPR – SATURDAY AND SUNDAY 11PM – 6AM

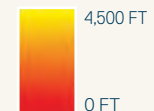


FLIGHT PATH	FLIGHT PATH TYPE	AVERAGE NO. OF JET FLIGHTS ON FLIGHT PATH	EXPECTED MINIMUM & MAXIMUM NO. OF JET FLIGHTS ON PATH	% OF BRISBANE AIRPORT'S TOTAL JET FLIGHTS ON PATH	% OF DAYS WITH NO JET FLIGHTS ON PATH
A	Arrival	6	0 - 20	11%	31%
B	Departure	<1	0 - 1	1%	4%
C	Departure	<1	0 - 0	<1%	100%
D	Departure	<1	0 - 1	<1%	59%
E	Departure	<1	0 - 1	<1%	41%
F	Arrival	<1	0 - 12	1%	87%
G	Arrival	<1	0 - 19	2%	87%
H	Arrival	<1	0 - 0	<1%	100%
I	Departure	3	0 - 4	5%	1%
J	Departure	2	0 - 9	3%	69%
K	Arrival	<1	0 - 7	<1%	87%
L	Departure	2	0 - 3	4%	1%
M	Departure	<1	0 - 6	1%	69%
N	Departure	<1	0 - 15	2%	88%
O	Arrival	28	0 - 36	54%	0%
P	Departure	7	0 - 9	13%	1%

ALTITUDE KEY

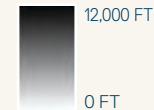
ARRIVALS

MEAN ALTITUDE



DEPARTURES

MEAN ALTITUDE



CONTOUR KEY

THE NUMBER OF OVERFLIGHTS OF 70dB(A) AND ABOVE DURING THE INDICATED TIME PERIOD



2060 is currently considered to be when Brisbane Airport reaches operating capacity, although this could change if there are changes to passenger forecasts, aircraft fleet mix or airspace management.

THESE FLIGHT PATHS REPRESENT WHERE THE MAJORITY OF AIRCRAFT WILL FLY, HOWEVER ALL AREAS COULD BE SUBJECTED TO SOME AIRCRAFT OVERFLIGHT.

ADDITIONAL NOISE CHARTS

Introduction

While the Flight Path and Noise Charts are highly informative, BAC has developed another way to describe noise impacts for the community – Flight Paths and Decibel Tables. Combined, the tools provide additional information about how operations at Brisbane Airport may affect any particular neighbourhood.

In addition, even though an overflight registering 70 decibels outside has been adopted nationally as the point at which most people may find aircraft noise disturbing, the Australian Government through its wide consultations has recognised that noise events of less than 70 decibels may also cause disturbance. With this in mind it has recommended that airports around the country consider the development and use of N60, N65 and N70 Noise Contour Maps to supplement information on flight paths and noise impacts.

Flight Path and Decibel Tables, as well as N60, N65 and N70 Noise Contour Maps have been included in this section.

FLIGHT PATH AND DECIBEL TABLES

The charts on pages 74 and 76 show the primary arrival and departure flight paths expected to be in use at Brisbane Airport after the opening of the NPR. The numbers that appear along the flight paths on the charts correspond to the adjacent tables on pages 75 and 77.

Each table provides information on aircraft type, the destination or origin of the flight and the maximum noise level that could be expected at that location from a single aircraft arriving or departing along the specific flight path.

The clear overlay included in the front of this book can be used to differentiate suburbs.

The tables also provide an indication of the reduction in sound levels that the industry has delivered in upgrading to modern aircraft.

NEW AIRCRAFT TECHNOLOGY BRINGS NOISE BENEFITS

The B747-400 aircraft which has been most common for long-haul international flights is being replaced by either the larger, but quieter, new generation A380 aircraft or the slightly smaller twin engine B777, which is also quieter than the B747-400 it replaces.

The medium widebody aircraft carrying 200 to 300 passengers on medium-haul international and busy domestic routes has been the B767, which is being replaced by the new generation B787.

Similarly there are new generation narrowbody domestic jets such as the B737MAX and the A320neo just entering production. These will be introduced into the Australian airline fleet over the coming years and will be quieter than the aircraft they are replacing.

TYPICAL SOUND LEVELS



Emergency Siren
140+ dB(A)



Construction Site
90 dB(A)



Modern twin-engine jet
(at take-off at
Brisbane Airport Boundary)
82 dB(A)



Roadways
80 dB(A)



Passenger car
(60km/h at 7m distance)
70 dB(A)



Cafes
50-70 dB(A)



Libraries
30-40 dB(A)

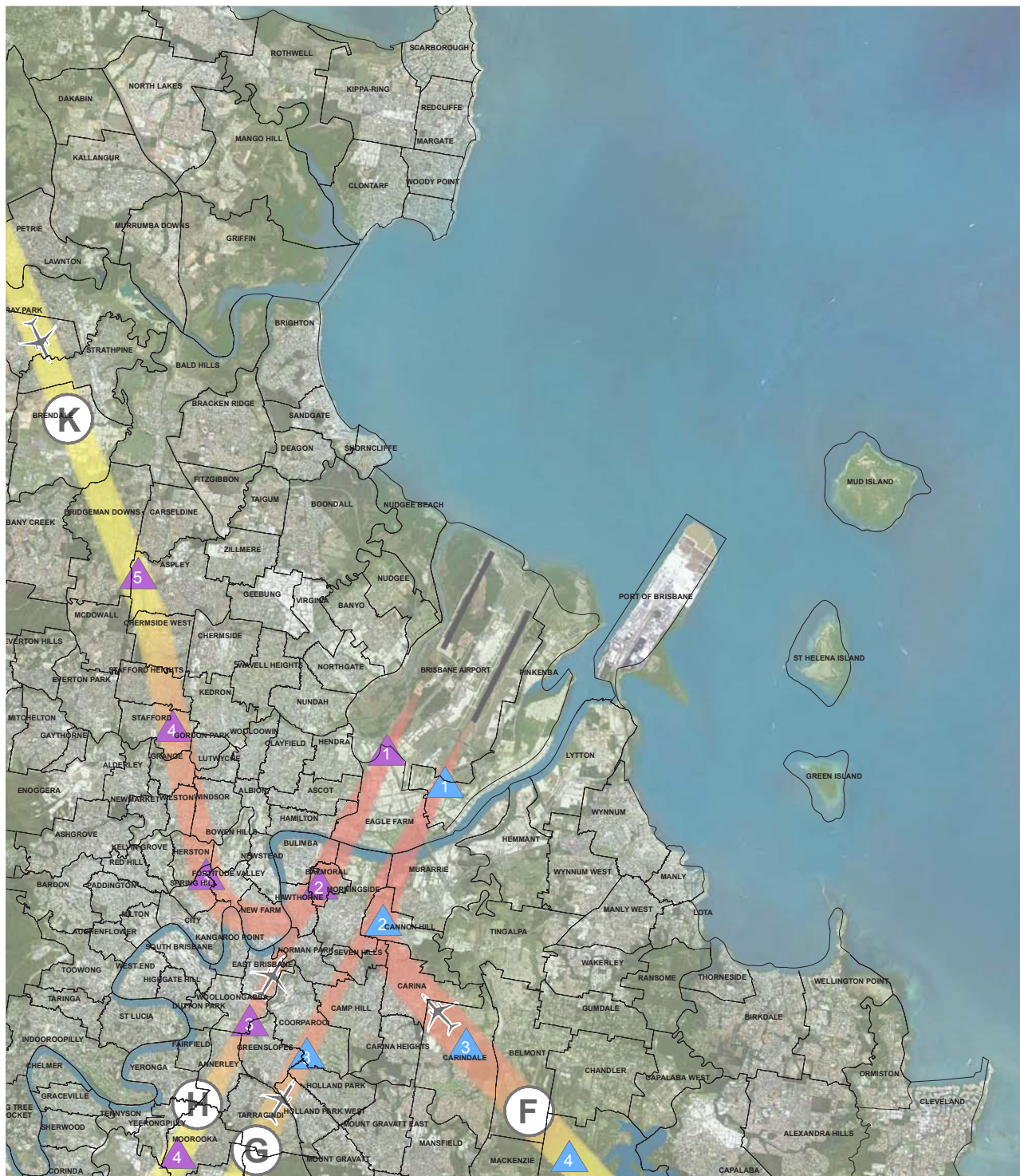
AIRCRAFT DESCRIPTIONS

Over the following pages you will see charts that mention various aircraft types that fly into and out of Brisbane. Below is a profile of the typical aircraft using Brisbane Airport including details of their make, flight range, start of service and passenger numbers.

A380		PASSENGERS – 525 RANGE – 15,700 KM	START OF SERVICE – 2006
B747-400		PASSENGERS – 416 RANGE – 14,205 KM	START OF SERVICE – 2002
B787-800		PASSENGERS – 242 RANGE – 14,500 KM	START OF SERVICE – 2011
B777-300		PASSENGERS – 365 RANGE – 13,427 KM	START OF SERVICE – 2003
A330		PASSENGERS – 295 RANGE – 10,500 KM	START OF SERVICE – 1993
B767-300		PASSENGERS – 269 RANGE – 10,195 KM	START OF SERVICE – 1986
A320		PASSENGERS – 179 RANGE – 5,676 KM	START OF SERVICE – 1987
A320neo¹		PASSENGERS – 164 RANGE – 6,900 KM	START OF SERVICE – 2015
B737-800		PASSENGERS – 162 RANGE – 5,765 KM	START OF SERVICE – 1998
B737MAX¹		PASSENGERS – 162 RANGE – 6,667 KM	START OF SERVICE – 2017
DASH 8-400		PASSENGERS – 74 RANGE – 3,334 KM	START OF SERVICE – 1998

1. Indicative information only and dependent on final design

ARRIVAL FLIGHT PATHS AND LOCATION FINDER WITH NPR



HOW TO READ THIS FLIGHT PATH LOCATION FINDER AND DECIBEL TABLE

The chart above and the table opposite enable you to determine the extent of noise in decibels that you might experience at certain locations around Brisbane when a particular type of aircraft is arriving on a flight path into Brisbane.

The numbers shown in triangles on the chart above correspond with the numbers in the table opposite. For instance, if you are located at any of the locations marked with a 2 you would experience a maximum noise event of approximately 74 decibels if an A380 coming from Singapore was using the flight path, 73 decibels if a B787-800 coming from Melbourne was using the flight path or 63 decibels if a Dash8 coming from Mackay was using that flight path.

Use the clear overlay at the front of the book to locate your suburb.

All distances are measured from the airport boundary.

ARRIVAL FLIGHT PATHS AND LOCATION FINDER TABLE

Aircraft	Sector	Destination	Path	Location				
				Airport Boundary	5km	10km	15km	20km
				1	2	3	4	5
Values in decibels								
A380	International	Singapore	K	82	74	68	66	66
B777-300	International	Singapore	K	84	76	71	67	67
B747-400	International	Singapore	K	87	78	73	69	66
B787-800	International	Hong Kong	K	79	71	66	63	63
A330	International	Hong Kong	K	82	74	67	64	64
Dash 8	Regional	Mackay	K	69	61	56	52	49
A380	International	Singapore	H	82	74	68	66	65
B777-300	International	Singapore	H	84	75	71	67	67
B747-400	International	Singapore	H	87	78	73	69	66
B787-800	International	Hong Kong	H	79	71	66	63	63
A330	International	Hong Kong	H	82	74	67	64	64
Dash 8	Regional	Mackay	H	69	61	55	52	49
A380	International	Singapore	G	85	76	70	66	66
B777-300	International	Singapore	G	87	77	72	67	67
B747-400	International	Singapore	G	91	80	74	70	67
B787-800	International	Hong Kong	G	83	73	68	63	63
A330	International	Hong Kong	G	86	75	68	65	64
B787-800	Domestic	Melbourne	G	83	73	68	63	63
A330	Domestic	Melbourne	G	86	75	68	65	64
B767	Domestic	Melbourne	G	89	79	72	67	63
B737 MAX	Domestic	Melbourne	G	82	72	66	59	59
B737-800	Domestic	Melbourne	G	85	75	69	62	62
B737-400	Domestic	Melbourne	G	85	74	67	62	58
A320neo	Domestic	Melbourne	G	80	69	64	60	60
A320	Domestic	Melbourne	G	82	71	66	62	62
Dash 8	Regional	Mackay	G	73	63	57	53	50
B787-800	Domestic	Melbourne	F	83	73	67	63	63
A330	Domestic	Melbourne	F	86	75	68	65	65
B767	Domestic	Melbourne	F	89	78	72	66	63
B737 MAX	Domestic	Melbourne	F	82	71	66	59	59
B737-800	Domestic	Melbourne	F	85	74	69	62	62
B737-400	Domestic	Melbourne	F	85	73	67	61	58
A320neo	Domestic	Melbourne	F	80	69	63	60	60
A320	Domestic	Melbourne	F	82	71	65	62	62

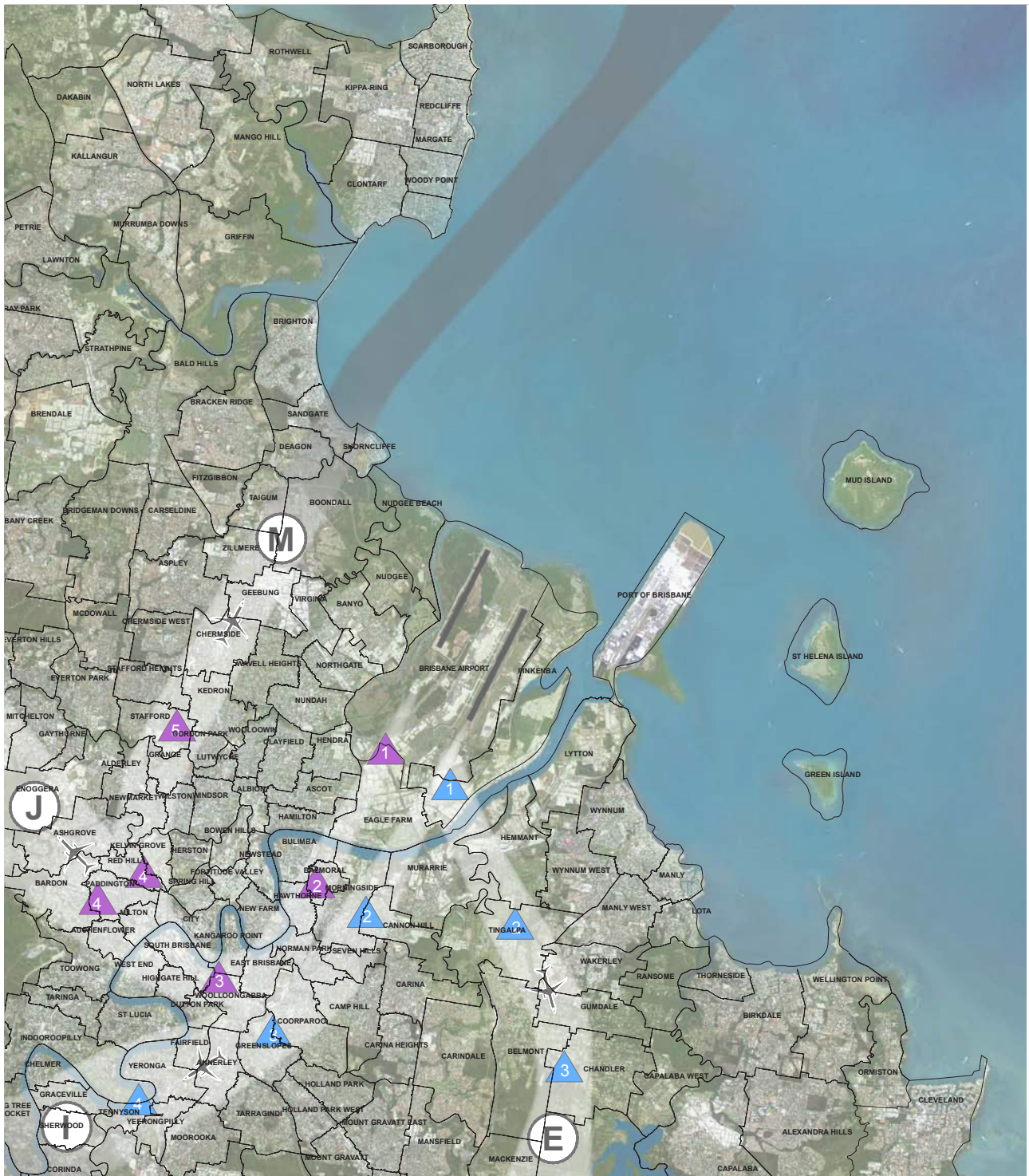
¹ Aircraft types in bold represent new generation aircraft that currently are, or will in the near future, be operational at Brisbane Airport.

Note: The noise levels shown in this table were calculated using the Federal Aviation Administration Integrated Noise Model (7.0d) software.

For completeness, the table above shows expected decibel levels at locations including 15 or more kilometres (column 4) and at locations of 20 or more kilometres (column 5) from the Brisbane Airport boundary. Some of these locations are beyond the boundaries on the map opposite, but the data is shown here to indicate the noise exposure at that distance from Brisbane Airport.

Important Note: Noise is measured on a logarithmic scale with the decibel (dB) as the unit of measure. Measurements of noise usually have a correction factor applied to reflect the sensitivity of the human ear. This factor is referred to as “A-weighting” and environmental noise is usually measured in dB(A) units. The noise level of normal daytime urban-based activities typically varies between 40dB(A) and 85dB(A). On this scale, a change in noise level of 10dB(A) is perceived to be a doubling or halving in loudness. For example, most humans perceive a noise event of 85dB(A) to be about twice as loud as an event of 75dB(A).

DEPARTURE FLIGHT PATHS AND LOCATION FINDER WITH NPR



HOW TO READ THIS FLIGHT PATH LOCATION FINDER AND DECIBEL TABLE

The chart above and the table opposite enable you to determine the extent of noise in decibels that you might experience at certain locations around Brisbane when a particular type of aircraft is departing on a flight path from Brisbane Airport over land. Aircraft departing over Moreton Bay may turn and head over land although these aircraft will be flying at altitude when this happens.

The numbers shown in triangles on the chart above correspond with the numbers in the table opposite. For instance, if you are located at any of the locations marked with a 2 you would experience a maximum noise event of approximately 75 decibels if an A380 going to Singapore was using the flight path, 71 decibels if a B787-800 going to Melbourne was using the flight path or 55 decibels if a Dash8 going to Mackay was using that flight path.

Use the clear overlay at the front of the book to locate your suburb.

All distances are measured from the airport boundary.

DEPARTURE FLIGHT PATHS AND LOCATION FINDER TABLE

				Location				
				Airport Boundary	5km	10km	15km	20km
Aircraft ¹	Sector	Destination	Path	1	2	3	4	5
Values in decibels								
A380	International	Singapore	J	87	75	68	64	60
B777-300	International	Singapore	J	87	75	69	64	61
B747-400	International	Singapore	J	94	82	76	71	67
Dash 8	Regional	Mackay	J	64	55	51	49	47
B787-800	International	Hong Kong	M	82	73	66	62	58
A330	International	Hong Kong	M	91	78	73	69	65
Dash 8	Regional	Mackay	M	64	55	51	49	47
B787-800	Domestic	Melbourne	E	86	71	64	59	55
A330	Domestic	Melbourne	E	95	76	71	66	62
B767	Domestic	Melbourne	E	94	78	71	66	63
B737 MAX	Domestic	Melbourne	E	90	70	65	60	57
B737-800	Domestic	Melbourne	E	94	74	69	64	61
B737-400	Domestic	Melbourne	E	95	76	69	64	61
A320neo	Domestic	Melbourne	E	87	68	62	57	53
A320	Domestic	Melbourne	E	88	69	64	59	55
B787-800	Domestic	Melbourne	I	86	71	64	58	55
A330	Domestic	Melbourne	I	95	76	71	66	62
B767	Domestic	Melbourne	I	94	78	71	66	63
B737 MAX	Domestic	Melbourne	I	90	70	65	60	57
B737-800	Domestic	Melbourne	I	94	74	69	64	61
B737-400	Domestic	Melbourne	I	95	76	69	64	61
A320neo	Domestic	Melbourne	I	87	68	62	57	53
A320	Domestic	Melbourne	I	88	69	64	58	55

¹ Aircraft types in bold represent new generation aircraft that currently are, or will in the near future, be operational at Brisbane Airport.

Note: The noise levels shown in this table were calculated using the Federal Aviation Administration Integrated Noise Model (7.0d) software.

For completeness, the table above shows expected decibel levels at locations including 15 or more kilometres (column 4) and at locations of 20 or more kilometres (column 5) from the Brisbane Airport boundary. Some of these locations are beyond the boundaries on the map opposite, but the data is shown here to indicate the noise exposure at that distance from Brisbane Airport.

Important Note: Noise is measured on a logarithmic scale with the decibel (dB) as the unit of measure. Measurements of noise usually have a correction factor applied to reflect the sensitivity of the human ear. This factor is referred to as “A-weighting” and environmental noise is usually measured in dB(A) units. The noise level of normal daytime urban-based activities typically varies between 40dB(A) and 85dB(A). On this scale, a change in noise level of 10dB(A) is perceived to be a doubling or halving in loudness. For example, most humans perceive a noise event of 85dB(A) to be about twice as loud as an event of 75dB(A).



N60, N65 AND N70 NOISE CONTOUR MAPS

The Australian Government, through the Department of Infrastructure and Regional Development, is focused on improving community amenity by minimising aircraft noise sensitive developments near airports, including improvements to methods for describing noise.

Through the NASAG, which comprises Commonwealth, State and Territory Government planning and transport officials, the National Airports Safeguarding Framework, has been developed.

The Framework acknowledges the importance of airports to national, state and local economics, transport networks and social capital. It also provides guidance for strategic land planning, with a particular focus on limiting noise-sensitive development under airport flight paths or within certain distances of an airport.

For instance, the Framework recognises that there is a need to treat future development and existing development differently. Where there is no major existing or approved development, there is scope to plan ahead to take account of potential noise disturbance and in particular to minimise the zoning of noise-exposed land for residential development.

The Framework explains that there may be less scope to avoid noise issues in situations of urban consolidation and infill or redevelopment of brownfield areas, but points out that consideration should be given to the appropriate nature of that development and the balance of public interest.

The Framework also outlines that consideration should be given to measures to manage the implications of aircraft noise where increasing settlement in existing areas exposed to a significant degree of aircraft noise is deemed acceptable, for instance, through appropriate construction techniques.

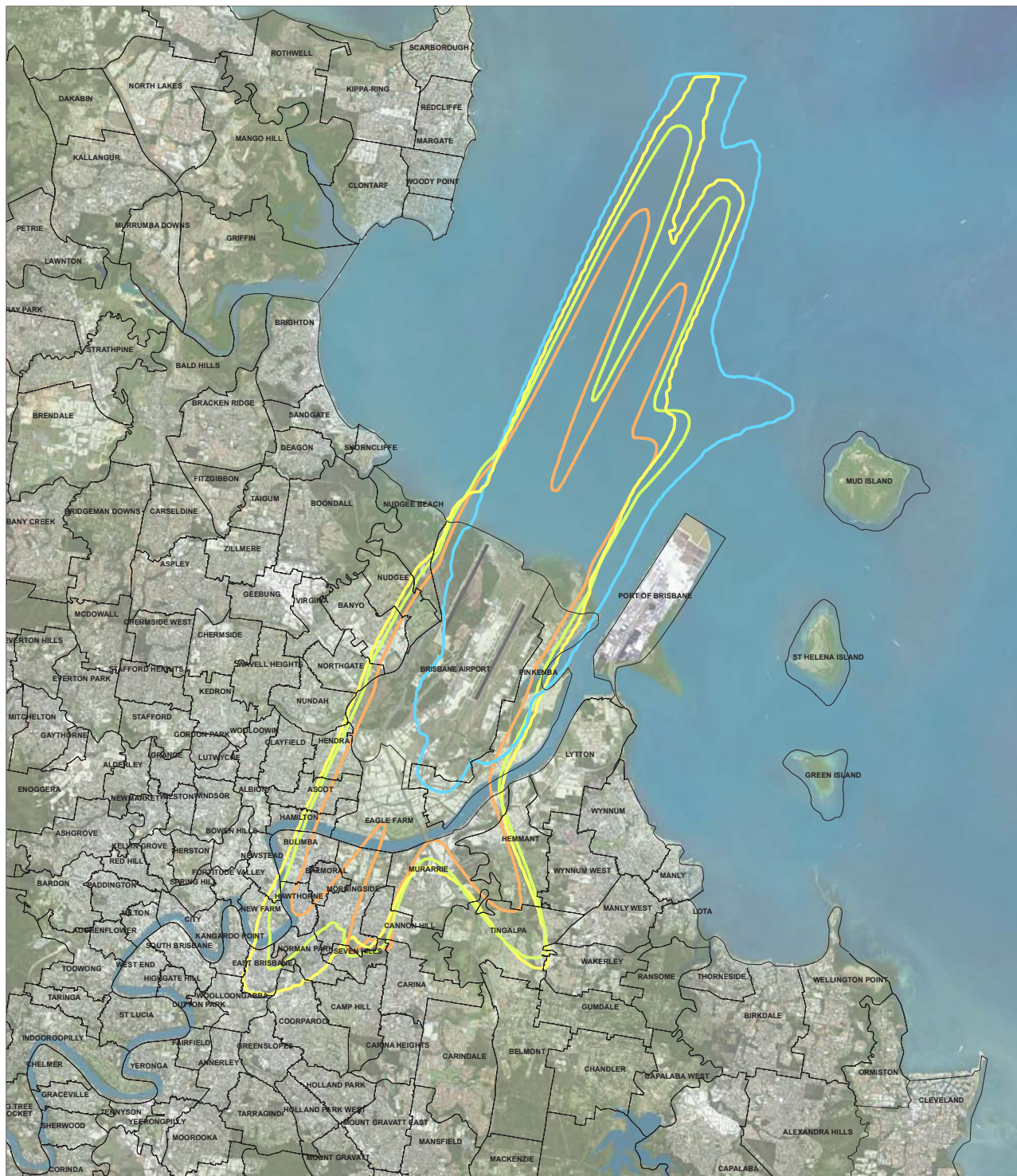
Taking the recommendations from the NASAG Framework on board, this section of the Current and Future Flight Path and Noise Information Booklet incorporates two additional contour maps.

One map represents 2034, which is the planning horizon for the Brisbane Airport 2014 Master Plan and the other represents 2060, a nominal ultimate runway capacity year for Brisbane Airport. Both maps are modelled on an "average day" basis.

The maps show where:

- » 20 or more daily events of greater than 70 decibels may occur
- » 50 or more daily events of greater than 65 decibels may occur
- » 100 or more daily events of greater than 60 decibels may occur
- » 6 or more events of greater than 60 decibels may occur between the hours of 11pm and 5am.

2024 NOISE CONTOUR MAP – N60, N65 AND N70



NOTE: Composite includes Summer Night being 11pm – 5am and Winter Night being 11pm - 6am.

Use the clear overlay at the front of the book to locate your suburb.

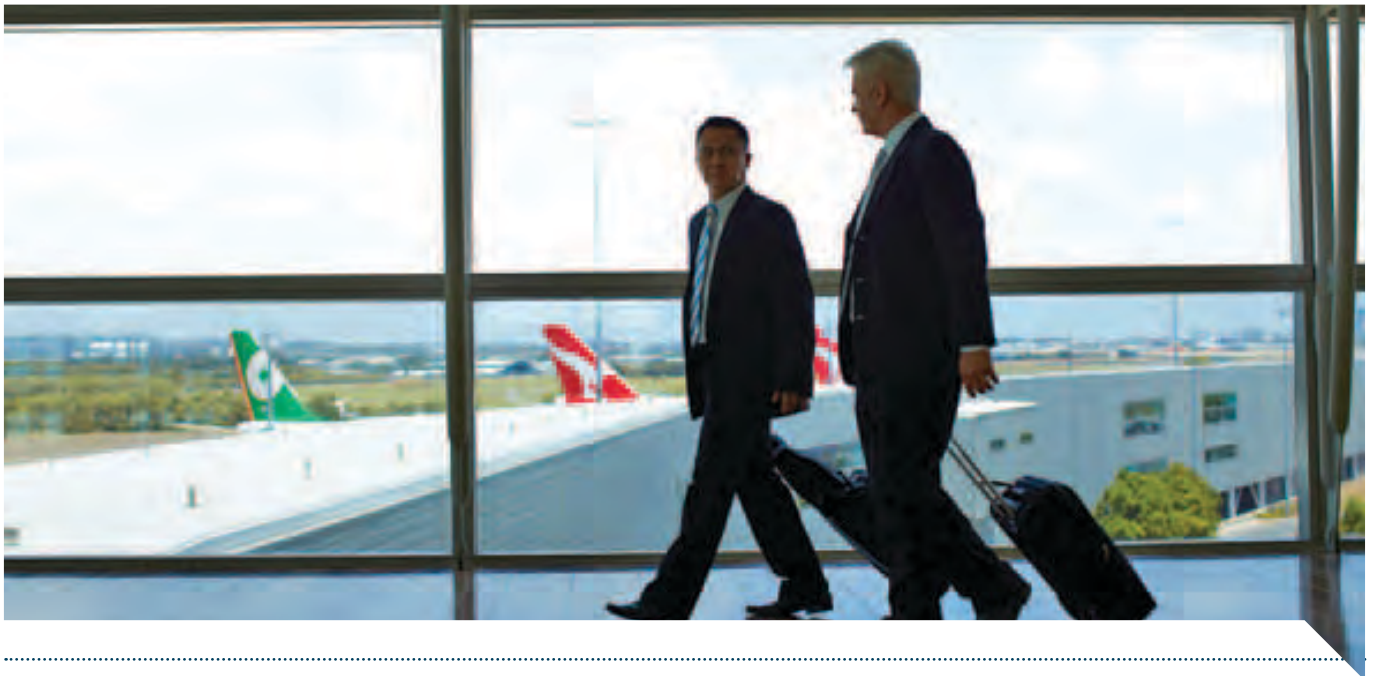
LEGEND

- 20 event N70 contour
- 50 event N65 contour
- 100 event N60 contour
- 6 event N60 contour between 11pm and 6am

[illegible]

2060 is currently considered to be when Brisbane Airport reaches operating capacity, although this could change if there are changes to passenger forecasts, aircraft fleet mix or airspace management.

20 event N70 contour
 50 event N65 contour
 100 event N60 contour
 6 event N60 contour between 11pm and 6am



FURTHER INFORMATION

Managing aircraft noise at Brisbane Airport is a responsibility shared by a number of organisations and bodies. Together, these groups actively research, plan and implement initiatives to achieve the optimal balance between the safe operation of the airport and minimising noise impacts on the community.

These groups include ICAO, Airservices, the Aircraft Noise Ombudsman (ANO), the Commonwealth Department of Infrastructure and Regional Development, CASA, individual airlines and BAC.

Other sources of information about aviation operations, flight paths and noise assessment include:

Airservices Australia:
www.airservicesaustralia.com

Noise Abatement Procedures:
www.airservicesaustralia.com/aircraftnoise/aircraft-operations/noise-abatement-procedures/

The National Airports Safeguarding Framework: www.infrastructure.gov.au/aviation/environmental/airport_safeguarding/nasf/

International Civil Aviation Organization:
www.icao.int

Civil Aviation Safety Authority:
www.casa.gov.au

Brisbane Airport: www.bne.com.au
(follow home page links from Upgrading Your Airport to information about the NPR EIS/MDP and information about construction of the new runway)

Department of Infrastructure and Regional Development:
www.infrastructure.gov.au

Aircraft Noise Ombudsman:
www.ano.gov.au

Above and Beyond – Working Together to Manage Aircraft Noise at Brisbane Airport: www.bne.com.au

BODIES RESPONSIBLE FOR MANAGING AND RESPONDING TO QUERIES OR CONCERNS ABOUT AIRCRAFT NOISE

The community has access to a number of organisations in the event they have queries or concerns about aircraft noise or aircraft operations generally, including:

BRISBANE AIRPORT CORPORATION

Complaints about ground-running noise can be directed to BAC on (07) 3406 3000.

AIRSERVICES AUSTRALIA

Airservices manages complaints and enquiries about aircraft noise and operations through their dedicated Noise Complaints and Information Service (NCIS).

You can lodge a complaint or make an enquiry:

- » Directly via WebTrak
- » Using the online form - www.airservicesaustralia.com/aircraftnoise/about-making-a-complaint/how-to-make-a-complaint/
- » By telephoning 1800 802 584 (freecall) or 1300 302 240 (local call – Sydney)
- » By fax (02) 9556 6641
- » By emailing ncis@airservicesaustralia.com
- » By mail, Noise Complaints and Information Service, PO Box 211, Mascot NSW 1460.

WEBTRAK

Complaints can also be logged via the WebTrak system, described earlier in this document.

WebTrak displays a map of surrounding suburbs within 55 km of a selected airport. You can view information about arriving and departing aircraft, from three months earlier up to just 40 minutes ago. After selecting the aircraft of concern, you can make a complaint about that flight. Visit <http://www.airservicesaustralia.com/aircraftnoise/webtrak/>

AIRCRAFT NOISE OMBUDSMAN

On 16 December 2009 the Australian Government released the Aviation White Paper 'Flight Path to the Future', which included the proposal for an ANO to:

- » Oversee the handling of aircraft noise enquiries and complaints

- » Conduct independent reviews of noise complaints handling
- » Make recommendations for improvements where necessary.

The ANO is independent of Airservices executive management structures, reporting directly to its Board on performance in regard to aircraft noise management matters.

The ANO has been established to conduct independent administrative reviews of Airservices and how it handles aircraft noise-related activities, such as the management of complaints / enquiries, community consultation processes, and the presentation and distribution of aircraft noise-related information.

The ANO Charter outlines how the ANO operates, including powers and duties, appointment terms, who is eligible to lodge a complaint, the types of complaints the ANO can consider, how the ANO reviews complaints and the types of recommendations the ANO can make.

Complaints should be first lodged through Airservices' Noise Complaints and Information Service, referred to earlier in this document. If they are unable to offer a satisfactory solution, complaints can be lodged with the ANO:

- » Using the online form – www.ano.gov.au/complaints/
- » By telephone 1800 266 040 (freecall)
- » By emailing ano@ano.gov.au
- » By mail, Aircraft Noise Ombudsman, GPO Box 1985, Canberra City ACT 2601

This service is free and available to anyone.



NOTES AND EXPLANATIONS

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. This information is used to determine whether a change of runway direction is required based on wind direction and speed and if a runway is wet or dry.

Further details on the criteria for runway selection are provided in the beginning of the booklet in the section describing the operation of Brisbane Airport's current and future runway system. In forecasting forward to 2020, 2034 or 2060, historical weather data has been used to predict future runway and flight path usage.

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 2020, 2034 and 2060 is based on the determination of a 'typical busy day' flight schedule. Different schedules were developed for Winter and Summer to capture the differences when daylight saving is operating in southern states.

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 has recently commenced commercial operations with Jetstar and other airlines operating into Australia, features reduced emissions and a new airframe and engines for quieter take-offs and landings compared to the aircraft it replaces.

Similarly, the use of these new aircraft, and the next generation of narrowbody aircraft currently under development and scheduled to enter service after 2016, the 737 MAX and the A320neo, are expected to deliver positive benefits to the community, and have been taken into account in the modelling.

AIRCRAFT NOISE PROFILES

The noise made by aircraft varies from aircraft to aircraft and can be different even for aircraft of the same type, and takes into account the variation in take-off weight and thrust settings depending on the trip distance (short, medium or long haul flights).

The modelling is conservative in that it is based on a busy day. The model assumes an average load factor is 65% of total payload (not passenger load), the trip range is based on 70% of the stage-length interval (e.g. for 1,500–2,500, it is 2,200 nm) and the fuel load assumes some reserves.

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 selected base year using the existing runway system. However, the allocation of flight paths for 2020 and beyond is based on the proposed airspace procedures and design, and the runway selection

criteria for operations on parallel runways, which is based on the origin and 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 for the NPR – is complex and rigorous. 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 THE EIS/MDP

The first step was the approval of the NPR EIS/MDP under the Airports Act and the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

In the EIS/MDP, a comprehensive environmental assessment of the operational impacts of the project (predominantly concerned with noise and air quality issues) was undertaken.

The assessment was based on a range of possible flight path options, approach and departure procedures and operating modes, which were prepared for BAC. The airspace design work was of an advanced technical level and will form the basis of the next step for adoption and implementation of airspace changes outlined in Step 2.

The environmental assessment undertaken and presented in the EIS/MDP provided:

- » The Australian Government Minister for the Environment with sufficient information to decide to approve the EIS for the purposes of the EPBC Act

- » The Minister for the Environment with sufficient information to provide advice to the Australian Government Minister for Transport and Regional Services to approve the EIS/MDP (this is a requirement of the EPBC Act)
- » The Minister for Infrastructure and Regional Development with sufficient information to approve the EIS/MDP for the purposes of the Airports Act
- » 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 provided the Minister for Environment and Heritage with information to provide advice to Airservices to 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 OFFICE OF AIRSPACE REGULATION (OAR)

The second step in the process is approval for the adoption and implementation of the airspace changes by the OAR, currently a division of CASA. The role of OAR is to exercise CASA's authority for airspace and environment responsibilities as defined with prescribed legislation including:

- » *Air Services Act 1995*
- » *Air Services Regulations 1995*
- » *EPBC Act*
- » *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 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 OAR 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 OAR will take into account the detailed environmental assessment contained in the 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 OAR assessment is based on a number of criteria, including:

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

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

PROCEDURES FOR DEFINING FLIGHT PATHS

The flight paths developed for Brisbane Airport both now and with the NPR, were developed in accordance with standards established by organisations including ICAO, CASA and Airservices.

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 stated 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 were followed in developing the proposed flight path options and modes of operation for the NPR were:

- » 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.

ABBREVIATIONS

Abbreviation	Meaning
01 / 19	Indicates the direction of the runway (01 = landing over the city and departing over Moreton Bay / 19 = landing over Moreton Bay and departing over the city)
01L	The New Parallel Runway (landings over the city)
01R	The existing runway (landings over the city)
19L	The existing runway (landings over Moreton Bay)
19R	The New Parallel Runway (lands over Moreton Bay)
Airports Act	Airports Act 1996
Airservices	Airservices Australia
ANEF	Australian Noise Exposure Forecast
ANO	Aircraft Noise Ombudsman
BAC	Brisbane Airport Corporation Pty Ltd
CASA	Civil Aviation Safety Authority
CROPS	Converging Runway Operations
dB	Decibels
DoIRD	Department of Infrastructure and Regional Development
DODPROPS	Dependant Opposite Direction Parallel Runway Operations
EIS/MDP	Environmental Impact Study and Major Development Plan for the New Parallel Runway
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
ICAO	International Civil Aviation Organisation
N60	Contour lines over a map showing areas within which a stated number of flights generating noise (N) of 60 decibels (60) or more occur in a specified period of time
N65	Contour lines over a map showing areas within which a stated number of flights generating noise (N) of 65 decibels (65) or more occur in a specified period of time
N70	Contour lines over a map showing areas within which a stated number of flights generating noise (N) of 70 decibels (70) or more occur in a specified period of time
NAP	Noise Abatement Procedures
NASAG	National Airports Safeguarding Advisory Group
NCIS	Noise Complaints and Information Service
NPR	New Parallel Runway
OAR	Office of Airspace Regulation
RDMS	Runway Demand Management System
RNP	Required Navigation Performance
RWY	Runway
SID	Standard Instrument Departure
SODPROPS	Simultaneous Opposite Direction Parallel Runway Operations
STAR	Standard Terminal Arrival Route

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