

ERIC J. ANCICH
Chartered Professional Engineer

35 Prince Edward Street Blackheath NSW 2785
Phone: 4787-8411 Mobile: 0427 470 474



REPORT No.9173 - R1

ASSESSMENT OF MEASURED AIRCRAFT NOISE LEVELS UNDER
THE EXISTING FLIGHT PATHS OF SYDNEY KINGSFORD SMITH
AIRPORT WITH REFERENCE TO WESTERN SYDNEY AIRPORT

EJA/DJC

March, 2019

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1.0 INTRODUCTION

This report presents the results of measured aircraft noise levels under the approach and departure flight paths of Sydney Kingsford Smith Airport (KSA) and the comparison of these noise levels with those predicted in the Environmental Impact Statement (EIS) for equivalent residential locations under likely approach and departure flight paths for the proposed Western Sydney Airport.

The report was prepared to present to Blacktown City Council following meetings and discussions with representatives of Council. The author is grateful that Council made available, free of charge, noise monitoring instrumentation which was used for the purposes of this report.

2.0 ASSESSMENT CRITERIA

The noise predictions in the Western Sydney Airport EIS are set out in “Volume -2a Chapter 10 Noise Aircraft”¹ and “ Appendix E1 Aircraft Overflight Noise”².

The assessment criteria was to compare the noise generated by aircraft in flight on approach and landing to/from KSA with noise levels predicted in the EIS for WSA.

Sound Level Meters (SLM) were set up under two approach flight paths in Pymble and under a departure flight path in Mays Hill. The Pymble and Mays Hill locations are 23 km and 21 km respectively from KSA.

A total 330 of flights were tracked over the locations of the SLM using Flightradar24 to determine the flight details, origin and destination, time, airline, flight number, aircraft type, altitude, height above ground level. The Flightradar24 UTC time (Universal Time Coordinated) and the ESDST for each event was used co-ordinated the corresponding data from each data set. The SLM data were time and date stamped permitting direct comparison with the Flightradar24 records.

The results of the noise study at each location are set out in the Appendices A1-A6, B1-B3 and C1-C3 as follows:

- a. Data in chronological order by day
- b. Data sorted in ascending order with respect to height of aircraft above ground level at the respective location
- c. Data sorted in descending order with respect to $L_{A_{Max}}$

3.0 INSTRUMENTATION

Two separate Brüel & Kjær. Model 2250 Sound Level Meters were used to measure sound pressure levels. For the two Pymble locations, a Brüel & Kjær “Sentinel On Demand” system was used and for the Mays Hill measurements, a Brüel & Kjær. Model 2250 based noise logger was used. These instruments satisfy the requirements of Australian Standard AS 1259-1990 for Type 1 instrumentation.

The instruments were operated using the A-weighted pre-amplifier input and RMS detector time constant “Fast”.

The instruments were field calibrated before and after measurements with a Bruel & Kjaer Type 4231 acoustic calibrator. The field calibration levels were within the acceptable limit of variation of ± 0.5 dBA. Unless stated otherwise in this report, the reference pressure for all sound pressure level measurements is 20 μ Pa.

4.0 ACOUSTIC ASSESSMENT

4.1 EIS Appendix E1 Page 3– Departures 70 dBA Contour

“The predicted departure noise contours of the B747 are significantly larger than those of the A320 aircraft; for example, the 70 dBA contour extends approximately 15 km from the runway end to St Marys for a B747, whilst the same contour extends only 5 kms for an A320 aircraft.”

4.1.1 Noise Study Data

- Departure -23 January 2019 Mays Hill A320 at 6089 ft 67.9 dBA at 21 km from KSA equivalent to 19.28 km from WSA to Blacktown. The 70 dBA contour for an A320 aircraft on departure extends to 19.28 km not 5km
- Departure -29 January 2019 Mays Hill 14 out of 33 flights generated noise levels between 65 and 72.2 dBA

4.1.2 Analysis of Results

- The 70 dBA contour for an A320 aircraft on departure extends to 19.28 km not 5 km
- The 70 dBA contour for an 747D on departure extends to 19.28 km not 15 km
- The 70 dBA noise contour extends further than that predicted by the EIS for most aircraft

4.2 EIS Appendix E1 Page 3- Arrivals Noise Contour for B747 and A320

“In the case of arrivals, the noise contours follow arrival tracks from a merge point over the lower Blue Mountains. The arrival noise contours of the B747 are also significantly larger than the same contours for the A320 aircraft; for example the 70 dBA contour extends approximately 15-17 km from the runways ends for a B747, whilst the same contour extends only 8-10 kms for an A320.”

4.2.1 Noise Study Data

- Arrival-10 November 2018 Avondale Golf Course 747-4D7 at 2788 ft: 81.9 dBA at 23 km from KSA equivalent to 19.28 km from WSA to Blacktown.
- Arrival-8 November 2018 Avondale Golf Course 320-232 at 2788 ft: 75.3 dBA at 23 km from KSA equivalent to 19.28 km from WSA to Blacktown.

4.2.2 Analysis of Results

The 70 dBA contour for a 747-4D7 aircraft on arrival extends to 23 km compared to the distance in the EIS of 15-17 km

The 70 dBA contour for an A320 aircraft on departure extends to 19.28 km compared to the distance in the EIS of 5 km

4.3 EIS Appendix E1 Page 5 – Arrivals Lower Blue Mountains

- *“At locations directly under the indicative flight tracks, the number of audible aircraft overflights (typically at levels of 55 dBA or below) could be over 70 per day in Stage 1. Worst-case locations would be under one of two approach paths that emanate from a “merge point” in the area of the lower Blue Mountains.*
- *The nominal location of this merge point based on the indicative flight tracks would be almost directly over the township of Blaxland, meaning that in Stage 1, residents could expect to experience aircraft overflights at significant altitude (typically over 5000 ft above ground level) almost 100 times per day, with maximum noise levels ranging up to 55 dBA.”*

4.3.2 Noise Study Data

- Arrival-28 October 2018 Pymble Ladies College 737-838 at 4113 ft 73.6 dBA equivalent height quoted for flights over Blaxland.
- Arrival-28 October 2018 Pymble Ladies College 737-838 at 4888 ft 70.4dBA equivalent height quoted for flights over Blaxland
- Arrival-8 November 2018 Avondale Golf Course 737-838 at 4738 ft 71.9 dBA equivalent height quoted for flights over Blaxland
- Arrival-8 November 2018 Avondale Golf Course 380-841 at 3988 ft 72.4 dBA equivalent height quoted for flights over Blaxland

4.3.3 Analysis of Results

- The EIS predicted that the maximum noise levels would range up to 55 dBA over Blaxland at 5000 ft (actual height above ground level is 4232 ft). The study data indicates the noise level would reach 73.6 dBA.
- An A380-841 at 3988 ft generated a noise level of 72.4 dBA
- Monitoring 263 flights on approach to KSA at Pymble Ladies College and Avondale Golf Course (at 23 km) showed for flights around 5000 ft noise levels averaged around 70 dBA.

4.4 EIS Appendix E1 Page 9 – Continuous Descent Approach

“With respect to the first point, the use of continuous descent approaches has already been adopted in noise assessments for this report and, at this time, there appear to be no other feasible options by which noise emissions from aircraft in flight could be reduced through alternative operating procedures”.

4.4.1 Noise Study Data

Figure 10-7 of Volume -2a Chapter 10 Noise Aircraft “Concept Diagram of Continuous Descent Approach Zone of Noise Benefit” shows there is no benefit within approximately 20 km of the end of the runway. On this basis the noise level data recorded at Pymble Ladies College and Avondale Golf Course at 23 km from KSA equivalent to 19.28 km from WSA to Blacktown can be adopted as is.

4.5 EIS Appendix E1 Page 9 – Noise Levels and Variable Height of Aircraft

”Options for Noise Mitigation

There are three fundamental options for mitigation of aircraft noise:

- *reduce noise emissions from the aircraft themselves;*
- *plan flight paths and airport operating modes to achieve lower impacts over noise-sensitive areas; and*
- *develop land use planning or other controls to ensure that future noise-sensitive uses are not located in noise-affected areas”.*

4.5.1 Noise Study Data

Monitoring 263 flights on approach to KSA at Pymble Ladies College and Avondale Golf Course (at 23 km) showed there was a large variability of aircraft heights.

- Avondale GC 7,8 and 10 November 2018 1288- 5388 ft
- Pymble Ladies College 27, 29 October 2018 1663-6138 ft
- For example for a 737-8FE, the level was 79.1 dBA at 1663 ft compared to 62.2 dBA at 4638 ft.

4.5.2 Analysis of Results

- The noise study shows the noise level generated by a particular aircraft is a function of the height above ground level for a particular event
- On this basis a noise level predicted for a particular location needs to specify the aircraft and the corresponding height above ground level.
- The variability of the height above ground level of aircraft results in a commensurate variability in recorded receiver noise levels.

4.6 EIS Appendix E1 Page 9 – Noise Levels over Blacktown

“Figure 3-3 and Figure 3-4 show L noise levels from a 747 arrival on any track. In this case, noise levels of 60 – 70 dBA can be expected over sections of Erskine Park and St Marys, extending to parts of Blacktown. Noise levels from this event also reach 60 dBA at Blaxland, beneath the “merge point” for arrivals. In Stage 1, there are expected to be five such arrivals per day”

“Arrivals by A320 aircraft, when they occur in the 23 direction, are predicted to produce levels exceeding 60 L_{AMax} over areas between Erskine Park, St Marys and Blacktown, and also (when they occur in the 05 direction) over areas in the Blue Mountains National Park and GBMWHHA”.

4.6.1 Noise Study Data

The flight paths over Blacktown are shown in Figure A-1 “Flight Tracks Modelled for Initial Development (Single Runway- All Operating Modes Combined)” of Appendix E1³, On this basis the height of aircraft over Blacktown for aircraft on approach to WSA on a glide slope 18.52 km (10 nautical miles) long on a 3 degree glide slope.

“Page 47 Western Sydney Airport Plan, Note 31 “Aircraft on final approach to the airport are on straight line descent to the runway from 10 nautical miles (18.52 km)”

This results in aircraft heights above ground level as follows:-

- Intersection Great Western Highway and Flushcombe Rd -2800ft at 17 km from WSA
- Intersection Prospect Highway and Lancelot St -3101 ft at 18.52 km from WSA
- Haynes St Seven Hills – 3582 ft at 21.34 km from WSA
- Arrival-10 November 2018 Avondale Golf Course 747-4D7 at 2788 ft: 81.9 dBA at 23 km from KSA equivalent to 19.28 km from WSA to Blacktown.
- Arrival-8 November 2018 Avondale Golf Course 320-232 at 2763 ft: 75.3 dBA at 23 km from KSA equivalent to 19.28 7km from WSA to Blacktown
- Arrival-8 November 2018 Avondale Golf Course 330-343 at 2838 ft: 75.2 dBA at 23 km from KSA equivalent to 19.28 km from WSA to Blacktown
- Arrival-7 November 2018 Avondale Golf Course 737-8FE at 2863 ft: 74.6 dBA at 23 km from KSA equivalent to 19.28 km from WSA to Blacktown

4.6.2 Analysis of Results

- Based on the study results popular aircraft types including 320-232, 330-343 and 737-8FE will generate noise levels up to 75.3 dBA over Blacktown
- The L_{AMax} recorded in the study Avondale Golf Course was 81.9 dBA for a 747D. This will apply to Blacktown compared to a prediction of 70 dBA.
- The prediction of an L_{AMax} of 60 for an A320 over Blacktown is low compared to the L_{AMax} of 75.3 recorded over Avondale Golf Course.
- For Avondale Golf Course on 8 November 2018 there were 39 flights (60% of all flights) between 70- 77.2 dBA on single runway. This is applicable to the planned flights over Blacktown.

- For Avondale Golf Course on 8 November 2018 there were 59 flights (92% of all flights) between 65-77.2 dBA on single runway. This is applicable to the planned flights over Blacktown.

5.0 RESULTS & DISCUSSION

5.1 Noise Study

The noise study measured noise generated by aircraft in flight and compared them with those predicted by computer modelling used for the EIS.

5.2 Noise Study Recording Sites

The sites at which the SLMs were set up at Pymble and Mays Hill make the results applicable to Blacktown and Lower Blue Mountains under WSA operating conditions.

5.3 Variability in Height of Aircraft

The study has highlighted the fact that height of aircraft results in variability in noise levels. It appears that the variability in height of arriving and departing aircraft was not considered in the EIS.

5.4 Noise Impact over Blacktown

The study results indicate that the noise impact over Blacktown will be significantly higher than the levels predicted in the EIS.

Table 1 Blacktown

Parameter	EIS Prediction	Noise Study	Perceived Loudness Increase
70dBA contour departure	A320 - 5 km from WSA	A320-19.28km from WSA	
70dBA contour departure	747D - 15 km from WSA	747D 19.28 km from WSA	
70dBA contour arrival	A320 - 5 km from WSA	A320 - 23 km from WSA	
70 dBA contour arrival	747- 15-17 km from WSA	747D - 23 km from WSA	
Variability aircraft height	No information	1288 – 6138 ft	
L _{AMax} 747D	60-70	81.9	2-4 times
L _{AMax} A320	> 60	75.3	3 times
Number of flights 70-77.2 L _{AMax}	1 off 747D	39 (60%) recorded in one day for a range of aircraft	Multiple events 2-3 times
Number of flights 65-77.2 L _{AMax}	1 off 747D	59 (90%) recorded in one day for a range of aircraft	Multiple events 2-3 times

5.5 Noise Impact Lower Blue Mountains

Notwithstanding that the merge point over Blaxland may be moved in the design of the final flight paths, the study results indicate that the noise impact over Blaxland will be significantly higher than the levels predicted in the EIS.

Table 2 Lower Blue Mountains

Parameter	EIS Prediction	Noise Study	Perceived Loudness Increase
Noise level at height above ground 4200 ft	Up to 55 dBA	73.6 dBA	3-4 times
Noise level at height 5000 ft	Up to 55 dBA	70.4	3 times
Noise level 747D 4938 ft	60 dBA	73.2	3 times
Noise level A380-841 at 3988 ft	Up to 55 dBA	72.4	3 times

6.0 CONCLUSION

A total of 330 flights (263 approach and 67 departure) were tracked over locations considered to be representative of locations under the flight paths of the proposed Western Sydney Airport (WSA). The conclusion of this study is that measurement of noise generated by aircraft in flight has demonstrated that variability in the height of aircraft will result in a wide range of receiver noise levels. This variability in height and the commensurate variability in noise levels will increase the noise impact over Blacktown and the Lower Blue Mountains compared to that predicted in the EIS.

The study raises questions as to the reliability of noise level predictions in the EIS for aircraft noise impacts on other areas affected by the WSA as it appears that the variability in height of arriving and departing aircraft was not considered in the EIS.

Report prepared by:

Eric J. Ancich
PhD, FIEAust, CPEng, MIABSE
Chartered Professional Engineer

REFERENCES

Western Sydney Airport EIS

1. <https://westernsydneyairport.gov.au/files/eis/WSA-EIS-Volume-2a-Chapter-10-Noise-aircraft.pdf>
2. <https://www.google.com/search?q=WSA-EIS-Volume-4-Appendix-E1-Aircraft-overflight-noise+2&ie=utf-8&oe=utf-8&client=firefox-b-ab>
3. https://westernsydneyairport.gov.au/files/Western_Sydney_Airport_Plan.pdf. Page 47
4. Figure A-1 “Flight Tracks Modelled for Initial Development (Single Runway- All Operating Modes Combined) of Appendix E1.

APPENDICES

- A1 Monitoring Of Flights Over Avondale Golf Course Nov 2018–Data Cronologically
- A2 Monitoring Of Flights Over Avondale Golf Course Nov 2018–Data Sort WRT to Height
- A3 Monitoring Of Flights Over Avondale Golf Course Nov 2018–Data Sort WRT L_{AMax}
- A4 Monitoring Of Flights Over Avondale Golf Course Nov 2018– 8 November 2018 Data Cronologically
- A5 Monitoring Of Flights Over Avondale Golf Course Nov 2018– 8 November 2018 Data Sort WRT to Height
- A6 Monitoring Of Flights Over Avondale Golf Course Nov 2018– 8 November 2018 Data Sort WRT to L_{AMax}
- B1 Monitoring Of Flights Over Pymble Ladies College Golf Course Oct 2018–Data Cronologically
- B2 Monitoring Of Flights Over Pymble Ladies College Nov 2018–Data Sort WRT to Height
- B3 Monitoring Of Flights Over Pymble Ladies College Nov 2018–Data Sort WRT to L_{AMax}
- C1 Monitoring Of Flights Over Mays Hill Jan 2019–Data Cronologically
- C2 Monitoring Of Flights Over Mays Hill Jan 2019–Data Sort WRT to Height
- C3 Monitoring Of Flights Over Mays Hill Jan 2019–Data Sort WRT to L_{AMax}

APPENDIX A5

MONITORING OF FLIGHTS OVER AVONDALE GOLF COURSE NOV '18 NOVEMBER ONLY

DAT SORT WRT TO HEIGHT

SYD DAY	FROM	TO	UTC DAY	UTC HR	UTC MIN	ESDST HR	ESDST MIN	AIRLINE	FLIGHT	AIRCRAFT	ALTITUDE	ELEVATION FT		DATA TIME ESDST	A5			
												HEIGHT ABOVE GL	LOCATION REF TO LOGGER					
8	ADEL	SYD	7	23	25	10	25	QANTAS	QF740	737-838	2300	1913	OVER	64	1024	64 FLIGHTS		
8	ADL	SYD	8	1	35	12	35	QANTAS	QF738	737-838	2575	2188	OVER	66.2	1237			
8	DENPASAR	SYD	7	19	55	6	55	GARUDA	GA417	330-343	2725	2338	OVER	71	656			
8	LAUNSCN	SYD	8	11	17	22	17	JETSTAR	JQ750	320-232	2800	2413	OVER	67.5	2218			
8	HONOLULO	SYD	8	8	29	19	29	HAWAIIAN	HA451	330-243	2825	2438	OVER	72.4	1929			
8	CHRISTCH	SYD	8	8	59	19	59	EMERITES	EK413	380-861	2850	2463	OVER	72.8	1958			
8	PERTH	SYD	8	5	3	16	3	QANTAS	QF642	737-838	2875	2488	OVER	74.5	1604			
8	KL	SYD	7	23	13	10	13	ASIA	D7222	330-343	2900	2513	OVER	70.6	1013			
8	GOLDC	SYD	8	0	19	11	19	TIGER	TT607	320-232	2925	2538	OVER	74.6	1119			
8	MEL	SYD	7	21	34	8	34	VIRGIN	VA813	787-8	2925	2538	OVER	70.2	834			
8	ADEL	SYD	7	22	12	9	12	VIRGIN	VA407	737-8FE	2950	2563	OVER	71.6	913			
8	PEKING	SYD	8	2	49	13	49	QANTAS	QF108	330-303	2950	2563	OVER	71.4	1350			
8	HOBART	SYD	7	22	41	9	41	JETSTAR	JQ718	320-232	2950	2563	OVER	70.2	944			
8	SINGAPORE	SYD	7	20	11	7	11	QANTAS	QF82	330-303	2950	2563	OVER	64.1	711			
8	LAX	SYD	7	21	32	8	32	AMERICAN	AA73	787-9	2950	2563	OVER	64.1	832			
8	SHANGHAI	SYD	7	22	18	9	18	CHINA E	MU561	330-243	2975	2588	OVER	73.7	918			
8	DENPASAR	SYD	7	20	36	7	36	JETSTAR	JQ38	787-8	2975	2588	OVER	69.3	736			
8	HK	SYD	7	20	34	7	34	CATHAY	CX111	330-343	3000	2613	OVER	70.1	733			
8	VANCOUVER	SYD	7	23	19	10	19	CANADA	AC33	777-233	3000	2613	OVER	67.8	1018			
8	MELB	SYD	7	22	34	9	34	QANTAS	QF414	737-838	3025	2638	OVER	71.3	934			
8	NANJING	SYD	7	21	42	8	42	CHINA E	MU727	330-243	3050	2663	OVER	73.5	843			
8	DUBAI	SYD	7	19	49	6	49	EMERITES	EK412	380-861	3075	2688	OVER	70.8	650			
8	MELB	SYD	8	8	19	19	19	VIRGIN	VA875	737-8FE	3125	2738	OVER	71.8	1919			
8	SUNSHINE	SYD	7	22	39	9	39	JETSTAR	JQ781	320-232	3150	2763	OVER	75.3	939			
8	PEKING	SYD	8	5	10	16	10	CHINA	CA173	330-343	3225	2838	OVER	75.2	1610			
8	BANGKOK	SYD	7	19	41	6	41	THAI	747-4D7	747-4D7	3275	2888	OVER	77.2	641		LAMax	77.2
8	GUANZHOU	SYD	8	9	33	20	33	CHINA S	CZ301	330-323	3275	2888	OVER	71.3	2033			
8	DOHA	SYD	8	7	47	18	47	QATAR	QR908	380-861	3300	2913	OVER	72	1847			
8	SEOUL	SYD	7	19	53	6	53	KOREAN	KE121	380-861	3350	2963	OVER	73.3	654			
8	PERTH	SYD	7	19	21	6	21	VIRGIN	VA570	737-8FE	3350	2963	OVER	69.2	622		29 FLIGHTS <3000 FT	
8	TONATAPU	SYD	7	22	26	9	26	VIRGIN	VA94	737-8FE	3400	3013	OVER	69.8	926		45%	
8	BRISB	SYD	8	2	21	13	21	QANTAS	QF525	737-838	3550	3163	OVER	68.4	1321			
8	DARWIN	SYD	8	0	31	11	31	HIFLY	AST045	340-313	3557	3170	OVER	70.7	1131			
8	HK	SYD	8	0	59	11	59	CATHAY	CX101	777-367	3575	3188	OVER	74.1	1158			
8	GOLDC	SYD	8	9	15	20	15	VIRGIN	VA540	737-8FE	3575	3188	OVER	68.3	2017			
8	TOKYO	SYD	7	19	29	6	29	JAPAN	JL771	787-8	3600	3213	OVER	73.4	629			
8	MELB	SYD	8	11	15	22	15	QANTAS	QF494	737-838	3600	3213	OVER	64.7	2216			
8	GOLDC	SYD	8	3	59	14	59	JETSTAR	JQ411	320-232	3800	3413	OVER	75.4	1459		LAMax	75.4
8	SHANGHAI	SYD	7	22	57	9	57	QANTAS	QF130	330-202	3800	3413	OVER	72.2	958			
8	SEOUL	SYD	7	21	0	8	0	ASIANA	OZ601	380-841	3800	3413	OVER	71.3	759			

8	BRISB	SYD	8	11	13	22	13	QANTAS	QF555	737-838	3875	3488	OVER	67.6	2213
8	XIAMEN	SYD	7	23	33	10	33	XIAMEN	MF801	787-8	3925	3538	OVER	70	1034
8	TOKYO	SYD	7	22	6	9	6	QANTAS	QF26	747-438	3925	3538	OVER	69.4	905
8	HK	SYD	7	19	47	6	47	QANTAS	QF128	747-438	4000	3613	OVER	74.1	646
8	BANGKOK	SYD	7	21	24	8	24	EMERITES	EK418	380-861	4050	3663	OVER	72.2	824
8	XIY	SYD	7	20	13	7	13	HAINAN	HU7993	330-243	4075	3688	OVER	71.7	713
8	SINGAPORE	SYD	7	19	37	6	37	BRITISH	BA15	777-336	4100	3713	OVER	69.1	638
8	BANGKOK	SYD	7	20	20	7	20	QANTAS	QF24	330-303	4100	3713	OVER	66	720
8	WUHANN	SYD	8	0	1	11	1	CHINA E	MU749	330-243	4125	3738	OVER	77	1100
8	BRISB	SYD	8	10	29	21	29	VIRGIN	VA986	737-8FE	4175	3788	OVER	74.2	2128
8	BRISB	SYD	8	11	15	22	15	JETSTAR	JQ823	320-232	4175	3788	OVER	65	2215
8	BRISB	SYD	8	11	23	22	23	QANTAS	QF559	737-838	4250	3863	OVER	65.1	2224
8	BRISB	SYD	8	8	43	19	43	TIGER	TT381	320-232	4275	3888	OVER	71.8	1943
8	MANILA	SYD	7	19	59	6	59	QANTAS	QF20	330-202	4325	3938	OVER	70.2	658
8	SINGAPORE	SYD	7	20	7	7	7	SING	SQ221	380-841	4375	3988	OVER	72.4	707
8	CHENGDU	SYD	8	4	17	15	17	CHINA	CA429	330-343	4450	4063	OVER	74.1	1518
8	HERVEY B	SYD	8	2	59	13	59	VIRGIN	VA1556	737-8FE	4450	4063	OVER	67	1400
8	GOLDC	SYD	8	11	5	22	5	VIRGIN	VA544	737-8FE	4500	4113	OVER	65	2204
8	GOLDC	SYD	8	5	31	16	31	VIRGIN	VA526	737-8FE	4700	4313	OVER	67.6	1432
8	TAIPEI	SYD	8	0	55	11	55	CHINA	C151	350-941	4850	4463	OVER	71.6	1154
8	LAX	SYD	7	21	38	8	38	UNITED	UA839	787-9	4850	4463	OVER	68.7	839
8	HAMILTON	SYD	8	4	5	15	5	VIRGIN	VA1280	737-81D	4875	4488	OVER	68.7	1507
8	SANFRAN	SYD	7	21	28	8	28	UNITED	UA863	787-9	5100	4713	OVER	71.5	828
8	TOKYO	SYD	8	10	33	21	33	POLAR	PO241	767-3JH	5100	4713	OVER	69.8	2133
8	GOLDC	SYD	8	6	9	17	9	QANTAS	QF865	737-838	5250	4863	OVER	67.4	1707

25 FLIGHTS 3000-4000

39%

54 FLIGHTS <4000 FT

84%

**APPENDIX A1
MONITORING OF FLIGHTS OVER AVONDALE GOLF COURSE NOV 2018**

DATA CRONOLOGICALLY

SYD DAY	FROM	TO	UTC DAY	UTC HR	UTC MIN	ESDST HR	ESDST MIN	AIRLINE	FLIGHT	AIRCRAFT	ALTITUDE	ELEVATION FT		DATA TIME ESDST	
												HEIGHT ABOVE GL	LOCATION REF TO LOGGER		
7	NANDI	SYD	7	0	16	11	16	FIJI	FJ911	330-243	4000	3613	OVER	65.8	1116
7	HK	SYD	7	0	37	11	37	CATHAY	CX101	777-367	4175	3788	OVER	69.6	1137
7	TAIPEI	SYD	7	0	59	11	59	CHINA	C151	359-941	3650	3263	OVER	67.2	1158
7	HANOI	SYD	7	1	39	12	39	VIETNAM	VN787	787-9	3875	3488	OVER	72.1	1238
7	SHANGHAI	SYD	7	1	43	12	43	CHINA E	MU735	777-39P	3175	2788	OVER	67.7	1243
7	MELB	SYD	7	1	45	12	45	QANTAS	QF428	737-838	3150	2763	OVER	67	1245
7	KUMIMG	SYD	7	2	47	13	47	CHINA E	MU777	330-243	3200	2813	OVER	76.7	1347
7	honolulu	SYD	7	4	3	15	3	JETSTAR	JQ4	787-8	3125	2738	OVER	67.4	1503
7	CAIRNS	SYD	7	4	28	15	28	QANTAS	QF923	737-838	3800	3413	OVER	71.8	1528
7	CHRISTCH	SYD	7	7	38	18	38	EMERITES	EK413	380-861	3750	3363	OVER	67.8	1839
7	SINGAPORE	SYD	7	7	2	18	2	SING	SQ288	777-312	2650	2263	OVER	66.6	1802
7	CHRISTCH	SYD	7	9	8	20	8	EMERITES	EK413	380-861	3750	3363	OVER	73.1	2005
7	HK	SYD	7	9	18	20	18	CATHAY	CX139	777-367	4100	3713	OVER	66.5	2018
7	GUANGZOU	SYD	7	9	22	20	22	CHINA S	CZ301	330-323	3250	2863	OVER	71.2	2022
7	BRISB	SYD	7	9	28	20	28	QANTAS	QF551	737-838	4500	4113	OVER	60.1	2029
7	SINGAPORE	SYD	7	9	52	20	52	SING	SQ211	777-312	3200	2813	OVER	70.4	2054
7	ADELAIDE	SYD	7	10	14	21	14	TOLL	TFR34	737-476	3125	2738	OVER	74.6	2113
7	MELB	SYD	7	10	26	21	26	TIGER	TT264	320-232	3175	2788	OVER	74	2126
7	MELB	SYD	7	10	40	21	40	VIRGIN	VA891	737-8FE	3250	2863	OVER	74.6	2140
7	MELB	SYD	7	10	46	21	46	QANTAS	QF7354	737-376	2175	1788	OVER	72.8	2145
7	MELB	SYD	7	10	48	21	48	JETSTAR	JQ518	320-232	3200	2813	OVER	73.3	2148
7	TOKYO	SYD	7	10	58	21	58	POLAR	PO241	767-3	5725	5338	OVER	78.6	2158
8	PERTH	SYD	7	19	21	6	21	VIRGIN	VA570	737-8FE	3350	2963	OVER	69.2	622
8	TOKYO	SYD	7	19	29	6	29	JAPAN	JL771	787-8	3600	3213	OVER	73.4	629
8	SINGAPORE	SYD	7	19	37	6	37	BRITISH	BA15	777-336	4100	3713	OVER	69.1	638
8	BANGKOK	SYD	7	19	41	6	41	THAI	747-4D7	747-4D7	3275	2888	OVER	77.2	641
8	HK	SYD	7	19	47	6	47	QANTAS	QF128	747-438	4000	3613	OVER	74.1	646
8	DUBAI	SYD	7	19	49	6	49	EMERITES	EK412	380-861	3075	2688	OVER	70.8	650
8	SEOUL	SYD	7	19	53	6	53	KOREAN	KE121	380-861	3350	2963	OVER	73.3	654
8	DENPASAR	SYD	7	19	55	6	55	GARUDA	GA417	330-343	2725	2338	OVER	71	656
8	MANILA	SYD	7	19	59	6	59	QANTAS	QF20	330-202	4325	3938	OVER	70.2	658
8	SINGAPORE	SYD	7	20	7	7	7	SING	SQ221	380-841	4375	3988	OVER	72.4	707
8	SINGAPORE	SYD	7	20	11	7	11	QANTAS	QF82	330-303	2950	2563	OVER	64.1	711
8	XIY	SYD	7	20	13	7	13	HAINAN	HU7993	330-243	4075	3688	OVER	71.7	713
8	BANGKOK	SYD	7	20	20	7	20	QANTAS	QF24	330-303	4100	3713	OVER	66	720
8	HK	SYD	7	20	34	7	34	CATHAY	CX111	330-343	3000	2613	OVER	70.1	733
8	DENPASAR	SYD	7	20	36	7	36	JETSTAR	JQ38	787-8	2975	2588	OVER	69.3	736
8	SEOUL	SYD	7	21	0	8	0	ASIANA	OZ601	380-841	3800	3413	OVER	71.3	759
8	BANGKOK	SYD	7	21	24	8	24	EMERITES	EK418	380-861	4050	3663	OVER	72.2	824
8	SANFRAN	SYD	7	21	28	8	28	UNITED	UA863	787-9	5100	4713	OVER	71.5	828

8	LAX	SYD	7	21	32	8	32	AMERICAN	AA73	787-9	2950	2563	OVER	64.1	832
8	MEL	SYD	7	21	34	8	34	VIRGIN	VA813	787-8	2925	2538	OVER	70.2	834
8	LAX	SYD	7	21	38	8	38	UNITED	UA839	787-9	4850	4463	OVER	68.7	839
8	NANJING	SYD	7	21	42	8	42	CHINA E	MU727	330-243	3050	2663	OVER	73.5	843
8	TOKYO	SYD	7	22	6	9	6	QANTAS	QF26	747-438	3925	3538	OVER	69.4	905
8	ADEL	SYD	7	22	12	9	12	VIRGIN	VA407	737-8FE	2950	2563	OVER	71.6	913
8	SHANGHAI	SYD	7	22	18	9	18	CHINA E	MU561	330-243	2975	2588	OVER	73.7	918
8	TONATAPU	SYD	7	22	26	9	26	VIRGIN	VA94	737-8FE	3400	3013	OVER	69.8	926
8	MELB	SYD	7	22	34	9	34	QANTAS	QF414	737-838	3025	2638	OVER	71.3	934
8	SUNSHINE	SYD	7	22	39	9	39	JETSTAR	JQ781	320-232	3150	2763	OVER	75.3	939
8	HOBART	SYD	7	22	41	9	41	JETSTAR	JQ718	320-232	2950	2563	OVER	70.2	944
8	SHANGHAI	SYD	7	22	57	9	57	QANTAS	QF130	330-202	3800	3413	OVER	72.2	958
8	KL	SYD	7	23	13	10	13	ASIA	D7222	330-343	2900	2513	OVER	70.6	1013
8	VANCOUVER	SYD	7	23	19	10	19	CANADA	AC33	777-233	3000	2613	OVER	67.8	1018
8	ADEL	SYD	7	23	25	10	25	QANTAS	QF740	737-838	2300	1913	OVER	64	1024
8	XIAMEN	SYD	7	23	33	10	33	XIAMEN	MF801	787-8	3925	3538	OVER	70	1034
8	WUHANN	SYD	8	0	1	11	1	CHINA E	MU749	330-243	4125	3738	OVER	77	1100
8	GOLDC	SYD	8	0	19	11	19	TIGER	TT607	320-232	2925	2538	OVER	74.6	1119
8	DARWIN	SYD	8	0	31	11	31	HIFLY	AST045	340-313	3557	3170	OVER	70.7	1131
8	TAIPEI	SYD	8	0	55	11	55	CHINA	C151	350-941	4850	4463	OVER	71.6	1154
8	HK	SYD	8	0	59	11	59	CATHAY	CX101	777-367	3575	3188	OVER	74.1	1158
8	ADL	SYD	8	1	35	12	35	QANTAS	QF738	737-838	2575	2188	OVER	66.2	1237
8	BRISB	SYD	8	2	21	13	21	QANTAS	QF525	737-838	3550	3163	OVER	68.4	1321
8	PEKING	SYD	8	2	49	13	49	QANTAS	QF108	330-303	2950	2563	OVER	71.4	1350
8	HERVEY B	SYD	8	2	59	13	59	VIRGIN	VA1556	737-8FE	4450	4063	OVER	67	1400
8	GOLDC	SYD	8	3	59	14	59	JETSTAR	JQ411	320-232	3800	3413	OVER	75.4	1459
8	HAMILTON	SYD	8	4	5	15	5	VIRGIN	VA1280	737-81D	4875	4488	OVER	68.7	1507
8	CHENGDU	SYD	8	4	17	15	17	CHINA	CA429	330-343	4450	4063	OVER	74.1	1518
8	PERTH	SYD	8	5	3	16	3	QANTAS	QF642	737-838	2875	2488	OVER	74.5	1604
8	PEKING	SYD	8	5	10	16	10	CHINA	CA173	330-343	3225	2838	OVER	75.2	1610
8	GOLDC	SYD	8	5	31	16	31	VIRGIN	VA526	737-8FE	4700	4313	OVER	67.6	1432
8	GOLDC	SYD	8	6	9	17	9	QANTAS	QF865	737-838	5250	4863	OVER	67.4	1707
8	DOHA	SYD	8	7	47	18	47	QATAR	QR908	380-861	3300	2913	OVER	72	1847
8	MELB	SYD	8	8	19	19	19	VIRGIN	VA875	737-8FE	3125	2738	OVER	71.8	1919
8	HONOLULO	SYD	8	8	29	19	29	HAWAIIAN	HA451	330-243	2825	2438	OVER	72.4	1929
8	BRISB	SYD	8	8	43	19	43	TIGER	TT381	320-232	4275	3888	OVER	71.8	1943
8	CHRISTCH	SYD	8	8	59	19	59	EMERITES	EK413	380-861	2850	2463	OVER	72.8	1958
8	GOLDC	SYD	8	9	15	20	15	VIRGIN	VA540	737-8FE	3575	3188	OVER	68.3	2017
8	GUANZHOU	SYD	8	9	33	20	33	CHINA S	CZ301	330-323	3275	2888	OVER	71.3	2033
8	BRISB	SYD	8	10	29	21	29	VIRGIN	VA986	737-8FE	4175	3788	OVER	74.2	2128
8	TOKYO	SYD	8	10	33	21	33	POLAR	PO241	767-3JH	5100	4713	OVER	69.8	2133
8	GOLDC	SYD	8	11	5	22	5	VIRGIN	VA544	737-8FE	4500	4113	OVER	65	2204
8	BRISB	SYD	8	11	13	22	13	QANTAS	QF555	737-838	3875	3488	OVER	67.6	2213
8	BRISB	SYD	8	11	15	22	15	JETSTAR	JQ823	320-232	4175	3788	OVER	65	2215
8	MELB	SYD	8	11	15	22	15	QANTAS	QF494	737-838	3600	3213	OVER	64.7	2216
8	LAUNSCN	SYD	8	11	17	22	17	JETSTAR	JQ750	320-232	2800	2413	OVER	67.5	2218
8	BRISB	SYD	8	11	23	22	23	QANTAS	QF559	737-838	4250	3863	OVER	65.1	2224

10	QINGDAO	SYD	9	20	0	7	0	CAPITAL	JD479	330-243	4825	4438	OVER	68.5	700
10	SINGAPORE	SYD	9	20	10	7	10	SING	SQ221	380-841	3175	2788	OVER	69.1	711
10	HK	SYD	9	20	6	7	6	CATHAY	CX111	330-342	4325	3938	OVER	71.5	706
10	MANILA	SYD	9	20	16	7	16	QANTAS	QF20	330-202	3950	3563	OVER	74.1	715
10	DENPASR	SYD	9	20	18	7	18	JETSTAR	JQ38	787-8	2175	1788	OVER	66.9	718
10	SHENZEN	SYD	9	20	19	7	19	CHINA S	CZ3071	330-343	3175	2788	OVER	73.8	719
10	BANGKOK	SYD	9	20	28	7	28	THAI	TG475	747-4D7	3175	2788	OVER	81.9	727
10	TOKYO	SYD	9	20	36	7	36	POLAR	PO241	767-3JH	3600	3213	OVER	64.7	735
10	SEOUL	SYD	9	20	38	7	38	ASIANA	OZ601	380-841	5325	4938	OVER	73.2	738
10	HK	SYD	9	21	2	8	2	VIRGIN	VA82	330-243	3575	3188	OVER	69.4	802
10	MEL	SYD	9	21	46	8	46	VIRGIN	VA815	737-8FE	3500	3113	OVER	70.1	846
10	BRISBN	SYD	9	21	52	8	52	QANTAS	QF507	737-838	3525	3138	OVER	69.2	852
10	TOKYO	SYD	9	22	0	9	0	QANTAS	QF26	747-438	3925	3538	OVER	78.7	900
10	SHANGHAI	SYD	9	22	6	9	6	QANTAS	QF130	330-303	2625	2238	OVER	72.7	906
10	LA	SYD	9	22	12	9	12	VIRGIN	VA2	777-3ZG	2350	1963	OVER	60.9	912
10	HK	SYD	9	22	20	9	20	CATHAY	CX161	777-367	5125	4738	OVER	71.9	920
10	JAKARTA	SYD	9	22	24	9	24	GARUDA	GA712	330-343	2850	2463	OVER	73.3	923
10	MEL	SYD	9	22	26	9	26	JETSTAR	JQ504	320-232	2650	2263	OVER	68.4	927
10	HO CHI MINH	SYD	9	22	30	9	30	VEITNAM	VN773	787-9	3125	2738	OVER	64.5	930
10	NANJING	SYD	9	22	34	9	34	CHINA E	MU727	330-243	3050	2663	OVER	68.5	935
10	XIAMEN	SYD	9	23	30	10	30	XIAMEN	MF801	787-8	5775	5388	OVER	69.8	1030
10	HO CHI MINH	SYD	9	23	40	10	40	JETSTAR	JQ62	787-8	4275	3888	OVER	74.3	1040
10	GOLD C	SYD	9	23	48	10	48	JETSTAR	JQ12	787-8	3600	3213	OVER	69.6	1048
10	WUHAN	SYD	10	0	16	11	16	CHINA E	MU749	330-243	2900	2513	OVER	78.1	1116
10	HK	SYD	10	0	40	11	40	QANTAS	QF118	330-303	3250	2863	OVER	69.7	1139
10	HK	SYD	10	0	45	11	45	CATHAY	CX101	777-367	3325	2938	OVER	66.1	1145
10	MELB	SYD	10	0	40	11	40	QANTAS	QF424	737-838	2975	2588	OVER	68.9	1141
10	NADI	SYD	10	0	46	11	46	FIJI	FJ911	330-343	2875	2488	OVER	71.1	1146
10	TAIPEI	SYD	10	0	55	11	55	CHINA	C151	350-941	3875	3488	OVER	72.7	1155
10	PROSERPINE	SYD	10	1	17	12	17	TIGER	TT393	320-232	4500	4113	OVER	68.8	1215

**APPENDIX A2
MONITORING OF FLIGHTS OVER AVONDALE GOLF COURSE NOV 2018**

HEIGHT DATA SORT

												ELEVATION FT		387	
SYD DAY	FROM	TO	UTC DAY	UTC HR	UTC MIN	ESDST HR	ESDST MIN	AIRLINE	FLIGHT	AIRCRAFT	ALTITUDE	HEIGHT ABOVE GL	LOCATION REF TO LOGGER	DATA LAMax	DATA TIME ESDST
7	MELB	SYD	7	10	46	21	46	QANTAS	QF7354	737-376	2175	1788	OVER	72.8	2145
10	DENPASR	SYD	9	20	18	7	18	JETSTAR	JQ38	787-8	2175	1788	OVER	66.9	718
8	ADEL	SYD	7	23	25	10	25	QANTAS	QF740	737-838	2300	1913	OVER	64	1024
10	LA	SYD	9	22	12	9	12	VIRGIN	VA2	777-3ZG	2350	1963	OVER	60.9	912
8	ADL	SYD	8	1	35	12	35	QANTAS	QF738	737-838	2575	2188	OVER	66.2	1237
10	SHANGHAI	SYD	9	22	6	9	6	QANTAS	QF130	330-303	2625	2238	OVER	72.7	906
7	SINGAPORE	SYD	7	7	2	18	2	SING	SQ288	777-312	2650	2263	OVER	66.6	1802
10	MEL	SYD	9	22	26	9	26	JETSTAR	JQ504	320-232	2650	2263	OVER	68.4	927
8	DENPASAR	SYD	7	19	55	6	55	GARUDA	GA417	330-343	2725	2338	OVER	71	656
8	LAUNSCN	SYD	8	11	17	22	17	JETSTAR	JQ750	320-232	2800	2413	OVER	67.5	2218
8	HONOLULO	SYD	8	8	29	19	29	HAWAIIAN	HA451	330-243	2825	2438	OVER	72.4	1929
8	CHRISTCH	SYD	8	8	59	19	59	EMERITES	EK413	380-861	2850	2463	OVER	72.8	1958
10	JAKARTA	SYD	9	22	24	9	24	GARUDA	GA712	330-343	2850	2463	OVER	73.3	923
8	PERTH	SYD	8	5	3	16	3	QANTAS	QF642	737-838	2875	2488	OVER	74.5	1604
10	NADI	SYD	10	0	46	11	46	FIJI	FJ911	330-343	2875	2488	OVER	71.1	1146
8	KL	SYD	7	23	13	10	13	ASIA	D7222	330-343	2900	2513	OVER	70.6	1013
10	WUHAN	SYD	10	0	16	11	16	CHINA E	MU749	330-243	2900	2513	OVER	78.1	1116
8	MEL	SYD	7	21	34	8	34	VIRGIN	VA813	787-8	2925	2538	OVER	70.2	834
8	GOLDC	SYD	8	0	19	11	19	TIGER	TT607	320-232	2925	2538	OVER	74.6	1119
8	SINGAPORE	SYD	7	20	11	7	11	QANTAS	QF82	330-303	2950	2563	OVER	64.1	711
8	LAX	SYD	7	21	32	8	32	AMERICAN	AA73	787-9	2950	2563	OVER	64.1	832
8	ADEL	SYD	7	22	12	9	12	VIRGIN	VA407	737-8FE	2950	2563	OVER	71.6	913
8	HOBART	SYD	7	22	41	9	41	JETSTAR	JQ718	320-232	2950	2563	OVER	70.2	944
8	PEKING	SYD	8	2	49	13	49	QANTAS	QF108	330-303	2950	2563	OVER	71.4	1350
8	DENPASAR	SYD	7	20	36	7	36	JETSTAR	JQ38	787-8	2975	2588	OVER	69.3	736
8	SHANGHAI	SYD	7	22	18	9	18	CHINA E	MU561	330-243	2975	2588	OVER	73.7	918
10	MELB	SYD	10	0	40	11	40	QANTAS	QF424	737-838	2975	2588	OVER	68.9	1141
8	HK	SYD	7	20	34	7	34	CATHAY	CX111	330-343	3000	2613	OVER	70.1	733
8	VANCOUVER	SYD	7	23	19	10	19	CANADA	AC33	777-233	3000	2613	OVER	67.8	1018
8	MELB	SYD	7	22	34	9	34	QANTAS	QF414	737-838	3025	2638	OVER	71.3	934
8	NANJING	SYD	7	21	42	8	42	CHINA E	MU727	330-243	3050	2663	OVER	73.5	843
10	NANJING	SYD	9	22	34	9	34	CHINA E	MU727	330-243	3050	2663	OVER	68.5	935
8	DUBAI	SYD	7	19	49	6	49	EMERITES	EK412	380-861	3075	2688	OVER	70.8	650
7	honolulu	SYD	7	4	3	15	3	JETSTAR	JQ4	787-8	3125	2738	OVER	67.4	1503
7	ADELAIDE	SYD	7	10	14	21	14	TOLL	TFR34	737-476	3125	2738	OVER	74.6	2113
8	MELB	SYD	8	8	19	19	19	VIRGIN	VA875	737-8FE	3125	2738	OVER	71.8	1919
10	HO CHI MINH	SYD	9	22	30	9	30	VEITNAM	VN773	787-9	3125	2738	OVER	64.5	930
7	MELB	SYD	7	1	45	12	45	QANTAS	QF428	737-838	3150	2763	OVER	67	1245
8	SUNSHINE	SYD	7	22	39	9	39	JETSTAR	JQ781	320-232	3150	2763	OVER	75.3	939
7	SHANGHAI	SYD	7	1	43	12	43	CHINA E	MU735	777-39P	3175	2788	OVER	67.7	1243

7	MELB	SYD	7	10	26	21	26	TIGER	TT264	320-232	3175	2788	OVER	74	2126
10	SINGAPORE	SYD	9	20	10	7	10	SING	SQ221	380-841	3175	2788	OVER	69.1	711
10	SHENZHEN	SYD	9	20	19	7	19	CHINA S	CZ3071	330-343	3175	2788	OVER	73.8	719
10	BANGKOK	SYD	9	20	28	7	28	THAI	TG475	747-4D7	3175	2788	OVER	81.9	727
7	KUMIMG	SYD	7	2	47	13	47	CHINA E	MU777	330-243	3200	2813	OVER	76.7	1347
7	SINGAPORE	SYD	7	9	52	20	52	SING	SQ211	777-312	3200	2813	OVER	70.4	2054
7	MELB	SYD	7	10	48	21	48	JETSTAR	JQ518	320-232	3200	2813	OVER	73.3	2148
8	PEKING	SYD	8	5	10	16	10	CHINA	CA173	330-343	3225	2838	OVER	75.2	1610
7	GUANGZOU	SYD	7	9	22	20	22	CHINA S	CZ301	330-323	3250	2863	OVER	71.2	2022
7	MELB	SYD	7	10	40	21	40	VIRGIN	VA891	737-8FE	3250	2863	OVER	74.6	2140
10	HK	SYD	10	0	40	11	40	QANTAS	QF118	330-303	3250	2863	OVER	69.7	1139
8	BANGKOK	SYD	7	19	41	6	41	THAI	747-4D7	747-4D7	3275	2888	OVER	77.2	641
8	GUANZHOU	SYD	8	9	33	20	33	CHINA S	CZ301	330-323	3275	2888	OVER	71.3	2033
8	DOHA	SYD	8	7	47	18	47	QATAR	QR908	380-861	3300	2913	OVER	72	1847
10	HK	SYD	10	0	45	11	45	CATHAY	CX101	777-367	3325	2938	OVER	66.1	1145
8	PERTH	SYD	7	19	21	6	21	VIRGIN	VA570	737-8FE	3350	2963	OVER	69.2	622
8	SEOUL	SYD	7	19	53	6	53	KOREAN	KE121	380-861	3350	2963	OVER	73.3	654
8	TONATAPU	SYD	7	22	26	9	26	VIRGIN	VA94	737-8FE	3400	3013	OVER	69.8	926
10	MEL	SYD	9	21	46	8	46	VIRGIN	VA815	737-8FE	3500	3113	OVER	70.1	846
10	BRISBN	SYD	9	21	52	8	52	QANTAS	QF507	737-838	3525	3138	OVER	69.2	852
8	BRISB	SYD	8	2	21	13	21	QANTAS	QF525	737-838	3550	3163	OVER	68.4	1321
8	DARWIN	SYD	8	0	31	11	31	HIFLY	AST045	340-313	3557	3170	OVER	70.7	1131
8	HK	SYD	8	0	59	11	59	CATHAY	CX101	777-367	3575	3188	OVER	74.1	1158
8	GOLDC	SYD	8	9	15	20	15	VIRGIN	VA540	737-8FE	3575	3188	OVER	68.3	2017
10	HK	SYD	9	21	2	8	2	VIRGIN	VA82	330-243	3575	3188	OVER	69.4	802
8	TOKYO	SYD	7	19	29	6	29	JAPAN	JL771	787-8	3600	3213	OVER	73.4	629
8	MELB	SYD	8	11	15	22	15	QANTAS	QF494	737-838	3600	3213	OVER	64.7	2216
10	TOKYO	SYD	9	20	36	7	36	POLAR	PO241	767-3JH	3600	3213	OVER	64.7	735
10	GOLD C	SYD	9	23	48	10	48	JETSTAR	JQ12	787-8	3600	3213	OVER	69.6	1048
7	TAIPEI	SYD	7	0	59	11	59	CHINA	C151	359-941	3650	3263	OVER	67.2	1158
7	CHRISTCH	SYD	7	7	38	18	38	EMERITES	EK413	380-861	3750	3363	OVER	67.8	1839
7	CHRISTCH	SYD	7	9	8	20	8	EMERITES	EK413	380-861	3750	3363	OVER	73.1	2005
7	CAIRNS	SYD	7	4	28	15	28	QANTAS	QF923	737-838	3800	3413	OVER	71.8	1528
8	SEOUL	SYD	7	21	0	8	0	ASIANA	OZ601	380-841	3800	3413	OVER	71.3	759
8	SHANGHAI	SYD	7	22	57	9	57	QANTAS	QF130	330-202	3800	3413	OVER	72.2	958
8	GOLDC	SYD	8	3	59	14	59	JETSTAR	JQ411	320-232	3800	3413	OVER	75.4	1459
7	HANOI	SYD	7	1	39	12	39	VEITNAM	VN787	787-9	3875	3488	OVER	72.1	1238
8	BRISB	SYD	8	11	13	22	13	QANTAS	QF555	737-838	3875	3488	OVER	67.6	2213
10	TAIPEI	SYD	10	0	55	11	55	CHINA	C151	350-941	3875	3488	OVER	72.7	1155
8	TOKYO	SYD	7	22	6	9	6	QANTAS	QF26	747-438	3925	3538	OVER	69.4	905
8	XIAMEN	SYD	7	23	33	10	33	XIAMEN	MF801	787-8	3925	3538	OVER	70	1034
10	TOKYO	SYD	9	22	0	9	0	QANTAS	QF26	747-438	3925	3538	OVER	78.7	900
10	MANILA	SYD	9	20	16	7	16	QANTAS	QF20	330-202	3950	3563	OVER	74.1	715
7	NANDI	SYD	7	0	16	11	16	FIJI	FJ911	330-243	4000	3613	OVER	65.8	1116
8	HK	SYD	7	19	47	6	47	QANTAS	QF128	747-438	4000	3613	OVER	74.1	646
8	BANGKOK	SYD	7	21	24	8	24	EMERITES	EK418	380-861	4050	3663	OVER	72.2	824
8	XIY	SYD	7	20	13	7	13	HAINAN	HU7993	330-243	4075	3688	OVER	71.7	713

APPENDIX A3

MONITORING OF FLIGHTS OVER AVONDALE GOLF COURSE NOV 2018

DATA SORT WRT LAMax

SYD DAY	FROM	TO	UTC DAY	UTC HR	UTC MIN	ESDST HR	ESDST MIN	AIRLINE	FLIGHT	AIRCRAFT	ALTITUDE	ELEVATION FT		DATA TIME ESDST	
												HEIGHT ABOVE GL	LOCATION REF TO LOGGER		
10	BANGKOK	SYD	9	20	28	7	28	THAI	TG475	747-4D7	3175	2788	OVER	81.9	727
10	TOKYO	SYD	9	22	0	9	0	QANTAS	QF26	747-438	3925	3538	OVER	78.7	900
7	TOKYO	SYD	7	10	58	21	58	POLAR	PO241	767-3	5725	5338	OVER	78.6	2158
10	WUHAN	SYD	10	0	16	11	16	CHINA E	MU749	330-243	2900	2513	OVER	78.1	1116
8	BANGKOK	SYD	7	19	41	6	41	THAI	747-4D7	747-4D7	3275	2888	OVER	77.2	641
8	WUHANN	SYD	8	0	1	11	1	CHINA E	MU749	330-243	4125	3738	OVER	77	1100
7	KUMIMG	SYD	7	2	47	13	47	CHINA E	MU777	330-243	3200	2813	OVER	76.7	1347
8	GOLDC	SYD	8	3	59	14	59	JETSTAR	JQ411	320-232	3800	3413	OVER	75.4	1459
8	SUNSHINE	SYD	7	22	39	9	39	JETSTAR	JQ781	320-232	3150	2763	OVER	75.3	939
8	PEKING	SYD	8	5	10	16	10	CHINA	CA173	330-343	3225	2838	OVER	75.2	1610
8	GOLDC	SYD	8	0	19	11	19	TIGER	TT607	320-232	2925	2538	OVER	74.6	1119
7	ADELAIDE	SYD	7	10	14	21	14	TOLL	TFR34	737-476	3125	2738	OVER	74.6	2113
7	MELB	SYD	7	10	40	21	40	VIRGIN	VA891	737-8FE	3250	2863	OVER	74.6	2140
8	PERTH	SYD	8	5	3	16	3	QANTAS	QF642	737-838	2875	2488	OVER	74.5	1604
10	HO CHI MINH	SYD	9	23	40	10	40	JETSTAR	JQ62	787-8	4275	3888	OVER	74.3	1040
8	BRISB	SYD	8	10	29	21	29	VIRGIN	VA986	737-8FE	4175	3788	OVER	74.2	2128
8	HK	SYD	8	0	59	11	59	CATHAY	CX101	777-367	3575	3188	OVER	74.1	1158
10	MANILA	SYD	9	20	16	7	16	QANTAS	QF20	330-202	3950	3563	OVER	74.1	715
8	HK	SYD	7	19	47	6	47	QANTAS	QF128	747-438	4000	3613	OVER	74.1	646
8	CHENGDU	SYD	8	4	17	15	17	CHINA	CA429	330-343	4450	4063	OVER	74.1	1518
7	MELB	SYD	7	10	26	21	26	TIGER	TT264	320-232	3175	2788	OVER	74	2126
10	SHENZHEN	SYD	9	20	19	7	19	CHINA S	CZ3071	330-343	3175	2788	OVER	73.8	719
8	SHANGHAI	SYD	7	22	18	9	18	CHINA E	MU561	330-243	2975	2588	OVER	73.7	918
8	NANJING	SYD	7	21	42	8	42	CHINA E	MU727	330-243	3050	2663	OVER	73.5	843
8	TOKYO	SYD	7	19	29	6	29	JAPAN	JL771	787-8	3600	3213	OVER	73.4	629
10	JAKARTA	SYD	9	22	24	9	24	GARUDA	GA712	330-343	2850	2463	OVER	73.3	923
7	MELB	SYD	7	10	48	21	48	JETSTAR	JQ518	320-232	3200	2813	OVER	73.3	2148
8	SEOUL	SYD	7	19	53	6	53	KOREAN	KE121	380-861	3350	2963	OVER	73.3	654
10	SEOUL	SYD	9	20	38	7	38	ASIANA	OZ601	380-841	5325	4938	OVER	73.2	738
7	CHRISTCH	SYD	7	9	8	20	8	EMERITES	EK413	380-861	3750	3363	OVER	73.1	2005
7	MELB	SYD	7	10	46	21	46	QANTAS	QF7354	737-376	2175	1788	OVER	72.8	2145
8	CHRISTCH	SYD	8	8	59	19	59	EMERITES	EK413	380-861	2850	2463	OVER	72.8	1958
10	SHANGHAI	SYD	9	22	6	9	6	QANTAS	QF130	330-303	2625	2238	OVER	72.7	906
10	TAIPEI	SYD	10	0	55	11	55	CHINA	C151	350-941	3875	3488	OVER	72.7	1155
8	HONOLULO	SYD	8	8	29	19	29	HAWAIIAN	HA451	330-243	2825	2438	OVER	72.4	1929
8	SINGAPORE	SYD	7	20	7	7	7	SING	SQ221	380-841	4375	3988	OVER	72.4	707
8	SHANGHAI	SYD	7	22	57	9	57	QANTAS	SQ130	330-202	3800	3413	OVER	72.2	958
8	BANGKOK	SYD	7	21	24	8	24	EMERITES	EK418	380-861	4050	3663	OVER	72.2	824
7	HANOI	SYD	7	1	39	12	39	VEITNAM	VN787	787-9	3875	3488	OVER	72.1	1238
8	DOHA	SYD	8	7	47	18	47	QATAR	QR908	380-861	3300	2913	OVER	72	1847

10	HK	SYD	9	22	20	9	20	CATHAY	CX161	777-367	5125	4738	OVER	71.9	920
8	MELB	SYD	8	8	19	19	19	VIRGIN	VA875	737-8FE	3125	2738	OVER	71.8	1919
7	CAIRNS	SYD	7	4	28	15	28	QANTAS	QF923	737-838	3800	3413	OVER	71.8	1528
8	BRISB	SYD	8	8	43	19	43	TIGER	TT381	320-232	4275	3888	OVER	71.8	1943
8	XIY	SYD	7	20	13	7	13	HAINAN	HU7993	330-243	4075	3688	OVER	71.7	713
8	ADEL	SYD	7	22	12	9	12	VIRGIN	VA407	737-8FE	2950	2563	OVER	71.6	913
8	TAIPEI	SYD	8	0	55	11	55	CHINA	C151	350-941	4850	4463	OVER	71.6	1154
10	HK	SYD	9	20	6	7	6	CATHAY	CX111	330-342	4325	3938	OVER	71.5	706
8	SANFRAN	SYD	7	21	28	8	28	UNITED	UA863	787-9	5100	4713	OVER	71.5	828
8	PEKING	SYD	8	2	49	13	49	QANTAS	QF108	330-303	2950	2563	OVER	71.4	1350
8	MELB	SYD	7	22	34	9	34	QANTAS	QF414	737-838	3025	2638	OVER	71.3	934
8	GUANZHOU	SYD	8	9	33	20	33	CHINA S	CZ301	330-323	3275	2888	OVER	71.3	2033
8	SEOUL	SYD	7	21	0	8	0	ASIANA	OZ601	380-841	3800	3413	OVER	71.3	759
7	GUANGZOU	SYD	7	9	22	20	22	CHINA S	CZ301	330-323	3250	2863	OVER	71.2	2022
10	NADI	SYD	10	0	46	11	46	FIJI	FJ911	330-343	2875	2488	OVER	71.1	1146
8	DENPASAR	SYD	7	19	55	6	55	GARUDA	GA417	330-343	2725	2338	OVER	71	656
8	DUBAI	SYD	7	19	49	6	49	EMERITES	EK412	380-861	3075	2688	OVER	70.8	650
8	DARWIN	SYD	8	0	31	11	31	HIFLY	AST045	340-313	3557	3170	OVER	70.7	1131
8	KL	SYD	7	23	13	10	13	ASIA	D7222	330-343	2900	2513	OVER	70.6	1013
7	SINGAPORE	SYD	7	9	52	20	52	SING	SQ211	777-312	3200	2813	OVER	70.4	2054
8	MEL	SYD	7	21	34	8	34	VIRGIN	VA813	787-8	2925	2538	OVER	70.2	834
8	HOBART	SYD	7	22	41	9	41	JETSTAR	JQ718	320-232	2950	2563	OVER	70.2	944
8	MANILA	SYD	7	19	59	6	59	QANTAS	QF20	330-202	4325	3938	OVER	70.2	658
8	HK	SYD	7	20	34	7	34	CATHAY	CX111	330-343	3000	2613	OVER	70.1	733
10	MEL	SYD	9	21	46	8	46	VIRGIN	VA815	737-8FE	3500	3113	OVER	70.1	846
8	XIAMEN	SYD	7	23	33	10	33	XIAMEN	MF801	787-8	3925	3538	OVER	70	1034
8	TONATAPU	SYD	7	22	26	9	26	VIRGIN	VA94	737-8FE	3400	3013	OVER	69.8	926
8	TOKYO	SYD	8	10	33	21	33	POLAR	PO241	767-3JH	5100	4713	OVER	69.8	2133
10	XIAMEN	SYD	9	23	30	10	30	XIAMEN	MF801	787-8	5775	5388	OVER	69.8	1030
10	HK	SYD	10	0	40	11	40	QANTAS	QF118	330-303	3250	2863	OVER	69.7	1139
10	GOLD C	SYD	9	23	48	10	48	JETSTAR	JQ12	787-8	3600	3213	OVER	69.6	1048
7	HK	SYD	7	0	37	11	37	CATHAY	CX101	777-367	4175	3788	OVER	69.6	1137
10	HK	SYD	9	21	2	8	2	VIRGIN	VA82	330-243	3575	3188	OVER	69.4	802
8	TOKYO	SYD	7	22	6	9	6	QANTAS	QF26	747-438	3925	3538	OVER	69.4	905
8	DENPASAR	SYD	7	20	36	7	36	JETSTAR	JQ38	787-8	2975	2588	OVER	69.3	736
8	PERTH	SYD	7	19	21	6	21	VIRGIN	VA570	737-8FE	3350	2963	OVER	69.2	622
10	BRISBN	SYD	9	21	52	8	52	QANTAS	QF507	737-838	3525	3138	OVER	69.2	852
10	SINGAPORE	SYD	9	20	10	7	10	SING	SQ221	380-841	3175	2788	OVER	69.1	711
8	SINGAPORE	SYD	7	19	37	6	37	BRITISH	BA15	777-336	4100	3713	OVER	69.1	638
10	MELB	SYD	10	0	40	11	40	QANTAS	QF424	737-838	2975	2588	OVER	68.9	1141
10	PROSERPINE	SYD	10	1	17	12	17	TIGER	TT393	320-232	4500	4113	OVER	68.8	1215
8	LAX	SYD	7	21	38	8	38	UNITED	UA839	787-9	4850	4463	OVER	68.7	839
8	HAMILTON	SYD	8	4	5	15	5	VIRGIN	VA1280	737-81D	4875	4488	OVER	68.7	1507
10	NANJING	SYD	9	22	34	9	34	CHINA E	MU727	330-243	3050	2663	OVER	68.5	935
10	QINGDAO	SYD	9	20	0	7	0	CAPITAL	JD479	330-243	4825	4438	OVER	68.5	700
10	MEL	SYD	9	22	26	9	26	JETSTAR	JQ504	320-232	2650	2263	OVER	68.4	927
8	BRISB	SYD	8	2	21	13	21	QANTAS	QF525	737-838	3550	3163	OVER	68.4	1321

8	GOLDC	SYD	8	9	15	20	15	VIRGIN	VA540	737-8FE	3575	3188	OVER	68.3	2017
8	VANCOUVER	SYD	7	23	19	10	19	CANADA	AC33	777-233	3000	2613	OVER	67.8	1018
7	CHRISTCH	SYD	7	7	38	18	38	EMERITES	EK413	380-861	3750	3363	OVER	67.8	1839
7	SHANGHAI	SYD	7	1	43	12	43	CHINA E	MU735	777-39P	3175	2788	OVER	67.7	1243
8	BRISB	SYD	8	11	13	22	13	QANTAS	QF555	737-838	3875	3488	OVER	67.6	2213
8	GOLDC	SYD	8	5	31	16	31	VIRGIN	VA526	737-8FE	4700	4313	OVER	67.6	1432
8	LAUNSCN	SYD	8	11	17	22	17	JETSTAR	JQ750	320-232	2800	2413	OVER	67.5	2218
7	honolulu	SYD	7	4	3	15	3	JETSTAR	JQ4	787-8	3125	2738	OVER	67.4	1503
8	GOLDC	SYD	8	6	9	17	9	QANTAS	QF865	737-838	5250	4863	OVER	67.4	1707
7	TAIPEI	SYD	7	0	59	11	59	CHINA	C151	359-941	3650	3263	OVER	67.2	1158
7	MELB	SYD	7	1	45	12	45	QANTAS	QF428	737-838	3150	2763	OVER	67	1245
8	HERVEY B	SYD	8	2	59	13	59	VIRGIN	VA1556	737-8FE	4450	4063	OVER	67	1400
10	DENPASR	SYD	9	20	18	7	18	JETSTAR	JQ38	787-8	2175	1788	OVER	66.9	718
7	SINGAPORE	SYD	7	7	2	18	2	SING	SQ288	777-312	2650	2263	OVER	66.6	1802
7	HK	SYD	7	9	18	20	18	CATHAY	CX139	777-367	4100	3713	OVER	66.5	2018
8	ADL	SYD	8	1	35	12	35	QANTAS	QF738	737-838	2575	2188	OVER	66.2	1237
10	HK	SYD	10	0	45	11	45	CATHAY	CX101	777-367	3325	2938	OVER	66.1	1145
8	BANGKOK	SYD	7	20	20	7	20	QANTAS	QF24	330-303	4100	3713	OVER	66	720
7	NANDI	SYD	7	0	16	11	16	FIJI	FJ911	330-243	4000	3613	OVER	65.8	1116
8	BRISB	SYD	8	11	23	22	23	QANTAS	QF559	737-838	4250	3863	OVER	65.1	2224
8	BRISB	SYD	8	11	15	22	15	JETSTAR	JQ823	320-232	4175	3788	OVER	65	2215
8	GOLDC	SYD	8	11	5	22	5	VIRGIN	VA544	737-8FE	4500	4113	OVER	65	2204
8	MELB	SYD	8	11	15	22	15	QANTAS	QF494	737-838	3600	3213	OVER	64.7	2216
10	TOKYO	SYD	9	20	36	7	36	POLAR	PO241	767-3JH	3600	3213	OVER	64.7	735
10	HO CHI MINH	SYD	9	22	30	9	30	VEITNAM	VN773	787-9	3125	2738	OVER	64.5	930
8	SINGAPORE	SYD	7	20	11	7	11	QANTAS	QF82	330-303	2950	2563	OVER	64.1	711
8	LAX	SYD	7	21	32	8	32	AMERICAN	AA73	787-9	2950	2563	OVER	64.1	832
8	ADEL	SYD	7	23	25	10	25	QANTAS	QF740	737-838	2300	1913	OVER	64	1024
10	LA	SYD	9	22	12	9	12	VIRGIN	VA2	777-3ZG	2350	1963	OVER	60.9	912
7	BRISB	SYD	7	9	28	20	28	QANTAS	QF551	737-838	4500	4113	OVER	60.1	2029

9 NOV ARRIVALS STH

APPENDIX A4

MONITORING OF FLIGHTS OVER AVONDALE GOLF COURSE NOV '8 NOVEMBER ONLY

DATA CHRONOLOGICALLY

SYD DAY	FROM	TO	UTC DAY	UTC HR	UTC MIN	ESDST HR	ESDST MIN	AIRLINE	FLIGHT	AIRCRAFT	ALTITUDE	ELEVATION FT		DATA TIME ESDST	
												HEIGHT ABOVE GL	LOCATION REF TO LOGGER		
													387		
8	PERTH	SYD	7	19	21	6	21	VIRGIN	VA570	737-8FE	3350	2963	OVER	69.2	622
8	TOKYO	SYD	7	19	29	6	29	JAPAN	JL771	787-8	3600	3213	OVER	73.4	629
8	SINGAPORE	SYD	7	19	37	6	37	BRITISH	BA15	777-336	4100	3713	OVER	69.1	638
8	BANGKOK	SYD	7	19	41	6	41	THAI	747-4D7	747-4D7	3275	2888	OVER	77.2	641
8	HK	SYD	7	19	47	6	47	QANTAS	QF128	747-438	4000	3613	OVER	74.1	646
8	DUBAI	SYD	7	19	49	6	49	EMERITES	EK412	380-861	3075	2688	OVER	70.8	650
8	SEOUL	SYD	7	19	53	6	53	KOREAN	KE121	380-861	3350	2963	OVER	73.3	654
8	DENPASAR	SYD	7	19	55	6	55	GARUDA	GA417	330-343	2725	2338	OVER	71	656
8	MANILA	SYD	7	19	59	6	59	QANTAS	QF20	330-202	4325	3938	OVER	70.2	658
8	SINGAPORE	SYD	7	20	7	7	7	SING	SQ221	380-841	4375	3988	OVER	72.4	707
8	SINGAPORE	SYD	7	20	11	7	11	QANTAS	QF82	330-303	2950	2563	OVER	64.1	711
8	XIY	SYD	7	20	13	7	13	HAINAN	HU7993	330-243	4075	3688	OVER	71.7	713
8	BANGKOK	SYD	7	20	20	7	20	QANTAS	QF24	330-303	4100	3713	OVER	66	720
8	HK	SYD	7	20	34	7	34	CATHAY	CX111	330-343	3000	2613	OVER	70.1	733
8	DENPASAR	SYD	7	20	36	7	36	JETSTAR	JQ38	787-8	2975	2588	OVER	69.3	736
8	SEOUL	SYD	7	21	0	8	0	ASIANA	OZ601	380-841	3800	3413	OVER	71.3	759
8	BANGKOK	SYD	7	21	24	8	24	EMERITES	EK418	380-861	4050	3663	OVER	72.2	824
8	SANFRAN	SYD	7	21	28	8	28	UNITED	UA863	787-9	5100	4713	OVER	71.5	828
8	LAX	SYD	7	21	32	8	32	AMERICAN	AA73	787-9	2950	2563	OVER	64.1	832
8	MEL	SYD	7	21	34	8	34	VIRGIN	VA813	787-8	2925	2538	OVER	70.2	834
8	LAX	SYD	7	21	38	8	38	UNITED	UA839	787-9	4850	4463	OVER	68.7	839
8	NANJING	SYD	7	21	42	8	42	CHINA E	MU727	330-243	3050	2663	OVER	73.5	843
8	TOKYO	SYD	7	22	6	9	6	QANTAS	QF26	747-438	3925	3538	OVER	69.4	905
8	ADEL	SYD	7	22	12	9	12	VIRGIN	VA407	737-8FE	2950	2563	OVER	71.6	913
8	SHANGHAI	SYD	7	22	18	9	18	CHINA E	MU561	330-243	2975	2588	OVER	73.7	918
8	TONATAPU	SYD	7	22	26	9	26	VIRGIN	VA94	737-8FE	3400	3013	OVER	69.8	926
8	MELB	SYD	7	22	34	9	34	QANTAS	QF414	737-838	3025	2638	OVER	71.3	934
8	SUNSHINE	SYD	7	22	39	9	39	JETSTAR	JQ781	320-232	3150	2763	OVER	75.3	939
8	HOBART	SYD	7	22	41	9	41	JETSTAR	JQ718	320-232	2950	2563	OVER	70.2	944
8	SHANGHAI	SYD	7	22	57	9	57	QANTAS	QF130	330-202	3800	3413	OVER	72.2	958
8	KL	SYD	7	23	13	10	13	ASIA	D7222	330-343	2900	2513	OVER	70.6	1013
8	VANCOUVER	SYD	7	23	19	10	19	CANADA	AC33	777-233	3000	2613	OVER	67.8	1018
8	ADEL	SYD	7	23	25	10	25	QANTAS	QF740	737-838	2300	1913	OVER	64	1024
8	XIAMEN	SYD	7	23	33	10	33	XIAMEN	MF801	787-8	3925	3538	OVER	70	1034
8	WUHANN	SYD	8	0	1	11	1	CHINA E	MU749	330-243	4125	3738	OVER	77	1100
8	GOLDC	SYD	8	0	19	11	19	TIGER	TT607	320-232	2925	2538	OVER	74.6	1119
8	DARWIN	SYD	8	0	31	11	31	HIFLY	AST045	340-313	3557	3170	OVER	70.7	1131
8	TAIPEI	SYD	8	0	55	11	55	CHINA	C151	350-941	4850	4463	OVER	71.6	1154
8	HK	SYD	8	0	59	11	59	CATHAY	CX101	777-367	3575	3188	OVER	74.1	1158
8	ADL	SYD	8	1	35	12	35	QANTAS	QF738	737-838	2575	2188	OVER	66.2	1237

APPENDIX A6

MONITORING OF FLIGHTS OVER AVONDALE GOLF COURSE NOV '18 NOVEMBER ONLY DATA SORT WRT dBA

ELEVATION FT 387

64 FLIGHTS

SYD DAY	FROM	TO	UTC DAY	UTC HR	UTC MIN	ESDST HR	ESDST MIN	AIRLINE	FLIGHT	AIRCRAFT	ALTITUDE	HEIGHT ABOVE GL	LOCATION REF TO LOGGER	DATA LAMax	DATA TIME ESDST
8	BANGKOK	SYD	7	19	41	6	41	THAI	747-4D7	747-4D7	3275	2888	OVER	77.2	641
8	WUHAN	SYD	8	0	1	11	1	CHINA E	MU749	330-243	4125	3738	OVER	77	1100
8	GOLDC	SYD	8	3	59	14	59	JETSTAR	JQ411	320-232	3800	3413	OVER	75.4	1459
8	SUNSHINE	SYD	7	22	39	9	39	JETSTAR	JQ781	320-232	3150	2763	OVER	75.3	939
8	PEKING	SYD	8	5	10	16	10	CHINA	CA173	330-343	3225	2838	OVER	75.2	1610
8	GOLDC	SYD	8	0	19	11	19	TIGER	TT607	320-232	2925	2538	OVER	74.6	1119
8	PERTH	SYD	8	5	3	16	3	QANTAS	QF642	737-838	2875	2488	OVER	74.5	1604
8	BRISB	SYD	8	10	29	21	29	VIRGIN	VA986	737-8FE	4175	3788	OVER	74.2	2128
8	HK	SYD	8	0	59	11	59	CATHAY	CX101	777-367	3575	3188	OVER	74.1	1158
8	HK	SYD	7	19	47	6	47	QANTAS	QF128	747-438	4000	3613	OVER	74.1	646
8	CHENGDU	SYD	8	4	17	15	17	CHINA	CA429	330-343	4450	4063	OVER	74.1	1518
8	SHANGHAI	SYD	7	22	18	9	18	CHINA E	MU561	330-243	2975	2588	OVER	73.7	918
8	NANJING	SYD	7	21	42	8	42	CHINA E	MU727	330-243	3050	2663	OVER	73.5	843
8	TOKYO	SYD	7	19	29	6	29	JAPAN	JL771	787-8	3600	3213	OVER	73.4	629
8	SEOUL	SYD	7	19	53	6	53	KOREAN	KE121	380-861	3350	2963	OVER	73.3	654
8	CHRISTCH	SYD	8	8	59	19	59	EMERITES	EK413	380-861	2850	2463	OVER	72.8	1958
8	HONOLULO	SYD	8	8	29	19	29	HAWAIIAN	HA451	330-243	2825	2438	OVER	72.4	1929
8	SINGAPORE	SYD	7	20	7	7	7	SING	SQ221	380-841	4375	3988	OVER	72.4	707
8	SHANGHAI	SYD	7	22	57	9	57	QANTAS	QF130	330-202	3800	3413	OVER	72.2	958
8	BANGKOK	SYD	7	21	24	8	24	EMERITES	EK418	380-861	4050	3663	OVER	72.2	824
8	DOHA	SYD	8	7	47	18	47	QATAR	QR908	380-861	3300	2913	OVER	72	1847
8	MELB	SYD	8	8	19	19	19	VIRGIN	VA875	737-8FE	3125	2738	OVER	71.8	1919
8	BRISB	SYD	8	8	43	19	43	TIGER	TT381	320-232	4275	3888	OVER	71.8	1943
8	XIY	SYD	7	20	13	7	13	HAINAN	HU7993	330-243	4075	3688	OVER	71.7	713
8	ADEL	SYD	7	22	12	9	12	VIRGIN	VA407	737-8FE	2950	2563	OVER	71.6	913
8	TAIPEI	SYD	8	0	55	11	55	CHINA	C151	350-941	4850	4463	OVER	71.6	1154
8	SANFRAN	SYD	7	21	28	8	28	UNITED	UA863	787-9	5100	4713	OVER	71.5	828
8	PEKING	SYD	8	2	49	13	49	QANTAS	QF108	330-303	2950	2563	OVER	71.4	1350
8	MELB	SYD	7	22	34	9	34	QANTAS	QF414	737-838	3025	2638	OVER	71.3	934
8	GUANZHOU	SYD	8	9	33	20	33	CHINA S	CZ301	330-323	3275	2888	OVER	71.3	2033
8	SEOUL	SYD	7	21	0	8	0	ASIANA	OZ601	380-841	3800	3413	OVER	71.3	759
8	DENPASAR	SYD	7	19	55	6	55	GARUDA	GA417	330-343	2725	2338	OVER	71	656
8	DUBAI	SYD	7	19	49	6	49	EMERITES	EK412	380-861	3075	2688	OVER	70.8	650
8	DARWIN	SYD	8	0	31	11	31	HIFLY	AST045	340-313	3557	3170	OVER	70.7	1131
8	KL	SYD	7	23	13	10	13	ASIA	D7222	330-343	2900	2513	OVER	70.6	1013
8	MEL	SYD	7	21	34	8	34	VIRGIN	VA813	787-8	2925	2538	OVER	70.2	834
8	HOBART	SYD	7	22	41	9	41	JETSTAR	JQ718	320-232	2950	2563	OVER	70.2	944
8	MANILA	SYD	7	19	59	6	59	QANTAS	QF20	330-202	4325	3938	OVER	70.2	658
8	HK	SYD	7	20	34	7	34	CATHAY	CX111	330-343	3000	2613	OVER	70.1	733
8	XIAMEN	SYD	7	23	33	10	33	XIAMEN	MF801	787-8	3925	3538	OVER	70	1034

LAMax 77.2

39 FLIGHTS 70-77.2 dBA

8	TONATAPU	SYD	7	22	26	9	26	VIRGIN	VA94	737-8FE	3400	3013	OVER	69.8	926	60%
8	TOKYO	SYD	8	10	33	21	33	POLAR	PO241	767-3JH	5100	4713	OVER	69.8	2133	
8	TOKYO	SYD	7	22	6	9	6	QANTAS	QF26	747-438	3925	3538	OVER	69.4	905	
8	DENPASAR	SYD	7	20	36	7	36	JETSTAR	JQ38	787-8	2975	2588	OVER	69.3	736	
8	PERTH	SYD	7	19	21	6	21	VIRGIN	VA570	737-8FE	3350	2963	OVER	69.2	622	
8	SINGAPORE	SYD	7	19	37	6	37	BRITISH	BA15	777-336	4100	3713	OVER	69.1	638	
8	LAX	SYD	7	21	38	8	38	UNITED	UA839	787-9	4850	4463	OVER	68.7	839	
8	HAMILTON	SYD	8	4	5	15	5	VIRGIN	VA1280	737-81D	4875	4488	OVER	68.7	1507	
8	BRISB	SYD	8	2	21	13	21	QANTAS	QF525	737-838	3550	3163	OVER	68.4	1321	
8	GOLDC	SYD	8	9	15	20	15	VIRGIN	VA540	737-8FE	3575	3188	OVER	68.3	2017	
8	VANCOUVER	SYD	7	23	19	10	19	CANADA	AC33	777-233	3000	2613	OVER	67.8	1018	
8	BRISB	SYD	8	11	13	22	13	QANTAS	QF555	737-838	3875	3488	OVER	67.6	2213	
8	GOLDC	SYD	8	5	31	16	31	VIRGIN	VA526	737-8FE	4700	4313	OVER	67.6	1432	
8	LAUNSCN	SYD	8	11	17	22	17	JETSTAR	JQ750	320-232	2800	2413	OVER	67.5	2218	
8	GOLDC	SYD	8	6	9	17	9	QANTAS	QF865	737-838	5250	4863	OVER	67.4	1707	
8	HERVEY B	SYD	8	2	59	13	59	VIRGIN	VA1556	737-8FE	4450	4063	OVER	67	1400	
8	ADL	SYD	8	1	35	12	35	QANTAS	QF738	737-838	2575	2188	OVER	66.2	1237	
8	BANGKOK	SYD	7	20	20	7	20	QANTAS	QF24	330-303	4100	3713	OVER	66	720	
8	BRISB	SYD	8	11	23	22	23	QANTAS	QF559	737-838	4250	3863	OVER	65.1	2224	
8	BRISB	SYD	8	11	15	22	15	JETSTAR	JQ823	320-232	4175	3788	OVER	65	2215	
8	GOLDC	SYD	8	11	5	22	5	VIRGIN	VA544	737-8FE	4500	4113	OVER	65	2204	20 FLIGHTS 65 -70 dBA
8	MELB	SYD	8	11	15	22	15	QANTAS	QF494	737-838	3600	3213	OVER	64.7	2216	31%
8	SINGAPORE	SYD	7	20	11	7	11	QANTAS	QF82	330-303	2950	2563	OVER	64.1	711	59 FLIGHTS 65-77.2 dBA
8	LAX	SYD	7	21	32	8	32	AMERICAN	AA73	787-9	2950	2563	OVER	64.1	832	92%
8	ADEL	SYD	7	23	25	10	25	QANTAS	QF740	737-838	2300	1913	OVER	64	1024	

**APPENDIX B1
MONITORING OF FLIGHTS OVER PYMBLE LADIES COLLEGE OCT 2018**

DATA CRONOLOGICALLY

SYD DAY	FROM	TO	UTC DAY	UTC HR	UTC MIN	ESDST HR	ESDST MIN	AIRLINE	FLIGHT	AIRCRAFT	ALTITUDE	HEIGHT ABOVE GL	ELEVATION FT	DATA LAMax	DATA TIME ESDST
													387		
27	DARWIN	SYD	26	19	0	6	0	QANTAS	QF829	737-838	4125	3738	5 BLCKS A1 A3	71	6:00
27	DALLAS	SYD	26	19	6	6	6	QANTAS	QF8	380-842	3250	2863	AVDALE PATH 1 KM	68.7	6:05
27	SINGAPORE	SYD	27	8	45	19	45	SING	SQ288	777-312	4100	3713	AVDALE PATH 1 KM	66.1	19:45
27	BRISBANE	SYD	27	8	48	19	48	TIGER	TT379	320-232	4500	4113	OVER LOGGER	66.3	19:49
27	BRISBANE	SYD	27	8	54	19	54	JETSTAR	JQ821	320-232	4150	3763	OVER LOGGER	68.5	19:52
27	BRISBANE	SYD	27	9	6	20	6	TIGER	TT381	320-232	4575	4188	OVER LOGGER	65.4	20:06
27	MELBOURNE	SYD	27	9	12	20	12	QANTAS	QF462	737-838	3550	3163	AVDALE PATH 1 KM	63.4	2012
27	BRISBANE	SYD	27	9	18	20	18	VIRGIN	VA978	737-8FE	4275	3888	AVDALE PATH 1 KM	63.4	2019
27	KL	SYD	27	9	20	20	20	MALAYSIAN	MH141	330-323	3100	2713	AVDALE PATH 1 KM	61.6	2020
27	PERTH	SYD	27	9	24	20	24	QANTAS	QF582	737-838	3100	2713	AVDALE PATH 1 KM	70.8	2025
27	GUANGZHOU	SYD	27	9	27	20	27	CHINA STH	CZ301	330-343	3850	3463	AVDALE PATH 1 KM	67.7	2028
27	PERTH	SYD	27	9	30	20	30	QANTAS	QF582	737-838	3100	2713	AVDALE PATH 1 KM	?	
27	GOLD C	SYD	27	9	54	20	54	JETSTAR	JQ419	320-232	4100	3713	OVER LOGGER	68.8	2052
27	GOLD C	SYD	27	10	6	21	6	TIGER	TT623	320-232	3850	3463	OVER LOGGER	68.3	2104
27	BRISBANE	SYD	27	10	12	21	12	QANTAS	JQ1725	717-BL	4250	3863	OVER LOGGER	72.4	2115
27	BRISBANE	SYD	27	10	18	21	18	VIRGIN	VA986	738-8FE	4300	3913	5 BLOCKS WEST	64.3	2118
27	CAIRNS	SYD	27	10	24	21	24	JETSTAR	JQ959	321-231	3825	3438	5 BLOCKS WEST	68.1	2124
27	SUNSHINE	SYD	27	10	36	21	36	JETSTAR	JQ789	320-232	4100	3713	OVER LOGGER	66.7	2134
27	BRISBANE	SYD	27	10	48	21	48	QANTAS	QF553	737-838	4875	4488	OVER LOGGER	66.1	2149
27	BRISBANE	SYD	27	11	0	22	0	JETSTAR	JQ819	320-232	4050	3663	OVER LOGGER	68.1	2157
27	HONG K	SYD	27	11	6	22	6	CATHAY	CX139	777-367	4700	4313	5 BLOCKS WEST	66.8	2202
27	BRISBANE	SYD	27	11	18	22	18	VIRGIN	VA992	737-8FE	4375	3988	OVER LOGGER	61.6	2222
28	DALLAS	SYD	27	19	0	6	0	QANTAS	QF8	380-842	3250	2863	AVDALE PATH 1 KM	71.1	600
28	PERTH	SYD	27	19	6	6	6	VIRGIN	VA570	737-8FE	2950	2563	2 BLOCKS EAST	69	605
28	SINGAPORE	SYD	27	19	7	6	7	SINGAPORE	BA15	777-36N	3775	3388	AVDALE PATH 1 KM	64.2	606
28	ABU DHABI	SYD	27	19	12	6	12	ETIHAD	EY450	777-3FX	3000	2613	AVDALE PATH 1 KM	67.8	612
28	HK	SYD	27	19	12	6	12	VIRGIN	VA82	330-243	3975	3588	AVDALE PATH 1 KM	68.8	613
28	PERTH	SYD	27	19	18	6	18	JETSTAR	JQ989	320-232	3600	3213	AVDALE PATH 1 KM	66	618
28	SINGAPORE	SYD	27	19	36	6	36	SINGAPORE	SQ221	380-841	3650	3263	AVDALE PATH 1 KM	67.8	634
28	JAKARTA	SYD	27	19	36	6	36	QANTAS	QF42	330-202	3025	2638	AVDALE PATH 1 KM	66.6	636
28	TOKYO	SYD	27	19	48	6	48	JAPAN	JL771	787-9	2950	2563	AVDALE PATH 1 KM	71.3	648
28		SYD	27	19	36	6	36	QANTAS	QF20	330-303	3750	3363	AVDALE PATH 1 KM	72.8	636
28	MANILA	SYD	27	19	48	6	48	CATHAY	CX111	330-343	3225	2838	0.5 KM WEST	64.5	648
28	DELHI	SYD	27	19	54	6	54	AIR INDIA	AI302	787-8	2950	2563	AVDALE PATH 1 KM	67.4	655
28	MELBOURNE	SYD	27	20	0	7	0	JETSTAR	JQ602	320-232	2950	2563	AVDALE PATH 1 KM	65.1	700
28	CHRISTCH	SYD	27	20	6	7	6	QANTAS	QF7528	767-381	2950	2563	OVER LOGGER	69.6	706
28	BANGCOCK	SYD	27	20	12	7	12	QANTAS	QF24	330-303	4350	3963	OVER LOGGER	73.7	712
28	DUBAI	SYD	27	20	30	7	30	EMERITES	EK412	380-861	2800	2413	AVDALE PATH 1 KM	66.2	730
28	XIAN	SYD	27	20	36	7	36	HIANAN	HU7993	330-343	3525	3138	AVDALE PATH 1 KM	70.9	736
28	LA	SYD	27	20	36	7	36	UNITED	UA839	787-9	2975	2588	500 M EAST	71.4	737
28	CHRISTCH	SYD	27	20	48	7	48	JETSTAR	JQ140	320-232	2950	2563	OVER LOGGER	71.3	748
28	WELLINGTN	SYD	27	20	54	7	54	ANZ	NZ845	320-232	2925	2538	OVER LOGGER	68	754

28	CANBERRA	SYD	27	21	0	8	0	VIRGIN	VA629	ATR 72-600	3575	3188	OVER LOGGER	70.1	800
28	SAN FRAN	SYD	27	21	6	8	6	UNITED	UA863	787-9	2950	2563	OVER LOGGER	74.4	806
28	WELLINGTN	SYD	27	21	12	8	12	QANTAS	QF162	737-838	2900	2513	OVER LOGGER	70	811
28	BRISBANE	SYD	27	21	12	8	12	VIRGIN	VA908	737-7FE	4150	3763	OVER LOGGER	67.1	812
28	BRISBANE	SYD	27	21	18	8	18	QANTAS	QF505	737-838	4350	3963	OVER LOGGER	68.7	818
28	AUKLAND	SYD	27	21	24	8	24	ANZ	NZ101	777-219	2925	2538	AVDALE PATH 1 KM	70.1	824
28	GOLD C	SYD	27	21	30	8	30	JETSTAR	JQ401	320-232	3975	3588	OVER LOGGER	68.2	830
28	AUCKLAND	SYD	27	21	42	8	42	LATAM CHIL	LA801	787-9	2950	2563	0.5 KM WEST	66.8	841
28	AUCKLAND	SYD	27	21	48	8	48	JETSTAR	JQ202	320-232	2925	2538	950M EAST	71.9	848
28	TOKYO	SYD	27	21	54	8	54	QANTAS	QF26	747-438	2750	2363	AVDALE PATH 1 KM	72.5	855
28	SHANGHAI	SYD	27	22	0	9	0	AIR CHINA	CA175	330-243	2900	2513	AVDALE PATH 1 KM	67.8	900
28	GOLD C	SYD	27	22	6	9	6	JETSTAR	JQ403	320-232	4075	3688	OVER LOGGER	70	906
28	SHANGHAI	SYD	27	22	6	9	6	QANTAS	QF130	330-202	3875	3488	AVDALE PATH 1 KM	63.1	907
28	GOLD C	SYD	27	22	6	9	6	QANTAS	QF861	737-838	4525	4138	OVER LOGGER	71.2	903
28	BRISBANE	SYD	27	22	6	9	6	JETSTAR	JQ811	320-232	3775	3388	OVER LOGGER	63	908
28	HO CI MINH	SYD	27	22	18	9	18	VEITNAM	VN773	787-9	3150	2763	AVDALE PATH 1 KM	63	918
28	BRISBANE	SYD	27	22	18	9	18	QANTAS	QF509	737-838	4550	4163	OVER LOGGER	70.3	919
28	HK	SYD	27	22	24	9	24	CATHAY	CX161	777-367	3750	3363	AVDALE PATH 1 KM	66.6	925
28	TOKYO	SYD	27	22	30	9	30	NIPPON	NH879	787-9	2950	2563	AVDALE PATH 1 KM	70.6	930
28	CAIRNS		27	22	24	9	24	VIRGIN	VA1408	737-8FE	3225	2838	AVDALE PATH 1 KM	65.2	926
28	VANCOUVER	SYD	27	22	36	9	36	CANADA	AC33	777-233	4275	3888	AVDALE PATH 1 KM	68.9	935
28	BRISBANE	SYD	27	22	42	9	42	JETSTAR	JQ813	321-231	4025	3638	OVER LOGGER	69.3	942
28	SHANGHAI	SYD	27	22	42	9	42	CHINA	MU561	330-243	2975	2588	AVDALE PATH 1 KM	66.5	944
28	JAKARTA	SYD	27	22	31	9	31	GARUDA	GA712	330-243	2350	1963	AVDALE PATH 1 KM	75.5	931
28	VANCOUVER	SYD	27	22	34	9	34	CANADA	AC 33	777-233	4275	3888	AVDALE PATH 1 KM	73.1	934
28	BRISB	SYD	27	22	42	9	42	TIGER	TT357	320-232	4500	4113	OVER LOGGER	69.4	944
28	CAIRNS	SYD	27	22	45	9	45	VIRGIN	VA1408	737-8FE	4075	3688	OVER LOGGER	66.9	944
28	SHANGHAI	SYD	27	22	54	9	54	QANTAS	QF130	330-202	3875	3488	AVDALE PATH 1 KM	69	954
28	XIAMMEN	SYD	27	22	58	9	58	XIAMEN	MF801	787-8	3300	2913	AVDALE PATH 1 KM	69.1	958
28	AUCKLAND	SYD	27	23	6	10	6	ANZ	NZ103	787-9	3025	2638	OVER LOGGER	76.5	1007
28	GOLDCST	SYD	27	23	11	10	11	VIRGIN	VA506	737-8FE	3725	3338	OVER LOGGER	71.8	1011
28	MELB	SYD	27	23	15	10	15	QANTAS	QF418	737-838	2875	2488	AVDALE PATH 1 KM	66.1	1015
28	MANILA	SYD	27	23	17	10	17	CEBU	5J41	330-343	3400	3013	AVDALE PATH 1 KM	69.2	1017
28	GOLDCST	SYD	27	23	19	10	19	JETSTAR	JQ405	320-232	4125	3738	OVER LOGGER	69.7	1019
28	BALLINA	SYD	27	23	30	10	30	JETSTAR	JQ457	320-232	3150	2763	OVER LOGGER	71.7	1030
28	CAIRNS	SYD	27	23	38	10	38	JETSTAR	JQ953	320-232	3675	3288	OVER LOGGER	73.4	1038
28	HK	SYD	27	23	59	10	59	QANTAS	QF118	330-202	3874	3487	OVER LOGGER	70.7	1100
28	SING	SYD	28	0	21	11	21	SINGAPORE	SQ231	380-841	600	213	AVDALE PATH 1 KM	74.9	1119
28	GOLDCST	SYD	28	0	23	11	23	TIGER	TT607	320-232	4550	4163	OVER LOGGER	65.9	1124
28	BRISB	SYD	28	0	25	11	25	VIRGIN	VA932	737-8FE	4700	4313	OVER LOGGER	68.9	1126
28	BRISB	SYD	28	0	26	11	26	QANTAS	QF517	738-838	4400	4013	OVER LOGGER	62.6	1128
28	GOLDCST	SYD	28	0	33	11	33	QANTAS	QF1565	717-2BL	4750	4363	OVER LOGGER	72.9	1133
28	FIJI	SYD	28	0	50	11	50	FIJI	FJ1915	737-8X2	2975	2588	OVER LOGGER	70.9	1150
28	BRISB	SYD	28	1	22	12	22	QANTAS	QF521	737-838	4400	4013	OVER LOGGER	67.3	1222
28	GOLDCST	SYD	28	1	26	12	26	VIRGIN	VA516	737-8FE	4025	3638	OVER LOGGER	71.7	1226
28	GOLDCST	SYD	28	1	29	12	29	JETSTAR	JQ409	320-232	3600	3213	OVER LOGGER	73.3	1229
28	GOLDCST	SYD	28	1	38	12	38	TIGER	TT609	320-232	5100	4713	OVER LOGGER	71.8	1239
28	SUNSHINE C	SYD	28	2	1	13	1	VIRGIN	VA482	737-8FE	3875	3488	OVER LOGGER	72.2	1301
28	BALLINA	SYD	28	2	4	13	4	JETSTAR	JQ459	320-232	4200	3813	OVER LOGGER	70	1305

28	BRISB	SYD	28	2	6	13	6	JETSTAR	JQ815	320-232	4675	4288	OVER LOGGER	68.4	1306
28	CAIRNS	SYD	28	2	18	13	18	JETSTAR	JQ517	320-232	4200	3813	OVER LOGGER	63.1	1319
28	BRISB	SYD	28	2	28	13	28	QANTAS	JQ1717	717-2BL	4975	4588	OVER LOGGER	71.2	1327
28	CAIRNS	SYD	28	2	44	13	44	TIGER	TT677	320-232	3900	3513	OVER LOGGER	71.5	1344
28	CAIRNS	SYD	28	2	58	13	58	QANTAS	QF925	737-838	5275	4888	OVER LOGGER	70.4	1358
28	HERVEY B	SYD	28	3	26	14	26	VIRGIN	VA1556	737-8FE	4700	4313	OVER LOGGER	70.8	1426
28	GOLDCST	SYD	28	3	36	14	36	JETSTAR	JQ411	320-232	4725	4338	OVER LOGGER	68	1435
28	GOLDCST	SYD	28	3	45	14	45	QANTAS	QF859	737-838	4150	3763	OVER LOGGER	70.6	1444
28	CAIRNS	SYD	28	4	5	15	5	VIRGIN	VA1418	737-8FE	4825	4438	OVER LOGGER	67.2	1506
28	SUNSHINE C	SYD	28	4	20	15	20	JETSTAR	JQ787	320-232	4475	4088	OVER LOGGER	66.1	1521
28	SUNSHINE C	SYD	28	4	24	15	24	VIRGIN	VA484	737-8FE	3875	3488	OVER LOGGER	70.2	1525
28	TOWNESVILLE	SYD	28	4	28	15	28	VIRGIN	VA1520	737-8FE	2050	1663	OVER LOGGER	79.1	1528
28	BRISB	SYD	28	4	36	15	36	VIRGIN	VA950	737-8KG	4700	4313	OVER LOGGER	68.1	1536
28	PROSERPINE	SYD	28	4	42	15	42	TIGER	TT397	320-232	4100	3713	OVER LOGGER	69.6	1542
28	JOBURG	SYD	28	4	50	15	50	QANTAS	QF64	747-438	3450	3063	AVDALE PATH 1 KM	68.7	1551
28	HAMILTON	SYD	28	4	56	15	56	QANTAS	QF867	737-838	4800	4413	OVER LOGGER	73.6	1556
28	BRISB	SYD	28	5	16	16	16	VIRGIN	VA954	737-8FE	4400	4013	OVER LOGGER	67.3	1616
28	BRISB	SYD	28	5	30	16	30	QANTAS	QF537	737-838	4500	4113	OVER LOGGER	73.6	1630
28	QTOWN	SYD	28	5	36	16	36	ANZ	NZ831	320-232	2925	2538	OVER LOGGER	69.2	1635
28	GOLD C	SYD	28	5	44	16	44	JETSTAR	JQ415	320-232	5200	4813	OVER LOGGER	68.7	1644
28	BALLINA	SYD	28	6	8	17	8	VIRGIN	VA1142	737-8FE	4400	4013	OVER LOGGER	77.5	1708
28	COFFSHBR	SYD	28	6	14	17	14	VIRGIN	VA1166	737-8FE	4625	4238	OVER LOGGER	73.3	1714
28	BRISB	SYD	28	6	24	17	24	QANTAS	QF541	737-838	5150	4763	OVER LOGGER	72.2	1724
28	TOWNESVILLE	SYD	28	6	26	17	26	JETSTAR	JQ913	320-232	4075	3688	OVER LOGGER	66.7	1727
28	BRISB	SYD	28	6	40	17	40	VIRGIN	VA958	737-8FE	4750	4363	OVER LOGGER	65	1740
28	BRISB	SYD	28	6	52	17	52	TIGER	TT377	320-232	6525	6138	OVER LOGGER	62.4	1752
28	GOLD C	SYD	28	6	58	17	58	QANTAS	QF1567	717-2BL	5550	5163	OVER LOGGER	69	1757
28	CAIRNS	SYD	28	7	2	18	2	ALLIANCE	QQ515	FOKKER 70	4975	4588	OVER LOGGER	64.3	1802
28	GOLD C	SYD	28	7	22	18	22	JETSTAR	JQ413	320-232	4850	4463	OVER LOGGER	65.5	1822
28	GOLD C	SYD	28	7	35	18	35	VIRGIN	VA532	737-8FE	4550	4163	OVER LOGGER	66.8	1835
28	BALLINA	SYD	28	7	43	18	43	JETSTAR	JQ461	320-232	3675	3288	OVER LOGGER	66.7	1843
28	DARWIN	SYD	28	7	53	18	53	VIRGIN	VA1354	737-8FE	4550	4163	OVER LOGGER	70.5	1853
28	MORESBY	SYD	28	8	7	19	7	NUIGINI	PX1	767-341	5900	5513	OVER LOGGER	68.5	1906
28	GOLD C	SYD	28	8	13	19	13	TIGER	TT623	320-232	3550	3163	OVER LOGGER	69.8	1913
28	BRISB	SYD	28	8	17	19	17	QANTAS	QF547	737-838	5200	4813	OVER LOGGER	65.3	1917
28	BRISB	SYD	28	8	27	19	27	QANTAS	QF549	737-838	5850	5463	OVER LOGGER	69.3	1926
28	CHRISTCH	SYD	28	8	31	19	31	EMERITES	EK413	380-861	2875	2488	500 M EAST	68.9	1931
28	BRISB	SYD	28	8	33	19	33	VIRGIN	VA970	737-8FE	3925	3538	OVER LOGGER	65.4	1933
28	BRISB	SYD	28	8	52	19	52	QANTAS	QF551	737-838	4725	4338	OVER LOGGER	65.2	1951
28	GOLD C	SYD	28	8	55	19	55	JETSTAR	jq423	321-231	3425	3038	OVER LOGGER	69.1	1955
28	GOLD C	SYD	28	9	30	20	30	JETSTAR	JQ425	320-232	4200	3813	OVER LOGGER	66.3	2030
28	BRISB	SYD	28	9	39	20	39	VIRGIN	VA978	737-8FE	4950	4563	OVER LOGGER	64.3	2040
28	BRISB	SYD	28	9	55	20	55	VIRGIN	VA892	737-8FE	4800	4413	OVER LOGGER	66.2	2054
28	BRISB	SYD	28	9	59	20	59	QANTAS	QF553	737-838	4525	4138	OVER LOGGER	64.5	2058
28	SUNSHINE	SYD	28	10	5	21	5	JETSTAR	JQ791	320-232	4675	4288	OVER LOGGER	61	2106
28	GOLD C	SYD	28	10	25	21	25	VIRGIN	VA544	737-8FE	5025	4638	OVER LOGGER	62.2	2126
28	BRISB	SYD	28	10	35	21	35	TIGER	TT387	320-232	3825	3438	OVER LOGGER	67.8	2135
28	GOLD C	SYD	28	10	46	21	46	JETSTAR	JQ427	321-231	3900	3513	OVER LOGGER	68.9	2146
28	BRISB	SYD	28	10	43	21	43	VIRGIN	VA988	737-8FE	3850	3463	OVER LOGGER	63	2139

28	BRISB	SYD	28	10	49	21	49	V	VA988	737-8FE	3875	3488	OVER LOGGER	65.8	2149

DEPARTING NTH 29/10

**APPENDIX B2
MONITORING OF FLIGHTS OVER PYMBLE LADIES COLLEGE OCT 2018**

DATA SORT WITH RESPECT HEIGHT ABOVE GROUND LEVEL

SYD DAY	FROM	TO	UTC DAY	UTC HR	UTC MIN	ESDST HR	ESDST MIN	AIRLINE	FLIGHT	AIRCRAFT	ALTITUDE	HEIGHT ABOVE GL	ELEVATION FT	LOCATION REF TO LOGGER	DATA LAMax	DATA TIME ESDST
													387			
28	TOWNESVILLE	SYD	28	4	28	15	28	VIRGIN	VA1520	737-8FE	2050	1663		OVER LOGGER	79.1	1528
28	JAKARTA	SYD	27	22	31	9	31	GARUDA	GA712	330-243	2350	1963		AVDALE PATH 1 KM	75.5	931
28	TOKYO	SYD	27	21	54	8	54	QANTAS	QF26	747-438	2750	2363		AVDALE PATH 1 KM	72.5	855
28	DUBAI	SYD	27	20	30	7	30	EMERITES	EK412	380-861	2800	2413		AVDALE PATH 1 KM	66.2	730
28	MELB	SYD	27	23	15	10	15	QANTAS	QF418	737-838	2875	2488		AVDALE PATH 1 KM	66.1	1015
28	CHRISTCH	SYD	28	8	31	19	31	EMERITES	EK413	380-861	2875	2488		500 M EAST	68.9	1931
28	WELLINGTN	SYD	27	21	12	8	12	QANTAS	QF162	737-838	2900	2513		OVER LOGGER	70	811
28	SHANGHAI	SYD	27	22	0	9	0	AIR CHINA	CA175	330-243	2900	2513		AVDALE PATH 1 KM	67.8	900
28	WELLINGTN	SYD	27	20	54	7	54	ANZ	NZ845	320-232	2925	2538		OVER LOGGER	68	754
28	AUKLAND	SYD	27	21	24	8	24	ANZ	NZ101	777-219	2925	2538		AVDALE PATH 1 KM	70.1	824
28	AUCKLAND	SYD	27	21	48	8	48	JETSTAR	JQ202	320-232	2925	2538		950M EAST	71.9	848
28	QTOWN	SYD	28	5	36	16	36	ANZ	NZ831	320-232	2925	2538		OVER LOGGER	69.2	1635
28	PERTH	SYD	27	19	6	6	6	VIRGIN	VA570	737-8FE	2950	2563		2 BLOCKS EAST	69	605
28	TOKYO	SYD	27	19	48	6	48	JAPAN	JL771	787-9	2950	2563		AVDALE PATH 1 KM	71.3	648
28	DELHI	SYD	27	19	54	6	54	AIR INDIA	AI302	787-8	2950	2563		AVDALE PATH 1 KM	67.4	655
28	MELBOURNE	SYD	27	20	0	7	0	JETSTAR	JQ602	320-232	2950	2563		AVDALE PATH 1 KM	65.1	700
28	CHRISTCH	SYD	27	20	6	7	6	QANTAS	QF7528	767-381	2950	2563		OVER LOGGER	69.6	706
28	CHRISTCH	SYD	27	20	48	7	48	JETSTAR	JQ140	320-232	2950	2563		OVER LOGGER	71.3	748
28	SAN FRAN	SYD	27	21	6	8	6	UNITED	UA863	787-9	2950	2563		OVER LOGGER	74.4	806
28	AUCKLAND	SYD	27	21	42	8	42	LATAM CHIL	LA801	787-9	2950	2563		0.5 KM WEST	66.8	841
28	TOKYO	SYD	27	22	30	9	30	NIPPON	NH879	787-9	2950	2563		AVDALE PATH 1 KM	70.6	930
28	LA	SYD	27	20	36	7	36	UNITED	UA839	787-9	2975	2588		500 M EAST	71.4	737
28	SHANGHAI	SYD	27	22	42	9	42	CHINA	MU561	330-243	2975	2588		AVDALE PATH 1 KM	66.5	944
28	FIJI	SYD	28	0	50	11	50	FIJI	FJ1915	737-8X2	2975	2588		OVER LOGGER	70.9	1150
28	ABU DHABI	SYD	27	19	12	6	12	ETIHAD	EY450	777-3FX	3000	2613		AVDALE PATH 1 KM	67.8	612
28	JAKARTA	SYD	27	19	36	6	36	QANTAS	QF42	330-202	3025	2638		AVDALE PATH 1 KM	66.6	636
28	AUCKLAND	SYD	27	23	6	10	6	ANZ	NZ103	787-9	3025	2638		OVER LOGGER	76.5	1007
27	KL	SYD	27	9	20	20	20	MALAYSIAN	MH141	330-323	3100	2713		AVDALE PATH 1 KM	61.6	2020
27	PERTH	SYD	27	9	24	20	24	QANTAS	QF582	737-838	3100	2713		AVDALE PATH 1 KM	70.8	2025
27	PERTH	SYD	27	9	30	20	30	QANTAS	QF582	737-838	3100	2713		AVDALE PATH 1 KM	?	
28	HO CI MINH	SYD	27	22	18	9	18	VEITNAM	VN773	787-9	3150	2763		AVDALE PATH 1 KM	63	918
28	BALLINA	SYD	27	23	30	10	30	JETSTAR	JQ457	320-232	3150	2763		OVER LOGGER	71.7	1030
28	MANILA	SYD	27	19	48	6	48	CATHAY	CX111	330-343	3225	2838		0.5 KM WEST	64.5	648
28	CAIRNS		27	22	24	9	24	VIRGIN	VA1408	737-8FE	3225	2838		AVDALE PATH 1 KM	65.2	926
27	DALLAS	SYD	26	19	6	6	6	QANTAS	QF8	380-842	3250	2863		AVDALE PATH 1 KM	68.7	6:05
28	DALLAS	SYD	27	19	0	6	0	QANTAS	QF8	380-842	3250	2863		AVDALE PATH 1 KM	71.1	600
28	XIAMMEN	SYD	27	22	58	9	58	XIAMEN	MF801	787-8	3300	2913		AVDALE PATH 1 KM	69.1	958
28	MANILA	SYD	27	23	17	10	17	CEBU	5J41	330-343	3400	3013		AVDALE PATH 1 KM	69.2	1017
28	GOLD C	SYD	28	8	55	19	55	JETSTAR	jq423	321-231	3425	3038		OVER LOGGER	69.1	1955
28	JOBURG	SYD	28	4	50	15	50	QANTAS	QF64	747-438	3450	3063		AVDALE PATH 1 KM	68.7	1551
28	XIAN	SYD	27	20	36	7	36	HIANAN	HU7993	330-343	3525	3138		AVDALE PATH 1 KM	70.9	736
27	MELBOURNE	SYD	27	9	12	20	12	QANTAS	QF462	737-838	3550	3163		AVDALE PATH 1 KM	63.4	2012

28	GOLD C	SYD	28	8	13	19	13	TIGER	TT623	320-232	3550	3163	OVER LOGGER	69.8	1913
28	CANBERRA	SYD	27	21	0	8	0	VIRGIN	VA629	ATR 72-600	3575	3188	OVER LOGGER	70.1	800
28	PERTH	SYD	27	19	18	6	18	JETSTAR	JQ989	320-232	3600	3213	AVDALE PATH 1 KM	66	618
28	GOLDCST	SYD	28	1	29	12	29	JETSTAR	JQ409	320-232	3600	3213	OVER LOGGER	73.3	1229
28	SINGAPORE	SYD	27	19	36	6	36	SINGAPORE	SQ221	380-841	3650	3263	AVDALE PATH 1 KM	67.8	634
28	CAIRNS	SYD	27	23	38	10	38	JETSTAR	JQ953	320-232	3675	3288	OVER LOGGER	73.4	1038
28	BALLINA	SYD	28	7	43	18	43	JETSTAR	JQ461	320-232	3675	3288	OVER LOGGER	66.7	1843
28	GOLDCST	SYD	27	23	11	10	11	VIRGIN	VA506	737-8FE	3725	3338	OVER LOGGER	71.8	1011
28		SYD	27	19	36	6	36	QANTAS	QF20	330-303	3750	3363	AVDALE PATH 1 KM	72.8	6.36
28	HK	SYD	27	22	24	9	24	CATHAY	CX161	777-367	3750	3363	AVDALE PATH 1 KM	66.6	925
28	SINGAPORE	SYD	27	19	64.2	6	64.2	SINGAPORE	BA15	777-36N	3775	3388	AVDALE PATH 1 KM	64.2	606
28	BRISBANE	SYD	27	22	6	9	6	JETSTAR	JQ811	320-232	3775	3388	OVER LOGGER	63	908
27	CAIRNS	SYD	27	10	24	21	24	JETSTAR	JQ959	321-231	3825	3438	5 BLOCKS WEST	68.1	2124
28	BRISB	SYD	28	10	35	21	35	TIGER	TT387	320-232	3825	3438	OVER LOGGER	67.8	2135
27	GUANGZHOU	SYD	27	9	27	20	27	CHINA STH	CZ301	330-343	3850	3463	AVDALE PATH 1 KM	67.7	2028
27	GOLD C	SYD	27	10	6	21	6	TIGER	TT623	320-232	3850	3463	OVER LOGGER	68.3	2104
28	BRISB	SYD	28	10	43	21	43	VIRGIN	VA988	737-8FE	3850	3463	OVER LOGGER	63	2139
28	HK	SYD	27	23	59	10	59	QANTAS	QF118	330-202	3874	3487	OVER LOGGER	70.7	1100
28	SHANGHAI	SYD	27	22	6	9	6	QANTAS	QF130	330-202	3875	3488	AVDALE PATH 1 KM	63.1	907
28	SHANGHAI	SYD	27	22	54	9	54	QANTAS	QF130	330-202	3875	3488	AVDALE PATH 1 KM	69	954
28	SUNSHINE C	SYD	28	2	1	13	1	VIRGIN	VA482	737-8FE	3875	3488	OVER LOGGER	72.2	1301
28	SUNSHINE C	SYD	28	4	24	15	24	VIRGIN	VA484	737-8FE	3875	3488	OVER LOGGER	70.2	1525
28	BRISB	SYD	28	10	49	21	49	V	VA988	737-8FE	3875	3488	OVER LOGGER	65.8	2149
28	CAIRNS	SYD	28	2	44	13	44	TIGER	TT677	320-232	3900	3513	OVER LOGGER	71.5	1344
28	GOLD C	SYD	28	10	46	21	46	JETSTAR	JQ427	321-231	3900	3513	OVER LOGGER	68.9	2146
28	BRISB	SYD	28	8	33	19	33	VIRGIN	VA970	737-8FE	3925	3538	OVER LOGGER	65.4	1933
28	HK	SYD	27	19	12	6	12	VIRGIN	VA82	330-243	3975	3588	AVDALE PATH 1 KM	68.8	613
28	GOLD C	SYD	27	21	30	8	30	JETSTAR	JQ401	320-232	3975	3588	OVER LOGGER	68.2	830
28	BRISBANE	SYD	27	22	42	9	42	JETSTAR	JQ813	321-231	4025	3638	OVER LOGGER	69.3	942
28	GOLDCST	SYD	28	1	26	12	26	VIRGIN	VA516	737-8FE	4025	3638	OVER LOGGER	71.7	1226
27	BRISBANE	SYD	27	11	0	22	0	JETSTAR	JQ819	320-232	4050	3663	OVER LOGGER	68.1	2157
28	GOLD C	SYD	27	22	6	9	6	JETSTAR	JQ403	320-232	4075	3688	OVER LOGGER	70	906
28	CAIRNS	SYD	27	22	45	9	45	VIRGIN	VA1408	737-8FE	4075	3688	OVER LOGGER	66.9	944
28	TOWNESVILLE	SYD	28	6	26	17	26	JETSTAR	JQ913	320-232	4075	3688	OVER LOGGER	66.7	1727
27	SINGAPORE	SYD	27	8	45	19	45	SING	SQ288	777-312	4100	3713	AVDALE PATH 1 KM	66.1	19:45
27	GOLD C	SYD	27	9	54	20	54	JETSTAR	JQ419	320-232	4100	3713	OVER LOGGER	68.8	2052
27	SUNSHINE	SYD	27	10	36	21	36	JETSTAR	JQ789	320-232	4100	3713	OVER LOGGER	66.7	2134
28	PROSERPINE	SYD	28	4	42	15	42	TIGER	TT397	320-232	4100	3713	OVER LOGGER	69.6	1542
27	DARWIN	SYD	26	19	0	6	0	QANTAS	QF829	737-838	4125	3738	5 BLCKS A1 A3	71	6:00
28	GOLDCST	SYD	27	23	19	10	19	JETSTAR	JQ405	320-232	4125	3738	OVER LOGGER	69.7	1019
27	BRISBANE	SYD	27	8	54	19	54	JETSTAR	JQ821	320-232	4150	3763	OVER LOGGER	68.5	19.52
28	BRISBANE	SYD	27	21	12	8	12	VIRGIN	VA908	737-7FE	4150	3763	OVER LOGGER	67.1	812
28	GOLDCST	SYD	28	3	45	14	45	QANTAS	QF859	737-838	4150	3763	OVER LOGGER	70.6	1444
28	BALLINA	SYD	28	2	4	13	4	JETSTAR	JQ459	320-232	4200	3813	OVER LOGGER	70	1305
28	CAIRNS	SYD	28	2	18	13	18	JETSTAR	JQ517	320-232	4200	3813	OVER LOGGER	63.1	1319
28	GOLD C	SYD	28	9	30	20	30	JETSTAR	JQ425	320-232	4200	3813	OVER LOGGER	66.3	2030
27	BRISBANE	SYD	27	10	12	21	12	QANTAS	JQ1725	717-BL	4250	3863	OVER LOGGER	72.4	2115
27	BRISBANE	SYD	27	9	18	20	18	VIRGIN	VA978	737-8FE	4275	3888	AVDALE PATH 1 KM	63.4	2019
28	VANCOUVER	SYD	27	22	36	9	36	CANADA	AC33	777-233	4275	3888	AVDALE PATH 1 KM	68.9	935

28	VANCOUVER	SYD	27	22	34	9	34	CANADA	AC 33	777-233	4275	3888	AVDALE PATH 1 KM	73.1	934
27	BRISBANE	SYD	27	10	18	21	18	VIRGIN	VA986	738-8FE	4300	3913	5 BLOCKS WEST	64.3	2118
28	BANGCOCK	SYD	27	20	12	7	12	QANTAS	QF24	330-303	4350	3963	OVER LOGGER	73.7	712
28	BRISBANE	SYD	27	21	18	8	18	QANTAS	QF505	737-838	4350	3963	OVER LOGGER	68.7	818
27	BRISBANE	SYD	27	11	18	22	18	VIRGIN	VA992	737-8FE	4375	3988	OVER LOGGER	61.6	2222
28	BRISB	SYD	28	0	26	11	26	QANTAS	QF517	738-838	4400	4013	OVER LOGGER	62.6	1128
28	BRISB	SYD	28	1	22	12	22	QANTAS	QF521	737-838	4400	4013	OVER LOGGER	67.3	1222
28	BRISB	SYD	28	5	16	16	16	VIRGIN	VA954	737-8FE	4400	4013	OVER LOGGER	67.3	1616
28	BALLINA	SYD	28	6	8	17	8	VIRGIN	VA1142	737-8FE	4400	4013	OVER LOGGER	77.5	1708
28	SUNSHINE C	SYD	28	4	20	15	20	JETSTAR	JQ787	320-232	4475	4088	OVER LOGGER	66.1	1521
27	BRISBANE	SYD	27	8	48	19	48	TIGER	TT379	320-232	4500	4113	OVER LOGGER	66.3	19:49
28	BRISB	SYD	27	22	42	9	42	TIGER	TT357	320-232	4500	4113	OVER LOGGER	69.4	944
28	BRISB	SYD	28	5	30	16	30	QANTAS	QF537	737-838	4500	4113	OVER LOGGER	73.6	1630
28	GOLD C	SYD	27	22	6	9	6	QANTAS	QF861	737-838	4525	4138	OVER LOGGER	71.2	903
28	BRISB	SYD	28	9	59	20	59	QANTAS	QF553	737-838	4525	4138	OVER LOGGER	64.5	2058
28	BRISBANE	SYD	27	22	18	9	18	QANTAS	QF509	737-838	4550	4163	OVER LOGGER	70.3	919
28	GOLDCST	SYD	28	0	23	11	23	TIGER	TT607	320-232	4550	4163	OVER LOGGER	65.9	1124
28	GOLD C	SYD	28	7	35	18	35	VIRGIN	VA532	737-8FE	4550	4163	OVER LOGGER	66.8	1835
28	DARWIN	SYD	28	7	53	18	53	VIRGIN	VA1354	737-8FE	4550	4163	OVER LOGGER	70.5	1853
27	BRISBANE	SYD	27	9	6	20	6	TIGER	TT381	320-232	4575	4188	OVER LOGGER	65.4	20:06
28	COFFSHBR	SYD	28	6	14	17	14	VIRGIN	VA1166	737-8FE	4625	4238	OVER LOGGER	73.3	1714
28	BRISB	SYD	28	2	6	13	6	JETSTAR	JQ815	320-232	4675	4288	OVER LOGGER	68.4	1306
28	SUNSHINE	SYD	28	10	5	21	5	JETSTAR	JQ791	320-232	4675	4288	OVER LOGGER	61	2106
27	HONG K	SYD	27	11	6	22	6	CATHAY	CX139	777-367	4700	4313	5 BLOCKS WEST	66.8	2202
28	BRISB	SYD	28	0	25	11	25	VIRGIN	VA932	737-8FE	4700	4313	OVER LOGGER	68.9	1126
28	HERVEY B	SYD	28	3	26	14	26	VIRGIN	VA1556	737-8FE	4700	4313	OVER LOGGER	70.8	1426
28	BRISB	SYD	28	4	36	15	36	VIRGIN	VA950	737-8KG	4700	4313	OVER LOGGER	68.1	1536
28	GOLDCST	SYD	28	3	36	14	36	JETSTAR	JQ411	320-232	4725	4338	OVER LOGGER	68	1435
28	BRISB	SYD	28	8	52	19	52	QANTAS	QF551	737-838	4725	4338	OVER LOGGER	65.2	1951
28	GOLDCST	SYD	28	0	33	11	33	QANTAS	QF1565	717-2BL	4750	4363	OVER LOGGER	72.9	1133
28	BRISB	SYD	28	6	40	17	40	VIRGIN	VA958	737-8FE	4750	4363	OVER LOGGER	65	1740
28	HAMILTON	SYD	28	4	56	15	56	QANTAS	QF867	737-838	4800	4413	OVER LOGGER	73.6	1556
28	BRISB	SYD	28	9	55	20	55	VIRGIN	VA892	737-8FE	4800	4413	OVER LOGGER	66.2	2054
28	CAIRNS	SYD	28	4	5	15	5	VIRGIN	VA1418	737-8FE	4825	4438	OVER LOGGER	67.2	1506
28	GOLD C	SYD	28	7	22	18	22	JETSTAR	JQ413	320-232	4850	4463	OVER LOGGER	65.5	1822
27	BRISBANE	SYD	27	10	48	21	48	QANTAS	QF553	737-838	4875	4488	OVER LOGGER	66.1	2149
28	BRISB	SYD	28	9	39	20	39	VIRGIN	VA978	737-8FE	4950	4563	OVER LOGGER	64.3	2040
28	BRISB	SYD	28	2	28	13	28	QANTAS	JQ1717	717-2BL	4975	4588	OVER LOGGER	71.2	1327
28	CAIRNS	SYD	28	7	2	18	2	ALLIANCE	QQ515	FOKKER 70	4975	4588	OVER LOGGER	64.3	1802
28	GOLD C	SYD	28	10	25	21	25	VIRGIN	VA544	737-8FE	5025	4638	OVER LOGGER	62.2	2126
28	GOLDCST	SYD	28	1	38	12	38	TIGER	TT609	320-232	5100	4713	OVER LOGGER	71.8	1239
28	BRISB	SYD	28	6	24	17	24	QANTAS	QF541	737-838	5150	4763	OVER LOGGER	72.2	1724
28	GOLD C	SYD	28	5	44	16	44	JETSTAR	JQ415	320-232	5200	4813	OVER LOGGER	68.7	1644
28	BRISB	SYD	28	8	17	19	17	QANTAS	QF547	737-838	5200	4813	OVER LOGGER	65.3	1917
28	CAIRNS	SYD	28	2	58	13	58	QANTAS	QF925	737-838	5275	4888	OVER LOGGER	70.4	1358
28	GOLD C	SYD	28	6	58	17	58	QANTAS	QF1567	717-2BL	5550	5163	OVER LOGGER	69	1757
28	BRISB	SYD	28	8	27	19	27	QANTAS	QF549	737-838	5850	5463	OVER LOGGER	69.3	1926
28	MORESBY	SYD	28	8	7	19	7	NUIGINI	PX1	767-341	5900	5513	OVER LOGGER	68.5	1906
28	BRISB	SYD	28	6	52	17	52	TIGER	TT377	320-232	6525	6138	OVER LOGGER	62.4	1752

APPENDIX B3

MONITORING OF FLIGHTS OVER PYMBLE LADIES COLLEGE OCT 2018

DATA SORT WITH RESPECT TO dBA

SYD DAY	FROM	TO	UTC DAY	UTC HR	UTC MIN	ESDST HR	ESDST MIN	AIRLINE	FLIGHT	AIRCRAFT	ALTITUDE	HEIGHT ABOVE GL	ELEVATION FT	DATA LAMax	DATA TIME ESDST
													387		
28	TOWNESVILLE	SYD	28	4	28	15	28	VIRGIN	VA1520	737-8FE	2050	1663	OVER LOGGER	79.1	1528
28	BALLINA	SYD	28	6	8	17	8	VIRGIN	VA1142	737-8FE	4400	4013	OVER LOGGER	77.5	1708
28	AUCKLAND	SYD	27	23	6	10	6	ANZ	NZ103	787-9	3025	2638	OVER LOGGER	76.5	1007
28	JAKARTA	SYD	27	22	31	9	31	GARUDA	GA712	330-243	2350	1963	AVDALE PATH 1 KM	75.5	931
28	SING	SYD	28	0	21	11	21	SINGAPORE	SQ231	380-841	600	213	AVDALE PATH 1 KM	74.9	1119
28	SAN FRAN	SYD	27	21	6	8	6	UNITED	UA863	787-9	2950	2563	OVER LOGGER	74.4	806
28	BANGCOCK	SYD	27	20	12	7	12	QANTAS	QF24	330-303	4350	3963	OVER LOGGER	73.7	712
28	BRISB	SYD	28	5	30	16	30	QANTAS	QF537	737-838	4500	4113	OVER LOGGER	73.6	1630
28	HAMILTON	SYD	28	4	56	15	56	QANTAS	QF867	737-838	4800	4413	OVER LOGGER	73.6	1556
28	CAIRNS	SYD	27	23	38	10	38	JETSTAR	JQ953	320-232	3675	3288	OVER LOGGER	73.4	1038
28	GOLDCST	SYD	28	1	29	12	29	JETSTAR	JQ409	320-232	3600	3213	OVER LOGGER	73.3	1229
28	COFFSHBR	SYD	28	6	14	17	14	VIRGIN	VA1166	737-8FE	4625	4238	OVER LOGGER	73.3	1714
28	VANCOUVER	SYD	27	22	34	9	34	CANADA	AC 33	777-233	4275	3888	AVDALE PATH 1 KM	73.1	934
28	GOLDCST	SYD	28	0	33	11	33	QANTAS	QF1565	717-2BL	4750	4363	OVER LOGGER	72.9	1133
28		SYD	27	19	36	6	36	QANTAS	QF20	330-303	3750	3363	AVDALE PATH 1 KM	72.8	6.36
28	TOKYO	SYD	27	21	54	8	54	QANTAS	QF26	747-438	2750	2363	AVDALE PATH 1 KM	72.5	855
27	BRISBANE	SYD	27	10	12	21	12	QANTAS	JQ1725	717-BL	4250	3863	OVER LOGGER	72.4	2115
28	SUNSHINE C	SYD	28	2	1	13	1	VIRGIN	VA482	737-8FE	3875	3488	OVER LOGGER	72.2	1301
28	BRISB	SYD	28	6	24	17	24	QANTAS	QF541	737-838	5150	4763	OVER LOGGER	72.2	1724
28	AUCKLAND	SYD	27	21	48	8	48	JETSTAR	JQ202	320-232	2925	2538	950M EAST	71.9	848
28	GOLDCST	SYD	27	23	11	10	11	VIRGIN	VA506	737-8FE	3725	3338	OVER LOGGER	71.8	1011
28	GOLDCST	SYD	28	1	38	12	38	TIGER	TT609	320-232	5100	4713	OVER LOGGER	71.8	1239
28	BALLINA	SYD	27	23	30	10	30	JETSTAR	JQ457	320-232	3150	2763	OVER LOGGER	71.7	1030
28	GOLDCST	SYD	28	1	26	12	26	VIRGIN	VA516	737-8FE	4025	3638	OVER LOGGER	71.7	1226
28	CAIRNS	SYD	28	2	44	13	44	TIGER	TT677	320-232	3900	3513	OVER LOGGER	71.5	1344
28	LA	SYD	27	20	36	7	36	UNITED	UA839	787-9	2975	2588	500 M EAST	71.4	737
28	TOKYO	SYD	27	19	48	6	48	JAPAN	JL771	787-9	2950	2563	AVDALE PATH 1 KM	71.3	648
28	CHRISTCH	SYD	27	20	48	7	48	JETSTAR	JQ140	320-232	2950	2563	OVER LOGGER	71.3	748
28	GOLD C	SYD	27	22	6	9	6	QANTAS	QF861	737-838	4525	4138	OVER LOGGER	71.2	903
28	BRISB	SYD	28	2	28	13	28	QANTAS	JQ1717	717-2BL	4975	4588	OVER LOGGER	71.2	1327
28	DALLAS	SYD	27	19	0	6	0	QANTAS	QF8	380-842	3250	2863	AVDALE PATH 1 KM	71.1	600
27	DARWIN	SYD	26	19	0	6	0	QANTAS	QF829	737-838	4125	3738	5 BLCKS A1 A3	71	6:00
28	FIJI	SYD	28	0	50	11	50	FIJI	FJ1915	737-8X2	2975	2588	OVER LOGGER	70.9	1150
28	XIAN	SYD	27	20	36	7	36	HIANAN	HU7993	330-343	3525	3138	AVDALE PATH 1 KM	70.9	736
27	PERTH	SYD	27	9	24	20	24	QANTAS	QF582	737-838	3100	2713	AVDALE PATH 1 KM	70.8	2025
28	HERVEY B	SYD	28	3	26	14	26	VIRGIN	VA1556	737-8FE	4700	4313	OVER LOGGER	70.8	1426
28	HK	SYD	27	23	59	10	59	QANTAS	QF118	330-202	3874	3487	OVER LOGGER	70.7	1100
28	TOKYO	SYD	27	22	30	9	30	NIPPON	NH879	787-9	2950	2563	AVDALE PATH 1 KM	70.6	930
28	GOLDCST	SYD	28	3	45	14	45	QANTAS	QF859	737-838	4150	3763	OVER LOGGER	70.6	1444
28	DARWIN	SYD	28	7	53	18	53	VIRGIN	VA1354	737-8FE	4550	4163	OVER LOGGER	70.5	1853
28	CAIRNS	SYD	28	2	58	13	58	QANTAS	QF925	737-838	5275	4888	OVER LOGGER	70.4	1358
28	BRISBANE	SYD	27	22	18	9	18	QANTAS	QF509	737-838	4550	4163	OVER LOGGER	70.3	919

28	SUNSHINE C	SYD	28	4	24	15	24	VIRGIN	VA484	737-8FE	3875	3488	OVER LOGGER	70.2	1525
28	AUKLAND	SYD	27	21	24	8	24	ANZ	NZ101	777-219	2925	2538	AVDALE PATH 1 KM	70.1	824
28	CANBERRA	SYD	27	21	0	8	0	VIRGIN	VA629	ATR 72-600	3575	3188	OVER LOGGER	70.1	800
28	WELLINGTN	SYD	27	21	12	8	12	QANTAS	QF162	737-838	2900	2513	OVER LOGGER	70	811
28	GOLD C	SYD	27	22	6	9	6	JETSTAR	JQ403	320-232	4075	3688	OVER LOGGER	70	906
28	BALLINA	SYD	28	2	4	13	4	JETSTAR	JQ459	320-232	4200	3813	OVER LOGGER	70	1305
28	GOLD C	SYD	28	8	13	19	13	TIGER	TT623	320-232	3550	3163	OVER LOGGER	69.8	1913
28	GOLDCST	SYD	27	23	19	10	19	JETSTAR	JQ405	320-232	4125	3738	OVER LOGGER	69.7	1019
28	CHRISTCH	SYD	27	20	6	7	6	QANTAS	QF7528	767-381	2950	2563	OVER LOGGER	69.6	706
28	PROSERPINE	SYD	28	4	42	15	42	TIGER	TT397	320-232	4100	3713	OVER LOGGER	69.6	1542
28	BRISB	SYD	27	22	42	9	42	TIGER	TT357	320-232	4500	4113	OVER LOGGER	69.4	944
28	BRISBANE	SYD	27	22	42	9	42	JETSTAR	JQ813	321-231	4025	3638	OVER LOGGER	69.3	942
28	BRISB	SYD	28	8	27	19	27	QANTAS	QF549	737-838	5850	5463	OVER LOGGER	69.3	1926
28	QTOWN	SYD	28	5	36	16	36	ANZ	NZ831	320-232	2925	2538	OVER LOGGER	69.2	1635
28	MANILA	SYD	27	23	17	10	17	CEBU	5J41	330-343	3400	3013	AVDALE PATH 1 KM	69.2	1017
28	XIAMMEN	SYD	27	22	58	9	58	XIAMEN	MF801	787-8	3300	2913	AVDALE PATH 1 KM	69.1	958
28	GOLD C	SYD	28	8	55	19	55	JETSTAR	jq423	321-231	3425	3038	OVER LOGGER	69.1	1955
28	PERTH	SYD	27	19	6	6	6	VIRGIN	VA570	737-8FE	2950	2563	2 BLOCKS EAST	69	605
28	SHANGHAI	SYD	27	22	54	9	54	QANTAS	QF130	330-202	3875	3488	AVDALE PATH 1 KM	69	954
28	GOLD C	SYD	28	6	58	17	58	QANTAS	QF1567	717-2BL	5550	5163	OVER LOGGER	69	1757
28	CHRISTCH	SYD	28	8	31	19	31	EMERITES	EK413	380-861	2875	2488	500 M EAST	68.9	1931
28	GOLD C	SYD	28	10	46	21	46	JETSTAR	JQ427	321-231	3900	3513	OVER LOGGER	68.9	2146
28	VANCOUVER	SYD	27	22	36	9	36	CANADA	AC33	777-233	4275	3888	AVDALE PATH 1 KM	68.9	935
28	BRISB	SYD	28	0	25	11	25	VIRGIN	VA932	737-8FE	4700	4313	OVER LOGGER	68.9	1126
28	HK	SYD	27	19	12	6	12	VIRGIN	VA82	330-243	3975	3588	AVDALE PATH 1 KM	68.8	613
27	GOLD C	SYD	27	9	54	20	54	JETSTAR	JQ419	320-232	4100	3713	OVER LOGGER	68.8	2052
27	DALLAS	SYD	26	19	6	6	6	QANTAS	QF8	380-842	3250	2863	AVDALE PATH 1 KM	68.7	6:05
28	JOBURG	SYD	28	4	50	15	50	QANTAS	QF64	747-438	3450	3063	AVDALE PATH 1 KM	68.7	1551
28	BRISBANE	SYD	27	21	18	8	18	QANTAS	QF505	737-838	4350	3963	OVER LOGGER	68.7	818
28	GOLD C	SYD	28	5	44	16	44	JETSTAR	JQ415	320-232	5200	4813	OVER LOGGER	68.7	1644
27	BRISBANE	SYD	27	8	54	19	54	JETSTAR	JQ821	320-232	4150	3763	OVER LOGGER	68.5	19.52
28	MORESBY	SYD	28	8	7	19	7	NUIGINI	PX1	767-341	5900	5513	OVER LOGGER	68.5	1906
28	BRISB	SYD	28	2	6	13	6	JETSTAR	JQ815	320-232	4675	4288	OVER LOGGER	68.4	1306
27	GOLD C	SYD	27	10	6	21	6	TIGER	TT623	320-232	3850	3463	OVER LOGGER	68.3	2104
28	GOLD C	SYD	27	21	30	8	30	JETSTAR	JQ401	320-232	3975	3588	OVER LOGGER	68.2	830
27	CAIRNS	SYD	27	10	24	21	24	JETSTAR	JQ959	321-231	3825	3438	5 BLOCKS WEST	68.1	2124
27	BRISBANE	SYD	27	11	0	22	0	JETSTAR	JQ819	320-232	4050	3663	OVER LOGGER	68.1	2157
28	BRISB	SYD	28	4	36	15	36	VIRGIN	VA950	737-8KG	4700	4313	OVER LOGGER	68.1	1536
28	WELLINGTN	SYD	27	20	54	7	54	ANZ	NZ845	320-232	2925	2538	OVER LOGGER	68	754
28	GOLDCST	SYD	28	3	36	14	36	JETSTAR	JQ411	320-232	4725	4338	OVER LOGGER	68	1435
28	SHANGHAI	SYD	27	22	0	9	0	AIR CHINA	CA175	330-243	2900	2513	AVDALE PATH 1 KM	67.8	900
28	ABU DHABI	SYD	27	19	12	6	12	ETIHAD	EY450	777-3FX	3000	2613	AVDALE PATH 1 KM	67.8	612
28	SINGAPORE	SYD	27	19	36	6	36	SINGAPORE	SQ221	380-841	3650	3263	AVDALE PATH 1 KM	67.8	634
28	BRISB	SYD	28	10	35	21	35	TIGER	TT387	320-232	3825	3438	OVER LOGGER	67.8	2135
27	GUANGZHOU	SYD	27	9	27	20	27	CHINA STH	CZ301	330-343	3850	3463	AVDALE PATH 1 KM	67.7	2028
28	DELHI	SYD	27	19	54	6	54	AIR INDIA	AI302	787-8	2950	2563	AVDALE PATH 1 KM	67.4	655
28	BRISB	SYD	28	1	22	12	22	QANTAS	QF521	737-838	4400	4013	OVER LOGGER	67.3	1222
28	BRISB	SYD	28	5	16	16	16	VIRGIN	VA954	737-8FE	4400	4013	OVER LOGGER	67.3	1616
28	CAIRNS	SYD	28	4	5	15	5	VIRGIN	VA1418	737-8FE	4825	4438	OVER LOGGER	67.2	1506

28	BRISBANE	SYD	27	21	12	8	12	VIRGIN	VA908	737-7FE	4150	3763	OVER LOGGER	67.1	812
28	CAIRNS	SYD	27	22	45	9	45	VIRGIN	VA1408	737-8FE	4075	3688	OVER LOGGER	66.9	944
28	AUCKLAND	SYD	27	21	42	8	42	LATAM CHIL	LA801	787-9	2950	2563	0.5 KM WEST	66.8	841
28	GOLD C	SYD	28	7	35	18	35	VIRGIN	VA532	737-8FE	4550	4163	OVER LOGGER	66.8	1835
27	HONG K	SYD	27	11	6	22	6	CATHAY	CX139	777-367	4700	4313	5 BLOCKS WEST	66.8	2202
28	BALLINA	SYD	28	7	43	18	43	JETSTAR	JQ461	320-232	3675	3288	OVER LOGGER	66.7	1843
28	TOWNESVILLE	SYD	28	6	26	17	26	JETSTAR	JQ913	320-232	4075	3688	OVER LOGGER	66.7	1727
27	SUNSHINE	SYD	27	10	36	21	36	JETSTAR	JQ789	320-232	4100	3713	OVER LOGGER	66.7	2134
28	JAKARTA	SYD	27	19	36	6	36	QANTAS	QF42	330-202	3025	2638	AVDALE PATH 1 KM	66.6	636
28	HK	SYD	27	22	24	9	24	CATHAY	CX161	777-367	3750	3363	AVDALE PATH 1 KM	66.6	925
28	SHANGHAI	SYD	27	22	42	9	42	CHINA	MU561	330-243	2975	2588	AVDALE PATH 1 KM	66.5	944
28	GOLD C	SYD	28	9	30	20	30	JETSTAR	JQ425	320-232	4200	3813	OVER LOGGER	66.3	2030
27	BRISBANE	SYD	27	8	48	19	48	TIGER	TT379	320-232	4500	4113	OVER LOGGER	66.3	19:49
28	DUBAI	SYD	27	20	30	7	30	EMERITES	EK412	380-861	2800	2413	AVDALE PATH 1 KM	66.2	730
28	BRISB	SYD	28	9	55	20	55	VIRGIN	VA892	737-8FE	4800	4413	OVER LOGGER	66.2	2054
28	MELB	SYD	27	23	15	10	15	QANTAS	QF418	737-838	2875	2488	AVDALE PATH 1 KM	66.1	1015
27	SINGAPORE	SYD	27	8	45	19	45	SING	SQ288	777-312	4100	3713	AVDALE PATH 1 KM	66.1	19:45
28	SUNSHINE C	SYD	28	4	20	15	20	JETSTAR	JQ787	320-232	4475	4088	OVER LOGGER	66.1	1521
27	BRISBANE	SYD	27	10	48	21	48	QANTAS	QF553	737-838	4875	4488	OVER LOGGER	66.1	2149
28	PERTH	SYD	27	19	18	6	18	JETSTAR	JQ989	320-232	3600	3213	AVDALE PATH 1 KM	66	618
28	GOLDCST	SYD	28	0	23	11	23	TIGER	TT607	320-232	4550	4163	OVER LOGGER	65.9	1124
28	BRISB	SYD	28	10	49	21	49	V	VA988	737-8FE	3875	3488	OVER LOGGER	65.8	2149
28	GOLD C	SYD	28	7	22	18	22	JETSTAR	JQ413	320-232	4850	4463	OVER LOGGER	65.5	1822
28	BRISB	SYD	28	8	33	19	33	VIRGIN	VA970	737-8FE	3925	3538	OVER LOGGER	65.4	1933
27	BRISBANE	SYD	27	9	6	20	6	TIGER	TT381	320-232	4575	4188	OVER LOGGER	65.4	20:06
28	BRISB	SYD	28	8	17	19	17	QANTAS	QF547	737-838	5200	4813	OVER LOGGER	65.3	1917
28	CAIRNS		27	22	24	9	24	VIRGIN	VA1408	737-8FE	3225	2838	AVDALE PATH 1 KM	65.2	926
28	BRISB	SYD	28	8	52	19	52	QANTAS	QF551	737-838	4725	4338	OVER LOGGER	65.2	1951
28	MELBOURNE	SYD	27	20	0	7	0	JETSTAR	JQ602	320-232	2950	2563	AVDALE PATH 1 KM	65.1	700
28	BRISB	SYD	28	6	40	17	40	VIRGIN	VA958	737-8FE	4750	4363	OVER LOGGER	65	1740
28	MANILA	SYD	27	19	48	6	48	CATHAY	CX111	330-343	3225	2838	0.5 KM WEST	64.5	648
28	BRISB	SYD	28	9	59	20	59	QANTAS	QF553	737-838	4525	4138	OVER LOGGER	64.5	2058
27	BRISBANE	SYD	27	10	18	21	18	VIRGIN	VA986	738-8FE	4300	3913	5 BLOCKS WEST	64.3	2118
28	BRISB	SYD	28	9	39	20	39	VIRGIN	VA978	737-8FE	4950	4563	OVER LOGGER	64.3	2040
28	CAIRNS	SYD	28	7	2	18	2	ALLIANCE	QQ515	FOKKER 70	4975	4588	OVER LOGGER	64.3	1802
28	SINGAPORE	SYD	27	19	64.2	6	64.2	SINGAPORE	BA15	777-36N	3775	3388	AVDALE PATH 1 KM	64.2	606
27	MELBOURNE	SYD	27	9	12	20	12	QANTAS	QF462	737-838	3550	3163	AVDALE PATH 1 KM	63.4	2012
27	BRISBANE	SYD	27	9	18	20	18	VIRGIN	VA978	737-8FE	4275	3888	AVDALE PATH 1 KM	63.4	2019
28	SHANGHAI	SYD	27	22	6	9	6	QANTAS	QF130	330-202	3875	3488	AVDALE PATH 1 KM	63.1	907
28	CAIRNS	SYD	28	2	18	13	18	JETSTAR	JQ517	320-232	4200	3813	OVER LOGGER	63.1	1319
28	HO CI MINH	SYD	27	22	18	9	18	VEITNAM	VN773	787-9	3150	2763	AVDALE PATH 1 KM	63	918
28	BRISBANE	SYD	27	22	6	9	6	JETSTAR	JQ811	320-232	3775	3388	OVER LOGGER	63	908
28	BRISB	SYD	28	10	43	21	43	VIRGIN	VA988	737-8FE	3850	3463	OVER LOGGER	63	2139
28	BRISB	SYD	28	0	26	11	26	QANTAS	QF517	738-838	4400	4013	OVER LOGGER	62.6	1128
28	BRISB	SYD	28	6	52	17	52	TIGER	TT377	320-232	6525	6138	OVER LOGGER	62.4	1752
28	GOLD C	SYD	28	10	25	21	25	VIRGIN	VA544	737-8FE	5025	4638	OVER LOGGER	62.2	2126
27	KL	SYD	27	9	20	20	20	MALAYSIAN	MH141	330-323	3100	2713	AVDALE PATH 1 KM	61.6	2020
27	BRISBANE	SYD	27	11	18	22	18	VIRGIN	VA992	737-8FE	4375	3988	OVER LOGGER	61.6	2222
28	SUNSHINE	SYD	28	10	5	21	5	JETSTAR	JQ791	320-232	4675	4288	OVER LOGGER	61	2106

APPENDIX C1

MONITORING OF FLIGHTS OVER DOROTHY ST MAYS HILL JANUARY 2019

ELEVATION FT 161 DATA CRONOLOGICALY

DAY	FROM	TO	UTC DAY	TIME UTC HR	TIME UTC MIN	TIME ESDST HR	TIME ESDST MIN	AIRLINE	FLIGHT	AIRCRAFT	ALTITUDE	HEIGHT ABOVE GL	LOCATION REF TO DOROTHY ST	DATA LAMax	DATA TIME ESDST
22	SYD	PERTH	22	3	25	14	25	VIRGIN	VA559	737-8FE	4450	4289	2 BLOCKS STH	71.41	14:26
22	SYD	PERTH	22	4	7	15	7	QANTAS	QF557	330-202	4025	3864	2 BLOCKS NTH	70.12	15:07
22	SYD	ADL	22	4	36	15	36	QANTAS	QF761	737-838	6325	6164	4 BLOCKS STH	64.5	15:43
22	SYD	SING	22	5	16	16	16	SINGAPORE	SQ222	380-841	3650	3489	2 BLOCKS NTH M4	65.76	16:15
22	SYD	DOHA	22	5	40	16	40	QATAR	QR907	777-3DZ	3525	3364	3 BLOCKS NTH	71.96	16:41
22	SYD	ABU DHABI	22	5	58	16	58	ETIHAD	EY451	777-3FX	4457	4296	2 BLOCKS STH	68.6	16:56
22	SYD	DENPASAR	22	6	10	17	10	QANTAS	QF43	330-203	4300	4139	2 BLOCKS STH	69.06	17:10
22	SYD	ADL	22	6	14	17	14	QANTAS	QF765	737-838	4350	4189	3 BLOCKS STH	67.47	17:09
22	SYD	DUBAI	22	6	20	17	20	EMIRATES	EK417	777-31	4350	4189	M4 END COLEMAN ST	68.68	17:20
22	SYD	PERTH	22	7	7	18	7	QANTAS	QF571	330-202	5725	5564	1 BLOCKS STH	72.58	18:12
22	SYD	PERTH	22	8	2	19	2	QANTAS	QF743	737-838	5125	4964	1 BLOCK STH	67.35	19:00
22	SYD	PERTH	22	8	31	19	31	VIRGIN	VA569	330-243	5550	5389	1 BLOCK NTH	68.69	19:30
22	SYD	SING	22	8	34	19	34	SINGAPORE	SQ242	777-312	4050	3889	M4 END COLEMAN ST	65.07	19:33
22	SYD	SING	22	8	50	19	50	SINGAPORE	SQ242	777-312	4050	3889	M4 END COLEMAN ST	62.03	19:50
22	SYD	SING	22	8	49	19	49	SINGAPORE	TR13	787-9	4275	4114	3 BLOCKS NTH	61.26	19:48
22	SYD	ADEL	22	8	52	19	52	QANTAS	QF783	737-838	8225	8064	2 BLOCKS STH	60.13	19:50
22	SYD	ADEL	22	9	18	20	18	QANTAS	QF583	330-202	4875	4714	2 BLOCKS STH	66.87	20:18
22	SYD	DENPASAR	22	9	31	20	31	JETSTAR	JQ37	787-8	5325	5164	2 BLOCKS STH	65.44	20:30
22	SYD	ADEL	22	9	34	20	34	VIRGIN	VA444	737-8FE	5375	5214	4 BLOCKS STH	69.22	20:37
22	SYD	BANGKOK	22	9	39	20	39	EMIRATES	EK419	777-36	5325	5164	3 BLOCKS NTH	67.87	20:38
22	SYD	SING	22	10	31	21	31	FEDEX	FX5283	MD11F	2925	2764	5 BLOCKS STH	67.1	21:28
22	SYD	DUBAI	22	11	3	22	3	EMIRATES	EK413	380-861	4775	4614	M4 END COLEMAN ST	68.72	22:03
22	SYD	DOHA	22	11	7	22	7	QATAR	QR909	380-861	3200	3039	2 BLOCKS NTH M4	67.64	22:06
22	SYD	ABU DHABI	22	11	22	22	22	ETIHAD	EY455	380-861	4300	4139	2 BLOCKS NTH M4	68.85	22:21
22	SYD	KUL	22	11	34	22	34	MALAYSIAN	MH140	330-323	3225	3064	1 BLOCK STH	67.24	22:33
23	SYD	DUBAI	22	19	17	6	17	EMERITES	EK415	380-861	4325	4164	5 BKS NTH M4 COLEMA	64.54	6:16
23	SYD	PERTH	22	19	51	6	51	QANTAS	QF565	330-202	3800	3639	1 BLOCK STH	65.1	6:51
23	SYD	ADEL	22	19	56	6	56	QANTAS	QF	330-202	4400	4239	4 BLOCKS STH	63.45	6:55
23	SYD	ADEL	22	20	20	7	20	JETSTAR	JQ762	320-232	6250	6089	4 BLOCKS STH	67.79	7:19
25	SYD	DUBAI	24	19	14	6	14	EMIRATES	EK415	380-861	3050	2889	6 BLOCKS NTH M4	65.25	6:13
25	SYD	PERTH	24	19	49	6	49	QANTAS	QF565	737-838	5875	5714	2 BLOCKS NTH	65.25	6:51
25	SYD	ADEL	24	20	0	7	0	QANTAS	QF735	737-838	5500	5339	1 BLOCK STH	60.34	6:59
25	SYD	ADEL	24	20	24	7	24	JETSTAR	JQ762	320-232	6550	6389	5 BLOCKS STH	60.53	7:24
25	SYD		24	20	30	7	30	VIRGIN	VA 551	330- 243	5000	4839	3 BLOCKS NTH	66.13	7:29
25	SYD	AYERS R	24	23	12	10	12	VIRGIN	VA627	737-8FE	5900	5739	OVER DOROTHY	64.47	10:13
25	SYD	ADL	24	23	48	10	48	QANTAS	JQ741	737-838	6000	5839	OVER DOROTHY	63.86	10:48
25	SYD	PERTH	25	0	30	11	30	QANTAS	QF581	330-202	3100	2939	6 BLOCKS STH	66.09	11:29
25	SYD	DENPASAR	25	0	36	11	36	VIRGIN	VA33	737-8FE	4300	4139	6 BLOCKS STH	66.89	11:35
25	SYD	PERTH	25	1	15	12	15	QANTAS	QF567	747-438	4725	4564	6 BLOCKS STH	66.1	12:13
25	SYD	SING	25	1	30	12	30	SINGAPORE	SQ232	380-841	4575	4414	M4 END COLEMAN ST	62.32	12:30
25	SYD	JAKARTA	25	3	15	14	15	QANTAS	QF41	330-303	4275	4114	6 BLOCKS STH	68.52	14:13

25	SYD	PEKNG	25	3	0	14	0	QANTAS	QF107	330-202	4725	4564		66.95	14:01
25	SYD	JAKARTA	25	3	6	14	6	QANTAS	QF41	330-303	3350	3189		63.49	14:05
25	SYD	PRTH	25	3	30	14	30	QANTAS	QF577	737-838	5300	5139	OVER DOROTHY	63.39	14:30
25	SYD	NA	25	4	0	15	0	QANTAS	QF6011	380-842	3825	3664	2 BKS NTH M4 COLEMA	64.56	15:00
25	SYD	DOHA	25	4	36	15	36	QATAR	QR907	777-3DZ	2575	2414	3 BLOCKS STH	63.84	15:36
25	SYD	ADL	25	6	0	17	0	JETSTAR	JQ770	320-232	4225	4064	M4 END COLEMAN ST	64.83	16:59
25	SYD	PERTH	25	6	18	17	18	QANTAS	QF569	737-838	4300	4139	1 BLOCK STH	73.14	17:19
25	SYD	PERTH	25	7	30	18	30	QANTAS	QF571	330-202	3750	3589	6 BLOCKS STH	67.05	7:40
25	SYD	DENPASAR	25	7	54	18	54	VIRGIN	VA37	737-8FE	2150	1989	M4 END COLEMAN ST	63.51	18:57
25	SYD	PERTH	25	10	0	21	0	TIGER	TT755	320-232	4475	4314	3 BLOCKS STH	61.44	21:04
25	SYD	KL	25	11	0	22	0	AIRASIA	DV221	330-343	2050	1889	5 BLOCKS STH	68.74	21:55
25	SYD	DOHA	25	11	12	22	12	QANTAS	QR909	380-861	3750	3589	M4 END COLEMAN ST	68.99	22:15
25	SYD	DUBAI	25	11	18	22	18	EMIRATES	EK413	380-861	1800	1639	M4 END COLEMAN ST	66.84	22:21
25	SYD	ABU DHABI	25	11	24	22	24	ETIHAD	EY455	380-861	5425	5264	5 BLOCKS NTH M4	62.21	22:24
29	SYD	DUBAI	28	19	18	6	18	EMIRATES	EK415	380-861	4375	4214	1 BLOCK NORTH	70.57	6:19
29	SYD	ADEL	28	20	12	7	12	JETSTAR	JQ762	320-232	7425	7264	4 BLOCKS STH	61.14	7:12
29	SYD	SINGA	28	22	28	9	28	SINGAPORE	SQ212	777-312	4450	4289	OVER DOROTHY ST	63.46	9:28
29	SYD	PERTH	28	23	0	10	0	VIRGIN	VA 555	330-243	5150	4989	2 BLOCKS NORTH	63.27	10:00
29	SYD	ALICE	28	23	36	10	36	QANTAS	QF790	737-838	2450	2289	OVER DOROTHY ST	64.13	10:35
29	SYD	PERTH	28	24	0	11	0	QANTAS	QF581	737-838	4025	3864	5 BLOCKS STH	62.76	11:00
29	SYD	AIRS ROCK	29	0	5	11	5	JETSTAR	JST660	320-232	5575	5414	1 BLOCK STH	63.47	11:06
29	SYD	DENPASAR	29	0	42	11	42	VIRGIN	VA33	737-8FE	6850	6689	5 BLOCKS STH	62.55	11:42
29	SYD	JAKARTA	29	1	1	12	1	GARUDA	GA713	330-343	3650	3489	3 BLOCKS STH	61.53	12:06
29	SYD	JOHHASBO	29	1	11	12	11	QANTAS	QF63	747-438	4075	3914	WESTMEAD HOSP	71.01	12:10
29	SYD	DENPASAR	29	1	11	12	11	GARUDA	GA 735	330-343	5475	5314	1 BLOCK NORTH		
29	SYD	KUALA	29	1	23	12	23	AIRASIA	D7223	330-343	4150	3989	3 BLOCKS STH	69.49	12:23
29	SYD	SINGA	29	1	36	12	36	SINGAPORE	SQ232	380-841	4575	4414	1 BLOCK NTH M4	65.21	12:36
29	SYD	ADL	29	2	0	13	0	QANTAS	QF1557	717-2K9	5825	5664	OVER DOROTHY ST	64.82	12:59
29	SYD	ADL	29	2	1	13	1	VIRGIN	VA418	737-8FE	6075	5914	3 BLOCKS STH	59.45	13:00
29	SYD	PERTH	29	3	8	14	8	VIRGIN	VA 559	737-8FE	5275	5114	OVER DOROTHY ST	65.52	14:07
29	SYD	JAKARTA	29	3	0	14	0	QANTAS	QF41	330-202	3875	3714	4 BLOCKS STH	66.58	14:00
29	SYD	PERTH	29	3	30	14	30	QANTAS	QF577	330-202	3075	2914	2 BLOCKS STH	66.58	14:30
29	SYD	ADL	29	4	40	15	40	JETSTAR	JQ764	320-232	5425	5264	6 BLOCKS SOUTH	63.22	15:40
29	SYD	SINGA	29	5	14	16	14	SINGAPORE	SQ222	380-841	3350	3189	OVER DOROTHY ST	69.54	16:14
29	SYD	DOHA	29	5	36	16	36	QATAR	QR907	777-3DZ	4125	3964	M4 COLEMAN	72.24	16:36
29	SYD	ADEL	29	5	42	16	42	JETSTAR	JQ770	320-232	6800	6639	4 BLOCKS STH	61.79	16:42
29	SYD	ABU	29	5	54	16	54	ETIHAD	EY451	777-3FX	5625	5464	6 BLOCKS NTH M4	64.22	16:54
29	SYD	DUBAI	29	6	24	17	24	EMIRATES	EK417	777-31H	4425	4264	M4 COLEMAN	64.68	17:25
29	SYD	ADEL	29	8	0	19	0	QANTAS	QF743	737-838	4700	4539	OVER DOROTHY ST	67.74	19:02
29	SYD	SINGA	29	8	25	19	25	SINGAPORE	SQ242	777-312	3752	3591	OVER DOROTHY ST	63.47	19:25
29	SYD	SINGA	29	8	35	19	35	SCOOT	TR13	787-9	3825	3664	OVER DOROTHY ST	65.88	19:43
29	SYD	ADEL	29	8	48	19	48	QANTAS	QF783	737-838	2700	2539	2 BLOCKS STH	63.25	19:48
29	SYD	SINGA	29	10	42	21	42	FEDEX	FX5283	MD-11F	8750	8589	OVER DOROTHY ST	63.88	21:39
29	SYD	DOHA	29	11	0	22	0	QATAR	XR909	380-861	2700	2539	2 BLOCKS NORTH	67.41	22:00
29	SYD	DUBAI	29	11	0	22	0	EMIRATES	EK413	380-861	2525	2364	M4 COLEMAN	67.41	22:00
29	SYD	ABUDHABI	29	11	7	22	7	ETIHAD	EY55	380-861	4100	3939	M4 COLEMAN	68.06	22:05
29	SYD	KL	29	11	30	22	30	MALAYSIAN	MH140	330-323	4950	4789	2 BLOCKS NORTH	64.64	22:25
30	SYD	DUBAI	29	19	18	6	18	EMIRATES	EK415	380-861	4125	3964	4 BLOCKS NTH M4	62.75	6:20

30	SYD	SINGA	29	22	18	9	18	SINGAPORE	SQ212	777-312	6675	6514	2 BLOCKS NTH M4	60.77	9:23
30	SYD	AYERS	29	23	48	10	48	JETSTAR	JQ660	320-232	5775	5614	6 BLOCKS STH	60.26	10:48
30	SYD	ADL	29	23	55	10	55	QANTAS	QF741	737-838	5000	4839	2 BLOCKS STH	65.78	10:53
30	SYD	QTWN	29	23	57	10	57	VIRGIN	VA163	737-8FE	6525	6364	3 BLOCKD NTH	68.41	10:57
30	SYD	PERTH	29	24	0	11	0	QANTAS	QF581	737-838	6450	6289	1 BLOCK NORTH	71.64	11:01
30	SYD	JAKARTA	30	0	48	11	48	QANTAS	GA713	330-343	3650	3489	3 BLOCKS STH	63.44	11:48
30	SYD	DENPASAR	30	0	45	11	45	VIRGIN	VA33	737-8FE	6850	6689	OVER DOROTHY	68.21	11:46
30	SYD	PERTH	30	0	49	11	49	QANTAS	QF567	737-838	4800	4639	1 BLOCK STH	60.68	11:49
30	SYD	DENPASAR	30	1	12	12	12	GARUDA	GA735	330-343	4025	3864	3 BLOCKS STH	66.99	12:15

NOTES
 THE DEPARTURE FLIGHT DISTANCE OF DOROTHY ST MAYS HILL FROM KSA IS 21 KM. THE STRAIGHTLINE DEPARTURE DISTANC FROM WSA IS 19.28 KM
 ON THIS BASIS THE HEIGHT OF AIRCRAFT AND NOISE LEVELS RECORDED AT DOROTHY ST MAYS HILL ARE APPLICABLE TO BLA
 ELEVATION MAIN ST BLACKTOWN 57 M =187 FT

SUMMARY OF LAMax

COMPARISON WITH NATS DATA FOR AIRCRAFT TYPE AND HEIGHT

NOTE: SOME AIRCRAFT FLIGHT PATHS NOT OVER DATA LOGGER LOCATION

AIRCRAFT	ALTITUDE	HEIGHT ABOVE GL	LOCATION REF TO DOROTHY ST	RECORDED LAMax	NATS DATA dBA FOR HEIGHT
747-438	4725	4564	6 BLOCKS STH	66.1	75-72
380-861	4375	4214	1 BLOCK NORTH	70.57	76-73
787-8	5325	5164	2 BLOCKS STH	65.44	67-64
777-3DZ	3525	3364	3 BLOCKS NTH	71.96	75-71
737-838	4300	4139	1 BLOCK STH	73.14	66-63
737-838	6450	6289	1 BLOCK NORTH	71.64	60-59
737-8FE	4450	4289	2 BLOCKS STH	71.41	66-63
737-8FE	5375	5214	4 BLOCKS STH	69.22	63-60
330-343	4150	3989	3 BLOCKS STH	69.49	73-69
330-323	3225	3064	1 BLOCK STH	67.24	77-73
330-202	3875	3714	4 BLOCKS STH	66.58	77-73
320-232	4225	4064	M4 END COLEMAN ST	64.83	66-63

APPENDIX C2

MONITORING OF FLIGHTS OVER DOROTHY ST MAYS HILL JANUARY 2019

ELEVATION FT 161 DATA SORT dBA

DAY	FROM	TO	UTC DAY	TIME UTC HR	TIME UTC MIN	TIME ESDST HR	TIME ESDST MIN	AIRLINE	FLIGHT	AIRCRAFT	ALTITUDE	HEIGHT ABOVE GL	LOCATION REF TO DOROTHY ST	DATA LAMax	DATA TIME ESDST
25	SYD	PERTH	25	6	18	17	18	QANTAS	QF569	737-838	4300	4139	1 BLOCK STH	73.14	17:19
22	SYD	PERTH	22	7	7	18	7	QANTAS	QF571	330-202	5725	5564	1 BLOCKS STH	72.58	18:12
29	SYD	DOHA	29	5	36	16	36	QATAR	QR907	777-3DZ	4125	3964	M4 COLEMAN	72.24	16:36
22	SYD	DOHA	22	5	40	16	40	QATAR	QR907	777-3DZ	3525	3364	3 BLOCKS NTH	71.96	16:41
30	SYD	PERTH	29	24	0	11	0	QANTAS	QF581	737-838	6450	6289	1 BLOCK NORTH	71.64	11:01
22	SYD	PERTH	22	3	25	14	25	VIRGIN	VA559	737-8FE	4450	4289	2 BLOCKS STH	71.41	14:26
29	SYD	JOHHASBO	29	1	11	12	11	QANTAS	QF63	747-438	4075	3914	WESTMEAD HOSP	71.01	12:10
29	SYD	DUBAI	28	19	18	6	18	EMIRATES	EK415	380-861	4375	4214	1 BLOCK NORTH	70.57	6:19
22	SYD	PERTH	22	4	7	15	7	QANTAS	QF557	330-202	4025	3864	2 BLOCKS NTH	70.12	15:07
29	SYD	SINGA	29	5	14	16	14	SINGAPORE	SQ222	380-841	3350	3189	OVER DOROTHY ST	69.54	16:14
29	SYD	KUALA	29	1	23	12	23	AIRASIA	D7223	330-343	4150	3989	3 BLOCKS STH	69.49	12:23
22	SYD	ADEL	22	9	34	20	34	VIRGIN	VA444	737-8FE	5375	5214	4 BLOCKS STH	69.22	20:37
22	SYD	DENPASAR	22	6	10	17	10	QANTAS	QF43	330-203	4300	4139	2 BLOCKS STH	69.06	17:10
25	SYD	DOHA	25	11	12	22	12	QANTAS	QR909	380-861	3750	3589	M4 END COLEMAN ST	68.99	22:15
22	SYD	ABU DHABI	22	11	22	22	22	ETIHAD	EY455	380-861	4300	4139	2 BLOCKS NTH M4	68.85	22:21
25	SYD	KL	25	11	0	22	0	AIRASIA	DV221	330-343	2050	1889	5 BLOCKS STH	68.74	21:55
22	SYD	DUBAI	22	11	3	22	3	EMIRATES	EK413	380-861	4775	4614	M4 END COLEMAN ST	68.72	22:03
22	SYD	PERTH	22	8	31	19	31	VIRGIN	VA569	330-243	5550	5389	1 BLOCK NTH	68.69	19:30
22	SYD	DUBAI	22	6	20	17	20	EMIRATES	EK417	777-31	4350	4189	M4 END COLEMAN ST	68.68	17:20
22	SYD	ABU DHABI	22	5	58	16	58	ETIHAD	EY451	777-3FX	4457	4296	2 BLOCKS STH	68.6	16:56
25	SYD	JAKARTA	25	3	15	14	15	QANTAS	QF41	330-303	4275	4114	6 BLOCKS STH	68.52	14:13
30	SYD	QTWN	29	23	57	10	57	VIRGIN	VA163	737-8FE	6525	6364	3 BLOCKD NTH	68.41	10:57
30	SYD	DENPASAR	30	0	45	11	45	VIRGIN	VA33	737-8FE	6850	6689	OVER DOROTHY	68.21	11:46
29	SYD	ABUDHABI	29	11	7	22	7	ETIHAD	EY55	380-861	4100	3939	M4 COLEMAN	68.06	22:05
22	SYD	BANGKOK	22	9	39	20	39	EMIRATES	EK419	777-36	5325	5164	3 BLOCKS NTH	67.87	20:38
23	SYD	ADEL	22	20	20	7	20	JETSTAR	JQ762	320-232	6250	6089	4 BLOCKS STH	67.79	7:19
29	SYD	ADEL	29	8	0	19	0	QANTAS	QF743	737-838	4700	4539	OVER DOROTHY ST	67.74	19:02
22	SYD	DOHA	22	11	7	22	7	QATAR	QR909	380-861	3200	3039	2 BLOCKS NTH M4	67.64	22:06
22	SYD	ADL	22	6	14	17	14	QANTAS	QF765	737-838	4350	4189	3 BLOCKS STH	67.47	17:09
29	SYD	DUBAI	29	11	0	22	0	EMIRATES	EK413	380-861	2525	2364	M4 COLEMAN	67.41	22:00
29	SYD	DOHA	29	11	0	22	0	QATAR	XR909	380-861	2700	2539	2 BLOCKS NORTH	67.41	22:00
22	SYD	PERTH	22	8	2	19	2	QANTAS	QF743	737-838	5125	4964	1 BLOCK STH	67.35	19:00
22	SYD	KUL	22	11	34	22	34	MALAYSIAN	MH140	330-323	3225	3064	1 BLOCK STH	67.24	22:33
22	SYD	SING	22	10	31	21	31	FEDEX	FX5283	MD11F	2925	2764	5 BLOCKS STH	67.1	21:28
25	SYD	PERTH	25	7	30	18	30	QANTAS	QF571	330-202	3750	3589	6 BLOCKS STH	67.05	7:40
30	SYD	DENPASAR	30	1	12	12	12	GARUDA	GA735	330-343	4025	3864	3 BLOCKS STH	66.99	12:15
25	SYD	PEKNG	25	3	0	14	0	QANTAS	QF107	330-202	4725	4564		66.95	14:01
25	SYD	DENPASAR	25	0	36	11	36	VIRGIN	VA33	737-8FE	4300	4139	6 BLOCKS STH	66.89	11:35
22	SYD	ADEL	22	9	18	20	18	QANTAS	QF583	330-202	4875	4714	2 BLOCKS STH	66.87	20:18
25	SYD	DUBAI	25	11	18	22	18	EMIRATES	EK413	380-861	1800	1639	M4 END COLEMAN ST	66.84	22:21
29	SYD	PERTH	29	3	30	14	30	QANTAS	QF577	330-202	3075	2914	2 BLOCKS STH	66.58	14:30

29	SYD	JAKARTA	29	3	0	14	0	QANTAS	QF41	330-202	3875	3714	4 BLOCKS STH	66.58	14:00
25	SYD		24	20	30	7	30	VIRGIN	VA 551	330- 243	5000	4839	3 BLOCKS NTH	66.13	7:29
25	SYD	PERTH	25	1	15	12	15	QANTAS	QF567	747-438	4725	4564	6 BLOCKS STH	66.1	12:13
25	SYD	PERTH	25	0	30	11	30	QANTAS	QF581	330-202	3100	2939	6 BLOCKS STH	66.09	11:29
29	SYD	SINGA	29	8	35	19	35	SCOOT	TR13	787-9	3825	3664	OVER DOROTHY ST	65.88	19:43
30	SYD	ADL	29	23	55	10	55	QANTAS	QF741	737-838	5000	4839	2 BLOCKS STH	65.78	10:53
22	SYD	SING	22	5	16	16	16	SINGAPORE	SQ222	380-841	3650	3489	2 BLOCKS NTH M4	65.76	16:15
29	SYD	PERTH	29	3	8	14	8	VIRGIN	VA 559	737-8FE	5275	5114	OVER DOROTHY ST	65.52	14:07
22	SYD	DENPASAR	22	9	31	20	31	JETSTAR	JQ37	787-8	5325	5164	2 BLOCKS STH	65.44	20:30
25	SYD	DUBAI	24	19	14	6	14	EMIRATES	EK415	380-861	3050	2889	6 BLOCKS NTH M4	65.25	6:13
25	SYD	PERTH	24	19	49	6	49	QANTAS	QF565	737-838	5875	5714	2 BLOCKS NTH	65.25	6:51
29	SYD	SINGA	29	1	36	12	36	SINGAPORE	SQ232	380-841	4575	4414	1 BLOCK NTH M4	65.21	12:36
23	SYD	PERTH	22	19	51	6	51	QANTAS	QF565	330-202	3800	3639	1 BLOCK STH	65.1	6:51
22	SYD	SING	22	8	34	19	34	SINGAPORE	SQ242	777-312	4050	3889	M4 END COLEMAN ST	65.07	19:33
25	SYD	ADL	25	6	0	17	0	JETSTAR	JQ770	320-232	4225	4064	M4 END COLEMAN ST	64.83	16:59
29	SYD	ADL	29	2	0	13	0	QANTAS	QF1557	717-2K9	5825	5664	OVER DOROTHY ST	64.82	12:59
29	SYD	DUBAI	29	6	24	17	24	EMIRATES	EK417	777-31H	4425	4264	M4 COLEMAN	64.68	17:25
29	SYD	KL	29	11	30	22	30	MALAYSIAN	MH140	330-323	4950	4789	2 BLOCKS NORTH	64.64	22:25
25	SYD	NA	25	4	0	15	0	QANTAS	QF6011	380-842	3825	3664	2 BKS NTH M4 COLEMA	64.56	15:00
23	SYD	DUBAI	22	19	17	6	17	EMERITES	EK415	380-861	4325	4164	5 BKS NTH M4 COLEMA	64.54	6:16
22	SYD	ADL	22	4	36	15	36	QANTAS	QF761	737-838	6325	6164	4 BLOCKS STH	64.5	15:43
25	SYD	AYERS R	24	23	12	10	12	VIRGIN	VA627	737-8FE	5900	5739	OVER DOROTHY	64.47	10:13
29	SYD	ABU	29	5	54	16	54	ETIHAD	EY451	777-3FX	5625	5464	6 BLOCKS NTH M4	64.22	16:54
29	SYD	ALICE	28	23	36	10	36	QANTAS	QF790	737-838	2450	2289	OVER DOROTHY ST	64.13	10:35
29	SYD	SINGA	29	10	42	21	42	FEDEX	FX5283	MD-11F	8750	8589	OVER DOROTHY ST	63.88	21:39
25	SYD	ADL	24	23	48	10	48	QANTAS	JQ741	737-838	6000	5839	OVER DOROTHY	63.86	10:48
25	SYD	DOHA	25	4	36	15	36	QATAR	QR907	777-3DZ	2575	2414	3 BLOCKS STH	63.84	15:36
25	SYD	DENPASAR	25	7	54	18	54	VIRGIN	VA37	737-8FE	2150	1989	M4 END COLEMAN ST	63.51	18:57
25	SYD	JAKARTA	25	3	6	14	6	QANTAS	QF41	330-303	3350	3189		63.49	14:05
29	SYD	SINGA	29	8	25	19	25	SINGAPORE	SQ242	777-312	3752	3591	OVER DOROTHY ST	63.47	19:25
29	SYD	AIRS ROCK	29	0	5	11	5	JETSTAR	JST660	320-232	5575	5414	1 BLOCK STH	63.47	11:06
29	SYD	SINGA	28	22	28	9	28	SINGAPORE	SQ212	777-312	4450	4289	OVER DOROTHY ST	63.46	9:28
23	SYD	ADEL	22	19	56	6	56	QANTAS	QF	330-202	4400	4239	4 BLOCKS STH	63.45	6:55
30	SYD	JAKARTA	30	0	48	11	48	QANTAS	GA713	330-343	3650	3489	3 BLOCKS STH	63.44	11:48
25	SYD	PRTH	25	3	30	14	30	QANTAS	QF577	737-838	5300	5139	OVER DOROTHY	63.39	14:30
29	SYD	PERTH	28	23	0	10	0	VIRGIN	VA 555	330-243	5150	4989	2 BLOCKS NORTH	63.27	10:00
29	SYD	ADEL	29	8	48	19	48	QANTAS	QF783	737-838	2700	2539	2 BLOCKS STH	63.25	19:48
29	SYD	ADL	29	4	40	15	40	JETSTAR	JQ764	320-232	5425	5264	6 BLOCKS SOUTH	63.22	15:40
29	SYD	PERTH	28	24	0	11	0	QANTAS	QF581	737-838	4025	3864	5 BLOCKS STH	62.76	11:00
30	SYD	DUBAI	29	19	18	6	18	EMIRATES	EK415	380-861	4125	3964	4 BLOCKS NTH M4	62.75	6:20
29	SYD	DENPASAR	29	0	42	11	42	VIRGIN	VA33	737-8FE	6850	6689	5 BLOCKS STH	62.55	11:42
25	SYD	SING	25	1	30	12	30	SINGAPORE	SQ232	380-841	4575	4414	M4 END COLEMAN ST	62.32	12:30
25	SYD	ABU DHABI	25	11	24	22	24	ETIHAD	EY455	380-861	5425	5264	5 BLOCKS NTH M4	62.21	22:24
22	SYD	SING	22	8	50	19	50	SINGAPORE	SQ242	777-312	4050	3889	M4 END COLEMAN ST	62.03	19:50
29	SYD	ADEL	29	5	42	16	42	JETSTAR	JQ770	320-232	6800	6639	4 BLOCKS STH	61.79	16:42
29	SYD	JAKARTA	29	1	1	12	1	GARUDA	GA713	330-343	3650	3489	3 BLOCKS STH	61.53	12:06
25	SYD	PERTH	25	10	0	21	0	TIGER	TT755	320-232	4475	4314	3 BLOCKS STH	61.44	21:04
22	SYD	SING	22	8	49	19	49	SINGAPORE	TR13	787-9	4275	4114	3 BLOCKS NTH	61.26	19:48
29	SYD	ADEL	28	20	12	7	12	JETSTAR	JQ762	320-232	7425	7264	4 BLOCKS STH	61.14	7:12

30	SYD	SINGA	29	22	18	9	18	SINGAPORE	SQ212	777-312	6675	6514	2 BLOCKS NTH M4	60.77	9:23
30	SYD	PERTH	30	0	49	11	49	QANTAS	QF567	737-838	4800	4639	1 BLOCK STH	60.68	11:49
25	SYD	ADEL	24	20	24	7	24	JETSTAR	JQ762	320-232	6550	6389	5 BLOCKS STH	60.53	7:24
25	SYD	ADEL	24	20	0	7	0	QANTAS	QF735	737-838	5500	5339	1 BLOCK STH	60.34	6:59
30	SYD	AYERS	29	23	48	10	48	JETSTAR	JQ660	320-232	5775	5614	6 BLOCKS STH	60.26	10:48
22	SYD	ADEL	22	8	52	19	52	QANTAS	QF783	737-838	8225	8064	2 BLOCKS STH	60.13	19:50
29	SYD	ADL	29	2	1	13	1	VIRGIN	VA418	737-8FE	6075	5914	3 BLOCKS STH	59.45	13:00
29	SYD	DENPASAR	29	1	11	12	11	GARUDA	GA 735	330-343	5475	5314	1 BLOCK NORTH		

NOTES

THE DEPARTURE FLIGHT DISTANCE OF DOROTHY ST MAYS HILL FROM KSA IS 21 KM. THE STRAIGHTLINE DEPARTURE DISTANCE OF BLACKTOWN FROM WSA IS 19.28 KM
ON THIS BASIS THE HEIGHT OF AIRCRAFT AND NOISE LEVELS RECORDED AT DOROTHY ST MAYS HILL ARE APPLICABLE TO BLACKTOWN

ELEVATION MAIN ST BLACKTOWN 57 M = 187 FT

SUMMARY OF LAMax

COMPARISON WITH NATS DATA FOR AIRCRAFT TYPE AND HEIGHT

NOTE: SOME AIRCRAFT FLIGHT PATHS NOT OVER DATA LOGGER LOCATION

AIRCRAFT	ALTITUDE	HEIGHT ABOVE GL	LOCATION REF TO DOROTHY ST	RECORDED LAMax	NATS DATA dBA FOR HEIGHT
747-438	4725	4564	6 BLOCKS STH	66.1	75-72
380-861	4375	4214	1 BLOCK NORTH	70.57	76-73
787-8	5325	5164	2 BLOCKS STH	65.44	67-64
777-3DZ	3525	3364	3 BLOCKS NTH	71.96	75-71
737-838	4300	4139	1 BLOCK STH	73.14	66-63
737-838	6450	6289	1 BLOCK NORTH	71.64	60-59
737-8FE	4450	4289	2 BLOCKS STH	71.41	66-63
737-8FE	5375	5214	4 BLOCKS STH	69.22	63-60
330-343	4150	3989	3 BLOCKS STH	69.49	73-69
330-323	3225	3064	1 BLOCK STH	67.24	77-73
330-202	3875	3714	4 BLOCKS STH	66.58	77-73
320-232	4225	4064	M4 END COLEMAN ST	64.83	66-63

WSA EIS PREDICTED A 747 ON ARRIVAL WOULD GENERATE 60-70 dBA
 BASED ON NATS DATA A 747 AND A380 PRODUCE UP TO 75 AND 76 dBA AT 4000 FT
 RESPECTIVELY. HOWEVER NATS DATA SHOWS AN A330 AT 3714 FT GENERATES
 77 dBA THIS WAS CONFIRMED BY RECORDED DATA.
 NOTE THAT A LARGE NUMBER OF SMALLER AIRCRAFT EXCEEDED 70 dBA WITH
 A PEAK AT 73.14 dBA

AIRCRAFT	ALTITUDE	HEIGHT ABOVE GL	LOCATION REF TO DOROTHY ST	MAX LAMax DATA OR NATS
747-438	4725	4564	6 BLOCKS STH	75-72
380-861	4375	4214	1 BLOCK NORTH	76-73
787-8	5325	5164	2 BLOCKS STH	67-64
777-3DZ	3525	3364	3 BLOCKS NTH	71.96
737-838	4300	4139	1 BLOCK STH	73.14
737-838	6450	6289	1 BLOCK NORTH	71.64
737-8FE	4450	4289	2 BLOCKS STH	71.41
737-8FE	5375	5214	4 BLOCKS STH	69.22
330-343	4150	3989	3 BLOCKS STH	73-69
330-323	3225	3064	1 BLOCK STH	77-73
330-202	3875	3714	4 BLOCKS STH	77-73
320-232	4225	4064	M4 END COLEMAN ST	66-63

APPENDIX C3

MONITORING OF FLIGHTS OVER DOROTHY ST MAYS HILL JANUARY 2019

ELEVATION FT 161 DATA SORT HEIGHT

DAY	FROM	TO	UTC DAY	TIME UTC HR	TIME UTC MIN	TIME ESDST HR	TIME ESDST MIN	AIRLINE	FLIGHT	AIRCRAFT	ALTITUDE	HEIGHT ABOVE GL	LOCATION REF TO DOROTHY ST	DATA LAMax	DATA TIME ESDST
25	SYD	DUBAI	25	11	18	22	18	EMIRATES	EK413	380-861	1800	1639	M4 END COLEMAN ST	66.84	22:21
25	SYD	KL	25	11	0	22	0	AIRASIA	DV221	330-343	2050	1889	5 BLOCKS STH	68.74	21:55
25	SYD	DENPASAR	25	7	54	18	54	VIRGIN	VA37	737-8FE	2150	1989	M4 END COLEMAN ST	63.51	18:57
29	SYD	ALICE	28	23	36	10	36	QANTAS	QF790	737-838	2450	2289	OVER DOROTHY ST	64.13	10:35
29	SYD	DUBAI	29	11	0	22	0	EMIRATES	EK413	380-861	2525	2364	M4 COLEMAN	67.41	22:00
25	SYD	DOHA	25	4	36	15	36	QATAR	QR907	777-3DZ	2575	2414	3 BLOCKS STH	63.84	15:36
29	SYD	ADEL	29	8	48	19	48	QANTAS	QF783	737-838	2700	2539	2 BLOCKS STH	63.25	19:48
29	SYD	DOHA	29	11	0	22	0	QATAR	XR909	380-861	2700	2539	2 BLOCKS NORTH	67.41	22:00
22	SYD	SING	22	10	31	21	31	FEDEX	FX5283	MD11F	2925	2764	5 BLOCKS STH	67.1	21:28
25	SYD	DUBAI	24	19	14	6	14	EMIRATES	EK415	380-861	3050	2889	6 BLOCKS NTH M4	65.25	6:13
29	SYD	PERTH	29	3	30	14	30	QANTAS	QF577	330-202	3075	2914	2 BLOCKS STH	66.58	14:30
25	SYD	PERTH	25	0	30	11	30	QANTAS	QF581	330-202	3100	2939	6 BLOCKS STH	66.09	11:29
22	SYD	DOHA	22	11	7	22	7	QATAR	QR909	380-861	3200	3039	2 BLOCKS NTH M4	67.64	22:06
22	SYD	KUL	22	11	34	22	34	MALAYSIAN	MH140	330-323	3225	3064	1 BLOCK STH	67.24	22:33
25	SYD	JAKARTA	25	3	6	14	6	QANTAS	QF41	330-303	3350	3189		63.49	14:05
29	SYD	SINGA	29	5	14	16	14	SINGAPORE	SQ222	380-841	3350	3189	OVER DOROTHY ST	69.54	16:14
22	SYD	DOHA	22	5	40	16	40	QATAR	QR907	777-3DZ	3525	3364	3 BLOCKS NTH	71.96	16:41
22	SYD	SING	22	5	16	16	16	SINGAPORE	SQ222	380-841	3650	3489	2 BLOCKS NTH M4	65.76	16:15
29	SYD	JAKARTA	29	1	1	12	1	GARUDA	GA713	330-343	3650	3489	3 BLOCKS STH	61.53	12:06
30	SYD	JAKARTA	30	0	48	11	48	QANTAS	GA713	330-343	3650	3489	3 BLOCKS STH	63.44	11:48
25	SYD	PERTH	25	7	30	18	30	QANTAS	QF571	330-202	3750	3589	6 BLOCKS STH	67.05	7:40
25	SYD	DOHA	25	11	12	22	12	QANTAS	QR909	380-861	3750	3589	M4 END COLEMAN ST	68.99	22:15
29	SYD	SINGA	29	8	25	19	25	SINGAPORE	SQ242	777-312	3752	3591	OVER DOROTHY ST	63.47	19:25
23	SYD	PERTH	22	19	51	6	51	QANTAS	QF565	330-202	3800	3639	1 BLOCK STH	65.1	6:51
25	SYD	NA	25	4	0	15	0	QANTAS	QF6011	380-842	3825	3664	2 BKS NTH M4 COLEMA	64.56	15:00
29	SYD	SINGA	29	8	35	19	35	SCOOT	TR13	787-9	3825	3664	OVER DOROTHY ST	65.88	19:43
29	SYD	JAKARTA	29	3	0	14	0	QANTAS	QF41	330-202	3875	3714	4 BLOCKS STH	66.58	14:00
22	SYD	PERTH	22	4	7	15	7	QANTAS	QF557	330-202	4025	3864	2 BLOCKS NTH	70.12	15:07
29	SYD	PERTH	28	24	0	11	0	QANTAS	QF581	737-838	4025	3864	5 BLOCKS STH	62.76	11:00
30	SYD	DENPASAR	30	1	12	12	12	GARUDA	GA735	330-343	4025	3864	3 BLOCKS STH	66.99	12:15
22	SYD	SING	22	8	34	19	34	SINGAPORE	SQ242	777-312	4050	3889	M4 END COLEMAN ST	65.07	19:33
22	SYD	SING	22	8	50	19	50	SINGAPORE	SQ242	777-312	4050	3889	M4 END COLEMAN ST	62.03	19:50
29	SYD	JOHHASBO	29	1	11	12	11	QANTAS	QF63	747-438	4075	3914	WESTMEAD HOSP	71.01	12:10
29	SYD	ABUDHABI	29	11	7	22	7	ETIHAD	EY55	380-861	4100	3939	M4 COLEMAN	68.06	22:05
29	SYD	DOHA	29	5	36	16	36	QATAR	QR907	777-3DZ	4125	3964	M4 COLEMAN	72.24	16:36
30	SYD	DUBAI	29	19	18	6	18	EMIRATES	EK415	380-861	4125	3964	4 BLOCKS NTH M4	62.75	6:20
29	SYD	KUALA	29	1	23	12	23	AIRASIA	D7223	330-343	4150	3989	3 BLOCKS STH	69.49	12:23
25	SYD	ADL	25	6	0	17	0	JETSTAR	JQ770	320-232	4225	4064	M4 END COLEMAN ST	64.83	16:59
22	SYD	SING	22	8	49	19	49	SINGAPORE	TR13	787-9	4275	4114	3 BLOCKS NTH	61.26	19:48
25	SYD	JAKARTA	25	3	15	14	15	QANTAS	QF41	330-303	4275	4114	6 BLOCKS STH	68.52	14:13
22	SYD	DENPASAR	22	6	10	17	10	QANTAS	QF43	330-203	4300	4139	2 BLOCKS STH	69.06	17:10

22	SYD	ABU DHAB	22	11	22	22	22	ETIHAD	EY455	380-861	4300	4139	2 BLOCKS NTH M4	68.85	22:21
25	SYD	DENPASAR	25	0	36	11	36	VIRGIN	VA33	737-8FE	4300	4139	6 BLOCKS STH	66.89	11:35
25	SYD	PERTH	25	6	18	17	18	QANTAS	QF569	737-838	4300	4139	1 BLOCK STH	73.14	17:19
23	SYD	DUBAI	22	19	17	6	17	EMERITES	EK415	380-861	4325	4164	5 BKS NTH M4 COLEMA	64.54	6:16
22	SYD	ADL	22	6	14	17	14	QANTAS	QF765	737-838	4350	4189	3 BLOCKS STH	67.47	17:09
22	SYD	DUBAI	22	6	20	17	20	EMIRATES	EK417	777-31	4350	4189	M4 END COLEMAN ST	68.68	17:20
29	SYD	DUBAI	28	19	18	6	18	EMIRATES	EK415	380-861	4375	4214	1 BLOCK NORTH	70.57	6:19
23	SYD	ADEL	22	19	56	6	56	QANTAS	QF	330-202	4400	4239	4 BLOCKS STH	63.45	6:55
29	SYD	DUBAI	29	6	24	17	24	EMIRATES	EK417	777-31H	4425	4264	M4 COLEMAN	64.68	17:25
22	SYD	PERTH	22	3	25	14	25	VIRGIN	VA559	737-8FE	4450	4289	2 BLOCKS STH	71.41	14:26
29	SYD	SINGA	28	22	28	9	28	SINGAPORE	SQ212	777-312	4450	4289	OVER DOROTHY ST	63.46	9:28
22	SYD	ABU DHAB	22	5	58	16	58	ETIHAD	EY451	777-3FX	4457	4296	2 BLOCKS STH	68.6	16:56
25	SYD	PERTH	25	10	0	21	0	TIGER	TT755	320-232	4475	4314	3 BLOCKS STH	61.44	21:04
25	SYD	SING	25	1	30	12	30	SINGAPORE	SQ232	380-841	4575	4414	M4 END COLEMAN ST	62.32	12:30
29	SYD	SINGA	29	1	36	12	36	SINGAPORE	SQ232	380-841	4575	4414	1 BLOCK NTH M4	65.21	12:36
29	SYD	ADEL	29	8	0	19	0	QANTAS	QF743	737-838	4700	4539	OVER DOROTHY ST	67.74	19:02
25	SYD	PERTH	25	1	15	12	15	QANTAS	QF567	747-438	4725	4564	6 BLOCKS STH	66.1	12:13
25	SYD	PEKNG	25	3	0	14	0	QANTAS	QF107	330-202	4725	4564		66.95	14:01
22	SYD	DUBAI	22	11	3	22	3	EMIRATES	EK413	380-861	4775	4614	M4 END COLEMAN ST	68.72	22:03
30	SYD	PERTH	30	0	49	11	49	QANTAS	QF567	737-838	4800	4639	1 BLOCK STH	60.68	11:49
22	SYD	ADEL	22	9	18	20	18	QANTAS	QF583	330-202	4875	4714	2 BLOCKS STH	66.87	20:18
29	SYD	KL	29	11	30	22	30	MALAYSIAN	MH140	330-323	4950	4789	2 BLOCKS NORTH	64.64	22:25
25	SYD		24	20	30	7	30	VIRGIN	VA 551	330- 243	5000	4839	3 BLOCKS NTH	66.13	7:29
30	SYD	ADL	29	23	55	10	55	QANTAS	QF741	737-838	5000	4839	2 BLOCKS STH	65.78	10:53
22	SYD	PERTH	22	8	2	19	2	QANTAS	QF743	737-838	5125	4964	1 BLOCK STH	67.35	19:00
29	SYD	PERTH	28	23	0	10	0	VIRGIN	VA 555	330-243	5150	4989	2 BLOCKS NORTH	63.27	10:00
29	SYD	PERTH	29	3	8	14	8	VIRGIN	VA 559	737-8FE	5275	5114	OVER DOROTHY ST	65.52	14:07
25	SYD	PRTH	25	3	30	14	30	QANTAS	QF577	737-838	5300	5139	OVER DOROTHY	63.39	14:30
22	SYD	DENPASAR	22	9	31	20	31	JETSTAR	JQ37	787-8	5325	5164	2 BLOCKS STH	65.44	20:30
22	SYD	BANGKOK	22	9	39	20	39	EMIRATES	EK419	777-36	5325	5164	3 BLOCKS NTH	67.87	20:38
22	SYD	ADEL	22	9	34	20	34	VIRGIN	VA444	737-8FE	5375	5214	4 BLOCKS STH	69.22	20:37
25	SYD	ABU DHAB	25	11	24	22	24	ETIHAD	EY455	380-861	5425	5264	5 BLOCKS NTH M4	62.21	22:24
29	SYD	ADL	29	4	40	15	40	JETSTAR	JQ764	320-232	5425	5264	6 BLOCKS SOUTH	63.22	15:40
29	SYD	DENPASAR	29	1	11	12	11	GARUDA	GA 735	330-343	5475	5314	1 BLOCK NORTH		
25	SYD	ADEL	24	20	0	7	0	QANTAS	QF735	737-838	5500	5339	1 BLOCK STH	60.34	6:59
22	SYD	PERTH	22	8	31	19	31	VIRGIN	VA569	330-243	5550	5389	1 BLOCK NTH	68.69	19:30
29	SYD	AIRS ROCK	29	0	5	11	5	JETSTAR	JST660	320-232	5575	5414	1 BLOCK STH	63.47	11:06
29	SYD	ABU	29	5	54	16	54	ETIHAD	EY451	777-3FX	5625	5464	6 BLOCKS NTH M4	64.22	16:54
22	SYD	PERTH	22	7	7	18	7	QANTAS	QF571	330-202	5725	5564	1 BLOCKS STH	72.58	18:12
30	SYD	AYERS	29	23	48	10	48	JETSTAR	JQ660	320-232	5775	5614	6 BLOCKS STH	60.26	10:48
29	SYD	ADL	29	2	0	13	0	QANTAS	QF1557	717-2K9	5825	5664	OVER DOROTHY ST	64.82	12:59
25	SYD	PERTH	24	19	49	6	49	QANTAS	QF565	737-838	5875	5714	2 BLOCKS NTH	65.25	6:51
25	SYD	AYERS R	24	23	12	10	12	VIRGIN	VA627	737-8FE	5900	5739	OVER DOROTHY	64.47	10:13
25	SYD	ADL	24	23	48	10	48	QANTAS	JQ741	737-838	6000	5839	OVER DOROTHY	63.86	10:48
29	SYD	ADL	29	2	1	13	1	VIRGIN	VA418	737-8FE	6075	5914	3 BLOCKS STH	59.45	13:00
23	SYD	ADEL	22	20	20	7	20	JETSTAR	JQ762	320-232	6250	6089	4 BLOCKS STH	67.79	7:19
22	SYD	ADL	22	4	36	15	36	QANTAS	QF761	737-838	6325	6164	4 BLOCKS STH	64.5	15:43
30	SYD	PERTH	29	24	0	11	0	QANTAS	QF581	737-838	6450	6289	1 BLOCK NORTH	71.64	11:01
30	SYD	QTNW	29	23	57	10	57	VIRGIN	VA163	737-8FE	6525	6364	3 BLOCKD NTH	68.41	10:57

25	SYD	ADEL	24	20	24	7	24	JETSTAR	JQ762	320-232	6550	6389	5 BLOCKS STH	60.53	7:24
30	SYD	SINGA	29	22	18	9	18	SINGAPORE	SQ212	777-312	6675	6514	2 BLOCKS NTH M4	60.77	9:23
29	SYD	ADEL	29	5	42	16	42	JETSTAR	JQ770	320-232	6800	6639	4 BLOCKS STH	61.79	16:42
29	SYD	DENPASAR	29	0	42	11	42	VIRGIN	VA33	737-8FE	6850	6689	5 BLOCKS STH	62.55	11:42
30	SYD	DENPASAR	30	0	45	11	45	VIRGIN	VA33	737-8FE	6850	6689	OVER DOROTHY	68.21	11:46
29	SYD	ADEL	28	20	12	7	12	JETSTAR	JQ762	320-232	7425	7264	4 BLOCKS STH	61.14	7:12
22	SYD	ADEL	22	8	52	19	52	QANTAS	QF783	737-838	8225	8064	2 BLOCKS STH	60.13	19:50
29	SYD	SINGA	29	10	42	21	42	FEDEX	FX5283	MD-11F	8750	8589	OVER DOROTHY ST	63.88	21:39

NOTES:

THE DEPARTURE FLIGHT DISTANCE OF DOROTHY ST MAYS HILL FROM KSA IS 21 KM. THE STRAIGHTLINE DEPARTURE DISTANCE OF BLACKTOWN FROM WSA IS 19.28 KM
ON THIS BASIS THE HEIGHT OF AIRCRAFT AND NOISE LEVELS RECORDED AT DOROTHY ST MAYS HILL ARE APPLICABLE TO BLACKTOWN

ELEVATION MAIN ST BLACKTOWN 57 M = 187 FT

SUMMARY OF LAMax

COMPARISON WITH NATS DATA UK FOR AIRCRAFT TYPE AND HEIGHT

NOTE: SOME AIRCRAFT FLIGHTPATH NOT OVER DATA LOGGER LOCATION

FOR NATS DATA UK GO TO:

AIRCRAFT	ALTITUDE	HEIGHT ABOVE GL	LOCATION REF TO DOROTHY ST	RECORDED LAMax	NATS DATA dBA FOR HEIGHT
747-438	4725	4564	6 BLOCKS STH	66.1	75-72
380-861	4375	4214	1 BLOCK NORTH	70.57	76-73
787-8	5325	5164	2 BLOCKS STH	65.44	67-64
777-3DZ	3525	3364	3 BLOCKS NTH	71.96	75-71
737-838	4300	4139	1 BLOCK STH	73.14	66-63
737-838	6450	6289	1 BLOCK NORTH	71.64	60-59
737-8FE	4450	4289	2 BLOCKS STH	71.41	66-63
737-8FE	5375	5214	4 BLOCKS STH	69.22	63-60
330-343	4150	3989	3 BLOCKS STH	69.49	73-69
330-323	3225	3064	1 BLOCK STH	67.24	77-73
330-202	3875	3714	4 BLOCKS STH	66.58	77-73
320-232	4225	4064	M4 END COLEMAN ST	64.83	66-63

<https://www.nats.aero/environment/aircraft-noise/representative-aircraft-lmax-data/>

WSA EIS PREDICTED A 747 ON ARRIVAL WOULD GENERATE 60-70 dBA
 BASED ON NATS DATA 747 AND A380 PRODUCE UP TO 75 AND 76 dBA AT 4000 FT
 RESPECTIVELY. HOWEVER NATS DATA SHOWS AN A330 AT 3714 FT GENERATES
 77 dBA THIS WAS CONFIRMED BY RECORDED DATA.
 NOTE THAT A LARGE NUMBER OF SMALLER AIRCRAFT EXCEEDED 70 dBA WITH
 A PEAK AT 73.14 dBA

AIRCRAFT	ALTITUDE	HEIGHT ABOVE GL	LOCATION REF TO DOROTHY ST	MAX LAMax DATA OR NATS
747-438	4725	4564	6 BLOCKS STH	75-72
380-861	4375	4214	1 BLOCK NORTH	76-73
787-8	5325	5164	2 BLOCKS STH	67-64
777-3DZ	3525	3364	3 BLOCKS NTH	71.96
737-838	4300	4139	1 BLOCK STH	73.14
737-838	6450	6289	1 BLOCK NORTH	71.64
737-8FE	4450	4289	2 BLOCKS STH	71.41
737-8FE	5375	5214	4 BLOCKS STH	69.22
330-343	4150	3989	3 BLOCKS STH	73-69
330-323	3225	3064	1 BLOCK STH	77-73
330-202	3875	3714	4 BLOCKS STH	77-73
320-232	4225	4064	M4 END COLEMAN ST	66-63