CHRISTCHURCH INTERNATIONAL AIRPORT

2008 AIRCRAFT OPERATIONS NOISE MONITORING REPORT

MARSHALL DAY Acoustics

Christchurch International airport Limited

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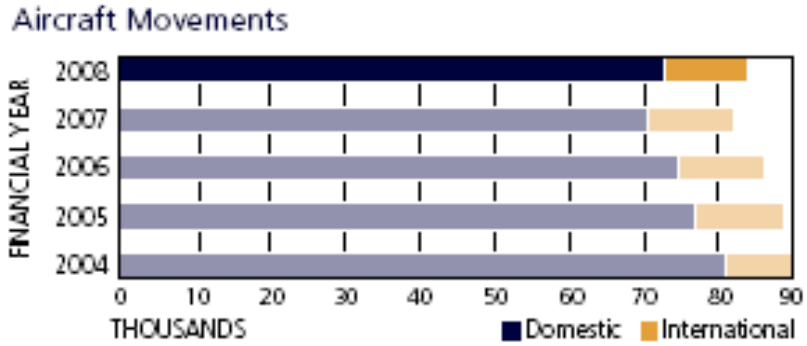
1.0 INTRODUCTION

1.1 General

This Noise Monitoring Report is required to be prepared on an annual basis by Rule 1.2.4.2 in Part 11 of the Christchurch City Plan. The purpose of the report is to present the annual calculated noise contours and associated monitoring results which have been prepared to demonstrate compliance with the City Plan noise standard for aircraft operations at the Airport.

This report is the first of the Noise Monitoring Reports to be prepared and is for the 2008 calendar year.

Christchurch International Airport is the main gateway to the South Island with current aircraft movements of between 80,000 to 90,000 per annum.



The total number of annual movements for the 2008 calendar year was 84,074. The breakdown of these movements and the data provided for input to the INM computer model for producing the Annual Aircraft Noise Contours (AANC) is detailed in section 3.0 of this report.

1.2 Noise Performance Standards – Aircraft Operations

The Christchurch City Plan refers to airport noise in a number of locations. Rule 11-1.3.5 refers to the Airport's requirement to not exceed L_{dn} 65 dBA outside the airport noise contour shown in the Plan as detailed below.

> ***"1.3.5 Aircraft Noise***
>
> ***Critical Standard***
>
> *CIAL shall manage the Christchurch International Airport so that the noise from aircraft operations does not exceed L_{dn} 65 dBA outside the L_{dn} 65 dBA airport noise contour shown in Appendix 3 to Part II.*
>
> *Noise from aircraft operations shall be based on noise data from the Integrated Noise Model (INM) and records of actual aircraft operations at CIA. The noise level shall be calculated over the busiest three month period of the year.*
>
> *Aircraft operations means:*

- *the landing and take off of aircraft at CIA*
- *aircraft flying along any flight path associated with a landing or take off at CIA*

The following activities are excluded from the definition of Aircraft Operations:

- *aircraft operating in an emergency for medical or national/civil defence reasons*
- *air shows*
- *military operations not associated with the Antarctic programme*
- *aircraft using the airport as an alternative to a scheduled airport elsewhere*
- *aircraft taxiing*
- *aircraft engine testing.*

Exceedance by up to 1 dBA of the noise limit is permitted provided CIAL demonstrates at the request of, and to the satisfaction of, the Council that any such exceedance is due to atypical weather patterns."

Rule 11 – 1.2.4.2 lays out the airport's obligation to provide annual calculations of the aircraft noise levels and the results of noise measurements where necessary.

"1.2.4.2 Aircraft noise monitoring

CIAL shall annually provide to the Council's Environmental Services Manager the result of calculations based upon monitored aircraft movements for the preceding year and the known noise characteristics of those aircraft. These calculations will be performed by a person with appropriate qualifications and experience in airport noise modelling and acoustic assessments. The provided result shall be verified by noise measurements and shall be in the form of a 65 dBA L_{dn} contour representing the noise created by aircraft operations over that year (other than movements of a kind excluded in the Aircraft Noise Rule 1.3.5) superimposed upon a copy of the plan forming Appendix 3 to Part II of this Plan. The measurement of aircraft sound exposure and the resultant derivation of a 65 dBA L_{dn} shall be in accordance with NZS 6805:1992."

2.0 ANNUAL AIRCRAFT NOISE CONTOURS

The 2008 annual contours have been calculated using the INM version 6.0c which is the same version used to prepare the existing City Plan airport noise boundaries.

A record of the aircraft activity for 2008 has been provided by CIAL in the form of monthly departures by aircraft type, runway, time of day and aircraft category (e.g. domestic passenger, international freight etc). MDA has analysed this data and determined that the busiest three consecutive months for commercial traffic were February, March and April[1].

[1] Note that runway usage data was not available for November and December 2008

Consideration has been given to the effect of General Aviation (GA) traffic on the noise contours and it has been determined that due to the insignificant contribution to the L_{dn} noise level, GA activity can be excluded from the contour calculation. This is discussed further in Appendix D.

In the model, aircraft movements have been distributed across flight tracks which were developed in 2007 during a review of the airport noise boundaries. It is noted that for the purpose of modelling the location of the 65 dBA L_{dn} contour, the flight track details beyond 4 km from the runway are irrelevant as the contour does not extend further than this. Therefore the approach taken is considered to be valid and appropriate.

The Airways data provided to CIAL is for departures and it has been assumed that for every departure, an arrival of an identical aircraft type occurs.

The annualised total movements for the busiest three consecutive months of commercial activity in 2008 is shown in Table 1 as well as a break down of the annualised day and night time movements. The number of night time movements is relevant as night time activity is treated as ten decibels louder than day time activity when calculating L_{dn}. A breakdown of the average daily aircraft movements by aircraft type and runway is included as Appendix B. A summary of the variation in aircraft activity on different runways throughout the year is provided in Appendix E.

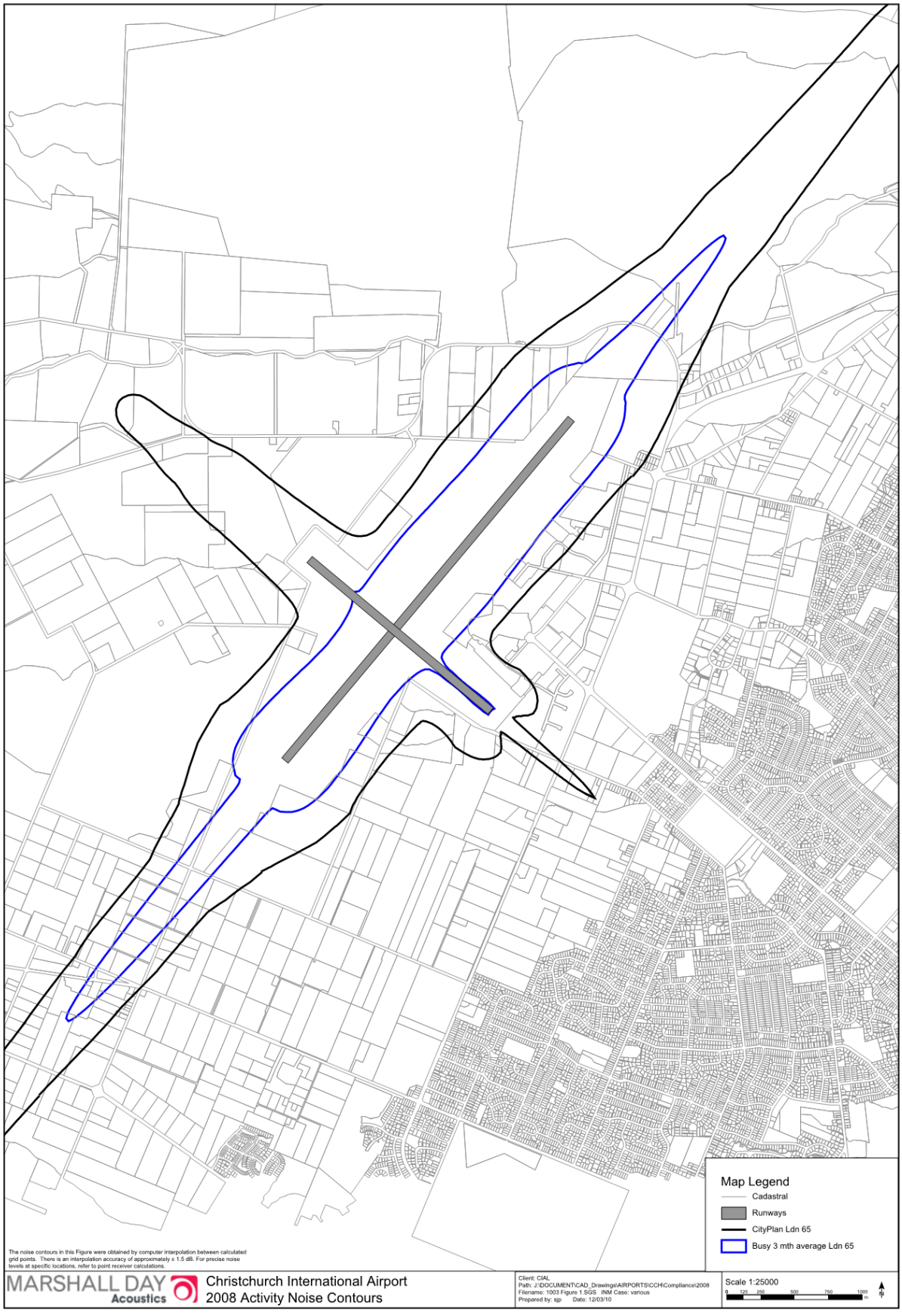
Table 1 – Summary of Commercial Aircraft Movements in the 2008 Noise Contours

	Busiest 3 Months
Annualised Total Movements	86,700
Annualised Day Time Movements	76,017
Annualised Night Time Movements	10,682

2.1 Calculated Contours

The calculated 65 dBA L_{dn} contour for 2008 activity, as described above, is shown in Figure 1 over the page compared with the Operative City Plan 65 dBA L_{dn} boundary. The figure shows that noise from aircraft operations in 2008 complies comfortably with the City Plan limit.

Figure 1 Noise from Aircraft Operations 2008 Compared with City Plan Limit



3.0 MONITORED NOISE LEVELS

3.1 Site Locations

Marshall Day Acoustics' airport noise monitor has operated at 399 Buchanans Road from 20 December 2007 to 7 May 2008. From 8 May 2008 to 13 November 2008 the monitor has been operating at a site in Coringa Road. The site locations relative to the District Plan 65 dBA L_{dn} contour are shown in Appendix C. The Buchanans Road site was selected as it is on the extended runway centreline, is close enough to the airport that aircraft on arrival and departure would overfly the monitor and the site is relatively removed from other noise sources. The Coringa Road site was selected as it is adjacent to the extended runway (i.e. a sideline position) in contrast to Buchanans Road. The Coringa Road location is also relatively removed from other noise sources and is close to the airport so that aircraft events clearly register at the monitor.

3.2 Airport Noise Monitoring Equipment

Noise monitoring was carried out generally in accordance with New Zealand Standard NZS 6805:1992 "*Airport Noise Management and Land Use Planning*". The Marshall Day Acoustics airport noise monitor consists of a Brüel & Kjær 2250 sound level meter with B & K outdoor microphone kit. The system includes a GSM modem which allows on-line checking of noise levels and system operation. Data is stored on a memory card which is changed regularly.

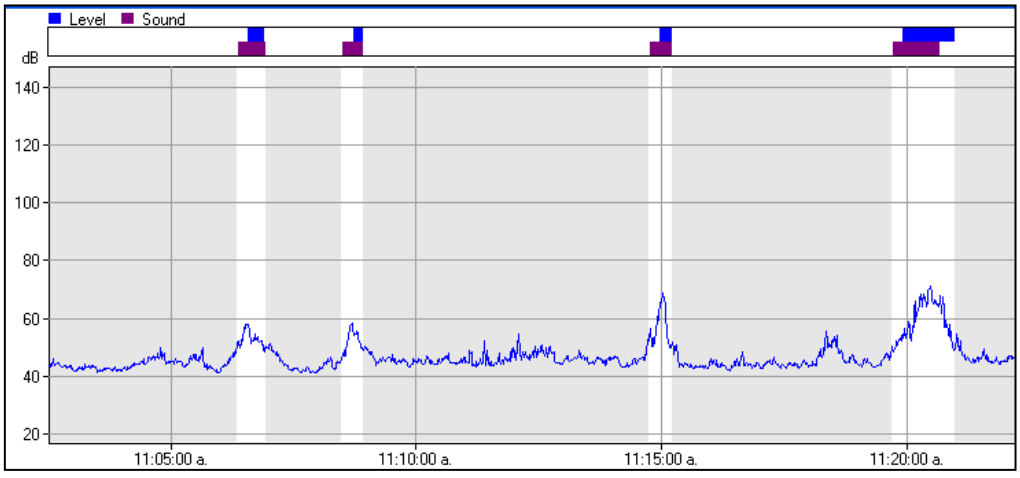
Figure 2 shows the noise monitor in-situ, in this case deployed at the Coringa Road site.

Figure 2:MDA Noise Monitoring Equipment

The system uses the Brüel & Kjær aircraft identification software to isolate and measure specific aircraft events. A digital audio recording is made for each of these short duration events which enables records to be checked by listening to the audio sample to ensure that it was created by an aircraft event. This is to exclude non-aircraft related events such as large trucks passing or farm equipment, which unavoidably trigger the noise monitoring system at times and contaminate the noise measurements.

The Brüel & Kjær analysis software allows calculations to be undertaken over a wide range of parameters, and provides graphical noise level traces that can be used in the analysis process. Figure 3 shows a screenshot of the software analysis module.

Figure 3 – Analysis Software Screenshot



The correlated data presented in this report has been generated using the above software, and includes audio analysis of all events for that particular month. This ensures that no extraneous noise sources are included in the presented noise data.

3.3 Airways Data

To assist in this process, a radar data stream has been obtained from Airways NZ which gives details of individual aircraft events over the monitoring location to enable correlation with the noise monitor recorded events.

The data stream is based on a defined 3D 'box' of set co-ordinates located in the vicinity of the noise monitor. When a particular aircraft enters this box, information relating to the aircraft location, type, time of the event and aircraft operation type (for example Departure on Runway 20) is stored. This information can then be used directly with the noise monitoring software to assign noise events to specific aircraft.

As well as assisting in the analysis of overall airport noise levels, analysis of particular aircraft types and their noise contribution at specific locations can thus be undertaken.

3.4 Monitoring Results

The following tables provide a summary of the monitoring data for both monitoring sites.

Table 3 Monitoring Results from Buchanans Road

Location: Buchanans Rd		**Noise Limit from City Plan Contours: 68 dBA L_{dn}**	
Month	**# Days of Data**	**Measured Noise Levels (dBA)**	
		Uncorrelated L_{dn}	**Correlated L_{dn} ***
Jan	30	65.0	64.8
Feb	22	64.5	64.2
Mar	30	64.3	64.1
Apr	18	63.7	63.5
May	6	62.3	62.1
Average	**106**	**64.4**	**64.1**

Table 4 Monitoring Results from Coringa Road

Location:	**Coringa Rd**	**Noise Limit from City Plan Contours:**	**58 dBA L_{dn}**
Month	**# Days of**	**Measured Noise Levels (dBA)**	

	Data	Uncorrelated L_{dn}	Correlated L_{dn} *
May	21	55.8	55.0
Jun	20	56.7	51.6
Jul	4	58.0	-
Aug	10	55.9	-
Sep	17	60.1	55.6
Oct	25	55.4	-
Nov	9	54.3	-
Average	**109**	**56.8**	**54.4**

* Indicates data that has been correlated with Airways Radar records.
- Dashes indicate where analysis of Airways data has not been carried out.

The noise monitoring shows the Airport is complying with the City Plan noise limits. The uncorrelated measured noise level at Buchanans Road was 64.4 dBA L_{dn}. The correlated measured noise level at Buchanans Road was 64.1 dBA L_{dn} which is 4 dB below the noise limit of 68 dBA L_{dn} that is indicated for this location by the City Plan noise contours.

It can be seen that the difference between the correlated noise level and uncorrelated noise level at Buchanans Road is 0.3 dB, which is not significant.

The uncorrelated noise level at Coringa Road was 56.8 dBA L_{dn} over seven months. For those months where detailed event analysis has been undertaken, the correlated noise level is lower than the uncorrelated noise level by 1 – 5 dB. The correlated average noise level is 54.4 dBA L_{dn} which is 4 dB below the noise limit of 58 dBA which is indicated for this location by the City Plan noise contours.

The uncorrelated noise level is higher than the City Plan Contour noise limit (58 dBA L_{dn}) for one month (September 2008) at 60.1 dBA L_{dn}. Following correlation of the events with Airways data and audio checking, the correlated noise level for September was 55.6 dBA L_{dn} and thus compliant with the noise limit.

3.5 Discussion

The reason that there is a larger difference between correlated noise levels and uncorrelated noise levels at the Coringa Road site is due to the lower overall aircraft noise level, which means extraneous noise sources are more likely to be detected by the airport noise logger. Nonetheless, the uncorrelated noise levels show compliance with the City Plan contour noise limit at this location.

On this basis, the recommendation for future monitoring is that initially, the uncorrelated noise level at any location be assessed with respect to the relevant City Plan noise contour limit and if this is found to be lower than

the limit, then compliance is demonstrated. If however, the uncorrelated noise level is in excess of the City Plan contour limit, then further analysis should be carried out to determine whether the noise from aircraft operations only (without contamination from other sources) complies. This process may involve correlation with aircraft radar data or analysis of the recorded sound files. This recommended approach is considered the most practicable and robust method for airport noise monitoring at Christchurch.

4.0 SUMMARY OF NOISE COMPLAINTS

Noise complaints are responded to within days of being received. Processes are being developed for recording and monitoring complaints which will enable an annual summary of complaints to made in future noise monitoring reports.

5.0 CONCLUSION

Noise contours have been calculated and in-field monitoring carried out to establish whether noise from aircraft operations at Christchurch International Airport during 2008 complied with the Christchurch City Plan 65 dBA L_{dn} limit. Both the contouring exercise and the noise monitoring results confirm that noise from aircraft operations in 2008 was approximately 3 - 4 decibels below the limit and hence comfortably complied.

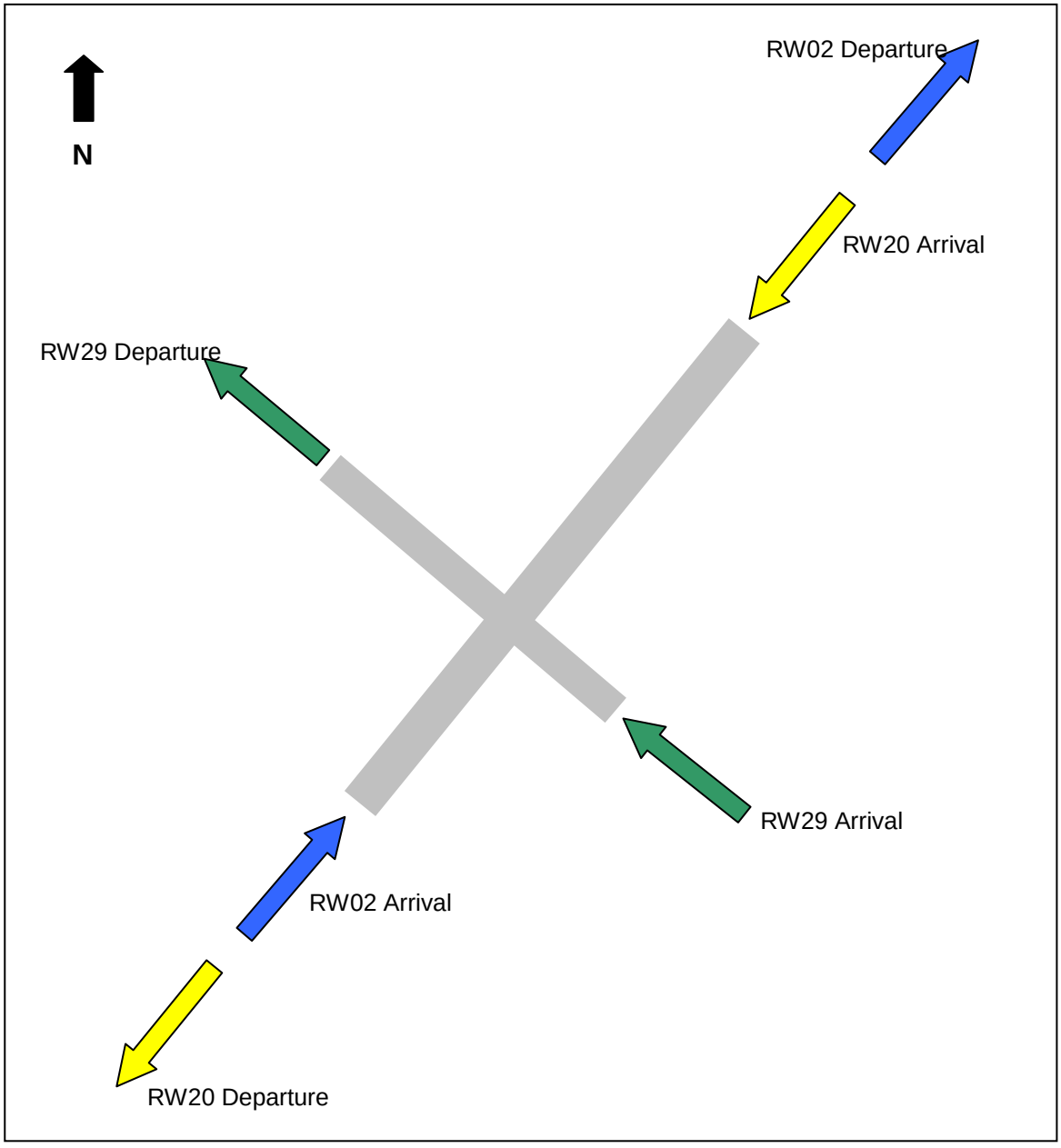
During the noise monitoring exercise it was found that the raw monitoring data typically includes contamination from noise sources other than aircraft. Methods such as listening to recorded sound files and correlating aircraft events with noise events using radar data were effective in reducing the level of contamination. However it is considered that this degree of accuracy is not necessary where the raw monitoring results demonstrate compliance with the airport noise limit regardless of the degree of contamination from other sources. As such it is recommended that costly processes such as event listening and event correlation only be employed where the raw monitoring results indicate non-compliance.

APPENDIX A CHRISTCHURCH AIRPORT RUNWAY VECTORS

Runway 02 refers to operations using the main runway with a heading of 20 degrees from true north i.e. arrivals from the south west landing in a north easterly direction and departures towards the north east.

Runway 20 refers to operations using the main runway with a heading of 200 degrees from true north i.e. arrivals from the north east landing in a south westerly direction and departures towards the south west.

Runway 29 refers to operations using the crosswind runway with a heading of 290 degrees from true north i.e. arrivals from the south east landing in a north westerly direction and departures towards the north west.



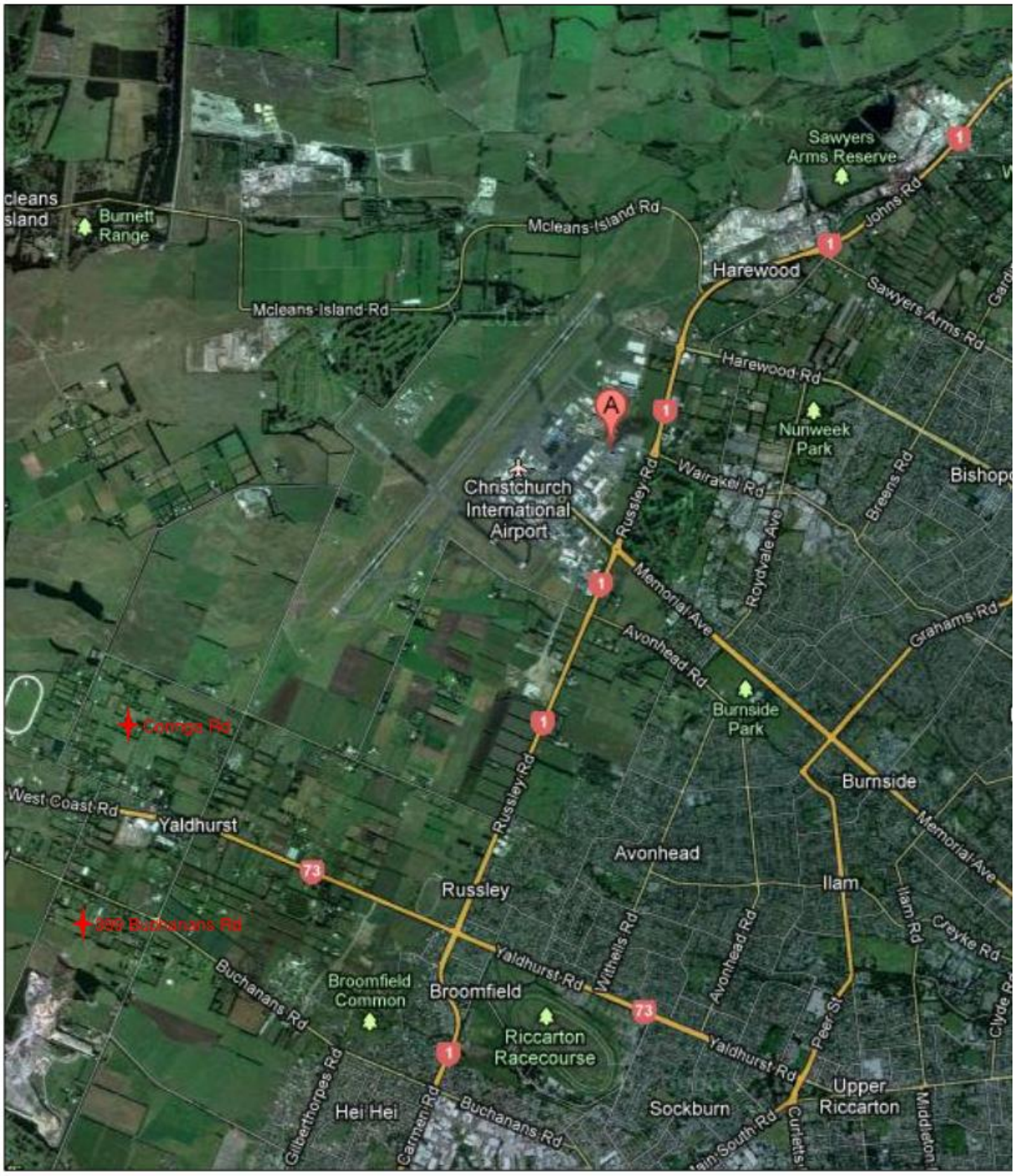
APPENDIX B AIRCRAFT MOVEMENTS FOR 2008 ANNUAL CONTOURS

Aircraft Activity for Busiest Three Months (Feb – Apr)

		Average Daily Aircraft Movements					
	Aircraft Type	Runway 02		Runway 20		Runway 29	
		Day	Night	Day	Night	Day	Night
Domestic Passenger	B733	41.62	3.60	18.73	1.11	1.29	0.02
	AT72	37.87	0.82	16.96	0.33	1.38	0.00
	DH8C	17.69	0.67	7.73	0.24	0.60	0.00
	B190	8.07	0.00	3.62	0.00	0.49	0.00
	B738	5.42	1.18	2.29	0.40	0.13	0.00
	A320	3.36	0.56	1.27	0.11	0.18	0.00
	JS32	4.49	0.02	1.91	0.00	0.13	0.00
	B734	1.38	0.24	0.71	0.11	0.02	0.00
	CVLT	0.47	0.00	0.22	0.00	0.07	0.00
	SW4B	0.11	0.00	0.02	0.00	0.00	0.00
	DH8A	0.13	0.00	0.04	0.00	0.02	0.00
	B73Q	0.02	0.00	0.00	0.00	0.00	0.00
International Passenger	A320	6.84	5.13	3.16	2.22	0.16	0.02
	B738	2.78	0.76	1.24	0.33	0.02	0.00
	B772	2.31	0.00	0.82	0.00	0.00	0.00
	B733	1.40	0.00	0.56	0.00	0.02	0.00
	B763	1.33	0.00	0.67	0.02	0.00	0.00
	A345	1.36	0.00	0.60	0.00	0.02	0.00
	B737	0.22	0.02	0.04	0.00	0.00	0.00
	B773	0.07	0.00	0.09	0.00	0.00	0.00
	B777	0.00	0.00	0.02	0.00	0.00	0.00
Domestic Freight	CVLT	1.44	1.96	0.67	0.76	0.02	0.00
	SW4B	0.69	1.33	0.27	0.91	0.02	0.02
	B73N17	0.02	1.96	0.00	0.71	0.00	0.00
	CV580	0.02	0.84	0.00	0.44	0.00	0.02
	F27	0.00	0.64	0.00	0.27	0.00	0.00
Domestic Relocation	B763	0.93	0.16	0.40	0.18	0.02	0.00
Domestic Military	C130	0.25	0.02	0.13	0.01	0.01	0.00
	C17	0.25	0.02	0.13	0.01	0.01	0.00
	KINGAIR	0.30	0.01	0.12	0.00	0.01	0.00
International Freight	B763	0.00	0.58	0.00	0.49	0.00	0.00
International Military	C130	0.30	0.00	0.03	0.00	0.00	0.00
	C17	0.03	0.00	0.01	0.00	0.00	0.00
Average Daily Mvmnts for 3 Months		141.18	20.51	62.47	8.67	4.62	0.09
Average Daily Mvmnts for 2008		117.22	18.46	75.83	11.02	6.92	0.24

APPENDIX C MONITORING LOCATIONS

Noise Measurement Terminal Locations, Harewood, Christchurch



APPENDIX D: THE EFFECT OF GENERAL AVIATION ACTIVITY ON THE NOISE CONTOURS

General Aviation (GA) aircraft are light piston powered propeller driven aircraft typically operated by small businesses, private operators and aero club members. There is a considerable number of GA aircraft operating from Christchurch Airport but the noise emission of a GA aircraft is significantly lower than a commercial jet. Neither the existing City Plan noise boundaries nor the recently developed 'Expert Panel' noise boundaries include GA activity in the modelling. The Expert Panel agreed that the contribution of GA aircraft to the Airport's noise contours was insignificant and therefore it was not necessary to include this activity in the modelling.

To validate this assertion, the noise contours for the busiest three months in 2008 have been calculated both with and without GA activity. The actual aircraft type for each GA movement is not identified in the available records therefore the calculations are based on the noisier GA aircraft types operating at the airport. The inclusion of GA in the model results in an increase of approximately 0.1 dB in L_{dn} which is considered to be a negligible change. Due to the small contribution to overall noise from the GA aircraft, it is considered reasonable to exclude this activity from the INM calculations.

The effect that GA activity has on the noise contours in the future will depend on the ratio of GA movements to large commercial aircraft movements. To monitor any significant change in this ratio, the table below lists the annualised busiest three months of airport operations by aircraft category. Each year the table will be updated in order to develop a historical record and highlight any significant changes in GA activity ratios.

Annualised Busiest Three Months of Aircraft Movements by Aircraft Category

	Jet	Turbo-Prop	General Aviation
2008	47,020	39,680	30,214

APPENDIX E: SEASONAL EFFECTS ON THE AIRPORT NOISE CONTOURS

The method by which the annual contours is calculated has been the subject of discussion between CIAL and Christchurch City Council. It was agreed that the noise contours for 2008 would be calculated by three different methods in order to facilitate a decision on the most appropriate method to apply in the future. The three methods are as follows:

- Average daily movements based on the busiest three months of commercial traffic on the main runway (i.e. Runways 02 and 20);
- Average daily movements based on the busiest three months of commercial traffic on Runway 29;
- Average daily movements based on 12 months of commercial traffic.

A diagram of the Christchurch Airport runway system is included as Appendix A for reference.

There was concern that noise contours based on a 12 month average or the three busiest months would not adequately monitor compliance for the period of time when the north-west winds are prevalent and aircraft utilise Runway 29 more than usual. To establish the sensitivity of the contours to this seasonal effect, noise contours based on the busiest three months for Runway 29 have been calculated and these have been compared with the 12 month and the overall busiest three month scenarios.

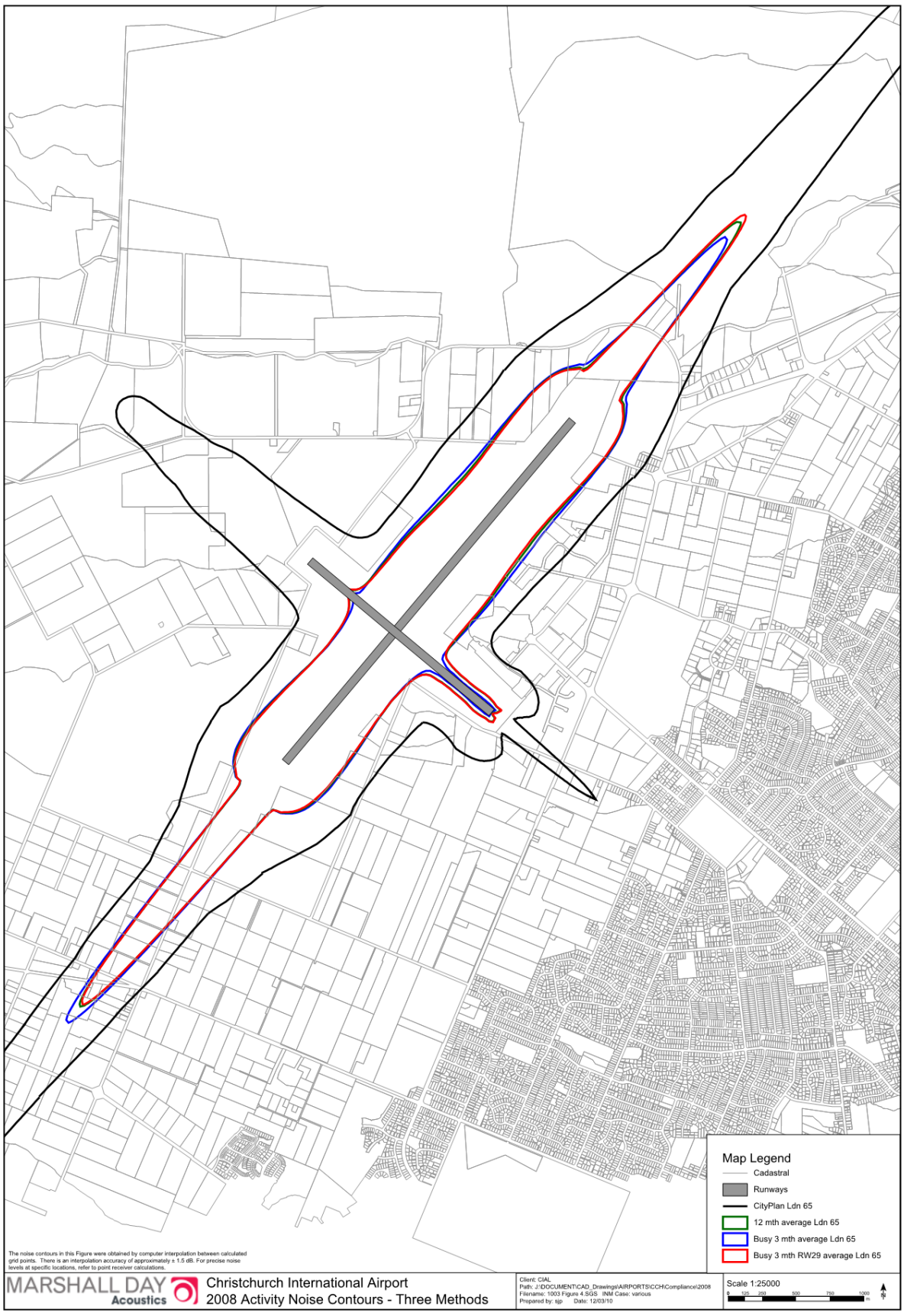
A breakdown of the aircraft activity for Runway 29 busiest three months and 12 months average is listed in the tables on the following pages. The breakdown for the busiest 3 months is listed in Appendix B.

The three calculated 65 dBA L_{dn} contours for 2008 activity, as described above, are shown in Figure 4 on the following page compared with the Operative City Plan 65 dBA L_{dn} boundary. All of the 2008 contours comply comfortably within the City Plan limit.

In this case there is little difference between the three methods of calculation for 2008. The 12 month average and the busiest three months on Runway 29 are a similar size and shape around the crosswind runway. The contour for the busiest three months on the main runway is slightly longer to the south west and shorter to the north east than the 12 month average contour by approximately 160m in either direction.

As there is only a minor variation in contour size between the different scenarios it has been agreed to calculate the annual noise contours for compliance purposes using the busiest three months of commercial activity.

Figure 42008 Noise Contours Calculated by Three Different Methods



Aircraft Activity for Busiest Three Months on Runway 29 2008 (Aug – Oct)

		Average Daily Aircraft Movements					
	Aircraft Type	Runway 02		Runway 20		Runway 29	
		Day	Night	Day	Night	Day	Night
Domestic Passenger	B733	33.70	3.57	24.15	2.07	3.07	0.00
	AT72	30.15	0.67	21.39	0.48	3.11	0.00
	DH8C	14.15	0.61	10.54	0.24	1.41	0.00
	B190	7.72	0.00	5.70	0.00	0.96	0.00
	B738	5.57	1.07	4.07	0.54	0.46	0.00
	A320	0.04	0.00	0.02	0.00	0.02	0.00
	JS32	2.26	0.00	1.57	0.00	0.17	0.00
	B734	1.26	0.13	0.65	0.04	0.09	0.00
	CVLT	0.26	0.00	0.24	0.00	0.02	0.00
	SW4B	0.00	0.00	0.00	0.00	0.00	0.00
	DH8A	0.07	0.00	0.02	0.00	0.00	0.00
	B73Q	0.00	0.00	0.00	0.00	0.00	0.00
International Passenger	A320	5.63	4.54	4.04	3.41	0.37	0.00
	B738	2.30	1.33	1.48	0.67	0.04	0.00
	B772	1.28	0.00	0.89	0.00	0.00	0.00
	B733	1.17	0.00	0.54	0.00	0.09	0.00
	B763	1.02	0.00	0.91	0.00	0.07	0.00
	A345	1.22	0.00	0.72	0.00	0.04	0.00
	B737	0.15	0.00	0.11	0.00	0.02	0.00
	B773	0.00	0.00	0.07	0.00	0.00	0.00
	B777	0.00	0.00	0.00	0.00	0.00	0.00
Domestic Freight	CVLT	1.41	2.00	0.63	1.07	0.07	0.02
	SW4B	0.65	0.72	0.26	1.11	0.02	0.02
	B73N17	0.02	1.15	0.00	0.89	0.00	0.02
	CV580	0.00	0.67	0.02	0.37	0.02	0.02
	F27	0.09	1.04	0.04	0.52	0.00	0.11
Domestic Relocation	B763	0.54	0.09	0.63	0.09	0.09	0.00
Domestic Military	C130	0.28	0.02	0.14	0.00	0.05	0.00
	C17	0.28	0.02	0.14	0.00	0.05	0.00
	KINGAIR	0.27	0.00	0.15	0.00	0.11	0.00
International Freight	B763	0.00	0.50	0.02	0.61	0.00	0.00
International Military	C130	0.04	0.01	0.01	0.00	0.00	0.00
	C17	0.04	0.01	0.01	0.00	0.00	0.00
Average Daily Mvmnts for 3 Months		111.59	18.15	79.17	12.11	10.35	0.20
Average Daily Mvmnts for 2008		117.22	18.46	75.83	11.02	6.92	0.24

Aircraft Activity for Twelve Months 2008

		Average Daily Aircraft Movements					
	Aircraft Type	Runway 02		Runway 20		Runway 29	
		Day	Night	Day	Night	Day	Night
Domestic Passenger	B733	34.88	3.47	22.74	1.76	2.07	0.03
	AT72	31.84	0.66	20.76	0.38	2.10	0.00
	DH8C	14.48	0.52	9.60	0.27	0.87	0.00
	B190	7.54	0.00	5.09	0.00	0.72	0.00
	B738	5.03	1.10	3.42	0.51	0.27	0.01
	A320	1.45	0.22	0.77	0.03	0.09	0.00
	JS32	2.81	0.01	1.84	0.00	0.14	0.00
	B734	1.07	0.28	0.68	0.07	0.05	0.00
	CVLT	0.38	0.00	0.19	0.00	0.03	0.00
	SW4B	0.03	0.00	0.01	0.00	0.00	0.00
	DH8A	0.11	0.00	0.09	0.01	0.01	0.00
	B73Q	0.01	0.00	0.01	0.00	0.00	0.00
International Passenger	A320	5.98	4.62	3.94	3.05	0.23	0.01
	B738	2.38	1.01	1.40	0.67	0.03	0.01
	B772	1.72	0.00	0.88	0.00	0.01	0.00
	B733	1.20	0.00	0.61	0.00	0.06	0.00
	B763	1.17	0.00	0.86	0.01	0.03	0.00
	A345	1.21	0.00	0.76	0.00	0.02	0.00
	B737	0.16	0.02	0.11	0.00	0.01	0.00
	B773	0.02	0.00	0.05	0.00	0.00	0.00
	B777	0.00	0.00	0.01	0.00	0.00	0.00
Domestic Freight	CVLT	1.37	1.87	0.70	0.93	0.03	0.04
	SW4B	0.68	0.95	0.30	1.00	0.03	0.04
	B73N17	0.02	1.53	0.01	0.82	0.00	0.03
	CV580	0.03	0.76	0.01	0.46	0.01	0.03
	F27	0.03	0.79	0.01	0.36	0.00	0.04
Domestic Relocation	B763	0.78	0.09	0.63	0.13	0.07	0.01
Domestic Military	C130	0.19	0.01	0.11	0.00	0.02	0.00
	C17	0.19	0.01	0.11	0.00	0.02	0.00
	KINGAIR	0.22	0.00	0.13	0.00	0.04	0.00
International Freight	B763	0.01	0.53	0.01	0.54	0.00	0.00
International Military	C130	0.11	0.01	0.02	0.00	0.00	0.00
	C17	0.11	0.01	0.02	0.00	0.00	0.00
Average Daily Mvmnts for 12 Months		117.22	18.46	75.83	11.02	6.92	0.24