



**CITY OF NAPLES AIRPORT AUTHORITY**

**QUARTERLY NOISE REPORT**

NUMBER 32

For the period

October 1, 2004 through December 31, 2004

Prepared by  
Airport Operations

## TABLE OF CONTENTS

	Page
<b>INTRODUCTION</b>	1
<b>PART I AIRCRAFT OPERATIONS</b>	1
Table I Airport Traffic Summary	2
Figure IA Total Monthly Operations	3
Figure IB Total Night Operations by Month	4
Table II Quarterly Air Traffic Nighttime Operations Summary	5
<b>PART II CITIZEN COMPLAINTS</b>	6
Table III Airport Noise Complaint Summary	7
Figure IIA Noise Complaints by Geographical Area	8
<b>PART III COMPLAINTS BY TIMEFRAME</b>	9
Figure IIIA Noise Complaints by Hour	9
Figure IIIB Noise Complaints by Month	9
<b>PART IV COMPLAINTS BY OPERATIONAL SOURCE</b>	10
Figure IVA Complaints by Type Aircraft	10
Figure IVB Air Ambulance Operations & Complaints	10
<b>PART V COMPLAINTS BY OPERATION</b>	11
Figure V Complaints by Operations	11
<b>SUMMARY</b>	12
Appendix A Total Aircraft Operations and Complaints	
Appendix B Noise Complaints vs. Number of Households	
Appendix C Noise Complaint / Operations Summary (Oct./Nov./Dec.)	
Appendix D Recurring Noise Monitoring Program	

## **PART I AIRCRAFT OPERATIONS**

### **INTRODUCTION**

This is the thirty-second Quarterly Noise Report prepared by the City of Naples Airport Authority - Airport Operations Department. This report is informational in nature. The data included in this report tracks aircraft operations, noise complaints and noise monitoring results obtained from the six (6) monitoring locations surrounding the airport (Appendix D). The information contained in this report is fiscal year (Oct. – Sept.). All percentages are rounded to the nearest percent.

### **AIRCRAFT OPERATIONS**

Table I, page 2, Airport Traffic Summary, contains aircraft movement data from FAA Form 7230-1 and after hour statistics recorded by the City of Naples Airport Authority Security Officers. Naples Air Traffic Control Tower is operational from 6:00 AM through 10:00 PM. A single movement represents either one arrival or one departure by the indicated aircraft category.

#### **This Quarter Compared to Previous Quarter**

This quarter's commuter traffic, compared to the previous quarter, has increased by 263%. General aviation activity has increased by 25%. Total traffic increased by 33%, from 28,894 operations to 38,341. The daily average for the First Quarter was 417 operations.

#### **This Quarter Compared to the Same Period One Year Ago**

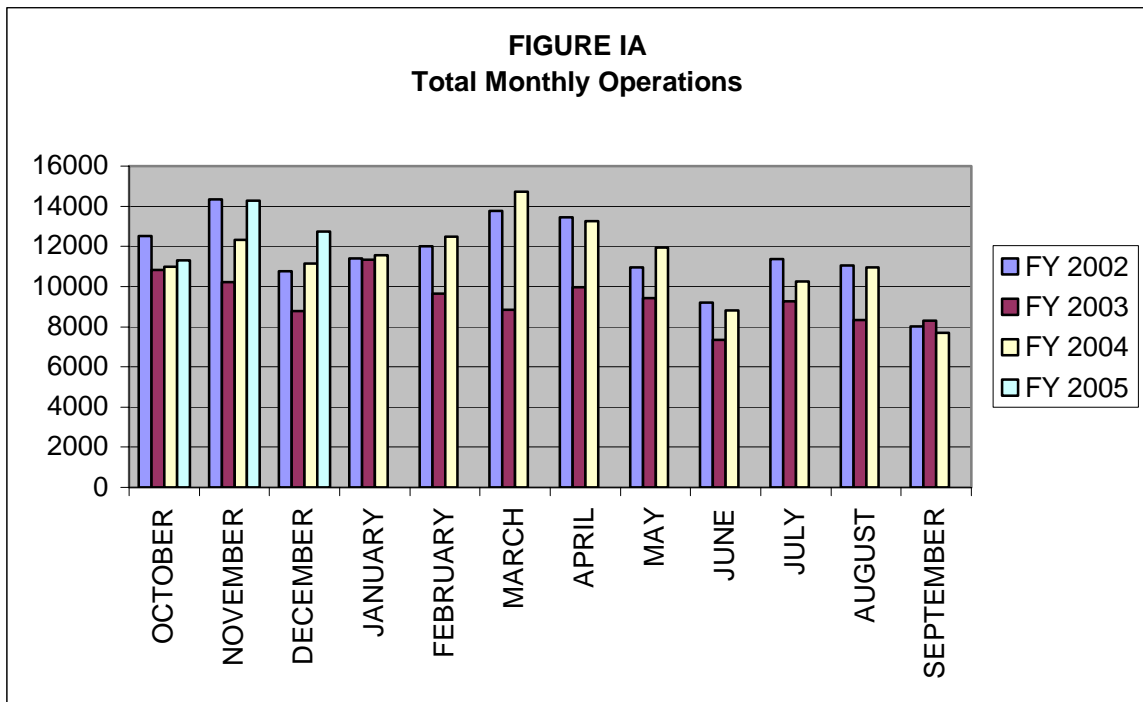
Compared to the same period last year, commuter traffic has increased by 38% and general aviation air traffic has increased 9%. Total air traffic operations increased by 11% from 34,454 operations to 38,341.

**Table I**

**AIRPORT TRAFFIC SUMMARY**  
**Landings and Takeoffs**  
**Fiscal Years 2004-2005**

YEAR	COMMUTER	GENERAL AVIATION	MILITARY	TOTAL TRAFFIC	DAILY AVERAGE
<b>2004</b>					
OCTOBER	603	10,336	35	10,974	354
NOVEMBER	951	11,355	16	12,322	410
DECEMBER	902	10,240	16	11,158	340
TOTALS FOR 1st QUARTER	2,456	31,931	67	34,454	368
JANUARY	1,371	10,152	30	11,553	373
FEBRUARY	1,594	10,871	8	12,473	430
MARCH	1,654	13,069	5	14,728	475
TOTALS FOR 2nd QUARTER	4,619	34,092	43	38,754	426
APRIL	1,259	11,947	57	13,263	442
MAY	876	11,035	27	11,938	385
JUNE	331	8,475	19	8,825	294
TOTALS FOR 3rd QUARTER	2,466	31,457	103	34,026	374
JULY	287	9,936	13	10,236	330
AUGUST	269	10,682	19	10,970	354
SEPTEMBER	375	7,309	4	7,688	256
TOTALS FOR 4th QUARTER	931	27,927	36	28,894	313
TOTALS FOR FY04	10,472	125,407	249	136,128	370
<b>2005</b>					
OCTOBER	700	10,601	11	11,312	365
NOVEMBER	1,370	12,907	2	14,279	476
DECEMBER	1,311	11,431	8	12,750	411
TOTALS FOR 1st QUARTER	3,381	34,939	21	38,341	417

Figure IA below illustrates the airport's month-by-month total operational levels for fiscal years 2002, 2003, 2004 and 2005.



There was an 11% increase in overall airport operations during the First Quarter of 2005, when compared to the same period in 2004.

### Night Time Operations

Figure IB, below, illustrates the airport's total nighttime (10:00 PM – 7:00 AM) operational levels for fiscal year 2002, 2003, 2004 and 2005.

Total nighttime operations have decreased 7% in the First Quarter of 2005 when compared to the First Quarter 2004 statistics. Jet operations occurring at night decreased by 6 operations and single and multi-engine aircraft operations decreased by 60 operations.

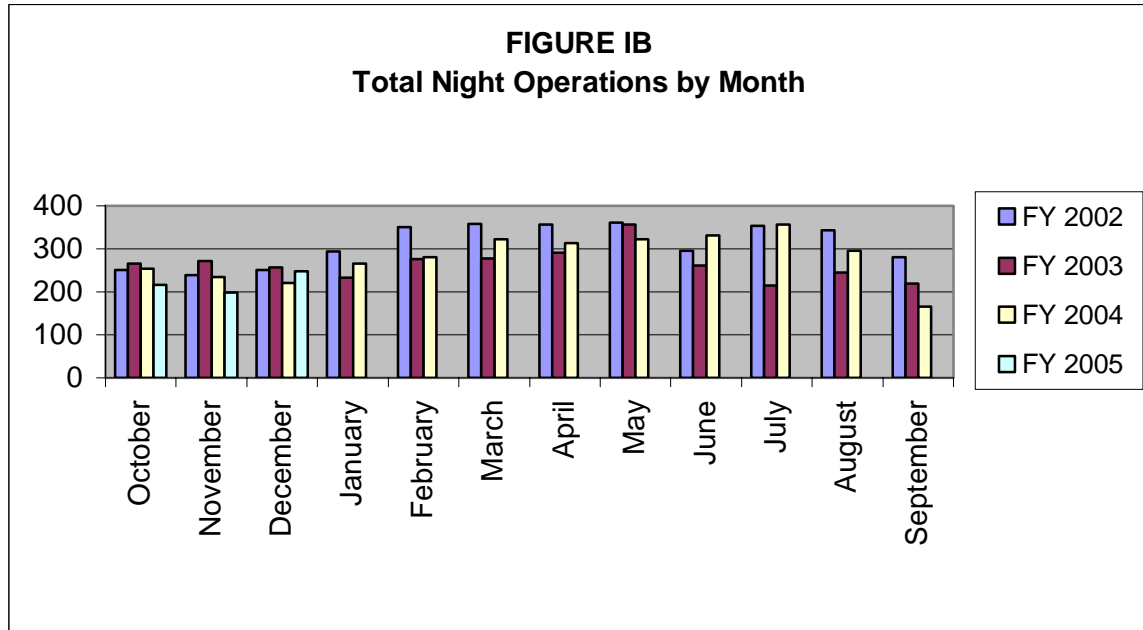


Table II, below, summarizes the types of nighttime operations occurring at the airport during the previous five quarters. Nighttime operations include voluntary curfew hours (10:00 PM through 7:00 AM). Reported nighttime operations have decreased by 47 total operations when compared to the same time last year.

As compared to the same time last year, the number of air ambulance operations has increased by one (1) operation. Single and multi-engine aircraft operations have decreased by 17%. The Public service operations represent 27% of the activity occurring at night.

**Table II**  
**Quarterly Air Traffic Nighttime Operations Summary – by Fiscal Year**

Activity	1 <sup>st</sup> 2004	2 <sup>nd</sup> 2004	3 <sup>rd</sup> 2004	4 <sup>th</sup> 2004	1 <sup>st</sup> 2005
Jets	201	297	177	79	194
Jet – Air Ambulance	0	14	2	2	1
Single & Multi-engine	349	435	571	417	289
Mosquito Control Aircraft	46	0	72	210	42
Helicopters Collier S.O., EMS & Coast Guard	113	122	145	109	136
<b>Total</b>	<b>709</b>	<b>868</b>	<b>967</b>	<b>817</b>	<b>662</b>

## **PART II CITIZEN COMPLAINTS**

Table III, on page 7, is a summary of citizen noise complaints separated according to four geographical areas (Quadrants). Below is a sample representation of the neighborhoods in each Quadrant. Every neighborhood in the area is not included in this list, although it is included in the Quadrant total.

**Northeast Quadrant** - Briarwood, Coconut River Estates, Golden Gate, Grey Oaks, Hawks Ridge, Wyndemere, and surrounding northeast areas.

**Northwest Quadrant** - Bears Paw, Coconut River Estates, Coquina Sands, Country Club of Naples, Lake Forest, Lake Park, Park Shore, Ridge Lakes, River Estates, River Reach, Sun Terrace, Moorings, Wilderness, and surrounding northwest areas.

**Southwest Quadrant** - Aqualane Shores, Old Naples, Port Royal, Royal Harbor, and surrounding southwest neighborhoods.

**Southeast Quadrant** - Brookside, Coconut Grove, Flamingo Estates, Foxfire, Kings Lake, Lakewood, Naples Gardens, Rock Creek Campground, The Glades, and surrounding neighborhoods.

The analysis will include the specific nature of the complaint, whether it was an arriving or departing aircraft or an overflight. Complaints relative to nighttime Mosquito Control operations, Air Ambulance Flights, Sheriff's Office and EMS helicopter operations are included in this report.

### **This Quarter Compared to Previous Quarter**

This quarter's noise complaints, compared to the previous quarter, have increased from 32 to 64. Complaints received from neighborhoods to the northeast of the airport have increased by 5, from the northwest they have increased by 4, from the southeast they have decreased by 6, and from the southwest increased by 29.

### **This Quarter Compared to the Same Period One Year Ago**

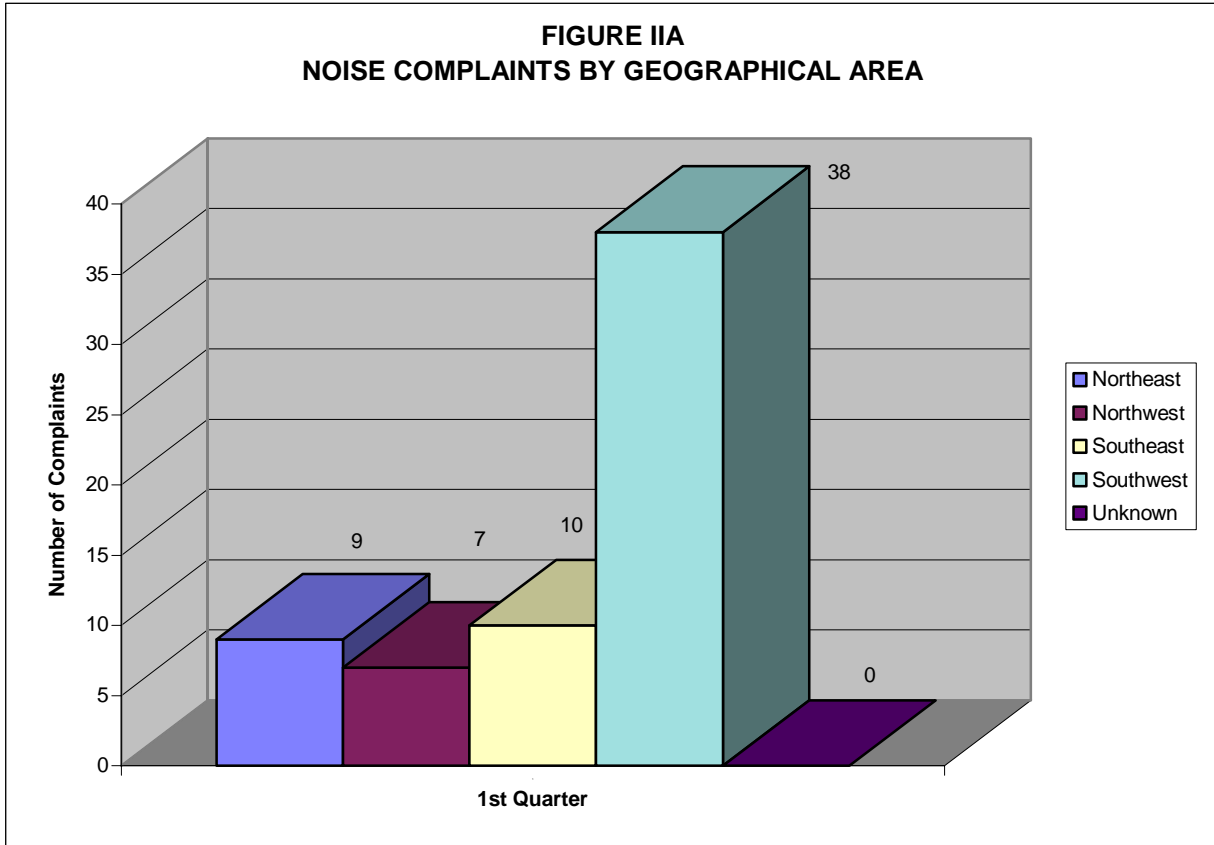
Compared to the same period last year, the total number of complaints decreased by 18 calls. Complaints received from neighborhoods to the northeast of the airport have increased by 3, from the northwest they have increased by 4, from the southeast decreased by 8, from the southwest decreased by 15, and unknown location complaints have remained the same. Total complaints received have decreased from 82 to 64.



**Table III**  
**AIRPORT NOISE COMPLAINT SUMMARY**  
 Fiscal Years 2004-2005

YEAR	Northeast	Northwest	Southeast	Southwest	Unknown Location	Monthly Total
<b>2004</b>						
OCTOBER	-	1	8	11	2	22
NOVEMBER	6	-	2	21	-	29
DECEMBER	-	2	8	21		31
TOTALS FOR 1st QUARTER	6	3	18	53	2	82
<b>2004</b>						
JANUARY	1	6	16	42	-	65
FEBRUARY	1	9	9	72	-	91
MARCH	2	9	6	21	-	38
TOTALS FOR 2nd QUARTER	4	24	31	135	-	194
<b>2004</b>						
APRIL	4	6	5	21	2	38
MAY	1	1	1	10	-	13
JUNE	-	1	2	4	-	7
TOTALS FOR 3rd QUARTER	5	8	8	35	2	58
<b>2004</b>						
JULY	2	2	3	4	-	11
AUGUST	2	1	11	3	-	17
SEPTEMBER	-	-	2	2	-	4
TOTALS FOR 4th QUARTER	4	3	16	9	-	32
TOTALS FOR FY04	19	38	73	232	4	366
<b>2005</b>						
OCTOBER	1	2	3	9	-	15
NOVEMBER	5	3	2	15	-	25
DECEMBER	3	2	5	14	-	24
TOTALS FOR 1st QUARTER	9	7	10	38	-	64

Figure IIA, below, graphically compares the noise complaints received by geographical areas based on data collected during the First Quarter of 2005. Total complaints for this quarter have increased 100% from the previous quarter, and decreased 22% when compared to the same period one year ago.



### PART III COMPLAINTS BY TIMEFRAME

Figure IIIA, below, depicts noise complaints for the First Quarter according to the time of the single event. Most complaints were received about operations occurring at 9:00 AM and 1:00 PM to 6:00 PM. Also, twenty-three percent (23%) of the total complaints were received during the voluntary curfew hours.

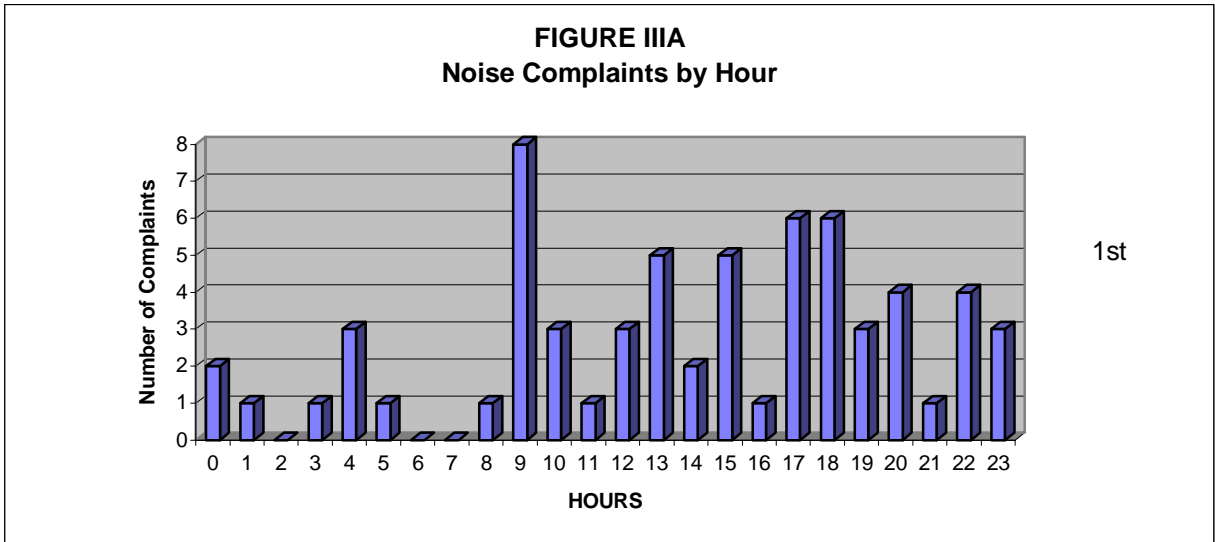
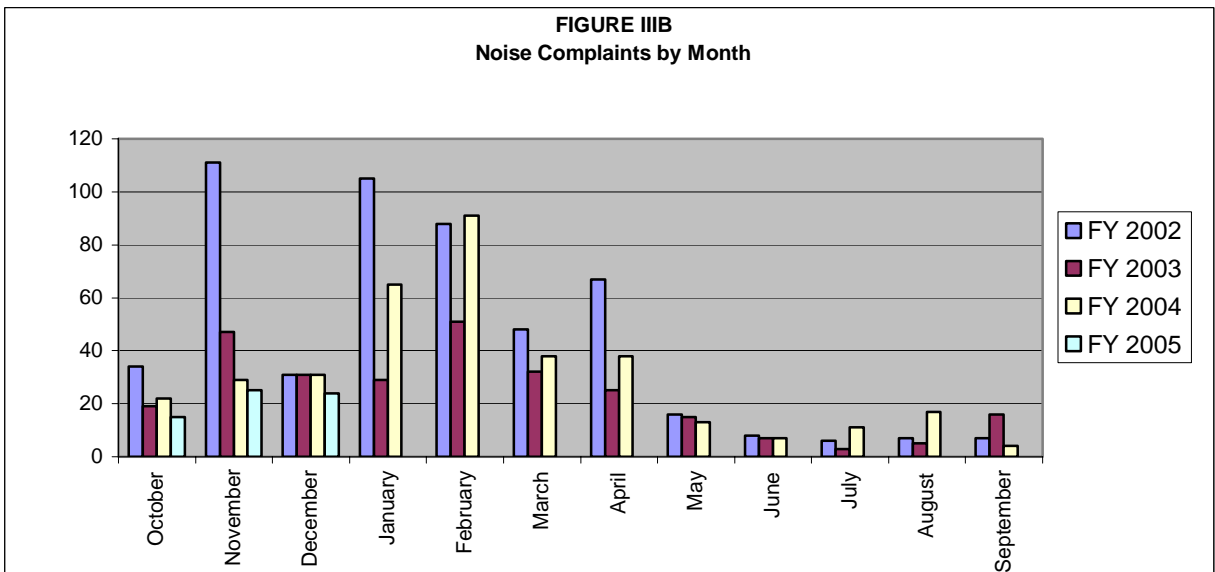


Figure IIIB below, illustrates the airport’s complaint volume for fiscal years 2002, 2003, 2004 and 2005.



**PART IV  
COMPLAINTS BY OPERATIONAL SOURCE**

Figure IVA below, indicates what types of aircraft the complainants were calling about. Seventy-five percent (75%) of the complaints were in regards to jet aircraft operations and of the total complaints received from jet aircraft operations, twenty-three percent (23%) were from Stage 2 air ambulance operations.

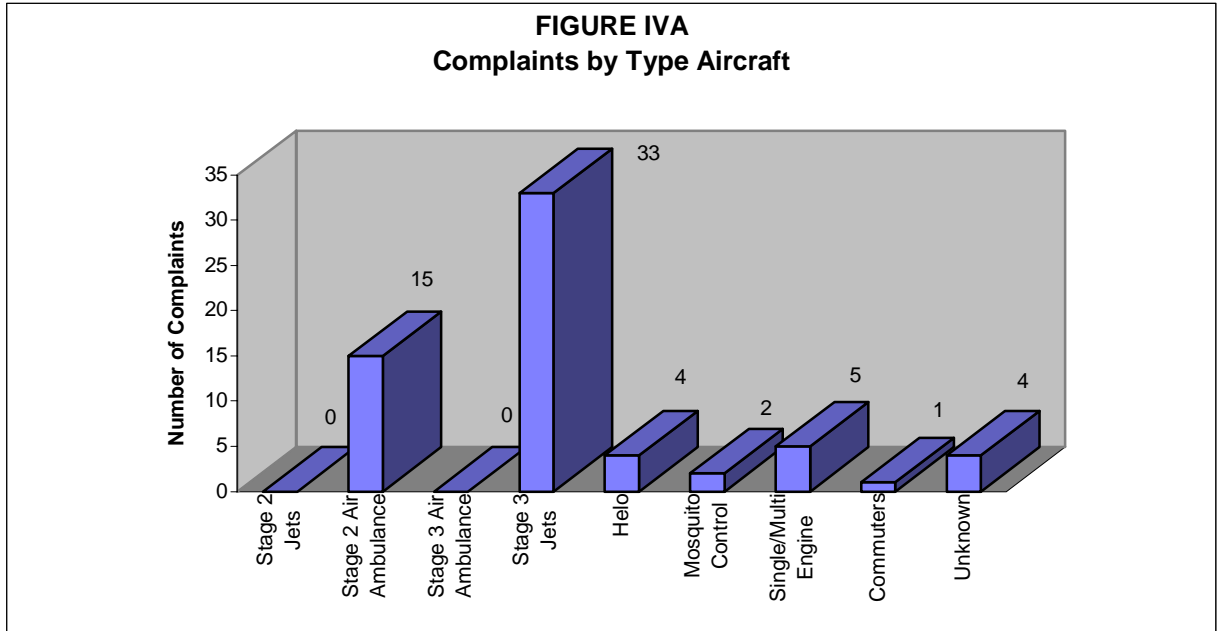
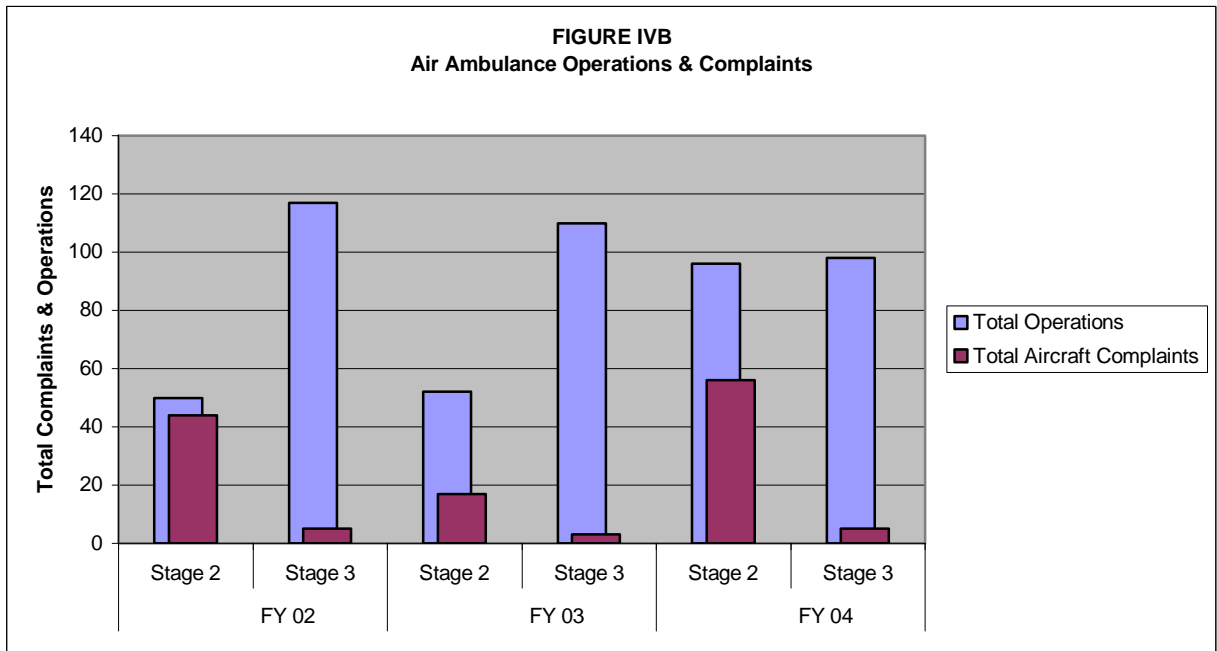
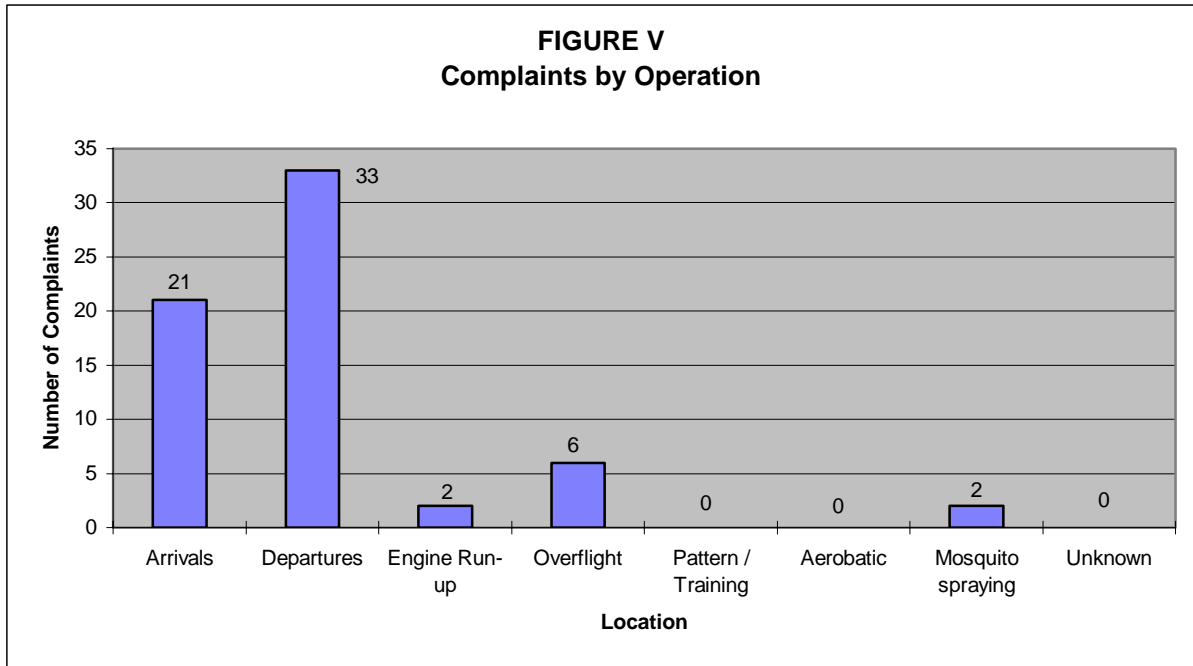


Figure IVB, below, depicts operations and noise complaints received from Stage 2 and Stage 3 Air Ambulances during FY 2002, 2003 and 2004.



**PART V**  
**COMPLAINTS BY OPERATION**

Figure V, below, shows the operational source of the noise complaints from the First Quarter of 2005.



## SUMMARY

### **Air Traffic**

Compared to the previous quarter, commuter traffic has increased 263%, general aviation traffic has increased by 25%, and total air traffic has increased by 33%. Compared to the same period one year ago, commuter traffic increased 38%, general aviation operations have increased by 9%, and total traffic has increased 11%.

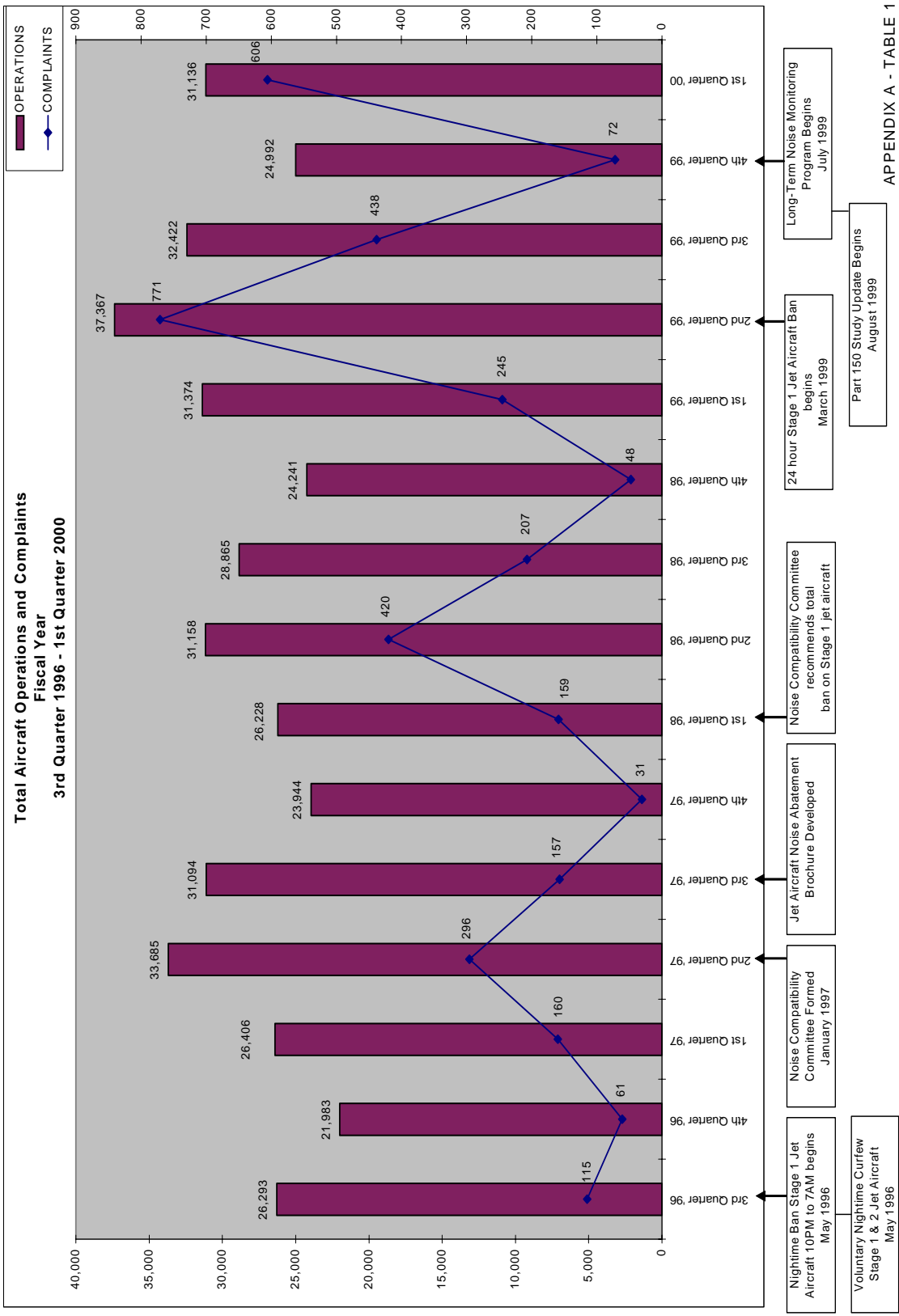
Twenty-seven percent (27%) of the total nighttime operations were attributed to Sheriff's Office, Emergency Services helicopters and air ambulance jet aircraft. Jet aircraft operations at night have decreased by six (6) operations when compared to same period last year. Single and multi-engine operations have decreased by 17%, and Mosquito Control operations have decreased by 9%. Overall nighttime operations have decreased by 7% when compared to last year.

### **Noise Complaints**

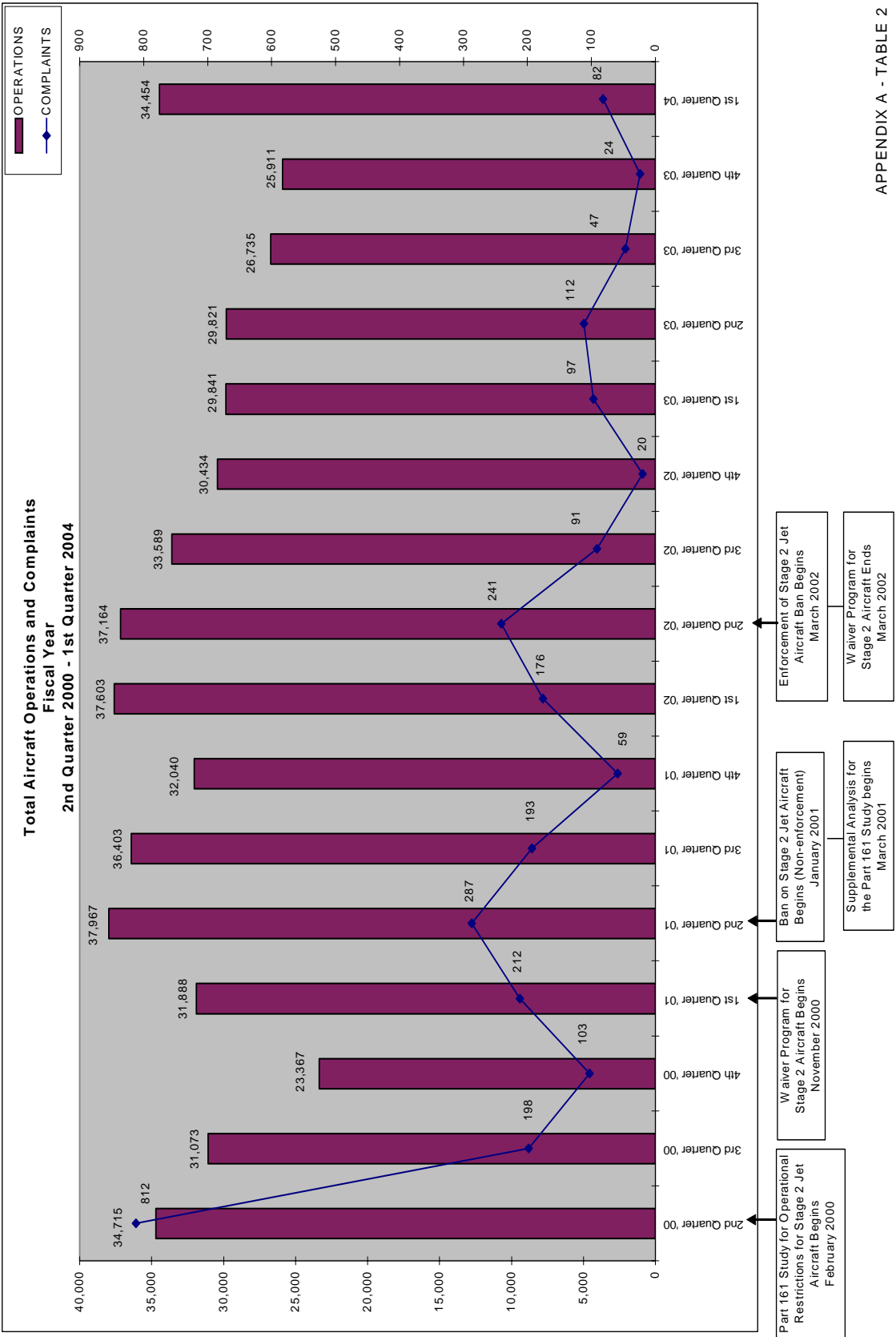
Compared to the previous quarter, noise complaints have increased from 32 to 64. Southwest Quadrant neighborhoods generated the most complaints during the Fiscal First Quarter of 2005, with a total of 38 complaints. Other areas generated the following number of complaints: Northeast-9, Northwest-7, Southeast-10 and Unknown location-0.

### **Noise Complaints by Family**

Forty (40) different families made 64 complaints to the Noise Abatement Office during the First Quarter of 2005. Four families made 21 calls, or 33% of the total complaints. Of the four families, three families were from the southwest (15 calls) and one family was from the Southeast (3 calls).

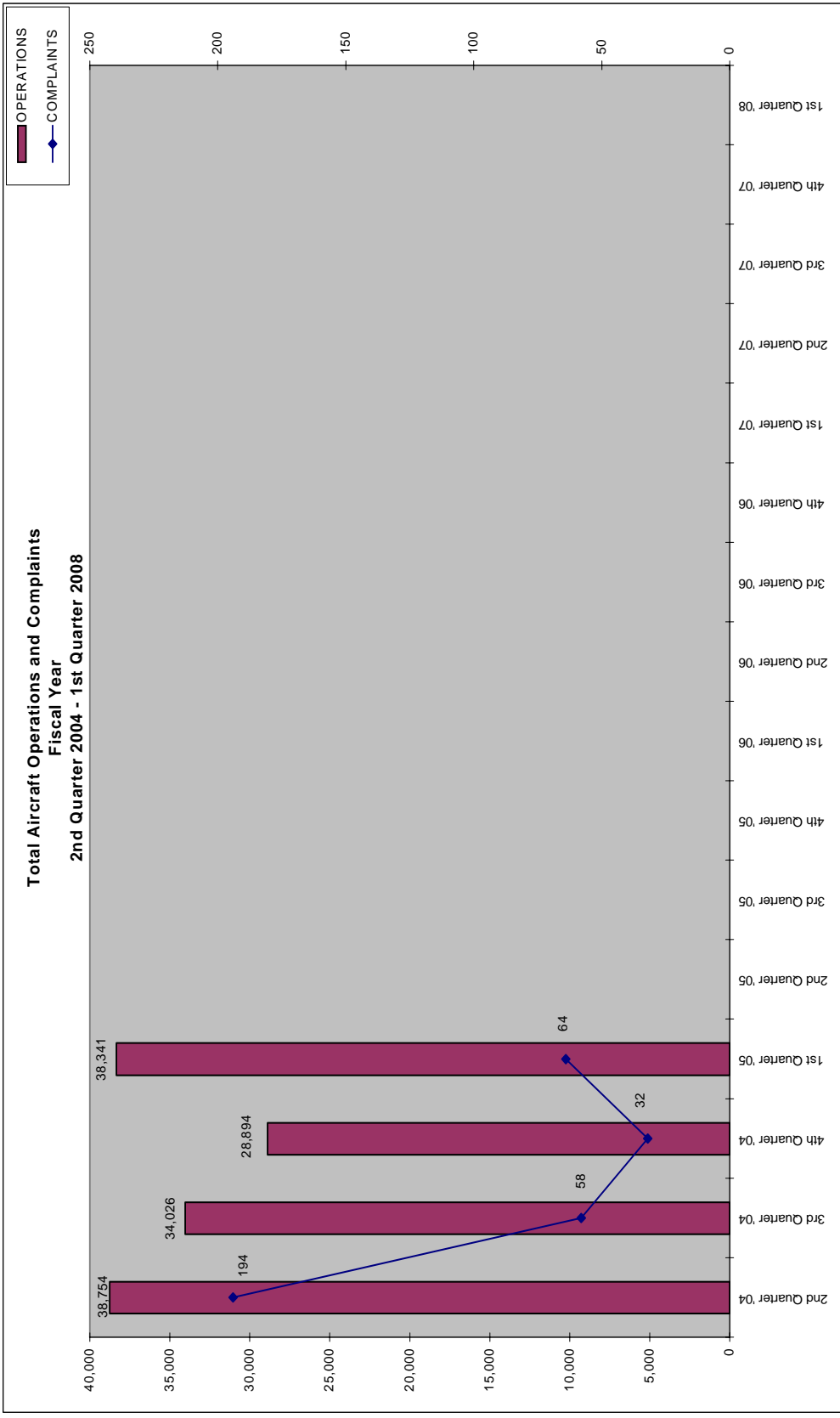


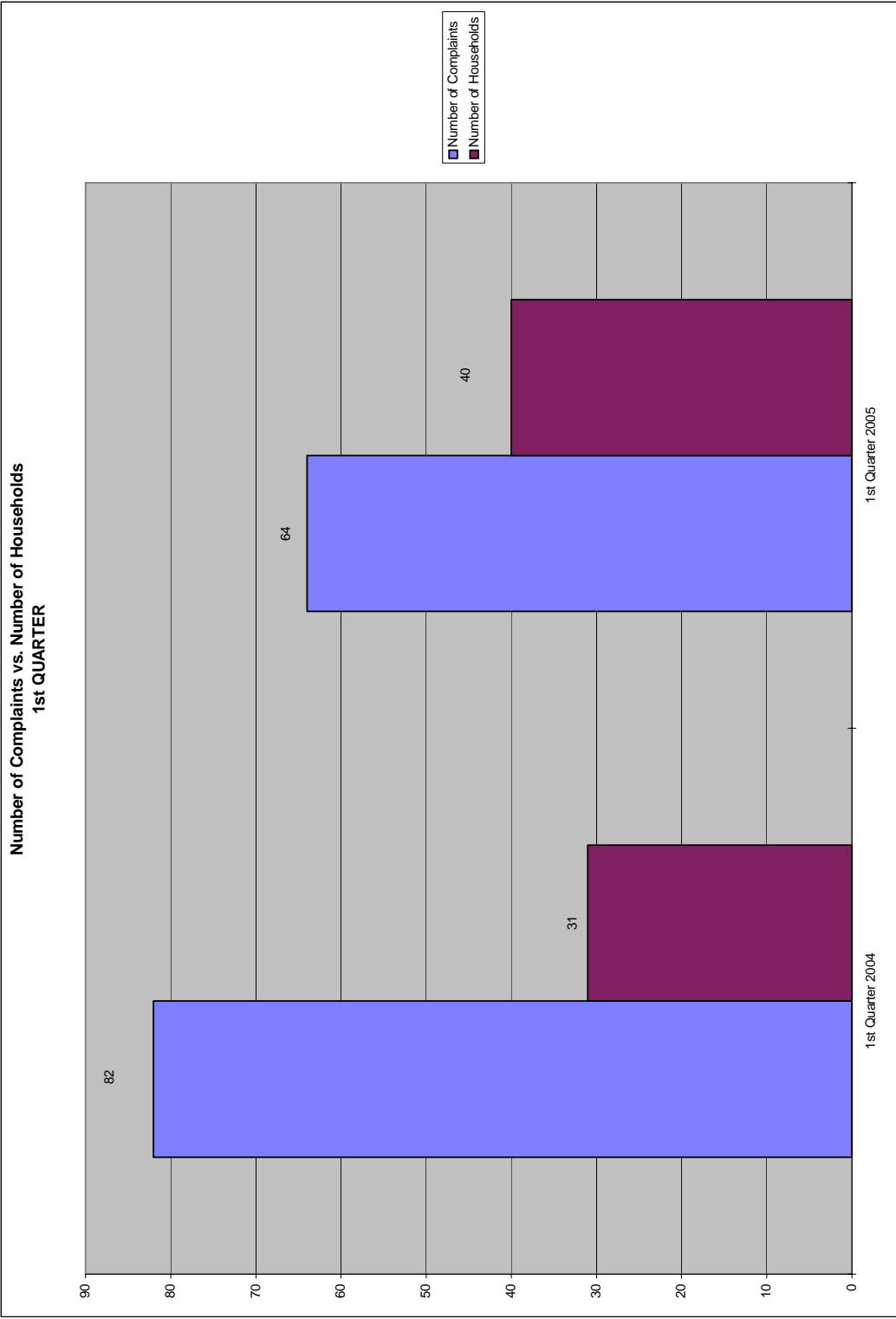
APPENDIX A - TABLE 1



APPENDIX A - TABLE 2







## NOISE COMPLAINTS & OPERATIONS SUMMARY

APPENDIX C

MONTH: October 2004

DATE	7 AM - 10 PM						10 PM - 7 AM						TOTAL OPERATIONS					
	JET+HELO+PROP			JET OPS			JET+HELO+PROP			JET OPS								
	EVENTS	COMPLAINTS	OPERATIONS	TOTAL STAGE 1 OPERATIONS	TOTAL STAGE 2 OPERATIONS	AA STAGE 1 (EXEMPT)	AA STAGE 2 (EXEMPT)	AA STAGE 3 OPERATIONS	EVENTS	COMPLAINTS	OPERATIONS	TOTAL STAGE 1 OPERATIONS		TOTAL STAGE 2 OPERATIONS	AA STAGE 1 (EXEMPT)	AA STAGE 2 (EXEMPT)	AA STAGE 3 OPERATIONS	STAGE 3 OPERATIONS
Fri-01			322								3						1	325
Sat-02			366								7							373
Sun-03			359								3						1	362
Mon-04			259					2			1							260
Tues-05			431								2							433
Wed-06	2	2	265								10						2	275
Thur-07	1	1	367								10						3	377
Fri-08			379								11						3	390
Sat-09			285								7						4	292
Sun-10	1	1	354								5						2	359
Mon-11			242						1	1	8						6	250
Tues-12			319						1	1	8						3	327
Wed-13	1	1	306								6							312
Thur-14			391								8						1	399
Fri-15			285								9						3	294
Sat-16			372								5							377
Sun-17			332								7						3	339
Mon-18			296								5						2	301
Tues-19	1	1	386								8						4	394
Wed-20			539								11						2	550
Thurs-21	2	2	368					2			8						1	376
Fri-22			417						1	1	12						2	429
Sat-23			345								6							351
Sun-24			398								8						1	406
Mon-25			289								5						1	294
Tues-26			478								5						1	483
Wed-27	2	2	418								4						2	422
Thurs-28	2	2	416								8						2	424
Fri-29			461								8						1	469
Sat-30			346								8							354
Sun-31			304								11							315
<b>TOTALS</b>	<b>12</b>	<b>12</b>	<b>11,095</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>217</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>51</b>	<b>11,312</b>

COMPLAINTS			
	DAY	NIGHT	TOTAL
Events	12	3	15
Complaints	12	3	15
Operations (Ops)	11,095	217	11,312
%Events/Ops	0.1%	0.1%	0.1%
Complaints & Events	10	10	10
%Complaints / Ops	0.1%	0.1%	0.1%

NIGHT OPERATIONS	
Air Ambulance (AA)	J 0
EMS	H 27
Sheriff's Office	H 34
Mosquito Control	H 6
Mosquito Control	P 4
<b>Public Service</b>	<b>J,H,P 71</b>
Air Carrier & GA [Other]	H,P 95
Jet Operations	J 51
<b>Night Ops - Total</b>	<b>J,H,P 217</b>

RESTRICTIONS		Violations	Letters
<b>Mandatory Restriction (MR)</b>			
Runups: Maintenance		0	0
Jet Stage 1 day & night Ops		0	0
Jet Stage 2 day & night Ops		0	0
<b>Voluntary Restriction (VR)</b>			
Jet Stage 3 night Ops		1	1

## NOISE COMPLAINTS & OPERATIONS SUMMARY

APPENDIX C

MONTH: November 2004

DATE	7 AM - 10 PM							10 PM - 7 AM							TOTAL OPERATIONS			
	JET+HELO+PROP			JET OPS				JET+HELO+PROP			JET OPS							
	EVENTS	COMPLAINTS	OPERATIONS	TOTAL STAGE 1 OPERATIONS	TOTAL STAGE 2 OPERATIONS	AA STAGE 1 (EXEMPT)	AA STAGE 2 (EXEMPT)	AA STAGE 3 OPERATIONS	EVENTS	COMPLAINTS	OPERATIONS	TOTAL STAGE 1 OPERATIONS	TOTAL STAGE 2 OPERATIONS	AA STAGE 1 (EXEMPT)		AA STAGE 2 (EXEMPT)	AA STAGE 3 OPERATIONS	STAGE 3 OPERATIONS
Mon-01			336								1						1	337
Tues-02			357							5							2	362
Wed-03	1	1	510							4								514
Thur-04			408							17							1	425
Fri-05			417							5							2	422
Sat-06	1	2	359							2							1	361
Sun-07	2	2	489							9							3	498
Mon-08	1	1	446							5							5	451
Tues-09			490							4							3	494
Wed-10			434							6							3	440
Thur-11			560							6							1	566
Fri-12			567							9							1	576
Sat-13	1	1	451							7							2	458
Sun-14			443							4								447
Mon-15	4	6	413						1	3	11					1	4	424
Tues-16	1	1	488							9							6	497
Wed-17			568		2					3							1	571
Thur-18	2	2	524							6							1	530
Fri-19	1	1	548							8								556
Sat-20			402							8								410
Sun-21	1	1	490							2								492
Mon-22			517							14							4	531
Tues-23			626						1	1	8							634
Wed-24			510							9							1	519
Thur-25			102							7							4	109
Fri-26			567							5							2	572
Sat-27	2	2	504							3							3	507
Sun-28	1	1	585							6							3	591
Mon-29			539							10							3	549
Tues-30			431							5							1	436
TOTALS	18	21	14,081	0	2	0	11	4	2	4	198	0	0	0	1	0	58	14,279

COMPLAINTS / COMMENTS			
	DAY	NIGHT	TOTAL
Events	18	2	20
Complaints	21	4	25
Operations (Ops)	14,081	198	14,279
%Events/Ops	0.1%	1.0%	0.1%
Complaints & Events	12	2.0	13
% Complaints / Ops	0.1%	2.0%	0.2%

NIGHT OPERATIONS		
Air Ambulance (AA)	J	1
EMS	H	16
Sheriff's Office	H	20
Mosquito Control	H	11
Mosquito Control	P	0
<b>Public Service</b>	J,H,P	48
Air Carrier & GA [Other]	H,P	92
Jet Operations	J	58
<b>Night Ops - Total</b>	J,H,P	198

RESTRICTIONS		Violations	Letters
<b>Mandatory Restriction (MR)</b>			
Runups: Maintenance		0	0
Jet Stage 1 day & night Ops		0	0
Jet Stage 2 day & night Ops		1	1
<b>Voluntary Restriction (VR)</b>			
Jet Stage 3 night Ops		1	1

## NOISE COMPLAINTS & OPERATIONS SUMMARY

APPENDIX C

MONTH: December 2004

DATE	7 AM - 10 PM							10 PM - 7 AM							TOTAL OPERATIONS			
	JET+HELO+PROP			JET OPS				JET+HELO+PROP			JET OPS							
	EVENTS	COMPLAINTS	OPERATIONS	TOTAL STAGE 1 OPERATIONS	TOTAL STAGE 2 OPERATIONS	AA STAGE 1 (EXEMPT)	AA STAGE 2 (EXEMPT)	AA STAGE 3 OPERATIONS	EVENTS	COMPLAINTS	OPERATIONS	TOTAL STAGE 1 OPERATIONS	TOTAL STAGE 2 OPERATIONS	AA STAGE 1 (EXEMPT)		AA STAGE 2 (EXEMPT)	AA STAGE 3 OPERATIONS	STAGE 3 OPERATIONS
Wed-01	1	1	530							5							1	535
Thur-02			512							7							2	519
Fri-03			440							7							4	447
Sat-04			424							15							1	439
Sun-05			398							4								402
Mon-06			339						1	1	8						5	347
Tue-07	1	1	405							8							5	413
Wed-08			506						2	2	15						6	521
Thur-09			511						1	1	17						4	528
Fri-10	2	7	310							9							5	319
Sat-11	1	1	266							8							1	274
Sun-12			438							8							3	446
Mon-13	1	1	472							11							6	483
Tue-14			447							11							3	458
Wed-15			419						1	1	10						3	429
Thur-16			526							5							3	531
Fri-17			484							9							2	493
Sat-18			401							8							1	409
Sun-19			422							4							1	426
Mon-20			509							4							1	513
Tue-21			532							6								538
Wed-22			494							8								502
Thu-23	1	1	224							2							1	226
Fri-24			56							0								56
Sat-25			64							3							3	67
Sun-26	2	2	270						1	1	5						5	275
Mon-27	1	1	391						1	1	18						7	409
Tue-28			446							9							4	455
Wed-29			436						1	1	11						7	447
Thu-30	1	1	494							9							1	503
Fri-31			336							4								340
<b>TOTALS</b>	<b>11</b>	<b>16</b>	<b>12,502</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>4</b>	<b>8</b>	<b>8</b>	<b>248</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>85</b>	<b>12,750</b>

COMPLAINTS / COMMENTS			
	DAY	NIGHT	TOTAL
Events	11	8	19
Complaints	16	8	24
Operations (Ops)	12,502	248	12,750
%Events/Ops	0.1%	3.2%	0.1%
Complaints & Events	15	10	13
% Complaints/Ops	0.1%	3.2%	0.2%

NIGHT OPERATIONS	
Air Ambulance (AA)	J 0
EMS	H 12
Sheriff's Office	H 27
Mosquito Control	H 19
Mosquito Control	P 2
<b>Public Service</b>	J,H,P 60
Air Carrier & GA [Other]	H,P 103
Jet Operations	J 85
<b>Night Ops - Total</b>	J,H,P 248

RESTRICTIONS		Violations	Letters
<b>Mandatory Restriction (MR)</b>			
Runups: Maintenance		0	0
Jet Stage 1 day & night Ops		0	0
Jet Stage 2 day & night Ops		0	0
<b>Voluntary Restriction (VR)</b>			
Jet Stage 3 night Ops		4	4

**RECURRING NOISE MONITORING PROGRAM RESULTS  
OCTOBER 1 – DECEMBER 31, 2004**

The purpose of this program is to conduct recurring monitoring sessions at selected locations in the airport environs to assist the Naples Airport Authority in identifying any changes in patterns and levels of noise exposure from season to season and year to year. Section I provides a basic description of activity noted during the monitoring period. Section II provides an activity comparison between quarters and a seasonal year-to-year comparison. Section III includes the quarterly decibel levels measured each quarter and a map depicting the monitoring locations and results from the most current monitoring period.

This program includes the following goals:

- Provide an objective basis for identifying long-term changes in noise exposure to correlate the changes in activity levels, facilities, airline schedules, airport rules, etc.
- Provide an objective basis for identifying seasonal variation in noise exposure.
- Provide an objective basis for evaluating geographic variation in noise exposure.
- Provide the interested public with useful, understandable, geographically representative information on long-term noise exposure patterns.
- Address the preceding technical objectives in the most efficient manner possible.

Staff spent several hours at the six locations, specifically documenting aircraft operations and determining what other sources produce significant sound levels in the vicinity of the monitors. Every source will contribute to the overall DNL results, as these sources may be louder than aircraft operations. Any type of “exceedance” occurring during these monitoring periods was noted. An exceedance is an event caused by any type of source (car, aircraft, or siren) which triggers the noise monitor to begin recording an event. An exceedance is only recorded if it lasts greater than five (5) seconds, and is louder than the threshold set on the monitor. During this round of monitoring, all monitor thresholds were set at 60 decibels to get as close as possible to the ambient background noise level at each site.

## SECTION I – QUARTERLY SITE ACTIVITY SUMMARY

All locations were monitored for approximately a ten day period, and staff were present at each location at least three times for various periods, noting exceedances, sound exposure levels \*(SEL) of various types of aircraft and background noise levels. Staff has also been able to provide noise monitor briefings, as well as, information about noise issues at the airport. The following SEL's and overall background noise levels noted in Section III were verified by staff during the on-site visits.

\* The Sound Exposure Level (SEL) is defined as a summation of the "A-weighted" sound energy over the duration of a noise event, where the duration is defined as the time when the sound level first exceeds a threshold level (in this case it's 60 dB) to the time that the sound level drops back down below the threshold. This energy is then squeezed into a one-second interval and the resulting energy level is called the SEL.

Below is a representative list of Sound Exposure Level (SEL) observations made at three sites. The event duration was added to the table below because the duration of the event directly impacts the Sound Exposure Level.

### Aircraft Arriving at Airport:

<b>SITE / LOCATION</b>	<b>AIRCRAFT TYPE</b>	<b>SEL LEVEL</b>	<b>EVENT DURATION in seconds</b>
Village Green / 1 ½ miles SW of airport	Twin Engine Baron	77.7 decibels	13.71
Village Green / 1 ½ miles SW of airport	Single Engine Cherokee	72.4 decibels	11.46
Springwood / ½ mile SE of airport	Twin Engine King Air	82.6 decibels	28.1
Pulling Property / 3/8 mile SW of airport	Gulfstream IV Jet	81.7 decibels	17.56
Pulling Property / 3/8 mile SW of airport	Hawker Jet	76.6 decibels	16.71
Pulling Property / 3/8 mile SW of airport	Single Engine TBM	80.3 decibels	24.21
Pulling Property / 3/8 mile SW of airport	Single Engine Cherokee	76.2 decibels	14.37
Pulling Property / 3/8 mile SW of airport	Citation Jet	77.5 decibels	22.18
Pulling Property / 3/8 mile SW of airport	CRJ - Delta	79.9 decibels	21.06

**Aircraft Departing Airport:**

<b>SITE / LOCATION</b>	<b>AIRCRAFT TYPE</b>	<b>SEL LEVEL</b>	<b>EVENT DURATION in seconds</b>
Pulling Property / 3/8 mile SW of airport	Twin Engine Seneca	80.9 decibels	25.34
Pulling Property / 3/8 mile SW of airport	Citation Jet	86.0 decibels	21.53
Pulling Property / 3/8 mile SW of airport	Single Engine Cessna 182	73.8 decibels	22.34
Pulling Property / 3/8 mile SW of airport	Twin Engine Cessna 421	81.4 decibels	30.93
Pulling Property / 3/8 mile SW of airport	Twin Engine Cessna 402 – Cape Air	83.8 decibels	23.59
Pulling Property / 3/8 mile SW of airport	Citation Jet	93.1 decibels	1.00.50
Pulling Property / 3/8 mile SW of airport	Gulfstream IV Jet	87.3 decibels	35.50
Pulling Property / 3/8 mile SW of airport	Challenger Jet	72.4 decibels	11.68

**Aircraft Doing a Low Approach**

<b>SITE / LOCATION</b>	<b>AIRCRAFT TYPE</b>	<b>SEL LEVEL</b>	<b>EVENT DURATION in seconds</b>
Pulling Property / 3/8 mile SW of airport	Twin Engine Baron	81.5 decibels	30.90
Pulling Property / 3/8 mile SW of airport	Twin Engine Baron	89.9 decibels	30.34
Pulling Property / 3/8 mile SW of airport	Single Engine Cherokee	82.0 decibels	24.71



## SECTION II – SEASONAL AND ANNUAL COMPARISON OF SITES

Noise Monitoring Site Summary Comparison between the Fiscal Fourth Quarter of 2004 and the Fiscal First Quarter of 2005, and a comparison between the same period last year.

A comparison of the six monitoring sites revealed that the DNL increased at two sites, decreased at four sites when compared to last quarter. The DNL increased at three sites, decreased at two sites when compared to same period last year (data not available for one site for this comparison). Below is a summary of each site. The changes in background noise are speculative unless staff observed changes in area construction levels, vehicular traffic or other activity. A more complete comparison is now available to compare the same time period on an annual basis, versus a seasonal basis.

The following guidelines may be helpful in interpreting community response to changes in DNL above 55 dB.

<u>Change in DNL</u>	<u>Community Response</u>
0 – 2 dB's	May be noticeable
2 – 5 dB's	Generally noticeable
Over 5 dB's	A change in community reaction is likely

**Site 1** – The DNL appears to have decreased by 0.8 decibels during the Fiscal First Quarter. When compared to the same period last year the DNL has increased by 1.2 decibels. The background noise at this site has decreased by 1.7 decibels.

**Site 2A** – The DNL at this site was 57.8 decibels which is an increase of 2.5 decibels when compared to the previous quarter and a decrease of 1.3 decibels when compared to the same period last year. Background noise level was 45.3 decibels.

**Site 3** – This site produced a DNL of 56.4 decibels. This data is a decrease of 4.9 decibels when compared to the previous quarter. Data is not available for comparison to the same period last year. Background noise level at this site was 47.3 decibels.

**Site 4** – The DNL at this site was 58.5 decibels, which is a 1.2-decibel decrease when compared to the previous quarter and the same period last year. Background noise level increased by 1.7 decibels.

**Site 5** – This site produced a DNL of 54.7 decibels. This data is a decrease of 0.4 decibels when compared to the previous quarter. When compared to the same period last year the DNL has increased by 3.7 decibels. The background noise level at this site has increased by 2.6 decibels when compared to the Fiscal Fourth Quarter of 2004.

**Site 7** – The DNL at this site increased by 0.8 decibels. When compared to the same quarter last year there is an increase of 0.5 decibels. There was a 1.2-decibel decrease in background noise at this site when compared to the previous quarter.

**DNL Comparison**  
**Fiscal Year**

<b>Site</b>	<b>First Quarter 2004</b>	<b>Fourth Quarter 2004</b>	<b>First Quarter 2005</b>
1	56.8 dB	58.8 dB	58.0 dB
2A	59.1 dB	55.3 dB	57.8 dB
3	N/A	61.3 dB	56.4 dB
4	59.7 dB	59.7 dB	58.5 dB
5	51.0 dB	55.1 dB	54.7 dB
7	59.1 dB	58.8 dB	59.6 dB

**SECTION III**  
**NOISE MONITORING SITE SUMMARY**  
Fiscal Year

SITES	1st Quarter Oct. - Dec., 2004		2nd Quarter Jan. - Mar. 2004		3rd Quarter Apr. - June 2004		4th Quarter July - Sept. 2004		1st Quarter Oct. - Dec., 2005	
	Bkgrnd	Total	Bkgrnd	Total	Bkgrnd	Total	Bkgrnd	Total	Bkgrnd	Total
1 Springwood-East Naples	46.4	56.8	47.3	62.8	48.4	58.2	49.2	58.8	47.5	58
2A Pulling Property	49.2	59.1	N/A	N/A	43.8	59.5	43.1	55.3	45.3	57.8
3 First Presbyterian Church - 6th St. South	N/A	N/A	47.5	60.6	47.7	59.6	48.7	61.3	47.3	56.4
4 Village Green - 11th Avenue South	46.4	59.7	43.8	56.9	44.7	59.9	43.9	59.7	45.6	58.5
5 The Conservancy	45.5	51	42	54.3	44.2	55.1	43.1	55.1	45.7	54.7
7 Wyndemere CC	49	59.1	48.8	59.3	44	55.8	47	58.5	45.8	59.6

**Bkgrnd** - The background noise level or the quietest level that would be experienced in the absence of most significant noise-producing human activity.

**Total** - Total noise as it occurs over a 24-hour period, adding a 10-decibel penalty to sound events occurring at night between the hours of 10:00 PM and 7:00 AM.