



**CITY OF NAPLES AIRPORT AUTHORITY**

**QUARTERLY NOISE REPORT**

NUMBER 27

For the period

July 1, 2003 through September 30, 2003

Prepared by  
Airport Operations

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# **PART I AIRCRAFT OPERATIONS**

## **INTRODUCTION**

This is the twenty-seventh 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 three (3) monitoring locations surrounding the airport (Appendix D). 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 decreased by 68%. General aviation activity has increased by 5%. Total traffic decreased by 3%, from 26,735 operations to 25,911. The daily average for the Third Quarter was 282 operations.

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

Compared to the same period last year, commuter traffic has decreased 54%, and general aviation air traffic has decreased 12%. Total air traffic operations decreased by 15% from 30,434 operations to 25,911.

### **Fiscal Year 2002 Compared to Fiscal Year 2003**

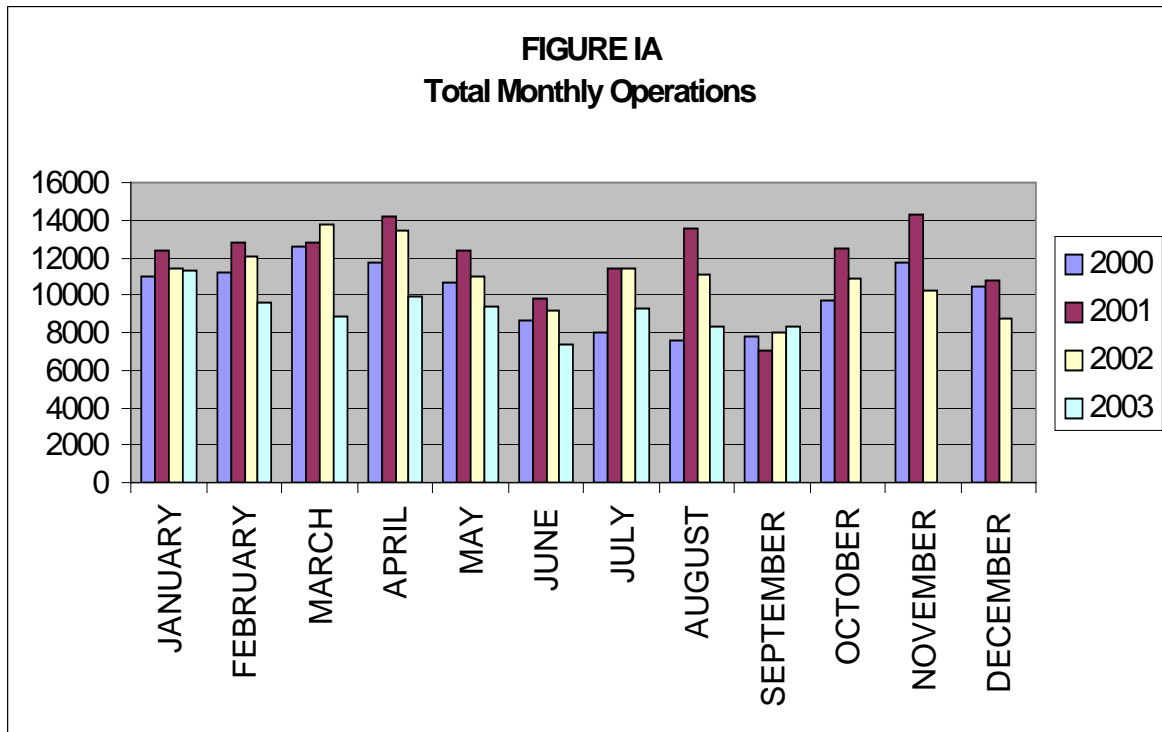
FY03 Operations have decreased by 26,482 operations (19%), from 138,790 to 112,308 operations when compared to FY02. Itinerant operations decreased 20%, from 104,937 to 84,256 operations, and local operations decreased 17%, from 33,853 to 28,052 operations. Itinerant operations accounted for 75% of the total airport operations in FY03. IFR operations decreased by 6%, from 40,543 to 38,016.

**Table I**

**AIRPORT TRAFFIC SUMMARY  
Landings and Takeoffs  
2002-2003**

<b>YEAR</b>	<b>COMMUTER</b>	<b>GENERAL AVIATION</b>	<b>MILITARY</b>	<b>TOTAL TRAFFIC</b>	<b>DAILY AVERAGE</b>
<b>2002</b>					
<b>JULY</b>	675	10,654	53	11,382	367
<b>AUGUST</b>	761	10,254	28	11,043	356
<b>SEPTEMBER</b>	614	7,394	1	8,009	267
<b>TOTALS FOR 3rd QUARTER</b>	2,050	28,302	82	30,434	330
<b>TOTALS FOR FY 2002</b>	13,819	124,639	332	138,790	375
<b>OCTOBER</b>	831	10,005	2	10,838	350
<b>NOVEMBER</b>	1,183	9,027	5	10,215	341
<b>DECEMBER</b>	1,206	7,579	3	8,788	284
<b>TOTALS FOR 4th QUARTER</b>	3,220	26,611	10	29,841	325
<b>2003</b>					
<b>JANUARY</b>	1,323	10,008	18	11,349	366
<b>FEBRUARY</b>	1,489	8,142	10	9,641	344
<b>MARCH</b>	1,569	7,201	61	8,831	285
<b>TOTALS FOR 1st QUARTER</b>	4,381	25,351	89	29,821	332
<b>APRIL</b>	1,550	8,380	27	9,957	332
<b>MAY</b>	914	8,493	28	9,435	304
<b>JUNE</b>	484	6,856	3	7,343	245
<b>TOTALS FOR 2nd QUARTER</b>	2,948	23,729	58	26,735	294
<b>JULY</b>	321	8,921	21	9,263	299
<b>AUGUST</b>	299	8,035	5	8,339	269
<b>SEPTEMBER</b>	319	7,971	19	8,309	277
<b>TOTALS FOR 3rd QUARTER</b>	939	24,927	45	25,911	282
<b>TOTALS FOR FY 2003</b>	11,488	100,618	202	112,308	308

Figure IA below illustrates the airport's month-by-month total operational levels for 2000, 2001, 2002 and 2003.



There was a 15% decrease in overall airport operations during the Third Quarter of 2003, when compared to the same period in 2002.

### Night Time Operations

Figure IB, below, illustrates the airport's total nighttime (10:00 PM – 7:00 AM) operational levels for 2000, 2001, 2002 and 2003.

Total nighttime operations have decreased 31% in the Third Quarter of 2003 when compared to the Third Quarter 2002 statistics. Jet operations occurring at night decreased by six operations, from 99 operations during the 3<sup>rd</sup> Quarter of 2002 to 93 during the 3<sup>rd</sup> Quarter of 2003.

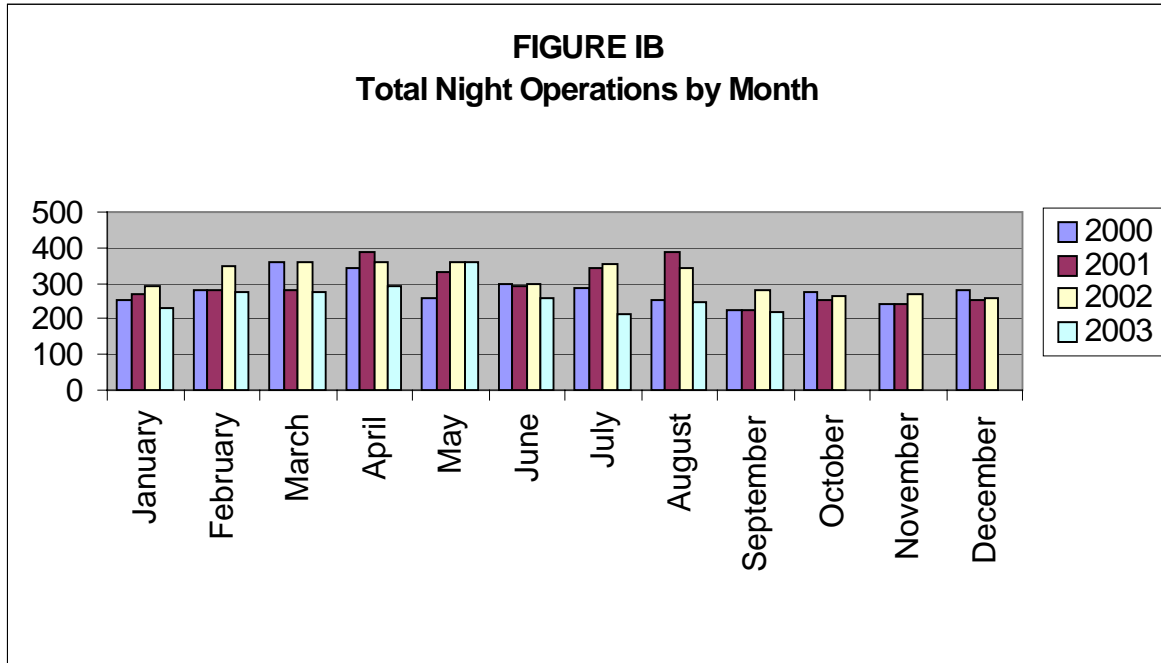


Table II, below, summarizes the types of nighttime operations occurring at the airport during the previous five quarters. Nighttime operations include voluntary curfew hours (10:00 PM through 7:00 AM). Reported nighttime operations have decreased by 299 total operations when compared to the same time last year.

The number of air ambulance operations has remained the same. Single and multi-engine aircraft operations have decreased by 51%. The Public service operations represent 37% of the activity occurring at night.

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

Activity	3 <sup>rd</sup> 2002	4 <sup>th</sup> 2002	1 <sup>st</sup> 2003	2 <sup>nd</sup> 2003	3 <sup>rd</sup> 2003
Jets	99	218	255	178	93
Jet – Air Ambulance	0	2	4	0	0
Single & Multi-engine	678	453	441	472	334
Mosquito Control Aircraft	88	15	5	115	135
Helicopters Collier S.O., EMS & Coast Guard	113	107	82	144	117
<b>Total</b>	<b>978</b>	<b>795</b>	<b>787</b>	<b>909</b>	<b>679</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 decreased from 47 to 24. Complaints received from neighborhoods to the northeast of the airport have increased by 3, from the northwest decreased by 2, from the southeast they have decreased by 2, and from the southwest decreased by 22.

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

Compared to the same period last year, the total number of complaints increased by 4 calls. Complaints received from neighborhoods to the northeast of the airport have increased by 6, from the northwest increased by 3, from the southeast decreased by 5 and from the southwest increased by 2. Total complaints received have increased from 20 to 24.

### **Fiscal Year 2002 Compared to Fiscal Year 2003**

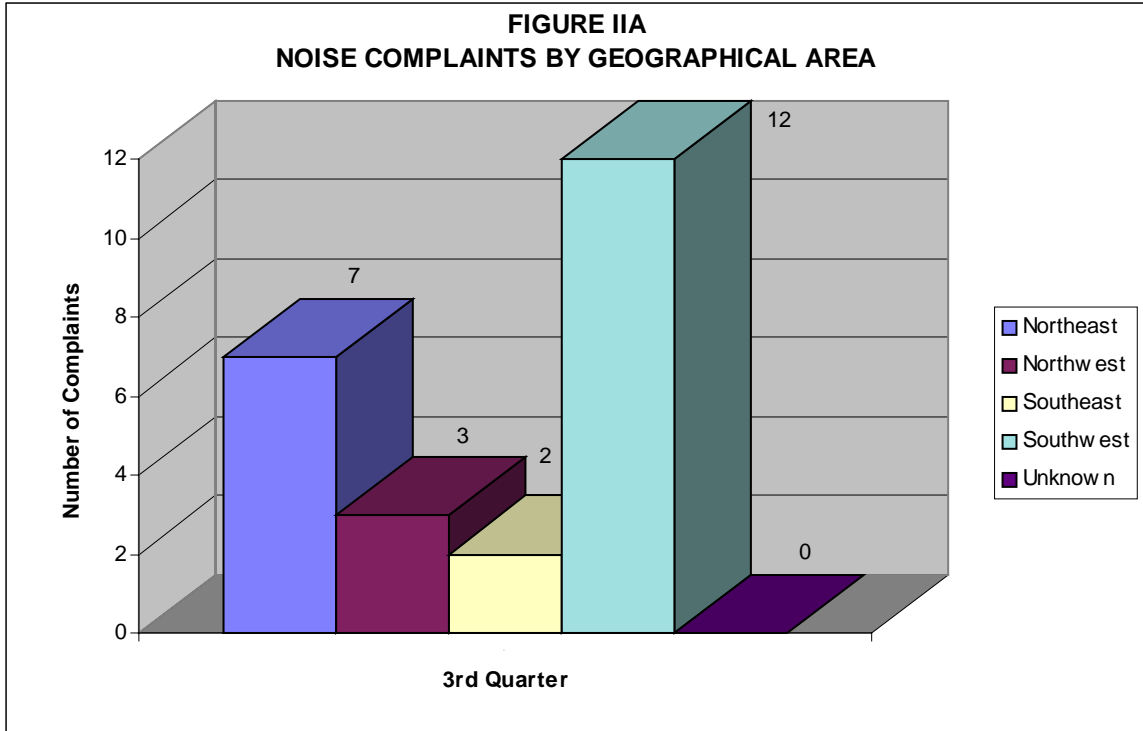
Complaints have decreased 47% in Fiscal Year 2003, from 528 in FY02 to 280 in FY03.



**Table III**  
**AIRPORT NOISE COMPLAINT SUMMARY**  
**2002-2003**

YEAR	Northeast	Northwest	Southeast	Southwest	Unknown Location	Monthly Total
<b>2002</b>						
JULY	-	-	-	5	1	6
AUGUST	1	-	4	2	-	7
SEPTEMBER	-	-	3	3	1	7
TOTALS FOR 3rd QUARTER	1	-	7	10	2	20
<b>2002</b>						
OCTOBER	4	-	4	11	-	19
NOVEMBER	10	2	6	29	-	47
DECEMBER	2	2	4	20	3	31
TOTALS FOR 4th QUARTER	16	4	14	60	3	97
TOTALS FOR FY 2002	55	40	55	372	6	528
<b>2003</b>						
JANUARY	-	1	5	23	-	29
FEBRUARY	1	12	8	30	-	51
MARCH	1	2	1	26	2	32
TOTALS FOR 1st QUARTER	2	15	14	79	2	112
<b>2003</b>						
APRIL	2	2	1	20	-	25
MAY	2	2	1	10	-	15
JUNE	-	1	2	4	-	7
TOTALS FOR 2nd QUARTER	4	5	4	34	-	47
<b>2003</b>						
JULY	2	-	1	-	-	3
AUGUST	1	-	-	4	-	5
SEPTEMBER	4	3	1	8	-	16
TOTALS FOR 3rd QUARTER	7	3	2	12	-	24
TOTALS FOR FY 2003	29	27	34	185	-	280

Figure IIA, below, graphically compares the noise complaints received by geographical areas based on data collected during the Third Quarter of 2003. Total complaints for this quarter have decreased 49% from the previous quarter, and increased 17% when compared to the same period one year ago.



### PART III COMPLAINTS BY TIMEFRAME

Figure IIIA, below, depicts noise complaints for the Third Quarter according to the time of the single event. Most complaints were received between 9:00 PM and 10:00 PM (21%). Also, twenty-one percent (21%) of the total complaints were received during the voluntary curfew hours.

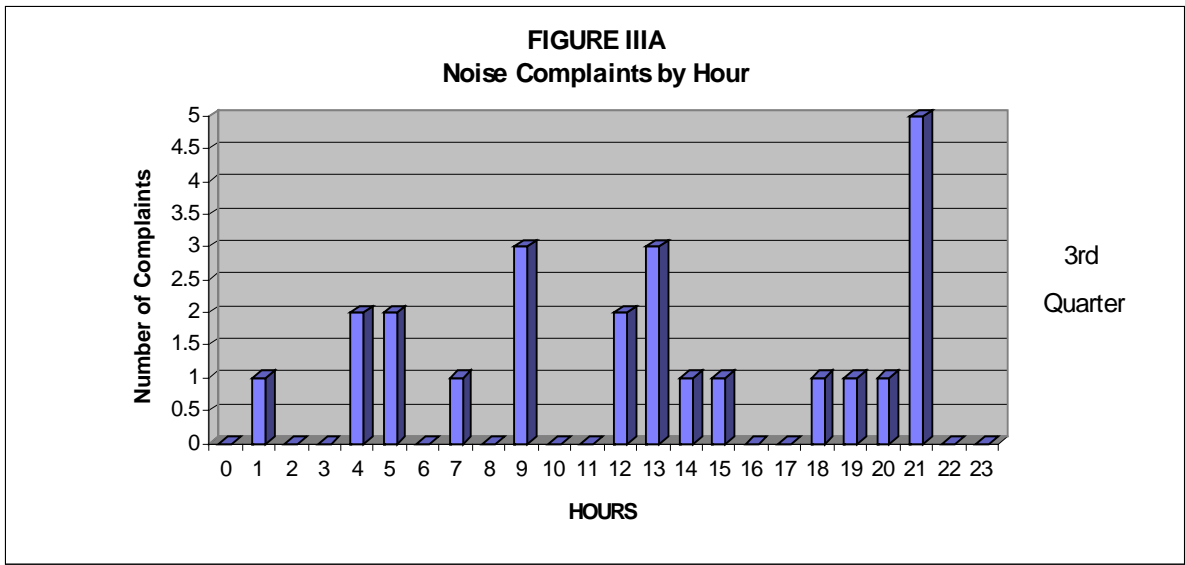
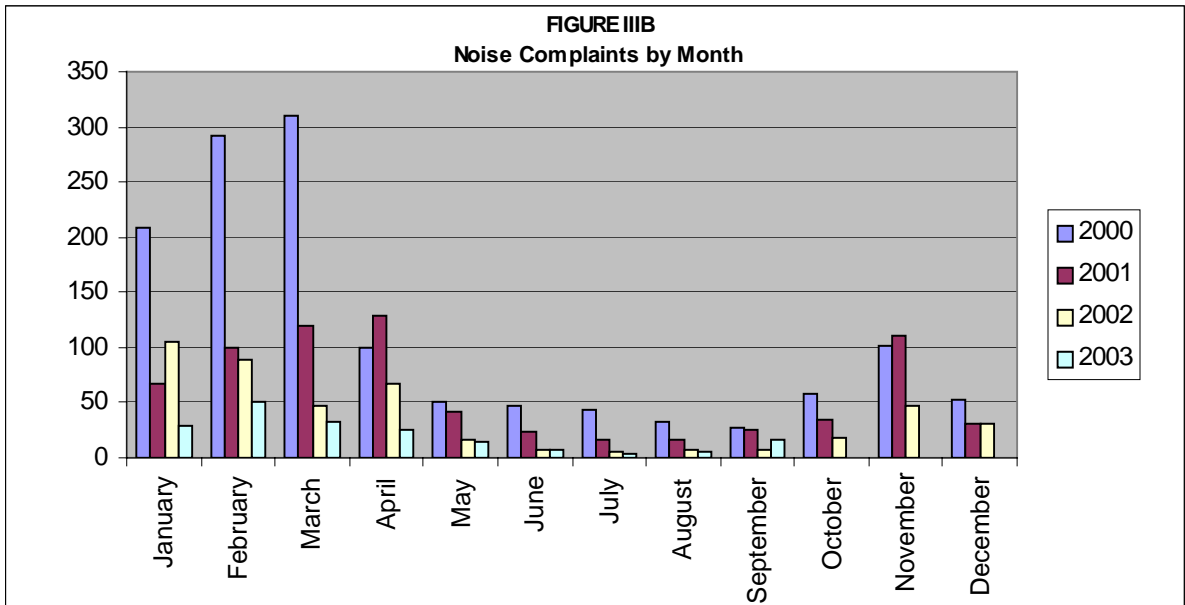
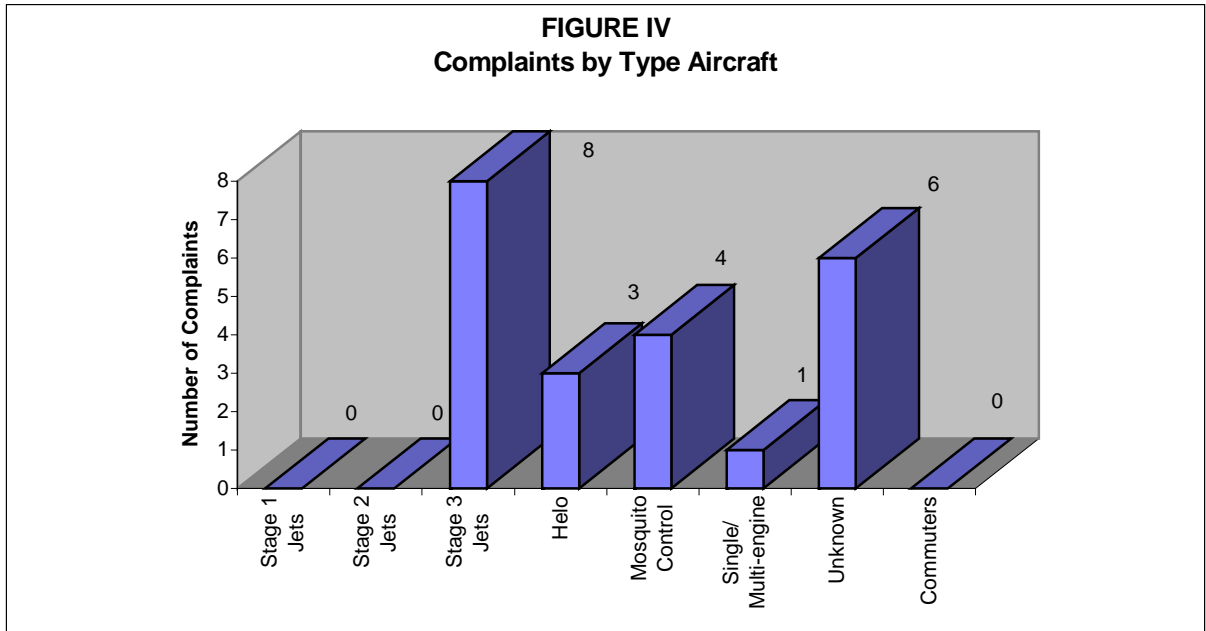


Figure IIIB below, illustrates the airport's complaint volume for 2000, 2001, 2002 and 2003.



## PART IV COMPLAINTS BY OPERATIONAL SOURCE

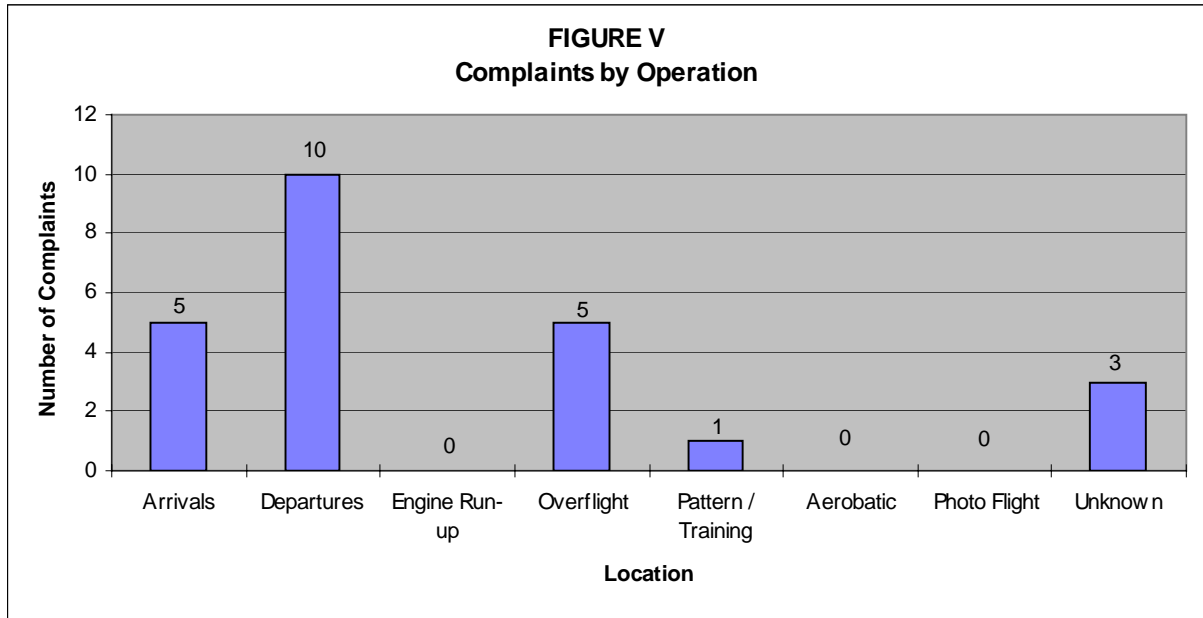
Figure IV below, indicates what types of aircraft the complainants were calling about. When comparing the last three (3) quarters noise complaints, it appears the complaints have remained relatively the same in regards to jet aircraft operations.



Staff received one (1) complaint from a Stage 2 Air Ambulance and one (1) complaint from a Stage 3 Air Ambulance during the Third Quarter of 2003.

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

Figure V, below, shows the operational source of the noise complaints from the Third Quarter of 2003.



## SUMMARY

### **Air Traffic**

Compared to the previous quarter, commuter traffic has decreased 68%, general aviation traffic has increased by 5%, and total air traffic has decreased by 3%. Compared to the same period one year ago, commuter traffic decreased 54%, general aviation operations have decreased by 12%, and total traffic has decreased 15%.

Seventeen percent (17%) of the total nighttime operations were attributed to Sheriff's Office or Emergency Services helicopters, and jet aircraft operations have decreased by six (6) operations when compared to same period last year. Single and multi-engine operations have decreased by 51%, while Mosquito Control operations have increased by 35%. Overall nighttime operations have decreased by 31% when compared to last year.

### **Noise Complaints**

Compared to the previous quarter, noise complaints have decreased from 47 to 24. Southwest Quadrant neighborhoods generated the most complaints during the Third Quarter of 2003, with a total of 12 complaints. Other areas generated the following number of complaints: Northeast-7, Northwest-3 and Southeast-2.

### **Noise Complaints by Family**

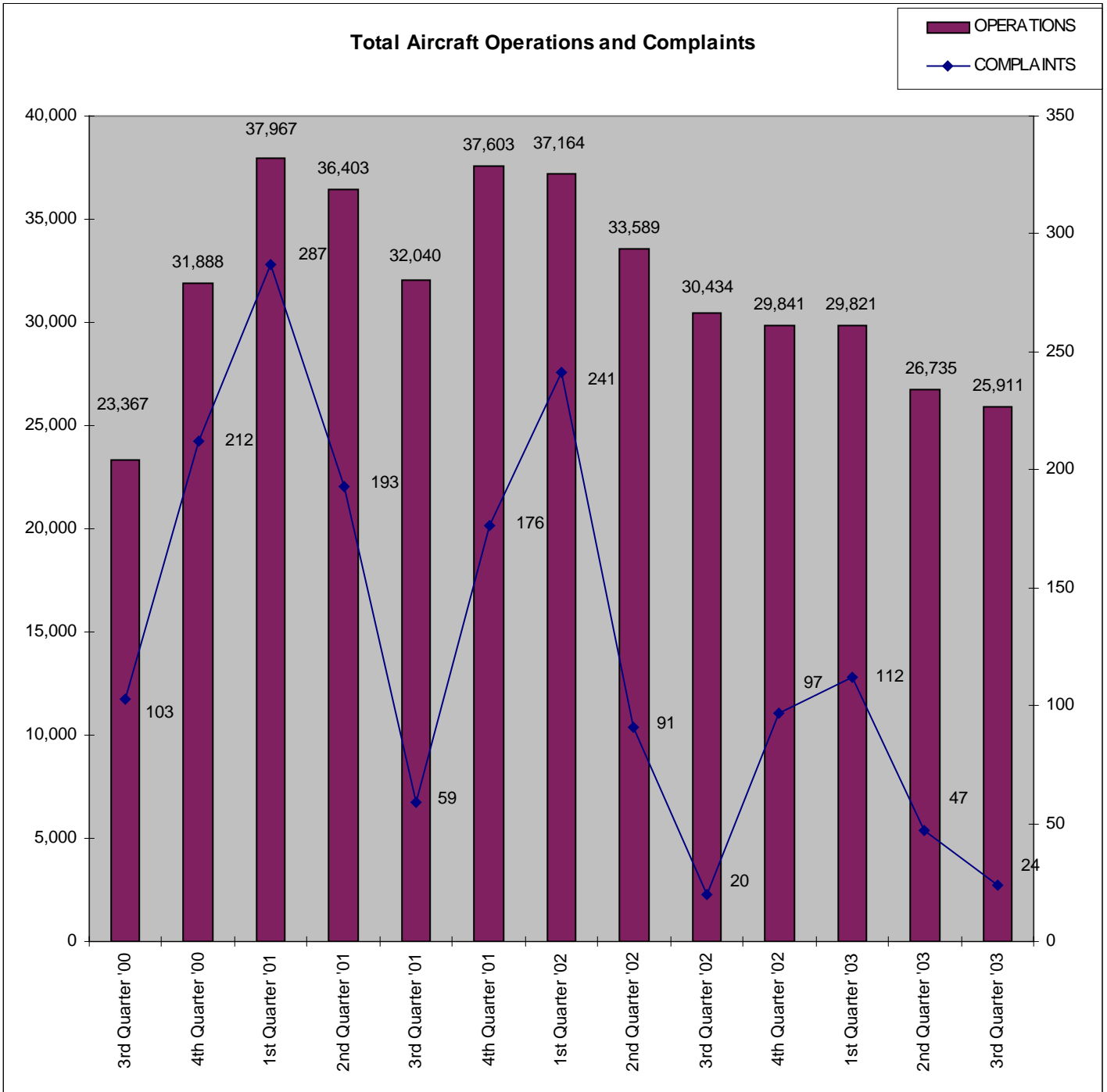
Sixteen (16) different families made 24 complaints to the Noise Abatement Office during the Third Quarter of 2003. One family made 9 calls, or 38% of the total complaints.

### **Air Traffic - Fiscal Year 2002 Compared to Fiscal Year 2003**

FY03 Operations have decreased by 26,482 operations (19%), from 138,790 to 112,308 operations when compared to FY02. Itinerant operations decreased 20%, from 104,937 to 84,256 operations, and local operations decreased 17%, from 33,853 to 28,052 operations. Itinerant operations accounted for 75% of the total airport operations in FY03. IFR operations decreased by 6%, from 40,543 to 38,016.

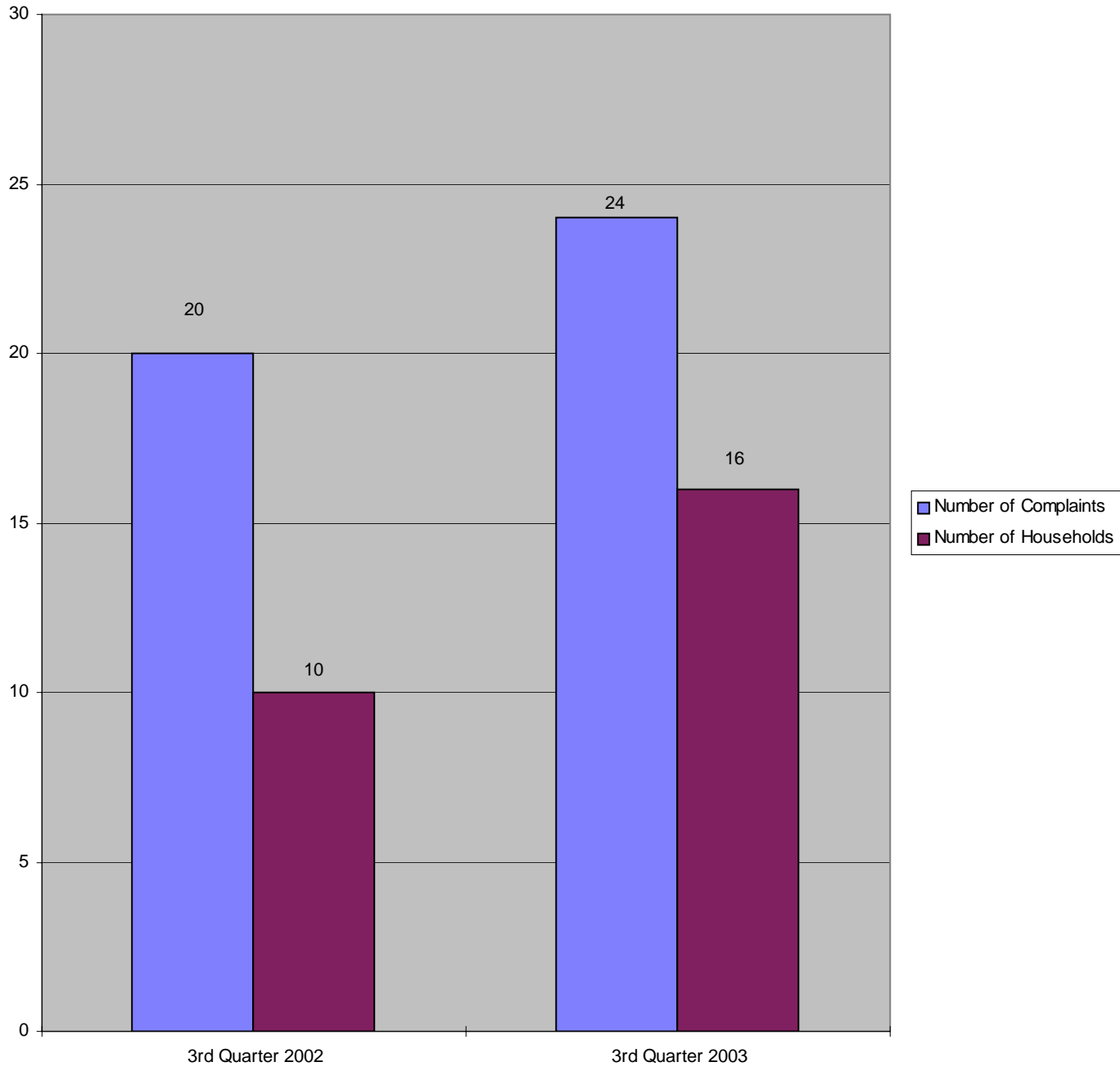
### **Complaints - Fiscal Year 2002 Compared to Fiscal Year 2003**

Complaints have decreased 47% in Fiscal Year 2003, from 528 in FY02 to 280 in FY03.



APPENDIX A

**3rd QUARTER  
Number of Complaints vs. Number of Households**





# NOISE COMPLAINTS & OPERATIONS SUMMARY

APPENDIX C

MONTH: July 2003

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
Tue-01			286					4			9						5	295
Wed-02			291								10						1	301
Thu-03	1	1	304								9							313
Fri-04			208						1	1	11							219
Sat-05			300								3							303
Sun-06			276								3						1	279
Mon-07			229								5						1	234
Tue-08			231								4							235
Wed-09			320								4						2	324
Thu-10			390								7						4	397
Fri-11			317								7							324
Sat-12			394								7							401
Sun-13			364								4						1	368
Mon-14			285								5						1	290
Tue-15			310								13						3	323
Wed-16			278					2			7							285
Thu-17			330								7						2	337
Fri-18			306								5							311
Sat-19			308								5							313
Sun-20			245								3							248
Mon-21			289								7						1	296
Tue-22			225								9						1	234
Wed-23			247								3						1	250
Thu-24			382								8						3	390
Fri-25			224								3						1	227
Sat-26			301								11							312
Sun-27			237								9						1	246
Mon-28			242								8						1	250
Tue-29			312								14						2	326
Wed-30			313								6						2	319
Thu-31	1	1	304					2			9						1	313
<b>TOTALS</b>	<b>2</b>	<b>2</b>	<b>9,048</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>6</b>	<b>1</b>	<b>1</b>	<b>215</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>35</b>	<b>9,263</b>

COMPLAINTS	DAY	NIGHT	TOTAL
Events	2	1	3
Complaints	2	1	3
Operations (Ops)	9,048	215	9,263
%Events/Ops	0.0%	0.5%	0.0%
Complaints & Events	10	10	10
% Complaints / Ops	0.0%	0.5%	0.0%

NIGHT OPERATIONS		
Air Ambulance (AA)	J	0
EMS	H	10
Sheriff's Office	H	23
Mosquito Control	H	11
Mosquito Control	P	17
<b>Public Service</b>	J,H,P	61
Air Carrier & GA [Other]	H,P	119
Jet Operations	J	35
<b>Night Ops - Total</b>	J,H,P	215

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	0	0

# NOISE COMPLAINTS & OPERATIONS SUMMARY

APPENDIX C

MONTH: August 2003

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			293								5						2	298
Sat-02			234								6							240
Sun-03			226								4							230
Mon-04			279								10						1	289
Tues-05			347								8							355
Wed-06			288								6						1	294
Thur-07			295				2		2	2	8							303
Fri-08			190								4						2	194
Sat-09			255								0							255
Sun-10			251								17							268
Mon-11			263								5							268
Tues-12			318								6						2	324
Wed-13			303								8							311
Thur-14			133								11						1	144
Fri-15			316								13						3	329
Sat-16			297								8							305
Sun-17			247								2							249
Mon-18			252								7							259
Tues-19			242								9						1	251
Wed-20			291								11						1	302
Thurs-21			255								6						2	261
Fri-22	1	1	245								11							256
Sat-23			339								15						2	354
Sun-24	1	1	336								5						1	341
Mon-25			250								9						3	259
Tues-26			259								8							267
Wed-27			241								7							248
Thurs-28	1	1	259								5						2	264
Fri-29			194								13						1	207
Sat-30			204								9						2	213
Sun-31			192								9							201
TOTALS	3	3	8,094	0	0	0	2	2	2	2	245	0	0	0	0	0	25	8,339

COMPLAINTS			
	DAY	NIGHT	TOTAL
Events	3	2	5
Complaints	3	2	5
Operations (Ops)	8,094	245	8,339
%Events/Ops	0.0%	0.8%	0.1%
Complaints & Events	1.0	1.0	1.0
% Complaints/Ops	0.0%	0.8%	0.1%

NIGHT OPERATIONS		
Air Ambulance (AA)	J	0
EMS	H	19
Sheriff's Office	H	18
Mosquito Control	H	9
Mosquito Control	P	53
<b>Public Service</b>	J,H,P	99
Air Carrier & GA (Other)	H,P	121
Jet Operations	J	25
<b>Night Ops - Total</b>	J,H,P	245

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		0	0

## NOISE COMPLAINTS & OPERATIONS SUMMARY

APPENDIX C

MONTH: September 2003

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			346								8						1	354
Tues-02			247								9						3	256
Wed-03	1	1	239								8						2	247
Thur-04			201						1	1	8						2	209
Fri-05			81								9						2	90
Sat-06			187								22							209
Sun-07	2	2	249								9							258
Mon-08	1	1	452								4						2	456
Tues-09			366								9						2	375
Wed-10			203								10						2	213
Thur-11			290								5						1	295
Fri-12			305								5							310
Sat-13			318								3							321
Sun-14			328								5						1	333
Mon-15			320								7						1	327
Tues-16			388								9						2	397
Wed-17			258								9							267
Thur-18	1	1	356					2			5							361
Fri-19			286								7							293
Sat-20			332								3							335
Sun-21	3	3	315						1	1	10							325
Mon-22			241								6							247
Tues-23			228								2						1	230
Wed-24	2	2	282					2			8						5	290
Thur-25	2	3	279					2			17						4	296
Fri-26			163								5							168
Sat-27			260								6							266
Sun-28			243								6							249
Mon-29	1	1	46								3						1	49
Tues-30			281								2						1	283
TOTALS	13	14	8,090	0	0	0	0	6	2	2	219	0	0	0	0	0	33	8,309

COMPLAINTS / COMMENTS			
	DAY	NIGHT	TOTAL
Events	13	2	15
Complaints	14	2	16
Operations (Ops)	8,090	219	8,309
%Events/Ops	0.2%	0.9%	0.2%
Complaints & Events	11	10	11
% Complaints/Ops	0.2%	0.9%	0.2%

NIGHT OPERATIONS		
Air Ambulance (AA)	J	0
EMS	H	20
Sheriff's Office	H	27
Mosquito Control	H	10
Mosquito Control	P	35
<b>Public Service</b>	J,H,P	92
Air Carrier & GA [Other]	H,P	94
Jet Operations	J	33
<b>Night Ops - Total</b>	J,H,P	219

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		0	0

**RECURRING NOISE MONITORING PROGRAM RESULTS  
JULY 1 – SEPTEMBER 30, 2003**

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 five of the six locations, \*(see explanation below) 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.

\*Staff was unable to noise monitor at one of the sites due to construction.

## SECTION I – QUARTERLY SITE ACTIVITY SUMMARY

One of the six sites was not monitored during this quarter due to construction. All other 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 its 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:

SITE / LOCATION	AIRCRAFT TYPE	SEL LEVEL	EVENT DURATION in seconds
Pulling Property / 3/8 mile SW of airport	Single Engine Cherokee	72.3 decibels	8.37
Pulling Property / 3/8 mile SW of airport	Single Engine Seminole	77.5 decibels	22.28
Pulling Property / 3/8 mile SW of airport	Citation Jet	78.1 decibels	18.75
Pulling Property / 3/8 mile SW of airport	Twin Engine Seneca	73.7 decibels	13.90

### Aircraft Departing Airport:

SITE / LOCATION	AIRCRAFT TYPE	SEL LEVEL	EVENT DURATION in seconds
Wyndemere/ 2 1/4 miles NE of airport	Single Engine Cessna 172	67.7 decibels	7.12

### Aircraft Fly-Over:

SITE / LOCATION	AIRCRAFT TYPE	SEL LEVEL	EVENT DURATION in seconds
Springwood / 1/2 mile SE of airport	Small Robinson 22 Helicopter	79.1 decibels	26.50

## SECTION II – SEASONAL AND ANNUAL COMPARISON OF SITES

Noise Monitoring Site Summary Comparison between the Second Quarter of 2003 and the Third Quarter of 2003, and a comparison between the same period last year.

A comparison of the five monitoring sites revealed that the DNL increased at two sites and decreased at one site when compared to last quarter (data not available for two sites for this comparison). The DNL increased at two sites and 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 increased by 3.3 decibels during the Third Quarter. When compared to the same period last year the DNL has increased by 4.9 decibels. During visits to this site, staff was unaware of any changes that would contribute to the increase in the DNL. The background noise at this site has increased by 0.5 decibel.

**Site 2A** – The DNL at this site was 57.8 decibels. Data is not available for a comparison to the previous quarter, but when compared to the same period last year, there was an increase of 1.2 decibels. Background noise level increased by 1.9 decibels, when compared to the Third Quarter of 2002.

**Site 3** – This site produced a DNL of 59.6 decibels, which is an increase of 0.6 decibels when compared to last quarter. The background noise level increased by 0.5 decibels. Comparison of this quarter to the same period one year ago is not available at this time.

**Site 4** – This site was not monitored due to construction.

**Site 5** – This site produced a DNL of 55.0 decibels. This data is a decrease of 0.5 decibels when compared to the same period last year. The background noise level at this site has increased by 2.0 decibels when compared to the Third Quarter of 2002. Data is not available for a comparison to last quarter.

**Site 6** – This site was removed from the list of noise monitoring sites.

**Site 7** – The DNL at this site decreased by 2.7 decibels. When compared to the same quarter last year there is a decrease of 2.4 decibels. There was a 7.5-decibel decrease in background noise at this site when compared to the Third Quarter of 2002. Staff believes that the decrease in the background noise level is the result of a noise buffer wall that was built along side of the recently expanded Livingston Road. Traffic noise during this period would now be deflected away from the noise monitor resulting in a dramatic decreased in the background noise level.

<b>DNL Comparison</b>			
<b>Site</b>	<b>Third Quarter 2002</b>	<b>Second Quarter 2003</b>	<b>Third Quarter 2003</b>
1	57.2 dB	58.8 dB	62.1 dB
2A	56.6 dB	N/A	57.8 dB
3	N/A	59.0 dB	59.6 dB
4	63.3 dB	N/A	N/A
5	55.5 dB	N/A	55.0 dB
7	56.3 dB	56.6 dB	53.9 dB

<b>Fiscal Year DNL Average Comparison</b>			
<b>Site</b>	<b>Fiscal Year 2002</b>	<b>Fiscal Year 2003</b>	<b>+ - Difference</b>
1	57.1 dB	58.8 dB	+ 1.7 dB
2A	N/A	58.9 dB	N/A
3	N/A	58.5 dB	N/A
4	60.2 dB	61.2 dB *	+ 1.0 dB
5	55.9 dB	52.9 dB	+ 3.0 dB
7	56.8 dB	58.1 dB	+ 1.3 dB

<b>Fiscal Year Background Noise Level Average Comparison</b>			
<b>Site</b>	<b>Fiscal Year 2002</b>	<b>Fiscal Year 2003</b>	<b>+ - Difference</b>
1	47.1 dB	47.8 dB	+ 0.7 dB
2A	N/A	45.8 dB	N/A
3	N/A	46.4 dB	N/A
4	48.0 dB	48.5 dB *	+ 0.5 dB
5	42.7 dB	42.1 dB	- 0.6 dB
7	46.5 dB	44.4 dB	- 2.1 dB

\* This number is not representative of the fiscal yearly average, due to the fact that data was only available for one quarter during that time period.

**SECTION III  
NOISE MONITORING SITE SUMMARY**

SITES	3rd Quarter		4th Quarter		1st Quarter		2nd Quarter		3rd Quarter		
	July - Sept. 2002		Oct. - Dec.. 2002		Jan. - Mar. 2003		Apr. - June 2003		July - Sept. 2003		
	Bkgrnd	DNL	Bkgrnd	DNL	Bkgrnd	DNL	Bkgrnd	DNL	Bkgrnd	DNL	
1	Springwood-East Naples	47.2	57.2	46.4	56.4	47.4	58	48.4	58.8	48.9	62.1
2A	Pulling Property	44.2	56.6	45	59.5	46.3	59.3	N/A	N/A	46.1	57.8
3	First Presbyterian Church - 6th St. South	N/A	N/A	45	55.2	46.4	60.3	46.9	59	47.4	59.6
4	Village Green - 11th Avenue South	51.6	63.3	48.5	61.2	N/A	N/A	N/A	N/A	N/A	N/A
5	The Conservancy	41.7	55.5	42.1	51	40.4	52.6	N/A	N/A	43.7	55
7	Wyndemere CC	45.5	56.3	48.6	60.1	45.5	61.9	45.3	56.6	38	53.9

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

**DNL** - 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.