APPENDIX H
OUTPUT FROM NOISE MODELING – MR_NMAP

BULLDOG A BASELINE

***** MOA RANGE NOISEMAP *****
Version 2.2
Release Date 15 August 1999

SETUP PARAMETERS

Number of MOAs and Ranges = 1 Number of tracks = 0
Lower Left Corner of Grid (Lat/Long) = 32 00 00 N 084 00 00 W
Upper Right Corner of Grid (Lat/Long) = 34 00 00 N 081 00 00 W
Grid spacing = 9468. feet Number of events above an SEL of 65 dB
Temperature = 59 F Humidity = 70 Flying days per month = 21

MOA SPECIFICATIONS

MOA name BULLDOG A

Latitude	Longitude
33 01 01 N	082 52 26 W
33 13 60 N	082 30 02 W
33 12 03 N	082 22 58 W
33 13 03 N	082 08 56 W
33 05 45 N	082 04 29 W
32 49 60 N	082 00 58 W
32 37 49 N	082 43 57 W
33 01 01 N	082 52 26 W

Floor = 500 feet AGL Ceiling = 9500 feet AGL

AVOIDANCE SPECIFICATION

Number of Avoidance Areas = 5

Latitude	Longitude	Radius (feet)	Floor (feet AGL)	Name
32 52 01 N	082 02 29 W	6076.	1500	STORK
33 02 04 N	082 14 53 W	6076.	1000	VIDETTE
32 58 59 N	082 23 00 W	18228.	1500	2J3
33 13 30 N	082 22 32 W	18228.	1500	65J
32 57 28 N	082 49 57 W	42532.	3000	KAOLIN

MISSION DATA

Mission name = F16 BULL A
Aircraft code = 163 Speed = 465 kias Power = 94.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	5
1000	2000	5
2000	5000	5
5000	10000	10
10000	17499	60
17499	23000	10
23000	49500	5

Mission name = F15 BULL A
Aircraft code = 147 Speed = 450 kias Power = 77.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	5
1000	2000	5
2000	5000	5
5000	10000	10
10000	17499	60
17499	23000	10
23000	49500	5

Mission name = F18 BULL A
Aircraft code = 172 Speed = 500 kias Power = 92.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	5
1000	2000	5
2000	5000	5
5000	10000	10
10000	17499	60
17499	23000	10
23000	49500	5

Mission name = AV8 BULL A
Aircraft code = 15 Speed = 300 kias Power = 95.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	5
1000	2000	5
2000	5000	5
5000	10000	10
10000	17499	60
17499	23000	10
23000	49500	5

MOA OPERATION DATA

MOA name = BULLDOG A

Mission Name	Daily Day OPS	Daily Night OPS	Monthly Day OPS	Monthly Night OPS	Yearly Day OPS	Yearly Night OPS	Time On Range (minutes)
AV8 BULL A	.238	.000	5.00	.00	60.	0.	30
F18 BULL A	5.369	.000	112.75	.00	1353.	0.	30
F15 BULL A	.317	.000	6.67	.00	80.	0.	30
F16 BULL A	16.690	.877	350.50	18.42	4206.	221.	30

***** MOA RANGE NOISEMAP *****
RESULTS

The noise metric is Ldnmr.

MOA RESULTS

MOA Name	MOA Area	Intersecting Avoidance Area	Uniform Distributed Sound Level	Number of Events Above SEL of 65 dB

	(sq statute miles)		(dB)	
BULLDOG A	1391.4	157.6	54.7	1.4

AVOIDANCE AREA RESULTS

Avoidance Area Name	Uniform Distributed Sound Level (dB)	Number of Events Above SEL of 65 dB
STORK	48.4	1.6
VIDETTE	50.8	1.3
2J3	48.4	1.6
65J	48.4	1.6
KAOLIN	42.9	1.3

<Run Log>

Date:	2/10/2005
Start Time:	12:55: 9
Stop Time:	12:55: 9
Total Running Time:	0 minutes and 0 seconds.

BULLDOG B BASELINE

***** MOA RANGE NOISEMAP *****
Version 2.2
Release Date 15 August 1999

SETUP PARAMETERS

Number of MOAs and Ranges = 1 Number of tracks = 0
Lower Left Corner of Grid (Lat/Long) = 32 00 00 N 084 00 00 W
Upper Right Corner of Grid (Lat/Long) = 34 00 00 N 081 00 00 W
Grid spacing = 9468. feet Number of events above an SEL of 65 dB
Temperature = 59 F Humidity = 70 Flying days per month = 21

MOA SPECIFICATIONS

MOA name BULLDOG B

Latitude	Longitude
33 13 60 N	082 30 02 W
33 12 03 N	082 22 58 W
33 13 03 N	082 08 56 W
33 13 03 N	081 58 55 W
32 54 02 N	081 50 27 W
32 34 04 N	081 55 59 W
32 33 45 N	081 57 48 W
32 32 45 N	082 03 44 W
32 34 34 N	082 25 29 W
32 37 49 N	082 43 57 W
33 01 01 N	082 52 26 W
33 13 24 N	082 31 31 W
33 13 60 N	082 30 02 W

Floor = 9500 feet AGL Ceiling = 26499 feet AGL

AVOIDANCE SPECIFICATION

Number of Avoidance Areas = 5

Latitude	Longitude	Radius (feet)	Floor (feet AGL)	Name
32 52 01 N	082 02 29 W	6076.	1500	STORK
33 02 04 N	082 14 53 W	6076.	1000	VIDETTE

32 58 59 N	082 23 00 W	18228.	1500	2J3
33 13 30 N	082 22 32 W	18228.	1500	65J
32 57 28 N	082 49 57 W	42532.	3000	KAOLIN

MISSION DATA

Mission name = F16 BULL B
Aircraft code = 163 Speed = 465 kias Power = 94.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	5
1000	2000	5
2000	5000	5
5000	10000	10
10000	17499	60
17499	23000	10
23000	49500	5

Mission name = F15 BULL B
Aircraft code = 147 Speed = 450 kias Power = 77.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	5
1000	2000	5
2000	5000	5
5000	10000	10
10000	17499	60
17499	23000	10
23000	49500	5

Mission name = F18 BULL B
Aircraft code = 172 Speed = 500 kias Power = 92.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	5
1000	2000	5

2000	5000	5
5000	10000	10
10000	17499	60
17499	23000	10
23000	49500	5

Mission name = AV8 BULL B
Aircraft code = 15 Speed = 300 kias Power = 95.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	5
1000	2000	5
2000	5000	5
5000	10000	10
10000	17499	60
17499	23000	10
23000	49500	5

MOA OPERATION DATA

MOA name = BULLDOG B

Mission Name	Daily Day OPS	Daily Night OPS	Monthly Day OPS	Monthly Night OPS	Yearly Day OPS	Yearly Night OPS	Time On Range (minutes)
AV8 BULL B	.238	.000	5.00	.00	60.	0.	30
F18 BULL B	5.369	.000	112.75	.00	1353.	0.	30
F15 BULL B	.317	.000	6.67	.00	80.	0.	30
F16 BULL B	16.690	.877	350.50	18.42	4206.	221.	30

***** MOA RANGE NOISEMAP *****
RESULTS

The noise metric is Ldnmr.

MOA RESULTS

MOA Name	MOA Area (sq statute miles)	Intersecting Avoidance Area	Uniform Distributed Sound Level (dB)	Number of Events Above SEL of 65 dB
BULLDOG B	2221.4	157.8	27.6	1.0

AVOIDANCE AREA RESULTS

Avoidance Area Name	Uniform Distributed Sound Level (dB)	Number of Events Above SEL of 65 dB
STORK	27.6	1.0
VIDETTE	27.6	1.0
2J3	27.6	1.0
65J	27.6	1.0
KAOLIN	27.6	1.0

<Run Log>

Date:	2/10/2005
Start Time:	13:20:38
Stop Time:	13:20:38
Total Running Time:	0 minutes and 0 seconds.

BULLDOG A/B BASELINE (JOINT USE)

As reflected above, the Bulldog A and B MOAs were modeled separately. The indicated noise levels reflect use of each MOA for an entire training period. However, these two MOAs are often used together. Due to the overall configuration and the altitude stratification of the airspace, rather than modeling, noise levels were scaled from the individual models, and then added to develop results for the joint use condition. This approach minimized the potential for an overestimation of noise in some areas, and an underestimation in others.

Scaling was accomplished by reducing the time spent in each MOA from 30 minutes to 15 minutes. This results in a 3 dBA reduction in noise levels in each MOA. Noise in Bulldog A is reduced from DNLmr 55 to DNLmr 52, and in Bulldog B from DNLmr 28 to DNLmr 25.

These values were then added to produce a result of DNLmr 52 on the ground.

Addition of noise levels is accomplished by:

$$DNLmr = 10 \times Log\left(10^{\frac{DNLmr1}{10}} + 10^{\frac{DNLmr2}{10}}\right)$$

GAMECOCK B BASELINE

***** MOA RANGE NOISEMAP *****
Version 2.2
Release Date 15 August 1999

SETUP PARAMETERS

Number of MOAs and Ranges = 1 Number of tracks = 0
Lower Left Corner of Grid (Lat/Long) = 33 00 00 N 081 00 00 W
Upper Right Corner of Grid (Lat/Long) = 35 00 00 N 078 00 00 W
Grid spacing = 9472. feet Number of events above an SEL of 65 dB
Temperature = 59 F Humidity = 70 Flying days per month = 21

MOA SPECIFICATIONS

MOA name GAMECOCK B

Latitude	Longitude
33 48 59 N	079 18 30 W
33 37 59 N	079 07 30 W
33 25 33 N	079 25 26 W
33 24 02 N	079 37 00 W
33 48 59 N	079 18 30 W

Floor = 9499 feet AGL Ceiling = 17499 feet AGL

MISSION DATA

Mission name = F16
Aircraft code = 163 Speed = 465 kias Power = 94.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
9499	17499	100

MOA OPERATION DATA

MOA name = GAMECOCK B

Daily Monthly Yearly

Mission Name	Day OPS	Night OPS	Day OPS	Night OPS	Day OPS	Night OPS	Time On Range (minutes)
F16	.857	.000	18.00	.00	216.	0.	30

***** MOA RANGE NOISEMAP *****
RESULTS

The noise metric is Ldnmr.

MOA RESULTS

MOA Name	MOA Area (sq statute miles)	Intersecting Avoidance Area (sq statute miles)	Uniform Distributed Sound Level (dB)	Number of Events Above SEL of 65 dB
GAMECOCK B	328.7	.0	16.9	.1

<Run Log>

Date:	12/23/2004
Start Time:	8:35:47
Stop Time:	8:35:48
Total Running Time:	0 minutes and 2 seconds.

GAMECOCK C BASELINE

***** MOA RANGE NOISEMAP *****
Version 2.2
Release Date 15 August 1999

SETUP PARAMETERS

Number of MOAs and Ranges = 1 Number of tracks = 0
Lower Left Corner of Grid (Lat/Long) = 33 00 00 N 081 00 00 W
Upper Right Corner of Grid (Lat/Long) = 35 00 00 N 078 00 00 W
Grid spacing = 9472. feet Number of events above an SEL of 65 dB
Temperature = 59 F Humidity = 70 Flying days per month = 21

MOA SPECIFICATIONS

MOA name GAMECOCK C

Latitude	Longitude
33 49 04 N	079 41 28 W
33 50 31 N	079 24 58 W
33 50 33 N	079 20 27 W
33 48 59 N	079 18 30 W
33 37 59 N	079 07 30 W
33 25 33 N	079 25 26 W
33 24 02 N	079 37 00 W
33 24 38 N	079 48 25 W
33 49 04 N	079 41 28 W

Floor = 100 feet AGL Ceiling = 9499 feet AGL

AVOIDANCE SPECIFICATION

Number of Avoidance Areas = 5

Latitude	Longitude	Radius (feet)	Floor (feet AGL)	Name
33 43 43 N	079 31 00 W	18228.	1500	H/S AP
33 27 04 N	079 31 31 W	18228.	1500	AND AP
33 42 01 N	079 34 44 W	6076.	1500	LWP
33 33 25 N	079 20 33 W	9114.	1500	SISTER
33 35 48 N	079 24 40 W	9114.	1500	BAXLEY

MISSION DATA

Mission name = F16
Aircraft code = 163 Speed = 465 kias Power = 94.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	10
1000	2000	10
2000	5000	40
5000	10000	40

Mission name = F15
Aircraft code = 147 Speed = 450 kias Power = 77.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	10
1000	2000	10
2000	5000	40
5000	10000	40

Mission name = F18
Aircraft code = 172 Speed = 500 kias Power = 92.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	10
1000	2000	10
2000	5000	40
5000	10000	40

Mission name = AV8
Aircraft code = 15 Speed = 300 kias Power = 95.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	10

1000	2000	10
2000	5000	40
5000	10000	40

Mission name = A10
Aircraft code = 22 Speed = 325 kias Power = 5333.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	10
1000	2000	10
2000	5000	40
5000	10000	40

MOA OPERATION DATA

MOA name = GAMECOCK C

Mission Name	Daily Day OPS	Daily Night OPS	Monthly Day OPS	Monthly Night OPS	Yearly Day OPS	Yearly Night OPS	Time On Range (minutes)
A10	5.643	.000	118.50	.00	1422.	0.	30
AV8	.357	.000	7.50	.00	90.	0.	30
F15	2.032	.000	42.67	.00	512.	0.	30
F16	9.782	.512	205.42	10.75	2465.	129.	30
F18	2.857	.000	60.00	.00	720.	0.	30

***** MOA RANGE NOISEMAP *****
RESULTS

The noise metric is Ldnmr.

MOA RESULTS

MOA	MOA	Intersecting Avoidance	Uniform Distributed	Number of Events Above

Name	Area (sq statute miles)	Area	Sound Level (dB)	SEL of 65 dB
GAMECOCK C	824.5	94.0	53.2	.9

AVOIDANCE AREA RESULTS

Avoidance Area Name	Uniform Distributed Sound Level (dB)	Number of Events Above SEL of 65 dB
H/S AP	48.0	1.0
AND AP	48.0	1.0
LWP	48.0	1.0
SISTER	48.0	1.0
BAXLEY	48.0	1.0

<Run Log>

Date:	12/23/2004
Start Time:	9: 9:30
Stop Time:	9: 9:30
Total Running Time:	0 minutes and 1 seconds.

GAMECOCK D BASELINE

***** MOA RANGE NOISEMAP *****
Version 2.2
Release Date 15 August 1999

SETUP PARAMETERS

Number of MOAs and Ranges = 1 Number of tracks = 0
Lower Left Corner of Grid (Lat/Long) = 33 00 00 N 081 00 00 W
Upper Right Corner of Grid (Lat/Long) = 35 00 00 N 078 00 00 W
Grid spacing = 9472. feet Number of events above an SEL of 65 dB
Temperature = 59 F Humidity = 70 Flying days per month = 21

MOA SPECIFICATIONS

MOA name GAMECOCK D

Latitude	Longitude
33 52 58 N	079 54 59 W
33 50 00 N	079 47 57 W
33 49 04 N	079 41 28 W
33 50 31 N	079 24 58 W
33 50 33 N	079 20 27 W
33 48 59 N	079 18 30 W
33 24 02 N	079 37 00 W
33 24 59 N	079 54 59 W
33 32 30 N	080 15 56 W
33 52 58 N	079 54 59 W

Floor = 9600 feet AGL Ceiling = 17599 feet AGL

MISSION DATA

Mission name = F16
Aircraft code = 163 Speed = 465 kias Power = 94.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
10000	17599	85
17599	23500	15

```
Mission name = F15
Aircraft code =  147  Speed =  450 kias  Power =    77.0
           Altitude Distribution
    Lower Alt    Upper Alt     Percent
   (feet AGL)   (feet AGL)   Utilization
     10000        17599          85
     17599        23500          15


Mission name = F18
Aircraft code =  172  Speed =  500 kias  Power =    92.0
           Altitude Distribution
    Lower Alt    Upper Alt     Percent
   (feet AGL)   (feet AGL)   Utilization
     10000        17599          85
     17599        23500          15


Mission name = AV8
Aircraft code =   15  Speed =  300 kias  Power =    95.0
           Altitude Distribution
    Lower Alt    Upper Alt     Percent
   (feet AGL)   (feet AGL)   Utilization
     10000        17599          85
     17599        23500          15


Mission name = A10
Aircraft code =   22  Speed =  325 kias  Power =  5333.0
           Altitude Distribution
    Lower Alt    Upper Alt     Percent
   (feet AGL)   (feet AGL)   Utilization
     10000        17599          85
     17599        23500          15


Mission name = EA6
Aircraft code =    7  Speed =  250 kias  Power =   100.0
           Altitude Distribution
    Lower Alt    Upper Alt     Percent
```

(feet AGL)	(feet AGL)	Utilization
10000	17599	85
17599	23500	15

MOA OPERATION DATA

MOA name = GAMECOCK D

Mission Name	Daily Day OPS	Daily Night OPS	Monthly Day OPS	Monthly Night OPS	Yearly Day OPS	Yearly Night OPS	Time On Range (minutes)
A10	.595	.000	12.50	.00	150.	0.	30
AV8	.143	.000	3.00	.00	36.	0.	30
EA6	.143	.000	3.00	.00	36.	0.	30
F15	1.619	.000	34.00	.00	408.	0.	30
F16	15.619	.821	328.00	17.25	3936.	207.	30
F18	2.286	.000	48.00	.00	576.	0.	30

***** MOA RANGE NOISEMAP *****
RESULTS

The noise metric is Ldnmr.

MOA RESULTS

MOA Name	MOA Area (sq statute miles)	Intersecting Avoidance Area (sq statute miles)	Uniform Distributed Sound Level (dB)	Number of Events Above SEL of 65 dB
GAMECOCK D	1110.7	.0	29.7	1.9

<Run Log>

Date: 12/23/2004
Start Time: 10: 1:42
Stop Time: 10: 1:43
Total Running Time: 0 minutes and 1 seconds.

POINSETT MOA / POINSETT RANGE (R-6002) BASELINE

***** MOA RANGE NOISEMAP *****
Version 2.2
Release Date 15 August 1999

SETUP PARAMETERS

Number of MOAs and Ranges = 2 Number of tracks = 0
Lower Left Corner of Grid (Lat/Long) = 30 00 00 N 084 00 00 W
Upper Right Corner of Grid (Lat/Long) = 36 00 00 N 077 00 00 W
Grid spacing = 27966. feet Number of events above an SEL of 65 dB
Temperature = 59 F Humidity = 70 Flying days per month = 21

MOA SPECIFICATIONS

MOA name 6002

Latitude	Longitude
33 54 26 N	080 24 19 W
33 46 25 N	080 23 21 W
33 44 27 N	080 31 34 W
33 50 10 N	080 31 12 W
33 53 36 N	080 31 11 W
33 54 26 N	080 24 19 W

Floor = 0 feet AGL Ceiling = 17599 feet AGL

MOA name POINSETT

Latitude	Longitude
33 51 17 N	080 23 39 W
33 37 48 N	080 16 14 W
33 37 20 N	080 38 06 W
33 42 11 N	080 35 41 W
33 47 19 N	080 31 13 W
33 44 27 N	080 31 34 W
33 46 25 N	080 23 21 W
33 51 17 N	080 23 39 W

Floor = 500 feet AGL Ceiling = 2500 feet AGL

AVOIDANCE SPECIFICATION

Number of Avoidance Areas = 2

Latitude	Longitude	Radius (feet)	Floor (feet AGL)	Name
33 36 24 N	080 21 22 W	12152.	2000	AVOID1
33 44 26 N	080 27 48 W	6076.	2000	AVOID2

MISSION DATA

Mission name = PF16
Aircraft code = 163 Speed = 465 kias Power = 94.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
300	2000	100

Mission name = PF15
Aircraft code = 147 Speed = 450 kias Power = 77.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
300	2000	100

Mission name = PF18
Aircraft code = 172 Speed = 500 kias Power = 92.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
300	2000	100

Mission name = PAV8
Aircraft code = 15 Speed = 300 kias Power = 95.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
300	2000	100

Mission name = PA10

Aircraft code = 22 Speed = 325 kias Power = 5333.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
300	2000	100

Mission name = PEA6

Aircraft code = 7 Speed = 250 kias Power = 100.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
300	2000	100

Mission name = RF16

Aircraft code = 163 Speed = 465 kias Power = 94.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	2500	12
2500	5000	12
5000	7500	12
7500	10000	12
10000	12500	12
12500	17500	20
17500	22500	20

Mission name = RF15

Aircraft code = 147 Speed = 450 kias Power = 77.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	2500	12
2500	5000	12
5000	7500	12
7500	10000	12
10000	12500	12
12500	17500	20
17500	22500	20

Mission name = RF18
Aircraft code = 172 Speed = 500 kias Power = 92.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	2500	12
2500	5000	12
5000	7500	12
7500	10000	12
10000	12500	12
12500	17500	20
17500	22500	20

Mission name = RAV8
Aircraft code = 15 Speed = 300 kias Power = 95.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	2500	12
2500	5000	12
5000	7500	12
7500	10000	12
10000	12500	12
12500	17500	20
17500	22500	20

Mission name = RA10
Aircraft code = 22 Speed = 325 kias Power = 5333.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	2500	12
2500	5000	12
5000	7500	12
7500	10000	12
10000	12500	12
12500	17500	20

17500	22500	20

Mission name = REA6
Aircraft code = 7 Speed = 250 kias Power = 100.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	2500	12
2500	5000	12
5000	7500	12
7500	10000	12
10000	12500	12
12500	17500	20
17500	22500	20

MOA OPERATION DATA

MOA name = 6002

Mission Name	Daily Day OPS	Daily Night OPS	Monthly Day OPS	Monthly Night OPS	Yearly Day OPS	Yearly Night OPS	Time On Range (minutes)
RF16	10.278	.000	215.83	.00	2590.	0.	30
RF15	1.012	.000	21.25	.00	255.	0.	30
RF18	1.429	.000	30.00	.00	360.	0.	30
RAV8	.091	.000	1.92	.00	23.	0.	30
RA10	.373	.000	7.83	.00	94.	0.	30
REA6	.091	.000	1.92	.00	23.	0.	30

MOA name = POINSETT

Mission Name	Daily Day OPS	Daily Night OPS	Monthly Day OPS	Monthly Night OPS	Yearly Day OPS	Yearly Night OPS	Time On Range (minutes)
PF16	.552	.000	11.58	.00	139.	0.	5
PF15	.056	.000	1.17	.00	14.	0.	5
PF18	.075	.000	1.58	.00	19.	0.	5
PAV8	.004	.000	.08	.00	1.	0.	5

PA10	.020	.000	.42	.00	5.	0.	5
PEA6	.004	.000	.08	.00	1.	0.	5

***** MOA RANGE NOISEMAP *****
RESULTS

The noise metric is Ldnmr.

MOA RESULTS

MOA Name	MOA Area (sq statute miles)	Intersecting Avoidance Area (sq statute miles)	Uniform Distributed Sound Level (dB)	Number of Events Above SEL of 65 dB
6002	71.0	.0	58.7	2.5
POINSETT	162.5	6.3	40.4	.1

AVOIDANCE AREA RESULTS

Avoidance Area Name	Uniform Distributed Sound Level (dB)	Number of Events Above SEL of 65 dB
AVOID1	35.9	.8
AVOID2	52.2	7.4

<Run Log>

Date:	1/14/2005
Start Time:	9:25:43
Stop Time:	9:25:44
Total Running Time:	0 minutes and 1 seconds.

SHAW MILITARY TRAINING ROUTES

***** MOA RANGE NOISEMAP *****
Version 2.2
Release Date 15 August 1999

SETUP PARAMETERS

Number of MOAs and Ranges = 0 Number of tracks =10
Lower Left Corner of Grid (Lat/Long) = 28 00 00 N 084 00 00 W
Upper Right Corner of Grid (Lat/Long) = 36 00 00 N 077 00 00 W
Grid spacing = 37224. feet Number of events above an SEL of 65 dB
Temperature = 59 F Humidity = 70 Flying days per month = 21

TRACK SPECIFICATIONS

Track name IR-0035

Flag Notation	Latitude	Longitude	Left (feet)	Right (feet)	Floor 1 (feet AGL)	Floor 2 (feet AGL)	Radius (feet)	Angle (degrees)
LW	33 09 32 N	076 28 04 W	30380.	30380.	300			
LW	33 51 56 N	076 23 34 W	30380.	30380.	300			
LW	33 52 42 N	077 20 02 W	30380.	30380.	300			
LW	33 13 11 N	077 48 50 W	30380.	30380.	300			
LW	33 15 12 N	078 46 42 W	30380.	18228.	300			
LW	32 46 08 N	079 26 37 W	30380.	30380.	300			
LW	32 46 32 N	080 07 35 W	30380.	30380.	300			

Track name IR-0036

Flag Notation	Latitude	Longitude	Left (feet)	Right (feet)	Floor 1 (feet AGL)	Floor 2 (feet AGL)	Radius (feet)	Angle (degrees)
LW	32 46 32 N	080 07 35 W	30380.	30380.	300			
LW	32 48 08 N	080 19 17 W	30380.	30380.	300			
LW	32 17 18 N	080 19 31 W	30380.	30380.	300			
LW	32 02 20 N	079 23 20 W	30380.	30380.	300			
LW	32 44 39 N	078 39 22 W	30380.	30380.	300			
LW	33 04 46 N	078 58 43 W	30380.	18228.	300			
LW	32 46 08 N	079 26 37 W	30380.	30380.	300			
LW	32 46 32 N	080 07 35 W	30380.	30380.	300			

Track name IR-0074

Flag Notation	Latitude	Longitude	Left (feet)	Right (feet)	Floor 1 (feet AGL)	Floor 2 (feet AGL)	Radius (feet)	Angle (degrees)
LW	34 41 37 N	081 14 34 W	12152.	12152.	6500			
LW	34 16 28 N	081 28 42 W	30380.	30380.	6500			
LW	34 06 56 N	081 34 08 W	60760.	60760.	3500			
LW	33 55 05 N	081 41 49 W	60760.	60760.	100			
LW	33 28 43 N	081 59 19 W	60760.	60760.	100			
LW	32 51 13 N	082 21 53 W	60760.	60760.	100			

LW	32 16 39 N	082 15 32 W	60760.	60760.	100			
LW	31 24 47 N	082 55 13 W	12152.	12152.	2500			
LW	30 56 36 N	083 20 15 W	12152.	12152.	2500			

Track name VR-0087

Flag Notation	Latitude	Longitude	Left (feet)	Right (feet)	Floor 1 (feet AGL)	Floor 2 (feet AGL)	Radius (feet)	Angle (degrees)
LW	34 20 32 N	079 02 53 W	60760.	60760.	300			
LW	34 00 08 N	078 28 39 W	60760.	60760.	300			
LW	33 58 20 N	077 30 45 W	60760.	60760.	100			
LW	33 28 22 N	076 55 40 W	60760.	60760.	100			
LW	33 29 24 N	077 58 41 W	48608.	48608.	100			
LW	33 09 49 N	078 42 46 W	48608.	48608.	100			
LW	32 55 49 N	079 10 39 W	48608.	48608.	100			

Track name VR-0088

Flag Notation	Latitude	Longitude	Left (feet)	Right (feet)	Floor 1 (feet AGL)	Floor 2 (feet AGL)	Radius (feet)	Angle (degrees)
LW	34 17 13 N	080 30 30 W	60760.	60760.	300			
LW	33 24 23 N	081 01 12 W	60760.	60760.	300			
LW	32 42 51 N	080 31 02 W	60760.	60760.	300			
LW	32 05 25 N	080 03 58 W	60760.	60760.	100			
LW	32 06 26 N	079 49 39 W	60760.	60760.	100			
LW	32 48 47 N	079 25 13 W	48608.	48608.	100			
LW	32 52 29 N	079 17 29 W	48608.	48608.	100			

Track name VR-0094

Flag Notation	Latitude	Longitude	Left (feet)	Right (feet)	Floor 1 (feet AGL)	Floor 2 (feet AGL)	Radius (feet)	Angle (degrees)
LW	30 00 53 N	082 41 19 W	60760.	60760.	100			
LW	30 26 31 N	082 58 01 W	60760.	60760.	100			
LW	30 51 32 N	082 38 14 W	60760.	60760.	100			
LW	31 45 49 N	080 51 23 W	60760.	60760.	100			
LW	31 22 53 N	080 19 02 W	60760.	60760.	100			

Track name VR-0097

Flag Notation	Latitude	Longitude	Left (feet)	Right (feet)	Floor 1 (feet AGL)	Floor 2 (feet AGL)	Radius (feet)	Angle (degrees)
LW	34 37 29 N	082 10 42 W	48608.	36456.	2500			
LW	34 32 40 N	082 32 42 W	48608.	36456.	100			
LW	34 31 26 N	082 40 02 W	48608.	48608.	100			
LW	34 20 43 N	083 28 53 W	48608.	48608.	100			
LW	34 10 12 N	083 40 28 W	48608.	48608.	100			
LW	34 05 31 N	083 46 16 W	30380.	30380.	100			
LW	33 57 01 N	083 34 35 W	30380.	30380.	100			
LW	33 48 53 N	083 22 29 W	30380.	30380.	100			
LW	33 38 14 N	083 01 16 W	30380.	30380.	100			
LW	33 35 20 N	082 52 07 W	30380.	36456.	100			
LW	33 30 04 N	082 48 22 W	30380.	36456.	100			

LW	33 02 08 N	082 32 26 W	36456.	60760.	100			
LW	32 50 02 N	082 25 55 W	36456.	60760.	100			
LW	32 12 31 N	082 11 00 W	36456.	60760.	100			
LW	32 01 53 N	082 07 45 W	54684.	60760.	100			
LW	31 56 45 N	081 41 21 W	54684.	60760.	100			
LW	31 54 31 N	081 29 44 W	60760.	60760.	100			
LW	31 38 47 N	080 06 54 W	60760.	60760.	100			
LW	31 52 49 N	079 58 17 W	60760.	60760.	100			
LW	32 06 26 N	079 49 39 W	60760.	60760.	100			
LW	32 48 47 N	079 25 13 W	48608.	48608.	100			
LW	32 52 29 N	079 17 29 W	48608.	48608.	100			

Track name VR-1059

Flag Notation	Latitude	Longitude	Left (feet)	Right (feet)	Floor 1 (feet AGL)	Floor 2 (feet AGL)	Radius (feet)	Angle (degrees)
LW	34 03 49 N	081 45 05 W	60760.	60760.	100			
LW	33 38 03 N	082 49 00 W	36456.	60760.	100			
LW	33 02 06 N	082 35 09 W	54684.	60760.	100			
LW	32 58 09 N	082 14 46 W	54684.	60760.	100			
LW	32 56 19 N	082 06 10 W	60760.	60760.	100			
LW	32 45 12 N	081 02 59 W	30380.	30380.	100			
LW	32 45 34 N	080 54 26 W	30380.	30380.	100			
LW	32 48 11 N	080 30 06 W	30380.	30380.	100			
LW	33 15 09 N	080 19 05 W	30380.	30380.	100			
LW	33 30 07 N	079 47 10 W	30380.	30380.	100			
LW	34 09 05 N	079 26 57 W	30380.	30380.	100			

Track name VR-1004

Flag Notation	Latitude	Longitude	Left (feet)	Right (feet)	Floor 1 (feet AGL)	Floor 2 (feet AGL)	Radius (feet)	Angle (degrees)
LW	30 58 07 N	081 44 01 W	30380.	30380.	200			
LW	31 06 03 N	082 34 03 W	30380.	30380.	200			
LW	31 22 59 N	083 12 55 W	30380.	30380.	200			
LW	31 47 11 N	082 58 48 W	30380.	30380.	200			
LW	32 13 04 N	082 58 01 W	30380.	30380.	500			
LW	32 53 50 N	083 16 56 W	30380.	30380.	200			
LW	33 19 00 N	083 51 07 W	30380.	30380.	200			
LW	33 26 52 N	083 39 07 W	30380.	30380.	200			
LW	33 19 51 N	083 09 00 W	30380.	30380.	200			
LW	33 02 05 N	082 36 03 W	30380.	30380.	200			
LW	32 25 08 N	082 39 53 W	30380.	30380.	200			
LW	31 54 08 N	082 51 48 W	30380.	30380.	200			
LW	31 42 52 N	082 41 47 W	30380.	30380.	200			
LW	31 50 53 N	082 04 56 W	12152.	12152.	200			
LW	31 47 57 N	081 50 12 W	12152.	12152.	200			

Track name VR-1040

Flag	Latitude	Longitude	Left	Right	Floor 1	Floor 2	Radius	Angle

Notation		(feet)	(feet)	(feet AGL)	(feet AGL)	(feet)	(degrees)
LW	33 53 54 N 078 22 00 W	12152.	12152.	500			
LW	34 26 06 N 078 15 57 W	12152.	12152.	200			
LW	34 26 55 N 078 58 09 W	12152.	12152.	200			
LW	33 44 56 N 079 43 47 W	18228.	6076.	200			
LW	33 30 54 N 079 48 59 W	18228.	18228.	200			
LW	33 19 56 N 079 56 50 W	18228.	18228.	500			
LW	33 09 04 N 080 21 50 W	18228.	18228.	500			
LW	32 20 01 N 080 28 01 W	24304.	6076.	500			
LW	31 54 12 N 080 55 49 W	18228.	18228.	200			
LW	31 30 58 N 081 10 57 W	18228.	18228.	200			
LW	30 14 51 N 081 03 47 W	18228.	18228.	200			
LW	29 42 06 N 081 13 48 W	18228.	18228.	200			
LW	29 24 10 N 081 26 48 W	18228.	18228.	200			
LW	29 23 01 N 081 31 08 W	18228.	18228.	200			

MISSION DATA

Mission name = C17A
Aircraft code = 66 Speed = 230 kias Power = 1.1

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	33
1000	2000	33
2000	3000	34

Mission name = C130A
Aircraft code = 83 Speed = 170 kias Power = 970.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	33
1000	2000	33
2000	3000	34

Mission name = T1A
Aircraft code = 256 Speed = 160 kias Power = 85.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	33
1000	2000	33

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      2000         3000          34


Mission name = F15A
Aircraft code =  144  Speed =  520 kias  Power =    81.0
           Altitude Distribution
    Lower Alt    Upper Alt     Percent
   (feet AGL)   (feet AGL)   Utilization
       500         1000          33
      1000         2000          33
      2000         3000          34


Mission name = F18A
Aircraft code =  172  Speed =  500 kias  Power =    92.0
           Altitude Distribution
    Lower Alt    Upper Alt     Percent
   (feet AGL)   (feet AGL)   Utilization
       500         1000          33
      1000         2000          33
      2000         3000          34


Mission name = C17B
Aircraft code =   66  Speed =  230 kias  Power =     1.1
           Altitude Distribution
    Lower Alt    Upper Alt     Percent
   (feet AGL)   (feet AGL)   Utilization
       500         1000          33
      1000         2000          33
      2000         6000          34


Mission name = C130B
Aircraft code =   83  Speed =  170 kias  Power =   970.0
           Altitude Distribution
    Lower Alt    Upper Alt     Percent
   (feet AGL)   (feet AGL)   Utilization
       500         1000          33
      1000         2000          33
      2000         6000          34


Mission name = F15B
Aircraft code =  144  Speed =  520 kias  Power =    81.0
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           Altitude Distribution
    Lower Alt    Upper Alt     Percent
   (feet AGL)   (feet AGL)   Utilization
       500         1000          33
      1000         2000          33
      2000         6000          34


Mission name = AV8B
Aircraft code =   15  Speed =  300 kias  Power =    95.0
           Altitude Distribution
    Lower Alt    Upper Alt     Percent
   (feet AGL)   (feet AGL)   Utilization
       500         1000          33
      1000         2000          33
      2000         6000          34


Mission name = F18B
Aircraft code =  172  Speed =  500 kias  Power =    92.0
           Altitude Distribution
    Lower Alt    Upper Alt     Percent
   (feet AGL)   (feet AGL)   Utilization
       500         1000          33
      1000         2000          33
      2000         6000          34


Mission name = F16B
Aircraft code =  164  Speed =  500 kias  Power =    95.4
           Altitude Distribution
    Lower Alt    Upper Alt     Percent
   (feet AGL)   (feet AGL)   Utilization
       500         1000          33
      1000         2000          33
      2000         6000          34


Mission name = A10B
Aircraft code =   22  Speed =  325 kias  Power =  5333.0
           Altitude Distribution
    Lower Alt    Upper Alt     Percent
   (feet AGL)   (feet AGL)   Utilization
       500         1000          33
      1000         2000          33
```

2000	6000	34

Mission name = EA6B
Aircraft code = 7 Speed = 250 kias Power = 100.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	33
1000	2000	33
2000	6000	34

Mission name = C17C
Aircraft code = 66 Speed = 230 kias Power = 1.1

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	25
1000	2000	25
2000	5000	25
5000	7000	25

Mission name = F15C
Aircraft code = 144 Speed = 520 kias Power = 81.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	25
1000	2000	25
2000	5000	25
5000	7000	25

Mission name = F18C
Aircraft code = 172 Speed = 500 kias Power = 92.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	25
1000	2000	25
2000	5000	25
5000	7000	25

Mission name = T39C
Aircraft code = 273 Speed = 250 kias Power = 89.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	25
1000	2000	25
2000	5000	25
5000	7000	25

Mission name = F16C
Aircraft code = 164 Speed = 500 kias Power = 95.4

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	25
1000	2000	25
2000	5000	25
5000	7000	25

Mission name = T45B
Aircraft code = 999 Speed = 250 kias Power = 85.5

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	33
1000	2000	33
2000	6000	34

Mission name = T45L
Aircraft code = 999 Speed = 250 kias Power = 85.5

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1500	100

Mission name = C17L
Aircraft code = 66 Speed = 230 kias Power = 1.1

Altitude Distribution

Lower Alt	Upper Alt	Percent

```
   (feet AGL)   (feet AGL)   Utilization
       500         1500         100


Mission name = T1L
Aircraft code =  256  Speed =  160 kias  Power =    85.0
           Altitude Distribution
    Lower Alt    Upper Alt     Percent
   (feet AGL)   (feet AGL)   Utilization
       500         1500         100


Mission name = S3L
Aircraft code =  253  Speed =  251 kias  Power =    60.0
           Altitude Distribution
    Lower Alt    Upper Alt     Percent
   (feet AGL)   (feet AGL)   Utilization
       500         1500         100


Mission name = F15L
Aircraft code =  144  Speed =  520 kias  Power =    81.0
           Altitude Distribution
    Lower Alt    Upper Alt     Percent
   (feet AGL)   (feet AGL)   Utilization
       500         1500         100


Mission name = F18L
Aircraft code =  172  Speed =  500 kias  Power =    92.0
           Altitude Distribution
    Lower Alt    Upper Alt     Percent
   (feet AGL)   (feet AGL)   Utilization
       500         1500         100


Mission name = AV8L
Aircraft code =   15  Speed =  300 kias  Power =    95.0
           Altitude Distribution
    Lower Alt    Upper Alt     Percent
   (feet AGL)   (feet AGL)   Utilization
       500         1500         100


Mission name = T38L
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Aircraft code =  270  Speed =  301 kias  Power =    90.0
           Altitude Distribution
    Lower Alt    Upper Alt     Percent
   (feet AGL)   (feet AGL)   Utilization
       500         1500         100


Mission name = F16L
Aircraft code =  164  Speed =  500 kias  Power =    95.4
           Altitude Distribution
    Lower Alt    Upper Alt     Percent
   (feet AGL)   (feet AGL)   Utilization
       500         1500         100


Mission name = A10L
Aircraft code =   22  Speed =  325 kias  Power =  5333.0
           Altitude Distribution
    Lower Alt    Upper Alt     Percent
   (feet AGL)   (feet AGL)   Utilization
       500         1500         100


Mission name = T39L
Aircraft code =  273  Speed =  250 kias  Power =    89.0
           Altitude Distribution
    Lower Alt    Upper Alt     Percent
   (feet AGL)   (feet AGL)   Utilization
       500         1500         100


Mission name = EA6L
Aircraft code =    7  Speed =  250 kias  Power =   100.0
           Altitude Distribution
    Lower Alt    Upper Alt     Percent
   (feet AGL)   (feet AGL)   Utilization
       500         1500         100



                      TRACK OPERATION DATA
Track name = IR-0035
                      Daily                Monthly               Yearly
   Mission        Day       Night       Day       Night       Day       Night
```

Name	OPS	OPS	OPS	OPS	OPS	OPS
C17A	1.345	.000	28.25	.00	339.	0.
C130A	.004	.000	.08	.00	1.	0.

Track name = IR-0036

	Daily		Monthly		Yearly	
Mission Name	Day OPS	Night OPS	Day OPS	Night OPS	Day OPS	Night OPS
C17A	.060	.000	1.25	.00	15.	0.
C130A	.008	.000	.17	.00	2.	0.
T1A	.012	.000	.25	.00	3.	0.

Track name = IR-0074

	Daily		Monthly		Yearly	
Mission Name	Day OPS	Night OPS	Day OPS	Night OPS	Day OPS	Night OPS
C17B	.004	.000	.08	.00	1.	0.
T45B	.004	.000	.08	.00	1.	0.

Track name = VR-0087

	Daily		Monthly		Yearly	
Mission Name	Day OPS	Night OPS	Day OPS	Night OPS	Day OPS	Night OPS
F15B	1.075	.000	22.58	.00	271.	0.
AV8B	.048	.000	1.00	.00	12.	0.
F18B	.075	.000	1.58	.00	19.	0.
F16B	.079	.000	1.67	.00	20.	0.
A10B	.004	.000	.08	.00	1.	0.
T45B	.004	.000	.08	.00	1.	0.

Track name = VR-0088

	Daily		Monthly		Yearly	
Mission Name	Day OPS	Night OPS	Day OPS	Night OPS	Day OPS	Night OPS
C17B	.020	.000	.42	.00	5.	0.
F15B	.508	.000	10.67	.00	128.	0.
EA6B	.012	.000	.25	.00	3.	0.
AV8B	.032	.000	.67	.00	8.	0.
F18B	.357	.000	7.50	.00	90.	0.
F16B	.202	.000	4.25	.00	51.	0.

Track name = VR-0094

Mission Name	Daily Day OPS	Daily Night OPS	Monthly Day OPS	Monthly Night OPS	Yearly Day OPS	Yearly Night OPS
C130A	.004	.000	.08	.00	1.	0.
F15A	.032	.000	.67	.00	8.	0.
F18A	.075	.000	1.58	.00	19.	0.

Track name = VR-0097

Mission Name	Daily Day OPS	Daily Night OPS	Monthly Day OPS	Monthly Night OPS	Yearly Day OPS	Yearly Night OPS
C17C	.004	.000	.08	.00	1.	0.
F15C	.083	.000	1.75	.00	21.	0.
F18C	.103	.000	2.17	.00	26.	0.
T39C	.036	.000	.75	.00	9.	0.
F16C	.353	.000	7.42	.00	89.	0.

Track name = VR-1059

Mission Name	Daily Day OPS	Daily Night OPS	Monthly Day OPS	Monthly Night OPS	Yearly Day OPS	Yearly Night OPS
C17L	.004	.004	.08	.08	0.	1.
F15L	.107	.000	2.25	.00	27.	0.
AV8L	.024	.000	.50	.00	6.	0.
F18L	103	.008	2.17	.17	26.	2.
T38L	.004	.000	.08	.00	1.	0.
T39L	1.730	.000	36.33	.00	436.	0.
F16L	.655	.000	13.75	.00	165.	0.
A10L	.004	.000	.08	.00	1.	0.
T45L	.004	.000	.08	.00	1.	0.
T1L	.048	.000	1.00	.00	12.	0.
S3L	.032	.000	.67	.00	8.	0.

Track name = VR-1004

Mission Name	Daily Day OPS	Daily Night OPS	Monthly Day OPS	Monthly Night OPS	Yearly Day OPS	Yearly Night OPS
F18L	1.060	.000	22.25	.00	267.	0.
T39L	1.056	.000	22.17	.00	266.	0.

Track name = VR-1040

Mission Name	Daily Day OPS	Daily Night OPS	Monthly Day OPS	Monthly Night OPS	Yearly Day OPS	Yearly Night OPS
C17L	.044	.000	.92	.00	11.	0.
EA6L	.020	.000	.42	.00	5.	0.
AV8L	.044	.000	.92	.00	11.	0.
F18L	.258	.000	5.42	.00	65.	0.
F16L	.063	.000	1.33	.00	16.	0.

***** MOA RANGE NOISEMAP *****
RESULTS

The noise metric is Ldnmr.

TRACK RESULTS

Track Name = IR-0035

Track Segment	Maximum Centerline Level (dB)	Number of Events Above SEL of 65 dB
01 - 02	32.7	.1
02 - 03	32.7	.1
03 - 04	32.7	.1
04 - 05	32.7	.1
05 - 06	33.7	.1
06 - 07	32.7	.1

Track Name = IR-0036

Track Segment	Maximum Centerline Level (dB)	Number of Events Above SEL of 65 dB
01 - 02	22.1	.0
02 - 03	22.1	.0
03 - 04	22.1	.0
04 - 05	22.1	.0
05 - 06	22.1	.0
06 - 07	23.0	.0
07 - 08	22.1	.0

Track Name = IR-0074

Track	Maximum Centerline	Number of Events Above

Segment	Level (dB)	SEL of 65 dB
01 - 02	.9	.0
02 - 03	.7	.0
03 - 04	.8	.0
04 - 05	6.1	.0
05 - 06	6.1	.0
06 - 07	6.1	.0
07 - 08	6.1	.0
08 - 09	2.6	.0

Track Name = VR-0087

Track Segment	Maximum Centerline Level (dB)	Number of Events Above SEL of 65 dB
01 - 02	44.8	.1
02 - 03	44.8	.1
03 - 04	44.8	.1
04 - 05	44.8	.1
05 - 06	45.8	.2
06 - 07	45.8	.2

Track Name = VR-0088

Track Segment	Maximum Centerline Level (dB)	Number of Events Above SEL of 65 dB
01 - 02	44.1	.1
02 - 03	44.1	.1
03 - 04	44.1	.1
04 - 05	44.1	.1
05 - 06	44.1	.1
06 - 07	45.1	.1

Track Name = VR-0094

Track Segment	Maximum Centerline Level (dB)	Number of Events Above SEL of 65 dB
01 - 02	35.0	.0
02 - 03	35.0	.0
03 - 04	35.0	.0
04 - 05	35.0	.0

Track Name = VR-0097

Track Segment	Maximum Centerline Level (dB)	Number of Events Above SEL of 65 dB
01 - 02	29.4	.0
02 - 03	38.8	.0
03 - 04	38.3	.0
04 - 05	38.3	.0

05 - 06	38.3	.0
06 - 07	40.3	.1
07 - 08	40.3	.1
08 - 09	40.3	.1
09 - 10	40.3	.1
10 - 11	39.9	.1
11 - 12	39.9	.1
12 - 13	38.3	.0
13 - 14	38.3	.0
14 - 15	38.3	.0
15 - 16	37.5	.0
16 - 17	37.5	.0
17 - 18	37.3	.0
18 - 19	37.3	.0
19 - 20	37.3	.0
20 - 21	37.3	.0
21 - 22	38.3	.0

Track Name = VR-1059

Track Segment	Maximum Centerline Level (dB)	Number of Events Above SEL of 65 dB
01 - 02	41.4	.2
02 - 03	42.4	.3
03 - 04	41.6	.2
04 - 05	41.6	.2
05 - 06	41.4	.2
06 - 07	44.4	.4
07 - 08	44.4	.4
08 - 09	44.4	.4
09 - 10	44.4	.4
10 - 11	44.4	.4

Track Name = VR-1004

Track Segment	Maximum Centerline Level (dB)	Number of Events Above SEL of 65 dB
01 - 02	49.7	.4
02 - 03	49.7	.4
03 - 04	49.7	.4
04 - 05	49.7	.4
05 - 06	49.7	.4
06 - 07	49.7	.4
07 - 08	49.7	.4
08 - 09	49.7	.4
09 - 10	49.7	.4
10 - 11	49.7	.4

11 - 12	49.7	.4
12 - 13	49.7	.4
13 - 14	49.7	.4
14 - 15	51.9	.6

Track Name = VR-1040

Track Segment	Maximum Centerline Level (dB)	Number of Events Above SEL of 65 dB
01 - 02	46.9	.1
02 - 03	46.9	.1
03 - 04	46.9	.1
04 - 05	46.9	.1
05 - 06	46.8	.1
06 - 07	46.8	.1
07 - 08	46.8	.1
08 - 09	46.9	.1
09 - 10	46.8	.1
10 - 11	46.8	.1
11 - 12	46.8	.1
12 - 13	46.8	.1
13 - 14	46.8	.1

<Run Log>

Date: 5/25/2005
Start Time: 12:48: 4
Stop Time: 12:48:24
Total Running Time: 0 minutes and 21 seconds.

BULLDOG A UNDER PROPOSED ACTION
(CONFORMAL WITH BULLDOG B)

***** MOA RANGE NOISEMAP *****
Version 2.2
Release Date 15 August 1999

SETUP PARAMETERS

Number of MOAs and Ranges = 1 Number of tracks = 0
Lower Left Corner of Grid (Lat/Long) = 32 00 00 N 084 00 00 W
Upper Right Corner of Grid (Lat/Long) = 34 00 00 N 081 00 00 W
Grid spacing = 9468. feet Number of events above an SEL of 65 dB
Temperature = 59 F Humidity = 70 Flying days per month = 21

MOA SPECIFICATIONS

MOA name BULLDOG B

Latitude	Longitude
33 13 60 N	082 30 02 W
33 12 03 N	082 22 58 W
33 13 03 N	082 08 56 W
33 13 03 N	081 58 55 W
32 54 02 N	081 50 27 W
32 34 04 N	081 55 59 W
32 33 45 N	081 57 48 W
32 32 45 N	082 03 44 W
32 34 34 N	082 25 29 W
32 37 49 N	082 43 57 W
33 01 01 N	082 52 26 W
33 13 24 N	082 31 31 W
33 13 60 N	082 30 02 W

Floor = 500 feet AGL Ceiling = 9500 feet AGL

AVOIDANCE SPECIFICATION

Number of Avoidance Areas = 8

Latitude	Longitude	Radius (feet)	Floor (feet AGL)	Name
32 52 01 N	082 02 29 W	6076.	1500	STORK

33 02 10 N	082 14 46 W	6076.	1000	VIDETTE
32 58 59 N	082 23 00 W	18228.	1500	2J3
33 13 30 N	082 22 32 W	18228.	1500	65J
32 57 28 N	082 49 50 W	42532.	3000	KAOLIN
33 01 54 N	082 00 04 W	18228.	1500	BXG
32 53 01 N	081 57 26 W	18228.	1500	2J5
32 35 57 N	082 22 25 W	18228.	1500	SBO

MISSION DATA

Mission name = F16BBPROP
Aircraft code = 163 Speed = 465 kias Power = 94.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	5
1000	2000	5
2000	5000	5
5000	10000	10
10000	17499	60
17499	23499	10
23499	26499	5

Mission name = F15BBPROP
Aircraft code = 147 Speed = 450 kias Power = 77.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	5
1000	2000	5
2000	5000	5
5000	10000	10
10000	17499	60
17499	23499	10
23499	26499	5

Mission name = F18BBPROP
Aircraft code = 172 Speed = 500 kias Power = 92.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	5
1000	2000	5
2000	5000	5
5000	10000	10
10000	17499	60
17499	23499	10
23499	26499	5

Mission name = AV8BBPROP
Aircraft code = 15 Speed = 300 kias Power = 95.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	5
1000	2000	5
2000	5000	5
5000	10000	10
10000	17499	60
17499	23499	10
23499	26499	5

MOA OPERATION DATA

MOA name = BULLDOG B

Mission Name	Daily Day OPS	Daily Night OPS	Monthly Day OPS	Monthly Night OPS	Yearly Day OPS	Yearly Night OPS	Time On Range (minutes)
AV8BBPROP	.238	.000	5.00	.00	60.	0.	30
F15BBPROP	.317	.000	6.67	.00	80.	0.	30
F16BBPROP	16.690	.877	350.50	18.42	4206.	221.	30
F18BBPROP	5.369	.000	112.75	.00	1353.	0.	30

***** MOA RANGE NOISEMAP *****

RESULTS

The noise metric is Ldnmr.

MOA RESULTS

MOA Name	MOA Area (sq statute miles)	Intersecting Avoidance Area (sq statute miles)	Uniform Distributed Sound Level (dB)	Number of Events Above SEL of 65 dB
BULLDOG B	2221.4	262.8	52.6	.9

AVOIDANCE AREA RESULTS

Avoidance Area Name	Uniform Distributed Sound Level (dB)	Number of Events Above SEL of 65 dB
STORK	46.3	1.0
VIDETTE	48.7	.8
2J3	46.3	1.0
65J	46.3	1.0
KAOLIN	40.8	.8
BXG	46.3	1.0
2J5	46.3	1.0
SBO	46.3	1.0

<Run Log>
Date: 2/10/2005
Start Time: 14:19:11
Stop Time: 14:19:11
Total Running Time: 0 minutes and 0 seconds.

BULLDOG B PROPOSED ACTION

***** MOA RANGE NOISEMAP *****
Version 2.2
Release Date 15 August 1999

SETUP PARAMETERS

Number of MOAs and Ranges = 1 Number of tracks = 0
Lower Left Corner of Grid (Lat/Long) = 32 00 00 N 084 00 00 W
Upper Right Corner of Grid (Lat/Long) = 34 00 00 N 081 00 00 W
Grid spacing = 9468. feet Number of events above an SEL of 65 dB
Temperature = 59 F Humidity = 70 Flying days per month = 21

MOA SPECIFICATIONS

MOA name BULLDOG B

Latitude	Longitude
33 13 60 N	082 30 02 W
33 12 03 N	082 22 58 W
33 13 03 N	082 08 56 W
33 13 03 N	081 58 55 W
32 54 02 N	081 50 27 W
32 34 04 N	081 55 59 W
32 33 45 N	081 57 48 W
32 32 45 N	082 03 44 W
32 34 34 N	082 25 29 W
32 37 49 N	082 43 57 W
33 01 01 N	082 52 26 W
33 13 24 N	082 31 31 W
33 13 60 N	082 30 02 W

Floor = 9500 feet AGL Ceiling = 26499 feet AGL

AVOIDANCE SPECIFICATION

Number of Avoidance Areas = 8

Latitude	Longitude	Radius (feet)	Floor (feet AGL)	Name
32 52 01 N	082 02 29 W	6076.	1500	STORK
33 02 10 N	082 14 46 W	6076.	1000	VIDETTE

32 58 59 N	082 23 00 W	18228.	1500	2J3
33 13 30 N	082 22 32 W	18228.	1500	65J
32 57 28 N	082 49 50 W	42532.	3000	KAOLIN
33 01 54 N	082 00 04 W	18228.	1500	BXG
32 53 01 N	081 57 26 W	18228.	1500	2J5
32 35 57 N	082 22 25 W	18228.	1500	SBO

MISSION DATA

Mission name = F16BBPROP
Aircraft code = 163 Speed = 465 kias Power = 94.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	5
1000	2000	5
2000	5000	5
5000	10000	10
10000	17499	60
17499	23499	10
23499	26499	5

Mission name = F15BBPROP
Aircraft code = 147 Speed = 450 kias Power = 77.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	5
1000	2000	5
2000	5000	5
5000	10000	10
10000	17499	60
17499	23499	10
23499	26499	5

Mission name = F18BBPROP
Aircraft code = 172 Speed = 500 kias Power = 92.0

Altitude Distribution

Lower Alt	Upper Alt	Percent

(feet AGL)	(feet AGL)	Utilization
500	1000	5
1000	2000	5
2000	5000	5
5000	10000	10
10000	17499	60
17499	23499	10
23499	26499	5

Mission name = AV8BBPROP
Aircraft code = 15 Speed = 300 kias Power = 95.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	5
1000	2000	5
2000	5000	5
5000	10000	10
10000	17499	60
17499	23499	10
23499	26499	5

MOA OPERATION DATA

MOA name = BULLDOG B

Mission Name	Daily Day OPS	Daily Night OPS	Monthly Day OPS	Monthly Night OPS	Yearly Day OPS	Yearly Night OPS	Time On Range (minutes)
AV8BBPROP	.238	.000	5.00	.00	60.	0.	30
F15BBPROP	.317	.000	6.67	.00	80.	0.	30
F16BBPROP	16.690	.877	350.50	18.42	4206.	221.	30
F18BBPROP	5.369	.000	112.75	.00	1353.	0.	30

***** MOA RANGE NOISEMAP *****
RESULTS

The noise metric is Ldnmr.

MOA RESULTS

MOA Name	MOA Area (sq statute miles)	Intersecting Avoidance Area	Uniform Distributed Sound Level (dB)	Number of Events Above SEL of 65 dB
BULLDOG B	2221.4	262.8	27.4	.9

AVOIDANCE AREA RESULTS

Avoidance Area Name	Uniform Distributed Sound Level (dB)	Number of Events Above SEL of 65 dB
STORK	27.4	.9
VIDETTE	27.4	.9
2J3	27.4	.9
65J	27.4	.9
KAOLIN	27.4	.9
BXG	27.4	.9
2J5	27.4	.9
SBO	27.4	.9

<Run Log>

Date:	2/10/2005
Start Time:	14:19:39
Stop Time:	14:19:40
Total Running Time:	0 minutes and 1 seconds.

BULLDOG A / B JOINT USE UNDER PROPOSED ACTION

As reflected above, the Bulldog A and B MOAs were modeled separately. The indicated noise levels reflect use of each MOA for an entire training period. However, these two MOAs are often used together. Due to the overall configuration and the altitude stratification of the airspace, rather than modeling, noise levels were scaled from the individual models, and then added to develop results for the joint use condition. This approach minimized the potential for an overestimation of noise in some areas, and an underestimation in others.

Scaling was accomplished by reducing the time spent in each MOA from 30 minutes to 15 minutes. This results in a 3 dBA reduction in noise levels in each MOA. Noise in Bulldog A is reduced from DNLmr 53 to DNLmr 50, and in Bulldog B from DNLmr 27 to DNLmr 24.

These values were then added to produce a result of DNLmr 50 on the ground.

Addition of noise levels is accomplished by:

$$DNLmr = 10 \times Log\left(10^{\frac{DNLmr1}{10}} + 10^{\frac{DNLmr2}{10}}\right)$$

GAMECOCK C PROPOSED ACTION

***** MOA RANGE NOISEMAP *****
Version 2.2
Release Date 15 August 1999

SETUP PARAMETERS

Number of MOAs and Ranges = 1 Number of tracks = 0
Lower Left Corner of Grid (Lat/Long) = 33 00 00 N 081 00 00 W
Upper Right Corner of Grid (Lat/Long) = 35 00 00 N 078 00 00 W
Grid spacing = 9472. feet Number of events above an SEL of 65 dB
Temperature = 59 F Humidity = 70 Flying days per month = 21

MOA SPECIFICATIONS

MOA name GAMECOCK C

Latitude	Longitude
33 49 04 N	079 41 28 W
33 50 31 N	079 24 58 W
33 50 33 N	079 20 27 W
33 48 59 N	079 18 30 W
33 37 59 N	079 07 30 W
33 25 33 N	079 25 26 W
33 24 02 N	079 37 00 W
33 24 38 N	079 48 25 W
33 49 04 N	079 41 28 W

Floor = 100 feet AGL Ceiling = 9499 feet AGL

AVOIDANCE SPECIFICATION

Number of Avoidance Areas = 5

Latitude	Longitude	Radius (feet)	Floor (feet AGL)	Name
33 43 43 N	079 31 00 W	18228.	1500	H/S AP
33 27 04 N	079 31 31 W	18228.	1500	AND AP
33 42 01 N	079 34 44 W	6076.	1500	LWP
33 33 25 N	079 20 33 W	9114.	1500	SISTER
33 35 48 N	079 24 40 W	9114.	1500	BAXLEY

MISSION DATA

Mission name = F16
Aircraft code = 163 Speed = 465 kias Power = 94.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	10
1000	2000	10
2000	5000	40
5000	10000	40

Mission name = F15
Aircraft code = 147 Speed = 450 kias Power = 77.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	10
1000	2000	10
2000	5000	40
5000	10000	40

Mission name = F18
Aircraft code = 172 Speed = 500 kias Power = 92.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	10
1000	2000	10
2000	5000	40
5000	10000	40

Mission name = AV8
Aircraft code = 15 Speed = 300 kias Power = 95.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	10

1000	2000	10
2000	5000	40
5000	10000	40

Mission name = A10
Aircraft code = 22 Speed = 325 kias Power = 5333.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	10
1000	2000	10
2000	5000	40
5000	10000	40

MOA OPERATION DATA

MOA name = GAMECOCK C

Mission Name	Daily Day OPS	Daily Night OPS	Monthly Day OPS	Monthly Night OPS	Yearly Day OPS	Yearly Night OPS	Time On Range (minutes)
A10	5.643	.000	118.50	.00	1422.	0.	20
AV8	.357	.000	7.50	.00	90.	0.	20
F15	2.032	.000	42.67	.00	512.	0.	20
F16	9.782	.512	205.42	10.75	2465.	129.	20
F18	2.857	.000	60.00	.00	720.	0.	20

***** MOA RANGE NOISEMAP *****
RESULTS

The noise metric is Ldnmr.

MOA RESULTS

MOA	MOA	Intersecting Avoidance	Uniform Distributed	Number of Events Above

Name	Area (sq statute miles)	Area	Sound Level (dB)	SEL of 65 dB
GAMECOCK C	824.5	94.0	51.4	.6

AVOIDANCE AREA RESULTS

Avoidance Area Name	Uniform Distributed Sound Level (dB)	Number of Events Above SEL of 65 dB
H/S AP	46.2	.7
AND AP	46.2	.7
LWP	46.2	.7
SISTER	46.2	.7
BAXLEY	46.2	.7

<Run Log>

Date: 1/27/2005
Start Time: 10:51:34
Stop Time: 10:51:34
Total Running Time: 0 minutes and 1 seconds.

GAMECOCK D / F PROPOSED ACTION

***** MOA RANGE NOISEMAP *****
Version 2.2
Release Date 15 August 1999

SETUP PARAMETERS

Number of MOAs and Ranges = 1 Number of tracks = 0
Lower Left Corner of Grid (Lat/Long) = 33 00 00 N 081 00 00 W
Upper Right Corner of Grid (Lat/Long) = 35 00 00 N 078 00 00 W
Grid spacing = 9472. feet Number of events above an SEL of 65 dB
Temperature = 59 F Humidity = 70 Flying days per month = 21

MOA SPECIFICATIONS

MOA name GAMECOCK D

Latitude	Longitude
33 52 58 N	079 54 59 W
33 50 00 N	079 47 57 W
33 49 04 N	079 41 28 W
33 50 31 N	079 24 58 W
33 50 33 N	079 20 27 W
33 48 59 N	079 18 30 W
33 24 02 N	079 37 00 W
33 24 59 N	079 54 59 W
33 32 30 N	080 15 56 W
33 52 58 N	079 54 59 W

Floor = 4600 feet AGL Ceiling = 21600 feet AGL

MISSION DATA

Mission name = F16GDF
Aircraft code = 163 Speed = 465 kias Power = 94.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
4600	6000	30
6000	10000	30
10000	15000	20

15000	20000	10
20000	21600	10

Mission name = F15GDF
Aircraft code = 147 Speed = 450 kias Power = 77.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
4600	6000	30
6000	10000	30
10000	15000	20
15000	20000	10
20000	21600	10

Mission name = F18GDF
Aircraft code = 172 Speed = 500 kias Power = 92.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
4600	6000	30
6000	10000	30
10000	15000	20
15000	20000	10
20000	21600	10

Mission name = AV8GDF
Aircraft code = 15 Speed = 300 kias Power = 95.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
4600	6000	30
6000	10000	30
10000	15000	20
15000	20000	10
20000	21600	10

Mission name = A10GDF

Aircraft code = 22 Speed = 325 kias Power = 5333.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
4600	6000	30
6000	10000	30
10000	15000	20
15000	20000	10
20000	21600	10

Mission name = EA6GDF

Aircraft code = 7 Speed = 250 kias Power = 100.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
4600	6000	30
6000	10000	30
10000	15000	20
15000	20000	10
20000	21600	10

MOA OPERATION DATA

MOA name = GAMECOCK D

Mission Name	Daily Day OPS	Daily Night OPS	Monthly Day OPS	Monthly Night OPS	Yearly Day OPS	Yearly Night OPS	Time On Range (minutes)
A10GDF	.595	.000	12.50	.00	150.	0.	20
AV8GDF	.143	.000	3.00	.00	36.	0.	20
EA6GDF	.143	.000	3.00	.00	36.	0.	20
F15GDF	1.619	.000	34.00	.00	408.	0.	20
F16GDF	15.619	.821	328.00	17.25	3936.	207.	20
F18GDF	2.286	.000	48.00	.00	576.	0.	20

***** MOA RANGE NOISEMAP *****

RESULTS

The noise metric is Ldnmr.

MOA RESULTS

MOA Name	MOA Area (sq statute miles)	Intersecting Avoidance Area (sq statute miles)	Uniform Distributed Sound Level (dB)	Number of Events Above SEL of 65 dB
GAMECOCK D	1110.7	.0	36.9	1.9

<Run Log>

Date:	1/27/2005
Start Time:	10:34:19
Stop Time:	10:34:19
Total Running Time:	0 minutes and 1 seconds.

NEW GAMECOCK E PROPOSED ACTION

```
***** MOA RANGE NOISEMAP *****
         Version 2.2
 Release Date  15 August 1999

        SETUP PARAMETERS
Number of MOAs and Ranges =  1     Number of tracks = 0
Lower Left  Corner of Grid (Lat/Long) =  33 00 00 N  081 00 00 W
Upper Right Corner of Grid (Lat/Long) =  35 00 00 N  078 00 00 W
Grid spacing =     9472. feet      Number of events above an SEL  of 65 dB
Temperature =  59 F      Humidity =  70     Flying days per month = 21


       MOA SPECIFICATIONS

MOA name GAMECOCK E
 Latitude     Longitude
33 52 58 N   079 54 59 W
33 32 30 N   080 15 56 W
33 44 29 N   080 31 43 W
33 46 23 N   080 23 07 W
33 54 26 N   080 24 14 W
33 52 58 N   079 54 59 W
Floor =    7600 feet AGL     Ceiling =   21600 feet AGL

         MISSION DATA
Mission name = A10GE
Aircraft code =   22  Speed =  325 kias  Power =  5333.0
           Altitude Distribution
    Lower Alt    Upper Alt     Percent
   (feet AGL)   (feet AGL)   Utilization
      7600        10000          40
     10000        15000          40
     15000        20000          15
     20000        21600           5

Mission name = AV8GE
Aircraft code =   15  Speed =  300 kias  Power =    95.0
           Altitude Distribution
```

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
7600	10000	40
10000	15000	40
15000	20000	15
20000	21600	5

Mission name = EA6GE
Aircraft code = 7 Speed = 250 kias Power = 100.0
Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
7600	10000	40
10000	15000	40
15000	20000	15
20000	21600	5

Mission name = F15GE
Aircraft code = 147 Speed = 450 kias Power = 77.0
Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
7600	10000	40
10000	15000	40
15000	20000	15
20000	21600	5

Mission name = F16GE
Aircraft code = 163 Speed = 465 kias Power = 94.0
Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
7600	10000	40
10000	15000	40
15000	20000	15
20000	21600	5

Mission name = F18GE
Aircraft code = 172 Speed = 500 kias Power = 92.0
Altitude Distribution

Lower Alt	Upper Alt	Percent

(feet AGL)	(feet AGL)	Utilization
7600	10000	40
10000	15000	40
15000	20000	15
20000	21600	5

MOA OPERATION DATA

MOA name = GAMECOCK E

Mission Name	Daily Day OPS	Daily Night OPS	Monthly Day OPS	Monthly Night OPS	Yearly Day OPS	Yearly Night OPS	Time On Range (minutes)
A10GE	.595	.000	12.50	.00	150.	0.	20
AV8GE	.143	.000	3.00	.00	36.	0.	20
EA6GE	.143	.000	3.00	.00	36.	0.	20
F15GE	1.619	.000	34.00	.00	408.	0.	20
F16GE	15.619	.821	328.00	17.25	3936.	207.	20
F18GE	2.286	.000	48.00	.00	576.	0.	20

***** MOA RANGE NOISEMAP *****
RESULTS

The noise metric is Ldnmr.

MOA RESULTS

MOA Name	MOA Area (sq statute miles)	Intersecting Avoidance Area (sq statute miles)	Uniform Distributed Sound Level (dB)	Number of Events Above SEL of 65 dB
GAMECOCK E	442.7	.0	35.5	8.2

<Run Log>
Date: 1/27/2005
Start Time: 11:51:22
Stop Time: 11:51:23
Total Running Time: 0 minutes and 2 seconds.

POINSETT MOA AND POINSETT RANGE (R-6002) PROPOSED ACTION

```
***** MOA RANGE NOISEMAP *****
         Version 2.2
 Release Date  15 August 1999

        SETUP PARAMETERS
Number of MOAs and Ranges =  2     Number of tracks = 0
Lower Left  Corner of Grid (Lat/Long) =  30 00 00 N  084 00 00 W
Upper Right Corner of Grid (Lat/Long) =  36 00 00 N  077 00 00 W
Grid spacing =    27966. feet      Number of events above an SEL  of 65 dB
Temperature =  59 F      Humidity =  70     Flying days per month = 21


       MOA SPECIFICATIONS


MOA name 6002
 Latitude     Longitude
33 54 26 N   080 24 19 W
33 46 25 N   080 23 21 W
33 44 27 N   080 31 34 W
33 50 10 N   080 31 12 W
33 53 36 N   080 31 11 W
33 54 26 N   080 24 19 W
Floor =       0 feet AGL     Ceiling =   17599 feet AGL

MOA name POINSETT
 Latitude     Longitude
33 51 17 N   080 23 39 W
33 37 48 N   080 16 14 W
33 37 20 N   080 38 06 W
33 42 11 N   080 35 41 W
33 47 19 N   080 31 13 W
33 44 27 N   080 31 34 W
33 46 25 N   080 23 21 W
33 51 17 N   080 23 39 W
Floor =     500 feet AGL     Ceiling =    4500 feet AGL
```

AVOIDANCE SPECIFICATION

Number of Avoidance Areas = 2

Latitude	Longitude	Radius (feet)	Floor (feet AGL)	Name
33 36 24 N	080 21 22 W	12152.	2000	AVOID1
33 44 26 N	080 27 48 W	6076.	2000	AVOID2

MISSION DATA

Mission name = PF16

Aircraft code = 163 Speed = 465 kias Power = 94.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
300	4500	100

Mission name = PF15

Aircraft code = 147 Speed = 450 kias Power = 77.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
300	4500	100

Mission name = PF18

Aircraft code = 172 Speed = 500 kias Power = 92.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
300	4500	100

Mission name = PAV8

Aircraft code = 15 Speed = 300 kias Power = 95.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
300	4500	100

Mission name = PA10
Aircraft code = 22 Speed = 325 kias Power = 5333.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
300	4500	100

Mission name = PEA6
Aircraft code = 7 Speed = 250 kias Power = 100.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
300	4500	100

Mission name = RF16
Aircraft code = 163 Speed = 465 kias Power = 94.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	2500	12
2500	5000	12
5000	7500	12
7500	10000	12
10000	12500	12
12500	17500	20
17500	22500	20

Mission name = RF15
Aircraft code = 147 Speed = 450 kias Power = 77.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	2500	12
2500	5000	12
5000	7500	12
7500	10000	12
10000	12500	12
12500	17500	20

17500	22500	20

Mission name = RF18
Aircraft code = 172 Speed = 500 kias Power = 92.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	2500	12
2500	5000	12
5000	7500	12
7500	10000	12
10000	12500	12
12500	17500	20
17500	22500	20

Mission name = RAV8
Aircraft code = 15 Speed = 300 kias Power = 95.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	2500	12
2500	5000	12
5000	7500	12
7500	10000	12
10000	12500	12
12500	17500	20
17500	22500	20

Mission name = RA10
Aircraft code = 22 Speed = 325 kias Power = 5333.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	2500	12
2500	5000	12
5000	7500	12
7500	10000	12
10000	12500	12

12500	17500	20
17500	22500	20

Mission name = REA6
Aircraft code = 7 Speed = 250 kias Power = 100.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	2500	12
2500	5000	12
5000	7500	12
7500	10000	12
10000	12500	12
12500	17500	20
17500	22500	20

MOA OPERATION DATA

MOA name = 6002

Mission Name	Daily Day OPS	Daily Night OPS	Monthly Day OPS	Monthly Night OPS	Yearly Day OPS	Yearly Night OPS	Time On Range (minutes)
RF16	10.278	.000	215.83	.00	2590.	0.	30
RF15	1.012	.000	21.25	.00	255.	0.	30
RF18	1.429	.000	30.00	.00	360.	0.	30
RAV8	.091	.000	1.92	.00	23.	0.	30
RA10	.373	.000	7.83	.00	94.	0.	30
REA6	.091	.000	1.92	.00	23.	0.	30

MOA name = POINSETT

Mission Name	Daily Day OPS	Daily Night OPS	Monthly Day OPS	Monthly Night OPS	Yearly Day OPS	Yearly Night OPS	Time On Range (minutes)
PF16	.552	.000	11.58	.00	139.	0.	5
PF15	.056	.000	1.17	.00	14.	0.	5
PF18	.075	.000	1.58	.00	19.	0.	5

PAV8	.004	.000	.08	.00	1.	0.	5
PA10	.020	.000	.42	.00	5.	0.	5
PEA6	.004	.000	.08	.00	1.	0.	5

***** MOA RANGE NOISEMAP *****
RESULTS

The noise metric is Ldnmr.

MOA RESULTS

MOA Name	MOA Area (sq statute miles)	Intersecting Avoidance Area (sq statute miles)	Uniform Distributed Sound Level (dB)	Number of Events Above SEL of 65 dB
6002	71.0	.0	58.7	2.5
POINSETT	162.5	6.3	38.1	.0

AVOIDANCE AREA RESULTS

Avoidance Area Name	Uniform Distributed Sound Level (dB)	Number of Events Above SEL of 65 dB
AVOID1	32.9	.1
AVOID2	52.2	6.8

<Run Log>
Date: 2/23/2005
Start Time: 10: 1:38
Stop Time: 10: 1:39
Total Running Time: 0 minutes and 1 seconds.

BULLDOG A ALTERNATIVE B

***** MOA RANGE NOISEMAP *****
Version 2.2
Release Date 15 August 1999

SETUP PARAMETERS

Number of MOAs and Ranges = 1 Number of tracks = 0
Lower Left Corner of Grid (Lat/Long) = 32 00 00 N 084 00 00 W
Upper Right Corner of Grid (Lat/Long) = 34 00 00 N 081 00 00 W
Grid spacing = 9468. feet Number of events above an SEL of 65 dB
Temperature = 59 F Humidity = 70 Flying days per month = 21

MOA SPECIFICATIONS

MOA name BULLDOG A

Latitude	Longitude
33 01 01 N	082 52 26 W
33 13 60 N	082 30 02 W
33 12 03 N	082 22 58 W
33 13 03 N	082 08 56 W
33 05 45 N	082 04 29 W
32 49 60 N	082 00 58 W
32 37 49 N	082 43 57 W
33 01 01 N	082 52 26 W

Floor = 500 feet AGL Ceiling = 2500 feet AGL

AVOIDANCE SPECIFICATION

Number of Avoidance Areas = 8

Latitude	Longitude	Radius (feet)	Floor (feet AGL)	Name
32 52 01 N	082 02 29 W	6076.	1500	STORK
33 02 10 N	082 14 46 W	6076.	1000	VIDETTE
32 58 59 N	082 23 00 W	18228.	1500	2J3
33 13 30 N	082 22 32 W	18228.	1500	65J
32 57 28 N	082 49 50 W	42532.	3000	KAOLIN
33 01 54 N	082 00 04 W	18228.	1500	BXG
32 53 01 N	081 57 26 W	18228.	1500	2J5

32 35 57 N 082 22 25 W 18228. 1500 SBO

MISSION DATA

Mission name = F16BA
Aircraft code = 163 Speed = 465 kias Power = 94.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	2500	100

Mission name = F15BA
Aircraft code = 147 Speed = 450 kias Power = 77.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	2500	100

Mission name = F18BA
Aircraft code = 172 Speed = 500 kias Power = 92.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	2500	100

Mission name = AV8BA
Aircraft code = 15 Speed = 300 kias Power = 95.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	2500	100

MOA OPERATION DATA

MOA name = BULLDOG A

	Daily		Monthly		Yearly		
Mission	Day	Night	Day	Night	Day	Night	Time On Range

Name	OPS	OPS	OPS	OPS	OPS	OPS	(minutes)
AV8BA	.238	.000	5.00	.00	60.	0.	30
F15BA	.317	.000	6.67	.00	80.	0.	30
F16BA	16.690	.877	350.50	18.42	4206.	221.	30
F18BA	5.369	.000	112.75	.00	1353.	0.	30

***** MOA RANGE NOISEMAP *****
RESULTS

The noise metric is Ldnmr.

MOA RESULTS

MOA Name	MOA Area (sq statute miles)	Intersecting Avoidance Area (sq statute miles)	Uniform Distributed Sound Level (dB)	Number of Events Above SEL of 65 dB
BULLDOG A	1391.4	158.6	55.7	1.7

AVOIDANCE AREA RESULTS

Avoidance Area Name	Uniform Distributed Sound Level (dB)	Number of Events Above SEL of 65 dB
STORK	52.1	5.9
VIDETTE	53.5	3.3
2J3	52.1	5.9
65J	52.1	5.9
KAOLIN	48.4	18.7
BXG	52.1	5.9
2J5	.0	.0
SBO	.0	.0

<Run Log>
Date: 2/10/2005
Start Time: 15:14:25
Stop Time: 15:14:26
Total Running Time: 0 minutes and 1 seconds.

BULLDOG B ALTERNATIVE B

```
***** MOA RANGE NOISEMAP *****
         Version 2.2
 Release Date  15 August 1999

        SETUP PARAMETERS
Number of MOAs and Ranges =  2     Number of tracks = 0
Lower Left  Corner of Grid (Lat/Long) =  32 00 00 N  084 00 00 W
Upper Right Corner of Grid (Lat/Long) =  34 00 00 N  081 00 00 W
Grid spacing =     9468. feet      Number of events above an SEL  of 65 dB
Temperature =  59 F      Humidity =  70     Flying days per month = 21


       MOA SPECIFICATIONS

MOA name BULLDOG B
 Latitude     Longitude
33 13 60 N   082 30 02 W
33 12 03 N   082 22 58 W
33 13 03 N   082 08 56 W
33 13 03 N   081 58 55 W
32 54 02 N   081 50 27 W
32 34 04 N   081 55 59 W
32 33 45 N   081 57 48 W
32 32 45 N   082 03 44 W
32 34 34 N   082 25 29 W
32 37 49 N   082 43 57 W
33 01 01 N   082 52 26 W
33 13 24 N   082 31 31 W
33 13 60 N   082 30 02 W
Floor =    2500 feet AGL     Ceiling =   26499 feet AGL


      AVOIDANCE SPECIFICATION
Number of Avoidance Areas =  8
 Latitude    Longitude      Radius       Floor         Name
                            (feet)     (feet AGL)
32 52 01 N  082 02 29 W      6076.        1500     STORK
33 02 10 N  082 14 46 W      6076.        1000     VIDETTE
```

32 58 59 N	082 23 00 W	18228.	1500	2J3
33 13 30 N	082 22 32 W	18228.	1500	65J
32 57 28 N	082 49 50 W	42532.	3000	KAOLIN
33 01 54 N	082 00 04 W	18228.	1500	BXG
32 53 01 N	081 57 26 W	18228.	1500	2J5
32 35 57 N	082 22 25 W	18228.	1500	SBO

MISSION DATA

Mission name = F16BB
Aircraft code = 163 Speed = 465 kias Power = 94.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
2500	5000	15
5000	10000	10
10000	15000	55
15000	20000	15
20000	26499	5

Mission name = F15BB
Aircraft code = 147 Speed = 450 kias Power = 77.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
2500	5000	15
5000	10000	10
10000	15000	55
15000	20000	15
20000	26499	5

Mission name = F18BB
Aircraft code = 172 Speed = 500 kias Power = 92.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
2500	5000	15
5000	10000	10

10000	15000	55
15000	20000	15
20000	26499	5

Mission name = AV8BB
Aircraft code = 15 Speed = 300 kias Power = 95.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
2500	5000	15
5000	10000	10
10000	15000	55
15000	20000	15
20000	26499	5

MOA OPERATION DATA

MOA name = BULLDOG B

Mission Name	Daily Day OPS	Daily Night OPS	Monthly Day OPS	Monthly Night OPS	Yearly Day OPS	Yearly Night OPS	Time On Range (minutes)
AV8BB	.238	.000	5.00	.00	60.	0.	30
F15BB	.317	.000	6.67	.00	80.	0.	30
F16BB	16.690	.877	350.50	18.42	4206.	221.	30
F18BB	5.369	.000	112.75	.00	1353.	0.	30

***** MOA RANGE NOISEMAP *****
RESULTS

The noise metric is Ldnmr.

MOA RESULTS

MOA	MOA	Intersecting Avoidance	Uniform Distributed	Number of Events Above

Name	Area (sq statute miles)	Area	Sound Level (dB)	SEL of 65 dB
BULLDOG B	2221.4	262.8	39.0	.3

AVOIDANCE AREA RESULTS

Avoidance Area Name	Uniform Distributed Sound Level (dB)	Number of Events Above SEL of 65 dB
STORK	39.0	.3
VIDETTE	39.0	.3
2J3	39.0	.3
65J	39.0	.3
KAOLIN	37.6	.4
BXG	39.0	.3
2J5	39.0	.3
SBO	39.0	.3

<Run Log>

Date: 2/10/2005
Start Time: 15:14:41
Stop Time: 15:14:42
Total Running Time: 0 minutes and 1 seconds.

BULLDOG A/B ALTERNATIVE B (JOINT USE)

As reflected above, the Bulldog A and B MOAs were modeled separately. The indicated noise levels reflect use of each MOA for an entire training period. However, these two MOAs are often used together. Due to the overall configuration and the altitude stratification of the airspace, rather than modeling, noise levels were scaled from the individual models, and then added to develop results for the joint use condition. This approach minimized the potential for an overestimation of noise in some areas, and an underestimation in others.

Scaling was accomplished by reducing the time spent in each MOA from 30 minutes to 15 minutes. This results in a 3 dBA reduction in noise levels in each MOA. Noise in Bulldog A is reduced from DNLmr 56 to DNLmr 53, and in Bulldog B from DNLmr 39 to DNLmr 36.

These values were then added to produce a result of DNLmr 53 on the ground.

Addition of noise levels is accomplished by:

$$DNLmr = 10 \times Log\left(10^{\frac{DNLmr1}{10}} + 10^{\frac{DNLmr2}{10}}\right)$$

GAMECOCK D ALTERNATIVE B

***** MOA RANGE NOISEMAP *****
Version 2.2
Release Date 15 August 1999

SETUP PARAMETERS

Number of MOAs and Ranges = 1 Number of tracks = 0
Lower Left Corner of Grid (Lat/Long) = 33 00 00 N 081 00 00 W
Upper Right Corner of Grid (Lat/Long) = 35 00 00 N 078 00 00 W
Grid spacing = 9472. feet Number of events above an SEL of 65 dB
Temperature = 59 F Humidity = 70 Flying days per month = 21

MOA SPECIFICATIONS

MOA name GAMECOCK D

Latitude	Longitude
33 52 58 N	079 54 59 W
33 50 00 N	079 47 57 W
33 49 04 N	079 41 28 W
33 50 31 N	079 24 58 W
33 50 33 N	079 20 27 W
33 48 59 N	079 18 30 W
33 24 02 N	079 37 00 W
33 24 59 N	079 54 59 W
33 32 30 N	080 15 56 W
33 52 58 N	079 54 59 W

Floor = 7600 feet AGL Ceiling = 21600 feet AGL

MISSION DATA

Mission name = F16DB
Aircraft code = 163 Speed = 465 kias Power = 94.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
7600	10000	60
10000	15000	20
15000	20000	10

20000	21600	10

Mission name = F15DB
Aircraft code = 147 Speed = 450 kias Power = 77.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
7600	10000	60
10000	15000	20
15000	20000	10
20000	21600	10

Mission name = F18DB
Aircraft code = 172 Speed = 500 kias Power = 92.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
7600	10000	60
10000	15000	20
15000	20000	10
20000	21600	10

Mission name = AV8DB
Aircraft code = 15 Speed = 300 kias Power = 95.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
7600	10000	60
10000	15000	20
15000	20000	10
20000	21600	10

Mission name = A10DB
Aircraft code = 22 Speed = 325 kias Power = 5333.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization

7600	10000	60
10000	15000	20
15000	20000	10
20000	21600	10

Mission name = EA6DB
Aircraft code = 7 Speed = 250 kias Power = 100.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
7600	10000	60
10000	15000	20
15000	20000	10
20000	21600	10

MOA OPERATION DATA

MOA name = GAMECOCK D

Mission Name	Daily Day OPS	Daily Night OPS	Monthly Day OPS	Monthly Night OPS	Yearly Day OPS	Yearly Night OPS	Time On Range (minutes)
A10DB	.595	.000	12.50	.00	150.	0.	20
AV8DB	.143	.000	3.00	.00	36.	0.	20
EA6DB	.143	.000	3.00	.00	36.	0.	20
F15DB	1.619	.000	34.00	.00	408.	0.	20
F16DB	15.619	.821	328.00	17.25	3936.	207.	20
F18DB	2.286	.000	48.00	.00	576.	0.	20

***** MOA RANGE NOISEMAP *****
RESULTS

The noise metric is Ldnmr.

MOA RESULTS

MOA Name	MOA Area (sq statute miles)	Intersecting Avoidance Area (sq statute miles)	Uniform Distributed Sound Level (dB)	Number of Events Above SEL of 65 dB
GAMECOCK D	1110.7	.0	32.4	4.7

<Run Log>

Date: 2/ 9/2005
Start Time: 14:19:32
Stop Time: 14:19:33
Total Running Time: 0 minutes and 2 seconds.