

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

CITIZENS OF THE EBEBY'S RESERVE
FOR A HEALTHY, SAFE & PEACEFUL
ENVIRONMENT

Plaintiff,

v.

U.S. DEPARTMENT OF THE NAVY;
ADMIRAL BILL GORTNEY, in his
official capacity as the Commander, Fleet
Forces Command; and COMMANDER
MIKE NORTIER, in his official capacity
as Commander Naval Air Station Whidbey
Island,

Federal Defendants.

NO.

COMPLAINT FOR DECLARATORY
JUDGMENT AND INJUNCTIVE
RELIEF

I. PRELIMINARY STATEMENT

1. This is an action for declaratory and injunctive relief challenging the U.S. Department of the Navy's ("Navy") failure to act to undertake environmental review under the National Environmental Policy Act ("NEPA") for its operation of the EA-18G "Growler" Aircraft at Naval Air Station Whidbey Island's Outlying Field Coupeville ("OLF Coupeville").

COMPLAINT FOR DECLARATORY JUDGMENT AND
INJUNCTIVE RELIEF - 1

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III. PARTIES

9. Plaintiff Citizens of the Ebey's Reserve for a Healthy, Safe & Peaceful Environment (hereinafter "CER") is a Washington non-profit corporation composed of members that own property and reside in the general vicinity of OLF Coupeville.

10. CER was formed with the purpose of representing its members' interests in preserving a healthy, safe and peaceful environment and protecting their quality of life.

11. CER and its membership have been significantly harmed by a significant increase in flight operations at OLF Coupeville. Members suffer a variety of health impacts, including loss of hearing, loss of sleep and loss of ability to focus or work. Outdoor occupations, if possible, must be suspended when the Growlers are flying. Where work cannot be suspended, workers are forced to endure dangerous noise levels. Livestock are also being damaged by the excessive noise impact. Members of CER have also suffered a decline in property values due to the excessive noise impacts.

12. If the Navy is allowed to continue its flight operations at OLF Coupeville without studying, and then mitigating, the impacts of its flight operation on the surrounding community, CER and its members will be further significantly harmed.

13. A declaratory judgment and/or injunction entered in favor of CER will substantially redress these harms.

14. The injuries suffered by CER and its members are due to the Navy's failure to fulfill its discrete and mandatory duty to analyze the environmental impacts, including noise impacts, of its continued flight operations at OLF Coupeville.

1 15. CER and its members' interests are within the zone of interests protected by
2 NEPA. NEPA requires that federal agencies take a "hard look" at the environmental
3 impacts of their actions through preparation of an adequate EIS before making decisions.

4 16. CER and its members have also suffered a procedural injury because the
5 Navy's failure to properly follow NEPA procedures has impaired their distinct and
6 concrete interest in full public environmental review and comment on the continued
7 operations at OLF Coupeville. The requirements of NEPA were expressly enacted to
8 protect citizens and organizations like CER and its members by ensuring thorough
9 environmental review of a proposed project.
10

11 17. CER has requested that the Navy comply with NEPA and its regulations by
12 initiating mandatory environmental review of its operations at OLF Coupeville. The Navy
13 has not responded and has not done so.
14

15 18. CER has exhausted its administrative remedies.

16 19. CER's individual members would have standing to bring this action.
17 CER's organizational purposes relate to the interests sought to be vindicated in this action.
18 The claims asserted do not require the participation of individual members.
19

20 20. CER has standing to bring this action on behalf of itself and its members.

21 21. Defendants U.S. Department of the Navy, Commander Bill Gortney and
22 Commander Mike Nortier are the agency and agency officials charged with compliance
23 with NEPA, and specifically charged with the non-discretionary duty to undertake
24 environmental review under NEPA for the Navy's continuing operation of the EA-18G
25 "Growler" Aircraft at OLF Coupeville.
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IV. FACTS

22. Naval Air Station Whidbey Island is located in Island County, Washington, approximately 45 miles north of Seattle and approximately 34 miles northwest of Everett, on Whidbey Island. Ault Field is the primary operational facility for NAS Whidbey Island and the location of the central airfield. Outlying Field Coupeville (“OLF Coupeville”) is located approximately 10 miles southeast of Ault Field and is used almost exclusively for Field Carrier Landing Practice (“FCLP”) operation. This case primarily concerns flight operations at OLF Coupeville.

23. Between 1971 and 2008, the Navy used the EA-6B “Prowler” for its Airborne Electronic Attack (AEA) mission. In approximately 2005, the Navy began review for replacing the EA-6B aircraft with the EA-18G “Growler” – a variant of the F/A-18 F “Super Hornet” strike fighter aircraft. The EA-18G is equipped with the same electronic weapons system as the EA-6B, allowing it to perform the same AEA mission that was being performed by the EA-6B.

24. In January 2005 the Navy published a Final Environmental Assessment for Replacement of EA-6B Aircraft with EA-18G Aircraft at Naval Air Station Whidbey Island, Washington (“2005 EA”).

25. The 2005 EA analyzed the environmental impact of noise on the residential community surrounding OLF Coupeville related to the replacement of the EA-6B Aircraft with the EA-18G.

26. The analysis supporting the 2005 EA predicted that there would be a *reduction* in noise impacts with the introduction of the EA-18G. This prediction was based

1 in large part on the assumption that there would be a reduction in the number of flight
2 operations at OLF Coupeville with the introduction of the EA-18G.

3 27. The 2005 EA and supporting noise analysis count each pass at OLF
4 Coupeville as two "operations" or "events." Thus, a single aircraft conducting a Field
5 Carrier Landing Practice, or "FLCP," with an approach and subsequent takeoff, is counted
6 as two operations. This complaint adopts the 2005 EA counting methodology.

7
8 28. According to the 2005 EA, there were 7,682 annual flight operations
9 conducted at OLF Coupeville in 2003.

10 29. The 2005 EA assumed that this number would significantly drop and that
11 by 2013 the number of annual flight operations at OLF Coupeville would decrease by 20%
12 to 6,120 flight operations.

13
14 30. Contrary to the assumption in the 2005 EA that the number of flight
15 operations would decrease, the number has actually significantly increased. According to
16 information released by the Navy through the Freedom of Information Act, the number of
17 annual flight operations at OLF Coupeville over the last five years is as follows:

18	2008	2,548
19	2009	5,292
20	2010	6,476
21	2011	9,378
22	2012	9,668

23 31. Based on numbers released by the Navy and counts conducted by members
24 of CER there were 5,688 flight operations at OLF Coupeville between January 1, 2013,
25 and May 31, 2013. This is already significantly more flight operations for the five-month
26 period between January and May than during this same period in 2012.

1 32. Flight operations at OLF Coupeville in 2012 were 368% of the operations
2 number in 2008. The number of flight operations for 2012 were 158% of what was
3 predicted in the 2005 EA for 2013.

4 33. This significant increase in the number of flight operations between 2008
5 and 2012/2013 constitutes a substantial change in ongoing activities.

6 34. The substantial change in operational tempo between 2008 and 2012/2013
7 has the potential for significant environmental impacts.

8 35. The actual number of flight operations at OLF Coupeville between 2010
9 and 2013 exceed the number of flight operations predicted and analyzed in the 2005 EA.

10 36. The 2005 EA did not analyze or consider the environmental impacts of the
11 actual number of flight operation at OLF Coupeville between 2010 and 2013.

12 37. The noise analysis in the 2005 EA was prepared based on the Day-Night
13 Average Sound Level (“DNL”) metric.

14 38. The DNL metric averages all noise events for a 24-hour period and applies
15 a 10-dB penalty for nighttime events after 10:00 p.m. and before 7 a.m.

16 39. According to the 2005 EA the 10-dB penalty “accounts for the added
17 intrusiveness of sounds during sleeping hours, both because of the increased sensitivity to
18 noise during those hours and because ambient sound levels during nighttime are typically
19 about 10 dB lower than during daytime hours.” Thus, a higher percentage of nighttime
20 operations results in a higher DNL metric.

21 40. In 2003 there were 1292 nighttime operations and 6390 daytime operations
22 at OLF-Coupeville. Nighttime operations accounted for only 17% of the total flight
23

1 operations. The 2005 EA assumed that this same ratio of nighttime to daytime operations
2 would continue.

3 41. The 2005 EA assumed that in 2013 there would be 1029 nighttime
4 operations and 5091 daytime operations at OLF Coupeville.

5 42. In 2012 there were actually at least 6184 nighttime flight operations and
6 3482 daytime flight operations at OLF Coupeville. This is 479% of the actual nighttime
7 operations in 2003 and 600% of what the 2005 EA predicted for 2013.

8 43. Nighttime operations in 2012 accounted for 64% of the flight operations at
9 OLF Coupeville – significantly more than the 17% relied on in the 2005 EA.

10 44. Conditions are even worse in the summer months. For example, in June
11 2012 nighttime operations made up 71% of operations at OLF Coupeville. And in July
12 2012 nighttime operations accounted for 84% of operations (935 out of 1116 total).

13 45. Because the 2005 EA assumed a significantly smaller percentage of
14 nighttime operations, it failed to accurately apply the 10-dB penalty and therefore
15 significantly underestimated the impact to the surrounding community.

16 46. As shown in the attached 2013 report prepared by JGL Acoustics, Inc.,
17 *Whidbey Island Military Jet Noise Measurements* (hereinafter “JGL Report”), based on
18 actual ratio of nighttime to daytime operations, predicted and calculated annual average
19 DNL levels at four measured locations were at least 5 dB above levels predicted in the
20 2005 EA.

21 47. For the purposes of NEPA, EPA Region 10 considers an increase in noise
22 levels above 5 dB to be a “significant” impact.
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1 48. This shift in nighttime operations at OLF Coupeville constitutes a
2 substantial change in a continuing activity that carries at least the “potential” for significant
3 environmental impacts.

4 49. The 2005 noise analysis prepared in support of the 2005 EA concluded that
5 the EA-18G Growler is 7 sound exposure levels (“SELs”) louder on arrival and 3 SELs
6 louder on departure than the replaced EA-6B Prowler. Mitigation for this increase was
7 supposed to be a reduced number of flight operations. The approach to the OLF on path
8 32, which was used on 78% of the approaches in 2012, crosses directly over the center of
9 Admirals Cove, the most densely populated area on either OLF Coupeville flight path (i.e.,
10 paths 32 and 14).

11 50. However, with clearly more flight operations than planned, the mitigation
12 never materialized. Instead, the actual result is louder jets and far more flight operations.

13 51. By relying solely on the DNL metric, the 2005 EA significantly
14 underestimated the significant noise impact on the community surrounding OLF
15 Coupeville. By averaging over an entire year and including non-operational days the DNL
16 metric results in diluted noise predictions.

17 52. The 2005 EA estimated DNLs over 75 dB in only a small area immediately
18 around OLF Coupeville. Based on the JGL Report findings discussed in paragraph 46,
19 DNL contours exceeding 75 dB cover a much more extensive area than the 2005 EA
20 predicted.

21 53. The 2005 EA failed to address maximum noise in the OLF area. The JGL
22 Report, however, indicated severe maximum noise impacts. For example, in a densely
23 populated residential area approximately one mile south of OLF Coupeville, maximum
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1 A-weight noise levels reached 119.2 dBA with the unweighted peak level at 134.2 dB.
2 During one 40-minute session there were 35 jet flyovers which produced an average SEL
3 of 113.1 dBA. At the four outside locations JGL recorded, the decibel levels varied from
4 113 to 119 dB, the latter being in Admiral's Cove, the most densely populated location
5 examined. Rhododendron Park, where families visit to watch the kids play ball, was just
6 behind that.
7

8 54. The maximum sound levels are well above the levels requiring hearing
9 protection and are high enough to potentially result in permanent hearing loss. The
10 industrial health experts at the National Institute for Occupational Safety and Health report
11 that *"115 to 120 dB is the critical noise level at which human hearing is subject to*
12 *instantaneous permanent damage. Without adequate hearing protection, any exposure to*
13 *noise levels above 115 dB is likely to cause permanent hearing loss."*
14

15 55. EPA explains that if someone, in a 24-hour period, is exposed to 1.5
16 minutes of noise over 100 dB, then they will experience permanent hearing loss. JGL
17 found that one 36-minute session of 28 jet overflights at Rhododendron Park exposed the
18 moms, dads, and kids at the ballpark to two minutes and 15 seconds of noise at 100-114
19 dB, nearly twice that of the EPA hearing-loss threshold.
20

21 56. Actual noise measurements collected in the vicinity of OLF Coupeville
22 demonstrate that noise impacts are significantly and qualitatively different and more severe
23 than predicted in the 2005 EA.
24

25 V. CAUSE OF ACTION: FAILURE TO ACT IN VIOLATION OF NEPA

26 57. Paragraphs 1-56 are incorporated herein by reference.
27
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1 58. 5 U.S.C. § 706 provides authority for this Court to “compel agency action
2 unlawfully withheld or unreasonably delayed.”

3 59. NEPA is intended to ensure that environmental issues are fully considered
4 and incorporated into the Federal decision making process.

5 60. An Environmental Impact Statement (“EIS”) must be prepared for proposed
6 major Federal actions that will have significant impacts on the human environment.

7 61. The Council on Environmental Quality’s NEPA regulations define major
8 federal actions subject to evaluation under NEPA to include, among other things, both
9 “new and continuing activities.” 40 C.F.R. § 1508.18.

10 62. The Navy has adopted NEPA regulations that further define and interpret
11 what Navy actions are considered “continuing activities” subject to review under NEPA.

12 63. The Navy’s NEPA regulations, at 32 C.F.R. § 775.69(c), provide that
13 preparation of a NEPA document is necessary for activities “which are presently being
14 carried out in fulfillment of the Navy mission and function, including existing training
15 functions” where “there is a discovery that the environmental effects of an ongoing activity
16 are significantly and qualitatively different or more severe than predicted in a NEPA
17 document prepared in connection with the commencement of the activity.”

18 64. The Navy’s NEPA regulations also provide that “[a] substantial change in a
19 continuing activity (such as a substantial change in operational tempo, area of use or in
20 methodology/equipment) which has the potential for significant environmental impacts
21 should be considered a proposal for a new action and be documented accordingly.”

22 65. Thus, according to the Navy’s NEPA regulations for continuing activities a
23 new NEPA review must be conducted if *either* the environmental effects of the ongoing
24

1 activity are significantly different or more severe than predicted, *or* if there is a substantial
2 change in the continuing activity with a potential for significant environmental impacts.

3 66. As discussed above, both situations exist.

4 67. The environmental effects of the ongoing operations at OLF Coupeville are
5 significantly different and more severe than predicted in the original 2005 EA.
6

7 68. There has also been a substantial change in the continuing activity with
8 more than a “potential” for significant environmental impact.

9 69. The Navy’s NEPA regulations require that the Navy take the discrete
10 agency action of preparing an environmental review of its ongoing operations at OLF
11 Coupeville.
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13 70. By failing to take a discrete action that it is required to take, the Navy has
14 failed to act and this Court, pursuant to 5 U.S.C. §§ 702-706, should compel compliance
15 and require the Navy to conduct appropriate NEPA environmental review of its activities
16 at OLF Coupeville.
17

18 VI. REQUEST FOR RELIEF

19 WHEREFORE, plaintiff respectfully requests that this court:

20 1. Declare that the Navy has failed to act by failing to conduct appropriate
21 environmental review of its activities at OLF Coupeville.

22 2. Issue an order compelling that the Navy conduct the required environmental
23 review of its flight operations at OLF Coupeville.

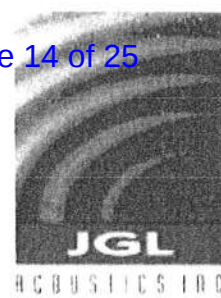
24 3. Issue a temporary restraining order, preliminary injunction and/or
25 permanent injunction requiring the Navy to cease all flight operations at OLF Coupeville
26 until such time as it has conducted appropriate environmental review of its operations.
27

DATED this 15th day of July, 2013.


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June 10, 2013

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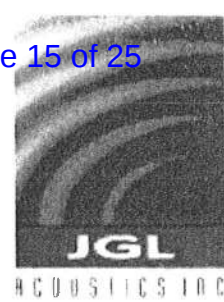
Subject: Whidbey Island Military Jet Noise Measurements

Ladies and Gentlemen:

This report summarizes my findings regarding the measured noise levels from military jet operations on Whidbey Island near Coupeville, WA. The noise measurements were conducted on May 7, 2013 at five locations near the touch and go landing strip (OLF Coupeville) approximately 3 miles southeast of Coupeville, WA. Figure 1 presents an aerial photograph showing the five measurement locations. These locations represent populated areas where people could be exposed to the aircraft noise without necessary hearing protection. The aircraft used in these operations were the EA-18G aircraft, which is replacing the older (and quieter) EA-6B jets.

Acoustic Instrumentation

The noise measurements were taken with two data logging sound level meters with current calibration certificates. The data from Positions 1, 2, and 3 were collected using a Bruel & Kjaer model 2270, and the data from Positions 4 and 5 were collected using a Bruel & Kjaer model 2238. Both instruments were programmed to record the A-weighted sound pressure level and the un-weighted (linear) sound pressure level every second. At each location the sound level meter was positioned on a tripod with the measurement microphone and protective windscreen positioned 5 feet above existing grade and away from nearby reflecting objects. Figure 2 presents a photograph of the B&K 2270 at Position 1 and the B&K 2238 at Position 4. Measurement Position 5 was an interior measurement with the noise monitoring system set up inside the living room of the residence.



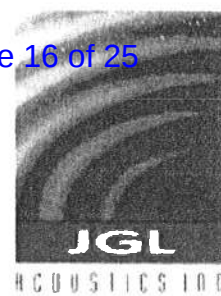
Measurement Results

Figures 3 through 7 present the measured A-weighted and un-weighted peak (linear) sound pressure level as a function of time at each of the five measurement locations. The graph on the top half of each page is a plot of the 1-second average (L_{eq}) sound pressure level, and the graph on the bottom half of each page is a plot of the un-weighted peak (linear) sound pressure level for each second of the measurement. It should be noted that the A-weighted sound pressure level is always significantly less than the un-weighted peak sound pressure level. There are two reasons for this difference. First and foremost, the A-weighting filters out much of the low frequency noise. Second, each of the A-weighted data points represents an average over a full second, while the un-weighted data points represent the highest sound level during each second. The un-weighted peak sound pressure level is typically about 18 dB higher than the 1-second average (L_{eq}) A-weighted sound pressure level during the aircraft flyover sessions. Most outdoor noise criteria are based on the A-weighted sound pressure level, but some hearing damage criteria are based on the un-weighted peak sound pressure level, and that is why the un-weighted peak data is included in this report.

Table 1 presents the summary noise level statistics for these measurements. The highest noise levels occurred at Position 1, which is in a densely populated residential area 1 mile south of the south end of the OLF runway. The lowest noise levels were measured at Position 5, which is inside a relatively new private residence 0.9 miles west of the north end of the OLF runway. The first two rows in Table 1 show the maximum A-weighted and peak un-weighted (linear) sound pressure levels during the measured session at each measurement location. The third row presents the total sound exposure level (SEL) for the entire session of jet flyovers. The sound exposure level (SEL) represents the total acoustic energy in a noise event, and it depends not only on the level of the noise but also the duration of the noise. The duration of each session is presented in the 4th row.

Table 1. Noise level statistics at each measurement location.

Statistic	Pos. 1	Pos. 2	Pos. 3	Pos. 4	Pos. 5
Maximum A-weighted Level (dBA)	119.2	113.4	115.7	114.3	81.1
Maximum Un-Weighted Peak Level (dB)	134.2	126.7	130.6	131.4	101.8
Session SEL (dBA)	128.5	124.5	122.7	127.7	92.1
Session Duration (minutes)	39	58	45	36	25
Total Jet Flyovers	35	43	26	28	8
Average SEL per Jet Flyover (dBA)	113.1	108.2	108.5	113.2	83.1



Because the jets are so close together, there is not enough time for the noise level to return to the ambient noise level before the next jet arrives, so it is not possible to measure the SEL of each individual jet flyover. However, knowing the number of jets and the total SEL for the entire session, it is possible to calculate the average SEL for a single jet flyover at each location, and this is what is shown in the last row of Table 1.

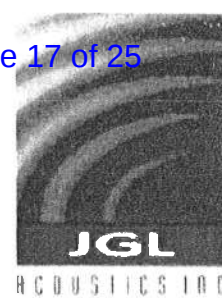
Table 2 presents the total time (in seconds) that the A-weighted and un-weighted peak sound pressure levels were over the indicated sound level threshold at each measurement location for that measurement session. Note that the exposure times at Position 2 are greater than Position 1 for the 80 to 90 dBA and 100 to 110 dB (peak linear) ranges, while the opposite is true at the higher sound level ranges. This is because the jets are scattered over a wider area near Position 2, causing an increased distance from the jets to the measurement location at Position 2. At Position 1 the jets are in a much tighter area and at a lower altitude (to access the OLF runway), and the homes are at a higher elevation (due to the existing topography), resulting in a reduced distance from the jets to the measurement location at Position 1.

Table 2. Time over threshold statistics at each measurement location.

Statistic	Pos. 1	Pos. 2	Pos. 3	Pos. 4	Pos. 5
Total Time over 80 dBA (sec)	581	1,298	593	919	1
Total Time over 85 dBA (sec)	448	855	365	600	0
Total Time over 90 dBA (sec)	335	371	195	408	0
Total Time over 95 dBA (sec)	235	121	87	248	0
Total Time over 100 dBA (sec)	128	50	39	135	0
Total Time over 105 dBA (sec)	48	18	10	45	0
Total Time over 110 dBA (sec)	11	3	2	8	0
Total Time over 100 dB peak linear (sec)	501	1,299	464	861	6
Total Time over 105 dB peak linear (sec)	385	696	261	550	0
Total Time over 110 dB peak linear (sec)	279	227	125	332	0
Total Time over 115 dB peak linear (sec)	175	83	61	186	0
Total Time over 120 dB peak linear (sec)	87	31	29	83	0
Total Time over 125 dB peak linear (sec)	28	5	5	23	0
Total Time over 130 dB peak linear (sec)	8	0	2	3	0

Data Analysis

It is difficult to make a direct comparison of these measured results with noise level predictions from the March 2005 AICUZ Study prepared by The Onyx Group, because



that study did not present maximum noise levels from the military jet activities. That study did, however, show predicted calendar year 2013 annual average day-night sound level (L_{dn}) contours surrounding the OLF in Figure 7-6 of that report.

The average SEL for each jet flyover can be used to calculate the day-night average sound level (L_{dn}) knowing only the number of jet flyovers and the percentage of day vs. night flights. The day-night sound level (L_{dn}) can be calculated for a single day, and it can be calculated for an annual average by assuming a certain number of over-flights during the daytime and nighttime hours. It is extremely important to specify the ratio of daytime to nighttime flyovers, because of the time weighting factor used in the calculation of the day-night sound level. This weighting can best be understood by knowing that a single jet flyover at night (after 10 PM and before 7 AM) is exactly equal to 10 identical jet flyovers during the daytime hours.

Table 3 presents a summary of the calculated day-night sound levels for each measurement location as it compares with the predictions found in the March 2005 AICUZ Study. Position 5 is not shown in this table because the L_{dn} predictions represent exterior sound levels, and the measurements at this location were taken indoors. Note that the day-night average L_{dn} sound levels calculated from the noise measurements taken on 5/7/13 are all significantly higher than the levels predicted in the March 2005 AICUZ Study. There may be several reasons for this discrepancy, including aircraft type and percentage of nighttime flights, but the main reason has to do with the annual average. Because the jets do not fly every day, when you average the “noisy” days with the “quiet” days the L_{dn} values become lower (diluted).

Table 3. Calculated single-day L_{dn} noise level at the four outside measurement locations, derived from the 5/7/13 data set. The AICUZ projection is based on an annual average.

Statistic	Pos. 1	Pos. 2	Pos. 3	Pos. 4
AICUZ Study Predicted CY 2013	77	70	70	75
1 daytime session, 0 night sessions	79.2	75.2	73.3	78.3
2 daytime sessions, 0 night sessions	82.2	78.2	76.3	81.3
3 daytime sessions, 0 night sessions	84.0	79.9	78.1	83.1
4 daytime sessions, 0 night sessions	85.2	81.2	79.3	84.3
0 daytime sessions, 1 night session	89.2	85.2	83.3	88.3
3 daytime sessions, 1 night session	90.3	86.3	84.4	89.4
2 daytime sessions, 2 night sessions	92.6	88.6	86.7	91.7
1 daytime session, 3 night sessions	94.1	90.1	88.2	93.2



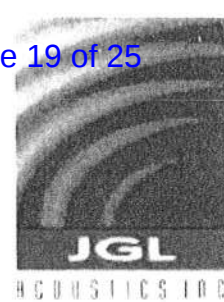
Table 4 presents the predicted average annual day-night sound levels due only to military jet operations at OLF Coupeville. In this analysis I have assumed that all jets are the EA-18G aircraft and the number of military jet over-flights is 4,834 per year at Position 1 (bounces using either path 14 or 32) and 3,784 at Positions 2 through 4 (bounces using path 32), which I understand to be the actual number of over-flights from 2012. The top row of Table 4 shows the predicted values from the 2005 AICUZ Study, which I understand assumed a total of 3,060 over-flights with only 16.8% occurring at night (after 10 PM). A range is shown because the values were taken from the noise contour map. The second row of Table 4 (shown bold) shows the calculated average annual L_{dn} assuming that 59% of the over-flights occur at night, which I understand represents the actual number for 2012. The other rows in the table show the calculated average annual L_{dn} for other percentages of nighttime flights.

Table 4. Predicted and calculated annual average L_{dn} at each measurement location.

Operational Assumptions	Pos. 1	Pos. 2	Pos. 3	Pos. 4
AICUZ Study Predicted CY 2013	76 to 78	68 to 72	68 to 72	74 to 76
41% Day Sessions, 59% Night Sessions	83.0	77.9	76.0	81.0
90% Day Sessions, 10% Night Sessions	77.7	72.7	70.8	75.8
80% Day Sessions, 20% Night Sessions	79.4	74.4	72.5	77.5
70% Day Sessions, 30% Night Sessions	80.6	75.6	73.7	78.7
60% Day Sessions, 40% Night Sessions	81.6	76.5	74.6	79.7
50% Day Sessions, 50% Night Sessions	82.4	77.3	75.4	80.4
40% Day Sessions, 60% Night Sessions	83.0	78.0	76.1	81.1
30% Day Sessions, 70% Night Sessions	83.6	78.5	76.6	81.7
20% Day Sessions, 80% Night Sessions	84.1	79.0	77.1	82.2
10% Day Sessions, 90% Night Sessions	84.6	79.5	77.6	82.6

Clearly, averaging over an entire year yields a much lower noise level when the number of operational days is small compared to the number of "quiet" days. In my opinion, the community reaction is more likely to follow the single event statistics (SEL and maximum noise level, L_{max}) as opposed to the daily L_{dn} , and even less likely to follow the average annual L_{dn} . People can easily hear the SEL and L_{max} , but the daily L_{dn} and annual average L_{dn} statistics are nothing more than numbers to which most people cannot relate. The community noise surveys showing the relationship between L_{dn} and the percentage of people highly annoyed are based mostly on social surveys of people exposed to noise around commercial airports which have approximately the same number of operations every day. For that reason, it seems only logical to assess the expected

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community reaction around Coupeville OLF on the average daily L_{dn} on fly days only, which would be the values presented in Table 3, not the values in Table 4.

I should also point out that the calculated day-night sound levels are well above recommended levels for residential areas. For example, in the 1980's the Port of Seattle purchased virtually all homes near Sea-Tac airport that were located inside the 75 L_{dn} contour, recognizing that aircraft noise above these levels are harmful to humans. The Port and the FAA is also funding multi-family residential building sound reduction projects for homes located inside the 65 L_{dn} contour. Clearly, these thresholds are well below the calculated L_{dn} levels shown in Tables 3 and 4.

Summary and Conclusions

The primary purpose for this study was to determine: (a) whether the 2005 AICUS noise contour projections are consistent with measured noise levels of the EA-18G aircraft operating at Coupeville OLF based on the actual number of over-flights in 2012, and (b) to determine whether noise levels in various positions around the OLF are below or above thresholds that should sponsor a need to examine possible impacts on the health and well-being of those exposed.

Clearly, the actual 2012 noise levels are much higher than predicted in the 2005 AICUZ Study, partly because of the greater number of over-flights, but primarily because of the much higher percentage of nighttime flights. The maximum sound levels are well above the levels requiring hearing protection and are high enough to potentially result in permanent hearing loss. These two facts alone lead me to conclude that the 2005 AICUZ Study should be revised and/or updated to more accurately reflect the potential noise impacts on the people living in the area.

If you have any questions regarding these findings, do not hesitate to give me a call.

Very truly yours,
JGL Acoustics, Inc,

A handwritten signature in black ink, appearing to read "Jerry G. Lilly".

Jerry G. Lilly, P.E., President, FASA
Member INCE, ASTM, NCAC

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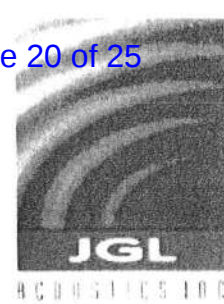


Figure 1. Aerial photograph showing the 5 noise measurement locations.

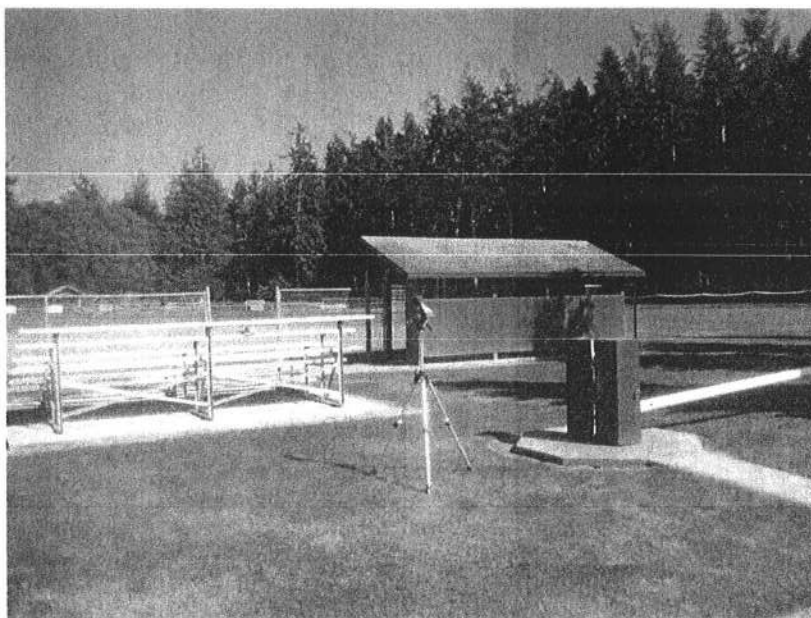
5266 NW Village Park Drive
Issaquah, WA 98027

Phone: (425) 649-9344
FAX: (425) 649-0737

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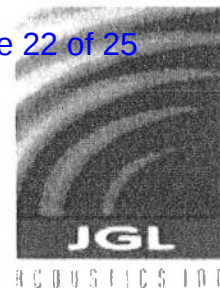
Figure 2. Photographs of sound level meter at Position 1 (above) and Position 4 (below).



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Whidbey Island Military Jet Noise, dBA
Position 1 (empty lot at the corner of Lockwood & Stark)

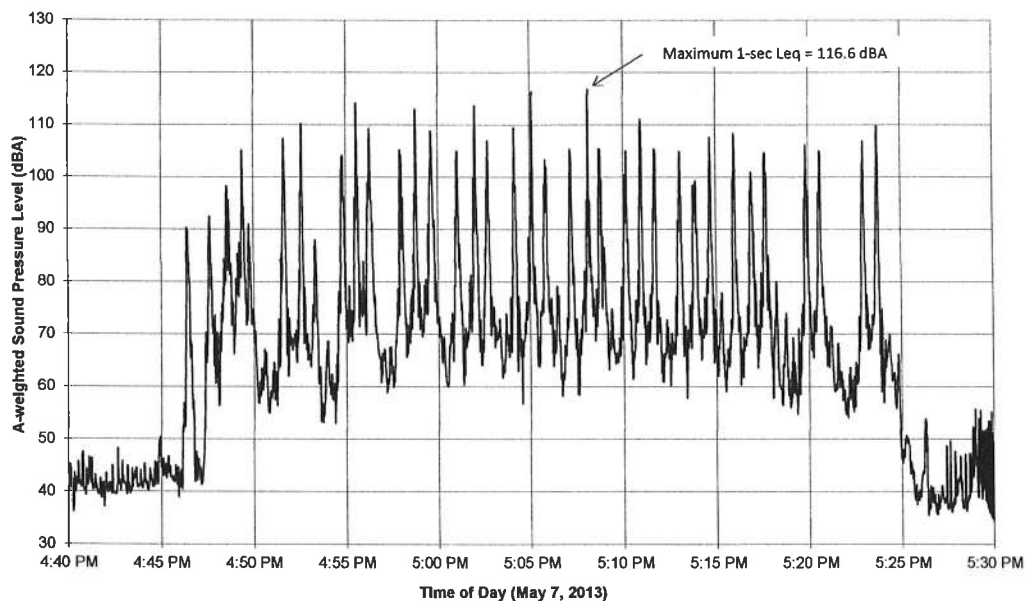
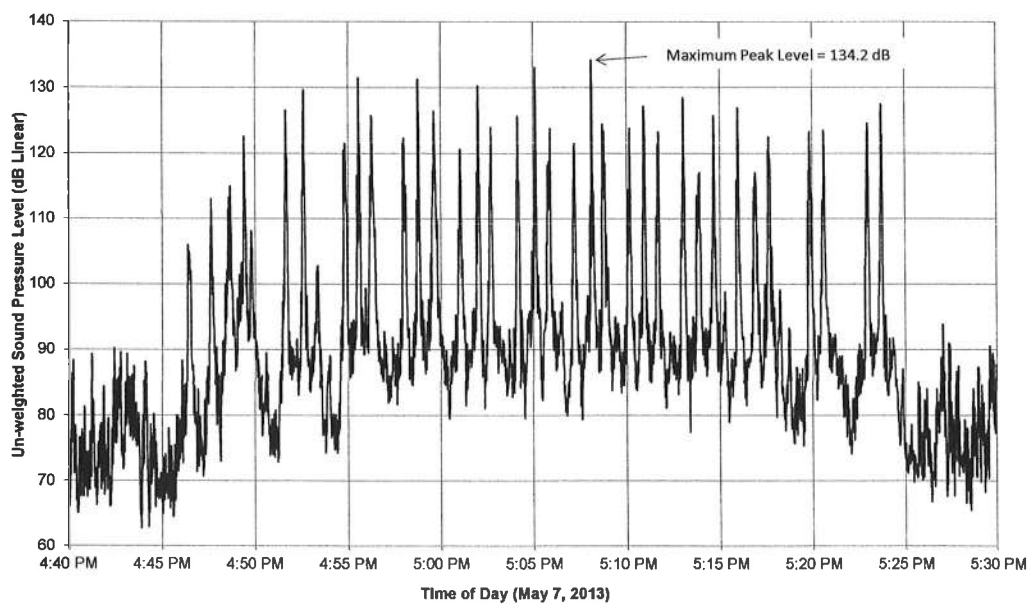
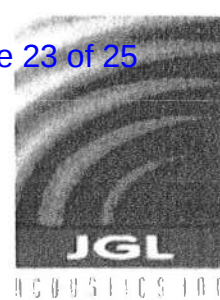


Fig. 3. Measured A-weighted (above) and un-weighted (below) noise levels at Position 1

Whidbey Island Military Jet Noise, dB (Linear)
Position 1 (empty lot at the corner of Lockwood & Stark)



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Whidbey Island Military Jet Noise, dBA
Position 2 (bird watching platform at beach near ferry dock)

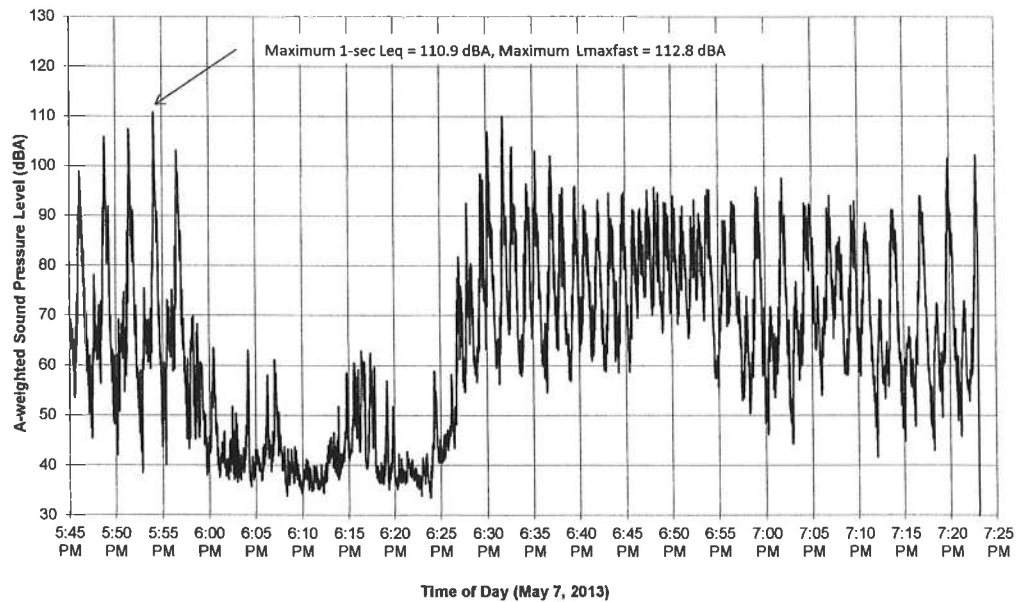
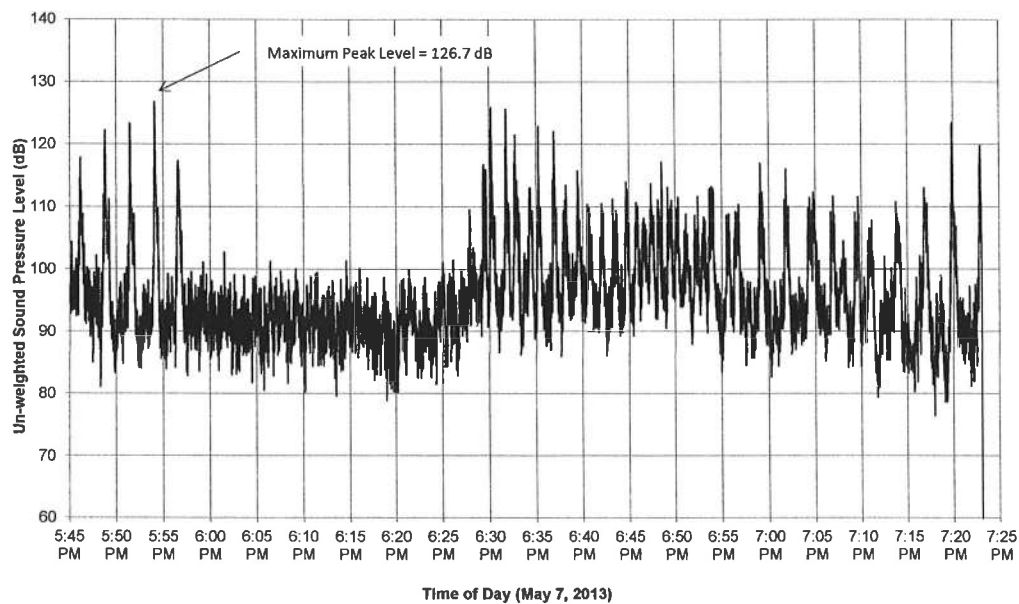
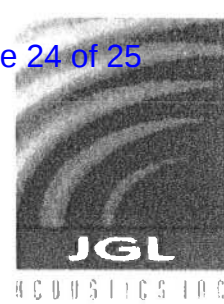


Fig. 4. Measured A-weighted (above) and un-weighted (below) noise levels at Position 2

Whidbey Island Military Jet Noise, dB (Linear)
Position 2 (bird watching platform at beach near ferry dock)



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Whidbey Island Military Jet Noise, dBA
 Position 3 (Rosehip Farm)

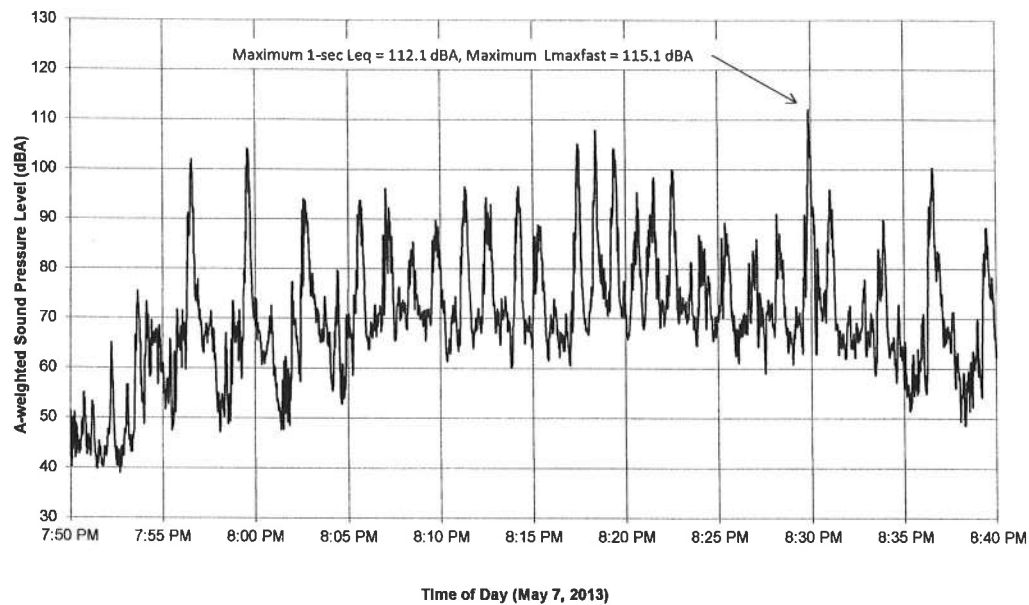
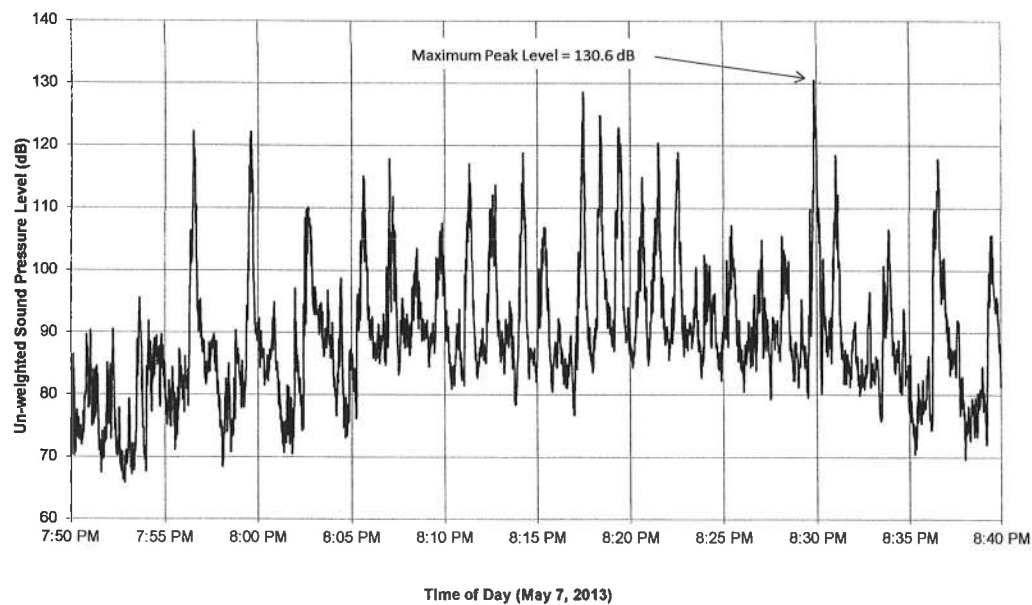


Fig. 5. Measured A-weighted (above) and un-weighted (below) noise levels at Position 3

Whidbey Island Military Jet Noise, dB (Linear)
 Position 3 (Rosehip Farm)



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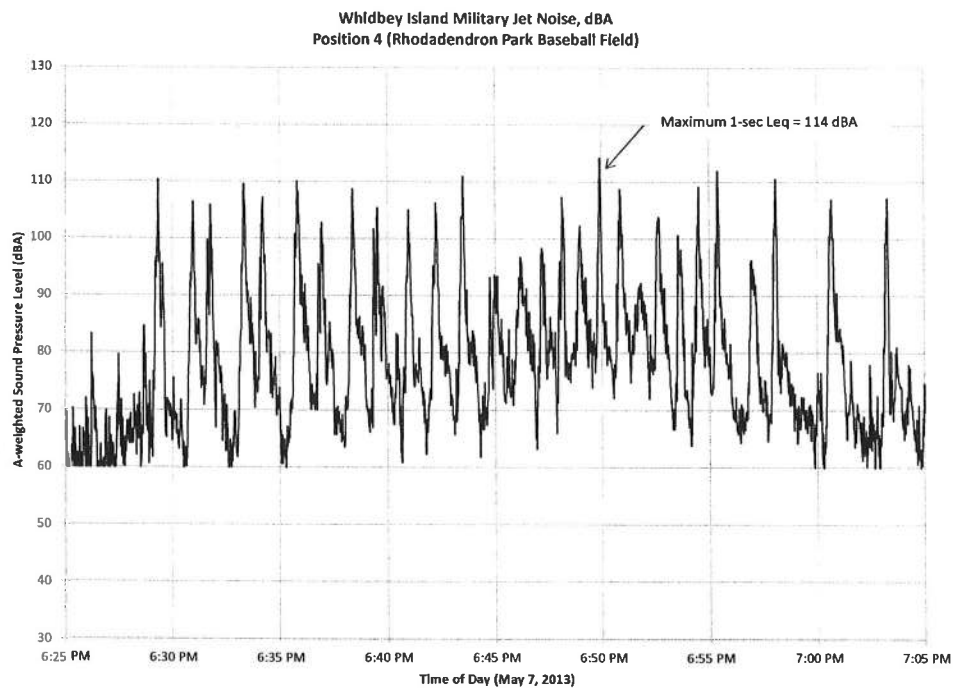
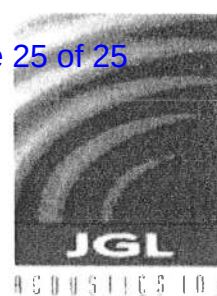


Fig. 6. Measured A-weighted (above) and un-weighted (below) noise levels at Position 4

