Navy must turn down the volume on Whidbey ‘Growler’ operations

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An EA-18G Growler takes off from Naval Air Station Whidbey Island during an exercise. (Ken Lambert / The Seattle Times, 2016)

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For more than a decade, Washingtonians have voiced their concern with the pervasive and intense noise of “Growler” aircraft operations at Naval Air Station Whidbey Island. These public complaints have been corroborated by state and federal officials who have determined that Navy assessments underestimated the health impacts of military noise.

Now, based on the Navy’s own data, we have published the first comprehensive evaluation (st.news/growler) of the public health implications of military noise pollution in the region. The results are striking, suggesting that Growler noise poses a substantial risk to the health and well-being of more than 74,000 people.

Using the best available science, our research points to serious effects on health from military noise that include elevated risk of annoyance, sleep disturbance and hearing impairment. Prolonged noise exposure can ultimately lead to more severe health consequences, including cardiovascular disease and psychological disorders. We also show that numerous schools are exposed to noise levels associated with compromised childhood learning. Perhaps most striking is our finding that thousands of people are exposed to unprecedented noise levels that are literally “off the charts” —— that is, beyond the limits of established exposure-response models used to estimate health impacts around the world.

The sound of military aviation is unlike any other source of noise. Growlers emit noise that is intense, with rumbling low-frequency energy that penetrates windows, shakes walls and can elicit more severe responses than civil aviation. The Navy often argues that military operations are sporadic, and thus less intrusive. We contend the opposite. The fact that operations are intermittent, occurring during daytime, evening and nighttime hours, makes them all the more unpredictable and creates a sense of helplessness among the public. Overall, the public health burden associated with military aircraft operations is extensive, suggesting that current efforts to ensure combat readiness at NASWI may simultaneously subject many civilians to severe collateral damage.

Our study purposely differed from previous Navy assessments. First, we used exposure-response models recommended by the World Health Organization to predict health outcomes, rather than the model used by the Navy that is derived from survey data that is now nearly 50 years old, and has repeatedly

been shown to underestimate health impacts. Second, despite broad scientific consensus and international guidelines showing that health risks begin as low as 45 decibels for aircraft noise (the threshold used in our study), current Federal Aviation Administration standards only consider significant health impacts to manifest above day-night average levels of 65 dB. Our results demonstrate that this higher threshold ignores an estimated 62,000 citizens that are subjected to adverse health risks. For this same reason, our study is also highly relevant to the issue of ongoing and increasing noise impacts around civil airports, including Seattle-Tacoma International Airport, which are assessed using the same outdated standards.

Although NASWI is exempt from civil airport regulations, many thousands of Washingtonians are exposed to noise that exceeds land-use recommendations and standards enforced by the Federal Aviation Administration and the Department of Housing and Urban Development. While realistic training operations are an important part of combat readiness, the Navy also has a responsibility to minimize harmful impacts to civilians, some of which are families of the very service members stationed at NASWI.

We urge the Navy to build greater trust with affected communities and embrace the growing body of modern science to inform their understanding of the public health implications of training operations, and devise actions for mitigation. A range of solutions exists, from altered flight paths to more strategic operational schedules. By considering such options, the Navy will demonstrate that the interests of national security need not come at the expense of protecting the public at home.

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