

THE BRIEFING PROJECT – EPISODE 10 WHAT DID YOU KNOW & WHEN DID YOU KNOW IT (PART I)

Thank you. I'm Steve Edmiston. I'm here to give you the briefing you asked for but did not receive last year from the FAA and Port staff on the subject of community impacts from increased aircraft overflights. In my last comment, we established the real numbers that matter to your airport neighbor communities: specifically, a baseline increase since 2013 of 97,000 additional aircraft, now reaching 413,000 annually, and a proposed increase of at least another 80,000 annual aircraft.

Now we can overlay existing science to assess the impacts. Unfortunately, this assessment also makes today – September 11, 2018 – your first “what did you know and when did you know it” day. From the days of Watergate, this phrase has possessed iconic cultural and legal significance. “What did you know and when did you know it” is routinely applied to the those responsible for launching products or services that cause harm. Think of tobacco and smoking; PCB's in pesticides; lead and asbestos; and coming soon, climate change and football CTE brain injury lawsuits. Your product is aircraft operations. Today's “what did you know and when did you know it” subject is the risk of harm from noise. And it's the tip of the iceberg. Here we go.

So today you know this: a 2017 *Occupational & Environmental Medicine* study associates exposure to aircraft noise with hypertension, cardiovascular disease, heart attacks and stroke, and that *each* nighttime 10 decibel increase associates substantially increases the risks.

And today you know is this: *The International Journal of Cardiology* and *Journal of American Cardiology* in 2018 both published conclusions that aircraft noise associates with sleep disturbance, stress, impaired cognition, hypertension, heart failure, stroke, and that nighttime noise increases the harms.

And today you know is this: *The BMJ* in 2013 found a statistically significant association between noise and risk of cardiovascular diseases for older people living near airports.

And today you know this: one month ago, the *International Journal of Environmental Research and Public Health* concluded noise from airports transitioning to automated flight systems poses serious health threats to the overflown communities.

And today you know this: a *European Heart Journal* study this year suggests that savings to airlines and airports in fuel and efficiencies has less value than the public health costs associated with the cardiovascular health effects of aircraft noise.

And today know this: a 2018 *National Academies Press - Children's Learning* study correlated noise exposure with reduced student test scores and learning.

Today you know this: *The Washington Post* reported in May that noise has become the new “second hand smoke” and the impact on cardiovascular health start at just 50 decibels, and that the European Union standard of 40 decibels at night and 50 during the day protects human health.


Thank you for providing this citizen two-minutes to comment.



THE BRIEFING

**THE BRIEFING YOU ASKED FOR BUT DID NOT RECEIVE –
IN TWO MINUTE PUBLIC COMMENTS**

PORT OF SEATTLE COMMISSION MEETING
SEPTEMBER 11, 2018
STEVE EDMISTON



Episode 10 – What Did You Know, When Did You Know It?

1. Numbers: last four years: +97,000 to reach 413,000 overflights annually
2. Numbers: proposed new increase: +80,000
3. The tip of the iceberg – the Watergate standard applied to your knowledge as of September 11, 2018, that aircraft noise associates with:
 - *High blood pressure/hypertension; cardiovascular disease; heart attacks; stroke; stress; sleep disturbance; cognitive impairment, arterial hypertension, myocardial infarction*
 - *Worse at night - increases stress hormones and vascular oxidative stress, which can lead to endothelial dysfunction, arterial hypertension, increased risk of atrial fibrillation*
 - *Worse for elderly living near airports*
 - *Worse for children and schools near airports*
 - *Automated changes in flight operations are making it worse*

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The tip of the iceberg citations:

- Occupational & Environmental Medicine 2017 (<https://www.ncbi.nlm.nih.gov/pubmed/28611191>)
- Int'l Journal of Cardiology ([10.1016/j.ijcard.2018.03.126](https://doi.org/10.1016/j.ijcard.2018.03.126)); Journal of American Cardiology (<http://www.onlinejacc.org/content/71/6/688>)
- The BMJ (formerly the British Medical Journal) (<https://doi.org/10.1136/bmj.f5561>)
- European Heart Journal <https://doi.org/10.1093/eurheartj/ehy333>
- International Journal of Environmental Research and Public Health <http://www.mdpi.com/1660-4601/15/8/1753>
- National Academies Press - Children's Learning (<https://www.nap.edu/read/24941/chapter/1#ii>)
- Washington Post (https://wapo.st/2KRNclG?tid=ss_mail&utm_term=.7f7378724f03)