

NOISE POLLUTION: NextGen is the FAA's Carte Blanche to Wreak Havoc on the Public's Ears and Serenity

Barbara Castleton, Medium.com | AUG 13, 2017

I've seen the Blue Angels, those soaring bits of metal origami shaped into space age planes and flown by scary-talented pilots. They go roaring over stadiums, inaugurations, and fields doing Mach 3 and better than 90 decibels. No one minds the howl of engines or how hearts lurch



as these powerful machines fly low enough to part hair. The Angels' presence is temporary. They constitute a showy demonstration of national might and patriots' pride. Still, what if the Blue Angels were acoustically dive-bombing your house day and night?

Welcome to NextGen, a new program instituted by the FAA. It is the FAA, the Federal Aviation Administration, with their autonomy over air traffic control, that decides how and where planes fly throughout the United States and out to its territorial limits. From over 131 FAA controlled towers, an average of 50,000 flights (as of 2011) soar into the atmosphere or descend to earth every 24 hours. At LAX, the number of flights in and out approaches 1600 per day. At SEATAC, in Seattle, only 1100 two winged carriers either come or go. To manage this noisy, vital horde, the FAA has traditionally used a radar system to track planes and plot flight paths. The NextGen program uses satellite data to accomplish the same tasks. Exact location data enables flight path alteration plus stable landing and take-off routes.¹

Through the use of satellite tracking, the FAA has altered and tightened up those last two aspects of airplane travel. What used to be a scattered method of plotting flight paths (...think of a shotgun...) with the landings and takeoffs occurring over a wide band of territory, has now become a laser method. With NextGen, dozens of planes travel along a precise route each day. Thus, with the satellite system's pinpoint accuracy, when a flight path is created right above and

¹ aiR footnote: actually, the slightly increased precision by using GPS does not accomplish any significant increases in airport capacity. The capacity increases are being realized by reducing minimum separation standards, especially to tighten arrival spacing and allow side-by-side simultaneous approaches.

horizontal to adjacent residential streets, those streets and the houses on them experience not just one plane flyover every so often, but dozens, even hundreds.²

These are just a sampling of the heartfelt, emotional, and documented responses that have followed the launch of NextGen:

- ***“Under seige.”***
- ***“... as a homeowner, landowner and landlord I can attest to the financial impact of flight noise zones.”***
- ***“...it’s [NextGen] a bad dream you will never forget.”***
- ***“...it [NextGen] appears to have been developed with a complete disregard to surface dwelling human beings.”***
- ***“It [NextGen] is also an assault weapon and a torture device and will without doubt destroy the lives & goals of thousands of American citizens.”***



Joe and Jane Q. Public are vehemently and regularly complaining about the incessant aircraft din in the Bay Area of California, in Boston, Charlotte, Chicago, New York, Phoenix, San Diego, Seattle, and our nation’s capital. Hundreds of thousands of documented phone calls to airports’ noise abatement lines express citizens’ displeasure with the oppressive tumult from jet and

prop engines as planes approach or leave major airports. Personally, I have left messages at SeaTac’s line, due to interrupted Skype call, a night’s sleep, and for an eardrum shattering airline engine test that went on for over 10 minutes.

Complaints to ombudsmen and the FAA begin with an accusation that it breached federal regulations regarding due process and public input when designing new take-off and landing patterns. This issue led one Washington state town to file suit. The suit resulted in the FAA pulling back slightly on residential flyovers. Then, later in the summer of 2017, the town heard that the FAA found “no significant or reportable noise impacts”. The residential flyovers restarted.

Another complaint asserts that their current scientific research clearly demonstrating how traditionally recognized levels of “safe” noise pollution are out of date and inaccurate. As science becomes able to quantify the damage caused by noise pollution, the nation’s citizenry will demand flight path redesigns. In fact, **current experiments support the notion that interrupted**

² aiR footnote: While it is true that the new RNAV and RNP routes are precise and create an intense repetitive impact pattern, this level of precision has been available for many decades – and used, at some airports. The change, under NextGen, is a wholesale transition toward RNAV/RNP routes that must be flown via auto-pilot, taking away pilot discretion to minimize noise and pollutant impacts below.

sleep caused by aircraft noise can impact cardiac function. Aircraft clamor effects not just physical health, but mental health, performance, and general well-being.

At LAX, monthly complaint calls number 5000 or more. People call about barking dogs reacting to the noise, babies woken, the impossibility of spending time outside, an inability to concentrate, sleep deprivation, and anxiety caused by planes flying lower and more often. In sum, these mirror and extend a 2010 MIT report, which categorized human response to noise pollution in four ways:

1. task interference,
2. sleep interference,
3. psychological effects, and
4. physiological effects.

Despite this, the FAA has muffled any opposition by citing time management, economy, fuel savings, and improved safety. Its own website seems to walk a linguistic tightrope around the



Graphic showing airplane turbulence.

whole issue of noise. “The FAA recognizes that aircraft noise issues can be highly technical and complex. We have developed a variety of programs aimed at increasing the understanding of noise impacts, identifying solutions to reduce those impacts, and educating the public on the issues and our ongoing efforts.” The webpage offers no clear-cut mention of noise pollution or specific noise abatement measures,... a telling omission.

In response to what feels like sensory harassment, dozens of noise abatement groups, largely tagged as quiet skies organizations, have sprung up in determined

opposition nationwide. They encourage local residents to take action in three specific ways:

1. Join and support a Quiet Skies group,
2. Consistently report extreme noise pollution via major airports’ noise abatement forms, phone lines or email, and
3. Write to state law makers plus senators and representatives in the US Congress. Be sure to clearly address the impact of noise pollution on life and health.

Going to court, as Burien, Washington has done, may be the only answer for many municipalities, as they struggle to provide their citizens with a homey, quieter atmosphere. In truth, the FAA is a wily foe armed with almost unlimited power. In dealing with a small town’s threat, the FAA has raised the specter of a distinction called a “Categorical Exclusion”. Essentially, this means that the aeronautics



Commercial jet engines produce 100–140 decibels at take off

body can say, “Our needs are greater than yours,” thus nullifying thousands of complaints from one town and putting all other municipalities on notice.

Likely, the auditory bedlam for those living near these flight paths will continue for some time. Said one east coast councilperson of this David and Goliath battle, “Memorial Day Weekend (2016) air traffic noise was unbearable for many residents here on the East End, destroying the peace and tranquility they have a right to expect in their own homes.” For those living anywhere near an airport, Memorial Day is every day, remembrance of a time when people came before planes.

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