

No. 70220-3-I

THE COURT OF APPEALS FOR THE STATE OF WASHINGTON  
DIVISION I

---

KEBEDE ADMASU, et al.,

Appellants,

vs.

THE PORT OF SEATTLE,  
A Washington municipal corporation,

Respondent.

---

2014 AUG 20 11:09:35  
COURT OF APPEALS  
STATE OF WASHINGTON

BRIEF OF *AMICUS CURIAE*  
AIRPORTS COUNCIL INTERNATIONAL – NORTH AMERICA  
IN SUPPORT OF RESPONDENT

---

Thomas R. Devine  
General Counsel  
**Airports Council  
International-North America**  
1615 L Street NW, Suite 300  
Washington, DC 20036  
Telephone: (202) 293-8500  
Facsimile: (202) 331-1362

James A. McDevitt, WSBA No. 6075  
General Counsel  
**Spokane International Airport**  
9000 W. Airport Drive, Suite 204  
Spokane, WA 99224  
Telephone: (509) 455-6455

Pablo O. Nüesch  
Jessica R. Bell  
**Spiegel & McDiarmid, LLP**  
1875 Eye Street NW, Suite 700  
Washington, DC 20006  
Telephone: (202) 879-4000  
Facsimile: (202) 393-2866

---

*Attorneys for Airports Council International - North America*

## TABLE OF CONTENTS

TABLE OF AUTHORITIES .....	ii
I. Identity and Interest of Amicus Curiae .....	1
II. Issue Addressed by Amicus Curiae .....	2
III. Statement of the Case.....	2
IV. Summary of Argument.....	3
V. Argument .....	4
A. Standard of Review .....	4
B. Federal Oversight of Aircraft Noise is Extensive and Comprehensive .....	5
a. Creation of FAA and Early Noise Legislation .....	6
b. The Aviation Safety and Noise Abatement Act .....	7
C. Noise Exposure Maps and Avigation Easements Are Important Tools in the Interaction Between Airport Operators and the Community .....	8
a. Noise Exposure Maps .....	8
b. Avigation Easements .....	12
D. Plaintiffs Have Not Demonstrated the Required Elements to Recover Damages for Noise .....	13
E. Plaintiffs' Noise-Generated Vibration Claims Are Limited by ASNAA .....	15
VI. Conclusion .....	19

## TABLE OF AUTHORITIES

### FEDERAL COURT CASES

<u>Provident Mut. Life Ins. Co. v. City of Atlanta</u> , 938 F. Supp. 829 (N.D. Ga. 1995) .....	18
--	----

### FEDERAL STATUTES AND LEGISLATIVE MATERIALS

42 U.S.C. § 4905(e)(1)(A).....	7
49 U.S.C. § 47502(2).....	7
49 U.S.C. § 47502(3).....	7
49 U.S.C. § 47503 .....	8
49 U.S.C. § 47503(a) .....	8
49 U.S.C. § 47506(a).....	16
49 U.S.C. § 47506(a)(1) .....	13
49 U.S.C. § 47506(a)(2) .....	14
49 U.S.C. § 47506(b).....	14
Act to Amend the Federal Aviation Act of 1958, Pub. L. No. 90-411, 82 Stat. 395 (1968) .....	6
Air Commerce Act of 1926, Pub. L. No. 69-254, 44 Stat. 568 .....	5
Aviation Safety and Noise Abatement Act of 1979, Pub. L. No. 96-193, 94 Stat. 50 .....	7
Civil Aeronautics Act of 1938, Pub. L. No. 75-706, 52 Stat. 973.....	5
Federal Aviation Act of 1958, Pub. L. No. 85-726, 72 Stat. 731 .....	6
Noise Control Act of 1972, Pub. L. No. 92-574, 86 Stat. 1234 .....	6

**FEDERAL REGULATIONS**

14 C.F.R. pt. 36.....7

14 C.F.R. pt. 150.....9, 10, 11

    § 150.1 .....9

    § 150.21(d)(1), (g) ..... 14

    § 150.23(a).....9

    § 150.23(c)..... 10

    § 150.23(d)..... 10

    pt. 150, App. A .....9, 10

**STATE AND LOCAL CODES**

King County Code, § 12.92.020(F) ..... 18

**OTHER AUTHORITIES**

8A Am. Jur. 2d *Aviation* § 8 (2009) ..... 12

Aviation Noise Abatement Policy 2000, 65 Fed. Reg. 43,802 (proposed July 14, 2000) ..... 18

*Aviation Noise Effects*, Report No. FAA-EE-85-2, Federal Aviation Administration, Mar. 1985, available at <http://www.wyle.com/PDFs/archive/ANE-10.pdf> ..... 16

*Environmental Desk Reference for Airport Actions*, Federal Aviation Administration, Oct. 2007, available at [http://www.faa.gov/airports/environmental/environmental\\_desk\\_ref/media/desk\\_ref\\_chap17.pdf](http://www.faa.gov/airports/environmental/environmental_desk_ref/media/desk_ref_chap17.pdf) ..... 12

Findings of the Low-Frequency Noise Expert Panel of the Richfield-MAC Noise Mitigation Agreement of 17 December, 1998, Apr. 25, 2000, available at <a href="http://www.techtransfer.berkeley.edu/aviation04downloads/LFNreport.pdf">http://www.techtransfer.berkeley.edu/aviation04downloads/LFNreport.pdf</a> .....	16, 17
<i>Guidelines for the Sound Insulation of Residences Exposed to Aircraft Operations</i> , Wyle Research Report WR89-7, Federal Aviation Administration, Nov. 1989, available at <a href="http://www.faa.gov/documentLibrary/media/Advisory_Circular/1505000_9a_withReport_p1.pdf">http://www.faa.gov/documentLibrary/media/Advisory_Circular/1505000_9a_withReport_p1.pdf</a> .....	17
Planning Data and Noise Compatibility Program Status—by State Airports, available at <a href="http://www.faa.gov/airports/environmental/airport_noise/part150/states/">http://www.faa.gov/airports/environmental/airport_noise/part150/states/</a> .....	10
S. Rep. No. 90-1353, <i>reprinted in</i> 1968 U.S.C.C.A.N. 2688.....	6
S. Rep. No. 96-52, <i>reprinted in</i> 1980 U.S.C.C.A.N. 89.....	7, 9, 12

## **I. IDENTITY AND INTEREST OF AMICUS CURIAE**

Airports Council International – North America (“ACI-NA”) was established in 1948 and represents local, regional and state governing bodies that own and operate commercial airports in the United States and Canada. ACI-NA’s members enplane over 95 percent of the domestic and nearly all the international passenger and cargo traffic in North America. ACI-NA is one of the five worldwide regions of Airports Council International.

ACI-NA advocates for policies and provides services that strengthen the ability of airports to serve their passengers, customers, and communities. ACI-NA has long recognized that the abatement and mitigation of noise generated by aircraft arriving to and departing from airports is crucial to airport operators. ACI-NA’s airport members participate in the Federal Aviation Administration’s noise programs and strive to work with surrounding communities to minimize impacts from aircraft noise, including the impacts of vibration caused by low-frequency aircraft noise. ACI-NA has particular expertise and interest in the federal legislation and regulations that impact airport operators, and has experience supporting airports in safe and efficient operations.

**II. ISSUE ADDRESSED BY *AMICUS CURIAE***

Do the liability limitations imposed by the Aviation Safety and Noise Abatement Act encompass vibration caused by low-frequency aircraft noise?

**III. STATEMENT OF THE CASE**

ACI-NA adopts the statement of the case set out in the Opening Brief of the Port of Seattle (“Port”), and briefly discusses the particular procedural and factual points relevant to the issue addressed here.

Plaintiffs’<sup>1</sup> original complaint alleged “heightened noise pollution, increased vibration, and increased toxic discharge and fumes” related to use of the Third Runway at the airport.<sup>2</sup> The Port sought summary judgment against two different groups of plaintiffs: those whose claims were barred by federal law, and those whose claims were barred by aviation easements.

As the Port explains in its Opening Brief, the trial court dismissed the noise exposure map (“NEM”) plaintiffs’ noise claims based on federal law, which counsel for plaintiffs did not contest.<sup>3</sup> The NEM plaintiffs now argue that their “non-noise” claims were improperly dismissed. In response, the Port notes that these claims lacked evidentiary support, and

---

<sup>1</sup> Appellants here.

<sup>2</sup> Clerk’s Papers (“CP”) at 6.

<sup>3</sup> Opening Brief of the Port of Seattle at 55 (citing Report of Proceedings at 254).

further, that the vibrations of which Plaintiffs complain are in fact “noise,” and thus, the vibration claims were appropriately dismissed along with plaintiffs’ other noise-based claims.<sup>4</sup>

ACI-NA agrees that the trial court properly dismissed claims for vibration because, under federal law, those claims are included within the preempted noise-based claims. ACI-NA additionally addresses the importance of noise exposure maps and aviation easements to the mitigation and abatement of aircraft noise nationwide.

#### **IV. SUMMARY OF ARGUMENT**

The federal scheme for the regulation of aircraft noise has evolved to serve the variety of interests involved, including aircraft operators, the public as consumers of air travel, airport operators, and communities around airports. Aircraft noise is controlled both at the source—by regulating the amount of noise that aircraft can emit and controlling the paths that aircraft fly—and on the ground—by setting standards for land use compatibility in locations particularly affected by aircraft noise and by funding noise abatement projects. The federal role in reducing the effects of aircraft noise has been important and extensive in all of these areas.

The Federal Aviation Administration has studied and established standards for compatible and non-compatible land uses at different noise

---

<sup>4</sup> *Id.* at 5, 57.

levels around airports. Federal funding is available to promote the study and adoption of measures by airport operators to mitigate the effects of aircraft noise, including noise insulation programs for buildings and structures whose use is noncompatible with certain noise levels.

Airport operators, in turn, study and map noise levels around their airports, often developing NEMs and noise compatibility plans to assist in avoiding and/or mitigating noncompatible land uses. Federal law limits the recovery of damages for noise when an airport operator prepares and publishes NEMs. This limitation of airport operators' liability for noise claims is integral to the federal regulatory scheme and is crucial to managing risk when planning for the future of the airport.

The federal limitation of liability must necessarily include claims for damages for acoustically-induced vibrations. Vibration effects, which are caused by low-frequency noise, have been recognized as noise effects and require the same treatment under the federal scheme.

## **V. ARGUMENT**

### **A. Standard of Review**

ACI-NA adopts the standard of review set out in the Port's Opening Brief.

## **B. Federal Oversight of Aircraft Noise is Extensive and Comprehensive**

Federal oversight of aviation extends back nearly a century.<sup>5</sup> The federal regulation of aircraft noise fits into the larger federal scheme of regulation of the nation's airspace and deals with the impacts of aircraft noise in two main ways: (1) decreasing noise at the source by regulating the amount of noise that aircraft emit and where aircraft fly as they approach and depart airports; and (2) setting standards for land use compatibility in areas around airports impacted by noise from aircraft operations and funding noise mitigation improvements to impacted residential and other sensitive structures located in these areas.

As air transportation has evolved, regulating aircraft noise has become an increasingly important component of the federal scheme to promote both the efficient use of airspace and to allow for planning by airport operators and their surrounding communities. The federal statutory scheme remains integral to supporting these dual goals. While there are other federal laws and regulations addressing aircraft and airports, this section discusses several important legislative enactments that frame the federal role in aircraft noise management, mitigation, and abatement.

---

<sup>5</sup> See Air Commerce Act of 1926, Pub. L. No. 69-254, 44 Stat. 568; Civil Aeronautics Act of 1938, Pub. L. No. 75-706, 52 Stat. 973.

### a. Creation of FAA and Early Noise Legislation

In 1958, Congress created the Federal Aviation Agency—now the Federal Aviation Administration (“FAA”)—and gave it broad authority over airspace and aircraft operations to provide for the safe and efficient use of the national aerospace.<sup>6</sup> In 1968, Congress amended the 1958 Act to require aircraft noise abatement regulation.<sup>7</sup> The amendment charged FAA with prescribing standards to measure aircraft noise and promulgating regulations to control and abate aircraft noise, as necessary. Congress recognized aircraft noise to be a “national problem.”<sup>8</sup> However, Congress also recognized the key role that State and local governments play in aircraft noise abatement, stating: “certain actions by State and local public agencies, such as zoning to assure compatible land use, are a necessary part of the total attack on aircraft noise.”<sup>9</sup>

In 1972, Congress enacted the Noise Control Act<sup>10</sup> to coordinate federal research activities in noise control and develop a federal noise emission standard. The act preempted state or local laws and regulations with respect to noise from a product for which the federal government had promulgated a regulation, unless the state or local regulation is identical to

---

<sup>6</sup> Federal Aviation Act, Pub. L. No. 85-726, 72 Stat. 731, *codified at* 49 U.S.C. § 40101 *et seq.*

<sup>7</sup> Act to Amend the Federal Aviation Act of 1958, Pub. L. No. 90-411, 82 Stat. 395.

<sup>8</sup> S. Rep. No. 90-1353, at 2, *reprinted in* 1968 U.S.C.C.A.N. 2688, 2689.

<sup>9</sup> *Id.* at 6, *reprinted in* 1968 U.S.C.C.A.N. at 2693.

<sup>10</sup> Pub. L. No. 92-574, 86 Stat. 1234, *codified at* 42 U.S.C. §§ 4901-4918.

the federal regulation.<sup>11</sup> FAA adopted noise standards for newly manufactured aircraft, and later imposed standards for all aircraft in operation, requiring either replacement or retrofit of aircraft that did not meet the standards.<sup>12</sup>

#### **b. The Aviation Safety and Noise Abatement Act**

The Aviation Safety and Noise Abatement Act of 1979 (“ASNAA”) directed FAA to establish a single system for measuring aircraft noise and for determining the exposure of individuals to noise “resulting from airport operations.”<sup>13</sup> FAA also was required to “identify land uses normally compatible with various exposures of individuals to noise.”<sup>14</sup> With ASNAA, Congress recognized that the problem of aircraft noise was impacting the air transportation system as a whole. The Senate report accompanying ASNAA noted that “[c]itizen opposition to aircraft noise has delayed, and in some cases prevented, airport development and expansion and the installation of facilities to improve safety and airport capacity,” again recognizing aircraft noise as a “national problem.”<sup>15</sup>

---

<sup>11</sup> 42 U.S.C. § 4905(e)(1)(A).

<sup>12</sup> See 14 C.F.R. pt. 36.

<sup>13</sup> Pub. L. No. 96-193, 94 Stat. 50, *codified at* 49 U.S.C. § 47502(2).

<sup>14</sup> *Id.* § 47502(3).

<sup>15</sup> S. Rep. No. 96-52, at 3, *reprinted in* 1980 U.S.C.C.A.N. 89, 91. Congress intended for ASNAA to be an important component of the strategy to address aircraft noise, as expressed in the accompanying Senate Report: “The primary purpose of title I is to establish a new program to assist airports and surrounding communities to develop and carry out programs to reduce existing noncompatible land uses and to prevent future noncompatible land uses around airports. The timing of this program is designed to

ASNAA also sets out a program under which federal financial assistance for noise compatibility programs is made available to eligible airport operators. Although these noise compatibility programs assist airport operators, they are mostly for the benefit of the communities that surround airports.

**C. Noise Exposure Maps and Avigation Easements Are Important Tools in the Interaction Between Airport Operators and the Community**

NEMs and avigation easements are key tools that airport operators use to work with community members to address aircraft noise concerns and to avoid and mitigate the effects of aircraft noise.

**a. Noise Exposure Maps**

A major component of ASNAA's contribution to evaluating land use compatibility with aircraft noise is the provision for NEMs.<sup>16</sup> Through this voluntary program, airport operators

submit to the Secretary of Transportation a noise exposure map showing the noncompatible uses in each area of the map on the date the map is submitted, a description of estimated aircraft operations during a forecast period that is at least 5 years in the future and how those operations will affect the map.<sup>17</sup>

---

coincide with source noise control, for only if these two programs are successful will optimum noise relief for airport neighbors be achieved." *Id.* at 11, *reprinted in* 1980 U.S.C.C.A.N. at 99.

<sup>16</sup> 49 U.S.C. § 47503.

<sup>17</sup> *Id.* § 47503(a).

FAA implements ASNAA's NEM program through its Part 150 regulations.<sup>18</sup> Part 150 "prescribes single systems for—(a) measuring noise at airports and surrounding areas that generally provides a highly reliable relationship between projected noise exposure and surveyed reaction of people to noise; and (b) determining exposure of individuals to noise that results from the operations of an airport."<sup>19</sup> The regulations also set forth land uses normally compatible with various levels of exposure to noise and provide technical guidance to airport operators to prepare and execute noise compatibility planning and implementation programs.

Part 150 prescribes a method for developing NEMs and predicting noise impacts, the Integrated Noise Model or an FAA-approved equivalent, and requires that the yearly Day-Night Average Sound Level ("DNL") be used for determining cumulative exposure to noise around airports.<sup>20</sup> FAA has established land use compatibility guidance<sup>21</sup> according to yearly DNL.

Once FAA approves an airport operator's NEM, that airport operator may develop and submit to FAA a noise compatibility program.<sup>22</sup> The noise compatibility program must be developed and prepared in

---

<sup>18</sup> 14 C.F.R. pt. 150.

<sup>19</sup> *Id.* § 150.1.

<sup>20</sup> *Id.* pt. 150, App. A.

<sup>21</sup> *Id.*

<sup>22</sup> *Id.* § 150.23(a).

consultation with officials of state agencies and other public and planning agencies having jurisdiction within the 65 decibel DNL noise contours<sup>23</sup> as depicted on the NEM, as well as with relevant federal officials. In accordance with ASNAA, the airport operator must also provide notice and the opportunity for a public hearing, as well as afford “adequate opportunity for the active and direct participation” of interested persons, including the public agencies and planning agencies around the airport, aeronautical users of the airport, and the general public.<sup>24</sup>

ACI-NA’s analysis of FAA data shows that FAA has approved NEMs for at least 254 airports throughout the country. This data reveals that compliance with the federal scheme began in 1983.<sup>25</sup> Further, airports continue to update their NEMs.

The FAA approved the Port’s first Part 150 submission made in January 1985.<sup>26</sup> Since then, the Port has updated its Part 150 study several times and published FAA-approved NEMs in 1993 and 2001.<sup>27</sup> Based on these studies, the Port developed a noise mitigation program, providing

---

<sup>23</sup> *Id.* § 150.23(c). This noise contour denotes the area with a Day-Night Average Sound Level (DNL or  $L_{dn}$ ) of 65 decibels (dB), which FAA has identified as the upper limit of compatibility for most residential land uses. *Id.* pt. 150, App. A.

<sup>24</sup> 14 C.F.R. § 150.23(d).

<sup>25</sup> Planning Data and Noise Compatibility Program Status—by State Airports, *available at* [http://www.faa.gov/airports/environmental/airport\\_noise/part\\_150/states/](http://www.faa.gov/airports/environmental/airport_noise/part_150/states/).

<sup>26</sup> CP at 517.

<sup>27</sup> CP at 518, 520-21.

upgraded windows, doors, and insulation to more than 9,300 homes using federal and Port funds totaling approximately \$300 million.<sup>28</sup>

As part of the approval process for the Third Runway, the target of Plaintiffs' complaint, FAA required the Port to expand its noise abatement program to mitigate the anticipated impacts of the Third Runway before it was constructed.<sup>29</sup> In response, the Port insulated an additional 87 homes and acquired 72 residential properties and facilitated the relocation of the affected residents.<sup>30</sup> The Port also provided funding for insulation of some homes outside the 65 DNL contour, but within the Port's historical noise remedy boundary, using airport-generated funds.<sup>31</sup>

The Part 150 program has allowed the Port (and countless other airport operators throughout the nation) to mitigate the effects of aircraft noise by studying its impacts, developing noise compatibility programs with the benefit of public input, and receiving federal assistance for noise abatement programs.

---

<sup>28</sup> CP at 517.

<sup>29</sup> CP at 518.

<sup>30</sup> CP at 518-19.

<sup>31</sup> CP at 519.

## b. Avigation Easements

Avigation easements<sup>32</sup> are another useful tool for both communities and airport operators and fit within the federal scheme of ensuring that land use around airports is compatible with airport operations.

When enacting ASNAA, Congress recognized a variety of measures that might be employed by airport operators as a means to reduce existing noncompatible land uses and prevent future noncompatible land uses, including the “[a]cquisition of land or interests such as air rights or easements to insure its use for purposes compatible with airport operations[.]”<sup>33</sup> FAA has also recognized the value of avigation easements.<sup>34</sup>

Like NEMs, avigation easements allow an airport operator to address noise mitigation while planning for future development, rather than in after-the-fact claims for noise-related damages. Both measures also address noise impacts on a particular property, rather than in relation to each successive owner, which permits long-term planning by airport

---

<sup>32</sup> Avigation easements are a type of land use measure used to address aircraft noise. See 8A Am. Jur. 2d *Aviation* § 8 (2009).

<sup>33</sup> S. Rep. No. 96-52, at 12, *reprinted in* 1980 U.S.C.C.A.N. at 101.

<sup>34</sup> See *Environmental Desk Reference for Airport Actions*, ch. 17, at 18 (describing common land use mitigation measures, including buying land interests such as easements), Federal Aviation Administration, Oct. 2007, *available at* [http://www.faa.gov/airports/environmental/environmental\\_desk\\_ref/media/desk\\_ref\\_chap\\_17.pdf](http://www.faa.gov/airports/environmental/environmental_desk_ref/media/desk_ref_chap_17.pdf).

operators. The easements allow airport operators and property owners to reach agreement regarding allowable levels of aircraft operations and the limitations on claims for the alleged impact of aircraft operations. State law authorizes the Port to provide noise mitigation measures at qualifying properties in exchange for aviation easements.<sup>35</sup>

**D. Plaintiffs Have Not Demonstrated the Required Elements to Recover Damages for Noise**

ASNAA and FAA's implementing regulations limit recovery of noise-related damages by supplementing the required showing that a plaintiff must make under state law to prevail in a claim for damages due to aircraft noise. Thus, ASNAA requires a plaintiff seeking noise damages from an airport operator that prepared and published NEMs to show (in addition to the elements required by state law) that, after acquiring an interest in the property subject to a NEM, there was a significant:

- (A) change in the type or frequency of aircraft operations at the airport;
- (B) change in the airport layout;
- (C) change in flight patterns; or
- (D) increase in nighttime operations.<sup>36</sup>

---

<sup>35</sup> CP at 2128.

<sup>36</sup> 49 U.S.C. § 47506(a)(1).

A “significant” change is one that results in an increase of 1.5 dB or greater in the yearly DNL.<sup>37</sup> The plaintiff must also prove that “the damages resulted from the change or increase.”<sup>38</sup>

Under this federal scheme, the airport operator knows the circumstances under which it could be liable for damages from aircraft noise. Absent a change in the specified circumstances from what is detailed in the NEM, the airport owner is not liable. This limitation on liability is key to helping airport operators manage risk while promoting noise mitigation programs and encouraging compatible land uses in areas surrounding participating airports. In turn, these benefits provide an incentive for airport operators to keep the public informed and engaged by preparing and publishing NEMs.

In this case, Plaintiffs who purchased their respective properties after the Port published notice of its FAA-approved NEMs had (at least) constructive knowledge of the maps.<sup>39</sup> The Port published FAA-approved NEMs in 1993 and 2002, which included projected noise levels assuming the opening of the Third Runway.<sup>40</sup> These Plaintiffs were required to satisfy not only the state law elements for nuisance, trespass, and/or inverse condemnation, but also to make the showing required by

---

<sup>37</sup> 14 C.F.R. § 150.21(d)(1), (g).

<sup>38</sup> 49 U.S.C. § 47506(a)(2).

<sup>39</sup> *See id.* § 47506(b).

<sup>40</sup> CP at 521.

ASNAA.<sup>41</sup> Although state law claims related to aircraft noise may vary from state to state, ASNAA provides an additional set of uniform elements that all plaintiffs must satisfy to recover damages for noise-related claims. Ignoring these additional elements would frustrate not only federal law, but also risk management determinations that airport operators nationwide make in reliance on their development of NEMs as well as the implementation of noise compatibility programs.

**E. Plaintiffs' Noise-Generated Vibration Claims Are Limited by ASNAA**

The limitations on recovering damages for noise set by ASNAA necessarily apply to claims based on acoustically-induced vibration, which is caused by low-frequency aircraft noise. Requiring plaintiffs to demonstrate the factors listed in ASNAA in order to maintain a claim for damages is supported by an understanding of the nature of noise-related vibration.

The record shows that “vibration occurs when the frequency level of the noise source matches the resonant frequency of a structural component.”<sup>42</sup> “Perceptible aircraft noise-induced vibrations in residential structures are caused by sound waves traveling through the atmosphere

---

<sup>41</sup> The Port introduced evidence in the Superior Court that aircraft noise exposure level at all of the 111 NEM Plaintiffs' properties is lower than it was at the time they purchased their properties, and no NEM Plaintiff has experienced a 1.5 dB DNL increase in aviation noise. CP at 4267.

<sup>42</sup> CP at 4269.

exciting various building components such as windows and walls and/or household decorations (e.g., paintings/photos hung on walls or bric-a-brac placed on shelves).”<sup>43</sup> Acoustically-induced vibration and audible noise are part of the same phenomenon, and thus, the vibration of which Plaintiffs complain is “noise attributable to the airport” within ASNAA and the applicable Part 150 regulations.<sup>44</sup> One plaintiff, in fact, described “noise vibrations” as a form of “aircraft noise and noise-related effects.”<sup>45</sup>

A 1985 FAA report explained that vibration and audible noise caused by aircraft are the same phenomenon at different frequencies.<sup>46</sup> The report plainly considered the effects of low frequency acoustical energy, including vibration, as “noise” effects.<sup>47</sup>

In 1998, an Expert Panel established by the City of Richfield, Minnesota and the Metropolitan Airports Commission agreed to undertake detailed studies of existing and potential impacts of low-frequency noise from aircraft around Minneapolis-St. Paul International Airport.<sup>48</sup> This Expert Panel found that major effects of low-frequency noise experienced

---

<sup>43</sup> CP at 4269.

<sup>44</sup> 49 U.S.C. § 47506(a).

<sup>45</sup> CP at 3518. This plaintiff was dismissed from the case based on an express avigation easement. CP at 4298.

<sup>46</sup> *Aviation Noise Effects* § 10.1, at 70, Report No. FAA-EE-85-2, Federal Aviation Administration, Mar. 1985, available at <http://www.wyle.com/PDFs/archive/ANE-10.pdf>.

<sup>47</sup> *Id.* § 10.0, at 69.

<sup>48</sup> Findings of the Low-Frequency Noise Expert Panel of the Richfield-MAC Noise Mitigation Agreement of 17 December, 1998, at I-1, Apr. 25, 2000, available at <http://www.techtransfer.berkeley.edu/aviation04downloads/LFNreport.pdf>.

at the relevant levels around airports include loudness and annoyance, as well as the detection and annoyance of building vibration.<sup>49</sup> The Expert Panel explained that the annoying sound of rattle can occur inside a building when acoustically-induced vibration causes solid surfaces that lie close to, but not necessarily in direct contact with, one another to impact each other.<sup>50</sup>

In discussing mitigation measures, the Expert Panel noted that “[p]ractical steps are available to homeowners and builders to reduce acoustically-induced building vibration and rattle.”<sup>51</sup> Audible noise and vibration control may be addressed through the same mechanisms, such as using vibration isolators when mounting HVAC system components to minimize vibration transmitted to the house.<sup>52</sup> Contemporaneously with the Expert Panel’s release of its findings, FAA stated that “[o]verall evidence recently evaluated by the FAA suggests low frequency noise is

---

<sup>49</sup> *Id.* at III-24, § B.3. The Expert Panel recommended the adoption of low-frequency sound level based on the six one-third octave bands from 25 Hz to 80 Hz as “most directly related to the noise effect of interest (rattle-induced annoyance)[.]” *Id.* at II-1.

<sup>50</sup> *Id.* at III-77, § B.11.3.2.

<sup>51</sup> *Id.* at III-83, § B.12.5.

<sup>52</sup> *Guidelines for the Sound Insulation of Residences Exposed to Aircraft Operations* at 1-10, Wyle Research Report WR89-7, Federal Aviation Administration, Nov. 1989, available at [http://www.faa.gov/documentLibrary/media/Advisory\\_Circular/150\\_5000\\_9a\\_withReport\\_p1.pdf](http://www.faa.gov/documentLibrary/media/Advisory_Circular/150_5000_9a_withReport_p1.pdf).

not a separate impact phenomenon, but rather is connected to high cumulative aircraft noise exposure levels.”<sup>53</sup>

Claims for damages based on acoustically-induced vibration fit into the federal scheme for regulating aircraft noise because the complaints of vibration are due to low-frequency aircraft noise, and its effects are regarded as noise effects.<sup>54</sup> A plaintiff seeking damages due to vibration is restricted by ASNAA’s limitations. The available research addressing aircraft vibration supports this position. FAA’s policy supports this position. There is no evidence that Congress or the FAA intended to limit the reach of ASNAA to purely audible noise and ignore the effects of low-frequency noise.

---

<sup>53</sup> Aviation Noise Abatement Policy 2000, 65 Fed. Reg. 43,802, 43,821 (proposed July 14, 2000). By way of example, it is noteworthy that the King County Code section entitled “Public Nuisance and Disturbance Noises” recognizes that sound may be “heard or felt” in a manner that causes a disturbance. King County Code, § 12.92.020(F) (emphasis added) (showing the common understanding that the impacts of sound and noise go beyond what can be heard with the human ear).

<sup>54</sup> Plaintiffs cite one case in which the court stated that ASNAA “may not deal with nuisance suits based on vibrations[.]” Appellant’s Opening Brief at 35 (citing Provident Mut. Life Ins. Co. v. City of Atlanta, 864 F. Supp. 1274, 1291 (N.D. Ga. 1994)). However, that case did not reach the issue of whether vibration is included in ASNAA because summary judgment was later granted on state law statute of limitations grounds. Provident Mut. Life Ins. Co. v. City of Atlanta, 938 F. Supp. 829 (N.D. Ga. 1995).

## VI. CONCLUSION

For the foregoing reasons, ACI-NA urges the court to affirm the Superior Court's grant of summary judgment in favor of the Port of Seattle.

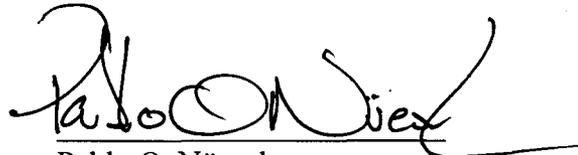
RESPECTFULLY SUBMITTED this 20th day of August, 2014,



Thomas R. Devine  
General Counsel  
**Airports Council International-  
North America**  
1615 L Street NW, Suite 300  
Washington, DC 20036  
Telephone: (202) 293-8500  
Facsimile: (202) 331-1362



James McDevitt, WSBA No. 6075  
General Counsel  
**Spokane International Airport**  
9000 W. Airport Drive, Suite 204  
Spokane, WA  
Telephone: (509) 455-6455



Pablo O. Nüesch  
Jessica R. Bell  
**Spiegel & McDiarmid, LLP**  
1875 Eye Street NW, Suite 700  
Washington, DC 20006  
Telephone: (202) 879-4000  
Facsimile: (202) 393-2866

*Attorneys for Airports Council International - North America*