

Response to Paine Field Draft Environmental Assessment (EA)

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Figure 1 "Silent" aircraft at treetop level (approximately 100 feet AGL) violating FAR Part 91.119 while terrorizing neighborhood NW of Paine. These aircraft are routinely vectored away from noise monitoring equipment to avoid detection. WWII era aircraft are also not included in baseline noise calculations in the EA.

The worst sort of business is one that grows rapidly, requires significant capital to engender the growth, and then earns little or no money. Think airlines. Here a durable competitive advantage has proven elusive ever since the days of the Wright Brothers. Indeed, if a farsighted capitalist had been present at Kitty Hawk, he would have done his successors a huge favor by shooting Orville down.

— Warren Buffett, annual letter to Berkshire Hathaway shareholders, February 2008.

This industry attracts more capital than it deserves.

— Stelios Haji-Ioannou, founder of EasyJet, reported in 'Aviation Week & Space Technology' 5 October 2009.

People who invest in aviation are the biggest suckers in the world.

— David G. Neeleman, after raising a record \$128 million to start New Air (the then working name for what became JetBlue Airways), quoted in 'Business Week,' 3 May 1999.

Introduction

This document was prepared in response to a Draft Environmental Assessment (EA) prepared by Paine Field Airport as prerequisite to becoming an FAA designated Class I airport.

In February 2009, FAA Regional Director Carol Suomi told Michael Deller, president and chief executive of the Bank of Everett, that funding for some projects would be withheld until an agreement is reached with Horizon. Deller, who supports scheduled passenger flights at the airport called her to confirm a rumor he'd heard. He said. "She was quite open and quite direct with me about the status and the direction."

One has to wonder why a federal employee (Ms. Suomi) would engage in conduct that is at best unethical, and quite possibly a violation of the United States Code (18 USC 35, 18 USC 872 and others) while using a banker to relay threats to the Snohomish County Council. I believe this is part of a pattern.

After reading the Draft EA it is very clear that the FAA is following a pattern of preferential prejudice towards airlines and commercial air service. This pattern discriminates against property owners and citizens living near the airport.

IT IS TIME FOR THE FAA TO STOP UNLAWFUL DISCRIMINATION AND REPRESENT THE INTERESTS OF PROPERTY OWNERS WHO STAND TO HAVE SUBSTANTIAL DAMAGE DONE TO THEIR PROPERTY AS A RESULT OF THE FAA'S CLEAR DISCRIMINATION AGAINST THEM!

The EA does not mention the word "pollution" once. It skews every figure possible to paint a rosy picture of the wholesale destruction of community and property of Paine Field's neighbors' (victims!).

The EA contains dozens of prejudicial and discriminatory statements. The EA:

- Uses "guesstimates" for baseline air, noise and light pollution measurements.
- Ignores APU, GSE, and taxiway noise pollution.
- Intentionally low balls the number of flights and ignores the capacity and potential gate turns of the facilities they are proposing.
- Fails to mention compatible land use as planned for the last 30 years.
- Disregards the culture of local communities.
- Disregards the destruction of property done by commercial airports.
- Fails to mention the health impacts of the pollution at Paine.

The [Findings of Fact and Mandates Section](#) of this document outlines steps needed to be taken by the airport and FAA to eliminate the prejudice shown in favor of commercial air service at Paine, and to end discrimination against citizens in surrounding communities.

Land Use Incompatibility

The Paine Environmental Analysis fails to mention the Mediated Role Determination (MRD). Written in 1979, an era when the Growth Management Act did not exist, the MRD has stood as the de-facto land use management document for property near Paine Field. It assured tens of thousands of property owners that their property would not suffer the same fate as do property values near commercial airports. It protected local citizens against the harmful health effects of the air, noise, and light pollution of Paine Field.

In the 1970s, '80s, and '90s other local airports such as Sea-Tac and Bellingham used funds to minimize property damage to their neighbors. Paine Field assured its neighbors (behind the veil of the MRD) that their property would be safe and encouraged growth right up to the property lines of Paine Field.

The MRD allowed the airport to grow without obtaining Avigation Easements (**RCW 14.12.220**) would allow for the air, noise, and light pollution resulting from Commercial Air Service at Paine.

In the decade starting in the year 2000 wealthy local businessmen such as the President of the Bank of Everett (who evidently commands a private audience with the FAA) began to make large political contributions in order to get the county to disregard local planning documents and the property rights of those affected by the MRD. The airport began to plan for commercial air service while the government entity that **supposedly** manages the airport assured the public that they would comply with land use as described in the MRD.

The false promise of economic development

Oddly some feel that commercial air service drives a local economy. This is a false premise. In fact, nothing could be further from the truth.

In the early 1980's the city of Bellevue decided to close its airport. Now they have a multitude of 21st Century industry booming on what was once the wasteland of an airport. Microsoft, Boeing Computer Services, Verizon Wireless and several other high tech firms are creating thousands of high paying jobs where once there was only a hand full of low paying airport service jobs.

Another example would be Moffet Field in Sunnyvale California. Instead of providing commercial air service the local community decided quality of life will attract business, not commercial air service. Indeed quality of life does attract business. Dozens of successful high tech companies have flourished in the area around Moffet Field, otherwise known as Silicon Valley.

This is a new era. This is an era where business travel is not a preferred use of company's or shareholders funds. Profitable companies have adapted no and limited travel policies. Instead they invest in modern IP telephony technologies. Technologies such as Internet Teleconferencing. This is an era when companies use the quality of life to recruit talent. Airports are never used to recruit talent.

The costs associated with commercial air service (reduced property values, crime, traffic etc) far outweigh any financial benefit to the surrounding communities.

Socioeconomic Impacts

The Draft EA sugar coats and does not fully examine the socioeconomic impact resulting from a commercial airport.

The Draft EA's optimistic noise pollution calculations (see EA Noise Analysis section) states it will affect 4.0 acres in 2011 and 17 acres by 2016. This noise analysis concludes that noise pollution resulting from commercial air service will QUADRUPLE every 6 yearsⁱ. As we extrapolate this out:

- 68 acres (.106 square miles) rendered uninhabitable by 2021.
- 272 acres (.425 square miles) rendered uninhabitable by 2026.
- 1088 acres (1.7 square miles) rendered uninhabitable by 2031.
- 4353 acres (6.8 square miles) rendered uninhabitable by 2036.

Even by using the unrealistically optimistic noise figure the town of Mukilteo (6.3 square miles) will be rendered uninhabitable by 2036. These numbers are totally in line with the environmental damage done by other Class I airports such as Sea-Tac. Thousands of property owners will suffer HUNDREDS OF MILLIONS OF DOLLARS IN DAMAGES AS A RESULT OF UNEEDED COMMERCIAL AIR SERVICE.



Figure 2 Houses near Sea-Tac. This will be what the entire city of Mukilteo looks like by 2036. This is the socioeconomic impact of commercial air service.



Figure 3 More houses near Sea-Tac's third runway that demonstrate the socioeconomic impact of commercial air service.

Not to mention the increase in crime in neighborhoods near airports. Airports are magnets for prostitution and other vice related crimes. Citizens do not want to have prostitutes roaming the streets like they do near commercial airports. We do not want to have one of the worst crime rates in the country as cities near commercial airports have.



Figure 4 Prostitution flourishes near commercial airports.

Purpose in Need Sectionⁱ

Paine Field is attempting to become a Class I Airport. **Sea-Tac, LAX, and JFK are examples of Class I airports. All large passenger airports in the United States are Class I airports.ⁱⁱⁱ**

Drawings show TWO passenger terminals: The “Proposed Modular Terminal Addition” and a much larger “Future Passenger Terminal”.^{iv} **The environmental effects of the “Future Passenger Terminal” and its “Access and Parking” have been intentionally omitted from this report.**

A two gate 225 passenger terminal is capable of handling **FAR MORE than one MD-80 and four Dash-8’s a day.** ^v **Not to mention the “future Passenger Terminal” being planned.**

The airport **wants tax payer’s money to build the airline terminals and to help subsidize Horizon and Allegiant operations.**^{vi} This comes at a time when record government deficits are occurring.

Spending money on commercial air service at Paine Field will only serve to show that government spending is totally out of control.

Alternatives Section^{vii}

The “No Action Alternative” is the alternative that should be chosen. **The “Proposed Alternative” seeks taxpayer funding to destroy the cities near the airport and destroy hundreds of millions of dollars in property, whereas the “No Action Alternative” will not affect ANYTHING!**^{viii}

The report claims “no expansion of service or facilities beyond those proposed is reasonably foreseeable” **yet it shows a “Future Passenger Terminal”!** ^{ix} **This report shows service steadily increasing.**³

Horizon claims 6-10 flights a day of 76 seat aircraft and Allegiant claims 2 to 10 flights per week of 150 seat aircraft. **Obviously a 225 seat terminal is capable of carrying far more passengers than the supposed “estimates”.** In addition the “Future Passenger Terminal” the airport is planning is not mentioned.^x

The report says the number of enplanements **will increase 120% from 112,000 in 2010 to over 238,200 by 2016.** Yet this report states no future expansion is planned! ⁹

The reports states “as a result of these considerations, the use of another airport for the proposed scheduled commercial passenger air service is not a reasonable alternative to the proposed action” **How on earth can the EA state that when they also state “there has been no indication from these airlines that should the proposed project not be implemented that they would initiate service to any other area airport beyond those used today”?** A change of the status quo FUNDED BY TAXPAYERS is obviously not needed.

The noise analysis is based on **Dash-8s and MD-80s**^{xi} yet the planned two terminals are capable of handling a variety of aircraft far larger. In fact the Noise Analysis says A330’s will be using the new terminals. Again the report states “**neither the FAA nor the Airport sponsor has the authority to instruct either carrier to provide service using a different aircraft**”. The use of any type of aircraft is not just plausible, it is guaranteed. Yet this report omits ALL types of aircraft except those they pick and choose to study.^{xii}

The report states the larger “Future Terminal” is “premature” and not “warranted and not the best use of public funds at this time”. **Yet the report obviously PLANS expansion because they show the drawings and state Future Passenger Terminal” will “continue to be shown on the ALP as a future reservation of space.** The statement that it is “premature” to study this planned expansion yet reserve space for the expansion is nothing more than an attempt to minimize the environmental damage they feel they should report at this time. If the best use of public funds is an issue **why are taxpayers being asked to pay to build airport facilities to transport gamblers to the casinos and prostitutes of Las Vegas?**^{xiii}

The report states “the airlines anticipate that some of the enplanements will be “new demand””. **The airlines are obviously planning for expansion, as is the airport, yet the report omits the effects of this expansion and new demand in an effort to hide the truth.**^{xiv}

The report states a *potential* gain of **27 jobs**, although most of those jobs would be jobs that already exist. **Millions of taxpayers’ dollars spent to subsidize 27 jobs.** ^{xv}

Noise Analysis Section^{xvi}

Table 2 shows **0 flights by A330s in 2008**. Then it shows **420 flights by A330s in 2010**, and **538 flights by 2016**. Yet the A330 flights, which are obviously planned, are omitted from this report and not included in “Current Project Totals” used to calculate noise. Instead, the use of A330’s is included in BASELINE calculations despite the fact that they do not fly out of Paine!^{xvii} This is done to falsely show that noise from A330’s will occur WITHOUT passenger operations, thus minimizing the actual impact of noise pollution from commercial air service!

DNL calculations do not include measurement of MD-80, Dash-8, and A330 operations at night! If one of the new “project” planes takes off during the hours between 7AM and 10PM it will dramatically change DNL calculations. **THERE IS NO WAY TO RESTRICT FLIGHT TIMES. Night flights are being INTENTIONALLY omitted.**^{xviii}

Oddly the number of flights given in the EA was **immediately adjusted downward** to reduce the number of flights because of Boeing decision to relocate a 787 line to South Carolina.^{xix} **Yet the EA FAILS to mention the INCREASE in flights resulting from the large Air Force Tanker contract Boeing is expected to win.**

Table 5 shows **between 40% and 60% of flights leaving Paine on the only runways capable of carrying commercial aircraft occur at night. Yet again the report states there will be NO nighttime flights.**

Which aircraft have been substituted in the INM model?^{xx} What aircraft are they being substituted for? What are the effects of the substitution? I think we know the answer to that. Obviously they would follow the clear pattern of deception in this report and be substituted to lower environmental damage being reported.

The tables also show flights of MD-80’s increasing from 0 in 2008, to 208 in 2010, to 1040 in 2016. Yet the “alternatives” section says Allegiant Air will have “**departures ranging from 2 to 10 per week over 365 days**”. 1040 flights per year equal 20 flights per week. This is another example of this report to **hide the truth by minimizing the environmental damage done by the world’s most environmentally destructive aircraft, the MD-80.**

In addition the EA does not include ground support equipment and auxiliary power units in baseline noise calculations.

Flight tracks are not shown although they are supposedly used.^{xxi} The reason this is done is because Paine vectors aircraft AWAY from monitoring stations instead instructing them to fly OVER NEIGHBORHOODS (particularly over the Olympus Terrace neighborhood). Since **there are not noise monitoring stations in any neighborhoods (unlike other Class I airports)** this allows Paine to skew baseline figures and falsely report minimal noise damage.

In addition Paine Field has no noise pollution monitoring equipment on its grounds. Instead it has moved them approx. 2 miles away from the north and south ends of the main runway to artificially reduce noise measurements. This allows for the majority of flights from Paine to NOT BE included in noise measurements.

Loud WWII aircraft have also been omitted in baseline noise pollution calculations.



Figure 5 Aircraft at approximately 150 AGL NW of Paine violating FAR Part 91.119 vectoring low over neighborhood NW of Paine to avoid noise measurement.



Figure 6 WWII aircraft flies at approximately 150 feet AGL violating FAR Part 91.119 over neighborhood NW of Paine. It is important to note Paine does not include the thousands of flights by WWII era aircraft in baseline noise calculations.



Figure 7 Formation of supposedly silent WWII fighters at approximately 200 feet AGL violating FAR Part 91.119 over neighborhood NW of Paine.

Environmental Conclusions Section^{xxii}

Air Quality calculations (Table 5 shows commercial air service will contribute 1200 tons of toxins to the air in 2010, and 1300 tons of toxic emissions in 2016) are all based on 4-6 flights per day. **Since there is no way to limit the amount of commercial traffic the air quality figures are truly low ball guesses.**

Compatible Land **uses incorrectly calculated noise figures** (see Noise Analysis). **The actual effects of the noise pollution resulting from Paine Field are much higher.**

The Light emissions and Visual Environment does not mention that the only visual barriers to the blight of the proposed terminals **are trees to the west that have been removed.** In addition it discusses a “slight change” in the light environment. **Moonlight is the natural light in most neighborhoods any light increase at the airport would be destructive.** The report **does not base any of its “light affects” on science.**^{xxiii}

As stated in the Socioeconomics section of this report the incorrectly calculated noise pollution (see Noise Analysis section) states it will only affect 4.0 acres in 2011 and 17 acres by 2016. Even this overly optimistic noise analysis concludes that noise pollution resulting from commercial air service will QUADRUPLE every 6 years^{xxiv}. As we extrapolate this out:

- 68 acres (.106 square miles) rendered uninhabitable by 2021.
- 272 acres (.425 square miles) rendered uninhabitable by 2026.
- 1088 acres (1.7 square miles) rendered uninhabitable by 2031.
- 4353 acres (6.8 square miles) rendered uninhabitable by 2036.

Even by using the unrealistically optimistic noise figure, the town of Mukilteo (6.3 square miles) will be rendered uninhabitable by 2036. These numbers are totally in line with the environmental damage done by other Class I airports. Thousands of property owners are about to suffer HUNDREDS OF MILLIONS OF DOLLARS IN DAMAGES AS A RESULT OF UNNEEDED COMMERCIAL AIR SERVICE.

The report also **fails to mention how much solid waste will be produced by the 238,000 passengers expected at the two new terminals at Paine Field.**^{xxv} In addition it does not discuss where this solid waste will go or how the addition of this solid waste will affect existing waste treatment facilities. The airport is passing the ball, making local ratepayers responsible for the sewage treatment facility upgrade. This will **cost local rate payers MILLIONS of dollars.**

Flawed statements in the EA “Hirsch Report”

The Hirsch report intentionally omits the “Future Passenger Terminal”. It uses a 4-6 flights a day figure as the maximum capacity for the modular terminal^{xxvi}.

The turnaround time for aircraft at the terminal is not mentioned (why not?). Nor are the **number of flights out of each terminal building at other Class I airports such as LAX and Sea-Tac.**

Clearly two large commercial aircraft can be serviced at each of the two terminals^{xxvii}.

There is absolutely no evidence the Alaska Air Group will NOT USE Paine as its regional hub. To the contrary, two terminals would only be needed if the plan WAS to use Paine as a hub. This is in contradiction to Hirsch’s assertion that Paine will not be a hub for Horizon AND Allegiant.^{xxviii}

Findings of Fact and Mandates

After performing an in depth analysis the following are findings as fact in the Draft EA:

- The FAA NW Regional Office has shown preferential prejudice towards commercial air service at Paine.
- The “No Action Alternative” is the only alternative that does not do environment damage and result in property destruction. It also does NOT affect either airline proposing subsidies at Paine. In addition the “No Action Alternative” indemnifies citizens against lawsuits by maintaining the status quo.
- The “Proposed Action or Project” IS NOT the “The Preferred Alternative”. No action that would result in lawsuits, property and health damage, and damage to the environment should ever be construed as a “Preferred Alternative”. Doing so only demonstrates contempt, negligence and sheer incompetence.
- Paine is planning for two new terminals. At no point do they ever realistically quantify the number of flights, gate turns or number of passengers that will utilize these two terminals.
- The number of flights cannot be legally limited. Limited commercial air service is an outright lie.
- By not specifying realistic use of TWO airline terminals, Paine is intentionally not specifying how many airliners will be in operation in 1, 5, 10, or 15 years.
- The EA makes statements that minimize the future number of flights such as reduced operations at Paine resulting from losing the Boeing 787 line, while failing to mention future aerospace manufacturing opportunities such as the Air Force tanker contract. This is done to skew any future airport usage in order to falsify noise pollution figures.
- The FAA and Paine Field think using taxpayer money to provide air terminals for gamblers flying to the casinos and prostitutes of Las Vegas are a proper user of taxpayer funds.
- Baseline Noise Analysis is flawed. It purposely omits night flights and actual or maximum capacity of the two planned terminals. It also omits Flight Path information to skew noise measurement.
- Noise pollution from loud WWII era aircraft is intentionally omitted from the Draft EA. In most cases these aircraft are vectored away from noise monitoring equipment to keep noise pollution reported low and routinely fly at dangerously low levels over neighborhoods.
- Violations of FAR Part 91.119 happen daily and are the norm. Flight tracks data is intentionally omitted to hide these violations.
- GSE and APU noise pollution has been omitted from the Draft EA.
- At best millions of taxpayer dollars will result in approximately two dozen (27) low paying service jobs.
- Commercial Air service does not encourage economic development. Airports such as Bellevue, WA and Moffet Field, CA are proof of this.
- In depth solid waste studies have not been performed on the effects of millions of air passenger on municipal utilities.
- Using flawed and intentionally low noise pollution numbers supplied in the EA, property damage will occur to neighborhoods within 10 years.

- Using flawed and intentionally low noise pollution numbers supplied in the EA, within 20 years the ENTIRE City of Mukilteo will be uninhabitable due to noise and air pollution from commercial air service at Paine.
- The omissions and misstatements in the report are a clear attempt by the airport and airlines to deceive the public in an attempt to not mitigate damages from their operations.
- The Draft EA demonstrates contempt and disregard for current and past land use.
- The Draft EA ignores the negative socio economic impacts of airports that provide commercial air service.

Mandates:

1. The FAA **MUST** immediately stop preferential prejudice towards commercial air service and discrimination against local residents who are going to suffer property and health damage due to commercial air service at Paine. In the interest of fairness and transparency The FAA NW Regional Office **MUST** immediately excuse itself from any determination as to Paine Fields future role.
2. The prejudicial term “Preferred Alternative” must be removed from this or any EA.
3. A full blown environmental impact study of Paine Field **MUST** be performed.
4. Air traffic patterns at Paine must be examined and modified to eliminate dangerous and harmful flight activities including violations of FAR Part 91.119 **BEFORE** “assuming” they are not taking place.
5. The current or any future EA or study must include the effect of **BOTH** new terminals and their **MAXIMUM** capacity. The environmental effect of two large terminals in operation 24 hours a day seven days a week **MUST BE** studied. GSE and APU noise and air pollution **MUST** also be included.
6. The current or any future EA or study **MUST** study the solid waste requirements of the **MAXIMUM** capacity of two airport terminals.
7. Paine Field **MUST** move noise pollution monitoring stations to the north and south end of the main runway, not two miles away from these locations. These stations will use science, not flawed estimates, to calculate the baseline noise pollution currently done at Paine Field.
8. Paine Field **MUST** install equipment to generate Flight Tracks (the **ACTUAL** flight paths of aircraft). This will enable the public to see where noise and air and noise pollution occur outside the property line of Paine Field. Flight Tracks **MUST** be used for placement of additional noise monitoring equipment. Flight Tracks **MUST** also be used to monitor for violations of FAR Part 91.119.
9. Paine Field **MUST** install air pollution monitoring stations to the north and south end of the main runway. This will allow for scientific calculations (not flawed estimates) to be used to calculate the baseline air pollution currently done at Paine Field.
10. Paine Field **MUST** install light pollution monitoring stations to the north and south end of the main runway. This will allow for scientific calculations (not estimates) to be used to calculate the baseline light pollution currently done at Paine Field.
11. Any current or future EAs or studies **MUST** include land use planning around the airport and the socioeconomic damage that will be done to the City of Mukilteo and neighboring communities as a result of commercial air service.

12. Snohomish County governmental agencies **MUST NOT** spend taxpayer funds on subsidizing commercial air service. This includes requesting federal funds. Any current requests for federal dollars **MUST** be immediately withdrawn. Any publicly funded agencies such as the Snohomish County Economic Development Council **MUST NOT** spend taxpayer funds to subsidize commercial air service.
13. The FAA and the operators of Paine Field **MUST** take every possible step to **INDEMNIFY** taxpayers against civil and punitive actions (such as Plaintiff v. Sea-Tac) by **ABIDING** to the MRD, the only existing and de-facto **LAND USE** document for Paine Field. Failure to do so should be construed as contemptible and negligent behavior by public employees.

References

ⁱ In the first year of commercial service operations (2010), the change in the noise contours compared to the No Action Alternative would be approximately 4.0 acres larger. By 2016, the change in the noise contours compared to the No Action Alternative would be approximately 17.0 acres larger.

ⁱⁱ

<http://www.painefield.com/ea/Stitched%20Chapters/Chapter%20A%20Purpose%20and%20Need.pdf>

ⁱⁱⁱ Per the FAA Airport Certification Program Handbook, a change from a Class IV operating certificate to a Class I operating certificate is required to serve scheduled operations by large aircraft

^{iv} Figure A3

^v In order to efficiently and safely serve the aircraft and passengers using those aircraft, the existing passenger processing space needs to be increased. Based on FAA planning guidelines to accommodate these passengers in a safe manner, and meet security requirements, it has been determined that approximately 18,000 square feet would be needed with two aircraft “boarding gates”, and these would be sized to accommodate 225 people in the gate boarding area.

^{vi} Approval of Airport Improvement Program (AIP) funding for the construction of modular terminal building sufficient to accommodate the proposed passenger service.

^{vii} <http://www.painefield.com/ea/Stitched%20Chapters/Chapter%20B%20Alternatives.pdf>

^{viii} The use of other area airports by both Horizon Air and Allegiant Air instead of Paine Field is reflected in the No Action alternative because Horizon Air already offers scheduled commercial air service at Seattle-Tacoma International Airport, approximately 30 miles south of Paine Field, and Bellingham, located approximately 74 miles north of Paine Field. Allegiant Air offers scheduled commercial air service currently at Bellingham International Airport.

^{ix} Therefore, no expansion of service or facilities beyond those proposed is reasonably foreseeable.

^x Horizon Air will utilize the 76 seat Q400 aircraft with a predicted load factor (percentage of available seats filled) ranging from 61 to 63% with departures ranging from 6 to 10 per day for approximately 350 days per year. Allegiant Air will utilize the MD83 aircraft with 150 available seats with a predicted load factor of 90% with departures ranging from 2 to 10 per week over 365 days. This would result in approximately 112,000 enplanements (people boarding aircraft at Paine Field) in 2010 increasing to approximately 238,200 enplanements in 2016.

^{xi} **Preferred Alternative (Proposed Action or the Project).** The proposed action is for the FAA to approve an amendment to Horizon Air and Allegiant Air Operating Specifications pursuant to 14 CFR Part 119 and amendment to the airport operating certificate pursuant to 14 CFR Part 139. This would allow both airlines to provide scheduled commercial service to PAE with the Bombardier Q400 Dash 8 (**with the CRJ700 as the substitute**) and the Boeing MD83 aircraft, respectively, if all safety, operational, and environmental issues are satisfied.

^{xii} As discussed above, neither the FAA nor the Airport sponsor has the authority to instruct either carrier to provide service using a different aircraft if the proposed aircraft can safely operate at the

proposed airport in compliance with all statutes. Additionally, public use airports such as Paine Field cannot deny access to an aircraft operator if they can safely operate at that facility.

^{xiii} Construct a Large Permanent Terminal as Shown on the ALP. Consequently, this alternative is not warranted and not the best use of public funds at this time. As such, it will not be considered in detail but will continue to be shown on the ALP as a future reservation of space.

^{xiv} The airlines anticipate that some of the enplanements will be “new demand” although some passengers now using Sea-Tac and Bellingham may opt for Paine Field due to closer proximity and shorter travel times.

^{xv} This demand would generate the need for six to ten additional airline employees, several which may be contracted from existing Fixed Base Operators. An additional seventeen employees; including TSA employees, security, rental car and maintenance workers are anticipated.

^{xvi} <http://www.paineairport.com/ea/Appendix/Appendix%20D%20Noise%20Analysis.pdf>

^{xvii} The study evaluated the existing 2008 baseline conditions (actual operations) and the future years 2010 and 2016.

^{xviii} In the DNL metric, any operations that occur after 10 p.m. and before 7 a.m. are considered more intrusive and are weighted by an additional 10 dBA. Therefore, accurately estimating the number of nighttime operations is very critical in determining the DNL noise contour.

^{xix} It is important to note, that the forecasts were revised in October of 2009 (and a new FAA approval issued) based on a news release from Boeing indicating that some of the B-787 final assembly would take place in Charleston, South Carolina instead of Paine Field. Both the original forecasts and approval letter, and the October 2009 revised forecasts and associated approval letter are included in Appendix G.

^{xx} Because some aircraft are not in the INM database, the INM model will reflect a substitute aircraft that is a close approximation in terms of noise.

^{xxi} The FAA has established flight paths for aircraft arriving and departing from PAE. Flight tracks are established for each runway end, and the use of each flight track by aircraft type is used as an INM input. These flight paths are not precisely defined ground tracks, but represent a path along the ground over which aircraft generally fly.

^{xxii}

<http://www.paineairport.com/ea/Stitched%20Chapters/Chapter%20D%20Environmental%20Consequences.pdf>

^{xxiii} There would be a slight change in the light environment around the Airport due to increase lighting in the vicinity of the modular terminal expansion. However; due to the mostly industrial land use in the area, neither the No Action Alternative nor the Preferred Alternative would result in any significant impacts relating to the lighting and visual environment of the Airport.

^{xxiv} In the first year of commercial service operations (2010), the change in the noise contours compared to the No Action Alternative would be approximately 4.0 acres larger. By 2016, the change in the noise contours compared to the No Action Alternative would be approximately 17.0 acres larger.

^{xxv} **Solid Waste.** Increases in solid waste generation and disposal as a result of the Preferred Alternative can reasonably be expected due to the increased use of the terminal building by arriving and departing airline passengers, as well as additional airport employees.

^{xxvi} Maximum capacity - A typical spoke (non-hubbing) airport will average 4-6 departures per gate per day. So PAE could have a daily capacity of 900-1,350 departing seats per day if both gates were used for the largest aircraft they are sized for.

^{xxvii} For PAE, the gates have a design capacity of one 75 seat regional aircraft plus one 150 seat mainline aircraft for a total of 225 seats.

^{xxviii} Maximum capacity - A typical spoke (non-hubbing) airport will average 4-6 departures per gate per day. So PAE could have a daily capacity of 900-1,350 departing seats per day if both gates were used for the largest aircraft they are sized for.