

May 16, 2002

The Honorable Ron Sims  
King County Executive  
King County Courthouse, Room #400  
516, Third Avenue  
Seattle, WA 98104

Re: KCIA Part 150 Noise Study

Dear Executive Sims:

We write to urge that King County act promptly to give further impetus to a proposal for significant relief from the noise generated by King County International Airport (KCIA, or Boeing Field). The recently drafted Part 150 Noise Study has much merit, and it is important to the affected residents that the recommendations be implemented as soon as possible. We believe that with some appropriate revisions, the Part 150 should be forwarded to the Federal Aviation Administration (FAA) for its review, approval, and funding.

The Seattle Council on Airport Affairs (SCAA), now entering its fifth year of activity, is very concerned that, to date, little meaningful noise reduction has occurred at KCIA. Our member community councils expect KCIA to be a good neighbor, and to display leadership in reducing operational noise levels over residential neighborhoods.

King County has long been aware that flight operations and ground noise from KCIA are sources of serious and continuing complaint from King County residents near and far. The proposals coming out of this recent study have the wide support – from representatives of airport neighbors, airport tenants of many descriptions, other aviation interests, the consultant, and the airport staff. Some sought additional work, and we believe there is still much that can be done, however this study is a remarkable accomplishment, considering the potential for dispute and contention when airport noise vs. airport business is the issue.

We attach for your consideration a Draft Review containing: (1) an executive summary of our comments on the study; (2) a fiscal note, which points out that full implementation of all the study recommendations will likely have no negative fiscal implications for the County; (3) detailed comments on the study and related problems; (4) a list of references; (5) a copy of Council-adopted motion no. 10565, approving the 1998 KCIA Noise Reduction Work Plan, and (6) a copy of the County's 1998 KCIA Noise Reduction Work Plan.

This Part 150 study, and the recommendations flowing from it, provide a significant opportunity to make real progress in the work of reducing noise impacts from KCIA. But nothing will happen until the County forwards its recommendations along to the FAA. We urge prompt and favorable action.

Sincerely,

Mike G. Rees, Chair, SCAA Part 150 Review Committee.

Cc: Mr. H. Taniguchi, K.C. Dept. of Transportation  
Mr. C. Hoggard, Chief of Staff, K.C. Executive Office  
Mr. M. Colmant, Acting Manager, KCIA

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# **SEATTLE COUNCIL ON AIRPORT AFFAIRS -- DRAFT COMMENTS TO THE KING COUNTY INTERNATIONAL AIRPORT PROPOSED PART 150 NOISE STUDY, SUBMITTED TO THE KING COUNTY EXECUTIVE, FEBRUARY 2002.**

## **(1) EXECUTIVE SUMMARY**

### A. The SCAA's understanding of the Part 150 process and the role of the King County Executive.

Airports such as King County's Boeing Field are sources of noise that is experienced far beyond their borders, often resulting in numerous complaints, and even lawsuits. Mitigation of such noise is expensive. Federal grants, administered by the FAA, are available to airport operators to pay for noise mitigation. However, before a grant is issued, an airport operator must conduct a noise study in accordance with very precise regulations (known as Part 150), and propose specific programs for FAA review.

The starting point is a series of maps, showing noise-impacted areas in accordance with FAA methodology. FAA will fund two major types of programs in areas shown by those maps to be severely impacted: (1) Insulation of properties if insulation will reduce interior noise to a prescribed maximum level. (2) Purchase of properties if insulation will not achieve the required reduction of interior noise. The FAA may also fund other programs that result in a reduction of noise levels caused by an airport's operation.

Part 150 studies are conducted by aviation consultants, working with Airport staff and some form of stakeholder advisory group. Results and recommendations are not considered by FAA until they have been reviewed and approved by the owner that is, King County. Action by both the Executive and the Council is required to move this process forward. The most recent Part 150 study at KCIA has now been completed, and its noise maps and its recommendations for action are before the Executive for review and approval. After action by the Executive, the study and recommendations are further subject to review and approval by Council, followed by submittal to the FAA..

### B. The SCAA review.

The Seattle Council on Airport Affairs formed a committee to review the Airport Proposal submitted to the King County Executive by the Airport Manager in February 2002. The committee included members who have followed and studied activities at KCIA for more than 8 years, and have a substantial

knowledge of the impacts of noise on adjacent neighborhoods, as well as a general understanding of the operational functions of KCIA.

Although SCAA was not a member of the Part 150 Study Advisory Committee, we did attend the majority of the Part 150 Study Advisory Committee public meetings, and Open Houses. We therefore have reviewed this study report from an informed but completely independent point of view.

This document is a draft review of the Airport Proposals and is intended to provide additional information by which the study report can be improved. The SCAA intends to examine the recommendations of the King County Executive, when they are available, and submit additional comments, as needed, to the County Council.

### C. Summary of Comments

1. The noise contour maps, a major product of the study, are buried in the report. They should be prominently displayed in an Executive Summary of the study, and of such a scale that streets and major facilities (like the Georgetown Steam Plant, schools, VA Hospital, etc.) are easily identifiable relative to the contours (Detailed comment 1).
2. To meet FAR Part 150 requirements, the predicted noise contour maps (for the fifth calendar year beginning after the date of submission), and associated supporting data, should be for the year 2007, rather than for 2006. If the noise study is to be submitted in 2003 the predicted noise contour map should be for 2008. Data showing the 50 DNL contours, identified by the Part 150 Scope of Work document, are missing (Detailed comment 2).
3. Data measured by the existing KCIA Noise Monitoring System is not used. It should be summarized by year, and should be presented to substantiate the analysis conducted by the consultant. Noise complaint data is not discussed. It should be presented to the FAA as an indication of long-term impacts of noise in the region, caused by KCIA operations (Detailed comment 3).
4. The FAA Part 150 data requirements include the statement "*The actual or anticipated effect of the program on reducing noise exposure to individuals.....*" Unfortunately noise levels are, according to this study, predicted to increase by 2006. The study should predict when the noise levels would begin to decrease to below "baseline" values (Detailed comment 4).
5. The study shows only *actual* flight tracks. The study should include illustrations of planned or *required* flight tracks, so that the FAA and the public can evaluate if aircraft are following assigned tracks (Detailed comment 5).

6. Newer navigational technology allows precise compliance to assigned flight tracks. The Part 150 recommendations should include the development of an Flight Management System (FMS) departure through Elliot Bay, and that all aircraft equipped with FMS should be required to use it (Detailed comment 6).
7. Three schools have been identified to be within the current 65 DNL contour. An interior/exterior noise survey should be carried out as soon as possible at each school, and the information provided to the school district, the students, and their parents (Detailed comment 7).
8. The main 10,000 foot runway does not currently meet FAA safety requirements at the south end, and the south threshold needs to be moved north by 880 feet. It is our view that all current aircraft can operate safely in and out of KCIA with a main runway length of 9120 feet, and therefore the Study should address the effects of a 9120ft main runway, without a proposed 880 foot extension at the north end (Detailed comment 8).
9. The budget staff should be given direction to prepare a Financial Plan based on full implementation of the recommendations from the Airport, and also including the items we have identified as recommended additions to the overall program (Detailed comment 9).
10. The landing fee schedule should be revised to provide a substantial fund for addressing noise issues in the community (Detailed comment 10).
11. The Airport should initiate a FAR Part 161 for closure of the airport during part of the night (Detailed comment 11).
12. The study should require an additional section about the Steam Plant, with a noise analysis, and comments by the government entities that have responsibility for the facility (Detailed comment 12).
13. The Airport should proceed immediately with the follow-on steps to initiate a Part 161, while maintaining the momentum achieved by this Part 150 (Detailed comment 14).

## (2) FISCAL NOTE

Summary: Most of the costs of the recommended noise-mitigation programs will be reimbursed by FAA grants. Ordinary revenue from the Airport can be applied to any costs not covered by FAA. The Airport has under-utilized revenue sources, easily capable of raising an additional million dollars or more per annum. Therefore, it is quite feasible to implement the full package of recommendations with no net cost to the County's non-Airport revenues.

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1 Airport not a producer of net revenue for County. Under the terms of various grants from FAA, the County is not allowed to spend revenues from the Airport for non-Airport purposes. Airport revenues must be plowed back into the Airport. However, revenues generated by the Airport may be used quite freely for Airport purposes, broadly defined – including noise-mitigation programs.

2 No immediate fiscal burden from Part 150 proposals. Surprisingly, there will be no immediate new costs of consequence for King County, as the result of Council and Executive recommending the Airport Proposal, or the SCAA supplemental proposal, to FAA for its approval. This is the result of the FAA's lengthy review processes

3 Lengthy timetable for FAA action. It is not uncommon for the FAA to take two or three years before they finish the process of review and approval of a Part 150 noise study. After the County transmits the Study with its recommendations to the FAA, that agency first reviews the noise-contour maps for compliance with FAA requirements. This process typically takes at least half a year, and often a lot longer. In this case, the FAA may take extra time to ponder on the use – which we strongly support – of noise contour maps that capture and report overflight noise from both KCIA and Sea-Tac in the same contours. If FAA rules that the noise maps need further work, FAA will remit the study to the County for that purpose, which can take several more months. When the maps are approved, and official notice of that approval is published, FAA then has another 180 days to review the detailed recommendations, and to issue its ruling. The 180-day limit is more in the way of a goal than a deadline. Then, the County must develop and enact all the details of the various FAA-approved action programs; only after that stage will there be significant outlays.

4 Minimal fiscal impact from typical low-level 'Part 150' programs. The typical 'Part 150' program has only two costly features: purchases of properties in a severely noise-impacted zone; insulation of properties not purchased. And also typically, airport owner-operators opt for buy-out and insulation programs that do not extend beyond the FAA-approved, computer-generated 65 DNL contours. FAA routinely funds insulation programs through grants from Federal tax revenues that pay 80 to 90 percent of the

costs, including administration. The current study estimates the total cost of the recommended home insulation program at \$67 million. The County's exposure would be in the range, \$6.7 to \$13.4 million, with potential revenues available, in our view, to meet that exposure, as is set out below, Point 7 (3).

5 Fiscal impact if programs extended beyond the 65 DNL contour. Contrary to what is often reported (even in the Airport's summary of the instant study, fn. 2, Table 1, p. 2), the FAA has legal authority to fund insulation and buy-out programs in areas outside the 65 DNL contours. This has repeatedly been confirmed in guidance documents from the central headquarters of the agency, confirming that funding is available for such work. Thus, if King County were to extend buy-outs, insulation, or both into the zone between the 65 and the 60 DNL contours, as has been done at Minneapolis and at Chicago, FAA funding would not be ruled out. Therefore, extending such programs out to the 60 DNL contour would result in no discernible fiscal impact on the County.

6 Special circumstances – older structures. Older institutional structures pose a problem in noise-insulation programs, as has been so dramatically illustrated locally in the case of the Highline School District. These structures typically do not meet current building and environmental codes. Major renovation, such as serious insulation, installation of triple-glazed windows, etc., likely will trigger requirements for bringing the whole structure up to code. Efficient, retrofitted insulation keeps noise out, and keeps heat in. Older institutional buildings often do not have heating, ventilation, and air-conditioning systems that can handle this challenge, and classrooms become intolerable in warm weather – opening the windows to cool the classrooms defeats the whole purpose of noise insulation. So, major upgrades of HVAC systems may be needed. Antique wiring, asbestos, or other defects or hazards are often found, and must be dealt with, resulting in significant additional costs. Unfortunately, FAA feels that it cannot provide funding to deal with these ancillary but very costly problems, while the building's owner, such as a school district, may feel that it should not have to incur heavy new costs as the price of "free" insulation. Whether such conditions will apply in the case of KCIA insulation is not yet known. The cost of engineering and architectural studies of school buildings would ordinarily not be paid out of the County's general funds. And, as is suggested below, Point 7 (3), the County has funding sources that can be used even for these exceptional cases. Further, in the case of the Highline School District, the FAA has just agreed to make a major contribution (\$50 million) toward an insulation program that includes funding for HVAC work, code-compliance improvements, and other non-insulation components. This is a hopeful precedent.

7 Potential additional funding sources. In our general comments on the Study, and on the Airport Proposal, we note the ongoing criticism of the DNL noise metric for airport-impact purposes, and we discuss briefly the more suitable metrics that are readily applied. If the County were to recommend to FAA a noise-remedy program that would use a more realistic noise metric, such as 80 SEL, would the County be faced with a negative fiscal impact? And what about the problems suggested in the discussion of older schools?

(1) In all likelihood, FAA would not make grants for buy-outs or for insulation in a zone outside of 60 DNL but inside an 80 SEL contour.

(2) As noted in Point 6 above, the FAA will not ordinarily cover major non-noise work that may be required as part of work in older schools.

(3) However, the County has other potential funding available for such work in the shape of additional fees that may legally be imposed at the Airport, provided that those revenues are applied to Airport purposes – such as funding buy-outs or insulation outside the 60 or 65 DNL contours, or extra work in schools, and meeting the small percentage of basic programs not covered by FAA grants.

# Landing fees. The Airport does not charge landing fees to many that use it, whereas most airports charge significant landing fees on all traffic. Aircraft classified as “General Aviation” pay no landing fees. This category is not just small, single-engine “hobby” craft – the largest corporate jets are included, as well. It would seem highly appropriate to impose landing fees on all users of the Airport – there is no reason for King County to provide these facilities free, and all users are certainly able to pay. Airport-impacted neighborhoods would see the justice of providing local funding for mitigation programs from fees levied directly on Airport users. The rate structure has not been reviewed since the early 1970s. Our last examination of this topic showed that the Airport charged \$0.35/1000 lbs. landing weight for cargo and passenger revenue aircraft, resulting in annual revenues between \$200,000 and \$300,000 in recent years. In contrast, Sea-Tac Airport, when last checked, levied a rate of approximately \$1.50/1000 lbs. for *all* landings. A modest increase in landing fee applied to *all* landings at KCIA could raise between \$500,000 and \$1,000,000 annually.

# Fueling fees. The Airport’s fueling fee is a very modest 5 cents per gallon. Even a slight increase in the fuel fee for fueling would raise additional funds. Airport budget documents published on the County’s website do not report on this activity, so we cannot readily suggest how much more revenue could be raised by increasing the fueling fee.

8 Increased revenues and program costs spread over several years. These proposed increases could go into effect quickly, thus building up a reserve fund. The noise-mitigation programs will not go into effect, at the earliest, for three years (see Point 3 above). The total life of the insulation program will probably extend for another eight to 10 years. Over that period of time, revenue enhancements could easily amount to at least \$13 million.

Any programs outside the 60 DNL contour, or in older buildings, could be designed to be funded by such revenues. It should be noted that buy-out programs and insulation programs are usually entirely voluntary. While a priority ranking system could be set up for either program, the experience at Sea-Tac Airport is that there is not an immediate rush to take advantage of these programs when instituted. It takes years and years to reach a saturation level. In fact, a vigorous outreach program is sometimes needed to maintain a steady flow of applicants. Therefore, such programs



can extend over several years without inconvenience to the beneficiaries and without sudden, large demands on the Airport's funds.

Conclusion. There will be little to no adverse fiscal impact on the County's non-Airport revenues as the result of adopting even a far-reaching and extensive program of insulation and buy-outs.

### **(3) DETAILED COMMENTS**

#### Introduction

Detailed comments are based on: the Airport Proposal; the FAR Part 150 requirements; the Scope of Work requirements; and new recommendations and analysis by the Seattle Council on Airport Affairs.

The Airport Proposal is a 13-page document in the front of the KCIA submitted Part 150 Noise Study (no date). The FAR Part 150 requirements were obtained from the Electronic Code of Federal Regulations (e-CFR), dated March 12, 2002. The Scope of Work is in Exhibit A, Scope of Services for the KCIA/Boeing Field FAR Part 150, dated January 20, 1999.

The Noise Study was completed without the benefit of an updated Master Plan or EIS, which have been in preparation for many years. The last Master Plan is dated 1986, and is substantially irrelevant to current planning of the Airport. Consequently assumptions were made that are not well established, and the results of this study may be in question, and need modification when the Master Plan and EIS are completed.

#### 1. Noise Contour Maps

One of the chief products of a Part 150 noise study is a set of maps showing the DNL (Day-Night Level) noise contours for the existing situation, and for the predicted situation 5 calendar years after submission of the study to the FAA.

It is significant and gratifying to noise-impacted residents, that this study addresses the important issue of the combined noise impacts of Sea-Tac and KCIA traffic, by publishing a map showing combined noise contours (Fig. C24) for the first time. Recognizing the multiple impacts from airports is the first step in addressing the combined noise effects of regional aviation on residents.

It is rather surprising, however, that these important noise maps are buried in the supporting data, (Figures C15, C24 and C25), and that they are of such small scale that it is not possible to determine the accurate location of the 65, 70, and 75 DNL contours. We believe that these Noise Contour Maps should be prominently displayed in an Executive Summary of the study, and of such a scale that streets and major facilities (like the Georgetown Steam Plant, schools, VA Hospital, etc.) are easily identifiable relative to the contours.

Further, the Part 150 KCIA/Boeing Field Scope of Work document (dated Jan 20, 1999) identifies that the noise contours for 50, 55 and 60 DNL contours would be presented. We were unable to find data referring to the 50 DNL contour in the study report maps.

## 2. Noise Level Prediction for +5 years

The Noise Exposure Map(s), required to be delivered as part of the Part 150 (see para. 150.21 (a) (1)), are "...based on forecast aircraft operations at the airport for the fifth calendar year beginning after the date of submission (based on reasonable assumptions concerning future type and frequency of aircraft operations, number of nighttime operations, flight patterns, airport layout including any planned airport development, planned land use changes, and demographic changes in the surrounding areas);....."

The noise map and associated supporting data should be for the year 2007, rather than for 2006, if the Part 150 is to be submitted in 2002 (or for 2008, if the study is not to be submitted until 2003). The 2007 forecast should include: the predicted number of nighttime operations (rather than a percentage value); the planned flight track patterns for that year including any proposed changes, (such as the Bay visual approach and the instrumented over-water approach from the north); identification of planned airport development such as proposed significant increases in air-cargo facilities; and an estimate of the planned changes in demographics in areas within 60 DNL, and the proposed insulation/buy-out of properties within the 65 DNL area.

## 3. Noise measurements and noise complaints

During the study process a noise measurement survey was conducted to validate the computer model developed by the consultant to predict noise contours. However, it appears that no use was made of the \$1,000,000+ noise monitoring system installed in 1996, and which has been gathering data for more than 5 years at 17 sites (Fig C 10). Instead the consultant used data from a survey over a 2-week period of time (November 16, 1999 to December 1, 1999) at 9 sites (Fig C 9). Data measured by the KCIA Noise Monitoring System should be summarized by year, and should be presented to substantiate the analysis conducted by the consultant.

Also not discussed were the noise complaints logged by the airport, which increased from 403 in 1995 to 13,725 in 1999 (see Fig 1 attached). Analysis of this data by time of day also shows that a significant number of noise complaints have been associated with nighttime operations (see Fig 2 attached). We believe all this data should be presented to the FAA as an indication of long-term impacts of noise in the region, caused by KCIA operations.

The consultant used a graphic (Fig C 5) in the supporting documentation that shows "Recommended Sleep Disturbance Dose Response Relationship Percent of Awakenings per SEL". It includes very questionable data; for instance there

are 3 data points of noise levels between 90 dB and 100 dB, measured at "Indoor Sound Exposure", which resulted in zero awakenings. Clearly a very unrealistic situation. The consultant has stated publicly that this data is "unusual" (Sea-Tac Part 150 discussions). We believe this data should be removed and not used in any analysis.

#### 4. Noise levels predicted to increase

We are very concerned that despite community demands that the noise levels be reduced at KCIA, the Part 150 noise study has projected an *increase* by 2006, and that there will be nearly 50% more people impacted within the 65 DNL noise contour from KCIA operations.

Using Tables D1 and D2, the impact of the increase in noise levels between 1999 and 2006 can be evaluated. For example, over this period, the area within the 65 DNL contour increases from 3.5 sq. miles to 4.5 sq. miles (+29%), the number of housing units in the 65 DNL contour increases from 1327 units to 1955 units (+47%) and the number of residents within the 65 DNL contour increases from 3251 to 4790 (+47%). Similarly, significant increases are observed for people in the 60 and 55 DNL contours.

Whereas most airports in the country have programs that are resulting in a *reduction* in noise levels over adjacent communities, KCIA makes the statement in this study report, that noise *increases* are planned -- a regrettable state of affairs. Further, there is no statement that implies when the noise levels will return to 1999 levels, or be reduced as required by County Council Motion 10565 and the 1998 Noise Reduction Work Plan.

FAR Para. 150.23 (e) says "*Each noise compatibility program submitted to the FAA must consist of at least the following: (5) The actual or anticipated effect of the program on reducing noise exposure to individuals .....*" (emphasis added) It appears clear to us that one main objective of the Part 150 study is to show how the noise levels caused by airport operations can be reduced. Unfortunately this study predicts increases in noise levels in the next 4 years, without proposing any plan for actual reduction. On that basis, this study appears to fail the requirements of FAR Part 150. At the very least, the study should predict when the noise levels would begin to decrease to below "today's" values.

#### 5. Flight Tracks

The Part 150 is a noise study, and as such should provide the FAA, the County, and the public opportunity to identify any differences between *planned* flight tracks and *actual* flight tracks, as a means to explain actual noise levels at a

particular location. Standard departure and arrival tracks are depicted in Fig A4 and A5. However these are *actual* flight tracks and do not show where the *planned* flight tracks should be. These planned tracks need to be illustrated for all aircraft types, from the tracks for small propeller GA (General Aviation) performing training touch and go's, to the arrival and departure tracks for large cargo jets.

## 6. Northflow departures

One aspect of northflow (north bound) departures, that contributes to noise complaints by residents, is the poor adherence to following a precise track over the Duwamish Industrial Area, and through the center of Elliot Bay, especially at night. The use of Flight Management System (FMS) technology and Global Positioning System (GPS) technology can significantly reduce the imprecise (sloppy) flight tracks that cause sleep disturbances over areas such as West Seattle and Magnolia. More and more aircraft, especially large jets, are equipped with FMS, and could use an FMS departure if one was authorized and published by the FAA. Sea-Tac reports recently that 60% of their operations have FMS capability. Fig 4 attached, shows an example of the improvement that can be expected in flight tracks using FMS, as presented at the Sea-Tac Part 150 study.

We note that both the Study Advisory Committee and the consultants in their recommendations (Pg. I. 8) supports the use of an FMS departure for northflow, and the consultants' report indicates that "...over 600 would be expected to benefit from this procedure within 65DNL, and many more would benefit at lower annual average noise levels". The Airport Proposal fails to make this recommendation, and without explanation. We believe that the Part 150 recommendations should include the development of an FMS departure through Elliot Bay, and that all aircraft equipped with FMS should be required to use it.

## 7. School noise impacts

Pg A 33 states the requirements of Washington State on Site Approval for Schools. It identifies an hourly LEQ limit of 55dBA during the time school is in session, and a limit of 45dBA for the interior noise levels. The Part 150 noise analysis does not appear to provide the measurements of noise levels corresponding to the State requirements at the three schools (Cleveland High School, Maple Elementary and St. George's' Schools) that are within the 65 DNL contour. We do note (and endorse) that KCIA is recommending a noise insulation program for each of them, however, it appears no noise survey was conducted at the schools to ascertain the *actual* interior noise levels.

We believe an interior/exterior noise survey should be carried out as soon as possible at each school, and the information provided to the school district, the students, and their parents.

## 8. Main runway extension

The Part 150 has made some assumptions based on draft versions of the Master Plan Update that has been in preparation for the past 7 years. This includes a proposed extension of the main runway. Statements have been made that, because of non-compliance of the main runway to FAA safety requirements, an extension of 880 feet at the north end is required. This will put the aircraft powering up for takeoff at less than 1500 feet from homes in Georgetown, which we consider to be an unacceptable situation.

One proposed reason for such an extension is that 10,000 feet of runway is required for AWACS operations, conducted by the Boeing Co. Page A1 erroneously states that The Boeing Co. maintains the world's fleet of AWACS at the airport. AWACS maintenance occurs at the appropriate AWACS maintenance bases. In the U.S. that is accomplished at Tinker AFB in Oklahoma. AWACS work that does occur at the airport is generally specialized testing of new updates, which involves a test AWACS, and requires very limited number of operations each year. It is our estimate that >99.5% of the time (on average over a yearly period), AWACS can take off and land at respective maximum weights, with a runway length of 9120 feet. For the rest of the <0.5% of the time, alternative options exist, such as take-offs at less than maximum take-off weight.

The second sentence of page A2 implies that the proposed addition of 880 feet of runway to the north end is to "...meet FAA dimensional requirements on the southern end of the runway" This is erroneous since the FAA does not determine the length of runways at airports. The FAA's requirement is for an adequate safety area which at present the airport is in violation. The airport can and should, easily and immediately, satisfy the needs of the FAA safety requirement by shortening the 10,000 foot runway by 880 feet at the south end.

In summary, technical data has yet to be presented that shows a need to extend the runway by 880 feet to the north. It is our view that all current aircraft can operate safely in and out of KCIA with a main runway length of 9120 feet, and therefore the Noise Study should address the effects of a 9120ft main runway, without the proposed 880 foot extension.

## 9. Financial Plan

Para. 150.23 (e) states, *"Each noise compatibility program submitted to the FAA must consist of at least the following:.....(8) The period covered by the program, the schedule for implementation of the program, the persons responsible for implementation of each measure in the program, and, for each measure, documentation supporting the feasibility of implementation, including any essential governmental actions, costs, and anticipated of sources of funding, that will demonstrate that the program is reasonably consistent with achieving the goals of airport noise compatibility under this part"*.

Other than a 1-page "Financial Plan for Part 150 Budgeting", attached to the Airport Proposal, the study does not meet the requirements of Part 150.23 (e). It appears this area needs substantial improvement before submittal to the FAA. Of course we recognize that major financial undertakings are a matter for decision by policy-makers, not by the Airport. Our strong recommendation is that the budget staff be given direction to prepare a Financial Plan based on full implementation of the recommendations from the Airport, and also including the items we have identified as recommended additions to the over-all program.

#### 10. Use of Landing Fees to fund noise reduction program

As we understand it, KCIA is an enterprise unit, which requires revenues collected to be used only for the unit, and not for funds or activities not associated with the airport activities. User fees are one way that KCIA collects revenue. One form of user fees is Landing Fees. (see Page G 72). Since the noise reduction program is required because of the "users", what better way to assist funding of such a program than by applying a reasonable fee to each user?

The current Landing Fee schedule has not changed since the 1970's and the fees only apply to less than 10% of all the landings at KCIA. Consequently it is the residents who have been impacted by the lack of funding an effective noise reduction program, who are subsidizing the operators that create the noise. The statement that "At KCIA landing fees are charged to all commercial operators." (Page G.72) is only true if you consider fee-paying businesses and passenger services. The fact is that most landings (more than 90%) at KCIA including, private GA, business jets, corporate aviation, helicopters, and Boeing operations, pay no landing fees. The statement that "The landing fee at KCIA has not been changed for some time,....."(see Page G.72) appears to obscure the fact that "some time" is 25 years -- an inexcusable lapse in revenue opportunity.

It is interesting to note that in 2000, an FBO (Fixed Based Operator) at KCIA has been advertising their business to aircraft operators with the statement: *"REMEMBER..... There are no landing fees or noise abatements at Boeing Field."* (See Fig 3 attached). This kind of action by operators at KCIA suggests that businesses are making money at the expense of the residents' quality of life.

It is a deplorable state of affairs, and should be vigorously discouraged by the County.

This situation reflects a reason for the unfortunate sentiment by some impacted residents, that KCIA is set up to predominantly benefit those that can afford to operate and use private aircraft, at the expense of the quality of life for those impacted by the airport.

Our last examination of the Landing Fee topic showed that the airport charged \$0.35/1000 lbs. landing weight for only cargo and revenue passenger aircraft, resulting in between \$200,000 and \$300,000 annually in recent years. In contrast Sea-Tac, when last checked, levied a rate of approximately \$1.50/1000 lbs. for *all* landings. A modest increase in landing fee applied to *all* landings at KCIA could raise between \$500,000 and \$1,000,000 annually.

We believe it is most appropriate that landing fee schedule be revised to provide a substantial fund for addressing noise issues in the community.

#### 11. Nighttime closure of airport

This study recommends the initiation of a FAR Part 161 study to restrict all Stage 2 aircraft operations at night. We concur with this recommendation. We understand the study considered but rejected the idea of shutting down the airport at night to all traffic.

Whereas we would not recommend total closure of the airport for the entire night (between 10 p.m. and 7 a.m.), we believe it is appropriate to close the airport for part of the night. For example between the hours of midnight and 4 am, when residents expect to have no sleep disturbance, and when operations at the airport are already at a low. During this period, closure would not cause undue impact to commerce, yet would give nearby residents assurance of not being disturbed now or in the future.

The proposed insulation program will be insufficient to bring the nighttime sleep disturbance problem under control. It is single loud noise events that cause awakenings, and there are many such events experienced far outside the boundaries of the FAA assisted noise insulation program.

Nighttime closure occurs at many airports across the country, some for periods up to 8 hours; many of these airports have more jet traffic than KCIA. In addition, cost savings would be achieved by closing the ATC (Air Traffic Control) tower for this period. We therefore recommend that the Airport initiate a FAR Part 161 for closure of the airport during part of the night.



## 12. Georgetown Steam Plant

Noise impact on the Georgetown Steam Plant, on the list of historical sites under the National Register, has not been detailed. This facility, as well as being of historical importance, is also used as a training facility, including schooling of students. The mitigation of the noise impacts on this facility must be addressed in detail.

Paragraph 150.23 (e) (4) requires "*A description of public participation and the consultation with officials of public agencies and planning agencies in areas surrounding the airport, FAA regional officials and other Federal officials having local responsibility for land use depicted on the map, any air carriers and other users of the airports.*" We did not find such description of consultation with government authorities related to the Georgetown Steam Plant, in particular with the Federal authorities that have jurisdiction over the facility as a National Historical site, or with the City of Seattle authorities that own the facility. It appears that the facility is within the existing 75 DNL contour, though it is very difficult to determine how much higher the actual noise level is, because Fig C15, the Existing DNL Contours does not have sufficient detail, because of its scale. Similarly, Fig C 25, the predicted 2006 DNL contours, is also of the same scale. Because of the Steam Plant's importance, it would seem that the requirements of the Part 150 should necessitate a section on the Steam Plant with an analysis and comments by the government entities that have responsibility for the facility.

## 13. Document Quality

In general the document organization and identification could use some improvement before submittal to the FAA. The overall document has no date of issue, and the Airport Proposal has no date and no signature. The Table of Contents has no page numbers against line items. The page containing the Financial Plan has a date but no page number. Sections 8 and 9 have no material, but are identified as "Reserved for adopted Noise and Land Use Compatibility Program" without explanation.

Page A2 has the statement: "A copy of the Work Plan is contained in the Appendix" but there appears to be no copy of the Work Plan in Appendix. Section 5, Aviation Activity Demand Forecast is identified as "Draft Report" but we find no Final Report. Section 5, Noise Analysis is identified as "Draft Report" but we find no Final Report. Fig C10 has the location of Noise Monitor NHS 7 incorrectly located.

The Study Advisory Committee (SAC) report, in contrast to the other reports, is well organized, easy to read, and the table of recommendations is a good summary of their considerations and conclusions, as well as those of the consultant.

#### 14. Further study recommended

The Part 150 study recommended that a FAR Part 161 study be started to restrict nighttime operations of all Stage 2 aircraft. We agree. Major changes in operational procedures at airports require special FAA approval, and that approval process includes a requirement for a special type of study, performed in accordance with the provisions of Federal Air Regulation Part 161, rather than being included in a Part 150 study. Major changes in operational procedures have a strong potential for reducing noise as experienced by people on the ground.

Our organization, and other citizen groups, have long advocated several measures to reduce KCIA operational noise that impacts residential areas; the Part 150 study found merit in further examination of such measures. But going through the Part 161 study process is a mandatory requirement before most noise-reduction steps may be taken. The FAA has encouraged airports to conduct Part 150's and Part 161's concurrently when appropriate. We urge the that the Airport proceed immediately with the follow-on steps to initiate a Part 161, while maintaining the momentum achieved by this Part 150.

(4) FIGURES

Figure 1

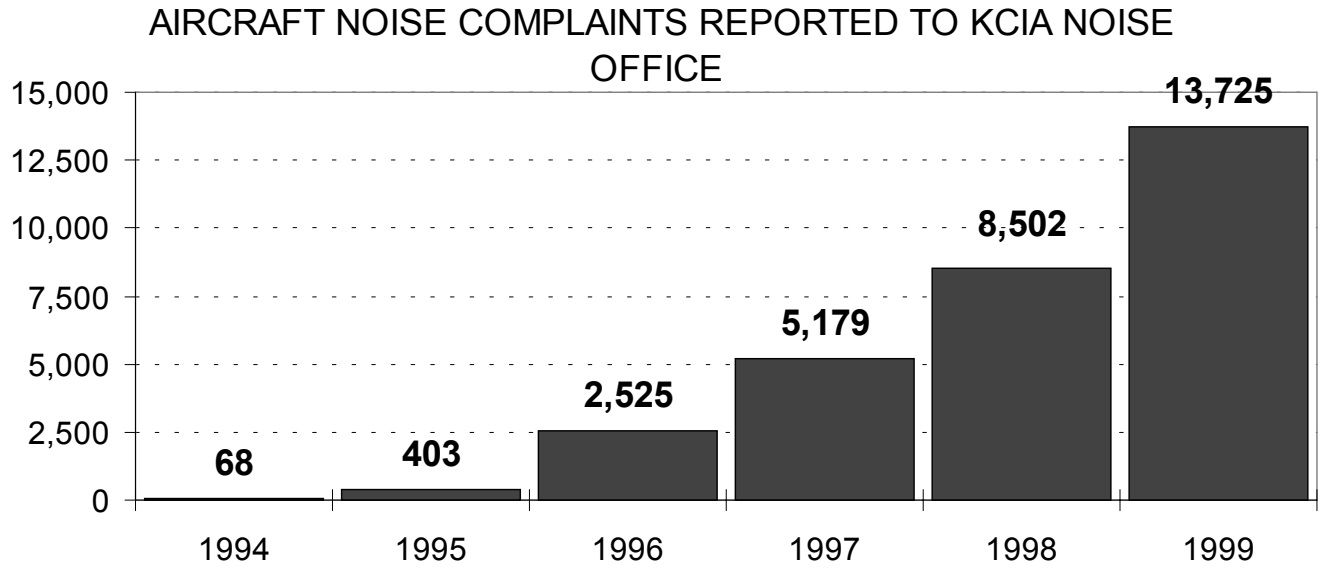
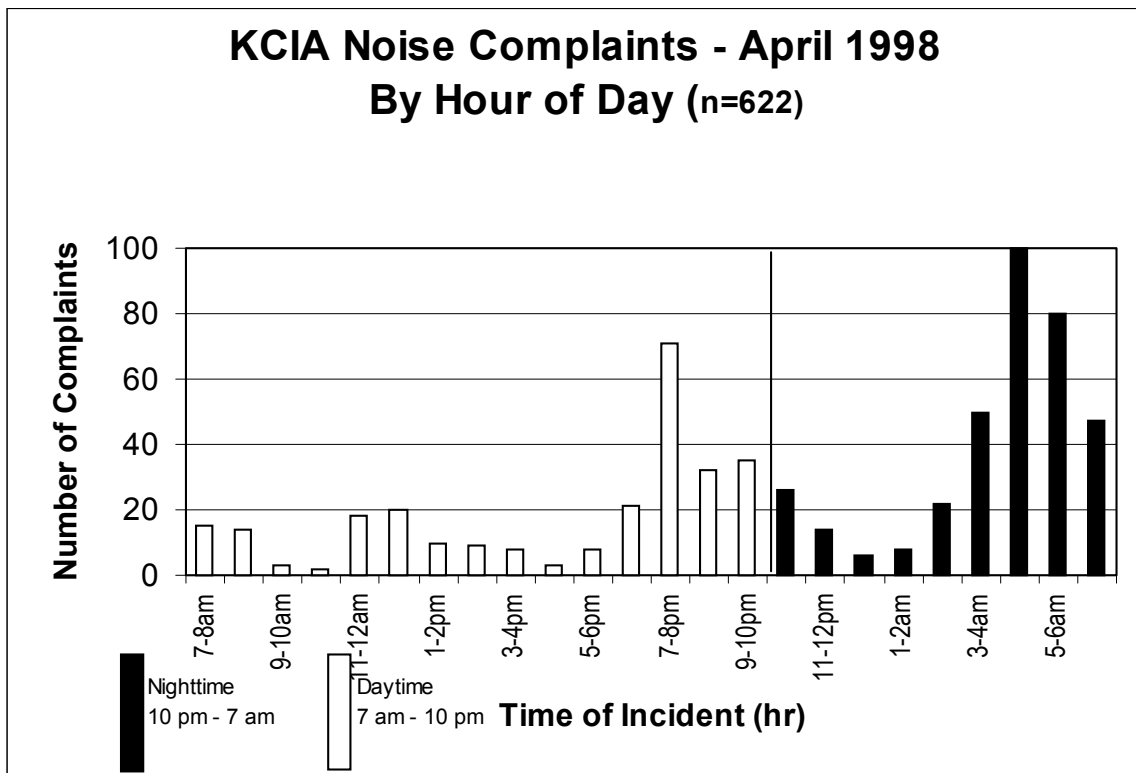


Figure 2



## Figure 3

FBO Advertising "No landing fees or noise abatements"

## Figure 4

Sea-Tac Part 150 example of Elliot Bay tracks with and without FMS

## **(5) REFERENCES**

Letter, Cynthia Stewart to Ron Sims, dated February 22, 2002, Airport proposed Noise and Land Use Compatibility Program (Part 150 Noise Study), transmittal letter.

Electronic Code of Federal Regulations (e-CFR) 14 CFR Part 150, Airport Noise Compatibility Planning, current as of the Federal Register dated March 12, 2002.

King County Council, Motion 10565, King County International Airport Noise Reduction Work Plan, adopted October 12, 1998.

King County International Airport/Boeing Field, Part 150, Scope of Work, dated January 20, 1999.

Letter, Cynthia Stewart to Roundtable and Part 150 Study Advisory Committee, dated April 2, 2001, Impacts on West Seattle of the Increased Charted Visual Use.

(6) King County Motion 10565

(7) KCIA Noise Reduction Work Plan,