December 20, 2014

Memorandum to: Councilwoman Kathee Burke-Gonzalez

From: Airport Planning Committee, Noise Sub-committee

Re: Twelfth Preliminary Findings and Recommendations – Final Proposed Noise Control Measures

At its meeting on December 1, 2014, the Noise Sub-committee approved for submission to the Town Board certain proposed noise control measures as set forth in its Tenth Findings. In the intervening two weeks, the committee has been further informed by the presentations on December 2, 2014 by HMMH and Kaplan, Kirsch & Rockwell to the Town Board of the results and conclusions of the Phase 2 noise study and the completion of the noise complaint analysis by Jim Matthews, member of the Noise Sub-committee and chair of the Northwest Alliance, submitted to the Town Board as our Eleventh Findings. In response, the Noise Sub-committee has revised its recommendation to include a measure limiting noisiest types to one roundtrip per week throughout the year and imposing the suggested noise pollution surcharge based on a targeted number of operations by noisiest aircraft.

The proposed noise control measures are attached hereto as Exhibit A.

We believe that these proposed measures are consistent with and wholly justified, indeed necessitated, by (i) the analysis in the Phase 1 noise study of exceedances by aircraft of the standards in the Town's own noise ordinance, (ii) the analysis of the large number of aircraft noise complaints by HMMH in the Phase 2 noise study, (iii) the

analysis of relevant factors contained in the Noise Sub-committee's Eighth Findings on measures to be considered, (iv) the committee's Ninth Findings on definition of the airport noise problem, (v) the Eleventh Findings on analysis of noise complaints, and is supported by (vi) the opinion of the D.C. Circuit Court of Appeals in *Helicopter Ass'n Int'l, Inc*. v. *FAA*, 722 F.3d 430 (D.C. Cir. 2013) regarding the relevance of noise complaint data and the obligation of government to protect residents from aircraft noise, (vii) the opinion of the D.C. Circuit Court of Appeals in *Air Transport Association of America, Inc*. v. *Dep't of Transportation*, 613 F.3d 206 (D.C. Cir. 2010) regarding the utility and legitimacy of "congestion pricing" at even federally-obligated airports, and by (viii) the authority of the Town under the judicially and congressionally recognized "airport proprietor's exception," as construed and interpreted by the Second Circuit Court of Appeals in *National Helicopter Corp*. v. *City of New York*, 137 F.3d 81 (2d Cir. 1998) and *SeaAir NY, Inc*. v. *City of New York*, 250 F.3d 183 (2d Cir. 2001).

These legal sources, taken together, make it absolutely clear that, upon the effective expiration of those FAA grant assurances, 22a, 22h, 29a, and 29b, previously binding on East Hampton Airport and no longer binding after 2014 by which the FAA controls airport access at federally-obligated airports, the Town Board will have broad authority under the proprietor's exception to adopt any and all measures that would reasonably serve to protect the community from airport noise. These include the exclusion of aircraft based on time of day, day of the week, and season, the exclusion of aircraft based on how noisy they are relative to other aircraft, and limitations on the number of operations permitted in a given time period. Further, the Town is permitted to consider the social value to the community of different classes of aviation operations and

to reduce operations overall, with the objective of reducing noise, by specifically targeting for exclusion those classes that are deemed to have the least social value. The proposals of the Noise Sub-committee are amply supported both by the evidence of the burden of airport noise on the community and by judicial precedents allowing a municipal airport proprietor to act to protect the community.

Various claims that the Town Board's legal authority will be "limited," notwithstanding the expiration of the relevant grant assurances, are a clear misconstruction of the scope of the proprietor's exception. Due to federal preemption of control over air navigation, the Town's authority is indeed *limited to controlling airport access for the purpose of controlling noise*. Efforts to limit airport access for other purposes would indeed likely be struck down by the courts. But, so long as the Town Board's measures are clearly directed at reducing airport noise and treat like aircraft alike, the Town Board has broad authority to set access rules for its own airport. Although it is also necessary that such rules not be an "undue burden on Interstate Commerce" there is no likelihood of that being the case at a general aviation airport such as East Hampton that does not have any scheduled passenger service.

Helicopter noise and nighttime noise were previously identified by the Noise Sub-committee in its Eighth Findings as acute problems to be addressed with the highest priority. The results of the complaint analyses of HMMH and Jim Matthews make it certain that both a curfew and measures directed at helicopters are overwhelmingly supported by the data. The public is five times more sensitive to helicopter noise than to the noise of propeller aircraft, the types that the airport has traditionally served and was intended to serve. Helicopter noise also generates complaints at two and half times the

rate as for jet operations, the source of the next most intrusive class of aircraft noise. Overall, 70% of noise complaints are attributable to helicopters. As a result, the Noise Sub-committee proposes that helicopters that are defined as among the "noisiest types" of aircraft be excluded from East Hampton Airport at all times and that helicopters defined as among the "noisy types" of aircraft be excluded during summer weekends and holidays, as defined.

The analysis of exceedances in the Phase 1 noise study shows that half of the 30 million annual exceedances by aircraft of the noise standard in the Town's own noise ordinance are attributable to the night period of 7 pm to 7 am as defined in the ordinance. Time of day complaint analyses undertaken by HMMH and by Mr. Matthews show clearly that the public is much more sensitive to noise during evening hours, nighttime, and early morning. The more refined analysis undertaken by Mr. Matthews shows that complaint data support a curfew from either 8 pm to 8 am or from 5 pm to 9 am (the latter, "business hours-only" operations). The Noise Sub-committee has considered the disparate noise impact of noisiest and noisy aircraft and proposes that noisiest types be excluded during the period 5 pm to 9 am and that all but the quietest aircraft, as defined, by excluded during the period 7 pm to 8 am (the period of the curfew in effect at Southampton's Heliport).

Mr. Matthews complaint analysis, particularly his adjustment of noise complaints for population, shows us that noise is not less of a problem off-season, although fewer people are affected because the population is only approximately 25% of the peak in the summer. To suggest that airport noise is only a problem when local population swells in the summer would be, in effect, to suggest that the year-round population is not worthy of

protection from noise, that only summer residents deserve this protection. The Noise Sub-committee therefore proposes that noisiest types of aircraft by limited to one round-trip per week, a landing and a take-off, per aircraft, as identified by tail number. This serves to limit operations by noisiest types while distributing equitably the number of operations by noisiest types deemed acceptable.

The complaint analysis by HMMH shows that public sensitivity to noise rises with the frequency of operations. As well, seasonal peaks in operations occur during the very periods, summer weekends and holidays, when the community most wants to savor the peace and quiet of the outdoors, whether at home or partaking of the beauty of the beaches and preserved areas that are the special attraction and bounty of the East End. The Noise Sub-committee therefore proposes that, during summer weekends and holidays, a noise pollution surcharge by applied to all operations, both landing and take-off, by aircraft defined as noisiest types with the goal of limiting the numbers of such operations to an average of approximately four per hour during these periods while still allowing flexibility overall to accommodate aviation demand. In direct response to concerns expressed by the Town's aviation counsel, Kaplan, Kirsch & Rockwell, the committee has re-framed this proposal so that it falls squarely within what has been previously been accepted by the D.C. Circuit Court of Appeals for permitted "congestion pricing" at even a federally-obligated airport. We are therefore confident therefore that this measure will pass muster with the federal courts.

Touch and go operations, even by light aircraft, present a particular problem because the aircraft never gains altitude and departs the area, remaining within the traffic pattern and repeatedly over-flying the same residences within a very short span of time -- on the order of very two to four minutes. The 1989 Airport Master Plan therefore called

for prohibition of touch and gos from noon Friday to noon Monday, May through September. This was never implemented due to FAA objections under the grant assurances. The assurances are no longer relevant after the end of 2014.

Noisiest types would *de facto* be prohibited from touch and gos by the limitation to one landing and take-off per week. The Noise Sub-committee therefore proposes that this measure that should have been implemented in 1989 finally be implemented with a ban on summer weekend and holiday touch and gos by aircraft defined as noisy types. Touch and gos by the quietest aircraft would be permitted but discouraged by not being exempted from landing fees.

We also wish to draw the Town Board's attention to the origin of the committee's definition of "noisiest types" of aircraft, those that are primarily subject to access rules (the only exceptions being the 7 pm to 8 am curfew and the restriction on summer touch and gos that would also apply to "noisy types" of aircraft).

The traditional and intended use of the airport has been to serve local aircraft owners, piloting their own aircraft for recreation or their own transportation. The airport was never designed to be a jetport. Indeed, the 1989 Airport Master Plan concluded that the design of the airport to accommodate business jets would be "incompatible with the character of the community." At that time, helicopters were so rarely seen at East Hampton Airport that they were not even mentioned. Since then, helicopters and commuter seaplanes have grown to be an enormous burden on both East Hampton residents and those of neighboring towns.

This was never designed or intended. It was the result of growth of noisy types of traffic, jet, helicopter, and seaplane, at a time when the Town's hands were tied. It was precluded by extant FAA grant assurances form responding to the unanticipated change

in the use of the airport. As the relevant grant assurances will effectively expire at the end of 2014, this is now the very first opportunity for the Town to address the problem of unwanted and unintended airport noise.

The Noise Sub-committee's definition of "noisiest types" applies almost exclusively to those aircraft types that are noisier, as measured by the FAA's two noise scales, EPNdb and dBA, than the vast majority of light aircraft, principally propeller-driven, piston-engined aircraft, that are those flown by recreational pilots. The Noise Sub-committee wishes to support the traditional use of the airport. Hence, the proposed rules impose only very slight limits, as to night operations and touch and gos, on such aircraft.

Aircraft that are similarly noisy to, and no more disturbing to residents than, such light aircraft should be permitted as well. Hence, the line drawn is one that separates traditional users of the airport from noisier types that are generally flown for commercial purposes. The line is imperfect. There are a small number of unusually noisy light aircraft that are within the noisiest category. That is, however, appropriate, as they are as disturbing as noisy jets. On the other hand, there are quiet types of jets and turbo-props that are below the line. This affords users the opportunity to transition to quieter types and avoid access restrictions.

The ultimate airport noise policy objective of the Town should be to eliminate this noisiest traffic entirely, by inducing airport users to employ existing quieter types, so that that all aircraft types using the airport are similar in their noise impact to the aircraft flown by local pilot-owners for their own pleasure and transportation.

This is achievable. In all cases of noisier aircraft types, helicopter, jet, and turbo-prop, there are models of aircraft that are not noisier than light piston aircraft. Aircraft

owners have much quieter alternatives that they must ultimately be required to employ in order to enjoy continued access to East Hampton Airport. Given the existence of technological alternatives, it would be unconscionable if aircraft owners were permitted indefinitely to impose oppressive noise on the community by employing less than the quietest types available.

The Noise Sub-committee recognizes that it would be impracticable simply and abruptly to prohibit operations by noisiest types outright. The proposal here allows a significant number of such operations to continue for the time being with the hope and expectation that, in order not to be restricted in their access to East Hampton Airport and to avoid noise pollution surcharges, aircraft owners and operations will over time convert to models that are not noisier or more disturbing than the light, owner-piloted aircraft for which the airport is intended.

Attached as Exhibit B-1 is a schedule of the aircraft types using the airport in 2013, the last year for which data were made available to use, showing which aircraft types are classified as noisiest, noisy, and quiet under the proposed rules. Attached as Exhibit B-2 is an analysis of the breakdown of 2013 aircraft operations into the various categories by overall category, helicopter, jet, turbo-prop, and piston.

Finally, attached as Exhibit C is an analysis of the *pro forma* effects of the proposed rules on operations, annually and in the summer, by the four aircraft categories, helicopter, jet, turbo-prop and piston. It can be seen readily that piston aircraft, overwhelmingly in the noisy and quiet categories, are little affected by the proposed noise control measures. Quieter jets and turbo-props that are not noisier than these piston aircraft are similarly little affected. The effect of these proposed rules is therefore to begin to return East Hampton Airport to its traditional use by recreational aircraft while

allowing access by other types and operations that are not more burdensome to the public.

This proposal is not submitted as a menu of alternatives. For technical, financial, and legal reasons, all its elements are necessary and together form an integrated whole. The various elements support each other so that the total outcome is one in which the community succeeds in recovering its essential semi-rural character, its peace, quiet, and repose, while the airport is able to continue in operation for its traditional and intended uses on a financially stable basis without any need of further FAA airport grants.

It is well understood by the Noise Sub-committee that there is considerable redundancy in these rules. That is by design. Although we believe strongly that each of these rules, separately and taken together, falls well within the ambit of what is permitted by the Second Circuit Court of Appeals for a municipal airport owner, there is always some legal uncertainty. If, as appears likely, the commercial operators seeking to continue unrestricted access to East Hampton Airport, no matter the burden they impose on residents, sue the Town, it is essential that the Town not rely on only a single measure. The redundancy is necessary to ensure that, if a court should find fault with some aspect of the proposed rules, the community will not be left without protection during the summer of 2015, as it is highly unlikely that a court would find fault with every measure even if it should find fault with one.

It is also the case that there is much greater risk to the community in seeking too little than in perhaps seeking too much. As written above, we believe all these rules are well within what is allowed by the courts. But if the Town seeks to reduce legal risk by asking for too little protection for residents, a court will not re-write the rules to maximum effect. The Town and its residents will be stuck with too little.

If on the other hand a court should find that the Town has exceeded is authority, there is nothing lost by the Town having asserted broad authority in good faith. That is the government doing its job. Accordingly, legal risk is minimized if the Town Board adopts all of those rules that it believes are justified by the need to protect residents from airport noise while preserving the traditional and intended use of the airport. Anything less would be a disservice to the community and would only tend to prolong the civil discord that has surrounded the airport for more than 30 years.

The Town Board should use its best judgment as to rules that would overall serve the best interests of the community. It is overwhelmingly likely that the judgment of the municipality will be supported by the federal courts, as it was in the *National Helicopter* and *SeaAir* cases and in the case of the Montauk ferry terminal, won decisively by the Town of East Hampton for the well-being of residents.

With such technical changes as to form as may be required to conform to the requirements of incorporation into the Town Code, we respectfully propose and urge the Town Board to notice for public hearing and adopt the attached proposal as its airport noise control ordinance.

Respectfully submitted,

Airport Planning Committee,
Noise Sub-committee

Exhibit A

A. General Provisions:

1. Anything that follows to the contrary notwithstanding, restrictions below shall not apply to: (i) operations by government aircraft of any jurisdiction, including police, fire, and emergency services, (ii) any emergency services or evacuation operations, whether public or private, or (iii) any operation by aircraft in an emergency. The airport will be open to all such operations at all times without limitation, charge, surcharge, or penalty.

2. If any of the provisions below shall be unenforceable, whether temporarily or permanently, due to an order or judgment of a court of law or administrative agency, the other provisions shall continue to apply as written. If at any time more than one provision below applies to the same aircraft operation, the most restrictive shall be deemed to be applicable and control.

3. (a) Certain definitions:

(i) "Operations" means departure (take-off) and arrival (landing) operations, but does not include repositioning of aircraft within the airport.

(ii) "Touch and go operation" is defined as any arrival operation after which the aircraft does not return to an aircraft parking ramp and come to a full stop before departing again.

(iii) "Quiet types" are defined as aircraft of whatever type and propulsion, jet, turbo-prop, or piston engined, fixed wing or rotary, having a published FAA dbA rating below 75.

(iv) "Noisy types" are defined as aircraft of whatever type and propulsion, jet, turbo-prop, or piston engined, fixed wing or rotary, that are not affirmatively classified as "quiet types." "Noisy types" includes "noisiest types."

(v) "Noisiest types" are defined as aircraft of whatever type and propulsion, jet, turbo-prop, piston or engined, fixed wing or rotary, having a published FAA EPNdB rating of 91 or above (on any of the three measures, AP, TO, FO) or a published FAA dbA rating of 80 or above.

(b) The Town will publish, by NOTAM, lists of noisiest types, as so defined, and quiet types, as so defined, and other information for airport regarding the provisions hereof including hours of operations and applicable noise pollution surcharges.

(c) Types not noise-rated by the FAA shall be presumed to be in the "noisiest type" category and so classified, but may apply for a permit that determines whether they are noisiest types or not or quiet types or not based on the Town's designated sound and aviation engineers's opinion, costs to be reimbursed by the applicant. The Town may, in its discretion and at its own expense, initiate determinations by the Town's designated sound and aviation engineers of the proper classification of types not noise-rated by the FAA. In each case, the published lists will be adjusted according to the results.

B. Airport Noise Restrictions:

1. Operations at East Hampton Airport by aircraft classified as noisiest types are prohibited from 5 pm to 9 am all days.

2. Operations at East Hampton Airport by aircraft classified as noisy types are prohibited from 7 pm to 8 am all days.

3. Operations at East Hampton Airport by helicopters classified as noisiest types shall be prohibited at all times on all days.

4. Aircraft classified as noisiest types are prohibited from conducting more than two operations per aircraft, as identified by aircraft tail number, one arrival operation and one departure operation, or vice versa, at East Hampton Airport during any single calendar week, defined as the period Sunday through Saturday, throughout the year.

5. Seasonally, from May 1 through September 30, operations at East Hampton Airport by helicopters classified as noisy types are prohibited from noon each Thursday until noon the following Monday, on all Federal holidays, and on the day preceding and the day immediately following any Federal holiday.

6. (a) Seasonally, from May 1 through September 30, each arrival and each departure operation at East Hampton Airport by an aircraft classified as a noisiest type occurring between noon each Thursday and noon the following Monday, on any Federal

holiday, or on the day preceding or immediately following any Federal holiday shall be subject to a noise pollution surcharge at the rate determined under sub-paragraph (b).

(b) The policy objective of the noise pollution surcharge shall be to reduce total operations by aircraft classified as noisiest types during the period in which the surcharge is in effect to not more than 120 in any such period. The amount of the surcharge shall be adopted by the Town Board by resolution from time to time in its discretion in order to achieve the policy objective consistent with the Town Board's assessment from time to time of aviation demand, the stability of airport finances, and applicable law. An increase shall be upon not less than 14 days' published notice. Subject to compliance with the State Environmental Quality Review Act (SEQRA), a decrease may be effective at any time in the discretion of the Town Board.

7. (a) Seasonally, from May 1 through September 30, touch and go operations at East Hampton Airport by aircraft classified as noisy types are prohibited from noon each Thursday until noon the following Monday, on all Federal holidays, and on the day preceding and the day immediately following any Federal holiday.

(b) All touch and go operations shall be subject to landing fees during the period May 1 through September 30.

Exhibit B1 - Noise Category by Type for 2013 Operations

ActivityDateTime	rcraftNumb	Mfr	Name	Model/Type	MLW	AAC	dBA	EPNdB	Activity	Category	Landings
		Noisiest									
4/26/13 4:41 PM	N888TW	Learjet	24	LJ24	11880	C		103.9	Arrival	Jet	1
12/1/13 10:42 AM	N951DJ	Dassault	Falcon 50	FA50	40783	B		97.4	Arrival	Jet	29
9/1/13 12:51 PM	N117MS	Gulfstream	III	GLF3	58500	C		96.8	Arrival	Jet	2
12/26/13 9:08 AM	N21FX	Raytheon	Hawker 800	H25B	23350	C		96.5	Arrival	Jet	65
9/2/13 9:42 AM	N109DD	Gulfstream	II	GLF2	58500	D		96.5	Arrival	Jet	19
8/25/13 5:13 PM	N178MT	Eurocopter		AS365	7500			96.1	Arrival	Helicopter	145
11/8/13 12:38 AM	N3PD	Eurocopter		BK17	7385			96.0	Arrival	Helicopter	4
12/26/13 9:06 AM	N802HH	Raytheon	Hawker 4000	HA4T	33500	C		95.7	Arrival	Jet	10
8/27/13 6:33 AM	N802HH	Raytheon	Hawker 4000	HRZN	33429	C		95.7	Arrival	Jet	2
12/30/13 11:58 AM	N638MF	Sikorsky		S76	11700			95.6	Arrival	Helicopter	1196
11/15/13 4:50 PM	N220PA	Dassault	Falcon 10	FA10	18000	B		95.2	Arrival	Jet	20
7/31/13 1:16 PM	N145RC	Bell		B230	8400			94.2	Arrival	Helicopter	19
8/16/13 2:30 PM	N85M	Dassault	Falcon 20	FA20	28880	B		94.2	Arrival	Jet	18
12/26/13 12:21 PM	N430HF	Bell		B430	8400			93.8	Arrival	Helicopter	270
7/28/13 3:04 PM	N719HG	Cessna	Citation	C650	20000	B		93.8	Arrival	Jet	1
12/1/13 3:36 PM	N429FL	Beech	Beechjet	BE40	15700	B		93.7	Arrival	Jet	134
12/7/13 3:06 AM	N439FX	Learjet	45	LJ45	19000	C		93.4	Arrival	Jet	33
12/23/13 9:08 PM	N225AR	Canadair	Challenger	CL60	36000	C		93.3	Arrival	Jet	21
12/31/13 2:56 PM	N51FD	Dassault	Falcon 2000	F2TH	33000	B		93.1	Arrival	Jet	30
12/27/13 5:21 AM	N179MT	Eurocopter		AS355	5600			92.9	Arrival	Helicopter	321
8/5/13 2:40 PM	N68PT	IAI	Westwind 24	WW24	19000	C		92.8	Arrival	Jet	3
8/28/13 12:39 PM	N311MK	Gulfstream	G200	GALX	28000	C		92.7	Arrival	Jet	9
12/26/13 3:54 PM	N85DN	Dassault	Falcon 7AX	FA7X	34928	B		92.6	Arrival	Jet	115
8/9/13 1:41 PM	N551MF	Learjet	55	LJ55	18000	C		92.4	Arrival	Jet	2
7/18/13 12:06 PM	PRNIO	Embraer	135	E135	40786	C		92.3	Arrival	Jet	1
9/19/13 12:18 PM	N70AY	Learjet	35	LJ35	14300	D		92.2	Arrival	Jet	33
9/29/13 4:04 PM	N525NY	Cessna	Citation	C525	9800	B		92.1	Arrival	Jet	59
8/23/13 10:29 AM	N668Z	Raytheon	Premier	PRM1	11849	B		92.1	Arrival	Jet	14
8/31/13 12:58 PM	N630TF	Cessna	Citation	C526	9900	B		92.1	Arrival	Jet	2
8/30/13 7:43 AM	N480JJ	Gulfstream	150	G150	21700	B		92.1	Arrival	Jet	2
11/25/13 8:57 PM	N922N	Gulfstream	IV	GLF4	66000	C		92.0	Arrival	Jet	60
10/29/13 11:39 AM	N850TC	Raytheon	Hawker 1000	H25C	22000	C		92.0	Arrival	Jet	11
12/15/13 7:04 PM	N999EH	Dassault	Falcon 900	F900	45501	B		91.7	Arrival	Jet	64
12/21/13 12:59 PM	N6MV	AgustaWestland		A109	6097			91.4	Arrival	Helicopter	171
10/10/13 10:33 AM	N518AR	Cessna	Citation	C25A	9800	B		91.4	Arrival	Jet	15
12/19/13 8:08 AM	N353JS	Eurocopter		AS350	4600			91.3	Arrival	Helicopter	200
11/30/13 2:15 PM	N429TD	Bell		B427	4400			91.2	Arrival	Helicopter	33
11/23/13 12:07 PM	N322FL	Embraer	505	E55P	16865	C			Arrival	Jet	54
12/4/13 12:35 PM	N614FX	Learjet	40	LJ40	19200	C			Arrival	Jet	25

Exhibit B1 - Noise Category by Type for 2013 Operations

ActivityDateTime	rcraftNumb	Mfr	Name	Model/Type	MLW	AAC	dBA	EPNdB	Activity	Category	Landings
9/20/13 5:07 PM	N605AS	Embraer	500	E50P	9766	C			Arrival	Jet	19
3/31/13 9:01 PM	N330FL	Embraer	Phenom 300	EMB505		C			Arrival	Jet	1
12/19/13 5:06 PM	N318PD	AgustaWestland	Koala	A119	5400		85.9		Arrival	Helicopter	66
12/12/13 11:38 AM	N406MR	Bell	Jetranger	B06	3000		85.2		Arrival	Helicopter	23
11/30/13 6:46 PM	N401TD	Bell		B407	5000		85.1		Arrival	Helicopter	222
12/30/13 8:33 AM	N695QS	Cessna	Citation Excel	C56X	18700	B	85.0		Arrival	Jet	259
12/11/13 4:16 PM	N16CG	Cessna		C208	9000		84.2		Arrival	Turboprop	861
12/29/13 3:09 PM	N934RB	Cirrus		SR22	3400		83.7		Arrival	Piston	347
7/26/13 5:55 PM	N480LR	Enstrom		EN480	2850		83.6		Arrival	Helicopter	1
12/31/13 10:48 AM	N254CP	Cirrus		SR20	2900		82.5		Arrival	Piston	63
8/28/13 6:40 PM	N866SR	Robinson		R44			81.9		Arrival	Helicopter	27
9/28/13 6:31 PM	N780CA	Piaggio		P180	11550		81.9		Arrival	Turboprop	16
										Total	5118

Noisy

10/27/13 12:01 PM	N108NY	Gulfstream	V	GLF5	75300	D		90.8	Arrival	Jet	65
11/16/13 9:03 AM	N499GS	Cessna	Citation II	C550	12700	B		90.5	Arrival	Jet	45
8/2/13 2:45 PM	N60CP	Cessna	Citation	C510	8000	B		90.5	Arrival	Jet	5
7/26/13 11:55 AM	N797CX	Cessna	Citation X	C750	31800	B		90.2	Arrival	Jet	3
7/30/13 3:02 PM	N314AD	IAI	Astra	ASTR	24650	C		89.8	Arrival	Jet	8
8/31/13 10:50 PM	N44GX	Bombardier	Global Express	GLEX	79000	C		89.8	Arrival	Jet	6
11/29/13 9:16 AM	N526FX	Canadair	Challenger	CL30	33750	C		89.6	Arrival	Jet	111
12/13/13 3:36 PM	N294CC	Cessna	Citation	C25B	12750	B		88.8	Arrival	Jet	69
7/20/13 7:50 PM	N600GW	Mitsubishi	Diamond	MU30	13000	B		88.4	Arrival	Jet	8
8/19/13 10:40 AM	N322ST	Cessna	Citation	C501	11350	B		87.9	Arrival	Jet	3
10/16/13 9:45 AM	N292KR	Learjet	60	LJ60	20000	C		87.7	Arrival	Jet	5
10/15/13 10:25 AM	N45DJ	Eclipse	500	EA50	4600	B		81.9	Arrival	Jet	7
12/31/13 11:27 AM	N680NY	Cessna	Citn Sovereign	C680	27100	B			Arrival	Jet	175
12/7/13 11:33 AM	N827QS	Cessna	Citation V	C560	15200	B	80.5		Arrival	Jet	145
12/31/13 4:45 PM	N789TP	Aviat	Husky	HUSK	1800		80.1		Arrival	Piston	44
12/27/13 3:26 PM	N7247N	Cessna		C206	3600		79.8		Arrival	Piston	49
11/14/13 2:16 PM	N5432J	Cessna		C340	5975		79.7		Arrival	Piston	40
11/16/13 4:33 PM	N24EA	Cessna	350	COL3	3230		79.7		Arrival	Piston	24
12/26/13 6:10 PM	N6155J	Grumman		AA5	2200		79.6		Arrival	Piston	53
12/31/13 2:59 PM	N123DM	Cessna		C210	3799		79.6		Arrival	Piston	31
11/30/13 1:57 PM	N6PZ	Cessna		P210	3800		79.4		Arrival	Piston	9
12/31/13 3:05 PM	CGDGD	Pilatus		PC12	9921		79.4		Arrival	Turboprop	345
12/2/13 3:29 PM	N1180X	Piper		PA32	3400		79.3		Arrival	Piston	86
7/20/13 11:58 AM	N61390	Schweizer		H269	1240		79.2		Arrival	Helicopter	2
12/25/13 2:27 PM	N1818Y	Beech	Bonanza	BE36	3850		79.2		Arrival	Piston	181

Exhibit B1 - Noise Category by Type for 2013 Operations

ActivityDateTime	rcraftNumb	Mfr	Name	Model/Type	MLW	AAC	dBA	EPNdB	Activity	Category	Landings
12/25/13 7:31 AM	N95GJ	Beech	200 King	BE20	12500		79.2		Arrival	Turboprop	92
12/27/13 6:37 PM	N219GM	Beech	Baron	BE58	5400		79.1		Arrival	Piston	216
11/29/13 3:37 PM	N6933T	Cessna		C310	5150		79.1		Arrival	Piston	17
9/17/13 2:45 PM	N397WA	McDonnel Douglas		MD600	4100		79.0		Arrival	Helicopter	10
12/28/13 12:27 PM	N1134N	Cessna		COL4	3420		78.8		Arrival	Piston	44
9/21/13 12:05 PM	N402WB	Cessna		C402	6850		78.8		Arrival	Piston	35
11/16/13 5:09 PM	N12TV	Eurocopter	Colibri	EC120	3700		78.7		Arrival	Helicopter	7
8/27/13 2:09 PM	N60078	Beech		BE76	3900		78.7		Arrival	Piston	11
12/24/13 10:50 AM	N408WB	Piper		P32R	3600		78.4		Arrival	Piston	76
11/29/13 1:48 PM	N369FL	Beech		BE55	5100		78.0		Arrival	Piston	20
12/3/13 12:03 PM	N47MM	Piper		PA31	6000		77.1		Arrival	Piston	121
12/27/13 12:27 PM	N421ST	Cessna		C421	7200		76.7		Arrival	Piston	65
12/30/13 4:09 PM	N1067F	Mooney		M20P	2450		76.6		Arrival	Piston	121
12/30/13 10:44 AM	N813JJ	Mooney		M20T	2740		76.6		Arrival	Piston	102
11/11/13 1:33 PM	N40NY	Cessna		C414	6751		76.6		Arrival	Piston	35
12/21/13 11:46 AM	N24WE	Piper		PA34	4751		76.4		Arrival	Piston	274
11/16/13 12:58 PM	N5BM	Piper		PA24	2300		76.2		Arrival	Piston	32
12/31/13 10:03 AM	N9348F	Cessna		C72R	2450		75.6		Arrival	Piston	149
12/28/13 5:34 PM	N326RH	Piper		P28A	2400		75.5		Arrival	Piston	208
12/27/13 11:22 AM	N9239C	Piper	Cherokee	P28R	2749		75.5		Arrival	Piston	13
10/21/13 10:32 AM	N54258	Piper		PA27	4940		75.5		Arrival	Piston	9
9/15/13 3:02 PM	N9123P	Piper	Dakota	P28B	3000		75.5		Arrival	Piston	8
12/16/13 8:59 AM	N850CH	Socata		TBM7	7024		75.4		Arrival	Turboprop	58
										Total	3242
		Quiet									
12/27/13 6:41 PM	N448ST	Piper		PA46	3900		74.7		Arrival	Piston	119
3/25/13 1:12 PM	N5315R	Cessna	172	C172			73.8		Arrival	Piston	544
11/30/13 4:49 PM	N665CA	Piper	Malibu	P46T	4848		73.7		Arrival	Turboprop	8
12/21/13 10:26 AM	N899JF	Beech	Superking	B350	14000		72.1		Arrival	Turboprop	107
12/19/13 10:23 AM	N888FM	Beech	Superking	BE30	13999		72.1		Arrival	Turboprop	43
12/30/13 12:07 PM	N121B	Beech	King 90	BE9L	9600		70.4		Arrival	Turboprop	88
12/31/13 4:01 PM	N96885	Cessna		C182	2550		69.1		Arrival	Piston	437
12/27/13 10:17 AM	N757AD	Cessna		C152	1600		64.8		Arrival	Piston	14
9/29/13 4:06 PM	N18222	Cessna		C150	1600		64.8		Arrival	Piston	13
8/29/13 5:01 PM	N5351C	Cessna		C140	1450		64.8		Arrival	Piston	12
										Total	1385

Exhibit B1 - Noise Category by Type for 2013 Operations

ActivityDateTime	rcraftNumb	Mfr	Name	Model/Type	MLW	AAC	dBA	EPNdB	Activity	Category	Landings
No Rating											
11/28/13 10:01 AM	N314RG	Sikorsky		S92	26150				Arrival	Helicopter	85
12/1/13 3:37 PM	N797AZ	Eurocopter		EC155	7500				Arrival	Helicopter	70
11/30/13 1:47 PM	N423CP	Robinson		R22	2400				Arrival	Helicopter	25
7/21/13 3:10 PM	N395M	Bell	Iroquois	UH1	5000				Arrival	Helicopter	2
8/28/13 9:59 AM	N139CH	AgustaWestland		A139	14109				Arrival	Helicopter	1
8/12/13 12:46 PM	N174AM	Eurocopter		EC130	5291				Arrival	Helicopter	1
8/19/13 11:44 AM	N447WB	Sikorsky		S61	19100				Arrival	Helicopter	1
12/27/13 9:37 AM	N111EH	Acrosport		ACR2	1520				Arrival	Piston	42
8/12/13 7:55 AM	N600VF	Aerostar	600	AEST	6000				Arrival	Piston	8
12/31/13 12:59 PM	N8198T	Beech	Bonanza	BE33	3400				Arrival	Piston	68
10/19/13 12:33 PM	N350NE	Beech	Bonanza	BE35	3050				Arrival	Piston	32
10/14/13 7:12 AM	N401WB	Britten-Norman	Islander	BN2P	6300				Arrival	Piston	14
12/25/13 4:29 PM	N378JP	Champion	Decathlon	BL8	2150				Arrival	Piston	30
11/10/13 11:34 AM	N523LT	Diamond		DA40	2407				Arrival	Piston	27
10/19/13 1:41 PM	N91WW	Flight Design		FDCT	1320				Arrival	Piston	8
12/18/13 3:28 PM	N8543C	Lake	Buccaneer	LA4	2400				Arrival	Piston	25
11/15/13 11:32 AM	N3296B	Rockwell	Commander	AC11	3140				Arrival	Piston	8
9/27/13 3:45 PM	N3663B	Beriev		BE10	11804				Arrival	Turboprop	37
12/13/13 8:25 AM	N311QS	SAE		JS31	14550				Arrival	Turboprop	32
										Total	516
Few Operations											
7/27/13 9:17 AM	N41E	Cougar		1C					Arrival	Piston	1
2/15/13 2:51 PM	N12T	Cessna		310C					Arrival	Piston	1
8/25/13 4:41 PM	N9148L	Bellanca		7ACA					Arrival	Piston	1
10/26/13 3:45 PM	N6324U			AC50	6750				Arrival	Piston	5
6/16/13 2:12 PM	N94AC			AC90	7000				Arrival	Turboprop	1
3/22/13 10:30 AM	N401CK			BE18	9300				Arrival	Piston	1
8/23/13 12:27 PM	N24698			BE23	2450				Arrival	Piston	4
11/23/13 11:34 AM	N710DS			BE60	6725				Arrival	Piston	3
3/2/13 10:27 AM	N9642R			BE95	5100				Arrival	Piston	3
1/17/13 10:05 AM	N381PD	Beech		C12C					Arrival	Turboprop	1
8/5/13 8:42 AM	N3095A			C170	2200				Arrival	Piston	6
5/1/13 4:01 PM	N8025T			C175	2350				Arrival	Piston	1
12/7/13 2:42 PM	N18518			C177	2350				Arrival	Piston	4
9/12/13 11:30 AM	N67F			C180	2550				Arrival	Piston	1
8/12/13 8:42 AM	N85CF			C185	3350				Arrival	Piston	2
6/16/13 3:43 PM	N34P			C195	3351				Arrival	Piston	1

Exhibit B1 - Noise Category by Type for 2013 Operations

ActivityDateTime	rcraftNumb	Mfr	Name	Model/Type	MLW	AAC	dBA	EPNdB	Activity	Category	Landings
8/17/13 11:14 AM	N33MH			C303	5150				Arrival	Piston	1
8/24/13 11:16 AM	N320VM			C320	4750				Arrival	Piston	1
3/16/13 11:00 AM	N3CP			C337	4465				Arrival	Piston	1
9/3/13 9:16 AM	N35VC	Cessna	401	C401	6301				Arrival	Piston	4
7/20/13 11:28 AM	N426J			C404	8100				Arrival	Piston	1
8/12/13 3:27 PM	N711			C425	8195				Arrival	Turboprop	1
8/27/13 4:40 PM	N716SM			C441	9850				Arrival	Turboprop	5
12/1/13 10:15 AM	N1806R			C82R	3100				Arrival	Piston	4
8/29/13 5:57 PM	N8AT			CASS	500				Arrival	Piston	1
10/23/13 3:04 PM	N5635L			CH7B	2150				Arrival	Piston	4
8/4/13 1:58 PM	CGOGD			CL2P	28000				Arrival	Piston	1
8/25/13 3:49 PM	N24ED			CRER	1232				Arrival	Piston	5
1/7/13 3:48 PM	N385PR			CRUZ	740				Arrival	Piston	1
9/29/13 12:33 PM	N53292	Boeing		D75N1					Arrival	Piston	1
8/17/13 7:56 PM	N119BJ			DA42	3935				Arrival	Piston	3
10/2/13 3:11 PM	N68CW			DC3	25200				Arrival	Piston	1
8/23/13 3:38 PM	N577MA			DV20	1600				Arrival	Piston	2
10/4/13 12:46 PM	N618P			EPIC	4000				Arrival	Turboprop	1
8/20/13 9:41 AM	N529ET	Lancair	Evolution	EVOL	1800				Arrival	Turboprop	1
9/25/13 3:01 PM	N74TS			F50	43500				Arrival	Turboprop	1
6/15/13 11:05 AM	N9934			G164	3750				Arrival	Piston	1
8/25/13 1:46 PM	N135MG			G44	4525				Arrival	Piston	2
6/15/13 2:40 PM	N613CP			GA8	4000				Arrival	Piston	1
10/18/13 12:05 PM	N205JB			GLAS	1058				Arrival	Piston	2
6/16/13 10:12 AM	N687KB	Boekelheider Kim	Glaster	HXB	2000				Arrival	Piston	1
5/17/13 6:27 PM	N70793			J3	2000				Arrival	Piston	3
4/2/13 1:48 PM	N85DM	McCarthy		KR2					Arrival	Piston	1
6/30/13 4:53 PM	N65PC			L37	3400				Arrival	Piston	1
8/4/13 11:56 AM	N309SH			LGEZ	800				Arrival	Piston	1
11/24/13 3:54 PM	N100XT			LNC2	2300				Arrival	Piston	2
8/2/13 11:40 AM	N94AG			M7	2400				Arrival	Piston	3
9/4/13 4:11 PM	N774MA			MU2	9955				Arrival	Turboprop	1
9/27/13 3:21 PM	N26808	N American	SNJ-4	NAT6					Arrival	Piston	1
7/19/13 6:59 AM	N5291G			O1	2650				Arrival	Piston	1
6/5/13 4:36 PM	N8519Y			PA18	1760				Arrival	Piston	1
8/2/13 3:53 PM	N3585A			PA20	1800				Arrival	Piston	3
11/8/13 2:45 PM	N9228D			PA22	2000				Arrival	Piston	6
8/7/13 4:58 PM	N52HF			PA23	3800				Arrival	Piston	3
10/11/13 3:36 PM	N8670L			PA25	2300				Arrival	Piston	1
2/22/13 10:50 AM	N395MT	Piper	Arrow	PA28					Arrival	Piston	2

Exhibit B1 - Noise Category by Type for 2013 Operations

ActivityDateTime	rcraftNumb	Mfr	Name	Model/Type	MLW	AAC	dBA	EPNdB	Activity	Category	Landings
10/28/13 11:43 AM	N8906Y			PA30	3600				Arrival	Piston	5
8/16/13 3:10 PM	N381PT			PA38	1670				Arrival	Piston	2
8/1/13 1:01 PM	N2085B			PA44	3800				Arrival	Piston	2
10/2/13 11:40 AM	N2458W			PAY1	8700				Arrival	Turboprop	1
9/14/13 12:15 PM	N200XL			PAY2	8999				Arrival	Turboprop	6
4/28/13 3:46 PM	N920JB	Pilatus		PC12NG					Arrival	Turboprop	1
8/15/13 11:45 AM	N95PS			PTS2	2000				Arrival	Piston	3
8/26/13 3:22 PM	N89DA			RV10	2700				Arrival	Piston	2
7/18/13 1:42 PM	N708JS			RV3	1500				Arrival	Piston	1
4/15/13 1:13 PM	N84JA	Andre		RV8					Arrival	Piston	2
7/28/13 1:55 PM	N197MT	Rans		S6ES					Arrival	Piston	1
4/14/13 1:03 PM	N227	Rans	Courier	S7S					Arrival	Piston	2
8/27/13 9:45 AM	N19EW	Stolp	Starduster	SA300					Arrival	Piston	1
5/2/13 9:34 AM	N437SA			SKAR	1400				Arrival	Piston	1
8/29/13 7:00 PM	N3035P			SS2T	6000				Arrival	Turboprop	1
8/2/13 2:54 PM	N500SX			SW3	11500				Arrival	Turboprop	1
4/22/13 10:45 AM	N317RG	Cessna	Centurion	T210					Arrival	Turboprop	1
6/16/13 1:23 PM	N5MT			T34P	4400				Arrival	Piston	1
8/10/13 2:23 PM	N73EC			TAMP	2200				Arrival	Piston	1
11/23/13 2:50 PM	N95675			TAYB	1000				Arrival	Piston	6
9/1/13 12:09 PM	N850BB			TBM8	7394				Arrival	Turboprop	2
5/15/13 10:25 AM	N726TB			TRIN	3086				Arrival	Piston	2
5/18/13 12:17 PM	N32039			WACF	2095				Arrival	Piston	1
8/20/13 11:00 AM	N975M			WP40					Arrival	Piston	1
8/30/13 4:01 PM	N98EW		Kitfox2						Arrival	Piston	2
										Total	162

Exhibit B2 - Noise Category by Type for 2013 Operations

	Heli	Jet	Turbo	Piston	
Noisiest	2698	1133	877	410	5118
Noisy	19	655	495	2073	3242
Quiet	0	0	246	1139	1385
	2717	1788	1618	3622	9745

	Heli	Jet	Turbo	Piston	
Noisiest	99%	63%	54%	11%	53%
Noisy	1%	37%	31%	57%	33%
Quiet	0%	0%	15%	31%	14%
	100%	100%	100%	100%	100%

Exhbit C - Effect of Rules on Operations

	Annual Total	Ann Excl	Annual Allwd	Perct Allwd	Total Summer	Quieter Total	Noisy Total	Summer: Quieter Allowed	Summer: Noisy Allowed	Summer Allowd	Quieter % allwd	Noisy % allwd	Total % allwd	Noisy Excl	Total % allwd
Helo	2878	2394	23	1%	2243	16	2227	16	168	184	100%	8%	8%	168	1%
Turbo	1710	719	991	58%	1465	641	824	629	167	796	98%	20%	54%		54%
Jet	1788	523	1265	71%	1407	297	1110	291	732	1023	98%	66%	73%		73%
Piston	4017	196	3821	95%	2492	2173	319	2152	194	2346	99%	61%	94%		94%
	10393	3832	6100	59%	7607	3127	4480	3088	1261	4349	99%	28%	57%	168	55%

	Total Quieter	Excl Night	Quieter Allwd	Perct Allwd	Total Noisiest	Excl Curfew	Excl Sholdr	-- 1 Per Wk Rule -- Allowed	Excluded	Excl Season	Excl Total	Noisiest Allwd	Perct Allwd	Noisy Excl	Total % allwd
Helo	23	0	23	100%	2855	79	506	1011	1259	550	2394	461	16%	461	0%
Turbo	800	13	787	98%	910	16	175	395	515		706	204	22%		22%
Jet	368	15	353	96%	1420	43	222	1177	243		508	912	64%		64%
Piston	3560	27	3533	99%	457	5	64	357	100		169	288	63%		63%
	4751	55	4696	99%	5642	143	967	2940	2117	550	3777	1865	33%	461	25%