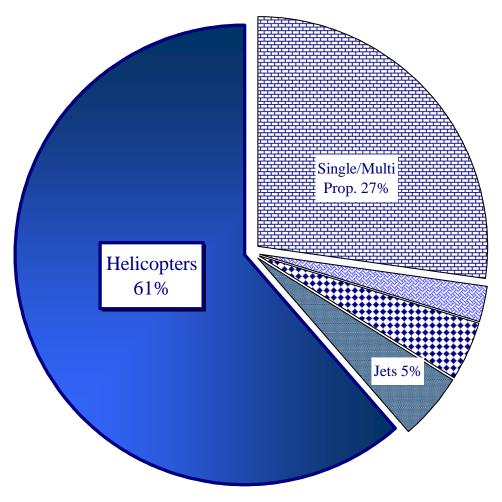
FINAL

FIVE YEAR REPORT OF THE EAST HAMPTON AIRPORT NOISE ABATEMENT ADVISORY COMMITTEE (2004-2009)

6.7 MILLION RESIDENTIAL NOISE EVENTS IN 2008



Residential Noise Events estimated pursuant to computations and assumptions described in **APPENDIX A: HTO COMMUNITY NOISE IMPACT MODEL**

December	1, 2009
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LETTER OF TRANSMITTAL & CAVEATS

This report is intended to serve as a briefing book for the incoming and continuing Town Board members, other elected officials and staff by summarizing more than five years of research and deliberation about how best to ameliorate the East Hampton Airport noise problem.

This is an update of the September 11, 2009 draft report delivered to the East Hampton Town Board, which was prepared for and approved by the East Hampton Airport Noise Abatement Advisory Committee. This final report differs from the September 11 draft mainly in that it incorporates certain communications subsequent to the September17 public hearing on the Environmental Impact Statement, including a follow-up letter to Supervisor McGintee included as Appendix C.

Since this report will be a public document, certain disclaimers are in order. Neither the computations of Residential Noise Events (see Chapter II and Appendix A) nor the forecasts in Chapter III have been audited by qualified professionals and should not be relied upon without independent verification. Nor have the legal opinions expressed herein been independently verified.

Disclaimers notwithstanding, I wish to thank the numerous professionals who have contributed to the knowledge base that has made this report possible, including Airport Manager Jim Brundige, Henry Young (Young Environmental Sciences), Peter Kirsch (Kaplan Kirsch Rockwell) and Bob Miller (Harris Miller Miller and Hanson), to name just a few. In addition, I wish to thank the members of the Noise Abatement Advisory Committee and the many residents of the east end of Long Island for providing the input and motivation to prepare this report.

Sincerely,

Peter A. Wadsworth
December 1, 2009

FINAL

FIVE YEAR REPORT OF THE EAST HAMPTON AIRPORT NOISE ABATEMENT ADVISORY COMMITTEE (2004-2009)

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December 1, 2009

EXECUTIVE SUMMARY

This report was prepared to provide a comprehensive view of the background (Chapter I), current status (Chapter II) of and twenty year outlook (Chapter III) for aircraft noise emanating from East Hampton Airport (HTO) and the efforts to-date to mitigate such noise. Chapter IV contains the recommendations of the Airport Noise Abatement Advisory Committee (ANAAC) based on five years of work. Appendix A describes a prototype Community Noise Impact Model using single event (as opposed to FAA averaging) noise measurement technology, and Appendix B describes a Noise Measurement & Reporting System using a refined and automated version of the Community Noise Impact Model, which the committee strongly recommends that the Town adopt. Appendix C contains the committee's critique of and recommendations to fix the flaws and omissions in the Draft Generic Environmental Impact Statement prepared by Young Environmental Sciences that was the subject of a public hearing on September 17, 2009

BACKGROUND

During the winter and spring of 2003, approximately 1,500 people signed a petition asking that the East Hampton Town Board defer any further capital improvements to the Airport until: (a) an effective Noise Abatement Program is operational, and (b) an updated Airport Master Plan has been adopted. The map below shows the approximate Location of 1500 CQA Petition Signatures within 7 ½ miles of HTO.

Clearly concern about airport noise is not restricted to those who live close to the airport.

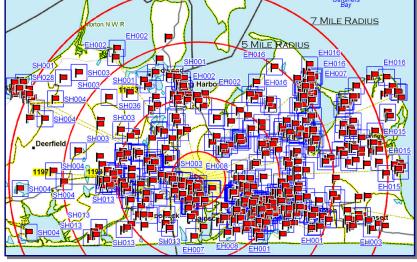
The 1500 petition signatures together with the East Hampton Aviation Association's 1500 petition signatures confirmed what was already obvious to many of us – that many people on the South Fork want the airport t60 be quieter than in 2002. The outcome of this community effort included:

- A noise study by Harris Miller Miller & Hanson, Inc. (2003);
- ➤ A Proposed Scope of Work by Savik & Murray to update
- the Airport Master Plan (June, 2004). Formation of the Airport Noise Abatement Advisory Committee (September, 2004), which has issued three reports concerning the master plan update and airport operations (2005 and 2006), as described in Chapter I;
- The Draft Airport Master Plan Report, on which a public hearing was held in July, 2007;
- A Draft Generic Environmental Impact Statement (July, 2009);

Chapter I also discusses FAA grant assurances and the essential role of specialized legal counsel.

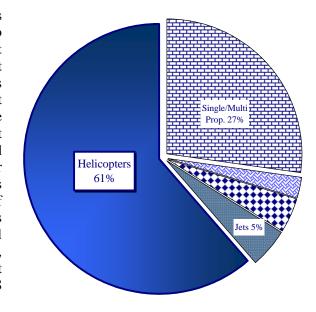
FAA NOISE AVERAGING VS. SINGLE EVENT NOISE

The FAA noise averaging standard yields the ludicrous conclusion that it would be permissible for a helicopter to hover over your house for over 9 hours a day during June, July and August making enough noise to pre-empt normal conversation. By contrast both East Hampton and Southampton consider any noise event in excess of 65dB during the day (7 AM to 7 PM) and 50 dB at night (7 PM to 7 AM) unacceptable. This is known a Single Event Noise measurement. The July 2009 EIS used the FAA noise averaging methodology as did the proposed airport layout plan (ALP) that was defeated in 2002.



FINDINGS & CONCLUSIONS

In 2008, we estimate that 6.7 million residential noise events exceeded 65 decibels (the Town code's noise limit) due to HTO flight operations. Helicopter noise impacted almost twice as many people as all fixed wing aircraft, but represented just one fifth of all HTO flights. These findings contrast with the July 2009 draft Environmental Impact Statement, which found no adverse impacts using FAA noise averaging methodology. The Committee also found that Residential Noise Events (RNEs) from helicopters had declined by 16% from 2006 to 2008 although helicopter flights had increased by 4.8% and that helicopter RNEs could approach the Committee's recommended target of 1998 levels in 2009 assuming a 20% decline in flights compared to 2008. The decline in helicopter residential noise impact is attributable to revised helicopter routing, improved compliance with HTO's voluntary 2500 foot altitude requirement and the decline in flight volume in 2008 and 2009.



Finally, the Committee's 20 year forecast analysis and scenarios leave little doubt that the community impact of helicopter noise will at least double by 2029 and could reach 10 times 2007 levels unless:

- 1. Helicopters are much more aggressively routed over the "water" routes (Northwest Creek and Georgica Pond) AND
- 2. The volume of helicopter flights is limited to no more than twice 2007 levels.

The Committee found that the 2007 DRAFT Airport Master Plan Report and July 2009 Environmental Impact Statement completely ignore the community impact of helicopter traffic and use unrealistically low, essentially no growth, forecasts of helicopter traffic to justify that significant omission.

8.0

7.0

6.0

5.0

4.0

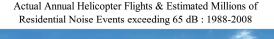
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2.0

FLIGHT VOLUMES & COMMUNITY IMPACT

Other findings include the following.

- > Helicopter traffic at HTO quadrupled between 1998 and 2007 before declining by 11% in 2008.
- > Jet traffic grew to over 3.64 times its 1998 level in 2007 before declining by 12% in 2008.
- Touch & goes declined by over 40% between 2006 and 2008 and continued to decline in 2009.
- Night flights (11 PM to 7 AM) decreased by 23% from 2007 to 2008 and 13% through July 2009.
- > Community impact of helicopters
- declined by 16% from 2006 to 2008 primarily due to changes in helicopter routing.
- > 1998 levels of community impact by helicopters could be reached by achieving 90% compliance with minimum altitudes, AND
 - Routing 1/3 of helicopters over Georgica Pond and 1/3 over Northwest Creek if helicopter flights do not exceed their previous peak levels in 2007, **OR**
 - Routing all helicopters over Georgica Pond and Northwest Creek, if volume doubles.



NW Creek

Jessups Neck

1998 Level

Flights

1998 Level 2.5

EXECUTIVE SUMMARY (CONT'D.)

➤ One scenario based on an FAA forecast and three on actual historical growth, suggest future that HTO helicopter volume could reach 2.3 to 10 times 2007 volume by 2029 (see chart below).

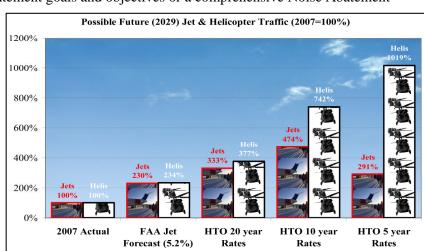
DRAFT AIRPORT MASTER PLAN & ENVIRONMENTAL IMPACT STATEMENT

The shortcomings of the July, 2009 Draft Generic Environmental Impact Statement (**DGIES** or **EIS**) reflect shortcomings of the 2007 Draft Airport Master Plan Report (**DAMPR**):

Absence of any stated noise abatement goals and objectives or a comprehensive Noise Abatement Program.

- Absence of Kaplan Kirsch & Rockwell, despite being retained, from the planning team.
- Unrealistically low forecast of future helicopter traffic and failure to recognize the long term implications of growing helicopter and jet traffic.
- Use of the discredited FAA day-night noise averaging methodology.
- ➤ No attempt to measure the impact of helicopter noise on the community.
- Failure to measure single event noise as required by Section 128 of the Town Code.

In short, anyone who read these two reports without being familiar with the situation might conclude that airport noise, especially from helicopters, is at worst a minor problem. Yet the Committee has concluded that 1,000 to 2,000 residents were adversely affected by a total of 6.7 million aircraft noise events in excess of 65 db in 2008. Moreover, helicopter noise was the subject of 80% (10,000) of all hotline complaints in 2007 and 2008.



RECOMMENDATIONS

The Committee strongly recommends that the Town adopt <u>single</u> <u>event</u> <u>noise</u> <u>measurement</u> methodology, <u>as required</u> <u>by the Town Code for approval of an airport master plan, EIS or capital <u>plan</u> and illustrated by the Community Noise Impact Model (Appendix A) and adopt a Noise Measurement & Reporting System as described in Appendix B.</u>

INCORPORATE NOISE ABATEMENT PLAN IN AIRPORT MASTER PLAN

Since one of the key charges to the ANAAC by the Town Board was to advise it on the incorporation of a Noise Abatement Program (NAP) into the Airport Master Plan update, the Committee has repeatedly recommended that a Noise Abatement Program must:

- ➤ Be an integral part of the Airport Master Plan
- > Contain stated noise abatement Goals & Objectives e.g. noise levels that prevailed in 1998.
- > Reflect community environmental and economic priorities and include community input
- ➤ Be legally & financially feasible
- Consist of specific noise abatement initiatives to be evaluated in an EIS.
- Include a funding plan, a timetable and enabling legislation

In addition, the Committee has repeatedly recommended that the Town utilize Kaplan Kirsch & Rockwell, counsel to Naples Municipal Airport, or a similarly qualified law firm to design a Noise Abatement Program, sort out related funding and grant assurances issues, and design legislation.

EXECUTIVE SUMMARY (CONT'D.)

AMENDMENT TO MASTER PLAN & EIS

The Committee recommends that the current Draft Airport Master Plan and DGEIS be amended as follows:

- 1. Explicitly acknowledge the excessively adverse community impact of helicopter noise.
- 2. Measure the community impact of single event noise from helicopters and fixed wing aircraft.
- 3. A full 20 year forecast of helicopter traffic with realistic growth projections that reflect local conditions and experience rather than uncorrelated national trends.
- 4. Evaluate specific measures to reduce helicopter noise, including:
 - i. the possibility of limiting helicopter traffic through legislation or other means;
 - ii. aggressive rerouting of helicopters away from the longest land route Jessups Neck.
- 5. Utilize Kaplan Kirsch & Rockwell to evaluate realistic noise abatement strategies.
- 6. Include an implementation and financing plan.

The committee's September 25, 2009 letter to Supervisor McGintee (Appendix C) contains more detailed recommendations concerning the DGEIS.

SPECIFIC NOISE ABATEMENT INITIATIVES

The following initiatives have been recommended to the Town Board in past reports from the Committee.

- ➤ Minimum Altitudes for Helicopters
- ➤ Helicopter Routing
- ➤ A Seasonal Control Tower
- ➤ A Noise Measurement & Reporting System (see Appendix B)
- ➤ Landing Fees Related to Noise Emissions and Time of Day
- ➤ Restrictions on Stage 2 Jets & Helicopters
- ➤ A mandatory night-time curfew
- > Banning touch & goes on summer weekends.
- ➤ A Part 161 Noise Study and/or Federal Legislation to enable the Town to limit flight volumes and restrict hours of operation.
- Amending the town noise ordinance to include restrictions on aircraft noise

The committee has proposed objectives for possible federal legislation in **Exhibit I-6** and has outlined possible local legislation in **Exhibit IV-1**.

FINANCIAL CONSIDERATIONS

Establish HTO as a separate financial entity.

- > Comply with federal legislation and regulation restricting uses of airport revenues
- Not comingle airport funds and bank accounts with any other Town accounts.
- > Separate all financial record keeping & reporting from all other Town financial counterparts
- Financial statements be audited by an accountant not employed by the Town for any other purpose.
- No revenues, assets or property used for any other Town purpose without due compensation as per an arms length transaction.
- Provide adequate financial oversight to ensure such compliance.

The committee believes that funding of capital improvements must be compatible with the Town's Noise Abatement Plan, which has not yet been defined

- ➤ Define a Noise Abatement Plan in order to evaluate potential conflicts with funding sources.
- > Consider tax exempt revenue bonds and airport surpluses as alternatives to FAA funding.
- > No FAA funding unless legal counsel determines compatibility with noise abatement program.

I. Introduction & Background

The purpose of this report is to provide a comprehensive view of the events leading up to, current status and twenty year outlook for aircraft noise emanating from East Hampton Airport (**HTO**) and the efforts to-date to mitigate such noise. In addition, it contains the recommendations of the Airport Noise Abatement Advisory Committee, some of whose members have devoted significant time to the issue as far back as the 1980s. The committee has been working since 2004 to assess the extent and causes of East Hampton Airport noise, potential solutions, and the airport master plan update and the related environmental impact study (EIS) intended, in part, to address the noise problem.

BACKGROUND

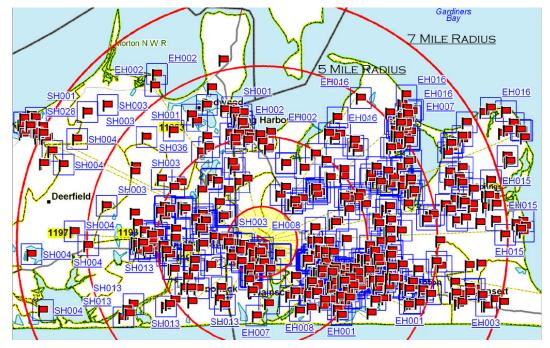
Noise from East Hampton Airport has been a recognized and growing problem at least since the 1980s. Due to the nature of the East End of Long Island (including such desirable characteristics as peacefulness and quietude) and its predominantly residential and recreational nature, aircraft noise is far more intrusive than in the urban or industrial settings in which most large commercial airports are found. Consequently, with relatively low ambient noise and the premium residents put on peace and quiet, individual noise events are more intrusive than at the average airport. While noise measurement to-date has been inconclusive or anecdotal, at best, the history of noise abatement propelled by the community's growing concern about airport noise provides substantial insight into the nature and severity of the problem. Many people agree that the airport noise has become substantially more intrusive since the late 1990s. A summary of significant events and considerations is provided below.

1989 AIRPORT MASTER PLAN UPDATE

In 1989 an Airport Master Plan Update was adopted by the Town Board after several years of work. Concerns about airport related noise and measures to mitigate noise were an integral part of the plan as adopted (see **Exhibit I-1** at the end of this chapter).

2003 PETITION FOR NOISE ABATEMENT

APPROXIMATE LOCATION OF 1500 CQA PETITION SIGNATURES WITHIN 7 1/2 MILES OF HTO



During the winter and spring of 2003, Citizens for a Quieter Airport – a non-partisan civic organization - obtained signatures from approximately 1,500 people, including more than 400 Southampton residents,

on a petition asking that the East Hampton Town Board defer any further capital "improvements" to the Airport until:

- ➤ AN EFFECTIVE NOISE ABATEMENT PROGRAM IS OPERATIONAL, AND
- ➤ AN UPDATED AIRPORT MASTER PLAN HAS BEEN ADOPTED.

The Southampton signatures came from residents of Sagaponack, Bridgehampton, Sag Harbor, Water Mill and North Sea and may, in fact, under-represent the public desire for HTO noise abatement because only a fraction of the potentially affected Southampton residents were solicited to sign the petition. The East Hampton Aviation Association circulated a petition for a "Safer & Quieter Airport", which received an additional 1500 signatures, some of which were duplicates.

The 1500 petition signatures together with the East Hampton Aviation Association's 1500 petition signatures confirmed what was already obvious to many of us – that many people on the South Fork of Long Island want a quieter Airport than the prevailing noise levels in 2002 on which these signatures were based

2003 HMMH NOISE STUDY

In 2003 the Town Board appointed a Noise Abatement Task Force (NATF) and voted to hire Harris Miller Miller & Hanson, Inc. (HMMH) as its noise abatement consultant. Among the recommendations HMMH made after monitoring noise during two two-week periods during the summer were the following:

- > Improve operations monitoring
- Raise helicopter flight paths
- ➤ Produce new Jeppesen insert; plot noise-sensitive areas and publish new abatement measures
- Encourage voluntary no-flight program from 11:00 p.m. to 7:00 a.m. for all aircraft types
- ➤ Encourage voluntary limit on touch-and-goes
- > Continue periodic meetings with Noise Advisory Group
- ➤ Hire a trained Noise Officer

HMMH also advised that landing fees could be proportional to each aircraft's noise emissions and that a surcharge could be imposed on landings between 7 PM and 7 AM in accordance with the FAA's noise weighting methodology for average day-night sound levels.

2004 PROPOSED SCOPE OF WORK TO UPDATE 1989 AIRPORT MASTER PLAN

In 2004, the new Town Board hired Savik & Murray to update the East Hampton Airport Master Plan. Savik & Murray submitted a proposed scope of work dated June 30, 2004.

AIRPORT NOISE ABATEMENT ADVISORY COMMITTEE CREATED 9/16/2004

On September 16, 2004 the East Hampton Town Board created the Airport Noise Abatement Advisory Committee ("ANAAC" or "Committee") "... to provide the Town Board with two specific functions;

"... advise the Town Board on how the noise abatement procedures are progressing and provide suggestions on how to improve such procedures; and

"... present a unified message on the issue of noise abatement during the master plan process;" 1

The resolution specifies that members shall be "persons who are directly affected by airport noise."

¹ Resolution #9252 dated September 16, 2004

PAST NOISE ABATEMENT COMMITTEE RECOMMENDATIONS

The following is a synopsis of past Committee recommendations.

JANUARY, 2005 REPORT RE: PROPOSED SCOPE OF WORK (2004)

The first order of business of the committee was to review Savik & Murray's Proposed Scope of Work as per the Town Board Resolution (above). On January 25, 2005 the Committee submitted a report that contained the following recommendations.

Goals & Objectives

In 2005 the Committee stated that it considers it "<u>necessary</u> to incorporate noise abatement into the update of the 1989 Airport Master Plan <u>and</u> begin implementation of an <u>effective</u> Airport Noise Abatement program to accomplish the following objectives:"

- ➤ REDUCE JET AND HELICOPTER NOISE TO 1998 LEVELS, reduce touch and go noise on summer weekends and keep Airport noise at or below those levels in the future.
- ➤ DEVELOP AN EFFECTIVE LONG TERM NOISE ABATEMENT STRATEGY WITH STATED, ACHIEVABLE GOALS WITHIN THE LIMITATIONS OF FAA LAW AND REGULATION, with or without FAA funding and with no adverse financial impact on East Hampton taxpayers.
- > SUBSTANTIALLY STRENGTHEN THE EFFECTIVENESS OF EXISTING AND FUTURE NOISE ABATEMENT MEASURES by continuously improving enforcement techniques, by providing adequate staffing and technological resources to enable HTO management to achieve clearly stated and agreed upon objectives, and by regularly reviewing HTO's noise abatement performance and releasing the results to the public.
- ESTABLISH AND ADMINISTER A MASTER PLAN UPDATE PROCESS THAT INTEGRATES NOISE AND SAFETY OBJECTIVES using engineering, environmental, legal/regulatory and financial expertise to develop a long term noise abatement strategy.

The Committee recognized that it was asking the Town Board to dramatically change the way it oversees HTO and to significantly expand the scope of the Airport Master Plan update process.

Noise Abatement, Management & Enforcement Initiatives

To achieve these objectives, the Committee recommended exploration of 8 Noise Abatement Initiatives and 6 Management & Enforcement Initiatives (see **Exhibit I-2** at the end of this chapter).

Recommended Town Board Actions

The Committee also recommended that the Town Board take following actions to achieve those objectives:

- **Hire a full time noise abatement officer** to serve as the 2nd in command to the Airport Manager.
- Have Savik & Murray incorporate a <u>Vision Statement</u>, <u>Objectives</u>, <u>Recommended Noise Abatement Measures and Recommended Management & Enforcement Initiatives</u> in Chapter III of the Committee's Report into the proposed Scope of Work.
- Retain <u>legal counsel</u> with extensive experience in <u>FAA law</u>, regulation and actual <u>practice</u> to evaluate the feasibility of all potential noise abatement initiatives and develop a legal and legislative strategy before Savik & Murray proceeds.
- Have Savik & Murray evaluate all recommended noise abatement measures and management & enforcement initiatives that are found by legal counsel to be legally feasible.
- Explore congressional legislation and codify the Airport Master Plan into the Town Code.
- Develop a financing plan for noise abatement, safety and maintenance, which incorporates increased landing fees and other sources of aviation revenue, possible bond issues and/or future FAA funding and has zero impact on local, non-aviation taxpayers.

Noise Abatement Objectives

The following objectives were recommended by the Committee in 2005:

- The Town should assign the highest priority to reducing single event noise that exceeds the noise limits prescribed by the Town Code, i.e. 65db from 7 AM to 7 PM and 50 db from 7 PM to 7AM, especially at noise sensitive times, i.e. nights and summer weekends, in residential areas.
- > The Town should reduce single event noise from jets and helicopters to levels that prevailed in 1998 (estimated at 55% of 2003 levels).
- ➤ Noise from touch and goes and other sources should also be reduced during noise sensitive periods, especially on summer weekends.
- Any changes to the Airport facility should help reduce jet & helicopter traffic.
- ➤ The Airport should be financially self-supporting, whether or not FAA funds continue to be used for capital improvements.

4/26/2005 REPORT TO TOWN BOARD

After meeting regularly with the Airport Manager, in April 2005 the Committee made a number of operational recommendations shown in **Exhibit I-3** at the end of this chapter.

4/28/2006 PROGRESS REPORT

Approximately one year later the Committee concluded in a written report that "...while the Town's efforts, and particularly those of Airport Manager Jim Brundige, have been laudable, the reductions, if any, in aircraft noise to-date have been minimal; and in some neighborhoods the noise has actually gotten worse. Consequently, additional actions will be required to actually reduce jet and helicopter noise to acceptable (1998) levels..." The committee recommended the actions summarized in **Exhibit I-4** at the end of this chapter.

AUGUST 2007 RE: DRAFT AIRPORT MASTER PLAN REPORT

In August, 2007 after a public hearing on a DRAFT Airport Master Plan Report (**DAMPR**) the committee recommended the following:

"No <u>airport master plan would be complete without a clearly stated plan to reduce airport noise to more nearly acceptable levels</u> including, but not limited to, putting a stop to the rapid growth of helicopter traffic. At a minimum the Town should do the following:

- 1. **Obtain a ... legal opinion [from qualified counsel]** that determines which noise abatement initiatives can be implemented and under what conditions, e.g. a Part 161 study, federal legislation or expiration of grant assurances.
- 2. <u>Perform an Environmental Impact Statement (EIS) that assesses all noise abatement options determined feasible by a legal opinion</u> (see above). An EIS will be required before the FAA can permit any improvements to the airport, and it is only as good as the questions asked and answered.
- 3. **File a Part 161 Study with the FAA** together with the above –referenced EIS.
- 4. **Perform a financial feasibility study** to determine how noise abatement initiatives and safety improvements can be funded without FAA support.
- 5. **Amend the Town Code** to ensure that noise abatement initiatives and funding prohibitions, if any, cannot be reversed by future Town Boards without public hearings and an EIS.
- 6. **Request that the Town of Southampton help pay** for a control tower and a Part 161 study."

To date none of the above recommendations have been acted upon.

POSSIBLE FEDERAL LEGISLATION

Because of widespread concern about helicopter noise all over Long Island, much of it attributable to traffic between New York City and East Hampton, Senator Schumer and Congressman Bishop began to take a special interest in finding solutions. One of the possible solutions was to amend the Federal Aviation Reauthorization Act of 2009, which as of this writing has passed the House but not the Senate. Accordingly, on Dec. 1, 2007 the Committee sent a letter to Supervisor McGintee recommending that the legislative objectives shown in **Exhibit I-6** to be incorporated into any federal legislation intended to impact East Hampton Airport.

It should be noted, however, that the only applicable language in H.R. 915: FAA Reauthorization Act of 2009, which passed by roll call vote on May 21, 2009, mandates only "a study on helicopter operations over Long Island and Staten Island, New York" to be completed "Not later than 6 months after the date of the enactment of" the reauthorization act. (See **Exhibit I-7** at the end of this chapter.)

ELEMENTS OF A NOISE ABATEMENT PROGRAM

An effective noise abatement program must have clear objectives and the ability to measure noise in relation to those objectives.

NOISE MEASUREMENT & REGULATION

The East Hampton and Southampton Town Codes have similar provisions limiting noise in residential neighborhoods to 65db (decibels) during the day (7 AM to 7 PM) and 50db at night (7 PM to 7AM) for specific noise events. There are exceptions that include construction equipment, "All noises coming from the normal operations of properly equipped aircraft, not including scale model aircraft." (East Hampton) and "Noise of aircraft flight operations" (Southampton).

The FAA, on the other hand, considers noise of 65 db acceptable during the day and 55 db at night when averaged 24 hours and 365 days. Obviously this understates seasonal noise as well as intermittent noise. Thus the FAA finds acceptable noise levels that are far greater than those allowable under the Town Codes of East Hampton and Southampton.

The Committee has repeatedly recommended that single event noise measurement, rather than the Federal Aviation Administration (**FAA**) noise measurement methodology, be used as the primary criterion for evaluating noise abatement initiatives and all other possible changes to HTO. The FAA methodology does not address this community's noise problem for two reasons: (1) FAA methodology averages noise over 24 hours rather than recognizing individual noise events, and (2) FAA regulation allows greater noise levels than otherwise allowable under the local noise ordinances of both Towns.

The Committee proposes a noise measurement methodology based on single event noise, which measures community impact of noise. It uses a metric termed **Residential Noise Events**, which is derived by multiplying the number of individual noise events in excess of allowable noise limits based on the Town Code (65dB from 7 AM to 7 PM and 50dB for the other 12 hours). Sample calculations for helicopter noise are shown in the next two chapters of this report and in **Appendix A: HTO Community Noise Impact Model**.

QUALIFIED LEGAL COUNSEL

The Committee has repeatedly recommended hiring a qualified aviation attorney to provide leadership in designing a noise abatement program for the reasons listed below, which still apply. Here are some of the reasons.

Knows Aviation Law & Regulation

A qualified attorney can design a realistic (LEGAL) noise abatement program, clarify FAA classification of helicopters and applicability of Part 161, assess legality of potential solutions to helicopters noise and help the Town make an informed decision about future FAA funding. Importantly, he knows the implication of expiring grant assurances, whereas other merely speculate without full knowledge of FAA regulation and federal aviation law.

Has Practical Experience with Leading Edge Noise Abatement

The attorney hired by the Town, Peter Kirsch of Kaplan Kirsch, was the lead attorney for Naples Municipal Airport when it banned stage 2 jets, defended itself from several lawsuits and won the right to continue to receive FAA funding. While Mr. Kirsch has cautioned that the Naples results may not be repeatable, he knows what noise initiatives have succeeded or failed around the country and why, litigated against the FAA in court and won and best understands what FAA could have done in Naples case or might do in a similar case in the future.

Can Quarterback Design of Legal Noise Abatement Program

The Committee has believed fro some time that no-one is better qualified to design a noise abatement program because Mr. Kirsch knows what has succeeded (or failed) elsewhere and can assess why, knows which initiatives are legal or can be legislated and can assess regulatory hurdles and litigation risk

Can Design Legislation

One opportunity to improve the Town's ability to effect a noise abatement program has been to incorporate changes into the FAA Reauthorization Act of 2009, which might streamline the Part 161 process, protect the Town against possible litigation if it limits helicopter traffic and grandfather 1989 Master Plan noise abatement rules. This possibility is being explored with Congressman Bishop and Senator Schumer, although the House of Representatives passed a bill in May (H.R. 915, see Exhibit I-7 at the end of this chapter) without such provisions.

May Save East Hampton Town Time Money

Having such an attorney quarterback the noise abatement effort could save the Town time and money by getting to a noise solution quicker, avoiding or minimizing cost of litigation, possibly bypassing the Part 161 process and/or avoiding exploring noise abatement initiatives that won't pass legal muster.

Here are some of the things the current Town Board may not have known due to its failure to adequately utilize qualified counsel. In National Helicopter v. the City of New York the 2nd Circuit Court of Appeals upheld the following noise abatement initiatives: a reduction of operations by a minimum of 47 percent overall; a restriction of weekday operations to between 8 a.m. and 8 p.m. and on weekend operations to between 10 a.m. and 6 p.m.; phasing out of weekend operations. The 2nd Circuit Court of Appeals also has jurisdiction over East Hampton.

LEGAL COUNSEL HIRED IN 2007

In 2007 the Town hired Peter Kirsch, a partner in the firm of Kaplan Kirsch & Rockwell (Denver, CO). Mr. Kirsch came to the Town's attention because of his role representing Naples Municipal Airport in Florida, which banned Stage 2 (noisier) jets and prevailed in court to win a continuation of FAA funding of its capital expenditures. The following is an excerpt from Mr. Kirsch's resume:

"For more than 20 years ... [Mr. Kirsch] has represented dozens of clients on the panoply of land use, regulatory and environmental issues that arise in complex airport development projects. He regularly advises airports on federal law and on airport financial and operational issues. He has represented clients in precedent-setting federal and state court litigation relating to the powers of airport proprietors, control of airport noise and preventing encroachment of incompatible land uses."

FAA GRANT ASSURANCES

As a result of a negotiated settlement between the FAA and the Committee to Stop Airport Expansion, certain provisions of the Grant Assurances from the Town to the FAA will expire in the year 2014 and all assurances will expire in 2021. This may increase the Town's ability to limit certain undesirable air traffic, provided that no future FAA grant money is accepted by the Town. The settlement agreement allowing the expiration of the Grant Assurances listed below on December 14, 2014 may give the Town some autonomy to encourage or discourage noisier aircraft:

- 22.a making the airport available for "all types, kinds and classes of aeronautical activities..."
- **22.h** "...not unjustly discriminatory conditions to be met by all users..."
- **29.a** "...will not make any changes or alterations not in conformity with the airport layout plan as approved by the [FAA] ..."
- **29.b** "... a change or alteration ... which the [FAA] Secretary determines adversely affects ... utility or efficiency of any federally funded property not ... approved by the Secretary..."

In the absence of a thorough analysis of all aviation law and FAA regulation, however, it is unclear how much freedom the Town will actually have after the expiration of certain grant assurances in 2014 and the rest in 2021. The settlement also stipulates that neither the 1989 airport layout plan (ALP) nor any other pre-existing ALP is valid for the purpose of receiving any further FAA funding. Therefore, the Town would have to prepare a new ALP and hold public hearings before receiving any further FAA funding.

* * * *

The next chapter of this report assesses the current noise situation, the following chapter assesses the out look for the next 20 years (the appropriate tine horizon for an airport master plan) and the final chapter contains the Committee's current recommendations to the Town Board.

EXHIBIT I-1: 1989 NOISE ABATEMENT INITIATIVES

- 1. **Increase the Minimum Altitude for Take-Off and Landing Turn Elevations** for all aircraft to 1,500 feet over noise sensitive areas.
- 2. **Helicopter Approach and Departure Paths** should follow the high power lines to avoid populated areas.
- 3. "Touch and Go" Operations should be Banned From Noon on Friday to Noon on Monday during June, July and August.
- 4. A night time curfew, from 11 P.M. TO 7 A.M. on Take-Offs and Landings should be imposed. Alternatively, maximum noise levels for all flight operations should be set. Aircraft that exceed the noise limit would be barred from using the Airport. There would be a higher noise limit for waking hours (6 A.M. TO 10 P.M.) and a lower noise limit for non-waking hours (10 P.M. TO 6 A.M.).
- 5. Pre-flight Engine Run-Ups Restricted to Certain Locations on the Airport.
- 6. **Installation of "Jet Blast Deflectors"** or **Use Of An Enclosed Hangar** for pre-flight engine run-ups to further limit noise from engine run-ups.
- 7. Lease Provision with Fixed Base Operators (FBOs) requiring compliance with all laws, ordinances, and regulations that deal with noise abatement and control. In addition, lease covenants that the FBO will restrict operations to normal waking hours, adhere to the National Business Aircraft Association's Take-Off and Landing Noise Abatement Procedures, and not operate or use aircraft that are louder than 67 dBA on take-off or 77 dBA on landing as listed on FAR Part 36.
- 8. **Continuing Noise Monitoring.** The Town will further monitor the Airport for noise. The monitoring would be conducted in accordance with the guidelines set forth for a FAR Part 150a study.
- 9. **Increase Landing Fees for noisy aircraft.** Increase landing fees for aircraft that exceed 67 dBA on take-off or 77 dBA on Landing.

EXHIBIT I-2: JANUARY 2005 RECOMMENDATIONS

NOISE ABATEMENT INITIATIVES TO BE EVALUATED

- 1. The Feasibility of Closing the HTO at night.
- 2. The Feasibility of Reducing jet & helicopter traffic to 1998 levels.
- 3. The Feasibility of Requiring helicopters to observe a specified altitude (at least 2000 feet).
- 4. The Feasibility of Banning touch & goes on summer weekends (noon Friday to noon Monday + holidays) and possibly at other times.
- 5. The Feasibility of Establishing landing fees that reflect
 - the FAA published noise emissions of fixed wing aircraft and noise equivalent fees for helicopters;

the weight of the aircraft;

- the time of day with higher landing fees during the night-time period as established by the Town code, i.e. 7 PM to 7AM.
- 6. Whether reconstructing Runway 4-22 would have a positive or negative impact on airport noise and safety.
- 7. The Feasibility of Alternative Helicopter Flight Paths & Landing Sites.
- 8. The Feasibility of an Automated Weather Observation System (AWOS).

MANAGEMENT & ENFORCEMENT INITIATIVES TO BE EVALUATED

- 1. A full time Noise Abatement Officer as an Assistant Airport Manager.
- 2. A 24-hour Complaint Hot-line and a Web Site.
- 3. Ongoing noise monitoring in all affected communities.
- 4. Airport landing fees reflect the amount of noise made by various aircraft and the time of day (or night) they land or take off.
- 5. A Control Tower that would dictate the flight paths & altitudes of all incoming & outgoing air traffic within a 5 mile radius of HTO.
- 6. Any other Initiatives that might strengthen the Town's ability to enforce its noise abatement program and objectives.

EXHIBIT I-3: APRIL 2005 RECOMMENDATIONS

I. ITEMS FOR IMMEDIATE ACTION

- 1. Institute a Noise Abatement Reporting System.
- Design report format using Naples and Westchester as examples
- Begin Providing Monthly Reports to Town Board & Advisory Committee in June
- Provide Quarterly & Yearly Reports to Town Board, Advisory Committee & Community
- 2. Interview Major Helicopter & Jet Owner/Operators; Establish Guidelines
- Start with Liberty Helicopter
- Let Jim talk with smaller fish.
- Tell them the Town takes noise abatement seriously
- Ask what they can do to reduce noise.
- Town Board Involvement essential
- 3. Publicize the 24 hour Complaint Hotline in both Towns
- Public Announcements & Advertisements in all major South Fork newspapers, including Southampton Press (Eastern Edition)
- Direct Mail to all affected property owners.
- Add to Town web site & Establish HTO Web Site
- Yellow Pages, phone directories, etc.
- Include information about the voluntary noise abatement programs, e.g. helis at 2000 ft, as guidelines for citizens' complaints.
- 4. Hire Assistant Airport Manager/Noise Abatement Officer.

II. ADDITIONAL ITEMS FOR PROMPT PLANNING

- 5. Institute a Noise Measurement & Reporting System (see attachments)
- Establish Noise Measurement Methodology
- Establish a Data Collection System
- Purchase & deploy sound meters at all ten HMMH Sites (or improvements thereto)
- 6. Prepare a Financial Plan to Fund Noise Abatement Initiatives
- Publish & publicize past financial results for HTO.
- Raise Landing Fees & Other Service Fees to Pay for Noise Abatement
- Balance HTO Budget for 2006 & Beyond
- Capitalize & Amortize Noise Abatement Improvements, where possible
- Pay for Capital with Tax-Exempt Airport Revenue Bonds, if necessary
- Eliminate subsidies from general tax receipts.
- 7. Codify 1989 Master Plan Noise Abatement Measures into Town Law

EXHIBIT I-4: APRIL, 2006 RECOMMENDATIONS

RECOMMENDED ACTIONS THAT REQUIRE NO FURTHER ANALYSIS

- 1. Noise Abatement Officer/Assistant Airport Manager
- 2. A Noise Measurement & Reporting System
- 3. Level II AWOS/Class E Airspace

POTENTIAL SOLUTIONS THAT MAY REQUIRE FURTHER ANALYSIS

- 4. Level III AWOS/Class D Airspace
- 5. Alternative Helicopter Routes over Water
- 6. A Seasonal Control Tower
- 7. Displaced Threshold on 10-28
- 8. Runways 16-34 and 4-22

POTENTIAL SOLUTIONS FOR WHICH A PART 161 NOISE STUDY MAY BE REQUIRED

- 9. Landing Fees Related to Noise Emissions and Time of Day
- 10. Restricting Stage 2 Jets & Helicopters
- 11. Mandatory Night-time Curfew
- 12. A Ban on Touch & Goes on Summer Weekends.

PART 161 STUDY

EXHIBIT I-5: ADDITIONAL RECOMMENDATIONS

1/15/2007 - LETTER TO SUPERVISOR MCGINTEE REQUESTING MEETING WITH PETER KIRSCH

"... we respectfully request that you arrange for a time when Mr. Kirsch can meet with this committee to discuss the Federal-State-Local legal framework within which our advice to you and the Town Board must be formulated to be most useful."

12/1/2007 - LETTER TO SUPERVISOR MCGINTEE RE: FEDERAL LEGISLATION OBJECTIVES

(see Exhibit I-6)

3/27/2008 - LETTER TO SUPERVISOR MCGINTEE RE: FINANCES, AWOS & PETER KIRSCH

- > AWOS has never been noticed for RFP
- ➤ Why is revenue surplus not being re-directed into necessary noise mitigation equipment, already approved by the Board?
- Mr. Kirsch has submitted one or more reports that have been or are being held by the office of the Town Attorney without any consultation with Airport Management, any action by Town Hall or any opportunity for Mr. Kirsch to contribute to the master plan.
- ➤ Without qualified legal counsel, the Airport Manager is deprived of tools that might be available to him to enforce voluntary noise abatement procedures for helicopters.
- Airport master plan team is being deprived of the very knowledge it requires to develop a noise abatement strategy that is consistent with FAA law and regulations.
- ➤ Whether achieving the Town's noise abatement objectives will require continuing rejection of FAA funding and airport revenue for needed capital improvements.
- ➤ How can any planning for airport finances and, more broadly, for future airport operations and development, and for future FAA regulation be adequately informed without the active involvement of the Airport Manager and Mr. Kirsch?

5/7/2008 - LETTER TO SUPERVISOR MCGINTEE RE: AIRPORT MASTER PLAN WORK SESSION

- 1. Statement of Noise Abatement Goals & Objectives
- 2. Noise Abatement Program designed or approved by Kaplan Kirsch
- 3. Noise impact on surrounding residents & neighborhoods of Airport Master Plan Alternatives, e.g.
- 4. A Financial Feasibility Study that specifies ALL costs, revenues & savings of airport master plan alternatives
- 5. Guidelines/Criteria/Limitations for all Future Airport Projects built into Town Code.

EXHIBIT I-6: EAST HAMPTON AIRPORT OBJECTIVES FOR POSSIBLE FEDERAL LEGISLATION

Whereas helicopter noise on the east end of Long Island has become intolerable and other aircraft noise, especially jets, at least as intrusive as at the time of the 1989 Airport Master Plan;

Whereas the Town of East Hampton has commissioned two studies of East Hampton Airport (**HTO**) related noise since 2003 and begun development of an airport master plan;

Whereas the Town wishes to implement and modify in the future, as necessary, a Noise Abatement Program without undue constraints from current aviation law, FAA regulation or agency practice;

The purpose of proposed federal legislation is to enable East Hampton Town, as the owner of East Hampton Airport, to establish an Airport Noise Abatement Program that

- 1. Reduces or eliminates noise from the following sources
 - o Helicopters & other stage 2 aircraft
 - o Jets
 - o Low-flying aircraft
 - o Touch & goes
 - o Air traffic of all kinds from 7 PM to 7 AM and on weekends
- 2. Enables HTO and the Town to limit single event and cumulative noise from aircraft arriving and departing East Hampton Airport by
 - o Establishing flight rules and procedures that it deems necessary to limit aircraft noise that exceeds community standards (65db from 7AM to 7 PM and 50db from 7 PM to 7AM).
 - Establishing enforcement mechanisms necessary to ensure compliance with flight rules and procedures, e.g. fining, banning or taking such other law enforcement action as shall be necessary to discipline offenders
 - o Establishing a minimum altitude of 3000 feet for helicopters within 5 miles of HTO;
 - Charging higher landing fees for noisier aircraft and those that use the airport between 7 PM to 7 AM;
 - o Limiting hours of operation, including a curfew from no later than 11PM to no earlier than 7AM, and total volume of flights
 - Designating and enforcing specific arrival and departure routes as dictated by the Noise Abatement Program
- 3. Enables the Town to determine and establish a Noise Abatement Program that is in the best interests of the local community using the process prescribed by New York State and local law that includes:
 - o the development of an Airport Master Plan that reflects community environmental and economic priorities,
 - o a process for community input including, but not limited to, public hearings
 - o an Environmental Assessment and Impact Statement that considers all reasonable alternatives
- 4. Ensures that the Noise Abatement Program, once established, cannot be substantially altered or negated by the FAA or another government agency without going through a process as described above except in the event of, and only during, a national emergency.
- 5. Exempts HTO from any provisions of the Airport Noise and Capacity Act of 1990 (ANCA), grant assurances and other airport laws and FAA regulations that would prevent it from establishing such a Noise Abatement Program and related procedures.
- 6. Protects the Town of East Hampton and related parties, to the maximum extent possible, from the cost of litigation.

EXHIBIT I-7: H.R. 915: FAA REAUTHORIZATION ACT OF 2009

May 21, 2009: This bill passed in the House of Representatives by roll call vote. The totals were 277 Ayes, 136 Nays, 20 Present/Not Voting.

See H.R. 915 on THOMAS for the official source of information on this bill or resolution.

SECTION 818.

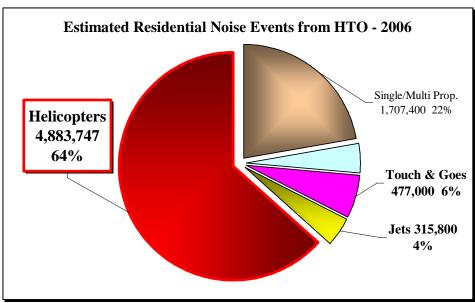
HELICOPTER OPERATIONS OVER LONG ISLAND AND STATEN ISLAND, NEW YORK.

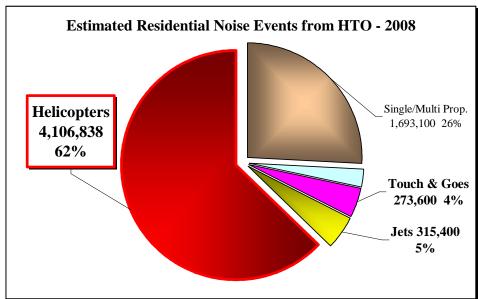
- (a) STUDY.—The Administrator of the Federal Aviation Administration shall conduct a study on helicopter operations over Long Island and Staten Island, New York.
- (b) CONTENTS.—In conducting the study, the Administrator shall examine, at a minimum, the following:
 - (1) The effect of helicopter operations on residential areas, including—
 - (A) safety issues relating to helicopter operations;
 - (B) noise levels relating to helicopter operations and ways to abate the noise levels; and
 - (C) any other issue relating to helicopter operations on residential areas.
 - (2) The feasibility of diverting helicopters from residential areas.
 - (3) The feasibility of creating specific air lanes for helicopter operations.
 - (4) The feasibility of establishing altitude limits for helicopter operations.
- (c) EXCEPTIONS.—Any determination under this section on the feasibility of establishing limitations or restrictions for helicopter operations over Long Island and Staten Island, New York, shall not apply to helicopters performing operations for news organizations, the military, law enforcement, or providers of emergency services.
- (d) LIMITATION ON STATUTORY CONSTRUCTION.— Nothing in this section shall be construed to interfere with the Federal Aviation Administration's authority to ensure the safe and efficient use of the national airspace system.
- (e) REPORT.—Not later than 6 months after the date of the enactment of this Act, the Administrator shall submit to Congress a report on the results of the study, including information and recommendations concerning the issues examined under subsection (b).

II. CURRENT STATUS OF NOISE AT HTO

Helicopters are still the number one cause of objectionable airport noise. Jets, late night flights and, to a lesser extent, touch & goes continue to plague the community. The combined effect of management improvements and a declining economy have resulted in material reductions in the impact of helicopter noise on the community but a recovering economy and continued growth in helicopter traffic (see Chapter III) are likely to negate the improvement in 2007-09. Other types of aircraft noise, by contrast, have been reduced although some residents are still not satisfied.

This chapter assesses the current status of noise and noise abatement at East Hampton Airport (**HTO**), as well as the 2007 DRAFT Airport Master Plan Report (**DAMPR**) and July 2009 Draft Generic Environmental Impact Statement (**EIS**). In addition, this chapter contains new information about the effect of airport related noise on local resident, using a **Community Noise Impact Model** developed by TWC Group, Inc. (see **Appendix A**). The charts below demonstrate that **helicopter noise adversely affects almost twice as many residents as all other air traffic from HTO**.

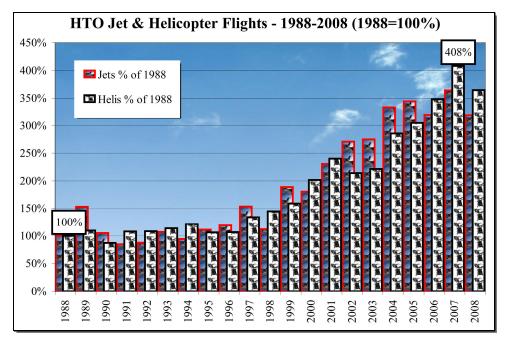




NOTE: This chart summarizes the results of the <u>Community Noise Impact Model</u> described later in this chapter and in detail in <u>Appendix A.</u>

AIR TRAFFIC

Helicopter traffic at HTO quadrupled between 1998 and 2007 before declining by 11% in 2008 due to the economy. Jet traffic grew to over 3.64 times its 1998 level by 2007 before declining by 12%. Helicopter traffic grew by 6.7% a year between 1988 and 2008 and jets by 6.0% a year, including the decline in 2008.



Lest we misinterpret the recent decline in traffic due to the current economic situation, in 6 of the 19 years prior to 2008 jet flights declined compared to the previous year as did helicopters in 3 of the 19 years (see **Exhibit II-1** at the end of this chapter). Nevertheless the overall growth of traffic (and noise) is unmistakable.

Data for propeller driven, fixed wing planes is not available as far back, but reports prepared by airport management beginning in 2006 give a more complete picture. The following table shows that every category of flights increased from 2006 to 2007 except touch & goes, which declined by 15.1% for the year, and unidentified aircraft, which declined by almost 40%.

HTO FLIGHT OPERATIONS (2006-2008)								
	<u>2006</u>	2007	% Change 2006-'07	2008	% Change 2007-'08	% Change <u>2006-08</u>		
Jets	3,158	3,599	14.0%	3,154	(12.4%)	(0.1%)		
Helicopters	5,787	6,788	17.3%	6,066	(10.6%)	4.8%		
$SEME^2$	19,459	20,147	3.5%	18,299	(9.2%)	(6.0%)		
Unidentified (no tail #)	3,158	1,937	(38.7%)	1,701	(12.2%)	(46.1%)		
Touch & Goes	2,385	2,024	(15.1%)	1,368	(32.4%)	(42.6%)		
Total Movements ³	31,562	32,471	2.9%	29,220	(10.0%)	(7.4%)		

In 2008 flight operations for every category of aircraft declined as a result of high fuel prices and the beginning of the economic meltdown. From 2006 to 2008 every category declined except helicopters,

-

² SEME = Single Engine/Multi Engine propeller driven planes.

³ Total movements do not equal the sum of the individual flight categories since some categories, e.g. touch & goes, overlap

which grew by 4.8%. Touch & goes experienced a cumulative decline of 42.6%. For the first 7 months of 2009 flight operations for all types of aircraft have declined sharply, although they declined less in July, no doubt due to the economic situation and its impact on the financial industry.

HTO FLIGHT OPERATIONS – JAN. – JULY OF 2009 vs 2008									
	July 2009	July 2008	% Change	2009 Ytd	2008 Ytd	% Change			
Jets	543	776	(30.0%)	1,314	1,748	(24.8%)			
Helicopters	1,177	1,364	(13.7%)	2,820	3,559	(20.8%)			
SEME ²	2,593	2,996	(13.5%)	8,089	10,304	(21.5%)			
Airscene (no tail #)	119	160	(25.6%)	845	934	(9.5%)			
Total Movements	4,432	5,296	(16.3%)	13,068	16,545	(21.0%)			

HELICOPTERS

Helicopter traffic has been the most robust component of flight operations at HTO. They were the only component to increase between 2006 and 2008 (up 4.8%). Nevertheless helicopter traffic declined by 10.6% in 2008, an additional 20.8% year-to-date through July, 2009, but just 13.7% July, 2009 compared to July, 2008.

JETS

Jet flights declined by 12.4% in 2008 and an additional 24.8% through July, 2009 (30% this July compared to July, 2008). While no actions have been taken to reduce jet noise, newer jets tend to be quieter. Nevertheless, residents at both ends of the main runway (10-28) continue to suffer the effects. A proposal to shorten the main runway might reduce the size of jets coming in, but there was little mention of that alternative at a July 19 public hearing.

NIGHT FLIGHTS

No growth estimates are available for night flights (between 11 PM and 7 AM) but they are the second greatest source of complaints. The Town Code's noise threshold is 50 decibels between 7 PM and 7 AM as compared to 65 decibels during the day (7 AM to 7 PM), but aircraft are excepted. The FAA precludes any control of aircraft in the air by municipalities except by control tower in FAA designated controlled airspace.

TOUCH & GOES

Touch & goes (practice landings), those annoying repetitive flights that circle around at low altitude declined by over 70% since the new airport manager, Jim Brundige, took office and are continuing to decline in 2009. A seasonal control tower could conceivably make some incremental improvement by discouraging the worst (most repetitive) abusers. A ban on summer weekend touch & goes in the 1989 master plan was never implemented.

COMMUNITY IMPACT

There is broad consensus that helicopter noise has an adverse effect on the quality of life all over Long Island. As a result Senator Schumer, Congressman Bishop and County Legislator Romaine have all made it a priority to find a solution to the noise impact of low flying helicopters. Helicopter noise is also the single biggest factor that has caused residents of the Towns of Southampton and East Hampton to unite in an effort to reduce airport noise. When the East Hampton Town Board held a public hearing on the Draft Airport Master Plan in July 2007 excessive helicopter noise was the predominant subject of public comments, as was recognized in the Town's subsequent write up of the of the hearing.

Airport management has taken some substantive actions to try to address the problem of helicopter noise:

- ➤ Repeated discussions with the Eastern Region Helicopter Council, helicopter owners and operators requesting compliance with higher (2500 foot) altitude minimums.
- Improving route discipline so that helicopters make less use of a southwestern approach over the highly populated sections of Sagaponack, Bridgehampton and Water Mill.
- Introducing two new helicopter routes over Northwest Creek and Georgica Pond, which impact fewer people than the main east-west route which traverses 6 to 7 miles of land to Jessups Neck.

Yet helicopter noise remains the predominant source of noise complaints at HTO and the Committee's analysis of Residential Noise Events demonstrates that helicopters account for over 60% of total airport related noise as shown in the chart below and the ensuing discussion on the following pages.

In the absence of a comprehensive analysis by the Town's environmental consultant, the Committee has developed a mathematical model to measure impact of helicopter noise on the residential community. It is based on helicopter flight data from HTO, impact estimates for the Northwest Creek route from the July, 2009 Draft Generic Environmental Impact Statement (p. 29) and from generally available summer and full-time population data for local neighborhoods.

FAA NOISE MEASUREMENT METHODOLOGY

The FAA noise averaging methodology over 24 hours and all four seasons is inadequate to measure the impact of helicopter noise in a summer resort that is much quieter, absent such noise, than a typical neighborhood near LaGuardia, Kennedy, O'Hare or any other large commercial airport. That is why Naples Municipal Airport in Florida applied a local community standard and considered single event noise to justify its successful ban of Stage 2 (noisier) jets despite the objections of the FAA.

The FAA measures noise as a day-night average (DNL) with an adjustment for night time noise, which tends to significantly understate the negative impact of single event and seasonal noise. The DGEIS attempts to address this issue by measuring the DNL on a busy summer day. However, the noise is still averaged over a 24 hour period.

To give the reader an idea of how inappropriate the FAA noise averaging methodology is to residential neighborhoods on the East End, a helicopter could hover over your house continuously emitting 95 decibels of sound (a level that would make conversation impossible) for 9 hours a day every day during June, July and August and not exceed the 65 DNL average.

COMMUNITY NOISE IMPACT MODEL: RESIDENTIAL NOISE EVENTS (RNES)

A much more useful alternative to the FAA way of measuring noise is to determine the number of noise events that exceed the allowable noise level (with certain exceptions) for both East Hampton and Southampton (65dB from 7 AM to 7 PM and 50dB from 7 PM to 7 AM). To measure area-wide impact the number of affected households should be taken into account reasoning that if a sound event occurs over a sparsely inhabited area it does less damage that in a densely populated area. In order to take both noise events above the allowable thresholds and the number of residents impacted, the ANAAC has devised a metric by multiplying the number of noise events exceeding the threshold times the number of residents affected (see **Appendix A: Community Noise Impact Model**.). Thus, if 300 residents are affected by 1,000 noise events (above the threshold) per year the metric would be 300,000 annual Residential noise events. If, on the other hand, 1,000 residents were affected by 500 noise events per year the metric would be 500,000 Residential Noise Events (**RNEs**).

NUMBER OF RESIDENTS AFFECTED

According to the draft EIS⁴ (p.29), 333 residents are affected by the Northwest Harbor helicopter route if helicopters fly at 1000 feet and 212 residents if they fly at 2,500 feet. Extrapolating these results to the other two helicopter routes – over Georgica Pond and west over Jessups Neck - approximately 1,000 to 1,650 people are affected by helicopter noise (see **Appendix A** for details).

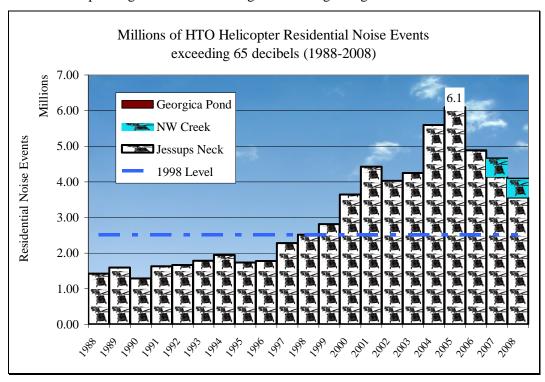
⁴ Draft Generic Environmental Impact Statement, July 2009

	Year Round Popn	Summer Popn.	# Affected at 1000 ft	% of Popn.	# Affected at 2500 ft	% of Popn.	80% compliance
NW Creek/ NW Harbor Route	2,167	12,910	387	2.6%	244	1.9%	272
Jessups Neck (Western) Route	11,166	46,658	1,200	2.6%	755	1.6%	844
Wainscott/ Georgica Pond Route	641	2,564	66	2.6%	42	1.9%	47
TOTALs	13,974	62,132	1,653	2.7%	1,040	1.7%	1,163

See Appendix A for details

These estimates of affected residents may understate the problem because of the prevalence of helicopter flights during the summer months when the population is higher. Nevertheless, they provide a basis for illustrating the overall community impact of helicopter flights. However, counting the number of residents affected does not differentiate between high traffic and low traffic routes, e.g. Northwest Creek vs. Georgica Pond. The basis for calculating Residential Noise Events in the table above are shown in Exhibit II-2 at the end of this chapter and include the following underlying assumptions:

- ➤ The number of affected residents associated declines increases between 1988 and 2006 due to population growth and declines between 2006 and 2008 due to increased average altitude at which helicopters fly over the affected areas.
- Percentage of helicopters flying the Jessups Neck route was 100% before 2007, 70% in 2007 and 65% in 2008.
- ➤ 5% of helicopter flights were over Georgica Pond beginning in 2007.



It should be stressed that these calculations are based on a model that did not have the professional input of the Town's environmental consultant, except as noted and the assumptions are subject to change. Nevertheless, we think the results are indicative of the actual community impact and are responsive to changes in helicopter flight patterns and compliance with voluntary minimum altitudes.

RESIDENTIAL NOISE EVENTS: HELICOPTERS 1988-2008

Based on the assumptions stated above we estimate that in 1988 there were 1.3 million the Residential Noise Events in excess of 65 dB (RNEs) due to helicopter traffic in and out of HTO. In 2006 RNEs peaked at almost 6.4 million RNEs then declined by a stunning 38% to 3.9 million over the two subsequent years (2007 and 2008). These results demonstrate the power of rerouting helicopters over less populated water routes, e.g. Georgica Pond and Northwest Creek.

A RETURN TO 1998 HELICOPTER NOISE LEVELS MAY BE POSSIBLE

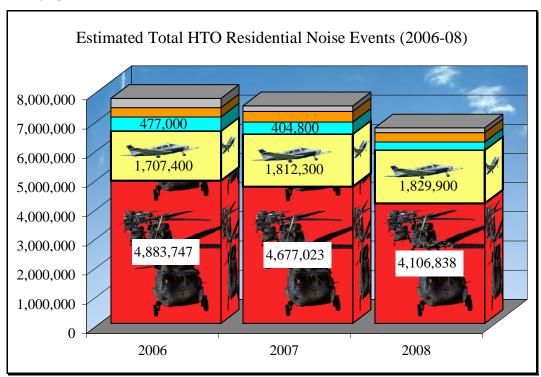
Our estimated of 2008 RNEs puts them at 157% of the estimated level in 1998, the committee's suggested noise target. The results of this community impact analysis demonstrate that increasing helicopter altitudes and continuing to reroute them over water routes could reduce the RNEs to 1998 levels. Specifically, we have found that, assuming 90% compliance with 2,500 foot minimum altitudes:

- ➤ RNEs could be reduced to 1998 levels by routing 1/3 of helicopters over Georgica Pond and 1/3 over Northwest Creek, assuming year 2007 volume of helicopter flights (6,788).
- ➤ By routing half of all helicopters flights over Georgica Pond and the other half over Northwest Creek, RNEs could be reduced to 1998 levels while volume more than doubled to 15,378 flights.

In other words, given current volumes of helicopter flights the Committee's recommended goal of reducing noise to 1998 levels could be achieved with more equitable helicopter routing. And helicopter flight volumes could more than double if the Jessups Neck route were eliminated altogether.

ESTIMATED TOTAL RESIDENTIAL NOISE (2006-2008)

By utilizing air traffic reports from airport management and making some assumptions about the residential impact of fixed wing planes (200 residents for touch & goes, 100 residents for all flights) we can estimate total residential noise impact resulting from HTO operations in 2006, 2007 and 2008, as shown in the graph below:



According to this estimate of total Residential Noise Events (for details see <u>Appendix A</u>) airport related noise has declined by 31%, more than 4 times the decline in air traffic (7.4%), during the two year period:

➤ Helicopter noise has declined by 39.3% even though helicopter flights increased by 4.8%.

- > Touch & goes, estimated as having twice the residential impact of other fixed wing flight operations, have declined by 42.6%
- ➤ Noise from Single/Multi-engine (SEME) operations, when combined with unidentified flights, decreased slightly (0.8%).

These findings strongly suggest the utility of Community Airport Noise Impact measurement and reporting system, as described in **Appendix B**.

AIRPORT MASTER PLAN

In early 2003, 1500 East End residents signed a petition asking the East Hampton Town Board to defer any further capital "improvements" to the Airport until

- An effective Noise Abatement Program is operational, and
- An updated Airport Master Plan has been adopted.

Quite obviously, any update of the Airport Master Plan, therefore, should contain an effective noise abatement plan. Yet the airport master planning process has proceeded with only lip service to noise abatement and the companion environmental impact statement only considers two management initiatives that are already under way. Furthermore, neither document recognizes the potential runaway growth of the helicopter noise nor offers any solution thereto.

DRAFT AIRPORT MASTER PLAN REPORT

A "DRAFT Airport Master Plan Report" (**DAMPR**) dated in April 24, 2007, which was prepared by Savik & Murray "in association with" DY Consultants and Young Environmental Sciences, deals primarily with the physical layout of the airport. While the report contains a noise study and lists a number of theoretical noise abatement initiatives, none are analyzed or recommended. <u>The report states no objectives for noise reduction nor does it articulate any strategy to do so.</u>

The Committee generally agrees with the Airport Role Statement and applauds the consultants for exploring new helicopter routes over water, an automated weather system (AWOS) and a seasonal control tower, all of which could ameliorate aircraft noise. <u>In addition, the noise analysis clearly states that the East End is an unusually quiet community more adversely affected by highly seasonal airport noise than the average community and that single event noise measurement should be used rather than the FAA's noise averaging methodology.</u>

However, the committee was critical of the following aspects of the report:

- The future impact of helicopter noise is seriously understated in two ways:
 - the forecast of future helicopter flights seriously understates likely future volume of helicopter flights (see **III. Twenty Year Outlook**); and
 - by using year 2000 population data the study seriously underestimates the number of people affected by helicopter noise due the building boom from 2001-2007.
- ➤ The analysis of alternatives in Chapter 5 of the DAMPR consists primarily of opinion and conjecture unsubstantiated by facts and analysis.
- The DAMPR lacks a rigorous analysis to determine the best strategy for the Town to halt the increase of and eventually reduce airport noise in light of FAA and other regulatory constraints.
- ➤ The DAMPR lacks a financial feasibility analysis to determine how best to fund the costs of operating a seasonal control tower and necessary capital expenditures without resorting to FAA funding or increasing East Hampton property taxes. Such a study may require expertise in both airport and capital (municipal bond) finance beyond the capabilities of the Town's current resources.

In short, the DAMPR does not accurately describe the growing problem of helicopter noise nor does it effectively address the elements of a noise abatement strategy.

DRAFT ENVIRONMENTAL IMPACT STATEMENT

In July, 2009 Young Environmental Sciences submitted a Draft Generic Environmental Impact Statement (**DGEIS**) that analyzes twelve proposed projects, only two of which – a seasonal control tower and an automated weather system (AWOS) – could have any positive impact on noise. While the committee supports both projects, the AWOS has already been installed and the seasonal control tower has been put out to bid, neither project will solve the helicopter noise problem. Moreover, the DGEIS only muddies the water by projecting airport traffic only until year 2013. Furthermore, the EIS was conducted under the false premise that the current noise level is acceptable, since it only analyzes increments over current levels. Subsequent to the September 17, 2009 public hearing on the DGEIS, the committee sent a latter to the town (See Appendix C) specifying the failures of the DGEIS as summarized below:

- 1. Fails to acknowledge despite overwhelming evidence, that airport noise, especially from helicopter traffic, is the major concern to thousands of residents.
- 2. Fails to measure the extent of airport noise beyond the airport boundaries, especially during the summer months, despite available methodologies to do so.
- 3. Fails to include a credible forecast of helicopter traffic, which would almost certainly demonstrate a significant adverse environmental impact absent effective mitigation.
- 4. Fails to measure the environmental impact on noise of the proposed noise mitigation measures, i.e. re-routing, a seasonal control tower and an AWOS.
- 5. Fails to consider a number of additional noise mitigation measures that may be available whether or not grant assurances are allowed expire in 2014
- 6. Fails to measure the environmental benefits of a Part 161 Study.

In addition, the DGEIS fails to comply with Section 128 of the Town Code, which requires that any airport master plan, airport layout plan or FAA five-year capital improvement plan be validated by an EIS "that takes into account <u>single-event noise</u> and <u>seasonal and weekend concentration of noise impacts.</u>" The current DGEIS does not do so (see attached letter dated September 25, 2009 to then Supervisor McGintee) and is vulnerable to an Article 78 action.

LEGAL COUNSEL & LEGISLATION

In 2007 the Town hired Peter Kirsch, a partner in the firm of Kaplan Kirsch & Rockwell (Denver, CO). Mr. Kirsch has represented Naples Municipal Airport in Florida, which prevailed in court to win a continuation of FAA funding of its capital expenditures after banning Stage 2 (noisier) jets.

However, to the best of our knowledge and judging from the lack of results to-date the Town has never charged Mr. Kirsch with responsibility of developing an effective noise abatement program. To the contrary, the evidence suggests that after a brief engagement during, the substance of which has been kept from the public, the Town stopped short of engaging Mr. Kirsch or any other qualified aviation attorney for the purposes summarized above with the following results:

- 1. **ABILITY TO ENFORCE NOISE ABATEMENT RULES COMPROMISED:** In the absence of access to qualified legal counsel, the Airport Manager is prevented from using certain tools that might be available to him to enforce voluntary noise abatement procedures for helicopters this summer. In addition, the Town continues to be subject to legal and regulatory restrictions that make it extremely difficult for the Airport Manager to enact and enforce meaningful noise abatement measures, which might be subject to legislative relief (see below).
- 2. **FEDERAL LEGISLATIVE OPPORTUNITY MAY BE LOST:** The delay in reviewing Kaplan Kirsch's recommendations may deprive the Town of a golden opportunity have Sen. Schumer and Rep. Bishop incorporate special language into the FAA re-authorization bill, which might exempt the Town from certain restrictions under the Airport Noise and Capacity Act of 1990 (ANCA) and the FAA grant assurances, possibly without giving up future FAA funding of capital projects.

3. VALUE OF AIRPORT MASTER PLAN COMPROMISED: The team responsible for the Airport Master Plan is being deprived of the very knowledge it requires to develop a noise abatement strategy that is consistent with federal aviation law and FAA regulation. No other team member has the qualifications and experience necessary to evaluate various strategies and tactics for reducing noise from low flying helicopters and from all aircraft at night. Chief among the issues to be resolved is whether the Town's noise abatement and home rule objectives are necessarily in conflict with the possibility of FAA funding for much overdue capital improvements.

In short, the failure of the Town to fully engage Kaplan Kirsch has severely jeopardized the Town's ability to complete and enact an effective noise abatement program before the end of the Supervisor's current term, and the opportunity to obtain meaningful legislative relief from certain FAA restrictions may have been lost forever. While it may have been the Town's intention to save money by minimizing legal fees, this is a great example of being penny wise and pound foolish.

LEGISLATION

Legislative relief and/or support for noise abatement could occur at many levels, e.g. local, county, state or federal, but the two that have been explored and seemed to have the most potential were local and federal. The kinds of legislation that could support noise abatement include:

- ➤ Codifying current noise abatement initiatives into (local) law to prevent them from being disregarded by future administrations.
- ➤ Enacting fines and other enforcement mechanism to strengthen the hand of the Airport Manager when dealing with private operators.
- > Grandfathering certain noise abatement provisions of the 1989 Airport Master Plan.
- Exempting HTO from certain requirements of aviation law or FAA regulation, which might enable it to exert greater control over local air traffic and still qualify for FAA funding.

The failure to properly utilize Kaplan, Kirsch, as described above, may have effectively foreclosed on the possibility of federal legislative support for local control to effect noise abatement without excessive cost, especially since the House of Representatives passed a bill in May (See Exhibit I-7: H.R. 915: FAA Reauthorization Act of 2009 at the end of the previous chapter) that includes none of the provisions described above.

AIRPORT OPERATIONS & FINANCE

Time and again the current Airport Manager has obtained approval from the Town Board to move ahead with various initiatives related to noise abatement, safety or simply operating the airport in a professional manner only to be delayed by lack of access to the airport's financial assets and/or the need to utilize various Town departments, e.g. purchasing, that have no familiarity with airport matters. An example is the automated weather observation system (AWOS), which was approved in 2006 but for various reasons not installed until 2009. One of the contributing factors is that the Town does not keep separate financial records and accounts for the airport, despite FAA regulation to the contrary. Therefore, the Airport Manager does not have access to a checking account or a reserve fund despite the belief that the airport has had an operating surplus for several years.

In addition, many penny wise and pound foolish decisions have been made when in comes to various aspects of the airport master plan update and related noise abatement initiatives. In short, every aspect of airport operations and planning has been compromised by the competing needs of a Town in financial distress.

NOISE ABATEMENT ACCOMPLISHMENTS TO-DATE

Despite our criticisms of the airport master plan, the related EIS and the failure to utilize legal counsel effectively, the Town has accomplished a number of positives as of this date:

➤ Hired an airport manager with many years of professional experience

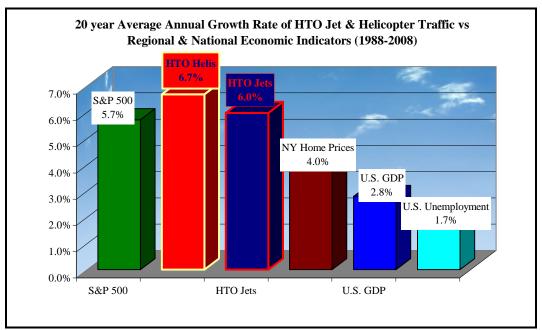
- > Created a citizens' noise abatement advisory committee.
- ➤ Hired consultants to study and make recommendations to repair and reconfigure the runways, address the growing environmental problems and other issues.
- Acquired one of the most advanced small airport flight tracking systems in the country and an automated weather reporting system that should reduce low flying flights in bad weather.
- ➤ Hired a full time noise abatement officer.
- Revised flight patterns to reduce the most egregious and repeated incidents of noise from low flying helicopter.
- Agreed to test drive a seasonal control tower that could further reduce noise over residential neighborhoods and improve safety.
- ➤ Hired a nationally recognized aviation attorney to help the town address airport noise and other related FAA issues.

EXHIBIT II-1
HTO JET & HELICOPTER FLIGHT OPS (1988-2008)

	J	ets	Helio	copters	Jets & Helicopters		
Year	Flight Ops	Annual Growth	Flight Ops	Annual Growth	Flight Ops	Annual Growth	
1988	988		1,664		2,652		
1989	1,512	53%	1,824	10%	3,336	25.8%	
1990	1,036	(31%)	1,446	(21%)	2,482	(25.6%)	
1991	834	(19%)	1,796	24%	2,630	6.0%	
1992	864	4%	1,800	0%	2,664	1.3%	
1993	1,058	22%	1,892	5%	2,950	10.7%	
1994	932	(12%)	2,024	7%	2,956	0.2%	
1995	1,098	18%	1,764	(13%)	2,862	(3.2%)	
1996	1,178	7%	1,776	1%	2,954	3.2%	
1997	1,516	29%	2,230	26%	3,746	26.8%	
1998	1,108	(27%)	2,408	8%	3,516	(6.1%)	
1999	1,866	68%	2,642	10%	4,508	28.2%	
2000	1,782	(5%)	3,352	27%	5,134	13.9%	
2001	2,280	28%	3,994	19%	6,274	22.2%	
2002	2,674	17%	3,562	(11%)	6,236	(0.6%)	
2003	2,716	2%	3,684	3%	6,400	2.6%	
2004	3,294	21%	4,754	29%	8,048	25.8%	
2005	3,400	3%	5,074	7%	8,474	5.3%	
2006	3,158	(7%)	5,787	14%	8,945	5.6%	
2007	3,599	14%	6,788	17%	10,387	16.1%	
2008	3,154	(12%)	6,066	(11%)	9,220	(11.2%)	

III. TWENTY YEAR OUTLOOK (2009-2029)

The Town is developing an update to Airport Master Plan, which was last completed in 1989, i.e. twenty years ago. For this and other reasons the Committee believes that 20 years is the appropriate time frame for planning purposes, especially for assessing the impact of the master plan on airport noise. Accordingly, we have examined the outlook for jet and helicopter traffic (and noise) from now until 2029, as compared to 2025 in the Draft Airport Master Plan Report (**DAMPR**) and 2013 in the draft EIS. This chapter reviews the available information and summarizes our conclusions as they relate to noise.



NOTE: 20 year HTO helicopter & jet growth rates are for the period ending Dec. 31, 2008 and therefore do not equal the pre-recession 20 year rates for the year ending 2007

WHY AN ACCURATE FORECAST MATTERS

The DAMPR forecast, which includes an unrealistically low forecast of future helicopter traffic, creates several problems:

- 1. It dramatically understates the magnitude of the helicopter noise problem in the future.
- 2. It creates an unrealistically low baseline by which to judge whether a control tower is causing an increase in air traffic, which might force a future Town Board to shut down the tower when in fact the tower was not the cause.
- 3. The report may also understate total airport traffic and therefore its future operational and safety needs. If helicopter ops triple in 10 years and quadruple in 20 (as they have in the past), total air traffic could nearly double and additional helicopter flights on summer weekends could create a major safety hazard.
- 4. It could undermine the credibility of the Airport Master Plan update, which once adopted becomes a matter of public record, and future noise abatement efforts such as a Part 161 study.

Therefore, the Committee has analyzed the available data and presented four alternative scenarios of future helicopter traffic, all of which assume a much higher growth rate for helicopter traffic after recovering from the economic downturn we are currently experiencing.

DRAFT AIRPORT MASTER PLAN & EIS FORECASTS

The 2007 DRAFT Airport Master Plan made the following projections of jet and helicopter traffic for East Hampton Airport through the year 2025.

Table I-17 (from 2007 DRAFT Airport Master Plan)

	2006	2010	2015	2020	2025
Single engine	16,059	16,317	16,576	16,835	17,094
Multi-engine	3,176	3,176	3,176	3,176	3,176
Jets	3,158	4,424	5,688	7,584	10,112
Rotor/Helicopters	5,787	6,573	6,761	7,074	7,512
Other AirScene	3,382	3,382	3,382	3,382	3,382
Total Annual Operations	31,562	33,872	35,583	38,051	41,276

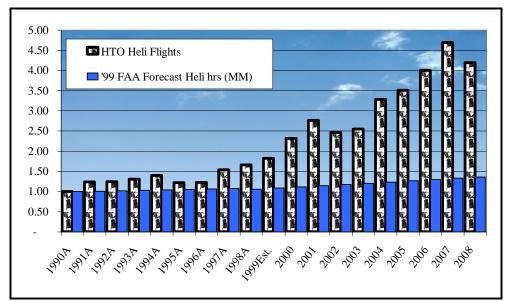
APR
0.3%
0.0%
6.3%
1.4%
0.0%
1.4%

AIRPORT MASTER PLAN'S 16 YEAR FORECAST RELIES ON NATIONAL FAA DATA

Annual percentage rates of increase, shown to the right of the table, were calculated by the Committee. We believe that the forecast in Table I-17 drastically understates future helicopter traffic, and therefore the potential noise impact, because it is based on the FAA's national forecast, which bears no relationship to local conditions. The differences include:

- Local helicopter traffic has grown by an average of 6.7% annually over last 20 years (1998-2008), i.e. much faster than the predicted rate of 1.4% for the next 16 years.
 - ➤ Historically neither FAA actual data nor FAA forecasts have been good predictors of HTO helicopter traffic (see chart below).

HTO HELICOPTER FLIGHTS COMPARED TO FAA ACTUAL (1990-99) & FORECAST (2000-2008) HELICOPTER HOURS (1990=1.00)



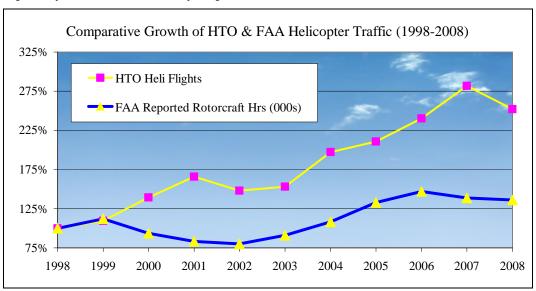
➤ Prior to the economic downturn in 2008 the growth rate of local helicopter traffic has been accelerating (see table below)

III. TWENTY YEAR OUTLOOK (CONT'D.)

Annual Growth Rates for HTO Jet & Helicopter Traffic

Time Period	Jets	Helis
20 Years (1987-2007)	7.3%	7.9%
10 years (1997-2007)	9.0%	11.8%
5 Years (2002-2007)	6.1%	13.8%

➤ Unlike national trends, helicopter traffic at HTO has been growing faster than jet traffic, especially for the last 5 and 10 year periods.



Finally, the forecast in the 2007 DAMPR was conducted before the economic downturn of 2008-2009 and does not reflect any downturn or recovery related thereto.

EIS'S FIVE YEAR FORECAST ALSO RELIES ON FAA DATA

The Draft Generic Environmental Impact Statement submitted by Young Environmental Sciences in July, 2009 provides a five year forecast of airport traffic, as shown below.

DGEIS Table2-17	2008	2009	2010	2011	2012	2013	APR
Single engine	18,299	17,101	16,998	16,998	16,998	16,998	-0.2%
Multi-engine		2,771	3,746	2,718	2,691	2,664	-1.0%
Jet	3,154	3,387	3,638	3,813	3,996	4,187	5.4%
Rotor/Helicopters	6,066	6,309	6,561	6,725	6,893	7,512	4.5%
Other Airscene	1,701	NA	NA	NA	NA	NA	NA
Total Annual Operations	29,220	29,568	30,943	30,254	30,578	31,361	1.5%

It is unclear why the DGEIS contained only a five year forecast, but it again relies on national FAA and therefore suffers from the same inadequacies as the 2007 forecast and introduces some additional shortcomings:

Five years is too short a period to assess a twenty year plan. While five years may be the planning horizon for FAA approved Airport Layout Plans (ALPs), the 1989 Airport Master Plan and the East Hampton Town Comprehensive Plan have much longer time horizons, e.g. 20 years.

ALTERNATIVE FORECASTING METHODOLOGY

Due to the inadequacies of the forecasts in the 2007 DAMPR and the 2009 DGEIS and the importance of future jet and helicopter traffic to the impact of airport noise on the community, the Committee has prepared an alternative forecast that it believes should be given serious consideration in the Airport Master Plan update. Our methodology and findings are explained below.

EFFECT OF ECONOMIC CONDITIONS

There is no question that the economic downturn of 2008-09 has a had a significant short term effect on air traffic in and out of HTO. For 2008 total air traffic declined by 10 percent with jet traffic declining even faster than helicopter and other traffic.

HTO AIR TRAFFIC 2008 VS 2007							
2008 2007 % Change							
Jets	3,154	3,599	(12.4%)				
Helicopters	6,066	6,788	(10.6%)				
SEME ⁵	18,299	20,147	(9.2%)				
Airscene (no tail #)	1,701	1,937	(12.2%)				
Total Movements	29,220	32,471	(10.0%)				

And air traffic for the first six months of 2009 declined by approximately 27%, but staged a significant recovery in July (down by 16%) so that air traffic for the first 7 months has declined by 21%.

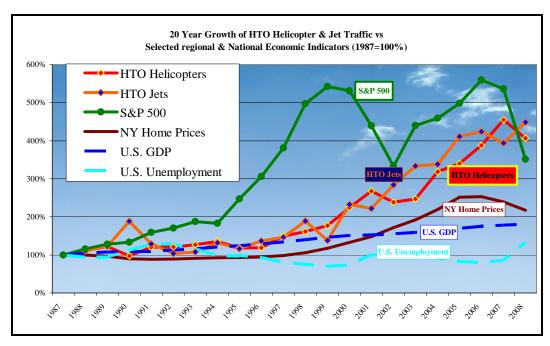
HTO AIR TRAFFIC – FIRST 7 MONTHS OF 2009 VS 2008								
	July 2009	July 2008	% Change	2009 Ytd	2008 Ytd	% Change		
Jets	543	776	(30.0%)	1,314	1,748	(24.8%)		
Helicopters	1,177	1,364	(13.7%)	2,820	3,559	(20.8%)		
SEME	2,593	2,996	(13.5%)	8,089	10,304	(21.5%)		
Airscene (no tail #)	119	160	(25.6%)	845	934	(9.5%)		
Total Movements	4,432	5,296	(16.3%)	13,068	16,545	(21.0%)		

Thus far in August, HTO traffic has been comparable to August, 2008; in other words, this year's traffic, which was down by 27% for the first six months of 2009, has been catching up with last year's. If the trend continues, overall traffic will decline by approximately 12% for the full year, as compared to the more conservative 20% decline we have assumed for the purposes of our forecast.

NATIONAL ECONOMIC DATA DOESN'T PREDICT HTO JET & HELICOPTER TRAFFIC

To forecast future demand, however, we looked beyond HTO traffic for other indicators. We considered national indicators such as Gross Domestic Product and unemployment but rejected them as being very poorly correlated with HTO traffic patterns (see chart below). We also considered such indicators as the Case Schiller index of New York area home prices, which correlated better but did not really explain or predict the growth in HTO jet and helicopter traffic very well, and the stock market (S&P 500), which showed the best, albeit imperfect, correlation and may prove to be a leading indicator after adjusting for bubbles.

⁵ SEME = Single Engine and Multi-engine fixed wing, piston driven planes.



UNIQUE ASPECTS OF EAST END NOT REFLECTED IN NATIONAL ECONOMIC & FAA DATA

We believe, therefore, that the conditions that best explain the rapid growth in jet and helicopter traffic at East Hampton airport are unique to the East End of Long Island and include:

- > The proximity of the East End to New York City and the challenges associated with commuting from one to the other.
- The desirability of the East End as a summer and weekend resort to wealthy people from the New York metropolitan area, Hollywood, Europe and Asia, i.e. all over the world.
- ➤ The importance of the financial industry to the New York area economy, which cannot be measured by stock market performance alone, but also by investment banking, financial advisory and merger and acquisition activity.

With respect to the financial industry, there is considerable evidence that it is leading the economic recovery in this country and all over the world.

- The stock markets have bounced back from their lows earlier this year. For example, as of this writing the S&P 500 has risen by over 50% from its low on March 9, 2009.
- ➤ Goldman Sachs and other financial institutions are beginning to report significant quarterly profits and are making forward commitments to pay multi=million bonuses to employees.
- Nobel Prize winning economist Paul Krugman has stated that he believes action by the US and foreign governments have headed off a 1930s style depression.
- Federal Reserve Chairman Ben Bernanke first made reference to "green shoots" of recovery on March 15.

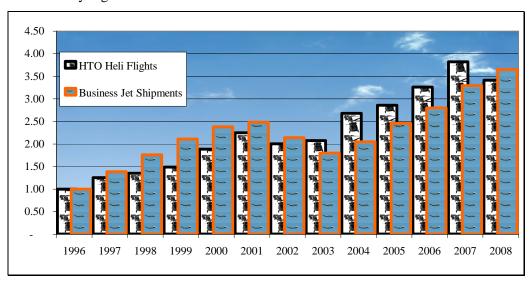
No economist thinks that the recovery will be easy or quick, but there is a general consensus that we are on our way.

HTO HELICOPTER & BUSINESS JET GROWTH

We cannot help noticing that, unlike in the national FAA data, helicopter traffic at HTO has been growing somewhat faster than HTO jet traffic -6.7% vs 6.0% over the past 20 years. Moreover, the volume of helicopter traffic at HTO in 2008 (6,066) was nearly twice the volume of jet traffic (3,154). It has been

⁶ March 15, 2009 interview with <u>CBS</u> <u>60 Minutes</u>.

suggested, therefore, that perhaps because of the unique geographic characteristic of New York City and the East End of Long Island, that helicopters serve a purpose similar to business jets in other parts of the country. Accordingly, we compared (national) business jet shipments with HTO helicopter flights since 1996 and found a very high correlation.



Consequently, we conclude that any forecast of future HTO helicopter traffic should incorporate growth rates equal to or greater than relevant business jet forecasts. Since we were unable to find reliable estimates of the growth of business jet shipments, we have relied on other estimates of business jet growth, e.g. the FAA, and on local experience with helicopter traffic.

COMMITTEE'S ALTERNATIVE 2009-2029 FORECASTS

The Committee, therefore, offers four alternative forecasts based on a range of assumptions or scenarios. This range of forecasts differs from the FAA based forecasts in a number of significant ways:

- ➤ All four scenarios reflect the actual drop-off in air traffic during 2008 and 2009 and a recovery period through 2011 before resuming normal growth.
- > Growth rates are based on actual experience at East Hampton Airport rather than poorly correlated national averages.
- > Growth in helicopter traffic is assumed to equal or exceed growth in jet traffic in accordance with actual experience at East Hampton Airport rather than national averages that show much lower rates of growth for helicopter usage than for small business jets.
- ➤ Projections were extended to 2029 in order to yield a 20 year planning period.

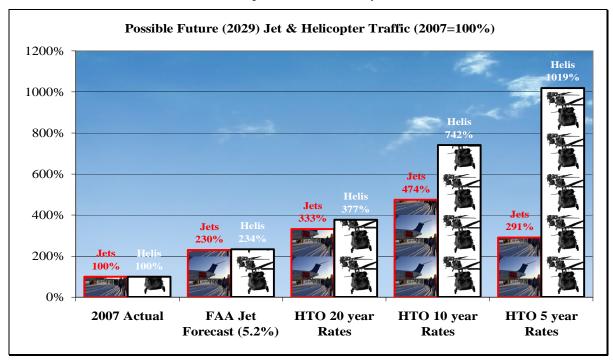
The four scenarios can be summarized as follows:

- 1 The annual rates of growth for local jet and helicopter traffic are equal; both are based on the FAA's 2009 Table 28 for jet traffic.
- 2 Based on the actual 20 year (1987-2007) local growth rates of jets & helicopters.
- 3 Based on the actual 10 year (1997-2007) local growth rates of jets & helicopters.
- 4 Based on the actual 5 year (2002-2007) local growth rates of jets & helicopters.

THE RESULTS

By extending the forecast period to 2029 and applying more realistic growth rates to jet and helicopter traffic, we find that jet and helicopter traffic could grow to 2.5 to 10 times their most recent peak levels in 2007. The committee's four alternative forecasts are based on FAA data and on local conditions and historical growth rates and all four scenarios assume a more pessimistic growth between now and 2012 than assumed in the 2007 DRAFT Airport Master Plan Report (**DAMPR**) and in the July, 2009 Draft

Environmental Impact Statement (**DGEIS**). If any of the committee's four scenarios is closer to the reality than in the DAMPR and the DGEIS, the latter only projects to 2013, then jet and helicopter noise could have a much worse environmental impact than forecast by the Town's consultants.



ASSUMPTIONS: 2009-2011

As stated above and unlike the assumptions underlying the Draft Airport Master Plan and Environmental Impact Statement, we have assumed a significant downturn in air traffic for the period 2009-2011, i.e.

- ➤ In 2009 jet and helicopter traffic will decline by 20% from 2008 levels
- ➤ In 2010 jet and helicopter traffic will recover to 2008 levels, a decline of 12.4% and 10.6% respectively from 2007 levels.
- ➤ In 2011 jet and helicopter traffic will return to 2007 levels, i.e. zero net growth for the four year period.

These assumptions are considerably more conservative than the projections prepared by Savik and Murray in 2007 before the economic downturn began and the projections prepared by Young Environmental Sciences in July 2009. However, the committee's long term projections are much more aggressive than the consultants' for the reasons stated above.

ASSUMPTIONS: 2012-2029

The committee has created four scenarios for growth of jet and helicopter traffic between 2012 and 2029, as described below. All four scenarios assume the same recovery decline and recovery scenario between 2009 and 2011 then a resumption of growth from 2012 through 2029 based on the average annual growth rates shown below:

	AVERAGE ANNUAL GROWTH RATES									
Scenario Jets Helicopters Comments										
1	5.9%	5.9%	Jet rate based on DGEIS/FAA Table 28; helicopter & jet rate equal							
2	7.3%	7.9%	Based on 20 year (1987-2007) jet & helicopter growth rates							
3	9.0%	11.8%	Based on 10 year (1997-2007) jet & helicopter growth rates							
4	6.1%	13.8%	Based on 5 year (2002-2007) jet & helicopter growth rates							

Scenario 1 assumes that 2010 traffic will return to 2008 levels and that the growth rates shown in the table below begin in 2011. This scenario utilizes the growth rate for jet traffic based on Table 2-18 of the DGEIS, which is based on FAA Forecast Table 28. We have then simply adjusted the assumed rate of growth of HTO helicopter traffic to more nearly equal the relative growth rates at HTO. This is actually a conservative assumption in that the 5, 10 and 20 year growth rates for helicopters have all exceeded those of jets at HTO. Scenarios 2, 3 and 4 reflect those historical growth rates.

Scenario 2 assumes that 2010 traffic will return to 2008 levels and that the growth rates shown in the table below begin in 2011.

Scenario 3 & 4 assume that 2010 traffic will return to 2008 levels, 2011 traffic to 2007 levels and that the growth rates shown in the tables below begin in 2012.

The forecasts resulting from these scenarios are shown in **Exhibit III-1** at the end of this chapter.

SUMMARY OF SCENARIOS

We have shown why the committee believes that the forecasts contained in thee 2007 Draft Airport Master Plan and in the 2009 Draft Environmental Impact Statement dramatically understate future jet and helicopter traffic. We have also shown that there is a weak correlation between national economic data and HTO jet and helicopter traffic. Finally four alternative forecasts based on more realistic assumptions predict future jet and helicopter traffic reaching at least 2.3 times current levels by 2029 based on national FAA data and as much as 10 times current levels using historical growth rates for HTO (see table below).

	НТ	HTO Flight Ops			% of 2007 Flight Ops		
Scenarios		Heli	Total	Jets	Helis	Total	
Actual 2007 Flight Ops	3,599	6,788	31,562	100%	100%	100%	
1. HTO jet & helicopter growth based on FAA rate							
for jets	8,261	15,888	45,994	230%	234%	146%	
2. 20 year (1987-2007) jet & helicopter growth rates	11,970	25,584	59,400	333%	377%	188%	
3. 10 year (1997-2007) jet & helicopter growth rates	17,063	50,342	89,250	474%	742%	283%	
4. 5 year (2002-2007) jet & helicopter growth rates	10,487	69,169	101,502	291%	1,019%	322%	

ESTIMATED RESIDENTIAL NOISE EVENTS IN EXCESS OF 65 DB

Using Community Noise Impact Model described in <u>Appendix A</u>, we can estimate community impact for each of the 4 forecast scenarios above. Unfortunately we are limited only to helicopter impact because the Town's consultant has not provided sufficient data to make similar calculations for jets.

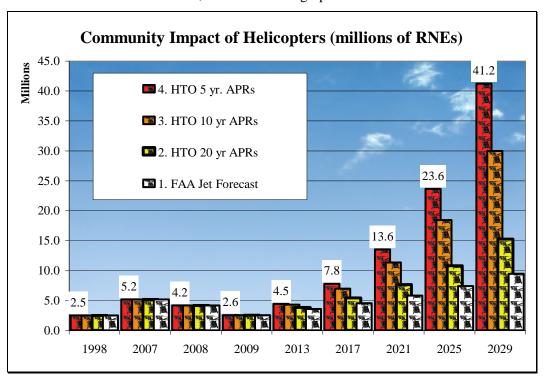
UNDERLYING ASSUMPTIONS

The forecasts of community impact incorporate a number of assumptions, which reflect the current DRAFT Airport Master Plan as well as other current conditions:

- > No new noise abatement initiatives will be instituted
- No legal or regulatory restraints will be imposed on the volume of helicopter traffic at HTO.
- ➤ HTO will continue to utilize existing helicopter routes –Northwest Creek for incoming flights, Jessups Neck for outgoing flights and Georgica Pond for incoming and some outgoing flights.
- ➤ Helicopters utilizing the Georgic Pond route will not exceed 20% of total traffic.
- No significant increases in helicopter altitudes will take place.
- No technology advances will result in significant reductions in helicopter noise.

RESULTS

Using the same methodology as in the previous chapter to calculate Residential Noise Events in excess of 65 dB (RNEs) and the four forecasting Scenarios just discussed, we estimate that community impact could increase from approximately 2.9 million RNEs to at least 8.7 million in 2029 and possibly as high as 41.2 million Residential Noise Events, as shown in the graph below.



Expressed another way, we estimate that the community impact from helicopters alone would triple by 2029 to 8.7 million events using the most conservative scenario and could reach in excess of 11 to 15 times current levels if reality resembles the higher growth scenarios (3 or 4)

ESTIMATED 2029 HELICOPTER RESIDENTIAL NOISE EVENTS AS % OF HISTORICAL LEVELS

Comparison Years	Scenario # 1. FAA Jet Forecast	Scenario # 2. HTO 20 yr APRs	Scenario # 3. HTO 10 yr APRs	Scenario # 4. HTO 5 yr. APRs
2029 as % of 1998	392%	631%	1241%	1705%
2029 as % of 2007	189%	305%	600%	824%

The committee has judged 1998 as the last year that helicopter noise was tolerable, and has asked the Town to establish that level as an objective for future noise abatement. According to the 1998 benchmark the dual effects of airport management's initiatives (new helicopter routes and voluntary enforcement of minimum altitudes) and the economic meltdown in 2008-09 have reduced community impact to within 20% of 1998 levels.

In the previous chapter we estimated that community impact could be reduced to the Committee's recommended goal of 1998 levels (2.5 million) "by routing half of all helicopters flights over Georgica Pond and the other half over Northwest Creek, ... [even if] volume more than doubled to 15,378 flights." This would be feasible only under the most conservative forecast (Scenario # 1), which predicts that helicopter traffic would increase to 15,888 by 2029. <u>In other words, this aggressive helicopter routing strategy would fail to adequately reduce community impact (to 1998 levels) even if helicopter traffic grew no faster over the next 20 years than it did over the last 20 years!</u>

The challenge will be for future Town Boards and airport management to find ways to continue to reduce the community noise impact of helicopters in the face of growing demand for helicopter commuter services between New York City and the East End.

EXHIBIT III-1: 4 SCENARIOS FOR FUTURE HTO HELICOPTER VOLUME

Scenario 1: As in the DGEIS and the DAMPR assumes continuous growth of air traffic rather than a dip in 2009 and 2010.

Scenario 1: Jets based on DGEIS; helicopters growth = jet growth	2009	2011	2013	2025	2029	2009-'29 APR
Single engine	13,763	17,804	17,873	18,295	18,438	0.2%
Multi-engine	2,237	2,343	2,343	2,343	2,343	0.0%
Jets	2,523	3,318	3,672	6,745	8,261	5.2%
Rotor/Helicopters	4,853	6,381	7,062	12,973	15,888	5.2%
Other Airscene	1,361	1,028	1,032	1,056	1,065	0.2%
Total Annual Operations	24,737	30,874	31,982	41,412	45,994	2.3%

Scenario 2: 20 year (1987-2007) growth rates	2009	2011	2013	2025	2029	2011-'29 APR
Single engine	13,763	17,804	17,873	18,295	18,438	0.2%
Multi-engine	2,237	2,343	2,343	2,343	2,343	0.0%
Jets	2,523	3,383	3,893	9,040	11,970	7.3%
Rotor/Helicopters	4,853	6,543	7,614	18,897	25,584	7.9%
Other Airscene	1,361	1,028	1,032	1,056	1,065	0.2%
Total Annual Operations	24,737	31,102	32,755	49,631	59,400	3.7%

Scenario 3: 10 year (1997-2007) growth rates	2009	2011	2013	2025	2029	2012-'29 APR
Single engine	13,763	17,804	17,873	18,295	18,438	0.2%
Multi-engine	2,237	2,343	2,343	2,343	2,343	0.0%
Jet	2,523	3,599	4,278	12,074	17,063	9.0%
Rotor/Helicopters	4,853	6,788	8,481	32,252	50,342	11.8%
Other Airscene	1,361	1,028	1,032	1,056	1,065	0.2%
Total Annual Operations	24,737	31,562	34,007	66,021	89,250	6.1%

Scenario 4: 5 year (2002-2007) growth rates	2009	2011	2013	2025	2029	2012-'29 APR
Single engine	13,763	17,804	17,873	18,295	18,438	0.2%
Multi-engine	2,237	2,343	2,343	2,343	2,343	0.0%
Jet	2,523	3,599	4,053	8,269	10,487	6.1%
Rotor/Helicopters	4,853	6,788	8,785	41,293	69,169	13.8%
Other Airscene	1,361	1,028	1,032	1,056	1,065	0.2%
Total Annual Operations	24,737	31,562	34,087	71,256	101,502	6.9%

IV. CONCLUSIONS & RECOMMENDATIONS

This chapter summarizes and makes recommendations based on the findings and conclusions of the three previous chapters.

SUMMARY OF FINDINGS & CONCLUSIONS

Airport related noise, a problem recognized in the 1989 Airport Master Plan Update, reached epidemic proportions by 2003 when 1500 residents signed a petition demanding an <u>effective</u> noise abatement program before any further capital expenditures were made. As a result, in 2003 the Town Board abandoned a proposed Airport Layout Plan (ALP) after a public hearing in December, 2002 at which the public was overwhelmingly opposed.

NOISE ABATEMENT ADVISORY COMMITTEE FORMED

In 2004, the Town received a Proposed Scope of work to update the East Hampton Airport Master Plan and on September 16, 2005 appointed 15 people to an Airport Noise Abatement Advisory Committee to advise the Town on noise abatement "procedures" and noise related aspects of the airport master plan. As a result the committee has issued three reports and sent several letters to the Town recommending that the Town:

- Establish noise abatement goals and objectives, including reducing airport noise to 1998 levels.
- Consider noise abatement initiatives recommended by the Committee (**Exhibits I-2, 4** and **5**).
- ➤ Institute certain operational improvements (Exhibits I-3).
- > Seek federal legislation that would accomplish several noise abatement objectives (**Exhibit I-6**).

The Town has implemented a number of the recommended management improvements but established no goals and objectives.

QUALIFIED ATTORNEY RECOMMENDED

The Committee also recommended that the Town hire a qualified aviation attorney to design a Noise Abatement Program that is feasible under aviation law and FAA regulations including:

- Assessing the feasibility of certain noise abatement initiatives recommended by the Committee. (see **Exhibits I-2, 4** and **5.**)
- Assessing the compatibility of such noise abatement initiatives with future FAA funding.
- Assessing the implications of certain FAA Grant Assurances expiring in 2014 and the rest in 2021 if no further federal funds are accepted by the Town.
- Assisting the Town in designing federal legislation that would make it easier to implement an effective noise abatement program

It has been recommended that the goals and objectives and the resulting Noise Abatement Program be incorporated into the master plan update.

AIRPORT MASTER PLAN & ENVIRONMENTAL IMPACT STATEMENT

The DRAFT Airport Master Plan Report (**DAMPR**) issued in 2007 and attendant Environmental Impact Statement (**DGEIS**) issued in July, 2009:

- > consider fewer noise abatement initiatives than in the 1989 plan,
- include no noise abatement objectives
- > ignore the future noise impact of continued growth of jet and helicopter flights (see Chapter III)
- > conclude that there is no adverse noise impact due to airport improvements under consideration.

AIR TRAFFIC

While overall volume of flight operations has remained relatively stable at HTO the mix of equipment and types of flights has changed:

- ➤ Helicopter traffic at HTO quadrupled between 1998 and 2007 before declining by 11% in 2008.
- > Jet traffic grew to over 3.64 times its 1998 level by 2007 before declining by 12%.
- ➤ Helicopter traffic grew by 6.7% a year between 1988 and 2008 and jets by 6.0% a year.
- > Touch & goes declined by over 40% between 2006 and 2008 and continued to decline in 2009.
- Night flights (11 PM to 7 AM) decreased by 23% from 2007 to 2008 and 13% through July 2009.

Helicopter routing has changed drastically since 2004 with more than half of all flights being directed over "water routes" (Northwest Creek and Georgica Pond), as compared to the western route over 6 to 7 miles of land. In addition, helicopter pilots are complying with route and minimum height requirements to a much greater degree than before 2005.

NOISE MEASUREMENT – FAA NOISE AVERAGING VS. SINGLE EVENT NOISE

The FAA considers an average noise level of 65 decibels over a 24 hour period (with a 10 dB penalty between 10 PM and 7 AM) acceptable. This noise standard yields the ludicrous conclusion that if a helicopter hovered over your house for 12 hours a day emitting enough noise to make normal conversation impossible, the FAA would consider the noise level acceptable. By contrast both East Hampton and Southampton consider any noise event in excess of 65dB during the day (7 AM to 7 PM) and 50 dB at night unacceptable; there are certain exceptions, e.g. construction equipment and aircraft.. This is known a Single Event Noise measurement.

The Committee has repeatedly requested that the Town utilize Single Event Noise in its assessment of the airport noise and potential solutions. This noise measurement technique is well known to environmental consultants and well within their capability. Yet it is absent from the July, 2009 Draft EIS.

COMMUNITY IMPACT - RESIDENTIAL NOISE EVENTS (RNES)

The Committee employed a prototype Community Noise Impact Model described in <u>Appendix A</u> to measure the impact of Single Event Noise on residents. Residential Noise Events are defined as the number of aircraft events exceeding 65 dB multiplied by the number of residents affected. The results are illuminating:

- ➤ Total Residential Noise Events (**RNEs**) for all air traffic to and from HTO was estimated to be 7.7 million in 2006, 7.4 million in 2007 and 6.6 million in 2008 a decline of 14.8% in two years as compared to a 7.4% decline in traffic.
- The estimated number of RNEs from helicopters declined by 16% from almost 4.9 million in 2006 to 4.1 million in 2008 despite a 4.8% increase in helicopter flights.

1998 Noise Targets Achievable

A 20% decline in helicopter flights in 2009 would put total helicopter RNE within reach of 1998 levels (2.5 million RNEs). Our community impact model suggests that 1998 levels could be reached by achieving 90% compliance with minimum altitudes of 2500 feet and:

- ➤ If helicopter flights do not exceed their previous peak in 2007, routing 1/3 of helicopters over Georgica Pond and 1/3 over Northwest Creek.
- > If helicopter volume no more than doubles, routing half of all helicopters flights over Georgica Pond and the other half over Northwest Creek.

All the underlying assumptions and predicted results should be verified by a qualified environmental consultant using a full featured noise model and actual data from HTO's flight tracking system (AirScene).

AIRPORT MANAGEMENT

Credit should given to the Town Board for hiring an experienced airport manager and a noise abatement officer, who have effected and are in the process of effecting a number of noise related improvements:

- > Establishing and improving helicopter compliance with minimum altitudes
- ➤ Establishing two new helicopter routes largely over water Northwest Creek and Georgica Pond and working to improve compliance.
- > Ordering and installing an Automated Weather Observation System (AWOS) that will improve safety and reduce the incidence of low altitude flights during low visibility conditions.
- ▶ Planning and obtaining proposals to operate a seasonal control tower.

Nevertheless, the Town Board has not given the Airport Manager enforcement powers, and management can only do so much to mitigate noise in the absence of a well designed noise abatement program supported with local, and possibly federal, legislation.

AIRPORT FINANCES

As with the Town in general, airport finances are in disarray and may be in violation of federal law. As a result improvements in safety and noise abatement, especially those requiring outside professional assistance, have been crippled.

AIRPORT MASTER PLAN

After five years (and counting) in development and hundreds of thousands of dollars spent, the Town Board has little more than an expensive Airport Layout Plan to show for its time and money. Despite extensive, carefully considered recommendations from the Committee on everything from the scope of work to the use of legal counsel. And despite a broad consensus at the July 2007 public hearing that helicopter noise was a huge problem left unaddressed by the master plan report, the Environmental Impact Statement does not even attempt to address the issue.

Many of the shortcomings of the EIS simply reflect shortcomings of the Draft Airport Master Plan Report (**DAMPR**):

- Absence of any stated noise abatement goals and objectives.
- Absence of a comprehensive noise abatement program, although a number of techniques ere mentioned in Chapter IV.
- > Unrealistically low forecast of future helicopter traffic based on national trends that do not reflect local conditions.
- Absence of qualified legal counsel from the planning team to help determine what noise abatement initiatives might be feasible with or without federal legislation.

As a result the EIS:

- Addresses no noise abatement initiatives beyond those already being implemented by airport management (see above).
- > Fails to recognize the long term implications of growing helicopter and jet traffic by limiting its traffic forecast to 5 years.
- ➤ Uses the discredited FAA day-night noise averaging methodology, as opposed to single event noise used by Naples Municipal Airport, to measure the noise impact of the proposed changes.
- Makes no attempt to measure the impact of helicopter noise on the community (see **Appendix A**) except to count the residents affected by the Northwest Creek route (page 29 of the DGEIS).

In short the EIS simply endorses those projects already approved by the Town Board, but does not consider alternatives including many noise abatement initiatives recommended by the Committee.

20 YEAR OUTLOOK

The Committee considers a reasonably accurate forecast of future airport operations essential to identifying and addressing problem areas. The DAMPR includes a ridiculously lowball forecast of future helicopter traffic that bears no relationship to the local experience. At HTO, helicopter traffic is the fastest growing component of flight operations and its growth has accelerated over the last 20 years, As a result, the Committee prepared four forecast scenarios for helicopter traffic, which are compared to the DAMPR forecast in the table below:

G CF CF	Annual	Helicopter Flights in	Helicopter Flights in
Source of Forecast	Growth Rate	Year 2025	Year 2029
DAMPR Forecast	1.4%	7,512	NA
July, 2009 EIS	2.9%	NA	NA
Scenario 1. FAA Jet Forecast	5.9%	12,973	15,888
Scenario 2. Actual HTO 20 yr Heli.Growth Rate ⁷	7.3%	18,897	25,584
Scenario 3. Actual HTO 10 yr Heli. Growth Rate ⁸	11.8%	32,252	50,342
Scenario 4. Actual HTO 5 yr Heli. Growth Rate ⁹	13.8%	41,293	69,169

Nor do they acknowledge the dramatic reduction in air traffic (21%) for the first seven months of 2009. The Committee believes that this discrepancy can be explained by the consultants' reliance on FAA national data, which does not correlate with local experience for the reasons explained in Chapter III.

As a result, neither the EIS nor the DAMPR acknowledges the potential future growth of the airport's single greatest noise problem - helicopters. The implications are staggering. If helicopter traffic grow as fast in the nest 20 years as in the last 20, Residential Noise Events could triple. Alternative scenarios predict that helicopter RNEs could reach 2 to 8 times 2007 levels, even assuming improved route and altitude compliance

ESTIMATED 2029 HELICOPTER RESIDENTIAL NOISE EVENTS AS % OF HISTORICAL LEVELS

Comparison	Scenario # 1.	Scenario # 2.	Scenario # 3.	Scenario # 4.
Years	FAA Jet Forecast	HTO 20 yr APRs	HTO 10 yr APRs	HTO 5 yr. APRs
2029 as % of 1998	392%	631%	1241%	1705%
2029 as % of 2007	189%	305%	600%	824%

The analysis concludes that an aggressive helicopter routing strategy would reduce community impact (to 1998 levels) only if helicopter traffic grows slower over the next 20 years than over the last 20 years!

⁷ 1987-2007 annual growth rate.

^{8 1997-2007} annual growth rate. 9 2002-2007 annual growth rate. 1)

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RECOMMENDATIONS

AIRPORT MASTER PLAN & ENVIRONMENTAL IMPACT STATEMENT

One of the key reasons the ANAAC was formed was to advise the Town Board on incorporating a Noise Abatement Program (NAP) into the Airport Master Plan update. From the very beginning the Committee has insisted that no Airport Master Plan would be responsive to the community without a Noise Abatement Program and that a feasible plan cannot be designed without the active involvement of a qualified aviation attorney such as Kaplan Kirsch, which the Town has retained but not used for this purpose. Here are some of the key elements for such a plan.

- > Must be an integral part of the Airport Master Plan Update.
- ➤ Must contain stated noise abatement Goals & Objectives; the Committee has consistently recommended returning to the levels of noise that prevailed in 1998.
- > Must reflect community environmental and economic priorities and include a process for obtaining and incorporating community input
- ➤ Must be Legally & Financially Feasible
- > Must consist of specific noise abatement initiatives that are evaluated in the Environmental Impact Statement required by law for the Airport Master Plan.
- Must include a funding plan, a timetable and enabling legislation

The Committee requests that the current Draft Airport Master Plan and EIS be amended as follows:

- 7. Explicitly acknowledge the excessive community impact of helicopter noise in 2009.
- 8. Amend the forecast of helicopter traffic to encompass a 20 year period and a growth rate based on local experience as suggested in Chapter III of this report. At least three growth scenarios would better facilitate contingency planning.
- 9. Measure the community impact of single event noise along the lines of the model incorporated in Chapters II and III of this report and described in detail in **Appendix A**.
- 10. Propose and evaluate specific measures to reduce helicopter noise using single event noise measurement and the Town Code's thresholds for noise violations, i.e. 65 db from 7 AM to 7PM and 50 dB from 7 PM to 7 AM, including:
 - i. the possibility of limiting helicopter traffic through legislation or other means;
 - ii. aggressive rerouting of helicopters away from the longest land route Jessups Neck.
- 11. Utilize legal counsel to hypothesize and test realistic noise abatement strategies.
- 12. Include an implementation and financing plan that resolves potential conflicts between noise abatement objectives and funding sources (see below).

The committee wishes to point out that all but one of these recommendations (aggressively rerouting helicopters) were first made in their current or similar form in 2005. (Please see also the recommendations in the committee's letter to Supervisor McGintee in Appendix C of this report.)

NOISE MEASUREMENT & REPORTING SYSTEM

Just as profits are the bottom line for corporate performance, noise is the bottom line for the Airport as far as the community is concerned. If noise is not measured, there will be no objective way to determine whether noise abatement initiatives are effective. A noise measurement system has three essential components:

➤ A **Noise Measurement Methodology** based on community standards for excessive noise, i.e. single events, rather than FAA noise averaging methodology, which is inappropriate to residential

areas on the East End of Long Island. The Committee recommends a production version of the prototype **Community Noise Impact Model** described in **Appendix A**.

- ➤ A **Data Collection System** that obtains all the relevant data needed to assess and manage the problem on an ongoing basis and provide a baseline measurement. The Airscene flight tracking system can, with some additional programming, compile most of this necessary data.
- A **Reporting System** that summarizes and analyzes the noise impact on various residential neighborhoods so that the Town and the community can quickly and easily assess the results, just as investors can assess corporate performance from its quarterly earnings per share.

For more about a Noise Measurement & Reporting System for HTO see <u>Attachment B</u> at the end of this report.

SPECIFIC NOISE ABATEMENT INITIATIVES

The following initiatives have been recommended to the Town Board in past reports from the Committee.

1. Minimum Altitudes for Helicopters

Airport management has increased voluntary minimum altitudes for helicopters and revised approach and departure procedures to increase altitudes over neighborhoods close to the airport. The Committee believes that while altitude compliance is now over 80 percent, it could be improved still further.

2. Helicopter Routing

Airport management has demonstrated that it can significantly reduce the noise impact of helicopters by rerouting (see Chapter II) them over water. Our Community Noise Impact Model (**Appendix A**) suggests that aggressive routing could reduce the helicopter noise impact to 1998 levels. Therefore, the Committee recommends that the Town Board support airport management's efforts to reroute as many helicopter flights as possible over Georgica.

3. A Seasonal Control Tower

The Committee agree with the Airport Manager that a seasonal control tower would yield much better control over flight patterns and practice, and therefore noise. It will facilitate real time compliance with voluntary noise rules and enable the controllers to spread the noise around more equitably.

4. Landing Fees Related to Noise Emissions and Time of Day

Preliminary indications are that a nominal fees imposed by on touch and goes have helped reduce traffic by half. High cost jets and helicopters, especially those charging their passengers fares, would likely require a higher fee increase to influence their behavior. Such fees would have the additional benefit of helping fund the cost of the airport's operations and capital improvements. Kaplan Kirsch & Rockwell LLP (**KKR**) and HMMH state that other airports have imposed "landing fees based on noise, time of day or other noise-related considerations." The Committee reiterates its support of this measure.

5. Restrictions on Stage 2 Jets & Helicopters

Some older noisier jets and all helicopters currently in use are classified as Stage 2 aircraft. According to KKR and HMMH "The FAA has taken the position that the [Airport Noise and Capacity Act of 1970] and [FAR] Part 161 apply to restrictions on helicopters." and go on to recommend that "an airport considering noise or access restriction on fixed wing aircraft should factor helicopters into the analysis." Both of these firms advised the Naples (FL) Airport in their efforts to ban Stage 2 jets. Since the Naples Municipal Airport in Florida has already won a court case allowing it to restrict noisier (Stage 2) aircraft without foregoing FAA funding, the Committee recommends that Town of East Hampton begin now to explore (with the assistance of qualified legal counsel) the possibility of banning Stage 2 aircraft, which

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¹⁰ "GUIDE TO AIRPORT NOISE RULES AND USE RESTRICTIONS" by Kaplan Kirsch & Rockwell and Harris Miller Miller & Hanson Inc. – June 2004 (p. 12)

¹¹ IBID. (p. 19).

includes most helicopters. In light of a recent (June 2005) court decision in Naples Airport's favor, now might be the best time to do so.

6. Mandatory Night-time Curfew

Late night and early morning flights are the primary source of complaints about jet noise. Last year the Committee recommended that a night time curfew (from 11 p.m. to 7 a.m.) on take-offs and landings be imposed. This was also one of the recommendations of the 1989 Airport Master Plan and, while never implemented, is likely exempt from ANCA. The Committee recommends that the Town consider extending this curfew to:

- ➤ 10 PM to conform to FAA sound level averaging or
- > 7 PM to conform to the local noise codes.

7. A Ban on Touch & Goes on Summer Weekends.

While touch and goes appear to have decreased markedly in 2005, they are still a major source of annoyance on summer weekends when they are most likely to occur. This problem does not show up in the complaint logs since most people on the ground cannot differentiate touch and goes from normal single and multi-engine propeller flights. The 1989 Airport Master Plan recommends a ban on "Touch and Go" Operations from Noon on Friday to Noon on Monday during June, July and August. The Committee supports such a ban.

8. Amended Town Noise Ordinance

The Committee recommends that both East Hampton and Southampton modify their noise ordinances to remove the exceptions for aircraft. Borrowing a page from Naples Municipal Airport, this will reflect the wishes of the community and strengthen the Towns' hand if it ever comes into conflict with the FAA concerning the rationale fro noise abatement.

PART 161 NOISE STUDY OR FEDERAL LEGISLATION

Even if the grant assurances are allowed to run out in 2014 and 2021, it almost certainly would be necessary to conduct a Part 161 Noise Study in order for the FAA to acquiesce to any restrictions on noisier (Stage 2) aircraft. And a Part 161 study may be required in order to implement the following elements of an effective noise abatement program, even if the Town chooses NOT to resume FAA funding.

Since much of the environmental work required for the Master Plan will also be required to perform a Part 161 Noise Study, it seems sensible to conduct the environmental assessment in a way that is compatible with Part 161 of FAA regulations for a noise study, thus potentially accelerating FAA acceptance required to implement these solutions. Common sense therefore suggests that the Town would save time and money by incorporating a Part 161 Study into the master planning process. Therefore the committee renews it recommendation that the Town conduct a Part 161 Study if needed to implement noise abatement initiatives and supported by legal feasibility study.

LOCAL & FEDERAL LEGISLATION

Local and federal legislation could greatly enhance the Town's ability to implement an effective Noise Abatement Program at minimum cost by:

- Clarifying Legal Standing
- Facilitating Implementation & Enabling Enforcement of Noise Abatement Initiatives (above)
- Protecting against Litigation
- ➤ Protecting against negative initiatives & backsliding by future administrations

The committee has proposed objectives for possible federal legislation in **Exhibit I-6**. In addition, the Committee has outlined possible local legislation in **Exhibit IV-1** at the end of this chapter.

RELATED FINANCIAL RECOMMENDATIONS

In 2005 the Committee recommended that the Town develop a financing plan for noise abatement, safety and maintenance, which incorporates increased landing fees and other sources of aviation revenue, possible bond issues and/or future FAA funding and has zero impact on local, non-aviation taxpayers. It is currently impossible to determine the true cash flow or accumulated reserves of East Hampton Airport really are since they have been so inextricably mingled with other Town accounts. This hampers airport management in a number of ways and leads to uninformed funding decisions.

The following recommendations are intended to enable HTO to fund operational and capital improvements in a way that complements rather than conflicts with other noise abatement initiatives. For example, HTO will never know to what extent it can afford the cost of a seasonal control tower until it knows its true revenues and expenditures nor could it issue revenue bonds dependent upon it revenues.

Establish HTO as a Separate Financial Entity

The finances of the East Hampton Airport property, which encompasses over 600 acres and a number of enterprises in addition to the airport itself, are governed in part by federal law and regulation. Specifically, "Section 47133 prohibits all such private airport owners or operators from using airport revenue for any purpose other than the capital and operating costs of the airport" (**Exhibit IV-2**). The Committee therefore recommends that:

- ➤ The Town comply with federal legislation and regulation restricting uses of airport revenues
- ➤ Bank accounts not be comingled with any other Town accounts
- ➤ All financial record keeping & reporting be separated from all other Town financial counterparts
- Financial statements be audited by an accountant not employed by the Town for any other purpose.
- ➤ No revenues, assets or property used for any other Town purpose without due compensation as per an arms length transaction.
- Adequate financial oversight be provided to ensure such compliance.

Funding of Capital Improvements

The committee believes that funding of capital improvements must be compatible with the Town's Noise Abatement Plan, which has not yet been defined. Accordingly, the Committee recommends that

- The Town define a Noise Abatement Plan in order to evaluate potential conflicts with funding sources.
- > Tax exempt revenue bonds and airport surpluses should be considered as alternatives to FAA funding.

FAA funding should not be employed until compatibility with noise abatement program can be determined by a legal opinion from a qualified law firm.

EXHIBIT IV-1 ANAAC PROPOSAL FOR A LOCAL LAW

June 15, 2009

ANAAC Proposal for a Local Law to amend the East Hampton Town Code to Provide for Effective Abatement of Aviation Related Noise Levels Associated with the East Hampton Airport.

Section 1. Legislative Intent.

The Town of East Hampton, as owner and operator of the East Hampton Town Airport, herein after referred to as the "Airport", hereby declares its intention that aviation related noise levels associated with the Airport shall be reduced to 1998 levels. The following provisions are intended to effectuate that goal within twelve months of the effective date of this local law.

Section 2. Curfew.

The Airport shall be closed to all aircraft operations, except emergency operations [to be defined: see Section 2 (D) of the 1989 proposed Town Law by Pat Trunzo] between the hours of 11:00 p.m. and 7:00 a.m. every day of every calendar year.

Section 3. Flight Rules, Procedures and Fees

The Manager of the Airport shall establish forthwith:

- (a) Flight rules and procedures to limit single-event aircraft noise exceeding community standards of 65 db from 7:00 a.m. to 7:00 pm and 50 db from 7:00 pm to 7:00 a.m.
- (b) A sliding scale of fees for aircraft landings and take-offs based upon type of aircraft, time of day, day of the week, and season of the year as follows:
 - (i) Based upon the noise level pattern of each type of aircraft, charging progressively higher fees as the noise level patterns of the respective types of aircraft increase;
 - (ii) In accordance with the following schedule.
 - a. The basic fee for each permissible landing and each permissible take-off for each type of aircraft based upon its noise level pattern, as provided in Section 3 (b) (i) above;
 - b. A higher fee for each permissible landing and permissible take-off between 7:00 p.m. and 11:00 p.m. generally at five times the basic fee; and
 - c. The highest fee for each permissible take-off between 7:00 p.m. on each Friday evening and 11:00 p.m., the following Sunday evening, during the days between March 31 and September 30 of each calendar year [ten times the basic fee]; and
 - (iii) Treating, in the case of touch and go operations, each such operation as one landing and one take-off.

Section 4. Helicopter Minimum Altitude.

Helicopters arriving at and departing from the Airport shall maintain a minimum cruising altitude of 3,000 feet upon entering the perimeter of the Airport and at departures from the same and shall maintain the 3,000 foot minimum cruising altitude while within five miles of the Airport and shall carry out permissible landings and permissible take-offs as directed by the Airport Control Tower Operator consistent with safety.

Section 5. Permissible Landings and Permissible Take-offs.

The terms "permissible landing" and "permissible take-off" mean landings and take-offs not prohibited by the curfew established by Section 2 of this local law.

Section 6. Enforcement.

Any violation of the curfew, rules, procedures, fees, curfews, or minimum altitudes established by or pursuant to sections 2, 3 or 4 of this local law shall, upon conviction, be punishable by a fine of not more than one thousand dollars (\$1,000) or imprisonment for not more than ten (10) days, or both such fine and such imprisonment.

EXHIBIT IV-1: PROPOSAL FOR A LOCAL LAW (CONTD.)

Section 7. Part 161 Study.

The Town Supervisor shall take steps within 30 days of the effective date of this local law to carry out a study complying with Part 161 of the Federal Aviation Administration regulations so as to coordinate the provisions of this local law with federal regulations.

Section 8. Airport Accounting and Finances.

The Budget Director shall set up a bookkeeping system treating the Airport and its properties and operations as though the Airport were a separate corporate subsidiary of the Town of East Hampton beginning with the _____ fiscal year, which shall be subject to an audit separate from and in addition to any other audits of East Hampton Town books and records. Thus treated as though a separate, corporate subsidiary for accounting purposes, the Airport, shall be operated on a self-supporting, business-like basis, with capital projects funded by appropriate revenue bonding and current operations funded by current operating revenues and without recourse to future local tax-payer or FAA funding. No airport revenues, assets or properties may be used for or transferred for any other Town purposes.

Section 9. Amendments.

Nothing in this local law may be amended, revised, or revoked without a full public hearing procedure as set forth in [existing Town Code provisions].

Section 10. Severability.

Should any section or provision of this local law be determined by a court of competent jurisdiction to be invalid for any reason, such determination shall not affect the whole, nor any other section or provisions hereof, other than the section or provision thus determined to be invalid.

Section 11. <u>Effective Date.</u>

This local law shall take effect immediately after filing with the New York Secretary of State as provided for by law.

EXHIBIT IV-2: FAA FINANCIAL REGULATIONS

FEDERAL LEGISLATION 12

Page 7700: Section 47133 prohibits all such private airport owners or operators from using airport revenue for any purpose other than the capital and operating costs of the airport.

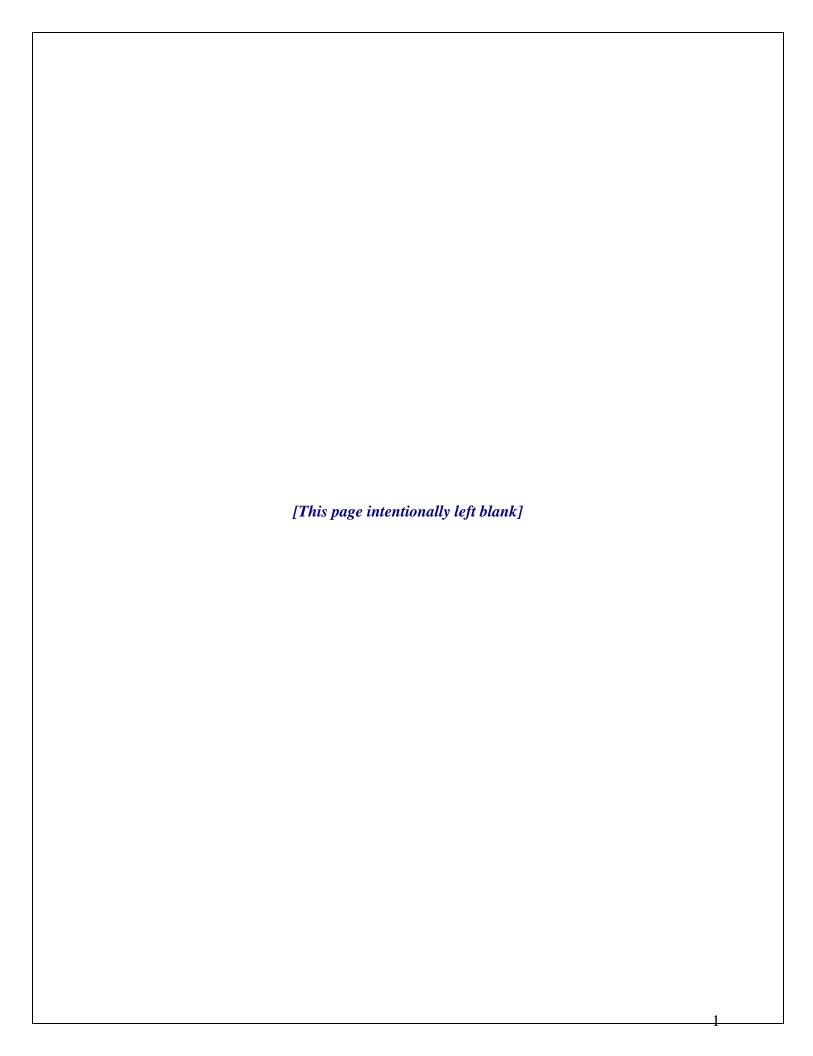
PAGE 7716: B. AIRPORT REVENUE

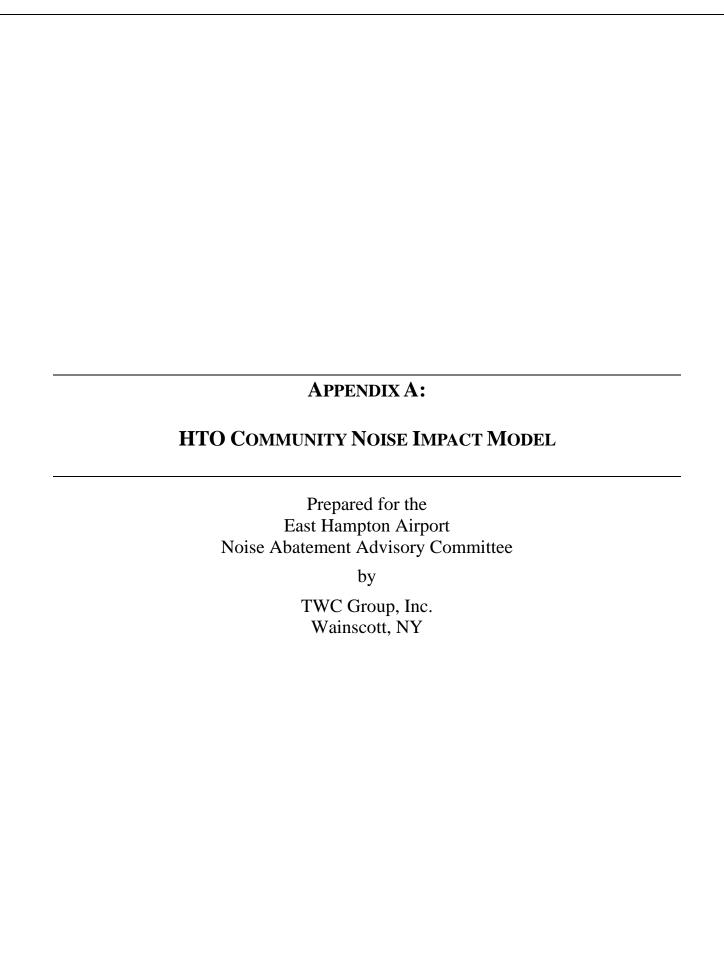
- 1. All fees, charges, rents, or other payments received by or accruing to the sponsor for any one of the following reasons are considered to be airport revenue:
- a. Revenue from air carriers, tenants, lessees, purchasers of airport properties, airport permittees making use of airport property and services, and other parties. Airport revenue includes all revenue received by the sponsor for the activities of others or the transfer of rights to others relating to the airport, including revenue received:
 - i. For the right to conduct an activity on the airport or to use or occupy airport property;
 - ii. For the sale, transfer, or disposition of airport real property (as specified in the applicability section of this policy statement) not acquired with Federal assistance or personal airport property not acquired with Federal assistance, or any interest in that property, including transfer through a condemnation proceeding;
 - iii. For the sale of (or sale or lease of rights in) sponsor-owned mineral, natural, or agricultural products or water to be taken from the airport; or
 - iv. For the right to conduct an activity on, or for the use or disposition of, real or personal property or any interest therein owned or controlled by the sponsor and used for an airport-related purpose but not located on the airport (e.g., a downtown duty-free shop).
- b. Revenue from sponsor activities on the airport. Airport revenue generally includes all revenue received by the sponsor for activities conducted by the sponsor itself as airport owner and operator, including revenue received:
 - i. From any activity conducted by the sponsor on airport property acquired with Federal assistance;
 - ii. From any aeronautical activity conducted by the sponsor which is directly connected to a sponsor's ownership of an airport subject to 49 U.S.C. §§ 47107(b) or 47133; or
 - iii. From any non-aeronautical activity conducted by the sponsor on airport property not acquired with Federal assistance, but only to the extent of the fair rental value of the airport property. The fair rental value will be based on the fair market value.
- 2. State or local taxes on aviation fuel (except taxes in effect on December 30, 1987) are considered to be airport revenue subject to the revenue-use requirement. However, revenues from state taxes on aviation fuel may be used to support state aviation programs or for noise mitigation purposes, on or off the airport.
- C. Unlawful Revenue Diversion Unlawful revenue diversion is the use of airport revenue for purposes other than the capital or operating costs of the airport, the local airport system, or other local facilities owned or operated by the airport owner or operator and directly and substantially related to the air transportation of passengers or property.

FROM GRANT ASSURANCES:

25. Airport Revenues. a. All revenues generated by the airport and any local taxes on aviation fuel established after December 30, 1987, will be expended by it for the capital or operating costs of the airport; the local airport system; or other local facilities which are owned or operated by the owner or operator of the airport and which are directly and substantially related to the actual air transportation of passengers or property; or for noise mitigation purposes on or off the airport.

¹² **Federal Register** / Vol. 64, No. 30 / Tuesday, February 16, 1999/Notices





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APPENDIX A: HTO COMMUNITY NOISE IMPACT MODEL

The East Hampton Airport (HTO) Community Noise Impact Model has been developed to assist the East Hampton Airport Noise Abatement Advisory Committee to:

- > Illustrate how single event noise can be combined with demographic data to measure the community impact of aircraft noise on East End residents.
- Measure the future impact of helicopter noise on the community;
- Assess the impact of various in airport management initiatives, such as rerouting of helicopters, on airport related aircraft noise;

The model is a work-in-progress in that: (a) although certain assumptions have been verified by airport management other assumptions will require input by an environmental consultant, and (b) it is currently limited to helicopter noise. Accordingly, we have included a list of suggested refinements and extensions of the model at the end of this write-up.

The model has used helicopter flight data from HTO, estimates of population impact for the Northwest Creek route taken from the Draft Generic Environmental Impact Statement (p. 29) submitted to the Town in July, 2009 and from generally available summer and full-time population data for local neighborhoods.

RESIDENTIAL NOISE EVENTS (RNES)

The FAA measures noise as a day-night average (DNL) with an adjustment for night time noise. The FAA methodology tends to significantly understate the negative impact of seasonal and single event noise. The DGEIS attempts to address this issue by measuring the DNL on a busy summer day. However, the noise is still averaged over a 24 hour period, which means that a helicopter hovering over a house for 12 hours a day while emitting 75 decibels of noise would pass the test for acceptable noise.

An alternative to the FAA way of measuring noise is to determine the number of noise events that exceed the allowable daytime noise level (65dB for both East Hampton and Southampton) and the lower noise threshold (50dB) is used by both towns from 7 PM to 7 AM. This is referred to as single-event noise and is the standard by which community noise is judged in both towns.

RESIDENTIAL NOISE EVENTS (RNES) = (# OF NOISE EVENTS) X (# OF RESIDENTS)

To measure the area-wide (community) impact of single event noise, the number of affected households should be taken into account. If a sound events occur over a sparsely inhabited area they inflict less harm to the community than in a densely populated area. In order to take into account both noise events above the allowable thresholds and the number of affected residents affected, we multiply the nu1mber of noise events exceeding the noise threshold by the number of residents affected. For example, if 300 residents are affected by 1,000 noise events above the threshold resulting Residential Noise Events (RNEs) would 300,000 (300x1,000=300,000). If, on the other hand, 1,000 residents were affected by 500 noise events per year the metric would be 500,000 RNEs (1,000x500=500,000).

NUMBER OF RESIDENTS AFFECTED

According to the draft EIS (p. 29), 333 residents are affected by the Northwest Harbor helicopter route if helicopters fly at 1000 feet and 212 residents if they fly at 2,500 feet. Assuming that the EIS accurately accounts for summer residents, 333 residents represent 2.6% of the summer population of Northwest Harbor affected by helicopter noise in excess of 65 dB and 212 people represents 1.6%. However, the EIS employs year 2000 census data, so we have increased the affected population by 2% a year through 2007. As a result we assume that 387 people are affected by a helicopter flying at 1,000 feet and 244 people are affected by a helicopter flying at 2,500 feet. If we assume that 80% of all helicopter flights over Northwest Creek are flying at an altitude of 2,500 feet and the rest at 1,000 feet, the resulting weighted average is 272 people affected by each helicopter flight.

Applying the same percentage of residents affected on the other two routes, approximately 1,163 people are affected by helicopter noise if all three routes are taken into account.

NW Creek/ NW Harbor Route	Year Round Popn 2,167	Summer Popn. 12,910	# Affected at 1000 ft	% of Popn.	# Affected at 2500 ft	% of Popn.	80% compliance
Sag Harbor	2,420	12,100	526	4.3%	331	2.7%	37
Noyack	2,751	13,755	299	2.2%	188	1.4%	210
North Sea	4,586	13,758	299	2.2%	188	1.4%	210
Bridgehampton	1,409	7,045	77	1.1%	48	0.7%	54
Jessups Neck (Western) Route	11,166	46,658	1,200	2.6%	755	1.6%	844
Wainscott/ Georgica Pond Route	641	2,564	66	2.6%	42	1.9%	47
TOTALs	13,974	62,132	1,653	2.7%	1,040	1.7%	1,163

These estimates of affected residents may understate the problem because of the prevalence of helicopter flights during the summer months when the population is higher and because they set the noise threshold at 65 dB day and night rather than lowering it to 50 dB from 7 PM to 7 AM. Nevertheless, they provide a basis for illustrating the overall community impact of helicopter flights.

RESIDENTIAL NOISE EVENTS: 1988-2008

Using the Helicopter Noise Community Impact Model and the assumptions stated below we estimate that in 1988 there were 1.3 million the Residential Noise Events in excess of 65 dB (RNEs) due to helicopter traffic in and out of HTO. By 1998 RNEs had risen to 2.5 million , and in 2006 RNEs peaked at almost 6.4 million. RNEs then declined by a 38% to 3.9 million over the two subsequent years (2007 and 2008). These results demonstrate the power of rerouting helicopters over less populated water routes, e.g. Georgica Pond and Northwest Creek.

The calculation of Residential Noise Events is shown in Exhibit A-1 and includes the following underlying assumptions:

- ➤ The number of affected residents associated declines increases between 1988 and 2006 due to population growth and declines between 2006 and 2008 due to increased average altitude at which helicopters fly over the affected areas.
- ➤ 100% of helicopters were flying the Jessups Neck route before 2007, 70% in 2007 and 65% in 2008.
- > 5% of helicopter flights arrived or departed were over Georgica Pond beginning in 2007.

It should be stressed that these calculations are based on a model that did not have the professional input of the Town's environmental consultant, except as noted, and the assumptions are subject to change. Nevertheless, we think the results are indicative of the actual community impact and are responsive to changes in helicopter flight patterns and compliance with voluntary minimum altitudes.

PROJECTED RESIDENTIAL NOISE EVENTS: 2009-2029

Using the four scenarios for projecting helicopter traffic (described in **Chapter III** of this report), Residential Noise Events are expected to rise significantly over the next 20 years, although they may be

moderated by increased routing of helicopters over water routes and improved compliance with the minimum recommended altitude of 2500 feet. The results predicted by the Helicopter Noise Community Impact Model, assuming that 20% of the flights are over Georgica Pond, predict that helicopter RNEs will, at a minimum, nearly quadruple and could exceed 16 times 1998 levels by 2029.

	2013	2017	2021	2025	2029	% of 1998
1. FAA Jet Forecast	3,734,718	4,759,677	6,065,926	7,730,663	9,852,272	392%
2. HTO 20 yr APR	4,026,504	5,672,941	7,992,605	11,260,780	15,865,310	631%
3. HTO 10 yr APR	4,484,965	7,284,828	11,832,584	19,219,403	31,217,648	1241%
4. HTO 5 yr. APR	4,646,124	8,098,688	14,116,872	24,607,206	42,892,972	1705%

ANALYSIS OF RESULTS FOR HELICOPTERS

Our estimate of 2008 RNEs puts them at 157% of the 1998 level, the committee's suggested noise target. The results of this community impact analysis demonstrate that increasing helicopter altitudes and continuing to reroute them over water routes could reduce the RNEs to 1998 levels. Specifically, we have found that, assuming 90% compliance with 2,500 foot minimum altitudes:

- ➤ RNEs could be reduced to 1998 levels by routing 1/3 of helicopters over Georgica Pond and 1/3 over Northwest Creek, assuming year 2007 volume of helicopter flights (6,788).
- ➤ By routing half of all helicopters flights over Georgica Pond and the other half over Northwest Creek, RNEs could be reduced to 1998 levels while volume more than doubled to 15,378 flights.

In other words, given current volumes of helicopter flights the Committee's recommended goal of reducing noise to 1998 levels could be achieved with more equitable helicopter routing. And helicopter flight volumes could more than double if the Jessups Neck route were eliminated altogether.

SUGGESTED REFINEMENTS & EXTENSIONS

To derive maximum value from the Helicopter Noise Community Impact Model it should be refined and extended along the following lines:

- 1. Verify all affected population data (by people familiar with the area) utilized by the model and adjust yearly for population changes.
- 2. Adjust for lower from 7 PM to 7 AM noise threshold (50 dB) and segregate flight data accordingly.
- 3. Extend methodology to other types of aircraft, e.g. jets, if practical.
- 4. Automate data collection from AirScene and combine with population data for monthly reporting.
- 5. Incorporate findings in to EIS and Airport Master Plan update.

<u>To impact the way future administrations manage airport noise, it is recommended that the outgoing Town Board mandate regular (no less than quarterly) public reporting of community aircraft noise impact utilizing CANIM methodology with suggested modifications.</u>

ILLUSTRATION OF POSSIBLE RESULTS

By utilizing air traffic reported by airport management and making some assumptions about the residential impact of fixed wing planes (200 residents for touch & goes, 100 residents for all flights) we can estimate total residential noise impact resulting from HTO operations.

The two tables below Residential Noise Events for the years 2006 through 2008 and, below it, the volume of flight operations from which the fixed wing RNEs were computed. The tables illustrate that

APPENDIX A: HTO COMMUNITY NOISE IMPACT MODEL (CONT'D.)

total Residential Noise Events (RNEs) have declined by 14.8% during the two year period, twice the decline in air traffic (7.4%) for the following reasons:

- ➤ Helicopter noise has declined by 15.9% while volume of flights increased by 4.8%.
- Touch & goes, which we estimate having twice the residential impact of other fixed wing flight operations, have declined by 42.6%
- ➤ When Single/Multi-engine (SEME) operations are combined with unidentified flights, the result is a slight decrease (1.1%) in RNEs.

HTO Residential Noise Events (2006-2008)										
	2007	2007	2000	2 year						
	<u>2006</u>	<u>2007</u>	<u>2008</u>	Change						
Jets	315,800	359,900	315,400	(0.1%)						
Helicopters	4,883,747	4,677,023	4,106,838	(15.9%)						
Single/Multi Prop.	1,707,400	1,812,300	1,693,100	(0.8%)						
Unidentified (no tail #)	315,800	193,700	170,100	(46.1%)						
Touch & Goes	477,000	404,800	273,600	(42.6%)						
Total Events	7,699,747	7,447,723	6,559,038	(14.8%)						

HTO Annual Flight Operations (2006-2008) 2 vear 2006 2007 2008 Change Jets 3,158 3,599 3,154 (0.1%)Helicopters 5,787 6,788 6,066 4.8% Single/Multi Prop. 17,074 18,123 16,931 (0.8%)Unidentified (no tail #) 3,158 1,937 1,701 (46.1%)Touch & Goes 2,385 2,024 1,368 (42.6%)**Total Movements** 31,562 32,471 29,220 (7.4%)

TWC GROUP, INC.

TWC Group, Inc. is a financial advisory and consulting firm founded by Peter A. Wadsworth. Prior to founding TWC Group, Mr. Wadsworth had worked for IBM, McKinsey & Company, Blue Cross & Blue Shield and was a Vice President at Kidder, Peabody. At Kidder, Mr. Wadsworth specialized in healthcare finance, which he continued to specialize in after founding his own investment banking firm. Mr. Wadsworth graduated from Cornell University where he earned a B.S. in engineering, with a minor in operations research and computer science, and an MBA.

Throughout his career, Mr. Wadsworth has utilized computer modeling techniques to solve problems, develop management reporting systems, financial forecasts and new financial products, appraise companies and do fact-based strategic and capital planning. Mr. Wadsworth's clients have included Fortune 500 companies, large non-profit healthcare organizations, municipal finance agencies and early stage technology companies.

Mr. Wadsworth has been a member of the East Hampton Airport Noise Abatement Advisory Committee since it was created and was a founder of Citizens for a Quieter Airport.

EXHIBIT A-1:
ESTIMATED HELICOPTER RESIDENTIAL NOISE EVENTS (RNES) IN EXCESS OF 65 DECIBELS – 1988-2008

		Routing of Flights			# of F	lights by	Route	Resid	lents Af	fected	Residential Noise Events			
Year	Flights	% Jessups Neck	% NW Creek	Georgica Pond	Jessups Neck	NW Creek	Georgica Pond	Jessups Neck	NW Creek	Georgica Pond	Jessups Neck	NW Creek	Georgica Pond	TOTAL
1988	1,664	100%	0%	0%	1,664	0	0	857	221	43	1,426,040	0	0	1,426,040
1989	1,824	100%	0%	0%	1,824	0	0	874	227	44	1,594,422	0	0	1,594,422
1990	1,446	100%	0%	0%	1,446	0	0	892	233	46	1,289,279	0	0	1,289,279
1991	1,796	100%	0%	0%	1,796	0	0	909	239	47	1,633,372	0	0	1,633,372
1992	1,800	100%	0%	0%	1,800	0	0	928	244	48	1,669,750	0	0	1,669,750
1993	1,892	100%	0%	0%	1,892	0	0	946	251	49	1,790,195	0	0	1,790,195
1994	2,024	100%	0%	0%	2,024	0	0	965	257	50	1,953,394	0	0	1,953,394
1995	1,764	100%	0%	0%	1,764	0	0	984	263	52	1,736,513	0	0	1,736,513
1996	1,776	100%	0%	0%	1,776	0	0	1,004	270	53	1,783,293	0	0	1,783,293
1997	2,230	100%	0%	0%	2,230	0	0	1,024	277	54	2,283,940	0	0	2,283,940
1998	2,408	100%	0%	0%	2,408	0	0	1,045	284	56	2,515,571	0	0	2,515,571
1999	2,642	100%	0%	0%	2,642	0	0	1,066	291	57	2,815,224	0	0	2,815,224
2000	3,352	100%	0%	0%	3,352	0	0	1,087	337	58	3,643,212	0	0	3,643,212
2001	3,994	100%	0%	0%	3,994	0	0	1,109	344	60	4,427,806	0	0	4,427,806
2002	3,562	100%	0%	0%	3,562	0	0	1,131	351	61	4,027,863	0	0	4,027,863
2003	3,684	100%	0%	0%	3,684	0	0	1,153	358	63	4,249,135	0	0	4,249,135
2004	4,754	100%	0%	0%	4,754	0	0	1,176	365	64	5,592,941	0	0	5,592,941
2005	5,074	100%	0%	0%	5,074	0	0	1,200	372	66	6,088,800	0	0	6,088,800
2006	5,787	100%	0%	0%	5,787	0	0	844	272	47	4,883,747	0	0	4,883,747
2007	6,788	70%	25%	5%	4,752	1,697	339	874	300	50	4,150,953	509,100	16,970	4,677,023
2008	6,066	65%	30%	5%	3,943	1,820	303	903	291	50	3,561,480	530,259	15,099	4,106,838

EXHIBIT A-2:

ESTIMATED HELICOPTER RESIDENTIAL NOISE EVENTS (RNES) IN EXCESS OF 65 DECIBELS – 2009-2029

SCENARIO # 1: HELICOPTER FLIGHTS GROW AT THE FAA FORECAST RATE FOR BUSINESS JETS (5.2%/YR) STARTING IN 2011

1		Rou	ting of Fl	ights	# of F	lights by	Route	Resid	lents Af	fected		Residential N	Noise Events	
Year	Flights	% Jessups Neck	% NW Creek	Georgica Pond	Jessups Neck	NW Creek	Georgica Pond	Jessups Neck	NW Creek	Georgica Pond	Jessups Neck	NW Creek	Georgica Pond	TOTAL
1998	2,408	100%	0%	0%	2,408	0	0	1,045	284	56	2,515,571	0	0	2,515,571
2006	5,787	100%	0%	0%	5,787	0	0	844	272	47	4,883,747	0	0	4,883,747
2007	6,788	70%	25%	5%	4,752	1,697	339	874	300	50	4,150,953	509,100	16,970	4,677,023
2008	6,066	65%	30%	5%	3,943	1,820	303	903	291	50	3,561,480	530,259	15,099	4,106,838
2009	4,853	46.7%	43.3%	10%	2,265	2,103	485	903	291	50	2,045,568	612,744	24,158	2,682,470
2010	6,066	45.0%	40.0%	15%	2,730	2,426	910	912	294	50	2,490,296	714,082	45,749	3,250,128
2011	6,381	43.3%	36.7%	20%	2,765	2,340	1,276	921	297	51	2,547,948	695,488	64,812	3,308,248
2012	6,713	43.3%	36.7%	20%	2,909	2,461	1,343	931	300	51	2,707,201	738,958	68,863	3,515,021
2013	7,062	43.3%	36.7%	20%	3,060	2,589	1,412	940	303	52	2,876,407	785,144	73,167	3,734,718
2014	7,429	43.3%	36.7%	20%	3,219	2,724	1,486	949	306	52	3,056,189	834,218	77,740	3,968,147
2015	7,815	43.3%	36.7%	20%	3,387	2,866	1,563	959	309	53	3,247,209	886,358	82,599	4,216,166
2016	8,222	43.3%	36.7%	20%	3,563	3,015	1,644	968	312	53	3,450,167	941,758	87,761	4,479,686
2017	8,649	43.3%	36.7%	20%	3,748	3,171	1,730	978	316	54	3,665,810	1,000,620	93,247	4,759,677
2018	9,099	43.3%	36.7%	20%	3,943	3,336	1,820	988	319	54	3,894,932	1,063,161	99,075	5,057,168
2019	9,571	43.3%	36.7%	20%	4,148	3,510	1,914	998	322	55	4,138,375	1,129,611	105,267	5,373,253
2020	10,069	43.3%	36.7%	20%	4,363	3,692	2,014	1,008	325	56	4,397,033	1,200,215	111,847	5,709,094
2021	10,592	43.3%	36.7%	20%	4,590	3,884	2,118	1,018	328	56	4,671,858	1,275,231	118,837	6,065,926
2022	11,143	43.3%	36.7%	20%	4,829	4,086	2,229	1,028	332	57	4,963,860	1,354,936	126,265	6,445,061
2023	11,722	43.3%	36.7%	20%	5,080	4,298	2,344	1,038	335	57	5,274,113	1,439,623	134,157	6,847,893
2024	12,332	43.3%	36.7%	20%	5,344	4,522	2,466	1,049	338	58	5,603,758	1,529,602	142,542	7,275,902
2025	12,973	43.3%	36.7%	20%	5,622	4,757	2,595	1,059	342	58	5,954,006	1,625,206	151,451	7,730,663
2026	13,647	43.3%	36.7%	20%	5,914	5,004	2,729	1,070	345	59	6,326,146	1,726,785	160,917	8,213,848
2027	14,356	43.3%	36.7%	20%	6,221	5,264	2,871	1,080	349	60	6,721,545	1,834,714	170,975	8,727,233
2028	15,103	43.3%	36.7%	20%	6,545	5,538	3,021	1,091	352	60	7,141,658	1,949,388	181,661	9,272,706
2029	15,888	43.3%	36.7%	20%	6,885	5,826	3,178	1,102	356	61	7,588,028	2,071,229	193,015	9,852,272

EXHIBIT A-3:
ESTIMATED HELICOPTER RESIDENTIAL NOISE EVENTS (RNES) IN EXCESS OF 65 DECIBELS – 2009-2029
SCENARIO # 2: HELICOPTER FLIGHTS GROW AT HISTORICAL 20 YEAR RATE FOR HTO (7.9%/YR) STARTING IN 2011

2		Rou	ting of Fl	ights	# of F	lights by	Route	Resid	lents Af	fected		Residential N	Noise Events	
Year	Flights	% Jessups Neck	% NW Creek	Georgica Pond	Jessups Neck	NW Creek	Georgica Pond	Jessups Neck	NW Creek	Georgica Pond	Jessups Neck	NW Creek	Georgica Pond	TOTAL
1998	2,408	100%	0%	0%	2,408	0	0	1,045	284	56	2,515,571	0	0	2,515,571
2006	5,787	100%	0%	0%	5,787	0	0	844	272	47	4,883,747	0	0	4,883,747
2007	6,788	70%	25%	5%	4,752	1,697	339	874	300	50	4,150,953	509,100	16,970	4,677,023
2008	6,066	65%	30%	5%	3,943	1,820	303	903	291	50	3,561,480	530,259	15,099	4,106,838
2009	4,853	46.7%	43.3%	10%	2,265	2,103	485	903	291	50	2,045,568	612,744	24,158	2,682,470
2010	6,066	45.0%	40.0%	15%	2,730	2,426	910	912	294	50	2,490,296	714,082	45,749	3,250,128
2011	6,543	43.3%	36.7%	20%	2,835	2,399	1,309	921	297	51	2,612,646	713,148	66,457	3,392,252
2012	7,058	43.3%	36.7%	20%	3,059	2,588	1,412	931	300	51	2,846,431	776,962	72,404	3,695,797
2013	7,614	43.3%	36.7%	20%	3,299	2,792	1,523	940	303	52	3,101,135	846,486	<i>78,883</i>	4,026,504
2014	8,213	43.3%	36.7%	20%	3,559	3,011	1,643	949	306	52	3,378,631	922,231	85,942	4,386,804
2015	8,859	43.3%	36.7%	20%	3,839	3,248	1,772	959	309	53	3,680,957	1,004,754	93,632	4,779,343
2016	9,556	43.3%	36.7%	20%	4,141	3,504	1,911	968	312	53	4,010,336	1,094,662	102,010	5,207,008
2017	10,308	43.3%	36.7%	20%	4,467	3,780	2,062	978	316	54	4,369,189	1,192,614	111,138	5,672,941
2018	11,120	43.3%	36.7%	20%	4,819	4,077	2,224	988	319	54	4,760,152	1,299,332	121,083	6,180,567
2019	11,995	43.3%	36.7%	20%	5,198	4,398	2,399	998	322	55	5,186,099	1,415,598	131,918	6,733,616
2020	12,939	43.3%	36.7%	20%	5,607	4,744	2,588	1,008	325	56	5,650,162	1,542,269	143,722	7,336,152
2021	13,957	43.3%	36.7%	20%	6,048	5,118	2,791	1,018	328	56	6,155,749	1,680,274	156,583	7,992,605
2022	15,055	43.3%	36.7%	20%	6,524	5,520	3,011	1,028	332	57	6,706,577	1,830,628	170,594	8,707,799
2023	16,240	43.3%	36.7%	20%	7,037	5,955	3,248	1,038	335	57	7,306,694	1,994,436	185,859	9,486,989
2024	17,518	43.3%	36.7%	20%	7,591	6,423	3,504	1,049	338	58	7,960,511	2,172,902	202,490	10,335,903
2025	18,897	43.3%	36.7%	20%	8,188	6,929	3,779	1,059	342	58	8,672,833	2,367,338	220,609	11,260,780
2026	20,384	43.3%	36.7%	20%	8,833	7,474	4,077	1,070	345	59	9,448,895	2,579,171	240,350	12,268,416
2027	21,988	43.3%	36.7%	20%	9,528	8,062	4,398	1,080	349	60	10,294,400	2,809,961	261,857	13,366,217
2028	23,718	43.3%	36.7%	20%	10,278	8,697	4,744	1,091	352	60	11,215,563	3,061,401	285,288	14,562,252
2029	25,584	43.3%	36.7%	20%	11,087	9,381	5,117	1,102	356	61	12,219,153	3,335,341	310,816	15,865,310

EXHIBIT A-4:

ESTIMATED HELICOPTER RESIDENTIAL NOISE EVENTS (RNES) IN EXCESS OF 65 DECIBELS – 2009-2029

SCENARIO # 3: HELICOPTER FLIGHTS GROW AT HISTORICAL 10 YEAR RATE FOR HTO (11.8%/YR) STARTING IN 2012

3		Rou	ting of Fl	ights	# of F	lights by	Route	Resid	lents Af	fected		Residential I	Noise Events	
Year	Flights	% Jessups Neck	% NW Creek	Georgica Pond	Jessups Neck	NW Creek	Georgica Pond	Jessups Neck	NW Creek	Georgica Pond	Jessups Neck	NW Creek	Georgica Pond	TOTAL
1998	2,408	100%	0%	0%	2,408	0	0	1,045	284	56	2,515,571	0	0	2,515,571
2006	5,787	100%	0%	0%	5,787	0	0	844	272	47	4,883,747	0	0	4,883,747
2007	6,788	70%	25%	5%	4,752	1,697	339	874	300	50	4,150,953	509,100	16,970	4,677,023
2008	6,066	65%	30%	5%	3,943	1,820	303	903	291	50	3,561,480	530,259	15,099	4,106,838
2009	4,853	46.7%	43.3%	10%	2,265	2,103	485	903	291	50	2,045,568	612,744	24,158	2,682,470
2010	6,066	45.0%	40.0%	15%	2,730	2,426	910	912	294	50	2,490,296	714,082	45,749	3,250,128
2011	6,788	43.3%	36.7%	20%	2,941	2,489	1,358	921	297	51	2,710,325	739,811	68,942	3,519,078
2012	7,587	43.3%	36.7%	20%	3,288	2,782	1,517	931	300	51	3,059,754	835,191	77,830	3,972,775
2013	8,481	43.3%	36.7%	20%	3,675	3,110	1,696	940	303	52	3,454,233	942,868	87,865	4,484,965
2014	9,479	43.3%	36.7%	20%	4,108	3,476	1,896	949	306	52	3,899,569	1,064,427	99,193	5,063,189
2015	10,595	43.3%	36.7%	20%	4,591	3,885	2,119	959	309	53	4,402,321	1,201,658	111,981	5,715,960
2016	11,843	43.3%	36.7%	20%	5,132	4,342	2,369	968	312	53	4,969,890	1,356,582	126,418	6,452,890
2017	13,237	43.3%	36.7%	20%	5,736	4,854	2,647	978	316	54	5,610,633	1,531,479	142,717	7,284,828
2018	14,796	43.3%	36.7%	20%	6,412	5,425	2,959	988	319	54	6,333,983	1,728,925	161,116	8,224,025
2019	16,538	43.3%	36.7%	20%	7,167	6,064	3,308	998	322	55	7,150,592	1,951,826	181,888	9,284,307
2020	18,486	43.3%	36.7%	20%	8,010	6,778	3,697	1,008	325	56	8,072,482	2,203,465	205,338	10,481,285
2021	20,662	43.3%	36.7%	20%	8,954	7,576	4,132	1,018	328	56	9,113,226	2,487,547	231,811	11,832,584
2022	23,095	43.3%	36.7%	20%	10,008	8,468	4,619	1,028	332	57	10,288,148	2,808,254	261,698	13,358,100
2023	25,815	43.3%	36.7%	20%	11,186	9,465	5,163	1,038	335	57	11,614,547	3,170,308	295,437	15,080,292
2024	28,854	43.3%	36.7%	20%	12,504	10,580	5,771	1,049	338	58	13,111,952	3,579,040	333,526	17,024,518
2025	32,252	43.3%	36.7%	20%	13,976	11,826	6,450	1,059	342	58	14,802,410	4,040,467	376,526	19,219,403
2026	36,049	43.3%	36.7%	20%	15,621	13,218	7,210	1,070	345	59	16,710,810	4,561,384	425,070	21,697,264
2027	40,294	43.3%	36.7%	20%	17,461	14,774	8,059	1,080	349	60	18,865,250	5,149,461	479,872	24,494,582
2028	45,039	43.3%	36.7%	20%	19,517	16,514	9,008	1,091	352	60	21,297,451	5,813,355	541,739	27,652,545
2029	50,342	43.3%	36.7%	20%	21,815	18,459	10,068	1,102	356	61	24,043,224	6,562,841	611,583	31,217,648

EXHIBIT A-5:
ESTIMATED HELICOPTER RESIDENTIAL NOISE EVENTS (RNES) IN EXCESS OF 65 DECIBELS – 2009-2029
SCENARIO # 4: HELICOPTER FLIGHTS GROW AT HISTORICAL 5 YEAR RATE FOR HTO (13.8%/YR) STARTING IN 2012

4		Rou	ting of Fl	ights	# of F	lights by	Route	Resid	lents Af	fected		Residential N	Noise Events	
Year	Flights	% Jessups Neck	% NW Creek	Georgica Pond	Jessups Neck	NW Creek	Georgica Pond	Jessups Neck	NW Creek	Georgica Pond	Jessups Neck	NW Creek	Georgica Pond	TOTAL
1998	2,408	100%	0%	0%	2,408	0	0	1,045	284	56	2,515,571	0	0	2,515,571
2006	5,787	100%	0%	0%	5,787	0	0	844	272	47	4,883,747	0	0	4,883,747
2007	6,788	70%	25%	5%	4,752	1,697	339	874	300	50	4,150,953	509,100	16,970	4,677,023
2008	6,066	65%	30%	5%	3,943	1,820	303	903	291	50	3,561,480	530,259	15,099	4,106,838
2009	4,853	46.7%	43.3%	10%	2,265	2,103	485	903	291	50	2,045,568	612,744	24,158	2,682,470
2010	6,066	45.0%	40.0%	15%	2,730	2,426	910	912	294	50	2,490,296	714,082	45,749	3,250,128
2011	6,788	43.3%	36.7%	20%	2,941	2,489	1,358	921	297	51	2,710,325	739,811	68,942	3,519,078
2012	7,722	43.3%	36.7%	20%	3,346	2,832	1,544	931	300	51	3,114,242	850,064	79,216	4,043,522
2013	8,785	43.3%	36.7%	20%	3,807	3,221	1,757	940	303	52	3,578,354	976,748	91,022	4,646,124
2014	9,995	43.3%	36.7%	20%	4,331	3,665	1,999	949	306	52	4,111,633	1,122,312	104,587	5,338,531
2015	11,371	43.3%	36.7%	20%	4,927	4,169	2,274	959	309	53	4,724,385	1,289,569	120,173	6,134,127
2016	12,936	43.3%	36.7%	20%	5,605	4,743	2,587	968	312	53	5,428,455	1,481,752	138,083	7,048,289
2017	14,716	43.3%	36.7%	20%	6,377	5,396	2,943	978	316	54	6,237,451	1,702,575	158,661	8,098,688
2018	16,742	43.3%	36.7%	20%	7,255	6,139	3,348	988	319	54	7,167,012	1,956,308	182,306	9,305,626
2019	19,047	43.3%	36.7%	20%	8,254	6,984	3,809	998	322	55	8,235,104	2,247,855	209,475	10,692,434
2020	21,668	43.3%	36.7%	20%	9,390	7,945	4,334	1,008	325	56	9,462,373	2,582,850	240,693	12,285,915
2021	24,651	43.3%	36.7%	20%	10,682	9,039	4,930	1,018	328	56	10,872,540	2,967,770	276,563	14,116,872
2022	28,044	43.3%	36.7%	20%	12,153	10,283	5,609	1,028	332	57	12,492,862	3,410,053	317,779	16,220,694
2023	31,905	43.3%	36.7%	20%	13,825	11,698	6,381	1,038	335	57	14,354,660	3,918,250	365,137	18,638,047
2024	36,297	43.3%	36.7%	20%	15,729	13,309	7,259	1,049	338	58	16,493,920	4,502,182	419,553	21,415,654
2025	41,293	43.3%	36.7%	20%	17,894	15,141	8,259	1,059	342	58	18,951,991	5,173,137	482,078	24,607,206
2026	46,977	43.3%	36.7%	20%	20,357	17,225	9,395	1,070	345	59	21,776,385	5,944,085	553,922	28,274,391
2027	53,444	43.3%	36.7%	20%	23,159	19,596	10,689	1,080	349	60	25,021,696	6,829,925	636,472	32,488,093
2028	60,800	43.3%	36.7%	20%	26,347	22,293	12,160	1,091	352	60	28,750,652	7,847,781	731,325	37,329,759
2029	69,169	43.3%	36.7%	20%	29,973	25,362	13,834	1,102	356	61	33,035,331	9,017,328	840,313	42,892,972

	APPENDIX	<u>кв</u> :	
A Noise M	MEASUREMENT & REPO	ORTING SYSTEM FO	OR HTO

APPENDIX B:

A NOISE MEASUREMENT & REPORTING SYSTEM FOR HTO

The purpose of this document is to suggest an ongoing noise measurement system at East Hampton Airport to facilitate the management of this growing community environmental problem – aircraft noise.

BACKGROUND

At the January 25, 2005 Scoping Session held at Town Hall for Savik & Murray, it was recommended that the Town Board establish a <u>Noise Measurement System</u> for all affected communities that measures.

- Noise that exceeds Town Code limits i.e. 65/50 db
- > The number of events or total time that aircraft noise exceeds limits.
- ➤ Average or total decibels for such events.
- > It was recommended that the Town Board put the system in place before Memorial Day 2005.
- > Review results w HTO Manager monthly & compare from year to year.

COMPLAINT MEASUREMENT VS. NOISE MEASUREMENT

It has been suggested that logging complaints is an effective (and less costly) alternative to measuring and reporting on noise. However, this concept is flawed for a variety of reasons including

- > many people have given up complaining and
- > complaints are, at best, a highly subjective measurement of results that do not provide true comparability from one year to the next.

In addition, complaints phoned into the HTO noise hotline included, in some years, a large number of calls from up island, which were out for HTO's jurisdiction.

Two airports – Westchester County Airport (NY) and Naples Municipal Airport (FL) – exemplify the two approaches:

- Naples has two noise meters and measures noise at 6 sites by moving the portable meters from site to site. As a result, Naples relies primarily on the volume of complaints it receives.
- ➤ Westchester has 20 noise meters at fixed sites and relies on both complaints and changes in noise levels at specific sites to measure the results of their program.

The Naples approach seems to be inferior for the following reasons:

- ➤ Complaint measurement yields false positives when people become discouraged and stop complaining. Paradoxically, therefore, a decline in complaints could signal a worsening noise situation.
- ➤ Portable noise meters require staff to move them, set them up, recharge their batteries and download the results at least once a week. Therefore, additional airport staff will be required and personnel costs are likely to higher to deploy portable meters.
- ➤ Complaints will be skewed toward those who are complainers. For example, Naples reports that 55 different families reported 112 complaints during the 1st quarter of 2003 and 79 of the 112 came from one quadrant..
- ➤ If pilots know where the noise meters are deployed they may game the system by avoiding the sites that are being monitored. Some Committee members strongly suspect that this was the case when HMMH took its sample data.
- ➤ Helicopters, which fly many different (random?) routes, are much less amenable to "sampling" approaches .

So complaint measurement, while useful, is the misleading tip of the iceberg.

APP. B: A NOISE MEASUREMENT & REPORTING SYSTEM (CONT'D.)

Noise is the Community's Bottom Line

Just as profits are the bottom line for corporate performance, noise is the bottom line for the Airport as far as the community is concerned. If noise is not measured, there will be no objective way to determine whether noise abatement initiatives are effective.

In addition, the Committee recommended that "The Town should reduce single event noise from jets and helicopters to levels that prevailed in 1998 (estimated at 55% of 2003 levels)." How will we ever know if that has been achieved if there is no effective noise measurement system and if future administrations are unsympathetic to community concerns?

COMPONENTS OF NOISE MEASUREMENT & REPORTING SYSTEM

The primary purpose of this system is NOT to identify offenders, although that may be a by-product, but to measure relevant noise in each affected community in a consistent and continued basis so that results can be compared from week to week, month to month and year to year. A noise measurement & reporting system has three essential components:

- A **Noise Measurement Methodology** based on community standards for excessive noise rather than the FAA one-size-fits-all methodology that is more appropriate to large commercial airports in non-residential or urban areas.
- A **Data Collection System** that obtains all the relevant data needed to assess and manage the problem on an ongoing basis and to provide a baseline measurement. We recommend using a production version of the Helicopter Noise Community Impact Model described in **Appendix A**.
- A **Reporting System** that summarizes and analyzes the noise impact on various residential neighborhoods so that the Town and the community can quickly and easily assess the results, just as investors can assess corporate performance from its quarterly earnings per share.

NOISE MEASUREMENT METHODOLOGY

All single event noise from aircraft would be measured in relationship to Town Code limits for noise in residential neighborhoods, which both East Hampton and Southampton limit to 65 db from 7 AM to 7PM, and 50db from 7 PM to 7 PM. Any occurrence of a noise event that exceeds Town Code limits on any affected (East Hampton OR Southampton) residential property would be defined as a problem event. 50db is a lower threshold than the FAA recognizes, but it is highly relevant to our peaceful co-existence with the airport. In addition, it should be recognized that summer weekends are especially noise sensitive. This methodology is not intended to relate to FAR Part 36 or any other FAA methodology for measuring noise but rather to the established norms for residential noise on the South Fork of Long Island.

The **Helicopter Noise Community Impact Model** described in <u>Appendix A</u> measures Residential Noise Event, i.e. any noise event that exceeds the community standard noise limit, multiplied by the number of people affected.

DATA COLLECTION SYSTEM

In the past, the Committee has recommended the use of noise meters. The **Helicopter Noise Community Impact Model** described in <u>Appendix A</u> obviates the need for noise meters, at least insofar as regular noise measurement and reporting is concerned. The following data will need to be collected:

- ➤ **Annually**: Number of residents affected for each helicopter route at specified altitudes, e.g. 1000, 1500, 2000, 2500 feet.
- ➤ Ongoing: flight data from the Airscene flight monitoring system specifying type of aircraft, route, altitude at a certain radius (e.g. 1 mile from HTO), date, time of day, etc.

Since Airscene does not currently have the ability to produce this data without a great deal of manual work, the system will require some programming to extract these data on a regular basis.

APP. B: A NOISE MEASUREMENT & REPORTING SYSTEM (CONT'D.)

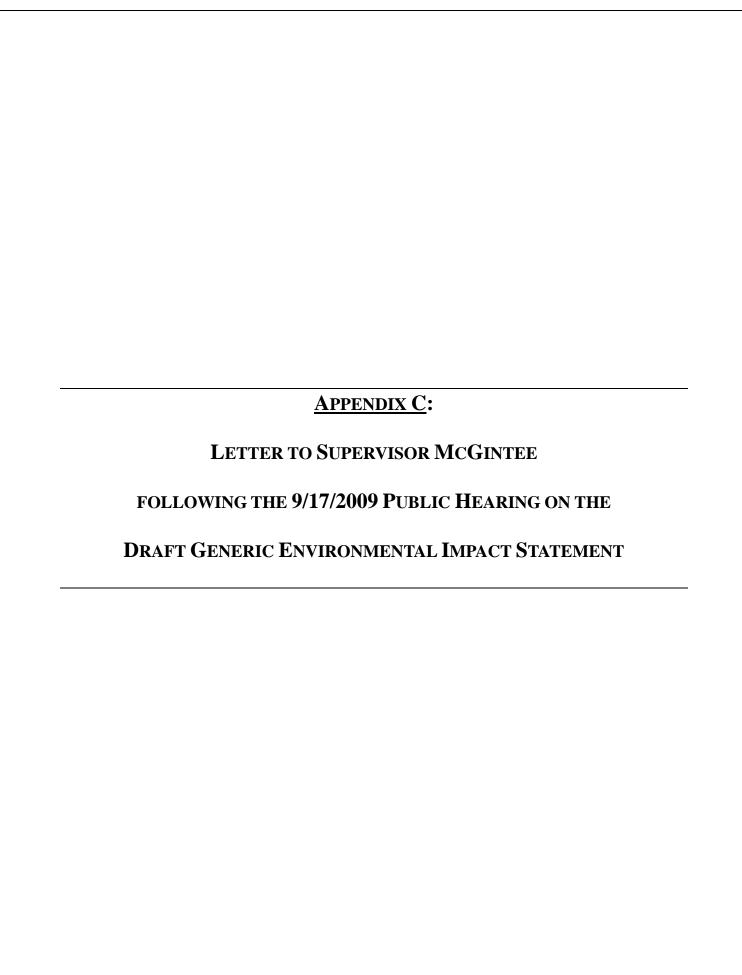
COMMUNITY REPORTING SYSTEM

The primary purpose of the permanent measurement system is to provide the community with a reliable results-oriented gauge as to how much noise is emanating from HTO and to serve as a management tool to measure the bottom line, just as a corporation measures profit. No other way has been offered for holding management and the Town Board accountable for their results year in and year out with comparable objective data. A sample report is shown at the beginning of this discussion:

The specific design of the report would be a collaborative effort of airport management, the Committee and the Town Board.

SAMPLE NOISE REPORT

R	esidential	Noise Eve	nts (Jan]	Dec. 2007)		
	Ju	ne, July, Au	gust		12 Months	
	2007	2006	% Inc./ (Dec.)	2007	2006	% Inc./ (Dec.)
Jets	211,300	188,700	12.0%	359,900	315,800	14.0%
Helicopters	2,806,351	2,984,090	(6.0%)	4,677,023	4,883,747	(4.2%)
Single/Multi Prop.	857,800	800,000	7.2%	1,812,300	1,707,400	6.1%
Touch & Goes	148,400	193,000	(23.1%)	404,800	477,000	(15.1%)
Unidentified	47,300	116,800	(59.5%)	193,700	315,800	(38.7%)
Total Noise Events	4,071,151	4,282,590	(4.9%)	7,447,723	7,699,747	(3.3%)
	Flight O	perations	(Jan Dec	. 2007)		
	Ju	ne, July, Au	gust		12 Months	
	2007	2006	% Inc./ (Dec.)	2007	2006	% Inc./ (Dec.)
Jets	2,113	1,887	12.0%	3,599	3,158	14.0%
Helicopters	4,073	3,536	15.2%	6,788	5,787	17.3%
Single/Multi Prop.	8,578	8,000	7.2%	18,123	17,074	6.1%
Touch & Goes	742	965	(23.1%)	2,024	2,385	(15.1%)
Unidentified	473	1,168	(59.5%)	1,937	3,158	(38.7%)
Total Movements	15,979	15,556	2.7%	32,471	31,562	2.9%



TOWN OF EAST HAMPTON AIRPORT NOISE ABATEMENT ADVISORY COMMITTEE

200 Daniels Hole Road, Wainscott, NY 11975

Friday, September 25, 2009

William McGintee, Supervisor Town of East Hampton 159 Pantigo Rd., East Hampton, NY 11937

Dear Supervisor McGintee:

The September 17, 2009 public hearing helped crystallize our concerns about the July 2009 Draft Generic Environmental Impact Statement (DGEIS) as it relates to airport noise and the airport master plan update. In our view, the DGEIS fails in at least six ways to address the environmental needs of the community as required by the New York State Environmental Quality Review Act.

1. Fails to acknowledge despite overwhelming evidence, that airport noise, especially from helicopter traffic, is the major concern to thousands of residents.

Overwhelming evidence of the importance of noise to the community includes the following information obtained from the DGEIS and this committee's Five Year Report:

- ➤ 20 of 29 speakers and 41 of 49 written comments in connection with the public hearing on the DRAFT Airport Master Plan Report (DAMPR) "strongly objected to the noise specifically from helicopters.". ¹ (Appendix A of the DGEIS)
- ➤ The airport received over 12,000 complaints about helicopter noise in 2007 and 2008, 80% of which were about helicopters. (p. 29 of DGEIS). Helicopter complaints averaged approximately fifteen times the rate for fixed wing aircraft
- A rudimentary computer model prepared by the Airport Noise Abatement Committee indicates that helicopters represent at least 60% of all aircraft residential noise events in excess of 65 dB. (from Five Year Report of ANAAC Sept. 11, 2009)

If nothing else, the DGEIS's failure to acknowledge the existing noise problem violates the regulation requiring that "all draft EISs must include the no action alternative" (NYCRR, sec. 617.9 (5) (v)).

2. Fails to measure the extent of airport noise beyond the airport boundaries, especially during the summer months, despite available methodologies to do so.

Despite the Town Board's awareness of the differences between the FAA noise averaging methodology and single event noise measurement and that the Town noise code is based on single event noise not averages, the DGEIS is based on the former. The DAMPR makes a compelling case for single event noise measurement:

"The single most effective means to curtail airport noise impact is by instituting single event noise levels, usually measured at the approach and departure measurement points specified in Federal Aviation Regulations Part 36. ...Single event noise level limits, especially when these can be enforced through noise monitoring are the fairest and most reliable way to impose limitations on cumulative aircraft noise impact." ²

The very fact that the FAA methodology does not reveal the cause of the majority of noise complaints (see above) indicates that it is inadequate to measure the problem and potential solutions thereto. Testimony at the DGEIS hearing from members of this committee made it clear how insensitive the FAA noise averaging methodology is to helicopters and other seasonal noise.

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DGEIS: Appendix A: Summary of Public Hearing Comments (July 2007)

² p. IV-227 **DRAFT Airport Master Plan Report** (Savik & Murray, LLP et. al. April 24, 2007)

EAST HAMPTON AIRPORT NOISE ABATEMENT ADVISORY COMMITTEE

William McGintee, Supervisor Friday, September 25, 2009

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3. Fails to include a credible forecast of helicopter traffic, which would almost certainly demonstrate a significant adverse environmental impact absent effective mitigation.

The DGEIS provides only a five year forecast (ending in 2013) of airport operations during a period despite the fact that the 2007 Draft Airport Master Plan Report (DAMPR) has at least a 20 year horizon and attempts to forecast airport operations through the year 2025. Chapter III of this committee's five year report (dated Sept. 11, 2009 and submitted as part of the public record on the DGEIS) explains in detail why the DGEIS and DAMPR forecasts are inadequate and offers four scenarios as alternatives.

		Fore	cast		Extende	ed to 2029
FORECAST	Flight Ops.	% of 2007 Fl. Ops.	Ending Date	APR	Flight Ops.	% of 2007 Fl. Ops.
2007 DAMPR	7,512	111%	2025	1.4%	7,942	117%
July, 2009 DGEIS	7,065	104%	2013	3.1%	10,507	155%
Scenario 1	15,888	234%	2029	5.9%	15,888	234%
Scenario 2	25,584	377%	2029	7.9%	25,584	377%
Scenario 3	50,342	742%	2029	11.8%	50,342	742%
Scenario 4	69,169	1019%	2029	13.8%	69,169	1019%

4. Failed to measure the environmental impact on noise of the proposed noise mitigation measures, i.e. re-routing, a seasonal control tower and an AWOS.

SEQR regulations state that "An EIS must ... analyze the significant adverse impacts and evaluate all reasonable alternatives." (NYCRR. Sec 617.9) Yet the EIS does not even analyze the environmental impact of the proposed noise mitigation measures (re-routing, a seasonal control tower and an AWOS) cited as projects in the DGEIS (p. v of the Executive Summary and elsewhere).

5. Failed to consider a number of additional noise mitigation measures that may be available whether or not grant assurances are allowed expire in 2014

As stated above SEQR regulations state that "An EIS must ... analyze ... and evaluate all reasonable alternatives." (NYCRR. Sec 617.9) SEQR regulations define "actions" as including: "(2) agency planning and policy making activities that may affect the environment ...; (3) adoption of agency rules, regulations, and procedures, including local laws, codes, ordinances, executive orders and resolutions that may effect the environment;..." In addition, the regs state: "Environmental means the physical conditions ... affected by a proposed action, including . . . noise ... and existing community or neighborhood character."

Accordingly, with reference to the clearly recognized issue of airport noise (see Item #1 above), the DGEIS must consider all "rules, regulations, and procedures, including local laws, codes, ordinances, executive orders and resolutions that may" address the adverse impact of airport noise now and for the entire planning period in question, i.e. 20 years. Furthermore, it cannot just list the possible actions, as in Chapter IV of the DAMPR. "An EIS must ... must analyze the significant adverse impacts and evaluate all reasonable alternatives"

"All reasonable noise abatement alternatives, would include, but not be limited to, night-time curfews, differential landing fees, and limiting the number of helicopter flights as per *National Helicopter Corp. v. City of New York*, 137 F. 3d 81, 88 (2d Cir.1998) whether recommended by this committee, by Kaplan Kirsch & Rockwell or catalogued in Chapter IV of the DAMPR.

³ NY State SEQR Regulations (Sec 617.2)

⁴ Ibid. **Sec 617.2 (l)**

⁵ NY State SEQR Regulations (Sec 617.9), emphasis added.

APPENDIX C: Letter to Supervisor RE: DGEIS (CONT'D.)

EAST HAMPTON AIRPORT NOISE ABATEMENT ADVISORY COMMITTEE

William McGintee, Supervisor Friday, September 25, 2009

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6. Failed to measure the environmental benefits of a Part 161 Study.

A Part 161 Study or equivalent could enable the Town to enact certain limitations on air traffic, which have been recommended for study by this Committee, (see below), might or might not require the Town to forfeit future FAA funding. It could give the Town the power to ban, whether exercised or not, Stage 2 helicopters. It has been strongly and repeatedly recommended in writing by this Committee, discussed but not analyzed in the DAMPR and recommended for consideration by outside counsel (Kaplan Kirsch & Rockwell, LLP).

If the Town takes the position that ANCA does not apply to helicopters, a formal Part 161 study would not be required for that purpose but much of the same substantive data would need to be collected and reported. A Part 161 Noise Study may also be required (as recommended in ANAAC Progress Report, April, 2006) for:

- Landing Fees Related to Noise Emissions and Time of Day
- Mandatory Night-time Curfew
- A Ban on Touch & Goes on Summer Weekends.

While it is recognized that the Town is concerned about the potential cost of litigation, there has been no analysis of the potential environmental benefits of a Part 161 study nor of ways to minimize or avoid litigation.

RECOMMENDATIONS

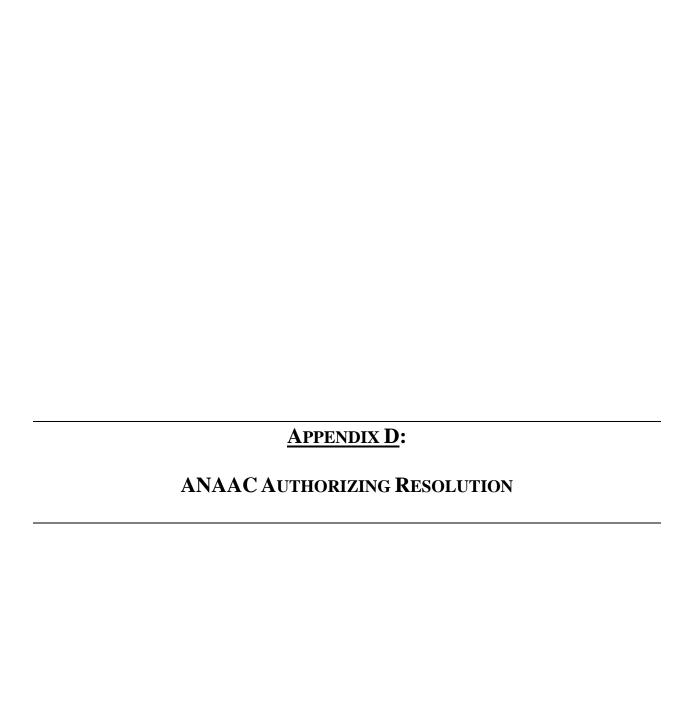
Accordingly, the July 2009 DGEIS is inadequate in at least six different respects detailed above. To remedy these inadequacies, we recommend the following:

- 1. Analyze all reasonable alternatives using single event noise measurement and the Town Code's thresholds for noise violations, i.e. 65 db from 7 AM to 7PM and 50 dB from 7 PM to 7 AM.
- 2. Provide a 20 year forecast of helicopter flight operations using growth assumptions more closely aligned with local experience rather than national averages and use the forecast as a basis for evaluating alternatives.
- 3. Analyze the environmental impact of all noise mitigation alternatives mentioned encyclopedically in Chapter IV of the DAMPR; those recommended for consideration by this committee in our Five Year Report or by Kaplan Kirsch & Rockwell. LLP; the seasonal control tower; helicopter re-routing and the AWOS to determine which ones might benefit the community by significantly reducing single event noise.
- 4. Perform a cost benefit analysis of the above noise mitigation alternatives that promise results.
- 5. Analyze the legal and regulatory compatibility of each promising noise abatement alternative with FAA funding and the grant assurances that come with them.
- 6. Perform a cost benefit analysis of a Part 161 study under the following scenarios:
 - a. The grant assurances expire in 2014.
 - b. The grant assurances do not expire in 2014.
 - c. Legislative relief is obtained and grant assurances expire in 2014.
 - d. Legislative relief is not obtained and grant assurances do not expire in 2014.
- 7. Establish noise abatement objectives and costs as recommended by this committee and by Kaplan Kirsch & Rockwell. LLP.

If acted upon, these recommendations should substantially cure the failure of the current DGEIS to address widespread community concerns about airport noise.

Sincerely,

Kathy Cunningham, Chairperson



RESOLUTION # 4 352 DATED: September 16, 2004

The following resolution was offered by Councilman Pete Hammerle, seconded by COUNCILWOMAN D. FOSTER, and adopted:

WHEREAS, the Town of East Hampton is embarking on a Noise Abatement Program and intends to update the East Hampton Airport master plan; and

WHEREAS, the Town Board wishes to create an Airport Noise Abatement Advisory Committee to provide the Town Board with two specific functions;

WHEREAS, the first function of the Committee is to advise the Town Board on how the noise abatement procedures are progressing and provide suggestions on how to improve such procedures; and

WHEREAS, the second function of the Committee is to present a unified message on the issue of noise abatement during the master plan process; and

WHEREAS, the members of the Airport Noise Abatement Advisory Committee shall be persons who are directly affected by airport noise; therefore be it

RESOLVED, that the Town Board hereby appoints the following individuals to serve as members of the Airport Noise Abatement Advisory Committee:

Pat Trunzo

Ed Gorman

Kathy Cunningham

Joan Osborne

Bob Wood

Barry Leach

Peter Wadsworth

Charles Ehren

Skip Keener

Jean Sinnenberg

Arthur French

Gay Wasserman (Co-Chair. Sagaponack CAC or designee)

Shira Kalish (Co-Chair. Bridgehampton CAC or designee)\

Mary Busch

Susan Burke (North Sea CAC)

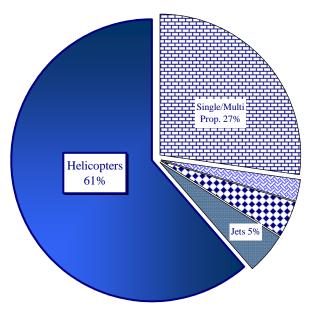
Airport Manager/ Noise Officer (ex officio)

and it is further

APPENDIX C: Letter to Supervisor RE: DGEIS (CONT'D.)

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6,695,838 RESIDENTIAL NOISE EVENTS IN 2008



Residential Noise Events estimated pursuant to computations and assumptions described in **APPENDIX A: HTO COMMUNITY NOISE IMPACT MODEL**

EAST HAMPTON AIRPORT NOISE ABATEMENT ADVISORY COMMITTEE