



Proposed Airport Noise Regulations, SEQRA & Traffic Diversion Study

April 14, 2015



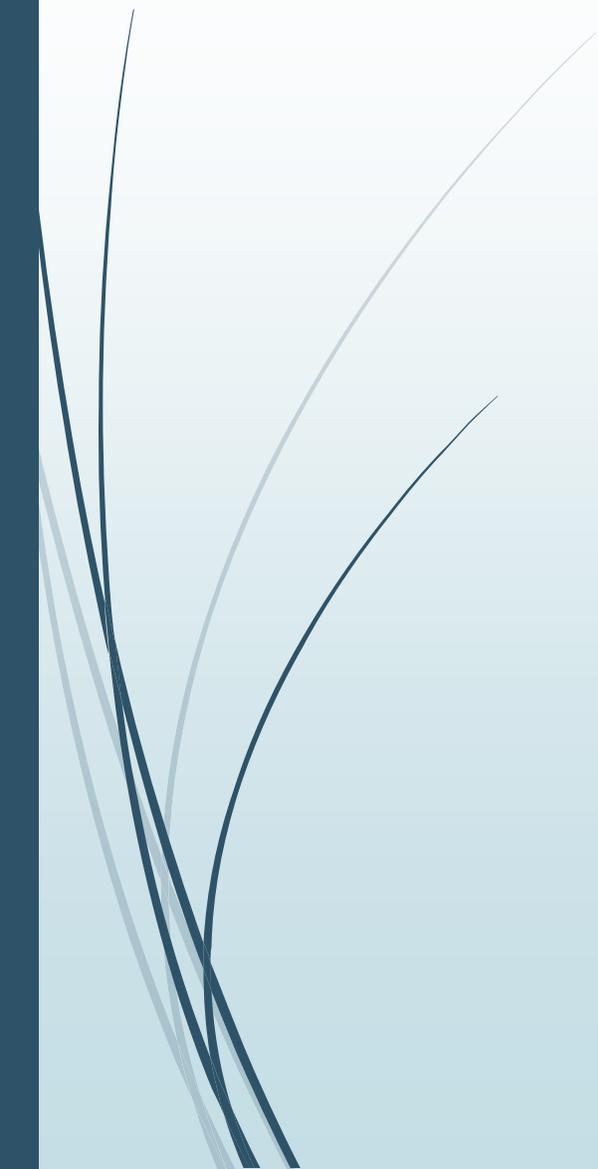
Purpose & Need



- 
- Annoyance and disturbance from aircraft noise
 - Extensive analysis of the complaints, the noise and the air traffic itself by the Town's aviation consultants and noise engineers
 - Impacts to community character and sense of place
 - Potential impacts to wildlife



What was proposed?





A public hearing was held on 4 proposed laws on March 12, 2015

Law #1 - A mandatory year-round curfew on all aircraft operations between 11:00 PM and 7:00 AM replacing the existing voluntary curfew.

Law#2 - Extending this curfew to between 8:00 PM and 9:00 AM for aircraft defined by town ordinance as noisy.

Law#3 - Prohibiting all helicopter operations on weekends and holidays from May 1 through September 30, with weekend defined as Thursday noon to Monday noon and holidays including the day before and day after each holiday.

Law#4 - Prohibiting noisy aircraft from conducting more than one take-off and one landing in any calendar week from May 1 through September 30.



The Town Board proposes to move forward with 3 laws at this time:

Law #1 - A mandatory year-round curfew on all aircraft operations between 11:00 PM and 7:00 AM replacing the existing voluntary curfew.

Law#2 - Extending this curfew to between 8:00 PM and 9:00 AM for aircraft defined by town ordinance as noisy.

Law#4 - Prohibiting noisy aircraft from conducting more than one take-off and one landing in any calendar week from May 1 through September 30.



The Town proposes to professionally study and evaluate the effectiveness of these local laws following the 2015 summer season. These studies will include analysis of the diversion of traffic to other airports, the effect on noise and complaints, the effect on aircraft operators and the financial impact of the restrictions. A public meeting will be convened after the 2015 season to present the results of these studies and to hear from the public.



Noise Abatement



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Goal Two of the Town Comprehensive Plan states that we should

“Take forceful measures to protect and restore the environment...” and reduce the impacts of human-produced noise.



The Airport Master Plan adopted in 2010 states:

“Control of noise and adverse environmental impacts at the airport is consistent with current Town goals for improved quality of life and land and water conservation. These goals recognize that protecting the environment is essential for improving the Town’s seasonal and year round economy. These controls are achieved through reasonable, non-arbitrary and non-discriminatory management practices. These may limit the maximum size of aircraft to be accommodated, regulate excessive peak demand during the summer season and otherwise adjust use patterns such as for helicopter access to minimize community disturbances.”



The Town has:

- ▶ diligently identified and promoted voluntary measures, including maintaining helicopter altitude up to the airport boundary line and a nighttime curfew
- ▶ met repeatedly with the New York Congressional delegation and the FAA regarding potential solutions to the problem of aircraft noise.
- ▶ Met repeatedly with airport stakeholders including Eastern Region Helicopter Council, Friends of the East Hampton Airport, the National Business Aviation Association, the Aircraft Owners and Pilots Association, the National Air Transportation Association, and other informal local groups of users and service providers to discuss their respective concerns
- ▶ held a special public meeting on August 27, 2014, to provide the public an opportunity to comment on the problem of aircraft noise and to share views on potential solutions. The meeting was attended by almost 400 people.



Disturbance by all types of aircraft is most significant in the evening, nighttime, and early morning hours when people are sleeping or when there is a heightened expectation of quiet.

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Of 24,000 airport noise complaints logged last year, the latest noise analysis discloses that they are overwhelmingly attributable to helicopters.

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Helicopter noise

- ▶ a unique percussive sound wave that is especially disturbing because it is felt and not just heard
- ▶ longer duration than with other aircraft because of lower speed and relatively lower and more constant altitude on approach and departure
- ▶ aural signature includes a higher proportion of low frequencies that, for reasons of physics, are heard at a much longer distance than other sounds and despite intervening obstacles
- ▶ approaching sounds that “ramp up” (termed “looming”) activate the “fear” region of the brain causing increases in anxiety



Diversion



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Potential Responses to the Proposed Restrictions

- Change the timing of flights to comply with restrictions
- Divert to another airport
- Utilize quieter aircraft
- Shift from helicopter to fixed wing aircraft
- Use highway or rail instead of flying
- Reduce the number of trips to the region

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There are many variables that will determine the number of landings diverted to local airports.

- ▶ Location of final destination
- ▶ Flying time
- ▶ Required fuel
- ▶ Ability to refuel at the airport
- ▶ Driving distance
- ▶ Airport amenities
- ▶ Weather constraints
- ▶ Hours of operation/staffing
- ▶ Personal scheduling
- ▶ Carrier scheduling

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What local airports could the traffic be diverted to?

- ▶ Montauk Airport
- ▶ Gabreski Airport
- ▶ Southampton Heliport

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How do these airports compare with
East Hampton Airport?



East Hampton

- 610 acres in size
- 2 active runways
- on-site fuel
- Seasonal Control tower operational and staffed 8am-8pm/7 days
May 22rd –September 13th
- 2 Fixed base operators
- Full fire and rescue
- Utilized by private aviation, corporate businesses and air taxi services
- 2 passenger terminals
- 2 rental car companies
- Inland location (approximately 2 miles from ocean)



Gabreski

- ▶ 1,451 acres in size
- ▶ 3 active runways, including one 9,000 feet long – among Long Island's longest after JFK International
- ▶ on-site fuel
- ▶ Control tower operational and staffed and staffed 24 hours/7 days
- ▶ Fixed base operator
- ▶ Full fire and rescue
- ▶ Utilized by private aviation, corporate businesses and air taxi services
- ▶ Passenger terminal
- ▶ Multiple rental car companies
- ▶ Restaurant
- ▶ Inland location (approximately 2.5 miles from ocean) and full FAA certified weather system
- ▶ 24 hour security provided by Suffolk County Sheriff's Office.
- ▶ Suffolk County Police Department and the Air National Guard present on-site



Montauk

- 37 acres with one active runway and a crosswind runway used for storage
- No fuel
- No passenger terminal
- Open 24 hours but only staffed during daylight hours by one person (possibly 2 during peak season)
- No communication regarding airport conditions when staff is not present
- Weather conditions subject to quick changes, wind and fog
- Located approximately 275 ft from Block Island Sound
- Landing can be affected by winds conditions altered by an approximately 30 ft high dune



Southampton Heliport

- ▶ Helipad only
- ▶ Landing restrictions:
 - ▶ May 1 - September 15: 8am – 7 pm
 - ▶ Sep 15 – Oct 31: 8am – 6pm
 - ▶ Nov 1 – Dec 31: 7am – 4pm
 - ▶ Jan 1 – end of Feb: 7am – 5pm
 - ▶ Mar 1 – Apr 30: 7am – 6pm
- ▶ Helicopters with gross weight greater than 15,000 lbs are prohibited
- ▶ Landing approaches and departures must be over Shinnecock Bay
- ▶ No parking, services or on-site fuel
- ▶ No passenger terminal
- ▶ Helicopters shall not sit on the helipad while awaiting the arrival of passengers
- ▶ Located between bay and ocean, approximately 350 feet from the bay and approximately 1300 feet from the ocean
- ▶ Subject to foggy weather conditions

Helicopter Landings

2006 - 2014

- ▶ How have the number of helicopter landings changed over time at each local airport?

| year | EH | Montauk | Gabreski | SH |
|------|------|---------|----------|-----|
| 2006 | 2893 | NA | 890 | NA |
| 2007 | 3394 | NA | 1276 | NA |
| 2008 | 3033 | NA | 1220 | 658 |
| 2009 | 2685 | NA | 593 | 688 |
| 2010 | 2960 | 168 | 719 | 678 |
| 2011 | 2510 | 217 | 544 | 817 |
| 2012 | 2844 | 214 | 633 | 915 |
| 2013 | 2864 | 266 | 697 | 800 |
| 2014 | 4198 | 385 | 450 | 890 |

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Proposed law # 1

- ▶ A mandatory year-round curfew on all aircraft operations between 11:00 PM and 7:00 AM replacing the existing voluntary curfew.



Proposed law #1

A mandatory year-round curfew on all aircraft operations between 11:00 PM and 7:00 AM replacing the existing voluntary curfew.

- ▶ 581 operations potentially affected by Restriction 1
- ▶ 457 operations are expected to re-schedule and 125 operations including 43 helicopter operations are expected to divert to other airports.
- ▶ operations are banned at Southampton Heliport during the proposed East Hampton curfew hours
- ▶ Montauk is not staffed at night and pilots are unable to communicate with the airport then.

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Proposed law #2

- ▶ Extending this curfew to between 8:00 PM and 9:00 AM for aircraft defined by town ordinance as noisy.



Proposed law #2 - Extending this curfew to between 8:00 PM and 9:00 AM for aircraft defined by town ordinance as noisy.

- ▶ would affect a total of 1,824 operations, including 1,013 helicopter operations from May through September
- ▶ AM arrivals and departures and PM departures that require a delay of an hour or less to comply with the curfews are expected to choose to re-schedule
- ▶ Operators of all other flights may divide their responses evenly between re-scheduling, diverting to other airports, and switching to quieter aircraft.
- ▶ Operators of AM helicopter flights can choose among Southampton Heliport (after 8AM in-season and 7AM off-season), Montauk Airport, and Gabreski Airport for diversion. Operators of PM helicopter flights and fixed wing aircraft can choose between Montauk and Gabreski.



Proposed law #4

- ▶ Prohibiting noisy aircraft from conducting more than one take-off and one landing in any calendar week from May 1 through September 30.

Fixed Wing and Helicopter Operations at East Hampton Airport May through September

| Aircraft Type | Operations May-Sept |
|---|--------------------------------|
| Fixed Wing Total | 14,004 |
| Fixed Wing Noisy | 1,663 |
| Percent Noisy | 11.9% |
| Helicopter Total | 5,855 |
| Helicopter Noisy | 5,384 |
| Percent Noisy | 92.0% |
| Helicopter Share of Total Noisy Operations | 76.4% |



From May through September helicopters accounted for over three quarters of the noisy aircraft operations at East Hampton Airport.



Adding a summer limit of two operations per week on noisy aircraft to the mandatory 11PM-7AM curfew for all aircraft and the extended curfew hours for noisy aircraft would affect a full year total of 5,822 operations, including 4,728 helicopter operations from May through September.

Estimate of Changes in Operations in Response to Proposed Law #4

| | Re-schedule | Divert | Switch to Quiet Aircraft | Total |
|-------------------|--------------|--------------------|--------------------------|--------------|
| Full Year | | | | |
| Helicopter | 679 | 2,197-2,846 | 1,361-2,010 | 4,887 |
| Fixed Wing | 423 | 341-369 | 143-171 | 935 |
| Total | 1,102 | 2,538-3,216 | 1,504-2,182 | 5,822 |

Expected Annual Decrease in East Hampton Airport Landings

| | Restriction 1 | Restriction 2 | Restriction 4 |
|---------------------|---------------|---------------|--------------------|
| Full Year | | | |
| Helicopter | 22 | 123 | 1,099-1,423 |
| Fixed Wing | 41 | 57 | 171-185 |
| Total | 62 | 181 | 1,269-1,608 |
| Share of HTO | | | |
| Operations | 0.5% | 1.4% | 9.9%-12.5% |

A large number of factors will determine which alternative airport each flight will choose, including distance and driving time to the ultimate destination and availability of services. Of the three airports only Gabreski offers complete services including aircraft refueling.

| | Gabreski Airport | Montauk Airport | Southampton Heliport |
|----------------------------------|------------------|-----------------|----------------------|
| Driving Distance in Miles | | | |
| Amagansett | 31.5 | 16.0 | 20.9 |
| Bridgehampton | 22.2 | 25.1 | 12.3 |
| East Hampton Village | 28.9 | 18.4 | 18.3 |
| Sagaponack | 23.6 | 25.0 | 12.9 |
| Shelter Island | 30.6 | 31.5 | 22.8 |
| Southampton Village | 17.7 | 31.3 | 5.5 |
| Water Mill | 19.5 | 28.0 | 8.8 |

| | |
|-----------------|--|
| <i>Closest</i> |  |
| <i>Middle</i> |  |
| <i>Furthest</i> |  |



The limits on noisy aircraft during the summer proposed by law 4 are expected to increase the number of diverted helicopter flights by 976 to 1,300 arrivals and diverted fixed wing flights by 113 to 128 arrivals for the season. With the summer season having 153 days, limiting noisy aircraft at East Hampton Airport to one flight (one landing and one take-off) per week would lead to an average of 6.4 to 8.5 helicopter arrivals diverted per day, and less than one fixed wing arrival per day.



The peak day for helicopter activity at East Hampton Airport had a total of 65 arrivals, or 1.9% of total May to September helicopter arrivals. If the peak day for helicopter diversions follows the same pattern as arrivals at East Hampton Airport, between 18.5 and 24.7 helicopter flights could be diverted from East Hampton Airport. The first helicopter on the peak day at East Hampton Airport arrived at 7:41 AM and the last arrived at 9:11 PM, so diversions would most likely be spread over a similar period. Peak day helicopter arrivals averaged 4.3 per hour with a maximum of 10 per hour.



Helicopters are expensive to own and use. Therefore, they are generally used by wealthy individuals or entities, whose homes are spread generally across the East End, from Southampton to Montauk. In light of that diversity of destination, the various pros and cons of the three potential diversion airports and with diverted flights spread over a period of time, it appears unlikely that proposed law 4 would add more than a handful of vehicles per hour to the current traffic on the Montauk Airport and Southampton Heliport access roads. The additional trips would not be sufficient to create a significant impact on traffic at or near any of the alternative airports.



The potential for significant noise impacts at the alternative airports is less than that at East Hampton Airport. The approaches to Montauk and Southampton are principally over water, not residential neighborhoods and Gabreski Airport encompasses 1,451 acres of airport land. None of the three alternatives have experienced the level of noise complaints that East Hampton has.



Aesthetic resources and the quality of the town's natural environment are a vital part of East Hampton's economy that is recognized in various town documents including the Town Comprehensive Plan and the Airport Master Plan. The proposed legislation is expected to reduce adverse impacts to wildlife in these areas as well as to the town residents and visitors that enjoy the quiet solitude of the natural landscape.



The Town Board has extensively researched and considered the causes and effects of disturbance from aircraft noise. Potential solutions have been thoroughly examined, discussed and revised in accordance with that information and with input from numerous public meetings and written communications. The proposed laws are the result of those efforts. The laws are expected to reduce the disturbance to residents, visitors and wildlife caused by noisy aircraft and to help restore our acoustical environment in accordance with the goals of our Comprehensive Plan.

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Next steps...

- Review the draft SEQRA documents and let me know if you need any revisions.
- Make the SEQRA declaration.
- Adopt the local laws.