

An aerial photograph of East Hampton, New York, showing the airport, surrounding residential and agricultural areas, and the ocean coastline. The text is overlaid on the image.

Regulations To Address Noise and Disturbance from Operations at East Hampton Airport

Updated February 10, 2015

Presenters

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Development of proposed legislation:

Legal requirements

- **Restriction must be “reasonable, non-arbitrary and non-discriminatory”**
 - *E.g., Nat’l Helicopter Corp. v. City of New York*, 137 F.3d 81, 88 (2d Cir. 1998)
 - FAA response to Congressman Bishop (Feb. 29, 2012)
- **Town must give up eligibility for future FAA grants**
 - FAA response to Congressman Bishop (Feb. 29, 2012)

Development of proposed local laws:

Analysis and process

▪ **Technical analysis**

- Initial noise study (2003-2004)
- Monitoring (2005-2011)
- Enhanced data collection (2012-2013)
 - PlaneNoise, Vector, AirScene, etc.
- Refined noise analysis (2014 - present)
 - Phase I: Noise Analysis Interim Report
 - Phase II: Definition of Problem Statement
 - Phase III: Development of a refined solution to the problem

▪ **Transparent and inclusive process**

- Resolution 2012-832 (Intent to Pursue Use Restrictions)
- Resolution 2014-1180 (Identify and Adopt Regulations to Address Noise and Disturbance from Operation at East Hampton Airport)
- Multiple public hearings
- Multiple opportunities for public comment

Final Problem Statement

- Phase II results included a problem statement presented at the December 2, 2014 Town Board meeting
- Phase III identified an additional refinement of the problem statement
 - Noise from aircraft operating at East Hampton Airport disturbs many residents of the East End of Long Island. Residents find helicopters more disturbing than any category of fixed-wing aircraft. Disturbance caused by all types of aircraft is most significant when operations are (1) most frequent and (2) in evening, night, and early morning hours.

Proposed Local Laws

▪ Four restrictions

1. Prohibit all aircraft operations year-round from 11 pm – 7 am
2. Prohibit noisy aircraft year-round during 8 pm – 9 am evening, night, and early morning hours (extends curfew into “shoulder hours”)
3. Prohibit helicopter operations on weekends and holidays during the summer season (May 1 – September 30)
4. Prohibit noisy aircraft from conducting more than one take-off and one landing in any calendar week during the summer season

▪ Collectively affect only 24% of all operations, but address 67% of all complaints

- Restrict types of aircraft – at the times of the day, week, and year – that are associated with the greatest number of complaints

Projecting outcomes of each restriction

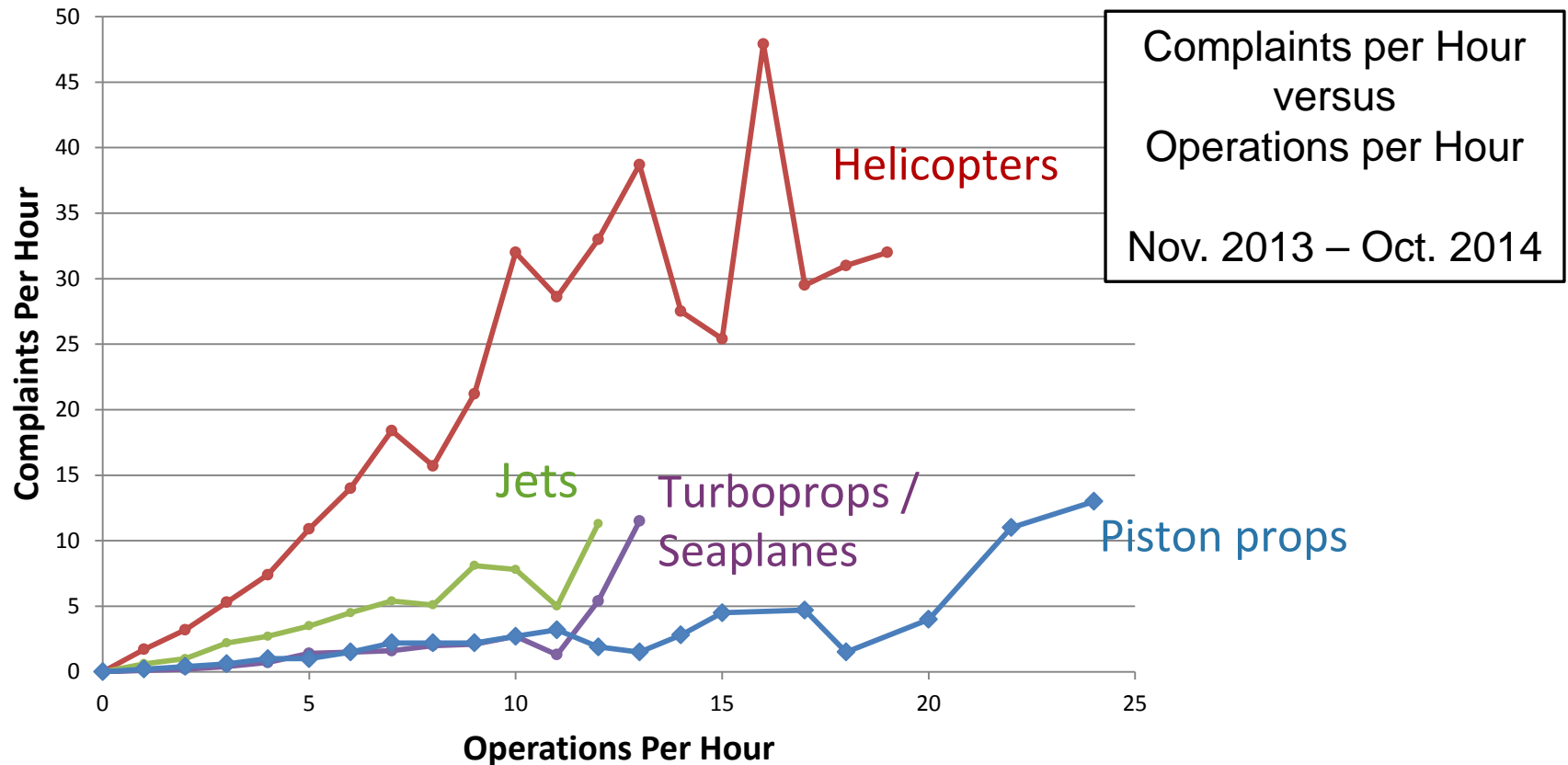
- **Based on November 2013 – October 2014 Vector operations data and PlaneNoise complaint data**
- **Identified numbers of operations that occurred over those 12 months that would have been affected by each restriction, if it had been in place**
 - Analysis of restrictions reflects cumulative effects; i.e., the affected operations build up in an additive fashion
- **Identified numbers of associated complaints**
 - Based on complaints by aircraft type category during specific time periods covered by each restriction
- **Town is in the process of enhancing the Vector system to maximize the numbers of operations captured**
 - Some ramp areas are not covered as well as others
 - Can lead to differences in counts of arrivals vs. departures

Restrictions require defining: “season”, “weekend”, “holiday”, “shoulder hours”, and “noisy aircraft”

- **All definitions reflect policy decisions integrating:**
 - HMMH review of operations and complaint data
 - Considered hourly, day-of-week and monthly data variations
 - Noise subcommittee input
- **Season**
 - May 1 – September 30
- **Weekend**
 - Thursday noon – Monday noon
- **Holidays**
 - Memorial Day, Independence Day and Labor Day
 - Also include the days before and after the holidays
- **Shoulder hours**
 - 8 – 11 p.m. and 7 – 9 a.m.

Defining “noisy” aircraft: *More than just helicopters*

- Helicopters result in the highest rate of complaints
 - However, jets generate complaints at a higher rate than props
- Sheer frequency of noisy operations is a problem in itself



Defining “noisy” aircraft

- **FAA and international regulators use a number of noise metrics to certify aircraft designs**
 - Jets, heavy props, and heavy helicopters are rated in terms of Effective Perceived Noise Level decibels (EPNdB)
 - Light helicopters are rated in terms of either EPNdB or Sound Exposure Level (SEL)
 - Light props are rated in terms of maximum A-weighted decibels (Lmax)
- **Noisy aircraft are defined as follows**
 - If EPNdB ratings are published by U.S. or international regulatory bodies, noisy aircraft are those with approach levels ≥ 91.0 EPNdB

Problem 1: Nighttime operations

- **Proposed restriction:**
 - Mandatory 11 pm – 7 am curfew on all aircraft, all year
 - Based on existing voluntary curfew
- **Estimated outcome:**
 - Encourage shift to less sensitive hours
 - Would have affected approximately 581 operations in 11/13 – 10/14 analysis period
 - 2.3% of annual operations
 - 1,109 complaints were associated with those operations
 - 4.9% of all complaints in the year

Outcome of Restriction 1: 11 pm – 7 am curfew

All subsequent outcomes build on this basic restriction

	May 1 – September 30			Annual		
	Heli-copter	Fixed-Wing	All Aircraft	Heli-copter	Fixed-Wing	All Aircraft
Estimated operations affected	175	323	498	199	382	581
Total existing operations in category	5,855	14,004	19,859	7,044	18,670	25,714
% total operations associated with basic curfew	3.0%	2.3%	2.5%	2.8%	2.0%	2.3%
Estimated associated complaints	702	335	1,037	747	362	1,109
Total existing complaints in category	14,935	5,999	20,934	16,152	6,316	22,468
% total complaints associated with basic curfew	4.7%	5.6%	5.0%	4.6%	5.7%	4.9%

Problem 2: Evening and early morning operations

- **Proposed restriction:**
 - Prohibit noisy aircraft year-round during 8 pm – 9 am evening, night, and early morning hours
 - Extends 11 pm – 7 am curfew into “shoulder hours” for noisy aircraft
- **Estimated outcome (with Restriction 1):**
 - Encourage shift to least-sensitive hours
 - Would have affected approximately 1,824 operations in 11/13 – 10/14 analysis period
 - 7.1% of annual operations
 - 4,485 complaints were associated with those operations
 - 20.0% of all complaints in the year

Outcome of Restriction 2: Extend curfew for noisy aircraft

Outcome of Restriction 2 is in addition to Restriction 1 (basic curfew)

	May 1 – September 30			Annual		
	Heli-copter	Fixed-Wing	All Aircraft	Heli-copter	Fixed-Wing	All Aircraft
Estimated operations affected	1,013	552	1,565	1,172	652	1,824
Total existing operations in category	5,855	14,004	19,859	7,044	18,670	25,714
% total operations associated with Restrictions 1 and 2	17.3%	3.9%	7.9%	16.6%	3.5%	7.1%
Estimated associated complaints	3,549	704	4,253	3,744	740	4,485
Total existing complaints in category	14,935	5,999	20,934	16,152	6,316	22,468
% total complaints associated with Restrictions 1 and 2	23.8%	11.7%	20.3%	23.2%	11.7%	20.0%

Problem 3: Helicopter disturbance

- **Proposed restriction:**
 - Prohibit helicopter operations on weekends and holidays during the summer season (May 1 – September 30)
- **Estimated outcome, with Restrictions 1 and 2:**
 - Would have affected approximately 5,570 operations in 11/13 – 10/14 analysis period
 - 21.7% of annual operations
 - 13,833 complaints were associated with those operations
 - 61.6% of all complaints in the year

Problem 3: How to measure helicopter impacts?

- **Helicopters clearly generate complaints at lower levels of noise than fixed-wing aircraft**
 - Noise characteristics of helicopters are distinctly different from other aircraft and may play a role in increasing reactions
 - Many factors affect annoyance besides sound; fear of mishap, purpose / necessity of the flight, etc.
- **But, no expert agreement on:**
 - Decibel correction to account for the increased response to helicopters
 - Whether a correction is even needed
 - The appropriate metric to use in assessing helicopter noise effects
- **Use of complaint data**
 - East Hampton data clearly demonstrate a strong response to helicopters
 - FAA and the courts have recognized complaints as a proper basis for regulation

Restriction 3. Ban on helicopter operations on weekends and holidays during the summer season (May – Sept.)

Outcome is in addition to Restrictions 1 and 2

	May 1 – September 30			Annual		
	Heli-copter	Fixed-Wing	All Aircraft	Heli-copter	Fixed-Wing	All Aircraft
Estimated operations affected	4,759	552	5,311	4,918	652	5,570
Total existing operations in category	5,855	14,004	19,859	7,044	18,670	25,714
% total operations associated with Restrictions 1 - 3	81.3%	3.9%	26.7%	69.8%	3.5%	21.7%
Estimated associated complaints	12,898	704	13,602	13,093	740	13,833
Total existing complaints in category	14,935	5,999	20,934	16,152	6,316	22,468
% total complaints associated with Restrictions 1 - 3	86.4%	11.7%	65.0%	81.1%	11.7%	61.6%

Problem 4: Frequent noisy operations in season

- **Proposed restriction:**
 - Prohibit noisy aircraft from conducting more than one take-off and one landing in any calendar week during the summer season
- **Estimated outcome, with Restrictions 1, 2, and 3:**
 - Encourage shift to quieter aircraft
 - Would have affected approximately 6,136 operations in 11/13 – 10/14 analysis period
 - 23.9% of annual operations
 - 14,972 complaints were associated with those operations
 - 66.6% of all complaints in the year

Restriction 4. Add two operation per week limit on noisy aircraft operations during summer season (May – Sept.)

Outcome is in addition to Restrictions 1, 2, and 3

	May 1 – September 30			Annual		
	Heli-copter	Fixed-Wing	All Aircraft	Heli-copter	Fixed-Wing	All Aircraft
Estimated operations affected	5,159	718	5,877	5,318	818	6,136
Total existing operations in category	5,855	14,004	19,859	7,044	18,670	25,714
% total operations associated with Restrictions 1 - 4	88.1%	5.1%	29.6%	75.5%	4.4%	23.9%
Estimated associated complaints	13,833	907	14,740	14,028	944	14,972
Total existing complaints in category	14,935	5,999	20,934	16,152	6,316	22,468
% total complaints associated with Restrictions 1 - 4	92.6%	15.1%	70.4%	86.8%	15.0%	66.6%

Continuing effort: Coordination with operators to pursue voluntary approaches

- **Met with operator representatives on January 21**
- **Focus of discussion was on voluntary noise abatement routes, altitudes, etc.**
- **Requested feedback on:**
 - Accurately monitoring, assessing, and describing compliance
 - Special circumstances to consider (e.g., weather, traffic, etc.)
 - Most effective means to communicate with operators and pilots
 - Most valuable feedback to provide operators and pilots
 - Ideas for building on “lessons learned” in 2014 season
 - Any other suggestions, observations, etc.

Ongoing opportunities for public involvement

1. Comment today

2. Submit written comments to:

- HTOcomments@EHamptonNY.gov

3. Review Town documents and reports at:

- www.HTOplanning.com

4. Attend and comment at public hearing

- (Tentatively March 5, 2015)

Comparison of cumulative effects of four proposed restrictions

Restrictions	<u>Cumulative</u> Operations Affected		<u>Cumulative</u> Associated Complaints	
	# Affected	% Annual Total	# Associated	% Annual Total
1. Mandatory 11 pm – 7 am curfew on all aircraft, all year	581	2.3%	1,109	4.9%
2. Extend curfew for noisy aircraft to 8 pm – 9 am, all year	1,824	7.1%	4,485	20.0%
3. Add weekend and holiday ban on helicopter operations, May – Sept.	5,570	21.7%	13,833	61.6%
4. Add two operation per week limit on noisy aircraft operations , May – Sept.	6,136	23.9%	14,972	66.6%
Annual totals (November 2013 – October 2014) for comparison purposes	Operations: 25,714		Complaints: 22,468	