

An aerial photograph of the East Hampton Airport and its surroundings. The airport is centrally located, showing runways and taxiways. To the north, there is a large body of water, likely a bay or inlet. The surrounding area is a mix of green fields, residential developments, and some industrial or commercial buildings. The coastline is visible in the lower right corner, with a sandy beach and the ocean. The text is overlaid on the image in a large, white, sans-serif font.

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

February 4, 2015

Presenters

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- **Ted Baldwin**



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 31% of all operations, but address 74% 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

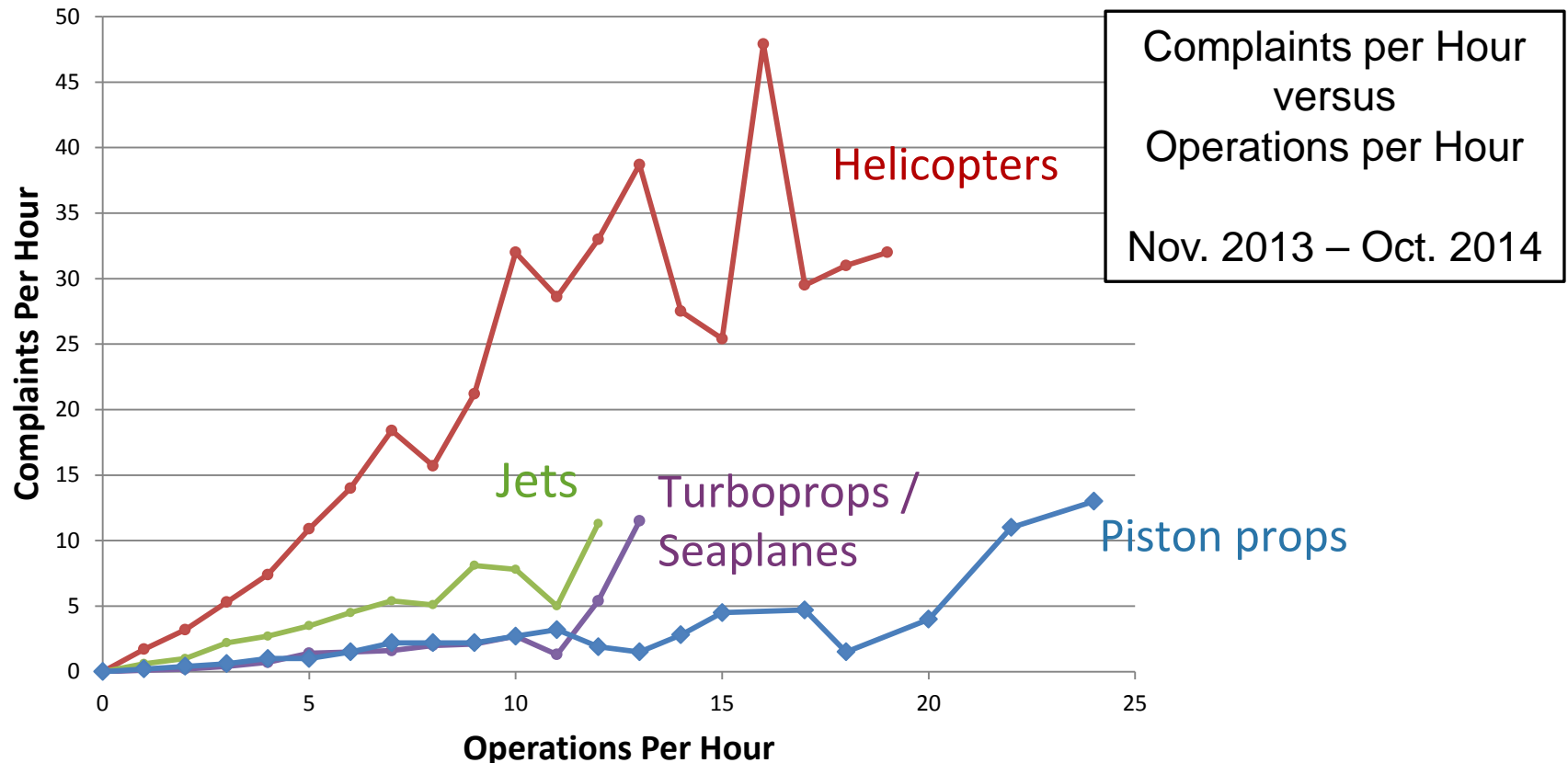
- **Based on November 2013 – October 2014 Vector operations data and PlaneNoise complaint data**
- **Identified numbers of operations that occurred over those 12 months that would have been affected by each restriction, if it had been in place**
 - Analysis of restrictions reflects cumulative effects; 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

- **Rank aircraft based on noise levels that FAA and international regulators use to certify aircraft designs**
 - Jets, heavy props, and heavy helicopters are in terms of Effective Perceived Noise Level decibels (EPNdB)
 - Light helicopters are in terms of either EPNdB or Sound Exposure Level (SEL)
 - Light props are 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
 - For aircraft with no published EPNdB rating, then noisy aircraft are those with published flyover levels ≥ 81.0 SEL or Lmax

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 2,418 operations in 11/13 – 10/14 analysis period
 - 9.4% of annual operations
 - 4,705 complaints were associated with those operations
 - 20.9% 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	1,074	1,009	2,083	1,245	1,173	2,418
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	18.3%	7.2%	10.5%	17.7%	6.3%	9.4%
Estimated associated complaints	3,757	704	4,460	3,965	740	4,705
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	25.2%	11.7%	21.3%	24.5%	11.7%	20.9%

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 6,117 operations in 11/13 – 10/14 analysis period
 - 23.8% of annual operations
 - 13,892 complaints were associated with those operations
 - 61.8% 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	4,773	1,009	5,782	4,944	1,173	6,117
Total existing operations in category	5,855	14,004	19,859	7,044	18,670	25,714
% total operations associated with Restrictions 1 - 3	81.5%	7.2%	29.1%	70.2%	6.3%	23.8%
Estimated associated complaints	12,944	704	13,647	13,152	740	13,892
Total existing complaints in category	14,935	5,999	20,934	16,152	6,316	22,468
% total complaints associated with Restrictions 1 - 3	86.7%	11.7%	65.2%	81.4%	11.7%	61.8%

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 7,905 operations in 11/13 – 10/14 analysis period
 - 30.7% of annual operations
 - 16,537 complaints were associated with those operations
 - 73.6% 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	5,178	2,392	7,570	5,349	2,556	7,905
Total existing operations in category	5,855	14,004	19,859	7,044	18,670	25,714
% total operations associated with Restrictions 1 - 4	88.4%	17.1%	38.1%	75.9%	13.7%	30.7%
Estimated associated complaints	13,890	2,402	16,292	14,098	2,439	16,537
Total existing complaints in category	14,935	5,999	20,934	16,152	6,316	22,468
% total complaints associated with Restrictions 1 - 4	93.0%	40.0%	77.8%	87.3%	38.6%	73.6%

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	2,418	9.4%	4,705	20.9%
3. Add weekend and holiday ban on helicopter operations, May – Sept.	6,117	23.8%	13,892	61.8%
4. Add two operation per week limit on noisy aircraft operations , May – Sept.	7,905	30.7%	16,537	73.6%
Annual totals (November 2013 – October 2014) for comparison purposes	Operations: 25,714		Complaints: 22,468	