

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

April 7, 2015

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.

Four Restrictions Considered

- 1. Prohibit all aircraft operations year-round 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 – Sept. 30)**
- 4. Prohibit noisy aircraft from conducting more than one take-off and one landing in any calendar week during the summer season**

Three Restrictions Proposed

1. Prohibit all aircraft operations year-round 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 noisy aircraft from conducting more than one take-off and one landing in any calendar week during the summer season

Collectively affect only 23% of all operations, but address 60% 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

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

- **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 (for extended curfew)**

- 8 - 11 p.m. and 7 - 9 a.m.

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

Incremental outcomes of Restrictions (1) 11 pm - 7 am curfew on all aircraft, (2) 8 pm - 9 am curfew on all noisy aircraft, and (3) limit each noisy aircraft to two operations (one takeoff and one landing) per week in season

Incremental outcomes of restrictions 1, 2, and 4

Note: May 1 – Sept. 30 weekend and holiday outcomes assume operators “retain” or “protect” weekend operations to the maximum feasible extent; i.e., they are the last to be cut.	May 1 – September 30 Weekend and Holiday Outcomes (See note)			Total May 1 – Sept. 30 Outcomes			Total Annual Outcomes		
	Heli-copter	Fixed-Wing	All Aircraft	Heli-copter	Fixed-Wing	All Aircraft	Heli-copter	Fixed-Wing	All Aircraft
Proposed Restriction	Estimated Operations Effected								
1) 11pm – 7am curfew on all aircraft operations	148	263	411	175	323	498	199	382	581
2) 8pm – 9am curfew on all noisy aircraft operations	631	171	802	838	229	1,067	973	270	1,243
3) Noisy aircraft limited to two operations per week in season	2,596	159	2,755	3,715	283	3,998	3,715	283	3,998
Proposed Restriction	Estimated Associated Complaints								
1) 11pm – 7am curfew on all aircraft operations	552	264	816	702	335	1,037	747	362	1,109
2) 8pm - 9am curfew on all noisy aircraft operations	2,225	301	2,526	2,847	369	3,216	2,997	378	3,376
4) Noisy aircraft limited to two operations per week in season	6,066	195	6,261	8,681	348	9,029	8,681	348	9,029

Combined outcomes of Restrictions (1) 11 pm - 7 am curfew on all aircraft, (2) 8 pm - 9 am curfew on all noisy aircraft, and (3) limit each noisy aircraft to two operations (one takeoff and one landing) per week in season

Total outcomes of restrictions 1, 2, and 4

Note: May 1 – Sept. 30 weekend and holiday outcomes assume operators “retain” or “protect” weekend operations to the maximum feasible extent; i.e., they are the last to be cut.	May 1 – September 30 Weekend and Holiday Outcomes (See note)			Total May 1 – Sept. 30 Outcomes			Total Annual Outcomes		
	Heli-copter	Fixed-Wing	All Aircraft	Heli-copter	Fixed-Wing	All Aircraft	Heli-copter	Fixed-Wing	All Aircraft
Estimated operations affected	3,375	593	3,968	4,728	835	5,563	4,887	935	5,822
Total existing operations in category	4,525	10,863	15,388	5,855	14,004	19,859	7,044	18,670	25,714
% total operations associated with Restrictions 1, 2, and 4	74.6%	5.5%	25.8%	80.8%	6.0%	28.0%	69.4%	5.0%	22.6%
Estimated associated complaints	8,843	761	9,604	12,230	1,051	13,282	12,425	1,088	13,513
Total existing complaints in category	12,126	4,943	17,069	14,935	5,999	20,934	16,152	6,316	22,468
% total complaints associated with Restrictions 1, 2, and 4	72.9%	15.4%	56.3%	81.9%	17.5%	63.4%	76.9%	17.2%	60.1%