Chapter I - Existing Conditions and Facilities

The following sections provide background and information regarding the facilities that currently exist at East Hampton Airport. These facilities are depicted in detail on Figure 1, Existing Airport Layout. The specific types and quantities of facilities identified in these sections will be evaluated by the Town officials and the community in conjunction with forecast demand and established planning criteria to determine future needs for the Airport.

A. Description of Existing Conditions and Facilities

East Hampton Airport consists of 610 acres including the 56.166 acres of East Hampton Industrial Park.

Airside facilities include runways, taxiways, lighting, and navigational aids. Characteristics of the runway and taxiway system at the Airport are described in the following sections:

1. Runways

East Hampton Airport was constructed in 1936. The Airport was built with three runways, 10/28, 4/22 and 16/34. The primary runway is Runway 10-28, which is 4,255 feet long by 100 feet wide. The majority of the traffic is handled by this runway as it is dimensionally the largest runway, provides more navigational measures and equipment to pilots, and is structurally in the best condition. In addition, this is the only runway with an FAA approved straight-in instrument approach procedure for use by pilots on approach to the airport during inclement weather conditions. The FAA has documented the pavement to be in good condition; however, the distresses found are low to high severity longitudinal and transverse cracking. Runway 10-28 is rated differently depending on the segment of the runway. Approximately 50% is rated for 60,000 lbs with a PCN of 23, 25% is rated for 48,000 lbs. with a PCN 15, and 25% is rated for 36,000 lbs. with a PCN of 9.

The secondary runway is Runway 16-34; which is 2,223 feet long by 75 feet wide. It is considered a crosswind runway used by small, piston engine aircraft. Performance characteristics of private and corporate jet aircraft prevent utilization of this runway due to its shorter length. Currently, Runway 16-34 pavement is considered by the FAA to be in fair condition. The predominant distresses observed are high severity block cracking, low severity raveling and weathering, and low to high severity longitudinal and transverse cracking. The runway is rated for 12,000 lbs. on approximately 80% of the runway. The

PCN and remaining 20% is not ratably due to the type of sub-base that exists underneath the pavement.

Runway 4-22 is another secondary crosswind runway used only by small General Aviation aircraft due to its length of 2,501 feet and width of 100 feet. This runway has recently been closed due to a condition analysis of the pavement by the FAA. The FAA has rated this runway as failed. The runway distresses observed include high severity block cracking, low severity raveling and weathering, low to high severity longitudinal and transverse cracking and low to high severity alligator cracking. The runway is rated for 60,000 lbs. (PCN of 23) except for the small portion adjacent to taxiway G which is rated for 12,000 (no PCN available). Use of the runway for taxiing operations is currently permitted; however, the pavement has failed and should be reconstructed to support aircraft and vehicles regardless of its use.

GRAPHIC SCALE

300 0 150 300 600 1200

(IN FEET)
1 inch = 300 ft.

N

RUNWAY 10-28 (4,265' x 100') ARC A-II

TAXIWAY A

AWOS

ARP

LEGEND

- EXISTING PAVEMENT
- RUNWAY SAFETY AREA (RSA)
- RUNWAY OBJECT FREE AREA (ROFA)
- RUNWAY PROTECTION ZONE (RPZ)
- EXISTING PROPERTY LINE

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EAST HAMPTON AIRPORT

EXISTING LAYOUT PLAN

EAST HAMPTON AIRPORT
SUFFOLK COUNTY, NEW YORK
FIGURE 1

DATE PREPARED:

SHEET OF

This runway system and its physical characteristics are described further in Table I-1.

TABLE I-1
RUNWAY SYSTEM CHARACTERISTICS

Characteristics	10-28	4-22	16-34
Use	Primary	Closed	Secondary
Length	4,255’	2,501’	2,223’
Width	100’	100’	75’
Strength (1,000’s lbs)	Varied SW 36-60	SW-12 (80%)	Varied SW 60
Condition	Good	Failed	Fair
Composition	Asphalt/grooved	Asphalt	Asphalt
Wind Coverage (All Weather) 10.5 Knots 13 Knots	 86.93% 92.93%	 87.01% 92.02%	 87.58% 92.93%
Safety Area Condition	Non-standard	Non-standard	Non-standard
Markings	Non-Precision	Visual	Visual
Lighting	Medium Intensity	None	None

Source: FAA Airport Master Record Form 5010 (June 8, 2006) and Savik & Murray, LLP

1. (cont.) Taxiways

The taxiway system at the airport consists of seven taxiways, all in generally good condition. All three runways at the Airport are served by two partial parallel taxiways. Table I-2 describes the taxiways and their characteristics.

TABLE I-2
TAXIWAY CHARACTERISTICS

Taxiway	Condition	Dimension	Description
Taxiway A	Good	25’ Wide	Partial parallel Taxiway. In good condition but needs cracks repaired in the pavement. There are fifty-eight edge lights and six signs.
Taxiway B	Good	35’ Wide	In good condition but needs crack repairs. The taxiway has thirteen lights and two signs.
Taxiway C	Good	40’ Wide	In good condition but needs crack repairs. There are twelve edge lights and three signs.
Taxiway C South End	Good	25’ Wide	The taxiway is in good condition. There is one sign. There are no edge lights.
Taxiway D	Good	35’ Wide	In good condition but needs cracks repaired. There are fifty edge lights and they are in fair condition. Also, there are four signs in fair condition.
Taxiway E	Good	35’ Wide	In good condition but needs cracks repaired. There are fourteen edge lights and three signs.
Taxiway F	Good		Has no edge lights, nor does it have any signs.
Taxiway G	Good	40’ Wide	In fair condition but needs cracks repaired. The taxiway has zero edge lights and two unlighted signs.

Source: Savik & Murray, LLP

2. Aprons

There are several aircraft parking aprons on the airport. These aprons are leased to the fixed based operators (FBOs) on the Airport, Sound Aviation and Myers Aero Service. FBOs offer services and the tie down locations for based and transient aircraft at the Airport. The pavement of both aprons is in fair condition.

2. (cont.) Terminal Area

The East Hampton Airport Terminal Area constructed in 1994 consists of the terminal building and its adjacent 60,000 square foot aircraft parking apron. The building is a 10,260 square foot wooden structure with concrete footings. It is in good condition and is equipped with utilities such as restrooms, sanitary system, electric, and telecommunications. There are several counters and offices inside the terminal including Hertz car rental desk to serve pilots of transient aircraft, Sound Aviation's customer services desk, the Airport Manager's Office, and the Airport attendant desk. The aircraft parking apron is a 60,000 square foot asphalt parcel that can accommodate approximately 5 transient aircraft. Transient means aircraft that are based at other airports, but fly into East Hampton. Transient aircraft typically would use East Hampton Airport to pick up or drop off passengers who are local residents or visit the area temporarily for the purpose of business or tourism. Additionally, there are numerous tiedown spots available.

Land and Building Use

The airport property is comprised of aviation and non-aviation uses. The East Hampton Industrial Park is located on airport property.

The aviation uses include thirteen hangars, four (4) buildings and nine (9) vacant parcels. The 13 hangars have a total of 64 units for aircraft storage, as shown in Table I-3.

The non-aviation uses include fourteen (14) building parcels and eight (8) vacant parcels, as shown in the table below.

The hangars, buildings, and vacant parcels are color coded on the airport facilities plan as shown in Figure I-2.

TABLE I-3
EAST HAMPTON AIRPORT FACILITY INVENTORY

Facility Number	Facility Use	Building Type	Size	Type of Construction	Condition	Owner/ Tenant	Description
1	Aviation Use	Flight School	455 Sq. Feet	Wood	Fair	Flight School	Yellow-framed building with blue window trim. Utilities include electricity and telecommunications throughout the building.
2	Aviation Use	Hangar	4,326 Sq. Feet	Metal	Fair	Sound Aircraft Services	The hangar includes the following utilities: gas, electric and telecommunications.
3	Aviation Use	Hangar	4,743 Sq. Feet	Metal	Fair	Sound Aircraft Services	In the outside corner of the building there is a bench mark from the 1956 United States Coast and Geological Survey labeled as J372. Also Includes the following utilities: gas, electric, and telecommunications.
4	Aviation Use	Hangar	3,119 Sq. Feet	Concrete Block	Fair	Myers Aero Service	The hangar is in need of repairs such as scraping and painting. The building has water, electricity, telecommunications and oil heat.
5	Aviation Use	Hangar	873 Sq. Feet	Metal	Fair	Pegasus Transfer	This T-hangar is used to store small aircraft. Only electricity is provided.
6	Aviation Use	Hangar	1,600 Sq. Feet	Metal	Fair	Munson/Ryan	Utilities include gas and electricity
7	Aviation Use	Hangar	924 Sq. Feet	Metal	Poor	Jay Andreassi	This T-hangar is used to store a small aircraft.

TABLE I-3 (Cont'd)
EAST HAMPTON AIRPORT FACILITY INVENTORY

Facility Number	Facility Use	Building Type	Size	Type of Construction	Condition	Owner/ Tenant	Description
8	Aviation Use	Hangar	15,525 Sq. Feet	Metal	Good	Hampton Hangars, Inc.	The tenants have 13 hangar units within the building. Utilities include gas, electric, and water.
9	Aviation Use	Hangar	15,525 Sq. Feet	Metal	Good	Hampton Hangars, Inc.	The tenants have 13 hangar units within the building. Utilities include gas, electric, and water.
10	Aviation Use	Passenger Terminal	10,260 Sq. Feet	Wood	Excellent	Town of East Hampton	Facilities include restrooms and a sanitary system, electric, water and telecommunications. The Terminal also includes the Airport Managers Office, Hertz and Enterprise car rental offices, Sound Aircraft Services offices, Airport Attendants desk, and a common area.
11	Aviation Use	Hangar	993 Sq. Feet	Wood	Poor	Hampton Transfer	Is in need of scraping and paint repairs. The only utility present in this building is electricity.
12	Aviation Use	Hangar	5,546 Sq. Feet	Metal	Good	East Hampton Hangar Condominium, Inc.	There are six hangar units within the building. The structure contains gas and electric utilities.

TABLE I-3 (Cont'd)
EAST HAMPTON AIRPORT FACILITY INVENTORY

Facility Number	Facility Use	Building Type	Size	Type of Construction	Condition	Owner/ Tenant	Description
13	Non-Aviation Use	Vacant	2.59 Acres	None	N/A	Town of East Hampton	This parcel is a vacant wooded lot.
14	Non-Aviation Use	Vacant	2.617 Acres	None	N/A	Town of East Hampton	This parcel is a vacant wooded lot.
15	Vacant	Vacant	3.72 Acres	None	N/A	Town of East Hampton	This parcel is a vacant wooded lot.
16	Vacant	Vacant	2.497 Acres	None	N/A	Town of East Hampton	This parcel is a vacant wooded lot.
17	Aviation Use	Fire Rescue	2,423 Sq. Feet	Metal	Good	Town of East Hampton (leased to the Fire District Training Facility, Inc.)	The fire truck currently housed at this facility is a 1988 Oshkosh T1500 with capacity for 1,500 gallons of water and 200 gallons of foam. The equipment is also used for emergencies off the airport. Utilities include gas, water, sanitary systems, electricity and telecommunications. The Fire Training Facility is also currently storing a flatbed pick- truck at this facility.

TABLE I-3 (Cont'd)
EAST HAMPTON AIRPORT FACILITY INVENTORY

Facility Number	Facility Use	Building Type	Size	Type of Construction	Condition	Owner/ Tenant	Description
18	Vacant	Vacant	1.03 Acres	None	N/A	Town of East Hampton	This parcel is a vacant wooded lot.
19	Vacant	Vacant	1.03 Acres	None	N/A	Town of East Hampton	This parcel is a vacant wooded lot.
20	Non-Aviation Use	Commercial	0.918 Acres	Metal	Good	Ron Sullivan	There is a 5,400 sq. foot building on the site with the following utilities: Water, sanitary systems, electricity, and telecommunications.
21	Non-Aviation Use	Commercial	0.918 Acres	Metal	Good	GT Power Systems	The building is a 6,750 sq. foot, multi-tenant structure with the following utilities: water, sanitary systems, electricity, and telecommunications.
22	Non-Aviation Use	Commercial	1.836 Acres	Metal	Good	Mapeasy	The building is a 7,650 sq. foot structure with the following utilities: water, sanitary systems, electricity, and telecommunications.
23	Vacant	Vacant	1.84 Acres	Vacant	N/A	Town of East Hampton	This parcel is a vacant wooded lot.
24	Aviation Use	Hangar	10,237 Sq. Feet	Metal & Concrete	Good	East Hampton Executive Terminal	The present utilities are gas (propane), water, sanitary systems, electricity, and telecommunications.

TABLE I-3 (Cont'd)
EAST HAMPTON AIRPORT FACILITY INVENTORY

Facility Number	Facility Use	Building Type	Size	Type of Construction	Condition	Owner/ Tenant	Description
25	Potential Aviation Use	Vacant	2.37 Acres	Vacant	N/A	Town of East Hampton	This parcel is a vacant wooded lot.
26	Potential Aviation Use	Vacant	2.47 Acres	Vacant	N/A	Town of East Hampton	This parcel is a vacant wooded lot.
27	Non-Aviation Use	Vacant	0.672 Acres	Vacant	N/A	Town of East Hampton	This is a scenic easement and is part of Site No. 26. Development is restricted on this lot.
28	Non-Aviation Use	Vacant	2.16 Acres	None	N/A	Town of East Hampton	This parcel is a vacant wooded lot.
29	Non-Aviation Use	Vacant	1.836 Acres	None	N/A	Town of East Hampton	This parcel is a vacant wooded lot.
30	Non-Aviation Use	Commercial	12,150 Sq. Feet	Wood	Good	Phoenix House	This building is used for personal rehabilitation with the following utilities: gas, water, sanitary systems, electricity and telecommunications.
31	Aviation Use	Vacant	N/A	N/A	N/A	Town of East Hampton	This vacant wooded area is used as the Runway Protection Zone for Runway 4.

TABLE I-3 (Cont'd)
EAST HAMPTON AIRPORT FACILITY INVENTORY

Facility Number	Facility Use	Building Type	Size	Type of Construction	Condition	Owner/ Tenant	Description
32	Non-Aviation Use	Commercial	1.836 Acres	Metal	Good	Pinewood Studios Building	This storage building is 3,307.5 sq. feet.
33	Non-Aviation Use	Commercial	2.75 Acres	Metal	Good	Local Television, Inc.	This building is 10,712 sq. feet with the following utilities: gas, electricity, water, sanitary systems, and telecommunications. Building sites No. 32 and 33 also have a common building which straddles the two building lots. This building is 26,325 square foot metal prefabricated structure. The building itself is in good condition.
34	Non-Aviation Use	Vacant	0.51 Acres	N/A	N/A	Town of East Hampton	This parcel is a wooded vacant lot.
35	Non-Aviation Use	Pavement	1.7 Acres	N/A	Good	East Hampton Police and East Hampton Fire Department	This site is mostly paved and is used for vehicle storage.

TABLE I-3 (Cont'd)
EAST HAMPTON AIRPORT FACILITY INVENTORY

Facility Number	Facility Use	Building Type	Size	Type of Construction	Condition	Owner/ Tenant	Description
36	Non-Aviation Use	Commercial	5.65 Acres	Metal	Good	East Hampton Fire District Training, Inc. East Hampton Police	The fire training facility is an 11,700 sq. ft. structure which contains the following utilities: gas, water, sanitary systems, electricity, and telecommunications. There is also a bathroom addition that is vinyl sided. The East Hampton Police Station is a 14,400 sq. ft. structure which contains the following: a security system, gas, water, sanitary systems, electricity, and telecommunications
37	Non-Aviation Use	Commercial	2.22 Acres	Metal	Good	39 Industrial Road, LLC	This building is 17,325 sq. feet with the following utilities: gas, water, electricity, sanitary systems, and telecommunications.
38	Non-Aviation Use	Commercial	3.67 Acres	Metal	Good	41 Industrial Road, LLC	The site has two (2) multi-tenant buildings, 18,900 sq. feet and 9,450 sq. feet respectively. Both buildings include the following utilities: gas, water, sanitary systems, and telecommunications.
39	Aviation Use	Vacant	2.83± Acres	N/A	N/A	Town of East Hampton	This partially cleared site consists of the runway 16 Runway Protection Zone.
40	Non-Aviation Use	Commercial	1.67 Acres	Wood	Good	The Country School	This building is a 7,200 sq. foot structure. This area is used for child daycare. The present utilities are water, sanitary systems, electricity, and telecommunications.

TABLE I-3 (Cont'd)
EAST HAMPTON AIRPORT FACILITY INVENTORY

Facility Number	Facility Use	Building Type	Size	Type of Construction	Condition	Owner/ Tenant	Description
41	Non-Aviation Use	Commercial	2.04 Acres	Greenhouse	Fair	Jane Lappin d/b/a Wainscott Farms, Inc.	There are three (3) greenhouses that are each 2,250 sq. feet.
42	Aviation Use	Hangar	8,100 Sq. Feet	Metal	Good	East End Hangars	This hangar structure contains 14 hangar units. The building includes the following utilities: gas and electricity.
43	Aviation Use	Hangar	27,125 Sq. Feet	Metal	Good	East End Hangars	This hangar structure contains 11 hangar units and has the following utilities: gas, water, sanitary systems, and electricity.
44	Aviation Use	Fuel Farm	N/A	N/A	Good/Poor	Town of East Hampton	The overhead canopy is in need of repair. The drainage scuppers and leaders have corroded and are missing in several areas. The steel framing needs to be scraped and painted. Fuel trucks are parked on site. These conditions indicate the fuel storage capacity is grossly undersized.
44	Aviation Use	Fuel Farm – AVGAS	8,000 Gallon Tank	N/A	Good	Town of East Hampton	The Town owns and sells the fuel to Sound Aircraft Services and Myers Aero Services for distribution to the users. The tank receives deliveries of almost 7,000 gallons once a week during the summer months and once a month other than the summer months.

TABLE I-3 (Cont'd)
EAST HAMPTON AIRPORT FACILITY INVENTORY

Facility Number	Facility Use	Building Type	Size	Type of Construction	Condition	Owner/ Tenant	Description
44	Aviation Use	Fuel Farm – Jet A	12,000 Gallon Tank	N/A	Good	Town of East Hampton	The Town owns and sells the fuel to Sound Aircraft Services and Myers Aero Services for distribution to the users. The tank receives deliveries of almost 9,000 gallons per day during the summer months and 9,000 gallons twice a week other than the summer months.
45	Non-Aviation Use	Commercial	96.7 Acres	N/A	N/A	Maidstone Fire Arms	This mostly wooded site without structures is the home of the Maidstone Gun Club.
46	Non-Aviation Use	Cell Tower	N/A	N/A	N/A	AT&T	The cell tower is situated on the Maidstone parcel.
47	Non-Aviation Use	Vacant	2.5 Acres	Vacant	N/A	Town of East Hampton	This parcel is a vacant wooded lot.
48	Non-Aviation Use	Vacant	2.1 Acres	Vacant	N/A	Town of East Hampton	This parcel is a vacant wooded lot.

AIRPORT FACILITIES

TOTAL ACREAGE = 609.80

1. FLIGHT SCHOOL BUILDING
2. HANGAR – SOUND AIRCRAFT SERVICES
3. HANGAR – SOUND AIRCRAFT SERVICES
4. HANGAR – MYERS AERO SERVICE
5. HANGAR – PEGASUS TRANSFER
6. HANGAR – MUNSON/RYAN
7. HANGAR – JAY ANDREASSI
8. HANGAR – HAMPTON HANGARS, INC.
9. HANGAR – HAMPTON HANGARS, INC.
10. TERMINAL BUILDING
11. HANGAR – HAMPTON TRANSFER
12. HANGAR – EAST HAMPTON HANGAR CONDOMINIUM, INC.
13. VACANT – NON AVIATION
    CHILD DEVELOPMENT CENTER OF THE HAMPTONS
14. VACANT – NON AVIATION
    CHILD DEVELOPMENT CENTER OF THE HAMPTONS
15. VACANT
16. VACANT
17. FIRE RESCUE BUILDING
18. VACANT
19. VACANT
20. RON SULLIVAN – NON AVIATION
21. GT POWER SYSTEMS – NON AVIATION
22. MAPEASY – NON AVIATION
23. VACANT
24. HANGAR – EAST HAMPTON EXECUTIVE TERMINAL
25. VACANT
26. VACANT
27. VACANT – SCENIC EASEMENT
28. VACANT – NON AVIATION
    CHILD DEVELOPMENT CENTER OF THE HAMPTONS
29. VACANT – NON AVIATION
    CHILD DEVELOPMENT CENTER OF THE HAMPTONS
30. A.A.P.L.E., INC. BUILDING
31. VACANT
32. PINEWOOD STUDIOS BUILDING
33. LOCAL TELEVISION, INC. BUILDING
34. VACANT
35. EAST HAMPTON POLICE AND EAST HAMPTON FIRE DEPARTMENT BUILDING
36. EAST HAMPTON POLICE AND EAST HAMPTON FIRE DEPARTMENT BUILDING
37. 39 INDUSTRIAL ROAD, LLC BUILDING
38. 41 INDUSTRIAL ROAD, LLC BUILDING
39. VACANT
40. THE COUNTRY SCHOOL BUILDING
41. JANE LAPPAN D/B/A WAINSCOTT FARMS, INC. BUILDING
42. HANGAR – EAST END HANGARS
43. HANGAR – EAST END HANGARS
44. AIRPORT FUEL FARM
45. MAIDSTONE FIRE ARMS
46. AT&T CELL TOWER
47. VACANT
48. VACANT

LEGEND

- NON AVIATION USE
- AVIATION USE
- NON–AVIATION PRIVATE PROPERTY
- DEER FENCING

GRAPHIC SCALE

300 0 150 300 600 1200

(IN FEET)

1 inch = 300 ft.

WOODED
SUFFOLK COUNTY WATER AUTHORITY
WOODS LINE (TYP.)
AIRPORT PROPERTY LINE
DEER FENCE
RUNWAY 4 – 22
RUNWAY 16 – 34
T/W F
BEACON
DANIELS HOLE ROAD
TAXIWAY A
T/W A
T/W B
PAPI
T/W C
A.R.P.
LIGHTED WIND CONE AND SEGMENTED CIRCLE
RUNWAY 10 – 28
T/W D
T/W E
REILS
TAXIWAY C
T/W G
INDUSTRIAL ROAD
WAINSCOTT FARM ROAD
TOWN LINE ROAD
LONG ISLAND RAIL ROAD
DEBRAS WAY

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EAST HAMPTON AIRPORT

EAST HAMPTON AIRPORT
SUFFOLK COUNTY, NEW YORK
EXISTING AIRPORT FACILITIES PLAN
FIGURE 2

DATE PREPARED:

SHEET OF

3. NAVAIDS

Aircraft navigating from one airport to another operate using Visual Flight Rules (VFR) or Instrument Flight Rules (IFR). The term VFR refers to rules that govern the procedures for conducting flight under visual conditions. The term IFR refers to a set of rules governing the conduct of flight under instrument meteorological conditions. Each of these terms is also used to indicate a type of flight plan.

Whether a pilot files a VFR or IFR flight plan depends on the weather conditions at the departing and arriving airports, whether or not ATC services are required, and the class(es) of airspace the pilot will be flying through. For example, all aircraft flying in Class A airspace (above 18,000 feet MSL) must file an IFR flight plan. As a result, most commercial activity is conducted under an IFR flight plan. Aircraft flying IFR rely on navigational aids for enroute navigation from origin to destination, and on final approach to an airport.

Navigation Aids present at East Hampton Airport include the Hampton VOR. The acronym VOR stands for Very High Frequency Omni-directional Radio Range. The Hampton VOR is located approximately 3.5 nautical miles (nm) southwest of the airport in the Town of Southampton. VORs provide a system of radio navigation to aircraft by broadcasting a VHF radio signal encoding both the identity of the station and the angle to it. This information tells the pilot in what direction he lies from the VOR station and is used to navigate to and from other VORs and NAVAIDs along the destination route.

AirScene

AirScene Program can be used to see flight paths, aircraft type, tail numbers, altitude, velocity, runway and type of operation. The program retains data for three years. There are five towers which are located in: 1) Noyac, 2) Amagansett, 3) Southampton Hospital, 4) Maidstone, and 5) on terminal roof. AirScene works by triangulation of transponder codes, but will not supply information unless aircraft has a Transponder. Mode S Transponders will reveal Tail #, type of aircraft, etc. and Mode C Transponders only reveal altitude and velocity. The disadvantages of the system are that the equipment cannot detect when an aircraft has executed a missed approach.

Weather Equipment

Weather equipment consists of a Digi Wax (through antenna on roof of terminal) which aids UNICOM operator to give Airport Advisories.

Sound Aviation has certified weather equipment that allows them to give Barometric Pressure readings. There is a notation on the approach plates advising pilots to obtain their local altimeter setting from Sound Aviation via the Common Traffic Advisory Frequency (CTAF). Information from the Westhampton Airport must be used if it cannot be obtained locally; however, the approach minimums are raised.

An Automated Weather Observation System (AWOS) is currently being designed for installation. An AWOS would provide an official weather reporting/observing source at the Airport. The design has been financed with local funds.

4. Visual Aids

Precision Approach Path Indicators (PAPIs) are located on Runway 10 and Runway 28. FAA owned Runway End Identifier Lights (REILs) are located on Runway 10. Town owned REILs are located on Runway 28. The PAPIs and REILs require continuous maintenance. The rotating beacon is located near the main terminal and is in fair condition, requires rehabilitation. The existing wind cones are in poor condition.

5. Lighting and Signage

The existing runway and taxiway edge lights and airport signs are in fair to poor condition. The cabling is poor. Rehabilitation of cable, lights and signs is required.

6. Roads/Parking Areas

Access to the Airport is provided off Daniel's Hole Road directly into the Airport auto parking area. Parking for approximately 117 automobiles is available and are divided as follows:

14	Employee
4	Handicapped
9	30-Minute Parking
22	Hertz Rental Car
65	Regular

The parking area is separated from the airfield by a security fence. The parking lots and main entrance pavements are in good condition. Hertz has a current, month to month contract for 22 designated parking stalls. Enterprise car rental also uses the parking lot; however, does not have a contract. They currently occupy part of the grassy area adjacent to the parking lot. Airport personnel have reported that there normally is several Enterprise vehicles present in the lot on any given day. Consideration should be given to coordinating new contracts with the car rental companies.

According to the Airport Manager, the current parking is inadequate. Persons not utilizing the airport use the parking facility to store their vehicles. This lot has become a "park and ride" for local residents and vacationers as they are limited to allowable parking spaces at their homes or rentals. Consideration should be given to constructing additional parking facilities elsewhere to accommodate these vehicles. The airport could consider charging a fee to park in the airport lot. This may discourage others from using the lot for other than airport usage.

The entrance roads to the FBO's are in poor condition with potholes and cracked pavement. These areas also lack adequate drainage facilities.

7. Emergency, Security and Fire Equipment

The East Hampton Police Department is located on Industrial Road within airport property.

The Fire Rescue Building (Building Site 17) is located on the south side of the airfield and is operated by the East Hampton Fire Department. The East Hampton Fire Department is a volunteer fire department.

Security consists of locked gates and motorized gates. The fencing system consists of deer fencing, short chain link fences and wire fencing with wood posts. The airport lacks adequate security. A security camera system is currently being designed for placement at key area locations to be monitored by airport management.

8.Boundary's/Topography

East Hampton Airport is located approximately 3.4 miles west of the Village of East Hampton, in Suffolk County. The Airports elevation is 55.5 feet above mean sea level; its geographic location is latitude 40º57'12"North and longitude 72º15'37"W.

The airport currently consists of 610 acres based on tax map information. The Airport is owned and operated by the Town of East Hampton. Industrial Road and Daniels Hole Road are local roadways within the airport property. The airport is relatively flat with some higher elevations to the west and south.

9. Vegetation and Adjacent Land/Non-Contiguous Owned Parcels.

During the spring and summer of 1999, the Town of East Hampton Planning Department and volunteer Hugh McGinnis conducted a study of the vegetation and breeding birds at the Airport. The vegetation of the Airport is a patchwork comprised of a good variety of native prairie species, areas of roadside lawn species, and areas of heartland plants. These grow upon typical dry, sandy Pine Barrens soils which have been cleared, scraped, and seeded at various times since the Airport was first constructed.

A number of NYS protected plant species were identified on the property. These include Pine Barrens Sandwort (*Minuartia caroliniana*) in the central triangle area, Bird's Foot Violet (*Viola pedata*) at the western end of Runway 10-28 and at the Daniel's Hole Road end of Runway's 4-22 and 16-34, and a *Spiranthes* orchid in the area northwest of Runway 4-22.

There are two bird species at the Airport and they include Grasshopper Sparrows (*Ammodramus savannarum*) and the Eastern Bluebirds (*Sialia sialis*) which are both classified as species of special concern in New York State. The Grasshopper Sparrow is declining rapidly in the northeast.

According to the Town of East Hampton, management of airfields for native grassland flora and fauna has been successfully accomplished on a variety of private, public and military airfields by the Massachusetts Audubon Society and the US Fish and Wildlife. The small size and low direct flight of grassland birds do not pose a threat to aircraft and the management of grassland vegetation for these species can help to discourage the large flocking birds which are more likely to damage aircraft.

In most recent years the Airport contains mostly alien species and fewer native plants than the areas which were cleared at earlier times. This difference is quite dramatic in the areas which were cleared for the repaving of Runway 10-28 where it appears that the imported topsoil used in that project was full of alien seeds.

10. Annual Revenue Summary

Revenue to support the Airport is derived from leases, landing fees, vending machines, Jet Fuel and Avgas sales, interest on investments, cell tower and local taxes. This is currently being further evaluated in another study.

B. Historic and Existing Airport Uses

The Airport is comprised of a number of parcels obtained by indentures and quit claim deeds during the 1930's and the 1940's from Suffolk County and Arnold Porter. Essentially, the land for the East Hampton Airport was donated to the Town. The original three runway configuration of the Airport still exists, with the exception of a few modifications to the runway pavement and dimensional characteristics. For the past 70 years, the airport has adapted to industry modernization and accommodated many new generations of aircraft.

1. Volume and Distribution of Aircraft Traffic and Based Aircraft

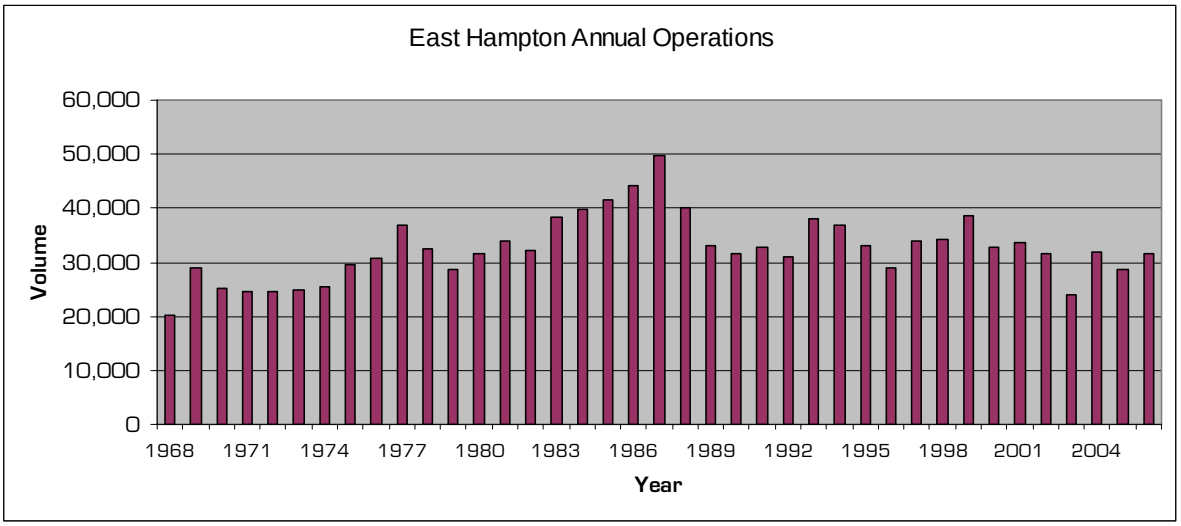
Aircraft operations consist of the total number of landings and takeoffs from an airport and can be classified as either local or itinerant. Local Operations consist of aircraft activity remaining within the Airport traffic pattern or within sight of the airport, aircraft departing to or arriving at a local practice area within a 20 nm radius, or aircraft executing simulated instrument approaches. Itinerant Operations are based aircraft (airport tenants) and transient aircraft (non-tenants), including air taxi and charter operations, flying in excess of 20 nm to or from East Hampton Airport.

Aircraft operations at East Hampton Airport have been difficult to document and track over the years since it is an uncontrolled airport, meaning there is no control tower located at the airport to record air traffic movements. Traditionally, the only method to track operations to and from an uncontrolled airport would be to use and interpolate data supplied by FAA reports or Airport Logbooks. However, in May of 2005, the Airport acquired a state-of-the-art, real-time flight tracking system known as AirScene. This system is used to provide an accurate count of operations and can monitor an aircraft's location, flight path, and altitude as well as aircraft registration data, if available. This system was funded and installed by the Town of East Hampton and became fully operational in January 2006 due to some initial technical and operational difficulties. The data and information appear to be very reliable today.

Airport Logbooks

According to records provided by Airport management that date back to 1968, East Hampton experienced 28,616 annual aircraft operations during 2005. Over the most recent 10-year period between 1996 and 2005 (see Table I-6); annual operations have averaged 31,845 with a high of 38,636 in 1999 and a low of 24,138 in 2003. This low-point is significant in that, as with other general aviation airports in the region, operations have declined possibly due to rising aviation fuel prices and the increased cost of aircraft insurance. In fact, airport operations for 2005 at East Hampton Airport are still 10 percent below the previous year 2004. The following Figure I-3 and Table I-4, below show the annual operations totals over various years. It must be noted that the Airport Logbooks do not account for night operations. After-hours occurs when the Attendant's office is closed for the day and nobody is there to record aircraft movements.

FIGURE I-3
EAST HAMPTON AIRPORT TOTAL ANNUAL OPERATIONS (1968 – 2006)



Source: Airport Manager Records

TABLE I-4
ANNUAL AIRCRAFT OPERATIONS

YEAR	TOTAL OPERATIONS
1996	28,850
1997	33,966
1998	34,332
1999	38,636
2000	32,718
2001	33,784
2002	31,584
2003	24,138
2004	31,834
2005	28,616
2006	31,562

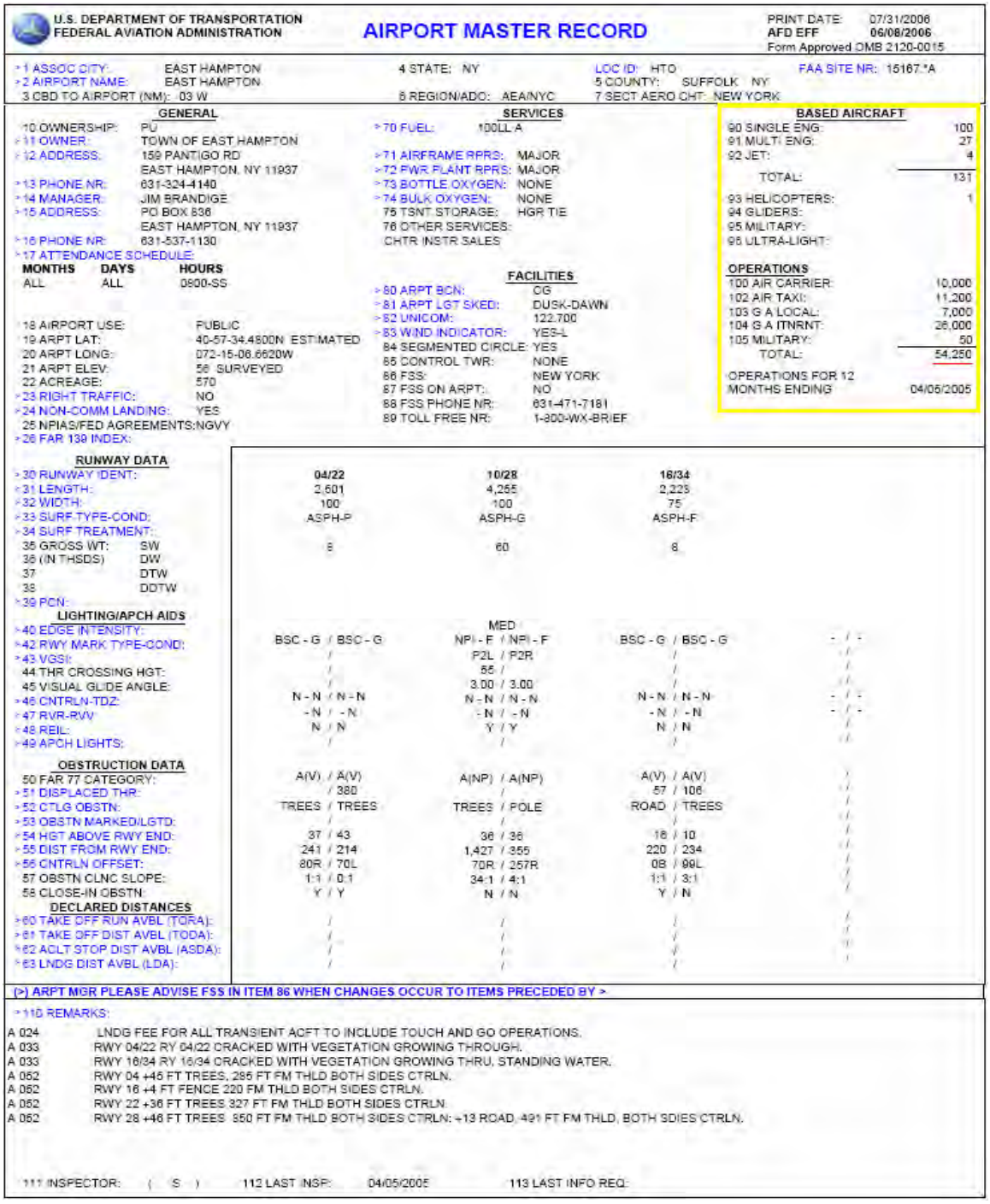
Source: Airport Manager Records

FAA Data

The Airport Master Record (FAA Form 5010-1) was also reviewed to obtain information on the FAA's estimation of the Airport's local and itinerant aircraft operations for 2005. This information is derived from FAA estimates. The interpolated FAA value for the total amount of operations from April 2004 to April 2005 (the FAA's inspection calendar year for East Hampton Airport) is 54,250 as underlined in red on Figure I-2 below.

FIGURE I-4

EAST HAMPTON AIRPORT MASTER RECORD



U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

AIRPORT MASTER RECORD

PRINT DATE: 07/31/2006
AFD EFF 06/08/2006
Form Approved OMB 2120-0015

>1 ASSOC CITY:	EAST HAMPTON	4 STATE: NY	LOC ID: HTO	FAA SITE NR: 15167.*A	
>2 AIRPORT NAME:	EAST HAMPTON		5 COUNTY: SUFFOLK NY		
3 CBD TO AIRPORT (NM): 03 W		6 REGION/ADO: AEA/NYC	7 SECT AERO CHT: NEW YORK		

GENERAL

10 OWNERSHIP:	PU
>11 OWNER:	TOWN OF EAST HAMPTON
>12 ADDRESS:	159 PANTIGO RD
	EAST HAMPTON, NY 11937
>13 PHONE NR:	631-324-4140
>14 MANAGER:	JIM BRANDIGE
>15 ADDRESS:	PO BOX 836
	EAST HAMPTON, NY 11937
>16 PHONE NR:	631-537-1130

>17 ATTENDANCE SCHEDULE:

MONTHS	DAYS	HOURS
ALL	ALL	0600-SS

18 AIRPORT USE:	PUBLIC
19 ARPT LAT:	40-57-34.480DN ESTIMATED
20 ARPT LONG:	072-15-08.6620W
21 ARPT ELEV:	56 SURVEYED
22 ACREAGE:	570
>23 RIGHT TRAFFIC:	NO
>24 NON-COMM LANDING:	YES
25 NPIAS/FED AGREEMENTS:	NGVY
>26 FAR 139 INDEX:	

SERVICES

>70 FUEL:	100LL A
>71 AIRFRAME RPRS:	MAJOR
>72 PWR PLANT RPRS:	MAJOR
>73 BOTTLE OXYGEN:	NONE
>74 BULK OXYGEN:	NONE
75 TSNT STORAGE:	HGR TIE
76 OTHER SERVICES:	CHTR INSTR SALES

FACILITIES

>80 ARPT BCN:	CG
>81 ARPT LGT SKED:	DUSK-DAWN
>82 UNICOM:	122.700
>83 WIND INDICATOR:	YES-L
84 SEGMENTED CIRCLE:	YES
85 CONTROL TWR:	NONE
86 FSS:	NEW YORK
87 FSS ON ARPT:	NO
88 FSS PHONE NR:	631-471-7181
89 TOLL FREE NR:	1-800-WX-BRIEF

BASED AIRCRAFT

90 SINGLE ENG:	100
91 MULTI ENG:	27
92 JET:	4
TOTAL:	131
93 HELICOPTERS:	1
94 GLIDERS:	
95 MILITARY:	
96 ULTRA-LIGHT:	

OPERATIONS

100 AIR CARRIER:	10,000
102 AIR TAXI:	11,200
103 G A LOCAL:	7,000
104 G A ITNRNT:	26,000
105 MILITARY:	50
TOTAL:	54,250
OPERATIONS FOR 12 MONTHS ENDING	04/05/2005

RUNWAY DATA

	04/22	10/28	16/34	
>30 RUNWAY IDENT:	04/22	10/28	16/34	
>31 LENGTH:	3,501	4,255	2,223	
>32 WIDTH:	100	100	75	
>33 SURF TYPE-COND:	ASPH-P	ASPH-G	ASPH-F	
>34 SURF TREATMENT:				
35 GROSS WT: SW	8	60	8	
36 (IN THSDS) DW				
37 DTW				
38 DDTW				
>39 PCN:				

LIGHTING/APCH AIDS

>40 EDGE INTENSITY:		MED		
>42 RWY MARK TYPE-COND:	BSC - G / BSC - G	NPI - F / NPI - F	BSC - G / BSC - G	- / -
>43 VGSI:	/	P2L / P2R	/	/
44 THR CROSSING HGT:	/	55 /	/	/
45 VISUAL GLIDE ANGLE:	/	3.00 / 3.00	/	/
>46 CNTRLN-TDZ:	N - N / N - N	N - N / N - N	N - N / N - N	- / -
>47 RVR-RVV	- N / - N	- N / - N	- N / - N	- / -
>48 REIL:	N / N	Y / Y	N / N	/
>49 APCH LIGHTS:	/	/	/	/

OBSTRUCTION DATA

50 FAR 77 CATEGORY:	A(V) / A(V)	A(NP) / A(NP)	A(V) / A(V)	/
>51 DISPLACED THR:	/ 380	/	57 / 106	/
>52 CTLG OBSTN:	TREES / TREES	TREES / POLE	ROAD / TREES	/
>53 OBSTN MARKED/LGTD:	/	/	/	/
>54 HGT ABOVE RWY END:	37 / 43	36 / 36	16 / 10	/
>55 DIST FROM RWY END:	241 / 214	1,427 / 355	220 / 234	/
>56 CNTRLN OFFSET:	80R / 70L	70R / 257R	0B / 99L	/
57 OBSTN CLNC SLOPE:	1:1 / 0.1	34:1 / 4:1	1:1 / 3:1	/
58 CLOSE-IN OBSTN:	Y / Y	N / N	Y / N	/

DECLARED DISTANCES

>60 TAKE OFF RUN AVBL (TORA):	/	/	/	/
>61 TAKE OFF DIST AVBL (TODA):	/	/	/	/
>62 ACLT STOP DIST AVBL (ASDA):	/	/	/	/
>63 LNDG DIST AVBL (LDA):	/	/	/	/

(>) ARPT MGR PLEASE ADVISE FSS IN ITEM 86 WHEN CHANGES OCCUR TO ITEMS PRECEDED BY >

>110 REMARKS:

A 024 LNDG FEE FOR ALL TRANSIENT ACFT TO INCLUDE TOUCH AND GO OPERATIONS.
A 033 RWY 04/22 RY 04/22 CRACKED WITH VEGETATION GROWING THROUGH.
A 033 RWY 16/34 RY 16/34 CRACKED WITH VEGETATION GROWING THRU. STANDING WATER.
A 052 RWY 04 +45 FT TREES, 285 FT FM THLD BOTH SIDES CTRLN.
A 052 RWY 16 +4 FT FENCE 220 FM THLD BOTH SIDES CTRLN.
A 052 RWY 22 +36 FT TREES 327 FT FM THLD BOTH SIDES CTRLN.
A 052 RWY 28 +46 FT TREES 350 FT FM THLD BOTH SIDES CTRLN; +13 ROAD, 491 FT FM THLD, BOTH SDIES CTRLN.

111 INSPECTOR: (S) 112 LAST INSP: 04/05/2005 113 LAST INFO REQ:

Source: FAA Form 5010-1; http://www.5010web.com

Operations calculated up to April 2005 are highlighted in yellow. The operations are broken down by Air Carrier, Air Taxi, GA Local, GA Itinerant, and Military. Total annual operations are underlined in red.

AirScene

Since January 2006 to the present, AirScene data has used to supplement airport management records. The system has helped airport management to retain more accurate operational data; however, it is not used as a sole source of information due to some inconsistencies. AirScene does not account for aircraft that execute missed approaches or do not have the proper type of transponder. Essentially, AirScene data is used to supplement the information gather manually by airport employees.

Values derived from the different methods of calculating operations at East Hampton Airport appear to be inconsistent. The Airport's logbooks describe that for the year 2005, a total of 28,616 operations took place. The FAA (from 2004-2005) indicates a yearly total of 54,250. Airport logbooks supplemented by AirScene data indicate the 31,562 operations took place in 2006.

Given the apparent capabilities of the new AirScene equipment and accuracy of manual Airport Logbook entries, it might be safe to assume that FAA projected levels of activity have been overestimated by around 25,000 operations a year or nearly 90%. This number (54,250 annual operations) is also listed in the FAA's Terminal Area Forecast (TAF), which is the official forecast of aviation activity at FAA facilities. The TAFs primary function is to provide the FAA with specific forecasting data so it can develop its budget and planning needs for all FAA-funded airports around the country. However, this forecasted data is estimated based on historical information, industry trends, inferences regarding factors that effect passenger demand, etc. Much like the FAA Airport Master Record, it cannot represent an exact calculation of operations for an uncontrolled airport. FAA data is probably less accurate than the other methods since it is simply and estimation based on interpreted information. For instance, the Airport Master Records describes that there were 10,000 air carrier operations at the Airport despite the fact that East Hampton is not an air carrier airport. Conclusively, a safe method of estimating current activity at East Hampton Airport would be to assume that operations are at a level consistent with the Airport Logbook's and AirScene data reports, quantifiably somewhere in the 30,000 operations per year range.

Based Aircraft

A based aircraft is an aircraft that is stationed at an airport on a permanent basis. East Hampton Airport provides facilities in support of small to medium sized based general aviation aircraft. The majority of these are either small single engine or small multi-engine aircraft.

The number of based aircraft has remained stagnant over the last 15 years at East Hampton Airport. In fact, Airport records show that 99 aircraft were based at the Airport in 1992. The airport master record showed 100 in 2005. Today there are approximately 101 based aircraft. Of those, approximately 4 are helicopters, 5 jet aircraft, and 92 piston aircraft reported by Airport management. The actual number fluctuates slightly between seasons. Of the smaller piston aircraft approximately half of those are twin engine aircraft and half are single engine aircraft.

Surrounding Airports

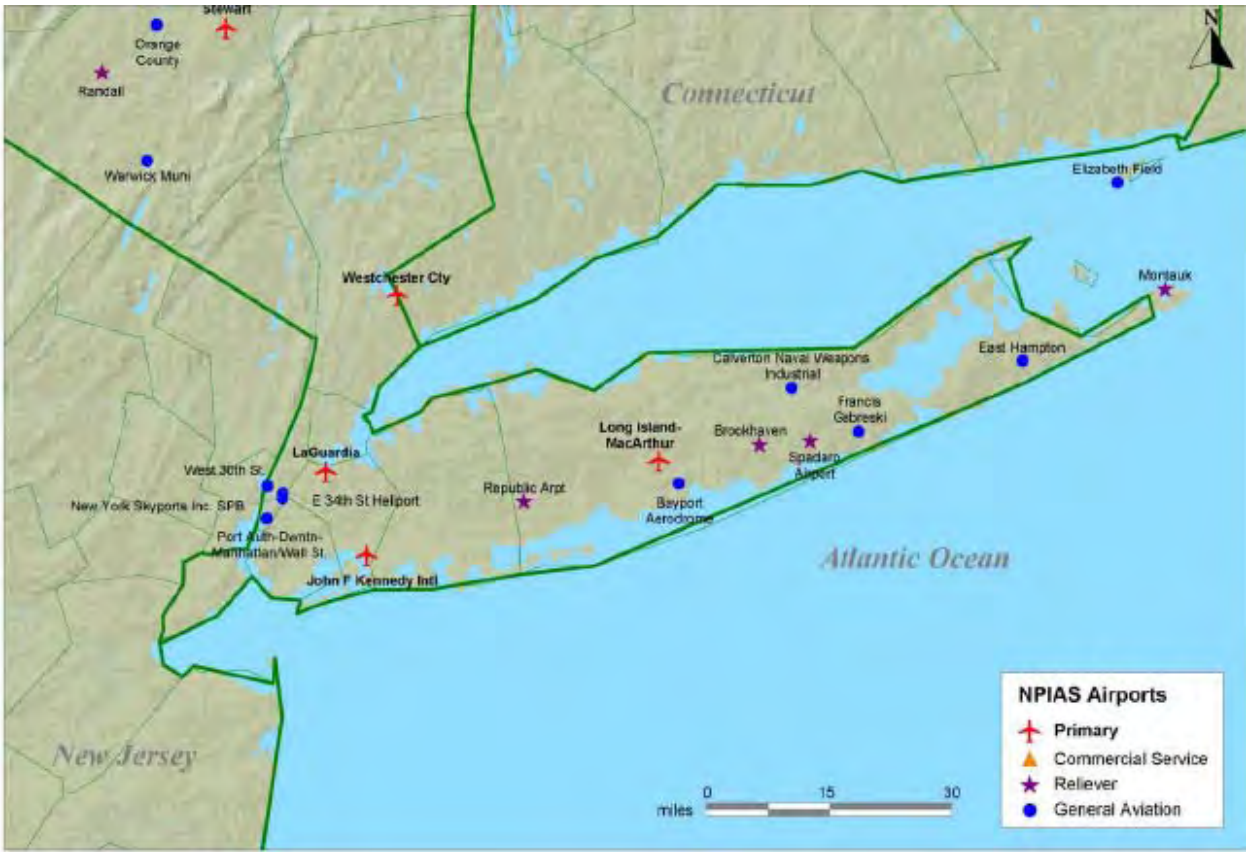
Currently, there are eight other public-use airports throughout Suffolk County. These facilities are privately owned or owned and operated by a municipality or town. In addition, there are three airports restricted for private use only. The public-use airports provide services ranging from aircraft fueling to commercial passenger service. Gabreski and Montauk Airports are within East Hampton's Primary Service Area, which is defined as those points within an approximate 30-minute drive from East Hampton Airport. Due to such close proximity, Airports located in the Primary Service Area have the potential to operationally impact one another. Table I-5 and Figure I-5 on the next page provide basic information and locations for each of these surrounding airports.

TABLE I-5
OTHER AIRPORT FACILITIES IN SUFFOLK COUNTY

AIRPORT NAME	LONGEST RUNWAY	LIGHTING	APPROACH PROCEDURE	FBO SERVICES	OTHER ITEMS
East Hampton Airport	4255’ X 100’	MIRL	Yes	Yes	PAPIs, REILs, Wind Indicator
Francis S. Gabreski (Westhampton)	9,000’ X 150’	HIRL	Yes	Yes	ATCT, PAPIs, REILs
Republic	6,827' X150'	HIRL	Yes	Yes	ATCT, PAPIs REILs
Long Island. MacArthur	7,002' X 150'	HIRL	Yes	Yes	ATCT, PAPIs REILs, VASI
Spadaro	2,200' X 20'	None	No	Yes	Wind Indicator
Montauk	3,258' X 85'	MIRL	Yes	No	Wind Indicator, PAPI
Bayport	2,740' X 75' (Turf)	None	No	Yes	Wind Indicator, VASI
Mattituck	2,200' X 60'	None	No	Yes	Wind Indicator
Brookhaven	4,224' X 150'	MIRL	Yes	Yes	VASIs, REILs

Source: FAA Form 5010-1; http://www.5010web.com

FIGURE I-5
LOCAL AIRPORTS INCLUDED IN NPIAS



Source: National Plan of Integrated Airport Systems; http://www.faa.gov

The based aircraft totals for the surrounding airports were also obtained from the FAA Airport Master Record previously shown in Figure I-4 and are shown below in Table I-6:

TABLE I-6
BASED AIRCRAFT AT SUFFOLK COUNTY AIRPORTS

AIRPORT	TOTAL	SINGLE ENGINE	MULTI-ENGINE	JET	ROTOR	MILITARY	GLIDERS
Republic	**537**	394	87	33	23	-	-
Long Island. MacArthur	**254**	157	23	45	21	8	-
Brookhaven	**217**	200	10	-	-	-	7
East Hampton	**101**	62	30	5	4	-	-
Francis S. Gabreski	**100**	68	14	3	2	11	2
Bayport	**61**	61	-	-	-	-	-
Spadaro	**35**	35	-	-	-	-	-
Montauk	**30**	25	5	-	-	-	-
Mattituck	**28**	28	-	-	-	-	-
TOTAL	**1,363**	**1,030**	**169**	**86**	**50**	**19**	**9**

Source: FAA Form 5010-1; East Hampton Airport Management Records

East Hampton Airport falls within the normal range in terms of based aircraft for airports offering similar services and facilities. Francis S. Gabreski Airport, located roughly 25 miles from East Hampton Airport bares the closest resemblance, as outlined in red in the table above. Both are classified by the FAA as General Aviation Airports, offer nearly the same services and accommodations, and experience comparable seasonal traffic fluctuations further described below.

2. Seasonal Traffic Variations

East Hampton Airport has two distinct seasonal demand characteristics: during the summer season (usually defined as Memorial Day to Labor Day), itinerant aircraft are clearly the largest user group on the Airport. During the rest of the year, local operations make up a much larger component of overall operations.

East Hampton Airport's status as a non-towered facility again requires that estimates based on historic records maintained by the airport are used to determine these peaking characteristics. As such, information samples were obtained from the Airport's operational logs and were augmented by discussions with Airport Management. As expected, peak-

month operations are conducted during the summer months from May through September with August typically being the busiest. Monthly operations decrease during the winter months. Table I-7 presents a comparison and breakdown of the peak season, summer months at East Hampton Airport for years 2005 and 2006.

TABLE I-7
SUMMER PEAKS (2005 VS. 2006)

OPERATIONS	JUN			JULY			AUG		
	2005	2006	% Chg.	2005	2006	% Chg.	2005	2006	% Chg
Jet	790	330	(58.2)	850	707	(16.8)	410	850	107.3
Rotor	1,222	761	(37.7)	976	1,326	35.9	804	1,449	80.2
SEME	3,154	1,688	(46.5)	2,780	3,257	17.2	2,170	4,020	85.3
Other AirScene	-	305	-	-	331	-	-	532	
Totals	5,634	3084	(45.3)	4,883	5621	15.1	3,637	6851	88.4
Touch & Go's	468	176	(62.4)	277	375	35.4	253	414	63.6

Source: East Hampton Airport Management Records

i. Peak Hour, Day, Weekend, Month

Generally accepted aviation planning practices typically calculate the peak-month as 10 percent of the yearly total. However, East Hampton's unique seasonal demand characteristics drive the peak-month up to nearly 22 percent. The average-day of the peak-month is simply the peak-month divided by 30 or 31 days (depending on the month). Airport management has conveyed that is presumable to account for an additional 20% of operations, which take place at night when the office is unmanned and unable to count operations. The peak-hour is generally seen as 12 percent of the average-day of the peak-month. The results of these concepts are outlined in Table I-8 as follows:

TABLE I-8
PEAKING CHARACTERISTICS

TIME FRAME	OPERATIONS
Peak Month (August)	6,851
Average Day/Peak Month	221
Average Day Plus Night (+20%)	265
Peak Hour	32 (1 op. every 1 min. 52 seconds)

Source: DY Consultants

Forecasts

East Hampton Airport, as previously discussed, provides services to the customers based at the Airport and to itinerant general aviation and charter aircraft. However, the based aircraft are the primary patron and user of the Airport's facilities and are, therefore, an excellent indicator of the potential customers that will utilize the Airport's facilities in the future. In short, based aircraft can help predict what the future demands of the airport will be. This is known as forecasting. It should be noted that due to the wide variability of forecasting, East Hampton will not consider this analysis as a major part in assessing future airport planning efforts.

To begin the forecasting effort, data was collected and analyzed from four sources to identify possible trends in based aircraft at the Airport:

(1) Federal Aviation Administration (FAA) Form 5010-1, which indicates the estimated number of based aircraft, number of annual operations, and aircraft mix at the Airport for a specific year;

(2) Forecasts from the previous Master Plan (1989);

(3) The FAA's Terminal Area Forecast (Years 2006 – 2025); and (4) the New York State Aviation System Plan (1998).

Given the age of some of these documents, the only common analysis year is 2012. As such, Table I-9 presents a comparison of the based aircraft forecasting data collected from various sources for the year 2012:

TABLE I-9
FORECAST COMPARISON

PLANNING DOCUMENT	FORECAST (2012)
FAA Form 5010-1	129
FAA Terminal Area Forecast	129
New York State Aviation System Plan (1998)	132
Master Plan Update (1989)	173

Source: As noted

Based on FAA Form 5010-1 Airport Master Records and Table I-6 "Based Aircraft at Suffolk County Airports" it can be determined that East Hampton Airport currently accommodates approximately 7.4 percent of the based aircraft located within Suffolk County. Furthermore, the Airport maintains over 43 percent the total based aircraft located at the "East End Airports," specifically Westhampton, East Hampton and Montauk Airports. At the county level, review of the 2005 FAA Aircraft Registry Database indicates that 940 aircraft are registered in Suffolk County and 475 in Nassau County (included since there are no airports located in this county). Unfortunately, the absence of historical FAA records regarding county registered aircraft but precludes the use of this data for forecasting purposes; but does present an accurate representation of the current presence of general aviation on Long Island.

The methodology employed for this study takes the most recent based aircraft data set (2006) and applies the FAA growth rates anticipated for the industry to each individual category, which are then combined to arrive at the Airport's total forecast of based aircraft through the year 2026. A 20-year planning scenario is typical to provide any visible change in aviation demand. While the FAA forecasts only cover the years through 2017, an assumption was made that change adjustment rates will continue through 2025. There appears to be only a slight increase in forecasted based aircraft using this method.

Table I-10 presents the growth rates for the various general aviation aircraft categories and Table I-11 presents the based aircraft forecast for East Hampton:

TABLE I-10
FAA GROWTH RATES BY AIRCRAFT CATEGORY

AIRCRAFT CATEGORY	PREDICTED ANNUAL GROWTH RATE (%)
Single Engine	0.3
Multi-Engine	0.1
Jets	6.0
Helicopters	2.7

Source: FAA Aerospace Forecasts 2006-2017

TABLE I-11
EAST HAMPTON AIRPORT GENERAL AVIATION BASED AIRCRAFT FORECAST

YEAR	TOTAL	SINGLE ENGINE	MULTI-ENGINE	JET	HELICOPTERS
1992	99	-	-	-	-
2005	101	62	30	5	4
2006	101	62	30	5	4
2007	102	62	30	6	4
2008	103	63	30	6	4
2009	104	63	30	7	4
2010	105	63	30	7	5
2011	105	63	30	7	5
2012	106	63	30	8	5
2013	107	64	30	8	5
2014	107	64	30	8	5
2015	108	64	30	9	5
2016	109	64	30	10	5
2017	110	64	30	10	6
2018	111	64	30	11	6
2019	112	65	30	11	6
2020	113	65	30	12	6
2021	114	65	30	13	6
2022	116	65	31	14	6
2023	117	65	31	14	7
2024	118	65	31	15	7
2025	120	66	31	16	7

Source: DY Consultants

Customarily, a ratio of operations to based aircraft should be established to develop airport activity forecasts at general aviation airports. This ratio is calculated by analyzing historical aircraft operations data if available, and dividing the annual operations for a given year by the number of known based aircraft for the same year. This ratio is applied to forecasted based aircraft volumes to determine forecasted annual operations.

While historical data exists for East Hampton's annual operations, the corresponding based aircraft data is unavailable except for the planning assumption that based aircraft totals have remained stagnant since 1992 at approximately 100 aircraft. Based on that assumption, Table I-12 presents the operations per based aircraft over the last 14 years.

TABLE I-12
OPERATIONS PER BASED AIRCRAFT

YEAR	ANNUAL OPERATIONS	BASED AIRCRAFT	OPERATIONS PER BASED AIRCRAFT
1992	31,167	99	315
1993	37,964	100	380
1994	36,830	100	368
1995	33,212	100	332
1996	28,850	100	289
1997	33,966	100	340
1998	34,332	100	344
1999	38,636	100	387
2000	32,718	100	327
2001	33,784	100	338
2002	31,584	100	316
2003	24,138	100	241
2004	31,834	100	318
2005	28,616	101	283
2006	31,562	101	313

Source: DY Consultants

Fluctuations in the volume of operations per based aircraft can be generally attributed to weather conditions, increase aircraft operating costs, construction, or the inconsistencies in the flight school and charter/air taxi markets. Based on the information contained in Table 12, annual operations per based aircraft have averaged approximately 326 since 1992 and 300 since 2001. Given the uncertainty of recent general aviation trends, it will be conservatively estimated that East Hampton's operations per based aircraft total will equal 313 (the average between the two results) for forecasted years. I turns out that 313 operations per based aircraft per year is what was estimated for last year (2006). This is considered the ratio or predictor of based aircraft to operations.

It is then applied to the forecast period. Table I-13 illustrates the predicted annual aircraft operations until the year 2025.

TABLE I-13
ANNUAL AIRCRAFT OPERATIONS FORECAST USING RATIO

	FORECAST				
ITEM	**2006**	**2010**	**2015**	**2020**	**2025**
Based Aircraft (Airport Records)	101	105	108	113	120
Based Aircraft Operations Ratio	313 (from table 12)	313	313	313	313
Total Annual Operations	31,613	32,865	33,804	35,369	37,560

Source: DY Consultants

Projected annual operations obtained using the based aircraft predictor can be analyzed further to estimate the proportion of based aircraft to itinerant aircraft. Table I-14 presents the monthly operations reports for 2006. It is broken down into how many and of what percentage based versus itinerant aircraft account for the total, with the help of the Airport operational logs.

TABLE I-14
LOCAL & ITINERANT OPERATIONS (2006)

Month:	Total	Local	%Total	Transient	%Total
January	**942**	482	51	460	49
February	**815**	435	53	380	47
March	**1029**	483	47	546	53
April	**1192**	402	38	790	62
May	**1882**	1004	53	878	47
June	**2779**	1070	39	1709	61
July	**5290**	1543	29	3747	71
August	**6319**	1950	31	4369	69
September	**3123**	1461	47	1662	53
October	**1887**	917	49	970	51
November	**1520**	841	55	679	45
December	**1662**	1400	84	262	16
Total	**28,440**	11988	42	16452	58

Source: Airport Records

During the summer season itinerant aircraft are predominantly the largest user group on the Airport. As the above data indicates, during the "off season," local operations make up a slightly larger component of the overall operation. The year was broken down into quarters and the middle month of each quarter was selected for review. Table I-15 shows that August's itinerant operations equaled 69 percent of total operations.

TABLE I-15
LOCAL & ITINERANT OPERATIONS (2006)

MONTH	LOCAL	%	TRANSIENT	%	TOTAL
February	435	53	380	47	815
May	1004	53	878	47	1882
August	1950	31	4369	69	6319
November	841	55	679	45	1,520

Source: Airport Management Records

The Airport Master Record (FAA Form 5010-1) data was also reviewed to obtain FAA information on local and itinerant aircraft operations. East Hampton's percentage breakdown of GA local/itinerant operations was estimated at 21/79, respectively. This does not reflect

the Airports Records annual average. Given the accuracy of data supplemented by AirScene, it should again be safe to assume that the levels that the FAA estimates are higher than what is occurring at East Hampton Airport. Again, the *average* operational composition calculated in Table I-15 was mean value of 52 percent itinerant and 48 percent local. The estimated breakdown is demonstrated in Table I-16 below:

TABLE I-16
RATIO BETWEEN BASED AND ITINERANT AIRCRAFT

FORECAST					
ITEM	**2006**	**2010**	**2015**	**2020**	**2025**
Total Annual Operations	31,562	32,865	33,804	35,369	37,560
Total Itinerant Operations (52%)	16,412	17,090	17,578	18,392	19,531
Total Local Operations (48%)	15,150	15,775	16,226	16,977	18,029

Source: DY Consultants

Fleet Mix

An aircraft fleet mix is defined as the physical characteristics of a population of aircraft. Aircraft can be fixed wing or rotorcraft, be large (more than 12,500 lbs) or small (12,500 lbs or less) and have one or more engines and/or types. The aircraft mix and operations forecast is generated again by analyzing recent based aircraft mix trends. This information is used to determine the ratio used to project future based aircraft mix and operations. For the purposes of this analysis, it was assumed that the current 2006 fleet mix percentages would be applied to each of the forecast years. The unknown AirScene totals were carried over from year to year.

Table I-17 presents the aircraft mix for East Hampton Airport.

TABLE I-17
AIRCRAFT MIX

	FORECAST				
ITEM	**2006**	**2010**	**2015**	**2020**	**2025**
Based Aircraft Mix					
Single Engine	62	63	64	65	66
Multi Engine	30	30	30	30	31
Jet	5	7	9	12	16
Rotor	4	5	5	6	7
TOTAL BASED AIRCRAFT	**101**	**105**	**108**	**113**	**120**
Annual Aircraft Operations					
Single Engine	16,059	16,317	16,576	16,835	17,094
Multi Engine	3,176	3,176	3,176	3,176	3,176
Jet	3,158	4,424	5,688	7,584	10,112
Rotor	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**	**33,821**	**35,583**	**38,051**	**41,276**

Source: DY Consultants

Further discussion of aircraft fleet mix at East Hampton Airport will occur later in this study.

3. Airport Traffic Pattern

To maximize safety and standardize visual approaches to airports, the FAA prescribes certain standards for airport traffic patterns in the Aeronautical Information Manual (AIM). The AIM is further supplemented for pilots by the "Airplane Flying Handbook," FAA Publication FAA-H-8083-3A. The purpose of the airport traffic pattern is to provide a standard for entry into and operation in the airport environment for landing aircraft and aircraft performing touch and go's. This term does not typically apply to helicopters due to their unique operating characteristics. The standard altitude for flight in the pattern is 1,000 ft. above airport elevation for piston aircraft and 1,500 ft. for jets, unless established otherwise. The typical area over which the traffic pattern is flown is ½ mi. to 1 mi. lateral distance from the airport. The FAA recommends left hand traffic patterns, meaning all turns made by aircraft are to the left, at non-towered airport. However, for reasons of noise

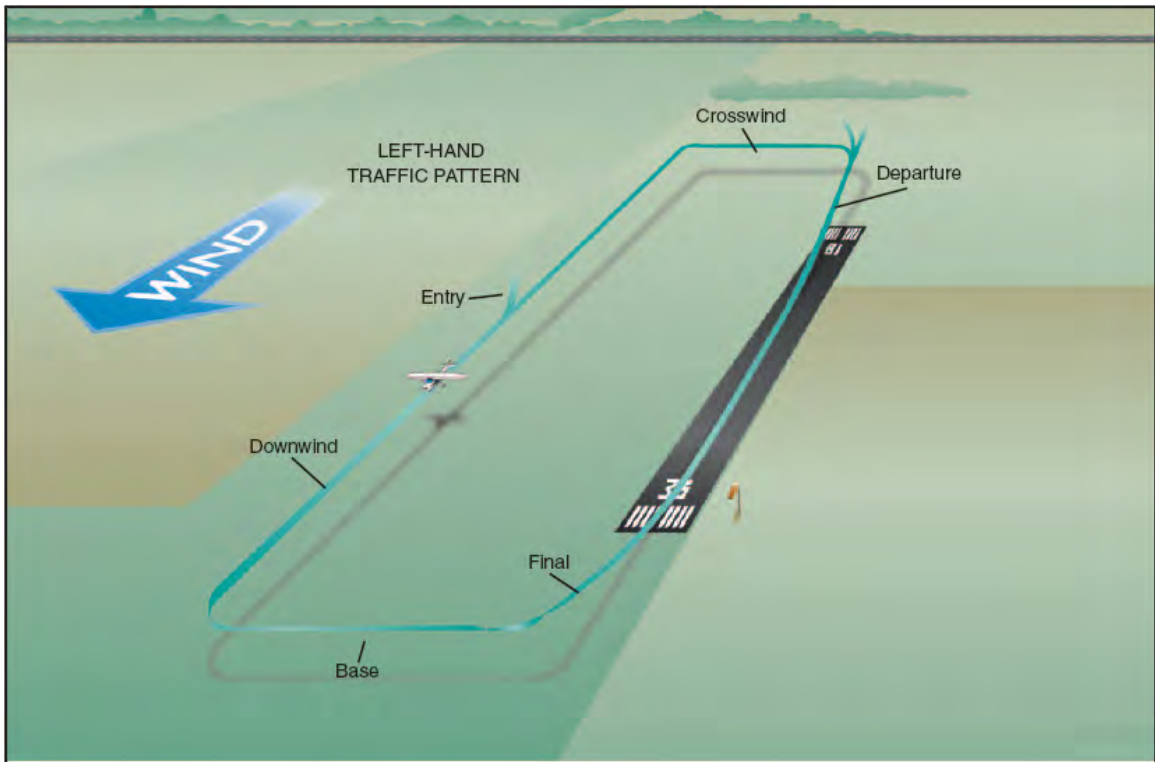
mitigation, environmental benefit, or obstruction avoidance; right hand traffic patterns are endorsed in specific cases. The standard pattern is essentially a rectangle flown around the airport and is comprised of different operating segments or phases. See Figure I-6 below. Its specific size and shape are largely dependent on several factors including:

1. Aircraft Performance Characteristics: Slower aircraft, typically single and twin piston engine aircraft will fly a smaller and lower pattern than faster jet aircraft.

2. Other Traffic: At uncontrolled airports, pilots are responsible for avoiding other aircraft. A pilot may have to lengthen or shorten a segment of the pattern to adjust for conflicting traffic entering the pattern, departures from the airport, or other landing aircraft.

3. Airport Specific Procedures: For specific safety reasons or other unique characteristics an Airport may alter the traffic pattern and publish the procedures in the Airport Facility Directory (AFD).

FIGURE I-6
STANDARD AIRPORT TRAFFIC PATTERN



Source: Airplane Flying Handbook/ FAA Publication FAA-H-8083-3A

The standard segments of the Airport Traffic Pattern are:

1. Upwind leg- A flight path parallel to the landing runway in the direction of landing. The upwind leg is essentially the same as the departure leg, but is generally attributed to aircraft that stay in the Traffic Pattern during Touch and Go's. The upwind leg is typically flown along an imaginary extended runway centerline up to a point that is 300 ft. below the standard Traffic Pattern Altitude (TPA). Depending on the performance characteristics of the aircraft, this is normally achieved by 1/2mi. to 1 mi. from the departure end of the runway.

2. Crosswind leg- A flight path at right angles to the landing runway off its takeoff end. Turns to the crosswind leg are made from upwind leg and are usually executed by a pilot who wants to remain in the traffic pattern. The crosswind leg is flown until the aircraft reaches TPA and an appropriate lateral distance from the runway.

3. Downwind leg- A flight path parallel to the landing runway in the opposite direction of landing. This leg is flown at standard TPA. The downwind leg is usually flown at a 1/2 mi. to 1 mi. of lateral distance from the landing runway. Once abeam the threshold a descent is initiated and continued until angle 45 degrees from that point is achieved. For itinerant aircraft, the downwind leg is the recommended location of entry into the airport traffic pattern. These aircraft normally join the pattern at TPA at the mid-point of and 45 degree angle to the downwind leg.

4. Base leg- A flight path at right angles to the landing runway off its approach end and extending from the downwind leg to the intersection of the extended runway centerline. Depending on the performance characteristics of the aircraft flying the pattern, the normal distance away from the airport is between ½ mi. and 1 mi. The descent for landing is normally continued during this leg.

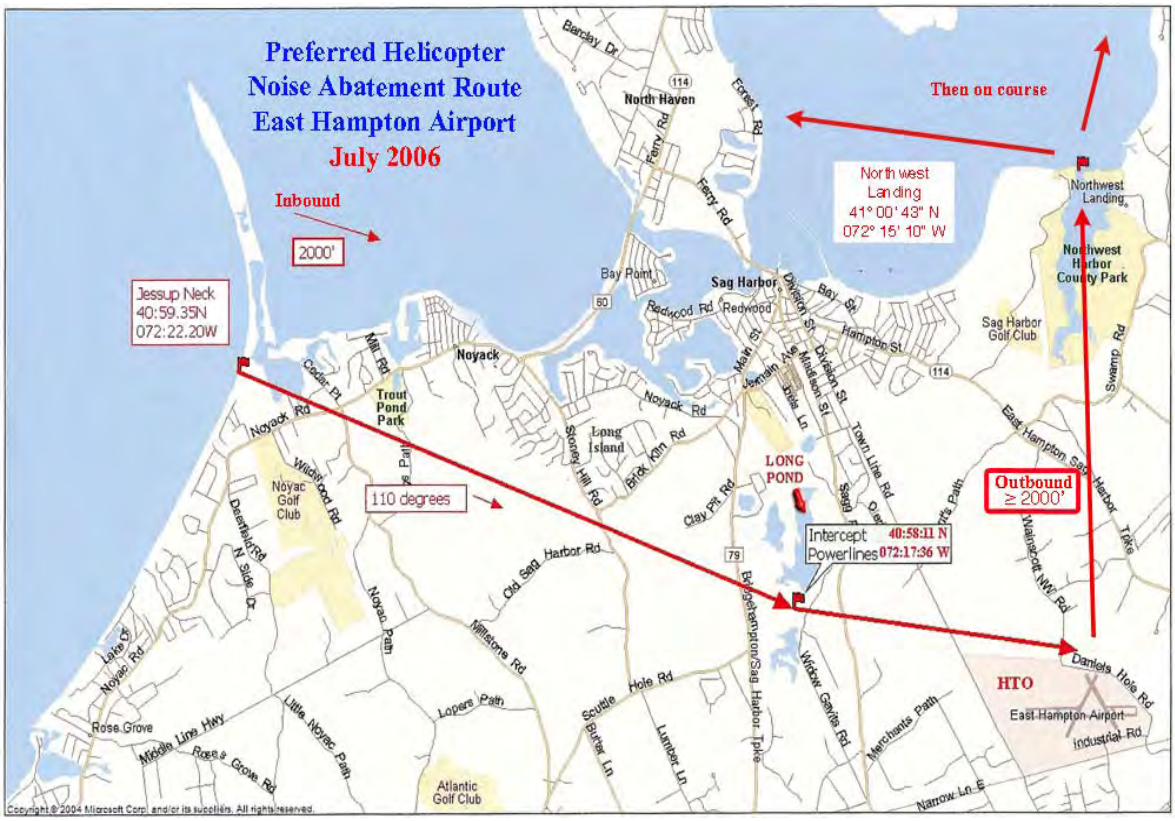
5. Final approach- A flight path in the direction of landing along the extended runway centerline from the base leg to the runway. The pilot aligns the aircraft with the runway and normally begins 3 degree stabilized approach to landing aided by the airport visual aids (described in later sections).

6. Departure leg- The flight path which begins after takeoff and continues straight ahead along the extended runway centerline. The departure climb continues until reaching a point at least $^1/_2$ mile beyond the departure end of the runway and within 300 feet of the traffic pattern altitude. Aircraft will typically depart the area in accordance with noise abatement procedures recommended by the Airport and continue on the route to their intended destination.

Patterns Specific to East Hampton Airport

Currently, all patterns flown for Runways 4-22, 16-34, and 10-28 are published and generally expected to be executed as left hand turns. The TPA recommended by the Airport is the standard 1000 ft. above ground level. The TPA information is published in addition to frequencies, preferred noise abatement routes, and requested helicopter entry and exit routes in a variety information documents available to pilots. Also, information can be distributed locally to pilots. East Hampton Airport promotes a preferred helicopter arrival and departure path. As previously stated, the conventional airport traffic pattern is primarily for fixed-wing traffic (airplanes). Helicopters normally rely on instructions from an Air Traffic Control Tower or locally accepted and supported routes. Handouts such as the one used at East Hampton are a popular method for distributing preferred helicopter routes. The following figure is the preferred helicopter route at East Hampton Airport.

FIGURE I-7
EAST HAMPTON AIRPORT: LOCAL PROCEDURES AND INFORMATION HANDOUT



Source: East Hampton Airport Management

The next figure shows the standard airport traffic pattern transposed onto an aerial photograph of East Hampton Airport. Runway 28 appears to be the favored runway in terms of movements based on discussion with the Airport and was chosen as the landing runway for the diagram to demonstrate the most common operational scenario. The dashed line closest to the airfield represents a traffic pattern flown by smaller, slower, aircraft at a half mile of lateral distance from the airport. The outer dashed line delineates the traffic pattern typically flown by larger, faster jet aircraft at the recommended 1 mi. lateral distance limit. The area in between these two paths is hashed to demonstrate the whole area of land that will fall underneath the typical traffic pattern.

FIGURE I-8
AREA COVERED BY STANDARD TRAFFIC PATTERN FOR RUNWAY 28

Source: DY Consultants/Graphic by Google Earth

The next figure presents a three dimensional depiction of the standard left hand traffic pattern for Runway 10-28 at a half mile lateral distance. Typical aircraft altitudes are shown for each segment of flight.

FIGURE I-9
STANDARD TRAFFIC PATTERN AND ALTITUDES FOR RUNWAY 10-28

Source: DY Consultants/Graphic by Google Earth

Figure I-10 below shows the recommended helicopter overlaid on an aerial photograph of the area. This route was previously determined by the Airport to have the greatest benefit to its noise abatement program. Helicopter traffic predominantly comes from Manhattan or other areas west of the Airport. Both arriving and departing helicopters are recommended to fly specific route at specific altitudes. The inbound aircraft are taken along the northern shore of Long Island and then proceed on a south-easterly heading of 110˚ to the Airport at an altitude of 2,055 feet. Outbound helicopter traffic proceed on the northerly heading at an altitude of 2,055 ft. until to intercepting the northern shore of Long Island, where they can proceed on course to their destination.

FIGURE I-10

RECOMMENDED HELICOPTER ARRIVAL/DEPARTURE

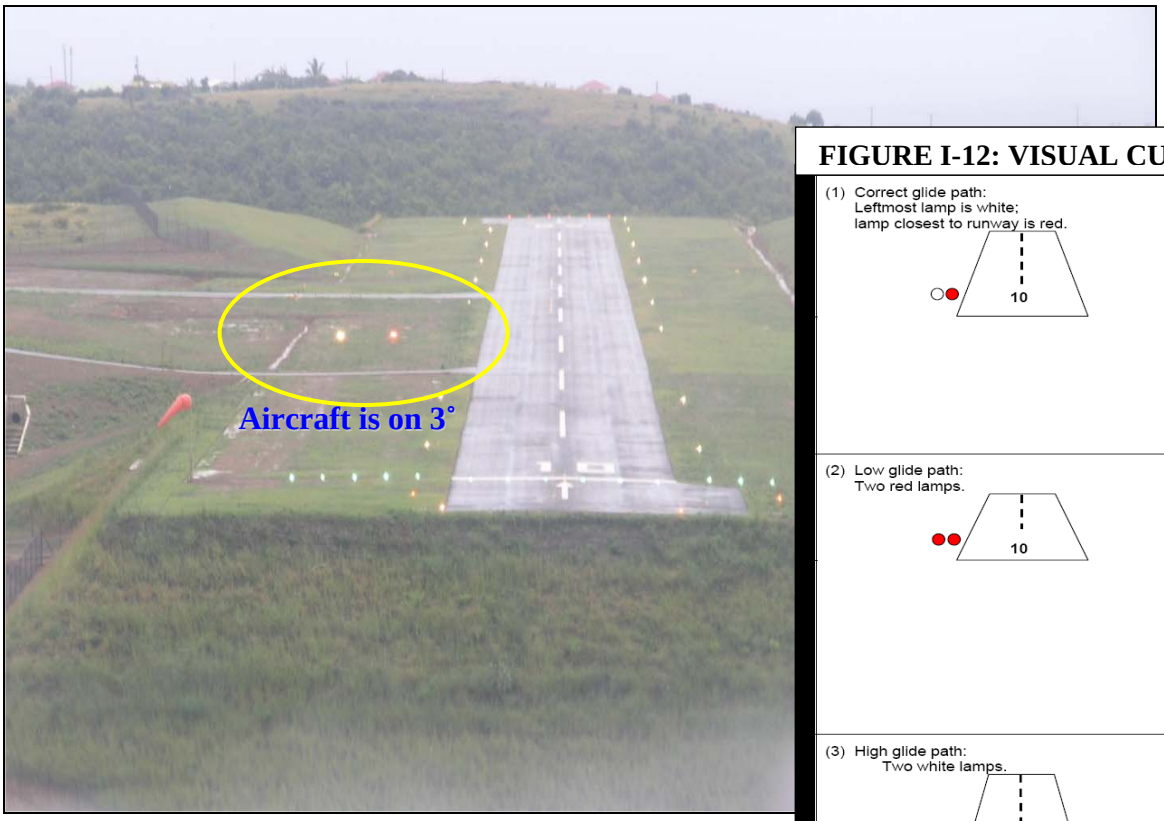
Source: East Hampton Airport Handouts/Graphic by Google Earth

Visual Aids/Final Approach

Many airports have a variety of Visual Aids (or simply VISAIDs) to assist pilots in making a safe and controlled visual approach to the airport. One type of VISAID is the Visual Glide Slope Indicator (VGSI), of which there are many kinds. The type that East Hampton Airport provides on both ends of its main Runway 10-28 is the Precision Approach Path Indicator (PAPI). The PAPI system provides approach slope information by supplying visual cues to the pilot on final approach to land at the airport. It has an effective visual range of about 5 miles during the day and up to 20 miles at night. The system operates by providing a definite white and red light projection pattern along the desired descent path up until the point of touchdown on the runway. The PAPI system at East Hampton Airport is a 2 box configuration and consists of single horizontal bar with two sharp transition multi-lamp units, referred to as lamp housing assemblies (LHAs). The LHAs are located on a line perpendicular to the runway centerline, at a distance from the runway threshold chosen to provide the proper height for an aircraft to cross the threshold of the runway and safely execute a landing.

Each LHA projects a split beam of light, the upper segment being white and the lower segment being red. The transition from white to red or vice versa occurs within a vertical angle of 5 minutes of arc at the beam center and results in a well-defined corridor of light consisting of white (top) and red (bottom) beams.

FIGURE I-11
THE PILOT'S VIEW OF THE PAPI ON FINAL APPROACH



rce: www.islagrandeflying.com

FIGURE I-12: VISUAL CUES

Source: Aeronautical Information Manual

The standard Glide Path Angle (GPA) is 3 degrees, meaning an aircraft descends at a slope of 3 degrees along the final approach until landing. FAA standards provide a tolerance for an increase in the GPA up to 4 degrees for non-jet runways. The PAPI equipment must be sited and aimed so that it defines an approach path with adequate clearance over obstacles and a minimum threshold crossing height. East Hampton Airport's PAPI GPAs are 3 degrees for both runways.

Approaches

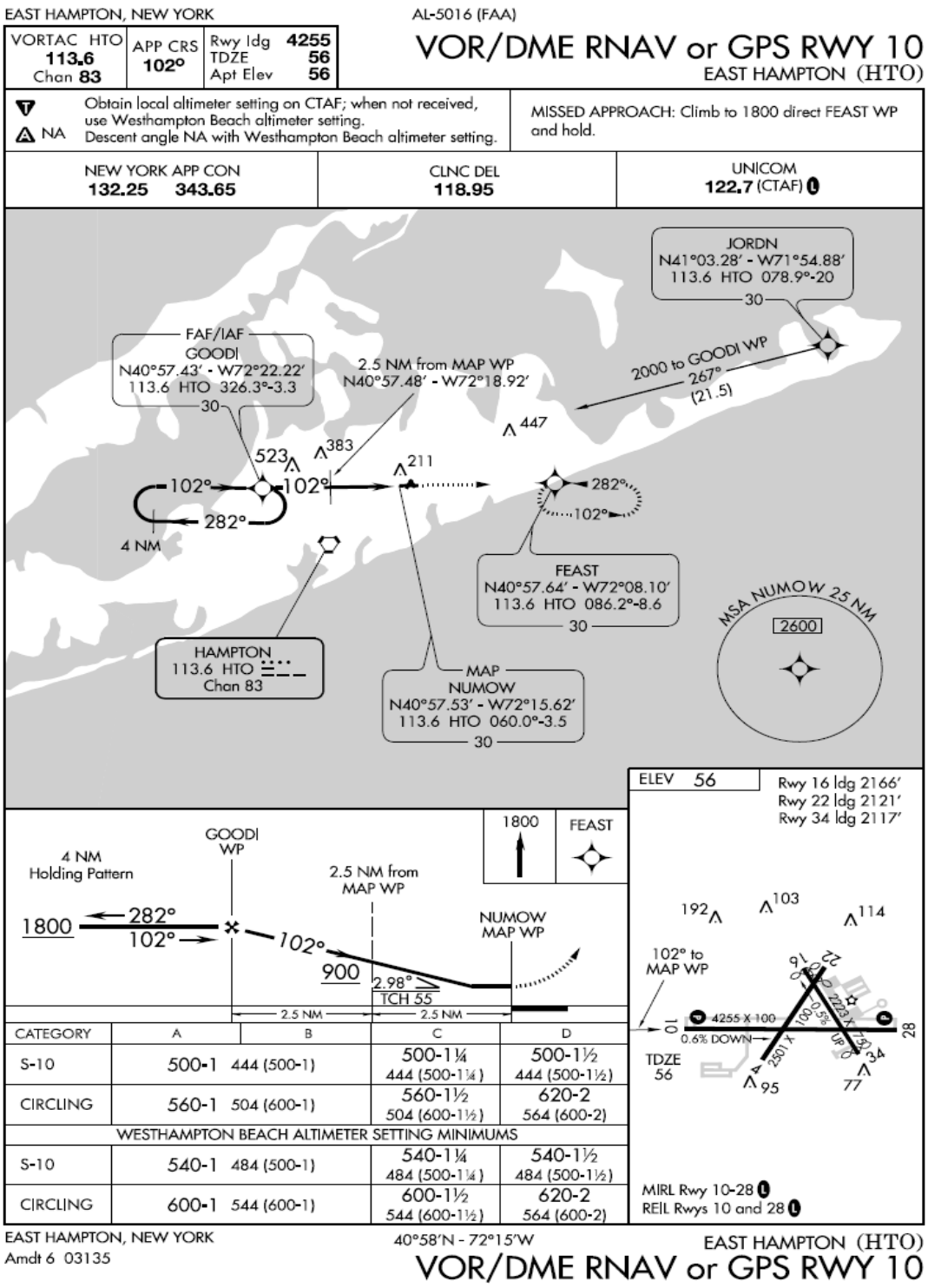
The method of aircraft flight is largely determined by weather. The FAA has divided and assigned certain criteria to good weather and fair weather. These two separate categories mandate different rules of flight. They are described as follows:

> VFR (Visual Flight Rules): Applies in meteorological conditions where the reported cloud ceiling is 1000 ft. and visibility is 3 miles or more.
>
> IFR (Instrument Flight Rules): Applies in conditions where the reported ceiling is less than 1,000 ft. and visibilities are less than 3 mi.

During VFR conditions, the standard airport traffic pattern described above is used. There are special "Instrument Approach Procedures" that must be followed when IFR conditions prevail. Additionally, aircraft operating during these conditions are under constant control of Air Traffic Control and operate under an IFR Flight Plan. The purpose of the instrument approach is to bring a pilot to a point where they are on a stabilized approach course that is aligned with the runway and can maneuver to land by use of navigational aids and flight instruments. Therefore, the approach patterns will be much different during IFR conditions compared to the traffic pattern during VFR conditions. It must also be noted that many operators, particularly of large jet aircraft, only operate under IFR flights plans even in VFR weather conditions. Therefore, the instrument approaches at an airport may be more frequently used than expected.

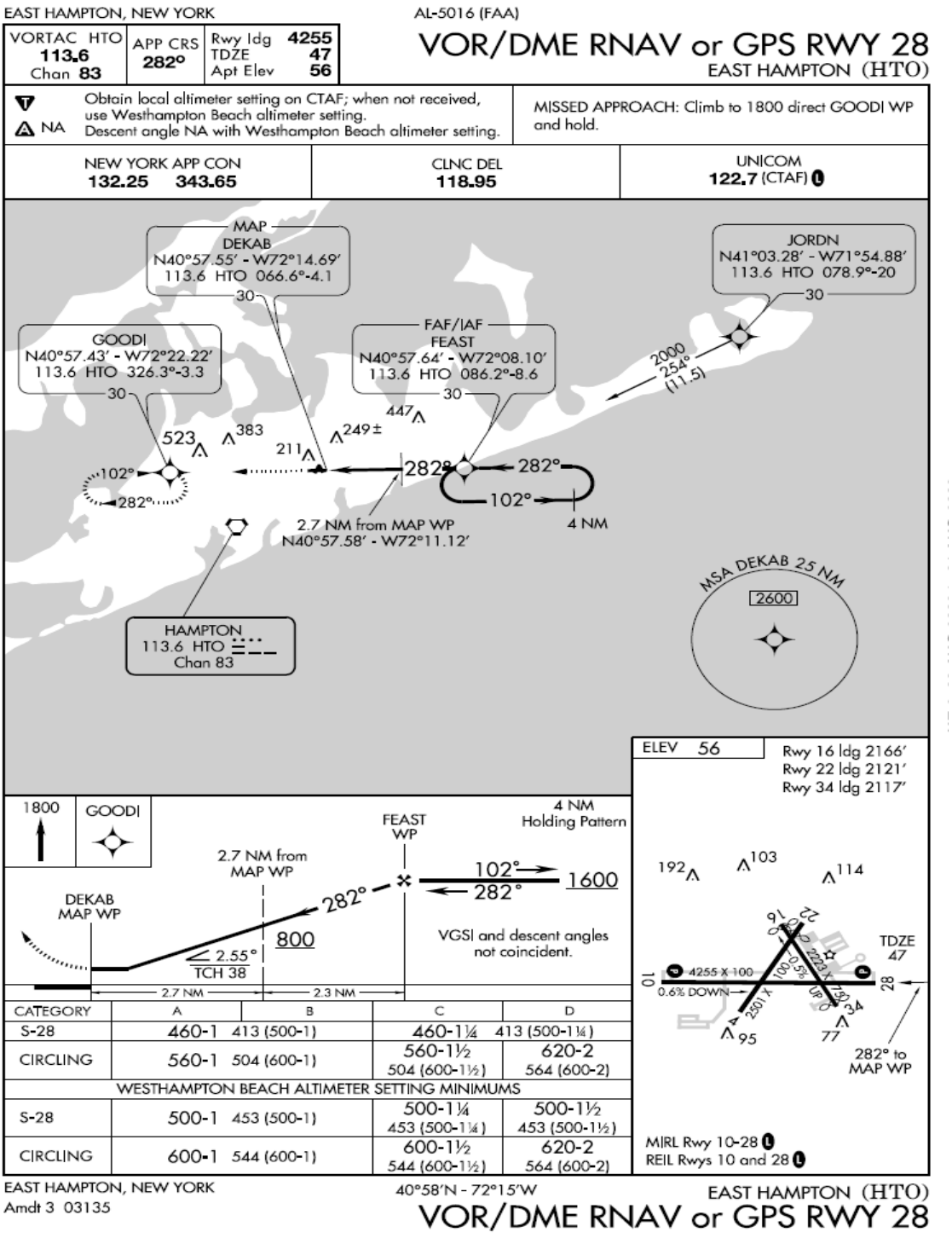
East Hampton Airport has three separate approaches published. See Figures I-13, I-14, and I-15.

FIGURE I-13
APPROACH PROCEDURE



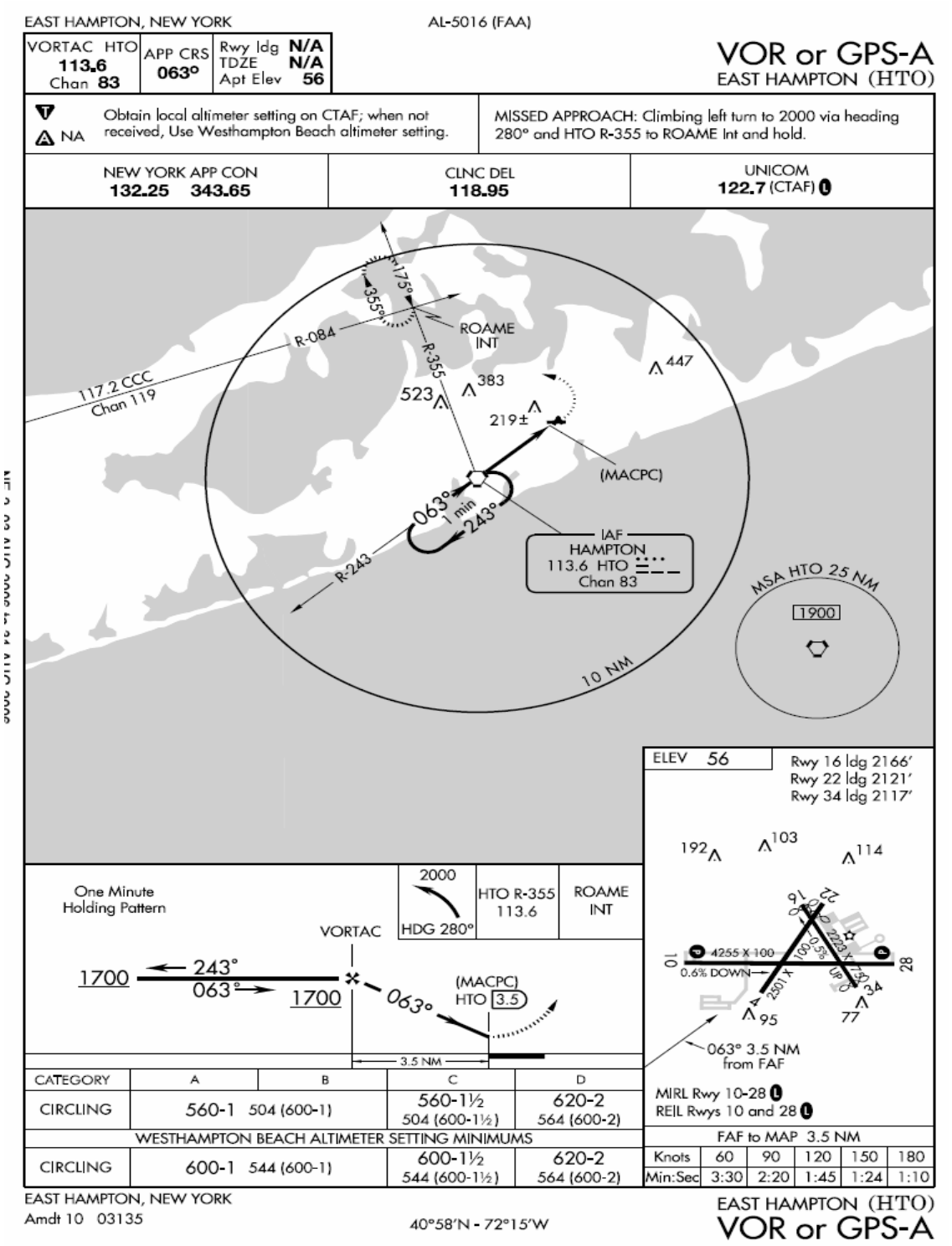
Source: www.naco.faa.gov

FIGURE I-14
APPROACH PROCEDURE



Source: www.naco.faa.gov

FIGURE I-15
APPROACH PROCEDURE



Source: www.naco.faa.gov

4. Meteorological Conditions

Wind conditions are of prime importance in determining runway use and orientation. The prevailing wind and visibility conditions determine the direction in which takeoffs and landings may be conducted and the frequency of use for each available runway.

For the purpose of this study, the terms visual flight rules (VFR) and instrument flight rules (IFR) are used as measures of ceiling and visibility. VFR conditions occur when the ceiling is at least 1,000 feet and visibility is three miles or greater. During these conditions, pilots fly on a see-and-be-seen basis. IFR conditions occur when the ceiling is less than 1,000 feet or visibility drops below three miles.

The orientation of runways for takeoff and landing operations is primarily a function of wind velocity and direction, together with the ability of aircraft to operate under adverse conditions. As a general rule, the primary runway at an airport is oriented as closely as practicable in the direction of the prevailing winds. The most desirable runway configuration will provide the largest wind coverage for a given maximum crosswind component. The crosswind component is the vector of wind velocity and direction which acts at a right angle to the runway. Further, runway wind coverage is that percent of time in which operations can safely occur because of acceptable crosswind components.

Table I-18 depicts how the crosswind value is determined based on the Airport Reference Code.

TABLE I-18
MAXIMUM RECOMMENDED CROSSWIND

Airport Reference Code	Design Crosswind Value (knots)	Type of Aircraft
A-I and B-I	10.5	Twin Otter
A-II and B-II	13.0	Beech King Air
A-III, B-III, and C-I through D-III	16.0	G-V
A-IV through D-IV	20.0	B747

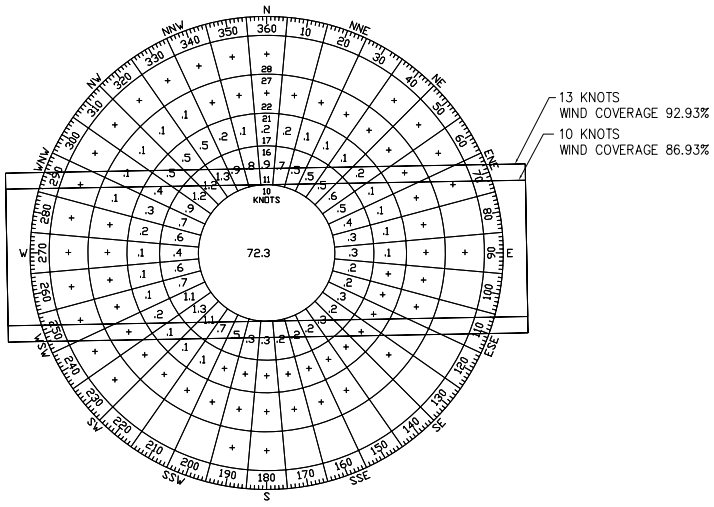
Source: DY Consultants

According to FAA objectives, runways should be oriented so that aircraft may land at least 95% of the time with 90° crosswind components not exceeding 13 knots for Runways 4-22 and 16-34 and 16 knots for Runway 10-28. A combination of the three runways at East Hampton Airport exceeds the criteria and provides more than the recommended 95% wind coverage at 10.5 knots, suitable for the smallest aircraft.

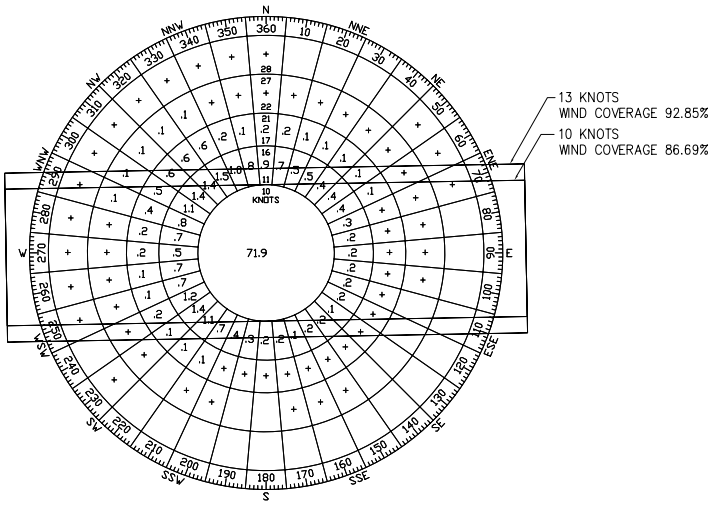
All-weather, VFR, and IFR wind roses were developed for East Hampton Airport using information gathered from the weather observations taken over a 10-year period from Frances S. Gabreski Airport, Westhampton Beach, for the 24 hour period from 1996 to 2005. As shown on the wind roses depicted on Figure I-16, I-17 and I-18, Runways 10-28, 4-22, and 16-34 provide combined all-weather wind coverage of 99.97% for a 13 knot crosswind and 99.79% for a 10.5 knot crosswind. These figures exceed the recommended coverage and provide acceptable coverage for the smallest aircraft 99.79% of the time. The percentages are shown in the following figure:

FIGURE I-15
WIND ROSE FOR RUNWAY 10-28

ALL WEATHER RW 10-28



VFR RW 10-28



IFR RW 10-28

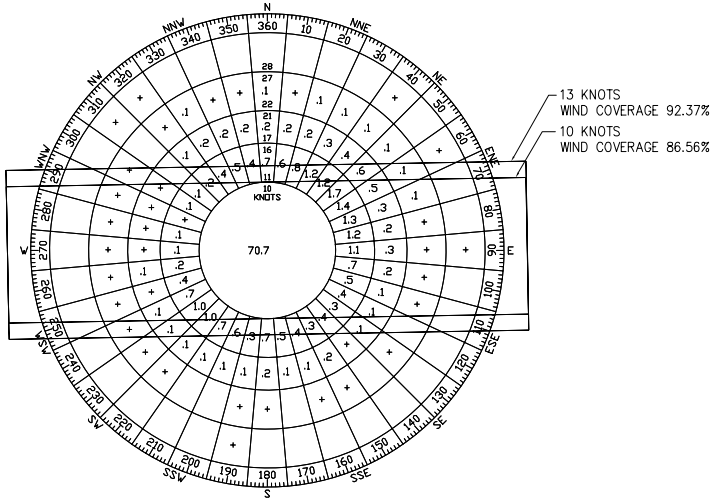
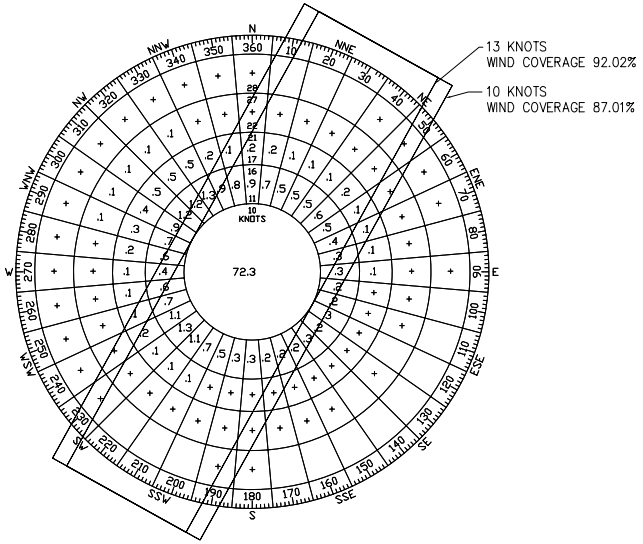
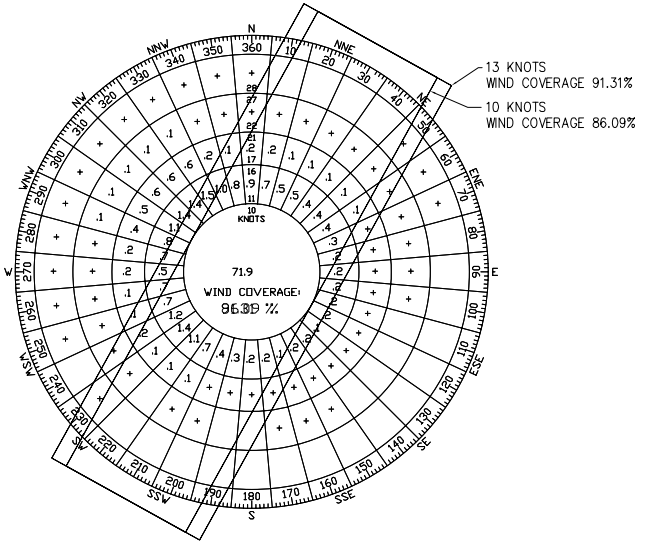


FIGURE I-17
WIND ROSE FOR RUNWAY 4-22

ALL WEATHER RW 4-22



VFR RW 4-22



IFR RW 4-22

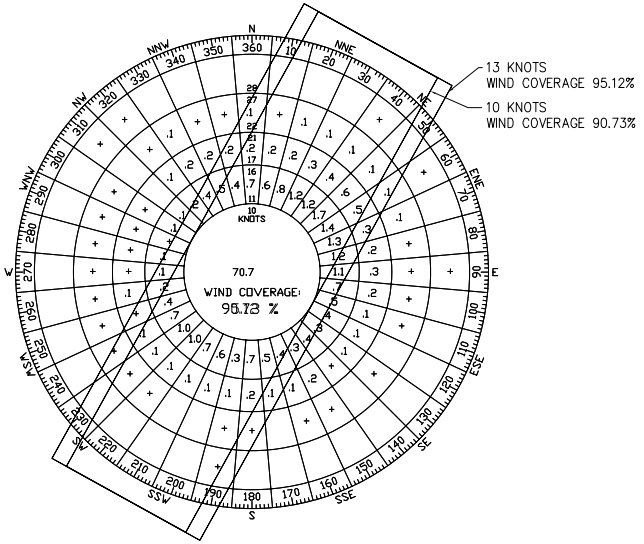
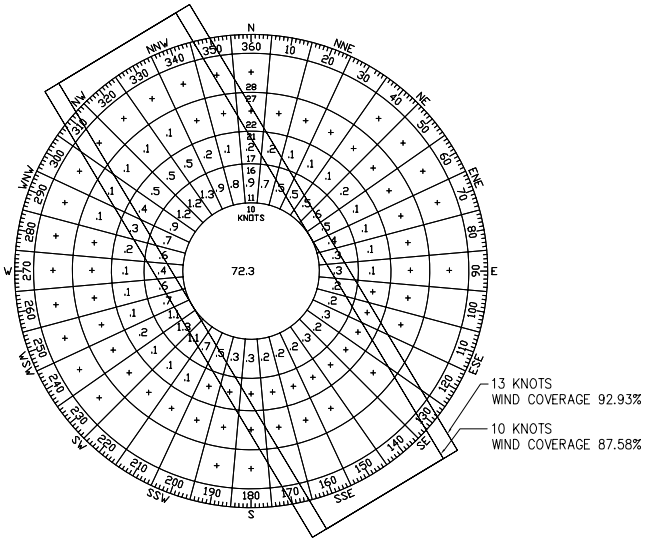
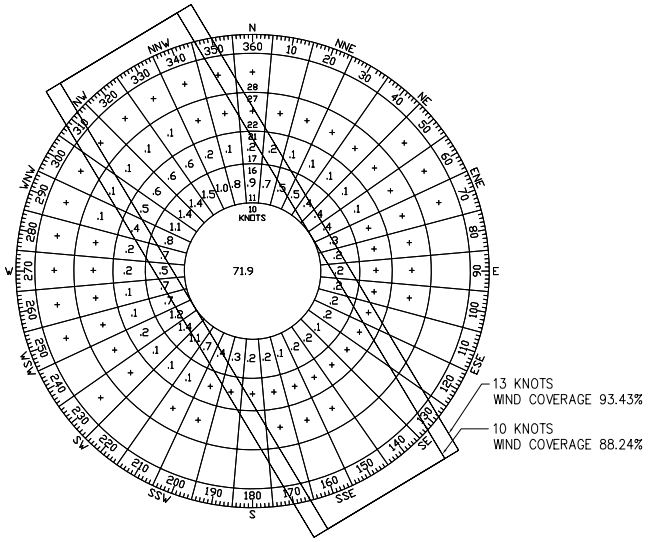


FIGURE I-16
WIND ROSE FOR RUNWAY 16-34

ALL WEATHER RW 16-34



VFR RW 16-34



IFR RW 16-34

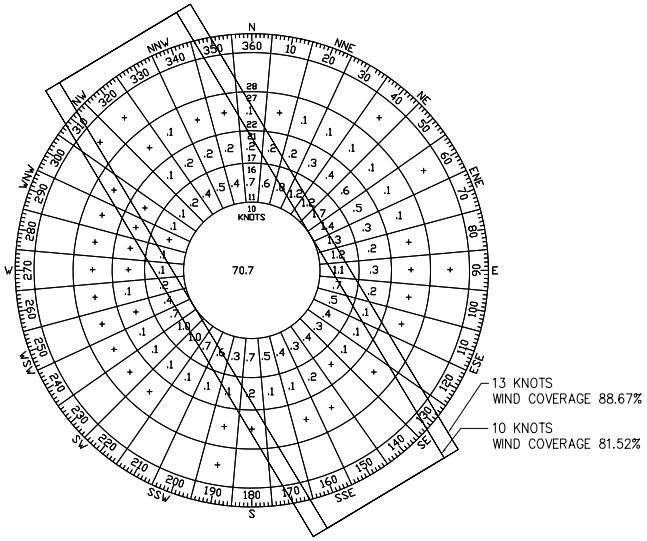


TABLE I-19

PERCENT WIND COVERAGE									
RUNWAY	12 MPH (10.5 Knot)			15 MPH (13 Knot)			18 MPH (16 Knot)		
	ALL WEATHER	VFR	IFR	ALL WEATHER	VFR	IFR	ALL WEATHER	VFR	IFR
10-28	86.93%	86.69%	86.56%	92.93%	92.85%	92.37%	97.70%	97.76%	97.03%
16-34	87.58%	88.24%	81.52%	92.93%	93.43%	88.67%	97.98%	98.24%	95.93%
4-22	87.01%	86.09%	90.73%	92.02%	91.31%	95.12%	96.58%	96.19%	98.35%
COMBINED	99.79%	99.80%	99.73%	99.97%	99.98%	99.95%	100.0%	100.0%	100.0%

WIND ROSE DATA

Source: National Oceanic & Atmospheric Administration, National Climatic Data Center, Asheville, North Carolina and DY Consultants

With Runway 4-22 closed, Runways 10-28 and 16-34 still provides the FAA's criteria of 95% wind coverage. For 10.5 knots there is 96.25% coverage and for 13 knots there is 98.97% coverage for all-weather. The following table depicts the combinations and their coverage's for all three runways.

TABLE I-20
THREE RUNWAY COMBINATION WIND DATA

PERCENT WIND COVERAGE									
RUNWAY	12 MPH (10.5 Knot)			15 MPH (13 Knot)			18 MPH (16 Knot)		
	ALL WEATHER	VFR	IFR	ALL WEATHER	VFR	IFR	ALL WEATHER	VFR	IFR
10-28 16-34	96.25%	96.58%	95.57%	98.97%	99.14%	97.69%	99.78%	99.85%	99.32%
10-28 4-22	94.50%	93.97%	97.02%	97.62%	97.37%	98.78%	99.19%	99.11%	99.55%
16-34 4-22	96.76%	96.83%	95.67%	98.85%	98.88%	98.39%	99.66%	99.67%	99.54%

Source: National Oceanic & Atmospheric Administration, National Climatic Data Center, Asheville, North Carolina and DY Consultants

5. Inventory of Planning Data and Past Proposals

Prior to this study there were many attempts to update the Airport Master Plan to no avail. The most current Master Plan and approved Airport Layout Plan (ALP) was completed by TransPlan, Inc. in 1989. Before this submission, Hoyle Tanner worked on a Master Plan in the early 1980's, which met with resistance from the community.

After the TransPlan approval, C&S Engineers, Inc. and Tri-State Engineering also submitted Master Plans; however, these were also not adopted by the Town of East Hampton.

The Town of East Hampton has a specific direction for how they would like the Airport to be, which has been overlooked by the past submissions. The main goal is to keep the airport small in size and scale and attempt to become self-supporting. The past documents have looked at larger aircrafts such as the Challenger 600, which would cause Daniel's Hole Road to be relocated and hence, enhance and grow the airport by allowing larger aircraft to enter the airport.

This study will be focusing on how to maintain the existing Airport through various alternatives discussed later in the study.

6. AIP Grants, Assurances, and Durations

AIP Grants

Under the Airport Improvement Program (AIP), authorized by Title 49 of the United States Code (U.S.C.), financial assistance is provided to airports in the form of Federal Grants. The goal of the program is to ensure the development of a nationwide system of public-use airports adequate to meet the current projected growth of civil aviation. Airports who participate in the Program are included in the National Plan of Integrated Airport Systems (NPIAS) and receive funding for airport planning and development projects based on the safety and operational priorities of the airport and airway system.

East Hampton Airport is included in the *National Plan of Integrated Airport Systems 2001-2005 (NPIAS)*. This planning document includes 3,364 existing airports that are significant to national air transportation and estimates that $46.2 billion in infrastructure development

that is eligible for Federal aid will be needed over the next five years to meet the needs of all segments of civil aviation. Airports with significant commercial service account for 82 percent of the total development needs. The FAA administers the Airport Improvement Program through the NPIAS, which supports the FAA's strategic goals for safety, system efficiency, and environmental compatibility by identifying the specific airport improvements that will contribute to achievement of those goals. Recent grants accepted by East Hampton Airport are as follows:

TABLE I-21
GRANT HISTORY

Year	Work Type
1983	Rehabilitate Runway
1990	Install Apron Lighting and Construct Taxiway
1991	Airport Master Plan Study
1992	Acquire ARFF Equipment
1992	Install Signs, Improve Building, Construct Taxiway and Apron, Improve RSA
1993	Construct Terminal
1993	Improve Building, Install VGSI
1993	Expand Apron
1993	Improve Access Road
1994	Install Guidance Signs, Perimeter Fencing
1995	Acquire Security Equipment, Install Guidance Signs
1996	Improve Service Road, Construct Apron, Install Apron Lighting, Improve Drainage
1996	Rehabilitate Runway
1997	Rehabilitate Runway, Install Guidance Signs, Construct Apron, Expand Apron
1997	Rehabilitate Runway, Rehab Runway Lights, Install NAVAID's
1997	Miscellaneous Study
2001	Rehabilitate Apron

Grant Assurances and Durations

After accepting funds from FAA-administered airport financial assistance programs, recipients must agree to certain obligations (or assurances). These assurances, known commonly as Grant Assurances, require the recipients to maintain and operate their facilities safely and efficiently and in accordance with specified conditions. They appear either in the application for Federal assistance and become part of the final grant offer or in restrictive covenants to property deeds. The duration of these obligations depends on the type of recipient, the useful life of the facility being developed, and other conditions stipulated in the assurances.

A copy of the typical assurances associated with accepting a Federal Grant is located in Appendix A. Typical industry interpretation and practices accept the following to be true for an Airport still obligated under FAA Grant Assurances:

- When accepting grants, the sponsor is obligated to comply with the assurances associated with the grant.
- The Airport Sponsor receiving the grant must operate the airport as a public use airport for 20 years upon its receipt.
- The airport must be operated and maintained as per FAA standards.
- Revenues generated on airport must remain on airport.

East Hampton Airport grant status is in effect and the airport is currently obligated to operate under and comply with all Grant Assurance stipulations. Additionally, the Airport is still in the FAA's National Plan for Integrated Airport Services and is eligible for additional grant under the AIP Program at this time.

Due to past conflicts associated with the issuance and acceptance of certain previous grants, the Committee to Stop Airport Expansion, a private group, reached an agreement with the FAA in January of 2005 regarding the duration of the Assurances associated with those grants in question. Specifically, a settlement agreement was filed with the U.S. District Court holding that certain Assurances would no longer be enforceable after December 31, 2014. See Appendix B for a copy of this agreement.

C. Off-Airport Environment and Community Setting

1. Socioeconomic Profile

The Town of East Hampton covers the eastern half of Long Island's South Fork in Suffolk County. The 2000 year-round population in East Hampton, including both the incorporated Village of East Hampton and the portion of Sag Harbor that lies within the Town, was 19,719.

Population information for East Hampton is difficult to assess with complete accuracy as it probably does not include all of the visitors, people who live in illegal housing or workers in group "summer shares". Because of the transient nature of the summer population, seasonal figures are likely to be more than the year-round information. The seasonal population estimates for the Town of East Hampton were reached by the Suffolk County Planning Department by estimating an average of 4.5 persons per household in seasonal homes throughout the Town, assuming a guest factor of 1.2 for year-round households in Town, and assuming four guests per motel room.

As indicated above in 2000 there were 19,719 year-round residents and an estimated 71,906 seasonal residents in the Town of East Hampton, totaling an estimated peak season population of 91,625 residents.

The median income reported in the census represents the middle value arrived at by dividing the income distribution into two equal groups, one having incomes above the median, and the other having incomes below the median. According to the 2000 census the median household income for the Town of East Hampton was $52,201, compared to $65,288 in Suffolk County.

Per capita income is an average obtained by dividing aggregate income by total population of an area. The per capita income is higher for the Town of East Hampton than in Suffolk County, $31,300 and $26,577 respectively. The higher per capita income is likely the result of the higher wages earned by a small segment of the East Hampton population that is averaged into the per capital income figure, as well as the fact that children under 18 made up a lesser percentage of the population in East Hampton than in the County.

Six percent of the households in East Hampton have incomes of $200,000 or greater, whereas only 4.1 percent of households Countywide have incomes of $200,000 or greater. The lower median household income in East Hampton is in part a result of the higher number of single-person households in East Hampton than in Suffolk County, and the higher number of seniors in East Hampton, many of whom are on a fixed income.

2. Regulatory Framework

i. Town Noise Ordinances

Town Ordinances

The entire Town code is furnished through a link on the current Town website. Three pertinent Chapters are discussed in detail below. These include Chapter 73 - Aircraft, Chapter 75 – Airport, and Chapter 185 – Noise.

Chapter 73 – Aircraft

Helicopters are prohibited from landing or operating in the Town except on Gardiner's Island, the East Hampton Airport and Montauk Airport. Seaplanes are prohibited from seven waterways throughout the Town including Three Mile Harbor, Fort Pond, Northwest Creek, Napeague Harbor, Wainscott Pond, Georgica Pond and Hog Creek. Exceptions are provided for in flight emergencies or medical, police or military emergencies. Penalties for violations are specified.

Chapter 75 – Airport

Local regulations specify that all aircraft operations shall conform to FAA regulations as well as local regulations. The regulation prohibits negligent operation and requires extreme caution and vigilance. In the event of an accident, the airport manager shall be notified. Disabled aircraft and vehicles must be removed. The ordinance provides for suspending an operator's right to use the Airport as a consequence of performing "unsafe, low or noise-provoking" maneuvers. The airport manager shall specify areas for loading and unloading of passengers, use of vehicles or pedestrians. Aircraft shall have the right of way over all ground vehicles. The use and operation of ultra light vehicles is prohibited. During taxi and start up, all aircraft must avoid damage due to turbulence, or exhaust blast. Aircraft must be kept under full control at all times and towed in the event that safety concerns exist.

Landing fees are specified for corporate, revenue producing and non-commercial single engine and twin engine aircraft, greater or lesser than 12,500 pounds ranging from five to 100 dollars.

The ordinance specifies terms of use for engine operation, use of runway and taxiways, operation by authorized individuals, care in operations, limiting taxiing speed, preflight run-ups, holding areas, and refueling and fuel storage practices. It specifies approvals for fueling trucks, restrictions to prevent fires, proper response to fuel spills and handling of hazardous materials, sign posting, and conformance of commercial activities to local and FAA regulations.

Penalties include suspension of airport use rights for 90 days and monetary fines.

Article II of Chapter 75 provides for public hearings concerning airport improvements and internal reviews of any airport improvements for consistency with the current Master Plan or Airport Layout Plan.

Chapter 185 – Noise (currently being amended)

This Chapter provides provisions for noise control within the Town.

Specifically prohibited are excessive noise emissions that may cause hearing loss, injure public health, cause a nuisance, exceed specified exposure standards or interfere with the comfortable enjoyment of life. Loud speakers and PA systems may not be operated between 9:00 PM and 9:00 AM, barking dogs must be controlled and excessive idling by stationary vehicles is prohibited. Noise pollution is generally prohibited.

Standards that apply at the property lines in residential districts allow a maximum of 65 dBA during the 7:00 AM to 7:00 PM day period and 50 dBA during the overnight period. Equivalent standards in octave bands are also provided.

Standards that apply in commercial or industrial districts are five decibels higher or 70 dBA during the day and 55 dBA during the over night from 7:00 PM to 7:00 AM.

Exceptions are provided for indoor and outdoor service equipment and construction activities between 7:00 AM and 8:30 PM, agricultural activities from 6:00 AM to 8:00 PM, alarms, church bells, properly equipped motor vehicles, snow removal equipment, emergency signals and athletic or recreational activities on Town property. Also exempted are organized civic activities, noise from properly equipped aircraft, fireworks, carnivals and parades, public speaking, emergencies or utility repairs.

Monetary penalties are specified and range from $50 to $1,000.

ii. Comprehensive Town Planning Issues

The Town of East Hampton Comprehensive Plan, May 2005 was the product of a four –and-a-half year effort involving two administrations of the Town Board several planning consultants, the Town Planning Department, the Town Department of Natural Resources, the Town Office of Housing and Community Development, the Town Attorney's Office and special counsel, Seventeen Comprehensive Plan Subcommittees, numerous business, civic citizen, professional and environmental organizations and the community at large. The Vision Statement articulating the overall image of what the community would like to be is excerpted below:

"East Hampton is defined by the unique character of its hamlets, villages and countryside. East Hampton's beaches are rated among the world's best. The land supports one of the highest concentrations of rare and endangered species in New York State. The farmland is rated the best in the state. The Nature Conservancy has designated the area as one of the "Last Great Places" in the Western Hemisphere. The woodlands are diverse and healthy where they are undisturbed. The harbors and bays are among the cleanest in the state. The Town is rich in historic and cultural resources. Development has not obliterated the natural and scenic characteristics once covering all of Long Island.

The Town treasures and is committed to sustaining this rich array of natural and cultural resources, authentic sense of place, rural character, and the people who make it unique. East Hampton is and will continue to be a "green" community, a leader in protecting the environment, saving energy and preserving open space. Future development should be

harmonious with the existing character of the community. Residents and visitors should have the option to use alternative transportation (train, bus, shuttle, walk, bike, etc.) as an alternative to their cars for daily needs. A diverse population should continue to have opportunities to engage in a variety of livelihoods ranging from traditional agriculture and fishing to clean technology and the arts. The seasonal economy of second homeowners and visitors, based largely on the pristine natural and rich cultural resources, helps support a vibrant, diverse year-round community and should be encouraged to continue. Although real estate continues to become very expensive, the Town's affordable housing programs strive to enable long-time residents to retire and year-round employees to live here. East Hampton is and should continue to be a wonderful place to live, work, raise a family, enjoy life and connect with the natural environment."

Recommendation #72 of the Comprehensive Plan specifically pertains to the East Hampton Airport: "Develop and updated Airport Master Plan acceptable both to aviation interests and the local community with an emphasis on safety and noise abatement." Another recommendation pertaining to a portion of the Town Airport land holdings is contained in the **Plan for Wainscott** section of the Comprehensive Plan, as quoted below:

" The 107.3 acre undisturbed Town-owned parcel adjacent to Daniel's Hole Road, currently zoned Commercial Industrial (CI), is not currently nor should it be used in the future for airport or commercial purposes, but should remain as part of the core groundwater protection area. It is part of the contributing area to the largest capacity SCWA well field in East Hampton and is part of the largest contiguous block of the Pine Barrens Site Type in the entire Town. Rezoning this parcel from CI to Parks and Conservation should be considered after completion of the updated Airport Master Plan and consultation with the Federal Aviation Authority (FAA)."

iii. Noise Abatement

The discussion below comprehensively reviews candidate noise abatement strategies at East Hampton Airport including those made in the past that have been implemented, those that

may be studied further during the planning process, and those that may be contemplated in the future as circumstances change.

Basically, there are only three physical strategies that can be used to reduce the adverse effects of aircraft noise in adjacent community areas. First, the source noise can be reduced, such as has occurred through improvements in propulsion technology or result from thrust management procedures. Second, the distance between the source and the receiver can be increased such as by relocating flight tracks. Third, the receiver can be protected such as with increased structural noise attenuation. While none of these measures are perfect solutions, all can be helpful in achieving an optimal mix.

Many additional noise abatement recommendations are rooted in two other areas. First, airport traffic must be monitored and analyzed. This provides a record for public scrutiny and understanding, facilitates interactions between airport management and the user community, objectively documents movement data over the long term and otherwise permits a factual portrait of real world circumstances. Second, a program of communications and accountability must be created. This permits the registration of noise complaints, communications with the user community, publication of records and recommendations, and fosters continuing improvements in program development based on perceived needs.

Noise Abatement Recommendations – HMMH

Earlier in the noise abatement planning process, a series of recommendations were advanced by Harris, Miller, Miller and Hanson. These included the deployment of an aircraft monitoring and tracking system, Air Scene by Rannoch Corporation. This system includes the integration of noise monitoring data to associate specific aircraft movements with observed noise levels. This system was installed in 2005 and has been operational since although incorporation of field noise measurement data has yet to be implemented.

Other HMMH recommendations included increasing helicopter altitudes to 2,000 feet which has been implemented along with a revised departure route shown elsewhere in this document.

HMMH recommended publication of a noise abatement advisory insert page for fixed wing pilots detailing the National Business Aircraft Association close thrust management departure procedure, detailing voluntary restrictions during the night period, voluntary limits

on touch and go operations during the night period, and notices of the monitoring system installation and contact information for the airport.

They also recommended the publication of sound insulation guidelines, continuing liaison with the Noise Abatement Committee and retaining a trained noise abatement officer.

Airport Noise Abatement Advisory Committee

The Airport Noise Abatement Advisory Committee has considered at length a variety of noise abatement recommendations. These include many that were advanced by HMMH and as well as others.

Under actions requiring no further analysis, they have recommended the hiring of a noise abatement officer, endorsed the establishment of a flight tracking and noise monitoring system, and the installation of an Automated Weather Observation System (AWOS). The AWOS is also endorsed by the Airport Manager as it will allow a re-designation of the airspace between 700 feet mean sea leve MSL and ground level in areas around the airport. Recently, the Committee has unanimously endorsed the establishment of a seasonal control tower subject to eventual review to establish that it is not growth inducing.

They have also recommended consideration of a number of measures that require additional research. These recommendations include development of alternative helicopter routes, consideration of a displaced threshold on Runway 28, and consideration of the traffic implications of rehabilitating Runways 4/22 and 14/32.

The Committee recommends study of the use of differential landing fees to discourage use during the night period and other management techniques for heavier and noisier aircraft. Similarly, the Committee recommends consideration of an FAR Part 161 Study for the establishment of restrictions on Stage 2 aircraft both fixed wing and helicopters. They also recommend investigation of a night curfew on operations and a ban on Touch and Goes on summer weekends and continuing efforts to discover new and more effective techniques for noise control. They also recommend consideration engine run up enclosures and designated locations for maintenance engine run ups.

Other Noise Abatement Techniques

There are a variety of strategies for noise abatement that have been utilized by airports both domestically and internationally. The most common include the following:

Preferential runway use is employed in circumstances where clear differences in land use compatibility permit diverting traffic to the runway or runway ends that have the highest degree of compatibility. Similarly, rotational runways use can be used to avoid excessive noise impact in particular neighborhoods.

Noise abatement flight tracks can be used in certain circumstances to avoid over flying sensitive community areas. Similarly, traffic pattern altitudes can be raised or in some cases relocated to avoid over flight of sensitive areas.

Single event noise limits have been used at some airports. This techniques uses established hierarchical rankings of aircraft by noise level such as published by the FAA to determine the maximum allowable noise emission levels by aircraft, typically measured at the approach measurement point approximately one nautical mile (2000 meters) from the runway end. The installation of a permanent noise monitoring system allows for establishment of a single event noise limit based on a continuing measurement basis, i.e., it allows pilots to fully exploit quiet flying techniques and provides direct feedback to the pilot about actual noise emission levels.

Prior permission rules are used to screen out aircraft that are excessively heavy and noisy, to permit the distribution of noise abatement recommendations prior to arrival, and to otherwise regulate access on a case by case basis. Often, prior permission rules are used in combination with weight limits to discourage use by heavier vehicles thereby reducing pavement wear and attendant maintenance costs.

Voluntary restraints are commonly used to discourage night period traffic. An important concept in reducing noise impact stems from the use of voluntary agreements of differing kinds. What may be difficult to achieve through regulation can, in some cases, be achieved through informal agreements among airport users. This can be especially effective at smaller airports where the community of users is of limited size.

Federal procedures under FAR Part 161 govern the adoption of airport access restrictions. Conformance with these procedures is recommended when the objective is the regulation of Stage 2 aircraft including helicopters. While it is expensive to formally comply with these regulations, Stage 2 aircraft, which are typically much noisier than aircraft that comply with the lower noise emission limits embodied in Stage 3 and Stage 4 regulations, cannot be over ridden by federal authority once the procedural requirements are satisfied.

Land use regulation for areas around airports can be used to guide sensitive uses away from areas under flight tracks or in airport adjacent areas.

For certain aircraft, there are various hardware modifications such as multi bladed propellers or hush kits in the case of older turbine powered aircraft to reduce noise emission levels. There are a variety of flight techniques as well that can reduce the adverse impact of aircraft noise.

There are a variety of additional techniques that have been commonly used in the past at air carrier airports although these are of limited application at East Hampton. These include noise budgets, quotas or other restrictions on cumulative noise levels, and formal or informal curfews. These techniques have largely been prohibited under current federal regulations since loss of federal grant support is the typical direct consequence of the adoption of prohibited restrictions. The East Hampton Airport may become independent of federal support in 2014, making these prohibitions on access restrictions moot. Caution is advisable in considering the freedom that this eventual independence may allow since it has been recognized that even in cases where environmental considerations merit restraints on interstate commerce, these must be reasonable, non arbitrary and non discriminatory. Generally, local authority is prohibited from placing undue burdens on interstate commerce.

In determining the techniques and specifications for noise abatement measures, an exclusive prerogative of the airport proprietor, the following guidelines are recommended. First, it must be understood that there is no perfect solution and unwanted effects on adjacent land uses are unlikely to be entirely eliminated. The objective then becomes one of obtaining the greatest degree of utility with the least resultant environmental impact. Second, noise abatement planning is sequential beginning with the least restrictive solutions and eventually considering more aggressive strategies only when lesser measures fail.

iv. Scoping Recommendations and Complaints

In preparation for the Master Plan and EIS exercise, a scoping session was held at 4:00 PM on January 25, 2005 at the East Hampton Town Hall meeting room. The full proceedings were video taped for reference.

The consulting team consisted of Tom Murray, Savik and Murray, Mr. Robert Grotell of DY Consultants and Henry Young of Young Environmental Sciences. Mr. Murray introduced himself and the two other team members. Robert Grotell summarized the steps in the master planning process and Mr. Young explained the environmental procedures.

A total of 19 local individuals spoke. Generally, four speakers supported the airport and its expansion, and 15 were concerned about a series of environmental and growth issues, primarily aircraft noise. The noise abatement committee presented an extensive formal review of concerns and recommendations for consideration.

Airport supporters drew attention to the economic benefits at the airport, support for local businesses and the vital air transportation services that the airport provides. There was continuing support for retaining Runway 4/22 and federal financing. There were concerns about the extent of local sponsorship. One commenter stressed the potential for integrating the airport into an intermodal transportation program.

Environmental concerns related primarily to aircraft noise and growth. East Hampton residents were concerned about fixed wing aircraft noise whereas Southampton residents stressed helicopter noise. Other issues mentioned included the sole source aquifer below the airport, adequacy of fire protection, growth trends over the last decade, the potential for further runway extension, the intensity of summer weekend noise, vibrations from helicopters, and low flying aircraft.

Several speakers expressed concern about costs and financing alternatives. Several speakers praised the inclusion of Southampton residents. Other individual concerns included the technique of noise analysis, consideration of a lower weight limit, and the establishment and enforcement of arrival and departure routes for helicopters. The meeting concluded at approximately 7:00 PM.

Chapter II - Background and Long-Term Future Planning

A. Airport Role

Airport Role Statement

The Role Statement for the East Hampton Airport articulates the intended functions, values, priorities and governing principles that will apply to the facility. The role statement provides a general description of the type and function of the airport without specifying the regulations. While non-binding, the role statement provides a framework for decision making, helping to define that which is "in bounds" from what is "out of bounds." It can serve as a reminder to both the airport user community and the adjacent residential community that there is a reasonable, non discriminatory body of principles which are being use to shape public policy now and in the future.

The East Hampton Airport is owned, maintained and operated for the benefit of the Town and its residents. The airport continues to be classified as a General Aviation Airport under federal criteria. Its primary role is the accommodation of light aircraft traffic. Aircraft operating at greater weights will be accommodated on condition without unjust discrimination. The airport is also managed with the objective of providing emergency access and facilitation of all other public and community responsibilities. The size and operation of the airport takes into consideration the needs of East Hampton and Southampton residents for protection from excessive noise disturbance and adverse environmental impacts.

The Town is committed to observing the highest standards of safety, and efficiency and observes all appropriate federal and state standards in terms of layout, operation and maintenance. The facility shall not be allowed to deteriorate, but instead shall be improved and maintained in an exemplary manner to best serve light aircraft.

East Hampton Airport is located in an environmentally sensitive area overlying the largest high quality drinking water resources in the entire town. Several of the largest capacity public water well fields are adjacent to the airport. This natural resource merits long term protection through restraints on the extent and intensity of airport development and utilization.

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 honors all reasonable obligations to the airport user community through customary due process without constraints except those that diminish the health, well being, and welfare of the community. The Town may from time to time establish and enforce such regulations as are needed to balance these conflicting goals. These actions will be within the envelope of existing federal procedures. This will preserve the opportunities for the user community to negotiate acceptable solutions and adjust to forthcoming changes in an orderly manner without imposing financial hardships.

The Town endeavors to operate and maintain the airport as economically and efficiently as possible with the costs of doing so being fairly allocated among those users who benefit from its utility; self sufficiency being the preferred management objective. However, recognizing the vast long term benefits associated with environmental conservation of the area, a degree of public support may be incumbent upon the Town. Thus, certain public resources may be needed to augment the income derived from transportation related fees to assure continued protection of the local community residents as well as the land and water resources themselves. This shall be a local public responsibility unaltered by the prospective availability of federal, state or private resources. The airport shall have a complimentary goal of facilitating economic improvement through support of education, commerce and industry consistent with the maintenance of the highest standards of long term environmental quality and quality of life for existing as well as future citizens.

B. Off-Airport Considerations

1. Land Use

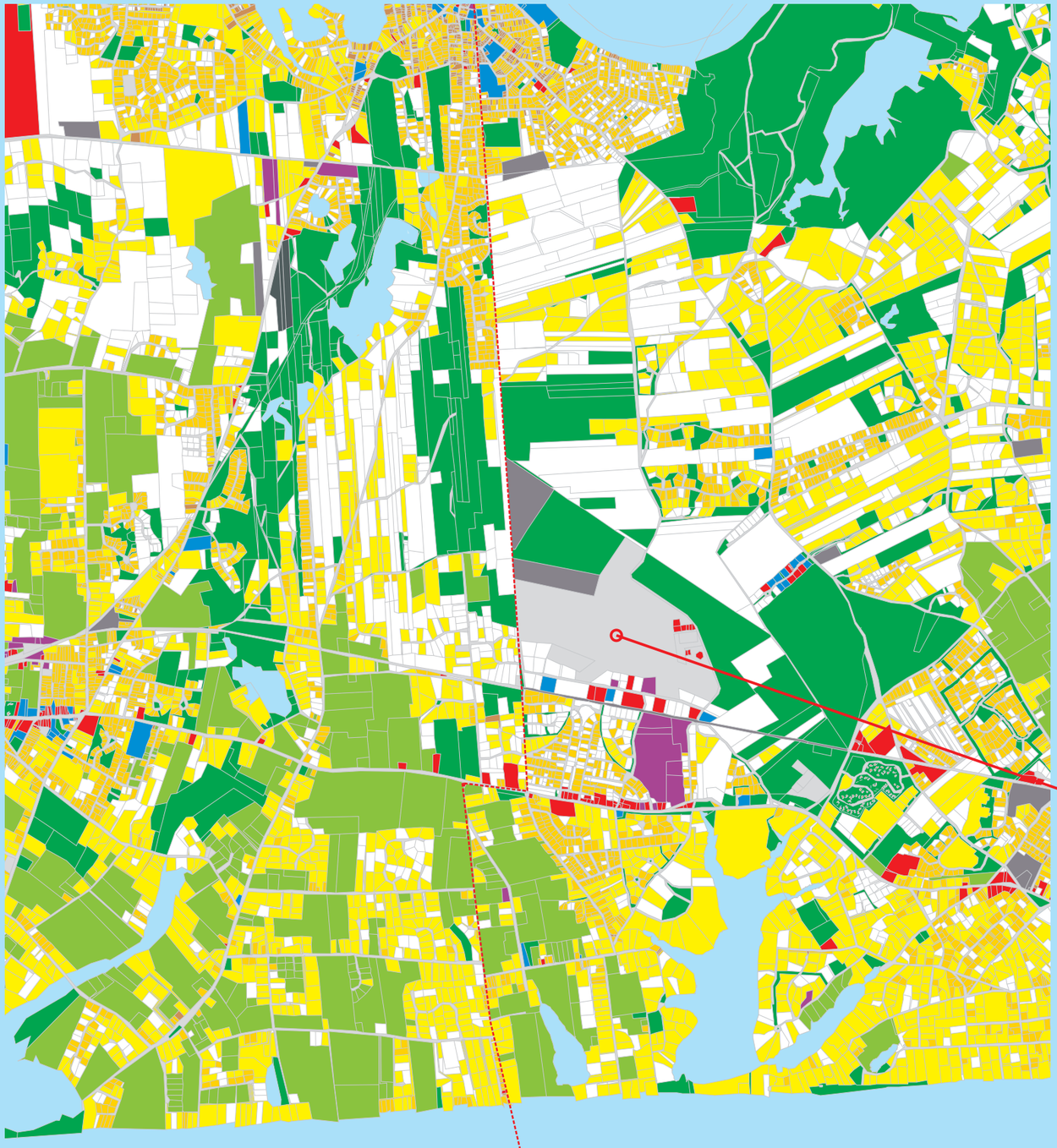
East Hampton Airport is located in the Hamlet of Wainscott, which is the western gateway to the Town of East Hampton. It extends from the Village of Sag Harbor to the Atlantic Ocean. Wainscott is the smallest of all planning areas in East Hampton and with 20.63% of its area vacant, has the highest percentage of vacant land. Residential and protected open space each comprises approximately 27% of the land area, as shown in Figure II-19.

The greatest intensity of development is concentrated within a core area between the railroad tracks and Montauk Highway. To the north of the development core is the Town Industrial Park which will be discussed further in Chapter III, and the Airport. Bordering the Southampton Town Boundary to the northwest of the Airport is a public well field and a future water tower site. Two active well field sites straddle the border of Wainscott: one at the boundary with the Village of Sag Harbor and the second along NYS Route 114 opposite Goodfriend Drive.

The land to the north of the Airport represents the Town's largest block on intact Pine Barrens Woodlands. Most of Wainscott's preserved and vacant areas are within this area. These woodlands overlie the Town's deepest and largest area of groundwater recharge. There are a handful of light commercial industrial uses situated in two subdivisions extending into this woodland block.

TOWN OF SOUTHAMPTON

TOWN OF EASTHAMPTON



LAND USE

Town of East Hampton
Suffolk County, New York

... LEGEND ...

- Low Density Res.
- Med Density Res.
- High Density Res.
- Commercial
- Industrial
- Institutional
- Rec Open Space
- Agriculture
- Vacant
- Transportation
- Utilities
- Waste Handling & Mgt.
- Surface waters

Scale: 1 inch = 1.5 miles

SUFFOLK COUNTY Planning NEW YORK

STEPHEN M. JONES
Director of Planning

LOCATION MAP

Fig II-19

February, 2001

2. Ambient Sound

Ambient sound refers to the level of sound that occurs at a given site and may include a variety of transportation noises. The background sound level is that which exists in a given setting absent the distinguishable event related noise. Statistically, the L90 level is customarily chosen as the key level reported by a sound level meter that defines the background level. This is the numerical level that is exceeded 90 percent of the time during a monitoring session. This number is variable and is dependent upon the location and duration of the noise monitoring period. Typical residual noise levels may be as high as 50 to 55 decibels in residential locations that are in a village setting, 40 to 50 decibels in suburban style residential neighborhoods and as low as 30 to 40 decibels in rural residential locations with substantial setbacks from the roadside and large separation distances from adjacent homes. Isolated homes may show L90 levels as low as the mid to high 20 decibel range.

Ambient sound levels may drop as much as 10 decibels at night. These sound levels are influenced primarily by mechanized noise including motor vehicles, yard equipment, air conditioners, and other human activities. Naturally occurring sounds such as birds, animals, insect life, wind, rain, leaves rustling, and water movement will also be included in noise monitoring samples setting a floor of 25 to 50 decibels. These levels actually contain very little energy and there may be significant variation without greatly changing the individual's perception of the acoustical environment. Further, since natural sounds may actually be valued by local residents, these levels may not represent an unwanted element in the acoustical environment. A bird song may register on the sound level meter but might not fit the definition of noise which is unwanted sound.

It is reasonable to assume that regardless of location within the Town, ambient sound levels are low in comparison to more densely developed and much more widespread residential areas in the region. This low level has several important influences on the residential listener. First, because of the generally low ambient, mechanical noises including aircraft can be intrusive even at relatively low peak noise levels. Since there are few competing sounds, transportation noise of all sorts will be perceived to have a longer duration since relatively little sound masking occurs. Finally, even when relatively few noise events occur and their peak intensity is modest, on a cumulative basis transportation related noise may dominate the acoustical environment, i.e., exceed all other sources combined, at a surprisingly low numerical level. Thus, considerable adverse reaction can be expected to

transportation noise even at very low threshold levels contrary to expectations derived from surveys in relatively urbanized areas. In many residential areas of East Hampton and Southampton, residents' expectations may resemble those of users of a national park or rural recreation area more than a suburban or urban neighborhood.

The results obtained during past noise monitoring studies in the East Hampton are discussed below.

2003 Noise Monitoring Exercise

A total of seven sites were monitored in early summer 2003. These were extensive and lengthy exercises, a minimum of six days and a maximum of 14 days at the individual sites. A thorough set of statistics were accumulated including the L90 statistic, the customary index of the ambient, at each of the seven sites. The exercise also included noting the L1 or top one percent of the noise samples and similarly the L10, and the L50. The results were reported in a series of graphs for each site. While this graphic display does not show specific numerical values, throughout the data, the L90 and L50 levels are relatively closely spaced. This means that that for over half of the total monitoring time, the sites predominantly quiet absent aircraft or other intermittent sound. Generally, all sites showed a low ambient with some site showing exceptionally low values.

A second, even more extensive effort was accomplished in late August covering ten sites an addition of three sites to the original seven studied previously. The length of the monitoring period was generally less in the second set of measurements. A site by site review of the ambient sound environment is provided below.

Site 1 – 11 Highview Drive, Wainscott

During early summer, the L90 at this site showed highs in the 32 to 55 decibel range with lows in the 20 to 28 decibel range over 14 days of monitoring. Somewhat higher levels were found six days of monitoring during the late summer. L90 highs were found in the 40 to 50 decibel range while lows were in the 24 to 30 decibel range. This is characteristic of a quiet rural residential site with occasional loud events from helicopters. L90 levels below 30 decibels are exceptional.

Site 2 – 93 Merchants Path, Bridgehampton

During the 12 days of early summer measurements, L90 highs were in the 40 to 56 decibel range while reported lows were in the 30 to 40 decibel range. Six days of monitoring in the late summer readings were higher with maximum L90 levels in the 51 to 58 decibel range with lows ranging from 40 to 46 decibels. Although slightly higher readings were obtained during the quieter periods of the day than at Site 1, the result are similar, i.e., a very quiet ambient.

Site 3 – 244 Widow Gravitts, Bridgehampton

This was the site of 13 total days of measurement in early summer. Located in the rear yard of a residence, the highest L90 readings were found to range from 38 to 58 decibels. Lows ranged from 20 to 35 decibels with the majority below 30 decibels. Late summer readings were again found to be higher than in early summer; l90 highs in the 51 to 58 range and lows in the 40 to 45 decibel range.

Site 4 – 75 West Gate, Wainscott

This site, the backyard of a residence, was noted during the first round of measurements to have considerable background noise from nearby construction activities. During the 13 days of monitoring, L90 levels were found to range from highs of 39 to 56 decibels and lows of 25 to 33 decibels. Higher readings were found during the second six day round of measurements; L90 highs in the 52 to 58 decibel range and lows in the 38 to 43 decibel range. These measurements, while slightly higher than the previous sites, were consistent with a subdued ambient sound level.

Site 5 – Georgica Estates Tennis Courts, East Hampton

This site is a recreation area where noise monitoring was conducted for a ten day period in early summer and a ten day period in late summer. L90 high range readings were 45 to 55 during early summer with lows in the 35 to 45 decibel range. Late summer readings were the 42 to 54 decibels at the highest and 27 to 34 decibels at the lowest. These are essential the same during both periods and consistent with the other sites, very quiet.

Site 6 – Ross School Athletic Fields, Wainscott

This open grassy field was not in use during either the initial six days or the final two days of monitoring. Given the absence of sound sources, the site showed highs in a lower range than previous sites, 35 to 44 decibels during early summer and 52 decibels during follow up measurements. Lows were in the 29 to 38 decibel range during early summer and 40 during the latter measurement period.

Site 7 - 136 East Main Street, East Hampton Village

This site is more urban than the previous sites selected. It was monitored initially for six days and subsequently for a second six day period. During early summer maximum L90 levels ranged from 43 to 52 decibels and the lows ranged from 37 to 43 decibels. Similar results were obtained in late summer with maximums ranging from 45 to 58 decibels and lowest L90 readings ranging from 38 to 44 decibels. While somewhat higher ambient sound levels were found at this site almost certainly due to its more urban location, it would still be characterized as a typically quiet residential site.

During the second round of monitoring, three additional sites were canvassed.

Site 8 – Town Line Road

This site, very close to the end of Runway 10/28 was chosen as an ideal location for aircraft monitoring and observation. During six days of monitoring, the L90 highs ranged from 48 to 53 while lows ranged from 35 to 40 decibels. While a slightly high ambient existed at this site than many others, it remained relatively quiet.

Site 9 – Greenleaf Lane, Wainscott

This residential site was monitored for six days. L90s showed highs in the 48 to 58 decibel range and lows in the 39 to 42 decibel range. These results were somewhat higher than at other residences and more typical of a suburban rather than rural environment.

Site 10 - 44 Woodruff Lane, Bridgehampton

A total of five days of readings were accumulated at this residence. Consistent with other home sites, L90s at their maximum ranged from 42 to 52 decibels and lows ranged from 29 to 43 decibels.

2006 Airport Noise Monitoring Program

A series of sites were monitored during the summer of 2006 using the Solo Data Logging Integrating Sound Level Meters furnished with the Rannoch Air Scene aircraft tracking equipment. These instruments were programmed to obtain one second long average noise level readings in A weighted decibels on the slow response setting. Using supplementary batteries, these units were deployed at a series of sites for as long as five to six days. The resulting data files were transferred to Excel software which was used to obtain four measurements. The first was a series of time history graphs allowing a visual inspection of noise level data broken into six hour long blocks. From these readings the long term average sound level was calculated (Leq), the Day Night Average Sound Level (DNL or Ldn) was calculated and the data was sorted to obtain the L90 level for each six hour data array. Each of these exercises resulted in a series of graphs and data summaries shown in Appendix C. The results are summarized below.

8 Oak Drive North, Noyac

Monitoring took place on July 14 through July 16. Peak noise levels were found to be in the high 60 to low 70 dB range. The long term average was 46.9 dB and the Ldn was 50.5. L90 levels ranged from a low of 26 dB to a high of 40.6 dB. These represent exceptional low background noise levels.

Georgica Estates

Noise monitoring began on July 28 and ended on August 4. Peak noise events were frequent usually in the 60 to 70 dB range, but with occasional peaks above 80 dB. The long term average sound level was 48.8 dB and the Ldn was 53.7 dB. The L90 background noise level ranged from 37.3 dB to 45.8 dB.

179 Northside Drive, Noyac

Monitoring commenced on July 29 and ended on August 2. Peak noise levels were primarily in the 60 dB range with occasional peaks above 70 dB. The long term average sound level was 47.2 dB. The Ldn was 51.6 dB. The L90 levels ranged from a low of 37.5 dB to a high of 41.5 dB.

2229 Deerfield Road, Southampton

Noise monitoring began on August 31 and was completed on September 4. Peak noise events were recorded from the low to mid 60 dB range with occasional peaks in the low 70 dB range.

50 Mill Hill Lane, East Hampton

Monitoring began on July 14 and ended on July 18. Peak noise levels were primarily above 70 dB with occasional lower readings in the mid 60 dB range. The long term average (leq) was 49.0 dB. The Ldn was 59.9, a relatively high reading. The L90 levels ranged from a low of 33.1 dB to a high of 43.7 dB.

East Hampton Airport

Noise levels in the Runway 10 Approach and the Runway 28 Approach were measured simultaneously from August 24 to August 28. As might be expected noise levels were considerably higher than at residential sites. Peaks for the Runway 10 Approach were consistently above 90 dB. Peak noise levels for the Runway 28 Approach were even higher, consistently above 90 dB with occasional peal levels as high as 110 dB.

For the Runway 10 Approach, the measured Leq was 61.7 dB and the Ldn was 65.3. These levels are clearly being influenced by overflying aircraft and occasional on airport aircraft sound. The background noise levels remained low, consistent with residential locations, with a low of 33.1 dB and a high of 43.7 dB.

The Runway 28 Approach showed similar levels. The long term average (Leq) was 64.8 dB and the Ldn was 65.6. Background (L90) noise levels were also consistent with other sites with a low of 39 dB and a high of 44.1 dB.

Summary

All monitored sites showed relatively low background readings as would be expected in a predominantly rural area or low density village. Some variations occurred between monitoring sessions at the same site. However, these are variations involved comparatively small amounts of energy and may result from slight differences in the equipment used. Sound level meters vary more than might be expected due to such factors as internal noise, differences in temperature and humidity, and factors such as human activities and animal and insect sounds. Regardless of these minor differences, every site showed low ambient noise levels at both the high and low end of the ranges measured. All these sites including two on the airport itself would be considered quiet and predominantly rural. For example, outdoor background noise levels were consistently below levels that are suitable for a bedroom environment, i.e., below 45 dB.

C. Local Transportation System

1. Relationship to Airport

The Town of East Hampton owns and operates the airport. The ground transportation system that provides access to the Airport consists of highways, railroads, state routes and public roads. The Airport's main entrance is on Daniels Hole Road located off NYS Route 27, Montauk Highway.

2. Inter-modal Hub

Yearly increases in summer season traffic congestion are a significant problem facing the Town of East Hampton. According to the Town of East Hampton Comprehensive Plan the Town must look to other modes of travel, particularly rail and bus, to accommodate the increased summer population and manage the overwhelming demand on its roadway system.

Recommendations included long-term parking areas, a railroad terminal, bus depot, and freight depot and discharge area would offer practical alternatives to various traffic generators throughout Town. This would likely involve the development of a parking area on the southern end of the Airport property adjacent to Daniels Hole Road and development of a railroad terminal. Those departing the area either by train, bus or by air could park their cars at the transportation center. Taxi and bus service would complement the accessibility of the facility.

While the above-mentioned recommendations have been discussed by various Town Citizen Advisory Committees and background documents contributing to the officially adopted Town of East Hampton Comprehensive Plan, the only consensus on this issue reached after the 4 ½ year planning effort was that the Town should coordinate with other agencies and transportation providers to provide improved public transportation with greater interconnectivity and that further evaluations of concepts such as transportation hubs need to be conducted.

D. Design Aircraft

Airports and their associated runways, taxiways, and terminals are not arbitrarily designed nor developed. Typically they have been or will be designed to accommodate the needs of the most demanding type of aircraft that is likely to use the airport and one that is consistent with the Airport's role within the community. This should generally be done by determining the design aircraft or, more formally, the critical aircraft; which for planning purposes will typically be the most demanding aircraft that has 500 or more itinerant operations annually or has scheduled service. Itinerant operations again are defined as based aircraft (airport tenants) or transient aircraft (non-tenants), including air taxi and charter operations, flying in excess of 20 nm to or from East Hampton Airport.

It is important to understand that choosing a particular Airport Reference Code (ARC) and a design aircraft does not restrict aircraft that fall into a higher design category from operating at the Airport. The ARC is used for planning purposes when determining the ideal design for the airport for that category. It is a standard set by the FAA for airport design and does not govern a pilot's actions. Aircraft currently using the Airport are in excess of the A-II criteria. They are still operating at the airport based on performance and operational adjustments of the aircraft.

Careful consideration must be given when selecting a realistic design aircraft. The design criteria for the entire airport will be based upon it. This selected aircraft, or list of aircraft that are similar in nature, will be evaluated for their runway length demands, impact on the community, etc. Criteria associated with the physical and operational requirements of the critical aircraft to airport design standards are organized into the concept of the ARC. The ARC is derived from two different components of the critical aircraft, its size and speed. Specifically, the wing span and the approach speed of the critical aircraft when landing. The criteria have been established by the FAA in Advisory Circular 150/5300-13 "Airport Design" and are outlined in Table II-22 as follows:

TABLE II-22
AIRPORT REFERENCE CODE CRITERIA

Aircraft Approach Category	Approach Speed	Airplane Design Group	Wingspan
Category A	Less than 91 knots	Group I	Less than 49 ft.
Category B	91 knots up to but not including 121 knots	Group II	49 ft. up to but not including 79 ft.
Category C	121 knots up to but not including 141 knots	Group III	79 ft. up to but not including 118 ft.
Category D	141 knots up to but not including 166 knots	Group IV	118 ft. up to but not including 171 ft.
Category E	166 knots or more	Group V	171 ft. up to but not including 262 ft.

Source: Federal Aviation Administration Advisory Circular 150/5300-13 Change 10 *Airport Design*.

There are a number of alternatives with subsequent aeronautical impacts that can be assessed to determine what ARC and critical aircraft would best suit East Hampton Airport. The Town of East Hampton, as owner and operator of the Airport, can choose to maintain the current conditions otherwise known as the "do nothing approach." This would entail retaining the current ARC designation of A-II with the Twin Otter as the critical aircraft, as per the last approved Airport Master Plan.

Another option would be to select a classification based on current usage of the Airport. Based on customary industry practices and interpretation it is understood that the ARC can not be decreased at this point in time due to federal grant assurances obligating the Airport to maintain its current availability to the flying public.

For example, aircraft are being flown at weights lower than their full capacity to allow them to utilize the existing length of the runway. This decision is made by the pilot after consideration of aircraft performance characteristics and operational capabilities is made. However, this does not usually mean that selection of a critical aircraft is a meaningless effort. Imposing a specific set of design requirements will ensure that there are no uncertainties pertaining to the safety standards that must be maintained by the airport.

The following is a listing of design aircraft under consideration for East Hampton Airport. These airplanes are being considered based upon historical factors, future trends, existing condition, and local community impacts.

Design Aircraft Alternative # 1-"Twin Otter"
Existing Design Aircraft

Taken from the last adopted and approved 1989 Airport Master Plan, it is understood that the current ARC selected for East Hampton Airport is A-II. This determination was based on the acceptance of the DeHavilland DHC-6, otherwise known as the Twin Otter, as the critical aircraft. The Twin Otter was certificated in the mid 1960's, has an approach speed of 75 knots and a wingspan of 65 ft., and is capable of holding up to 20 passengers. It was considered the most demanding aircraft using or expected to use the airport in 1989.

FIGURE II-20
TWIN OTTER

Source: Photo by Richard Hunt, UK1989

Jets were not considered from a facilities requirement standpoint due to lack of accommodating pavement. More modern jet aircraft require longer and wider runways due to performance characteristics such as higher approach speeds and more formidable pavement strengths due to heavier operating weights. In 1989 the runway characteristics were as described in Table I-23 below.

TABLE II-23
AIRFIELD SPECIFICATIONS IN 1989

Runway	Length (ft.)	Width (ft.)	Weight Bearing Capacity (lbs.)
10-28	4242	75	Single Wheel 8,000
16-34	2220	75	Single Wheel 8,000
4-22	2501	75	Single Wheel 8,000

Source: 1989 East Hampton Airport Master Plan

The weight bearing capacity is likely to have had the most substantial impact in deterring jet aircraft at the time. This value is a realistic estimate of how much weight the pavement of a runway, taxiway, or parking apron could handle without being adversely impacted under normal conditions and levels of activity. Typical jet aircraft have gross weights much heavier than 8,000 lbs. Today, the pavement on Runway 10-28 has a Single Wheel Weight Bearing Capacity of 60,000 lbs. and it is understood that many of the taxiways and aprons are strengthened for such heavier aircraft. The width of Runway 10-28 was also increased from 75 ft. to 100 ft. This width may be associated with the design criteria for ARC B-II runway that has an instrument approach with visibility minimums less than ¾ mi. or a critical aircraft that falls in Design Group C or higher.

Currently the Twin Otter does not accurately represent the definition of the critical aircraft for East Hampton Airport. Moreover, the aircraft fleet mix at today at the Airport is also much different than it was in 1989. It is understood that the regular charter service provided by the Twin Otter at the time ceased operating many years ago and the demand was likely absorbed by more modern aircraft. Industry trends could also be an important factor in understanding the increased presence of larger, faster, jet aircraft at East Hampton Airport. Since the 1980's, jet aircraft have become more technologically advanced, readily available, affordable, and thus popular. Trends in general aviation appear to show a preference for use of private jets for conducting business or tourism, especially in the post September 11th era. Charter companies have capitalized on this by marketing the concept of "Fractional Ownership," which is essentially timeshare purchases in private jets. NetJets and Citation Shares are two such companies with a varied fleet of jet aircraft that frequently operate at

East Hampton Airport. Additionally, the economy, affluence of the local community and its residents, and increased popularity of the area for summer housing and tourism are some possible reasons for the upgrade in fleet mix and the increased use of the airport. The industry has changed since the 1980's. In summary, jet aircraft in the past two decades have appeared to dominate the particular facet of the general aviation market that has developed to support the demand for transport and access to East Hampton and its adjacent communities.

Facilities Implications of the Twin Otter

As already stated, the selection of the critical aircraft should be consistent with the Airport's role within the community. The decision to maintain the Twin Otter as the critical aircraft is indicative of support for the "do nothing approach". If is chosen, only the present design standards that pertain to ARC A-II/Twin Otter combo would need to be maintained. However, it is understood that the present Runway Safety Area lengths for runway 10-28 and 4-22 do not meet standard, as they are intercepted by Daniels Hole Road. Several concepts for mitigating this present deficiency will be present later on in this study.

Design Aircraft Alternative # 2-"Challenger 600"
Design Aircraft of 1994 and 2002 Master Plans

Prior to this study, it is understood that there were several attempts to update the Airport Master Plan for East Hampton Airport. However, these plans apparently were never adopted. The selection of the critical aircraft in these prior reports reflects the above mentioned trends toward business jets. Two separate studies, one completed in 1994 and another in 2002, recommended the Challenger 600 as the critical aircraft to represent a middle ground for the mix of Category B, C, and D jets operating at the Airport. This aircraft would require an increase to meet ARC C-II standards for Runway 10-28. The Challenger 600 has an approach speed of 125 knots and wingspan of 64 ft., 4 in. This aircraft is a twin engine general aviation jet, certificated to hold up to 19 passengers depending on configuration.

FIGURE II-21
CHALLENGER 600

Source: www.avbuyer.com

The prior studies recommended reducing the ARC designation for Runways 16-34 and 4-22 specifically. They recommended that these existing runways be designed to serve smaller piston engine aircraft since their lengths prohibited them from accommodating jet aircraft. These studies proposed that the critical aircraft for Runways 16-34 and 4-22 should be the twin engine, turbo-prop Beechcraft Baron (ARC B-I) based on their lengths at the time.

FIGURE II-22
BEECHCRAFT BARON

Source: www.aircraftdealer.com

Facilities Implications of the Challenger 600 and Baron

If the Challenger 600 is chosen as the critical aircraft, some dimensional adjustments may be necessary at the Airport, potentially an increase runway length. The take-off performance characteristics of the Challenger 600 with the most extreme conditions present (aircraft at full passenger capacity and full fuel, on a hot day) will require more than the 4,242 ft. of runway at East Hampton Airport. (Exact runway length requirements will be determined later during the study). An analysis of alternatives for runway safety area compliance will likely be required. Additionally, for planning purposes the airport may need to consider additional hangars and fuel storage to accommodate the needs of this aircraft.

Design Aircraft Alternative #3-"Citation V"
"Largest Based Aircraft as Design Aircraft"

As previously stated, the critical aircraft is used as a planning tool to determine the necessary development of the airport to meet the aeronautical demands while minimizing local impacts. However, East Hampton Airport has been operating with a critical aircraft that has not been present in the fleet mix since the 1980's. The mix of aircraft at the Airport has even changed since the conclusion of the two previous studies.

Today, using the technical definition, the critical aircraft for East Hampton Airport could be the Cessna Citation V, or C 560 according to ICAO code, which has a passenger seating capacity of 8-10 people, a wingspan of 52 ft., and an approach speed of 100 knots. This aircraft is highly popular with current charter companies and fractionals operating at the Airport and conducts more than 500 operations per year. The Citation V would increase the current ARC for the Airport from A-II for all runways to a B-II for Runway 10-28.

FIGURE II-23
Citation V

Source: www.speedwings.ch

Runway 16-34 and 4-22 today typically serve single engine aircraft. The width of Runway 4-22 has been increased to 100 ft; its length has remained 2,501 ft. as described in the official 1989 Master Plan. The length and width of Runway 16-34 has also remained unchanged. Both of these runways could serve the GA community as simply Category B Design Group I (ARC B-I) runways. The critical aircraft for these two runways could again be the Beechcraft Baron from Figure II-23 or another aircraft similar in size and performance that fits into the ARC B-I criteria.

Facilities Implications of the Citation C V and Baron

Selection of this aircraft would support a limited growth strategy in terms of the Airport's role within the community. The Citation V has needs similar to, but not as demanding as the Challenger 600. Potential modifications of the Airport may include a runway extension to comply with the aircraft's worst case scenario take-off requirements, increased hangar space, and greater fuel storage and supply capabilities. The B-I designation of the smaller runways might include decreasing the standards. Runway safety area compliance analysis will likely be necessary.

Design Aircraft Alternative # 4-"Very Light Jets"
Possible Trend

The concept of "Very Light Jets" or "VLJs" is brand new to the industry. In fact, most manufacturers are still only taking orders or in the final stages of certification. The appeal of the VLJ is that they can diversify the cost and structure of charter and corporate aircraft fleets, allow access to smaller airports by requiring less runway length for takeoff and landing, and are affordable for the wealthier pilot who would like to own and fly his or her own jet.

There are at least 17 manufacturers of the various models of VLJs. Typically each jet can be operated by a single pilot and is large enough to carry between 6 and 10 passengers. An average wingspan between the various models is 40 ft. with an approach speed of approximately 90 knots, putting it into the A-I ARC Category. The media has been calling this aircraft "the Flying Minivan." An example of a VLJ would be the Eclipse 500.

FIGURE II-24
ECLIPSE'S VERSION OF THE VLJ

www.aerospace-technology.com

The following tables show the various manufacturers and models of these jets and their associated production information.

TABLE II-24
PROTOTYPES BUILT AND UNDERGOING FLIGHT TESTING

Design	Manufacturer	Seats	Max. Cruise	Cost	Sold	Certification
Eclipse 500	Eclipse Aviation [1]	6	375 knots	$1.49 million	2,400	July 26, 2006
Citation Mustang	Cessna [2]	6	340 knots	$2.62 million	240	2006
Adam A700 AdamJet	Adam Aircraft Industries [3]	7	340 knots	$2.28 million	282	2006
Diamond D-Jet	Diamond Aircraft [4]	5	315 knots	$0.93 million	125	early 2008
ATG Javelin	Aviation Technology Group [5] Israeli Aircraft Industries [6]	2	530 knots	$2.80 million	> 100	early 2008
Spectrum Aero Model 33	Spectrum Aeronautical [7]	9	415 knots	$3.65 million		Q1 2008
Excel-Jet Sport-Jet	Excel-Jet [8]	5	340 knots	$1.00 million		early 2008
Honda HA-420 HondaJet	Honda [9]	6-8	420 knots	one-off-production announced		production announced

TABLE II-25
CURRENTLY UNDER DEVELOPMENT

Design	Manufacturer	Seats	Max. Cruise	Cost	Sold	Certification
Embraer Phenom 100	Embraer [10]	6-8	380 knots	$2.85 million		mid 2008
Epic Jet	Epic Aircraft [11]	7	390 knots	$2.10 million		early 2008
Vantage Jet	Eviation Jets [12]	10	424 knots	$3.00 million		late 2007

TABLE II-26
HOMEBUILT DESIGNS

Aerocomp Comp Air Jet	Aerocomp [13]	8	320 knots	< $0.87 million		
Viper Jet	Viper Aircraft [14]	2	460 knots			
Maverick Leader III	Maverick Jets [15]	4	472 knots			

TABLE II-27
DORMANT OR CANCELLED PROJECTS

Avocet ProJet	Avocet Aircraft [16]	6	365 knots	$2.00 million		cancelled 2006
Safire Jet	Safire Aircraft [17]	6	380 knots	$1.40 million		dormant 2005
Century Jet	Century Aerospace [18]	6	370 knots	$2.70 million		dormant 2001

Source: www.wikipedia.com

Facilities Implications

Modifications to the existing airfield and facilities at East Hampton Airport might be appropriate if the VLJ is considered as the design aircraft. Runway safety area compliance analysis will be required. However, it is likely that these aircraft are too new to the industry to anticipate what impacts they might have on the existing infrastructure. The only basis for forecasting future popularity of these aircraft is the reported amount on order by the various manufacturers.

Design Aircraft Alternative #5-"King Air 90"

Another alternative selection for the critical aircraft at East Hampton Airport could be the King Air 90 produced by the Beech Aircraft Company, now a division of Raytheon Aircraft. The King Air 90, also know as the B-90 or F-90, was originally manufactured in 1964 and is equipped for seating two crew and five passengers. It powered by dual turbo-propeller engines and is considered by the FAA as a small aircraft, since its maximum take-off weights is less than 12,000 lbs. The King Air has an approach speed of 108 knots and wingspan of 45.9 ft.; requiring an ARC designation of B-I if chosen as the critical aircraft.

FIGURE II-25
BEECH KING AIR 90

Source: www.aircraftdealer.com

Facilities implications

This aircraft, like the Citation V, is consistent with the limited growth strategy. Selection of the King Air 90 as the critical aircraft for East Hampton Airport would allow for simple modifications of the airfield in its existing condition. Runway safety area analysis will be required. A potential decrease in length and width for Runway 10-28 could be considered.

Summary

Each potential critical aircraft and its associated ARC classification will likely have varying impacts in the general areas described in the table. These impacts will be examined in much greater detail in the following section.