#### **Overview of Aviation**

Aviation first became a true "industry" when the Wright Brothers flew the first powered, controlled aircraft in 1903. After their pioneering flight, aircrafts were used mainly for military purposes (throughout World Wars One and Two). In 1910, Glenn Curtiss popularized aviation in the Hudson River Valley by making the first nonstop flight from Albany to New York City. After the wars, aviation started to become a commercial business, by using ex-military aircrafts to transport people and cargo. By the 1970s, the aviation industry had begun to blossom into the industry we all know and use today. Aviation became so popular in the Hudson River Valley because of the many airfields in the area. These airfields were heavily concentrated around this area mainly because of the proximity to West Point and the necessity for military pilots. Had West Point not been in the Hudson River Valley, we would not have nearly as many airports in the area as we do today.

Specific individuals mainly influenced Stewart International Airport and Albany International Airport. Stewart Airport was influenced by The Stewarts, who donated their land to be used as an airport, Douglas MacArthur, who proposed flight training for cadets at the airport, and Nelson Rockefeller, who saw Stewart's potential to support the metropolitan area. The MTA also played a role in tuning Stewart into a major airport. Glenn Curtiss' historic flight, and Charles Lindbergh, who helped the local government decide on using the Shaker land as the new airport site, influenced Albany. Local and state governments, as well as the military, which used airports such as Westchester and Dutchess for flight training and bases, mainly influenced the County Airports. The key sites of aviation in the Hudson River Valley are Stewart International Airport, Albany International Airport, Westchester County Airport, Dutchess County Airport and Orange County Airport. Many of these sites started out as military training fields for cadets during World Wars One and Two. After the wars, the airfields were developed into airports for both commercial and private use. Despite the minimal commercial use that many of these airports receive, all of the airports remain fully functional and open for business today.

The overall summary of the involvement of interpretive signs in this research project of "Airports in the Mid-Hudson Valley" has to do with a mapping out of plans, an integration of the history and cultural significance of the issue, and adherence to regulated mandates from government and independent agencies. For the sake of this topic, the use of ACHP, or Advisory Council on Historic Preservation are to be met. These guidelines, in the forms of surveys, are abbreviated as HAER(Historic American Engineering Record), HABS (Historic American Buildings Survey), and HALS (Historic American Landscape Survey).

The purpose of using these guidelines is to demonstrate the overall significance of the topic, hit upon the key fundamental facts of the issue, and adhere to a government guideline. After all, if one is to pursue the task of drawing up interpretive signs, one must be able to prove that the areas picked have a historical and cultural influence; and in turn, the implementation of the interpretive signs can take place. Regardless of where, how, when, or what landmarks are being reported on, rules and regulations need to inevitably be honored. In terms of reporting on the subject of "Airports in the Mid-Hudson Valley," the guidelines mapped out by the ACHP, in conjunction with the historical and cultural content of the issues will determine where and how the interpretive signs will be placed.

The technical overview of the aviation industry in the Hudson Valley region includes elements such as runways, towers and other technicalities that vary from one airport to another. Albany International Airport and Stewart International Airport are two major municipal airports located in the Hudson Valley. The Dutchess, Westchester and Orange County Airports all support flights within the United States. Although they serve the same purpose, they differ in many ways. An example of one of these differences includes Orange County Airport having no control tower while the rest having at least one or maybe more. The variations among the technical make up of each airport supports the overall industry in the Hudson River Valley region allowing it to remain a successful and reliable form of transportation.

These main, small and large airports throughout the Hudson River Valley are all located in different towns, villages, or cities. These locations are Harrison, Newburgh, Colonie, Wappingers Falls, and Montgomery. Each one has its own distinctive characteristics that make it stand out from the others. The larger airports, such as Albany International Airport, are typically located in or near cities, such as Newburgh, due to the fact that they are being used more frequently by flyers. For the most part, these places have high human populations because of the industries, such as aviation, that are located in their vicinity. Overall, these places have some characteristics in common, but for the most part have some things that make them individualistic. It was decided to place the highway markers based on major and local highways, as well as county roads that led to the airports. For major highways, markers were used ten miles, five miles, two miles, and one mile away from the exits for the airports. The local highway markers started five miles away from the exits. The markers on county roads were used for convenience and clarity.

#### Lesson Plan

#### Lesson Plan: Aviation Industry in the Hudson River Valley

Objectives: Students will...

- Go on a field trip to either, the Albany International Airport, Dutchess County Airport, Orange County Airport, Stewart Airport or the Westchester County Airport.
- Be split up into groups of 3 or 4 and be assigned a chaperone.
- Adventure around the airport in order to find the answers to a questionnaire they will be required to complete, which includes a drawing portion.
- Be given one hour to search throughout the airport.
- Meet back with the class at a specific time to go over their responses to the questionnaire.
- Reflect on their experience and learn more about the history of the airport during a collective class discussion located in the lobby of the airport.

### New York State Standards:

Standard 1 – History of the United States and New York

Use a variety of intellectual skills to demonstrate their understanding of major ideas, eras, themes, developments, and turning points in the history of the United States and New York.

### *Standard 3* – Geography

Use a variety of intellectual skills to demonstrate their understanding of the geography of the interdependent world in which we live – local, national, and global – including the distribution of people, places, and environments over the Earth's surface.

### Learning Styles:

- Verbal/Linguistic Students will be working together in their teams, discussing their responses to questions provided on the worksheet. They will converse ideas and information about the airport of which they are visiting.
- *Interpersonal* Students will be working together to gather information in order to complete their questionnaires.
- *Kinesthetic/Tactile* Students will be adventuring through the airports and experiencing its functioning and processes.
- *Visual* Students will be able to see the different airplanes used at the different airports, as well as other elements that contribute to the functioning of that particular airport.
- *Auditory* Students will be listening to the teacher present information about the airport and there will be a class discussion in order to reflect on the experience where students will listen to one another's ideas.

### <u>Materials:</u>

- Pen/pencil
- School bus
- Questionnaire based on airport
- Colored pencils

### Teacher Resources:

- http://www.co.dutchess.ny.us/CountyGov/Departments/Airport/ARIndex.htm
- <u>http://www.albanyairport.com/</u>

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- http://www.co.orange.ny.us/orgMain.asp?orgid=40&storyTypeID=&sid=
- <u>http://www.whiteplainsairport.com/</u>
- <u>http://airport.westchestergov.com/</u>
- <u>http://www.panynj.gov/airports/stewart.html</u>

*<u>Motivation</u>*: Students will be out of the classroom. They will be working with their peers and venturing around an airport to complete a questionnaire.

### Procedure:

### Before Learning:

- Travel to the airport on a school bus.
- Separate students into groups of 3 or 4 and assign each group to a chaperone.
- Hand out questionnaires to each student.

### During Learning:

- Students will walk around the airport discovering locations of baggage claim areas, various concessions, types of airplanes used, etc.
- Students will work together to complete the questionnaire that applies to the airport they are visiting.

### After Learning:

- Class reunites at a specific time and goes over their findings and the answers to the questionnaire.
- The class will reflect and discuss their experiences at the airport.

Joanna Macaluso

• Teacher will go over any additional information not covered by the questionnaire.

### Summary:

Students will take a field trip to an airport in the Hudson River Valley region. They will complete a worksheet that asks specific questions pertaining to that airport. A class discussion will be initiated to share their experiences and opinion of the airport.

### Evaluation:

Informal observations of students will be considered in order to assess if students are working together efficiently and actually gaining information throughout the airport. The questionnaires will be collected as a formal assessment to make sure students were on task throughout the field trip.

# Guidebook for Airports in the Hudson River Valley Westchester County Airport:

Westchester County Airport is located in White Plains, NY, and has been in operation since 1942. Like many airports in the Hudson River Valley, Westchester County Airport started out as an Air National Guard base during World War II. It was mainly built to protect New York City and its drinking water supply. In 1983, the Air National Guard unit was moved to Stewart International Airport. The airport is used by many people who live in the New York Metropolitan Area as an alternative to the larger New York City Airports such as La Guardia Airport, John F. Kennedy Airport and Newark Liberty Airport.

### Driving Directions from the George Washington Bridge to Westchester County Airport

- 1 Head west on Interstate 95 Upper Level S toward Exit 74
- 2 Take exit 73 toward US-9W/NJ-67/Fort Lee
- 3 Keep right at the fork, follow signs for Hudson Terrace
- 4 Turn right at Hudson Terrace
- 5 Turn right at Bruce Reynolds Blvd
- 6 Take the 2nd **right** onto **Martha Washington Hwy** Take the ramp onto **Interstate 95 Upper Level N**
- 7 Partial toll road Entering New York

- 8 Take exit 1C for I-87/Maj Deegan Expy toward Albany/Queens
- 9 Keep **right** at the fork to continue toward **I-87 N** and merge onto **I-87 N**
- 10 Take exit 4 toward Cross County Pkwy
- 11 Merge onto Central Park Ave
- 12 Take the Cross County Pkwy E ramp
- 13 Keep **right** at the fork, follow signs for **Kimball Ave/Bronk Pkwy/W Broad St**
- 14 Continue toward Cross County Pkwy and merge onto Cross County Pkwy
- 15 Merge onto Hutchinson River Pkwy N

### 16 Slight left at I-684 N

17 Take exit 2 toward NY-120/Westchester Co Airport

- 18 Merge onto Airport Rd
- 19 At the traffic circle, continue straight to stay on Airport Rd
- 20 Continue onto Westchester Airport County Rd/Westchester County Airport

Arriving at Westchester Airport County Rd/Westchester County Airport Total: **27.9 mi** - about **41 mins** (up to 47 mins in traffic)

# Your day at Westchester County Airport:

To start the day, go to the Panorama terminal. You can take a "Discovery Flight" for \$99 plus tax, and start to learn how to fly! Call 914-328-9800 to set up your appointments.

After your flight lesson, go to the Skytop Restaurant for lunch. You can enjoy a good meal while watching airplanes, both big and small, take off and land along the runways.

For your afternoon excursion, call the Air Traffic Manager and get clearance to take a tour of the control tower. You will be able to see what is involved in coordinating the air traffic at a busy commercial airport and see the technology involved in modern air traffic control.

For dinner, go to The Cheesecake Factory on 1 Maple Avenue in White Plains, New York.

### Where to stay near Westchester County Airport

Soundview Manor Bed & Breakfast, 283 Soundview Ave, White Plains, NY 10606

www.soundviewmanor.com



### **Stewart International Airport:**

Stewart Airport is one of the most popular airports in the Hudson Valley. It was originally opened as a military base in the 1930s to allow cadets at West Point to learn how to fly aircrafts. It is now a major commercial airport, and still has a military airfield on site. In an emergency, Stewart could accommodate a space shuttle landing. Originally, a dairy farmer (Thomas Stewart) owned the airport land. He sold the land to the city of Newburgh to be developed into an airport in 1930, but due to the Depression, the city did not have the means to develop the property. In 1934, the city sold the land for one dollar to the military academy to be used as an airfield to train cadets. A dirt airstrip was cleared and graded, and during World War II, many barracks and outbuildings were erected on the site. After the Air Force was created during World War II, the site was turned into an official U.S. Air Force Base. It was deactivate as a base in 1970, but was instated as a U.S. Air National Guard Base in 1983. It is still an active base today. Despite local opposition, the airport has expanded to become New York Metropolitan Area's fourth major airport. (MT Authority runs) It is now listed as a secondary commercial airport.

### Driving Directions from Westchester County Airport to Stewart International Airport

- Head south on Westchester Airport County Rd/Westchester CountyAirport toward Hangar Rd
- 2 Continue straight onto Airport Rd
- 3 At the traffic circle, continue straight to stay on Airport Rd
- 4 Continue onto New King St/New King Ct
- 5 Turn left at NY-120 S/Purchase St
- 6 Take the 1st right onto Airport Rd

Turn **right** to merge onto **I-684 N** 

- 7 Passing through Connecticut Entering New York
- 8 Take the exit onto **I-84 W**
- 9 Take exit **7B** for **NY-300 N/Union Ave**

10 Turn left at NY-300 S/Union Ave

11 Turn right at NY-207 W/Little Britain Rd

- 12 Continue onto Breunig Rd
- 13 Continue onto Bruenig Rd
- 14 Turn right at Y St
- 15 Turn left at 1st St
- 16 Turn left to stay on 1st St

17 Turn right to stay on 1st St

Arriving at 1st St

Total: 62.1 mi - about 1 hour 17 mins

### Your day at Stewart International Airport:

Take a tour of the military aircraft on the field. Stewart Airport houses C-130 aircraft that are currently used for military transport year round, and you might even be able to see other military aircraft that are making stops in the area.

For lunch, go to The Galaxy Café (located on the airfield). You will be able to watch the planes come and go, and you might even catch a C-130 on the runway!

In the afternoon, take a helicopter ride around the area. You can rent a helicopter by the hour and your tour guide will show you around the Hudson River Valley.

For dinner, go to Schlesinger's Steak House on 475 Temple Hill Road, in New Windsor, NY.

# Where to stay near Stewart International Airport

Botsford Briar Bed & Breakfast, 19 High Street, Beacon, NY 12508 www.botsfordbriar.com



### **Orange County Airport:**

Orange County Airport is located in Montgomery New York. It does not have a commercial terminal; it is only used for general aviation. It does not have an air traffic control tower—pilots taking off and landing must communicate with each other to control the traffic. It has become a popular place among private pilots to store aircraft because of the low traffic the airport receives.

## Driving Directions from Stewart International Airport to Orange County Airport

Head north on 1st St
 Continue onto A St
 Slight right at Aviation Ave
 Take the 2nd right onto International Blvd
 Turn right at NY-747 N/County Rd 54/Drury Ln
 Turn left at New York 17K W
 Turn left at Union St
 Turn right at Dunn Rd
 Arriving at Dunn Rd
 Total: 11.4 mi - about 23 mins

# Your day at Orange County Airport:

This is a chance to see how a general aviation airport works. Call the airport manager and he/she will take you around the entire field and show you how traffic is controlled at a non-towered airport. You will be able to see the hangars, taxiways, runways, etc without worrying about the high traffic of airports like Westchester and Stewart.

For lunch, go to Rick's Runway Café, which is also on the airfield. You will be able to see how the traffic seems to control itself, without the help of air traffic controllers.

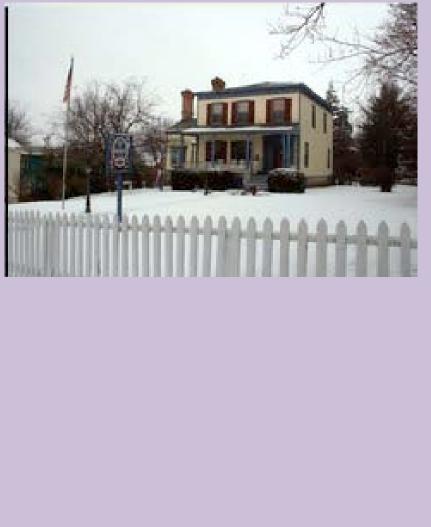
For your afternoon excursion, arrange to take a ride in the open-air World War I and World War II planes. You can see firsthand how aviation has truly evolved in only 70 years.

For dinner, go to Cascarino's Pizzeria on 121 Hawkins Drive, in Montgomery, NY.

### Where to stay near Orange County Airport

Borland House Bed & Breakfast, 130 Clinton Street, Montgomery, NY 12549

www.theborlandhouse.com



### **Dutchess County Airport:**

Dutchess County Airport is another high traffic airport in the Hudson Valley. It is located in the Wappingers Falls, although it is sometimes referred to as Poughkeepsie Airport. It was also built in the 1930s for use by the military to train pilots for World War II. On June 17, 1942, British Prime Minister Winston Churchill met with President Franklin Roosevelt, who had driven to the airport from his Hyde Park home. Throughout the span of the twentieth century, Dutchess County Airport went from being a general aviation airport (no commercial operations) to a commercial airport, and back to a general aviation airport because of the competition with Stewart Airport. Dutchess County Airport is still open today as a general aviation facility.

### Driving Directions from Orange County Airport to Dutchess County Airport

- 1 Head northeast on Dunn Rd toward Hangar Rd
- 2 Turn left at Union St
- 3 Turn **right** at **New York 17K E/Ward St** Continue to follow New York 17K E
- 4 Turn **left** to merge onto **I-84 E** Partial toll road
- 5 Take the exit toward **N Rd/New York 9D N**
- 6 Turn **left** at **N Rd/New York 9D N** Continue to follow New York 9D N
- 7 Turn right at E Main St
- 8 Turn left at Albany Post Rd
- 9 Take the 1st right onto County Rd 104/New Hackensack Rd
- 10 Turn left at Duthchess Airport County Rd/Duthchess County Airport

Arriving at Duthchess Airport County Rd/Duthchess County Airport Total: **25.7 mi** - about **45 mins** 

### Your day at Dutchess County Airport:

First, take a tour of the control tower. You will be able to see the differences between general aviation and commercial airports. You can hear pilots with different levels of training, from beginning student pilots to seasoned pilots in their prime.

For lunch, go to the Bonefish Grill on Route 9 in Poughkeepsie, NY.

In the afternoon, take a drive up to Poughkeepsie and go on the Walkway Over the Hudson. You will be able to see planes on their approaches to the airports you have already visited, as well as experience the longest pedestrian bridge in the world.

For dinner, go to Shadows On The Hudson on Rinaldi Boulevard in Poughkeepsie, NY.

### Where to stay near Dutchess County Airport

Le Petit Chateau Inn, 39 West Dorsey Lane, Hyde Park, NY 12538 www.lepetitchateauinn.com



### **Albany International Airport:**

Albany Airport is a commercial airport located near Albany, NY in the small town of Colonie, NY. It is the first and oldest municipal airport in the United States. It started in 1908 as an airstrip, and grew into a major airport throughout the twentieth century. It has undergone many closures and renovations over the years, and more renovations are planned for the near future, including adding an entire concourse.

### Driving Directions from Dutchess County Airport to Albany International Airport

- 1Head northeast on Duthchess Airport County Rd/Duthchess County<br/>Airport toward County Rd 104/New Hackensack Rd
- 2 Turn right at County Rd 104/New Hackensack Rd
- 3 Take the 1st **right** onto **County Rd 110/Jackson Rd** Continue to follow Jackson Rd
- 4 Take the 2nd left onto Co Rd 77/Vassar Rd
- 5 Take the 3rd **right** onto **Spring Rd**
- 6 Turn **right** at **US-9** N/S Rd Continue to follow US-9 N
- 7 Take the exit toward **Columbia St**
- 8 Turn right at Columbia St
- 9 Turn left at Lincoln Ave
- 10 Continue onto **Jefferson St**
- 11 Turn **left** at **NY-55 W/U.S. 44 W** 
  - Merge onto NY-55 W/US-9W N/U.S. 44 W via the ramp to
- 12 Highland/Kingston Continue to follow US-9W N
- 13 Take the **Delaware Ave** exit
- 14 Slight right at Delaware Ave
- 15 Slight right at Broadway

16 Continue onto I-587 W/NY-28 W/Col Chandler Dr

- Slight right
- 17 Toll road

18 Merge onto <b>I-87 N</b> via the ramp to <b>Albany</b> Toll road
19 Take exit <b>24</b> to merge onto <b>I-87 N/I-90 E</b> toward <b>Albany/Montreal</b> Toll road
Take exit <b>1N</b> to merge onto <b>I-87 N</b> toward <b>Albany International</b> 20 <b>Airport/Montreal</b> Partial toll road
21 Take exit 4 toward NY-155 W/Albany Shaker Rd
<ul> <li>22 Turn left at County Rd 153/Wolf Rd</li> <li><sup>23</sup> Take the 1st left onto Albany Shaker Rd/County Rd 151</li> <li><sup>23</sup> Continue to follow Albany Shaker Rd</li> </ul>
24 Continue onto NY-155 W/Access/Francis Delasandro
25 Slight right toward Access/Airport Terminal Rd
26 Continue straight onto Access/Airport Terminal Rd Continue to follow Airport Terminal Rd
Arriving at Airport Terminal Rd
Total: <b>91.5 mi</b> - about <b>1 hour 51 mins</b>

# Your day at Albany International Airport:

For your morning excursion, take a tour of the Honda and Eclipse hangars, where you will see the latest in personal jet technology. Throughout your trip, remember the old style planes in Orange County and how far we have come in only 70 years.

For lunch, go to the Calaway Grill on 6699 Albany Shaker Road, in Albany, NY.

While you are in our state's capital, you should visit the State House or any of the other government buildings and see where our state government resides. There are many different tours you can take, depending on which buildings you choose to visit.

For dinner, go to Romano's Macaroni Grille on 1 Metro Park Road in Colonie, NY.

### Where to stay near Albany International Airport

Pine Haven Bed & Breakfast, 531 Western Ave, Albany, NY 12203 www.pinehavenbedandbreakfast.com



#### History of Aviation in the Mid-Hudson River Valley

#### By: Lizzi Schneider

As many people know, The Wright Brothers were the first to fly in a powered, controlled aircraft. Before this milestone, many different cultures tried to build aircrafts, finally evolving to the powered, controlled, modern aircrafts we use in our culture. The planning for the modern aircraft started in 1799 by Sir George Cayley, and revised in 1852 by Henri Giffard, in 1896 by David Schwarz and in 1901 by Alberto Santos-Dumont. Before the Wright Brothers, pilots had flown powered aircrafts (free flight) and controlled aircrafts (gliders), but the Wright Brothers were the first to combine the two ideas. Despite the Wright Brothers' first flight in 1903, it wasn't until World War I that aircraft were advanced enough for practical use. Specifically in the Hudson River Valley, in 1910 Glenn Curtiss made the first sustained direct flight from Albany to New York City, flying over the Hudson River.

In the aviation "golden age" (1918-1939), many technological advances occurred in the aviation industry. By the time World War I had started, aircraft had evolved from the rudimentary biplanes the Wright Brothers flew into monoplanes designed for warfare. After World War I, many of the fighter pilots went into small towns across the country to show off their flying skills and give rides to eager, paying passengers. These pilots are the reason places like the Old Rhinebeck Aerodrome were opened—someone saw an opportunity to make money and jumped on it. On top of charging passengers for airplane rides, these aerodromes held contests for pilots, and awarded cash prizes. Aviation was beginning to turn into a financial industry.

With the start of World War II, aircraft production and development boomed. Countries all over the world wanted to use aircraft to fight the war, and this was the first time anybody saw long-range bombers, fighter escorts, dive bombers, radar, jet planes and helicopters being effectively used. After World War II, the commercial aviation industry boomed. At this point, ex-military planes were generally used to commercially transport people and cargo. It wasn't until the late 1960's that Boeing developed the 747, and planes like that Concorde made their maiden flights.

Since the beginning of the twentieth century, when aviation became an industry, the Hudson River Valley was a major hub for the developing business. Many of the airports in the area started as training fields for the military use, to teach cadets to fly. The aviation industry boomed during World War II, since the war was fought in so many different territories. West Point was already in operation as the United States Military Academy during World War II, and the military started using the airstrips in the area to train cadets to fly to expand the military powers of the United States. This strengthened the Hudson Valley as an aviation hub, and after the war, the training airstrips became civilian airports. The surplus of airports led to an increase in civilian pilots and helped solidify aviation as a key mode of transportation in the Hudson River Valley.

#### Key Sites of Aviation in the Mid-Hudson River Valley

#### By: Lizzi Schneider

Stewart Airport is one of the most popular airports in the Hudson Valley. It was originally opened as a military base in the 1930s to allow cadets at West Point to learn how to fly aircraft. It is now a major commercial airport, and still has a military airfield on site. In an emergency, Stewart could accommodate a space shuttle landing. Originally, a dairy farmer (Thomas Stewart) owned the airport land. He sold the land to the city of Newburgh to be developed into an airport in 1930, but due to the Depression, the city did not have the means to develop the property. In 1934, the city sold the land for one dollar to the Military Academy to be used as an airfield to train cadets. A dirt airstrip was cleared and graded, and during World War II, many barracks and outbuildings were erected on the site. After the Air Force was created during World War II, the site was turned into an official U.S. Air Force Base. It was deactivate as a base in 1970, but was reopened as a U.S. Air National Guard Base in 1983. It is still an active base today. Despite local opposition, the airport has expanded to become New York Metropolitan Area's fourth major airport. (Metropolitan Transit Authority operates it.) It is now listed as a secondary commercial airport.

Dutchess County Airport is another high traffic airport in the Hudson Valley. It is located in the Wappingers Falls, although it is sometimes referred to as Poughkeepsie Airport. It was also built in the 1930s for use by the military to train pilots for World War II. On June 17, 1942, British Prime Minister Winston Churchill met with President Franklin Roosevelt, who had driven to the airport from his Hyde Park home. Throughout the span of the twentieth century, Dutchess County Airport went from being a general aviation airport (no commercial operations) to a commercial airport, and back to a general aviation airport because of the competition with Stewart Airport. Dutchess County Airport is still open today as a general aviation facility. Orange County Airport is located in Montgomery New York. It does not have a commercial terminal; it is only used for general aviation. It does not have an air traffic control tower—pilots taking off and landing must communicate with each other to control the traffic. It has become a popular place among private pilots to store aircrafts because of the low traffic the airport receives.

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We used this website to find background information about Westchester County Airport.

#### The Aviation Industry in Relationship to Nearest Towns or Other Municipalities

#### By: Claire Daly

There are several different large and small airports throughout the Hudson River Valley. Three of the main, large airports are the Westchester County Airport, Stewart International Airport, and the Albany International Airport. Two of the main, small airports are the Dutchess County Airport and the Orange County Airport.

The Westchester County Airport is located in Harrison, New York and serves the lower portion of the Hudson River Valley. The town of Harrison is bordered by White Plains and has a total area of 17.4 square miles of which, 16.8 square miles of it is land and 0.6



square miles of it is water. According to the 2000 census, the population was 24,154 and today is now estimated to be 26,665. The census states that Harrison's demographics consist of 85.2 percent of Caucasian, 6.7 percent Hispanic, 5.4 percent Asian, 1.4 percent African American and 1.1 percent other races. Their educational statistics state that 66 percent of the adult

population have received some college experience or beyond. The most common occupations in Harrison are management, sales and service occupations. Approximately 76 percent of workers in Harrison work for companies, 14 percent work for the government and 7 percent are self-employed. Their unemployment rate is at a low percent of just 3.5 %. Government data reports that the average salary for residents in Harrison is \$52, 726.

The Stewart International Airport is located in Newburgh, New York and serves the

middle portion of the Hudson River Valley. The city of Newburgh is located sixty miles north of New York City. The city has a total area of 4.8 square miles of which, 3.8 square miles of it is land and 1 square mile of it is water. According to the 2000 census, Newburgh's population was 28,259 and today is now estimated to be 28,101. The census states that Newburgh's demographics consist



of 42 percent Caucasian, 33 percent African American, 6 percent Hispanic, 1 percent Asian, and 18 percent other races. Their educational statistics state that only 31 percent of the adult population have received some college experience or beyond. The most common occupations in Newburgh are production, transportation, and material moving occupations.

Approximately 73 percent of workers in Newburgh work for companies, 12 percent work for the government and 3 percent are self-employed. The city's unemployment rate is 11.3 percent. Government data reports that the average salary for residents in Newburgh is \$24,176.

The Albany International Airport is located in Colonie, New York and serves the upper portion of the Hudson River Valley. Colonie is the most populous town located in the



city of Albany. The town has a total area of 57.9 square miles of which, 56.1 square miles of it is land and 1.8 square miles of it is water. According to the census, Colonie's population is 7,916. The census states that Colonie's demographics consist of 93 percent Caucasian, 4 percent African American, 3 percent Asian, and 1 percent other races. Their educational

statistics state that a little more than half of the adult population have received some college experience or beyond. The most common occupations in Colonie are registered nurses, office managers, and dental assistants. Approximately 63 percent of workers in Colonie work for companies, 28 percent work for the government and 4 percent are self-employed. Their unemployment rate is at a low percent of just 4.7. Government data reports that the average salary for residents in Colonie is \$34, 722.

The Dutchess County Airport is located in Wappingers Falls, New York. The village of Wappingers Falls is 1.2 square miles. According to the 2000 census, the town's population was 4,292 and of that population 85 percent are Caucasian, 6 percent are African American, 3 percent are Asian, and 6 percent are other races. Their educational statistics state that a little less than half of the adult



population have received some college experience or beyond. The most common occupations in Wappingers are occupational therapists and physical therapists. Approximately 76 percent of workers in Wappingers Falls, New York work for companies, 17 percent work for the government and 3 percent are self-employed. Their unemployment rate is at a low percent of 3.2. Government data reports that the average salary for residents in Wappingers Falls is \$32,377.

The Orange County Airport is located in Montgomery, New York. The town of Montgomery is 51.1 square miles. According to the 2000 census, the



town's population was 20,891 and of that population 92 percent are Caucasian, 4 percent are African American, 1 percent are Asian, and 3 percent are other races. Their educational statistics state that basically half of the adult population have received some college experience or beyond. The most common occupations in Montgomery are hygienists and dental assistants. Approximately 65 percent of workers in Montgomery work for companies, 26 percent work for the government and 4 percent are self-employed. Their unemployment rate is at a low percent of 4.8. Government data reports that the average salary for residents in Montgomery is \$36, 924.

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#### **Key Leaders**

#### **By: Frank Campagnola**

All of the airports our group selected, which include Stewart, Albany, Westchester, Dutchess, and Orange, have a rich history. There were also many individuals and groups who are responsible for the success of these airports.

Thomas Stewart convinced his uncle, Samuel Stewart, to donate land so that it could be used as an airport. That airport would come to be known as Stewart International Airport. In 1939, the U.S. Military Academy at West Point built the first airfield at Stewart for cadet aviation training, later dedicating it as the "Wings of West Point." In 1948, the airfield became Stewart Air Force Base. In the 1970s, Governor Nelson Rockefeller's administration saw the potential for Stewart to support the metropolitan area. Earlier, Douglas MacArthur, then superintendent of the United States Military Academy, proposed flight-training cadets at the airport. The Mass Transit Authority also played a major role, as it was the first government body to try to turn Stewart into a major airport.

Albany has an even richer history than Stewart. The biggest influence on Albany was Charles Lindbergh, who landed in Albany shortly after his flight to Paris. In 1927, as air travel increased, Albany's visionary mayor, John Boyd Thatcher announced plans for a new and modern airport to be located on farmland owned by the Shakers on the Albany-Shaker Road. The Albany Air Board drove Lindbergh to the Shaker farms to look over the new site, and Lindbergh gave it his enthusiastic approval. Mayor Thatcher had worked hard to create the nation's oldest municipal airport. At one point Thatcher said, "A city without the foresight to build an airport for the new traffic may soon be left behind in the race for competition." The county airports, Westchester, Dutchess, and Orange, have a much different history. The key leaders were groups, such as the local governments and the military. At Westchester, the main leaders involved were the regional government and the military. The Westchester County Airport was originally constructed on land purchased by Westchester County. However, World War II began, and the United States Army appropriated the land set aside for the airport. Beginning in 1952, the United States Air National Guard maintained a base at the airport for reserve training and transportation missions. However, the military presence at the airport ended in 1983 when the unit moved to Stewart Airport.

Dutchess County Airport's history is very similar to Westchester's. The field at the airport was established in the 1930s by the United States Department of Commerce, primarily as an emergency field to cover mail runs between metropolitan areas along the east coast. At the start of World War II the field was taken over by the Army Air Corps. It functioned as a satellite base to Stewart Airfield. A control tower was added and its main use was to function as a training field for West Point cadets. On April 4, 1947 the field was deeded to Dutchess County by the War Assets Administration under provisions of the Surplus Property Act of 1944. The county paid \$1 and agreed to keep the field open to aviation.

Orange County Airport is another that does not have a specific key leader. It is government run, so the individuals with the biggest influence on the airport were those who had to do with the purchasing of the land, the production and building of the airport, and those who are involved with its daily activities. These airports have had a tremendous impact on the Mid-Hudson Valley and will continue to do so for generations to come.

#### **Highway Markers**

#### **By: Frank Campagnola**

Highway road markers are essential for drivers in knowing where they are going, especially for airports. So, it is essential for road markers to be conveniently located on surrounding highways and roads so that drivers can successfully get to their desired location. For the purpose of this study, our group has chosen five airports in the Mid-Hudson Valley to examine.

Stewart International Airport, located in New Windsor, New York, is very to major New York highways, 84 and 87, respectively. It is also near highways 747, and 300. On the major highways, I would highway route markers beginning ten miles



from the exit needed to get to the airport. I would then have one placed at five miles from the exit, two miles from the exit, and finally, one mile away. For the smaller highways, I would use the same process, but starting with five miles instead of ten. I would also use signs directing drivers to the airport once they exit their highway.

Albany International Airport, located in Albany, New York, is located just off I-87. The

airport also surrounds state highway 158, well as Albany-Shaker Road. On I-87, I would begin with using highway route markers ten miles away from the exit needed to get to the airport, then use one miles away, two miles away, and finally,



as

five one mile away. Afterwards, I would use route markers in strategic locations, like on state highway 158, to assist drivers with getting them to their desired destination.

Dutchess County Airport is a small airport located in Wappingers Falls, New York. Route 9 is the nearest "major" highway to Dutchess County Airport, and Highway 376 is closest highway to the airport. On Route 9, I would use highway markers leading up to New



the

Hackensack Road, which is the most direct road off of Route 9 to the airport. On highway 376, I would use the markers starting ten miles away from the airport, then five miles away, two miles away, and one mile away. Finally, since there are not many highways near the airport, I would also use the markers on local county roads such as County Roads 93 and 94, leading up to the airport.

Westchester County Airport is located in White Plains, New York, on the border of Westchester County and Greenwich, Connecticut. The nearest major highway to Westchester is 684, while highways 120 and 15 are also in close proximity. In regards to the route markers, I would follow the same process I have



used for the previous airports. On 684, I would use route markers beginning ten miles away, then at five miles away, two miles, and finally, one mile. On 120 and 15, I would use route markers beginning five miles away, then reducing to two miles away and finally one mile away. Finally, I would again use route markers on the surrounding roads near the airport, such as Purchase Street.

Orange County Airport, located in Montgomery, New York, is conveniently located near three highways: I-84, 416, and 211. For the final airport, I would continue with the previous process I have been using. On I-84, I would use route markers beginning ten miles away from the exit needed to get to



the airport, and then have a marker five miles away, two miles away, and finally, one mile away from the exit. For highways 416 and 211, I would again follow a similar process. I would start the markers five miles away from the exit needed, and then have markers stationed two miles away, and one mile away from the desired exit.

Pictures with markers are shown for each airport. I strategically placed each marker on or near a major highway or road that drivers would need to use to get to the airport. However, I did not follow the procedure I used in this essay, since there would be too many signs, and the map would be too hard to read. Instead, I used one road sign on each highway or road to give an example.

To get the pictures, I took a screenshot on Google images of each highway. I then used Brett's prototype of the highway markers, and placed a sign on each major highway or road in close proximity to the airport. To locate the signs, look for the highway number. For example, to find the New York Thruway, one would look for I-87 on the map, and then search for the green highway marker.

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### The Technical Overview of the Aviation Industry in the Hudson River Valley The Hudson Heroes by Joanna Macaluso

The aviation present in the Hudson River Valley contributes to the successful and efficient transportation system. There are several international airports that serve those in the Northeast part of the United States, while small local airports provide air transportation for the people of the mid-Hudson region. The Albany International Airport and Stewart Airport provide international flights and the Westchester County Airport, Dutchess County Airport and the Orange County Airport are utilized for either national or private flights. Although they are all similar in their services, their technicalities can be quite different.

Albany International Airport is a publicly used airport just over five miles from the city of Albany. It is about 285 ft. /86.9 m above the mean sea level. It has a control tower with continuous attendance. It also has a lit wind indicator but no segmented circle, marker that indicates traffic patterns at airports. The surface of both the 8,500 by 150 feet runway and the 7,200 by 150 feet runway is grooved asphalt that can be considered as being in good condition. The airstrip was originally located on a former polo field on Londonville Road but was eventually moved to Westerlo Island and remains the oldest, municipal airport in the United States. A recent multi-million dollar improvement project included a new 230,000 square foot terminal, parking garage, Air Traffic Control Tower and cargo facility. The Albany International Airport uses the following

commercial airline services: Air Canada, Continental, Continental connection, Delta, Delta Connection, Southwest, United/United Express and US Airways Express. There are three terminals: Concourse A, Concourse B, and Concourse C. Albany uses 46 Single Engine Airplanes, 12, Multi-Engine Airplanes, 16 Jet Airplanes, 9 Helicopters, and 10 Military Aircrafts.

Stewart International Airport can be found in Newburgh, New York covering 2,400 acres of land. Stewart opened a



passenger terminal concourse

featuring seven jet-boarding bridges in 1997 and now accommodates seven passenger gates on the second floor. It contains a state of the art control tower that is open 24 hours a day and is staffed by FAA-certifies air traffic controllers. Its two asphalt runways (one being

11.818 feet and the other 6,006 feet) are both 150 feet wide. It also has a 40 by 12 foot helipad with an asphalt surface. Originally developed as a military base to allow cadets to learn aviation but it has grown into a major passenger airport for the mid-Hudson region but can serve for military purposes. Stewart's twolevel passenger terminal features 7 jetboarding bridges, ticket counters, flight display systems, concessions, car rental agencies, and an EDA baggage screening system. It uses 8 airlines that fly to domestic airports and those include: AirTran Airways, Allegheny Airlines, Allegiant Air, American Airlines, Atlantic Coast Airlines, Independence Air, Northwest Airlines, and US Airways. It uses 4 airlines that fly to international airports, Air Canada, Allegheny Airlines, American Eagle Airlines, Inc, and Continental Air Lines. The types of aircrafts include 8 Single

Engine Aircrafts, 7 Multi-Engine Aircraft, 26 Jet Engine Aircrafts, 8 Helicopters, and 31 Military Aircraft Operational (including helicopters).

Westchester County Airport is a publicly used airport covering about 702 acres of land in the city of White Plains. Being about 439 feet about sea level, it contains a control tower, a lit wind indicator but no segmented circle. The 4,451 by 150 feet runway has an asphalt surface that is in fair condition while the 6,548 by 150 feet runway with an asphalt surface is in better condition. Possible obstructions include trees when it comes to the view of the pilots. It currently has seven airlines flying to sixteen destinations around the United States only but serves those in the New York metropolitan area or mostly those who want to avoid the congestions of the other New York City-area airports. It's the largest airport of the lower Hudson

Valley, other than the three New York City/New Jersey international airports. The Westchester County Airport is presently served by seven scheduled passenger airlines: AirTran, American Airlines, Cape Air, Delta, JetBlue, United and US Airways. It has one



relatively small threelevel terminal with six gates

(A,B,C,F,G,H). The second floor contains concessions and runway views, while the third floor has an outside observation deck with views of the runway as well. The airport has an average of 422 aircraft operations per day. There are 326 aircraft based at this airport including 54% Single Engine, 23% Jet, 19% Multi-Engine and 4% Helicopter.

The Dutchess County Airport is located seven miles south of

Poughkeepsie in Wappingers and provides corporate and general aviation transportation services. The airport covers 560 acres that includes two paved runways of 5,001 by 100 feet and 3,003



by 100 feet and one turf runway of 1,425 by

100 feet. Its control tower operates seven days a week, fourteen hours per day, regulating ground control, local control, ATIS and UNICOM through different frequencies. There are 108 aircrafts based on the field. Of those, 90 are Single Engine Airplanes, 8 are Multi-Engine Airplanes, 8 are Helicopters and 2 are Military aircrafts. This one terminal airport services mostly private flights.

The Orange County Airport is open to the public residing in Montgomery, New York. It consumes 528 acres of

land, some of which is covered by the two runways, one being 5,002 by 100 feet of asphalt of bituminous concrete and the other being 3,664 by 100 feet with the same type surface. There is no air traffic control tower so organization is based on ground communications. There is a segmented circle airport marker system and wind direction indicator, as well as, a lighting schedule set up for the runways. It contains services such as, airport management, aviation fuel, aircraft parking (ramp or tiedown), hangars, passenger terminal and lounge, and pilots lounge. Since it is an untowered aviation airport, it is generally a popular place for aspiring local pilots to learn to fly or practice or to store private jets. But it is New York's second busiest general aviation airport. It is the base of 228 aircrafts, 90% Single Engine, 9% Multi-Engine, 1% Jet and 1% Helicopter.

The Hudson River Valley aviation industry has been and will continue to aspire. The few airports mentioned are similar in serving as transportation for those residing in the region but are quite different in their technical overview. The size of the airports and their runways are different. For example, Stewart



International Airport is 2,400 acres in size

while Dutchess County Airport is only 560 acres. Therefore, it is clear that Stewart supports a heavier consumer population and flight options while Dutchess County may be more limited in their options. But these airports due share the fact that most of the aircrafts that are based are small Boeing aircrafts. The aviation industry in the Hudson River Valley Region remains a successful and reliable form of transportation for many people.

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#### INTERPRETIVE SIGNS AND AIRPORTS OF THE MID-HUDSON VALLEY

#### **By: Brett Laffin**

When seeking an explanation of the term "interpretive signs" via internet search engines like Google, two definitions are provided. The first is the synonymous tern of "heritage interpretation," which defines it as "the communication of information about, or the explanation of. the nature. importance, and purpose of historical, natural, or cultural resources, objects, sites and phenomena using personal or nonpersonal methods."1 While being in relation Sequoia Riverland Trust's to the conservation effort, the other definition provided is "a sign that demonstrates/interprets the natural surroundings of a place (a preserve, a national park, a scenic view) to its visitors."2 These aspects need to be considered when drawing up plans for

interpretive signs.

According The National to Historic Preservation Act amended in 1980, the qualifications for a landscape to follow: preserved are "HABS as /HAER/HALS Standard I covers content, requiring documentation to adequately explain and illustrate what is significant or valuable about the structure being recorded. Standard II addresses quality, requiring accurate preparation and documentation from reliable sources and stating clear limitations independent permit to verification of information. Standard III requires use of readily reproducible, durable, standard-size materials for preparation of documentation. Standard IV specifies that documentation must be produced clearly and concisely. "3

And finally, the last issues that need to be addressed are concerned with the interpretive sign, as an object. Similar to the first questions addressing this issue, this part of the interpretive sign fulfills the who, what, where, why, and when concerning the interpretive sign itself. Also, it seeks to fulfill the two definitions of what an interpretive sign exactly is (the heritage interpretation and the "sign that demonstrates/interprets" functions).

In order to determine the locations of the interpretive signs in relation to the airports, there first must be a differentiation of the two types of signs. As mentioned earlier, the first interpretive sign is one that relays heritage interpretation. This sign can take on the form of a plaque, an information table, or an actual sign on a post. It would feature the historical significance of the area on the surface of it in the form of a paragraph or multiple paragraphs. The second type of interpretive sign is one that can take on the form of a single symbol, with letters spelling out "Park," "School," or "Airport" on it; and they are usually green colored. For the sake of accuracy, both types of signs will be provided.

As far as the positioning of the

interpretive signs, the green directional signs that indicate a historic area is within the area would be placed approximately a mile and half on a road alongside the neighboring locations, and possibly even within the towns or cities themselves. The placement of the actual heritage/historic interpretive signs, would be either within the premises of the airport in and around the key historic sights (for example, around the towers or hangars), or they would be placed on the outside of it. The placement of the actual historic signs would be dependent on whether or not the airport premises would be open to tourists and observers.

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# Aviation in the Hudson River Valley

Lizzi, Claire, Joanna, Frank, Brett

# Updates to the Midterm

- Claire-updated website links
- Frank-added pictures of maps, put markers on the maps
- Lizzi-created guidebook pages
- Joanna-created lesson plan
- Brett-updated wayside exhibits





# Lesson Plan

# Questionnaire





# **Guidebook-Itinerary Pages**





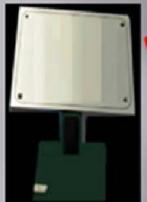
Each of the following maps indicates the placement of interpretive signs for the wayside exhibits. These areas were chosen because of their position in relation to potential tourist sites and patronage within those areas. KEY:

Diamond shapes are upright panels. These are placed in these areas because of the constructs of the surroundings and relevance to the site. Four-sided star shapes are "low-profile" panels that are picked for construct of surroundings and relevance as well. MAPS OF INTERPRETIVE SIGNS FOR WAYSIDE EXHIBITS AT KEY SITES



"Low-profile" Panels

Each panel may have an illustration or Picture (depending on space and subject matter), and will have a heading written in fancy Forte style font (white lettering, sized 26), and paragraphs in sans-serif (black lettering, sized 8-16).



# WAYSIDE EXHIBIT

According to the National Park Services, there are three types of Wayside Exhibits. These are used to provide a comprehensive, safe, and enriching intellectual experience for the tourists to enjoy.

- I. Three Types of Wayside Exhibits:
- Interpretive- historic, natural, and cultural information
- Orientation and "Wayfinding"- to help visitors plan and enjoy their experience
- Management Objectives- available resources, and assistance.

For the task of designing a wayside exhibit for "Aviation in the Mid-Hudson Valley, the first two types of wayside exhibits will be used for the airports of Westchester, Orange, Dutchess County, Stewart, and Albany International airport. These airports were picked for their historicity and significance as major arenas of transportation in the Mid-Hudson Valley.

## The Two Wayside Prototypes



"LOW PROFILE" PANEL -38" wide by 24" tall 24" by 18" Base -Forte "Fancy" Style Headlines -Serif Style Font -Usually placed in outdoors near

natural landmarks, but sometimes Placed -Fixed Down with four 4mm bolts

-Photos, Illustrations, etc. -Braille and Spanish Translations

Illustration By Brett Laffin

## **Upright Panels**

-36" wide by 48" tall -Either fixed to walls or propped up by 2x4 posts

-If fixed to wall, 1/16 mm bolts will be used, and if fixed to post, 4mm bolts. -Fancy Style Bold-Face Header, Serif Style Paragraphs

-Braille and Spanish Translations -Features Photos, Illustrations, Etc. -Usually placed indoors near lobby areas, cocktail lounges, art exhibits, windows overlooking runway, ticketing and baggage areas, and other waiting areas.



#### PANEL PROTOTYPE TWO







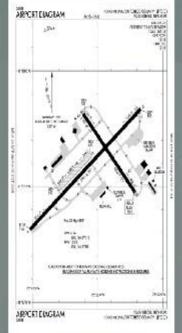
### DUTCHESS COUNTY AJRPORT

Dutchess County Airport was created in the 1930s to meet the demands of the ever-increasing mail deliveries that the aviation industry provided. The U.S. Chamber of Commerce funded its construction and at the beginning of World War II the Army Aircorps took over the facility as a secondary site for Stewart and provided training for West Point cadets. This 640 acre facility contains three runways; two of which are payed and the third a dirt/turf runway. The main runway(6-24) is 5,001 by 100 feet, and features an instrument landing system on the northwest end facing the runway with a medium intensity approach light system that uses runway lights to guide craft in dark weather and night conditions. The crosswind runway (15-33) was shortened from its original size of 3,003 feet to 2,743 feet, a 100 foot decrease due to displacement of thresholds. The turf/dirt runway (7-25) is 1.355 by 100 feet. A Flight Service Station(which ended up being closed down in the 1990s) and control tower were built for the airport in the 1970s. The Federal Aviation Administration constructed the control tower that operates 14 hours a day, and as of 2004 gave the airport \$1 million to improve safety and runway From August 31st of 2006 to August 31st of 207 (a 12-month period) the airport had aviation conditions. traffic of approximately 269 craft per day (99% of which were general aviation, 1% military, 1% air-taxi), totaling 98,342 flights per year. In 2007 the airport housed 198 aircraft: 50% single-engine, 11% multiengine, 1% jet, 8% helicopter, and 1% military. Dutchess County Airport's business hours are between 8:30 AM and 4:30 pm, and the line services (fueling) operates from 7:00AM to 9:30 PM.

### DUTCHESS COUNTY AJRPORT

In the 1950s, Colonial Airlines provided air carrier services. In 1956 this service was a DC-3 from LaGuardia Airport in New York City that made Monday through Friday flag stops at 11:50 AM between Montreal and Ottawa, as well as intermediate stops at Albany International Airport and and Burlington International Airport in Vermont. From the 1960s to the 1980s, commercial airlines such as Colgan Airways, Air North, and Command Airways (which was later known as American Eagle Airlines) operated out of Dutchess County Airport as hubs, executive offices, and maintainence facilities. The ATR in accordance with the Federal Aviation Administration opened up for U.S. flight operations in the airport, and by September of 1980, a 16,700 square foot terminal building was opened for the use of airline passengers.

In 1990, commercial operations out of the airport ceased when Stewart International began commercial operations. Dutchess County Airport lost its commercial service in August 12th, 2001 when CommutAir, a Continental Connection carrier stopped its flights to Burlington International Airport in Vermont. The airport still continues to provide corporate and general aviation transportation services, and operates as a site for the Aviation Divison Market to engage in business.



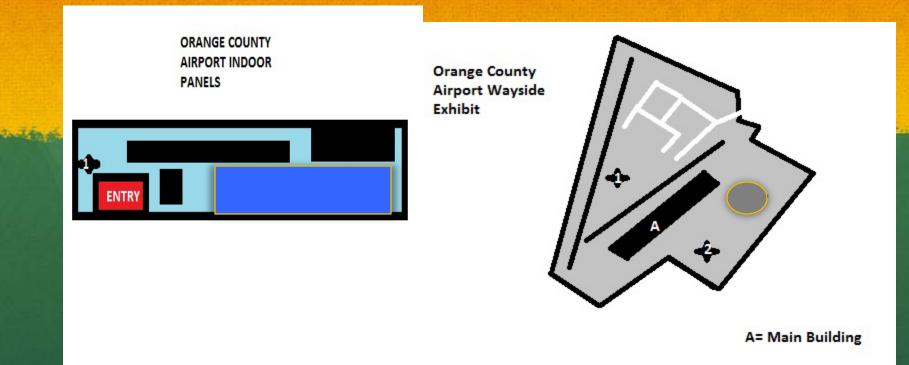
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### DUTCHESS COUNTY AJRPORT

Originally known as Hackensack Field, and sometimes referred to as "Poughkeepsie Airport," the facility was ussed by the U.S. Army Airforces as a s"sister" location for Stewart Field to train students from the United States Military Academy in preparation for World War II. It has been a historic location for its service to Winston Churchill and President Franklin Delano Roosevelt. On June 17th, 1942, Franklin Delano Roosevelt drover from his homestead in Hyde Park, New York to the Wappgingers based field to pick up British Prime Minister Winston Churchill who arrived from Naval Air Station Anacostia. On April 4th, 1947, the the airfield was deeded for \$1 to Dutchess County by the War Assets Administration under the conditions to of the Surplus Property Act of 1944, which enabled the field to remain open for general aviation purposes. The IBM corporation built a hangar in the airfield to house coroporate aircraft and helicopters, which included the Gulfstream II jets in the 1970s through the 1980s. The Cessna Aircraft Corporation built and maintained a Cessna Citation (a line of business jets built and sold by the company) in the airfield.

#### ORANGE COUNTY AIRPORT



#### MAP OF WAYSIDE EXHIBITS AND PANELS FOR THE INSIDE AND OUTSIDE OF ORANGE COUNTY AIRPORT. Diamond= Upright Panel Four-sided Star= "Low-Profile" Panel

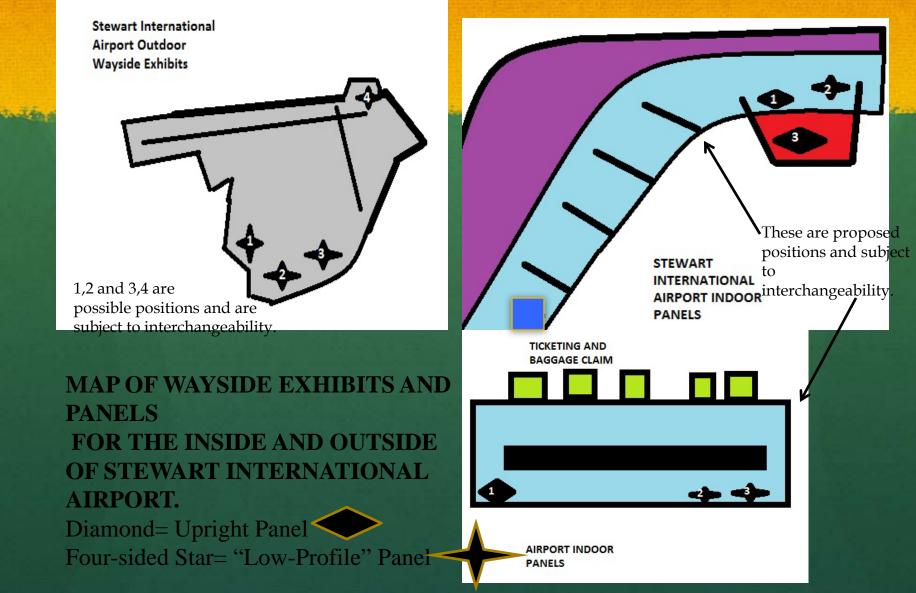
The shapes that stand out are edits in the map to suit the slides for the panels. Both numbered shapes are interchangeable.



ORANGE COUNTY AJRPORT

Orange County Airport, located southwest in the Town of Montgomery in Orange County, New York, is a 526 acre an untowered, general aviation airfield owned by the county. It is located at the junction of highways 211 and NY-416, and is the second busiest facility (having approximately 125,000 take-offs and landings) that is mostly used to train aspiring pilots and those who wish to hone in on their aviation skills. It features a 1-watt rebroadcast station at 88.1 megahertz, enabling its broadcasting to be picked up by cars within the area of the airport. The minimal amount of air-traffic through the airport has made it a popular landing and depot area for private aircraft. Currently county officials are looking to add 10 luxury and private hangars to house aircrafts due to the growing market without having to raise taxes, but bring business.

STEWART INTERNATIONAL AIRPORT



## STEWART JNTERNATJONAL AJRPORT

After the creation of the United States Airforce, the Army Airfield was recreated as an Air Force Base that would still be used to train cadets from West Point. These operations remained up until 1970 when it became deactivated. The site remainedout of operations until 1983 when the New York National Guard took up operations with their 105th Airlift Wing and 213 EIS. These operations included support missions for military occupations in Iraq and Afghanistan, as well as crisis missions. The base also housed the C-5 Galaxy for the Air National Guard and the VMGR-452, a Marine Corps squadron operating the KC-130T craft. At this point in time, the airfield became known as the Stewart Air National Guard Base.











### Under the urgency and direction of Mayor John Boyd Thatcher II to create a site that surpassed the potential of any other municipality, the

Mayor, the Albany Airboard, and Col. Charles Lindburgh road out to the future site and began to plan their aviation "masterpiece.". With a little help of some friendly neighbors in the local Watervilet Shaker population, the Albany airfield was relocated and to and constructed on Albany-Shaker Road in the town of Colonie, NY, just northwest of the business district in the city of Albany. Mayor Thatcher initially proposed the name "Lindburgh Field," but this idea was not carried out. As previously mentioned, the Shakers were instrumental in the erection of the field, loaning tools, equipment, tractors, workers, and even provided meals for them. While excavating the area, the crew came across a historic relic: the body of Mother Ann Lee, the founder of the Watervilet Shaker colony who expired in 1784, and her brother Father William Lee, and the both of them were relocated to the local community cemetery where they were properly buried. The field on Albany-Shaker Road was originally 249 acres; it housed two macadam runways, one cinder runway, two brick hangars, and one brick administration building.

The airfield was opened on June 1st, 1928, and was first used for transporting mail and cigars from the mayor of Albany to the mayor of Buffalo. By October 1st of that year, the flights dispatching from the airport in Montreal-to-Albany-to-Newark carrying mail, goods, and passengers. On October 3rd and 4th of that year, a grand opening was held that featured an air meet, an exposition, and a dedication of the field. Two years later, the airfield would become exactly what Mayor John Boyd Thatcher II had visioned: "the aerial crossroads of the northeast. The airstrip and operations were not the only innovation that came out of its inception. In 1930, the first airport weather bureau for Continental and Eastern Airlines would be in the first administration building.





#### ALBANY JNTERNATJONAL AJRPORT

Other presidential candidates who used the airport were Richard M. Nixon, Barry Goldwater, George Wallace, Thomas Dewey, Al Gore, William Bradley, and John F. Kennedy. President Bill Clinto landed with Air-Force One in October of 1994.

By 1937, Thatcher decided to expand the airfield, adding 3,600 feet to each runway to secure the city finances of the airport. However, due to insufficient timing, this plan never went through. In 1937, the total number of passengers increased by 2,300 from 1936. By January of 1939, the airport faced the threat of

being closed down by the civil Aeronautics Administration for flight operations not being deemed suitable for use. This was the result of a long running dispute between the city and federal officers over responsibility for improvements needed to be done. (Mayor Thatcher felt that the city was not responsible for making the improvements that benefited national defesne and commerce. Federal officials closed the airport, only allowing the airport to hold daylight operations in December of 1940. All of the restrictions were lifted in January of 1942, and the airport has never been closed since.

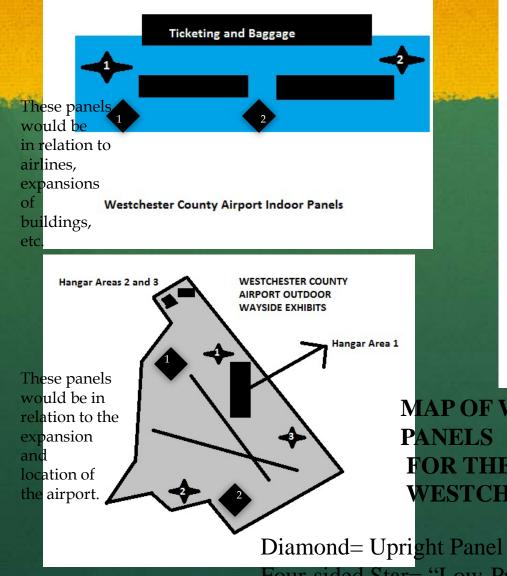
In 1962, a new terminal building was opened, along with a landside building that had ticket counters, baggage claim, a coffee shop, and a single-story extension coming out of the building. In 1965, the concourse was widened northwest, housing boarding gates for Allegheny Airlines on the second floor, and baggage carousels.



Operating as a class C airspace, Albany International Airport, in the first year of its operations the airfare was approximately 25 dollars (only to be reduced in 1932 to \$14.70) and brought 180 passengers via Canadian Airways from Albany to New York, 125 from New York to Albany, and 54 from Albany to Montreal. In 1932, operations expanded as 16 aerial passengers and mail routes were in daily operations between Cleveland to Albany, Newark to Boston and back, from Boston to Springfield to Albany and back: and from Newark to Albany to Montreal and back. By 1932, multiple commercial airlines were operating out of the airport, includiong Canadian Colonial Airways, Eastern Airlines, American Airlines, and Albany Aircraft Corp. In addition to housing commercial airlines, the airport provided space for flight school and hangars housing aircrafts that were on the market for purchase.

1932 garnered in another historic landmark for the airport. Future president and Governor at-the-time Franklin Delano Roosevelt made a legendary flight with ten other passengers from Albany to Chicago to accept his Democratic presidential nomination. This event along with Will Rogers' use of the transportation hub brought the airport to the lexicon of its fame, as reporters and photographers were on hand to witness and document the historic event (although photographers were told to not take pictures of Roosevelt boarding the plane with his frail polio-inflicted state requiring him to be double-bent and carried into the plane). Other historic flights included Wrong Way Corrigan who left from New York City to Los Angeles in 1938, only to land in Ireland, who touched down in the Albany airport to promote his movie called 'The Flying Irishmen' (written in green in the newspapers).

#### WESTCHESTER COUNTY AIRPORT



Avitat Hangar Wayside Exhibit For Private and Corporate Planes



The Avitat hangar is a hangar where info on the types of planes would be. This is just an example of a layout for a hangar wayside exhibit and does not relate to any of the signs in the following slides, its merely an example.

**MAP OF WAYSIDE EXHIBITS AND** FOR THE INSIDE AND OUTSIDE OF WESTCHESTER COUNTY AIRPORT

Four-sided Star= "Low-Profile" Panel



#### Westchester county Ajrport

Westchester County Airport is the hub located on the New York-Connecticut border, and has been serving the diversity of the aviation industry in the Hudson Valley since 1944. Located between the three towns of Rye, Harrison, and North Castle, New York, it serves not only Westchester County residents, but neighboring residents in Fairfield County Connecticut, New York City (freeing up congestion for airports like LaGuardia), and residents that are even further north in Upstate New York. In 2008 it was estimated that 901,831 passengers boarded airlines based out of the airport, creating a 78,353 increase from 2007. Located approximately 33 miles from Midtown Manhattan, and 3 nautical miles from the business district of White Plains, New York, the airport houses 7 major airline providers flying to 16 destinations in the United States only. On average 1.9 million passengers depart or arrive at this facility on 32,000 commercial airline flights, going directly to and from recreational and

business sites.

### WESTCHESTER COUNTY AJRPORT

In 1942. Westchester County purchased land in the Rye area with the intent to build a commercial transportation enterprise. However, this plan was became stagnate as the demand for protection of the Rye Lake and New York City from potential attack in World War II. The airport became the home to the Air National Guard during the war, only to finally be relocated in 1983 north at Stewart International Airport. In 1945 the airport was reopened, but did not have a commercial departure from it until three years later. By 1952, the United States Air National Guard remained with a base on the airfield and held flight training and transportation missions for the cadets. Before the passing of the Airline Deregulation Act (which sought to remove government control of fares, routes, and market integration of new airlines, overturning the Civil Aeronautics Board's regulatory power over such issues), the airport served such airlines as Alleghemy Airlines, Empire Airlines, Command Airways, and several other regional enterprises. However, as of January 5th, 2006, the airport became the site of the last flight of commercial airline Independence Air from Westchester to Washington, D.C. The facility currently houses 7 commercial airlines, and in the past served such airlines as Continental Airlines, which served as a non-stop flight from New York to Cleveland on what was known as the Continental Connection.

Today Westchester County Airport remains as an ever-evolving stalwart in the Hudson Valley, and asserts its continuous effort to adhere to environmental concerns and the lure of the breath-taking visual aesthetic of the surrounding area to invite tourism, would-be residents, and business ventures to encamp themselves in the area.

#### WESTCHESTER COUNTY AJRPORT

JetBlue is the airport's largest air-carrier, daily completing 12 round trips to 5 destinations, including Fort Lauderdale, Fort Myers, Orlando,

Tampa, and West Palm Beach. Cape Air is the newest airline to operate out of the facility in June of 2009, providing flights to Nantucket and Martha's Vineyard, Massachusett, and was brought to Lebanon Municipal Airport in New Hampshire in 2010. The Cape Air flights depart and arrive at Signature Flight Support facility located in south in the Main Terminal due to the lack of space for ticket counters. Air Canada, under the ownership of Air Georgian, announced in 2010 its discontinuation of using Westchester County Airport.





### 🕻 WESTCHESTER COUNTY AJRPORT

Westchester County Airport is no stranger to controversy. The main issue of controversy concerns expansion, but not entirely of the facility. The expansion of the facility has created an influx of travelers utilizing the airport to avoid flight delays at other locations. In turn, this creates traffic-congestion in Westchester as a result of "Bee-Line" buses transporting masses of passengers at the urgency of the county not to drive to the airport. Being that a number of residential neighborhoods a located near the airport, the county implemented a "Voluntary Restraint From Flying" program, in which there is an observation of a "voluntary curfew," therefore eliminating some concerns over the airport's activity. Studies on noise and encroaching expansion are conducted regularly.









#### Westchester county Ajrport

Other points of interest about Westchester County Airport include: -Meet the Parents starring Ben Stiller and Robert DeNiro has a scene filmed there, along with The Best Man, Random Hearts, Space Camp, and TV Shows The West Wing and Law & Order.

### Westchester county Ajrport

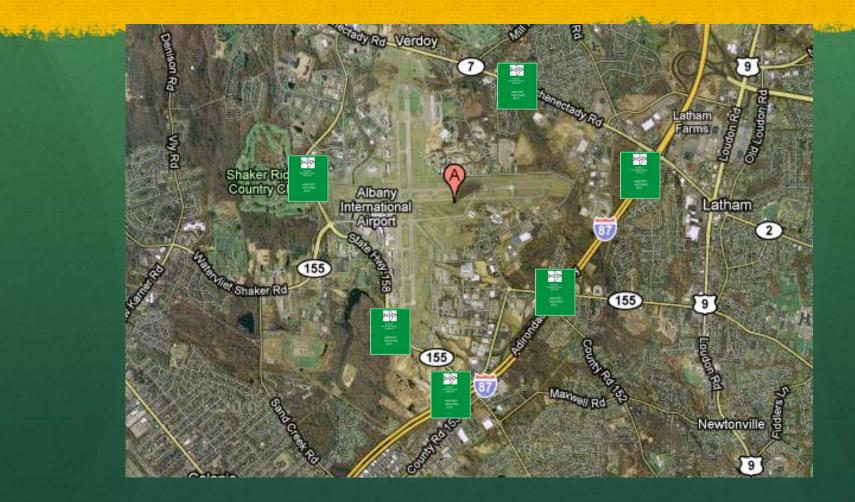
While the airport is limited in space, it is constantly seeking to expand with such entities as a car rental service within the airport. and expand the actual size of the airport. However, this does not seem to be something that will happen soon as adherences to guidelines and the protests of the surrounding community seem to get in the way. The IATA code is another source of confusion concerning the airport. as the origins of it seem obscured. Some assert that it stems from the name of the city (IATA codes do not normally begin with the first letter of the town or city it is located in). Others believe it is an abbreviation for Harrison, New York, one of the tri-laterally connected towns neighboring on the location of the facility. Westchester County Airport covers a wide area of 702 acres, and is comprised of two paved asphalt runways, (16/34) 6,548 by 150 feet, and (11/29) 4.451 by 150 feet. The 11/29 runway, or runway 29 has a displaced threshold of 1,297 feet as a result of the surrounding trees (actually considered to be in Connecticut and measure 37 feet tall are 370 feet from the runway) that are obstructing the path. The runway is built to handle JetBlue's Airbus A320, the AirTran's Boeing 737, and Boeing 717. There are many FBO's, or fixed base operators in the facility, such as Landmark, NetJets, Avitat, Signature Flight Support, Million Air, Panorama, and other operators., providing Jet A and 100LL fueling, repair, and maintenance, as well as the tying down of craft, de-icing. United States Customs, luxurious services such as limousine transportation and delux surroundings. There is a lack of parking space in the facility, and the price for parking is significantly higher than the other New York Metro Area based airports, and as a result the airport encourages passengers to get rides to the facility. The United States Civil Air Control operates out of Westchester County Airport with its New York Wing and Southeastern New York Wing, which are in the same building as the Airport Police Station. Remodeling is being done for the arrival of the New York Wing to the facilities.

### **Stewart International**

Jas John States



### **Albany International**



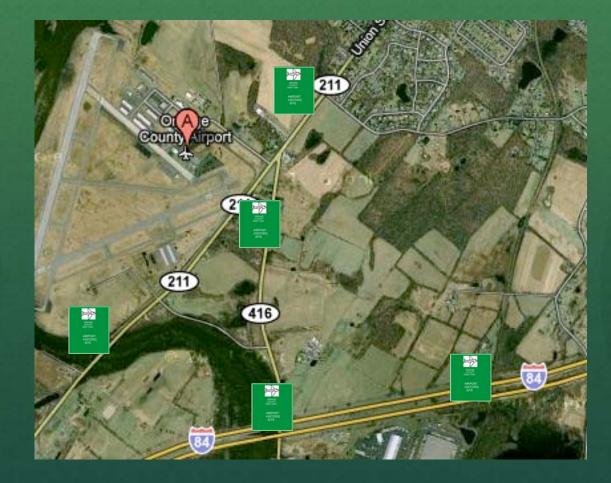
## **Dutchess Airport**



# Westchester Airport



# Orange Airport



### Website Links

<u>Hudson Valley Airports</u> <u>Albany Airport</u> <u>Westchester Airport</u> <u>Stewart Airport</u> <u>Dutchess County Airport</u> <u>Orange Count Airport Diagram</u> <u>Hudson River Valley Institute</u> <u>Old Rhinebeck Aerodrome</u> <u>Hudson River Valley National Heritage Area</u> <u>The Glenn Curtiss Museum</u>

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