

# Wing Tips

## THE AEROSPACE EDUCATION NEWSLETTER OF NEW YORK WING SUMMER 2011

Westchester County Airport: 24 Loop Road, Bldg 1; White Plains, NY 10604-1218  
Lt Col Marilyn Rey, CAP, DAE Lt Col George Fillgrove, CAP, assist. DAE

Col Jack Ozer, CAP, Commander  
Maj George Geller, CAP, AEO Capt Richard Lauricella, CAP, AEO

### NAVY CELEBRATES 100 YEARS OF NAVAL AVIATION

The Navy agreed to purchase an airplane from Glen Curtiss on May 8, 1911 and that is considered the birth of Naval Aviation.

Actually, the Navy had been interested in flying machines since 1898 when then Assistant Secretary of the Navy, Theodore Roosevelt recommended that two officers investigate flying machines and their possible use for the Navy. This was the same TR who would later become President and the first US President to fly in an airplane.

In 1910, Eugene Ely flew a Curtiss pusher biplane from a wooden platform built on the deck of the cruiser *USS Birmingham* at Hampton Roads, Virginia. The plane headed toward the water when it left the ship and the propeller got slightly damaged, but Ely was able to land it safely on shore.

Glen Curtiss hoped to get a government contract and offered to train a Naval Aviator for free. The Navy selected Lt Theodore G. Ellyson to be the first Naval Aviator

In January the following year, Eugene Ely landed on a platform built on the cruiser *USS Pennsylvania* in San Francisco Bay. A tailhook was used to catch onto ropes stretched across the platform with sandbags at each end, a simple yet innovative form of arresting gear. It was the first successful landing of an aircraft on a ship. Ely was able to land and take off easily.

In February, Glen Curtiss flew one of his airplanes fitted with floats, called the hydroaeroplane, out to the *Pennsylvania* at anchor in San Diego Harbor, landed in the water and taxied alongside. A crane lifted the aircraft on board the ship. Later Curtiss and the plane were put back in the water and Curtiss flew away.

The Navy wanted to get involved in aviation but was undecided whether seaplanes that could land on water or planes that could land on a ship as Ely had done, or airships (lighter-than-air craft) would best suit their purposes. However, they did buy their first airplane from Curtiss. It was the Curtiss A-1 Triad, called

“Triad” because its environment was the air, the water and the land as it could fly, float, and it had wheels.

### AERIAL RECONNAISSANCE DURING THE CIVIL WAR

This Year is the 150<sup>th</sup> anniversary of the start of the Civil War. As one historian put it, it was the first modern war and the last old-fashioned war. Railroads and steamships were used to transport men and equipment, but also horses and wagons were used. Troops got from one place to another by marching and they fired single-shot weapons. The telegraph speeded up messages, but messengers on horseback were also used. Yes, they also had aerial reconnaissance.

A man named Thaddeus Lowe was a balloonist and wanted to show that balloons could be useful to the Army in the War. He set up his demonstration in front of the Washington DC Armory which was where the National Air and Space Museum now stands. The next building was the city’s gas works that made coal gas for lighting the city. Coal gas was nearly as good as Hydrogen for ballooning. The balloon rose to an altitude of 500 feet and telegraph wires were connected from the balloon to the telegraph system. They could see for 25 miles in all directions and the telegrapher that Lowe took up sent a message to President Lincoln about what they saw. Lincoln was very impressed! They brought the balloon down and “walked” it over to the White House where Lincoln came out to see it.

Lowe made some flights for the Army, but realized that, in the field, he would not have a gas plant so he designed gas generators that he called, inflation wagons which were built for him at the Navy Yard and mounted on ordinary Army wagons. The gas generators made Hydrogen by mixing dilute sulfuric acid with iron filings. The Navy also converted a barge into an “aircraft carrier” for him. Thousands of flights were made by Lowe and his associates during the War.

The Confederates also used balloons. Some used “illuminating gas,” and some were hot-air balloons.

PLEASE POST ON YOUR BULLETIN BOARD