



Missions for America

*Semper vigilans!*  
*Semper volans!*

# The Coastwatcher

Newsletter of the Thames River Composite  
Squadron

GON  
Connecticut Wing  
Civil Air Patrol

<http://cap-ct075.com/default.aspx>

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Vol. III No. 39

05 November, 2009

## SCHEDULE OF COMING EVENTS

### NOVEMBER

10 NOV-Character Development-Blues  
17 NOV-Aerospace-BDUs  
18 NOV-USCGA Lecture  
20-22 NOV-Danielson November Bivouac  
24 NOV-Emergency Services-BDUs  
28 NOV-TRCS Rifle Training

### FOR FUTURE PLANNING

TBA-Danielson December Bivouac  
TBA-IG visit

### CITRUS FRUIT FUND RAISER

The Annual Citrus Fruit Fund Raiser is drawing to a close and approximately 260 cases have been sold. A final tally will appear in the next *Coastwatcher*.

## CADET MEETING MINUTES 03 NOVEMBER, 2009

Maj John Lesick, CTWG Director of Cadet Programs briefed the Cadets on current and future programs. He explained the application and interview procedures for National Cadet Summer Activities and discussed the plans for the 2010 Cadet Ball.

Maj Rocketto announced that the New England Air Museum will be holding a special "Women Take Flight" program on 8 November and presented the details of the program.

The Danielson emergency services encampment will be held on the 20-22 of November and Cadets were encouraged to make plans to attend.

Current event topics included news about the successful launch of the Ares-1X vehicle, the commencement of the countdown for the 16 November launch of Atlantis, and the discoveries made by the Cassini spacecraft in its "fly through" of the plume of matter issuing from one of Saturn's moons, Enceladus.

## NATIONAL COMMANDER'S SAFETY DOWN DAY

31 October, 2009

Capt Paul Noniewicz, Squadron Safety Officer, opened the mandated program with an overview of CAP safety policies and discussions of the applicable regulations and forms.

Maj Rocketto discussed firearms safety. Hearing and eye protection, proper firearms storage, and safe handling of different types of firearms was demonstrated.

SM Wojtcuk's topic was fire in the home. The types and uses of the different classes of fire extinguishers was explained and alternative methods were discussed. Escape options were emphasized.

Maj Bouque's presentation on vehicle safety focused on recurrent vehicle inspection.

Lt Lintelmann explained the FAA Safety Program and how what might get academic and flight time credited.

Capt Noniewicz reviewed Operational Risk Management.

LtCol Wisheart's comments on aviation medical and physiological issues covered carbon monoxide poisoning, hypoxia, and related issues.

Maj Neilson discussed features of the FAA *Nall Report* which reviews aviation accidents.

### **PROPBUSTERS FIELD TRIP**

The Cadet contingent visited the Salem Flying Field of the Propbusters and were introduced to the hobby of flying radio controlled model aircraft. The Propbusters were formed in 1937 and have a membership of over 100 enthusiasts who fly a wide range of different types of radio controlled aircraft, from free flight to helicopters.

Club President Dennis Duplice, a professional aviator, welcomed us and introduced us to Tom Vernon who briefed the Cadets on the technique of flying the model aircraft and explained the control system. He then split the group up and assigned various members of the Propbusters as instructors to each group. The Cadets were then given the opportunity to fly the aircraft.

Each Cadet control box was linked to an Instructor Pilot box and could be overridden if the IP considered it necessary. It was an extremely

windy day and the neophyte pilots had to work hard to keep the aircraft in the right hand pattern and develop the delicate touch needed to operate the fully functioning control system. By the end of the session, Cadet Flynn managed to perform a Cuban Eight and no disasters occurred despite the fact that three aircraft were in the pattern at one time.

*Cadet Barberan pilots RC craft under the guidance of an instructor pilot.*



Members of the club demonstrated various aircraft including some helicopters.



*Duplice's helicopter and a scale model of a Mudry CAP 232 high performance aerobatic aircraft sit on the flight line.*



*Note the rotor head detail on the helicopter.*

We adjourned to a hot dog lunch. Brownies were supplied by Mrs. Herzog.

Squadron members attending were Cadets Lexie Wojtcuk, Michael Herzog, Jonathan Scannell, Brendan Flynn, George Barbaran, SM Wojtcuk, and Maj Rocketto.

## DANIELSON BIVOUAC

An Emergency Services Training Bivouac is planned for the Danielson Airport campground on 20-22 November. Cost will be \$15 to cover food. The training emphasis will be on using map and compass in conjunction with grid numbers.

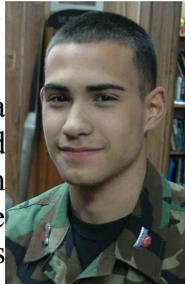
### SENIOR ACTIVITY

31 October, 2009

Squadron members who will attend the USAF Evaluation Exercise at HFD on Saturday engaged in a command post exercise. They examined a number of possible mission scenarios and developed tactics to effectively carry out search and rescue or reconnaissance flights which would meet mission requirements.

### AIR TRAFFIC CONTROL TOWERS

by  
C/A1C Jorge Barberan Jr.



Air traffic control (ATC) is a service provided by ground based personnel who direct aircraft on the ground and in the air. The primary purpose of ATC systems worldwide is to separate aircraft to prevent collisions, to organize and expedite the flow of traffic, and to provide information and other support for pilots. In some countries, ATC may also play a security or defense role or actually be run by the military. With the U.S. Civil Air Patrol I've been able to experience what ATC is like from both the cockpit and the tower.

While on an orientation flight, I learned that you cannot always rely on ATC to alert you to the close proximity of another aircraft. When flying, it is important for the crew to maintain constant vigilance. Once I saw another Cessna aircraft at three o'clock and a bit higher than us. The instructor was talking to me and looking down at

the instruments so I said, "Sir, traffic, 3 o'clock high." "Roger, traffic in sight," and we flew right under the other plane. It was an amazing feeling for me, considering that many people never get the opportunity to do and say such things. In addition to its primary function, the ATC provides additional services such as weather and navigation information. When controllers are responsible for separating some or all aircraft, the airspace is called "controlled airspace" in contrast to "uncontrolled airspace" where aircraft may fly without the use of the air traffic control system. Depending on the type of flight and the class of airspace, ATC may issue instructions that pilots are required to follow or merely flight information to assist pilots operating in that airspace. So if there is an aircraft near you but you are not in controlled airspace, you are responsible for seeing and avoiding other traffic.

In 1919, The first attempts to provide a semblance of air traffic control were based on simple "rules of the road." Archie League, who used colored flags at what is today's Lambert-St. Louis International Airport, is often considered the first air traffic controller. In the United States, The first air traffic regulations were established by the Air Commerce Act in 1926. Four years later, in 1930, control towers were equipped with radios. By 1935 several airlines jointly established the first Airway Traffic Control centers to enhance traffic flow and expedite aircraft movements. Airlines using the Chicago, Cleveland, and Newark airports agreed to coordinate the handling of airline traffic between those cities. In 1936 this preliminary effort was transferred to the Federal Government, and the first generation Air Traffic Control (ATC) System was born and in December, the first Airway Traffic Control Center opened at Newark, New Jersey.

The primary method of controlling the immediate airport environment is visual observation from the control tower. The tower is a tall, multi-windowed

structure located on the airport grounds. Tower controllers are responsible for the separation and efficient movement of aircraft and vehicles operating on the taxiways and runways of the airport itself, and aircraft in the air near the airport, generally 5 nautical miles.

Ground Control is responsible for the airport "maneuvering" areas. This generally includes all taxiways, inactive runways, holding areas, and some transitional aprons or intersections. Exact areas and control responsibilities are clearly defined in local documents and agreements at each airport. Any aircraft, vehicle, or person walking or working in these areas is required to have clearance from the ground controller. During my visit to the Groton-New London (GON) tower, state vehicles which were plowing snow required clearance from ground control to cross taxiways and runways. This is normally done through VHF radio, but there may be special cases where other methods are used. Aircraft or vehicles without radios will communicate with the tower *via*, to my amazement, aviation light signals. A gun-like device tower hangs from the tower ceiling and can transmit a beam of red, green, or white lights in various combinations to inform vehicles without radios about appropriate actions such as "cleared to land" or "exercise general caution."



*TRCS Cadets at Westover Tower. Note the light signal gun, familiarly known as a "biscuit gun."*

Runway capacity and weather are major factors in maintaining on-time operations. Rain or ice and

snow on the runway cause landing aircraft to take longer to slow and exit which reduce the arrival rate and requiring more space between landing aircraft. I visited GON during the winter and it had snowed the day before. Taxiway Charlie was closed due to ice. Fog also required a decrease in the landing rate. These, in turn, increase airborne delay for holding aircraft. If more aircraft are scheduled than can be safely and efficiently held in the air, a ground delay program can occur, holding aircraft which wish to depart.

The day-to-day problems faced by the air traffic control system are primarily related to the amount of traffic within the system. Each landing aircraft must touch down, slow, and exit the runway before the next crosses the beginning of the runway. This process requires at least one and up to four minutes. Allowing for departures between arrivals, each runway can handle about 30 arrivals per hour. A large airport with two active runways can handle about 60 arrivals per hour in good weather. Problems begin when airlines schedule more arrivals into an airport than can be physically handled, or when delays elsewhere cause groups of aircraft that would otherwise be separated in time to arrive simultaneously. Aircraft must then be delayed in the air by holding over specified locations until they can be safely sequenced to the runway. Up until the 1990s, holding, which has significant environmental and cost implications, was a routine occurrence at many airports. Advances in computers now allow the sequencing of planes hours in advance. Planes may be delayed before they even take off, or may be told to reduce power in flight and proceed more slowly significantly reducing the amount of holding. The Federal Aviation Administration and many aerospace organizations continue to work to improve the equipment and procedures in order to minimize delays which in turn reduce fuel and operating costs.