

Missions for America

*Semper vigilans!*  
*Semper volans!*



## The Coastwatcher

Newsletter of the Thames River Composite Squadron  
GON  
Connecticut Wing  
Civil Air Patrol

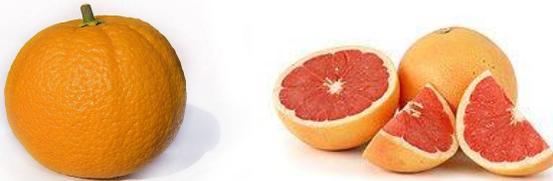
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C/2Lt Flynn, Printer's Devil

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### CITRUS FRUIT FUNDRAISER DEADLINE EXTENDED

**The deadline for the fruit sale has been extended to Sunday, 07 November, 1800 hours. If you sell any fruit after the meeting on 02 November, email the type, weight, and amount to Maj Rocketto by Sunday night, the seventh of November. The order goes in on Monday, the eighth. Bring money to meeting on the ninth.**

**Cadets should turn in all money and invoices to SM Jennifer Hall. Officers should return their receipts to Maj Rocketto.**

### SCHEDULE OF COMING EVENTS

#### November

05-07 NOV-Glider Orientation Weekend  
09 NOV-Squadron Meeting  
12-14 NOV-NER Conference  
13 NOV-Cadet Meeting-Casa Woj  
16 NOV-Squadron Meeting  
20 NOV-USCGA PT Training  
20 NOV-USAF Evaluation-HVN  
15-20 NOV-USAF Graded Training Exercise  
23 NOV-Squadron Meeting-Col Isabelle visit  
30 NOV-Squadron Meeting

#### For Future Planning

04 DEC-Squadron SAREX with HVN and BPT  
07 DEC-Bowling Night  
18 DEC-USCGA PT Training  
21 DEC-Squadron Party  
30 DEC-No Meeting  
14 FEB, 2011-Juliet Long Aerospace Festival  
TBA-1109 AVCRAD Helicopter Flights

### CADET MEETING

*02 November, 2010*

*(Reported by C/2Lt Flynn)*

The meeting commenced with drill. A number of USCGA cadets came and helped us with columns. Cadet Albano was instructed on facing movements by a Coast Guard cadet.

Back at the squadron, C/SrAmn Michael Herzog taught a class on holiday safety, which included discussions on lights, wires, candles, and outlets.

This was followed by a uniform inspection by C/2Lts. Wojtcuk and Flynn.

Maj. Bourque taught an aerospace class on aspects of our solar system, including orbits, the moon, distances in space, and speeds needed to launch spacecraft.

Capt. Wojtcuk tested cadets on their "cadet oaths", which must be recited in order to be promoted. She also discussed the color guard contest trip on Nov. 6, the Nov. 13 forum at her house, and PT at the USCGA.

Any cadets who wish to go to the color guard contest must email Capt Wojtcuk immediately.

Maj. Rocketto announced the winner of last week's Coastwatcher contest winner, Cadet Cathcart. Maj. Rocketto discussed the fruit sale, which has been extended to Sunday. He also talked about the glider camp. Cadets were instructed to arrive at the squadron at 1600 with their BDUs, sleeping bag (or blankets), sleeping pad, Form 60, 101 card and CAP ID, and toiletries. Pack warm and pack tight. We will return on Sunday between 1800 and 1900.

Capt. Noniewicz provided the final class of the evening. He went over the Squadron Bowling Tournament, which has been moved to December 7, and the Christmas party. Capt Noniewicz also informed the Cadets about the upcoming USAF Guided Training Exercise for the Wing and the Wing's Subordinate, and the Squadron's Subordinate Unit Inspection.

A promotion ceremony concluded the meeting. Cadet Jeffrey Bourque was promoted to Cadet Airman.

## SQUADRON ORIENTATION FLIGHTS

*30 October, 2010*

Saturday's morning frost delayed the departure of one of the aircraft which had been parked at Meriden-Markham but the orientation flights were successfully completed despite winds of 16 knots gusting to 22 at Groton. Maj Mode and Lt Farly flew the Cadets.

Participating Cadets were C/ABs Chartier, Cathcart, Bunevich and C/Amn Daniels and Ray.

## GLIDER WEEKEND

The following information pertains to the weekend trip:

Departure from Squadron: Friday, 05 DEC 1600

Uniform: BDUs

Credentials: CAP ID, Form 60, Form 101

Spending Money: ten dollars

Equipment: **WARM OUTER CLOTHING**, rain gear, two changes of undergarments, toilet articles, sleeping bag.

***YOUR TRAVEL KIT MUST BE TIGHTLY PACKED IN ORDER TO FIT IN THE VAN.***

We will be staying in the Springfield Vermont Squadron buildings at the Springfield-Hartness Airport, Springfield, VT. The telephone number is 802-886-8199.

Return: Approximately 1900 hours, Sunday, 07 DEC.

**SPECIAL CADET "LEARN TO LEAD"  
MEETING**

In our first big attempt to slowly hand-over the Cadet Squadron to the leadership of the cadets as per the new Learn to Lead program...

Cadets will meet at the Woj Abode on Saturday, Nov. 13, at 9AM-3PM, to set our goals and schedule for the coming year in line with the new Learn to Lead Program.

The agenda will

1. Set a schedule according to the suggested CAPHQ Cadet Programs schedule.
2. Choose topics to be covered in AE, Safety, Leadership, Moral Leadership, and ES.
3. Plan another ES mini-bivouac.
4. Discuss how the Model Rocketry program will fit into our schedule during the winter months so we can spend time on outdoor activities in the spring/summer/fall.
5. Discuss the Color Guard and parade opportunities.

*E-mail Capt Wojtucuk and state if you will or will not be in attendance so we get a head-count for pizza, cost to be announced at a later date.*

**SPECIAL CADET PT TRAINING**

Winter PT training is difficult since we lack sufficient space for indoor training. Through the good offices of Commander Flynn, we have obtained use of US Coast Guard facilities. The dates and times follow:

Saturday, November 20th, 8:30AM-10:00AM-  
The van leaves the squadron at 8:15AM sharp.

Saturday, December 18th, 8:30AM-10:00AM -The van leaves the squadron at 8:15AM sharp.

We meet at the squadron (no matter how close to the Academy you might live) and go in together as a squadron - PLEASE do not ask for exceptions.

Wear PT "uniform" as listed on our website on the elephant page. Do not wear anything with writing or pictures on it unless it is our squadron tee shirt or a CAP encampment shirt.

There will be no other PT testing during these months. Please watch our website Cadet Calendar for uniform of the day and classes during the winter months. Stay tuned for Jan-Mar dates.

**GROUND OBSERVER CORPS REDUX  
ANSWERS AND NEW CONTEST**

For the second week in a row, Cadet Cathcart won the GOC contest. Cadet Herzog also correctly identified the three aircraft but provided little back up information so the prize goes to Cathcart.

Lt Col "Wild Bill" Dolan also sent in an entry. As a pilot for Pilgrim Airlines, he flew all four of the Twin Otters pictured and in addition, in his entry, noted the tail of the Fokker F-27 parked beyond the Twin Otters.

Here is Cadet Cathcart's winning answer.

*TRCS GOC Contest Answers  
DeHavilland of Canada Aircraft*

*by  
Cadet Andrew Cathcart's*

*All planes in the Coastwatcher this week are made by a Canadian Plane company named De Havilland. Here's a bit about them:*

*Mystery Aircraft #1 is a De Havilland DHC-2 Beaver, a single engine, high wing aircraft, which is commonly used as a bush plane (a plane which serves as a means of transportation generally because of insufficient road systems in places like Africa, the Australian outback, Canadian tundra, and Alaska). After the plane was introduced in*

*1948, the US Army bought several hundred of these aircraft. Over 1,600 aircraft were produced until 1967, when the original line shut down. Nine Beavers are still in service with CAP.*

*Mystery aircraft #2 is another plane made by De Havilland, the De Havilland DHC-4 Caribou. The Caribou's first flight was July 30, 1958 and it was introduced into service in 1961. The Caribou was bought by the US Army, the USAF, and the Royal Australian Air Force. The US military designation for the Caribou was the C-7 and it was a cargo plane with short take off and landing (STOL) capabilities. A little side note: the Caribou had 3 different US Army designations, starting out as the AC-1, followed by the C-7, then lastly the CV-2. The Caribou saw service in the Vietnam War in areas where C-130s and C-123 Providers could not land. It was mainly a cargo plane in Vietnam, however it did also drop off troops and jeeps into airfields (it could carry 32 troops or two jeeps!). Some Caribou's were captured by the North Vietnamese, and remained in service with them until the late 1970s. Following Vietnam, the Caribou was transferred to the Air Force Reserve and the Air National Guard until replaced by C-130s. The last of the C-7 Caribous serve with the US Army Parachute team: The Golden Knights. All others have been phased out; however, it is still used in rugged areas such as the Canadian Tundra and Alaska.*

*Mystery Aircraft #3 is yet another plane made by De Havilland. the DHC-6 Twin Otter. It is a 20 passenger Short Take Off and Landing aircraft. It is currently used by commercial sky-diving operators, Viking Airlines, the US Army Parachute*

*Team, and (you guessed it!) bush pilots. Its first flight was in May 20, 1965 and it was introduced sometime in 1966. These planes are very expensive (about 2,000,000 USD) but they are great for bush pilots because they can come straight from the factory with skis, tricycle landing gear, or floats, pretty practical considering some of the unpaved, snowy runways there are in some places. There are 3 USAF Twin Otters used by the USAF Academy's Skydiving Team.*

### NEW CONTEST

A prize will be awarded to the Cadet who provides the best answers to this week's contest. As usual, a short essay should accompany your answer so I can use it to break ties. Answers are due by Sunday midnight, 07 November.

The theme this week is "home grown" aircraft. All of the aircraft which must be identified were manufactured in Connecticut. The winner will correctly identify each aircraft and submit a short, approximately 50 word essay on each one. The short paragraph should state some interesting fact or details about the aircraft's history, mission, or construction and should be in the words of the writer. Do not "cut and paste" from some reference source.

Here are three more mystery aircraft and clues to their identity.



*Aircraft #1*

*Chauncey's company had a penchant for using the letter "C" as the initial letter of the name of its aircraft, some of which had pirate themes. Argh!*



*Aircraft #2*

*Not all of Igor's aircraft are helicopters. This one bears the emblem of CAP's Coastal Patrol Squadron Two, Rehoboth Beach, Delaware.*



*Aircraft #3*

*Not all helicopter's are made by Igor. Let's hear an Ovation, accompanied by guitar, for Charlie's coaxial contraption, call sign "Pedro."*

## **CURRENT EVENTS**

### **Boeing Reconsiders the 737**

Boeing is examining the future of the popular 737 design. An engine upgrade, design improvements, or a completely new replacement aircraft are all on the table.

The problem which drives the decision is operational economy, a function of fuel efficiency and dispatch reliability.

The 737 is the only single aisle, narrow body fuselage on the Boeing production line. Over 4,000 are in service and since 1967, over 6,000 have been manufactured. Remarkably, back orders exceed 2,000 and Boeing is turning them out four model variants at the rate of 31 per month.

Chief Project Engineer John Hamilton seemingly rejects a fly-by-wire upgrade based upon the fact that the aircraft flies with a 99.8% dispatch reliability and that the weight increase would not be cost effective.



*Early 737 in the Livery of Pluna, an Uruguayan Airlines. Note the small circumference turbo jets and the stubby fuselage which led to the nickname "Fat Albert."*



*Late model 737 of Dubai's Emirate Airlines. Note the stretched fuselage, winglets, and the unusual stowage of the landing gear.*



*Southwest Airlines is an all 737 fleet. Note the fan jet engines.*



*A Continental airliner displays the nacelle modifications necessary to provide ground clearance for the larger fan jets.*

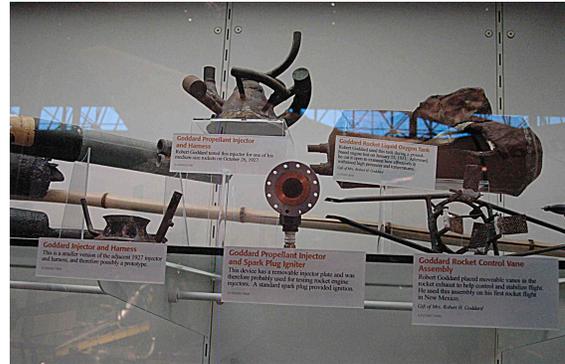
### *Farley to Florida*

Lt Farley, our ES Training Officer, is off to Cape Canaveral to witness the 39th and last launch of *Discovery*. Liftoff is scheduled for Thursday due to delays caused by electrical system anomalies and weather. An 11 day mission is planned to deliver 6,5000 lbs of supplies, The Permanent Logistics Module, and a humanoid robot to the International Space Station.

Mission Pilot is Col Eric Boe, USAF and a former Civil Air Patrol Cadet. This will be his second time in space.

## AVIATION HISTORY

01 November, 1923-Robert Goddard successfully operates a liquid oxygen and gasoline rocket motor on a test apparatus.



*Goddard Relics*

02 November, 1931-For the first time, US Marine Corps squadrons are assigned to aircraft carriers when VS-15M and VS-14M embark on USS Lexington and USS Saratoga.

03 November, 1944-The first Japanese *Fu-Go* balloon bombs are launched against the United States. (See accompanying article!)

04 November, 1964-A BOAC Hawker-Siddeley Trident lands in dense fog, the first automatic blind landing by a passenger aircraft.



*Trident 2E*

05 November, 1976-The USMC received the latest model of the Bell Sea Cobra helicopter.



*Sea Cobra-USMX Aviation Museum-Miramar*

06 November, 1935-First flight of the Hawker Hurricane, unglamorous sister of the Spitfire. but most, in respect to aircraft destroyed, the most effective RAF interceptor during the Battle of Britain.



*Mk.I Hurricane-RAF Museum-Hendon*

07 November, 1950-BOAC retires its last flying boat, a Short Solent, from commercial service.



*Short Solent on its Beaching Gear*

08 November, 1959-1st Lt Russell Brown, flying a Lockheed F-80 Shooting Star, downs a North Korean MiG-15 in the first jet vs. jet aerial victory.



*Lockheed P-80C Shooting Star*

09 November, 1904-Wilbur Wright flies for five minutes, four seconds over Huffman Prairie, Ohio, covering 2 ¾ miles.



*Ground Fog Obscures Wright Hangar at Huffman Prairie*

10 November, 1907-Louis Bleriot introduces what will become the modern configuration of the airplane. His No.VII is a not only a monoplane tractor propelled aircraft but has an enclosed fuselage.

11 November, 1929-Inter-Island Airways, the predecessor of Hawaiian Airlines initiated direct service from Honolulu to Hilo using Sikorsky S-38s.

### **JAPANESE BALLOON ASSAULT ON US MAINLAND**

The third of November marks the 66th anniversary of the start of a desperate effort by the Empire of Japan to attack the continental United States. Previously, Imperial forces had struck against U.S facilities in North America. In 1942, here are two recorded cases of submarines shelling an oilfield in California and Fort Stevens in Oregon and a submarine launched seaplane dropped incendiary bombs on a forest in Oregon. Also in 1942, Japanese troops landed on Kiska and Attu in the Aleutian Islands, Territory of Alaska and occupied them for about a year.

But the most bizarre strike by Japan against the United States in World War II was the *Fu-Go* balloon campaign, arguably the first case of deployment of an intercontinental weapons system.

Japanese researchers planned to take advantage of the jet stream winds which had first been tracked by a Japanese meteorologist, Oishi Wasaburo, in the 1920s. The jet stream is a high speed flow of air, west to east, found in the layer of the atmosphere known as the tropopause, between about 25,000 and 40,000 feet above sea level depending upon the season. Geographically, the flow occurs in the temperate and sub-polar regions.

Under the command of Maj. Gen. Sueyoshi Kusaba, the Army Number Nine Research Laboratory, the weapon was perfected, constructed, and launched with the hope of setting forest fires and weakening the morale of the American people.

Most of the balloons were made of a special paper, manufactured from mulberry bushes. They were about 30 feet in diameter and inflated with around 20,000 cubic feet of hydrogen. Rigging suspended an aluminum ring below the balloon and bombs, sand bag ballast, and a timing mechanism was attached to the ring.

In principal, the balloons, launched from the eastern shores of Honshu and drifted westward across the Pacific at about 100 mph, reaching North America in about three days. Sunlight caused the balloons to rise at night as the gas expanded but to descend in the cool night air. A barometer was connected to a mechanism which either vented gas or dropped sand bag ballast in order to maintain an optimal altitude between 30,000 ft and 39,000 ft. After three days or so, a period calculated from forecasts of the winds, the timer dropped the bombs and initiated a self-destruct mechanism on the balloon.

The balloon raids were highly unsuccessful. Most of the balloons were launched during the U.S. wet season so few forest fires were set. Six people were killed. In 1945, a Sunday school group, picnicking in Oregon, found one of the bombs on the ground which exploded, killing six children and the pregnant wife of the pastor. Ironically, one balloon caused a short power failure at Hanford, Washington, the Manhattan Project plant producing plutonium for the atomic bomb dropped on Nagasaki. Production was halted for a short time.

Over nine thousand balloons were launched and about 10% reached North America. They were found as far north as Alaska and as far south as Mexico. Some actually reached Michigan.

Once the U.S. military realized that balloons were being employed, countermeasures were authorized. Aircraft were alerted and one balloon was downed by a P-38. At first, the authorities did not believe that the balloons were being launched from Japan. They suspected offshore launches by submarines or onshore launches by saboteurs and fifth columnists. However, army intelligence analyzed the sand recovered from one of the ballast bags and determined from its chemical makeup, physical properties, and included organic matter that the source was certain beaches in Japan.

The US military also kept a tight lid on information about the attacks so no publicity resulted. Consequently, the Japanese could gain no intelligence about their successes and failures and consequently, could not plan improvements in the system.

Fortunately, the Japanese did not consider the use of chemical or biological agents in their bombs. Their infamous Army Unit 731 had done serious research into the efficacy of weaponry utilizing anthrax, bubonic plague, smallpox, and cholera to name just a few. They carried out numerous

experiments on human beings and deployed the weapons in China. The results of their use over the continental United States might have caused significant casualties.

However, bad ideas never die. At the end of World War II, the United States found a new enemy, the Soviet Union. Churchill once remarked that is "Russia is a riddle wrapped in a mystery inside an enigma." No good maps existed, little was known about the transportation net, industrial, and military infrastructure. Even telephone books were classified!

The Strategic Air Command, our premier strike force desperately needed targeting information and little was to be had. The United States even recruited former members of Hitler's intelligence service hoping to gain useful information about the Soviet's material means and intentions. The U-2 and satellite reconnaissance systems did not exist. So a plan was developed to use high altitude balloons and the jet stream to carry cameras over the denied territory, photograph what ever was below, and recover the film by snatching the parachuted cameras in mid-air using modified C-119s. Project Moby Dick was born.



*Fairchild C-119J Flying Boxcar at the USAF Museum. This craft was used to recover Corona photo intelligence satellites. Note the special direction finding antennas on the nose. The same setup was used for the balloon recoveries.*



*The same C-119 showing its modified "beaver tail" fuselage from which a trapeze was deployed to capture a parachuted intelligence package.*

Moby Dick and subsequent programs such as Genetrix and WSL-119 were instituted in the 1950s during the Eisenhower administration and lasted for a decade. Essentially, the balloons were launched west of the Soviet targets, carried by jet stream winds, then tracked and retrieved in safe recovery zones. Launch sites included Germany, Turkey, and Norway.

The project's were, at best, relatively unsuccessful. A relatively small number of balloons were recovered and quite often showed pictures of cloud tops and unidentifiable topography. Details of Soviet radar and nuclear tests were recorded and proved useful. Political ramifications were many. The Russians protested, allies objected to the use of their territory of espionage, and even the Central Intelligence Agency called a halt to the project. Their reason was that strong Soviet protest might cause President Eisenhower to reconsider the overflight plans for the newly developed U-2 aircraft!

Details of these U.S. programs and other balloon reconnaissance and propaganda efforts are not within the scope of this article but if reader interest is shown, a future edition may explore the subjects in more detail.