



Mission for America

*Semper vigilans!
Semper volans!*

The Coastwatcher

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

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

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Schedule of Coming Events

November

27 TUE Squadron Meeting
29 THU USCGA Lecture

December

01 SAT Field Trip to ANG A-10 Facility
Civil Air Patrol Day in Connecticut
04 TUE Squadron Meeting (PT)
05 WED CTWG SCC/CAC
09 SUN East Eagle Scout Ceremony
11 TUE Squadron Meeting/CC/Testing (BDU)
18 TUE Squadron Meeting (Blues)
19 WED CTWG Staff Meeting

EAST EAGLE SCOUT CEREMONY

Cadet Shawn East invites Squadron members to attend his Eagle Scout Ceremony on Sunday, 09 December, at 1300 at the Quaker Hill Rod and Gun Club. Scouts are requested to wear their uniforms. If you plan on attending, please notify Cadet East by 01 December. E-mail should be sent to andreweast@msn.

USCGA LECTURE

On Thursday, 29 November, Dr. June Matthews , Massachusetts Institute of Technology, will discuss the topic of particle physics and cosmology.

The lecture will be held in Dimick Hall at 2000 and will be preceded, if there is any interest, by a pizza dinner hosted by Capt Rocketto. If you are interested in attending, you must e-mail Capt Rocketto by Tuesday, the 27th.

WING O' FLIGHT

Four members of the Squadron attended the Wing O Flight at Waterbury-Oxford Airport last Saturday. Cadets Kevin Roe, Ryan Montgomery, George Barberan, and James Wallace all completed Syllabus Six of the CAP Cadet Orientation Flight Syllabus.



Roe in Right Seat



*Wallace, Roe, Barberan,
& Montgomery*

VISIT TO 103rd FIGHTER WING

Our planned visit to the Bradley Air National Guard Base is now definite. Plan on a 0730 departure from our trailers and a 1400 return time.

Tentatively, we will probably be briefed on the A-10 and C-21 aircraft and visit the armaments shop, and engine repair facilities. We must have a final count by Tuesday, 27 November. Contact Capt Rocketto at srocketto@aquilasys.com. Cadets who do not make this prior arrangement will not be allowed to participate.

ANSWERS TO THE LAST QUIZ OF THE WEEK

**The Challenge was Issued
Which Cadet Triumphed?**

LtCol Stidsen, the Wing IG sent in the first and only set of answers and scored 100%. This is the second time in a row for the Colonel. Shame on the Cadets!

1. What is the full designation of the “mystery airplane” for this week? **Kaman H-43B Huskie.**
2. The ELT which 73X searched for this week operated on 243.0 MHz. Translate the symbol “MHz” into ordinary English. **Megahertz or “million cycles per second.”**
3. What is the mathematical relationship between the frequency broadcast by civil ELTs and the military ELTs? **The military frequency is twice that of the civil frequency.**
4. Identify the mystery airplane of the week. Oops! **This question is redundant. Blame the Department of Redundancy Department of *The Coastwatcher*.**
5. What was the original nationality of the founder of the Sikorsky company? **Russian**
6. What was the first name of the founder of the Sikorsky company? **Igor**
7. What was William Sterling Parsons nickname? **“Deke”**
8. What is the mechanical difference between the methods used to initiate the nuclear reaction in “Fat Man” and “Little Boy?” **“Fat Man” was a plutonium device which used implosion to initiate the chain reaction. “Little Boy” was the simpler “gun-type” which created a critical mass by firing a piece of U-235 into another piece.**
9. For whom is the USCG Cutter Chase named and why? **The ship is named for Salmon P, Chase, a Secretary of the Treasury under Abraham Lincoln. A**

10. **former Governor and Senator from Ohio, he later served as Chief Justice of the Supreme Court during Reconstruction.**
11. On what denomination of U.S. currency does Chase appear? **The \$10,000 note, which Col Stidsen points out was last printed in 1918.**

THE NEW QUIZ OF THE WEEK

Will some Cadet take up the challenge?

1. What is the full designation of the mystery airplane for this week?
2. Specifically, who are the two men whose pictures are painted on the hangar visible behind “The Bone?”
3. What is the three letter designation for Waterbury-Oxford Airport?
4. What two other private gentlemen were associated with Gill Robb Wilson in establishing the Civil Air Patrol?
5. What does the “U” in U-Boat stand for? A bonus point if you state it in German.
6. Who was Director of Civil Defense when CAP was established?
7. What was “Hap” Arnold's full name?
8. For what American icon did Gustave Eiffel design the framework?
9. What is the primary difference between and autogiro and a helicopter?
10. What company built the A-10 Thunderbolt II?
11. Where was Coastal Patrol Squadron 2 based?
- 12...What two cities were the primary targets of Operation Linebacker II?

**CADET MEETING MINUTES
20 November, 2007**

Col Kinch, the Squadron Commander and C/MSgt Molinari inspected the Cadets.

Cadet Scannell led a session on Module Six of the Aerospace curriculum.. Capt Rocketto provided details about Newton's First and Third Laws of Dynamics and how they are related to the concepts of centripetal and centrifugal force.

Capt Wholean initiated a moral leadership discussion on the topic of values as not only significant but also necessary in the development of human character.

C/SrA Jesse Brohinsky was promoted to C/SSgt. Cadet Scannell was presented with his Wright Achievement certificate.



Col Kinch Pins Sgt Insignia on Cadet Brohinsky

Cadet Kevin Roe received the National Rifle Association Distinguished Expert Medal. This medal is the highest award in the NRA smallbore program and the culmination of two and a half years of effort. Cadet Roe is Captain of the Montville High School Rifle Team and also a member of the Connecticut Junior High Power Rifle Team, one of the best in the nation.



Cadet Roe Congratulated by Col Kinch

FRUIT SALE

The sale has been extended to Tuesday, the 27th. Hand in all of your invoices and collected money by that meeting. Currently, the sales leaders are as follows:

Capt Rocketto (45), The Wojtcuk Syndicate (25), Cadet Montgomery (11), Col Kinch (7), Col Wisehart (7) Cadets East and Abbiati (7), Capt Bourque and Lt. Heard (6), Lts, Lintelmann, and Manners (5), Cadet Barberan (4), and Lts Miller and Jalbert and Cadet Scannell (1 each).

The Squadron wishes to thank the Scannell family for their generous donation.



***UNCLE STEVE
NEEDS YOU...TO
SELL FRUIT!***

CAP ANNIVERSARY

Saturday marks the 66th anniversary of the birth of the Civil Air Patrol. Cadet Jesse Brohinsky has written the following article which describes the early mission of CAP in the dark days at the beginning of World War II. This essay was edited. Footnotes are available upon request.

C.A.P.: The Minutemen of WWII

by

Jesse Brohinsky

December 1, 1941: seven days before the Pearl Harbor attack, an idea was set into motion, which brought up a revival of that “minuteman” spirit cherished by America 200 years ago. This idea

provided civilians with an opportunity to serve their country and eventually deterred an entire U-Boat campaign. That idea was the Civil Air Patrol or C.A.P.

At the start of the Second World War, several different countries were forced by military necessity to ground all civilian aircraft. With a dread that the same fate would befall the United States of America, Mr. Gill Robb Wilson, with the approval of Governor Edison and General Henry H. "Hap" Arnold, started the N.J.C.A.D.S. or New Jersey Civil Air Defense Services. This program was the ultimate inspiration for the Civil Air Patrol as it stands today.

Looking at New Jersey's success, several other states started their own Civil Defense Program: The Airplane Owners and Pilots Association (a national organization that still exists today) had its 'Civil Air Guard' units in several metropolitan cities across the nation. The Civil Air Guard was started by Mr. Milton Knight in Ohio. In time, other states followed the pioneering efforts of New Jersey. Colorado and Missouri had state air squadrons; Florida formed an organization known as the 'Florida Defense Force.' From these organizations, the US Army Air Corps and Civil Aeronautics Administration built the Civil Air Patrol, signing it into being on December 1, 1941, with Mr. Gill Robb Wilson as the first C.A.P. executive officer, and Major General John F. Curry as National Commander.

The day after the attack on Pearl Harbor, the worst fears of the pilots became a reality - all civilian planes were grounded. Thankfully, the ban on flying was mostly lifted two days later. Then Earle E. Johnson showed the nation how lax their "grip" on security was by "bombing" three war plants with sandbags. Security measures were tightened incredibly to prevent another attack. Surprisingly, the recent events made C.A.P.'s membership levels grow even more, and prepared it for its important task ahead.

During this time, America had an even bigger problem; Germany was dispatching submarines to our east coast and were sinking ships. This

attack caused losses of, valuable war supplies including petroleum. The commanders of the Civil Air Patrol were almost certain that they could do something about this problem, but the Navy and Air Force were reluctant to let these civilian pilots take control of an important operation. They allowed the C.A.P. to institute a 90-day coastal patrol experiment in order to prove themselves. The C.A.P. passed those 90 days with "flying colors" and was allowed to take the operation as their own.



Coastal Patrol 2 Emblem

The Civil Air Patrol's coastal patrol was an important asset in the Second World War, but sometimes they would spot a U-boat and it would take so long for reinforcements to arrive, and the U-boat would dive before it could be attacked. "Ike Vermillya, a C.A.P. base commander, personally knew General 'Hap' Arnold, Commander of the U.S. Army Air Forces. 'Ike' immediately phoned 'Hap' and told him the sad story of one such incident. To say 'Hap' was also furious is to put it mildly. 'Hap' yelled, 'Ike, start gettin' those little Civil Air Patrol planes armed with bombs, even if you have to throw th' damned bombs outa' th' WINDOWS!'"

Now the Civil Air Patrol had an even bigger problem; how does one arm a plane such as the low-ground-clearance Stinson Reliant with bombs and depth charges? Their conclusion was to mount The 100 pound explosive to the bottom of the fuselage, saw off the bottom guide fins, and pray that it didn't hit anything on the runway during takeoff or landing. With this new addition,

the Civil Air Patrol finally had the equipment needed to do their job right.

Another important role played by the C.A.P., was target practice for fighters, Anti-Aircraft (AA) guns, and searchlights. For AA target practice, the C.A.P. airplanes would fly overhead, trailing



Fairchild 24 *Stinson V-77 Reliant*

targets behind them, and simulate strafing attacks; the AA guns would then fire at the targets behind the planes. Though rare, occasionally a stray shot would hit an airplane. For searchlight practice, the planes would fly in evasive maneuvers, while the searchlights would try to target the planes and keep them in their beams. This was very dangerous as well, even though there was no firing involved, because the powerful spotlight could be disorienting to a pilot who looked directly into the beam. “While events like this did occur, (7 CAP members killed, 5 seriously injured, and 23 aircraft lost) they were clearly the exception, and not the norm. For three years CAP flew these hazardous missions, helping to increase the efficiency of Army units preparing for combat.

CAP flew a total of 20,593 towing and tracking missions – 46,000 hours were flown on live ammunition and searchlight tracking missions.”

Search and Rescue, (SAR) is the name of the procedures used to find downed pilots. Using the Civil Air Patrol was a much better way of doing things, because the C.A.P. pilots knew the territory better, they could fly lower, and they had a quicker response time than the Air Force. This resulted in a greater percentage of successful SAR missions.

Courier and Cargo Flying, as the name suggests, was the Civil Air Patrol’s way of contributing in

the realm of transportation. “From 1942 through early 1944, CAP pilots moved 3.5 million pounds of mail and cargo for the Army Air Forces, and it transported hundreds of military passengers throughout the United States.” SAR and Courier and Cargo missions are still carried out by the Civil Air Patrol today.

Here are example of the Civil Air Patrol’s success: in 18 months, the number of bases grew from 3 to 21, it reported 173 U-boats, sank 2 and



Piper L-4 (J-3) Cub

hit at least 57, flew 86,865 missions on the coast for 24,600 hours, traveled approximately 24,000,000 miles, helped 91 ships in distress, saved 363 survivors of U-boat attacks, reported 17 floating mines, and flew 5,684 convoy missions.

Unfortunately, no good thing comes without sacrifice. The Civil Air Patrol lost twenty-six members during Coastal Patrol. However, it is slightly comforting to think of all the lives saved because of the Civil Air Patrol. Just out of submarine attack survivors alone, we see 363 lives saved; and with the SAR program, the numbers rise even higher.

With C.A.P.’s arrival on the scene, the efficiency of the U-boat fleet was reduced. As told by Lt Col Andrew Ten Eyck in his book *Jeeps in the Sky*, “Although the victory against the submarine was a joint operation of the Army, Navy, Coast Guard, and the CAP, it is a fact that the U-boats disappeared in direct proportion to the spread of CAP operations. The Berlin radio, commenting on the dwindling effectiveness of its underseas campaign, complained of the unexpected appearance of the fleets of civilian aircraft as the main hazard which forces the U-boats out of our coastal waters.” Robert Neprud states in his book *Flying Minute Men* that “A final evaluation of CAP’s coastal patrol came many months later –

and from the other side of the Atlantic. After the German surrender, one of Hitler's high-ranking naval officers was asked why the Nazi U-boats had been withdrawn from the United States coastal waters early in 1943. The answer was exploded in a curt guttural curse about those "little red and yellow planes!"

On July 1st 1946, Public Law 476 incorporated the Civil Air Patrol. Within a short time, it was recognized at the official auxiliary of the new United States Air Force. For over 60 years, the Civil Air Patrol has been serving the United States as a non-profit organization, conducting Search and Rescue operations which save around 100 lives a year. They continue to support humanitarian missions and promote aerospace education through a Cadet Program and public outreach. The Civil Air Patrol's motto is Semper Vigilans, (Always Vigilant) and since 1941 it has proved this motto to be true countless times.

GROUND OBSERVER CORPS REDUX

Last week's mystery aircraft was the Kaman HH-43B ,Huskie. This unusual helicopter incorporated a number of interesting features. Charles Kaman was an aerodynamicist at Hamilton Standard during World War II. At the end of the war, he suggested a number of interesting innovations to Sikorsky which was affiliated with Hamilton Standard. Sikorsky was not interested so Kaman resigned and with a \$2000 stake started constructing his first helicopter in his mother's garage.

The principal features of his new machine was a set of intermeshing rotors, originally conceived by Anton Flettner and equipped with servo tabs. The intermeshing rotors eliminated the need for the torque compensating tail rotor, therefore delivering more energy for lift and thrust. The servo tabs eliminated the need for the complicated pitch mechanism in the rotor hub and reduced control forces.

The Huskie was his first large scale sale to the U.S.. military and saw service with the Navy and

Marines as well as the Air Force. Known to its crews as "Pedro," the Huskie was utilized as a search and rescue craft and equipped with a special package, as an aerial firefighter. The first few models were equipped with piston engines but within a short time, the Huskie became the first production helicopter equipped with a turbine engine. Not only did this machine set a number of altitude records but more importantly, established an unparalleled safety record.

Kaman's genius was not limited to helicopters. He pioneered the use of composite materials, developed the Ovation acoustic guitar, and founded Fidelco, a Connecticut company which trains guide dogs for the visually impaired.

Now, try to identify our new mystery aircraft!

Mystery Aircraft of the Week



MEMORIES OF DECEMBERS PAST

01/41 **CAP ESTABLISHED**

02/25 NACA publishes the first "Standard Atmosphere" chart.

03/08 The first test of an airplane for the U.S. Army is held at Fort Myers, Virginia.

04/52 First Flight: Grumman XS2F-1

05/45 Five USN Avengers of Flight 19 disappear off the coast of Florida.

06/25 Goddard conducts first static test of liquid fueled rocket engine in Worcester, Mass.

07/31 *Croix de Sud* piloted by Jean Mermoz disappears over South Atlantic.

08/64 Little Joe II, the Apollo escape system is tested at White Sands, N.M.



Little Joe at Wallops Island, VA

09/36 Juan de la Cierva, developer of the autogiro is killed in crash of KLM airliner.

10/54 Lt. Col. John Paul Stapp, M.D., PhD riding Sonic Wind 1 rocket sled experiences 40G forces during deceleration experiments at Holloman, N.M.

11/13 First Flight of Sikorsky *Ilya Muromets* at St. Petersburg, Russia.

12/25 Colonial Air Transport, forerunner of American Airlines is organized to fly CAM-1 (Civil Air Mail Route 1) between Boston and New York.

13/58 Gordo, a squirrel monkey survives launch aboard US Army Jupiter-C only to be lost when flotation device on nose cone fails.

14/27 The aircraft carrier U.S.S. Lexington (CV-2) commissioned.

15/2003 NASM Udver-Hazy Annex opens in Chantilly, Virginia.

16/41 Reaction Motors Inc, producers of JATO and Bell XS-1 engines is founded.

17/03 FIRST FLIGHT-KITTY HAWK, N.C.

18/72 Operation Linebacker II is launched.

19/28 Harold F/ Pitcairn flies first autogiro in the U.S. at Willow Grove, Pennsylvania.

20/41 The American Volunteer Group (Flying Tigers) engages Japanese aircraft for the first time.

21/44 Hap Arnold promoted to the rank of General of the Army.

22/16 Lawrence B. Sperry files a patent for an aerial torpedo," a precursor of the cruise missile.

23/74 First Flight: North American-B-1A Lancer



North American Rockwell B-1A at Museum of the USAF



Allegheny Commuter Nord 262 at GON

24/37 First Flight: Nord 262

25/37 Walter Thiel experiments with LOX and LH2 rocket engine fuels.

26//56 First Flight: Convair F-106 Delta Dart

27/23 Gustave Eiffel, pioneer aerodynamicist and engineer dies

28/49 USAF "Project Sign" discontinued concluding that "flying saucers" do not exist."

9/64 First hovering flight of the Vought-Hiller-Ryan XC-142 Tilt Wing.



Vought-Hiller-Ryan XC-142A

30/30 First successful launch of a Goddard rocket at Roswell, New Mexico

31/26 The first Air Commerce Act becomes effective at midnight regulating registration, licensing, and markings of aircraft