Missions for America

Semper vigilans!
Semper volans!

The Coastwatcher

Publication of the Thames River Composite Squadron
Connecticut Wing
Civil Air Patrol

300 Tower Rd., Groton, CT
http://ct075.org.

Lt Col Stephen Rocketto, Editor
srocketto@aquilasys.com
Lt Col John deAndrade, Publisher

C/CMSgt Michael Hollingsworth, Cadet Reporter
Lt David Meers & Maj Roy Bourque, Papparazis
Hap Rocketto, Feature Editor

Vol. IX Issue 9.3 20 October, 2015

FRUIT SALE

The annual citrus fundraiser is underway. The Squadron is selling 25 pound boxes of navel oranges, grapefruit, or mixed fruit for $27. The 40 lb boxes are priced at $37.

If any reader wished to purchase fruit, please make a selection and send a check, made out to TRCS-CAP to Stephen Rocketto at 928 Old Colchester Rd., Oakdale, CT 06370. He will then fill out an invoice, scan it, and return it to you. We expect delivery around the first week in December.

We have used these products for our once-a-year fundraiser for almost a decade and the oranges and grapefruit have always been excellent.

The sale ends on November 3rd.

CADET MEETING MINUTES

20 October, 2015
submitted by
C/CMSgt Daniel Hollingsworth

The Cadets reported to Poquonnock Plains Park for physical training.

After returning to the Squadron, C/CMSgt Daniel Hollingsworth conducted an aerospace education presentation about USAF observation and attack aircraft used in the Vietnam War. A feature article with annotated commentary on these aircraft is included in this edition of *The Coastwatcher.*

The final part of the meeting was an exercise in which the Cadets debated the allocation of a $10,000 budget for a hypothetical squadron.

SENIOR MEETING MINUTES

20 October, 2015
submitted by
Captain Edward Musick

Lt Col Kinch ran a training session for new members who wished to qualify as scanners.

Lt Col Rocketto conducted ICUT testing.

Squadron members worked on individual projects.

9th COMMANDER'S CUP ROCKET CONTEST

Thames River edged by Waterbury's 143rd Composite Squadron by a score of 34 to 32. The event was held on 17 October in Durham.

Flight One, restricted to novice entries and eligible for credit on the Titan Stage of the Rocketry Badge requirements was won by Waterbury. Cadet Hinkson and Garofalo each scored 11 points our of a possible 15. Incidentally, Hinkson just earned his glider private pilot certificate so rocket power is a step up. Thames River's Cadet deAndrade placed second with a 10. The Waterbury squadron

October 2015

SUN	MON	TUE	WED	THU	FRI	SAT
				1 OFlight	2	3
4	5	6	7	8 OFlight	9	10 Groton Festival
11	12 Columbus	13 CDR CALL PD visit	14	15	16	17 **Rocket Contest**
18	19	20	21	22 OFlight	23	24 CLC Glider Day
25 Glider Day	26	27 milestone nite	28	29 Trumbull Speech	30	31 Hallow

Sell Sell Fruit

November 2015

SUN	MON	TUE	WED	THU	FRI	SAT
1	2	3 FRUST ORDERS DUE	4	5	6	7 Cadet Ball
8	9	10 CC CALL	11	12 OFlight	13	14
15	16	17	18	19 OFlight	20	21
22	23	24 No Meeting	25	26 Thnkgvng	27	28
29	30					

FRUIT SELL END NOV 3

December 2015

SUN	MON	TUE	WED	THU	FRI	SAT
		1	2	3 OFlight	4	5 UCC/TLC
6 UCC/TLC	7	8 CC CALL	9	10 OFlight	11	12
13	14	15 Party	16	17 OFlight	18	19
20	21	22 No Meeting	23	24	25 Cmas	26
27	28	29 No Meeting	30	31		

Janunary 2016

SUN	MON	TUE	WED	THU	FRI	SAT
				1 New Years	2	3
4	5	6	7	8	9	10
11	12	13 CC CALL	14	15 OFlight	16	17
18	19	20	21	22 OFlight	23	24
25	26	27	28	29 OFlight	30	31

Respect

6 Senior: Planning

6 Cadet: Admin, Testing, Leadership training, open

10 Groton Festival

13 CC Call Cadet: Drill, CD, safety, presentatns, Promotion (Blues) Professional Dev Visit from Wing

17 Commander's Cup Rocketry Contest

20 Senior: training Cadet: Fitness, AE (outdoor) (PT)

25 - Glider OFlights NJ 24/25 - Corp Lead School, Mt Fury

27 Senior: Cadet: Drill, Milestone Award Night 7-8 (BLUES)

29 Ft Trumbull Speech on Coast Guard 1900 Free

Integrity

3 Senior: Planning Cadet: Testing, admin, Leadership, PT, if needed

7 Cadet Ball

10 CC Call Cadet: Drill, AE pres, Char Dev- Guest Speaker, Promotions (BDUs)

17 Senior: Cadet: Safety, PT, indoor games (PT)

24 No Meeting

Volunteer Service

1 Senior: Planning Cadet: Drill, Leadership, admin, DDR/Safety (BDUs)

5/6 UCC and Train Leader Course Camp Niantic

8 Commander's Call/ Promotions Cadet: Drill, CD, AE, Promotions (Blues)

15 Holiday Party (Civies)

Excellence

6 Senior Staff/Planning Cadet: Leadership

13 Senior: Commanders Call Cadet:

20 Senior: ES Cadet:

27 Senior Cadet:

This schedule is not a replacement for good communications.

Other Ground Tranex O-Flight Meeting Wing National

was led by Capt Richard Hinkson and 1st Lt George Garofalo. Maj Roy Bourque headed Thames River.

The Danielson Cadet Squadron, led by Capt Everett Hadley entered on a non-competitive basis, using the event to start Cadets on the Rocketry Badge and train for next year.

Judging was done by a committee led by Stuart Sharack, an Aerospace Education Member and CAP's first national Teacher of the Year awardee. Each participating squadron then appointed one of their senior members to the committee.

Cadet John Pineau represented TRCS in Flight One. His successful launch was a partial qualification for the Titan Stage of the CAP Rocketry Badge

Flight Two requires the construction of a multi-stage rocket or a load bearing rocket. Waterbury's Garofalo placed first with an 11 followed by Cadet Matthew Drost from Thames River who earned nine points. Successful completion of his event earned Cadet Pineau partial credit on the Saturn stage of the Rocketry Badge.

Going into the final flight. Waterbury was ahead 22 to 19. Flight three required the construction of an "historic" rocket. This is defined as a scale model of some actual rocket used in the past or in service today.

Cadet Daniel Hollingsworth of Thames River entered a model of the Patriot Surface-to-Air missile which scored a perfect 15 points. Cadet Fahy from Waterbury placed second with 10 points.

Hollingsworth Patriot lifts off.

In the final reckoning, Hollingsworth's entry made the difference and Thames River emerged the winner of The Cup.

Wing DAE Rocketto presents to Commander's Cup to Maj Bourque and Cadet Drost of TRCS

The only Senior Member to launch, Lt Col Rocketto, CTWG Director of Aerospace Education, brought a rocket painted like a USCG buoy tender. The nose cone was a model of the Ledge Light House in New London harbor. The ascent was perfect by alas, the nose cone retaining cord failed and the lighthouse and tender departed company. Fortunately, an impromptu Cadet search and rescue team formed and Cadets found both parts downrange.

Rocketto Rocket Rising

Prizes, contributed by the Aquila Systems, Inc. and the Corporal Digby Hand Schützenverein were plentiful.

The Prize Table

Each Squadron received a book for its reference center and every Cadet present received a prize for either merit or participation.

The Wing thanks CATO, a group of Connecticut amateur rocket enthusiasts and Brad Oestreicher, their president of the excellent launch support.

KUDOS

SM John Pindeau completed all requirements in the Introductory Communications User Training program and is now qualified in ICUT.

GROTON FALL FESTIVAL PICTURES

Maj Bourque explains a rocket detail to a young visitor

Some Cadet volunteers at the Festival
(photo credit: Lt Ray and Major Bourque)

CTWG PROFESSIONAL DEVELOPMENT STAFF VISITS

Lt Cols Heather Murphy and Jeffrey Travers visited the Squadron last week to speak about the opportunities for professional development within the Wing.

Murphy, who is the Wing Professional Development Officer and a recent recipient of the Paul E. Garber Award spoke about the Wing's promotion of CAP's Squadron Leadership School (SLS) and Corporate Learning Course.

Squadron Commander deAndrade share an observation with Travers while Murphy looks on.

The SLS is CAP specific and is designed to (1) enhance a senior member's performance at the squadron level and (2) to increase understanding of the basic function of a squadron and how to improve squadron operations. Prerequisites for attendance are completion of Level I and enrollment in one or more specialty tracks. The school takes two days and completion is a requirement for Level II (Technical Training) and the Benjamin O. Davis, Jr. Award.

The CLC is a broad based course which discusses the relationship the CAP squadron has with the next major echelon of command -- the wing. Specifically, CLC discusses how wing-level operations help to accomplish CAP's three missions of aerospace education, emergency services, and cadet programs. It describes the working relationships wing staff officers have with each other, and their squadron level counterparts.

The CLC runs for two days and completion is a requirement for Level III, (Management) of CAP's Professional Development Program.and the Grover C. Loening Award.

Lt Col Travers discussed Wing initiatives in offering both courses several times a year and rotating the venues around the state. The PD Department also sponsors the Training Leaders of Cadets Course (TLC) and Unit Commander's Course (UCC). Both of these programs are scheduled for Camp Niantic on 5-6 December.

After speaking to the senior membership, Murphy and Travers convened with Lt Cols Kinch and Doucette, Personnel Officer, and Professional Development Officers respectively for discussions about details of those squadron offices. They then attended the Cadet Change of Command and Promotion Ceremonies.

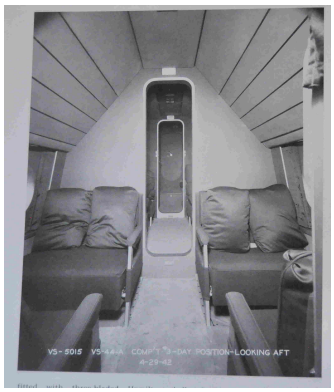
AEROSPACE CURRENT EVENTS

Airliner Seats

In the early days of commercial air travel, the passengers either sat on the mailbags in smaller

aircraft or on armchairs of the kind found in houses. Some models of the Ford Trimotor had wicker seats installed. As the commercial air industry developed as a medium for wealthy people to fly, airlines such a Pan American and British Imperial Airways provided luxurious seating accommodations with plenty of elbow room, leg room, and comfortable padding. In some aircraft, special dining facilities were provided separate from the seating.

Wicker Seats on Sikorsky's Ilya Mourmets.



Commodious Seats on Sikorsky's VS-44A

The maturation of commercial air travel introduced adequate and comfortable seating, even in the low priced tourist/economy/coach class. But the advent of high fuel prices changed the services provided by the airlines. Free-in flight meals have been replaced by a coffee, fruit juice or soft drink, often without even a bag or peanuts or pretzels or a cookie. There is charge for checked baggage. Airplanes routes are designed to maximize seating and airplanes have been provided with more efficient engines and wings.

But in order to save weight and maximize available seating, critics of the industry have noted a new style of seating, the "slimline" seat. Slimline seats are about 30% lighter than the seats which they replaced. Lighter materials are used and the number of parts reduced. The pitch, or distance between seats had also been reduced but this is somewhat mitigated by changes in the tray and the information card/magazine pocket position. But worst of all, the seat padding thickness has been reduced.

If you fly a three hour leg in what is sometimes called "sardine class, this reduction in padding can be compared to sitting on a wooden classroom chair.

Airline executives claim that comfort is not sacrificed. Many airline passengers disagree. One disgruntled passenger said that if these new seats are so comfortable, then they should be installed in the airline executive offices.

On a recent round trip flight from BDL to Ontario, California which requires one layover, a coach class ticket cost about $450. A first class ducat may be obtained for around $650. What do you get for $200. Aside from some meaningless privileges such as early boarding, first class gets complimentary beverages, including spirits, pre-take off and in flight. The seats are about two inches wider and have 6 extra inches of legroom. The flying time for the round trip runs around 12 hours or about $16/hour for premium service!

Maximum density seating and weight reduction do yield profits and save airlines money and the price of passenger tickets stay affordable. Nonetheless, The price paid is the loss of some amenities and seating comfort.

AEROSPACE HISTORY

The Editors travel recently to historic Flabob Airport in Riverside California to attend the annual flocking of the Quiet Birdmen. While there, the visited the QB Museum which is run by the

Goodfellow Historic Foundation. The museum contains a remarkable collection of material about the earlier days of aviation and he took the opportunity to do some research which turned up some material on Civil Air Patrol.

The source of the information was some World War II copies of *Aero Digest* magazine advertisements and a CAP squadron insignia which was hanging on a wall.

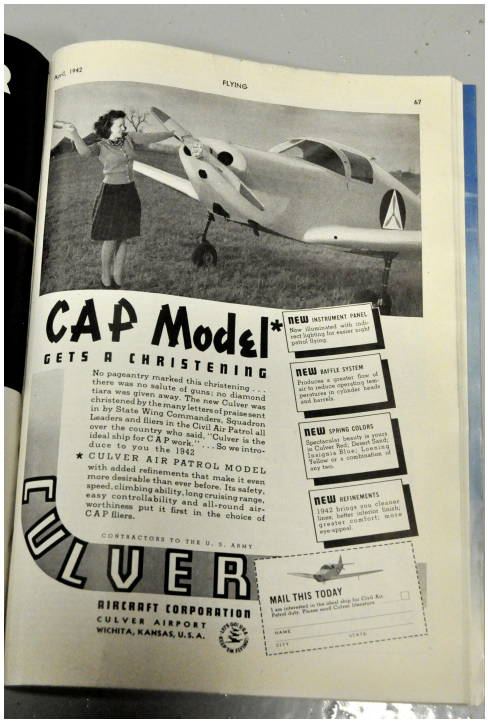
The insignia is that of CAP Coastal Patrol Base 17 and was designed by cartoonist and CAP pilot Zach Mosley. CPB 17 operated out of Riverhead, Long Island in 1942 and 1943. Their field, formerly Suffolk County Airport and Westhampton Beach Airport is now the Francis S. Gabreski Airport.

Drooping wings, a sweaty brow, slobbering tongue, and the biddlestiff characterize the long days and peripatetic life style of the Coastal Patrol Base crews.

A Sikorsky S-39, a gaggle of Stinsons, and a Waco biplane stand alert at CPB17. *(photo credit: Col Lester Hopper Collection)*

Riverhead is familiar to our Long Island Patrol crews. It is the site of the deep-draft offshore platform and a tank farm with 20 tanks capable of holding around five million barrels of oil.

Some of the early World War II magazine advertisements mentioned CAP activities.



Nothing like a pretty girl to christen a pretty airplane. The Culver Civil Air Patrol Model Cadet was designated PQ-8A and used as a radio controlled drone. One of its designers was Al Mooney.

Culver's factory designation for the Cadet was LCA. This one is on display in the Reading's Mid-Atlantic Air Museum, Carl A. Spaatz Airport, Reading, Pennsylvania. Note the Northrop P-61 Black Widow undergoing restoration

The Aircraft Owner and Pilots Association (AOPA) placed an April, 1942 ad in *Flying* for membership and urging civilian pilots to join the Civil Air Patrol and participate in war-time missions, a list of which is provided.

The AOPA was founded in 1939. Gil Robb Wilson, the visionary who founded CAP was its first member.

The Editor took this as a good omen and found a Stinson 10A at Cal Aero and decided that it would be perfect for a Form 5 check ride. It even had a glass cockpit. All the "steam gages" were covered by glass discs. He even had the 25 hours of time and 50 take-offs and landing in tail wheel aircraft.

The Editor grins broadly before his dream was crushed.

Alas, he was thwarted by the bureaucratic pygmies on staff. They first pointed out that current CAP policies do not list the Stinson 10A as a qualifying aircraft. Next, CAP reg 60-1 expressly forbids hand-propping. Finally, the aircraft did not have a back-up electrical system for the "glass" cockpit and the applicant was not wearing a CAP uniform. The foreign submarines lurking off the California coast were safe from molestation.

For those with a deeper interest in CAP history, we recommend the following web sites and books:

The National Museum of the Civil Air Parol
http://caphistory.org/

https://www.youtube.com/watch?v=oPE1HP2x4AM

USAF Observation and Attack Aircraft in the Vietnam War

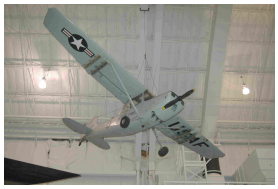
by

C/CMSgt Daniel Hollingsworth and Lt Col Stephen Rocketto

A wide variety of aircraft saw service with the USAF in the Vietnamese War. This photo-essay will take a look at a few of these planes. Space will not allow a discussion of every type of aircraft and precludes the inclusion of notable types such as the LTV A-7 Corsair II, the Republic F-105 Thunderchief, and the Douglas A-26 Invader.

Over five million sorties were flown and about 1700 aircraft lost, 1100 in combat and about 500 in accidents.

Observation and Reconnaissance Aircraft



Cessna's Model 305 carried the L-19 (liaison) and later the O-1 (observation) designations but is better known as the Bird Dog. She served in both the Korean and Vietnam Wars with both the Army and Air Force and used for artillery spotting and as a forward air controller.

Cessna's Model 337 Skymaster found military employment at the O-2 or "Oscar Deuce." Sometimes called the "blow-suck" Cessna due to the combined tractor-pusher propeller arrangement, was used for FAC duties and designed to replace the Bird Dog.

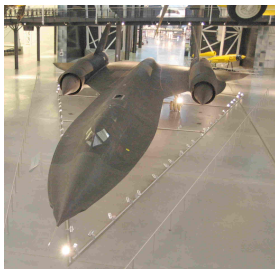
The North American-Rockwell OV-10 Bronco was a purpose built counter-insurgency (COIN) aircraft and was turbine powered. It has a cargo compartment in the rear of the fuselage for cargo or paratroopers. The 'V" in the designator indicates its short take-off and landing capabilities.

Sponsons attached to the fuselage carry for M60 machine guns and racks for external stores. An additional hard point is found on each wing.

The California Department of Forestry and Fire Prevention operates Broncos as lead-in ships for their tankers.

Lockheed's U-2 Black Lady won notoriety when one was shot down near Sverdlovsk in the Soviet Union. The aircraft was designed by Kelly Johnson at Lockheed's Skunk Works. Designed to fly at an altitude beyond the range of Soviet interceptors and missiles, the U-2 incorporated high aspect ratio wings and a jet engine which allowed it to operate in excess of 70,000 feet.

As missiles improved, the U-2 became vulnerable. Aside from the Soviet shoot-down, one was lost over Cuba and five, operated by the Republic of China, were shot down over the People's Republic of China.



Lockheed's SR-71 Blackbird is another Kelly Johnson creation. For the U-2, altitude was life, out of the range of the enemy. The SR-71 not only can obtain high altitude but has a blistering speed capability, over Mach 3, the fastest manned air breathing aircraft in history. Thought of as a U-2 successor, the SR-71 was retired in 1990 while modern variants of the U-2 soldier on.

Attack Aircraft

The Douglas A-1 Skyraider (formerly the AD) is arguably one of the greatest attack aircraft in the history of air combat. The Able Dog or Spad as it is familiarly known, she is equipped with four 20 mm cannon, can carry four tons of ordnance, and has an endurance of six hours. The Skyraider achieved its greatest fame in Vietnam where, under the call-sign "Sandy," provided cover for helicopters rescuing downed pilots.

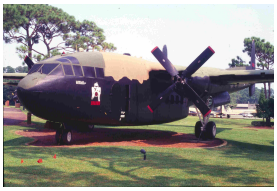
Cessna's Model 318, the "Tweet" started out life as the T-37 primary jet trainer. Its two small jet

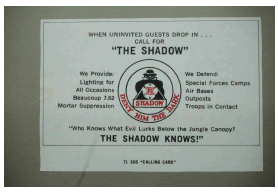
engines emitted a high pitched shrike suggested "tweety bird." A less kind sobriquet was the "6,000 pound dog whistle."

During the early days of the Vietnam War, the Air Force was searching for a COIN aircraft. Cessna contracted to modify its T-37. Bigger engines, stronger wings, armament, and a larger fuel capacity led to the A-37 Dragonfly or "Super Tweet."

The need for high volumes of fire for close air support for troops in contact converted the venerable military version of the DC-3, the C-47 Skytrain, into a gunship. Three General Electric 7.62 mm miniguns were installed on the port side and the aircraft commander was equipped with a gunsight mounted on the left side of the cockpit. Flares were also carried and the AC-37 Spooky was born.

Known to the troops as "Puff, the Magic Dragon," a reference to a popular song of the day and the fiery stream of tracers emitted by the aircraft as it performed pylon turns around its target.





The need for a higher volume of fire that provided by Spooky, led the Air Force to modify Fairchild C-119 Flying Boxcars into Stinger gunships.

Two auxiliary jet engines were hung outboard of the two piston engines and the plane was armed with a pair of 20mm Vulcan cannons and a quartet of 7.62 mm miniguns. The heavier cannon were added to attack trucks along the Ho Chi Minh trail. The Vulcans and miniguns could deliver up to 6,000 rounds/minute at their highest rate of fire. If all guns fired simultaneously, not the usual technique, 600 rounds/second were delivered to the target.

The last gunship used in Vietnam was a conversion of the Lockheed C-130 Hercules which became the AC-130 Spectre, equipped with searchlights, night vision and infrared sensors, and attack radar.

Armament varied but the early ships were armed with various combinations of Vulcans, 20 and 40 mm cannons, and a 105 mm howitzer.

<u>An Unusual Observation Plane Used in Vietnam</u>

Lockheed developed the YO-3 Quiet Star for the U.S. Army. Based on the Schweizer 2-32 glider, the Quiet Star was equipped with a large slow turning propellor, and a very effective muffler system. The plane was acoustically stealthy and designed for night operations at very low altitude, generally 1,000 feet but sometimes lower. Visual observations were supplemented with a variety of sensor packages. None of the eleven deployed ever had a shot fired at it.

Upon retirement, the were used to study SR-71 sonic booms, catch poachers in Louisiana, and Federal Bureau of Investigation law enforcement duties.