



Missions for  
America  
*Semper vigilans!*  
*Semper volans!*

## The Coastwatcher

Publication of the Thames River Composite  
Squadron  
Connecticut Wing  
Civil Air Patrol  
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06 March, 2018

10-11 MAR-Squadron Leadership Course  
13 MAR-TRCS Meeting  
17 MAR-Geophysics Lecture-HFD MIT Club  
17-18 MAR-ICS 300 & 400 Courses-Camp  
Hartell  
20 MAR-TRCS Meeting  
24 or 25 MAR-First Air Course-New Haven  
24-25-SLS Course  
27 MAR-TRCS Meeting  
07 ARR-CTWWG TRANEX  
17 APR-CTWG TRAEX  
6-8 APR-NER Cadet Competition  
19 APR-TRCS Legislative-Hartford  
21 APR-commander's Cup Rocket Contest  
28-29 APR-Corporate Leadership Course

### CADET MEETING

06 March, 2018

Drill, attendance, the Pledge of Allegiance, Cadet Oath, inspection and GES testing opened the meeting as is customary.

Lt Col Rocketto presented a series of briefings on the upcoming Commander's Cup Rocket Contest, the Model Rocketry Badge, the AIAA/CTWG Essay Contest, and potential field trips.

Rocketto led the cadets outside for an impromptu astronomy lesson. Although clouds were moving in, the group did see three constellations: Canis Major, Orion, and Taurus and their principal stars, Sirius, Betelgeuse, Bellatrix, and Rigel, and the nebula M42. Some sharp eyed cadets claim to have seen the Pleiades.

### 7th and 8th GRADE CADET ESSAY CONTEST



The Hartford Section of the American Institute of Aeronautics and Astronautics (AIAA) and the Aerospace Education Office of the Connecticut Wing, Civil Air Patrol are supporting the 2018 Space Systems AIAA Essay Contest.

#### *Theme*

Describe the role of astronauts and their impact on NASA, their impact on the future of the United States, and their impact on international partnerships.

#### *Requirements*

Double spaced size 12 font in 1,000 words or less.

Entrant name, teacher or aerospace officer (AEO) name and school or squadron name types in the upper right corner of the first page of the essay.

At the end of the essay, include cadet and AEO names, phone numbers and e-mail addresses.

### *Judging Criteria*

- a) Originality of ideas presented
- b) Soundness of logic used to develop ideas
- c) Realism of ideas presented
- d) Quality of composition and clarity of expression

### *National Prizes At Each Grade Level*

Certificate of recognition & essays published by AIAA

1<sup>st</sup> place: \$100 award + \$500 for their science classroom; 2<sup>nd</sup> place \$50 award; 3<sup>rd</sup> place: \$25 award. Each student will receive a 1-year free membership with AIAA.

### *State Prizes*

Grade levels will be combined.  
The three best entrants will receive \$100, \$50, and \$25 prizes respectively.

### *Eligibility*

Any seventh or eighth grader or seventh or eighth grade cadet (or equivalent).

### *Deadline for Submissions*

Final submission deadline to local AIAA section officers is March 31, 2018. Local winners and their teachers or AEOs will be notified in April. National winners and their teachers will be notified in May. E-mail all entries to [srocketto@aquilasys.com](mailto:srocketto@aquilasys.com)

## **SENIOR MEETING**

*06 Mar, 2018*

As is the custom, department heads updated the membership on the current status of their operations.

## **MISSIONS, TRAINING, ACTIVITIES**

### *Schmidt Training as Mission Pilot*

Lt Schmidt completed a mission pilot training session with Capt Ray Laramie of the Royal Charter Squadron. They used the G1000 SAR package to fly parallel searches between Windham and Hartford.

### *Bluff Point TRANEX*

Deputy Commander of Cadets, Lt Schmidt planned and led a search and rescue exercise in Bluff Point State Park on Saturday, March 3rd. Cadets were notified by phone around noon that a hiker was presumed lost and all available cadets were to muster at the park entrance at 1400.

C/Lt Col Hollingworth led the search party. Participating cadets were C/CMSgts Daniel and Hannah Ramsey and Cadets Munzner, Martin, Race, and Thornell. The cadets were broken down into two search parties and assigned areas of responsibility. Lt Schmidt and SM Thornell accompanied each party. SM Martin played the role of the lost hiker. Lt Col Rocketto manned the radio in the command vehicle.



*Lt Schmidt checks out SM Martin on the radio.*



The mandatory safety instructions and warning were issued regarding trail safety, hypothermia, and of course, hydration. Lt Col, concerned about spotting wildlife, especially bears, stated that:

*If you go down in the woods today  
You're sure of a big surprise  
If you go down in the woods today  
You'd better go in disguise!*

The cadets, dressed like woodland vegetation, all donned orange safety vests and disguised themselves as hunters.

A final warning was issued.

*If you go out in the woods today,  
You'd better not go alone.  
It's lovely out in the woods today,  
But safer to stay at home.*

The fearless Cadets formed into column and entered the park. An immediate hazard presented itself. The recent nor'easter, Winter Storm Reilly had saturated the ground and flooded the park entrance, an ANTRAK underpass. Careful soundings indicated that the water over the sidewalk on the east side of the underpass was only boot-lace deep.



Cadets, edging along the curbing, obeyed the speed limit.

Once inside the park, the two search parties split up and entered their assigned areas, reporting position and status each half hour.



*Hollingsworth, Race, and Martin on the trail.....*

(Photo Credits: SM J. Thornell)

Lt Col Rocketto's warning about bear sign was in vain. The critters artfully concealed themselves from the youth in hunter garb.

*Beneath the trees where nobody sees  
They'll hide and seek as long as they please  
"Cause that's the way the  
Teddy Bears have their picnic.*

After about two hours, the "lost hike" was found and the cadets returned to the command vehicle for a debriefing. There was a general agreement about the need for better radio communications. Equipment and supplies were discussed and improvements suggested.



### First Aid Course

The CTWG and Minuteman Squadron is sponsoring a one day First Aid CPR course for Civil Air Patrol members at the headquarters of the Minuteman Squadron, 62 Thompson Avenue, Tweed New Haven Airport East Haven, CT 06512

Attendees will have the option of choosing to attend either Saturday the 24th or Sunday the 25th of March 2018 from 9am-2pm.

Students will be certified at the end of successfully completing this course. The course will cost each member \$28.00. Seats are limited and will be on a first come-first served basis.

Dates: Either 24 March or 25 March, 2018

Times: 9am-2pm each day

UOD: Any CAP uniform.

CAP Forms: CAPF17, 160/161

The project officer and point of contact for this

course is 1st Lt Mirai Hashimoto who can be reached at [hashimoto0514@gmail.com](mailto:hashimoto0514@gmail.com).

On Sunday March 4 CT 075 launched for a damage assessment after storm Riley, using the LISP mission—Pilot- Farley, MO- Spreccace- MS Heard.

#### *Damage Assessment Mission*

The Squadron flew a damage assessment mission on Sunday, the 4th of March to evaluate damage caused by Storm Riley.

Maj Farley and Lts Spreccace and Heard flew along the coast from Pawtucket, Rhode Island to Hammonasset State Park looking for damaged boats, displaced navigation markers, and floating debris. The 1.5 hour mission detected no problems.

### **HISTORY**

#### *Before Electronic Navigation*

by

*Stephen M. Rocketto*

I am divesting myself of part of my book collection. My brother, who is the executor of my estate demands that I do so. If not, he threatens to visit with a flame thrower and front end loader to clean out the basement. So, I am paying visits to the Book Barn in Niantic and several libraries where I can sell or donate books. The problem is that I cannot resist buying more books as the opportunity arises, especially used books at bargain prices.

Several weeks ago, I stumbled across Byron Moore's book, *The First Million Miles*. The cover pictured Moore next to his home-built plane and a DC-7. Inside, on the flyleaf, I found an inscription by Moore to a Capt Leland wishing him continuous success for the rest of his flying career. And only four dollars. How could I resist.

I expected the book to be an autobiography and was surprised to discover that it was really a general history of changes in commercial aviation during his flying career. Moore received his training in the Army Air Corps in the early '20s

and had a career as a barnstormer, air mail pilot, and air transport pilot. His first employment in the airline industry was with the Thompson Aeronautical Corporation and he flew Loening amphibians between cities on the Great Lakes. American Airlines absorbed Thomson and Moore ended his career flying the Douglas DC-7 on transcontinental hops.

What immediately caught my attention was his account of some early navigation flying from Toledo to Detroit City Airport. A summary of the trip follows:

*I had my personal "dog path." Leaving Toledo, I got down on Telegraph Road just above the high tension lines...Where Telegraph Road peters out,I'd angle right and pick up Oakwood Boulevard...electric sign of a peculiar blue shade spelling BIJOU THEATRE...keep on my right to avoid the four hundred foot gas tank standing smack in the middle of Detroit City Airport. The tank has a characteristic pattern of light...when I saw them go by on my right, I bend that old Fokker around, groping for a certain line of street lights which I knew led to the south runway.*

In those days, a *Rand-McNally Road Atlas* and a good memory were necessary tools for safe aerial navigation. Gradually, the Post Office completed a trans-continental system of beacons to guide pilots, some airports had lights, and instrument flying and radio navigation equipment were in their infancy so the primary methods of getting from place to place was pilotage, the art of flying by visual recognition of landmarks and dead reckoning, following a compass course using knowledge of winds and distances with references to landmarks.

One of Moore's contemporary's was one Elrey Borge Jeppesen. He started his career with Tex Rankin's Flying Circus doing everything from selling tickets to wing walking. Within a few years, he was flying a DeHavilland DH-4 for Fairchild Aerial Surveys. His pilot's license was signed by Orville Wright and shortly thereafter, he started flying the mails for Boeing Air

Transport which after the reorganization of the industry became United Airlines. Legend has it that he piloted the Ellen Church, the first stewardess in a Boeing 80A. The flight was from Oakland to Chicago took 20 hours with 13 stops!



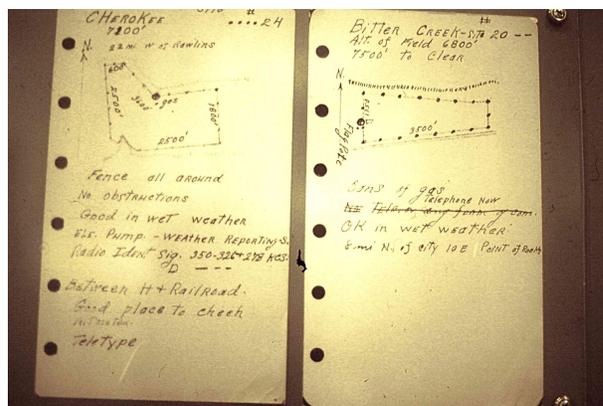
*The Transcontinental Route*

*Captain Jepp is memorialized by a 16 foot bronze statue which stands in a terminal at Denver International Airport.*



The air mail routes took Jeppesen over wild country and into rudimentary airports. Roads, rivers, lake shores and railroads, the “iron compass” provided guidance. Jeppesen started taking notes which he kept in a small notebook. He listed features of routes and landing sites and any other information which he gleaned useful to cross-country flying. He passed out copies to fellow pilots and as demand grew, established a company and sold what was called his “Little Black Book.”

I photographed a page from the original “Little Black Book” when I last visited the Museum of Flight located at Boeing Field in Seattle. The two pages depict Cherokee Field and Bitter Creek Field in south central Wyoming. They are about 30 mile apart. A flight between the two requires the pilot to thread the Bitter Creek Valley with 7,000-7,500 foot mountains on each side. Today, just follow I-80.



*Cherokee is fairly well equipped with a radio beacon, electric fuel pump and teletype. Bitter Creek is more rudimentary with gas stored in cans and a telephone.*

Back in the 70s, I had finished graduate school and was trying to stay alive teaching philosophy part-time at Connecticut College and flying charter out of Waterford Airport for Yankee Airways. A lot of Yankee business was the Fishers Island run, 15 minutes round-trip on the Hobbes meter. When the weather went sour as it often did and visibility got down to the legal minimums, Cap'n Steve's “Little Black Book” set out the details of flying the route. Suppose the weather was marginal.

You might take off from runway 25 at Fishers and maintain course until you picked up Race Rock Light.



At Race Rock, a course of 300° would take you to the Bartlett Reef buoy. At that point a change in course to 250° brought you to Jordan Cove and the mouth of Jordan River. All that had to be done at that point was fly due north magnetic, taking care to avoid the Hendel tower and it was a

straight-in to runway 35 at Waterford.



(Credit: Connecticut State Archives via Abandoned and Little Known Fields website.)

Prudent pilots used a bit of flap to slow the trip which assisted in picking up the landmarks. It also added a little time to the Hobbes meter which was how our pay was calculated.

I cannot verify this story but there was a rumor that one pilot had devised an automatic direction finder approach to Waterford using WNLC's 1510 kHz signal.

Today, the modern pilot's safety no longer depends upon Captain Jepp's "Little Black Book" but on a steady source of electricity for his GPS and an Electronic Flight Bag with long-lasting batteries.

At the beginning of *The First Five Million Miles*, Moore ruminates about his contemporaries who lament that "They've taken the romance out of flying. I wish I could go back to the good old days." For today's new pilots, I can only say that these are their "good old days." Who can say what technological advances will cause them to look back with nostalgia on their "good old days."

## AEROSPACE CHRONOLOGY

07 MAR, 1961 – Capt Robert M. White piloted the North American X-15 to 77,450 feet and achieved Mach 4.43, 2,905 mph. This was the first time a manned aircraft exceeded Mach 4.



08 MAR, 1949– William Odom set a new light plane record when he piloted a Beech 35 Bonanza non-stop from Honolulu, Hawaii to Teterboro, New Jersey. The 56hr 2min flight was 4,957 miles long.



*Waikiki Beach at the National Air & Space Museum*

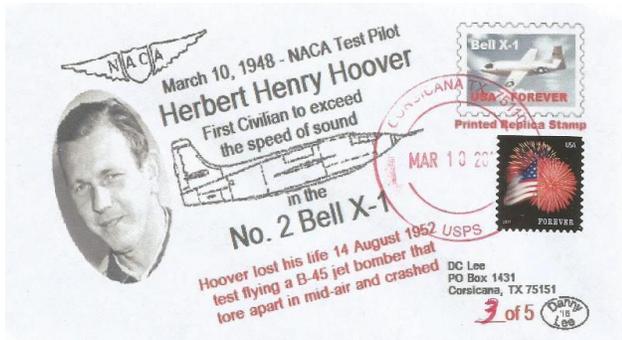
09 MAR, 1941 – First flight of the jet propelled Gloster E.1/44. The flight occurred some nine months before the Pearl Harbor attack and about 18 months after the start of World War II.

*First British Jet*  
(Credit: Imperial War Museum)



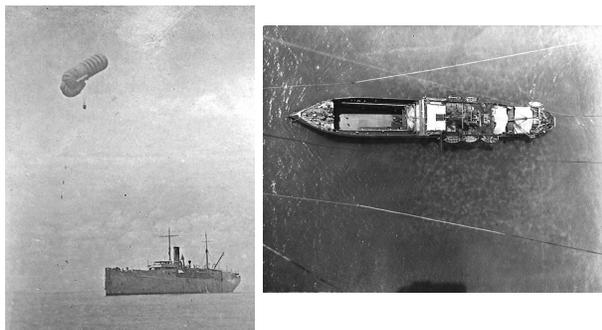
*The historic aircraft is now ensconced in the British Science Museum.*

10 MAR, 1948 – Test pilot Herbert Henry Hoover becomes the first civilian to exceed the speed of sound when he pilots the No. 2 Bell XS-1 to a speed of 703 mph (Mach 1.065).



*Not Bob Hoover. Not President Herbert Hoover.*  
(Credit: NASA)

11 MAR, 1916 – The Royal Navy charts the cargo ship *SS Manica* and converts it into the first British balloon ship, *HMS Manica*. The ship will be used to launch observation balloons. The ship will see action during the Dardanelles Campaign, directing naval gunfire against the Turkish forces opposing the landing of Australian and New Zealand troops.



*Kite balloon over HMS Manica and a vertical view of the balloon hangar.* (Credit: Imperial War Museum)

At least two other interesting examples of ships

handling lighter than air vehicles bear mentioning. The USS Patoka, a fleet oiler, was fitted out with a mooring mast and acted as a tender for the Navy's dirigibles Shenandoah, Los Angeles, and Akron.

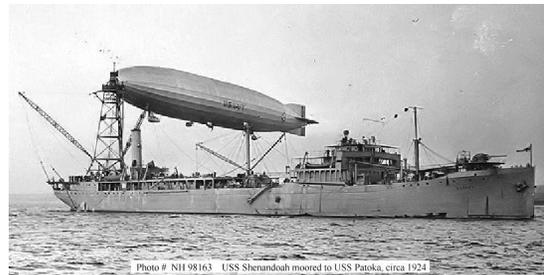


Photo # NH 98163 USS Shenandoah moored to USS Patoka, circa 1924

(Credit: US Navy Archives)

In the late 1940's and early 50s, the Navy launched a number of high altitude balloons from navy ships. The Skyhook Project was used to investigate high altitude conditions and photographs of the sun, undistorted by low altitude atmospheric conditions. The also contained “sniffers” designed to collect the atmospheric residue of Soviet nuclear tests. One series of experiments used the balloons to lift rockets out of the dense lower atmosphere, a precursor of modern airborne launch techniques.



*Skyhook balloon ready for launch from USS Valley Forge. The balloon will expand to a spheroid about 100 feet in diameter as the gas expands during the ascent. The carrier appears to be making enough headway to counteract the wind.*

But the very first of the US aircraft carriers can be traced back to the Civil War. Observation balloons were used by the Union. Due to the difficulty of preparing launch sites on the heavily forested areas during the Peninsula campaign, barges were converted to transport the balloon and gas generators and launch the balloons.



12 MAR 1947 – First flight of the Douglas Cloudster II. The single prototype used two 250 hp engines buried in the fuselage to drive a single eight foot twin bladed pusher propeller. Douglas determined that the five seat aircraft was too expensive to be commercially viable and after two flights the project was abandoned.



13 MAR, 1951 – A Queensland and Northern Territory Air Service (QANTAS) PB2B-2 Catalina, Frigate Bird II under the command of Capt P. G. Taylor departs Rose Bay, Sydney on a proving flight to determine the possibilities of an Australia-South American route.



*Crew of Frigate Bird II (l-r) Percival, Purvis, Taylor, Allison and L'Huillier.*

*Frigate Bird II on a take-off run.*



The aircraft, registered VH-ASA, was a stock Royal Australian Air Force Catalina VI, built by Boeing Canada and still survives, on display at Sydney's Powerhouse Museum.

The outward bound 8,500 flight alighted at seven intermediate refueling stops, Noumea, New Caledonia; RNZAF Station Luthala Bay, Suva, Fiji; Stapuala Bay, Samoa; Aitutaki; Cook Islands; Papeete Harbor, Tahiti; and Mangareva, French Oceania; and Easter Island before landing at Valparaiso, Chile. The aircraft returned to Brisbane, Australia on the 20th of April, five weeks later.

Today, a QANTAS 747 will get you from Sydney to Santiago in 12 hr 20 min one way direct.



*Qantas names its aircraft and painted some of them to celebrate Aboriginal culture. This 747-400 (VH-OJB) carries the name Wunala Dreaming. Wunala means Kangaroo.*