



Missions for America

Semper vigilans!

Semper volans!

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

<http://ct075.org>

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SQUADRON CALENDAR

- 05 FEB-TRCS Meeting-Staff
- 09 FEB-Ground Branch Director Course CTWG
HQ/Middletown
- 10 FEB-Mission Safety Officer Course-CTWG
HQ/Middletown
- 12 FEB-TRCS Meeting
- 07-14 SEP-Regional Staff College-Niantic
- 19 FEB-TRCS Meeting
- 26 FEB-TRCS Meeting
- 05 FEB-TRCS Meeting-Staff
- 12 FEB-TRCS Meeting-Commander's Call

- 19 FEB-TRCS Meeting
- 26 FEB-TRCS Meeting



“The Bridgeport Aerodrome is a far better field for an aeroplane course than Belmont Park and excels any spot in the North and East for aeroplane purposes.”

Thomas T. Tuttle, personal representative of Mr. Glenn Curtiss

CADET MEETING

29 January, 2019

The senior staff led the cadets in a session during which the learned how to tie useful knots. Knots practiced were the square knot, bowline, clove hitch, fisherman's knot, and sheet-bend.

An aerospace session by Lt Col Rocketto covered parts two and three of Module Two of Aerospace Dimensions. Airport layout, airport signs and markings, traffic patterns, wind indicators, and lighting, latitude and longitude, and basic information available on a sectional chart were some of the topics.

SENIOR MEETING

29 January, 2019

Maj Farley, Lt Col Kinch, and Lt Spreace conducted an emergency services briefing. The first three ice patrol missions were discussed and lessons learned extracted. Second, Maj Farley explained the methodology and advantages employed by the new DAART equipment.

ICE PATROL

The Squadron flew three missions observing and photographing ice on the Connecticut and Thames Rivers. These missions are in support of the U.S. Coast Guard's efforts to maintain navigable waterways. Photographs and written reports are submitted to USCG Sector Long Island Sound for analysis and if needed, response.

Maj Farley and Lt Col Kinch flew the first mission on Friday, the 25th. All required points on the Connecticut were photographed. Rain and potential icing conditions forced the crew to abandon the survey of the Thames River.

On Saturday, the 26th, Maj Neilson, Lt Col Kinch, and SM Chebelyon-Dalizu reported a 20% coverage on the Connecticut with the heaviest icing south of Haadam. The Thames River was relatively clear.

Sunday's mission was manned by Maj Noniewicz, Lt Spreace, and SM Chebelyon-Dalizu.

INFRASTRUCTURE IMPROVEMENTS

Lt Steven Heard has assiduously worked on repairs and maintenance projects. The unreliable door locks have all been changed and the fluorescent bulbs have been replaced with LEDs which provide an 80% energy saving.

The last improvement has been a re-purposing of the water closet which contained a toilet bowl and sink and random storage of cleaning supplies. Our hopes to get a sewer hook-up and running water were dashed on the rocks and shoals of Financial Reef.

Cadet Deputy Commander Lt Jennifer Thornell saw a solution of one of her problems. The cubby-hole "...would make a great changing room when we issue cadets their BDUs".

Lt Heard then designed and built a bench seat with storage. The seat will make changing easier and the storage area is now dedicated to caching the supply of LED bulbs.

Heard and Thornell then cleaned out the old

supplies and installed the bench.



This is not a picture of the now politically correct common toilet facilities designed for the gender of the user's choice. It portrays Thornell and Heard taking their ease after completing the newest improvement to our facilities. (Photo Credit: Maj Scott Farley)

DAART

*submitted by
Maj Scott Farley*

One had to dart around a dictionary of acronyms to find out that DAART symbolized Domestic Operations Awareness & Assessment Response Tool). The Squadron then sent Maj Farley and Lt Pineau to Hartford to find out what it all entailed.

DAART is a system which will allow CAP to send live video streams or still imagery to customers who also participate in the DAART program.

The equipment for DAART includes a laptop computer and a video camera. Both go in the airplane (or vehicle). The laptop connects to the internet while flying using Sprint or Verizon cell systems and relays real time video or photos. For those who remember, this is apparently an improved technology replacing the GIIEP system.

The DAART system comes with some challenges, primarily maintaining connectivity to the cell system in order to send videos or photos. The training consisted of a full day of classroom training followed by 2 flights where trainees demonstrate proficiency in using the equipment.

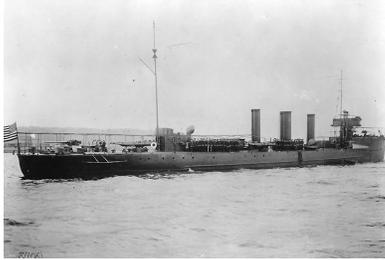
Maj Noniewicz supported the training by flying seven sorties conduction trainee practice and qualification flights on Saturday and Sunday. Farley and Pineau both qualified

The Wing will have 2 DAART units and will

attempt to develop a third so the all hubs (Groton, Hartford, and Oxford) have these units.

AEROSPACE HISTORY AND CHRONOLOGY

Jan. 30, 1911 – The destroyer *USS Terry* (DD-25) makes the first airplane rescue at sea saving the life of John McCurdy 10 miles from Havana, Cuba.



The Terry performed the rescue three months after it had been commissioned.

McCurdy was the first British subject to fly an aircraft in the British Empire when he piloted the Aerial Experiment Association's *Silver Dart* in Nova Scotia. The *Silver Dart* was the first powered airplane to fly in Canada and McCurdy held the first Canadian pilot certificate.



McCurdy at the controls of the Silver Dart.

An article from the Bridgeport Evening Farmer, May 9, 1911, states that the opening celebration of the Bridgeport Aerodrome will be graced by well known aviators James McCurdy, Lincoln Beachy, Glenn Curtiss, Lt Ellyson, and Lt, Fickel.

Beachy was known as the “the world's greatest aviator, the man who owned the sky.” He was the first to recover from a spin and the first to loop and aircraft. Lt. Theodore “Spuds” Ellyson Theodore was Naval Aviator #1. Lt. Jacob Fickel, US Army, was the first to discharge a firearm from an an

aircraft, Glenn Curtiss, who needs no further comments, was the pilot.

McCurdy continued to set flying records until 1916 when vision problems grounded him. Afterwards he continued his career in aviation, involved in the establishment of airframe production companies and directing aircraft production during World War II. After the war, he served five years as Lieutenant Governor of Nova Scotia.

Jan. 31, 1928 – The Cackle Corner Poultry Farm in Garrettsville, Ohio had complained that low flying planes were affecting egg production. The aircraft belonged to National Air Transport Company, a contractor flying mail from New York to Chicago.



The Coastwatcher solution. Foghorn Leghorn tests hearing protectors while overseeing his brood.

This was the first aircraft noise complaint reported to the Aeronautics Branch of the Commerce Department. US Postmaster General Harry S. New issued an order that all US mail contractors must climb to higher altitudes when flying over Garrettsville, Ohio.

It did not end there. Beachgoers in Rhode Island complained about low flying aircraft and a fox farmer in Nebraska reported that low flying aircraft were causing his foxes to miscarry. A golf club located next to Roosevelt Field on Long Island complained that the noise of the aircraft was disturbing and one might say, caused their gold balls to miscarry.

The issue, alive to this day, is about who owns the air rights over property. States created new laws and in some cases, aerial flight over private property was a trespass and trespassers could be

shot. The profusion of laws was partially resolved.

A well organized commercial aircraft industry and the implication that the control of airspace had national security implications resulted in a 500 foot minimum height when passing over private property. But with the advent of the noisy jets and the encroachment of housing near airports, the issue became hot again. Either by legislative fiat or agreement among the parties, noise abatement rules were instituted but that will not be the end of the fight between aviation and property owners.

Feb. 1, 1964 – President Lyndon Johnson publicly acknowledges the existence of the Lockheed A-12 Mach 3+ spy plane program and displays a picture that is actually one of the YF-12A.

The SR-71 Blackbird is the best know of Lockheed's family of Mach 3+ aircraft but the first was the Lockheed A-12 reconnaissance aircraft built for and flown by the Central Intelligence Agency. The single seat aircraft was lighter and flew faster and higher than the better know Blackbird. One variant was the two seat M-21 which carried the D-21 drone, also a Mach 3 aircraft. The one-off two seat trainer was nicknamed the “titanium goose.” A total of 13 A-12s and two D-21s were built.



A-11

YF-12



SR-71

The A-12 led to the development of the prototype YF-12 for the US Air Force. The aircraft was developed as a two seat interceptor. Only three were built and the cost of the Vietnam War led to cancellation of funding for production aircraft.

The SR-71 was an Air Force flown bird and flew for over 30 years. Its retirement was a hash of financial and political reasons. They were very expensive to fly and the Air Force was not enamored with the fact that most of its intelligence product went to the Central Intelligence Agency, the Defense Intelligence Agency, and the National Security Agency.

The elimination of overflights of hostile nations meant that the upgraded U-2 family equipped with real-time data links provided an adequate substitute at a lower price. As with the present argument over the A-10, the Air Force had other equipment priorities which needed funding and the SR-71 program served as a sacrificial lamb.

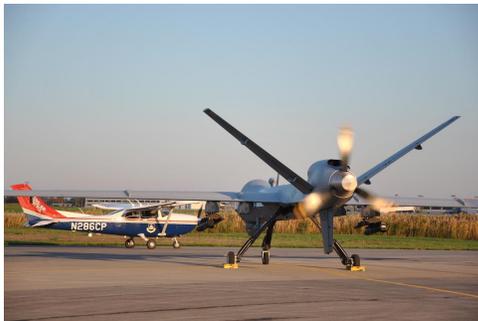
Feb. 2, 2001 – First flight of the Prototype General Atomics RQ-1 Predator B, later re-designated MQ-9 Reaper.

The Reaper is a remotely piloted aircraft capable not only collecting phonographic and signal intelligence but also using Hellfire missiles and Joint Direct Attack Munitions to attack selected targets precisely.

The Air National Guard's 174th Air Attack Wing based at Hancock Field Air National Guard Syracuse, New York has given up its F-16s and now flies the Reaper. It also operates out of Wheeler-Sack Army Air Field at Fort Drum. Maintainers are trained at Hancock Field and the

pilots and sensor operators who are based at Fort Drum use the restricted air space to train in reconnaissance and live fire missions.

CAP has an important role in the mission of the 174th. The airspace between Syracuse and Fort Drum is civil airspace and aircraft transiting must comply with the FAA's "see and avoid rule." The unmanned Reaper is not equipped to meet the standards of "see and avoid" so CAP aircraft escort the Reapers between Syracuse and Fort Drum. The program, in its third year, is estimated to save more than \$1 million dollars and has allowed the Air Force to increase training time by 25 percent.

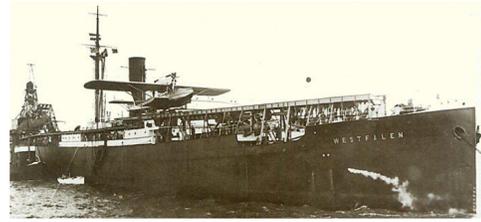


CAP Escort and Reaper

Feb. 3, 1934– Lufthansa begins the first regular airmail service across the Atlantic Ocean connecting Berlin with Belem, Brazil. The trans-ocean leg of the trip was flown by Dornier Wal flying boats between Bathurst, Gambia and Pernambuco, Brazil. The flights were possible by the use of mid-ocean refueling ships equipped with catapults.

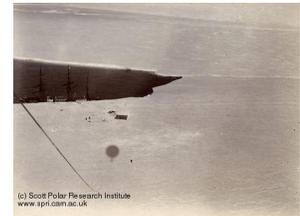


Wal at Bathhurst



Westfalen with Wal mounted on the catapult.

Feb. 4, 1902 – The first balloon flights in Antarctica are made when Robert Falcon Scott ascend in a tethered hydrogen balloon. On the second ascent, Earnest Shackleton ascends 800 feet and takes the first Antarctic aerial photographs.



(Credit: Scott Antarctic Institute.)

Feb. 5, 1972– NASA and de Havilland Canada make major modifications to a C-8 Buffalo for use in the several short take-off and landing studies.



A Buffalo on display and painted to memorialize one shot down over Syria in 1974. The aircraft was serving a United Missions and all nine Canadian servicemen aboard were killed.

NASA 716 is the C-8A Buffalo Augmenter Wing Jet-STOL research aircraft modified with split-flow turbofan engines for studying powered lift.



The aircraft was renamed in 1776 as Bisontennial to honor the bicentennial of the United States.

NASA modified a second Buffalo of the Quiet Short Haul Research investigation. The wing was an unswept, supercritical airfoil which incorporated a boundary layer control system. It used four high-pass turbofans salvaged from the Northrop YA-9 program. The above wing mounts enabled the aircraft to take advantage of the Coandă effect. The Coandă effect is a phenomena in which the air flow over the wing stays attached even though the camber of the wing curves away from the original direction of flow.



NASA 715NA lands on the aircraft carrier Kitty Hawk.

Feb 6, 1938 – The Short-Mayo composite aircraft makes its first successful in-flight separation. The composite consisted of a Short S.21 flying boat named Maia equipped with a dorsal pylon. The second aircraft, a Short S.20 seaplane named Mercury could be mounted atop Maia similar to NASA's 747 Space Shuttle carrier. But the Mercury could depart Maia in flight.



The system was developed because the Short Empire flying boats could not carry enough fuel to make a trans-Atlantic flight with mail, cargo, or passengers. By using the combined power of the two aircraft, the Mercury would be carried aloft and released and still carry sufficient fuel for the ocean crossing.



Imperial Airways used the Maia-Mercury composite to make the first commercial east to west flight from Foynes, Ireland to Quebec, Canada on the 21st of July, 1938.

ERRATUM

Lt Col Stidsen pointed out that the name of the *Saratoga's* sister-ship was not the *Enterprise* but the *Lexington*.



The first three US carriers together: Lexington, Saratoga, and Langley.