



*Missions for America
Semper vigilans!
Semper volans!*

Publication of the Thames River Composite
Squadron
Connecticut Wing, Civil Air Patrol
<http://ct075.org>
300 Tower Rd., Groton, CT

Issue 17.04

24 January 2023

*Lt Col Stephen Rocketto Editor
1st Lt David Pineau, Publisher
Maj Roy Bourque, Paparazzo
2d Lt Joanne Richards, PAO
C/Amn Lucas Dellacono, Cadet PAO
Capt Edward Miller, Features
Maj Scott Farley, Roving Correspondent
Shawn Terry, Automated Sciences, IT Guru*

31 JAN-TRCS Meeting/No Senior Meeting
04 FEB-CTWG SAREX
07 FEB-Staff Meeting
14 FEB-Commander's Call (Valentine's Day)
21 FEB-TRCS Meeting (Fat Tuesday)
28 FEB-TRCS Meeting
18 FEB-Cadet Meeting-Leadership
23 FEB-Senior Meeting
24 FEB-Cadet Meeting
02 MAR-Senior Staff Meeting
03 MAR-Cadet Meeting

SENIOR MEETING

24 January, 2023

Lt Otrin briefed the senior membership about the causes, detection and symptoms of carbon monoxide. A spirited discussion ensued about the available CO detection devices available.

Capt Kopycienksi brought a guest, Ens. Seth Brannon, USN, a prospective candidate for membership.

CADET MEETING

24 January, 2023

No Report

CHALLENGE BY THE EDITOR TO THOSE WHO THINK THEY CAN IDENTIFY AIRCRAFT.

During my wanderings at various aircraft venues, museums, airshows, airports and flight, I like to take photographs of the aircraft which I see. The following pairs of aircraft have been selected from my files. One is of domestic manufacture. The second is a foreign aircraft. Can you name the aircraft, manufacturer and country and state what the pairs of aircraft from different nations have in common? Once you solve the problem for one, the others will be easier for then you will know the theme. Answers will appear at the end of this edition of *The Coastwatcher*.

1.



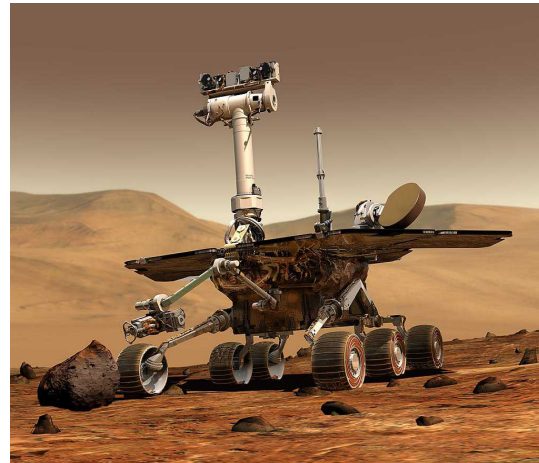
2.



3.



4.



(Credits: NASA/JPL)

Opportunity was a magnificent engineering success for NASA and the Jet Propulsion Laboratory.. Planned to last for 90 Martian days, called sols, she functioned for 5111 sols, equivalent to 14 years, 113 days on earth. During that period of time, *Opportunity* traveled 28.06 miles sampling the Martian lithosphere and providing a vast amount of data for study.

MISSIONS

Ice Patrol
21 January, 2023

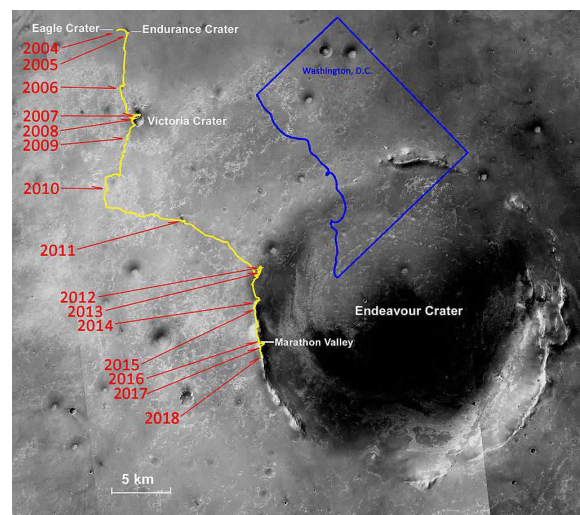
Capt Adam Spreace and Maj Scott Farley followed the extended route for the ice patrol starting at the Ousatonic Dam at Derby Connecticut south to Bridgeport, east along the coastline to the Connecticut River, north to Hartford east to Norwich and south along the Thames River.

ACHIEVEMENTS

C/SMSGt Alexander Knets, now KC1 SJC has earned a technician class amateur radio license from the Federal Communications Commission.

AEROSPACE CHRONOLOGY FOR THE WEEK

January 25, 2004 – *Opportunity*, MER-B (Mars Exploration Rover – B), an American robotic rover lands on the planet Mars.



Opportunity's Martian Cross-Country Trek

Controllers used solar power to recharge the batteries and placed *Opportunity* into hibernation during dust storms and nights to conserve energy. In August of 2018, *Opportunity* failed to respond to commands and after 1000 attempts to restore contact, the mission was ended.

January 26, 1911– Glenn Curtiss demonstrates the first practical seaplane when he operates his Hydro

of at North Island, San Diego Bay. The aircraft was known as the Triad because it was an amphibian and could operate in the air and off water and land.

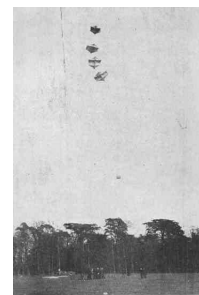


Glenn Curtiss and the Triad. Note the retracted landing gear. (Credit: San Diego A&SM)

A version of the Triad was adopted by the Navy as the A-1. Powered by a 75 hp Curtiss V8, the aircraft was repeatedly modified, damaged, repaired and after 285 flights was written off. Many of the early naval aviators learned to fly in the A-1.

Among their achievements were experiments with the first catapults, airborne radio communications, night water landings with the benefit of lighting and cross-country flying.

.January 27, 1894 – At Pirbright Camp, Surrey, England, Captain B. F. S. Baden-Powell of the Scots Guards managed to become airborne beneath a 36 foot tall kite. He improved the design and eventually used five 12 foot kites to fly to an altitude of 100 feet.



Baden-Powell in Flight

Younger brother of the founder of the Boy Scout movement, B-P was an enthusiast innovator and one of the first to argue for the utility of aerial vehicles as military equipment. He not only experimented with kites and aerial photography from balloons but also saw the military advantages and designed one for army use. He was President of the Royal Aeronautical Society from 1900 to 1907.

Bicycles became a part of standard equipment in many armies. The Japanese used them in WWII in their advance down the Malay Peninsula aimed at Singapore. The United States suffered from Vietnamese use of bicycles on the Ho Chi Minh trail to move supplies and ordnance south.



Vietnamese porter on the Ho Chi Minh Trail,

Although no armies maintain bicycle regiments today, the Swiss disbanded their last unit in 2003, these cheap, lightweight “mechanical horses” are still used and currently, studies about the adoption of electrical power are being carried on.

January 28, 1919 – Col. Francis Gabreski,

American fighter pilot is born. “Gabby” became the top American fighter ace in Europe during World War II, a jet fighter ace in Korea, and one of only six USAF pilots to become an ace in two conflicts, WWII and Korea. Gabreski shot down 28 German aircraft in Europe before becoming a P.O.W. He was scheduled to go home but decided to fly “one more mission.”



After a successful escort of some bombers, he noted an airfield with some parked Heinkel III's and decided to cap off the day with some strafing. While making a second strafing pass, Gabby flew too low, damaged his propeller and was forced to make a controlled crash landing. He evaded capture for five days but ended up in Stalag Luft I for nine months until the German surrender.

Repatriated, he became a test pilot, earned a degree in Russian from Columbia University and returned to the Air Force. After the North Koreans invaded the South, he was sent to Korea flying the F-86E and recorded 6.5 victories.



Gabby retired to Long Island, worked for Grumman and then accepted appointment to head up the State owned Long Island Rail Road, a decision he was soon to regret. His inexperience, the convoluted politics and the sorry state of rail transport defeated the two-time ace and he resigned under pressure. After his death in 2002, the Suffolk County AFB/Westhampton Beach Airport was renamed the Francis S. Gabreski Airport in his honor.



HC-130 Hercules aircraft of the 102nd Rescue Wing sit on the military ramp at Gabreski. They also operate the HH-60G Pave Hawk.

The other pilots who are member of this select club are Air Force members George Davis, Jr., William Whisner, James Hagerstrom, Harrison Thyng, Vermont Garrison and James Bolt, USMC.

January 29, 1941– First flight of the Tupolev Tu-2. It was a first rate high speed bomber and 2,257 units were produced.



It was comparable to the British de Havilland Mosquito and Germany's Ju-88. The People's Liberation Army Air Force did not retire their last Tu-2 until the late 1970s.

The US military engaged the Tu-2, NATO code name Bat in the Korean War and claimed nine shoot-downs, four of which were certain. The nationality of the crews were unknown and could have been North Korean, Chinese or Russian. They also saw combat against the Nationalist Chinese and in 1959 against rebels in Tibet.



Tupolev directed the eponymous Tupolev Design Bureau. He built and test piloted his first glider in 1910 and went on to create or supervise over 100 different aircraft including the reverse engineering of the B-29 into the Tu-4 Bull.

The story of the Tu-4 design is fascinating. The United States refused to supply B-29s to the Soviet Union under lead-lease but they acquired four of them which had been damaged raiding Japan to make emergency landings in Soviet territory. One of them was named ironically named *The Hap Arnold Special*.



Stalin demanded an exact copy and he meant it. Every deviation from an exact copy required bureaucratic approval. Consider the problems faced by the engineers charged with making the Soviet version involving metric conversions, materials and sub-systems. Ultimately, Soviet engines were used limitations in Soviet technology forced other changes but the final product, almost 900 aircraft, was Stalin's primary strategic bomber deployed during the early stages of the Cold War.

His later Cold War works include the Tu-16 Badger, a B-47 equivalent, the incredible turbo-prop Tu-95 Bear and the Tu-104 Camel, 2nd operational jet airliner.

Tupolev's career was remarkable in that he managed to become a subject of both the suspicions and sanctions by both Czar Nicholas II's imperial government and Joseph Stalin's paranoid personality. He was released from custody by the Czar but restricted in his movements. Stalin took not only him but most of the top ranking members of the aeronautical institutions and executed them or sentenced them to long periods in prison. Andrei Tupolev worked on the Tu-2 design while under NKVD confinement in what can only be described as a work camp for academics.

January 30, 1965 – First flight of the Aerial Distributors DW-1 Distributor Wing, The Distributor Wing was an unorthodox aerial applicator. A second engine was mounted on the nose beneath the main power plant. But this engine was used to compress air which was used to blow dry chemicals over the trailing edge of the wing.



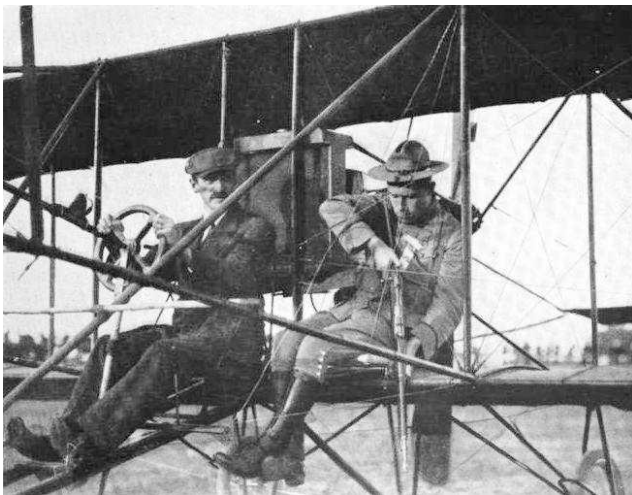
(Credit: Bill Larkins)

The design is that of a typical aerial applicator except except for the 108 hp Lycoming piston engine mounted beneath the 350 hp Lycoming.

January 31, 1883 – Birth of Jacob Earl "Jake" Fickel, Major General, Army of the United States.



Fickel, an infantry officer, fired the first recorded rifle shots from an airplane on August 20, 1910. The flight occurred at the Sheepshead Bay Race Track in Brooklyn, New York and Glenn Curtiss was the pilot. Fickel fired two shots from a 1903 Springfield Rifle at a ground target while the aircraft was at an altitude of 100 feet.



Curtiss and Fickel in a posed ground photograph.

In 1911, piloted by Hap Arnold, he competed with a British team consisting of Tommy Sopwith and Malcolm Campbell. The event was held at the Nassau Boulevard Airfield on Long Island and

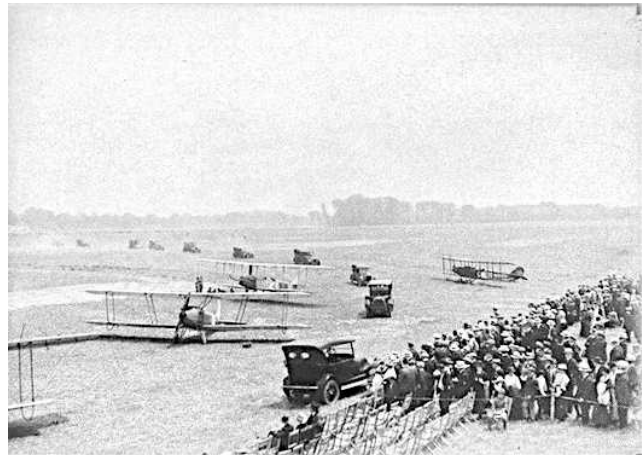
Fickel emerged victorious by putting six bullets through a dinner plate sized target from an altitude of 200 feet.

In 1918, Fickel became a student at Rockwell Field, North Island, California where he earned his wings.

His last career posting was following Gen. John Curry as Commanding General, US Army Air Forces Western Technical Training Command.

A 1921 ARTICLE ABOUT BRAINARD FIELD

While researching information about early Connecticut aviation, the Editor discovered a 1921 article published by the Federal government praising Brainard Field. It is published below in its entirety.



June 21, 1921-Opening Day at Brainard Field

(Credit: Connecticut Historical Society)

Vol.V. Information Group

Air Service

AIR SERVICE NEWS July 13, 1921

LETTER

No. 26.

Munitions Bldg., Washington, D.C.

The purpose of this letter is to keep the personnel of the Air Service both in

Washington and in the field informed as to the activities of the Air Service in general, and for release to the public press.

Mr. Hiram Percy Maxim. President of the Hartford Aviation Commission, recently addressed a communication to the Air Service in which he states that the City of Hartford has a very fine Municipal Landing Field under the direction of the City of Hartford Aviation Commission. The landing field is located directly south of the city, within the city limits and directly on the west bank of the Connecticut River.

The distance from the Headquarters Building to the Aviation Field to the center of the city is approximately 1½ miles. The field is L shaped. The larger leg of the L is north and south and is approximately 2,500 feet long north and south and 1,000 feet wide east and west and approximately 800 feet wide north and south. The north and south leg is very carefully graded and an almost perfect turf surface prevails over its entire area. In the center of this north and south leg is a large white circle as a marker measuring 100 feet in diameter and three feet wide. It's made of crushed stone and kept whitewashed.

On the field there is kept high test gasoline and four grades of lubricating oil, including, castor oil. A regular Municipal caretaker is on the ground seven days a week. Public flying is done constantly. there being two planes at the field all of the time. These planes are owned by private individuals who use em for taking up passengers.

Lieut. Moffit, of the Air service Station and the Framingham Airdrome, Mass., recently visited the Field and pronounced it the best in New England. There is clear flying ground for at least one square mile, and the conditions are hardly excelled anywhere in the country.

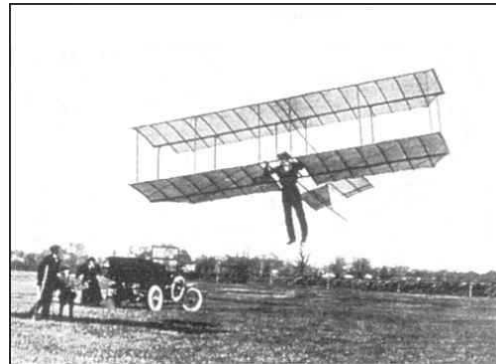
Editor's Note

Hiram Percy Maxim is the son of Sir Hiram Maxim, the inventor of the Maxim machine gun. Hiram Percy was no mean technologist himself.

He developed mufflers for automobiles, created and marketed the first commercially successful firearms silencer, raced and manufactured automobiles, was a pioneer in developing electric automobiles and was a co-founder of the American Radio Relay League.



Hiram the Ham, W1AW (Credit: Hartford Public Library)



Glider over Brainard Field. Maxim is the gentleman on crutches in the lower left, recovering from a glider crash.

The Lieut. Moffit mentioned in the last paragraph was Lt. Reuben Moffat who flew the first air mail to New England in October of 1921. He landed at Framingham's Musterfield Airport. The mail was then trucked to Boston which had no airport.

CONTEST ANSWERS

The theme is that each pair of aircraft has the same popular name whether in English or its native language.

1. **Lightning**-The Lockheed P-38, known to the Luftwaffe as *der Gabeschwanz Teufel*, the “forked tail devil,” wearing an early WWII insignia

The second aircraft is an English Electric T.5.FRA from No. 106 Squadron. Note how the two engines on the jet are stacked vertically. It was a Mach 2 aircraft and could climb vertically at Mach 1.

The English Electric Lightning was designed as a point interceptor to defend the airfields of the RAF strategic bombers so the original models had a very short range. For ferry flights, the F.6 model could mount auxiliary fuel tanks *over* the wings.



Saudi F.6 with Ferry Tanks

2. **Albatross/Albatros**-A Grumman SHU-16B Albatross anti-submarine aircraft operating with the Chilean Air Force and an Aero Vodochody L-39ZA Albatros wearing an East Bloc motif and Bort Number 106 with no nationality displayed. It is US registered NX396ZA and parked at Groton.
3. **Galaxy**-A trio of Lockheed C-5A Galaxies belonging to the 239th Airlift Wing, the Patriot Wing, photographed during a Thames River Composite Squadron field trip to Westover Air Reserve Base.
4. The second picture is of an Israel Aircraft Industries (IAI) Gulfstream 150. The aircraft's very complex history starts with Aero Commander and was taken over by Rockwell Standard and North American but issues involving anti-trust legislation arose since North American-Rockwell was also producing the very similar Westwind.

The legal issue was solved in 1968 when IAI purchased the rights, tooling and 48 unfinished aircraft. Over the years, the aircraft was modified and carried the names Commodore Jet and Westwind. In 2001, A General Dynamics's Gulfstream Division bought the Galaxy Aerospace sub-division of IAO marketed the G100 and G200. The final version was the G150 Galaxy. Does this confuse you as much as it confused the Editor?
4. **Arrow**-The Piper PA-28R and the Dornier Do 335 *Pfell*, “arrow” in German. The Piper Arrow is one of the 15 or so variants of John Thorpe's basic PA-28 design. It was designed to fill the light retractable gear market niche held by Mooney. A unique feature was an auto-extension system which lowered the landing gear if the power is reduced and the airspeed is below 87 knots indicated.

The Dornier's “push-pull” configuration was chosen to reduce frontal area and lower drag. Consequently, with two powerful 1,800 hp engines, it was one of the fastest prop planes ever built and maxed out at around 470 mph. However, it also required a pneumatic ejection seat for the pilot.

The D0 335 is a good example of a WWII heavy fighter designed as a bomber destroyer. For this mission, it was armed with a 30 mm cannon and two 20 mm auto cannons. As a multi-role aircraft, it could haul a ton of bombs. However only 37 were produced and it saw limited action.