



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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Issue 13.10

19 March, 2019

SQUADRON CALENDAR

26 MAR-TRCS Meeting
29-31 MAR-Cadet Competition-Camp Niantic
30 MAR-Aircrew meeting in Hartford
30 MAR-CTWG Rifle Safety and Marksmanship
02 APR-TRCS Staff Meeting
06 APR-CTWG SAREX
09 APR-TRCS Commanders's Call-Blues
16 APR-TRCS Meeting
23 APR-TRCS Meeting
27 APR-CTWG Rifle Safety and Marksmanship
30 APR-TRCS Meeting
17-19 MAY-USAF Evaluation of CTWG
26 MAY-Ledyard Memorial Day Parade
15 JUN-Commander's Cup Rocket Contest
22 JUN-CTWG Annual Conference
04 JUL-Groton 4th of July Parade
10-17 AUG-CTWG Encampment



*"Levity is the
lubricant of a
crisis. We
resort to jokes,
pranks and
good natured
kidding to
relieve
tension, stress
and boredom."
- Wally
Schirra, Prime
Prankster,
NASA
Astronaut
Corps*

CADET MEETING

19 March, 2019

Cadet Aerospace Education Officer Louis Trinidad presented a current events briefing on the USAF X-37B Spaceplane.

Lt Col Rocketto provided information about the recent problems with the Boeing 737Max and explained the purpose and function of the Maneuvering Characteristics Augmentation System which may be associated with the recent crashes of the Lion Air and Ethiopia Airlines 737 Max aircraft.

The major aerospace education session of the evening was an astronomy lesson which explored the development of horology and calendars by observations of celestial bodies.

Rocketto presented personal studies of sites in Peru, Scotland, Ireland and the Thames River Gold Star Memorial Bridge which may or may not have had use in understanding the cycles of time.

Lt Bradstreet briefed the cadets about the importance of the proper wear of the uniform.

SENIOR MEETING

19 March, 2019

Maj Farley conducted a hot wash of the March 26th training exercise with emphasis on ground, communication, and airborne training.

ACHIEVEMENTS AND HONORS

Lt Michael Kopycienksi qualified as a Communications Unit Leader.

Cadet Elizabeth Burton received Ground Team 3 certification.

Lt Col Lawrence Kinch has been selected by the Wing as the Administrative/Personnel Officer of the Year.

Lt Col Stephen Rocketto has been selected by the Wing as the Public Affairs Officer of the Year.

Kinch and Rocketto will have their awards presented to them at the 2019 CTWG Conference which is being held at the U.S. Army Reserve Center in Middletown, CT on Saturday 22 June 2019.

CTWG TRAINING EXERCISE

16 March, 2019

The Connecticut Wing held a search and rescue training exercise on Saturday. The mission base was at Brainard Airport.

Sixty CAP members took part. Thames River contributed 13 members, 20% of the total. Given that the TRCS membership composes 7% of the Wing. This is a notable achievement.

The scenario involved a lost hiker in the Nepaug State Forest, locating three emergency locator transmitters and an add-on photo mission to the Housatonic's Stevenson Dam. All missions were successfully completed.

Maj Bourque led a ground team consisting of cadets Trotochaud, Burton, Trinidad and Lts Ceniglio and Bradstreet.



Ground Teams 1 and 2 before entering the forest. GQ Magazine criticized their dress, objecting to the faulty color coordination of international orange, lime green and the varied styles of camouflage.

A TRCS aircrew, Maj Noniewicz and Lt Col Kinch launched from Groton.

Lt Kopycienski ran Wing communications.

Air Operations was manned by Lts Pineau and Johnson.

Maj Farley worked as Air Operations Branch Director and Lt Col Rocketto was the Public Information Officer

AEROSPACE HISTORY AND CHRONOLOGY

Luftschiffbau Zeppelin initiates a regular trans-Atlantic service between Friedrichshafen, German and Rio de Janeiro, Brazil.



The Graf passes Sugarloaf Mountain as she enters Rio's Guanabara Bay.

The flight aboard the *Graf Zeppelin* takes four and a half days with an intermediate over-night stop at Recife, Brazil and costs in today's money about

\$11,000. This was \$365 in 1932, about the average annual wage of a secretary or steel worker.

Luftschiffbau Zeppelin  Friedrichshafen, Germany
No. 2

To South America by Zeppelin
1934 Time Table of the airship „Graf Zeppelin“.

Friedrichshafen*		Pernambuco	Rio de Janeiro	Aeroplane connections of Zeppelin under LufL.		Rio de Janeiro	Pernambuco	Friedrichshafen*
Dep. Sunday evening	Arr. Tuesday morning	Arr. Thursday morning	Buenos Aires An. Friday	Buenos Aires Sun. Monday	Dep. Tuesday morning	Dep. Friday evening	Arr. Tuesday other noon	
6. 9.	6. 12.	6. 14.	6. 16.	6. 13.	6. 14.	6. 15.	6. 19.	
6. 23.	6. 26.	6. 28.	6. 30.	6. 30.	7. 1.	7. 2.	7. 6.	
7. 21.	7. 24.	7. 26.	7. 27.	7. 25.	7. 26.	7. 27.	7. 31.	
8. 4.	8. 7.	8. 9.	8. 10.	8. 9.	8. 9.	8. 10.	8. 14.	
8. 18.	8. 21.	8. 23.	8. 24.	8. 22.	8. 23.	8. 24.	8. 28.	
9. 1.	9. 4.	9. 6.	9. 7.	9. 5.	9. 6.	9. 7.	9. 11.	
9. 15.	9. 18.	9. 20.	9. 21.	9. 19.	9. 20.	9. 21.	9. 25.	
9. 29.	10. 2.	10. 4.	10. 5.	10. 3.	10. 4.	10. 5.	10. 9.	
10. 13.	10. 16.	10. 18.	10. 19.	10. 17.	10. 18.	10. 19.	10. 23.	
10. 27.	10. 30.	11. 1.	11. 2.	10. 31.	11. 1.	11. 2.	11. 6.	

* In Europe there are direct aeroplane connections operated by the Deutsche Luft Hansa A.-G. The foregoing Time Table is subject to alterations, especially as regards the departure dates, in and after August.

Fares:
Friedrichshafen—Pernambuco..... *R.M.* 1400.—
Friedrichshafen—Rio de Janeiro..... *R.M.* 1500.—
Pernambuco—Rio de Janeiro..... *R.M.* 400.—
Rio—Buenos Aires (Aeroplane)..... *R.M.* 400.—

Freight rates (excluding Consular fees):
Friedrichshafen—Pernambuco..... *R.M.* 8.— per kilogramme
Friedrichshafen—Rio de Janeiro..... *R.M.* 10.— per kilogramme

For Information and Bookings please apply to:
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Wm. H. Müller & Co., 66-68 Rye Market, London SW1
their agencies, travel bureaus, or:




Republic P-47N
Thunderbolt of the
103rd Fighter
Group, Connecticut
National Guard.
(Photo: San Diego Air &
Space Museum)



The service lasted for five years until abandoned after the *Hindenburg* disaster in 1937. The Graf Zeppelin was grounded and six months after Germany invaded Poland and touched off World War II in Europe, Hermann Göring ordered her scrapped.

March 21, 1946 – A major reorganization of the United States Army Air Forces creates the Strategic Air Command (SAC), the Air Defense Command (ADC), and the Tactical Air Command (TAC).

The importance of the nuclear strike mission and the reduced spending at the end of WWII made SAC the 500 pound gorilla dipping into the military coffers to the fiscal detriment of her two sister commands.

March 22, 1982 – Space shuttle *Columbia*, STS-3, is launched on a research and development flight. The planned landing site, Edwards Air Force Base is flooded so commander Jack Lousma and pilot Gordon Fullerton headed for the alternate, the Northrop Strip, White Sands, New Mexico.



SAC's "big stick, the
Consolidated B-36
Peacemaker.



Bell P-61B Black Widow,
ADC interceptor.



Northrop Strip has two 35,000 foot runways. The site was familiar to both crewmen since it was used by space shuttle trainees for practice using one of NASA's four C-11A Shuttle Training Aircraft, (STA) a Grumman Gulfstream II with a replicated shuttle cockpit and modifications

allowing it to imitate the steep glide needed to land the orbiter.



Lousa, Fullerton, and the STA
(Credit: NASA)



(Credit: NASA)



The landing was successfully executed but the cloud of gypsum dust raised permeated the interior of *Columbia* and despite cleaning, traces of gypsum could be found for the rest of her career.



Columbia flaring with two T-38 chase planes.
(Photo: NASA)

An emergency de-orbit or return to landing on take-off was always a possibility and the orbiter was capable of managing to land on a 9,000-10,000 foot runway. Contingency plans existed for some 90 different airports in a bout two dozen countries, one of which was Bradley International in Windsor Locks, Connecticut.

Kennedy was the preferred destination to eliminate the repositioning by the special Boeing 747 and was used on 78 or the 133 flights. The orbiter landed at Edwards 54 times and as related, White Sands once.

March 23, 1965 – Gemini 3, the US's first manned mission in the Gemini program is launched with Gus Grissom and John Young aboard. The mission was a test of the orbital maneuvering system which was successfully accomplished during the five hour, three orbit flight.

The crew named the capsule Molly Brown, an allusion to a popular Broadway musical, *The Unsinkable Molly Brown*, a fictionalized account about the life of Molly Brown a survivor of the *RMS Titanic* sinking. Grissom had flown the ill-fated Mercury *Liberty Bell 7* flight which sank after touchdown and was light-hearted enough to laugh at the possibility of a hex. NASA administrators were not amused and requested that Grissom choose another name. Grissom replied *Titanic* and the bureaucrats backed off.

But this was not the end of the waggish behavior in the Astronaut Corps. Schirra related the following in his book *Schirra's Space*.



Wally Schirra flew three missions: Mercury's Sigma 7, Gemini 8, and Apollo 7.
(Credit: NASA)

Young mentioned to me a day or two before launch that there was not a meal scheduled on the flight, since the flight was less than five hours. But add a two-and-a half-hour countdown, he reasoned they were bound to get hungry. So I went to Wolfie's, a restaurant and deli in Cocoa Beach and bought a corned beef sandwich on rye with two dill pickle slices. I kept it in a refrigerator in the

crew quarters and got word to Young that it was there. John tucked the sandwich into his space suit and when Gus complained of being hungry during the flight, he said, "We have it taken care of, Sir."

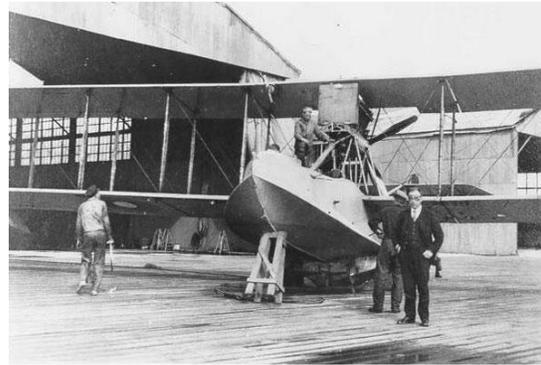
Young unwrapped the two day old sandwich, took a bite and passed it to Grissom. Then they noticed the crumbs floating in the free-fall environment and realized the damage they could cause if the air circulation system transported them into on-board electronics or valves. The sandwich was re-wrapped and stowed.

When the story got out, Congress was not amused. The U.S. House of Representatives Appropriations Committee had a beef about the corned beef sandwich. Part of the mission was to evaluate some space rations. This was done and the crew found out that it was difficult to get the food unstuck from the packaging. One of them, Representative George Shipley, a Democrat from Illinois thought that to "slip a sandwich aboard the vehicle, frankly, is just a little bit disgusting." Perhaps he had found out that the sandwich had no mustard and the pickle slices had been left on earth?

Young was called to a House hearing where a committee member called it a "\$30 million sandwich," typical hyperbole from a Congressman. Young became the first astronaut reprimanded but it did not hurt his career. After Gemini 3, he flew on Apollo 10, Apollo 16, and the first and ninth space shuttle flights. Before closing out his 41 year career, he was Chief of the Astronaut's Office.

Incidentally, Young was the first to eat an approved corned beef in space on the first space shuttle mission which he commanded.

March 24, 1920 – The United States Coast Guard opens Coast Guard Air Station Morehead City at Morehead City, North Carolina. It is the first Coast Guard Air Station.



Maintenance on a Curtiss HJ2-SL at Morehead City Air Station

William P. Wishar USCG Aviator #5 recommended Morehead City as "best suited to prove the worth of Coast Guard aviation. It was closer to the Graveyard of the Atlantic at Cape Hatteras, where there would be more opportunities to locate vessels in distress, derelict menaces to navigation, and vessels ashore on Diamond Shoals, Lookout Shoals, and Frying Pan Shoals."

The request for aircraft was also honored and four HS-2L Curtiss flying boats and two Aeromarine Model 40s were provided.

The air station continued to prove its worth but there was no appropriation for continued operation forthcoming from Congress. The Morehead City air station remained in commission until July, 1922 at which time personnel were transferred to other assignments and the aircraft were returned to the Navy.

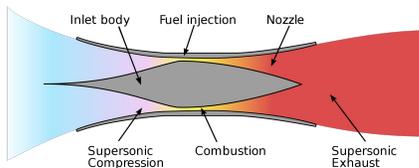
March 25, 2006 – A revolutionary scramjet engine, Hyshot III designed to fly at Mach 7 is successfully tested at Woomera, South Australia. The engine was launched on a Terrier-Orion Mk 70 sounding rocket to an altitude of 200 miles. The rocket then rotated 180 degrees to face the earth below. The scramjet was then ignited and burned for around 8 seconds reaching a speed of a Mach 7.6.



*Above:
Technicians Prepare a
HyShot.*

*Left:
Terrier-Orion Launch
(Credit: NASA)*

A scramjet (supersonic combustion ramjet) ingests supersonic air and maintains a supersonic airflow throughout the engine. A Pratt and Whitney engineer once told the Editor that it was akin to keeping a candle alight in a hurricane.



March 26, 1940 – First flight of the Curtiss C-46 Commando.



The prototype, designated CW-20, had a twin-tail configuration. It was soon modified to a large single tail.

The prototype was the CW-20, one of the first pressurized airliners. The US Army Air Force evaluated first prototype, designated C-55, returned the aircraft to Curtiss, which subsequently sold it to the British Overseas Airways Corporation.



BOAC CW-20 at Gibraltar. (Credit: F/O B.J.H. Daventry)

However, the aircraft was recognized as a potential military air-lifter and a small order of non-pressurized was made. Eventually, modifications included a large cargo door and a strengthened floor. By 1945, when production ceased, just over 3,000 had been produced.

During the war, it acquired a modicum of fame as a mainstay of the airlift from India to China, the flight over the Himalaya Mountains. A run known as “The Hump.”



C-46 crossing The Hump (Photo: USAAF)

Although it lived in the shadow of its more famous sister, the Douglas C-47, it should be noted that it had twice the volume, could carry 150% of the load over a longer distance. Mr Steven Gracewski, the Editor's English and Latin instructor flew the Hump.



C-46D at the Museum of Aviation, Warner Robins, Georgia. The unique “double-bubble fuselage, an artifact of the plan for pressurization is clearly visible.

The Commando found favor with the US Marine Corps over the Pacific. Possible the most famous R5C pilot was the actor Tyrone Power who flew medical evacuation flights and cargo runs in and out of Iwo Jima, and Okinawa.

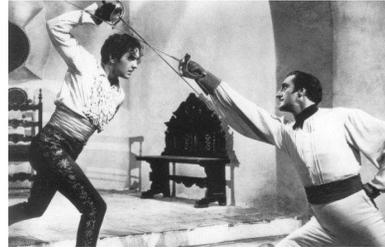


A weather-beaten USMC R5C (C-46A) at Pensacola.



Tyrone Power

Power achieved Hollywood fame as a swashbuckling swordsman, in both meanings of the title. Basil Rathbone, recognized by many as the silver screen's premier fencer but he stated that "Power was the most agile man with a sword I've ever faced before a camera," Rathbone said. "Tyrone could have fenced Errol Flynn into a cocked hat."



Don Diego Vega (Power) and Captain Esteban Pasquale (Rathbone) fight to death

The Editor recommends that the reader go to *You Tube* and view the extraordinary swordplay between Rathbone and Power in *The Mark of Zorro* accomplished without special effects but only by dint of talent and practice.

After the war, many were purchased at low cost by small operations for non-scheduled cargo runs. The Commando was considered by the major airlines but its prodigious fuel consumption and high maintenance costs led to its rejection in favor of the C-47 (DC-3), C-54 (DC-4), and the more advanced designs emerging from Lockheed and Douglas.

However, their powerful engines and high load carrying capacity proved a plus in the less settled regions of the world such as South America and Africa.



A Bolivian registered C-46 on an altiplano airport.

Civil Air Transport, the fore-runner of Air America found them useful. A small fleet was used by the CIA for legitimate commercial operations and secretly for clandestine flights in Southeast Asia.



An Air America C-46 with a Pilatus PC-6 Porter in the background.

A man named Al Schwimmer was instrumental in smuggling a number of Commandos to Israel where they were used to fly dismantled Avia S-199 fighters, a Czech spin-off of the Me 109 to serve in the Israeli War of Independence.

The aircraft were leased to Lineas Aereas Panama, S.A. (LAPSA), a false front airline. The flew from New Jersey to Panama to Zatec, Czechoslovakia via Paramaribo, Natal, Dakar, Casablanca, and Catania.

Later, El Al flew the Commando.



An El Commando, Heathrow in 1954. (Credit Ruth AS)

Nine are still listed on the FAA's registration list and Alaska's Everts Air Cargo has at least two in service. They are rugged aircraft suitable for many of Alaska's gravel runways.



Everts Air Fuel, Inc. N7848B is a C-46R



48B, now named Dumbo, with a spiffy paint job.

Buffalo Airways, based at Yellowknife in the Northwest Territories also flies the Commando.



Buffalo Airways C-46A (Credit D. Forese)

The main problem is obtaining the high octane aviation fuel needed for the thirsty 18 cylinder Pratt & Whitney R-2800 engines. Research indicates that the high octane 100/130 and 115/145 is still available in limited quantities. The engine was originally rated for 91/96 avgas and an unleaded version of that is available.