



*Missions for America  
Semper vigilans!  
Semper volans!*

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

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12 July, 2022

16 JUL-JUL 17 - North Stonington Fair  
16 JUL-Introductory Airman Meeting-Danielson  
19 JUL-TRCS Meeting  
23 JUL-Water Survival-Rogers Lake-1000 EDST  
24 JUL-CTWG SAREX  
29 JUL-Military Appreciation Day-Dodd Stadium  
20 AUG-27 AUG-CTWG Encampment  
25-28 AUG-CAP National Conference  
02 SEP-08 OCT-TRCS Fruit Sale

### CADET MEETING

*12 July, 2022*

Maj Borque lectured on the vocabulary found in the cadet textbook, *Aerospace Dimensions, Module 1*.

### SENIOR MEETING

*12 July, 2022*

The meeting was cancelled so that the emergency services team could attend a CTWG training session.

### MISSIONS

*Search and Rescue Re-qualification  
7 July, 2022*

Major Farley, Mission Pilot, and Lt Pineau, Mission Observer flew a SAR re-qualification mission.

Lt Pineau demonstrated the use of the G1000 SAR Package and set up four different types of search patterns as part of his successful completion of the re-qualification requirements.

*Orientation Flights  
8 July, 2022*

Thames River Composite Squadron has maintained its goal of assuring that all newly joined cadets have at least one orientation flight as soon as possible after joining. As of now, this goal has been met for all 29 cadets.

Cadets Lucas Dellacono and Adam Balfour flew with Maj Farley and completed Lesson One of the CAP Orientation Flight Syllabus. After a pre-flight briefing, the cadets went to the aircraft and were instructed on aircraft handling and the basic structure of the aircraft.



*The function of the VHF transmitter antenna is explained by Maj Farley.*

The flight syllabus consists of the use of the ailerons, elevators and rudder to control roll, pitch and yaw and the use of the throttle to control climb, the use of horizon references, identification of objects on the ground, entering the traffic pattern and a stabilized approach, touchdown and taxi to parking. Cadets are allowed to handle the controls during cruise flight above 1,000 feet above ground level. A post-flight briefing concludes the lesson.

### ACHIEVEMENTS

*Maj Scott Farley*



The O'Flight Flight mentioned above marks the 100<sup>th</sup> Cadet Orientation Flight which Maj Scott Farley has completed since 2010. He now qualifies

to add a bronze clasp to his Cadet Orientation Pilot Ribbon.

*Lt David Pineau*



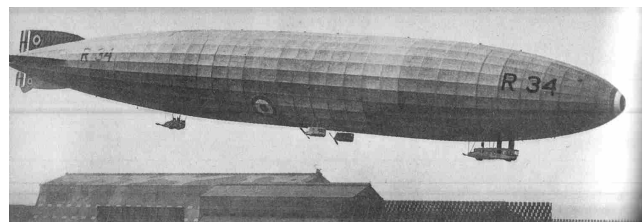
Lt David Pineau has re-qualified as a Mission Observer.

The Mission Observer is a scanner with expanded duties and who usually sits in the right front seat. In addition to the primary duty of scanning while in the search area, the observer assists the pilot with planning, navigation, and communication. The observer may also serve as mission commander, ensuring that all mission objectives are met.

### AEROSPACE HISTORY

*The Week in Review*

July 13, 1919 – The Royal Air Force dirigible R.34 lands at RAF Pulham after completing the first two way trans-Atlantic air crossing.



R.34 was a product of William Beardmore and Company, Glasgow, Scotland. She was in the design phase when the German LZ 76 had been forced down in England in 1916. British engineers carefully studied the features of the German airship and incorporated the best of German technology into their newest airship class. Power was provided by five 275 hp Sunbeam Maori engines driving pusher propellers. To save fuel, three of them were sufficient but the price paid was a lower speed.



*R.34, Ground Crew and Hydrogen Bottles*

The R.34 departed RAF East Fortune in Scotland on the second of July. The journey into the prevailing winds, foul weather and engine trouble took 108 hours and the aircraft landed at Mineola, Long Island with one hour of fuel left!

The ground crew had no experience so Maj. E.M. Pritchard parachuted down to direct the operation. He was the first passenger to reach America by air from Europe!



*Maj Pritchard just before his arrival at Mineola.*



*R.34 on the ground at Mineola*

Two other firsts were racked up. William Ballantyne, a crew member scheduled to be left behind to save weight concealed himself and was not discovered until the R.34 was over the ocean. He had the ship's mascot, a cat named Wopsie. So the two of them entered history as the first human and feline stowaways to cross the Atlantic by air.



*Ballantyne and Wopsie*

The 75 hour return flight landed at RNAS Pulham. East Fortune was fogged in.

July 14, 1974 – General Carl Andrew “Tooe” Spaatz goes West. Spaatz was the first Chief of Staff of the USAF and the highest award for Civil Air Patrol cadets is named in his honor.





After flight school, Spaatz served with Pershing's Punitive Expedition into Mexico in 1916. During The War to End All Wars, Spaatz was credited with three German Fokkers.

His greatest aerial achievement was his role as commander of the crew of *The Question Mark*, a modified Atlantic-Fokker C-2A which using aerial refueling set an endurance record of 150 hours, 40 minutes, and 14 seconds.



During a refueling over the Rose Bowl, the hose pulled out of the tank's receptacle and Spaatz was drenched with gasoline. Spaatz stripped naked and wiped himself down with oil-soaked rags to prevent chemical burns. Before one of the supply aircraft had delivered a new set of flying togs, Spaatz performed the next refueling naked, another aeronautical first!

During the flight, the left engine quit and the flight engineer, Sgt. Roy W. Hooe, crawled out on a catwalk and managed to secure the windmilling propeller, allowing the flight to continue for a

short time. Hooe was inducted into the Airlift/Tanker Association Hall of Fame in 2001 and the 380th Expeditionary Force Support Squadron installed a mural in his honor in their mess facility, Roy's Flight Kitchen.



During World War II, Spaatz's most notable assignments was command of U.S. Strategic Air Forces in Europe and after Germany's surrender, Strategic Air Forces in the Pacific.



*Spaatz emerges from Boops, her personal B-17. Boops was the nickname of his youngest daughter.*

Upon the retirement of Hap Arnold, Spaatz was appointed Commanding General of the Army Air Forces in February 1946. When an independent air force was created in 1947, Spaatz was appointed the first Chief of Staff.

July 15, 1941 – The first supply flight from India to China over the 'Hump' is flown. This date is disputed and *The Coastwatcher* has found at least two other references to different dates but so be it.

When the resupply operation ended approximately ¼ million tons of cargo had been delivered at the

cost of 594 aircraft and 1,659 personnel killed or missing.

The Editor had a personal connection with a Hump aviator. Mr. Stephen Gracewski was his Latin teacher at New London High School. His difficulties at teaching me to conjugate *ferro* in the imperfect subjunctive and remember the dative plural case of *agricola* were equivalent to navigating a C-46 in a thunderstorm over 24,000 foot mountains without accurate charts and no radio aids.

But my volunteering to stay after school for extra help did allow me to get him to tell a few war stories. Oh, the cunning of youth! Mr. Gracewski spent over a year in the China-Burma-India Theatre. A tangential connection also comes to mind. Mr. Gracewski underwent primary pilot training at Marana Field just north of Tucson, an airfield from which I once flew albeit around 25 years later and where one could view a most uncommon variety of aircraft.



*Challenge: Can you identify the aircraft on the ramp at Marana? Hint: The operator of the aircraft was Intermountain Aviation.*

An air lift to China became vital when the Burma Road was lost to the Japanese. The United States considered it vital to keep China in the war since the Japanese Army had tied down 1.2 million troops in their struggle to conquer China, troops that were not available to defend the Pacific islands.

Most regard 'the Hump' as a mission carried out

by the Air Transport Command of the USAAF but another outfit also flew the missions first, a more experienced but not well supplied organization manned by highly experienced pilots, the China National Air Corporation (CNAC). CNAC was formed in the mid '30s, a partnership between Chinese business interests and the Curtiss-Wright Corporation but it soon ended up in the hands of Pan American Airways.



*A CNAC C-47 identified by the "Chung." For those of you not conversant with Chinese characters it may be freely translated as "Middle Kingdom Space Machine Family."*

One of their early wartime missions was to keep the American Volunteer Group, the Flying Tigers supplied. They also flew Jimmy Doolittle out of China to India. The DC-3, designed for 21 passengers, was flown by legendary Capt. Moon Fun Shin and carried 74 souls to safety. They had no reluctance to ignore the weight carrying limitations of the aircraft.

Eventually, the CNAC fleet was supplemented by about two dozen DC-3s in a sort of lend-lease arrangement.

CNAC pioneered the two airlift routes. The high altitude one, 550 miles over the south east Himalayas taxed both the aircraft and the crews. Weather was abominable: thunderstorms, icing, extreme turbulence and the effects of the then unknown jet stream. The southern route was

slightly shorter but passed through a large portion of Japanese controlled airspace and pilots preferred to fly in bad weather when the Japanese fighters were grounded.

The logjam was broken when the Air Transport Command was formed under the direct command of Hap Arnold and made independent of any theatre commanders. By mid 1944, CNAC recorded its 20,000 flight over “the Hump.”



The flow of more capable aircraft and crews and the appointment of General William Tunner who brought military discipline and efficient maintenance and flight scheduling to the Hump led to massive increases in cargo transport.



*The Curtiss C-46 Commando could carry twice the payload of a C-47.*

Here is some data which compares early CNAC performance against the struggling USAAF. In July of 1942, the USAAF 's fleet of 35 aircraft delivered 73 tons of cargo whereas CNAC, flying nine aircraft carried 136 tons. In September of 1943, the 225 USAAF aircraft moved 5,198 tons and 27 CNAC planes moved 1,132 tons. The AAF delivered five times more cargo but used ten times more aircraft!

*Variants of the B-24, the C-87 Liberator Express and the C-109 brought four engine safety.*



The early days of the airlift were a horror show of worn aircraft, exhausted crew, maintenance shortages, squalid living conditions and a command structure that would make Kafka smile.

The Hump command was cursed by a bevy or squabbling generals, each guided by his own operational interests: Generalissimo Chiang Kai Chek, China's dictator concerned with the Japanese occupation and the Communist threat to his regime, Gen. Claire Chennault, focused on an aggressive combat air campaign, General “Vinegar Joe” Stilwell, Commander of U.S. and Chinese ground forces and military theatre commanders who were only too eager to snap up the cargo aircraft flying supplies to China for their own more narrow campaign exigencies.



*And the Douglas C-54 Skymaster made the Hump, Korean and Berlin Airlifts successful.*

Eventually, the Air Transport Command sent new records for cargo handling and established many of the protocols which have been used to this day by the USAF. However, in the early days of the airlift, the highly experienced American and Chinese crews of CNAC and their blatant disregard of the weight and balance tables performed yeoman service.



July 16, 1941 – One of the more unusual design concepts made it first flight, the Hillson Bi-mono which used what was termed a “slip-wing.”

The aircraft took off as a biplane and then jettisoned the upper wing. No change in trim was noted but 500 feet of altitude was lost. The idea was to improve take-off runs



One final experiment attached a “slip wing” to a Hurricane fighter but no further experiments were carried out.



July 17-18, 1938 – After repeatedly denied permission to attempt a trans-Atlantic flight, Douglas Corrigan filed a flight plan to fly nonstop from Floyd Bennett Field in Brooklyn, New York, west to California.



Corrigan and his Curtiss Robin, Sunshine

He departed in a heavy fog in a heavy fog, and following air traffic instructions, he headed east to avoid some tall buildings west of the airport. Unable to fly by ground contact, he relied on his magnetic compass. Some 26 hours later, he descended into clear air and in the light of day, noted that he had inadvertently followed the wrong end of the compass needle! Some two hours and 13 minutes later, he landed at Baldonnel Airport, Dublin.



According to legend, Douglas Corrigan, a young mechanic at the Ryan factory in San Diego, pulled the chocks of the *Spirit of St. Louis* as it left California for Roosevelt Field, New York, and its epic flight to Le Bourget, Paris.

Corrigan decided that one day, he would make a similar flight and chose Ireland, the land of his forefathers, as a suitable destination. In 1933, he purchased a Curtiss Robin and modified it for the trip but was denied permission to make the trip by the government which declared it "unsuitable."

Over the next several years, he modified the

aircraft several times but was repeatedly denied permission to attempt the flight to Ireland.

This Son of the Emerald Isles was treated as a hero by the Irish. The US government was not amused and repeatedly questioned him about his supposed error. He stuck to his explanation to the day he died, stating, "That's my story!" He has been known since as "Wrong Way Corrigan."



*Corrigan signing autographs in Dublin. (Credit: Getty)*

At one point in his life, he was reputed to say that after repeated denials of a permit to fly the Atlantic, government officials told him "...to get lost so I did."

Corrigan's pilot's license was suspended for fourteen days, the suspension ending on the day of his arrival by steamship in New York where he was honored with a ticker-tape parade.



*New York ticker-tape parade-bigger than Lindbergh's*

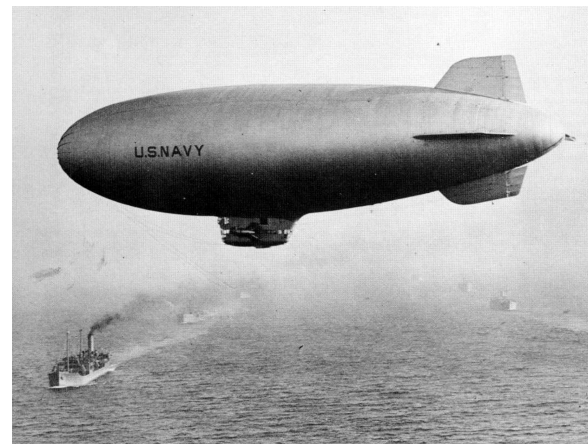
Corrigan capitalized on his flight by writing his

autobiography, *That's My Story*, and starring in a movie, *The Flying Irishman*. During World War Two, he flew as a production test pilot and Air Transport Command pilot and later worked in business aviation. He retired from aviation to grow oranges.



*A 1938 First Day Cover welcoming Corrigan back to California after his epic flight. Note the six cent airmail stamp.*

July 18, 1943 – The U.S Navy blimp K-74 engages in a gun duel with U-134 and is shot down.



*A K-class blimp escorting a convoy.*

The K-74 was patrolling east of the Florida Straits in the Bahamas when her radar spotted a surfaced U-boat heading towards a tanker and a freighter. Lieutenant Nelson G. Grills decided to engage it in order to protect the merchantmen.

Just after midnight, K-74 opened up with its .50-calibre machine gun at 250 yards. As it passed



over the U-134. Accounts vary at this point. Either two depth charges were dropped and caused minor damage to the submarine or the depth charges “hung up” and did not drop.

Grills returned for a second attack during which the anti-aircraft defenses, an 88 mm deck gun and two 20 mm anti-aircraft guns mounted on the conning tower knocked out the blimp's starboard engine and punctured the blimp's envelope causing leaks. The loss of an engine and the helium led to a ditching. All crew escaped but one was lost to a shark just before rescue the next morning.



(Credit: Battle of the Atlantic 1942–45 by Edouard A Groult)

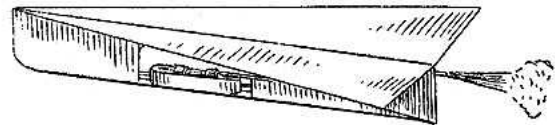
The attack was contrary to doctrine which stated that upon sighting a submarine, the blimp was to stay upwind and out of gun range while radioing for air and surface support. A blimp skipper could decide to attack in case of an immediate threat to shipping.

Grills decided that the target ships, although 20 miles distant, were in immediate danger. At maximum speed, the U-134 was capable of 10 knots so the merchantmen were two hours away.

Grills was both praised and criticized for his decision to attack. Some wanted a medal issued for aggressive initiative. Others advocated court martial. Neither happened. He was transferred to an office at Lakehurst, N.J. to develop airship anti-submarine tactics!

Six weeks later, the frigate *HMS Rother* sunk U-134 was sunk in the Bay of Biscay.

July 19, 1867 – Englishmen J.W. Butler and E. Edwards take out patents for a jet powered delta-wing monoplane using steam, compressed air, gun powder or gas for propulsion.



They hedged their bet by also proposing that screw propellers could also be used. One version of the propeller was based upon Hero's Aeolipile, a working invention circa first century C.D.



(Credit: Hero's Spiritalia)

Some 60 years later, the German engineer Alexander Lippisch patented the first practical delta aircraft, his Delta 1.

