



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 12.37

02 October, 2018

SQUADRON CALENDAR

06 OCT-Groton Fall Festival
09 October-TRCS Meeting-Commander's Call
11-12 OCT-Unit Commanders Course
13 OCT-Touch-a-Truck-Niantic
16 OCT-SUI/TRCS Meeting
11-14 OCT-CTWG/NER Conference
23 OCT-TRCS Meeting
28 OCT-Veterans' Grave Marking-Groton
30 OCT-TRCS Meeting & **Fruit Sale Deadline**
06 NOV-TRCS Meeting
09 NOV-Veterans Day Ceremony-Groton Elks
10 NOV-Cadet Ball
11 NOV-Veterans Say Ceremony-Niantic
13 NOV-TRCS Meeting
20 NOV-TRCS Meeting
23 NOV-Wingman Down Day
27 NOV-TRCS Meeting
18 DEC-TRCS Holiday Party
25 DEC/01 JAN-No Meetings

CADET MEETING

02 October, 2018

The cadets did physical training and then engaged in a contest called Sectional Battleship in which teams attempted to discern the location of another teams battleships located on a sectional chart.

SENIOR MEETING

02 October, 2018

Lt Richards explained the current status of our plans for participation in the Groton Town Fair.

Maj Farley briefed the seniors on the upcoming "Wingman Down Day" mandated by National Headquarters.

Department heads all reported that the status of their departments was up to standards.

LONG ISLAND SOUND PATROL

Thames River Composite Squadron closed out the LISP season flying two patrols on Saturday and two on Sunday. Nothing unusual occurred.

Maj Farley and Lt Sprepace flew the early Saturday mission and Lt Schmidt and Maj Nielson took the afternoon flight.

On Sunday, Maj Nielson and Lt Pineau flew in the afternoon and Maj Noniewicz and Lt Sprepace completed the evening patrol.

AEROSPACE HISTORY AND CHRONOLOGY

Oct. 3, 1963 – The DH 106 Comet aircraft were retired from Royal Canadian Air Force service. The RCAF was the first military organization to operate jet transports, acquiring two Comet 1As which were modified to the 1XB configuration.



A RCAF Comet displays its clean lines
(Credit: Canadian Forces Joint Imagery Centre)

Oct. 4, 1958 – A BOAC de Havilland Comet 4 makes the first commercial transatlantic crossing by a jet airliner, from London Heathrow Airport to New York's Idlewild Airport with a one hour refueling stop at Gander, Newfoundland.



G-APDB on the ramp at Idlewild.

A second comet departed from New York the same day bound for London. Aided by the prevailing westerly winds and not needing a refueling stop, she reached London in a record-breaking time of 6 hours and 11 minutes, some four hours quicker than her sister ship.

Oct. 5, 1930 – The British dirigible R101 crashed in France on its maiden flight to India. Great Britain had developed a plan known as the Imperial Airship Scheme which would link the far flung colonies and dominions by regular airship service.



R 101 rides the mast at Cardington.

Two airship were constructed to implement the plan, one by the government, the R 101 and one by private industry, a subsidiary of Vickers Aircraft, the R 100.

Accidents can generally be traced to a chain of circumstances. In the case of the R101, many unique features were incorporated into its design but it suffered from stability problems and was overweight. Fixes were performed but the political importance of the India flight a Certificate of Airworthiness was only given to the ship's captain on the day of departure!

The R101 departed Cardington on October 4th with 54 passengers and crew aboard and crossed the French coast around midnight. She flew into deteriorating weather condition and two hours later, failed to maintain height, struck the ground and burned. Forty eight of the souls on board perished. Investigations laid blame on a tear in the forward gas bags causing a loss of lift which engine power could not overcome.

The privately designed and constructed R100 had been designed by a team headed by iconic engineer Barnes Wallis who used geodetic techniques to design the fuselage of the Wellington bomber and was responsible for the creation of the bouncing bomb used in the “dam Buster raids.” The author, Nevil Shute was the senior stress engineer.



R 100 moored. The airship in the background is the Graf Zeppelin, the most successful of all the commercial dirigibles.

The R 100 cost about 2/3 that of the R 101 and flew ten months earlier. On July 29, 1930, the R 100 departed on its first commercial flight, destination Montreal, Canada. She arrived 78 hours later where it stayed for 12 days, making a number of exhibition flights. The R 100 returned to Cardington on 13 August after a 57 ½ hour flight assisted by the prevailing westerly winds.

After the R101 crashed a burned, the Air Ministry grounded the R100. Plans to use the R100 for testing were discarded and in 1931 the Air Ministry had the framework of the aircraft crushed and sold for scrap, a dubious solution to an embarrassing government problem.

Oct. 6, 1944 – The Army Air Force cancelled the contract for the Fisher P-75 Eagle. The Eagle was designed by the Fisher Body Division of General Motors.



The last surviving Eagle is now on display at the Air Force Museum. Note the counter-rotating propellers. The ventral air intakes for the center mounted engine are also visible.

The hope was to produce an interceptor with a extremely high rate of climb using the most powerful liquid cooled engine available. Later, military needs changed and the Eagle's mission was changed to be a long range escort.

In war, no expense is spared and no idea deemed unworthy. The P-75 was a “Frankenstein” aircraft. To hasten the design process, the tail of the Douglas A-24 Banshee, the outer wing panels of the Curtiss P-40, and the undercarriage of a Vought F4U Corsair.

The Allison engine was a mid-mounted and designed to produce around 2,800 hp and drive a pair of co-axial counter-rotating propellers. Historical hindsight indicates that the particular engine and propeller arrangement would be nothing but trouble and so it was.

By the time the Eagle's many deficiencies were corrected, the AAF decided to reduce the number of aircraft types in the pipeline and go with reliable standards such as the long range Mustang and Lightning. The Eagle was relegated to use as an engine testbed and only 14 ever came off the production line.

Oct 7, 1963– First flight of the Learjet and the start of the business jet industry. The fertile mind of the eccentric genius Bill Lear, Sr. imagined that a small fast jet would fill a niche in the world of corporate flight departments.

Like the Frankenstein P-75 above, he decided to adapt the best features of a prototype Swiss ground attack aircraft to the design. Lear went to Switzerland, rounded up a core of American, British, and Swiss engineers and formed the Swiss American Aircraft Corporation (SAAC).

Flug-und Fahrzeugwerke Altenrhein had developed the FFA P-16 which was rejected in favor of the British built Hawker Hunter. Lear saw promise for both saving time and money if key features of the P-16 could be adopted into his vision of an executive jet.

The wing and basic fuselage design was adaptable and the new aircraft, the SAAC-23 Execujet



A Lear 23 and its P-16 Progenitor

Lear commenced construction in Switzerland. However, even though labor was cheaper, bureaucratic bramble bushes led to long delays so Lear moved the company to Wichita, Kansas and the company was renamed Lear Jet Corporation. The rest is history.



The second production Lear 23 is now on display at the National Air and Space Museum.

Oct 8, 1940 – Josef František, a Czech, goes West in an air crash. František flew with the Kościuszko Squadron, No. 303 (Polish) Fighter Squadron, Royal Air Force.



František and a Hawker Hurricane bearing the insignia of the 303 (Polish) Squadron. The Hurricane pictured is based at Duxford.

František seemed to have little regard for military discipline and his obstreperous conduct was only tolerated because of his brilliant airmanship. A pilot in the Czech Air Force, he fled when the

Nazis occupied his homeland. František then trained with the Polish Air Force but when Germany conquered Poland, fled to French territory and entered their air force. Finally, he escaped to England where he enlisted in his fourth air force, the RAF and accounted for 17 German aircraft, making his the highest scoring non-British Ace in the Battle of Britain.



František's Four Air Forces!

The complement of RAF pilots who flew in the Battle of Britain was composed of 25% foreigners with the Poles and Czechs contributing the most, around 225 pilots. This number is comparable to the 25% of foreign sailors who served with the Royal Navy during the Napoleonic Wars.

As a side story, the squadron was named after Andrzej Tadeusz Bonawentura Kościuszko. Kościuszko served as a military engineer with the Continental Army during the revolution. He is also regarded as a national hero in his native Poland and Lithuania and Belarus for services in their wars against foreign oppressors.



Kościuszko is credited with construction the fortifications which contributed to the American victory at Saratoga. Kościuszko was active in resisting Russian and Prussian rule in Poland. Thomas Jefferson wrote that "He is as pure a son of liberty as I have ever known."

A second intersection with American history occurred during the Polish-Soviet War of 1919-21. A unit, the Polish 7th Air Escadrille enlisted 21 American airmen and adopted the name Kościuszko Squadron in memory of his

contributions to American liberty.



*Merian Cooper with the
Kościuszko Squadron*



Most famous of the American pilots was Merian Cooper, a WWI pilot, better known for directing the movie *King Kong*. He was also the pilot of the plane which fired the fatal shots into Kong. But was this really what killed Kong?



*Curtiss Falcons attack Kong. The are two place
biplanes and the observer has twin Lewis guns on
Scarf mounts. But what really killed Kong?*

In the last scene of the movie a photographer states that “What does it matter? The airplanes got him.” but Carl Denham says “It wasn't the airplanes...it was beauty killed the beast.”

Cooper re-upped for the Second World War, his third war. He worked as a logistics liaison for the Doolittle raid, helped set up The Hump Airlift, and was Chief of Staff for General Claire Chennault and flew in combat for the China Air Task Force. His final posting was Chief of Staff of the Fifth Air Force's Bomber Command. A witness to the Japanese surrender on the U.S.S. Missouri, he retired as a brigadier general.

Oct. 9, 1930 – Canadian pilot J. Erroll Dunsford Boyd and navigator Harry Connor, a U.S. Navy officer, depart Harbour Grace, Newfoundland for England. The next day they land on Tresco, Isles of Scilly, a British archipelago southwest of Land's

End off Cornwall. After refueling, they proceeded the 300 miles to Croydon Airport, London. Boyd, the first Canadian to complete a transatlantic flight is hailed as the “Lindbergh of Canada” Interestingly, John Alcock, one of the two men who completed the first transatlantic crossing had been one of his flight instructors.



*Standing
with Boyd on
the left are
Harry
Connor and
Charles
Levine.*

Boyd had a remarkable career. He flew combat in World War I, worked as a test pilot, airline pilot and bush pilot. He founded the Air Scouts of Canada, a progenitor of the Royal Canadian Air Cadets. In 1941, in Hartford, he became a United States citizen. Boyd, a talented song writer, lived in New York and produced Broadway hits and pop music. He died in Sharon, Connecticut in 1960.

In 1938, Connor served as navigator for Howard Hughes when they set a new record for a round-the-world flight, beating Wiley Post's previous record by almost four days.

The aircraft used by Boyd was a remarkable design by Giuseppe Bellanca. Bellanca was an aeronautical genius who designed the first monoplane with an enclosed cockpit and produced a line of aircraft whose high all-up weight performances made them suitable freighters and bush planes. He also taught Fiorello LaGuardia, an important figure in the activation of the Civil Air Patrol, to fly.

It was a one-off design designated WB-2. Bellanca had been hired by the Wright Aeronautical Corporation to design an aircraft to serve as a test bed for the new J-5 Whirlwind engine. The plane incorporated two unique features, a fuselage and struts with wing-like characteristics which provided additional lift.



The aerodynamic struts which allowed the WB-2 to lift a heavier fuel load contributed to its remarkable long range performance.

Clarence Chamberlain had the ambition to win the Orteig Prize offered for the first non-stop flight from New York to Paris. He secured use of the WB-2 and with Bert Acosta set a new endurance record of just over 51 hours which covered more than 500 miles needed for the transatlantic journey. He was now confident that the WB-2 could make the New York-Paris flight.

Charles A. Levine, a millionaire who had made his fortune buying and selling World War I salvage purchased the WB-2. Levine had designs on the Orteig prize also. Charles Lindbergh, impressed by the aircraft's performance offered to buy it but Levine refused to sell. Levine, who also owned the Columbia Aircraft Corporation christened his new acquisition, *Miss Columbia*.

Levine then got involved in a legal dispute which led to a court injunction which legally grounded the WB-2. The delays allowed Lindbergh to acquire the Ryan NYP, *Spirit of St. Louis* and on May 20-21, 1927 flew the flight and claimed the prize.

His hopes dashed, Levine decided to attempt to set a long distance record, New York to Berlin. With Chamberlain at the controls and Levine as passenger, *Miss Columbia* departed Roosevelt Field, New York on June 4th. They ran into weather conditions which caused them to stray south of their planned course. By chance, they flew by the *RMS Mauritania* on its passage from Southampton to New York. Also by chance they had on board a copy of the New York Times which listed the sailing date of the liner.

In a slick piece of navigational legerdemain, Chamberlain calculated the position of the ship and corrected his heading. After crossing the German border, their low fuel state forced them to land near Eisleben, 3,911 miles and 42 hours 45 minutes from take-off. They had beat Lindbergh's record by 300 miles. After refueling, *Miss Columbia* flew the remaining 125 miles to Berlin.

Three years later, Boyd and Connor made their flight in *Miss Columbia*, now christened *Maple Leaf*. The WB-2 was now distinguished in two ways. First, she was the first plane to carry a transatlantic passenger. Second, she was the first plane to make the voyage twice.

Three years later, the WB-2 was hangared at Bellanca Field, New Castle, Delaware, one day before its transfer to the Smithsonian Institution. The hangar caught fire and the aircraft was destroyed.

Oct. 10, 1907 – Another early aeronautical pioneer and innovator was Robert Esnault-Pelterie, the inventor of the joy stick. (And where would modern computer gamers be without this concept?) Oct 10th is the anniversary of the first flight using a joy stick to control roll and pitch.



R.E.P.1 was the first aircraft to use a joy stick for control and was powered by a unique semi-radial engine designed by Esnault-Pelterie.

(Credit: PHGCOM)

But Esnault-Pelterie was not a “one-trick pony.” Along the way, he contributed to the development of all-metal airframes, cantilever wings, radial air-cooled engines, and tandem wheel landing gear.

In 1913, he derived formulas for the energy needed to propel a rocket into space. In 1934, he published *L'Astronautique* in which he considered interplanetary space travel and the use of radium as a power source.