



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

Lt Col Stephen Rocketto, Editor  
[srocketto@aquilasys.com](mailto:srocketto@aquilasys.com)

Maj Scott Farley Publisher  
Maj Roy Bourque, Paparazzi  
C/SrA Stephen Buchko, Cadet AEO  
Hap Rocketto, 2nd Lt, AUS, (ret'd.) Feature Writer  
Capt Edward Miller, Feature Writer

Issue 14.17

22 April, 2020

**TIME MACHINE**  
*Lest We Forget*



*Col Peter Jensen and Col Fred Herbert*



*Father Mode*



*Tom Petry*



*Willi Lintelmann*

**TENTATIVE SQUADRON CALENDAR**

Virtual Meetings and Independent Projects to be Scheduled. Tentatively, Senior meet on Tuesday night and Cadets meet on Thursday night. Zoom is the videoconferencing tool of choice.

- 05 MAY-TRCS Staff Meetings
- 12 MAY-TRCS Commander's Call
- 16 MAY-Commander's Cup Rocket Contest
- 23 MAY-TRCS Meeting
- 30 MAY-TRCS Meeting

**CADET MEETING**

*Thursday, 16 April, 2020*

In a character development seminar 2d Lt Jeremy Minter addressed the concept of personal responsibility and how it is necessary for control of one's life. Led by pertinent questions, the cadets then engaged in an open discussion

Cadet Mitchell Bury provided a series of trivia questions about World War II. It was followed by Lt Thornell's questions about CAP core values or integrity, volunteer service, excellence and respect.

The surprise session promised by Lt Thornell had the cadets and seniors displaying their pets in front of the camera.

**SENIORS MEETING**

*Tuesday, 21 April, 2020*

Capt Johnson briefed the officers on issues regarding weather and flight decisions.

A round robin of attendees was held and everyone reported that everything is copacetic.

**THAMES RIVER COMPOSITE SQUADRON**

*Achievements and Activities*

SM Docker received instruction from Maj Bourque in ramp checks, hasty searches and documenting clues and finds.

2d Lt Otrin passed his instrument written tests and

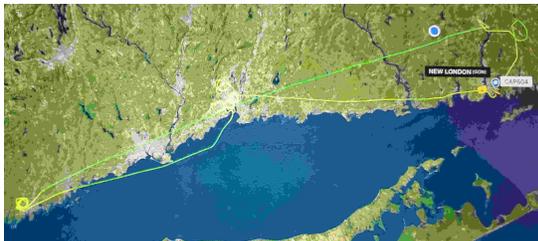
continues to run his UCONN UAV course on-line.

Maj Borque continues to run the testing program using mothers as proctors.

Maj Neilson flew a transport flight moving CAP 608 to Bridgeport and exchanging it for CAP 604. Lt Col visited the squadron and filed CAP history documents, labeled instructional materials and to the relief of Maj Farley, emptied the waste basket in his office, a job which has fallen off the cadet to-do list.

On Sunday, the 19th, Lts Spreace and Pineau flew a special mission to take still and video imagery of Connecticut National Guard medical support sites. Lt Kopycienski operated the ground and video radio station. Cpt James Whitesell, CTWG Director of Operations commended the team for excellent performance.

Maj Farley submitted the Flightradar 24 track below. Enlarge it and you will see the details of the circling maneuvers needed to obtain the imagery.



The high frequency radio antenna installed by Lt Kopycienski and C/CMSgt Burton, CAP FM antenna and the quadrifilar satellite antenna can be seen if the image below is blown up.



## THE WEEK'S AEROSPACE ANNIVERSARIES

April 22, 1965– First flight of the Transavia PL-12 Airtruk, An Australian ag plane. Only around 100 were manufactured but it did acquire some notoriety as the "Flying Jalopy" in the movie *Mad Max: Beyond Thunderdome*. Technically it is a sesquiplane, a biplane with one wing having half the area of the other.



April 23, 1988 – Kanellos Kanellopoulos, a 14 time Greek national champion cyclist, pedals the MIT Daedalus from Crete to Santorini, Greece replicating the mythological feat of Daedalus. It took 3h 45m to cross Holmer's "wine dark sea," a journey of 74 miles. The aircraft was the third in a series built by a team of Massachusetts Institute of Technology enthusiasts.



*Under test at Edwards AFB (Credit: NASA)*

The materials used to construct the aircraft were carbon fiber tubes, polystyrene foam, Mylar and Kevlar resulting in an empty weight of 70 pounds carried by the 112 foot wingspan. An 11 foot diameter propeller was driven through a 3:2 gearbox. The energy used by Kanellopoulos was equivalent to running two marathons back-to-back.

April 24, 1946– WWII vets Fred P. Dollenberg and Raymond W. Baldwin Jr. inaugurate a novel

air freight delivery business, Winged Cargo, using war surplus Douglas C-47s towing Waco CG-4 Hadrian gliders.



*C-47 taking off with a CG-4 in tow and the delivery of the bovine cargo.*



Based at Northwest Philadelphia Airport, the towed glider added the ability to carry more weight and bulk cargos using one powered airplane. At that time you could buy a brand new Waco for \$75 and the C-47s were going for about \$25,000 so non-scheduled cargo carriers proliferated. Most operated on a shoestring and the competition was fierce.

Winged Cargo lost a C-47 carrying migrant workers over the Caribbean, found insufficient work in the crowded post-war market and was forced to end its service by the Civil Aeronautics Board in December of 1947.

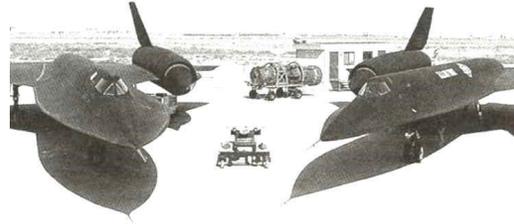
April 25, 1955 – First flight of the FFA P-16. The P-16 was a failed Swiss fighter-bomber project but its wing form was adopted by Bill Lear's Swiss-American Aircraft Corporation and used on the Learjet.



*P-16 and SAAC-23*



April 26, 1962 – First flight of the Lockheed A-12 Cygnus. The single seat A-12 was the CIA predecessor to the USAF two seat SR-71 Blackbird. Thirteen were built. They can fly faster and higher than the Blackbird but have less payload.



*SR-71 on left and A-12 on right (Credit: CIA)*

A-12 / SR-71 COMPARISON			
CIA A-12 OXCART		USAF SR-71 BLACKBIRD	
101 FT. 9 IN.	LENGTH	107 FT. 5 IN.	
53 FT. 5 IN.	WINGSPAN	55 FT. 7 IN.	
120,000 LBS	MAXIMUM IN-FLIGHT WEIGHT	140,000 LBS	
2,208 MPH	FASTEST DOCUMENTED SPEED	2,193 MPH	
90,000 FT	MAXIMUM TEST ALTITUDE	85,069 FT	
3,000 MI.	UNREFUELED RANGE	3,250 MI	
NONE	ARMAMENT	NONE	
1	CREW	2	

April 27, 1972– After a seven year campaign consisting of 873 sorties the USAF and USN succeeds in destroying the Thanh Hóa Bridge. The bridge was part of the artery which fed troops, munitions and supplies south. Air Force F-4 Phantoms using 2,000 pound laser guided Paveway bombs rendered the bridge unusable.



The attack had used four Phantoms nominated to be the "designators" and eight other bomb delivery aircraft to be "shooters." The designators illuminated the target with a laser and the shooters dropped the ordnance which guided themselves to the illuminated point.

# HOWARD HUGHES, AVIATOR

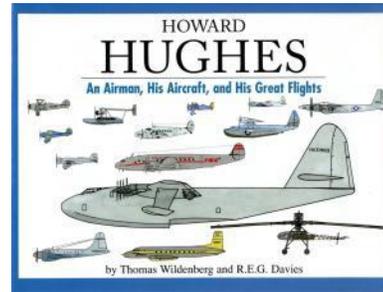
*A Photo Essay*

*Part III*

*The Boom Years 1950-1959*



*The Phantom and the Corsair*



Later, further attacks by Navy Vought A-7 Corsairs used television guided Walleyes and 500 pound general purpose bombs to drop the center section. The age of precision guided munitions had matured. The bridge was restored in 1973 and still stands.

1950

The start of the Korean War leads to fat contracts for Hughes Aircraft as it starts to branch out into the missile and electronics fields.

April 28, 1948 – The first non-stop Paris/New York flight is made by an Air France sleeper Constellation; the journey from Orly Airport takes 16 hours, 1 min.

Hughes is the major shareholder in TWA and rarely if ever contacted the Flight Department about their requirements so he flew what he wanted to when he wanted to. If you like to fly different aircraft, even if not rated, its good to be the the focus of attention of the industry salesmen.



He also bought a Martin 4-0-4 airliner and as was his habit, modifies it for corporate flying. It joined his fleet of war surplus Douglas B-18 Bolos, B-23 Dragons and A-20 Havocs which he had purchased, many also modified as business aircraft.

(Credit: Lucio Perinotto)



B-23



Martin 4-0-4



1951

Howard is the major shareholder and eventual sole owner of RKO studios. He is credited with produced 27 motion pictures between 1926 and 1957 and hands in a slew of others, some of which won Oscars or Academy Award nominations.

In 1951, he started to film *Jet Pilot* starring John Wayne. Predictably, his mania for perfection will draw out the filming and editing and *Jet Pilot* was not be released until 1957.



1952

Howard counts coup on A.V. Roe Canada. The company had produced the world's second passenger jet, the C-102 Jetliner which flew only two weeks after the DeHavilland Comet in 1949.



By 1952, the aircraft was still under development but progress was slowed because the Canadian government wanted AVRO to dedicate its limited production facilities to the CF-100 Canuck interceptor. Unable to establish a production line, the sales prospects were dismal. And in flew the White Knight, Howard Hughes with bags of money to outfit TWA with the latest technology of aircraft production. But the White Knight turned out to be a cowboy in a black hat.



*The Canuck interceptor never fired a shot in combat but its adoption by the Royal Canadian Air Force destroyed the Jetliner program.*

Hughes was thinking about purchasing 30 Jetliners or even manufacturing them in the United States floated around but nothing came of them. Hughes checked out in the aircraft after it had been flown to Hughes Airfield in April but used the subterfuge of testing the Jetliner for Like most of the aircraft which he flew he lost interest and it remained parked for six months before AVRO reclaimed it.



*Howard personally commends Jim Floyd, Chief Engineer at AVRO.*

Any chance of production disappeared and their workers faced massive lay-offs. Avro was temporarily saved by sales of 700 Canucks.

The Canadian government shot itself in the foot five years later when it cancelled the AVRO Arrow, like the C-102 a state-of-the-art aircraft. 25,000 people were put out of work and Canada

lost another chance to be a world leader in aircraft development. AVRO as an independent company was doomed and strong Canadian aero industry faded away. The legacy of the C-102 is the word which now describes an entire family of aircraft, "jetliner."

On October 23rd Hughes Aviation had a public display of what was the largest helicopter in the world, the XH-17 Flying Crane. The rotor diameter was 137 feet, 20 feet more than the wingspan of a 737MAX! To this day, they are the largest rotors ever flown.



*Hughes is 2<sup>nd</sup> for right wearing his trademark fedora. Gale Moore, the test pilot is 3<sup>rd</sup> from right.*

A unique system powered the rotors, two two side-mounted turbojets sent hot compressed air through the hub and out to the tips of the hollow rotor blades. Fuel was then mixed in and ignited and ejected from nozzles on the trailing edges of the blades.

His behavior was becoming more bizarre and he moved to Las Vegas and isolated himself in a hotel. Becoming more and more unpredictable, he took to micro-managing his enterprises by telephone. From time to time, he flew from Vegas to his plant at Culver City, exhibiting his usual erratic flying style and an absolute disdain for air traffic rules.

1953

The Convair F-102 Dart made its first flight. The interceptor was equipped with the Hughes Falcon missile and fire control system. 1,000 were built and the Hughes industrial empire became a major

player in the electronic and missile game.



*CTANG Dart at BDL*

*Falcon Missile*



1954

Ever conscious of taxes and eager to avoid them, Howard became involved in a complex arrangement in which the Howard Hughes Medical Institute (HHMI) was founded for medical and biological research. Hughes Tool Company (HTC) which he had inherited from his father, Hughes Aircraft, and the HHMI had a game plan involving the leasing and subleasing of land which drew the attention of the Internal Revenue Service.

The IRS opened a legal action in which they challenged the "charitable" claims which Hughes made about the financial legerdemain which had knit the HHNI, HTC, and Hughes Aircraft together. Like his battle with Senator Owen Brewster over war time procurement contacts, Hughes defeated the forces of government again.

1955

Howard got a flight check in his Convair 240.



*Howard's Convair and his A-20 in the background.*

He also decided to remove helicopter production from Hughes Aircraft and make it part of HTC as its Aircraft Division. Then main products were the Army's OH-6 Cayuse and the highly popular Hughes 300, 500 and TH-55 Osage and which

gained him a large slice of the civilian and military helicopter market.

*1,500 Cayuses were produced and 3/4 of them were lost in Vietnam.*



But in order to win the government contract for the Cayuse, Hughes instructed them to bid so low that the purchase price was less than the production cost. The company won the bid and it took years to recover from the losses incurred.

Hughes was also doing a lot of business with the Central Intelligence Agency. Mainstreet was a CAI operation to tap a Vietnamese telephone line. A quiet helicopter was needed to insert the wire tappers. The company modified two Cayuse variants into the 500P with a huge muffler, an extra rotor blade with customized tips and a forward looking infrared vision system.



*CIA Hughes 500P*

1956

George Marrett, a long-time Hughes test pilot tells this story which is hard to believe about anyone but Howard Hughes.

Sud, a French firm, was flogging its new Caravelle medium range transport and the sales staff saw Hughes as a target. It was known that aircraft purchased by TWA had to have the imprimatur of Howard who flew candidates for purchase and made his opinions known to the airline.



So, late in the year, they flew one of them to Hughes Airport. Hughes got a cockpit briefing from the pilots/salesman. He then asked the Sud representative to step outside, closed the door, started the engines, taxied out, took off and disappeared. They contacted FAA facilities around the state but of course, Howard had neither filed a flight plan nor contacted any air traffic facilities. A few days later they located the plane in Palm Springs but Howard was nowhere to be found.

1957

When Howard's purchased an aircraft his practice seemed to be to make a bunch of touch-and-goes and afterwards park or hangar it. He would hire guards with very, very specific instructions on the care of the aircraft. One of his memos specified that the aircraft should be parked facing within one degree of the prevailing wind.

He purchased a Douglas DC-6A for \$275,000 straight from the factory. After it was flown for 52 minutes and granted an airworthiness certificate, Howard had it towed from the plant across the airport to a rented hangar with 24 hour guards. It sat there for years, with occasional engine run-ups until he negotiated to sell it to Ibn Saud, King of Saudi Arabia.



*Howard's DC-6A after Riddle Airlines acquired it.*

Saud was interested in a piston-engine airliner after learning of the two crashes of the DeHavilland Comet he believed it was the work of the devil and refused to fly in a jet aircraft. According to Marrett, Saud offered 1.5 million dollars for the aircraft because no Jew had ever flown in it and proffered a \$500,000 down payment. After a six month wait, Hughes returned the check.

That DC-6A flies today. It is based in Fairbanks

Alaska by Everts Air Refueling and delivers bulk fuel to remote villages.



On July 11th, a Hughes test pilot brought a modified Douglas A-20G Havoc (NL34920) to Hughes Airport. He was told to park it in a specific spot and was still there 19 years later when Hughes died.



After six years in production, *Jet Pilot*, the motion picture starring John Wayne was finished. It took 18 months to film and the balance of the time subjected to Howard's penchant for re-editing. Wayne considered it one of the worst film in which he starred. Howard loved it. The critics did not.

Howard met Jack Real, a Lockheed engineer and executive. Real became a friend and one of his closest advisors although in true Hughes fashion, their contacts involved hours on the telephone. He also became a facilitator for Howard, arranging transport during the frequent moves and in the 1990s, arranged for the move of the beloved H-4 flying boat to a permanent home at the Evergreen Air and Space Museum in McMinnville, Oregon.

In 1971, at Howard request, he left Lockheed for Hughes Helicopters. The company was in serious financial trouble. In order to win a government contract for a light observation helicopter, Hughes instructed them to bid so low that the purchase price was less than the production cost. The company won the bid and it took years to recover

from the losses incurred. But he oversaw the development of the Apache helicopter and three years after Hughes dies, Real became president of the company.

1958

Early in October, Hughes flew the Boeing 367-80, the prototype for the fantastically successful 707. Reports indicate that his flying was undisciplined, that he expressed no concern for air traffic rules and that he seemed oblivious to any suggestions from the experienced Dash 80 pilot in the right seat.



*The Dash 80*

Howard also liked to fly other people's aircraft and inveigles demonstration flights in most of the developing turbine powered airliners: the 707, Douglas's DC-8, Convair 880 Skylark and the Lockheed L188 Electra, a turboprop.

*Convair 880  
Skylark*



The decline in his mental state was obvious. He became more reclusive and his behavior more abnormal. He became obsessed with watching the same movie repeatedly and had dietary demands became even more bizarre than those of the past. His father had bequeathed Howard a silver spoon which supported his lavish spending but his mother had bequeathed him with germophobia which more and more, controlled the whole pattern of his later life. Part IV follows in the next issue of *The Coastwatcher*.