



Missions for
America
Semper vigilans!
Semper volans!

The Coastwatcher

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

LtCol Stephen Rocketto, Editor
srocketto@aquilasys.com

Lt Col deAndrade, Publisher
Lt David Meers & Maj Roy Bourque, Papparazis
Hap Rocketto, 2nd Lt, AUS, (ret'd.), Features
Capt Edward Miller, Features

Issue 11.08

28 February, 2017

CADET MEETING

28 February, 2017

Lt Drost led the cadets in completing the Wingman Course, a program for new members which discusses core values, safety, cadet protection, and the value of a “wingman” to offer support in CAP activities.

SENIOR MEETING

28 February, 2017

submitted by

Capt John Pardoe

The meeting fulfilled the official requirements for the annual safety down day. Maj Noniewicz moderated and opened the meeting with a review of the Operational Risk Management concept.

Lt Pineau, a professional firefighter, followed with an in-depth review of fire safety

Maj Noniewicz followed and briefed the members on the salient points of CAP regulations 60-1 and 60-2.

Maj Neilson concluded the session by discussing the use of the mandated FAA and CAP aircraft operations checklists.

TRCS VISITS THE TOWER OF POWER

The fog came in on little cat's feet and Major Farley, mission pilot for Thursday's “ice patrol” prudently decided to scrub the mission. Having nothing to do, the crew contacted the Groton Tower and requested a tour.

Chet Moore, Tower Chief invited us up and he and Mike Kryszczuk gave a two hour grand exposition of the duties of the tower crew and the tools used.

The electronic transmission of flight strips which describe the vital details of incoming aircraft and the coordinated use of radar allowed a few arrivals and departures despite the fact that GON was IFR.



Flight strips are used to assist in the management of traffic.

The weather reporting instruments which compile the data for the Automatic Surface Observing System and the human skills of determining

visibility were demonstrated. While the grounded TRCS crew observed, an hourly and a special weather broadcast were broadcast.



Mike Kryszczuk points out a radar contact to Maj Farley.

The visit was two hours well spent in learning about the important functions of the control tower and the skilled controllers perched in their glass enclosed aerie.

AEROSPACE HISTORY

Cessnas Obscure Aircraft: Helicopters, Gliders, and Jets

All of us are familiar with the Cessna line of aircraft. The Cessna 172 Skyhawk production exceeds 43,000 units, more than any other aircraft ever built. It and the Cessna 182 Skylane make up the bulk of the Civil Air Patrol fleet, the largest fleet of Cessnas in the world. The number of new pilots trained in the Cessna 150 are legion and the Cessna 310 was one of the pioneers of the light twin market. The conglomeration of business jets which are branded as Citations consist of around two dozen models.

But there are many Cessnas less well known to the aviation community. Fixed wings and one or two engines are the hallmarks of the Cessnas produced since the end of World War II, the memory span of most of the readers of this article.

Cessna CH-1 Skyhook



July of 1953 marked the first flight of Cessna's lone foray into the helicopter market. The CH-1 Skyhook was tested by the U.S. Army as the YH-41A Seneca and they purchased ten of them which were sent to Iran and Ecuador as part of the Military Assistance Program.

The Skyhook employed a 260 HP engine and it still holds the record for the highest altitude reached by a piston powered helicopter, 29,777 feet. However, its limited payload and onerous maintenance requirements caused the Army to reject it for operational use.

Cessna CG-2



(Photo credit: FlugKerl2)

The company was in trouble during the Great Depression and in order to keep the firm solvent, a primary glider, the CG-2, was produced. A perusal of aviation literature of the 1930s indicates that gliding was extremely popular.

Little information is available about this aircraft and one source claims around 300 were sold. The cost of a CG-2 is listed in the September, 1930 edition of Popular Aviation as \$248. Seattle's Museum of Flight, where a CG-2 is displayed, states that the Yakima Glider Club bought one for \$400. Sales were offered through a catalogue.

The Experimental Aircraft Association, were another CG-2 is displayed states the following:

The CG-2, inspired by some of the German primary gliders of the day, was introduced in 1930, with an ad campaign that promised that “man might fly first, without power, in safety.” The price was \$398 (about \$5,700 in 2015 dollars) for the aircraft and a bungee-based launch system, crated and ready for shipment. Also included was an assembly manual; one of the reasons the CG-2 was so cheap was that it was a true do-it-yourself project and was shipped as a kit. Once built, it could be launched using the bungee cord method, or be towed by car or airplane

Alas, Clyde Cessna's cash flow, even when buttressed by the sale of the CG-2 could not keep the company from insolvency and the plant had to shut down for several years.

Cessna 407/526/E530

The three model numbers illustrate an interesting progression in the effort to produce a small jet aircraft. The highly successful T-37 Tweet (Model 318) was adopted by the USAF as a primary jet trainer and over 1,200 were built. In the late 1950s, Cessna wished to capitalize on the investment in the Tweet and produce a small twin engine jet for the private market. Customer reaction was “underwhelming” and Model 407 only existed as a wooden mock-up.



Wooden Mock-up of the 407

Forty years later, the Tweet was heading for retirement and Cessna decided to enter the competition to produce the follow-up primary jet trainer. The new design was assigned the model number 526. At the time, Cessna was producing the highly successful Citation 525 and as with the

407, the company decided to take advantage of the Citation's design costs and tooling to produce the new aircraft. The 526 used the same engines as the Citation, wings, landing gear, and auxiliary systems and achieved a 75% commonality with its business jet brother.



The 526 CitationJet

Cessna also considered marketing it on the commercial market. But a dark horse candidate was adopted by the military. The turboprop T-6 Texan II was based upon the Swiss Pilatus PC-9 working in conjunction with Beechcraft. The general consensus was that the PC-9 was cheaper to operate, using less fuel and less maintenance intensive than a pure jet. Only two were built.

And that brings us to the current competition of a new training aircraft and light attack aircraft for the military. Cessna, now a division of Textron has teamed with AirLand to produce the Model E530 Scorpion. Prior experience with the 526 has been incorporated to produce a clean sheet design and prototype by a lean “Skunk Works” team of workers in around a year.



The Airland-Textron Scorpion firing an APKWS missile.

The plane has been flying for the last two years but has attracted no customers. Cessna is touting the Scorpion as a versatile, cheap to buy and operate trainer, light attack plane with

applications to the intelligence, surveillance, and reconnaissance role.

The situation seems to be akin to that which faced Northrop when they produced the F-20 Tigershark. The USAF did not purchase it nor did any foreign air forces. The Scorpion faces a marketing problem in which it is more expensive than equivalent turboprops but does not have the advanced capabilities of higher priced aircraft.

In the next edition, some unfamiliar high wing single engine Cessnas using their classic design features and their attempt to produce a four engine executive transport.

AEROSPACE CHRONOLOGY

Memories of March's Past

01 MAR, 1924-First flight of the semi-rigid airship N.1 at Ciampino, Italy. Renamed *Norge*, she was the first airship over the North Pole.



The Norge at King's Bay, Norway preparing to fly over the North Pole to Alaska.

02 MAR, 1969-First flight of the Sud Aviation/British Aircraft Corporation *Concorde*.



Concorde in company with first Boeing 707 and the Boeing 307, the first pressurized airliner.

03 MAR, 1919-First international air mail service is inaugurated when Eddie Hubbard and William

Boeing flies a Boeing C-700 series seaplane between Vancouver and Seattle.



Hubbard and Boeing delivering the 60 pound pouch of mail from Vancouver.

(Photo credit: Boeing)

04 MAR, 1957-First flight of the Grumman WF-2 Tracer, an airborne early warning aircraft, later renamed the E-1B.



Grumman Departing Groton

05 MAR, 1936-First flight of R. J. Mitchell's Supermarine Spitfire, piloted by "Mutt" Summers.



Spitfire Mk I displays its beautiful elliptical wing tips at RAF Hendon.

06 MAR, 1953-Boeing delivers the last of the piston engine bombers to the USAF, a TB-50 Superfortress.



WB-50D, a weather reconnaissance version of the B-50

07 MAR, 1963-First flight of the Hughes OH-6A.



CTANG Loach in the Hover

08 MAR, 1917-Count Ferdinand Zeppelin goes West.



Ferdinand Adolf Heinrich August Graf von Zeppelin-His name was as long as his airships.

09 MAR, 1971-First flight of the TF-8A, a NASA modified Vought Crusader, designed to test Richard Whitcomb's supercritical airfoil.



NASA Test Vehicle-Dryden Flight Research Center

10 MAR, 1956-Flying a Fairey Delta 2, Peter Twiss is the first aviator to exceed 1,000 mph.



The plane which first broke 1,000 mph at the Fleet Air Arm Museum.

11 MAR, 1941-President Franklin D. Roosevelt signs the Lend-Lease Act which allows for the transfer of armaments to other nations whose defense is important for US security. Approximately 43,000 aircraft will be transferred to nations fighting the Axis powers. The Bell P-39 Airacobra and P-63 King Cobra, Douglas A-20 Boston, North American B-25 Mitchell and Curtiss P-40 were the most numerous types.



Over 4,400 lend-lease Kobrastochkas fought in the "Great Patriotic War."