



Missions for America

Semper vigilans!
Semper volans!

31 JUL-7 AUG CTWG Encampment
22-24 OCT CTWG Conference

CADET MEETING MINUTES

30 March, 2010

Meeting cancelled due to roadway flooding.

The next issue of *The Coastwatcher* would like to publish the names of some of your favorite flying movies and a comment about why you chose it. Please submit your entries by email to srocketto@aquilasys.com.

SENIOR MEETING

30 March, 2010

Meeting cancelled due to roadway flooding.

AVIATION CURRENT EVENTS AND HISTORY MILEPOSTS

Current Events

NASA completed its second drop test of an MD-500 helicopter in a series of experiments designed to better understand its crash response in order to provide data for improving the safety features of rotorcraft.

The test vehicle is equipped with 160 channel data recorders and are "manned" by four anthropomorphic dummies, one of which is fully outfitted with simulated internal organs. The flight path is approximately 33 degrees to the ground and from a height of 35 feet, generates impact velocities of 33 mph horizontally and 48 ft per second vertically.

In the first test, the vehicle was equipped with a honeycomb foam to cushion the crash. As the foam collapses, it extends the time of the impact, thereby decreasing the deceleration and reducing the forces on the airframe and passengers. Very little damage occurred in this first test.

The Coastwatcher

Newsletter of the Thames River Composite
Squadron
GON

Connecticut Wing
Civil Air Patrol

<http://cap-ct075.com/default.aspx>

S. Rocketto, Editor
srocketto@aquilasys.com

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SCHEDULE OF COMING EVENTS

April

- 06 APR BDU-Cadets-Leadership/Testing
Seniors-General Cap Training
- 09 APR Fisher's Island School Visit
- 12-16 APR DC Trip #1
- 13 APR Blues-Cadets-Ch. Dev/Leadership
Seniors-Commander's Call
- 19-23 APR DC Trip #2
- 20 APR BDU-Cadets-Rocketry/Testing
Seniors-Emergency Services Train.
- 24-25 APR SLS Course-Stratford
- 27 APR BDU-Cadets-Color Gd/Team Build
Seniors-Duty Briefing-Personnel

For Future Planning

- 07-09 MAY Great Starts Bivouac-Camp Rell
- 15-16 MAY TLC Course-TBD
- 18-26 JUN NESAs Camp Atterbury, Indiana
- 24-25 JUL NER SAREX Competition

In the second test, the foam was removed and the MD-500 was dropped. The gear collapsed, the windshield cracked, and the data recovered from the sensors in the dummies indicated that humans would have suffered potentially fatal injuries. G forces were triple that of the initial test.

History Milestones

02 APR, 1959-NASA names the seven Project Mercury astronauts.

05 APR, 1968-Flt. Lt. Alan Richard Pollock flies his Hawker Hunter between the spans of London's Tower Bridge. (see "History Article of the Month")

06 APR, 1927-The Aeronautics Branch of the Department of Commerce issues Pilot's License #1 to William P. McCracken.

15 APR, 1952-First flight of Boeing YB-52 Stratofortress.



A Boeing NB-52A, 003, modified by North American to serve as mothership for X-15 program. Only three A models were produced and this is the third one. The 'N' prefix indicates "Special Test." (AMARC-Tucson)



A closeup showing unique mission marks on -003

TRCS's Maj deAndrade flew the 52s during his time in the Air Force. The B-52H is the only model still flying and there are less than 100 of them combat ready. The last H model was produced in 1962 making the youngest one about 48 years old. Some are being flown by the sons of the original pilots!

17 APR, 1941-A float equipped VS-300A piloted by Igor Sikorsky makes the first water landing by a helicopter.

21 APR, 1951-First flight of Chase XC-123A, the first US jet transport. (see mini-article below)

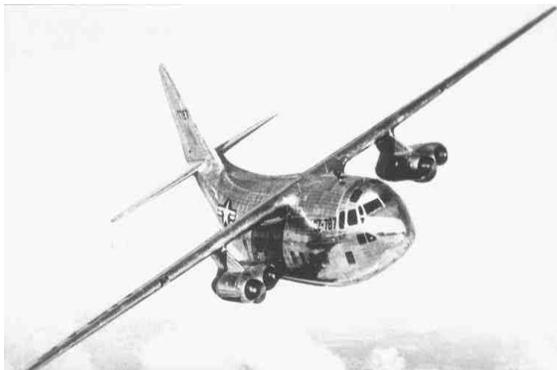
HISTORY MINI-ARTICLE

STROUKOFF'S AMAZING AIRFRAME

The 49th anniversary of the first flight of the Chase XC-123A on 21 April brings to mind some fascinating facts about this remarkable airframe. After the Bolshevik Revolution, many Russian emigrees contributed to development of aircraft in the United States. The most well known are Igor Sikorsky, primarily associated with the development of the helicopter and Alexander Seversky, airpower advocate and developer of a line of fighters culminating in the Republic P-47 Thunderbolt. A lesser known figure is Mikhail Mikhailovich Strukov, anglicized to Michael Stroukoff whose association with Stroukoff, Chase and Fairchild Aircraft resulted in the creation of the only airframe to fly as a glider, prop, composite, and jet powered aircraft as well as a land plane, seaplane, and ski-plane!

In World War II, Stroukoff and Chase constructed some all metal gliders which carried the sobriquet "Avitruk." The XCG-20 was the assault transport result. As the YC-122, the aircraft was provided with two engines in removable nacelles so it could be switched between a powered or a glider configuration.

The XG-20 glider version was equipped with four General Electric J-47 jet engines housed in pairs in two B-47 pods to become the first US jet transport.



Courtesy of Johan Visschedijk, 1000aircraftphotos.com.

With two Pratt & Whitney Double Wasps, the classic C-123 Provider design emerged and was adopted by the USAF. It featured a low, square fuselage with internal tread ways and a large aft hatch and ramp to facilitate cargo handling.



*USCG C-123B
Used to Service
Remote LORAN
Sites (AMARC)*

As is the case, the '123 was underpowered and eventually, turbines were hung outboard of the reciprocating Pratt's to create a four engine composite power setup.



US Air Force Reserve C-123 at GON

But that was not the end of the airframe tinkering. Stroukoff's *Project Pantobase* added a hydroski, sealed fuselage, and wing mounted pontoons which allowed the aircraft to operate off water. or

snow as well as land. As a final touch, the aircraft flew with boundary layer controls. Air blown onto the upper surface of the wing reduces drag and improves slow speed performance.



Stroukoff YC-123E

So ultimately this versatile airframe operated in the following modes: glider, switchable glider/twin reciprocating power, twin reciprocating power, four engine jet, four engine composite power, land plane, sea plane, ski plane and STOL plane!!!!

GONE WEST

Robert M White, Maj. Gen., USAF (ret'd.) took his final flight on St. Patrick's Day.



General White holds the distinctions of being the first man to fly at Mach 4, Mach 5, and Mach 5 and the first USAF member to be awarded Astronaut Wings for exceeding 50 miles in altitude, all flights achieved in the North American X-15.

White, a New York City native, entered the service in 1942. His combat career ended on this 52nd mission when his Mustang was shot down over Germany.

In 1954, White graduated from the Air Force's Experimental Test Pilot School. He was selected for the X-15 program and flew 16 of the 199 flights.



The No. 1 X-15 at NASM (Mall).

During the Vietnam War, Gen. White flew 70 combat missions in Republic F-105s and was awarded the Air Force Cross.

His last tour of duty was as Commander of the Air Force Flight Test Center at Edwards Air Force Base from where he retired in 1961.

GONE WEST

Elinor Smith Sullivan (*nee* Elinor Patricia Ward), 98, one of the great women pioneering pilots flew west on March 19th. Known as "the Flying Flapper of Freeport," Miss Smith raised the bar for women's aviation feats with a series of remarkable achievements oft obscured in the shadows of the better publicized women flyers such as Earhart, Barnes, and Cochran.

She soloed a WACO Model 10 at 15 and in 1927 became the youngest licensed pilot on record at age 16 and her *Federation Aeronautic Internationale* license was endorsed by Orville Wright. A year later, she flew under four of the New York East River Bridges, a flight detailed in a subsequent article in this issue.

WACO Model 10 Old Rhinebeck Aerodrome



Over the next five years she became the youngest holder of an Air Transport License, set altitude, endurance, and speed records, worked as a pilot for the Irvin Air Chute Company, Fairchild and Bellanca, and participated with Bobbi Trout, in the first all-women air refueling experiments.



In 1930, licensed pilots selected Smith as the "Best Woman Pilot in America." (Jimmy Doolittle was the male nominee.) She was also the first woman pictured on a Wheaties box.

Smith married Patrick Sullivan, a New York legislator, in 1933 and retired from flying to raise a family. When her husband died in 1956, she resumed her flying career. Through her affiliation with the Air Force Association, Smith not only got to fly the T-33 but also the C-119 during troop parachute exercises. The parachute drops harkened back to her work with Irvin when, in 1929, at the Cleveland Air Races, she was involved in one of the first mass drops, seven men.

NASA invited her to Ames Research at Moffett Field where she became the oldest person ever to successfully land the Space Shuttle by simulation. At the age of 90, Smith went to Langley where NASA was running a program called *Agate* (Advanced General Aviation Technology Experiments). These were tests of single power levers, multi function displays, and energy absorbing structures for light aircraft. There, at the age of 90, Smith flew on AGATE equipped Bonanza. In some ways, a far more advanced aircraft than the WACO 10 which she soloed in 1927 but in fundamental ways, the same kind of bird.

An aviatrix has passed and we are diminished.

HISTORY ARTICLE OF THE MONTH

FLYING UNDER BRIDGES

From time to time, a confluence of occurrences demands attention to a particular topic. This week, within three days, four separate but related happenings drew the *Coastwatcher* editor's attention to a somewhat taboo form of flight among the safety wonks in the aviation community; to wit: flying under bridges.

First, the fifth of April notes the 48 anniversary of Flt. Lt. Alan Richard Pollock flight between the spans of London's Tower Bridge. Next, in the same mail delivery, the Editor received the April edition of *Flying* and a copy of the autobiography of Squadron Commander Christopher Draper. Finally, notification was received of the death of Elinor Smith Sullivan.

All of these notifications and publications were connected in that they all related to the practice of flying under bridges

The effervescent Martha Lunken's article in her *Flying* column, *Unusual Attitudes*, was titled "Was That an Airplane?" and discusses what she terms "creative contour flying" and her experiences investigating it during her time while in the employ of the FAA. The article was graced with a photo, taken over an aircraft glare shield, of an approach to a warren truss deck arched bridge crossing a river in a narrow river valley. Alas, there was nor further reference to the circumstances which led to the origin of this picture.

Flying under bridges has been a advocacy of aviators since the dawn of powered heavier than air flight. Chronicles of World War I record a number of instances of this practice and given the average life span of an aviator in The Great War, ducking under a bridge was probably fairly low on the scale of dangers which they faced from combat and engine and airframe failure.

During that conflict, the term "Mad Major" was applied by soldiers in the trenches to allied aviators who would perform low level feats of derring-do to relieve tension and amuse the troops. Arguably, the "maddest" of these might be Christopher Draper, a Great War Ace, who started the war serving in the Royal Naval Air Service and ended this military career in the Royal Air Force.

His biography states that he amused himself practicing on the Firth of Tay Bridge while assigned to the Royal Naval Air Service station at Dundee. This railroad bridge had 29 arches so he could satisfy his taste for variety. Later, while ferrying Sopwith 1½ Strutters from the factory at Brooklands, he stated that "if conditions were favorable," he would fly under the "small footbridge that crossed the motor track at the back of the Sopwith hangars as "a sort of goodbye gesture" after each pickup.

In 1931, the publicity seeking Draper arranged for photographers and flew a Dehavilland Puss Moth between the bascules and the upper deck walkway of Tower Bridge, skipped the next seven bridges and finished by flying under the central arch of Westminster Bridge. Officialdom was not amused. Draper comments that the Air Ministry was "very cross" and the magistrate ordered a 12 month probation.



*DeHavilland
DH.80
Puss Moth*



Threading Tower Bridge-1953

But Draper's his most spectacular performance occurred on May 5th, 1953. Out of work and seeking to prove his worth, he rented an Auster I, G-AGYD, at the Herts and Essex Airplane Club, Broxbourne Airport, and headed for London and the Thames. He missed his first target, Blackfriars Bridge, but at 80 knots, he managed to fly under 15 of the next 17 bridges, all offering clearances between the span and the water of between 40 and 50 feet.



A Daily Mirror Photographer Captures the Auster, its Shadow and its Reflection as it Emerges from Under Westminster Bridge.

He eschewed passage under Hungerford, Barnes, and Kew Bridges because "the rising tides were tricky" and he "did not want to any risks," a statement which, when taken at face value, describes a prudent and conservative flying style.

As might be expected, the British Judicial System and the Civil Aviation Authority were not amused.

According to *The Hindu*, which bills itself as India's National Newspaper, the phlegmatic British judicial system charged him with "eight summonses of dangerous flying" and he was ordered to pay a ten guinea fine.

A summons issued by the Bow Street Magistrates lists two counts, violating altitude and distance regulations and causing unnecessary danger to persons and property. His license was suspended for seven months.

The Mad Major went West on 16 January, 1979. He closed his logbook on 17,000 hours and 73 different types. Perhaps it is the romantic in me but I like to think that on his final westward flight, as he passed over the United States, he might have spotted the St. Louis Arch and....

Groton, Connecticut, home to our own Thames River Composite Squadron also sits on the bank of a Thames River. Some years back, in the late '50s, an enterprising Part 135 air taxi operator based a Republic RC-3 Seabee amphibian at a dock by the New London train station and had a contract to transport naval personnel. The bulbous Seabee and its 215 HP Franklin engine was a notorious water lover and its ability to carry four people and 75 gal of fuel did nothing to improve its takeoff run.



Republic Seabee at the British Columbia Air Museum

According to local legend, our pilot picked up a load of passengers at the Submarine Base and attempted a downstream water takeoff to the south. About 1½ miles ahead loomed the twin spans of the Gold Star Memorial Bridge and the somewhat lower Thames Railroad Bridge, a bascule design. The estimated clearances are 30 feet from water to railroad bridge deck and about 50 feet between the top of the railroad bridge and the bottom of the deck of the Gold Star Bridge. Staggering into to air after a very long water run, the "Bee" expressed a definite reluctance to climb

and according to legend, our intrepid pilot navigated between the two bridges. Like the Air Ministry, the Navy was not amused and air taxi contracts were cancelled.



Gold Star Memorial Bridge-Thames River Railroad Bridge Looking North. The Two Support Columns of the Vertical Lift Bridge Which is Under Construction in This Photo Were not There in the Mid '50s When the Seabee Flight is Alleged to Have Occurred.

The legendary Pan American pilot, Captain Edward Musick was caught in similar circumstances on the 22nd of November in 1935. In command of a Martin M-130 flying boat, the famous *China Clipper*. Musick, in accord with orders, "cast off" from San Francisco for Oahu with six crewmen and a ton of mail on its first revenue flight. The heavily loaded aircraft, its climb impaired by its cargo, fuel, and the open cowl flaps on its four engines, was headed for the San Francisco-Oakland Bay Bridge, still under construction, with a number of large cables dangling beneath. Musick knew he could not clear the roadway so he elected to go under, weaving through the cables. According to the story, the small fleet of news planes followed him through!



The China Clipper Departing Alameda

Flight Lieutenant Allan Pollock's pass through Tower Bridge was performed in a Hawker FGA.9 Hunter, a fighter modified for close air support. Pollock, a consummate aerobatic pilot and trained for ground attack, was protesting the refusal of the British government to schedule a formal formation flypass to celebrate the 50th anniversary of the Royal Air Force. Again, like Draper and Smith, he carefully planned out the foray, laying out the course on his chart and selecting appropriate speeds. In order to reduce noise, Pollock elected to operate the Rolls-Royce Avon engine of the Hunter at a fairly low power setting while making his pass through the London area so as to avoid alarming the public.



Former Swiss Hunter at RCAF Museum, Trenton

Needless to say, the RAF was not amused. Pollock, recovering from pneumonia, was refused the court martial which he demanded and discharged on medical grounds, saving the establishment of embarrassment of an open hearing during which he could air his grievances.

Elinor Smith, whose obituary is announced in a *Gone West* feature in this issue, pulled off a kind of bridge "home run" on the East River, New York, "tagging" four of them in one flight. Like Draper, she spent some time researching the bridges, their heights and the tides. On October 21, 1928, she climbed into the cockpit and, according to the story, Charles Lindbergh encouraged her saying "Good luck, kid. Keep your nose down in the turns." She lifted off from Roosevelt Field, headed west, and in turn, flew under the the Queensboro, Williamsburg, Manhattan, and Brooklyn Bridges. The Department of Commerce was not amused. She received a ten day grounding after New York Mayor Jimmy Walker interceded on her behalf.

A final note on ducking under bridges. According to another legend which has circulated among local airmen, once, two adventurous aviators managed to fly a Fokker F-27 under the Bear Mountain Bridge on the Hudson River. Now that the statute of limitations has expired, can anyone corroborate this story?

AFTERWORD

The research which turned up the information about flying under bridges, came up with some other interesting information. Tower Bridge has been transited at least five times, twice by jets and once by a Texan. Once, someone took a blimp under a bridge! The City Fathers of St. Louis once considered hanging cables off the Arch in order to discourage aerial passage. And yes, the Eiffel Tower is no exception but it is entirely appropriate given Alexandre Gustave Eiffel's aeronautical research. He actually had a wind tunnel constructed in his lab at the base of the tower.

AIRPORTS

The Puzzle Master received a bunch of answers to the mystery airport question. C/2Lt Scannell and Cadets Herzog and Dougherty and LtCols Stidsen and Bergey all came in with answers. Bernie Stedman sent one in from Alabama. All were different but acceptable although some were out of date: Calverton Executive Airpark in New York, Grumman Calverton Facility, Long Island, New York, Grumman's acceptance hangar at Calverton, New York, and Calverton Naval Weapons Industrial Reserve Plant.



Four F-14s and one A-6 are visible on the ramp.

LTCOL BERGEY RETORTS

An e-mail from Col Bergey, received too late for publication in the last issue, makes a counterclaim to what Col Stidsen claims he was saying to Lt Dell'Orco in the Krazy Kaption Kontest photo. Bergey states that the position indicated on the chart is where his "...hot pocket would be done in (the P-3) convection oven when flying south from NAS Brunswick! Who are we to argue.

AIRCRAFT SURVIVAL KIT HANDY ON ROUTE 32

Speaking about heading south. Last week, on his way to the Squadron meeting, driving in a driving rain, Maj Rocketto was enjoying Beethoven's Symphony No. 3, the *Eroica*, when a series of loud banging noises. Pulling over to the side of the highway, he quickly determined that his right rear tail light installation had come adrift and was hanging by the power cord.

Fortunately, his aircraft survival bag was aboard. His first attempt at a repair using duct tape failed. Duct tape is really "duck tape" and as water will not stick to a duck so duct tape will not stick to the wet surface of an automobile. Digging deeper, he found some parachute cord and a knife which served to fashion a temporary fix to the problem. The kit has been traveling with Maj Rocketto since his flying days in Peru in the late 1960's and has finally proven useful.

TRCS GROUND TEAM SAREX

27 March, 2010

Maj Bourque led our Ground Team to Bluff Point for training on Saturday last.

Cadet 2Lt Scannell, Abigail Wojtcuk, Flynn, and Hall participated. Cadet Lieutenant Scannell completed a number of tasks for GTM2 and

Cadets Flynn and Hall received credit of a number of GTM3 tasks. Cadet Wojtcuk was charged with placing the ELT beacon.



*In Hoc Signo Vinces.
Cadet Hall works the L-Per Under the
Supervision of Lt Scannell.*



*When You Go Into the Woods Today You're In for
a Big Surprise.
Cadet Flynn on the Prowl.*



3C8

HFD



ATL

**WHAT IS UNUSUAL ABOUT THIS
AERONAUTICAL ODDITY?**

The former Grumman Facility at Calverton (3C8) had an unusual configuration of runways. The are separate and connected by taxiways. Most airports with multiple runways arrange them in an intersecting pattern. The common exception are airports which might have parallel runways such as Brainard (HFD) and Atlanta-Hartsfield (ATL). HFD has a turf runway paralleling 2/20 and ATL has five, count them, five more or less parallel runways. Occasionally, a more unusual situation prevails. Hint: Consider the old Bolling Field and Naval Air Station Anacostia and the answer is not that they are close to each other.

Study the imagery below and see if you can discover the aeronautical oddity. Enlarge the image.

