



## *The Daedalean*

**Semper Discens**

*Monthly Aerospace Education Newsletter of the Connecticut  
Wing of the Civil Air Patrol*

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### **CALENDAR**

#### **For Future Planning**

31 JUL-07 AUG-CTWG Encampment  
12-14 AUG-AEO School-USAF Museum  
21 AUG-CTWG Rocket Contest  
16-24 OCT-National Staff College  
22-24 OCT-CTWG Conference  
01-04 SEP-CAP National Conference

### **2010 COMMANDER'S CUP WING ROCKETRY CONTEST**

**DEFINITE DATE  
21 AUGUST, 2010**

**EVERY PARTICIPATING SQUADRON  
SHOULD SUPPLY ONE JUDGE WHO WILL  
SCORE ROCKET CONSTRUCTION AND  
ALTITUDE.**

#### **Rules Clarification and Amendments**

1. Spin stabilization is allowed.

2. Flight Three-Free Form Competition promotes load bearing rockets, historical rockets, and multistage rockets, all of which are applicable to the CAP Rocketry Badge.

Here are the rules:

Flight 1: Tyro Cadets will build an Estes Alpha or Quest Astra 1 decorated in a Civil Air Patrol Theme. The entry will be judged on construction, finish, and flight. Each first year Cadet in a Squadron may enter one rocket. A Tyro Cadet is a Cadet who has never participated in the Wing contest. (CAVEAT-The Alpha is the model with balsa fins. Do not order the Alpha III with plastic fins for this contest.)

Flight 2: Altitude Competition-Build a rocket, kit or scratch, which will use a standard engine which will be supplied by the Wing. This will be the same engine for all and will be either an 1/2A, A, or B engine, all of which have the same dimensions (2.75 in x 0.69 in). Your entry must accept this size engine. Judging will be based on maximum altitude reached. Each Squadron may enter two rockets for one flight each and the best of the two flights will be counted.

Flight 3: Free Form Competition-Each Squadron may enter two scratch built rockets powered by a D engine. Judging will be based on construction, finish, and flight.

Finish points will be based on sanding, contouring of fins, joins of fins to fuselage, and alignment of fins. Finish will be based upon quality of paint application, neatness of decal or marking application, and appropriate markings and colors.

Altitude will be judged on the basis of a number of measurements, the high and low of which will be discarded.

Flight will be judged on a vertical climb, and proper deployment of recovery device.

A scoring rubric will be developed and sent out for comments.

Squadrons are responsible for purchasing rockets, engines, igniters, and wadding except for Flight 2, altitude rockets, in which case, the Wing will supply the engines. CATO will supply launch services.

5. Obtaining Supplies: Here are some suggested websites for information on obtaining rockets, engines, and supplies in bulk. No endorsement is meant or implied by these recommendations.

- A. <http://www.estesrockets.com>
- B. <http://www.questaerospace.com>
- C. <http://www.acsupplyco.com> (offers bulk discounts)/CAP Model Rocketry section

If you have any questions, please contact me. MAJ Stephen Rocketto, *Raketekampfdirektor* at [srocketto@aquilasys.com](mailto:srocketto@aquilasys.com).

### NELSON GRADUATES

Eric Nelson, former Cadet Commander at Thames River Composite Squadron, graduated from the US Air Force Academy in the Class of 2010. He received a Bachelor of Science in Systems Aeronautical Engineering, a commission as Second Lieutenant in the United States Air Force and special acceptance to the Euro NATO Joint Jet Pilot Training Program at Sheppard Air Force Base, Wichita Falls, Texas.



### AVIATION CURRENT EVENTS

Friday, 04 June-The SpaceX Corporation successfully launched its Falcon 9 rocket and placed an experimental capsule into a 180 mi high orbit. The 180 foot two stage rocket is fueled by kerosene with a liquid oxygen oxidizer. The first stage is powered by nine SpaceX Merlin engines generating just over one million pounds of thrust. The second stage uses a single Merlin engine. SpaceX has received a 1.6 billion dollar contract from NASA for future staging of up to 12 flights to resupply the International Space Station.

### AVIATION HISTORY MILESTONES

07 July, 1915-Robert Goddard obtains his first patent for a liquid fueled rocket.

11 July, 1955-The first class of Cadets is sworn in at the USAF Academy temporary facilities at Lowry AFB, Colorado.

14 July, 1974-General Carl "Tooe" Spaatz goes West.



20 July, 1956-The first KC-135 Stratotanker leaves the Boeing factory



21 July, 1946-Cmdr. James Davidson piloting a McDonnell XFD-1 Phantom makes the first landing of a turbojet aircraft on a US aircraft carrier, the USS Franklin D. Roosevelt.



26 July, 1955-Capitol Airlines becomes the first US flag carrier to operate a turboprop airliner when it adopts the British built Vickers Viscount.



### **CADET ESRA JENSEN COMMENDED**

Cadet Esra Jensen of the Stratford Eagles is commended for his resolution of an historical problem. While at Bolling Air Force Base during our last Wing trip to Washington, an claim was made that some CAP squadron in Texas had "stolen" the Stratford Eagles insignia for their squadron emblem.

The issue was unresolvable and several Stratford Cadets exhibited a state of high dudgeon over this alleged piracy. Cadet Jensen did what ever researcher does, tracked down the rumor to its original source.

He contacted C/Col Joseph Kraynak and obtained the contact for former C/Capt Mary Kraynak who had been in the program when the alleged misappropriation had occurred. This was her reply:

It was the Addison Eagles Composite Squadron from Addison Texas.

They didn't steal our patch - we were so good that they asked us if they could name their squadron after ours and model their patch after ours too. Of course we said yes.

This was a very long time ago.

The issue has been laid to rest and we have found not only a case if one squadron's generosity to a sister squadron but of the Addison squadron's concern for intellectual property rights and Cadet Jensen's initiative is solving a problem.



*Stratford Eagles*



*Addison Eagles Composite Squadron*

**CIVIL AIR PATROL**



## AEROSPACE EDUCATION NOTIFICATIONS

The latest AE Newsbrief from CAP NHQ may be viewed at:

[http://members.gocivilairpatrol.com/aerospace\\_education/stay\\_informed/ae\\_newsbriefs.cfm](http://members.gocivilairpatrol.com/aerospace_education/stay_informed/ae_newsbriefs.cfm)

### COL STIDSEN ON THE "MANTZIAN" AIRFORCE

Our Wing Inspector General, LtCol Stidsen also serves as the Research Librarian at the New England Air Museum. His knowledge of aviation lore is encyclopedic and if he does not know some detail, he knows where the information may be found.

His comments refer to details about Paul Mantz and his post-war purchase of a fleet of airplanes from the Reconstruction Finance Corporation, a government agency whose charter included the disposal of surplus military aircraft.

Col Stidsen relates that

Paul Mantz and associates bought 475 planes from the Stillwater, Oklahoma storage yard in February of 1946, drained the fuel, and recovered only half of their expense. The cost of rendering the aircraft airworthy was such that they had to sell all but 10 of those aircraft to the scrappers to return those 10 to the sky. Among the survivors was Mantz's famous P-51C and the B-25's later used for Cinerama filming and other aviation filming.

A partial rundown of the haul at Stillwater was : 1 B-18, 1 A-20, 78 B-17, 145 B-24, 10 B-25, 22 B-26, 6 P-39, 90 P-40, 31 P-47, 7 P-51, 8 PB4Y-1, 2 F-7.

Research indicates that the price which Mantz paid for this fleet was \$55,000! He was heard to say that he now owned the sixth largest air force in the world.

Three if the saved aircraft were notable for the missions which they performed in the civilian life.

Two of the P-51Cs were converted to racing aircraft and Mantz won three successive Bendix transcontinental races with them.

One of the P-51s, NX-1202, was eventually purchased and flown by Charlie Blair. As *Excalibur III*, Blair flew here on the first solo flight across the North Pole, pioneering new navigation techniques required by the unusual conditions of polar flight. *Excalibur III* is now displayed at the National Air and Space Museum's Udvar-Hazy Annex at Dulles Airport.



Another of Blair's aircraft, the Sikorsky VS-44A, *Excambian*, sister ship to the original *Excalibur*, may be seen at the New England Air Museum.



Mantz also achieved fame with a North American B-25H. The plane became a state-of-the-art camera plane and many of the pictures covered in the recent *Coastwatcher* series "Favorite Aviation Movies" were filmed from this aircraft. The B-25 also pioneered the use of the cinerama cameras for aerial work. Maj Rocketto still remembers the extraordinary scenes from the first cinerama production, essentially an aerial tour of the United States. In one sequence, the aircraft is "flat-hatting" over a featureless and flat desert and suddenly flies over the rim of the Grand Canyon! The change in the giant wide-screen format's depth and width of field brought a collective gasp from the audience.



If you wish to see a B-25H, the New England Air Museum has one on display. *Dog Daize* is unusual in that it is equipped with the large 75 mm cannon, one of the largest rifled weapons ever fitted to a warplane.



## PANCAKE BREAKFAST WESTERLY AIRPORT ASSOCIATION

*11 JULY, 2010*

The Westerly Airport Association will sponsor a pancake breakfast at Dooney's Aviation, 63 Tom Harvey Rd, Westerly Airport to benefit their scholarship fund. Cost is \$6/adult and \$4/child under 12.

The *carte du jour* will include blueberry, strawberry, or plain pancakes (with real maple syrup flown in from Vermont!) bacon, sausage, coffee, juice

Tickets are available at Dooney Aviation, from WAA members or at the hangar door! See [www.wstaa.net](http://www.wstaa.net) for directions.

## CADET GLIDER ORIENTATION FLIGHTS AND GLIDER ACADEMY

The Springfield Composite Squadron in Vermont is offering two opportunities for Cadets to participate in glider and powered flight.

The first is a weekend program offering glider orientation flights and is held on every second and fourth Friday to Sunday weekend subject to special events and weather. Cadet Orientation Rides 1-5 are offered. Total cost including room, board, and fees is \$35. Cadets may attend as a Squadron event or individually, space permitting.

Cadets will review the review the "Wing Walkers" on-line course on Friday night and engage in a full program of flight and social activities on Saturday and Sunday.

The program circular states that

The sailplane has dual flight controls, and your glider pilot will sit behind you. Your

pilot has all the directional controls that you have and will show you the control motions or follow along with you as you are learning to guide the sailplane. You'll learn to fly the sailplane straight and level and to turn it in varying degrees of bank. You will glide down to enter the airport traffic pattern at a predetermined altitude and will fly your approach precisely, land your craft with its wings level, and stop where you want to stop.

The second program offered by Springfield is a one week Powered Flight Academy, Sunday through Friday. The cost for five nights room and board, instruction, and fees is \$750. The course starts on August 15th and included ground school and 10 hours in a Cessna 172.

### NATIONAL EMERGENCY SERVICES ACADEMY

Seven Officers and eight Cadets from CTWG attended the second week of the National Emergency Services Academy at Camp Atterbury, Indiana.

One the way out, LtCol Doucette and Maj Rocketto of Thames River Composite Squadron stopped at the Neil Armstrong Air and Space Museum in Wapokeneta, Ohio



*The TRCS van, 06007, stands next to Neil Armstrong's Douglas F5D Skylancer, NASA 802, one of only four manufactured, and the only survivor. In the early '60s, Armstrong flew this aircraft for NASA simulating flight characteristics of the projected "Dyna-Soar" vehicle, a planned predecessor of the "Space Shuttle."*

Col Doucette enrolled in the aerial photography course in which he practiced with the specialized camera and GPS system now standardized by CAP. But the actual photography was only a preliminary to the meat of the course which concentrated on the assembly, annotation, and transmission of the data to the customer.

The six students in his class were formed into two teams, one of which was flown by Connecticut's Lt Egan. The flew five sorties, first reviewing Scanner skills, and then engaging in recording ground objects ranging from dams to buildings. After each sortie, they spent hours hunched over computers in order to package their data in to a usable form.

Maj Rocketto participated in the Mission Pilot program and flew five sorties in which he and his Observer planned and executed standard CAP searches ranging from the relatively simple route search to the more complex expanding square. Their final flight had them locate a beacon by the wing null method.

Maj Rocketto is proud to announce that his Observer, John Outlan of Memphis, Tennessee, was chosen Honor Graduate, no doubt for his ability in keeping Maj Rocketto from violating international borders, TFRs, and the Camp Atterbury Artillery Range.



*Instructor Louisa Jenks from Alaska and Observer John Outlan, hale, hearty, and relieved after their last flight with Maj Rocketto.*

The 2010 NESA flight program was based at the Columbus, Indiana Municipal Airport (BAK) and utilized a fleet of some two dozen planes, Cessna

172s, 182s, 206s, and the Gippsland GA-8. Some

600 sorties were launched in the two weeks totaling around 900 hours of flight time.

LtCol Vallillo was a student in the Incident Command Course during the first week and a NESAs instructor and lecturer during the second week.



*Col Vallillo lectures the air crews on the delights of flying in midwestern line squalls!*



*And this is of what he speaks; the leading edge of a storm passes over our classroom building.*

LtCol Paul Rowan, also a NESAs staff member, led a contingent of Connecticut and Massachusetts Officers and Cadets who were enrolled in either the ground search and rescue sessions or the Observer or Scanner program. The Cadets were Avery Hage, Tyler Strider, Ben Fay, Nelson Balvin, Auguste Gumbs, Rosemary Campbell, Andrew Karcz, and Ryan Mastromatteo.

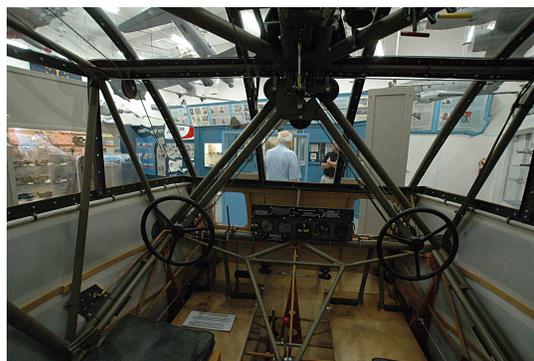
The Officers were Lester Dutka and Edward Teague.

Capt Testman and Cadet Testman were also present and enrolled in Incident Command and Ground SAR programs respectively.

The Columbia Municipal Airport, from which our flight crews launched was a World War Two training facility at which the crews which manned the WACO CG-4 assault glider and the Douglas C-47 tow pilots trained. A beautifully maintained museum which celebrates the history of the former Bakalar Army Airfield and Bakalar Air Force Base is located on site.



*The apron at BAK, formerly Bakalar Army Airfield. Part of the CAP fleet appears at left and the old style control tower is evident in frame center.*



*Reconstructed CG-4 "front office" on display at the Atterbury-Bakalar Air Museum.*



*The classic control tower at BAK.*