



The Daedalean

Semper Discens

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

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UPCOMING EVENTS

05 MAR-Stratford Eagles Banquet and Awards
01-03 APR-Tri-State SAREX
13-15 MAY-CTWG Great Starts
21-25 JUN-National AEO School-Pensacola
9-16 JUL-RSC-McGuire AFB
9-16 JUL-Reg. Cadet Ldrshp School-Concord, NH
23 JUL-07 AUG-NESA (two sessions)-Atterbury
08-14 AUG-CTWG Encampment-Camp Niantic
13-20 AUG-Reg. Cadet Ldrshp School-McGuire
17-20 AUG-CAP Nat'l Summer Conference-KY
22-24 SEP-AOPA Summit-Hartford
22-23 OCT-CTWG Convention

DAE REPORTS FORTHCOMING

The required annual squadron aerospace activity reports have been filed by 11 squadrons. Two are still outstanding. The Wing Director of Aerospace Activities is completing the annual report for National Headquarters and submitting the Wing Aerospace Education Plan of Action. Details will be printed in the next issue of *The Daedalean*.

GONE WEST

CHARLES H. KAMAN

A giant of the helicopter industry, Charles Kaman, died at age 91 on Monday, 31 January.

As a young aeronautical engineer, Kaman was employed at Sikorsky but left to pursue an independent course in helicopter design. He left Sikorsky and formed his own company in 1945.

Among his many innovative ideas were the servo flap and the interlocking counter-rotating twin rotor. He also led in the application of composite materials to rotor fabrication, the use of turbine power, and the development of drone helicopters.

The servo flap is a hinged airfoil located on the trailing edge of each rotor blade, approximately two-thirds of the way from the hub. It provided an alternative to the articulated hubs commonly used.

The K-225, first flown in 1951, was the first gas turbine helicopter and is now on display at the Smithsonian's National Air and Space Museum.

The company which he founded, headquartered in Bloomfield, is also a leading subcontractor to the aerospace industry, producing a wide range of materials and components.

Two spin-offs reflecting Kaman's catholic interests are Ovation Guitars and the Fidelco Guide Dog Foundation. An amateur guitarist himself, Kaman used an engineering approach and composite materials which he applied to the creation of acoustic and acoustic-electric guitars.

He and his wife also founded the Fidelco Guide Dog Foundation which breeds German shepherds.

In 1996, Kaman was awarded the National Medal of Technology, our highest national honor for contributions to technology. A year later, the National Aeronautics Association presented Mr. Kaman with the Wright Brothers Memorial Trophy for his contributions to aviation.

Charlie Kaman, aeronautical engineer, innovator, entrepreneur, philanthropist has cased his slide rule forever. We are diminished.

AEROSPACE CURRENT EVENTS

ISS Resupply Efforts

The ISS crew used a remote manipulator arm to berth Japan's HTV-2 spacecraft, *Kuonotori*, on 27 January. HTV-2 carried over 10,000 lbs of cargo consisting of spare parts, food, water, and materials for scientific experiments.

An unmanned Russian *Progress* resupply ship docked at the International Space Station on 30 January. The cargo consisted of 6000 lbs of supplies and fuel. The docking port was recently vacated by another Progress carrying trash which re-entered and burned up the Pacific Ocean.

The US Space Shuttle Discovery is set for flight on 24 February. Delayed since November due to hydrogen leaks and cracks in the insulating foam of the external tank, Discover will be making its 39th trip into space. Cargo consists of a storage module and a humanoid robot.

Second Air Force X-37B Readied for Launch

Two months ago, the first X-37B completed a 220 day mission. The vehicle will be launched from Florida in the nose of an Atlas 5 rocket on 04 March. The first vehicle was found free of major faults and no major changes have been made in the second craft. As before, the USAF is not revealing the purposes of the mission.

AEROSPACE HISTORY MEMORIES OF FEBRUARY'S PAST

01 FEB, 1930-The Daniel Guggenheim Fund for the Promotion of Aeronautics is dissolved. During its lifetime, it promoted aviation, supported engineering schools, and funded Goddard's rocket research as well as the experiments which led to Doolittle's success in "blind flying."

02F EB, 1925-President Calvin Coolidge signs the Kelly Act which allows the Post Office to let out contracts to private companies to carry airmail.

03 FEB, 1959-The Day the Music Died-Buddy Holly, Richie Valens, the Big Bopper and pilot Roger Peterson die in crash of a Beechcraft Bonanza near Mason City, Iowa.



Bonanza displays its characteristic V-tail

04 FEB, 1957-The USAF takes delivery of its first Boeing KC-135 Stratotanker.



Retired Stratotanker with the Original P&W-57 Engine Nacelles. The fleet has been re-engined with turbofans.

05 FEB, 1923-The Collier Trophy, awarded annually for the greatest achievement in American aviation, is presented to the U.S. Airmail Service for one year of fatality free transcontinental service.



Jenny-A Workhorse of the US Mail and the Barnstormers

06 FEB, 1926-Pratt and Whitney introduces the first Wasp engine, a nine cylinder, 400 HP radial.

07 FEB, 1954-First Flight of the Lockheed XF-104 piloted by noted test pilot, Tony LeVier.



YF-101A, the Service Prototype of the Starfighter

08 FEB, 1966 Freddie Laker, the founder of eponymous Laker Airways, institutes service from Gatwick using two Bristol Britannias.



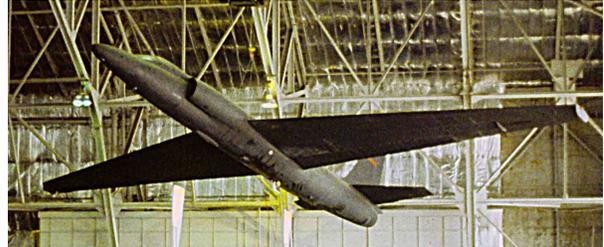
Britannia 312 in the Livery of Monarch Airlines



09 FEB, 1936-Billy Mitchell goes West.

10 FEB, 1956-Father of the RAF, Marshal of the Royal Air Force, Lord Trenchard, goes west.

11 FEB, 1962-Gary Francis Powers, U-2 pilot, arrives back in U.S. after a spy swap for "Col Rudolph Abel."



Lockheed U-2A

12 FEB, 1934-Zantford D. Granville, GeeBee designer goes west in crash at Spartanburg, N.C.



GB R-1 Replica at the New England Air Museum

13 FEB, 1943-The Vought F4U Corsair makes operational debut in a raid on Bougainville.



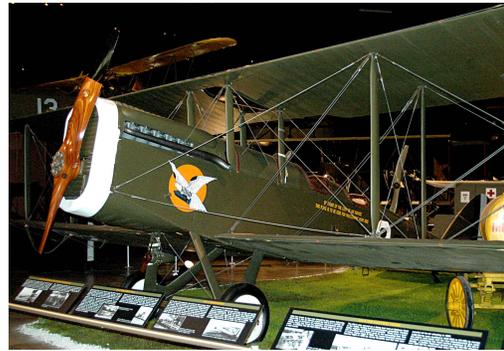
Connecticut's state airplane impressed into the Royal Navy. Didn't we fight a war over this practice?

14 FEB, 1930-The Navy accepts the Boeing 205 for testing. It is the first monoplane designed for aircraft carrier operations. It is designated as the XF5B-1.

15 FEB, 1975-The first pre-production Fairchild A-10A makes its maiden flight.



Note the false canopy on this Warthog and its 11 hard points.



Blow this picture up and read the order from the Chief of the Air Service!

16 FEB, 1982-The first production Airbus A310 rolls out of factory in Toulouse, France.



One of some five dozen FedEX A310s.

22 FEB, 1987-First flight of Airbus A320 introducing fly-by-wire control to the commercial market.



17 FEB, 1915-HMS Ark Royal, the first seaplane carrier commences operations in the Dardanelles.

18 FEB, 1943-Extraordinary test pilot "Eddie" Allen goes west in crash of XB-29.

19 FEB, 1915-Robert Goddard commences a series of solid fuel rocket experiments.

20 FEB, 1965-Eugene L. Vidal, former Director of Air Commerce, goes West.

21 FEB, 1921-Lt W.D. Coney makes the first one-stop transcontinental solo flight from San Diego, Calif. to Jacksonville, Fl. in a DH-4B.

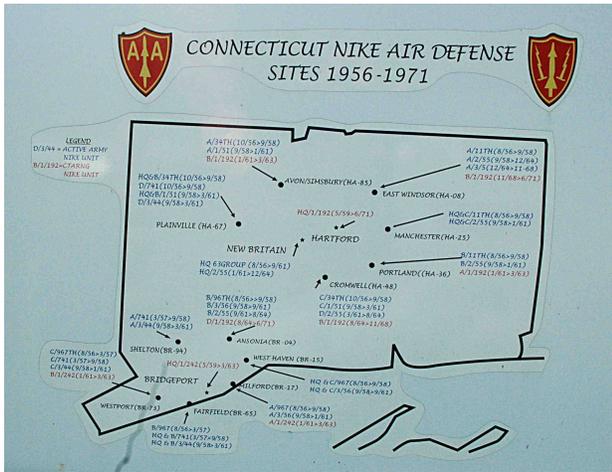
23 FEB, 1909 -The Silver Dart is the first airplane to fly in Canada.

24 FEB, 1939-Pan American Airlines accepts the first Boeing 314 Clipper.

25 FEB, 1956-The first launch of the prototype Nike-1 SAM is made at White Sands Missile Range.

Nike-Ajax at Camp Niantic memorializing the CTNGs 1st Battalion, 242 Artillery and the 1st Battalion, 192nd Artillery. The plaque below shows the Connecticut sites of Nike missile batteries during the Cold War.





from Dayton, Ohio to Boston, Mass. using only navigation instruments.

GROUND OBSERVER CORPS ID QUIZ

This is new feature for The Daedalean. Each month, we will offer a set of aircraft to identify based on some theme. The answers will be found at the end of the newsletter.

Theme: Since this is the 100th anniversary of naval aviation, we will start with some aircraft from the sea service.

26 FEB, 1946-The Eighth Air Force ends its World War II operations in England.



Over 26,000 combat dead and 17 Medals of Honor

27 FEB, 1969-Colin Campbell Mitchell, developer of the steam catapult, is reported as having gone west.

28 FEB. 1925 -Testing the earth inductor compass, Lt. H.P. Whitten and Navigator Bradley Jones fly

#1



#2



#3



The agenda will cover a full range of aerospace issues. In addition, there will be an opportunity to view a Blue Angel performance and meet the team and there will be tours of the museum and the restoration facility

For information go to the website:
http://www.capmembers.com/aerospace_education/internal_specific/aeo_resources/aeo_school.cfm.

#4



2011 Commander's Cup Rocketry Contest Connecticut Wing

The CTWG will once again sponsor the Commander's Cup Rocket Contest. This year, the rules of engagement have been aligned with the requirements of the Rocketry Badge Program. The construction of the rockets is an ideal winter activity program. The rules follow:

TENTATIVE RULES OF ENGAGEMENT

Every participating squadron will supply one judge.

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#5



ROAD TRIP

DAE: It's 1350 miles to Pensacola, we got a full tank of gas, a bag of chips, it's dark, and we're wearing sunglasses.

AEO: Hit it!

CAP is holding the National Aerospace Education Officer Staff School at Pensacola this year. Since the Navy is celebrating the 100th year of US naval aviation, there should be some special events. The dates are June 21-25. Is anyone interested in a road trip?

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: Load Bearing or Multistage Rocket

Flight 3: Historic Air Vehicle

Judging will be based on construction and finish,.

Construction 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.

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

Squadrons are responsible for purchasing rockets, engines, igniters, and wadding.

SUGGESTIONS ON USING *THE DAEDALEAN*

1. AEOs should be conduction current events and aerospace education briefings on a regular basis. the Aerospace History and Current Events give you a starting point.
2. Look at the calendar and plan for coming events.
3. In the coming issue, read the CTWG AE Plan of Action.
4. Submit information on your unit aerospace activities for publication.
5. Check the special articles such as the Kaman obituary or the CTWG Commander's Cup announcement for ideas and planning.
- 6, Print and post the ID quiz on the unit bulletin board or hold a contest among your Cadets.

GROUND OBSERVER CORPS ID QUIZ ANSWERS

#1 The aircraft is the North American SNJ-7 Texan (USAF T-6, British Commonwealth Harvard), an advanced trainer. This particular plane is displayed on the USS Midway in San Diego.

#2 The San Diego Aerospace Museum in Balboa Park used to have the Consolidated PB5Y-5A Catalina (USAF OA-10, Canadian Canso, Russian GST) amphibious patrol bomber pylon mounted on an outdoor display. It is now indoors in a large hall. The Naval Aircraft Factory in Pennsylvania build a version of this aircraft, the PBN. The flight engineer handled the engines from a seat located in the pylon which supports the wing.

#3 The Grumman F6F-3 Hellcat was the Navy's premier carrier based fighter during the war. they were build on nearby Long Island. The -3 model was equipped with Connecticut's Pratt & Whitney R-2800 engine. Some 12,000 Hellcats were produced at a cost of around \$35,000 each. They accounted for about 75% or the Navy air to air kills in the Pacific.

#4 The Beech SNB Expedito (USAF C-45 in some variations was a "bug smashing" utility plane, used for training, as a station hack, and light transport. Some say SNB stood for "Secret Navy Bomber."

#5 The Douglas SBD-4 Dauntless (USAF A-24 Banshee) dive bomber was responsible for sinking the four Japanese carriers at the Battle of Midway. Note the dive brakes. This aircraft is located on the hangar deck of the USS Midway in San Diego.