



Missions for America

*Semper vigilans!
Semper volans!*

The Coastwatcher

Publication of the Thames River Composite Squadron
Connecticut Wing
Civil Air Patrol

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SCHEDULE OF COMING EVENT

- 01-08 AUG-CTWG Encampment
- 04 AUG-No Cadet Meeting
- 08 AUG-SAR EVAL Prep
- 11 AUG-TRCS Meeting
- 18 AUG-TRCS Meeting
- 19 AUG-National Aviation Day-GON
- 21-23 AUG-CTWG/USAF Evaluation
- 25 AUG-TRCS Meeting
- 26-29 AUG-CAP National Conference

- 03 OCT-Cadet Ball-USCGA
- 10 OCT-Groton Fall Festival
- 17 OCT-Commander's Cup Rocket Contest

CADET MEETING MINUTES

14 July, 2015
No Report!

21 July, 2015

The Cadets worked on the rockets for The Commander's Cup competition.

Cadet Daniel Hollingsworth gave a speech to meet one of the Armstrong Achievement requirements.

28 July, 2015

submitted by
C/SMSGt Daniel Hollingsworth

C/SrA Sitz commanded the drill session.

Lt Drost led a character development seminar entitled "I Double Dare You." It was about thinking before you do, recognizing and avoiding foolish decisions for yourself and others, and preventing peer pressure.

Cadets Michael and Daniel Hollingsworth briefed the Cadets on their experiences at Hawk Mountain National Cadet Summer Activity. The well delivered and illuminating report covered the equipment and paperwork requirements, the seven schools offered by the program, and the activities: a three day hike, woodman-ship and navigation training, communications techniques, and health and medical issues to name just a few.



Michael Hollingsworth explains the pre-acceptance requirements.

Daniel Hollingsworth points out features of the obstacle course.



Integrity

July 2015						
SUN	MON	TUE	WED	THU	FRI	SAT
			1	2	3	4
				O/F		
5	6	7	8	9	10	11
				O/F		Viet LISP
12	13	14	15	16	17	18
Viet LISP		CDR CALL		O/F		SAR prep
19	20	21	22	23	24	25
				O/F		Wing
26	27	28	29	30	31	
		Visit		O/F		

2 O-Flight
 7 Senior: Planning Cadet: Planning
 9 O-Flight
 11-12 VietNam 50th BDL
 11 LISP
 12 LISP
 14 Senior CDR Call Cadet: Character Dev, Leadership
 16 O-Flight
 18 SAR Eval Prep
 21 Senior : ES Training Cadet: Fitness, Safety , DDR
 23 O-Flight
 25 CT Wing Conference Fly-In
 28 Senior Cadet: Aerospace, Rocketry LG and Wing Visit
 30 O-Flight
 31 Encampment Staff on site

August 2015						
SUN	MON	TUE	WED	THU	FRI	SAT
						1
						LISP
2	3	4	5	6	7	8
LISP				O/F		O/F SAR Prep
9	10	11	12	13	14	15
		CDR CALL		O/F		GT
16	17	18	19	20	21	22
			Aviation	O/F	Eval	Eval LISP
23	24	25	26	27	28	29
Eval LISP			Nat'l	O/F Nat'l	Nat'l	Nat'l
30	31					

1 - 8 CT Wing ENCAMPMENT
 1 LISP
 2 LISP
 4 Senior: Planning Cadet: No meeting
 6 O-Flight
 8 SAR Eval Prep O-flight
 11 Senior CDR CALL Cadet: Char Dev, Encampment Rpt
 13 O-Flight
 15 Ground Team
 18 Senior ES Training Cadet: Fitness, Safety, DDR
 19 National Aviation Day
 20 O-Flight
 21-23 CT Wing USAF Evaluation
 22 LISP
 23 LISP
 25 Senior Cadet: Aerospace, Rocketry
 26 - 29 CAP Nat'l Conference
 27 O-Flight

Volunteer Service

September 2015						
SUN	MON	TUE	WED	THU	FRI	SAT
		1	2	3	4	5
				O/F		
6	7	8	9	10	11	12
		CDR CALL		O/F		LISP
13	14	15	16	17	18	19
LISP				O/F		
20	21	22	23	24	25	26
				O/F		
27	28	29	30			
30	31					

1 Senior: Planning Cadet: Planning Open House?
 3 O-Flight
 8 Senior CDR Call Cadet: Character Dev
 10 O-Flight
 12 LISP
 13 LISP
 15 Senior ES Training Cadet: Fitness
 17 O-Flight
 22 Senior Cadet Rocketry
 24 O-Flight
 29 Senior Cadet

Excellence

October 2015						
SUN	MON	TUE	WED	THU	FRI	SAT
				1	2	3
				O/F		Cadet Ball
4	5	6	7	8	9	10
				O/F		Groton Festival
11	12	13	14	15	16	17
		CDR CALL		O/F		CDR Cup
18	19	20	21	22	23	24
				O/F		
25	26	27	28	29	30	31

1 O-Flight
 3 Cadet Ball
 6 Senior: Planning Cadet:
 8 O-Flight
 10 Groton Festival
 13 Senior: CDR Call Cadet:
 15 O-Flight
 17 Commander's Cup Rocketry Contest
 20 Senior: Cadet
 22 O-Flight
 27 Senior: Cadet:

Respect

Other Ground Tranex O-Flight Meeting Wing National

This schedule is not a replacement for good communications.

SENIOR MEETING MINUTES

14 July, 2015

The Squadron will participate in the Groton Fall Festival on 10 October. This will be an opportunity for public outreach and recruiting.

The USAF Evaluation on 22 August will be an all-hands evolution. TRCS members will report to the the Squadron. Details are forthcoming.

21 July, 2015

Maj Paul Noniewicz led a practice session on using the search and rescue features of the Garmin 1000

28 July, 2015

Lt Col Nicholas Brignola, CTWG Director of Logistics conducted an inventory of CAP property assigned to the Squadron.

Lt Col Richard Doucette discussed CAP membership opportunities with two senior candidates for membership.

Lt Meers worked on wiring the new flight simulator system.

Lt Col Darren Cioffi, Wing Vice Commander, and Maj Conrad Rustek met with with Lt Col deAndrade and discussed the “state of the squadron.” They then offered an open forum in which senior members participated.

LISP FLIGHTS

The Squadron flew three Long Island Sound Patrol missions on the 11th and 12th of July.

Maj Noniewicz, Lt Col Kinch, and Captain Miller flew the Saturday patrol.

On Sunday, Lt Wisheart, Capt Miller and Lt Crandall took the early afternoon mission and Maj Farley, Lt Col Kinch, and Lt Col Doucette

flew the late afternoon mission.

Lots of boats were observed but all observations were normal with no emergencies reported.

PROMOTIONS, QUALIFICATIONS, AND AWARDS



Mr. Schantz assists in affixing C/Senior Airman First Class stripes to Cadet Ryan Schantz.

C/SrA Colin Schultz receives his new insignia from his parents.



Newly minted C/SMSGt Alexander deAndrade reports to the Squadron Commander.



C/CMSgt Daniel Hollingsworth is recognized upon completion of the Armstrong Achievement



2d Lt Frank Crandall has qualified as a Scanner, flown his first LISP mission, and has commenced airborne photography training.

Crandall, a wounded Afghanistan combat veteran has made numerous important contributions to the Squadron Cadet Program, spearheaded the new

floor in the Cadet trailer, and been a key supporter of Squadron social activities.



*2d Lt
Crandall
directs
balloon
toss at
TRCS
picnic*

The Squadron was one of nine in the Wing recognized as a Squadron of Merit. Lt Col deAndrade accepted the pennant which will be attached to our unit's flag staff.

Lt Col Rocketto received a Commander's Commendation Award in recognition of selection as Aerospace Officer of the Year.

CAPT ERIK "SWIFT" NELSON AND HIS B-52 AT BRADLEY

Well, the BUFF does not really belong to him but as aircraft commander, it is the next best thing and he does not have to pay for fuel.

The aircraft which Erik and his crew flew in to Bradley for Vietnam Remembrance Dahy is about twice as old as any member of the crew! It was manufactured in 1961 and will be around until at least 2040!

Nelson, a former Thames River Cadet Commander and U.S. Air Force Academy graduate is based at Minot AFB, N.D. He is assigned to the 23^d Bomb Squadron of the 5th Bomb Wing.

An aviation enthusiast from an early age, like Mary Feik, Erik restored his first car, a 1948 Chevy Coupe, as a young teenager. He joined the Civil Air Patrol and credits the organization with providing him with the leadership opportunities and airmanship skills which were the stepping stones to his present position. He is especially grateful to Major Keith Neilson, his CAP flight

instructor, who taught him to fly with precision and under whom he earned his private pilot certificate.

Since entering the USAF eleven years ago, Erik has established a record of achievement. He has earned both a B.S. in Systems Aeronautical Engineering and an M.S in Aeronautics. He is a Distinguished Graduate of the Air and Space Basic Course, Distinguished Graduate of the B-25H Initial Qualification Course, and 5th Bomb Wing Pilot of the Year.

TRCS members Lt Cols deAndrade, Doucette, and Major Roy Bourque and CTWG Deputy Commander Darren Cioffi met with Nelson and his copilot, Capt Jon "Shake" Birmingham and were treated to a tour of the aircraft. Cadet A1C Colin Sitz was unable to take the tour. Unfortunately, he was assigned to a parking detail.



*L to R: Birmingham, Rocketto, Doucette, Cioffi,
deAndrade, Bourque, and Nelson*

Despite its enormous size, the Stratofortress has remarkably cramped crew positions. The cockpit on the upper deck is about seven feet wide has room for the pilots and a jump seat for an observer. Four rows of engine instruments, 32 in all, four for each engine occupy the center of the panel. The throttle quadrant is immediately below and just behind it is the wheel which is used to set up the landing gear for cross-wind landings. The long drooping wings prevent awing low side-slip. The crab approach is used with the landing gear aligned with the runway and the aircraft slewed in the direction of the prevailing wind.

The long drooping wings presented Erik with a problem in taxiing to the National Guard Ramp. The signs on one side were too high to allow safe passage. Erik solved the problem by pumping fuel from the outboard tanks to tanks closer to the centerline. The weight shift raised the low wing and allowed it to clear the signs.

The Electronic Warfare Officer sits behind the pilots facing rearward. Capt Birmingham mentioned a recent 44 hour long mission with only one narrow bunk provided for crew rest.

The Weapons System Officers sit in a windowless lower deck. Their ejection seats fire downward and require an altitude of 250 feet and an airspeed of at least 120 knots.

During the walk-around, Nelson explained many of the external features including details of the landing gear, the electronic warfare antenna farm, and the chaff and flare storage chutes. The cavernous bomb bay and wing mounted heavy stores adapter beams can house a variety of weapons including air launched cruise missiles and precision guided bombs.

Erik is a prominent example of the value of the CAP Cadet program to the USAF and he is a credit to the Thames River Composite Squadron and the Connecticut Wing.

*An Incidental Note about a USAF CAPSTER at
BDL*

While touring the Lockheed Galaxy, we met Msgt Ryan Johnson, the Loadmaster. Johnson was a Cadet officer around 1999 in Franklin County, Mass. He credits his CAP membership and encampment with giving him a clear-cut advantage in boot camp and allowing him to enter the Air Force in the enlisted grade of E-3, Airman First Class. Not only does this grant seniority privileges but the also means about \$1400 dollars per month extra over a newly enlisted E-1, Airman Basic.

CTWG FLY-IN

Four TRCS members attended the annual conference, staged for the first time as a fly-in. Lt Cols deAndrade and Rocketto and Maj Bourque attended the meetings. Maj Farley flew orientation flights.

Lt Col Steven Valastro, CTWG Safety Officer and 2015 Encampment Commander ran a briefing for Cadet Basics and Staff and parents which explained the encampment operational philosophy and the schedule of activities. Over 100 Cadets will be supported by 53 staff.

Lt Col Darren Cioffi chaired the Pilot's Meeting and discussed the recent problem with tail strikes and the pilot decisions and actions needed to avoid them.

The Region Commander, Col Dan LeClair, opened a discussion about the problems inherent in WIMRS 2.0 and CAP action to improve the computer network.

He also provided information about the new aircraft which are scheduled to enter the CAP fleet. Many of the older aircraft will be retired it is expected that 20% of the current inventory will be replaced by the end of the next fiscal year.

The western regions will be receiving 11 turbo supercharged Cessna 206s. Six of these are ex-Afghan Air Force trainers. Some 21 172s with a partial glass cockpit, climb props, and glider tow hooks are on order. However, these Skyhawks will not be equipped with the Becker radio direction finders. An additional 15 rebuilt C182 Skylanes are also in the pipeline.

\ Squadron and Wing Staff Leadership reported to Col Kenneth Chapman, Wing Commander for a State of the Wing briefing. Chapman stated that 100% of the State Senate and Lt. Governor Wyman are now members of the Legislative Squadron and State grants have been renewed.

There is plenty of money for Cadet Orientation Flights (Power) and the Wing leadership encourages a maximum effort to fly every Cadet. The Wing glider program is stalled. The Air Force did not fund it but the Wing is trying to re-establish a base at Meriden.

The highest priority at the present time is preparation and successful completion of the USAF SAR evaluation during the 3rd week of August.

Col LeClair, the Northeast Region Commander, stated that the Level One and Form 5 burdens have been reduced.

The membership numbers is a cause for concern, especially Cadets. LeClair noted that “word of mouth” is our best recruiting tool and it depends upon a healthy cadet program. The cadet leadership needs to promote hands-on and weekend activities and avoid a “classroom” atmosphere at meetings. In addition, Cadets who are 18 years old are no longer eligible for O Flights but are eligible to become aircrew members, an option which must be encouraged.

Capt Joseph Bisnov from the Wing Finance Section announced that it is now budget planning time. Requests for funding by units or wing sections should be submitted by the end of August.

ROAD TRIPS

A travel in Aviation History

The impromptu Road Trip is a classic American custom and the Blues Brothers is a classic example of a road trip. When Elwood said It's 106 miles to Chicago, we got a full tank of gas, half a pack of cigarettes, it's dark... and we're wearing sunglasses.” Jake replied, “Hit it.”

On a day-off at the National Rifle Championships in Bristol Indiana, four competitions were at loose ends until Lt Col Rocketto realized that they were only 70 miles north of the Grissom Air Museum, and issued the order to his brother, “Hit it.”

The museum is located in Peru, Indiana and named after Gus Grissom, a Hoosier native and the astronaut killed in the Apollo One disaster. Originally, it was a World War II training based, Bunker Hill Naval Air Station. One of its trainees was baseball great and Marine aviator, Ted Williams. Now, it is an Air Reserve Base, home to the KC-135R Stratotankers of the 434th Air Refueling Wing.

The museum houses a exterior collection of over two dozen aircraft and an interior display of models, weapons, flight gear, engines, and models. These include a 1911 Wright Brothers propeller and a model of an M3 halftrack, constructed entirely of matchsticks!



Some of the aircraft on display have special interest.

The first is a Convair TF-102A Delta Dagger, better known as “the Deuce.”. The aircraft was the first operational supersonic fighter. In its original configuration, it could not fly faster than sound. The “area rule,” a principle developed by the legendary aeronautical engineer, Richard Whitcomb, was then applied and turned the sluggish performer into a Mach 1.25 interceptor.



The “area rule” reduces drag by maintaining a constant cross sectional area. This is accomplished by “pinching” the fuselage which results in a “wasp waist” configuration.



The “wasp waist” is illustrated by this overhead picture of a CF-104.

The aircraft on display is the trainer version, a somewhat bug-eyed design which allowed the trainee and the instructor to sit side by side.

The second President Bush was an F-102 pilot with the Texas Air National Guard.

The first USAF supersonic bomber was also a Convair product, the B-58 Hustler and the Grissom display is that of a TB-58A. Like the F-102, the Hustler has a “wasp waist and its four General Electric J-79 engines and was capable of Mach 2 flight. During its short career, the aircraft set 19 world speed records.

Some novel features were part of the design. Aluminum and fiberglass honeycombs were used to bond inner and outer wing surfaces. The plane had no internal bomb bay but carried bombs and extra fuel in a ventral pod. The three man crew were protected during ejection by fully enclosable capsules



The Hustler was expensive to acquire and maintain and had a number of adverse flight characteristics which led to a high accident rate. Almost 25% of the Hustler fleet was lost in accidents.

Supersonic fighters and bombers are more glamorous than the pedestrian freight haulers and aerial tankers but the sharp edge of the aerial sword could not effectively be employed without the supplies carried by their “plain Jane” supporters.

One of these vital aircraft is the Boeing KC-97L Stratofreighter The design evolved from Boeing's Model 377 Stratocruiser and C-97 Stratofreighter which are descendents of the B-29 Superfortress. Lt Col Doucette of Thames River was a KC-97 navigator. The KC-97 was not only an aerial tanker but had the capability to carry troops or supplies on its upper deck.



The early KC-97s had four 3,500 hp Pratt and Whitney 4360 radial engines but its stodgy performance complicated aerial refueling of the B-47 and B-52 all jet bombers so two General Electric J-47 turbojets were added to the “G” model to create the “L.” The plane at Grissom is the first one to have this modification.

Another requirement for effective offensive operations is the need for command and control channels so that tactical intelligence about enemy dispositions and movements can be relayed to the bomber and fighter force.

A wide range of aircraft has been and is being developed to serve these functions. One of them is the Boeing EC-135L airborne command post relay aircraft. The version at Grissom is a modified KC-135 equipped with a suite of specialized communications equipment.



The aircraft on display, *Excaliber*, saw service in Operation Just Cause in Panama and Operations Desert Shield and Desert Storm in Iraq. Its record Desert Storm record credits it with assisting in the destruction of two Iraqi aircraft, over 60 tanks, and 27 anti-scuad strikes.



The ribbon is the USAF Outstanding Unit Award.

The fighters and bombers also rely on forward air controllers (FACs) to provide guidance when striking enemy troops which are in close proximity to friendly forces, especially for close air support (CAS) operations. The aircraft flew low and slow and were highly vulnerable to light anti-aircraft fire from machine guns and even rifles.

Around 100 of the unarmored Cessna O-2A were lost in Vietnam. One of these aircraft is on display at Grissom and not only saw service in Vietnam but also flew drug interdiction missions for the Federal Bureau of Investigation.

When the enemy location was determined, the FAC could mark it with small white phosphorus rockets or smoke grenades. Then the FAC called in the strike aircraft, providing information about the relative positions of friendly and enemy troops, wind, safe altitudes, and attack and egress directions. When the strike ended, the FAC provided bomb damage assessment.

In Vietnam, a typical FAC aircraft was the Cessna O-2 Skymaster. The Skymaster is a militarized version of the 337 Super Skymaster equipped with hard points for mounting marking rockets. The twin engine aircraft has engines mounted fore and aft, providing centerline thrust and simplifying the control if an engine is lost. The engine is a higher powered version of the Lycoming IO-360 power plant used in the Cessna 172. The high wing and additional windows enhanced the ability to observe the ground.

The aircraft is also equipped with FM, UHF, and VHF radios to communicate with ground troops, control authorities, and strike aircraft.



The scale of the aircraft compared to other aircraft can be illustrated by a story. A New York Air National Guard outfit, the 105th Tactical Air Support Group, call sign "Polo" operated out of Westchester County Airport (HPN) in White

Plains, N.Y. and flew the O-2. In 1983, they were relocated to Stewart International Airport (SWF), renamed the 105th Military Airlift Group, and re-equipped with the Lockheed C-5A Galaxy, the largest aircraft in the Air Force inventory. According to one member, the manuals for the Galaxy weighed more than the O-2!

Stidsen on the Road

Lt Col Carl Stidsen, CTWG Aerospace Education Officer (External) is on an extensive trip to aviation resources.

He reports that the EAA show at Oshkosh and may use the material for his Encampment presentation. He has written about first time appearances of the B-52H, F-35, F-22, PB4Y-2, A350, Goodyear/Zepplin NT "Wingfoot One", Mosquito, Lancaster, and the Fairchild XNQ-1 among others. He said that the airport crew had to remove the runway lights to allow the B-52 to land. The runway is 150 feet wide and the span of the B-52 between the wingtip pogos is 148 feet!

He did manage to get on board the Lancaster and had his picture taken crouching next to the pilot and wearing a CAP hat.



CAP Cap perched on his head, Stidsen seated by the flight engineers folding seat.

While stopping in Milwaukee, he found a small Billy Mitchell exhibit in the terminal and a used bookstore with about 10,000 titles, two of which he had been searching for which he then purchased.

His last report was from Seattle where he has or will visit the Museum of Flight, Boeing Field, and the Boeing Everett plant

AEROSPACE HISTORY

Memories of August's Past

01 AUG, 1907-Today is the 100th anniversary of the establishment of the Aeronautical Division of the U.S. Army Signal Corps, forerunner of the United States Air Force.

02 AUG, 1909-The U.S. Army purchases its first airplane from the Wright Brothers for \$30,000.

03 AUG, 1921-Lt. John A. McCready, USAAC, engages in crop dusting experiment against caterpillar infestation.

04 AUG, 1901-Octave Chanute arrives at Kill Devil Hill to photograph Wright glider experiments.

05 AUG, 1943-The Women's Auxiliary Ferrying Service (WAFS) is amalgamated with the Women's Flying Training Detachment (WFDT) to form the Women Air force Service Pilots (WASP).

06 AUG, 1946-The Enola Gay drops the first atomic bomb on Hiroshima.

07 AUG, 1928-First Flight of the Curtiss-Robertson J-1 Robin.



Curtiss Robin flown by the Key Bros. when, in 1935, they set a still-standing world endurance record of 27 hours.

08 AUG, 1946-First Flight of the Consolidated XB-36.



B-36 Peacemaker-Note the open forward dorsal gun turret.

12 AUG, 1957-Lt. Commander Daniel Walker flying a Douglas F3D Skynight successfully alights on the U.S.S. Antietam in the the first test of an automatic carrier landing system.



U.S.M.C. Skynight-Korean War Night Fighter

09 AUG, 1956-First Flight of the Fiat G.91.



Displayed in the colors of the Italian Precision Flying Team, Frecce Tricolori, this aircraft was once evaluated by the U.S. Army as a close ground support aircraft.

10 AUG, 1896-Aviation pioneer Otto Lilienthal goes West after experimental glider crash. According to legend his last words are "*Opfer müssen gebracht werden.*" (Sacrifices must be made.)



Lilientahl gliding from an artificial hill which he constructed near his home. (Credit: Library of Congress)

11 AUG, 1915-Eastman Kodak and U.S. Naval Observatory collaborate on aerial camera development.

13 AUG, 1940-*Adler Tag* (Eagle Day) The *Luftwaffe* commences what Churchill calls the Battle of Britain. This was the first major campaign in history fought entirely between opposing air forces.

Hurricanes vs. Heinkels



Mk I Hawker Hurricane bearing the colours of RAF ace Richard Stanford Tuck.



Heinkel 111H at the Museum of the USAF.

14 AUG, 1919-An Aeromarine West Indies Airways flying boat transfers mail to the White Star liner RMS Adriatic shortly after the ship had departed New York.

15 AUG, 1957-General Nathan F. Twining becomes the first USAF officer to serve as Chairman of the Joint Chiefs of Staff.

16 AUG, 1960-Capt. Joseph William Kittinger II sets records for the highest parachute jump and the longest delayed jump when he departed from the balloon Excelsior III at an altitude of 102,800 feet. In the thin upper atmosphere, his vertical speed exceeded 600 mph.



*Kittinger departing!
(USAF photo)*

17 AUG, 1943-The Eighth Air Force sends 376 bombers to attack the Messerschmitt works at Regensburg and the ball bearing industry at Schweinfurt. Weather conditions cause a delay in launching the Regensburg force and the *Luftwaffe* is able to concentrate its attacks. Approximately one third of the force is shot down or damaged beyond repair.

18 AUG, 1960-A C-119J makes the first aerial recovery of a returning artificial satellite payload when it snags the Discoverer 14 capsule. The Discoverer Project was a cover for the Corona Project, a military reconnaissance program using what became known as the "Keyhole" satellites to photograph denied areas.



The aircraft pictured above is the actual plane which recovered Discoverer 14. Note the direction finding antennae on the nose which were used to "bird dog" the descending parachuted payload.

19 AUG, 1871-Orville Wright is born. National Aviation Day

20 AUG, 1910-Glenn Curtiss pilots a Curtiss biplane accompanied by Lt Jacob Earl Fickel who, over Sheepshead Bay, Brooklyn, becomes the first man to fire a rifle at a target on the surface.



The rifle appears to be a 1903 Springfield. (PD)

21 AUG, 1923-The first illuminated airway, Chicago-Iowa City-North Platte-Cheyenne, is activated.



*The system used 284 beacons approximately 10 miles apart. A sequence of Morse letters identified the beacon in each segment:
WUVHRKDBGM
which pilots remembered using the sentence "**When Undertaking Very Hard Routes Keep Directions By Good Methods.**"*

22 AUG, 1938-The Civil Aeronautics Act becomes effective and the Civil Aeronautics Authority is created, the forerunner of the FAA.

23 AUG, 1954-First Flight of the Lockheed YC-130 Hercules.

*City of Ardmore,
First Production C-130
Dyess AFB*



24 AUG, 1956-The first non-stop transcontinental rotary wing flight occurs when the U. S. Army flies a Piasecki H-21 Shawnee from San Diego to Washington, D.C. The flight took 37 hours!



Shawnee at Oshkosh

*MiG Killers all!
Left to Right: Lt Col Carl Baily, Capt Charles DeBellevue, Capt Jeffrey Feinstein, Capt Richard Stephen Ritchie. (USAF Photo)*



29 AUG, 1970-First Flight of the Douglas DC-10.

25 AUG, 1932-Amelia Earhart becomes the first woman to fly non-stop across the United States accomplishing the feat in a Lockheed 5B Vega



The Winnie Mae, a Lockheed 5B Vega similar to Earhart's craft, was flown by Wiley Post and navigated by Harold Gatty on record world flight and later used for stratospheric research.



Freighter Version of the DC-10

The KC-10 Extender, USAF Tanker Version



26 AUG, 1976-The first women enter USAF pilot training.

27 AUG, 1910-James A. McCurdy, flying a Curtiss biplane transmits and receives radio messages with Harry M. Horton, Sheepshead Bay, Brooklyn.

30 AUG, 1960-First Flight of the NAMC YS-11.



LANSA Nihon YS-11 landing at Arequipa Peru

28 AUG, 1972-Capt Steve Ritchie becomes the first USAF ace since the Korean War and one of the three USAF aces to earn the title in the Vietnam conflict. The other two were both Weapons Systems Officers flying in the back seat of the McDonnell F-4. Capt Charles DeBellevue was partnered with Ritchie on four of his kills and his total of six make him the top ace. Captain Jeffrey Feinstein is credited with five.

31 AUG, 1956-First Flight of the Boeing KC-135.



Boeing KC-135 Stratotanker