



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

07 DEC-Ground School
09 DEC-TRCS Meeting
14 DEC-Ground School
16 DEC-TRCS Annual Holiday Party
21 DEC- Ground School
23 DEC-No Meeting
30 DEC-No Meeting

06 January-TRCS Meeting
07 JAN-CTWG Commander's Call
13 JAN-TRCS Meeting-Commander's Call
20 JAN-TRCS Meeting
21 JAN-CTWG Staff Call
27 JAN-TRCS Meeting

FRUIT DELIVERY

The fruit delivery is tentatively scheduled for noon on Wednesday, 10 December. The merchandise will be dropped at E.T. Grasso Technical School, 189 Fort Hill Road, Groton, CT. We will inventory the fruit at Grasso and then transfer it to the Squadron.

The evolution is expected to take six hours. Any Squadron members who can volunteer to work during the noon-1800 time frame is requested to attend.

Pickup trucks and vans will be useful to move the near five tons of fruit. If you have access to one of these vehicles, please bring it.

In case of a change in plans, notification will go out by e-mail

SQUADRON PROMOTIONS AND CHANGE OF COMMAND

05 December, 2014

Thames River Composite Squadron held a major promotion ceremony and a change of command ceremony concurrently on Tuesday last.

LtCol Lief Bergey served as master of ceremonies and SM Joel Drost delivered the invocation.

Cadets Ryan Poe and Ian Poe both advanced to the grade of Cadet Staff Sergeant. The promotion to C/SSgt signifies completion of Phase One of the Cadet program and marks the transition to non-commissioned officer status and the award of the Wright Ribbon.



*Maj Noniewicz
and 2d Lt Poe,
Cadet Ryan Poe's
mother, pin on his
new C/SSgt
insignia.*

Maj Noniewicz and 2d Lt Poe, Cadet Ian Poe's mother, pin on his new C/SSgt insignia.



The major award issued was the Amelia Earhart Ribbon. Maj Roy Bourque spoke about the life and particularly the flying career of Amelia Earhart.

Cadet Christian Tynan then reported and received the Amelia Earhart Ribbon and his Cadet Captain epaulettes for completing Phase three of the Cadet Program. C/Capt Tynan also received a congratulatory Legislative Proclamation from State Representative Kevin Ryan.



C/Capt Tynan's grandfather and mother attach his new epaulettes.



Representative Ryan presents Tynan with a citation from the Connecticut General Assembly

After over four years of inspired leadership, Maj Paul Noniewicz turned Squadron command over to LtCol John deAndrade. Among his many qualifications, Noniewicz, a 15 year CAP veteran, is qualified as a Mission Check Pilot, Air Operation Branch Director, and Mission Safety Officer. He is a technology specialist with

Computer Sciences Corporation.



C/2dLt Jessica Carter passes the Squadron flag to LtCol deAndrade as Eastern Group Commander LtCol Thomas Litwinczyk and Major Noniewicz stand ready.

LtCol deAndrade, an Air Force Academy graduate, is a pilot for Delta Airlines and a CAP Command Pilot. He is a Check Pilot Examiner, Level Three Incident Commander, Operations and Planning Section Chief, and Air Operations Branch Director. At the CTWG conference, he was honored as CAP Officer of the Year.

After the formal Change of Command, deAndrade presented a framed photograph of a CAP C182 which will be signed by the Squadron members.



The new Squadron Commander, deAndrade lauds Maj Noniewicz and presents a token of appreciation to honor his tenure as leader.

LtCol deAndrade then spoke briefly about his plans for the future of the Squadron. The theme was "Do More, Meet Less," more operational training and less meeting time.



The new Squadron Commander makes a point about his future plans for the unit.

Every member will be responsible for their own CAP experience by planning and preparing for training. Meetings will be focused on planning and training. The first Tuesday will be staff planning followed on successive Tuesdays by Command functions, academic training, and field training. The fifth Tuesday will be reserved for make-up work.

Not all need attend each meeting but we can expect to use weekends for ground team and flight crew training and Cadet orientation flights.



Maj Noniewicz and LtCol deAndrade pose with our guests, Katherine Young, Connecticut Aviation Authority, LtCol Lytwinczyk, CTWG Staff, and Representative Ryan.

The participants then adjourned for the traditional cake and punch.

AEROSPACE CURRENT EVENTS

Restructuring of Army Aviation

In order to reduce spending by \$12 billion dollars over the next five years, the U.S. Army has

announced its “Aviation Restructuring Initiative (ARI).

The ARI proposes the downsizing of Army Aviation by retiring all single engine helicopters and redistributing aircraft between active and reserve units.

The Bell OH-58D Kiowa Warrior, an armed scout helicopter and the OH-58 trainers will be retired. The trainers will be replaced by the EADS/Airbus LUH-72A Lakota which are manufactured in Columbus, Mississippi.

The Kiowa Warrior will not be replaced. Its mission will be undertaken by the Boeing AH-64D/E Apache operated in conjunction with AII RQ-7B and General Atomics MQ-9 Gray Eagles drones. There is some controversy over the efficacy of this approach, notably by the Kiowa Warrior community. Their argument is the loss of flexibility enjoyed by a a manned scout and the less maneuverable characteristics of the Apache.

The TH-67 Creek, a Bell 206 Jet Ranger used as a primary trainer will be released to the surplus market which has caused manufacturers to worry about future sales. A similar situation arose at the end of WWII. The cheap Douglas C-47s and Curtiss C-46 transports cut into sales of the twin engine Martin 4-0-4 and the Convair 340 series airliners.

Legislators, at the behest of their constituent states, are likely to resist the transfer of National Guard Apaches in return for Blackhawks.

The Army states that radical Federal budget cuts demand a radical solution and the ARI is their proposal for the future of Army aviation.

Lead Free Aviation Gasoline Under Test

Jimmy Doolittle, remembered for pioneering instrument flying and the Tokyo raid made a significant contribution to aviation while working for Shell Oil. He was instrumental in convincing the company to invest in production of high

octane gasolines, making the high compression engines which powered our war planes possible.

Old timers among us remember when as many as four grades of AVGAS were available at many airports. Grade 80/87 was colored red and used by most of the small general aviation aircraft. A brown concoction, 91/96 was primarily a military fuel and not commonly found on most airports. Green 100/130 would be used in some of the larger engines found in commercial airliners. Finally, 115/145, colored purple was the fuel of choice for the big turbo-supercharged radials. Currently, most of us are using 100LL, colored blue. The other octanes are rare and only found, if at all, under special circumstances.

Now, most of us are relegated to 100LL but the Federal Aviation Administration has started Phase One of a two phase project to develop a lead free aviation gasoline. \$6 million dollars per year has been appropriated by Congress for the program.

The fuels will be tested at the FAA's William J. Hughes Technical Center in Atlantic City, New Jersey. The testing will be directed at determining the compatibility of the new fuels with hoses, bladders, pumps, and other elements of the fuel system.

Phase Two will involve flight testing with three of the fuels and will include experimentation with mixing them with 100LL.

AVIATION HISTORY

Part One-Two Contemporary Issue: Command of Close Air Support and Intra-Theatre Airlift

The U.S. Army's Aviation Restructuring Initiative brings to mind the long struggle of Army Aviation since the formation of the U.S. Air Force. The post-war military fought a three cornered battle against each other for the missions and the funding which came with the missions.

This article intends to discuss the inter-service battle between the Army and the Air Force and

study some Army fix wing aircraft from 1947 to the present.

The nuclear mission as seen as the key to the Federal strongbox. Withing the Air Force, the Strategic Air Command became the "500 lb" gorilla and the Tactical Air Command received short shrift in the Air Force budget and lost independent status.

The Navy realized that it had to have a nuclear delivery capability and started construction on a flush deck super-carrier capable of carrying large bombing aircraft which were under development: The North American AJ Savage and the Lockheed P2V Neptune. At the same time, the Navy attempted to undercut the Air Force B-36 intercontinental bomber. The Navy lost the fight the super-carrier, keel already on the stocks, was cancelled and the B-36 formed the backbone of the strategic bomber force for a decade until replaced by the B-47 and B-52.



SAC's "Big Stick" was the 10 engined intercontinental bomber, the Convair B-36 Peacemaker. The Navy tried to terminate the program but ended up scuttling its super carrier, the U.S.S America.



The carrier based North American AJ-2 Savage.



The Lockheed P2V-7 Neptune in its anti-submarine modification. These planes were the Navy's bid to take a share of the budget dedicated to the nuclear strike force. It failed.



What did work was the Fleet Ballistic Missile Submarine armed with Polaris missiles.

The Army had been stripped of its air assets by the National Defense Act of 1947 when the Air Force was established as an independent military service. To become “nuclear,” they developed an number of land weapons and missiles. These included atomic artillery, the M65 atomic cannon and the M28/29 Davy Crockett for tactical employment, nuclear land mines to block a Soviet attack in Europe, and rockets capable of bearing nuclear warheads, the MGR-1 Honest John being one example.



The M65 Atomic Cannon and its prime mover.



A Davy Crockett Recoilless Rifle capable of launching a nuclear projectile. Unfortunately, its maximum range of 2.5 miles placed its launch crew within the blast radius of the warhead!



More successful was the M289 Honest John mounted on an International Harvester carrier.

Ultimately, the Navy developed its ballistic missile submarine which became one third of the nuclear triad, manned bombers and intercontinental missiles being the other two.

The Air Force also made some effort to control all air assets of both the land and maritime forces and was engaged in a struggle with the Navy. The Army was dragged into the fight. In 1948, James Forrestal, U.S. Secretary of Defense and the Joint Chiefs of Staff signed an accord known as the “Key West Agreement”

The Air Force captured the long range strategic nuclear mission which brought in the most funding. The Navy managed to hold its own in that it could maintain a nuclear capability in line with that which is necessary for a naval campaign. But the Army, which wanted to control close air support (CAS) and aerial resupply of its ground forces were pummeled. They were allowed only to operate reconnaissance and medical evacuation aircraft.

The agreement limited the Army to fixed wing aircrafts under 5,000 pounds which virtually eliminated any possibility to develop close air support assets. Logistics support and CAS were to be a province of the Air Force which was wedded to the concept of strategic bombardment as opposed to tactical support of ground troops which had been their primary mission leading up to World War II.

In 1949, the Bradley-Vandenburg Agreement further limited Army fixed wing aircraft to 2,500 pounds and helicopters to 4,000 pounds. These restrictions were not lifted until the Army and Air force signed a memorandum of understanding in

1951. However, the Army aviation was not to duplicate Air Force roles and their operations were limited to the immediate combat zone. In 1956, helicopter weight limit was raised to 40,000 pounds.

Army officers wanted to operate somewhat like the U.S Marine Corps whose CAS assets were organic to the ground troops. Pilots were specially trained for the mission and the aircraft were more or less tailored to do the job. Moreover, the lines of command were shortened and a close relationship was developed between infantry and airmen. Army requests for CAS or logistical support had to be approved by the Air Force. This made for a longer chain of command and, more importantly, and longer response time. When troops were in contact, immediate help was demanded. Finally, given the Air Force proclivity for fast fighters and big bombers, the Army was suspicious of their ability to meet the specific requirements of CAS.

The new jet aircraft were faster and less maneuverable than the previous generation of fighters and bombers. Therefore, although they could get to the action faster, they had less time to acquire targets and less accurate in the delivery of ordnance. Their prodigious consumption of fuel at low altitudes made their on-station time shorter and they were much more expensive.

But the Army found a loophole. The Key West accord said nothing about helicopters and the Army engaged on a campaign to develop them, both for medical evacuation, troop transport, and cargo delivery. The Korean Police Action proved the worth of the helicopter and the Army developed doctrines for the coordinated operation of rotary wing aircraft and ground troops.

At the same time, the Army harbored hopes to operate their own fixed wing cargo aircraft. The XCG-20 assault glider was designed by another one of those Russian aeronautical geniuses who fled the Bolsheviks, Michael Stroukoff. Working for Chase Aircraft, the XCG-20 metamorphosed into a convoluted variety of models, the XC-123A-CA, a four engine jet aircraft and a light

weight version of what would become the C-123 Provider to name just two.

Army hope to adopt the C-123 concept had to be abandoned. The Air Force controlled Army aviation purchases and they "improved" the C-123 to replace the C-119 Flying Boxcar. The result was a heavier aircraft that required more runway and was outside the parameters of Army requirements. However, the C-123 and the Lockheed C-130 Hercules became the primary intra-theater cargo aircraft and both were operated by the Air Force.



The 123 was known as a real ground lover with marginal single engine performance so the Air Force added two podded jet engines. This K model is at Dyess AFB.

Over time, give and take negotiations between the Army and the Air Force allowed the Army to procure the DeHavilland of Canada's piston powered CV-2 Caribou and some turbo-prop CV-7 Buffaloes. These were used extensively in Vietnam until the Air Force took notice. In 1966, the Air Force assumed control of the Caribous and re-designated them as the C-7. Part of the give and take would allow the Army to develop armed helicopters and the Air Force would not dispute Army rights to operate helicopters intra-theater.



Caribou



A Buffalo at the Canadian Warplane Heritage Museum wearing UN livery.



Rhode Island National Guard Sherpa. The joke used to be that the Sherpa was the box that the Twin Otter was shipped in.

Some National Guard units including Connecticut's 1109th AVCRAD were equipped with Shorts C-23 Sherpas as utility transport.

The latest battle involved the Alenia C-27 Spartan. The Spartan is a derivative of the G.222 modified with the same engines used on the Hercules. It was selected as the Joint Cargo Aircraft (JCA) for the United States. The Army desired to use it to replace the C-23 Sherpa in Air National Guard units and use it for direct support

of Army operations. The Air National Guard crews flew two of these in field tests in Afghanistan and they were under Army tactical control.

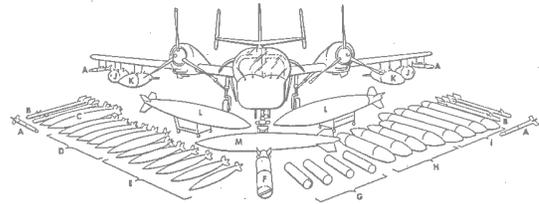
About a year later, the USAF decided to cancel the entire program citing budgetary issues. The Army believed that the C-27 program was sacrificed to solve Air Force budget problems and that they found the aircraft useful in the short field, high and hot environment of Afghanistan. Use of the C-130 was three times more expensive in terms of flight hours and the Hercules was underutilized since it often flew with only partial loads.

The Air Force replied that the "Herc" was a tried and true vehicle with simpler maintenance. The additional costs of operating fleets of two different aircraft was another factor. Moreover, the hourly cost to operate the different aircraft was almost the same and the C-130 would come out cheaper when one considers long-run costs. The aircraft which had been given to the Afghan Air Force were scrapped at six cents per pound!



C-27 bearing Army markings. The Connecticut National Guard's 103rd Airlift Wing had been slated to receive this aircraft to replace its A-10s but is now accepting the C-130.

But the Army still wished to “own” the CAS assets which would support their troops. They flirted with a number of single engine jet and piston aircraft: the Douglas A-4 Skyhawk, Northrop F-5, Freedom Fighter, Cessna's A-37 Dragonfly, The G.91 from Italy's Fiat, and North American's piston powered T-28 Trojan.



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|--------------------------------------|-----------------------------|
| A) 5" HYAR | H) AERO 7D ROCKET PACK |
| B) SIDEWINDER | I) LALL-10A ROCKET PACK |
| C) MK 81 1000-LB BOMB | J) .50 CAL. MACHINE GUN POD |
| D) MK 82 500-LB BOMB | K) 150-GAL TANK |
| E) MK 82 250-LB BOMB | L) 300-GAL TANK |
| F) E-163 CHEMICAL CORPS CLUSTER BOMB | M) MK 79 FIREBOMB |
| G) AERO 6A ROCKET PACK | |

OV-10 Armament Possibilities (Credit: Grumman Corp.)



An Army AT-37 at Fort Rucker

The Army realized that Mohawk employment over a battle zone also allowed a short response time for CAS, if the Army could secure armed Mohawks. They purchased 24 Mohawks designated AV-1. At the same time, they bought three dozen Bell UH-1B Iroquois helicopters armed with rockets, what they termed “Aerial Rocket Artillery,” to support the planned Air Assault Division. The Air Assault concept was tested in the mid '60s and the First Cavalry Division (Airmobile) deployed to Vietnam.

What they settled on is surprising. The U.S. Marine Corps. The Marines had developed the Grumman OV-1 Mohawk as a reconnaissance aircraft but Marines, being institutionally aggressive, also equipped their Mohawks with weapons hard-points and .50 caliber machine guns, strictly for self defense of course!

Army roles for the armed helicopter expanded but the armed fix wing Mohawk was halted by Pentagon directive in 1965.



OV-10C of the Georgia National Guard

So with the anticipated retirement of the Air Force's Republic A-10, a CAS aircraft much loved by the ground pounders, and the loss of the C-27 Spartan fleet, the Army finds itself subordinate to the Air Force for its CAS and intra-theater requirements, a mission planned for the fast and expensive Lockheed-Martin F-35 Lightning II and the resolute and trusty Lockheed C-130 Hercules, both of which are considered unsuitable for their special army support missions.

The next issue will take a look into the past at fixed wing aircraft operated by the Army and Army National Guard