

Missions for America
Semper vigilans!
Semper volans!



The Coastwatcher

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

300 Tower Rd., Groton, CT
<http://ct075.org>

LtCol Stephen Rocketto, Editor
srocketto@aquilasys.com

C/TSgt Justin Ketcham, Reporter
C/A1C Virginia Poe, Cub Reporter
Lt David Meers & Maj Roy Bourque, Papparazis

Vol. VIII, No. 04

29 January, 2014

SCHEDULE OF COMING EVENTS

04 FEB-TRCS Meeting
11 FEB-TRCS Meeting-Commander's Call
18 FEB-TRCS Meeting
22 FEB-Wing Wide SAREX-HFD
25 FEB-TRCS Meeting

13-15 MAR-CTWG Staff Assisted Visit
15 MAR-Hartford MIT Colloquium-Weather
19 APRIL-CSRRA Junior High Power Clinic
26 APR-04 May-NER Mission Aircrew School
29 APR-Wing Wide SAREX-GON
16 JUN-Tri-State SAREX (CT/RI/MA)
23AUG-Wing Wide SAREX-HFD
17-19 OCT-CTWG.NER Conference
20 SEP-Cadet Ball-USCGA (tentative)

CADET MEETING

28 January, 2014

Earhart Award Celebration

submitted by

LtCol Richard Doucette

Drill exercises were performed on the airport parking lot.

C/1stLt Tynan briefed the cadets on CAP and USAF customs and courtesies.

The main part of the meeting was devoted to an awards ceremony.

Brendon Schultz received the Amelia Earhart Award and was promoted to the grade of Cadet Captain. The award is named in honor of the female pilot, accompanied by navigator Fred Noonan, who lost her life when attempting to make the first aerial circumnavigation of the globe by a woman.



C/Capt Schultz and East Lyme Representative Ed Jutila display the citation granted by the Connecticut General Assembly.

The Amelia Earhart Award is given to cadets who have completed the first 11 achievements of the cadet program. Cadets must pass a comprehensive exam covering aerospace topics and leadership theory. In addition, they must complete staff duty responsibilities, mentor other cadets in aerospace training, pass a physical fitness exam, and lead character development discussions. Only three percent of nearly 25,000 CAP cadets nationwide earn the Amelia Earhart Award.



While Squadron Commander looks on, C/Capt Schultz is congratulated by his parents.

Schultz has been a dedicated member of our Cadet program since joining in December of 2009. He actively participates in ongoing aerospace, leadership and mentoring activities and is the current Cadet Commander for the squadron.

For a high level of performance at the 2011 Connecticut Wing Encampment at Camp Rell, Niantic, Schultz received a Commander's Commendation. In the 2013 encampment, he served as a Flight Commander.

Besides being active in CAP, Brendon is a current Sophomore at East Lyme High School, carrying a GPA of 4.0. He studies a range of subjects which include business management, civics, honors algebra, advanced placement economics and two languages, Chinese and German. His extracurricular activities include the marching band and the indoor and outdoor track teams.

Five other cadets also were promoted. Jessica Carter and Matthew Johnstone were awarded their C/CMSgt stripes. Daniel Hollingsworth, Michael Hollingsworth, and Virginia Poe all advanced to the rank of cadet senior airman.



Cadet Jessica Carter reports to receive her C/CMSgt stripes.

Maj Noniewicz and Mrs. Zimmerman, the cadet's grandmother performs the honors for Johnstone.



The Hollingworths report to Maj Noniewicz for their C/SrA insignia while Deputy Commander of Cadets Lt Ray observes.



Mrs. Poe pins on her daughter's new insignia.



Retiring senior member Constance Bourque received a bouquet and hug from Lt Ray.
(All award ceremony photos by Maj Bourque)

SENIOR MEETING

28 January, 2014

Officers attended the Earhart ceremony.

WEEKEND GROUND TRAINING

Major Roy Bourque directed a weekend training session covering emergency services ground team requirements.

Cadets Austin VanDevander, John Meers, and Matthew Johnson completed a number of required tasks.

Lts Sonia Simpson and David Meers both met the standards for a number of ground team training tasks.

Both Meers are now fully trained for the mission

participation segment of GTM3 and await the next scheduled training mission.

AEROSPACE CURRENT EVENTS

USCG-DOA Aircraft Swap

The latest congressional appropriations bill appropriates 31 million dollars to the US Coast Guard to support the 14 Alenia C-27J aircraft it will receive from the USAF. In return, the Coast Guard will return six Lockheed HC-130H Hercules to the Air Force which will upgrade the wing center boxes and install fire retardant systems before transferring them to the Department of Agriculture's Forest Service for employment as aerial firefighters.

The Coast Guard is figuring that it will save one half billion dollars in capital acquisition costs



(photo rendition: Alenia)

OK Admiral! Here's the deal. I will give you 14 of these Italian mini-Hercs for six of your Georgia built "H" model Hercs.



(photo credit: US Navy)

The Forest Service is also getting 15 Short C-23B Sherpas from the US Army. They will be used to deliver smoke jumpers and cargo to fire sites.



And to sweeten the deal for the Forest Rangers, we will throw in 15 Sherpas now stored at Ft. Sill.

The C-27Js, some of which were scheduled to be bedded with the Connecticut National Guard at Bradley were rejected by the Air Force for

financial reasons but ironically, seven of the aircraft have been transferred to the Special Operations Command.

New USN and USMC Aircraft Plagued by Systems Problems

Boeing's P-8A Poseidon and Lockheed-Martin's F-35B Lightning II are both experiencing problems with components of their computer systems.

The Poseidon, a variant on the Boeing 737, is designed for anti-submarine warfare and the intelligence, surveillance, reconnaissance (ISR) mission. The first units are now entering service but the Pentagon's weapons testing office has reported that the radar performance, sensor integration, and data transfer capabilities are not meeting standards and the aircraft is limited in its ability to accomplish its missions.



A P-8A from VP-16 makes a pass over NAS Jacksonville and an F-35B demonstrates a short take-off from the deck of the USS Wasp.

(US Navy Photos)

The USMC's Lightning II has also received a negative report from the Pentagon's weapons testing unit. The report states that seven electronic systems suffer from deficiencies. The systems include the radar, electro-optical targeting system, navigation, and helmet-mounted display system.

Problems in the development and deployment of new aircraft are not new. Successful models such as the World War II Mustang and Flying Fortress and the jet era Sabre and Phantom II all required initial upgrades before acceptance and continuing improvement during their operational careers. The teething problems of the new aircraft are compounded by the integration of complex electronic devices and circuitry into the total aircraft system.

AEROSPACE HISTORY

A PHOTO-ESSAY ON USCG AVIATION

Part IV

USCG Rotary Wing Aircraft

by

Stephen M. Rocketto, LtCol, CAP

Official Coast Guard involvement with rotary wing aircraft can be traced back as far as 1938 when Lt. Commander William Kossler served on a board evaluating experimental aircraft.

Kossler is of special interest to me since he was one of the leaders in developing competitive USCG rifle teams. My brother, Hap Rocketto discovered this while researching his history of the USCG competitive shooting programs.

Kossler led the 1931 Coast Guard team, earned the gold Distinguished Rifleman's Badge, and received a letter of commendation from Commandant Frederick C. Billard.

Billard is a noteworthy figure in Coast Guard history. He earned the Navy Cross in WW I and served three terms as Superintendent of the USCG Academy, dying in office. Billard was instrumental in improving the USCG Academy's curriculum and moving it to its present location.

Parenthetically, a private military school located on Pequot Avenue in New London, the Admiral Billard Academy, was named after Admiral Billard and operated from 1936 to around 1955. Joe Fugere, the founder of Pilgrim Airlines attended Admiral Billard Academy.

In 1935, Kossler became Coast Guard aviator #43. Five years later, as CG Chief of Aviation Engineering, Kossler pressed for the development of helicopters for military applications and rescue work. He then became USCG helicopter pilot #25 and his pioneering work led to his induction in the Coast Guard Aviation Hall of Fame.



*Commander Frank Erickson, USCG Helicopter Pilot #1.
(USCG Photo)*

*In 1941, Erickson, flying an HNS-1, demonstrates a rescue lift using Igor Sikorsky as the test subject.
(USCG Photo)*



In April of 1942, Commander W.A. Burton observed USAAF flights of the Sikorsky XR-4 and noted the possibilities of its employment in Coast Guard missions and recommended purchasing some for training and experiment.

A testing program was established involving the USCG, the Bureau of Aeronautics, the USAAF, the US Maritime Commission, the US Navy, and Great Britain. The purpose was to determine the efficacy of operating helicopters off merchant ships as convoy protection against the German U-boats.

In 1943, USAAF Sikorsky YR-4 helicopters flown by USCG aviators and USAAF and British pilots made a series of successful landings on improvised platforms installed on several merchant ships.



*Pontoon equipped YR-4 executing a deck landing on the SS Bunker Hill, a T2 tanker, in 1943.
(USCG Photo)*

The Coast Guard Air Station at Floyd Bennett Field became a helicopter training base and

supported three Sikorsky HNS-1 aircraft. Sergei Sikorsky was one of the personnel who worked there at this time developing methods for landing on a pitching and rolling ship as well as perfecting the first rescue hoist.

In 1944, Cdr. Stuart Graham, CG helicopter pilot #2,, flying a Sikorsky YR-4B, made the first helicopter take-off from and landing aboard a ship on the high seas, the British freighter *SS Daghestan*. Graham was evaluating the use of helicopters aboard merchant ships for anti-submarine warfare.



On the left Graham at the controls. On the right, the YRB-1 lashed down on an improvised flight deck on the SS Dahgestan.

(USCG Photos)

That same year, Erickson flew the first helicopter rescue mission. An explosion had occurred aboard the *USS Turner* off Sandy Hook, N.J. Sandy Hook Hospital ran out of blood plasma trying to treat over 150 injured sailors. Lashing two cases of plasma between the floats of his HNS-1 and leaving his co-pilot behind to save weight, Erickson took off from Battery Park on Manhattan Island and, in IFR conditions delivered the plasma in 14 minutes saving hours and an indeterminate number of lives.

In 1945, the hoist developed with Sergei Sikorsky's assistance at Floyd Bennett Field was used for the first real rescue mission on 29 November when a factory supplied helicopter rescued two seamen from a barge which had broken its tow off Bridgeport.



The HOS-1G, Hoverfly II was adopted in 1945.
(USCG Photo)

The rapid development of helicopter technology lead the Coast Guard to test or commission a number of different models during the next five years.

Sikorsky's S-51, designated the HO3S-1 Dragonfly, served as both a test vehicle for development of the rescue basket and guiding cutters through ice fields.



This Dragonfly in high visibility yellow is on display at the Museum of Naval Aviation, Pensacola.

The ubiquitous Bell Model 47 entered USCG service as the HTL-1 in 1947 and continued serving in three improved variants, the dash 4, 5, and 7.



A Pontoon equipped Bell with a fabric covered fuselage.
(USCG Photo)

Piasecki joined the ranks of Coast Guard suppliers when, in 1948, three HRP-1 Rescuers were procured from the Navy. Better know as the "Flying Banana," they were based at Elizabeth City, N.C.



The fabric covered fuselage of the Rescuer could house eight passengers.
(USCG Photo)

The first two years of the 1950s saw three Connecticut manufacturer's models in Coast Guard livery.

In 1950, a single Kaman HK-1 was delivered. A product of the fertile mind of Charles Kaman, a

Sikorsky engineer who founded his own company in Bloomfield, Conn., the “Mixmaster” used counter-rotating intermeshing rotor blades which eliminated the need for an anti-torque propeller on the tail.

Tested but little used, the “Mixmaster” was returned to the Navy from whence it had come.

(USCG Photo)



1959, the Coast Guard accepted the The Sikorsky S-58, known in U.S. Coast Guard parlance as the HUS-1G Seahorse. It had twice the horsepower of the HO4S but only weighed 60% more fully loaded. With droppable fuel tanks, it had a range of 550 miles, 60% greater than its predecessor. Alas, it was a dollar short and an hour late. A newer and more capable machine was on the drawing boards in Stratford and purchases were curtailed while awaiting the new craft.

Second, in 1951, the first Sikorsky S-55 was delivered to Floyd Bennett Field as an HO4S-1G and was followed by deliveries of 27 more as dash 2G and 3G variants. The aircraft has the “tug-bird” modification and could tow small craft when necessary. As a sign of the times, the unit cost of the aircraft was \$177,530! This is about 1.5 million in today's dollars. The current HH-60 Jayhawk cost about 17 million dollars per copy, indicating a one order of magnitude helicopter inflation rate.

The HO4S was known as an HSL to their brethren in the USMC and the H-19 or UH-19 Chickasaw to the US Army and USAF. (USCG Photo)



Known as the HH-34 to the land services, the HUS-1G had its 1525 HP Wright radial mounted at an angle in the nose.

A Navy UH-34D at the New England Air Museum displays its unusual engine mounting. This aircraft served with VX-6 in Antarctica.



Then, in 1952, Sikorsky delivered eight of its S-52s as the HO5S-1G. They were the first of the Sikorsky's with metal rotor blades. They were unsuitable for Coast Guard service due to the short range and limited lift capability.



The original two seat design was modified for four seats for the USMC.

(USCG Photo)

The previously acquired HO4S models also suffered from short range and lack of a useful load so an aircraft with more utility was sought. So in

Another aircraft making a 1959 appearance for the Coast Guard was the Bell HUL-1G. They were the first USCG helicopters in Alaska and they served on both cutters and icebreakers.



Their short 200 mile range and low 1,200 pound payload were no detriment to ice reconnaissance duties aboard breakers. (USCG Photo)

That more capable machine which the Coast Guard awaited to replace the Seahorse arrived in 1963. The Sikorsky S-62, an amphibious turbine powered helicopter, which is arguably the first of the modern, versatile Coast Guard rotorcraft. Ninety-nine ended up in the Coast Guard fleet and performed extraordinarily over their two and a half decades of service as the HH-52 Seaguard.



A Seaguard approached the Heavy Ice Breaker Polar Star. (USCG Photo)

Crew chief in an exposure suit preflights the Seaguard preparatory to departing Groton.



Seaguard proponents claim that it has rescued more people than any other aircraft. In 1965, 1200 people were airlifted to safety after Hurricane Betty hit New Orleans.

When the 210 foot cutters, equipped with flight decks, entered service, the safety methods for landing a securing helicopters were validated and shipboard operations were standardized.



The cutter Reliance, seen here on patrol on the Thames during a Presidential visit to the USCGA graduation, was the test ship for the helicopter tests.

In 1977, the Coast Guard started to plan for a new short range SAR helicopter to replace the Seaguards. In the past, all of their rotorcraft had been adopted from a design used by another service. For the first time, the USCG ordered a machine unique to their organization and of foreign manufacture.

The French Aérospatiale, HH-65A Dolphin is powered by a single turbine and used a unique fenestron tail rotor design. The anti-torque rotor is housed in a shielding which protects ground personnel from blade strikes, increases propeller efficiency, and reduces noise. Just over 100 were purchased and the first were commissioned in 1984.

This MH-65D, on the Groton ramp, is the HH-65 with an upgraded navigational system. She is based at Atlantic City.



The MH-65C is an armed helicopter used to patrol the National Capital Region Air Defense Identification Zone and pursue drug smugglers. It is armed with the 7.62 mm M240 squad machine gun and a Barrett M107 rifle which fires the .50 BMG round.

The Coast Guard also needed a helicopter for the medium range SAR mission. This led to the adoption, in 1968, of a version of the Sikorsky S-61, a twin turbine, amphibious helicopter capable of inflight refueling which became the HH-3F Pelican. Forty Pelicans were purchased.

Twenty years after the first Pelicans arrived, the Coast Guard acquired some Sikorsky CH-3E helicopters from the USAF. These had been used to resupply the Texas Tower radar stations which the Air Force had constructed off the northeast coast of the United States. These Air Force machines are better known as the "Jolly Green Giants" which were noted for combat search and rescue in Vietnam.



Coast Guard Pelicans were occasionally seen at Groton during the 1970s.

In 1990, the Pelican began to be replaced by another Sikorsky design, the S-70. As an Army aircraft, the plane is generally known as the Blackhawk but the Coast Guard version more closely resembles the Navy's SH-60 Seahawk series. It is a medium range SAR aircraft with twin turbines similar to the Pelican but lacks the amphibious hull.

The testing and evaluation took place at the US Navy Test Facility, Patuxent River, Md. and a year later, the first Jayhawk was deployed to CGAS Mobile, Ala. While in service, they have accumulated an amazing record, not only in SAR but also in law enforcement, environmental protection, and homeland security missions.

The MH-60T conversion includes an avionics upgrade and a weapons package.

A rescue of local interest performed by the Jayhawk occurred on 29 October, 2012. The sailing ship *Bounty*, a replica of Captain Bligh's HMAV *Bounty*, had departed New London four days earlier bound for St. Petersburg, Fla. She ran into Hurricane Sandy and foundered off the Carolina coast. Jayhawks managed to pluck 14 of the crew of 16 from life rafts but two who were washed overboard were lost. One was the master, Capt. Robin Walbridge. The other was Claudene Christian who claimed to be a descendent of the mutineer, Fletcher Christian.



A Jayhawk and a 41 foot utility craft practice rescue coordination off Avery Point.

Survivor-Eye View of Jayhawk.



The ongoing issues involving law enforcement and homeland security have pushed Coast Guard experimentation into avenues far removed from the well-known assistance to those in peril on the sea.

Between 1998 and 2000, the USCG's Helicopter Tactical Interdiction Squadron (HTIS) flew the McDonnell-Douglas MH-90 Enforcer, a version of the MD 900 and 902 which they leased. When the HTIS concept was found to be practicable, bidding for a new aircraft was won by Agusta-Westland who contracted to supply the eight Model 109E which received the USCG designation MH-68A Stingray. The ships carried the M240 machine gun, M14 rifles, and a Barrett 50 caliber rifle. In 2008, the contract expired and the mission was undertaken by the Sikorsky MH-65C referred to in the Jayhawk section of this article.



MH-90 Enforcer (USCG Photo)



MH-68 Stingray (USCG Photo)

This concludes our four part photo-essay on 98 years of USCG aviation history. One facet of aviation, not covered, is the increasing use of unmanned aerial vehicles by the Coast Guard. This topic will be reserved for some future edition.