

Missions for America
Semper vigilans!
Semper volans!



The Coastwatcher

Weekly Magazine 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/A1C Virginia Poe, Cub Reporter
Lt David Meers & Maj Roy Bourque, Papparazis

Vol. VIII, No. 02 15 January, 2014

SCHEDULE OF COMING EVENTS

19 JAN-Cadet PT-US Submarine Base
21 JAN-TRCS Meeting
28 JAN-TRCS Meeting

22 FEB-CTWG SAREX-HFD
26 APR-CTWG SAREX-GON
16-21 JUN-Tri-State SAREX
23 AUG-CTWG SAREX-HFD

CADET MEETING

14 January, 2014
C/A1C Virginia Poe

C/CMSgt Carter explained classroom etiquette, customs, and courtesies.

C/2dLt Tynan and C/CMSgt Trotochaud conducted and inspection.

C/CMSgt Ray announced that a contest will be held to design the new CTWG patch. The Squadron will vote on a design at the 25 February meeting.

Maj Wojtuck conducted a character development lesson on setting priorities and goals.

C./CMSgt Trotochaud taught a lesson on making ethical decisions.

SENIOR MEETING

14 January, 2014

Capt Scott Farley briefed the Squadron on the new procedures for Skills Evaluator Trainers and senior members who wish to become qualified in a new emergency services specialty.

Basically, the Specialty Qualification Training Record is a five part document. Each section must be completed in order. The first section are the pre-requisites and this is followed by the squadron commander noting that the pre-requisites have been met and approval to proceed has been given. The next three sections: familiarization and preparation, advanced tasks, and training missions follow.

Each of the line items must be signed off by the accredited skills evaluator, dated, and in some cases, additional information supplied. The importance of following these procedures was emphasized.

INFRASTRUCTURE PROJECTS



Maj Noniewicz spent several hours Sunday last replacing the external light on the northeast edge of the senior trailer.

When he entered the supply trailer, he found that the roof had leaked and a number of tiles had disintegrated. The roof will need repair and the tiles replaced once warmer weather allows tarring.

Additionally, the supply trailer could use some metal shelving. If any squadron member has some which can be donated, it would be appreciated.

AEROSPACE CURRENT EVENTS

Economic Forces Drive Aircraft Buying Spree

Over 8,000 airliners have been ordered over the past five years driven by economic necessity. Reports indicate that 24 aircraft are produced each week and Airbus has just announced that it is considering an increase in production of the A320 and it will take eight years to fulfill all of its present orders.



Low cost carrier JetBlue operates around 140 A320-200s and expects to receive around 70 of the new A321neo aircraft in about two years.

High fuel and maintenance costs and low interests rates are the primary driving forces in the buying spree. However, the addition of amenities, often on a fee basis, is another factor fostering the demand for new aircraft.

Fuel prices over the last decade have increased by almost four times and the airlines in the United States spend \$50 billion dollars a year to feed the engines. A three percent savings, which is in accord with recent promises by the airframe and engine manufacturers of the new aircraft would save 1.5 billion dollars per year. This amount of money could purchase about 165 new Boeing 737-900ER aircraft per year!



United Airlines depiction of its new 737-900ER



Over 1,000 757s have been built. United has 54 in their fleet.

A trend has developed to replace larger aircraft with smaller ones. Boeing 757-300 can carry around 250 passengers 3,500 miles. The new 737-900ER, the main competitor to the Airbus 320, carries about 200 passengers over a 3,200 mile range. The decrease in performance is more than off-set by three factors. First, the 737 will use about 15% less fuel per passenger than the 757 and second, the engines have twice the time between major overhauls, and finally, the initial general upkeep costs, interior, paint, airframe parts replacement, will be less for the brand new models.

However, the buying frenzy is also being fueled by the need for more aircraft to supply the airlines in southwest Asia and the far east. As the economies of India, China, and the countries between improve, a growing middle class demands increased air transport.

All of this is good news for the companies which produce airframes, engines, and their supply chain as well as the communities which they support.

AEROSPACE HISTORY

A PHOTO-ESSAY ON USCG AVIATION

Part II

USCG Fixed Wing Aircraft: World War II

World War Two led to an expanded role for Coast Guard aviation. In accord with law, the Coast Guard was transferred from the Treasury Department to the Navy Department. Its roles still included the former law enforcement and normal

search and rescue responsibilities but Coast Guardsmen found themselves on anti-submarine patrols, crewing transports ships and landing craft, providing convoy escorts, and engaging in combat search and rescue.

Coast Guardsmen made notable contributions. On the water, Signalman 1st Class Douglas Munro won a posthumous Medal of Honor for his courage in leading a force which evacuated trapped US Marines during the Guadalcanal campaign.

The USCG also served on land running beach patrols. In 1942, Germany launched *Case Pastorius*. U-202 landed four German saboteurs on Amagansett Beach, Long Island, a scant 30 miles from New London, an unarmed "sand pounder," CG Seaman Second Class John C. Cullen spotted them and raised the alarm. All four were subsequently captured as well as four cohorts who had landed near Vero Beach, Florida. Six of the eight were executed and the two who cooperated were deported at the end of the war.

Greenland, a Danish colony became a protectorate of the United States after Germany occupied Denmark. Greenland's location made it vitally important as base for convoy protection and weather reporting. It also was a source of cryolite, an aluminum ore.

The Coast Guard assisted the Danes in the formation of the Northeast Greenland Sledge Patrol which was instrumental in disrupting German plans to establish weather stations. The Coast Guard also participated in a number of

missions which captured and destroyed the stations and captured the personnel. A German weather ship was also captured by the *USCGC Eastwind* and temporarily taken into Coast Guard service as the *Eastbreeze*. Sailed to Boston and turned over to the Navy which commissioned her as the *USS Callao*.



*USCGC Eastwind
Note the Duck
stowed amidship
behind the
aircraft handling
crane.*

USCG air assets played an important role in these operations and in the search for and the rescue of downed US airmen who crash landed on the icecap.

VP-6 (CG) was stationed at the somewhat notorious Blue West One (BW-1), Narsarsuaq, Greenland and charged with ASW, SAR, ice patrols, and mail and supply delivery to bases and isolated outposts.



Coast guardsmen maintaining Catalinas under harsh conditions in Greenland.

But USCG aviation was most heavily engaged in the Battle of the Atlantic, on the US Sea Frontiers and in the Caribbean and Pacific and they utilized a wide range of aircraft for its specialized missions.

The first full year of US participation in World War II saw the introduction of three types of sea compatible aircraft into Coast Guard service: the Consolidated PBY Catalina, and the Vought OS2U

Kingfisher.

The Kingfisher was built by the Vought-Sikorsky Division of United Aircraft in Stratford, Connecticut. Rex Biesel, the man ultimately responsible for the famous Corsair was its designer.



An armed Kingfisher is moored at Biloxi CGAS.

The Coast Guard flew around fifty of the OS2U-3 models which included some of the similar OS2N-1s manufactured by the Naval Aircraft Factory. Their primary function was to fly six hour anti-submarine patrols (ASW) on the Eastern Sea Frontier with small contingents assigned to the Gulf of Mexico and San Francisco. They were also involved in a number of rescues of the survivors of torpedoed ships.

The Consolidated PBY was designed by Isaac Laddon who also created the B-24 Liberator. The PBY is arguably the greatest WW II maritime patrol aircraft of all times and was produced in greater number than any other of its type.



A PBY flying over Traverse City CGAB.

The USCG aircraft were all amphibious and carried the -5A or -6a suffix. Some notable features were its retractable floats which, when retracted, formed the wingtips and a flight engineer stationed in the strut which carried the parasol wing.

As air-sea rescue aircraft, they were known as “dumbos” and were highly successful in that mission. The Air Force used them and designated them as the OA-10

Training pilots for the expanding Coast Guard air fleet was of paramount importance. Coast Guard and USMC aviator candidates joined US Navy officers at Pensacola. However, in 1942, the Coast Guard did procure two Vultee SNV-1 aircraft as utility aircraft and for instrument training.



Known in the Army Air Force as the BT-13A Valiant, they were more popularly called the “Vultee Vibrator.”

Six more types entered the list in 1943, a record year. Two transport types were acquired: the legendary Douglas R4D Skytrain and the lesser known Curtiss R5C Commando.

Eight Douglas hand-me down R4Ds were transferred from the Navy and placed on cargo and passenger transport duty. The R4D was the commercial DC-3, the first plane that could economically fly passengers without an airmail subsidy. The Air Force flew the aircraft as the C-47 Skytrain. The British knew it as the Dakota (DACOTA for Douglas Aircraft Company Transport Aircraft).



A R4D carries the wide yellow band just forward of the empennage marking it as an air-sea rescue craft.

The Commandos were based at the Elizabeth City Aircraft Repair and Supply Center and provided logistics support.



The Curtiss Commando served in all theaters of World War II and is noted for its service flying the "Hump" supply route from India to China.

A basic trainer was added. The Boeing subsidiary, Stearman, provided 11 N2S-3 open cockpit biplanes, better known as the Pt-17.



A Kaydet at an airshow carries USCG markings.
(photo: timephotworks.wordpress.com)

Beech Aircraft supplied seven of their Model 18s known to the sea services as the SNB and to the Army as the C-45. They carried out varied tasks:

flight cargo hauling, proficiency flying, courier duty, and, in one case, supported the US Coast and Geodetic Survey mapping harbors.



The ubiquitous SNB, oft referred to as the "secret navy bomber," seated on the tarmac at Elizabeth City.

A large flying boat also found a home in the Coast Guard. Martin's Middle River plant turned out 27 PBM-3s for the USCG and a year later, a supplement of 4 -5 models. Their most common task was air-sea rescue.



A Martin PBM Mariner exhibits a jet assisted takeoff (JATO).

Curtiss produced the SO3C Seamew as a replacement for the SOC Seagull. Most often seen with a center float, it could be converted to a land configuration. The intention was to supply a scout-observation plane which could carry an external weapons load.

Alas, its general shape bode ill. It has an unfortunate resemblance to the Curtiss SB2C Helldiver, a plane fraught with stability and weight problems and shared those problems.



SO3C-3 Seamew mounted on wheels.



PB2Y Coronado

Note the retractable wing tip floats.

Only about three dozen were produced and some of them were, ironically, replaced in service by the SOC, the aircraft which they were built to replace!

1944 saw two of the largest, up to that time, aircraft acquired. Consolidated supplied the “red-headed stepsister” of Boeing's glamorous Flying Fortress. The PB4Y-1 Liberator (B-24 and later the P4Y-1)) had a longer range, could carry a larger bomb load, and was built in far greater numbers than the B-17 but like comedian Rodney Dangerfield, “got no respect.”

In contrast with the two behemoths previously mentioned, two GH-2s and a single GH-3 Nightingale. The aircraft were “impressed” from civilian ownership and were offsprings of Benny Howard's DGA (“Damn Good Airplane”) series. One of the antecedent brother aircraft, “Mr. Mulligan,” won the Bendix Trophy Race in 1934



A brace of Liberators on long range patrol.



The last of the class of 1944 aircraft which needs

mentioning is none other than the Curtiss SB2C Helldiver. Percy does not mention the Helldiver in his fine work on Coast Guard aviation but there is a record of the Coast Guard acquiring at least one and testing it. The Helldiver, known as “the Beast” or more profanely, “Son-of-a-bitch Second Class” was not a popular aircraft and failed to replace the stolid Douglas SBD Dauntless in the affection of the dive bomber community.

The five Coast Guard Liberators long range made them very useful for long overwater searches. The US Navy and RAF Coastal Command used them in the Atlantic to close the Mid-Atlantic Gap. The “Gap” was a portion of the North Atlantic out of reach of most aircraft so convoy protection was lost. The B-24 filled in “the Gap” and deserves no little credit for its role in winning the longest and one of the most vital campaigns of WWII, the Battle of the Atlantic.



The Curtiss Helldiver

The second large aircraft was a flying boat, also from Consolidated, the PB2y Coronado. The Coast Guard flew two of them, equipped with low altitude engines, searching for castaways and hunting the U-boat.

The last year of the war, 1945, two large aircraft and one advanced trainer appeared on Coast Guard ramps.

Boeing's B-17G joined the "Coasties" as the PB-1G. The chin turret was replaced by a surface searching radar and some of the planes could carry a 27 foot, 3,300 pound powered life boat which was outfitted with supplies for 12 men for 20 days! The boat was built by Higgins, the innovative developer of landing craft, and could be supplied in several different sizes.



A PB-1G bearing a Higgins air droppable life boat.

The Douglas DC-4 had been produced as the C-54 for the USAAF and adopted by the Navy and Coast Guard as the R5D Skymaster. They multi-tasked as transports, SAR craft, LORAN calibration, and on International Ice Patrol surveys.



An R5D-4 passes an iceberg while on International Ice Patrol duty. Recall that 90% of that berg is underwater!

A scion of the Liberator, the Consolidated PB4Y-2 Privateer appeared also. The Privateer had an extended fuselage and a large single tail, salient differences with its antecedent. It had superior long range abilities and the Coast Guard models eliminated the bow and waist turrets and replaced them with large observer ports.



Many Privateers ended up as water bombers for aerial fire fighting outfits such as Hawkins & Powers in Greybull, Wyoming.

The Coast Guard also received, on loan from the Navy, 15 copies of the ubiquitous North American SNJ Texan. Since Coast Guard aviators were going to Pensacola for flight training, these aircraft were distributed among six different Coast Guard stations and found work as instrument trainers, courier aircraft, and station hacks.



Ground crew position a Texan.

The Coast Guard also experimented with a North American B-25 Mitchell using the Navy designation PBJ.



The PBJ is the only US warplane named after a human being, "Billy" Mitchell," and early advocate of airpower.

All Photos in this article are Courtesy of USCG)

The next edition of The Coastwatcher will carry Part III-USCG Fix Wing Aircraft: Post World War II and the dominance of turbine power plants.

Much of this information in the article was drawn from three sources. The first is Arthur Percy's comprehensive volume, U.S. Coast Guard Aircraft since 1916, published by Airlife in 1991. The second is the US Coast Guard website, <http://www.uscg.mil/history/aviationindex.asp>. The third is the website of the USCG Pterodactyls: <http://uscgaviationhistory.aoptero.org/>