



*Missions for America
Semper vigilans
Semper volans!*

*Publication of the Thames River Composite
Squadron
Connecticut Wing
300 Tower Rd., Groton, CT
Civil Air Patrol
<http://ct075.org>*

*Lt Col Stephen Rocketto Editor
Lt David Pineau, Publisher
Maj Roy Bourque, Paparazzo
Lt Joanne Richards, PAO
2dLt Stephen Buchko, Cadet AEO
C/Amn Lucas Dellacono, Cadet PAO
Capt Edward Miller, Features
Maj Scott Farley, Roving Correspondent*

Issue 16.45

29 November 2022

06 DEC-TRCS Staff Meeting
10 DEC-Commander's Cup-Durham
13 DEC-TRCS Meeting
20 DEC-TRCS Meeting
27 DEC-No Meeting
03 JAN-TBA
10 JAN-TRCS Staff Meeting

SENIOR MEETING

29 November, 2022

Submitted By

Capt Adam Sprecece and Capt Jason Otrin

Senior members reviewed upcoming events including the upcoming SAREX on Urban Direction Finding on Saturday 12/3 and the Ice Patrol briefing for aircrew on Thursday, 12/8 at 1900.

Capt Sprecece asked members to review the ribbon spreadsheet posted near the front door and verify they are in possession of the ribbons listed. He will also email the document.

1st Lt Pineau briefed the seniors on incorporating risk management in CAP operations, specifically all the factors that must be considered. Examples included awareness of crew experience and mission complexity, the difference between training events and real-world operational missions and the constant monitoring of the changing environment and how it affects risk.

Lt Pineau then presented a video on Crew Resource Management (CRM) which discussed the history of CRM. A large number of aviation accidents in the 1970s involved professional flight crews. NASA played an important role by bringing together psychologists, analysts and representatives from all parts of the aviation industry to build CRM models. They also started in-depth analysis of aviation accidents to learn lessons and improve CRM procedures. Following the video, members discussed ways we could improve our CRM through training scenarios.

The meeting concluded with Capt Sprecece demonstrating a dance routine made famous by Fred Astaire and Ginger Rogers leaving the readers with the question of who played Ginger.

CADET MEETING

29 November, 2022

Leadership activities were held.

ACHIEVEMENTS AND TRAINING

Capt Otrin qualified as a UAS (Unmanned Aircraft System) Mission Pilot this weekend. He and Capt Spreace, a UAS Technician, are the squadron's first qualified UAS team.

Lt Col Rocketto completed a training seminar with the Bradley Flight Standards District Office to renew his status as an FAA SafetyTeam Service Provider.

AEROSPACE HISTORY

30 November, 1939 – The Soviet Union, breaking three non-aggression pacts launch air raids on Helsinki and Viipuri, Finland marking the outbreak of the Winter War. The first wave of the attack consisted of six SB-2 bomber which targeted the railroad station and the airport. Two other waves followed killing and maiming civilians and destroying buildings.



The Tupolev ANT-40, service designation SB-2 was an obsolescent high speed bomber mauled by Finnish AA and fighter opposition.

Soviet Foreign Minister Vyacheslav Molotov responded to international criticism by claiming that they were not bombing Finnish cities but dropping humanitarian aid to the starving Finns. The Finns sarcastically call them “Molotov bread baskets” and will eventually respond with “Molotov Cocktails.”

01 December, 1941– The Civil Air Patrol is

created by Fiorello La Guardia, QB 03908, Mayor of New York City and Director of the Office of Civilian Defense, with the signing of Administrative Order 9.

December 1, 1941

Administrative Order No.9

Establishing Civil Air Patrol

By virtue of the authority vested in me through my appointment as United States Director of the Office of Civilian Defense through the Executive Order of the President crating said Office, dated May 20, 1941.

I have caused to be created and organized a branch of this Office of volunteers for the purpose of enlisting and training personnel to aid in the national defense of the United States, designated as the Civil Air Patrol.

In conformity with said organization, Major GeneralJon F. Curry, US. Army Air Corps has been assigned to this office by the U.S. Army and designated by me as its National Commander. Said organization shall be formed as outlined in the attached chart, which is made a part of this Order as if written herein in full. The Civil Air Patrol shall carry out such Orders and directives as are issued to it by the Director of Civilian Defense. It shall be the duty and responsibility of the National Commander to see that the objectives and purposes and orders issued in conformity with the policy of this office are carried out and that all activities are reported regularly to the Director through the Aviation Aide.

All enlistments and appointments in the Civil Air Patrol may be disapproved by the Director of the Office of Civilian Defense.

F.H. LaGuardia, U.S. Director of Civilian Defense

02 December, 1937 – First flight of the Brewster F2A Buffalo. The Buffalo was chosen to be the first USN monoplane fighter, beating out Grumman's Model G-16, the XF4F-1, a biplane designed abandoned but which re-emerged as the XF4F-2 Wildcat.

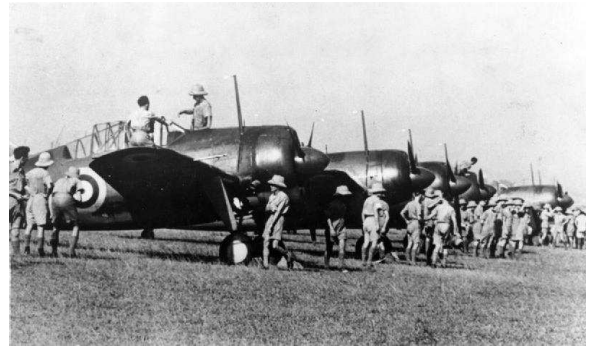


One of the prototype Buffalos.

It was somewhat underpowered and eventually overweight but the obsolescent design was accepted as war clouds loomed. Most accepted into U.S. service ended up with the Marines or as trainers. However, the desperate European nations were quick to purchase it and the RAF, Finnish Air Force and the Royal Netherlands East Indies Air Force (RNEIAF) employed them Against the Japanese, the Brits and Dutch took a beating. The Marines fared no better at Midway.



Around 1969, the Editor was in the Fiji Islands where he lifted a few brews with an Australian copra planter who had flown the Buffalo at Singapore. His told of several times shot down and glad to make it back whole to “down under” when Singapore fell. The RNEIAF fared no better. It was a different story in Finland.



British Buffalos at Singapore

The Finn twice took on the Soviet Union, once alone and once allied with Germany, the Winter War (1939-40) and the Continuation War (1941-44). Massive Soviet force resulted in massive Soviet casualties with the Finns maintaining a modicum of independence by the end of World War II.

The Finnish Air Force fought a defensive war, doing their best to protect cities by obtaining air superiority over Finnish territory and interdicting Soviet supply lines. Details of the scope of the combat is beyond the scale of this article. Suffice to say, the order of battle at the start of the Winter war was an estimated Soviet fighter force of 700 aircraft versus 46 Finn fighters. The Continuation War saw the Finns acquiring a potpourri of fighters, about 500 aircraft, 44 of which were Buffalos, but still grossly outnumbered by the Soviets.

Buffalos were well liked, fought well and had a 32:1 kill ratio. They used superior tactics and modified the Buffalos to get the maximum amount of performance from them. Thirteen Finnish pilots scored enough kills in just Buffalos to become aces.



Ski equipped Finnish Buffalo

So some might say it was the worst fighter of World War II but they malign the aircraft unfairly. It was obsolescent when it entered the war and had to fight Zeros and Me-109s, the best the Axis had at the time. Under the right conditions, the Buffalo held its own.

03 December, 1945 – Aboard *HMS Ocean (R68)*, a de Havilland Mk5 Sea Vampire became the first pure jet aircraft to take off and land from an aircraft carrier.

The aircraft, LZ551, was the second prototype DH.100 Vampire modified for carrier operations and re-named Sea Vampire.



(Credits: Imperial War Museum)



The pilot was Eric “Winkle” Brown, arguably the greatest test pilot in history. He has over 2,000 carrier take-offs and over 2,000 landing, a record that will probably never be beaten. His log book

shows that he has flown 487 basic types of aircraft.

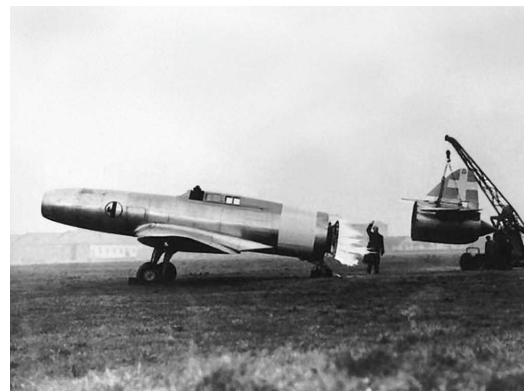
04 December, 1941 – Noted test pilot Mario de Bernardi and flight engineer Giovanni Pedace fly mail from Milan to Guidonia Montecelio, Italy in a Caproni Campine CC.2 motor jet. It is the first time mail is transported by a jet aircraft.



The aircraft is listed as a motor jet. The turbines which compress the gases are driven by a piston engine mounted below the cockpit, an unfortunate location. Temperatures get so high that the aircraft had to be flown with the canopy open.



Open canopy created excessive drag and effected speed excessively.



Test with aft fuselage removed.

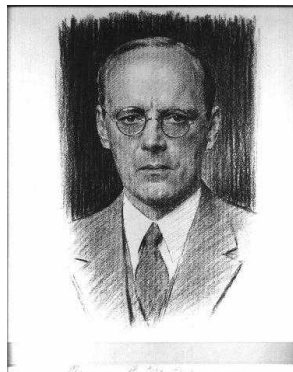
De Bernardi is one of the luminaries of Italian aviation. A World War I , he achieved fame as a racing pilot, winning the Schneider Cup and setting a number of speed records. In 1931, he won the World Aerobatic Championship in Cleveland. HSThe man died a pilot' death. While demonstrating the M.d.B 02 Aero Scooter at an air show, he suffered a heart attack while in flight. but landed safely and died minutes after!

05 December , 1941 – *USS Lexington (CV 2)* departs Pearl Harbor ferrying Marine aircraft to Midway. A week earlier, *USS Enterprise (CV6)* sailed from Pearl taking Marine aircraft to Wake Island. Consequently, no carriers would be moored in Pearl Harbor on December 7, 1941.



The “Lady Lex” deck is spotted with Brewster Buffalos forward, Douglas Avengers mid-deck and Douglas Devastators aft. (Credit: USN)

06 December, 1928– North American Aviation Inc. was founded by Clement Keys.



NAA was a holding company with many interlocking interests: Curtiss, Transcontinental Air Transport, General Motors, Fokker, and Sperry Gyroscope. The Air Mail Act of 1934 forced the holding companies to split up their manufacturing interests and airline interests. North American became autonomous and produced a celebrated line of products which include the T-6 Texan, B-25 Mitchell, P-51 Mustang, F-86 Sabre, X-15, the Apollo Command Module and the Space Shuttle Orbiter. In 1967, NAA merged with Rockwell Standard and renamed North American Rockwell

07 December-1942 – Robert M. Stanley made the first flight of the P-63 Kingcobra a year to the day after the Pearl Harbor attack.

Stanley was Bell's Chief Test Pilot, a Cal Tech engineering graduate and Navy trained was an inventor, designer and the first American to fly a jet aircraft, the Bell P-59.



XP-63-One of the first prototypes.

It was to be the last fixed wing piston engine airplane designed and built by Bell. Unfortunately it was optimized as a short range high altitude interceptor and entered quantity production when USAAF fighter doctrine was switching to the long range escort and ground support mission as carried out by the P-51 Mustang and P-47 Thunderbolt.

The Kingcobra never found a combat role with the Army Air Force but the Soviets welcomed it with open arms. Some 73% of the 3,303 produced ended up flying on in the Soviet Union.



Russian bound Kingcobras await ferry pilots at Bell's Buffalo factory.

A 1943 agreement stated that the bulk of them would be deployed for future actions against Japan but this agreement was not fully observed. However, it is clear that they were employed in combat when the Soviets commenced hostilities against Japan. As late as 1950, the Kingcobra was still part of the Soviet inventory and given the NATO code name "Fred." The French also used the P-63 in the First Indochina War supporting ground operations.

A number of interesting variants of the Kingcobra were developed. The "Pinball" was used to train gunners. Equipped with 109 Sperry built devices which counted hits and, like Rudolph, lit a red bulb in the nose with each hit, the "Pinball" was actually shot at by gunners using .30 caliber frangible bullets. The bullets were made from a composition of bakelite and powdered lead. The pilot and vital engine components were protected by aluminum armor. Some 300, mostly RP-63G models were built.



RP-63C Pinball (Credit: USAFM)

Bob Stanley conceived of the idea of a V-tail in the 1930s and built a high performance record-setting sailplane called Nomad. Believing that the configuration would reduce weight and drag. Tests indicated that no appreciable performance benefits were gained and the idea was dropped.



XP-63N

At war's end, swept wing research was conducted using a modified Kingcobra originally designated XP-63N but changed by the Navy sponsors to L-39. Two were constructed. A ventral fin provided to improve directional stability.



L-39 (Credit U.S. Navy)

A wide range of tests were carried out to determine lift and stall characteristics with different wing slat configurations. One of the aircraft was used by Bell to study the best swept wing design for the Air Force Bell X-2 Starbuster rocket plane.

The Kingcobra became a steed for racing pilots. Slick Goodlin, Jack Frost and Jack Woolams led the pack converting the P-39 Airacobra with some success. Soon a number of pilots turned to the Kingcobra and a number of variations appeared on the closed circuit Thompson Trophy and Bendix cross-country races. Wings were clipped, engines souped up or swapped and a wide variety of aerodynamic tuning was tried. They were not notably successful



P-63C, Flying Red Horse



Lucky Jack, a P-63C, crashed at the 1947 Cleveland races after the pilot bailed out. (Credit: San Diego Air and Space Museum)



RP-63C at Oshkosh, 1974 (Credit: RuthAS)



P-63C Tucker Special also carried the Flying Red Horse name.

The Kingcobra was Bell's last gasp as a successful producer of fixed wing propeller driven aircraft. Their XP-77 was an attempt to build a lightweight fighter out of non-strategic materials but only two were built.

The age of jet propulsion heralded in new opportunities. The P-59 Airacomet was America's first jet fighter but it lost the contract to Lockheed's P-80 Shooting Star and only 66 were built.



Airacomet and Kingcobra share airspace. (Credit: USAF)

Most famous was the X-1 series of rocket planes, X-1, X-1A, X-1B, X-1C, X-1D, and X-1E and the X-2 Starbaster whose swept wing design was first envisioned on the L-39.

Today, the Bell is a Textron company and firmly established producing helicopters, both military and civilian.