

*Missions for America  
Semper vigilans!*



*Semper volans!*

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03 JUN-NCO Academy  
04 JUL-Groton Independence Day Parade  
13-16 JUL-North Stonington Fair  
29 JUL-06 Aug-CTWG Encampment  
19 AUG-Connecticut Aviation Day-GON  
09 SEP-Touch-A-Truck-East Lyme  
15-17 SEP-CTWG Conference  
23 SEP-Scarecrow Festival-Preston

## **CADET MEETINGS**

*09 May, 2023*

*submitted by*

*C/SrA Adam Balfour, Cadet Ass't PAO Officer*

C/1stLt Fago delivered a safety brief on cold weather injuries. The briefing included dangers such as hypothermia, frostbite, non-freezing injuries, chilblains, and trench foot. He discussed ways to avoid these dangers.

Capt. Schmidt went over the Cadet Wingman Course. This included an activity called, "Stick in the Middle." Cadets were partnered up and had to both hold onto a stick while one partner is blindfolded. The other partner must guide the blind partner to safety without hitting any object in the room. This activity showcased trust and leadership. To end the Wingman Course, cadets watched a scene of Batman and the story of the Pardo Push, both of which demonstrated, integrity, volunteer service, excellence and respect.

*16 May, 2023*

*No Report*

*23 May, 2023*

**Eaker and Mitchell Promotion Ceremonies**

*30 May, 2023*

Drill practice emphasized flank movements and spacing.

C/2dLt Stephen Buchko presented an aerospace briefing on the Boeing-Sikorsky RAH-66 Comanche helicopter.

This was followed by an aerospace lesson conducted by C/LtCol Bosse on reading sectional charts.

## **SENIOR MEETINGS**

Capt Spreccace moderated a short meeting. Air crews were reminded about the LISP briefing on Wednesday evening.

*09 & 16 May, 2023*

No Reports

*23 May, 2023*

No Meeting

*30 May, 2023*

No Meeting

## **PROMOTIONS**

Cadet Adam Bosse received the General Ira C. Eaker Award and was promoted to Cadet Lieutenant Colonel.

The award honors General Eaker who not only pioneered aerial refueling but commanded the 8<sup>th</sup> Air Force in World War II and initiated the American strategic bombing campaign against Nazi Germany.

C/LtCol Bosse has earned his private pilot certificate and is the only cadet in the CTWG to qualify as a small unmanned air systems technician. He also holds qualifications as a mission radio operator, flight line marshaller, and ground team member. His decorations include the CAP Achievement Award, the CTWG Commander's Commendation Award and the Crisis Service Award.

Cadet Aneise Mazzulli received the Amelia Earhart Award and was promoted to Cadet Captain.

The Earhart Award honors Amelia Earhart who set numerous flight records and was the first woman to make a solo flight across the Atlantic Ocean.

C/Capt Mazzulli has earned both the Crisis Service Award and the CAP Achievement Award.



*C/LtCol Bosse and C/Capt Mazzulli are flanked by TRCS Deputy Commander Capt Adam Spreccace and CTWG Commander Col Matthew Valleau.*

## **MISSIONS & ACTIVITIES**

*submitted by  
Maj Scott Farley*

*Proficiency Flight  
Wednesday, May 10*

Maj Farley, Mission Pilot, and David Kania, Commander, Meriden Squadron, Mission Observer conducted a CAP proficiency flight, Profile #4 which requires the planning and flight of at least three navigational legs and includes five different types of take off and landings (e.g., short field, soft field, simulated forced take-off/landings, etc.). The overall objective is to support continued pilot/aircrew proficiency and maintain familiarity with airfields in the area of operation for any given Wing.

After the mission Farley and Kania were able to visit the Groton Control Tower on the field at Groton. They were welcomed by Tower Manager, Mr. Chet Moore who is always willing to allow visits and explain the air traffic control services available.

*Orientation Flight  
May 24, 2023*

Cadet Aubrietta Gudbrandsen who joined the Thames River Composite Squadron in late April, 2023 received her first Cadet Orientation flight. The Canadian wildfires created some haze but other than that flight conditions were excellent.



Gudbrandsen took the controls and experienced the three dimensional aspect of aircraft flight. As an added bonus, they managed to locate the Gudbrandsen house not always an easy thing to do for first time flyers.

*Rifle Safety and Marksmanship Training  
27 May, 2023*

Eight cadets from Thames River Composite Squadron and the Danielson Cadet Squadron attended the third CTWG Rifle Safety and Marksmanship Training held this year. All of the cadets qualified for marksmanship medals.

Cadets Adam Balfour, Tiger Bland, Aubrietta Gudbrandsen and Braedon Larson all met the standards for the Marksmanship Award.

Cadets Thelma Grogan and Anthony Stefanelli from TRCS and Anthony Detoro and Cole Smat from Danielson qualified as Pro-Marksman.



*Coach Logan Gurchik, Grasso Tech Rifle Team assists Cadet Gudbrandsen.*

*Niantic Memorial Day Parade  
submitted by  
2dLt Joanne Richards*

Cadets Larson and Watkins carried our banner and Cadets Danner, Knets, Fago and Grogan acted as color guard for the Niantic Memorial Day parade. Seniors Richards, Thornell and Larson provided support.

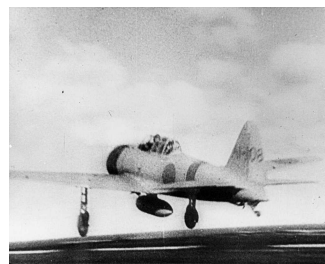


**FEATURE ARTICLE**

*Allied Reporting Names for Japanese Aircraft*

During World War II, a somewhat analogous system was used by the Allies to designate Japanese aircraft. Initially, fighters were given boy's names and all other aircraft were assigned girl's names. Later, the system was refined and training aircraft were named after trees, transports were given girl's names beginning with the letter "T" and bird names were applied to gliders.

*Zero, Zeke, Rufe and Hamp*



*A6M2 departs IJN Akagi bound for Pearl Harbor. (Credit: USN History and Heritage Command)*

The system was originated by Capt. Frank T. McCoy who was assigned to the Allied Technical Air Intelligence Unit in Australia. A Nashville native, he used some "hillbilly" names so Zeke

was the appellation given to the Mitsubishi A6M.

“Zero” was, in Japanese, Navy Type 0 carrier fighter (零式艦上戦闘機, rei-shiki-kanjō-sentōki), or the Mitsubishi A6M *Reisen*. Its pilots called it the Reisen (零戦, zero fighter). The “Zero” is from the designation *Reisen* since it entered service in the Imperial year 2600 (Gregorian Year 1940)

Interestingly, two variants of the Zero received different names later. The Nakajima A6M2-N, Navy Type 2 Interceptor/Fighter-Bomber floatplane version was named Rufe and the A6M3-32 version was called Hap until Hap Arnold objected and it was renamed Hamp.

*A6M2-N  
Rufe*



*Betty*

Similarly, the Mitsubishi Navy Type 1 attack bomber (一式陸上攻撃機, 一式陸攻, Ichishiki rikujō kōgeki ki, Isshikirikukō) was referred to by Japanese pilots as “*Hamaki*,” translating as “leaf roll” or “cigar,” a reference to the cylindrical shape of the fuselage. On a morbid note, the Betty also had a tendency to catch fire after it was hit.



Given the problems of translation, even using the transliteration of the Japanese, one can easily see why simple western names were applied to report Japanese Aircraft. Here are a few examples of different classes of Japanese aircraft.

*Val*



The primary dive bomber of the Imperial Japanese Navy was the Aichi D3A Type 99 Carrier Bomber. Some 1,500 were built and first saw service in China. They comprised 35% of the Pearl Harbor attack force and served until the end of the war. The Val was roughly similar to the Junkers Ju-57 Stuka, each carried a 550 lb. bomb load and three machine, two firing forward and one operated by a gunner aft.

*Emily*

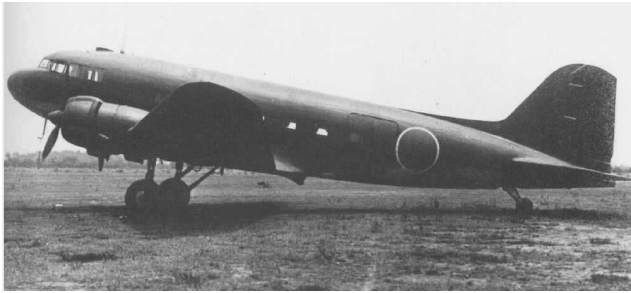
Arguably one of the finest maritime patrol flying boats of World War II, Emily, the Kawanisi H8K, was comparable to the Short Sunderland series and the Martin PB2Y Coronado., both of which were four engine flying boat which served the Allies.



Emily is noted for carrying out the little known second raid on Pearl Harbor, the longest two plane bombing mission carried out to that time.

## *Tabby*

An aircraft of U.S. origin used extensively by the Japanese was the Shōwa L2D and Nakajima L2D, Shōwa Navy Type 0 Transport and Nakajima Navy Type 0 Transport. These were license built versions of the Douglas DC-3 and code-named Tabby.



Earlier, the DC-2 had been built under license. About two dozen DC-3s had been delivered to Japan. Two unassembled kits had been assigned to Showa Aircraft for assembly and they worked in concert with Nakajima to open a production line utilizing Japanese standards of manufacture and the substitution of Japanese parts. By the end of the war, 487 units had been produced and the L2D was the mainstay of the Japanese transport fleet.

Most did not survive the war although one was incorporated into the French Air Force in Vietnam when they returned to Indochina after the Japanese capitulation. A few others were operated by the Collaborationist Nanjing Chinese Army, Republic of China and Japanese commercial airlines.

## *Asides*

Nakajima is now known as Fuji Heavy Industries and those of you who drive Subarus and Nissans own products produced by the former Nakajima Aircraft Company. The Editor had the pleasure of logging some time in an Aero Subaru Fuji FA-200 while flying in Australia. It was a four seater but was rated aerobatic with two seats occupied.



The Editor once found a small bunch of derelict Fuji KM-2s stored in a yard in northwestern Connecticut. The KM-2 was a development of the Beech T-34 Mentor which Fuji built under license as a trainer for the Japanese Self-Defense Forces.



Allied Code names and the Japanese type designations are somewhat dull. However, Japanese culture honors the beauty of language and they named many of their aircraft with poetic and colorful names. Here are three examples:

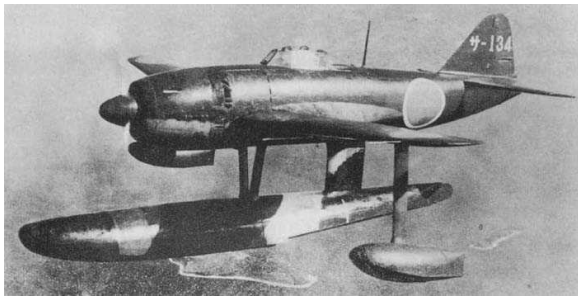
The Nakajima G5N *Shinzan* (Deep Mountain) code named Liz was the attempt by the Japanese to develop a heavy bomber. The aircraft was based upon the Douglas DC-4E, a one-off prototype sponsored by three U.S. airlines which flew in 1938. After the American airlines rejected the design because of its performance and expensive costliness, Japan Airlines Company purchased it and turned it over to Nakajima which dismantled it and studied its features. After suitable modifications, six were built but proved disappointing and only used as transports.



One of Japan's finest fighters was the Kawanishi N1K-J *Shiden* (Violet Lightning) code named George. Its floatplane version was the N1K1 *Kyōfū* (Mighty Wind), code named Rex.



Somewhat underpowered, the aircraft competed with the McDonnell XF-88 for the USAF long range penetration fighter contract but lost. Then the Air Force re-evaluated its needs of the mission and the XF-88 contract was also cancelled.



Another excellent fighter, the Nakajima Ki-84 *Hyayate* (Gale) was assigned the code name George. It was comparable to the best of the Allied fighters, boasted two 30 mm and two 20 mm cannons and was capable of intercepting the high flying B-29s.

May 18, 1948 – Aquila Airways is founded. Aquila was unusual in that its entire fleet was composed of flying boats. It started operations during the Berlin Airlift and flew 265 missions carrying bulk freight, particularly salt and coal.

Passenger carriage commenced with scheduled flights to Portugal and charter operations to a variety of holiday destinations around Europe using a variety of Short flying boats: Sandringhams, Solents and Sunderlands. In 1956, during the Suez Crisis, Aquila evacuated the civilian members of the Suez Canal Company from the Great Bitter Lake to Southampton Waters via Grand Harbor, Malta.



*Aquila's City of Funchal, a Solent 4.*  
(Credit: RuthAS)

## AEROSPACE CHRONOLOGY FOR THE WEEK

May 17, 1950 – Lockheed test pilot Tony LeVier reached Mach 1.12 during high speed dive tests of the XF-90.

But the curtain was falling on the flying boat. World War II had not only built a plethora of runways all over the world but the advanced technology of the piston engine airliners such as the Douglas Commercial and Lockheed Connie series proved superior economically. In July of 1958, Aquila ceased operations. Tasman Empire Airways Limited (TEAL) serviced the specialized routes around New Zealand, Australia and the archipelagos to the north-east of the big islands. But around 1960, the last of the flying boats flying international routes were retired.

May 19, 1978 – McDonnell-Douglas delivers its 5,000th F-4 Phantom II.



*Mr. Mac and #5,000.*

This is twenty years after first flight. In 1981, the last of 5,195 variants left the production lines. Greece, Turkey, South Korea and Iran still operate Phantoms.

May 20, 1946 – A USAAF Beech C-45F Expeditor departed Lake Charles AAF in Louisiana on a navigation training flight to Newark AAF in New Jersey. Foggy conditions prevailed in the New York area. LaGuardia was reporting a 500 foot ceiling.



*A C-45 and the facade of what is now known as the Trump Building.*



Around 8 p.m., the aircraft crashed into the 58<sup>th</sup> floor of the at 40 Wall St., Manhattan. All four aboard were killed but there were no other casualties. The building is now controlled financially by Donald Trump and branded, The Trump Building.

May 21, 1878 – Glenn Hammond Curtiss was born in Hammondsport, New York. The principal rival of the Wright Brothers, Curtiss was responsible for many advances in technology and design and is considered the father of naval aviation.



*A motorbike built for two. Glenn and wife Lena Pearl.*

May 22, 1982 – The first aircraft carrier to be built in Spain is launched at Ferrol.



*Príncipe de Asturias*, was a light aircraft carrier and flagship of the Spanish Navy. She was equipped with a ski-ramp flight deck to accommodate a dozen McDonnell Douglas AV-8B Harriers and a similar number of helicopters: 6 Sikorsky Sea Kings, 4 Augusta Bell AB212s for anti-submarine duties and 2 Sikorsky SH-3s equipped as early warning aircraft.

Financial constraints on the Spanish government

led to the 2013 decommissioning of the *Principe de Asturias* and the elimination of its escort force. In August of 2017, she was scrapped.

Later, the Ministry of Defence adopted the RP-3 which carried a 13 lb charge of TNT or Amatol as its standard air to surface missile.

May 23, 1943 – A Fairey Swordfish from HMS Archer sinks the German submarine U-752 using air-to-surface rockets. This is the first time aerial rockets sank a submarine.

The Swordfish is an open cockpit biplane, first flown in 1934 and affectionately known as the “Stringbag.” The nickname is derived from the mesh bag commonly used by housewives to carry their purchases. These bags could contain a wide variety of contents of varied shapes and weights much as the Swordfish could carry a wide variety of ordnance: torpedoes, depth charges, bombs, mines, rockets or flares as well as ground search radar.

*Rocket armed  
Swordfish coming  
aboard HMS Tracker.*  
(Credit: Lt. D.C. Oulds, Royal  
Navy)



The Swordfish was not retired from Fleet Air Arm until 1945 having outlived its replacement, the Fairey Albacore by almost two years.

The rockets used had solid, cast-iron heads and were known as "rocket spears". One of these punched right through the submarine's pressure hull and rendered it incapable of diving. The U-boat was scuttled to prevent capture.



*Ordnance  
ratings loading  
a Swordfish  
with rockets.*

## READERS CONTRIBUTIONS

*Lt Col Carl Stidsen*

*By the time I was old enough to read Blackhawk Comics, they were flying the Lockheed XF-90, which I always considered a snazzy machine. Only two were built. One was tested to destruction by NACA in Cleveland and the other survived three nuclear detonations at Frenchman Flats in Nevada. It is now at the Museum of the USAF undergoing some restoration.*

Another reader asked why so many aircraft prototypes were underpowered as was the XF-90. Stidsen replied:

*It is true that engineers can design an aircraft to meet requirements and look for an engine that claims to have the power to meet those requirements and still fit into the airframe. What usually happens especially in the early turbines is that the engine as received fails to deliver the specified power or reliability resulting in an underpowered machine once it is test flown. Or a serious design flaw may jeopardize the entire project, regardless of power.*

*For an example of the latter instance, Consider the story of the original Convair XF-102 derived from the XF-92A whose straight tubular fuselage had to be redesigned to the "Wasp Waist" configuration to reduce transonic drag and get it past Mach 1 as the designated YF-102A). Even then it was barely supersonic with its J-57 engine so a further major redesign extended and reshaped the fuselage, relocated air intakes, redesigned fin, and the General Electric J-79 turned it into the F-102B, later re-designated F-106A, a Mach 2 interceptor.*



## Development of the Convair Delta Design



Top left image is the XF-92. Note that the same fuselage cross-section is maintained from nose to tail. The top right image is the F-102 Delta Dagger. The “pinched” waist is a sign of the application of Whitcomb's “area rule”. The concept reduces transonic drag by maintaining the same fuselage cross section from nose to tail. The “pinched” waist reduced the exposed cross-section surface were the wings are attached. The bottom left image is the F-106 Delta Dart. Note that the area rule has been applied and the air intakes moved further aft. Bottom right is the B-58 Hustler, a supersonic strategic bomber which used the “Area Rule” to reach Mach 2 but was doomed by high maintenance costs and a high accident rate and the elimination of its mission with the advent of the ICBM.

The XF-90 design was originally designed for two 4,000 lb. thrust L-1000 jet engines, but they were never fitted. The L-1000 project was cancelled so two non-afterburning 3000 lb. Thrust Westinghouse J-34's were substituted. It was still underpowered. It flew trials against the McDonnell XF-88 and the North American YF-93 but did not make the cut. In fact, all three aircraft were cancelled but the XF-88 was redesigned and reborn as the XF-101 Voodoo.

## ERRATA

Lt. Carl Stidsen strikes. He notes that two aircraft in the article on code names for Soviet aircraft are incorrect. The Lavochkin LA-9 Fritz photo is actually of a Polikarpov I-16, and the MiG-23 Flogger photo is actually a MiG-29 Fulcrum. Our proof reader has been sent for a short term of re-education to the Lubyanka were he will be given the same cell once occupied by Andrei Tupolev who passed through there when purged by Stalin.

Stidsen also points out that the first mount of the Blackhawks was not the Grumman XP-50 but rather the Grumman XF5F-1. The XF5F was a taildragger and had the stub nose. The XP-50 featured the long nose and the tricycle landing gear.

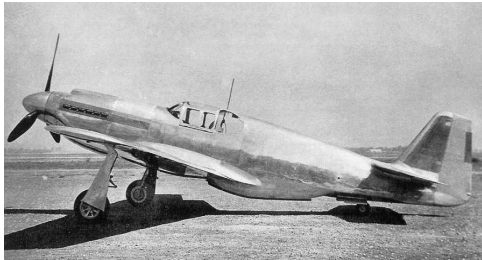


The XP-50 was developed from the XF5F along the path that ultimately led to the F7F Tigercat.

*Philip Kortesis*

Reader Phil Kortesis sent an interesting photo and some comments on the North American NA-73 better known as the P-51 Mustang. The Mustang was inspired by British interest in acquiring additional fighter aircraft. The wanted North American to produce variants of the Curtiss P-40

Tomahawk but North American's Dutch Kindelberger bridled at the thought of producing another manufacturer's design and counter-offered with the promise of a new and better design. And amazingly, 102 days after the contract was signed, North American delivered the first airframe.



NA-73X

The lead designer was Edgar Schmüd, an Austrian citizen born in Germany but after a peripatetic career involving work in Brazil, came to the United States and worked for Fokker and Bellanca, becoming an American citizen and ended up working for North American, responsible for design work on the P-64 and B-25.

The first Mustangs were equipped with the Allison V-1710 engine and found employment with the RAF for reconnaissance and as a fighter bomber. Then the British realized that switching the Allison with a Rolls-Royce Merlin would provide the high altitude performance needed to engage the Luftwaffe fighters and the Mustang Mark III (P-51B/C) was adopted by the USAAF.



*Mustang Mark III*

Kortesis included the following picture of a British bound Mustang equipped with wooden wheels. They were used to ease movement of the airframes up and down ramps at North American's Inglewood production plant. A close examination of the photo reveals that some wag stenciled "Do not inflate" on one of the wheels.



*Bonus*  
*XF-90 Diorama*

There has been mention of the Lockheed XF-90 penetration fighter in recent *Coastwatcher* editions. Only two prototypes were built. After Air Force evaluation, one was tested to destruction by NACA and the second "survived" after being subjected as a test item to three nuclear blasts in Nevada. Its remains were transferred to the Museum of the USAF where after some serious decontamination procedures, it is now on display as a diorama in the Cold War Gallery.



*(Photo Credit: Shawn Terry)*