

*Missions for America
Semper vigilans!
Semper volans!*



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Squadron
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28 OCT-Commander's Cup Rocket Contest
31 OCT-No Senior or Cadet Meeting
04 NOV-Col Palmer Cadet Ball/Veteran's Lunch
07 NOV-Senior Staff Meeting-Cadet PT
11 NOV-Ledyard Holiday Market
14 NOV-Staff Projects
21 NOV-Commander's Call/Cadet Promotions
28 NOV-Staff Projects
05 DEC-Senior Staff Meeting
12 DEC-Staff Projects
19 DEC-Commander's Call
26-DEC-Boxing Day-No Meeting

CADET MEETING

24 October, 2023

A briefing about the correct way to use medical gloves was given by C/SSgt Thelma Grogan following drill practice.

Capt Deignan-Schmidt led a personal development seminar about the concept of and expression of gratitude.

SENIOR MEETING

24 October, 2023

Capt Deignan-Schmidt briefed the senior members about the Wreaths Across America fundraiser which the Squadron will conduct.

Maj Farley presented the accounting from the citrus fruit sale. 146 cases have been ordered.

Lt Col Rocketto conducted a seminar about aircraft engine failures. He discussed the most likely flight conditions for failures, methods which can warn of potential failures or prevent failures and actions to mitigate engine failures. Rocketto illustrated his main points by describing an engine failure which he experienced one night over Long Island. A round-robin discussion answered questions and added valuable commentary.

CTWG TRANEX

21 October, 2023

Six TRCS members participated in the CTWG training exercise held at Brainard Field. Much of the practice was conducted as table-top exercises due to the inclement weather. Scenarios included an overdue aircraft possibly down in central Connecticut and a missing hiker thought to be along the Connecticut River between Hartford and Windsor Locks.

Capt Michael Kopyscienski was safety officer for the exercise. Capt Stephen Deignan-Schmidt trained candidates for communication and mission staff assistant slots. Father and son SM Christopher M. Regan and C/Amn Christopher C. Regan worked on ICUT and ground team qualifications and LtCol Stephen Rocketto performed Public Information Officer duties and renewed his PIO rating.

Best know for helicopters, Sikorsky built the largest aircraft in the world while in pre-revolutionary Russia. After emigrating to the United States, Sikorsky flying boats and amphibians were the vehicles of choice for Pan American Clipper service to the Caribbean and South America. World War II and the flourishing development of land aircraft allowed Sikorsky to return to his initial dream and of a flying machine, the helicopter. Although the modern helicopter is a complex combination of many technologies, Sikorsky's experiments established the paradigm for the single rotor helicopter.

AEROSPACE CHRONOLOGY

Oct. 25, 1951– Japan initiated its first postwar domestic airline service. The leased five Martin 2-0-2 aircraft from Northwest Orient Airlines and contacted with Transocean Airlines (TALOA) for crews., maintainers, and dispatchers.



A Northwest 2-0-2 with what appears to be TALOA markings. (Credit: Ed Coates Collection)

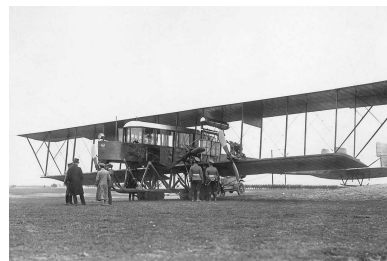


A bevy of Japanese Air Lines beauties pose in front of their first 2-0-2, named Mokusei (Jupiter). (Credit: Japan Air Lines).

Oct. 26, 1972 – Igor Sikorsky Goes West.



Sikorsky adjusts his famous fedora before a test flight of the VS-300. (Credit: Sikorsky Archives)



Sikorsky S-21, Russky Vityaz (Russian Knight), the first four engine aircraft built by Russian Baltic Railroad Car Works!

S-42, the West Indies Clipper over the unfinished Golden Gate Bridge. (Credit: United Aircraft).



Sikorsky and Cmdr. Frank A. Erickson, first USCG helicopter pilot demo the HNS-1 Hoverfly, the first production helicopter.

A visionary engineer with the courage to test his own designs, he once observed in the early days of flight, "...the chief engineer was almost always the chief test pilot as well. That had the fortunate result of eliminating poor engineering early in aviation."

Oct. 27, 1957 – Pioneering Italian aircraft designer Giovanni Caproni dies. Caproni was a multi-talented engineer a degree in civil engineering and an doctorate in electrical engineering but established a reputation as an aircraft designer and entrepreneur. During World War I, his company produced a line of tri-motor bombers and varied styles of transport aircraft.



Capt. And U.S. Congressman Fiorello La Guardia and Gianni Caproni
(Credit: Bettman/Getty Images)

The Caproni Ca.44 flown by LaGuardia and the U.S. Army Air Service in Italy.



In 1940, the Caproni-Campini N.1 flew, the second jet powered aircraft after the Heinkel He 178. Thrust was generated by a ducted water cooled V12 piston engine. The engine produced so much heat the the aircraft was flown with the cockpit canopy open.



The N.1 at the Italian Air Force Museum, Lago Bracciano, Italy.

During the Second World War, Caproni produced a wide range of rather mediocre undistinguished aircraft for the *Regia Aeronautica*.



Ca.309 Ghibli light bomber and transport.

But the company faded away in the post World War II period with few designs, some successful gliders, but their light aircraft, and jet trainers never reached production status.

Oct. 28, 1952 – First Flight for the Douglas XA3D-1 Skywarrior.



XA3D-1

At the beginning of the Cold War, the USAF Strategic Air Command was the 800 pound gorilla in the funding fights waged in Congress. The Navy developed a number of programs to get its oars in the funding pool and one of them was for a carrier-borne strategic bomber capable of operating off a Midway-class carrier. Of course weight was a problem and if you wanted a capable attack aircraft, then you turned to Ed Heinemann of Douglas Aircraft, whose fine hand could be found in the excellent SBD Dauntless, A-20 Havoc, A-26 Invader, and AD Skyraider designs. Heinemann's XA3D entry came in 30,000 pounds under the weight of submissions by eight other competitors.

Saving weight requires sacrifices and one item not provided for the crew were ejection seats. The fleet conditions under which the Skywarrior operated contributed to a hefty loss rate. About 40% of the 282 built were destroyed in accidents or combat in Vietnam. Its lack of ejection seats led to the A3D's morbid sobriquet, "All Three Dead."



The B-66 Destroyer in the foreground is the USAF light bomber version of the Skywarrior in the background.

With the creation of the Polaris ICBM submarines, the A3J (A-5) Vigilante supersonic bomber and the A-6 Intruder all-weather medium bomber, the Navy repurposed the Skywarrior as a tanker, reconnaissance aircraft and electronic intelligence aircraft. The last of the breed was retired in 1961, concluding a four decade career.

Oct. 29, 1956 – Operation Kadesh-the Israeli incursion into the Sinai Peninsula.

The Israeli occupation of the Sinai Peninsula was provoked by long-term provocations by the Egyptian government and a proximate cause, the nationalization of the Suez Canal by Egypt. Israel had been complaining to the United Nations Security Council for five years about an Egyptian blockade of Israeli shipping from the Canal and interference with Israeli maritime traffic through the Straits of Tiran which controlled access to the Gulf of Aqaba and the port of Eilat.

Egypt and Israel were in a permanent state of war and in 1955, Gamal Abdel Nasser commenced a built-up of armaments supplied by the Soviet Union to confront Israel. At the same time, he established a paramilitary force, the Fedayeen whose mission was to infiltrate Israel and attack targets of opportunity, a violation of the United Nations brokered armistice agreement. Nasser stated the following

Egypt has decided to dispatch her heroes, the disciples of Pharaoh and the sons of Islam, and they will cleanse the land of Palestine...There will be no peace on Israel's border because we demand vengeance, and vengeance is Israel's death.

Nasser also forged an alliance with Syria and Jordan in which both countries placed their armed forces under Egyptian command. Israel claimed that armistice violations by the Egyptians resulted in the death of 101 Israelis killed and over 360 wounded

The United Nations response was predictable. They ignored the Israeli complaints and blamed

them for retaliating against the Fedayeen attacks.

On the 26th of July, 1956, Nasser nationalized the Suez Canal Company. Technically, Egypt owned the waterway but the British and French owned the Suez Canal Company which operated it. In 1888, the Convention of Constantinople declared that the canal was a neutral zone under British protection but the Company was wholly owned, on an almost 50-50 basis by the British and French who profited immensely by the tolls imposed on traffic. Egypt was anxious to claim this revenue to build the Nile dam at Aswan after the World Bank turned down its request for a loan.

The response led to the Protocol of Sèvres, a political and military collusion to to cause a regime change in Egypt. Israel would invade the Sinai and the British and French would intervene to protect the canal.

The Israelis launched Operation Kadesh using F-51 Mustangs to cut Egyptian telephone cables in the Sinai and dropping 400 paratroopers for 16 DC-3s to seize the Mitla Pass, a crucial choke point between Cairo and the Gulf of Aqaba. The intervention,



Israeli Mustang and map of the Kadesh Operation.



Operation Musketeer involved a major parachute and amphibious operation by the British and French starting with the seizure of Port Said and Alexandria and a march on Cairo. But as Robert Burns has warned, "The best-laid schemes o' mice an' men gang aft agley." Operation Musketeer is an example of a tactical victory turned into a strategic defeat.

Israel fared better. The Straits of Tiran were opened to Israeli shipping and the United Nations “Peace Keeping” forces stationed along the Sinai-Israeli border brought an end to the Fedayeen raids for a decade.

President Eisenhower was enraged since he thought that the plan was ill-conceived and had believed that his previous warning to stand down had been ignored. He threatened to “pull the plug” on support of the British pound. At the same time, the Soviet Union intervened in the Hungarian uprising which sought to depose the Communist government in Budapest. The British public did not support the intervention and Premier Anthony Eden resigned in February of 1957. Egypt took over operation of the canal and paid fees to the Suez Canal Company until privatized in 1987.

Record Setting Polar and Equatorial Circumnavigations of the Earth

Oct. 30, 1976 – Pan American Flight 50, the Boeing 747SP *New Horizons* and under the command of Capt. Walter H. Mullikan lands in San Francisco 54 hours 7 minutes and 12 seconds after it left San Francisco setting a new speed record for a round-the-world polar flight.



(Credit: Brian Baum)

The Boeing 747SP (Special Performance) is a shortened version designed for a higher speed and longer range at the expense of passenger capacity. Some modifications included a taller vertical stabilizer to compensate for the shorter fuselage and simpler flaps. Only 45 were built.

*PanAm Flt 50.
Does this prove the world is flat?*



The tariff for each of the 270 or so globe-trotters was \$2222 economy or \$3333 first class. Along the way they were treated to a Gucci fashion show, had their own troubadour and an on-board hair dresser. However, they were restricted to one piece of carry-on luggage.

Other Aerial Polar Circumnavigations of the Earth Airliners

Flight 50 was the third such flight. In 1965 a Flying Tiger Line Boeing 707-320C named *Pole Cat* was modified for the trip and carried scientists and special guests. It took 62 hours 277 minutes.



Pole Cat (Credit: Flying Tigers Pilots Association)

Three years later, *Polar Byrd I*, Flight KV 907, a Modern Air Transport (MAT) Convair 990A made a polar circumnavigation, landing to refuel at McMurdo Station, Antarctica. This flight commemorated the 40th anniversary of the first flight to the South Pole. 70 businessmen paid \$10,000 each, half of it going to support the Byrd Polar Research Center. The Captain was Harold L. Neff, a former Air Force One aircraft commander.



Polar Byrd I on McMurdo's ice runway.

MAT repeated the voyage in December of 1970, carrying 60 passengers with an average age of above 70. McMurdo was closed for commercial

refueling but they did land at Easter Island.

The current record may stand at 46 hours 39 minutes 38 seconds flown by a Gulfstream G650ER. The departure was on July 9th, 2019 from Kennedy Space Center with stops in Nur-Sultan, Kazakhstan, Port Louis, Mauritius, and Punta Arenas, Chile,. The aircraft belongs to the Qatar Executive Fleet. The mission was named “One More Orbit” and staged to commemorate the 50th anniversary of the Apollo 11 mission.



The record setting Gulfstream

Earlier that year, the same aircraft though named *Clipper Liberty Bell* at the time set a speed record for circumnavigating the globe around the Equator. She departed The Big Apple carrying 98 passengers and landed at New Delhi. A delay occurred at the next stop, Tokyo Haneda due to a strike but reached New York's JFK after a flight time of 39 hours 25 minutes 53 seconds in 46 hours clock time, 40 times faster than Jules Verne's *Around the World in Eighty Days*.



Clipper Liberty Bell

The first flight to circumnavigate the earth by air was performed in 1924 by the U.S. Army Air Service flying Douglas World Cruisers and took 175 days.

Oct. 31, 1943 – First flight of the Budd RB-1 Conestoga.



(Credit: Nancy Canavan Heslop)

During World War II, critical materials needed to prosecute the war effort were in short supply and substitutes were found. The Budd RB-1 was a cargo plane constructed from stainless steel rather than the more conventional aluminum. The Budd Company specialized in producing objects made of steel. Probably most well know locally was the Budd Car, a stainless steel self-propelled rail diesel car familiar to many old-timers who recall their use on the old New York, New Haven & Hartford Railroad in Connecticut.



Budd Rail Diesel Car #25 in New London on the New London-Worcester run. (Credit: Marty Barnard)

As it turns out, sufficient aluminum was available for aircraft construction and the Navy halted production of the RB-1 and only 17 saw service. The Army cancelled it entire contract for what they called the C-93. The Conestoga had some unusual features such as a tricycle landing gear and a rear loading ramp but the design was underpowered and doomed to oblivion by the vast

production numbers of superior Douglas C-47 Skytrains and Curtiss C-46 Commandos.

In 1945, the Budds were sold off and 14 were acquired by National Skyway Freight (NSF), a company formed by veterans of the famed Flying Tigers. NSF were one of the many start-up airlines which survived on government contracts, charters and on-demand freight service. Eventually, NSF became the Flying Tiger Line and grew to become a major cargo hauler until 1989 when it was sold to Federal Express.



Supply shortages can be alleviated by halting or rationing the manufacture of products which demand the use of scarce resources or finding substitutes materials. World War II saw the aircraft industry turn out a number of aircraft using high percentages of wood or fabric: Howard Hughes H-4 Hercules and the Bell XP-77 both failed to achieve production orders but over 5,000 Cessna AT-17 Bobcats (the Bamboo Bomber) served as trainers and utility aircraft and deHavilland's incredible "Wooden Wonder," the DH.98 Mosquito, ranks as one of the best warplanes ever produced.



The prototype Mosquito is preserved in the de Havilland Aircraft Museum in London Colney, England.

A Navy JRC-1 Bobcat at the Collings Foundation Museum in Hudson, Massachusetts



Not all wooden designs were successful. Curtiss-Wright produced the C-76 Caravan. Rather than use a balsa core and birch exterior ply as did deHavilland with the Mosquito, Curtiss opted for a mahogany ply which made the aircraft very heavy. Sub-contractors from furniture companies including Baldwin Piano were charged to build the components which Curtiss-Wright would then assemble.



The aircraft was also underpowered on its second flight fell apart in mid-air killing the crew. The aircraft was also unstable and suffered from failure of its glue and metal fasteners. The second Caravan to fly, built at a different plant lost its empennage during a flight killing all three crew members. The contract was canceled and the 25 prototypes and production aircraft condemned to ignominy.

So what makes wood so wonderful? Often called nature's composite, wood may just be the perfect aircraft building material. It's strong. Pound for pound, wood has twice the tensile strength of aluminum. You can form wood into complex shapes because it becomes pliable after applying copious amounts of hot water. Wood is easy to cut, which means you can build an airplane with common hand tools-saws, chisels, drills, and sandpaper -that most people already have in their shops. Wood is safe, because unlike composite materials, it's nontoxic. Heck, wood even smells good, is aesthetic in its own right, and is satisfying to work with. Mike DiFrisco (EAA Sport Aviation, May 2000)