Missions for America
Semper vigilans!
Semper volans!

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Lt Col Stephen Rocketto Editor
1st Lt David Pineau, Publisher
Maj Roy Bourque, Paparazzo
2d Lt Joanne Richards, PAO
Capt Edward Miller, Features
Maj Scott Farley, Roving Correspondent
Shawn Terry, Automated Sciences, IT Guru

10 OCT-TRCS Staff Projects
17 OCT Commander's Call/Mitchell Ceremony
24 OCT-Staff Projects-Cadet CD or Aerospace
21 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
14 NOV-Staff Projects
21 NOV-Commanders Call/Cadet Promotions
28 NOV-Staff Projects

CADET MEETING

03 October, 2023

The cadets received lessons and practical experiences in ironing shirts, polishing boots, and military courtesies.

SENIOR MEETING

03 October, 2023
StaffMeeting

Three potential members attended. The format for a staff meeting was modified. Department heads presented their reports as customary but also reviewed their responsibilities and opportunities training and advancement in their specialty tracks.

AEROSPACE CHRONOLOGY

Oct. 4, 1943 – Operation Leader was a combined effort of the U.S. Navy and Royal Navy to destroy German shipping along the Norwegian Coast. The *USS Ranger* (CV-4) equipped with 27 F4F Wildcats, 27 SBD Dauntless dive bombers an 18 TBF Avenger torpedo planes was the primary strike element of the U.S contribution. *Ranger* was supported by two heavy cruisers and five destroyers.

Ranger was originally designed without an island. When an island was added late in the design stage a "normal exhaust" stack could not be installed because of the arrangement of the machinery. The six stacks are rotated to a horizontal position during flight operations.
(Credit:USN)

Operation Leader was a minor success. Six German transport ships were claimed sunk and four damaged which disrupted shipments of iron

ore to Germany.

Ranger, the first United States purpose built carrier was too small and slow for Pacific operations with the new class of fast carriers so she spent most of the war in the Atlantic where she provided air support for Operation Torch, the invasion of North Africa, ferried aircraft and trained aircrews.

Oct. 5, 1930 – The British rigid airship R101 crashed in Beauvais, France while on its maiden voyage. She was carrying a delegation of diplomats to India and 48 lives were lost.

The R-101 moored at Cardington.

R101 was built as part of a quasi-political and transportation program called the Imperial Airship Scheme planned to connect the far flung parts of the British Empire with a fast mail and passenger service. The Air Ministry funded two airships, the R101 designed and built by the government airship works at Cardington and the R100, privately designed and constructed by the Airship Guarantee Company, a subsidiary of Vickers-Armstrong.

R100 was eminently successful, completing a trans-Atlantic round trip to Canada. This set the stage for the R101 disaster. The Air Ministry, lacking confidence in the ability of the somewhat troubled design of the R100 to make the India flight but pushed by financial considerations, pride and public opinion made the attempt but encountered control and structural problems in a storm and crashed.

Embarrassed, the Air Ministry resorted to what is now traditional government maneuvers to cover the damning evidence. They ordered that the successful R100 be scrapped and the airship program cancelled. Today, they shed the documents, scrub the hard-drives, erase the e-mails and phone records, smile politely and blame someone else.

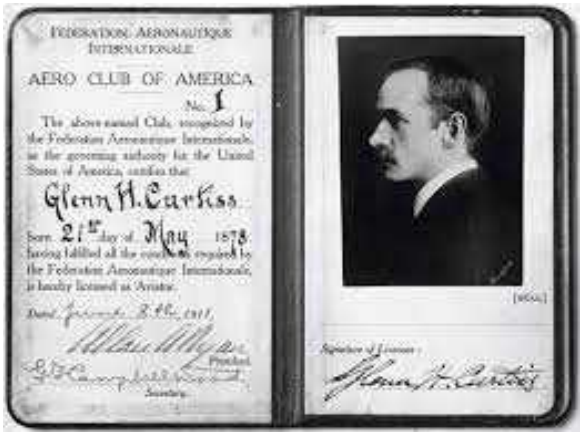
Oct. 6, 1955 – Encountering major systems failures, George Shirley Mills, a McDonnell test pilot bails out of his F3H-2N Demon. However, the aircraft stubbornly remains aloft for an hour without a canopy, pilot and ejection seat until it crashes into a cornfield in Iowa, 250 miles away from the bail-out site.

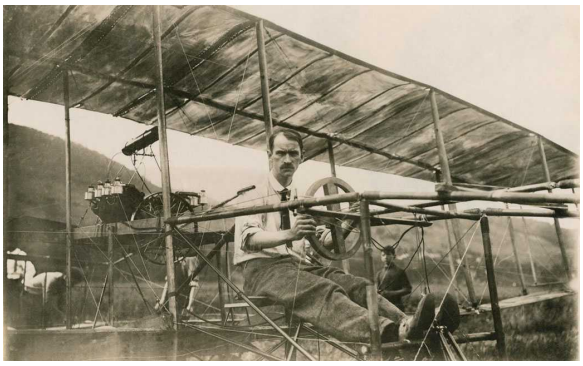
The F3H-2N Demon was an all-weather fighter which in 1962, under the new DoD unified naming system became the F-3C.

This unmanned Demon flew 180 miles more than the unmanned F-135B Lightning II which crashed in the Carolinas. Does this reflect on the stability of the new breed of fly-by-wire aircraft?

Enthusiasts of the aviation cinema would like to believe that during the accident investigation he explained details of what caused the incident and the investigator said "Surely you can't be serious?" to which Mills replies "I am serious — and don't call me Shirley."

Oct. 7, 1909 Glenn Curtiss/01900 becomes the first American to hold an FAI airplane certificate.





Oct.8, 1919 – Start date of the first and only transcontinental reliability and endurance test. Forty-eight aircraft departed Roosevelt Field, Long Island and 15 more left from the Presidio, San Francisco which at that time was an Army Air Service airfield and was renamed Prissy Field in honor of Maj. Dana H. Crissy, one of the seven flyers killed in one of the 54 crashes during the event. Also flying were a Fokker D.VIII from war prize stocks seized by the United States at war's end.

The event was also a race and was and had been conjured up by Brig. General Billy Mitchell, Chief of Army Air Service Training and Army public affairs to demonstrate the ability of its men and planes operate under different kinds of flying conditions over an extended distance to make points during the upcoming congressional air service appropriation hearings and to promote aviation.

Billy Mitchell, the stormy petrel of the U.S Army Air Service in full formal finery.

The course was a round trip which required a return to the starting point of each individual aircraft, a 5,400 mile journey and was routed along railway lines since formal aerial navigation charts did not exist. The rules also required that on each transcontinental leg there be 20 intermediate stops of no more than 30 minutes nor less that 48 hours at airports within 180 miles of each other. Night flying was forbidden and each multi-seat aircraft had to carry one passenger. Aircraft were limited to U.S. government owned aircraft, mostly DH-4s and some Royal Aircraft Factory SE-5s, and the SPAD SXIII manufactured in the United States. Participants had to be an American military pilot or a military pilot form a World War One ally. A range of prizes were set for shortest elapsed time, fastest flying time by type, and a handicap based upon cruising speed.

The DH.4 was the only U.S. built aircraft to see combat in with the Army in World War I. 4,846 copies of the Geoffrey de Havilland designed DH.4 were built in the United States by Boeing, Dayton-Wright, Fisher Body and Standard.

The DH.4 pictured above is in the livery of 12th Aero Squadron of the U.S. Army Border Patrol. Eight squadrons were deployed in 1919 to deter the smuggling of illegal aliens, narcotics and weapons.

The contest had an international flavor. Brig. Gen. Lionel Charlton, Royal Air Force and the British Air Attaché flew a Bristol F.2 fighter but hit a fence near Ithaca, New York during a forced landing. Capt. Paul de la Verne of the French Air Service and the French Air Attaché flew with 1st Lt. D. B Gish in a DH-4 until they made an emergency landing in western New York due to an engine fire.

The Bristol F.2B. Part of the Shuttleworth collection.

The winner was Lt. Belvin Maynard. He had studied divinity at Wake Forest University and was known as the "Flying Parson." During the war, he spent most of his time testing aircraft and may have had more time in the DH-4 than any other AAS pilot. A year or so before the transcontinental event, he gained some fame and importance experience winning an air race from New York to Toronto.

His plane was a DH-4, named *Hello Frisco* and the passengers were his mechanic, William Kline whom he called "the best mechanic in the Air Service." and his dog, Trixie.

Trixie, Maynard, and Kline

His decision to take Kline was inciteful. On a freezing morning just outside of Cheyenne, Wyoming, Maynard started the engine but water in an overflow pipe had frozen and the radiator burst. No one at the airport could repair the radiator so Maynard and Kline removed it, took it to town and found a plumber who made repairs. The delay was only seven hours.

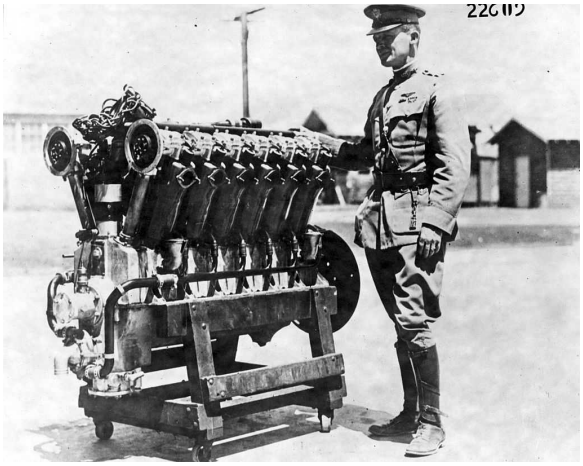
A good picture of the DH-4 radiator.

On the return flight, Maynard was "on top" but reduced power to descend through the clouds and check his position. When he advanced the throttle to climb back up, the hollow crankshaft of the liberty engine broke and he had to dead-stick into a pasture in Nebraska.

They needed a new engine and remembered from a newspaper report that Capt. Roy N. Francis flying a twin engine Martin MB-1 had hit telegraph wires at Yutan, Nebraska while trying to land in fog. Yutan was only ten miles away from their landing site.

The Martin MB-1. The engine size can be scaled by the size of the pilot in the cockpit.

Maynard, got hold of one of the MB-1 engines that same day using a borrowed truck from the Omaha Army Base. While Maynard drove to get the replacement engine, Kline and a farmer who had worked on Liberty engines while in the Navy positioned the aircraft under a tree and removed the damaged engine. When the new engine arrived, they worked through the night,installed it, and were able to depart the next day. The aircraft may have been made of wood and fabric but the men were made of iron.



Maj Hap Arnold with the first of the Liberty V-12 power plants.

Maynard gained two advantages from his previous testing of DH-4s and long distance racing. The Liberty engine was rated for 1,650 rpm maximum and it developed vibrations between 1,400 and 1,500 rpms so he set cruise at 1,550 to baby the engine.

In addition, most of the other races flew "contact IFR" (**I** **F**ollow **R**ailways.) Maynard used his compass and held a tight direct heading, gaining time by reducing the distance he needed to fly from point to point.

On the 18th of October, Maynard, Kline, and Trixie landed back at Roosevelt Field. He was the first to land, nine days four hours, 25 minutes and 12 seconds after his westward departure. His actual flying time was 25 hours, 16 minutes and 47 seconds.

Lessons learned. Fly with a good mechanic, learn to hold a constant heading, have plenty of experience in type ,treat an engine with respect, remember that most engine failures are associated with changes in throttle settings, preheat engines on cold days and finally, it helps if God is your co-pilot so don't skip divinity school.

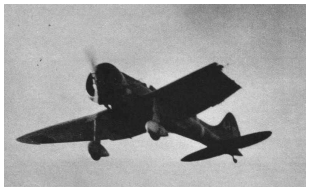
Mitchell's transcontinental brainchild revealed that Air Service aircraft were inadequate for austere and challenging conditions and pilot skills were marginal in both airmanship and navigation. However, they pioneered the aerial trail which became the first transcontinental airmail route and provided experiences which would be useful for establishing safe and reliable long distance flying.

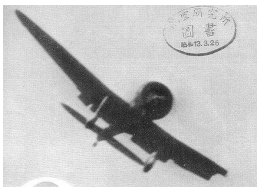
Maynard was touted as 'the greatest pilot on earth" but *sic transit gloria mundi,* fame is fleeting. A month after the end of the race, he "got in dutch" when he made an address at a temperance meeting and claimed the some of the race pilots had been drunk. His Baptist training at Wake Forest had come back to bite him. The Army took offense and insisted that the racers had been checked at all of the intermediate stops and no one had been found intoxicated. There were murmurings about a court-martial. He resigned from the army and became a barnstormer.

On September 7, 1922, he was performing at an airshow in Rutland, Vermont flying an Avro 504 and carrying two other men. He had been doing the same aerobatic routine all week but this time entered a spin at 2,000 feet and failed to recover. Maynard and his two passengers were killed.

Wing and a Prayer Department

09 DEC, 1937 – During air combat in China, Pilot Officer 3rd Class Kanichi Kashimura, Imperial Japanese Navy, flying a Mitsubishi Type 97 A5M Claude, collides with a Chinese Curtiss Hawk and loses the outer third of his port wing. He returns to base and after multiple attempts at landing crashes but walks away unharmed.





He achieves fame in Japan as the pilot who flew a plane with one wing. Kashimura will earn Ace status but goes West six years later when he is shot down while flying an A6M2 zero, most likely by the rear gunner of a USMC SBD Dauntless.

Thirty-seven years later, January 10th, 1985, a Boeing B-52 flown by a Boeing test crew led by Charles Fisher encountered extreme turbulence which tore the horizontal fin and rudder off the aircraft. Fisher regained control and managed a safe landing six hours later.

(Credit: USAF)

to view a video go to
https://www.youtube.com/watch?v=b-Ek42EhHsw

On June 18th, 2009, Israeli pilot Zvi Nadivi and his instructor Yehoar Gal flying an F-15D collided with an A-4 Skyhawk during an aerial combat maneuvering exercise. The starboard wing of the F-15D was destroyed. The wing damage was not visible from the cockpit.

Zvi and his back-seater elected to stay with the plane and used power management and deft control manipulations to safely land.

For a video, go to:
https://www.youtube.com/watch?v=LveSc8Lp0ZE

Oct. 10, 1958 – The USAF Thunderbirds have the worst accident in their history and it does not involve any demonstration aircrafts flying aerobatic routines.

A C-123B Provider carrying the Thunderbird maintenance crew from Hill AFB, Utah to McChord AFB Washington crashes near Payett, Idaho. Five crew member and all 14 maintenance personnel on board are killed.

The contributing causes to the accident are disputed. The primary cause is that the aircraft flew into a flock of birds but subsequent investigation concluded that the plane was overloaded, the pilot may have been incapacitated, crew rest restrictions violated and the pilot seat was not occupied by a qualified pilot.