



Missions for  
America

*Semper  
vigilans!*

*Semper  
volans!*

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Squadron

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300 Tower Rd., Groton, CT

Lt Col Stephen Rocketto, Editor

[srocketto@aquilasys.com](mailto:srocketto@aquilasys.com)

Maj Scott Farley Publisher

Maj Roy Bourque, Paparazzi

C/SrA Stephen Buchko, Cadet AEO

Hap Rocketto, 2nd Lt, AUS, (ret'd.) Feature Writer

Capt Edward Miller, Feature Writer

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13 May, 2020

*The Coastwatcher is changing its publication day from Tuesday to Wednesday in order to publish the senior and cadet weekly meetings together.*

16 MAY-Commander's Cup Rocket Contest

19 MAY-Sr. Meeting

20 MAY-Cadet Meeting

26 MAY-Sr. Meeting

29 MAY-Cadet Meeting



*The Masked Duo, Capt Johnson and Lt Sprecace supporting the Air Operations Branch Director at the recent Navy exercise*  
*(Photo: Maj Paul Noniewicz)*

## **CADET MEETING**

*06 May, 2020*

1st Lt Thomas Ceniglio hosted a Zoom meeting,

C/1st Lt Rhyss Thornell presented a oral Staff Duty Analysis about the duties and responsibilities of deputy cadet commander without the use of notes.

1st Lt Thornell conducted a question and answer session based upon the aerospace material found in Module 6 of *Aerospace Dimensions*, the cadet aerospace text. A score was kept of which cadets responded correctly. Cadets were encouraged to take the Module 6 test as soon as possible.

Lt Col Rocketto offered an illustrated talk about a WWII incident in which four B-17s buzzed the first game of the 1943 World Series.

## **Cadet Meeting**

*13 May, 2020*

C/Capt Schantz told the story of what MSgt Leroy Petry did to win the Medal of Honor.

Lt Kopycienski read Maj General Smith's letter regarding the extension of the stand-down.

Maj Farley discussed the squadron goals and how they must be modified in light of the stand-down.

Lt Col Rocketto presented his story about death and heroism in a combat mission to Bremen by the B-17 Stardust.

SM Docker's challenge to research answers to questions about the B-1B was met by a number of Cadets who correctly answered the questions. Lt Thornell is keeping score and winners will be awarded prizes when the CAP meeting return to normal operation.

## **SENIOR MEETING**

*12 May, 2020*

Maj Noniewicz's safety briefing covered covering up or in the words of Rudyard Kipling:

*But the worst o' your foes is the sun over'ead:  
You must wear your 'elmet for all that is  
said:*

*If 'e finds you uncovered 'e'll knock you down  
dead,*

Maj Farley reviewed the Squadron Goals and the effects of the stand-down on them.

Lt Col Rocketto presented his WWII story, *Flight Stardust-The Bremen Mission*. However, he had already made the presentation last week. The officers were polite enough to say nothing until the end. But a good story is worth repeating.

It has been said that Howard Hughes once watched the movie *Ice Station Zebra* over 150 times, possibly a binge record.

Rocketto promises to show the third and last installment, *Meathounds Final Mission* next week if he remembers.

A round-robin allowed each member of the Squadron time to report on their past week's activities. SM Otrin announced that he is closing out the course which he teaches for UConn and also took his first IFR training flight, a VOR-A approach at Windham made less pleasant by turbulence.

## **PROMOTIONS, ACHIEVEMENTS AND MISSIONS**

Cadet Maximus Morse has been awarded the Arnold Ribbon and promoted to Cadet Airman First Class.

Maj Borque and SM Docker installed a trickle charger in the squadron vehicle

SM Docker and Lt Kopycienski did preventive maintenance on the supply trailer installing gutters to control run-off.

*Docker installing  
the gutter over the  
main door of the  
supply trailer.*



They pair also finished the practical requirements for Otrin's Mission Radio Operator qualifications

## **CURRENT EVENTS**

*Little Change, Big Results*

Fuel in the tanks is critical to the pilot. The cost of the fuel is critical to the bean counters. Any way in which drag can be reduced with a concomitant increase in fuel economy is a treasure seized by the aircraft industry. The most obvious mark of this practice are the ubiquitous winglets gracing the wings of many aircraft. Some planes are designed with integral winglets and others have them retrofitted. Birds are born with them.



*A white stork and an airliner parade illustrate natural and man-made winglets*



Studies using computational fluid dynamics modeled air flow over the nose of a McDonnell-Douglas MD-11 and revealed that by mounting the windshield wiper blades vertically instead of horizontally the flight drag was reduced by 1.2%!

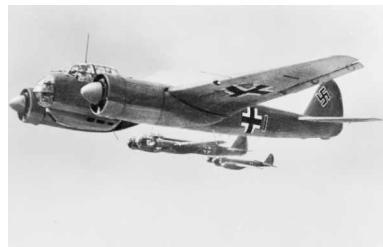
The Air Force conducted tests on its Boeing KC-135 Stratotanker. The heavily used tanker fleet of 400 aircraft uses 260 million gallons per year and accounts for 14% of the Air Force jet fuel budget. Repositioning the blades may lead to savings of \$7 million per year. Tests are now being conducted on improving the blade design for further savings. Delta Airlines has indicated interest in a similar study on their Boeing 767 fleet.

Once a final configuration and design are settled on it will still have to meet FAA airworthiness standards. If approval is granted, there would be an enormous positive economic impact when applied to other types of aircraft.

### THE WEEK'S AEROSPACE ANNIVERSARIES

13 May, 1944 - 59 Ju 88 bombers fling at 3,000 feet hit the base of the 340th Bombardment Group at Alesia, Corsica. With moon and flares illuminating the targets, major destruction occurred. Approximately 60 B-25 bombers were destroyed.

*The Ju 88 Attackers*



Previously between 18 and 23 March, Mount Vesuvius had erupted. At that time, the 340th were based at Pompeii Airfield at the base of the volcano. Hot ash and tephra damaged engines, burned the fabric off the control surfaces and crazed, even melted plexiglass windscreens and turret domes. Estimated destruction was around 80 aircraft.



*Ash deposits and damaged elevators on 240th B-25s*



The 340th had the dubious distinction of having the highest aircraft losses of any medium bomber outfit. It is also noted for a bombardier, Joseph Heller, author of *Catch-22*.

*The 240th does a fly-by in hopes of appeasing Vulcan, Roman God of Volcanos.*



14 May, 2005 – Didier Delsalle touches his Eurocopter AS350 down on the summit of Mt Everest for almost four minutes and is recognized by the Fédération aéronautique internationale with a new altitude record for helicopters, 29,045 ft. He repeated the feat a day later.



*Delsalle and the Eurocopter at base camp*



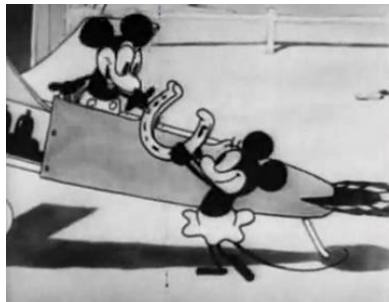
*A bad place for an auto-rotation.*



*Cockpit view of the approach to the summit.*

The helicopter was more or less standard with items such as passenger seats removed to save weight. Delsalle utilized the updrafts and downdrafts to assist. He states that at one point "I found an updraft so strong that I could rise up with almost no power."

15 May, 1928 – Mickey Mouse makes his first cartoon appearance in *Plane Crazy*, a tribute to Charles Lindberg. Disney cannot find a distributor until March of 1929.



*El Raton will need the luck because he is going to have a weight and balance problem with that horseshoe. Perhaps Minnie has taken out flight insurance on Mickey*

This is five months after *Steamboat Willie* is released so the palm for first place is awarded to a boat cartoon rather than a plane cartoon. Reminds one of the *Memphis Belle* claim about first to complete 25 missions.

16 May, 1929 – Aviators collaborate and produce

the first and only silent film to win the Academy Award for best picture. Three principals, Director William Wellman, Writer John Monk Saunders, and Actor Richard Arlen were all WWI pilots. Buddy Rogers, the male co-star learned to fly for the picture. And incidentally, the culmination action is the Battle of the St. Mihiel Salient. Billy Mitchell led the air action at St. Mihiel.



*Arlen, the "It Girl" Clara Bow and Rogers on the poster.*

Gary Cooper had a beautifully done bit part which launched his career. Supposedly he showed Howard Hughes a copy of the script but Howard only showed interest only into seeing how Wellman would manage the aerial filming.

The Army cooperated and filming was done at Kelly Field in San Antonio and Selfridge Field in Michigan. Three hundred pilots participated and at least eight different types of aircraft were utilized.



*Wellman developed novel techniques for filming air-to-air scenes.*

Saunders wife was Fay Wray. Wray is the "Beauty that killed the Beast." if you recall the aircraft attack on King Kong at the top of the Empire State Building.



*Saunders & Wray*

*Kong takes  
on a flight of  
Helldivers*



As a point of interest, the original movie *King Kong* was a creation of Merrian Cooper.

He was a bomber pilot in World War I, a volunteer in the Polish Kościuszko's Squadron which fought against the Communists in the 1920 Polish-Soviet War was a logistics officer for the Doolittle Raiders and worked setting up the "Hump" transport operation between India and China. Merrian had a bit part as one of the pilot's attacking Kong. John Travolta is a late-comer to the Hollywood aviation community.

Search for "Kong, Empire State Building" on "You Tube" if you wish to view a combination of a live performance and 1933 animation.

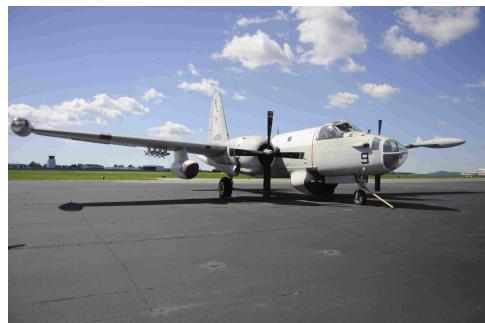
#### *Big Day for First Flights*

17 May, 1946 – First flight of the Douglas XB-43 Jetmaster. Douglas uses the experience gained by building the XB-42 prop plane to produce the first American jet bomber. The XB-42, featured in last week's issue, had an airframe optimized for jet engines after the buried piston engines and tail mounted propellers were removed.



But the technology of jet engines and jet airframe design was in its infancy. The Air Force decided that four engines were needed and the rather conventional North American B-45 Tornado won the bomber contract.

The highly successful Lockheed P2V took to the air. The highly versatile aircraft was used for maritime patrol, anti-submarine warfare, and communications and signal intelligence.



A technology demonstrator, the McDonnell-Douglas X-36 made its first flight at Edwards AFB. The aircraft was tailless and the investigations focused on stability, weight reduction and radar cross-section.



The X-36 is a sub-scale drone, controlled by a

pilot sitting in a ground-based cockpit. It follows a long tradition in which sub-scale models are used to garner data about design characteristics.

### *Ladies Day*

*A quintet of aviatrixes share May 18th as a birthday or day of achievement.*

1905 – Birth of Ruth Blaney Alexander US Female aviation pioneer. On September 29th, 1929 she entered flight instruction and two months later became the 65th licensed woman pilot in the United States. Her flying career only lasted one year but it was a year of phenomenal achievements.



The day after being licensed she set a new altitude record for women. She rapidly developed her skills and became a commercial pilot and the first female American glider instructor. Four months after that she set the absolute altitude record for light planes, 26,600 feet. The altitude record flights were quickly followed by speed and distance records over a route along the west coast from Mexico to Canada.

On September 18th, 1930, the 25 year old Ruth departed Lindbergh Field, San Diego intending to fly home to Wichita but a mile from the airport flew into low clouds and a fog bank, crashed and was killed, almost a year to the day of her initial flight instruction.

1952 - Jeana Yeager (no relative to Chuck) is born. She earned a private pilot certificate in 1978. Starting in 1980, Jeana set a number of distance and speed records flying Burt Rutan designed aircraft. Her most notable achievement was as co-pilot to Dick Rutan on Voyager's epic unrefueled non-stop circumnavigation of the earth, a 9 day 3 minute 44 second 24,986 mile marathon.



*Yeager, Rutan, and Voyager*

1953– Jackie Cochran becomes the first woman to break the sound barrier. After a remarkable two decade aviation career, Cochran decided to break the world speed record for women held at that time by another Jackie, Jacqueline Auriol of France. After the USAF refused to help, she turned to the Royal Canadian Air Force which not only loaned her the only Canadair Sabre 3 ever built but also provided a support crew.

*Cochran standing on the wing of her F-86 talking to Chuck Yeager and Canadair's Chief Test Pilot Bill Longhurst (Credit: Air Force Flight Test Center History Office)*



Jackie not only set a new women's speed record but on one run, went supersonic. By the time of her death in 1980, she held more speed and altitude records than any other aviator, alive or dead.

1966 – Former British actress Sheila Scott departs London Heathrow for her first round the world solo flight, 29,000 staged miles in a Piper Comanche named *Myth Too*.



She learned to fly in 1958 and in around two decades of flying set over 100 aviation records, mostly for endurance and distance. Sheila was also the first to complete an equator to equator flight over the North Pole. Her honors include induction into the Order of the British Empire and the Collier Trophy.

1971 – Desiree Tylor Horton is born. Known as "Chopper Chick," Horton has had a diverse career flying charter, ferrying helicopters, fighting wildfires, and most famously, a Los Angeles traffic reporter and television commentator. Helicopters not her only choppers. Desiree has also appeared as a model in Harley-Davidson motorcycle and clothing catalogs.



19 May, 1978 – The first prototype of the Sikorsky Blackhawk crashes. The YUH-60A and the three aboard were killed due to a maintenance mistake.



*The first  
Blackhawk before  
the crash.  
(Credit: Sikorsky)*

The aircraft was forced into a nose-down attitude while transitioning from hover to forward flight. An unconnected air speed sensor controlling the tailplane actuator caused the crash. Lessons were learned and some 4,000 Blackhawks in many variants have been produced.

## **CHAFF, FLARES AND DECOYS**

At the last Cadet meeting questions were asked about the crew and onboard protection of the B-1B. On member of the crew is the Defensive Weapons System Officer. He controls an array of protective devices.: flares, chaff, jammer and decoys.



*Two Bones Dropping Flares*

*Flares are designed to produce a false target for a heat seeking missile. They are commonly pellets of a pyrotechnic composition of magnesium. The "pyrotechnic" element causes the pellet to ignite on contact with air.*



*An Artist's Conception of Chaff Dispersal  
Modern chaff is made from aluminized fibers.  
A cloud of chaff reflects the radar signal and  
swaps the screen with false images.*



*An Artist's Conception of a Bone Towing a Decoy  
The decoy mimics the radar image of the aircraft  
and can sacrifice itself by luring the radar guided  
missile to it rather than the manned aircraft.*