MAFC

March 2017 Issue

MONMOUTH AREA FLYING CLUB

Club Meetings

Board Of Trustees: -
7:00 PM 3/2/17
Club House

General Meeting:
9:00 AM 3/18/17
N12 CAP Building

Editorial Staff: Charles Burke, Dave Pathe, Karen Barbagelata

Inside this issue:

KEWR Tour

Building 1

As reported in the February newsletter, the club is sponsoring a behind-the-scenes tour at Newark Liberty Airport scheduled for Friday, March 10. For those who have signed up, the tour will begin in the main lobby of Building One at 10am. This historic 1934 terminal is where airport memorabilia is on display along with models of numerous commercial aircraft. The tour starts its first phase walking throughout this area before continuing to the back of the building for an Air Rescue Fire Fighting demonstration involving some of the equipment used for emergency situations involving aircraft, as well as the buildings that are located all over the airport. Next we head to the Landside Control Center where a display of CCTV footage streams in real-time, covering areas throughout the terminals, parking lots, and roadways. After the LCC, the tour boards a bus and heads to the P4 AirTrain station where a quick AirTrain ride and walkthrough of Terminal B concludes the tour. The group is then returned to Building One at approximately noon.

Building 1 interior

After the pre-arranged tour, the group will be invited to have lunch at the staff cafeteria located in a building on the northeastern end of runway 22. The cafeteria is open to the public and serves a wide array of food at reasonable prices. But the best part of this can be appreciated if the weather cooperates. Standing in the parking lot, you have an up-front birds-eye view of aircraft landing or taking off.

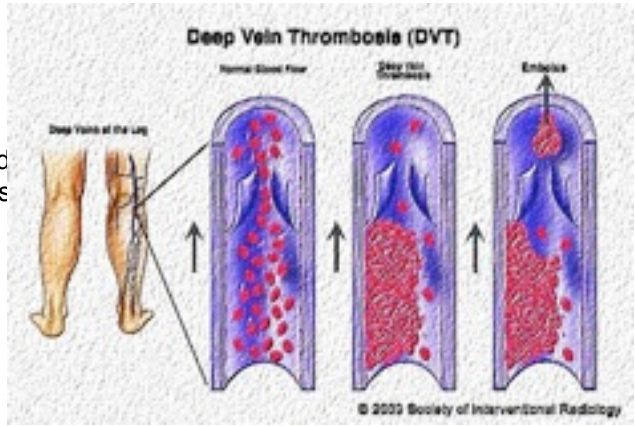
There is also a possibility that the group may be able to visit the tower but this will not be know until almost the last minute.

A look back by Charles Burke

While doing research on Newark Airport, a fascinating film was found on Your Tube which chronicles what went on in the typical commercial airport back in 1947. It was produced as an invitation to explore the wide range of vocations that were available at that time in our history. The original film is worn and tattered but the overall body of information is worth taking a look at. The link to the video is :

www.youtube.com/watch?v=GUEBpKL1qiI

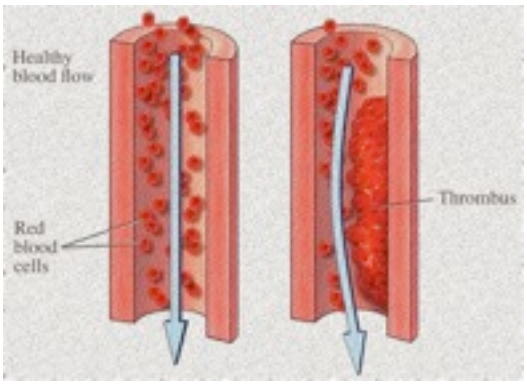
Blood Clots and Flying by Parvez Dara, MD FACP, ATP, MCFI, Gold Seal SAFE



A while ago, I saw a patient in the emergency room. He was well built in his 50s. His main complaints were shortness of breath on minimal exertion. His physical examination revealed bilateral deep vein thrombosis, which was confirmed on further diagnostic tests. There had been no traumatic episodes or a preexisting family history of blood clots. The dilemma of causation stayed with me for the day, until I went back and asked him about travel. There it was he had been on an 8-hour international flight across the pond a week ago. Aha! the Sherlock in me cried out, Elementary, my dear Watson.

What had caused it?

Think of it as an exercise in understanding. All pilots take flights for granted. There are risks, this happens to be one of the risks in flight.



To elucidate this fully, imagine a compressible tube and a flow of fluid through it. The wave of the fluid expands the tube (just like a rubber hose). Now imagine that the fluid has thickened significantly. Imagine also that the expansile ability of the tube is limited because the flow is slow. Also imagine that the fluid is now filled with sedimentary material that would flow linearly in the middle of the tube due to the force of the pressure of the fluid flow, but now that the flow gradient has diminished moderately due to the thickness and lower volume, the linear flow of the sediment is therefore marginalized onto the inner surface of the tube. And I know I am taxing the imagination here a bit, but humor me with one more imagination, that the tube (or rubber hose) is now bent at a right angle. There, now you have the ingredients of a clot formation.

You see in flight at altitude, the air is dry (less water vapor) and so with each breath humans give out more water vapor than they take in. Each breath therefore dehydrates an individual. Hence the need to constantly rehydrate oneself in flight. With dehydration the blood thickens as the osmotic pressure within the blood vessel increases compared to the surrounding tissues, with depleted moisture reserves. This water loss to tissues, leads to thickening of the blood. (remembering that 70% of the human body is water). A marginal decrease of water load leads to impairment of organ function. With thickening of the blood, the linear flow is disrupted and the “sediment” (in the case of blood is red cells, white cells and platelets) falls to the periphery or to the inner walls of the blood vessels (veins). The platelets are tiny blood fragments that have the capacity to coalesce and create mounds. Their function is mostly to stop bleeding in veins that have been traumatically cut or bruised. That is how bleeding stops after a cut and applied pressure. In an individual sitting for 8 hours in the aircraft with a bent knee or pressure from a crossed leg, the setup is complete.

As the platelets fall off in clumps with other clotting material in the blood towards the vessel wall, a mound of sediment forms inside the vein. That mound being a disrupter of linear flow, is the beginning of a blood clot. Upon landing, reestablishing the hydrated state and normal blood flow rate across the mound, more and more platelets arrive, the mound gets bigger, eventually leading to further hampering of the blood flow. This mound within the vein initiates an inflammatory response (a body mechanism to mitigate the problem) which causes pain in the calf, or behind the knee or in some cases in the thigh. Other signs include swelling and pain, possibly redness of the skin and warmth to touch. If a larger vein is the one obstructed, the lower extremity swells, as the inflow of blood from the arteries continues unabated by the pumping of the heart while the outflow is limited due to the semi-obstructing mound. Eventually with normal activity of walking a small clump of this “sediment” gets dislodged from the vein and ends up in the lungs causing a lung clot. The afflicted individual experiences a sudden chest pain and/or shortness of breath or both, anxiety, a racing heart-beat and in rare cases coughing up blood. The treatment here is an emergent process after recognition of the diagnosis.

Although this is not an uncommon phenomenon in a normal population, it occurs with more frequency in people with Prothrombin Mutation (2% of US population) or Factor V Leiden mutation (an inherited genetic mutation with a 5% penetration in population)- both can be easily diagnosed with blood tests. The latter is more common in females as compared to males but affects both when present.

The answer then is to remain hydrated during long flights in any aircraft at altitude above 5000 feet. Remain cognizant to move limbs and exercise the muscles even in cramped quarters and recognize the potential when symptoms warrant to go see your doctor.

Continued below

CDC gives the following Risk factors:
- ☒ Older age (risk increases after age 40)
- ☒ Obesity (body mass index [BMI] greater than 30kg/m^2)
- ☒ Recent surgery or injury (within 3 months)
- ☒ Use of estrogen-containing contraceptives (for example, birth control pills, rings,patches)
- ☒ Hormone replacement therapy (medical treatment in which hormones are given to reduce the effects of menopause)
- ☒ Pregnancy and the postpartum period (up to 6 weeks after childbirth)
- ☒ Previous blood clot or a family history of blood clots
- ☒ Active cancer or recent cancer treatment
- ☒ Limited mobility (for example, a leg cast)
- ☒ Catheter placed in a large vein
- ☒ Varicose veins

Speaking about the patient, he was treated with blood thinners and discharged to normal activity within days. Nursed fully back to health!

References: https://ghr.nlm.nih.gov/condition/factor-v-leiden-thrombophilia
And : http://circ.ahajournals.org/content/110/3/e15
And : https://www.cdc.gov/ncbddd/dvt/travel.html

Spotlight on: Frank Fine

During World War II Frank's parents were neighborhood volunteer air raid wardens. They were issued official airplane spotter cards to hopefully help them identify any airplanes flying overhead as either friendly or enemy aircraft. As a child he studied those cards for hours, learning airplane configurations. He grew up watching Sky King in the movies and reading Smilin' Jack Comics. When he was a young teen he rode his bicycle from Nutley, NJ to Teterboro Airport to watch the airplanes.
He enlisted in the Marines during the Korean War and used the GI Bill to learn to fly and obtain his Private Pilot License. He began flying at Asbury Air Terminal in 1957 in an Aeronca 7AC. He continued his flight training in a Piper Cherokee at Monmouth Airport. Eventually he received his Commercial, Multi-Engine, Sea Plane, Glider, Instrument, Instructor, and Instrument Instructor ratings, along with tow plane, and tail wheel certifications. Over the years he has flown everything from Ultralights to Turboprops.
One summer Frank worked as dispatcher for Ed Brown's Monmouth Airlines; his wife, June, ran the Flight School. He also flew as Co-Pilot on air taxi flights in various planes including a Beech 99, Piper Navajo, and Piper Cherokee Six. On one particular day, he dispatched a flight to DC in the morning, selling the tickets and carrying the luggage to the plane. One passenger returning from DC in the evening was surprised to see the Co-Pilot on his return flight was the same person who had sold him his ticket earlier that day!
Frank has restored several antique aircraft, two of which he has donated to museums. A 1939 Taylorcaft is in the College Park Aviation Museum in Maryland and a 1944 Military Piper L4 is on display at the Piper Aviation Museum in Lock Haven, Pennsylvania. Along with his wife, June, he was the advisor for Aviation Explorer Post 19, a Boy Scout youth program, which produced several US Air Force officers as well as future airline pilots, an aviation missionary, and numerous general aviation pilots. He was named 1996 Wall Township Citizen of the Year for his work with youth.

For many years, Frank has served as Young Eagles Flight Coordinator for EAA Chapter 315. Several MAFC Pilots have participated in Young Eagles Flight Rallies over the years. He is a Past President of Experimental Aircraft Association Chapter

Continued below

315, and a founding member of the Central Jersey Soaring Club. Frank was an instructor in the Fort Monmouth Army Flying Club and an original member when it became the MAFC. He serves on the Board of Trustees, has served as Vice President, has twice served as Club President, and is Chief Flight Instructor.
Frank and his wife June recently celebrated their 63rd wedding anniversary. They had two daughters, Carol Fine Hart, and the late Cathryn Fine. The entire family rib-stitched together and Carol also served as Frank's practice student while he worked on his Instructor's rating.

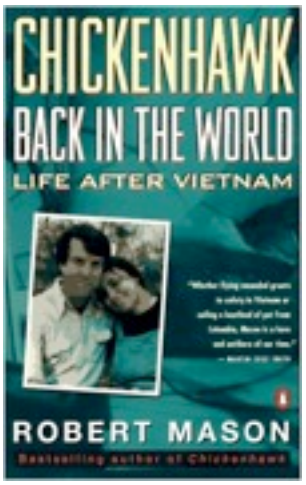
He is still flying and instructing. On his 80th birthday, he became a member of the United Flying Octogenarians (UFO).

McDonalds submitted by Tom Flieger

The famous golden arches of McDonald's restaurants are all over the planet with 36,600 outlets of the fast food chain worldwide. Making it even more interesting, are some pretty unique locations and unexpected exteriors. In one case (see left) it is inside of an aircraft that is located in Taupo, New Zealand. If you want to see more of these interesting locations, go to:

http://mentalfloss.com/article/65298/13-most-unexpected-mcdonalds-locations-around-world
or
http://twistedsifter.com/2012/09/the-most-unusual-mcdonalds-locations-in-the-world/

A Good Read: Recommended by Neil Linzmayer



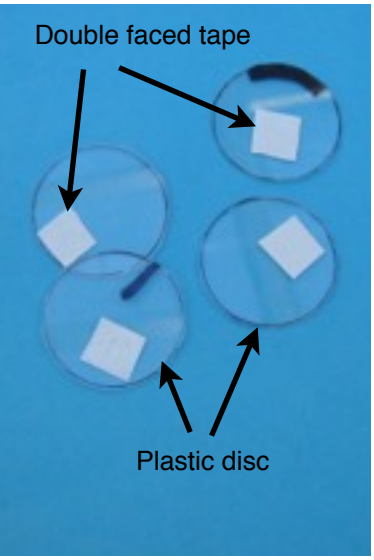
This sequel to Chickenhawk, a 1983 memoir of Vietnam, covers Mason's postwar life and his struggle with the classic symptoms of post-traumatic stress disorder: overwhelming restlessness, panic attacks and inability to hold a job. After finding relief in writing about his tour as a helicopter pilot in Vietnam, he then took a major misstep by joining a drug-smuggling venture that involved a sailboat voyage across the Caribbean. Caught by U.S. customs authorities, Mason found himself facing the shame of trial and the terror of prison. During this critical period, he received the news that Viking had accepted the book in hand for publication. Thus: "While I was experiencing the highest moment of my life, I was also experiencing the lowest moment of my life." Mason has a powerful personal tale that should have wide appeal. His account of the smuggling misadventure and his imprisonment in Florida are searing.

Aviation Stamps

The US Post Office has a long tradition of issuing stamps linked to aviation and you can periodically check their web site to see if any are now available. These special issue stamps sell for the same price as any other stamp so you can liven up your letters at no additional cost.

But there is another whole world out there of past issues and you might find them fascinating, even if you are not into stamp collecting. If you do a quick search of the internet using the words, "aviation stamps" you will find many sources for them. Interestingly, some of them are actually available for less than the face value but they are still usable! Here is a sample of what can be found.

What is in my Flight Bag--BUGS! by Charles Burke



Sometimes it is handy to have instrument gauge bugs that can be temporarily attached to act as a reference indicator. But not all gauges have them built in so it can be helpful if you bring your own. As a student pilot, I sometimes used these temporary gauge bugs as a reminder to apply carburetor heat when the engine's RPM dropped too low.

Temporary gauge bugs can easily be made from scrap materials and then custom fit to your needs. My material of choice are the clear discs that are at the top of CD or DVD blanks. If you don't have any of these, there are plenty of items that will work such as the clear plastic boxes that some foods are packaged in.

Just cut out a few circles that approximate the size of a gauge face then apply a small square of double faced tape to the back side. If the double faced tape has a protective strip on one side, you can make up a few of these bugs and store them for future use. Just add a magic marker to complete the package.

When a need arises, simply peal off the backing and gently press the disc on to the face of the gauge. Use your marker to note the bug position and you are all set. Just remember to remove and properly discard the bug when you are finished for the day.

MAFC Rules and Regulations Part 4

14. A reservation is forfeited if the pilot does not arrive at the airport by the scheduled time plus 15 minutes. If you know you're going to be delayed, call up and reschedule for a later time. Plan to arrive at the airport 15-30 minutes before your scheduled time. If, upon return, more than 30 minutes is remaining on the scheduled time, the remaining time must be cancel led via the Scheduling System. Fines will be levied against Club members who do not show up for scheduled flights or for not canceling flights on time.

15.Minimum fee:

The purpose of the minimum fee is to ensure that a member does not reserve a plane for an extended period, thus making it unavailable to other members, and then not fly the plane or only fly it a short part of the time reserved, thus providing very little revenue to the Club.

1. Any member who reserves a plane for five or more hours between the hours of 8AM and 8PM. Eastern Time shall pay the minimum fee according to this rule, or the actual flying time charges, whichever is greater. For all reservations of less than five hours, this section does not apply. Note that this fee applies whether you fly the plane or not. See the exceptions below.

2. On weekends and Federal Holidays, the minimum fee is 2 hours per day for the affected airplane. On weekdays, the minimum fee is 1 hour per day. If you have a plane reserved for 5 hours or more on a weekend or a Federal Holiday, you pay a minimum fee of 2 hours flying time in that plane. You pay a minimum fee of 1 hour of flying time in that plane for any other day. If you keep the plane past 1PM of the following day, add another 2 hours flying time to your minimum fee for weekend days or Holidays. Add 1 hour of flying time to your minimum fee for other days. Continue to add to your minimum fee (2 hours for weekend days and Holidays, 1 hour for other days) for each additional day you keep the plane past 1PM. The minimum fee should be calculated on all RON forms for the Operations Officer's consideration.

3. Exceptions:

a. The minimum fee will not apply to reservations that were cancelled at least 24 hours in advance.

b. The minimum fee will not apply to whatever portion of a flight is canceled, abbreviated or delayed for safety reasons, including (but not limited to) unfavorable weather, unairworthy aircraft, or pilot illness. In this case, the member who cancels shall explain to the Operations Officer in writing why the trip was canceled. This exception will be given a broad interpretation, so pilots will not feel "pressured" to fly unsafely because of the minimum fee.

c. If a flight is delayed or canceled because the previous flight did not return on schedule, the pilot of the previous flight becomes responsible for the minimum fee for the affected period.

(see below)

Here are a couple of examples, illustrating how the minimum fee rule works:

a. You take the aircraft Tuesday evening and keep it all day Wednesday, returning it before 1PM on Thursday. Minimum fee: 1 hour at the hourly flying rate.

b. You take the aircraft Saturday morning and return it late Sunday evening. Minimum fee: 4 hours at the hourly flying rate.

c. You take the aircraft Monday morning and return it Friday evening. Minimum fee: 5 hours at the hourly flying rate.

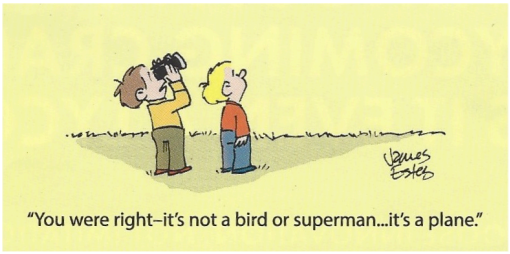
d. You schedule an aircraft for Saturday, 11AM–5PM. You decide not to fly that day (for any reason including weather, illness, etc) and fail to cancel your reservation. Minimum fee: 2 hours at the hourly flying rate.

Instructors generally impose a substantial charge (typically 1 hour at the normal instruction rates) on students who fail to show up, or cancel at the last minute without good reason. This is separate from the minimum fees imposed by the Club.

16. Used-up or expired Sign-out/Sign-in pages and usage pages should not be discarded or spoiled; they are important Club records and will be kept in the files.

Important Dates In Aviation for March

March 2, 1969: The Concorde makes its first flight.
March 9, 1962: Swissair introduces the Convair 990 on its route to Tokyo.
March 11, 1964: British European Airways, BEA, introduces the Hawker Siddeley Trident on its route between London and Copenhagen.
March 14, 1966: The Douglas DC-8-61, a stretched DC-8, makes its first flight.
March 16, 1960: KLM introduces the Douglas DC-8 on its service to New York.
March 17, 1954: BOAC places an order for 19 de Havilland Comet 4's
March 23, 2001: Airbus Industries officially rolls out the worlds longest airliner, the A340-600.
March 29, 2001: Boeing announces it is developing the “Sonic Cruiser”, an airliner capable of cruising at Mach .95.
March 30, 1958: The prototype Douglas DC-8 makes its first flight.



Takeoffs are Optional, Landings are Mandatory

Of Special Note!

Oliver Lin, pictured with Bill Wheaton FAA examiner, passed his Private Pilot practical test on February 14 2017! Matt D'Angelo instructor

The following members have completed the Probationary Period-- Congratulations!

Darren Mattos *Guy Barbagelata* *Kaushal Soni* *Karen Barbagelata*