

Club Meetings

Board Of Trustees:
7:00 PM 12/6/18
Club House

General Meeting:
9:00 AM 12/15/18
CAP Building



Editorial Staff: Charles Burke,
Dave Pathe, Karen Barbagelata

Art Martone Honored!

Several members and spouses traveled to the Fiesta Ballroom in Wood-Ridge, New Jersey for the 45th induction dinner of the NJ Aviation Hall of Fame. The “class of 2018” consisted of four new inductees joining approximately 160 members who came before.

This year’s inductees included Emil Buehler, whose Emil Buehler Trust was established in 1984 to support his commitment to aviation science and technology. He was an aviation visionary, architect and an engineer, and Linda Castner, who co-owns their family airport, Alexandria Field. Linda implements non-traditional outreach programs to promote aviation. The 3rd inductee was Huntley Lawrence who is the first African-American director of Aviation of the Port Authority, responsible for managing one of the world’s largest airport systems.

But, they saved the BEST FOR LAST, Colonel Arthur E. Martone, a life member of the Monmouth Area Flying Club! A member of the board of trustees of the Hall of Fame and Vietnam veteran introduced Art. He explained that he had never met Art until just a little while ago when Art arrived but they did speak on the phone for over an hour during the weekend. Following the introduction, a video was shown about Art with lots of photos of him during his military years. As Art approached the lectern, there was a standing ovation. Art seemed moved that he was nominated, chosen and now being inducted into this state’s Aviation Hall of Fame. Again, as he finished, there was a standing ovation.

During his speech, the squadron commander and cadet commander of the Teterboro squadron of the Civil Air Patrol were standing off to the side. Following his speech, they approached, saluted him and explained that because this is the 75th anniversary of the Civil Air Patrol, a commemorative challenge coin was pressed. They presented Art with one. All of the MAFC members were proud that they were there supporting Art and knowing the most important of all of the inductees. Following the program, our members had trouble getting to Art to take a group photo because so many other people were approaching him to take photos, speak with him, or just shake his hand.

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What made the evening more memorable was that the 12th of November 2018 was the day after Veteran’s Day and the official holiday this year. CONGRATULATIONS ART!



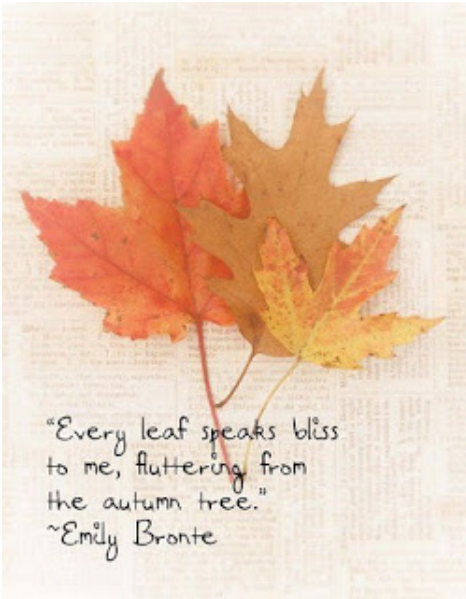
Art Martone receiving the award from NJAHOF executive director, Ralph Villecca, Sr



Members of MAFC



3 NJAHOF inductees: Lt.Col Steve Riethof 2008, Janis Keown-Blackburn 2015, and Art Martone 2018

FALLING LEAF MANEUVER by Parvez Dara, MD, ATP, MCFI, AGI

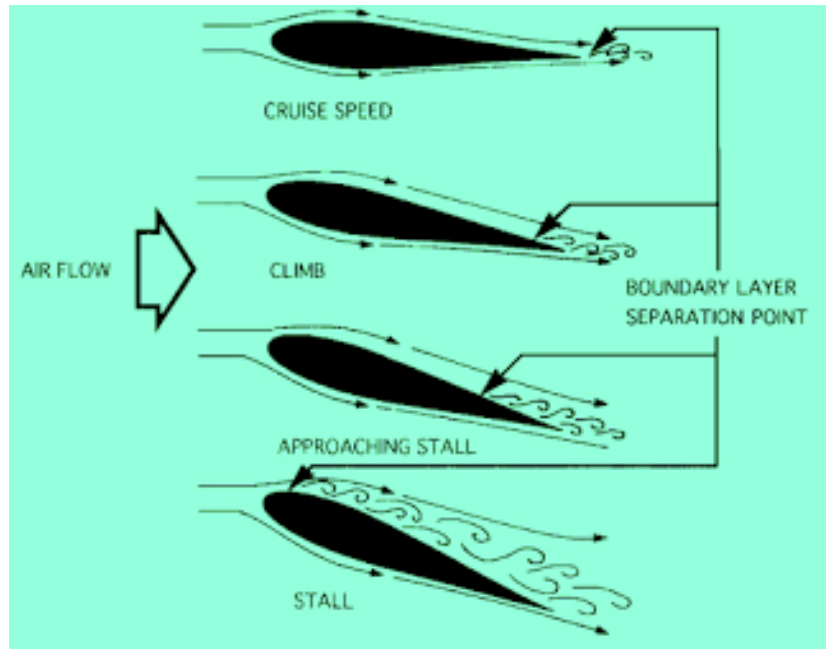
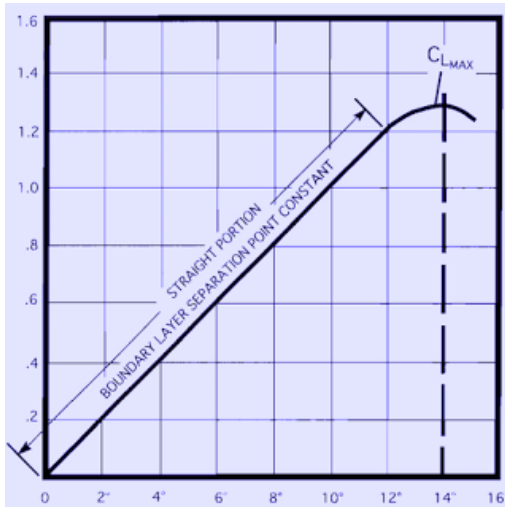
There is a certain grace in the fall of a leaf. It floats and then it does not. It flies and then it ceases to fly and having spent all its kinetic energy, it falls inexorably to its fate by the pull of gravity. The falling leaf symbolizes the dance of nature. It is a slow graceful dance to behold. Plucked by the breeze drifting slowly, but filled with beauty. A portent of struggle, between the lift and the drag and also perhaps of unusual potential transfer from one force over to the other. It is a disorienting phenomenon filled with potential gifts of capacity, experience and facility and learning for a pilot.

The Falling Leaf maneuver is similar in every respect, except it is not meant to fall all the way down to the earth, but be held up in the air by the pilot. **It is disorienting in nature but cannot be executed by an unfocused or untrained pilot.**

CAUTION: DO NOT TRY THIS ON YOUR OWN WITHOUT AN EXPERIENCED INSTRUCTOR!

Let us look at a Stall first...

If you carefully fly into a slow coordinated flight and bring the aircraft to a stall, what happens? Most of you would say, that the aircraft first buffets a bit giving you a warning. In the big irons the "stick shaker" will be the corresponding alert. Once the shudder is past, the aircraft nose simply falls down. What exactly is happening there?



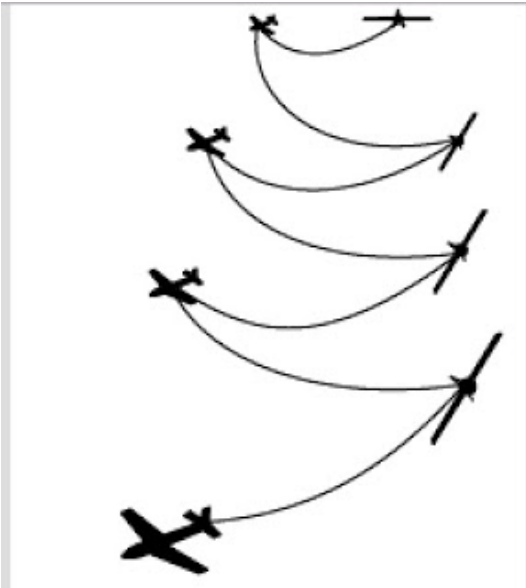
Noting that lift is created as a consequence of the angle of the airfoil to the Relative Wind. It is a dance between the "pull" of the Lift being created by the wind over the upper surface of the cambered wing (Bernoulli) and the "push" of the wind on the underside of the wing (Newton). The higher the angle of attack, the more the lift but equally with increasing Angle of Attack (AoA), the more the drag, is

mostly a form drag that keeps increasing, ultimately exceeding the Lift when Stall occurs. There is separation of airflow from the upper surface of the wing starting from the trailing edge of the wing (airfoil) slowly migrating to the leading edge. Once the separation is complete, the drag takes over and gravity plays its part. Ok, so having figured the mechanics of that out, if one were to ask, how would you recover from a stall? The answer is simple, isn't it? Put the nose down, let the wings gain lift and it will fly again. At low altitude added thrust (power) and the correct positive attitude with right rudder to counter the p-force etc. (per the aircraft being flown) is required. Remember the **Center of Gravity or CG** is forward of the **Center of Lift or CL**. As the Angle of Attack increase the Lift decreases and the Gravity pitches the nose down (Aircraft designers are pretty smart, aren't they?). This nose down is further helped by the loss of the horizontal stabilizer efficacy, being buffeted by the high angle of attack. And with the nose down, the wing flies again. Remember, if it buffets accidentally (wind shear etc.) nose down and power up (i.e. if engine is running).

Quite simple, isn't it? Next time, ask your instructor to demonstrate this to you. It will remove the demons that irritate and create unnecessary fear, off your shoulders.

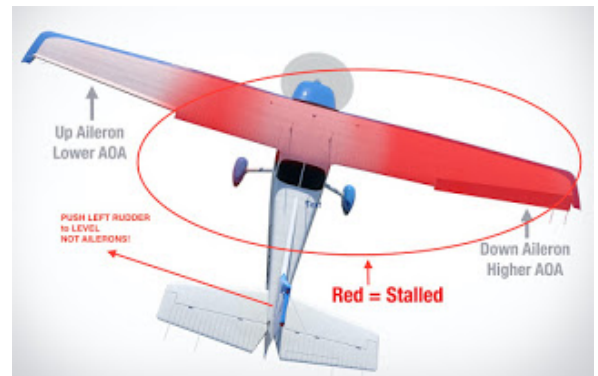
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Now assume you have mastered the stall characteristics and the recovery mechanism. Again, with an instructor who is trained in the maneuver at your side your side, who has the experience, on a calm day, go fly up to an altitude of, say 4500 feet AGL and put the aircraft into a stall. Now instead of recovery keep the back pressure on the yoke.



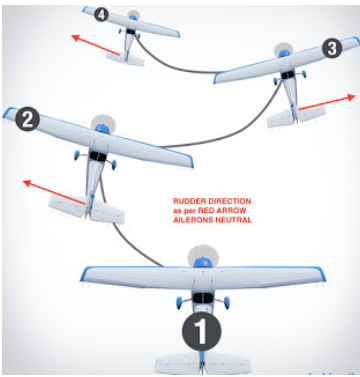
What happens next? One or the other wing of the aircraft will fall away from level flight (usually the left one). When that happens, most pilots even with many thousands of hours will do the same thing...use the ailerons to level the wings. **Here is the warning:** Using the ailerons to level the wings increases angle of attack and deepens the stall by increasing drag and lift loss and further aggravates the situation. The correct method is to use the opposite rudder to the low wing.

Let us look at it from a perspective of understanding. **A falling leaf maneuver is a dance between multiple potential, imminent spins corrected by the judicious use of the rudder.** You are not falling out of the sky, so to speak, just have less lift, more drag and you are controlling the loss of lift by coordinating by alternately creating (as wings level momentarily) and losing Lift (when one wing drops and the other sustains the aircraft transiently) and doing the dance with expertise. The pitching and side to side motions can be abrupt and disorienting. I don't want it to sound gracefully benign in the early learning process, but with practice and experience it can be made to look and feel comfortably benign and graceful.



No heavy lead feet needed in this maneuver. Just judicious anticipation and effective use of the opposite to the lower wing, rudder to keep the wings level (preventing a wing-over into an incipient spin is the key). Delay in opposite rudder input can deepen the roll). Remember there is grace in a falling leaf, unless in a gale.

You might ask, "what is the benefit of putting myself through this ordeal?" Good question! The answer is quite simple, it **helps understand that even during a stall the VSI stays at a 500+/- rate of descent, which means the aircraft is still flying**, albeit poorly! It teaches the importance of the rudder use and gives you, the pilot, confidence. Or simply put, it teaches you to dance on the rudders with a deft touch when needed. It will also help you make expert, coordinated turns without skids and slips (which create drag and slow you down). So, learn to tap-dance gently on those rudders.



The "falling leaf" maneuver is a series of full stalls where you never release back pressure, but play the forces of the aerodynamic lift of the wing, relative wind, the angle of attack and form drag of the aircraft, all the while straining to keep the wings level. During the maneuver, your plane should look like a leaf gently rolling and falling but continue in its flight! Learning the Falling Leaf maneuver will help prevent you from making preventable mistake and inadvertently falling to the ground.

CAUTION: DO NOT TRY THIS ON YOUR OWN WITHOUT AN EXPERIENCED INSTRUCTOR!

Test #11 What is the maximum and minimum oil level in N4287Q and N96KK?



Spotlight on: Mayer Waldman

Flying has been a passion of mine since I was a little boy. A family friend was a pilot, he used to take us flying. I learned to fly in Republic -KFRG

I did my training in a Piper Warrior. I joined the club in April 2018. So far I have logged over 130 hours. I have flown a Luscombe 8, Skyhawk and Lance. I currently have a PPL and am working on my instrument rating.



\$100 Hamburger (Brown bag) by Mike Bernicker & Charles Burke



We both had flown to Mount Pocono Airport (KMPO) before but it was many years ago. But this time, it was not a warm summer day but rather a chilly fall morning that started out with a reading of 32° on the thermometer. The reason for heading north was to see nature's handiwork of the mile upon mile of forests.

We departed N12 with a 12,000 ft gray ceiling that extended for hundreds of miles ahead of us. Acting like a giant damper, the air lacked even the smallest amount of turbulence thus affording one of the smoothest rides in a long long time. A direct line to KMPO takes you almost over Princeton Airport then you slide past Solberg where the New Jersey Highlands come into full view. As we threaded our way northward, the Delaware River comes into view on our left and finally the Delaware Water Gap is almost dead ahead.

Once you clear the gap, it is a short ride to the airport and KMPO comes into view. The facility has two beautiful runways but they come with a perplexing conundrum, there are no taxiways. Well, that is not true, there is a short one on the western side of 5/23 but it was closed due to construction work. However, the cross runway, 13/31 has none! This is an interesting situation because you need to back-taxi after landing and the airport is fairly busy during the summer months.

While we normally eat at an on-site restaurant, there are none at KMPO but they do have a crew car that you can borrow for free. Just make sure that you call ahead and reserve it. But this time, we decided to brownbag it. One of their staff greeted us and just beyond the counters you could easily see an area set aside for pilots. They had a number of very comfortable lounge type chairs as well as a small table with stools. The lounge chairs were equipped with a small wooden extension coming off the arm that created a mini table and this is where we decided to enjoy lunch.

The idea of brownbagging has not really been mentioned to any great extent in this column but it does need to be explored. While it is fun to fly in and enjoy a freshly prepared meal, there are a number of fine airports that simply do not have these amenities to offer. Including places that do not offer dining facilities will open your flying experience to a lot of really great airports that otherwise might be missed. So think about testing the water the next time you fly and turn the event into an airborne picnic.

The flight home took us in a slightly different direction, but for good reason. It had been learned that N4287Q was ready to roll but was at Ocean County Airport (KMJX). So with a reset on the GPS, we headed straight down there. Using flight following also paid off, they directed us right through the Class D of Lakehurst (KNEL)). Once we were on the ground, N4287Q was picked up and we flew both planes back. But just as we were leaving, N61WT was coming in then we heard N268BG on the radio. For a short time, the majority of the club's aircraft were in a group other than at N12.

Continued

A short hop north brought us back to N12 and an opportunity to reflect on the beautiful countryside that we had seen. We are really lucky to have so many different terrains to fly over within such a short span of time and we had just traversed several of them.

London to Paris circa 1923 by Art Templeton

Within only two decades of the tenuous first steps taken by the Wright Brothers, aviation had leapfrogged into an industry that was providing luxury transportation for passengers. In this rare black and white 1923 film you will see a flight from London to Paris. The images capture a time only a few years after the close of WW I depicting London and Paris as having been unscathed by the turmoil of those times.

<https://www.youtube.com/watch?v=FivQtHa2l-QFrom>



Maintenance Report by Dan Coles



N66977-C152 The new TKM nav. / com has been installed in the aircraft after it returned from BP Air. The spare ARC radio that was used until the new one was returned will go back in the trailer. A new battery was installed at BP Air. The loud whistling noise in flight that was coming from around the wind shield has been repaired.

N67818 C152 It has been reported that this aircraft has a nose wheel shimmy. and that the rear white navigation light was out. One of our members has picked up a new bulb and replaced the burnt out one with it. This did not correct the problem. This aircraft is in its annual inspection at BP Air where these issues will be addressed.

N4287Q-C172-L The #2 nav/com is unable to change frequencies. Ocean Aire avionics shop said there are no parts available to repair this. We will have to replace the radio. We have looked into a TKM slide in replacement for it. Ocean Aire Avionics shop quoted an installed price of \$5750.00 for a Garmin GTX335 ADS B out unit and \$8550.00 for a GTX345 WAAS in/out. Included in both prices are new GAE12 encoders.

N93KK C172 M The aircraft was taken to BP Air for a reported low voltage reading. They discovered that the alternator was not charging the battery so a new one was been installed. The aircraft was very close to its 50 hour service interval and this was taken care of while it is there thus eliminating another trip and down time.

N268BG-PA28-181

We are still in need of an overhauled D.G. The aircraft will have to be grounded for about a week while the D.G. is removed from the aircraft and sent to the overhaul facility. The attitude indicator has been reported not showing wings level in flight.

N55804-PA28-200 R The rear head set jacks are inoperative. These will be addressed at the next 50 hour service. A member noted that while working with various ATC centers/app controllers where seeing the altitude as 100 feet higher than what was showing on the altimeter with current altimeter setting. At the time of writing this 4.6 hours remained until oil change 50 hour service due. We have a price of \$1600.00 for recovering the 2 front seats with the same material as the rear seats. That price came from an upholstery shop at Doylestown airport.

N61WT The aircraft was flown to Lancaster to have the propeller balanced. This time the weather cooperated and the flight was completed with much success. A member reported the windshield was leaking on the copilot's side in flight but not on the ground. The aircraft was taken to Ocean Aire for a 50 hour service, fuel lines AD inspection and to repair the leaking windshield. They will also look into why the M BATT amps indicated yellow -1.5 after one hour of flight, remained for rest of flight. And that it also occurred on subsequent flight. M BUS volts remained at 27.8. Pilot's seat height adjustment lever was jammed, would not rotate either direction. In the process of inspecting the aircraft it was discovered that the firewall has been buckled from a hard landing. The aircraft will not be released for flight until the firewall has been replaced. It is not expected to return for at least a month.



Answers to the test: The maximum is 8 quarts and the minimum is 6 quarts. Other aircraft may have different specs. Check the POH to make sure you are working with the correct amounts.



Club elections will be held at the January 2019 General Membership meeting. If you are interested in running as a candidate, there will be a signup sheet posted in the trailer.



Anthony Astray-Caneda earned his IFR certification on November 17

Arun Ayyagari passed his commercial ride on November 30.
Ryan Ruffini, Instructor

Of Special Note!



Takeoffs are optional but landings are mandatory

