

Club Meetings

Board Of Trustees:
7:00 PM 3/7/19
Club House

General Meeting:
9:00 AM 3/16/2019
CAP Building



Editorial Staff: Charles Burke,
Dave Pathe, Karen Barbagelata

The 2019 MAFC Staff Directory

Each year, at the first MAFC Board of Trustees meeting following the election, a reorganization takes place during which the President assigns important duties. Because these duties impact every member, they are being listed in the newsletter. Please note that:

1. No contact information will be included. This is being done to protect the personal information of these individuals from being accessible to non-members. If you wish to reach any of these people, you can find their contact data on Flight Circle.

2. The descriptions are only a brief outline of the responsibilities and duties required. These outlines are being presented so that the members will have a better idea as to who to reach out to when a problem or question arises. All members should be familiar with both the By-laws and the Rules and Regulations. Within these documents, you will find the details associated with each post.

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Janis Blackburn, President:

The *President* oversees meetings of the organization following Robert's Rules. The President and monitors the club and can make recommendations to the Board of Trustees. In addition, the President can create and assign members to various posts and has the option to cast a vote when it is required.



John Pereira, Vice President & Assistant Maintenance Officer*

The Vice President assists the President in all related matters and can cast a vote when required.



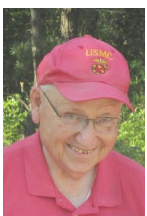
Tom Smock, BOT & Treasurer:

The treasurer's principal responsibilities are to make sure that funds owed the Club are collected, that the dues and flying fees are sufficient to ensure the operation of the Club, manage the Club's savings and borrowings to ensure adequate cash to meet expenses and makes sure there are adequate reserves for engine overhauls, airframe repairs, avionics upgrades, etc..



Mike Bernicker, Assistant Treasurer:

The Assistant Treasurer is responsible for collecting checks from members and verifying the amounts entered into Flight Circle. The AT enters checks that have not already been entered and makes deposits 2-3 times per month. These actions help the Treasurer in preparing financial reports.



Frank Fine, BOT & Chief Flight Instructor:

The Chief Flight Instructor checks to ensure that each MAFC Instructor is current and meets FAA requirements for CFI and/or CFII, as appropriate. He flies with, evaluates, and recommends for approval new prospective MAFC Instructors to the BOT. He is also charged with ensuring that student pilots are properly prepared for solo flight by review with their Instructor or other means as appropriate.



Dan Coles, BOT & Maintenance Officer:

The Maintenance Officer and Assistant Maintenance Officers are responsible for making sure that each airplane is kept in good condition and when problems are encountered, they take appropriate actions to correct them. They also make recommendations to the Board of Trustees regarding maintenance work that must be done and also provide suggestions for updating equipment.



Tom Griffin, BOT & Operations Officer:

The Operations Officer is responsible for bringing the computer files up to date, based on the Pilot Database Update forms and also handling the RON requests. He also ensures an adequate supply of engine oil, light bulbs, wash & wax materials, etc. are available for club use.



Dave Trulli, BOT, Avionics Officer and Flight Circle Manager:

The information and technology Officer checks to ensure that all aircraft avionics are in good working order and, when needed, arranges necessary repairs with the avionics shop. He also arranges for aircraft to be ferried to and from the avionics shop for repairs when necessary.



Tom Russell, Secretary:

The secretary is responsible for taking minutes at the BOT and General Membership meetings that usually includes the attendance, various reports and matters that have been conducted during these sessions.



Tom Flieger, BOT, Membership Chairman & Assistant Maintenance Officer*

The Membership Officer is responsible for publicity and recruitment. In addition, he maintains records on members and screens applicants to make sure they meet the established requirements. When a membership slot becomes available, he then presents them to the Board of Trustees.



Joe Bonacci, BOT & Safety Officer:

The Safety Officer is responsible for coordinating safety meetings, safety briefings and programs.



Darren Mattos, BOT, Assistant Maintenance Officer* & Probation Member Officer:

The Probation Member Officer monitors new members during the first year and then submits a report to the Board of Trustees that will be used to determine if the new members should be given full membership privileges.



Art Templeton, BOT & Assistant Maintenance Officer*:

The Assistant Maintenance Officers help to collect and review maintenance reports and repair issues then work with the Maintenance Officer to address problems.



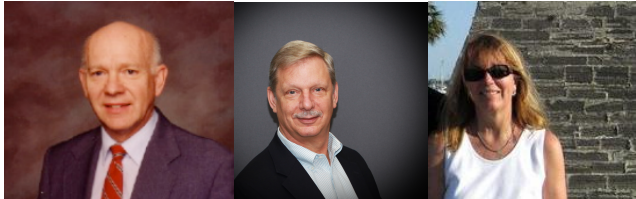
Girish Mandhwani: Probationary Member Officer:

The Probationary Member Officer gathers data and sends it to the Membership Officer for review..



Greg Gelnaw: Plant Manager:

In charge of our corporate headquarters performing maintenance, repairs and alterations to the club house.



Charles Burke (left) Dave Pathe (center) and Karen Barbagelata (right): Newsletter Editors:

The Newsletter Editors are responsible for gathering materials that go into the newsletter and then distributing the completed issues to all members at the beginning of each month.

Assistant Maintenance Officers and Assigned Aircraft

When an issue is encountered, members should only call or text the appropriate Crew Chief (see below) whose numbers will be in the club trailer as well as on Flight Circle. The Crew Chief will review and troubleshoot the problem prior to notifying the Maintenance Officer. **DO NOT CALL DAN COLES.** However, if a member encounters an issue which is an airworthiness problem the Maintenance Officer and Crew Chief should be called immediately as should any members who may have the plane reserved next. Please try to follow these guidelines to help the club's maintenance issues be handled optimally.

Tom Fieger	Darren Mattos	Art Templeton	John Pereira	Bill Butler (assistant)
<i>Cessna 152</i>	<i>Cessna 172</i>	<i>Piper</i>	Cessna 172S	Cessna 172S
N66977	N4287Q	N268BG	N61WT	N61WT
N67818	N93KK	N55804		



Test: What are the basic VFR weather minimums according to the FAR's' Define MVFR. (see page 6 for answer)

Spotlight on: Jon Stump



I became involved in flying during high school - albeit briefly. In 1981, I had taken two introductory flights: one at Old Bridge and one at Allaire. I did not pursue flying at that time as my father had me speak to one of his co-workers who was a former pilot and he convinced me that the commitment was too great for a high school student. But I was not alone in the pursuit of a pilots certificate, my grandmother had also started taking flying lessons while in her sixties

My real training began in 1992 flying in Cessna 152's and progressed to 172's at Princeton Airport where I got my Private in 1994. In 1996, I joined the Royal Karina Flying club at Sky Manor Airport where I started my instrument training. The club moved to Trenton-Mercer and I received my rating in 1998.

I joined the MAFC in November 2018 and have logged a total of 320 flight hours. While I enjoy flying the club's aircraft, my preferred plane has been the Cessna 182. I have been checked out in a Grumman Tiger and started taildragger training in an American Champion Citabria in Grand Prairie, TX. I have also flown a Piper Archer and a Diamond DA40.

I have ASEL and Instrument ratings along with sign-offs for complex and high performance aircraft. I have approximately 4 hours towards a taildragger sign-off and approximately 10 hours towards a commercial certificate, both stopped years ago.

I was born in Plainfield, NJ and grew up in Freehold where I still live today. I am married and have three boys, ages 21 through 11, along with 4 dogs, a cat, and a parrot. I went to college at the University of Rochester where I received my degree in Mathematical Computer Science. Am now looking forward to getting back into flying since life got in the way over 10 years ago. Am also working to have flying a part of my kids lives now that I am able to start up again. Mathematics:Computer Science. I have worked in IT for over 30 years, focusing primarily on infrastructure. My work has had me temporarily live in Tampa, Seattle, and Ft. Worth and has had me travel to Canada, Mexico, Brazil, England, Belgium, France, Sweden, Germany, Portugal, Italy, Switzerland, India, Singapore, Malaysia, China, Hong Kong and Japan.

737, Built in just 9 Days: submitted by Art Templeton

One example of how modern technology has impacted the world of manufacturing is the fabrication of a Boeing 737. This short video takes you through the 9 day process at the Boeing plant in Seattle, Washington which results in 42 aircraft rolling out the door each month. <https://www.youtube.com/watch?v=liZ0WEEsuz4>



Landing Energy Management : by Parvez Dara, MD, ATP, MCFI, Gold Seal

Let us look at energy as a stored form of force. As in potential energy that one gains by appropriating first the chemical energy (burning of fuel) and translating it to the mechanical energy (turning the prop and creating thrust) into stored potential energy as altitude. You go up in the air with a whole bunch of fuel burn and then coast down with a bunch less. But in that bunch less is a major wizardry of airmanship. How we manage that energy is what determines the difference between the sound generated by the repeating doppler-effect-engine-power-hog-jock and an aviator. The slow dissipation of energy by carefully manipulating the Throttle to achieve a steady state loss of that potential energy transformed into kinetic energy, is the key to good airmanship. When the Landing configuration is best at 1.3 VSo for normal landings and 1.2 VSo for short field landings, there is a specific need to adhere to that tenet. Or else you run the gauntlet of what might be. And most times it won't be pretty.

Many a pilot has ventured past the runway end carrying more than needed energy. A case in point is the recent Falcon crash at Greenville Airport that killed both the pilot and copilot in their haste to land while the runway kept shortening in front of them. The NTSB has yet to finalize on that fatal accident, therefore, this statement is a hearsay opinion based on the video of that flight while in the landing phase.

Remembering that speed is a form of kinetic energy and it dissipates at a certain rate when thrust is eliminated: The stored energy is a thief of time and space. Knowing only through practice, conditions a pilot in it's judicious use.

Let's look at the correlations between Speed and Energy...

Assuming a 3000-pound aircraft arriving at a runway at the given speeds creates the resultant force. **(Kinetic Energy + ½ mass * Velocity squared)**

65 knots of airspeed = 562,128 ft-lb of kinetic energy. 0% Baseline

80 knots of airspeed = 851,508 ft-lb of kinetic energy. +52%

50 knots of airspeed = 332,620 ft-lb of kinetic energy. -41%

Given those dynamics, it behooves us to maintain the appropriate energy on final approach to the runway.

Additional benefits of proper speed/energy management also include:

The sudden deceleration, say, hitting a parked truck or a deer on the runway or a structure requires tremendous energy dissipation...

Stopping a 60kt aircraft at 18 feet distance leads to a 9G force on the body (The limits of the FAA certified seat belts).

Stopping that same force/energy in 9 feet distance leads to an 18G force on the body (limits of sustainability).

And a sudden stop at 1-foot distance leads to 159 G force (unsustainable for the human body).

So, going back to my landing, I came in with near 10% higher speed/energy than required and I paid the price in runway used. Mind you, with that much stored/kinetic energy, I would certainly have taken out the runway end identifier lights on a 2000-foot runway.

A word of advice - Translate appropriate power and pitch for climb/cruise, appropriate power reduction and constant pitch for descent and zero power and changing pitch for level over runway and thence a smooth landing flare. Always concentrate on the VSo1.3 on normal landings and VSo1.2 on short field landings.



Fly by the numbers appropriate for the aircraft you fly and always fly safe.



What is the oldest-operating commercial airline? *See page 6 for answer*

Maintenance Report by Dan Coles

N66977-C152 The intercom has been reported to be intermittent with no communication available between the pilot and copilot. It was realized that the intercom switch was in the wrong position.

N67818 C152 It was reported that the flaps were not working. As this aircraft was to be taken to BP Air for repairs the flaps worked normally. It is suspected that ice may have gotten into one of the micro switches causing the malfunction. There have been no other squawks for this aircraft since its return from annual inspection.



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. The aircraft was at Three Crown Avionics to have the GTX 335, new GAE12 encoder installed.

N93KK C172 M The only squawk received was the glide slope was not working on the number one radio. The number two nav/com that was removed to repair the display and should be installed by the time you are read this. This aircraft was at BP Air where the annual inspection was done. Some of the items that were addressed were loose copilot door hinges, engine oil leaks checked, engine cooling baffling repaired, adjustment to the flaps and slick magneto service bulletin. On the preflight inspection Billy O smelled a strong gasoline odor. Upon further inspection he discovered fuel leaking from rubber hose connection at the wing root. He said that all if the hoses were old and brittle and changed all of them. To gain access to the area where the hoses are located he had to remove the head liner. Once the head liner was down he noticed a lot of surface corrosion on the inside of the cabin roof. He removed the corrosion and then painted the surface with zinc chromate primer.

N268BG-PA28-181 This aircraft was taken to Ocean Aire to have an oil change and 50 hour service. While there they replaced a cowl fastener and repaired the pitot heat. We are still in need of an overhauled D.G. and the attitude indicator has not showing wings level in level flight. These items will be addressed at the annual inspection. The aircraft is currently at Ocean Aire where the annual inspection is being done.

N55804-PA28-200 R The aircraft was taken to Ocean Aire to drop off the Archer. The pilot noticed the right brake was dragging. The shop removed the brake caliper freed the corrosion frozen piston, cleaned the affected parts, put in new seals, reassembled and bled the brakes then returned the aircraft to service. 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. We have an appointment to have the work done towards the end of this month.

N61WT The aircraft is back on line after Ocean Aire replaced the damaged firewall.

New Terminal for KTTN: Source Star Ledger

A steady increase in the number of flights, and passengers being carried at Trenton- Mercer Airport, has prompted plans to greatly expand the facility. This is in stark contrast to several smaller airports that have, or are in the process of closing.

Mercer County has hired an engineering firm to draft three different proposals with an overall estimate of \$55,000,000.00 for the actual construction. The new building will be located adjacent to the existing terminal which will retain the easy access to Rt I-295, The new design will increase the terminal space to of 125,000 square feet Included will be a number of amenities that future passengers will be very please with.





Answers to the test:

For VFR in class G airspace at or below 1200 feet, it is 1 mile and clear of clouds . From 1200 to 10,000 it is 1 miles visibility, 500 ft. below, 1000 ft above and 2000 ft laterally. Flying in class E or at night it is 3 miles visibility, 500 ft. below, 1000 ft above and 2000 ft laterally.

Answer to Trivia question:

The Royal Dutch Airlines, legally known as Koninklijke Luchtvaart Maatschappij or KLM, is the national airline of the Netherlands. KLM was established in 1919 making it the world's oldest operating airline. The airline still operates under its original name scheduling passengers and cargo services to about 130 destinations.

Need for Pilots

The looming commercial pilot shortage has been echoed in aviation magazine, by aviation clubs, and the media, just to name but a few. In this 11 minute video, the crisis is documented starting with a historical overview then proceeds on to exploring the situation that now exists. No matter what your relationship is to aviation, it is worth taking the time to review this excellent video. <https://www.youtube.com/watch?v=cognzTud3Wg>



FOR SALE. BUY or TRADE by Charles Burke



With spring rapidly approaching, it will mean more club members will be dusting off their equipment and taking stock of both what they need and what they may wish to get rid of. This can be further impacted by gifts that were received over the recent holidays. Please remember that you are welcome to post FOR SALE, TRADE or WANTED notices in the newsletter. Also, just a reminder, for those wishing to obtain steeply discounted materials, E-bay and Craigs List are good places to explore. However these two windows of opportunity will soon become more competitive as the bug bites many who suddenly decide to take lessons so it is far better to act now as opposed to later.



Out with the old, in with the new!



Takeoffs are optional but landings are mandatory

