

Club Meetings

General Meeting:
12/20/14 9:00 AM
N12 CAP Building

Board Of Trustees:
1/8/15- 7:00 PM
Club House

General Meeting:
1/17/15 9:00 AM
N12 CAP Building



Dec 14./Jan. 2015

Edited by Charles Burke & Dave Pathe

N93KK

With the installation of a rebuilt engine, 93KK is back on line! But before it can be made available to the club for routine flights, a 25 hour break-in period is necessary. This allows for the seating of the new piston rings and other mechanical functions to operate properly. To hasten the break-in period, a special rate was offered to the members, along with important guidelines to follow. This will help to accelerate the break-in process and the quest to once again have a full fleet.!



Spark Plug Fouling: Submitted by Dan Coles

Spark plug fouling in your aircraft engine may be a problem. In many cases, spark plug fouling results from the tetraethyl lead (TEL) in aviation fuel that can be reduced or eliminated by proper operating techniques.

The problem of lead fouling arises when low engine operating temperatures are coupled with running a rich mixture. Doing this prevents the complete vaporization of TEL. Under these conditions, lead deposits can form on spark plug electrodes, causing misfiring. By establishing and maintaining proper engine operating temperatures, the TEL can be kept properly vaporized and pass out the exhaust system.

For pilots experiencing lead fouling, the following operating recommendations are made:

1. Use only the spark plugs that are recommended by the manufacturer.
2. Rotate the top and bottom plugs every 25 to 50 hours.
3. Proper adjustment of the idle speed (600 to 650 RPM) fuel mixture and maintenance of the air induction system will ensure smooth engine operations and eliminate excessive rich fuel/air mixture at idle speeds.
4. The engine should be operated at speeds between 1000 to 1200 RPM after starting to reduce the initial warm-up period. Avoid long prolonged closed throttle idle engine speed operation (when possible).
5. After a flooded start, slowly run the engine to high power to burn off harmful lead deposits, then return the engine to normal operating power.
6. Keep engine operating temperatures in the normal operating range. Too often many people think the lower the temperature the better. Keep cylinder head temperatures in the normal operating range by use of normal power and proper leaning.
7. Use normal recommended leaning techniques at cruise conditions regardless of altitude and re-lean the mixture with application of alternate air or carburetor heat. If aircraft are used as trainers, schedule cross country operations whenever possible.
8. Rapid engine cool down from low power altitude changes, low power landing approaches and/or engine shutdown too soon after landing or ground runs should be avoided.
9. Prior to engine shut-down the engine speed should be maintained between 1000 to 1200 RPM. until the operating temperatures have stabilized. At this time the engine speed should be increased to approximately 1800 RPM for 15 to 20 seconds, then reduced to 1000 to 1200 RPM and shut-down immediately using the mixture control.
10. During ground and taxiing operations, lean the mixture.

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Greg Gelnow: Trailer Maintenance Chief

The BOT has appointed Greg Gelnow to the newly created position of Trailer Maintenance Chief. Greg was instrumental in helping to construct the new stairs and made other improvements to the new trailer. This appointment will be a fitting tribute to his dedicated service to the club. Congratulations Greg!

Chris Dumont's Icing Presentation

At the November 15th General Membership meeting, Chris Dumont, from the FAA, presented an outstanding program on the dangers of icing. Covering virtually every aspect of this subject from the physics of the various phases of water to its impact upon flight, those in attendance received a truly well rounded education on this topic.



Spotlight on Peter Abadir



Peter joined the club in September after having, "thought about it for a long time". Actually, a current member, Mike Souza is a patient of his (Peter is a dentist) who had told him about the MAFC and all its positive attributes.

As a new pilot-in-training, Peter is just beginning to log air time and firmly believes that this is something he wants to pursue. Actually, he recently logged about 15 hours and then soloed! At this point in time, he is a bit frustrated because the demands of his dental practice, family and the fall weather all put pressure on his schedule so scheduling air time is an up hill battle.

Like many of our members, Peter's journey to membership has an interesting story behind it. He was born in Egypt and came here in high school then went on to Rutgers majoring in chemistry. This led to pursuing a degree and license to practice dentistry here in New

Spotlight on Michael Muench

The desire to become a pilot became more pressing to Michael during the past few months because of frequent trips to Pittsburg, PA. which can run about 6 hours. But underlying this is the fact that both of his older brother and mother are also pilots. So the idea of trading the car for an aircraft was something that was rooted in personal experience.

Michael is currently flying our Cessna 172s and has logged about 35 hours to date. The fact that KK has been grounded for engine repairs put a slight dent in the scheduling process

Michael was born in Red Bank NJ. and has a very broad background. For starters, he has two doctorate degrees (MD, DC), and an MBA. He has travelled to multiple countries in Europe and the Caribbean. Michael is married with 3 children (twins age 12 and a daughter age 8) of particular note, he was awarded a grant for medical research, and special recognition on patient's that he has treated. He was also featured on Fox News Colorado for effects of Altitude on pregnancy.



Member Accomplishments

David Cottrel receiving his plaque from Tom Flieger for successfully becoming a private pilot.

In addition, Carl Policari soloed on the 11th, Tom Flieger instructor



Ground School

Private pilot ground school will be held in the club's trailer every Tuesday night between 6:30 and 9:30 P.M. for the next 8 weeks. If you have to go inside the trailer to sign out or in an aircraft during this time, please be respectful of the on going class. Conduct your business as quietly as possible so you won't disturb the class.

Thank you for your cooperation
Dan Coles President MAFC

With the fall and winter months ahead, it is nice to sit back and enjoy a good book. Here is one that you might enjoy.

Being able to easily perform math calculations in your head is a skill that every pilot strives for. If (like many!) you struggle a bit with this process, or, if you are simply looking for a way to improve your math skills in the cockpit, then 'Mental Math for Pilots' is a must read! Whether you are gearing up for that coveted pilot interview, preparing for a check-ride or proficiency check, or simply want to improve your inflight calculations performance, author Ron McElroy offers numerous invaluable tips and tricks to help you in all areas of cockpit calculations.



Sharpen your math skills for the interview as well as for the cockpit, with these instructions for figuring math problems in your head without paper or electronic calculator.

Knots by Charles Burke



When we study the basics of aviation, we learn that aircraft speed can be measured in MPH (miles per hour) or Kts (knots). While the origin of miles per hour is fairly easy to picture, knots is a different story. To understand this term it must be remembered that it was carried over from nautical measurements. Basically, knots represents the speeds of vessels (aircraft or boat) relative to the fluids in which it travel. For consistency, the speeds of air or water is also is measured in knots. The knot is a unit of speed equal to one nautical mile (1.852 km) per hour, or approximately 1.151 mph.

But how were knots originally measured? Until the mid-19th century, vessel speed at sea was measured using a chip log. This consisted of a wooden panel, attached by line to a reel, and weighted on one edge to float perpendicularly to the water surface and thus

present substantial resistance to the water moving around it. The chip log was thrown over the stern of the moving vessel and the line allowed to pay out. Knots tied starting at a distance of 47' 3" passed through a sailor's fingers, while another sailor used a 30-second sand glass to time the operation. The knot count would be reported and used in the sailing master's dead reckoning and navigation. This method gives a value for the knot of 20.25 in/s, or 1.85166 km/h. The difference from the modern definition is less than 0.02%

What can be confusing is that knots are a relative measurement. This means that you have to specify what you are measuring the boat or aircraft against. Here is one example as to why some people find this confusing. If a boat or aircraft is moving through perfectly calm water or air mass, the indicated speed in knots will also be the the vessel's speed relative to earth's surface. In this case, if the indicated air speed is 30 knots than the vessel is moving along at 30 knots or one nautical mile per hour relative to the earth. But, let us say a vessel or aircraft is moving at 30 knots in the same direction as the fluid or air which is also moving at 30 knots, relative to earth. In such a case, the resulting indicated speed would be 0 (zero)!! This is because both the fluid or air mass is moving together in the same direction and speed as the vessel or aircraft. Another way to picture this is to see yourself sitting on a train that is moving at 30 knots. Since both you (aircraft) and the train (air) are moving at the same speed and in the same direction, you will be standing still (0 knots) relative to the seat. Bottom line, you have to know what you are comparing the vessel's speed against to obtain a measurement that has some meaning and value.

On a more practical note, this is why we take off and land going into the wind. As the aircraft moves into an oncoming wind, the indicated airspeed will be increased. This is because the wing "sees" air moving at a cumulative speed. But, if you were to take off or land going with the wind (tailwind), the relative airspeed would be decreased making it possible to lose control or stall.

Prior to 1969, airworthiness standards for civil aircraft in the United States Federal Aviation Regulations specified that distances were to be in statute miles, and speeds in miles per hour. In 1969 these standards were progressively amended to specify that distances were to be in nautical miles, and speeds in knots.

The following abbreviations are used to distinguish between various measurements of airspeed.

- KTAS is knots true airspeed, the airspeed of an aircraft moves relative to undisturbed air
- KIAS is knots indicated airspeed, the speed shown on an aircraft's pitot static airspeed indicator. This means that the aircraft is measuring speed relative to the air that it is passing through.
- KCAS is knots calibrated airspeed, the indicated airspeed corrected for position error and instrument error.
- Ground speed is the actual speed that the aircraft is moving relative to earth.
- " Ground Speed in knots is the speed of the aircraft as measured compared to the earth

Armed with this information, speed measurement should not pose a knotty problem to you in the future!

During the renovation of the previous club trailer, a number of historical documents were discovered buried in drawers and cabinets. These were collected and thus began a project to save these important materials especially for those who are new to the club. The process to save these materials involves a number of steps that include cataloging, restoration, display and storage. To help make everyone aware of what has been collected, they will be periodically highlighted here in the newsletter.



To start things off it would seem only fitting to begin with a copy of the first MAFC BOT meeting minutes. As you can see, they were recorded on October 3, 1985 just over 29 years ago.

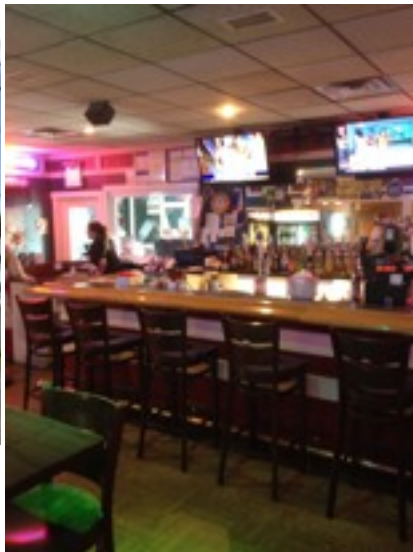
In the weeks and months ahead, these documents will be made available to everyone and you will be encouraged to look them over. It is asked that if you have any materials of historical significance that you consider adding them to the collection. The items can be in any form and include not only documents but plaques, photographs, patches, or your own personal items.



\$100 HamburgerFocaccia Pizza 'n' Pasta at N47 by Bob Tozzi & Charles Burke

We were looking for some casual Italian food and found a great place that is a very short hop from N12 at the Central Jersey Regional Airport. On a beautiful August day, we flew over to N47 to see if the food was as good as we had heard and were not disappointed. The airport is very well maintained and the ground crew greeted us with a set of chocks. To get to Focaccia Pizza 'n' Pasta you only need to walk a short distance and will find it just off of the end of the runway in the northeast corner.

The menu offers a nice array of both casual as well as more formal items. Since we were on a tight schedule, we chose to have sandwiches and were very pleased with the food, the staff and the prices. The interior has a welcoming bar to the left as you enter plus two large dining areas. Even though we were the first to venture in for lunch, they worked quickly to bring us a most enjoyable meal. Two thumbs up for Focaccia Pizza 'n' Pasta



Outside my window: Shots taken by Pilots

