

Club Meetings

Board Of Trustees:
7:00 PM 1/3/19
Club House

General Meeting:
9:00 AM 1/19/19
CAP Building

Editorial Staff: Charles Burke,
Dave Pathe, Karen Barbagelata



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Announcements

Avionics Units in KK & Q

The BOT recognizes that there are some issues with the Nav/Comm systems in both 4287Q and 93KK and created a research committee to explore upgrading these systems so that they meet the needs of the membership and provide newer, more reliable avionics in the aircraft. The initial goal was to replace the existing systems with a Garmin 430W in the comm/nav #1 position and a basic comm/nav in the #2 position. This would provide a near uniform Comm/Nav and GPS systems in all of our primary aircraft.

N4287Q



• GNC 300XL: GPS (IFR) + Comm
• KX 170B: Comm/Nav

N93KK



• GNC 150XL: GPS (VFR), No Comm
• Narco MK 12D: Comm/Nav 1
• TKM MX-300: Comm/Nav 2

The report that was compiled by the committee, headed by Tom Griffin, was submitted to the BOT prior to the December 5th meeting and contained a series of recommendations as well as cost estimates. The estimated cost for full implementation of this proposal ran between \$17,000 and \$24,000 for each aircraft. Due to the cost considerations and possible impact on hourly usage fees, the BOT is reviewing how best to proceed.

Elections

Club elections will be held at the January, 2019 General Membership meeting. If you are interested in running as a candidate, there is a signup sheet posted in the trailer. You must be a member in good standing (dues paid up, etc.) to run for office or vote for nominees.



Basic Med by Charles Burke

At a recent membership meeting, a question was raised by an attendee asking if the speaker, speaker, Ray Basri, an FAA AME, also performed Basic Med. While the presenter indicated that he only performed the standard FAA 3rd Class examination, this a lot of misinformation. Rather than attempt to address specific points. AOPA, one of the prime sponsors of the Basic Med program, was contacted and they provided a simple solution to the matter. The AOPA has a handy quick reference guide that addresses issues for both pilots as well as the medical examiner. They then sent a copy and, because it is of significant value, it has now archived on the www.flymafc.com web site.



If you have any interest in exploring the program, or would like to approach a licensed medical provider here in NJ for help, you can read or download and then print out the document. Simply go to www.flymafc.com and click on OTHER PAGES (TOP RIGHT) then click on DOCUMENTS look under OTHER USEFUL DOCUMENTS TO LOCATE IT. The Basic Med materials are at the bottom of that list

Winter Flying Safety Briefing by Dave Pathe

At the MAFC General Membership Meeting, Tom Flieger presented a number of safety items covering Winter Operations. Some additional safety items were also discussed with the members and they have been included in this listing.

PREFLIGHT

1. ALL frost, snow and ice **MUST** be removed before attempting flight.
2. Arrive in time to de-ice the airplane and, if necessary, preheat the engine.
3. **DO NOT** scrape or chip ice, snow or frost off the airplane. (No, you cannot use your American Express, Visa or Mastercard!)
4. **DO NOT** use the scraper from your car on the windshield. (Your car's windshield is glass. The airplane windshield is plastic. You will leave permanent opaque marks on the windshield which are hard to see through.)
5. If possible, **AND ALLOWED**, drive your vehicle onto the ramp, taxiway and runway environment to assess conditions.
6. If you're going cross country, especially to smaller airports, call ahead to determine runway and taxiway conditions.
7. Check NOTAMS.

STARTING PROCEDURES

1. Use of manual priming is generally required in colder weather.
 2. **DO NOT** over-prime or pump the throttle when cranking the engine. It could lead to an engine fire, and possible loss of the airplane. (This happened to JAC's Warror some years ago).
 3. Dan Coles noted that the carburetors which are located under the engine are "updraft" units which require the engine to be running in order to have fuel vaporized and delivered to the cylinder combustion chambers. Working the throttle causes the accelerator pump to inject a stream of fuel into the carburetor which won't vaporize and could ignite under the engine in certain conditions.
- The battery is also weaker in cold conditions, so over-cranking the engine could drain the battery or damage the starter.

The key to starting in cold weather (less than 32deg F) is to make sure the engine is thoroughly preheated. MAFC regs require preheating below 25deg F and no-flying below 10deg F.

GROUND OPERATIONS

1. Test your brakes - before taxiing.
2. Beware of icy taxiways, runways and parking areas. If possible, have the plane towed to a ramp area **NOT** covered by ice or snow.
3. Taxi **SLOWLY** and **CAREFULLY**. Use extra caution in the parking area of the ramp around other planes.
4. You're **PROBABLY** taxiing at the right speed **IF** you have to slightly add power going around a corner.
5. **IF** you start sliding and feel like you're heading for trouble, **IMMEDIATELY PULL THE MIXTURE** to save the propeller/engine and minimize any other damage.
6. Low wing aircraft - beware of the possibility the snow banks may be higher than the airplane wings, and there may be hidden taxiway lights buried in the snow.
7. Make sure you are on a safe surface (not on ice) before doing your runup.
8. Use caution when pushing aircraft back into a parking space. It can be easy to lose your footing on icy surfaces.

DO NOT EVEN CONSIDER ATTEMPTING TAKE-OFF IF THERE IS ANY ICE, SNOW OR FROST ON THE PLANE. NASA wind tunnel tests showed that frost on a plane can reduce lift by up to 30% and increase drag up to 40%. Combined with a relatively short runway, you may never get out of ground effect!

If you have any questions about winter operations, preflight or preheating, please contact a crew chief, maintenance officer, or any BOT member. Fly **SAFE!**



Test: At what time of day must the aircraft's positioning lights be turned on?



Spotlight on: Captain Dennis J Smith American Airlines



I reside in Middletown, NJ and am married to the girl of my dreams, Kathleen and am blessed with a son Daniel and daughter Aileen. My son also insisted I mention our dog Tucker.

As with many pilots, my interest in flying started at a young age. My father worked near TEB airport. While visiting him we would have lunch along the perimeter fence. Seeing the airplanes up close sparked my passion. Growing up in Brooklyn, NY, I was afforded little exposure to aviation careers. Most of my classmates became police officers and firefighters. There was a good chance I would follow this path as well. I graduated from St Francis College in Brooklyn with an AAS and from Manhattan College in the Bronx with a BS, both in Criminal Justice. Along the way, I was offered a Pilot Slot with the USAF, though the AFROTC Program of which I was a member. This sealed my fate. I attended USAF Undergraduate Pilot Training straight out of college at Laughlin AFB Del Rio TX, KC-135 training at Castle AFB Merced, CA and C-5 training at Altus AFB in Altus OK. I served seven years of active duty followed by fourteen years of Air National Guard and AF Reserve duty which completed my military service. While in the military, I received the Distinguished Graduate and Top Performer as a KC-135 Aircraft Commander Course- think Top Gun for tankers. I was also the recipient of the 1983 US Jaycees Outstanding Young Men of America Award.

In 1990, the airlines were hiring in full force. I accepted a position with American Airlines. It is hard to believe I have worked for them for almost 30 years! My first position with American was as a Flight

Engineer on the B727 and DC10. This was followed by First Officer positions on the F100,B727,B737 and B767. Ten years later, I became a Captain on the F100,S80,B737,767 and currently fly the A321. My general aviation time is 500 hrs. My total military, airline and general aviation time is 23,000 hours.

Airline flying is fun but still, it is work. Flying long distances is not as boring as some may think. London, Paris and most of Europe is challenging. South and Central America have crazy high terrain. Language barriers with controllers exist throughout the world. Pacific tracks lack divert options and the North Atlantic Tracking System is more crowded than the Garden State Parkway during Friday rush hour. This is why I love flying with the MAFC. It is pure fun and relaxing flying. I have only met the best of people through my brief two years here. A special thanks to Bob Tozzi and Tom Flieger for signing my initial application and to Frank Fine for checking me off as a Club CFI. I look forward to flying with and meeting as many of you as I can. Fly safe to all.

Air Force One by Art Templeton

Air Force One represents not only the United States but also the pinnacle of aviation technology. Throughout the history of these aircraft, we see the evolution of the accommodations that form an environment to safely transport the President to locations around the world. In this video, you are afforded an opportunity to see behind the curtain with a tour of the cabin. https://www.youtube.com/watch?v=C-MaU_-ZQ8w



Maintenance Report by Dan Coles

N66977-C152 The new TKM nav/com has been installed and checked for operation. The spare ARC radio that was used until the new one was returned is back in the trailer. We will be making an attempt this winter to have a new interior put in this aircraft. Expect there will be a period of down time for this aircraft. If you are a frequent flyer of this plane please make sure you press alt on the transponder prior to departure. This feature is not automatic and must be set after the aircraft master is turned on.



N67818 C152 It has been reported that this aircraft has a nose wheel shimmy. The rear white navigation light is out. This aircraft was in for its annual inspection. These issues were addressed during the annual inspection. During the annual inspection metal shavings were found in the oil filter. At has been determined the metal is aluminum. An oil sample has been sent to the lab for analysis to determine the nature of the aluminum. Billy O said one of the main gear tires need to be replaced. Also the cable tensions for the ailerons were too tight. The last part of the annual inspection they found the main landing gear fairings cracked enough to warrant replacement. New Cessna gear leg fairings cost \$1,200.00 each and need to be painted. Billy O makes them for \$400.00 each and has them powder coated.

Continued

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. Carl from Three Crown Avionics called me Thursday and said that Garmin has a special offer. The GTX 335, new GAE12 encoder and his labor for installation the price is \$3,800.00. With such a good deal at hand the BOT decided we should also buy a second unit for N67818. We are on the schedule at Three Crown to have the ADS B unit installed in Q the second week of January.

N93KK C172 M When we take N4287Q to Sussex for the ADS B installation N93KK should be the chase plane so that the number two nav/com can be removed for repair.

N268BG-PA28-181 This aircraft was taken to Ocean Aire to address a nose wheel shimmy, pitot heat not working, avionics master not working and the leaking primer. While there he also addressed the hard starting issue. This was done by adding another primer nozzle and another impulse coupling to the right magneto. The reply from Tom Rae about the avionics master was to not push in the circuit breaker that is supposed to be left out. 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 This aircraft was grounded at N12 with a faulty electric fuel pump. Bill called me and said he installed the pump in 2002. I asked if the warranty was still in effect. He said that it wasn't and would order a new pump and that he expected to arrive on Tuesday 12/4/18. The aircraft was returned to service 12/7/18. 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. Once we have a written estimate we will settle in on a date to have the work done.

N61WT The aircraft is at Ocean Aire and will not be released for flight until the firewall has been replaced. Lenny Boyd is anxious to get the parts ordered to repair the damage. He and Tom Rae questioned me several times about repairing the aircraft. My reply to them was that we are waiting to hear back from the insurance company. At the time I am writing this all of the paperwork for the insurance company has been completed and we are waiting on them. Hopefully when you read this the repairs will be well underway.

ATC-610 IFR Trainer by Charles Burke

Back in the summer of 2013, I was able to secure an ATC-610 flight trainer from Princeton University.. At that time it was possible to log IFR training time on it while working with an instructor. However, the FAA subsequently revoked this authorization. But while it may not be used towards maintaining currency, it is still a valuable tool for those who wish to sharpen their IFR skills.

The unit currently sits on a desk in the rear of the trailer, which during the winter months is not conducive to an ideal learning environment unless you enjoy sub freezing temperatures. However, permission was just granted to allow members to borrow the unit and take it home for limited periods of time.

If you wish to explore the potential that this trainer has to offer, there is a sign-out sheet that will be posted where the ATC 610 is not sitting. Just fill in the requested information and carefully transport it home. Please be careful when handling to unit so that it can be used by others.

In addition to the unit, the original operations manual is also available and it can be found on the club's website. go to www.flymafc.com and click on OTHER PAGES (top right) then select DOCUMENTS. Once that page opens you will find the manual under AVIATION MANUALS.



COMPARISON OF FEATURES ATC-510 & ATC-610

ATC-510

Three models - 510A, 510E & 510G. The 510 is a time based simulator and is limited to approaches of 2, 3 and 4 minutes only.

ATC-510A is the basic unit and has localizer course deviation indicator (no glide slope), turn and slip indicator, vertical speed indicator, clock, fuel gauge and power indicator. Also, a turbulence control, NAV/COM, transponder, marker beacon, stall light, typical aircraft control and switches. You can practice IFR techniques such as loss of airspeed resulting in stall/spin, failure to maintain assigned altitudes, becoming inverted following loss of attitude control, fuel starvation, turbulent air enroute and on approaches, amended clearances, holding, back course, go-arounds, vectors - even emergencies. *

ATC-510E adds glide slope, pitch trim control, T&S with live ball, hour meter, key lock and circuitry for the rudder pedal assembly option to all the typical light aircraft instruments and controls of the ATC-510A. This is a fine instrument flight trainer, allowing you to exercise all the basic skills of IFR flight, including full precision ILS approaches.

ATC-510G adds digital ADF receiver, indicator and verification lights, glide slope, hour meter, pitch trim control, key lock, a live ball in the T&S indicator and rudder pedal circuitry.

*Rudder pedals are not available on the ATC-510A.

ATC-610

ATC-610 is a position based simulator. Flight - simulation - either enroute or approaches will correspond to the actual time required to fly courses or approaches exactly as would be done in an aircraft.

The 610 is a complete airplane configuration (the 510 has fixed gear and pitch characteristics), it is patterned closely to the Aero 200. With comparison to the 510, the 610 adds the following features:

- Altimeter with Kollsman Window.
- VOR w/ OBS, Localizer, Glide Slope.
- An improved ADF Receiver w/ADF Bearing Indicator (as real as your airplane).
- Tachometer (RPM).
- Manifold Pressure Indicator.
- Power Quadrant.

Page from operations manual that is on the www.flymafc.com website

Thin Black Line by Charles Burke

Because there are several great places to enjoy a great \$100 hamburger in Maryland, excursions south of the Delaware Bay are a top choice to explore. But venturing down into this region poses a caveat that some may overlook and one is the thin black line.

If you look at the northern end of the Washington DC sectional chart, it is easy to miss this demarkation line. Take a look at the sectional chart and you will see it passing between Cambridge (KCGE) and Laurel (N06). But to know what it means, you need to travel down further along the line and will see that it is designated DCA-VOR-DME-60 NM.

What this means is that if you are flying VFR, you need to have in your possession a certificate showing you have successfully passed a required FAA test. On August 12, 2008, the FAA issued a final rule entitled, "Special Awareness Training for the Washington, DC Metropolitan Area". This rule requires any pilot who flies under VFR conditions within a 60 nm radius of the DCA-VOR/DME to complete the required training course. This rule is now codified [under FAR 91.161](#).

Actually, this course is also the gateway to flying in and around Washington DC. As you will learn, there are very specific regulations in place as to how you must communicate with ATC and what avenues of approach / departure must be utilized without causing the Air Force to communicate with you via an F16 gliding up along side of you. The free course has been developed by the FAA and is available online at www.faasafety.gov/gslac/ALC/CourseLanding.aspx?CID=405.

But like many other FAA tests, it is not something to be feared because it can be taken and retaken should you need to. But the best offense is a good defense so when you sit down at your computer, take notes as you watch the presentation. It has been found that by simply doing this, you can easily ace (pass) the test and then download the certificate. Once you have captured it, simply print it out and carry it with you on any flight you take down into this geographical area. Needless to say, if for no other reason than it affords you safe passage to good food, it is worth the time and effort.



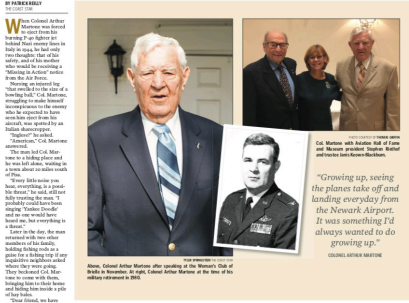
South of the Border by Tom Flieger

Sao Paulo, Brazil has the largest civilian helicopter fleet operating in the world. There are over five hundred helicopters registered to city/suburban operators with more than seven hundred helicopter rides per day. The financial district, the primary destination of those flights, is a five minute ride from Campo de Marte Airport, the city's primary commercial airport.



Answers to the test: The lights should be on from sun set to sun rise.

COL. ARTHUR MARTONE INDUCTED INTO THE NEW JERSEY AVIATION HALL OF FAME
A Lifetime in the Sky



Art Martone was honored with a full page article in the Coast Star newspaper!

<https://starnewsgroup.com/the-coast-star-edition/>



Of Special Note!



Matt D'Angelo Dave Williams
 (not a MAFC member)

Matt D'Angelo passed his check ride and earned his first type rating in the Embraer 145!!! Next up...DC-3!!! Congratulations also go to his sim partner, Dave Williams, on becoming Captain!!! Thank you for your friendship and mentorship and for skillfully and patiently showing me the ropes!!! Thank you so much to my amazing wife and all of my supportive family, friends, instructors, teachers and mentors!!! Could not have done it without all of you! Thank you!!! Love you and appreciate you!!! Next step...the line!!!

Chuck McKelvey was temporarily appointed to replace Bob Tozzi, who relocated to Texas, as Membership Officer.

NOTICE: Ryan Betts will no longer be available for instruction, he will be going inactive for a few months while in airline training.



Michael Berger became a Private Pilot on December 9, 2018 Congratulations on a job well done. Janis Blackburn instructor

Takeoffs are optional but landings are mandatory



Congratulations to Javier Perez-Hernandez for completing his CFI practical test to become an instructor, on December 6, 2018 Ryan Betts, Instructor.

