



Club Meetings

Board Of Trustees:
7/7/16- 7:00 PM
Club House

General Meeting:
7/16/16 9:00 AM
N12 CAP Building

Editorial Staff: Charles Burke,
Dave Pathe, Karen Barbagelata

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Takeoff & Landing
Of Special Note

Does The Runway Shrink On A Hot Humid Day? by Frank Fine – MAFC Chief Flight Instructor

The season is here that brings hazy hot and humid conditions. That should make us think about density altitude. Warm air holds more moisture than cold air and is thus less dense than cold air. Anyone who has flown in both winter and summer has noticed how the plane jumps off the ground in winter and climbs much better due to the cold dense air. In summer on a hot humid day, you notice the take off run is longer and the plane does not climb as well. The engine produces less power and the plane has to reach a greater ground speed to produce the required take off airspeed. (Wind speed considered to be still air.)

Another thing to think about: On landing at your normal approach airspeed, the aircraft will have a higher ground speed and will require a longer roll out. There may be situations - a short runway or obstacles to clear - where you have to wait until the air cools towards evening before you attempt a takeoff.

If the situation is that close to the maximum performance of the aircraft be sure to get out the performance charts and do the required calculations. Keep in mind that the charts are for a *new plane* flown by a *test pilot* (neither will apply to any MAFC member) and figure in a fudge factor.

How do we find out the density altitude? Contact AWOS for the local airport.

Or use your E6B computer (you don't have to plug it in)

1. Set the altimeter in the plane to standard pressure 29.92 and read the altimeter
2. Read the outside air temperature on the plane's thermometer

With these two values on your E6B set air temperature over the pressure altitude and read the density altitude at the arrow. Then go to the performance tables in the Pilot Operation Handbook and follow the directions to see how much runway you will need. You will also need to figure the weight and while you are at it, calculate the center of gravity or balance.

Also, keep in mind that as the air cools to within a few degrees of the dew point the moisture will condense and become visible such as fog, dew, frost, clouds, rain or snow. As warm air rises it reaches its dew point and forms cumulus clouds. If the air is unstable you will see vertical development (towering cumulus). If these clouds continue to develop they could turn into thunderstorms (cumulonimbus).

On a 90 degree day with a density altitude of about 2000 feet, from the Piper Arrow charts 1300 feet are required for takeoff with no flaps. From the chart with the density altitude of about 2000 feet you might expect an initial rate of climb of about 800 feet per minute. In one minute you will cover 1.6 miles at 96 miles per hours (best angle speed) and no wind. (How far away and how high are those wires?) And don't forget this is based on a new airplane flown by a test pilot.

Remember the old saying "I'd rather be down here wishing I were up there than up there wishing I were down here."



Rub & Scrub by Karen & Guy Barbagelata

Guy and I had the pleasure of attending our first "Rub and Scrub" on June 18. There were more than 30 club members on hand, each armed with rag and wax, coffee and donut, putting a fresh shine on the fleet and on our club friendships. After practicing "wax on, wax off" for several hours, we left feeling more like a club family than club members. Especially wonderful was the attendance of several club families; young and old(er) laughed and worked together. When the fall date for the "Rub and Scrub" is announced, please make room on your calendar. To quote Henry Ford, "Coming together is a beginning; keeping together is progress; working together is success."



No Flathatting! by Charles Burke



In a recent edition of the Start Ledger, the front page covered some of the inane laws that are still on the books here in our home state. Listed were the usual laws that were geared to the days when horse drawn carriages roamed our highways and byways as well some dealing with occupations that no longer exist. But surprisingly, there were three that addressed aviation. Since these are still on the books, and against club rules, it was thought that you might find them of interest.

1. No Pelting from Planes: "No airman or passenger may drop any object from an aircraft except loose sand or water ballast or will be charged with a fine of \$1,000.00 and one year in prison"
2. No Poultry Pummeling: Using your airplane to intentionally kill or attempt to kill any bird can result in a misdemeanor punishable with a fine of not more than one hundred dollars or imprisonment for not more than three months, or both.
3. No Flathatting: it is illegal to fly over a thickly inhabited area or over a public gathering. The law clarifies this by saying that you cannot engage in trick or acrobatic feats or fly at low levels so as to endanger the person on the ground. To do so can result in a \$1,000.00 fine and jail time,

Spotlight on: Jim Purcell

It is hard to pick a point in time when it was realized I wanted to become a pilot because I always wanted to fly. My mom bought me the first home version of Microsoft Flight Simulator in the 80's and I flew it constantly. Along with the flight simulator, many model fighter planes were constructed then hung in my room. I was even a Top Gun and Iron Eagle fan.



When I was around 12, I took an orientation flight in a 152 at Marlboro Airport and loved it but never had the money to follow through and take lessons. However, I did fly on C141s, KC135s and KC10s aircraft (part of ROTC in high school) many times before I ever flew commercial.

A career choice was divided between being a police officer or a fighter pilot but reality kicked in and law enforcement was the path taken. Now that my life has found a groove, it was decided to revisit the idea of being a pilot. Currently lessons are being taken in the 152s but am really interested in eventually being checked out in the Pipers.

My roots are in Manahawkin but I work as a police officer in Barnegat. I actually am one of the departments motorcycle officers and ride nearly every day. A real driving force behind acquiring a pilot's certificate has to do with my ten year old son. He shares my interest in aviation and loves airplanes but does not know about my lessons. The training has been kept a secret because I want to surprise him someday when we fly together for the first time..

Courtesy Cars by Bob Tozzi

For those who like to do some extended Cross Countries or \$100 Hamburger runs, this App might help you get a ride. It's available in Android and iPhone versions <http://generalaviationnews.com/2015/02/11/app-eases-search-for-airport-courtesy-cars/>



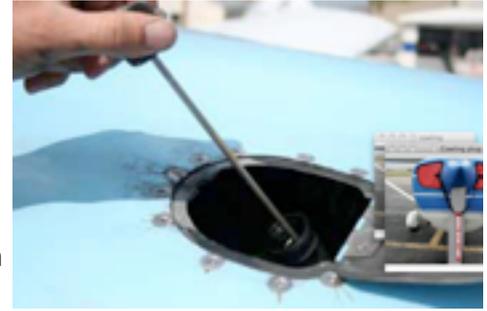
F Minus by Tony Carrillo



Dipsticks and Plugs Oh My!

As the new flying season begins to ramp up, several problems have arisen regarding basic practices. While they could be mistakes taken by new members who have not yet been given proper instructions, it is possible that there are more seasoned pilots who may have forgotten these rules of thumb.

The first issue involves how to properly insert the cowling plugs. The proper way to install them is to press them in so that the connecting strap is in front of the propeller. The reason for doing is actually a safety issue that could have costly results.



If an aircraft engine is started with the plugs still in the cowling, but the strap in front of the propeller, the rotary motion will not only pull the plugs out but also throw them away from the plane. However, if the strap is behind the propeller, it is possible that the plugs will remain in place preventing air from entering the engine compartment. This could lead to overheating and a possible engine failure! So make sure the strap is in front.

The second problem that can also be costly stems from good intentions gone awry. When putting the dipstick back in place, just use two fingers to gently apply a light sealing action. When too much pressure is applied, there is a good chance that the next person will find it almost impossible to unscrew it. This happened to me just a few weeks ago when it was found necessary to use a pair of pliers to loosen the dipstick.

The problem is not simply a matter of finding it hard to unscrew the dipstick, if the amount of torque is sufficiently high, it is possible to break the seal where the dipstick tube is attached to the engine block. If this happens, it is feasible that the oil may leak out in flight and cause the engine to seize up. So please don't tighten down on the dipstick, just a little pressure is all that is needed. One way to determine if you are over tightening, try removing the dipstick after you have put it in. If you have a hard time trying to get it out then you also know that you are creating a dangerous situation.

Spotlight on: Parvez Dara

Aviation lured me into its fold in 1982. I began taking lessons in Long Beach California but never finished the licensing requirements. There is no better place to learn stalls than over the Malibu beaches. Following a hiatus when life got in the way, I finally got my license in 1986 in New Jersey. I learnt to fly in a Cessna 152 and transitioned to a Cessna 172 and then into an Archer (for IFR) a Mooney (Commercial and CFI) and Seneca (ATP).

I joined the club in June 2016. I have estimated 4400 hours of flight time. I currently instruct Mooney Pilots for the MAPA Safety Organization where I am a Past President and current Secretary. I am also a Director at SAFE organization where I serve as a Treasurer.

I have flown, Mooneys from M20J to M20TN, Saratoga, Malibu, Baron, Cessna 310, Viper Jet.

I have a Single and multi-engine ATP, CFII, MEI and currently hold a 6-time Master CFI. I have received the Regional CFI of the year (Philadelphia FSDO) and numerous External FAA Awards. I am also a FAAS Team Representative for the EA-17 FSDO.



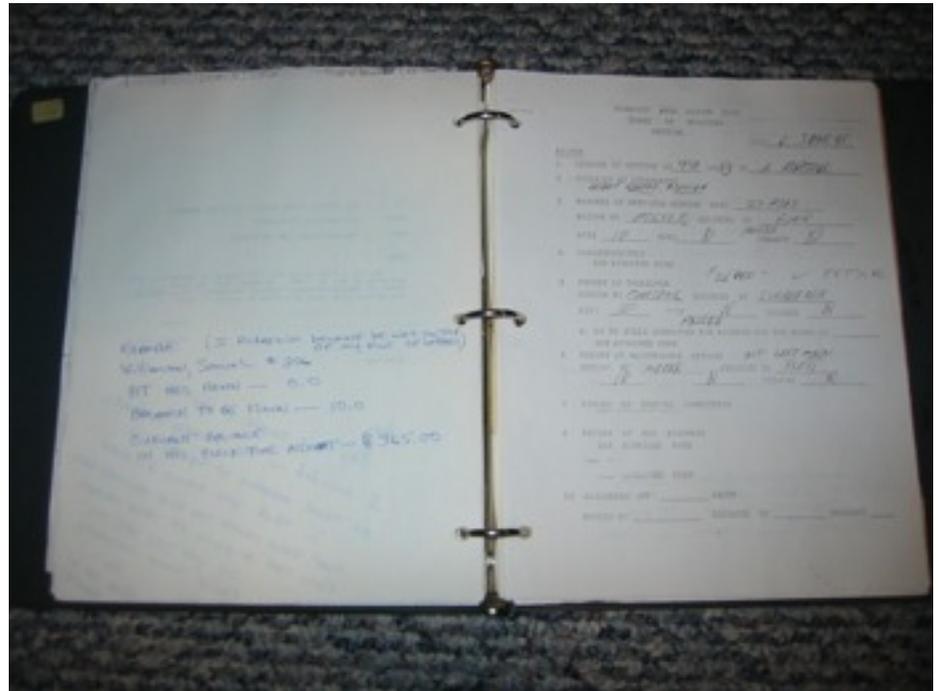
MAFC Historical Note by Charles Burke

In the process of moving the club's possessions from the old trailer, located behind the CAP building, a number of historical items were found tucked in the back of file cabinets. These were dusted off and are now found in the club house.

But, from time to time, a senior member will discover materials that date back decades and this is the case with Art Martone. Art found a notebook titled, 1994-1995, Monmouth Flying Club Records. Within its pages are aircraft service records, Hobbs readings from aircraft both still active as well as those that have gone on to other pastures. There are welcoming letters to new members, the results of BOT elections and plenty of minutes from meetings.

These, and other documents, contain a reminder that the club is a rich source of inspiration to those who have only recently joined our ranks. While the specific information is of cursory value, the collective assemblage represents a goal driven group of aviators who worked hard and long to bring us to where we are today. So the next time you are in the trailer, take a minute to scan through the collection and gain an insight into the club's roots.

1994-1995 Meeting Minutes and Notes



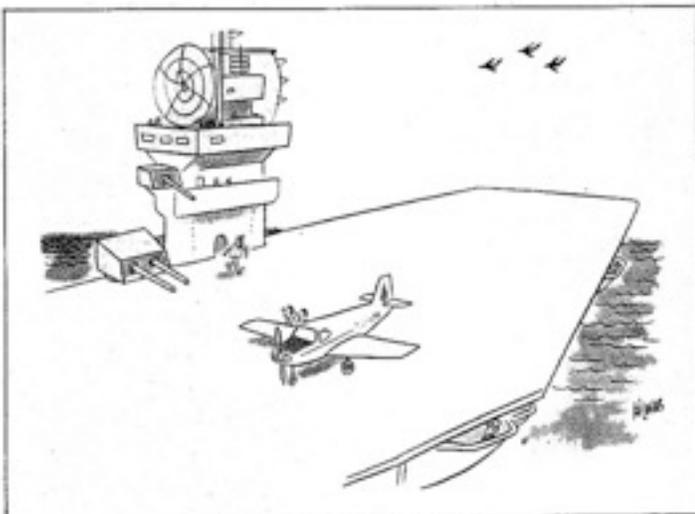
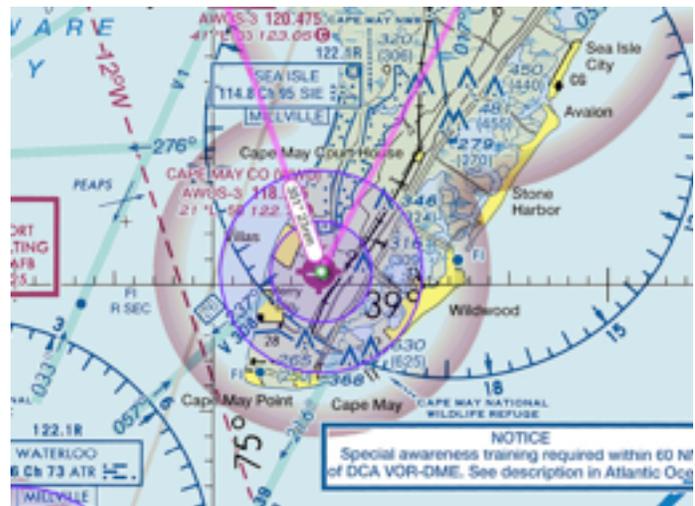
Drotams by Charles Burke

While preparing for a flight that included a stop at KWWD, I went to Sky Vector (www.skyvector.com) and plotted out the desired multi-stop route. It was at this time I noticed a new icon selection along the top of the screen that had an illustration of a drone and the title DROTAM's below it. A click of the mouse on the icon triggered a pull-down menu with several options including one, SHOW ALL DROTOMs. When I clicked on this line, two purple circles appeared around KWWD along with other scattered about in northeastern Maryland.

Rather than venture into this uncharted area based solely upon a link to the FAA that was contained in the pull-down menu, I called FSS to see what they had to say. Surprisingly, the agent initially had no idea! However, he jumped on his computer and was able to find the same screen image. He then moved the pointer over the circles and up popped information on two drones that include the date and times of operation.

OK, but my next question was the important one, "what does this mean to me as a pilot passing through this area"? His reply was that it simply meant to keep an eye out for them and that they had to keep an eye out for you. While this was a good start, it was decided to follow the link that was given in the pull down menu (<http://www.faa.gov/uas/>) producing very little of value since the article that appeared only dealt with the owners and operators of drones.

Bottom line, check to see if an area that you will be flying into or through has drones listed as being operational. Secondly, call FSS and make sure to determine if flying into one of these areas may put your flight at risk.



"I'll let you do the talking."

Art Templeton and Frank Fine upon landing the Archer at another military landing strip.

Important Dates In Aviation for July

- July 1, 1937: Varney Speed Lines changes its name to Continental Airlines.
- July 4, 1975: Boeing rolls out the Boeing 747SP. This aircraft is 48.33 feet shorter than a regular 747.
- July 5, 1960: United Airlines puts the Boeing 720 into service between Chicago and Los Angeles via Denver.
- July 8, 1983: The Airbus A300-600 makes its first flight.
- July 14, 1978: United Airlines places an order for 30 Boeing 767's.
- July 15, 1954: The Boeing Company unveils its model 367-80. This aircraft will serve as the prototype for both the Boeing 707 passenger aircraft and the U.S. Air Force's KC-135 tanker.
- July 23, 2000: Boeing rolls out the latest model of the 737, the 737-900.
- July 27, 1949: The world's first jet powered passenger transport, the British de Havilland Comet, is rolled out at Hertfordshire, England.
- July 29, 1959: Qantas introduces the Boeing 707-138 on its route from Sydney to San Francisco.
- July 31, 1997: Boeing completes its takeover of McDonnell Douglas.

Takeoffs are Optional, Landings are Mandatory



Of Special Note!

Bob Tozzi completed his training program to fly N61WT. Matt D'Angelo Instructor

