

### Club Meetings

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

General Meeting:  
9:00 AM 12/13 /18  
CAP Building



Editorial Staff: Charles Burke,  
Dave Pathe, Karen Barbagelata

### The Complex Fall WX by Charles Burke

As the fall begins to settle in, the weather patterns change and for us that means the inevitable decrease in hurricanes but an increase Nor'easters. This translates into grounding the aircraft and the need to lash them down securely. But did you ever wonder why we experience Nor'easters? First off, they are much more common than most people realize, averaging between 20 to 40 per year! While you may be surprised by the frequency, in reality, only two or three develop into severe storms. Making matters worse, is when the air is cold enough, the rain they produce can be changed into snow that really piles up.



The Nor-easter storms are unique to the East Coast because they are a product of our geography with the vast majority being initiated off the coast from Georgia to New Jersey. They derive their name, Nor-easter from the fact that while the storms track upward along the coast following the Gulf Stream, they dump the majority of the moisture to the west of the low pressure center that is their atmospheric engine. This is because of the counterclockwise rotation of the atmosphere that low pressure centers produce in the northern hemisphere. With such a configuration, the wind and rain literally emanate from the north east as the storm passes by us.

Nor-easter are usually created when a specific set of atmospheric conditions exist and these are:

1. A high pressure system is situated over the Great Lakes area bringing cold air down from eastern Canada with its clockwise rotation of air. This creates a cold front that migrates eastward.

2. Warm moist air is carried in a northeasterly direction up from the Gulf of Mexico along this frontal system. The cold denser air then slides under the warm moist air pushing it up to higher altitudes.

3. The northward moving warm water Gulf Stream and the southward moving cold water of the Labrador Current collide in an area off the coast between Georgia and New Jersey.

4. This combination of air and water movement then spawns a low pressure center that quickly migrates north following the coast line. Drawing moisture from the warm water, the system generates potentially heavy rain and strong winds.

While this is bad enough, the situation is believed to worsen in the years ahead as global warming pushes atmospheric condition to react to more extreme levels. An example of this was seen in 2013 when a Nor-eastern buried much of the coastal areas of New England in up to 40" of snow. What is even more worrisome, is that this exacerbation of weather extremes has upon hurricanes. Such a scenario played out only a few weeks ago when Florence slammed into the Carolina coastline causing a once in a lifetime devastation.

One of the worst to hit New Jersey occurred in 1903 when a record breaking storm hit Cape May then followed a path that followed what is now the Parkway northward before turning east and slamming into New York City. According to New Jersey State Climatologist, David Robinson, if the same storm were to strike the state today, literally hundreds if

### Inside this issue:

#### Page 1

Fall WX

#### Page 2:

Test #10  
History of KAIV  
Spotlight On

#### Page 3

747 Standing Still!  
A Farewell

#### Page 4

A Reminder  
Nerves of Steel  
Tach & Hobbs Form

#### Page 5

Maintenance Report

#### Page 6

Ground Crew  
Test Answers  
Announcements

not thousands of people could perish in southern NJ. This is because there are only two major escape roads that exit from this region, The Parkway and the Atlantic City Expressway. While the much improved warnings from the National Weather Service would provide an early alert, there is little doubt that the situation would be catastrophic.

As a club, we currently have seven aircraft that could potentially be destroyed if we fail to initiate prudent safety measures in the face of much less severe storms. This can be seen with the most basic precautions such as properly tying down the aircraft. Regrettably, there are some members who have never mastered this simple process which puts our planes at great risk. Even if you are 100% sure you are doing it correctly, you are urged to watch this short video <https://www.youtube.com/watch?v=UMITtV80xpY>



**Test #10** Where are the fuel drains located on our aircraft? When are they drained and why?

**History: Bader Field Airport (KAIY) by Charles Burke**

The next time you are flying past Atlantic City, or practicing landings, look for an abandoned airfield just to the west of the boardwalk, this is what is left of Bader Field Airport (KAIY) once the aviation gateway to the city. It was opened in 1910 and was the first facility to cater to both land as well as seaplanes. This dual usage generated the term, airport. But of even greater significance, it was the location at which the Civil Air patrol was founded in 1941.

When it became fully operational, the airport covered 143 acres and had two runways 4/22 (2600 ft) and 11/29 (2950 ft). The facility averaged about 29 operations a day with 81% keyed to GA operations and the balance used for "air taxi services". Among those who used it were a number of current and former MAFC members. But in 1990 the field was closed and quickly slated for redevelopment.

But the field saw a tragic accident six years later when on May 15, 2005 when a small jet overran the runway when attempting a 10 knots tailwind landing, ending up in the adjoining Intercostal Waterway. The NTSB report of the accident noted, "...the airport diagram...observed attached to the pilot's control column after the accident...read, 'airport closed to jet aircraft'".

After closing, the first redevelopment project involved the building of the Bernie Robbins baseball stadium, that seated 5,500. But this enterprise failed in 2009 and was replaced with an ice skating rink. It has also been the site of numerous concerts staged by internationally known entertainers as well as car races..

But remnants of Bader Field have been preserved for you to see. The tower, along with other artifacts, were moved to the Cape May Airport ((KWWD) and are now housed in the Naval Air Station Wildwood. It was completely restored and even affords visitors an opportunity to talk to "pilots" who may be seated in one of the display aircraft.



Bader Field Airport



May 15, 2005 Accident



Bader Field Tower

**Spotlight on Francis Kemp**



I grew up in Union City, NJ and currently reside in Morganville, NJ. I earned a Bachelors of Science degree in Chemistry from Saint Peters College. I was a Research Chemist for the VA and Rutgers NJ Medical School and through a life's serendipitous moment became a firefighter and eventually Captain for the North Hudson Regional Fire and Rescue.

I have had a lifelong interest in aviation including model aviation and advocating for general aviation issues through my AOPA membership. My interest was fueled by my father who served during WWII in the Pacific Theater on a B-25 Mitchell. He received the Purple Heart, Distinguished Flying Cross and Silver Star for his 50 mission service. Many hours of hard work at a local supermarket helped to support my training. I earned my private pilot certificate, (single engine, land) with the patient instruction of Sid Gilman, and the classic Piper Cherokee 140 Flight Liner at Safair (first hanger), Teterboro Airport in November 1973. I have flown several aircraft types including seaplane and retractable but prefer the Archer.

**Continued**

Unfortunately the high cost of renting aircraft and other interests limited my flying to about 15 hours a year. I interrupted flying for about 20 years after the arrival of my 2 children and increased job responsibilities required more of my attention.

A recent visit to Monmouth Executive Airport and the inspiring "Flight of the Warbirds" program renewed my interest and the start of adding to my 320 hours of flight time and exploring the wonders available through flight. MAFC was recommended to me by a member as a well run, highly responsible flying club. I appreciate this opportunity to be a member and look forward to sharing my experiences with other members of MAFC.

### 747 Stands still while in flight!! by Charles Burke

If you tune into the Science Channel, you will find that there are several programs that has a tendency to play a bit loose when it comes to exploring the science behind observable phenomena, Strange Evidence is one of them.

Recently, there was one segment that was aired in which they play a video of a 747, on approach to an Amsterdam Airport, that would make you believe the plane was standing still in mid air. They repeatedly play the same footage over and over then have experts try to determine what was going on. After a number of outlandish explanations, they finally reach the conclusion that it was an optical illusion generated by the rapidly moving auto carrying the observers with the camera and a fixed point just beyond the road. Add in the slow speed of the full flap approach, coupled with the physical position of the car and aircraft separated by a hilly terrain, and you create the illusion that the aircraft is, indeed, standing still in mid air.

After the show was over, a search was made on the internet to see if there were other sightings of aircraft seemingly held in mid air and there were a number of them. But most ignore the science and put forth a belief that there are mysterious forces such as worm holes at work, aliens, or even the supernatural.

Then there is one where the video camera appears to be in a Cessna 172 and you can see out of the windows that the aircraft is standing still. And, in fact it is. But they fail to point out that it is running with full flaps, probably in a 60+ mph headwind so while the aircraft is showing a zero ground speed, the airspeed is sufficient to prevent a stall.

If there is nothing else to learn from this, it is that the physics of aviation can be spun on its head with optical illusions then you can throw in pseudo physics to a point that makes it entertaining. For your viewing entertainment here is a sampling.

<https://www.youtube.com/watch?v=qFzGvg50qao&t=26s>

<https://www.youtube.com/watch?v=Ck6ySYIBr1Q&t=225s>



[https://www.youtube.com/watch?v=PaDwHI\\_PRYQ](https://www.youtube.com/watch?v=PaDwHI_PRYQ)

### A Personal Message from Bob Tozzi



It is with a bittersweet feeling that I will be leaving my positions as Vice President and Membership Chairman of the Monmouth Area Flying Club as my wife Barbara and I move to Austin, Texas to be near our Daughter and Granddaughters. I will truly miss the variety of Aircraft that the club has and destinations that the Northeast has to offer. I want to thank the entire board, especially Dan Coles who offered me a position on the board to fill a vacancy back in 2014, Tom Flieger my Checkout Instructor and good friend, as well as the entire membership of the club who have made the past 8 years a very happy experience.

While I am giving up my official positions, I am considering staying in the club as a member so I can fly when I make visits back to New Jersey. Once again, thank you to all of the wonderful Monmouth Area Flying Club members. Bob

Art will be inducted into the NJ Aviation Hall of Fame at a dinner honoring him and three other inductees on the evening of Monday, November 12, at The Fiesta Banquet Hall, 215 Rt. 17, Wood-Ridge NJ (near Teterboro Airport). A cocktail hour will begin at 6 p.m., dinner at 7. Art's son and daughter and other family members will attend. We're hoping for a large MAFC turnout for this event and ask that you contact Tom Griffin at [tgriff5@yahoo.com](mailto:tgriff5@yahoo.com) or call 732-300-5062. (As of now it looks like the cost will be \$110 per person.)

**Nerves of Steel** by Tom Smock

While sitting in a doctor's waiting-room, I picked up one of the magazines on the table and noticed a Q & A section that started out mentioning Southwest Airlines. It was not a long column so I began to read and it reminded me that aviation heroes come in many different packages. In this case, the focus was on Captain Tammie Jo Shultz who was the pilot on a Southwest Airlines flight 1380 when a major crisis struck. It came in the form of an engine that exploded killing one woman and injured eight others. The exploding engine was bad enough but it sprayed the fuselage with a hail of metal shards that literally ripped a hole in the side of the aircraft. The fatality occurred when the rapid decompression sucked a woman out of the opening.



But the point of this story is not found in the details that describe the actual accident but in how this former Navy fighter pilot reacted. Her training, coupled with the ability to focus on the situation, prompted her to immediately instituted a series of rapid-fire actions to bring the aircraft under control and descend to an airport. In the process, Captain Shultz had ordered airport emergency crews to be on stand-by.

One thing that helped her to become a hero in the face of adversity, was her OODA response. Her training taught her to, Observe, Orient, Decide and Act. This coupled with her flight skills went on to save the aircraft and the remaining passengers. The lesson here is that should a crisis strike, we need to not only know what to do but to take control of the situation and follow the steps necessary to implement them in a logical and orderly fashion.

**Hobbs & Tach Numbers** by Charles Burke

Am not sure if you have figured this out yet but I like clerical forms! This is because they, like check lists, provide a standardized format to record information on. But before going on, it might help to note that there is a bit of history to this in that I once worked as a draftsman. As a result, I often had to create lists of data on the drawings that frequently took the forms of spread sheets. If this statement causes you to wonder why I did not simply pull up an Excel spread sheet, it is because this was back in the day when draftsmen worked in ink on velum! If that draws a blank, it was a time period that existed just after the great astroid wiped out the dinosaurs.

But getting back to the 21st Century and flying, one area that fell through the cracks for me was not having a simple form that could be used to record the Hobbs and tach numbers as well as any issues that were noted during the pre-flight check. This time, armed with an Excel spread sheet program, I came up with a form that was miles ahead of using one of those small scraps of paper that are ubiquitous on and around the counter in the trailer. Armed with this form, it is attached to the clipboard that holds my copy of the aircraft's check list and acts as an extension of it. If you happen to think that this might work for you, here is a sample that you can build upon. In my case, I have a master sheet with three (3) of the forms on it. One pass through the printer, and a little scissor work generates three copies after simply pressing PRINT.

Date \_\_\_\_\_

Aircraft	N_____	Notes
Hobbs	Tach	



**N66977-C152** The new TKM nav/com that was installed, was found to be defective and confirmed by Ocean Aire avionics shop. It has been returned to TKM for repair or replacement. The spare ARC radio will be used until the new one is returned. On 9/22/2018 the battery was discovered to be dead. I used the clubs battery charger to charge the battery. The battery held the charge for a while but then went dead again. The battery was installed 2/2018 at BP Air and will be replaced as it is still under warranty. A pilot reported loud whistling noise in flight. It is thought that the noise is coming from the seal leaking air around the windshield. We are having this looked at by BP Air.

**N67818 C152** Other than a slight nose wheel shimmy we have had no other squawks from this aircraft.

**N4287Q-C172-L** The #1 nav/com that was reported to have a lot of static on the com was returned to Garmin for repair. The unit has returned from Garmin and has been put back in the aircraft. It has been checked and found to be working normally. The #2 nav/com has an issue with the button that changes the frequencies from stand by to active. Don Ginsberg said that with a lot of effort he was able to get it to change frequencies but that it is not practical for flight operations. Since there are no parts available to repair this we will have to replace the radio. TKM makes a slide in replacement for that radio. While Q is there they will be putting together a price for a Garmin GTX335 ADS B out unit.

**N93KK C172 M** One of the air vents came loose and now falls out. This will be repaired at the next 50 hour service. The #2 TKM MX300 radio with the display that is difficult to read was taken out of the tray to check the serial number. That s/n is 3358. I have been in contact with TKM and they said that they no longer support radios with that low of a serial number.

**N268BG-PA28-181** This aircraft was at Ocean Aire for an oil change and 50 hour service. It has been brought back to N12. During the wash and wax a bolt was discovered hanging down below the left wing next to the landing gear. I took a picture and sent it to Tom Grey to get his opinion. He said the bolt was one of eight holding in the landing gear. After looking it over, and thoroughly inspecting both of the main landing gear, he installed all new hardware on the left gear. He also checked for a shimmy in the nose wheel. He found excessive play in the scissors for the nose wheel. He shimmed and tightened them. I reported this to Tom Rae from Ocean Aire to keep him informed of the situation as he is our main maintenance person on that aircraft. 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 when from the opinion of the reporting pilot the wings were level.

**N55804-PA28-200 R** There was a squawk reported about the right brake dragging. The aircraft was taken to Ocean Aire and it was discovered there was no brake lining left on the right brakes and the bare metal was in contact with the brake rotor. New brake pads have been installed. Tom Rae said that if we do this again the rotors will have to be replaced.

**N61WT 172S** On 9/30/2018 a pilot reported a dead battery. The battery was charged and the aircraft was taken to Ocean Aire. After sitting overnight the mechanics found the battery dead. A new maintenance free battery has been installed. It is scheduled to be flown to Lancaster to have the propeller balanced. So far the weather has not been cooperating. I am hoping that by the time you read this the prop has been balanced. A member reported the windshield was leaking on the copilots side on an IFR flight in the rain. It was not leaking on the ground. We will have this addressed at the next 50 hour service.

**Special Note:** *This past month we had two instances where items that should have been picked up on a preflight inspection were not. These were #1 the hanging landing gear attachment bolt on N268BG and #2 the worn or should I say missing brake pads on N55804. Thanks to the watchful eye of the crew cleaning BG, we were able to avert what could have been a disaster. They spotted the hanging bolt and called it to my attention. It's hard to say how long the bolt had been broken. There were no signs of dirt or grease on the shaft hanging down to indicate it had been that way for long. The brakes on the arrow however, are a completely different situation. This should have been picked up several times during previous preflight inspections. If you are not sure what worn brake pads are, or look like, contact your flight instructor or maintenance person for the aircraft you are about to fly. As far as that goes, if you see anything out of the ordinary you should always ask and not assume that because it just flew and they didn't have a problem, it's okay to fly. For the aircraft with wheel pants we have them inspected by the mechanics every 100 hours.*

*You the pilot in command are the final authority of the airworthiness for the aircraft you are about to trust to take you where you want to go and return you safely. The saying "safety is no accident" may sound a bit cliché but it could mean the difference between having a great day of flying or a sorrowful one.*

Ground Crew by Dan Coles



To help you report problems with our aircraft in a more efficient manner, a list of the ground crew members has been posted above the squawk board in the trailer. This easy to use reference information can help to speed up the resolution of important safety matters.

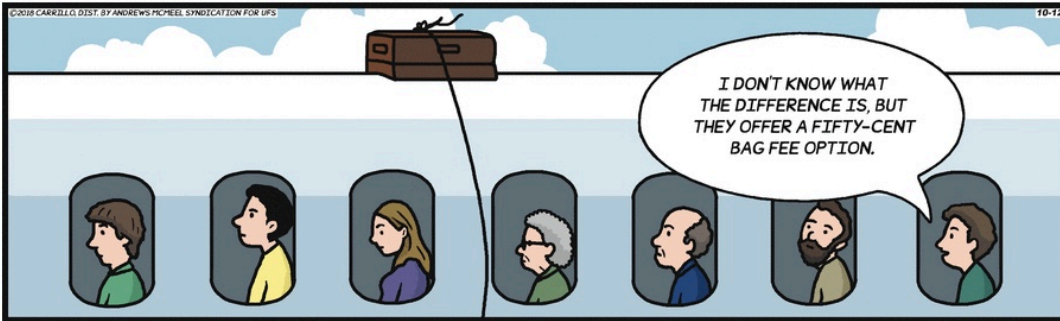
**Answers to the test:**

There are three (3) fuel drains on almost all of our aircraft and they are located in two areas, under each wing and/or under the cowling or slightly offset to the pilot's side. The one exception is N61WT, in that there are three under the fuselage and five under each wing for a total of thirteen (13)



The fuel quality (ie water or foreign matter) should be checked using the sumps prior to should be checked prior to starting the aircraft. However they should be rechecked if you have received additional fuel.

Of Special Note!



Jay Lei, first solo, Oct 14, 2018, Tom Flieger instructor

Takeoffs are optional but landings are mandatory



Mark Herega,  
New Member