MAFC

September 2017 Issue

MONMOUTH AREA FLYING CLUB

Club Meetings

Board Of Trustees: -7:00 PM 9/7/17 Club House

General Meeting: 9:00 AM 9/16/17 N12 CAP Building

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Historical Tidbits by Charles Burke



Most people who hear the name brand Heathkit immediately think of electronic kits but did you know the business actually began by selling airplanes? Back in the 1920 and 30s, the Heath Parasol was the only aircraft that you could build at home. It was an extremely successful business that sold over 1000 planes. The Heath Company was founded by Edward Bayard Heath in 1912 as an aircraft company. It was later that he changed the product line to

building electronic kits that propelled the company to national fame. Tragically, he died in 1931 testing a new aircraft design.

It is not widely known that the first submarine was built in 1878 by John Holland who was, at that time, a teacher at St. John's Parochial School in Paterson, NJ. As I child, I recall seeing it on display along the Passic River in Nutley, NJ. The submarine is now on display at the Patterson Museum.



Dave Pathe, Karen Barbagelata

But there was another fascinating New Jersey submarine that is linked to aviation which has all but been lost to history. In 1961 Donald Reid, of Wanamassa, designed and built a

single-seat 33 foot long craft capable of flight and underwater movement, the Reid Flying Submarine. It was powered by 65 hp engine which provided propulsion for flight while a 1 hp electric motor provided underwater propulsion. The first full-cycle flight was demonstrated on June 9, 1964.

CROSS WIND LANDING by Parvez Dara, MD, ATP, MCFI

When someone or something plays the devil's advocate, how can you survive to tell the tale? Such a provocative question deserves some brief introduction. Let us start first by ignoring the "someone" in the statement, because the remedy is quite easy; avoid their company. The "something" however is more difficult to tackle. Especially when that "something" is called Nature. You can avoid it most of the time, but then other times you really have-to face it head on, or "quartering-head-on."



Consider a takeoff in benign conditions CAVU and still air in the early morning sunrise and after a burger or two return to a strong crosswind at your homeport graced only with a single runway that is aligned 90 degrees to the wind flow.

What now you ask? What to do?

Ever tried doing a forward slip before when flying with an instructor? Never, you say? Well it might be time to execute one of those while you have the option. Here is a simple technique...

Align the aircraft to the centerline apply a 10-15-degrees bank to the left and apply the right rudder (or the reciprocals) to keep the nose from deviating to the left. Or in simpler terms prevent the aircraft from turning. Now if you are really-good, and your instructor is wearing a double sewn underwear, you might try to land the aircraft on the left wheel easing the pressures from both the yoke and the rudder in close approximation to allow the right wheel to touchdown and then the nose-wheel to plop on the runway – in still air. Isn't that the mechanism of landing in cross-winds? Upwind wheel touches down first, then the leeward wheel and then finally the weaker of the three, nose-wheel.

Continued

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Better attempt it a 50-100 feet above the runway first to practice the technique and then slowly lower the wheels closer to the tarmac. Remembering that the actual act is a whole lot different than the practice at altitude. Its akin to practicing the engineout over the runway and knowing the outcome than to losing an engine and trying to find a safety zone where the right circumstances and conditions prevail. So, let us get back to the Crosswind story, shall we?

There are at least two ways to skin this cat; One is continuous forward slip all the way to the runway and the second is crab till you are within 5-10 feet from the runway and then push the appropriate rudder to align with the runway. The final act in both these techniques is the same; cross-controls!

Reminds me of the landing from hell. I was flying east from Colorado and had to make a fuel-stop and a pit-stop for a passenger. Think at the time the first one was more important from my perspective and the second from his. The state of Illinois was floating beneath us and ATIS was not very helpful in keeping with a pilot's comfort zone from all the airports behind, in front and the sides. The best decision I could make was to find a 200-foot-wide runway with high speed access taxiways. The winds were howling, and I mean howling beyond the rudder authority of my aircraft. As I recall the surface winds were 60 degrees from the right of the runway at 36 knots gusting to 48 knots. So, in keeping with that thought, I figured, if I landed the aircraft on the wide runway at an angle aligned with the high-speed taxiway, I would cut off some 30+ degrees of the cross-wind component. Of course, my approach speed was with 18+12 (30) knots added to the VS1.3 as per training. And that is what I did. The aircraft came to a fairly-abrupt stop once on the ground just barely rolling onto the high-speed taxiway, almost like landing on a carrier without a tail-hook. The aircraft behaved decently and after taxi off and exiting the aircraft, I lost my baseball cap to the wind, while my passenger lost something else in the beeline to the FBO.

The rule of the game was still the simplicity of the argument that won the day, bank-angle and enough rudder authority to keep alignment, stabilize the aircraft over and on the ground and the ability to rationalize a way out of the potential risk. Do I recommend this trick to everyone?

No, not really. But one has-to improvise sometime to tame nature's wrath and you must always keep your thinking cap on all the time while in the cockpit.

Take your instructor out for one of these...

Groups, Routes And Than Some! by Charles Burke

There is an old adage that states, the sum of the parts is greater than the whole, and this is being proven yet again by our club members. Endeavoring to encourage members with similar interests and also encourage ride sharing, a set of three groups has been created. The groups include, 1. Newer pilots, 2. VFR and 3. JEB pilots. An all-call was shotgupped out to the members asking if they wanted to

3. IFR pilots. An all-call was shotgunned out to the members asking if they wanted to subscribe to any or all, went out and quickly produced membership in all three.

The new pilot group has no maximum flying time, membership duration or certificate held limit, it simply was set up for those who would like to share rides with others who feel more comfortable with others on a similar comfort level. Speaking from personal experience, this approach helped build confidence plus accelerated the learning curve for me as well as those who I logged many hours with. One reason for this was that usually the pilot in the left seat would fly the aircraft while the one in the right seat would take care of navigation and communications. Being able to focus your attention on only one operation allowed for a chance to learn without distractions.

The VFR group is open to any and all with no restrictions and can include members who currently are not in a position to take the left seat. Again, if share riding is practiced, both people can use this as a great opportunity to have an enjoyable flight plus make new friends. Hopefully, every member will consider joining this group.

The IFR group jumped to the top of the list when it came to sheer numbers. Within two days more than 10% of the membership had signed on. Because of special requirement required to maintain proficiency, having another IFR pilot in the crew opened up a lot of opportunities to sharpen skills. But because of the required equipment in the aircraft that IFR flying is limited to, additional information was requested from those joining the group. This included data on which aircraft they have been checked out in.

Interested in joining one or more of these groups? All that is needed is to simply send me your name and note which groups you would like to be listed in. Also indicate the planes that you are checked out to fly so that a better match can be made with others in the selected groups. Once your listed, all of the other group members will be updated on your inclusion.

Continued below



Now that you can find friends to fly with, where do you go? This part of the equations has also been addressed through a series of suggested routes that have a number of positive attributes. In creating the routes, it was decided to set a number of parameters and they included things such as:

- 1. Visit as many different airports as possible.
- 2. Single out airports with restaurants.
- 3. Single out airports that had museums or other attractions.
- 4. Sharpen navigational skills by flying out and back using combinations of methods such as VOR's, GPS, pilotage, etc.
- 5. Fly through all classes of airspace including E,D,C and B working with ATC or using flight following.
- 6. Include various distances from around the corner flights to those that will involve multiple states.

7. Split the route so that it had the same number of legs and of approximately the same overall distance. This will insure that both pilots would have equal opportunities during the trip.

Here is a copy of the first suggested route that was distributed to all members.

Course #1. Attributes

- A. Route: N12 Lakewood to Coyle VOR to KVAY South Jersey Regional to N87 Trenton
- Robbinsville to N12 Lakewood
- B. Goal point- KVAY, South Jersey Regional Airport
- C. Two segments per leg.
- D. Total distance about 81 nm.
- E. At KVAY there is a great restaurant there plus the Air Victory Museum is next door.



As you receive these suggested routes, there will also be this set of reminders. All of the courses:

A. Start at N12 and end at N12 but there may be some that do not. ----- There will be a few exceptions to this rule----

- B. Have a target midway point.
- C. Have the same number of legs going and returning
- D. Provide an opportunity to use multiple navigational techniques.
- E. Allow you to ride share with another pilot so that one is flying outbound and the other the inbound leg.
- F. Can be edited by you to better meet your particular interests and abilities.
- G. Require that you obey all of the rules and regulations set forth by the FAA and other regulatory agencies.
- H. Are different in that some are around-the-corner while others will take you up to about an hour or more to navigate.
- I. Can be flown in reverse order.
- J. Involve airports, navigational systems, etc. that are found on paper sectional charts as well as the electronic versions.
- K. The attributes listed with each course are simply a few suggestions and should not be considered the only characteristics to be considered.

L. <u>Check TFR listings before heading out!</u> Between "The Donald" and sporting events, the restrictive TFRs will be a fact of life for years to come.

M. Many of the courses include way points that take you over a VOR or an airport. You do not have to actually fly over them, they can simply be seen and recognized. If you do fly over these points, be extremely careful and <u>always watch for other</u> <u>traffic</u>. You are the PIC and are solely responsible for the flight.

N. All course directions are shown simply as general guides, you must verify the numbers and figure in headings involving wind direction.

O. If a route's attributes state that there is a restaurant or attraction at the airport, make sure you call first to verify that it is still in business and, if so, that it will be open when you arrive.

Enjoy the flights and please send in ideas for new courses so that they can be shared with the entire membership!

Note that Girish Mandhwani is working to develop a better way to locate and list the members within the groups.

EAA AirVenture by Chris Kuelzow

From July 21-30, Ann and I attended the Experimental Aircraft Association's Fly-In Convention, known as EAA AirVenture, at Wittman Regional Airport in Oshkosh, Wisconsin. (<u>https://www.eaa.org/en/airventure</u>) We were joined by approximately 590,000 aviation enthusiasts from more than 80 countries!

From humble beginnings more than 60 years ago, EAA AirVenture has evolved from a small gathering of aircraft and aviators into a grand, weeklong celebration of all things aviation. The show is so mature, so highly evolved and so respected, that anyone who has aviation related products or services is sure to be represented.

Continued below

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Then there are the civil, military, commercial, vintage, homebuilt, ultralight, warbird and aerobatic planes. Thousands and thousands of:

- · Big planes (B52...)
- Little planes (Ultralight...)
- · Old planes (Wright Flyer...)
- New planes (Cirrus Vision...)
- Tall planes (B1B...)
- Short planes (Sonex...)
- · Slow planes (Cub...)
- Fast planes (F35...)

And that is exactly why Ann and I decided to attend.



Specifically, we wanted to explore, learn (nearly 1,000 forums and workshops offered), identify options and formulate new goals - all while enjoying a week totally immersed in aviation.

The weather was nearly perfect. So each day we could visit with vendors, attend forums and workshops of interest, watch the air shows, make new connections (John & Martha...) and discover new restaurants.

We have vacationed in many places over the years, but this trip ranks near the top. It is truly worth your time. Highly recommended.

Basic WX-TAFs by Charles Burke

An extremely important part of flight planning must include a check of the on route weather conditions and there are many web sites that offer this information. One of the most trusted source for current and projected conditions is the FAA web site <u>www.aviationweather.gov/adds</u>. It is a one stop shopping point for all of the reference materials that you would need.

One meteorological resource that can help to fill in information on projected conditions around key airports are TAFs (terminal aerodrome forecasts). Selected sites around the country post projections ranging from 3 to 24 hours in advance within a 5 sm radius of the reporting station.

To obtain the data, just click on the TAFS tab, found under FORECASTS, then when the new page pops up, type in the reporting station that you wish to obtain the data from. You can enter any number of station codes, just add a comma between them. They offer a choice of raw data or a translated printout. This is all well and good but where can you find a list of the reporting stations?

On the left side of this same page, below the national map, you will see a smaller yellow map titled, Regional TAF Plots. Click on the region that you are interested in (for this area try BWI) and a new map will show up. Next to the wind flags you will see the three letter airport code that represents a TAF reporting station. Make up a list covering the area that your route will take then go back to the previous page and enter the codes in where it says, Manually Selected TAF Data. Again, you need to add a K were required plus insert a comma between stations. What will emerge are the reporting station data that you will need in planning your trip.



Caveat: It should be noted that this system may be replaced in the near future with a more graphic format. Watch for announcements from the FAA

Map of Reporting Stations found in BWI section

MAFC Rules and Regulations Part 6

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6. Currency, Proficiency, and Insurance Requirements

1. Becoming an MAFC-approved instructor requires a vote of approval by the BOT. The BOT will probably not approve an application except on the recommendation of the Chief Pilot. Discuss your application with the Chief Pilot first.

2. You may not operate MAFC aircraft at night (i.e., during the period from sunset to sunrise) unless you have completed a night checkout by a MAFC- approved instructor in that make and model of aircraft. A night checkout implies day checkout privileges



4.You may not operate MAFC aircraft unless you have completed a flight review within the past six calendar months. Expiration of the 6-month period for the flight review falls on the last day of the 6th month after the month of the review date. This must be conducted to FAA Flight Review standards, and signed off as such. At least once a year, this flight review must be accomplished in the most complex aircraft for which you wish to retain MAFC pilot privileges, or an airplane of comparable or greater complexity. An FAA check ride for a new certificate or rating, or completion of a FAA Wings training program will also satisfy the annual flight review requirement. For example, you pass a flight review on May 5 th, 2001. Your may fly up to and including November 30, 2001 without obtaining another flight review.

Maintenance Corner by Dan Coles

Once again this past month, we have been continuing with our regularly scheduled maintenance along with some unscheduled. We had two 50 hour services performed, one on N61WT, and another on N55804. Yes, we have put 50 hours on the newly overhauled engine in the Arrow and break in has gone fine. We are now using regular motor oil in the engine. The Arrow had an issue with the mode C not being picked up by ATC on a recent cross country trip. The avionics shop at Ocean County airport was not able to reproduce the problem and found everything working as it should. While they were checking over the ADS B they updated the GDL 88's software with the latest version. N61WT had the fuel line A.D. complied with and also had the rear left head set jacks repaired. There was a problem with the pilot's door not closing correctly. Tom Rae at Ocean Aire made some adjustments to it. Please do not slam the doors on this aircraft.

N67818 was reported to be leaking oil. The mechanic at Lakewood cleaned the engine and cowling. Then he ran the engine twice and didn't see anything leaking. He said for us to fly the plane to see where the oil is coming from. One of our members flew it to Sky Manor with his wife. When he landed he noticed that the engine was leaking oil. After removing the top half of the cowling he saw oil leaking from the end of one of the pushrod tubes. The plane was left there so the mechanics could check it further the next day. The next day was Monday, that afternoon the mechanic, Jay, called me and said that one of the cylinders was cracked and the cylinder head was coming off of the cylinder barrel. I asked him to purchase a new Lycoming cylinder assembly and install it on the engine. The new cylinder arrived on



N67818's faulty cylinder

Friday and was installed at the beginning of the following week. Our president (flying club that is) and one of his students retrieved the plane in between TFR's. Jay told Tom to use our regular motor oil, Exxon Elite, and to restrict the plane from practice takeoffs and landings for the next 10 hours.

N4287Q was ferried to B.P. Air to have the beacon repaired. N93KK's #2 nav com display was hard to read in the daytime. The dimmer was adjusted to brighten the display.

Please report any squawks promptly to the appropriate club maintenance person. Fly safe!



Important Dates In Aviation for September

September 1, 1966: Boeing announces that production of the 707 is to end. September 3, 1970: Air France places an order for six Airbus A300's. September 8, 1982: United Airlines puts the Boeing 767-200 in service. September 9, 1998: United Parcel Service places an order for 30 Airbus A300-600F's plus 30 options. September 13, 1984: Pan Am places an order for 12 A300B4's, 4 A310-200's, 12 A310-300's and 15 A320's. September 15, 1956: Aeroflot puts the Tu-104 into service. September 18, 1998: Boeing delivers the first 737-600 to Scandinavian Airlines System, (SAS). September 20, 1989: A UTA DC-10 is blasted out of the sky by a terrorist bomb. All 117 people on board are killed. September 22, 1972: The Boeing 727 passes the 1000th sales mark with an order for 14 from Delta Airlines. September 23, 1999: The newest Boeing jetliner, the 717-200, is delivered to launch customer AirTran Airways.

September 24, 1946: Cathay Pacific Airways is founded in Hong Kong. September 26, 1967: West Germany and Britain sign a memorandum of understanding, MoU, to develop the A300, a 300 seat wide-body ietliner.

September 30, 1968: Boeing rolls out the prototype Boeing 747.

Of Special Note!

1. On August 22, ten members of MAFC toured the KEWR ATC tower then on August 25, twenty four members took the behind the scenes tour.





KEWR Tower Tour Group 1, August 22,



KEWR Behind-the-Scenes Tour August 25,

2. So, who do you submit the RON forms to? The answer to that question is; Janis Blackburn!

Golfer Pilots Wanted!

Are you a lousy golfer, don't keep score, take frequent Mulligan, are available on Wednesdays or Thursdays and have a Monmouth County Golf Card? If the answer to all of these points is a resounding YES, give me a call at 732-861-6046. I sometimes play with Matt Gomes when he is back home and on the ground. Charles Burke



Takeoffs are Optional, Landings are Mandatory



