

The FlyPaper

June 2016

The Official Newsletter for EAA Chapter 477, Charleston, South Carolina



Words From the President

What a busy week at the Low country Regional Airport. With blimps, airships and jets in an out, the USC aviation camp and Young Eagle flights it's been a very active month for aviation at RBW. Special thanks to Michael Brown for a great presentation on the Air Force's mid-air collisions avoidance and airspace at our last meeting.

Looking forward to June and our regular monthly meeting which starts with Young Eagle flights at 08:00, (pilot briefing at 07:30), and then the seniors at 11:00. There will a memorial fly in at the Sumter Airport for those who want to attend. Jeff Grigg, our Young Eagle coordinator will be flying up around 09:00 if you would like to fly with Jeff, then give Jeff a call and see if he has a seat on his Cesena 172. I won't be going; I will be here for our regular meeting. We will be talking about fly-ins and upcoming events.

I do want to take this time to reflect over the last twelve months and all that our chapter has accomplished. First our air show that was beyond our wildest imaginations with over 6,000 in attendance. Second, we received over nine hundred dollars for our young eagle flights, through the EAA national office. Third, special thanks to all the outstanding speakers who have given so much in information on so many areas in aviation, from aircraft inspections, to weather, to Air traffic control, to mid-air avoidance, to FAA medical examinations. It's been great. Also I want to send a special thanks to our pilots, officers, newsletter editor, and all our members who have made this a great chapter. Thank you and I look forward to more great meeting and exciting things to come.

Roger Medlin
President EAA 477



Upcoming Events

EAA477 Chapter meeting

June 11th Young Eagles at 8:00 with meeting at 11:00. Burgers and dogs on the grill after the meeting

South Carolina Breakfast Club:

June 12th Salisbury, NC

KRUQ

June 26th Greenwood, SC

KGRD

Comments from your Newsletter Editor

Glen Phelps

I wanted to let our readers know that this newsletter is going to be much different than past issues. For a long time, I have been asking for articles by our members to provide such for others to enjoy. With this issue, we have one Sightings report, and two Trip reports. I am confident that you will agree with me that these are well done and hopefully will provide you with some entertaining reading. For others that have ideas that can be published, you can forward them to me, or contact any of the chapter officers.

I ask that any article not be anything that might be confrontational or usurp other authority. An example of an article that we did not publish several years ago was one person's opinion of the cause or contributing cause of a fatal aircraft incident. Obviously, in this case, that determination needs to be in the hands of the proper authorities.

May Chapter Meeting Report

Glen Phelps (for Diana Belknap)

This was one of those meetings where there were not a lot in attendance. Just one of those days, but we were happy with the twelve that showed up and the visitors that were there. Those that attended the general aviation open house at Shaw Air Force base shared their experience, and Michael Brown presented slides regarding the “dos and don'ts” of flying in the MOA and along the MTR environment. I'll attempt to talk you through the slides that follow,

EAA 477

Slide #1

SAFETY DAY SHAW AFB Mid-Air Collision Avoidance

- Seymour Johnson AFB [Goldsboro](#) NC F-15
- Shaw AFB Sumter SC F-16
- [McIntire](#) ANG Columbia SC F-16
- Charleston AFB Charleston C-17
- Plus Commercial and GA traffic
- 304,000 aircraft use this area

EAA 477

Slide #2

Understanding Military Aircraft Issues

Radar imperfect

- IFF (Identify Friend or Foe) mostly used for combat arena
- Use TCAS (Traffic Collision Alert System) which can miss some aircraft
- Doppler Notch +/- 60 degree elevation and azimuth only
- No plan for ADS-B on military fighter aircraft
- LOS (line of sight) useless with GA aircraft – 350 [kts](#) closure vs 150 [kts](#) average for GA aircraft
- UHF vs VHF radios – ATC is only link

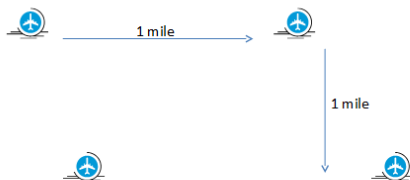
There are four major airfields in the area that we fly in that have military aircraft use. Add to this, the commercial and GA use, and you have a lot of traffic. Add to this is the military equipment, which just does not “jive” with GA, and that leaves ATC being the only link for really knowing what is going on.

EAA 477

Slide #3

Formation Flights

- Fighters - 2 ship and 4 ship are typical



- Only one aircraft in formation is squawking a code

EAA 477

Slide #4

Formation Flights

- MYR and CHS are typical divert fields for fighters
- [MTRs](#) (military training routes) typical 4 ships at 500 AGL & 500 [kts](#)
- [MTRs](#) – 5 miles from center line
- SFO maneuvers (simulated flame outs) aggressive maneuvers to get down to a specific airfield
- [Enroute](#) [airspeeds](#) 300-350 [kts](#)

Slide #3 shows the typical formation of military aircraft that would be using the MTRs. Combine this with the speed of the aircraft, the width of the route and maneuvers and you can begin to see the need to cautious when traversing the routes when flying about the area. This is a good reason to stay in contact with ATC.

MOAs – Military Operating Area

- Possibly have 8-10 aircraft
- Primary focus of military pilot is wingman, targets, etc
- Not focusing on GA aircraft in their MOA
- Practicing BFM (basic flight maneuvers)
- Do not have the 250 kts max limit below 10,000 ft
- Spillovers can occur – pilots can make mistakes

C-17s

- Equipped with TCAS – only separation tool in cockpit
- Does not work without GA aircraft transponder being used
- Pilots use visual scan because no guarantees with their equipment
- Normal formation flights are 3 ships
- Following aircraft slightly higher and 4,000 ft back
- Their procedures are to avoid civilian airfields by 1,500 ft and 3 miles
- Use MTRs to go to North Field Auxiliary
- Low as 300 AGL – airspeed 250-300 – 300 kts max
- Examples: IR035; IR036; VR 1040; VR1041
- Air drops at 5,000 AGL

Slide #5 shows what you might be dealing with in a MOA. There can be a lot of stuff going on there! And, they are NOT looking out for YOU. The last bullet point needs to be taken seriously; they can make mistakes too. Keeping everything in the MOA with what they are doing and at the speeds they are at, it is easy to see. Now look at slide #6 and understand the C017s are doing. Again, ATC can be your friend here.

EAA 477

RECOMMENDATIONS

- Talk to ATC
- Use flight following – squawk 1200 at minimum
- Call FSS for MTR activity
- Watch for additional aircraft in formation – only one will be squawking due to constant conflict alerts
- Avoid MOAs if possible – give wide berth for spillovers
- Avoid altitudes below 5,000 AGL near North Field Auxiliary
- Seeandavoid.org

This last slide in the presentation summarizes what are very good recommendations for our flying in this part of the country.

Thanks Mike for a great presentation.

As I mentioned earlier, we had some visitors. Emile Fournet stopped by to see what was going on. He was at the Wings-n-Wheels event last month and stopped by the EAA 477 tent to chat. Hope we see more of you in the future Emile.

We also had Patrick Shields and his wife come by. As you might remember, Patrick is a Charleston ATC controller and has given us presentations before. It is always good to see Patrick, and as always he shared contributing information to Mike's presentation. I don't know about you, but I ALWAYS learn something from him.

Treasurer's Report

Roy Carson

Department of Treasury Report for the month of May:

Beginning Balance -----	\$2,134.99
Expenses -----	\$ 78.87
Deposits -----	\$ 89.00
Ending Balance -----	\$2,145.12

End of Report*

*We are still waiting for the reimbursement from National for the purchase of tables and chairs.

Walterboro Sightings Report

Roger Medlin

Well it seems to be blimp season at the Low Country Regional Airport. We were visited by the Navy blimp, the MetLife blimp, and just this week we were graced with the Good Year blimp or airship. The biggest and best of the Good Year airship graced our skies and landed at RBW. ("Big Andy big") It's big, the LZ N07-101 model is 246 feet long, 64 feet high, and weighs 23,567 lbs. It has a range of 559 miles and will carry 12 passengers, and yes it has its own bathroom. It has the full state of the art cockpit with the Garmin G1000 navigation system and is powered by three IO-360 Lycoming engines with 200 horsepower each.



It has a max speed is 77 mph, and it cruises at 71 mph with a service ceiling of 8,560 ft., with an endurance of twenty four hours. Not bad for an airship. This semi-rigid airship or dirigible is an airship which has a stiff keel or truss supporting the main envelope along its length. The keel may be partially flexible or articulated and may be located inside or outside the main envelope. The outer shape of the airship is maintained by gas pressure, as with the non-rigid blimp.



This blimp or better known as the Wingfoot One airship was on its way to Chester, NC where it will grace the skies of Concord, NC during the Pepsi Cola 600 NASCAR race. Well there you have it another sighting over the Low country Regional Airport.



Adventures in Aviation (and other stuff)

By Lee Miller

It's not often that I have two very entertaining weekends in a row that don't involve grandkids and their school, sports, or holiday activities.

My wife (Jennette) and I decided to throw caution to the wind and brave tiny bladders, the possibility of missed medications and ball games and head out on a couple of road trips.

The first weekend (May 14th and 15th) had nothing to do with aviation but was interesting anyway as I have always enjoyed the racing of most things mechanical and Jennette seems to like that stuff as well (aren't I a lucky guy?).

Every year in Union, S.C. there is an event called "Steel in Motion" where a local car club throws a Friday and Saturday combination "Classic Travel Trailer/Motor Cycle/Bicycle and Pre 1970 Automobile Show" and a regional "Gas Class" drag race (South East Gassers). This event features acres of classic vehicles on display, swap meets, grudge races open to any of the attending vehicles as well as the regional competition, rock and roll bands, and even a "Pin up Girl" contest on the final day.

Since Jennette had to work Friday and part of the day Saturday and I had EAA477 meeting on Saturday morning, we went up Saturday after our commitments and got there about 4PM. This was our first time going to the event and if I go again it will be for both days (there were that many vehicles and interesting people to see). We got to see the semi-finals and finals of the gasser drag races, the Pin Up competition and a couple acres of cars and trailers. We stayed for two or three hours of the after the event party but with the band getting louder, the crowd getting rowdier, and the sun going down, we decided to head for Columbia to spend the night.

Sunday we did something I hadn't done in awhile (and something that Jennette wanted to do), we went to the Zoo. It's neat to see the faces of all the kids who have never seen live animals in person, however I think most of the folks at the car show in Union were a lot wilder than the critters we saw on Sunday.

The following weekend Jennette took Friday and Saturday off, and I was on vacation from work so we could travel to Beaufort (pronounced Boe-fert), NC at Michael J. Smith Field for one of the AOPA regional fly-ins that happen each year (we flew-in in our 2012 GMC Acadia since I'm not current and Jennette won't fly in anything smaller than a Boeing 747 stretch). The last one of these events I had been to was in 2014 at St Simons Island in Georgia (that time I flew in by myself in a rental Oldsmobile).

We got to our Motel on time, dressed up (Khakis for me is dressing up) and went to the "Barnstormer's Party" Friday evening, which consisted of Bar-B-Que, Mac & Cheese and a more "Country" themed band than the week before although they did play some "Eagles" as well. Jennette heard a lady on the next table over complain about the band being too loud. She should have been with us at the Car Show.

There were a few off and on showers and the cloud cover had been too low for any VFR fly-ins on Friday so most everyone that was at the party had either drove in or flew in on Thursday before the weather had moved in.

We spent the night in Morehead City and went back to the airport bright and early the next day. Well actually it wasn't bright at all. It had rained all night, sometimes rather enthusiastically and it was even hard to find a clear way to the car in the motel parking lot without using life jackets.

There were still a lot of low clouds with occasional showers in the morning and some venues had to be changed due to the folding chairs sinking into the ground past their landing gear.

I attended the rusty pilot seminar in the morning (I had also attended that seminar at the St. Simon's Island fly in but it hadn't knocked all the rust off so I gave it another treatment). It was very informative and was given more in the format of ground school (in fact it counts as three hours of ground school for WINGS credit in getting your biennial flight review) than the previous one had been. After some review of regs and airspace we went through planning a cross country flight (VFR) including weather, communications, air space restrictions, alternate airports, fuel requirements, and the many other things involved in that activity. The entire flight was to have been in Florida so we also covered emergency procedures for landings in water, marshes, swamps, and on alligators.

While I was at the seminar, Jennette met up with a lady she had met at the Barnstormers party and they attended the pancake breakfast and toodled around stuffing bags with free give-away stuff from the AOPA store and the various commercial booths.

With the Rusty Pilot seminar being three hours long, there were a number of seminars that I would have liked to attend but which occurred during the one I was at. I definitely think the one I went to was the one that will do me the most good though. I had a lot of rust that still needed to be penetrated and dissolved.

(continued on next page)

When the seminar was done we got together and had the lunch that was served (fried chicken and/or pork slices & mac & cheese). Oh, by the way they did serve a pancake breakfast at the seminar as well and it did not include mac&cheese. (actually there was more then just meat and mac & cheese at the meals).

After lunch we looked at the \$500,000 and up aircraft they were hawking on the tarmac and I got a chance to quickly walk through the booths in the big hangars by the main stage tent where we had eaten. I stopped by the EAA booth and enjoyed a short conversation with the two young ladies that were "manning" the booth and then headed for my other planned seminar "Spinning 101", given by Catherine Cavagnaro, a CFII (among many other accomplishments) specializing in aerobatics and upset recovery at Ace Aerobatic School, which she runs.

That had to be one dizzy lady as she had video of her performing multiple turn spins in a Cessna 152 Aerobat including one where she climbed above the published service ceiling to 15,000 feet (on a very cold day) and spun down to 2500 ft agl (I believe she said 44 turns). She discussed the different stages of spins, the fact that although there were some aircraft that had very different stall/spin characteristics, the majority of aircraft recovered from spins using similar techniques.

She also emphasized the necessity of checking the POH for your particular aircraft to see if there were any required actions specific to your model. (such as "Don't ever spin")

Just outside of this venue (which you could have used pontoons to get around in) was the AOPA giveaway "Re-imagined Cessna 172" which has been completely gone over and redone to a nearly new condition. (see photo below and AOPA.org for details)



About noon or so the skies opened up enough that a few aircraft flew in including a formation flight of an RV-4 and three Yak trainers. A good number of those who had been able to make it in on Thursday decided to call it a weekend and flew back toward their home airports while the gettin' was good.

As a goodly part of the South was still socked in I hope everyone made it home ok without having to divert or turn back

At 2:35 a town meeting was held by President and CEO Mark baker updating us on events in Washington. Even though there were not a lot of planes at this fly-in there were a good number of pilots at the seminars, so no matter how they got there this had to be considered a successful fly in.

When the "Fly-In" ended at 4 P.M. we jumped in our trusty four wheeled craft and headed for Sumter, back in the Southern most Carolina to spend the night and wake up for what I hoped would be the most enjoyable part of the two road trips for the kid in me, an air show at an Air Force Fighter Jet Base (Shaw AFB). Even though some of the shows are quite similar, I never seem to tire of fast and loud and fighter jets have both in spades.

This was the 75th Anniversary of Shaw Air Force Base so they had a really good shew planned out. Since Jennette is still recovering from her disastrous year last year, we utilized handi-cap parking so only had to walk about half a mile to the static displays (we got to rest part way as we stood in line to go through the ever present security station and metal scanners) and then about another half mile to the other end of the static displays (you've gotta love things set up on the scale of an airbase). I have to admit Jennette was a real trooper and put a lot of miles on her cane over the two weekends.

The theme of this show was honoring the service of those past and present and especially those who had given the ultimate sacrifice of their life in service to their country. There were displays of WWII, Korean War, Vietnam War, and current conflict aircraft. One of the more interesting flight demonstrations was that by a Mig 16 aircraft similar to that flown against our airmen in Korea (see below), and one by an F-80 US fighter that fought against the Mig.



Mig 16

There were several mock combat bombing/strafing runs by F16s, P51 Mustangs, an A4 Corsair, A10 Warthogs, and Huey Helicopter Gun Ships with a rescue behind enemy lines by a Blackhawk Helicopter. There were capability demonstrations by those aircraft and F/A18's (2) one from Canada and one from the U.S., and of course the main attraction of the day (according to some) the USAF Thunderbirds Flight Demonstration Team. Since I had seen the T-Birds several times as well as the USN Blue Angels (which I think are better) (so shoot me, I'm retired Navy) I was more impressed by the other flight demos.

Hopefully by the time you see this I'll have a few more pictures in the Members Photos section of EAA477.org .

So ciao until my next adventure. See you in the funny papers.

Lee.

Trip Report, to Falcon Field FFC

Roy Carson

Most of us who fly are familiar with Aircraft Spruce and Specialty Company, a major retailer of aircraft and pilot supplies. The weekend of our Chapter 477 meeting last month, Aircraft Spruce held their customer appreciation day, offering discounts on purchases, free shipping and raffles at their Peachtree City location next to the Atlanta Regional, Falcon Field Airport (FFC). They had shuttles available to take customers, who flew in, to their store which was only a short distance from the FBO. Actually, it is within walking distance from the airport.



Falcon Field is also home to one of the largest RV aircraft communities, called the RV Falcon Squadron, which in conjunction with the customer appreciation day, held their annual fly-in and cookout. There is a total of 37 RV's based at the Atlanta Regional and they were all out on the ramp for people to view.



So, here you have discount purchases on supplies you need for yourself, free food, great flying weather, friendly people and airplanes. What reason was there for not attending, especially when you own an RV?

I departed RBW around 9 AM and climbed to 4,500' heading direct to FFC. The weather was absolutely beautiful except for the winds, which were a bit gusty. I had a headwind of 30 kts giving me a ground speed of only 128 kts. I engaged the autopilot, sat back and just enjoyed the ride and the view. An hour and 40 minutes later, I arrived at the Atlanta Regional Airport. The

local EAA Chapter 468 and Falcon Squadron personnel were directing aircraft to the parking

spots and welcoming pilots and passengers to the fly-in. What a great way to spend a Saturday (other than at your own Chapter Meeting). This is an annual event, which I would highly recommend.

