



PARTICULARS

AMA Charter 331

Website: peoriarcmodelers.com

PRESIDENT: Scott "Fergy" Ferguson
Phone: (309) 339-3756, ferg88@comcast.net

VICE PRESIDENT: JD "Capt Crunch" Keenan
Phone: (309) 648-1008, jdk737@comcast.net

SEC/TREAS & FACEBOOK: "Smokin-Jimmy" Fassino
Phone: (309) 361-6828, jfassino@me.com

SAFETY: Joe "Stitch" Lang
Phone: (309) 265-7934, joe.a.lang@comcast.net

WEBMASTER: Terry "The Flamer" Beachler
(309) 696-0035, terry@beachlers.com

MAINTENANCE & GROUNDS: Roger "Pod Man" Stegall
(309) 579-3023, rogerstegall@hotmail.com

EDITOR: Bob "Grumpletiltskin" Wilson
(309) 219-4262, wilsorc@gmail.com

AMA CONTEST DIRECTORS: Bob Wilson, Jim Hogan, Jim Fassino

Flying Field Location

The flying field is located off Old Galena Road, ½ mile north of the Caterpillar Technical Center on the west side of the road.

GPS Location: N40 51.844' W89 33.788'

Flying Hours

Flying hours are 8am until dusk, Monday thru Friday, Saturday and Sunday.

Membership

Club dues are \$100/year. All members and flyers must belong to the Academy of Model Aeronautics (AMA). A \$100 new field assessment will be initiated for all new club members in 2011. Beginning in 2012 the new field assessment will expire.

General

We are committed to having fun and the safe operation of model aircraft. The Peoria RC Modelers is an equal opportunity, not-for-profit organization and welcomes all new members.

Flight Instruction

The Peoria RC Modelers offers flight instruction as a free service to members. However, flight students are urged to supply their own aircraft, radio and support equipment. Students should also coordinate training schedules with the instructor. A club trainer aircraft is available for special situations. Questions pertaining to flight instruction can be directed at any of the officers listed above.

PHOTO OF THE MONTH



Joe Lang captured this photo of one of the Fantasy Racers during last Saturday's race. Great shot!

REAL AIRPLANES HAVE TWO WINGS

A monthly study on biplanes and other early aircraft

When I first decided to look at the Great Lakes Trainer, I didn't realize that the Great Lakes Aircraft Company had such a long and somewhat complicated history.

Interestingly, the photo below was taken by a former Peoria RC Club member. Unfortunately, I have forgotten his name. He was an older gentleman. He told me that back as a boy in Cleveland, Ohio, he had climbed the fence and wandered around the grounds of the 1935 Cleveland Air Races. With his trusty Brownie he snapped a variety of photos. There was quite a military contingent there and he took photos of the XB17, F4B-4, P12E, P-26 Peashooter, Gruman F3F and the Great Lakes BG-1 below..



A Great Lakes BG-1. Note the air race pylon in the background.

The Great Lakes Aircraft Company built a variety of aircraft, many for military contract including the BG-1. They were best known, however, for the two seat Model 2T-1. Interestingly the "2" designated two seats and the "T" designated "Trainer".



The popular 2T-1 Great Lakes Trainer.

The company built 264 of the "Trainers" until it went out of business in 1936 after suffering through the depression.

From 1960 on, various companies have bought the rights for the airplane. Harvey Swank of Cleveland, Ohio provided plans for home builders until 1990 when he sold the business to Steen Aero Lab of Palm Bay, Florida.

In the late 1970's the 2T was manufactured in Eastman Georgia, but after a run of 3-4 years it folded.

Doug Champlin also produced the 2T in Oklahoma for several years until 1985 when production ceased. In 2000, John Duncan of Palmer Lake, Colorado bought the Great Lake_Sport Trainer type certificate and tooling and began production once again.

Most recently, Waco Classic announced the return to production of the Great Lakes Model 2T-1A-1/2, a fully aerobatic 180-hp aircraft.

So, it seems the 2T has come full circle and will be around for some time.

THE FLIERS & LIARS CLUB
(Light on flying, long on Lying)



**Meet for breakfast every Saturday morning at the
Bob Evans on Allen Rd.**

**Arrive any time before 7:00 AM or you will be
severely heckled.**



PRCM STYLE PYLON RACING

by Jim Fassino

Its official, we are racing this year, both 4Star 40s and Fantasy Racers. There will be 2 races a month, one on a Wednesday 6 PM and one on a Saturday 9 AM each month. Here are the approved dates: May 18 and 28, June 11 and 15, July 6 and 16, August 17 and 27, September 7 and 24. Only Fantasy Racers will be raced on Wednesdays, both airplanes will race on Saturdays.



The Green Weenie on "final" approach. Joe Lang photo.

It's official, we are racing this year, both 4-Star 40s and Fantasy Racers. There will be 2 races a month, one on a Wednesday 6 PM and one on a Saturday 9 AM each month. Here are the approved dates: May 18 and 28, June 11 and 15, July 6 and 16, August 17 and 27, September 7 and 24. Only Fantasy Racers will be raced on Wednesdays, both airplanes will race on Saturdays.



Matt Putthoff works on his Fantasy Racer at the first Wednesday race. Unfortunately, the weather in the background closed flight operations shortly after this photo was taken.

After a number of false starts the PRCM Pylon Racing took off on Saturday, May 28, 2011. Our previous attempts on Wednesdays were scrubbed. Saturday proved to be the opportunity for both the Fantasy Racers and the 4 Star 40 Racer to take to the sky, and was it ever a lot of fun.



Glen Howard & JD Keenan wait for the countdown at Saturday's race.

The new format made the racing easy, fast and fun. This new format has two pylon judges one at each end to record cuts. There is also one Starter responsible for giving the countdown from 2 minutes to race start for the air starts. While it would be nice to have 4 lap counters we were able to function with just one or two lap counters. The air start worked well and the racers caught on to the timing of the start real fast.

The races are not timed, rather points are awarded based on the finishing order. First place gets 4 points, second place gets 3 points, third place gets 2 and fourth across the finish line gets 1 point. After the race heat the pylon judges give their report of cuts. One point is deducted from the finishing points for the first cut, a second cut by the same pilot results on a score of zero for the race as does crossing the start line early. There were very few pylon cuts and no pilots called for false starts.

The National Miniature Pylon Racing Association approach to racing makes it fun to participate, easy to work and fair for the racers. For example if we had had 16 racers on Saturday each of the pilots would have raced in 4 heats with 4 unique pilot groups. Everyone gets to race against all pilots and the total points will show winning order for the days race. A maximum of 16 points is possible with a first place finish in each of four races.

We had several Fantasy Racers and 2 of the Four Star racers. Tom Imhoff was first with Bob Wilson finishing second on points in this category.

The Fantasy Racing results had me finishing in first, Joe Lang second place Glen Howard was third and Joe "Cuts" Board was 4th. Also participating were Bob Wilson and JD Keenan, both raced a few heats but had equipment issues and did not complete the four heats.



Bob Wilson's Fantasy Racer with "Equipment Issues"

We plan to race Fantasy Racers one Wednesday a month and Fantasy Racers and 4 Star 40 on one Saturday morning a month. Wednesday's race starts at 6 PM and the Saturday race starts at 9 AM. If you have an airplane I hope you will come out and race. If you do not want to race or do not have a racer, I hope you will consider attending a race, we could use your help. See the race schedule attached.

Thanks to the Pylon Racing Committee for planning this year's racing format. Based on the early feedback the racers had a lot of fun and no mid-air collisions with all of those races! I enjoyed it so much that I'm thinking about building a new 4 Star 40 to race.

SPECIAL ANNOUNCEMENT



A major storm was experienced at the field on Wednesday May 25. Winds exceeding 60 mph blew over the Porta-Potty that had been anchored to the ground with reinforcement bar. We are happy to report that Bryan Chumbley, a frequent visitor to the outhouse, was not in attendance at the time. There were no injuries.



FROM THE PREZ



Scott "The Ferg" Ferguson

There is no article from the PRCM President for this month. There is a concern as to his where-a-bouts.



Our friend and club president seems to have gone missing.

AllmondAviation

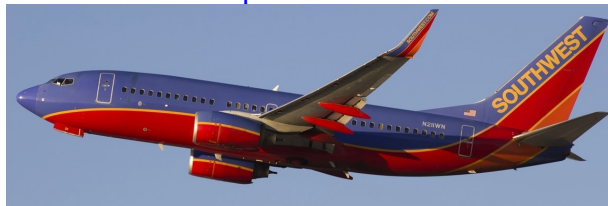
Learn To Fly Here!  L.L.C.

Adama Allmond
Flight Instructor / Professional Pilot

www.allmondaviation.com Peoria, IL
allmondaviation@gmail.com Cell 309.258.1459

FROM THE VEEP

J.D. "Capt Crunch" Keenan



On Saturday, June 11 starting at 8AM your club will be hosting our annual open house. This is a great opportunity for us to show off our club and maybe drum up some interest from potential new members. We have posters and flyers floating around town and will also rely on word of mouth to make the day a success. Please tell your friends, coworkers and anyone you know who may have an interest in model airplanes to come out. We plan to have a flight simulator set up and at least one trainer ready to go. Anyone interested can have a hand's on experience. We plan to have everything from large gas powered airplanes to micro electric helicopters. Now would be a good time to spiff up some of your models and come show them off! We would like to have at least one airplane in the air all day. To make this happen we need pilots to bring their airplanes. If there is anything you would like to see this year please call me and I will make sure it gets discussed.

We have a sign-up sheet posted in the clubhouse. Last I checked, there were only a few people on the list. Folks, I promise it won't be hard work. We need help with pilot registration, raffle, making coffee and selling food. Please make an effort to throw yourself on the list for, at least, a one hour block. We would really like to see a lot of club participation. Sign up sheet will be available at the next club meeting.

Every year we have items that we raffle off during the day. This year is proving to be very challenging in this department. Stores that we usually count on to provide items have decided not to help us out this year. So, that being said, we are asking club members to help us out. If anyone has something they would be willing to donate to our club for the raffle, it would be greatly appreciated. The item does not have to be RC or even aviation related. Please contact me if you think you might be able to help.

Remember, it's always better to be down on the ground wishing you were up in the air than up in the air wishing you were down on the ground.

J.D. aka "Captain Crunch"

WANTED!

GOOD WOMAN

Must be able to clean, cook, sew, wax aircraft and navigate.

Must have airplane and hangar.

PLEASE SEND PICTURE OF PLANE AND HANGAR



THE SAFETY OFFICER SPEAKS



May went by awfully fast with not nearly enough flying. Here's hoping that June brings much better flying weather! However, I am happy to report that there were thirteen new aircraft tested for sound level during the month. Great work everyone! As we have discussed many times over the past several months, compliance with the sound testing and sign in sheets go a long way to keeping the park district in support of our field and activities.

Along with all of the sound testing that is occurring, there has been a lot of discussion about prop noise. Questions have arisen on how much prop noise contributes to the overall sound level and ways to reduce it. The answers to both of these questions have many variables. However, there is a little bit of science that can help.

Two years ago, when we were developing the current sound program, Bob Wilson dug up some great research on propeller noise and efficiency. There is a lot of math, and if anyone is interested, I can provide more details including a paper or two that double as wonderful sleep aids. However, a very simple rule of thumb is that at propeller tip speeds in excess of 6/10ths the speed of sound (0.6 Mach), prop noise increases drastically and at the same time, propeller efficiency begins to fall off. The principles in play here involve drag and the speed of air over an airfoil, which in this case is the propeller itself. When propeller tip speeds reach this "transonic" range, the noise generated by the propeller can often be louder than the engine. Now some good news: If you don't want to repeat all of the math involved, here is a simple formula to calculate the RPM when the tips of a propeller reach 0.6 Mach:

RPM when Tip Speed is 0.6 Mach = 154889 divided by the length of propeller (in inches)

For instance, a 23 inch propeller's tips will reach 0.6 Mach at (154889 / 23) = 6734 RPM.

So what does it all mean? Again, there are a lot of variables, but you can be assured that if your setup exceeds the RPM from the equation above, you are generating significant prop noise. Also, the farther you go beyond this RPM, your propeller will be less and less efficient which means you may not be getting the full benefit of the power the engine is delivering. These effects need to be balanced against the power curve of the engine and the aerodynamics of the model itself. A great example of how much difference a small change can make is my Venus II with an OS 120AX. With the 16x7 APC prop, it generates 91dBA in our sound

test. With a 16x8 APC, it generates 87dBA. It also flies much better on the 16x8. It has better vertical power and a wider usable throttle range.

So... remember that the engine manufacturer's recommended propeller is just that: a recommendation and a good place to start. However, if you are operating in RPM ranges higher than the 0.6 Mach tip speed number from the equation above, experiment with different propellers! Adding length or twist will add load to the engine and reduce top end RPM. There are no guarantees, however, the results may very well be more usable power and a quieter setup!

Fly fun, fly safe!!

Joe Lang

Be a PRCM Bagel-Biter

Join the retired, laid off, laid up, lame, unemployed or unmotivated PRCM crew at Paneras on Knoxville every Thursday morning at 7:00 AM.



Have a cup of Joe and a bagel, check out the chicks and listen to all the world's problems being solved.

If you're not there, we're going to talk about you!

BUILDING TIP SOLDERING DEANS PLUGS TO THICK BATTERY LEADS

Recently I purchased three 2650 mah batteries for my Fantasy Racer and, of course, all three had the wrong type of lead attached to them. Now, the 2650 mah batteries have thicker than normal leads on them. The reason for thick leads is to minimize resistance and heat during the higher current flow. With that size battery a lot of electrons are trying to get from one place to another.

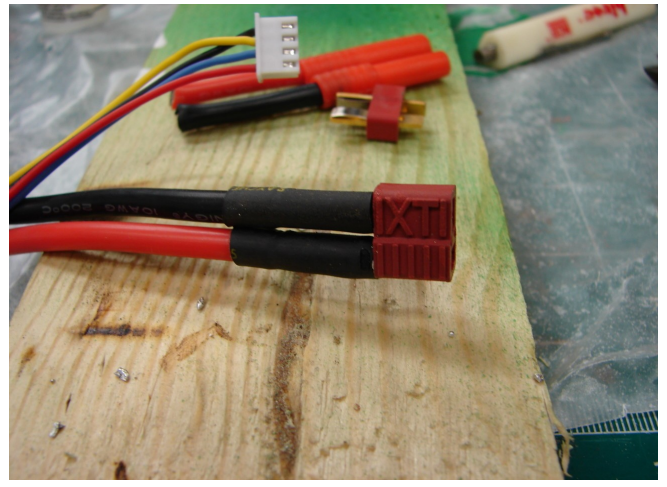
I would have to convert my batteries to the Deans type plug that was on the Fantasy Racer.

I've noticed that many pilots just tack one side of the battery lead to the Deans plug. This, of course, defeats the purpose and besides not having much strength, heat will build at the narrow confluence resulting in a small amount of power loss.

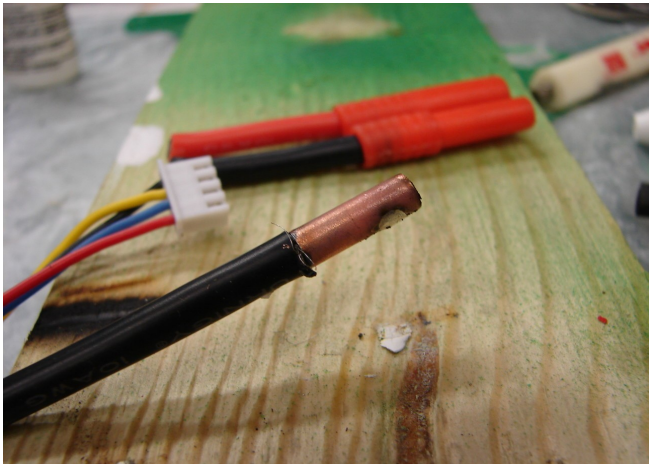
Warning!!! Whenever you're changing leads only cut and solder one lead at a time. Make sure it is well insulated before cutting the other lead. Shorting out two of these naked leads could be a real eye opener...and dangerous!



Cut one lead and trim back the insulation 1/4". Cut a 5/8" piece of 3/16" OD copper tubing.



Slide the insulating heat shrink tube over the exposed copper and shrink it down with the MonoKote blow gun.



"Tin" the wire with solder before sliding the copper tube over it. Heat the copper tube and run additional solder into the ID.

Before doing anything else, remember to slide the shrink tube insulation over the wire. Locate it as far back on the wire as possible so that the heat generated from the soldering operation doesn't prematurely shrink it.



The 3/16" OD copper tube will just slide over the Deans tab. Leave about 1/16" between the copper tube and the base of the plug. Heat and run solder into that opening.

DEAR AMELIA



These are real questions from real members about RC pilot concerns. Amelia Airhead will answer all questions and give unique insights from an area of the brain little explored. Address questions for Amelia directly to the editor. Amelia Airhead is the pen name of Roger "Pod Man" Stegall

Dear Amelia

I have noticed the grass growing in the rocks on the club's entry road. At breakfast this weekend some blowhard was pontificating about the **Gravel Integrity** being disturbed by this growth. Could he be onto something with his gravel integrity theory or should we ignore him on this subject also? he be onto something with his gravel integrity theory or should we ignore him on this subject also?

Signed,
C A Six

Dear C A Six,

After consulting with several gravel engineers, none of them was familiar with the term "**Gravel Integrity**." These engineers were of the opinion that the blowhard you referenced is either on the leading edge of gravel dynamics or has consumed way too many pancakes for his own good. I'm surprised your integrity guy didn't suggest installing a drive through car wash on the field

entry lane to prevent dirty vehicles from diminishing the ambiance of the flying experience. The best plan of action would be to ignore the dandelions in the lane and suggest to this member that he use some form of modern-age eating utensil to assist in his Breakfast Integrity. A group intervention might be required to curtail his deviant behavior before it reaches critical mass and becomes a new topic for "Servo Talk."

Sincerely,

Amelia Airhead – totally lacking in all forms of integrity

Dear Amelia,

Last fall, one of our old members got all excited about the club building quarter scale World War 1 fighters. He said he would lead the way and expressed interest in an "high end" Albatross German fighter. Other members though it was an excellent idea and lots of time was spend at Saturday morning breakfast talking about which WW1 fighter was the best.

By the spring of this year, we expected to have a plethora of WW1 airplanes showing up at the field. Obviously, our old member was expected to lead the way with his airplane. So far, we have seen only two airplanes and one was built last year. When the old guy was asked how his WW1 airplane was coming along, he looking into his coffee cup and mumbled something about a pattern contest.

Amelia, should we CA him to his chair until the WW1 bird is ready?.

Signed,

Where's the plethora.

Dear "Where's the Plethora"

The story you tell is very common among aging members of the RC flying community. Many of the older grumps within each club have grandiose plans but they have lost the "completion" gene from their chromosome pool. Projects that once took only a few weekends to complete now seem to drag-on longer than Presidential campaigns. Count yourselves lucky if this guy finishes his WW1 before WW3. The best laid plans of mice and men often get derailed by aches, pains and the need to keep a little lady happy. My crystal ball predicts this grump will manage to fly one of the two jeeps in your club, before frost is again on the pumpkin. Sincerely,

Amelia Airhead – ain't no frost on my pumpkins



A SERIOUS NOTE ABOUT AMELIA

From the EAA

A report from Papua, New Guinea says the wreck of an aircraft that might be the Lockheed Electra flown by Amelia Earhart and her navigator Fred Noonan has been found on a reef near Bougainville Island near Papua New Guinea. The Papua New Guinea Post Courier is reporting "armed men" are guarding the area over a reef off Matsungan Island where an aircraft matching the description of Earhart's plane has been found. Divers are now checking the wreck and inquiries are flooding in from all over the world. There is no word on whether any human remains have been recovered.

If the plane is Earhart's, it will help to solve a 78-year-old mystery surrounding her disappearance on a leg of a pan Pacific flight leg from New Guinea to Howell Island in July of 1934. Local sources told the newspaper the existence of the wreck has been known for years. Government officials say it belongs to Papua New Guinea and they'll be defending that claim.



Email HobbyDeals@computerdeli.com for price quotes. Please include the Horizon Hobby part number for the items you are asking for a price on. Thanks!

Hobby Deals!

Sign up for our weekly RC email specials the next time you visit a store location! Sign up forms are located in the stores.

Computer service, upgrades, repairs, parts & cables.

Friendly & Helpful Service. Fast.

Computer Deli

Mon-Sat 10-7, Sun 12-5

www.computerdeli.com

Bloomington: 1306 E. Empire St 309-661-8266

Champaign: 39 E. Marketview Dr 217-398-4000

Peoria: 4615 N. Sheridan 309-692-4100

Springfield: 2922 Constitution Dr 217-726-7100

No mail order sales please, we are walk-in only.

THE TAIL-DRAGGERS

The "Tail-draggers" are a group of PRCM members that get together on Thursday mornings (immediately after Bagel Biters) and fly for the better part of the day. Recently, the editor joined the Thursday crew and had a memorable experience.

Obviously, some of the "Tail-draggers" are retired, but some have shift jobs and others are just playing hooky from work. In any case, they all are having fun at the field.



Verne Holeman, Jim Hogan & Jon Dewey. Some of the "Tail-dragger" crew performing a sound check on Verne's airplane.

At mid-day this fun-loving group adjourns to the River Beach Club for lunch to ogle the waitresses.

Back at the field after lunch it's more flying, and on this particular day I got to see Jon Dewey's JU87 Stuka on its maiden flight.



Test pilot Hogan, Dewey & George Knight prepare the Stuka for flight.

The maiden flight of the Stuka went off without a hitch and Jon even managed to drop a couple of bombs during the day.



Jon Dewey's Stuka in flight

The high point of my visit, however was watching several of the fliers chase Verne Holeman's airplane around the field. Seems Verne's throttle stuck shortly after landing and the airplane decided to go on a sight-seeing tour. I missed the really great camera shot because I was laughing too hard, but did manage to capture the aftermath.



Sucking oxygen after his race around the field, Jim Hogan finally subdues Verne's errant aircraft.

Come on out and join the crew on Thursdays...I guarantee you'll enjoy yourself.

Editor



Roger Has Aluminum Spinners for Sale



1.5 - 2.00 inch	\$5
2.25 - 3.00 inch	\$10
3.25 - 3.75 inch	\$15
4.0 - 5.0 inch	\$25

Contact Roger Stegall (309) 579-3023



While going down the street the other day I happened to see this really nice Taylorcraft, or Cessna, no...maybe a Howard, Stearman...who cares!

