FLIGHTLINE

NEWSLETTER OF THE PALM BEACH RADIO CONTROL ASSOCIATION

The Vought V-173 "Flying Pancake"



AMA Club# 1016

ONE OF THE LARGEST AMA CLUBS IN AMERICA
Summer 2024



The Palm Beach Radio Control Association Current Board of Volunteers

John Scaduto President/Webmaster/Newsletter Editor

Gary Hoffman Vice President

Princeton Rose Treasurer

David Spielman Secretary and Membership Chair

Diego Souza Chief Safety Officer

Jon Gerber Chief Training Officer

Seth Sterling Director

Please use the following email address to contact any of the Directors: pbrca.info@gmail.com

Membership Meeting Dates! Second Saturday of Every Month ALL DATES ARE TENTATIVE

JulyNo MEETINGSummer break, no meetingAugustNo MEETINGSummer break, no meetingSeptember14th, 202410:00 AM at Westervelt FieldOctober12th, 202410:00 AM at Westervelt FieldNovember9th, 202410:00 AM at Westervelt FieldDecember14th, 202410:00 AM at Westervelt Field

For more information and upcoming events please visit the Calendar page of the PBRCA Website

https://www.palmbeachrc.com/calendar

A FRIA approved club (FAA-Recognized Identification Area)



John Scaduto

President/Webmaster/Newsletter Editor

Thinking about next year, 2025, I wanted to chat a bit about why serving as an officer in our club is such a big deal. PBRCA relies on the energy and enthusiasm of its members, and having fresh faces on the board is key to keeping things exciting and running smoothly.

Being on the board is a fantastic way to get involved and make a real difference. You'll help plan and organize events and set up other activities that bring our members together. Seeing an event come together and knowing you played a part in making it happen is incredibly satisfying. Plus, you get to work with people who share your passion for radio control airplanes, which is always a blast.

Over the years, our club has achieved some amazing things thanks to the hard work of our board members (and other volunteers). We've hosted some exciting events, maintained our flying field, and grown our membership. These accomplishments are something to be proud of and show what a dedicated team can achieve. By stepping up as an officer or other board member, you get to be a part of this legacy and help steer our club towards even more success.

Being a board member is also a great way to grow personally and professionally. You'll pick up skills in leadership, project management, and teamwork that are valuable in all areas of life. Working closely with other board members can create lasting team spirit. The shared experiences and sense of purpose make the whole journey worthwhile.

So, as you think about your future with PBRCA I really encourage you to consider joining the board. Your ideas, enthusiasm, and unique perspective are exactly what our club needs to keep thriving. Thanks for being such an awesome community, and I look forward to seeing the amazing things you'll do.

John

Upcoming PBRCA Events:

- National Model Aviation Day/Intro to Flight Kids Day August 17, 2024
- Helis Over the Glades October 4-6, 2024
- Pylons Over the Glades October 25-27, 2024
- Warbirds Over the Glades November 22-24, 2024
- Toys for Tots December 2024

Rember: no meetings in July or August.



Gary Hoffman

Vice President

Gassers for Newbies

By: Gary Hoffman and Cody Wojcik

Why gassers over glow?

- Cost
- Gassers use about 1/3 the fuel per minute, and the fuel is \$4-5/a gallon versus \$20+ for glow fuel
- · Ease of use
- No oil slime on airframe to clean up
- No glow ignitor
- No starter
- More flight time per tank

Gassers downsides versus glow

- Size/weight
- Gassers have a minimum practical size.
- Horizon has just introduced 10, 15, 20 and 33cc gassers. They are converted glow engines and require a richer oil to gas ratio – They use the muffler to pressurize the fuel system similar to glow engines
- Complexity
- Electronic ignition requires some wiring from Rx to spark plug Ignition box mounting
- Fuel tank setup has vent lines and fuel dot (filler), NOT pressure on all but the Horizon Evo engines
- All the fuel lines need to be 100% leak free (very important!!!)

Exhaust Options

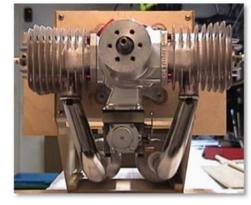
- Stock muffler
 - Consists of a small chamber and exhaust pipe, bolt directly to exhaust port like on a glow engine
 - Lightest
 - Least expensive
 - Simplest to install
 - Usually maintenance-free
 - Loudest
 - No power gain
 - Requires cowl to be cut for exit clearance





Canister

- Consists of a header, coupling (usually Teflon with spring clamps), and a canister that is mounted inside the fuselage
 - Heavier
 - More expensive
 - More work to install, but still easy on newer models designed for them
 - Flexible headers may require periodic maintenance
 - Ouietest
 - No or little power gain, but certain canisters provide smoother running
 - No cowl cutting necessary usually



Tuned pipes

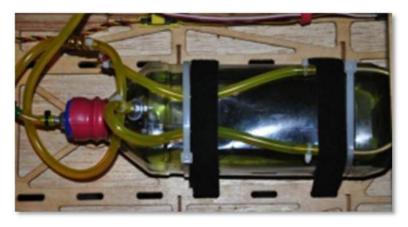
- Consists of a header, coupling (usually Teflon with spring clamps), and a long pipe that is mounted inside the fuselage
 - Similar weight to canister
 - Most expensive
 - More work to install, but still easy on newer models designed for them
 - Flexible headers may require periodic maintenance
 - Slightly louder than canisters, quieter than stock mufflers
 - Significant power gains due to tuned pressure waves
 - Header length must be correct
 - No cowl cutting usually necessary



Gasser setup, fuel systems

- Fuel Systems
 - Gassers need a vent loop, not pressure. Use a loop then exit opening down.
 - No silicone fuel lines! Silicone will decompose with gasoline. Use Tygon (yellow) or Viton (black)
 - Since gassers have a fuel pump, they "suck" the fuel and all the fuel lines need to be zip tied from clunk to engine.
 - Gassers have a choke that needs a linkage. The choke is needed for starting.
 Use filters on filler and vent.







1 Liter Fiji water bottle tank

Fuel Systems

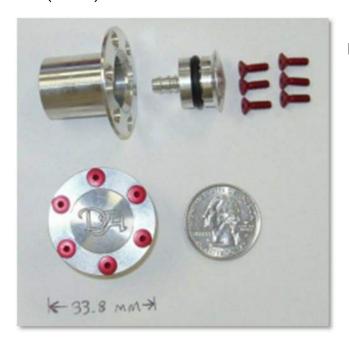
- There are 2-line and 3-line systems. With a 2-line system, there is a "T" between the tank and the carb that the filler line uses.
- A 3-line system does not use a "T" but uses a separate filler line into the tank.
- With a 3–line system, a leak with the filler line does not affect the engine.



2-line system with a "T" Vent line exit



- All Fuel Systems need a "Fuel Dot".
- A Fuel Dot is a fitting on the side of the plane, that allows the fuel tank to be filled.
- It is critical on a 2-line system that the fuel dot plugs the line and has zero leaks to prevent fuel starvation in the carb.
- With a 3-line system, a fuel dot leak is not as critical since there is an interrupted tank to carb line (no "T").



Desert Air fuel dot



Secraft fuel dot

- All gassers with Walbro type carbs need a choke linkage.
- Converted glow engines (Evolution, NDH, etc.) do not have chokes
 - The choke needs to be able to move from full choke to fully open.
 - If it does not fully close, it will be difficult to start when cold.
 - If it does not fully open, the engine will not run at full power.
 - It can be activated by a servo, a rod going forward or linkage rearward and down (or out the side) through a bellcrank.

Simple wire rod going forward through cowl Bellcrank through the bottom





All fuel lines MUST be 100% leak free!

- Tygon, Viton, all must be of the correct size for the fitting.
- Zip ties will work but are not optimum.
- · A short piece of same size tubing works well.
- Heat in a cup of hot water, expand with needle nose pliers and slip over the line.
- · Heat again to slip over barbed fitting.

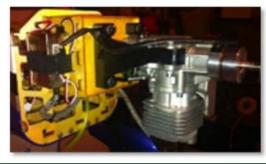


- Most ignitions run on 4.8 to 6 volts, but some new Rcexl's will run on 7.4V.
 - Option 1: Use separate battery and switch
 - Option 2: Use a separate battery and switch with optical kill switch
 - Option 3: Use diode in series from Rx to ignition module
 - Option 4: Use IBEC (ignition battery eliminator circuit) from Rx to ignition module. The IBEC isolates the ignition noise and regulates the voltage to 5.2 volts. It has an LED to indicate if the ignition is hot or not. http://www.tech-aero.net/ultra-ibec
 - Options 2 and 4 allow a switch on the Tx to turn on/off ignition power on command, options 1 and 3 require lowering throttle position to stop motor



IBEC made by Tech-Aero

- Ignition Systems
 - The ignition module needs to be soft mounted. Velcro straps damp the vibration.
 - The ignition module needs to be located within the length of the spark plug lead.
 - Use shrink tubing, tape or clips on all connectors
 - The steel spark plug cap must be fully seated on the spark plug. Mount receiver as far away from the ignition as reasonable.
 - DLE spark plugs are terrible, use genuine NGK CM-6 plugs.



DLE-20 on 68 inch Velox



- Gasser carbs
- Most widely used carbs are Walbro diaphragm "pumper" carbs
 - The diaphragm is a fuel pressure regulator and needs no adjustments.
 - Crankcase pulse pressure pumps fuel from vented tank.
 - The carbs have a low and high-speed needles. The low speed needle affects the mixture even at full speed. Tune the low speed for best throttle response from idle, then the HS for best power.
 - Use longer arm on the throttle for more precise servo control. The servo to throttle link should not be 100% metal. Use a Nyrod and/or a plastic servo arm to prevent RF interference. DLE engines come with a fiberglass throttle arm

Fiberglass throttle arm and Nyrod to throttle servo on DLE-30 below.



Gasser setup, carburetors

- Most gas engines (except Desert Aircraft) you will see 3 screws on the side of the carb.
- The upper one shown in the picture is a throttle idle stop and should be removed completely
 and thrown in the trash, it is not to be used in a RC plane. It is there for use on power
 equipment like leaf blowers, chain saws, etc, with a trigger type throttle to provide idle
 adjustment. With an RC plane, the throttle servo controls the idle, and not only is this not
 needed. it is unwanted.
- The lower 2 screws are for the fuel mixture, with the one closest to the engine always being the "low speed" and the one nearest the carb opening being high speed".



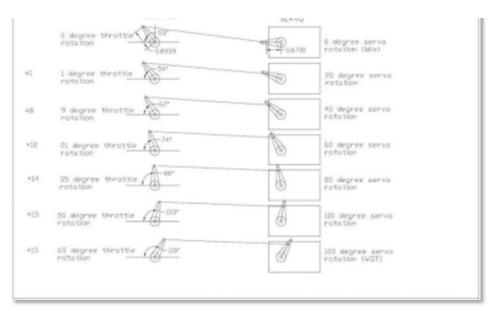
Throttle Idle stop screw

High Speed needle

Low speed needle



- Gasser carbs
- Servo to carb linkage geometry is important.
- Small gassers get most power in first half of throttle.
- Take advantage of servo motion to allow small carb throttle motion initially for a lot of throttle servo motion.



Gasser setup, general

- Some gassers (DLE-30 and up) have multiple prop bolts Use a drill guide (mandatory!!!!), and preferably a drill press. Drill the prop so that when it comes up on compression, the top of the prop is at 2 O'clock for easier flip to start
- Fuel proof all the wood near the engine and fuel tank Use epoxy thinned with denatured alcohol or acetone
- Make choke operation easy, and servo can be used but a "Z" bend wire works just as well and is lighter.
- Gassers, especially single cylinder engines, have a lot of vibration that needs to be dealt with.
 - The propeller and spinner need to balanced. Often the prop is balanced, but carbon spinners are not. The Vess balance ring (VBR) is an excellent product to balance the assembly.
 - Wood props can/do compress under the bolts, so check after the first flight and periodically after. Carbon fiber props do not have this issue.
- Do not use "Loctite" on prop bolts, you will be removing them occasionally and the Loctite will need to be cleaned out each time.
- Nordlocks are 100% effective on hard surfaces, but do not work on soft (i.e. wood). They are perfect for prop bolts with carbon props.
 - See: http://youtu.be/mgwmuZuJ02I
 - A stripe of paint across the bolt head will indicate if it has rotated at a glance.



Princeton RoseTreasurer

Rocking and Rolling

Halfway through the year I'm happy to report that we have completed our major improvement projects for 2024. The last significant improvement initiative was the split rail fencing in front of the Press Box that was installed by the parks department in early June. We remain ever grateful for the continued support of our parks department partners.



As we discussed at our June

2024 General Meeting, we will focus our energies during the remainder of the year on executing our 2024 events schedule that includes the combined *National Model Aviation Day* and *Intro To Flight Kids Day* events in August, *Helis Over The Glades* in October, *Pylons Over The Glades*, also in October, *Warbirds Over The Glades* in November, and of course, *Toys For Tots* in December. In addition to providing thrilling and fun experiences for club members and visitors, we expect a positive financial impact from these significant events.

Improvement projects for 2025 include refurbishing our Press Box floor and walls and installing a more permanent solution to manage water pooling from heavy rains under the runway carports. Longer term we must resurface our 17-year-old runway and must plan for this significant expense.

Happy flying and continue enjoying this awesome hobby!

Princeton



David Spielman

Secretary and Membership Chair

What do I write about when I'm the club secretary? I know, I can tell you there are now 265 members in the club, I take notes at meetings, and I share correspondence from the AMA with the club and I file the club charter, so we are insured in case something bad happens..... boooring!

I'd rather say that this job is great because I get to help out my fellow club members by signing them up for another year in PBRCA. I get to tell everyone about important things that are happening in the club, and I get to send out urgent messages about club events and no flying restrictions (NOTAMs). I get to help make sure your flying experience is fun and as carefree as possible.

I hope you've all heard that PBRCA has been a Gold Leader club for 15 years. Yup, that's right. You, our members, got us there by supporting training, safe flying, volunteering, charitable giving and hosting flying events. Most important is that you welcome new members and guests to the club, to help us grow and to foster support from the community. All those times, you delayed flying to answer a few questions has actually paid off. That's money in the bank of favors. The parks department recognizes this and in turn has supported our requests to protect the field from motor vehicle damage. You will soon be seeing some new fencing that lets us move freely but restricts truck entry. Thanks to you our members for getting our 2024 Gold Leader status.

I'm looking forward to a bit of flying this summer and have a few models to focus on. One in particular is a Marlin EDF Jet that spent a few months in the woods surrounding our field. It was home to three frogs and a family of ants. The model required careful checkout to make sure it was airworthy. After evicting the current residents with a bit of Raid and a vigorous shaking, I went to work. One aileron hinge was torn and the linkage missing, the speed control and receiver were non-responsive. All 8 of the servos tested good with my servo tester. The hinge was easily fixed with some Beacon Foam-Tac. A new speed control, repurposed Spektrum AR636 receiver and a bunch of programming and I was ready to fly.



Spektrum AR636 receivers can be repurposed if you have a Spektrum programmer cable to set up AS3X and safe mode. It takes some time and instructions are on U-Tube. I added some yellow paint for visibility and the plane was ready to fly.

You've heard from me about grouper in a most recent email blast. You may have also seen ads for free membership to the AMA in MA magazine from Grouper. I think this is pretty cool because this puts cash in our members' pockets to the tune of over \$6,000 collectively if a third of the club joins up. This benefit is part of a number of Medicare Supplement plans. I've signed up this week and hope to enjoy the break in annual dues and hope you do too. Look for more news from Grouper in your inbox.

Fly safely and remember to keep your membership current, David Spielman, PBRCA Secretary



Diego SouzaChief Safety Officer

Jon Gerber
Chief Training Officer



FEATURE ARTICLES

How Do I Become Successful as a New Pilot? By Ed Anderson

Whether you have a coach or you are trying to learn to fly on your own, you will need to be mindful of these six areas if you are going to become a successful RC pilot. After many years of working with new fliers at our club, and coaching fliers on the forums, there are a few things I have seen as the key areas to stress for new pilots. Some get it right away and some have to work at it. They are in no particular order because they all have to be learned to be successful.

- Wind
- Orientation
- Speed
- Altitude
- Over control
- Preflight check

Wind

The single biggest cause of crashes that I have observed has been the insistence upon flying in too much wind. If you are under an instructor's control or on a buddy box, then follow their advice, but if you are starting out and trying to learn on your own, regardless of the model, I recommend dead calm to 3 mph for the Slow Stick and Tiger Moth type airplanes and less than 5 mph for all others. That includes gusts. An experienced pilot can handle more. It is the pilot, not the model that determines how much wind can be handled.

Let me share a story:

The wind was roughly 8 mph steady with gusts to 12. That was strong enough that some of the experienced pilots flying 3- and 4-channel, small electric airplanes chose not to launch. A new flier insisted that he wanted to try his 2- and 3-channel park flyers. Crash, crash, crash—three models in pieces. He would not listen. Sometimes you just have to let them crash. There is no other way to get them to understand.

Many park flyers can be flown in higher winds by an experienced pilot. I have flown my Aerobird in 18 mph wind (clocked speed), but it is quite exciting trying to land it.

Always keep the airplane upwind from you. There is no reason for a new flier to have the model downwind ever!



Orientation

Knowing the orientation of your airplane is a real challenge, even for experienced pilots. You have to work at it, and some adults have a real problem with left and right regardless of which way the model is going. Licensed pilots have a lot of trouble with this one as they are accustomed to being in the airplane.

Here are two suggestions about how to work on orientation when you are not flying:

Use a flight simulator on your PC. Pick a slow-flying model and fly it a lot. Forget the jets and fast airplanes. Pick a slow one. Focus on left and right coming at you. Keep the airplane in front of you. Don't let it fly over your head.

An alternative is to try an RC car that has proportional steering. You don't have to worry about lift, stall, and wind. Get something with left and right steering and speed control. Set up an easy course that goes toward and away from you with lots of turns. Do it very slowly at first until you can make the turns easily. Then build speed over time. You'll get it! If it has sticks instead of a steering wheel, even better, but not required. Oh, and little cars are fun too.

Too Much Speed

Speed is the enemy of the new pilot, but if you fly too slowly the wings can't generate enough lift, so there is a compromise here. The key message is that you don't have to fly at full throttle all the time. Most small electrics fly very nicely at $^2/_3$ throttle and some do quite well at $^1/_2$. That is a much better training speed than full power. Launch at full power and climb to a good height, say 100 feet as a minimum, so you have time to recover from a mistake. At 100 feet, go to half throttle and see how the airplane handles. If it holds altitude on a straight line, this is a good speed. Now work on slow and easy turns, work on left and right, flying toward you and maintaining altitude. Add a little throttle if the airplane can't hold altitude.

Not Enough Altitude

New fliers are often afraid of altitude. They feel safer close to the ground. Nothing could be more wrong. Altitude is your friend. As previously stated, I consider 100 feet—about double tree height where I live—as a good flying height and I usually fly much higher than this. Fifty feet is the minimum flying height for new fliers. Below that you better be lining up for landing.

Over Control

Most of the time, the airplane does not need input from you. Once you get to height, a properly trimmed airplane flying in calm air will maintain its height and direction with no help from you. In fact, anything you do will interfere with the airplane.

When teaching new pilots, I often do a demo flight of their airplane. I get the model to 100 feet, and then bring the throttle back to a nice cruising speed. I get it going straight, with plenty of space in front of it, then take my hand off the sticks and hold the radio out to the left with my arms spread wide to emphasize that I am doing nothing. I let the airplane go wherever it wants to go, as long as it is holding altitude, staying upwind, and has enough room.



If you are flying a high-wing trainer and you can't do this, your airplane is out of trim.

Even in a mild breeze with some gusts, once you reach flying height, you should be able to take your hand off the stick. Yes, the airplane will move around and the breeze might push it into a turn, but it should continue to fly with no help from you.

Along this same line of thinking, don't hold your turns for more than a couple of seconds after the airplane starts to turn. Understand that the airplane turns by banking or tilting its wings. If you hold a turn too long, you will force the model to deepen this bank and it will eventually lose lift and go into a spiral dive and crash. Give your inputs slowly and gently and watch the airplane. Start your turn, then let off, then turn some more and let off. Start your turns long before you need to and you won't need to make sharp turns.

I just watch these guys hold the turn, hold the turn, hold the turn, crash. Of course they are flying in 10 mph wind, near the ground, coming toward them at full throttle.

Preflight Check

Before every flight it is the pilot's responsibility to confirm that the model, the controls, and the conditions are correct and acceptable for flight.

Airplane:

- Batteries at proper power
- Surfaces properly aligned
- No damage or breakage on the airplane
- Everything secure

Radio:

- Frequency control has been met before you turn ont he radio (this has gone away with 2.4 GHz systems)
- A full range check before the first flight of the day
- All trims and switches in the proper position for this model
- Battery condition is good
- Antenna fully extended
- For computer radios: correct model is displayed
- All surfaces move in the proper direction

Conditions:

- No one on the field or in any way at risk from your flight
- You are launching into the wind
- Wing strength is acceptable (see wind information)
- Sunglasses and/or hat to protect your eyes
- All other area conditions are acceptable



Then and only then can you consider yourself, your airplane, radio, and the conditions right for flight. Based on your model, your radio, and local conditions, you may need to add or change something here, but this is the bare minimum. It only takes a couple of minutes at the beginning of the flying day and only a few seconds to perform before each flight.

If this all seems like too much to remember, do what professional pilots do, take along a preflight checklist. Before every flight they go down the checklist, perform the tests, in sequence, and confirm that all is right. If you want your flying experience to be a positive one, you should do the same. After a short time, it all becomes automatic and a natural part of a fun and rewarding day.

I hope this is useful in learning to fly your airplane!



Risk Management Practices

Princeton Rose - Treasurer

We must never tire of executing effective risk management practices when flying model aircraft at our flying sites that are open to the public, and this article builds on the *Risk Management Practices* discussion in our Fall 2023 newsletter. Among the risks club members and nonmembers face are the following:

- Pilots inadvertently hurting other pilots or park patrons, or damaging vehicles in the parking lots adjacent to our flying sites, and
- Pilots inadvertently hurting park patrons that fish in the lake at the West side of the runway.

It's worth reemphasizing that creating a safe environment that protects pilots, nonpilots, and surrounding property is crucial and the responsibility of every individual participating in RC aircraft building and flying. At our West Delray Regional Park flying sites the number of pilots and nonpilots vary by the day of the week and the time of day. The same is true for the vehicles parked in our parking lots. It is incumbent on us to keep everyone and their vehicles safe and we are happy to continue reporting that club members are generally vigilant in looking out for each other and for park patrons and their pets and vehicles. We are continuing our club's long history of promoting safe flying by enforcing practical safety rules and fostering a "safety first" culture.

As a reminder, it is against club safety rules to fly in the parking lots adjacent to our flying sites. Section 2, Item #15, of PBRCA's **Field Safety Rules**, states "Aircraft must be flown within the designated boundaries at all times. No flying south of the extended southern edge of the runway in both directions. Flying over the pilot station, pits, spectator area, parking area or archery range will not be tolerated at any time. Failure to comply with these requirements will result in

suspension of flying privileges and/or membership termination." It is worth highlighting that our Field Safety Rules apply to club members and nonmembers flying at West Delray Regional Park. This fact is noted in the parks department sign stating, "Field rules of the host club must be observed while flying at this site." A related sign states "Anyone flying unsafely can be refused the right to fly by the host club."

As the host club at West Delray Regional Park, PBRCA and its members shoulder a tremendous



responsibility for keeping safe the hundreds of visitors and users of the park's RC flying sites.





As part of our efforts to keep park patrons safe, the parks department has several information and warning signs around our flying sites. Signs addressing fishing in the lake at the West end of the runway are posted along the lake. These warning signs alert park patrons to not fish when aircraft are present. Notwithstanding the "No Fishing..." warning signs, it's every pilot's responsibility to avoid a scenario where aircraft are in the air when park patrons are fishing.

PBRCA's Risk Management Program

Our club's "risk management program" includes ongoing efforts to comply with the requirements of the "Special Use Permit" from the parks department and the safety code and related guidelines of the AMA (see AMA safety code below). To help us comply with the conditions of the Permit and the AMA, our club has requirements for trainee pilots to fly solo, a detailed set of club safety rules, and safety reporting at our club meetings. Note, having the rules don't take the place of club members using common sense and just

being considerate of their fellow pilots and visitors to the park. And this requires ongoing commitment and vigilance......

AMA Safety Code Effective January 1, 2018

A model aircraft is a non-human-carrying device capable of sustained flight within visual line of sight of the pilot or spotter(s). It may not exceed limitations of this code and is intended exclusively for sport, recreation, education and/or competition. All model flights must be conducted in accordance with this safety code and related AMA guidelines, any additional rules specific to the flying site, as well as all applicable laws and regulations.

As an AMA member I agree:

- I will not fly a model aircraft in a careless or reckless manner.
- I will not interfere with and will yield the right of way to all human-carrying aircraft using AMA's See and Avoid Guidance and a spotter when appropriate.
- I will not operate any model aircraft while I am under the influence of alcohol or any drug that could adversely affect my ability to safely control the model.
- I will avoid flying directly over unprotected people, moving vehicles, and occupied structures.
- I will fly Free Flight (FF) and Control Line (CL) models in compliance with AMA's safety programming.
- I will maintain visual contact of an RC model aircraft without enhancement other than corrective lenses prescribed to me. When using an advanced flight system, such as an autopilot, or flying First-Person View (FPV), I will comply with AMA's Advanced Flight System programming.
- I will only fly models weighing more than 55 pounds, including fuel, if certified through AMA's Large Model Airplane Program.
- I will only fly a turbine-powered model aircraft in compliance with AMA's Gas Turbine Program.
- I will not fly a powered model outdoors closer than 25 feet to any individual, except for myself or my helper(s) located at the flightline, unless I am taking off and landing, or as otherwise provided in AMA's Competition Regulation.
- I will use an established safety line to separate all model aircraft operations from spectators and bystanders.



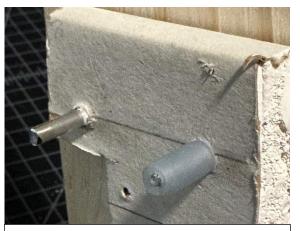
AND NOW FOR SOMETHING COMPLETELY DIFFERENT

Model airplane skills and fuel tubing helped me make a better shelf support. One of the things about building and repairing model airplanes is that you have to use a bit of ingenuity to make things work. This mantra applies to complete kits and ARFs too. Not everything we do with a kit is fully spelled out, but that should not prevent you from giving a build a try.

Problem: How do you make a built-in bookcase with glass shelves that look like they were floating. The shelves need to hold books, model airplanes, pottery, photos and nick-knacks. We have flat and square walls in a recessed area and close-fitting glass shelves. There are solid wood supports behind ½" wall board. Shelf pins would work, but they are short and would require extra length. Brackets are ugly, wood edge supports are big and old fashion. I like pins the best, so how to do this?



Here's a screw with the head ready to be cut off. A good pin substitute.



Here's the modified screw on the left and one with fuel tube cushion on the right.

The idea: Let's try some stainless screws and cut off the heads after they are installed. A trip or three to Home Depot and I had samples of different screws. A short length of 2x4 and scrap ½" wall board simulates the wall. I needed to test for strength and appearance. Ok... I can hang on the pin sticking out of the board and see what it does. Test 1: A finish nail. Bang it in nice and straight and clip the head off. ③ It bends. Test 2: A stainless steel #7 finish screw. Drive it in, clip off the end and hang on it. ⑤ It bends. Go figure, stainless steel is tough, but more malleable than steel, so go bigger. Test 3: A stainless steel #10 exterior decking screw. It has a good long smooth shank. Drive it in, clip off the end and hang on this one. The end was tough to clip off, good sign. It worked. The shank flexed, but no permanent bend at more than 50 pounds of shelf load.

Huston... we have lift off. Now we need a soft pad to protect the glass. FUEL TUBE! Silicone fuel tube fits

perfectly. Wow, a custom shelf support, made to fit. All I need is 16, 2-1/2" #10 stainless decking screws and 8" of 6mm fuel tubing, a hard wire cutter and a file to smooth off the ends.

This set of tools and techniques is the same used for cutting and forming custom wire landing gear, and a sailplane tow hook. So, life is better brought to you by model plane building experience, again! Thank you, Midwest, Top Flight, SIG, Goldberg, Hobby-Lobby, Xtreme Flight, E-Flight and a bunch of others.

David Spielman, PBRCA Secretary



3-meter sailplane tow hook made from a 8-32 socket head screw.



Reminders

FAA and RC Planes:

The Federal Aviation Administration (FAA) regulates all civil aviation, including radio-controlled model aircraft (RC hobby aircraft). The FAA considers RC hobbyists to be recreational users and has specific rules to ensure public safety. These rules include:



- Registration: All unmanned aircraft (UA) require registration, except those that weigh 0.55 pounds or less
 and are flown exclusively under the Exception for Recreational Flyers. You can register your aircraft online
 at the FAA Drone Zone or by mail. Registration costs \$5 and is valid for three years. You must also label
 your aircraft with the registration number on the outside and carry proof of registration with you when
 flying.
- Age: You must be at least 13 years old to fly an RC plane.
- Citizenship: You must be a U.S. citizen or legal permanent resident to fly an RC plane.
- Safety test: You must pass the Recreational UAS Safety Test (TRUST) to register your aircraft.
- Flight restrictions: You should not fly directly over people or moving vehicles, or where your RC aircraft could interfere with emergency response activities. You should also never fly an RC aircraft under the influence of alcohol or drugs.

The Recreational UAS Safety Test (TRUST)

What is TRUST?

The law requires that all recreational flyers pass an aeronautical knowledge and safety test and provide proof of passage if asked by law enforcement or FAA personnel. The Recreational UAS Safety Test (TRUST) was developed to meet this requirement.

TRUST

TRUST provides education and testing on important safety and regulatory information. If you fly your drone recreationally under the Exception for Recreational Flyers, you must pass the test before you fly.

TRUST was developed in collaboration with drone stakeholders to determine content, and how it would be administered. Since June 2021, we have worked with a group of approved Test Administrators to provide TRUST as an online test. We in the FAA provide the TRUST content to the approved test administrators who, in turn, provide the online test to you, the recreational flyer.

Renew your AMA before it expires!

https://www.modelaircraft.org/membership/enroll





Renew your PRBCA club membership before it expires!

https://www.palmbeachrc.com/join-or-renew



To help you comply with the AMA/FAA regulations of having identification on all your airframes, the AMA sells stickers that can help.

0	
	5161 E. Memorial Dr.
ARA	Muncie IN 47302
AWA	Tel.: (800) 435-9262 Fax.: (765) 289-4248
ACADEMY OF	
MODEL AERONAUTICS	www.ModelAircraft.org
	orting or storing. If this l aircraft, disconnect and away from fire.
Finder should not	tify owner immediately. given to any claimant fication is provided.
Finder should not be	given to any claimant
Finder should not Model should not be unless positive indenti	given to any claimant
Finder should not be unless positive indenti	given to any claimant
Finder should not be unless positive indention AMA No.	given to any claimant
Finder should not be unless positive indention AMA No. Name Address	given to any claimant fication is provided.

This adhesive-backed label has fuel-proof adhesive and space on the bottom for your name and address. A clear plastic flap seals over your information to protect it. One of these stickers on or in your model complies with the Safety Code requirements for identification and will help recover the model if it is lost. 10 labels per pack. Id labels measure 2.125" x 3.5".

Item: 5084 Airplane ID Label 10Pk \$3.99 as of today 7/1/2024

Click the link below to get to the respective web page on the AMA site:

https://shop.modelaircraft.org/product/5084-airplane-id-label-10pk/398?cp=true&sa=false&sbp=false&category_id=16





Parks and Recreation Department

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Lake Worth, FL 33461
(561) 966-6600
Email: pbcparks@pbc.gov
www.pbcparks.com



Palm Beach County Board of County Commissioners

Maria Sachs, Mayor

Maria G. Marino, Vice Mayor

Gregg K. Weiss

Michael A. Barnett

Marci Woodward

Sara Baxter

Mack Bernard

County Administrator

Verdenia C. Baker

"An Equal Opportunity Affirmative Action Employer" Palm Beach County
Parks and Recreation
2024 Hurricane Information Sheet

The Parks and Recreation Department has detailed emergency management procedures that staff follow in preparation for a hurricane and in the immediate aftermath of a hurricane making landfall, or in a near miss scenario. Concessionaires and special user groups must understand that the Department takes on a significant emergency management role for the entire County in these instances. This role may involve staging infrastructure recovery contractors, storing supplies for bulk distribution, and distributing recovery supplies to individuals. A significant portion of our staff take on roles that support County-wide recovery rather than their normal responsibilities in the Parks. Many of our Department staff work at the Emergency Operations Center, set up and operate emergency operations center satellite facilities in the field, prepare and work in shelters, clear roads, operate family resource centers, and etc. Staff take on these responsibilities while at the same time work diligently to return parks to normal operations.

The Department prioritizes park clearing and reopening based upon County Emergency Operations Center needs and then the Departments priorities. These priorities may change based upon the significance of the storm and the needs of County residents. Prior to any park area being opened, staff conduct safety inspections of the park regardless of whether the storm made landfall or it was a near miss. For these reasons, concessionaires must be patient when attempting to get back to their operations post storm, and must not access park areas until they have been given permission. Failure to do so may result in personal injuries to the concessionaire or Park staff. Additionally it takes staff away from their important recovery duties while they address unknown individuals in the park without permission or unnecessary injury emergencies.

We understand that Concessionaires want to get back to their operations to see if there has been any damage, however, the Parks priorities take precedence in these instances and concessionaires must abide by the Park rules and the terms of the concession agreements. To make these difficult times a little easier please take note of and address the following:

- Have an emergency action plan on file with the Department that details what actions your concession will take to prepare for a storm. Include emergency contact information.
- Store perishable materials at an offsite location. Power may be out for some time and FPL or Lake Worth Utilities may prioritize returning power to hospitals, senior living facilities, homes, and etc., ahead of parks.
- Execute the plan when necessary, notify your Department liaison of your operating schedule prior to the storm and your concession closing time (which must be prior to the closing time of the Park).
- If your concession is in a shared space and if parks is responsible for shuttering it they will get to it in a prescribed order. Preparation work continues in our parks after they have been closed to the public/concessionaires.
- Do not advertise your concessions opening until you have a firm Park reopening time from the Department. Notify your Department liaison of your proposed opening time/day (which must be at or after the opening time of the Park).
- If an alarm goes off at your concession while the Park is closed notify your
 Department liaison and get direction from them. Depending on weather conditions
 if PBSO or Fire Rescue are able to respond they will respond. If we have staff in the
 Park and they are able to respond we will request that they respond.
 Concessionaires should not go to a closed Park before, during or after a storm
 without getting permission from your Department liaison.
- Once the park where your concession is located is cleared you will be notified when you can return. Upon your return please note and provide the Department liaison with information regarding any damages to your concession and/or the park facilities in close proximity to your concession.
- Repairs to your park that are the responsibility of the Department may take time, additionally, some items such as awnings may not be replaced until the end of the hurricane season. Please be patient as we work to bring our parks back to normal operating conditions.

Finally, you may have been provided keys to park gates and/or other areas as a courtesy to make normal operations run more smoothly. The Department may repossess these keys temporarily or permanently from Concessionaires and special user groups who choose to ignore the aforementioned items.

Thank you for your assistance with our emergency plans.

REGULAR FEATURES

You MUST have a current AMA membership card to fly at Westervelt Field. This is a requirement of the Palm Beach County Parks & Recreation Department.

Also, please note that we will not create your PBRCA membership card unless you have a current AMA membership card. The Club Membership form is available on the PBRCA web site, www.palmbeachrc.com or at the field in the press box.

Thank-Yous

• Chris Lavin for continued use of live streaming from the airfield camera.

Club E-mail Notifications

You should be receiving e-mail notifications for the monthly general membership meetings and semi-annual newsletter publication. If you are not receiving our e-mails, please let David know your e-mail address and we will update our records (David's email: pbrca.info@gmail.com. If you want your name & phone number removed from our website list, also contact David at: pbrca.info@gmail.com.

FAA SUAS REGISTRATION

All sUAS (small Unmanned Aircraft Systems - (0.55 lbs. up to 55 lbs.) pilots must register with the FAA. Furthermore, once registered, you are required to affix your assigned FAA Registration number to the 'exterior' of **every** aircraft you fly. For more information and registration online go to: https://faadronezone.faa.gov/#/



SAFETY FIRST!



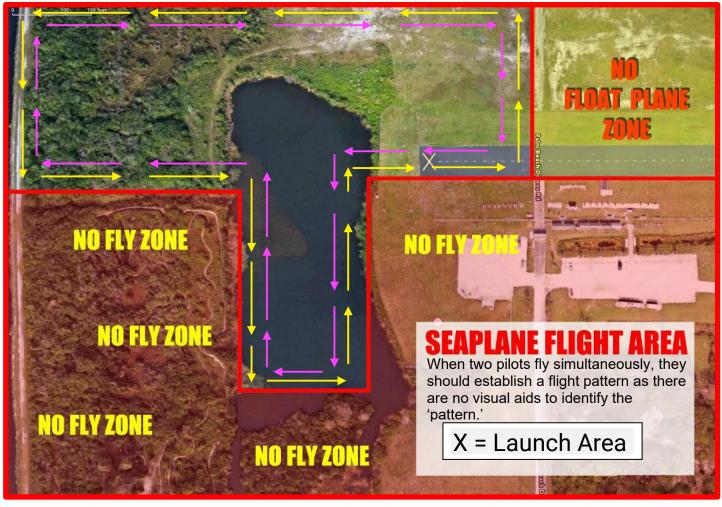
As the park gets more and more popular, we are going to see more and more patrols by the Sheriff's Department. The park speed limit is 25 mph and stop signs mean STOP! Don't risk and expensive ticket by becoming complacent. Also, watch for the Frisbee Golf guys. That group seems to be getting more and more active.

Click this link for the Club Safety Rules: Flight Safety Rules



Float-plane Flight Area

The membership has approved the proposed rules for flying off 'West Lake' in April 2018. The



changes and additions are now incorporated into our Safety Rules.

The revised safety rules and the map have been posted on the window of the press box and on our website, and can be accessed at:

Flight Safety Rules



Land-based Flight Area

Palm Beach County has previously established "flying" boundaries and we need to adhere to those restrictions. This is an aerial map showing the boundary lines for West and South flying, and it is also posted in the bulletin board located at the "impound." Our club has already been warned about flying over the Everglades by a Federal Wildlife Officer. You must fly within the designated boundaries!





PBRCA Battery Charging Station (Operating Principles)

Note that for fire safety concerns, all battery charging must be done outside of the Press Box and at the charging station. It is against Club Policy to use the 110-volt AC power strip inside the Press Box for charging batteries inside the Press Box.

For the best charging experience while using our DC-volt charging stations, users should keep the following Operating Principles in mind:

- Plan on connecting your battery chargers to the 4mm banana plug connectors on the DC Power Strips, using connecting wires ideally 24" long with banana tip plugs.
- To protect the DC Power Strips from fire, battery chargers and batteries should be placed on the wire shelf below the metal boxes that house the DC Power Strips. Please avoid placing items in the metal boxes.
- Battery charging must only be performed when the Smart Batter Monitor shows the charging system's voltage above 12 volts. For example, in the screenshot



the system is reporting 14.1 volts, so charging would be safe since it's above the minimum 12 volts.



- Users must charge their batteries within the following operating parameters of the DC Power Strips:
 - o the maximum output current for each position is 24 Amps, AND
 - o the total maximum current is 50 Amps.
- Multiple users charging at the same time should coordinate among themselves to stay within the operating parameters of each charging station to avoid overloading the system.
- For safety and convenience, the charging stations are equipped with resettable circuit breakers. In the event a circuit breaker is tripped, first locate, and correct the offending connection(s) and then reset the circuit breaker.

Happy and safe charging!







(THE RECREATIONAL UAS SAFETY TEST)

YOU SHOULD.

https://trust.modelaircraft.org/



Hats and shirts are available for online ordering!



Pick your size and color and have it delivered to SEWBUSY.COM your door!

