## FLIGHTLINE

NEWSLETTER OF THE PALM BEACH RADIO CONTROL ASSOCIATION

The de Lackner HZ-1 Aerocycle: A One-Man Personal Helicopter From the 1950s



**AMA Club# 1016** 

ONE OF THE LARGEST AMA CLUBS IN AMERICA Summer 2023



### The Palm Beach Radio Control Association Current Board of Volunteer Directors

John Tice President

John Scaduto Vice President/Webmaster/Newsletter Editor

Princeton Rose Treasurer

Ellen Hoffman Secretary and Membership Chair

David Spielman Chief Safety Officer

Jon Gerber Chief Training Officer

Please use the following email address to contact any of the Directors: <a href="mailto:pbrca.info@gmail.com">pbrca.info@gmail.com</a>

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

July	NONE	Summer break.
August	NONE	Summer break.
September	9 <sup>th</sup> , 2023	10:00 AM at Westervelt Field
October	14 <sup>th</sup> , 2023	10:00 AM at Westervelt Field
November	11 <sup>th</sup> , 2023	10:00 AM at Westervelt Field
December	9 <sup>th</sup> , 2023	10:00 AM at Westervelt Field

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

https://www.palmbeachrc.com/calendar



### John Tice President

Hello Members,

Many of us have been thinking about what the value of our club is. It's a good question and the answer may not be obvious without some serious thought. Let's imagine we have a county park which allows RC flight at a place or two on the property but without a club. Well, problem number one is the issue that the county does not want to be involved in managing the safety aspect of the RC activities. The only reason the county park would even allow these activities is with the fact that a structured organization is handling all the safety aspects. These safety standards come from a national organization that has managed the activity standards since 1936. OK, let's assume the county did not care about issue number one and explore other thoughts.

**Federal Recognized Identification Area:** If there were no club, who would work with the AMA to get FRIA status so you could fly without adding a remote Identification module? The AMA only does this for chartered clubs as I understand it.

Grants: AMA clubs are eligible for site grants. We received one for improvements recently.

**Infrastructure:** This RC area would have no paved runway, no metal canopies, no fencing, no wind sock, no startup stands, no press box, no storage container etc. All these things were donated or paid for by early Club member / Founder Steve Westervelt. Would you donate a runway and press box without knowing that these improvements would be maintained for years to come? OK, let's assume these things could have happened without a club at the area.

**Website:** Without a club, there would likely be no web site. What good is the web site? Who uses the web site and what value does it have? We can list many things on the website that people who fly here, members and non members use regularly. Web sites are not free and someone has to keep it up to date with information and it also has photographs, video links, rules, beginner section and the field camera which is getting replaced soon with a live feed camera, (sorry about being down) We have had many emails from members about this.

**Notifications:** Sometimes the Park has information about temporary closures or special activities which need to be shared. Being a club member on an email list makes sure everyone knows about these things that do come up from time to time.

**Training:** One of the things the club offers free of charge is training to anyone who is interested. Yes, training can be done without a club and our program needs some more support. The primary reason for training is safety first and more fun with less crashing for the student. The club has training aircraft and transmitters for people to try before they invest in the hobby.

**Growth:** Let's talk about growing the hobby. Do you feel this is important? A club can do things that take this great fun to new groups such as events for kids, women, and seniors. Of course, word of mouth is ok as well.

**Giving:** Let's talk about giving back to our community. A club may opt to be a not for profit as we are, and make an effort a few times every year to give what we can to a variety of charities. Do you want to be part of doing something good while having fun? I guess individuals can give to charity alone.

**Volunteerism:** Some don't realize but there are people who volunteer for clubs, because they are looking for a way to keep busy as retired people or people with a little time (or no time) and do something meaningful for an organization they believe in.

**Fellowship:** The social aspect of the hobby is one that has different meaning to each person. A club does help foster some meaningful social interaction which is a great thing. Fun flys and BBQ's can certainly help with this. I guess you don't have to be in a club to gather.

Just food for thought...

Thank you for being a member. We value **ALL** our **members** and non-member **supporters** because we are stronger as a group.

John E. Tice President



## John Scaduto Vice President/Webmaster/Newsletter Editor

Greetings fellow radio-controlled airplane enthusiasts!

As we soar into the summer months, I just wanted to share some encouragement and enthusiasm.

First, let's talk about the growing popularity of radio-controlled aviation. Our club has been welcoming new pilots of all ages and skill levels. It's great to see the passion for our hobby spreading and inspiring more individuals to take to the skies. We are a vibrant and diverse club.

Technology continues to advance, and our hobby is not left behind. The advent of brushless motors, lighter and more powerful batteries, and advanced flight control systems has revolutionized the way we fly. It's a fun time to be part of the RC airplane community, as these advancements provide us with unprecedented capabilities and exhilarating flying experiences. Whether you're a beginner or a seasoned pilot, there's always something new to explore and master.

Speaking of exploration, let's not forget the incredible variety of aircraft available to us. From sleek aerobatic planes to scale replicas of iconic warbirds, there's a model to suit every aviation enthusiast's taste. It's pretty cool to witness the creativity and craftsmanship on display as our members bring their own unique visions to life in the form of these flying machines.

In terms of events, our club continues to organize and participate in various exhibitions and fun fly days. These events provide opportunities to showcase our skills, learn from one another, and build friendships. The camaraderie within our club is noteworthy, and I encourage all members to actively engage and participate in these events.

Safety remains a top priority for our club. As responsible pilots, it's essential that we adhere to all safety guidelines and regulations set forth by the Academy of Model Aeronautics (AMA) and local authorities. Let's continue to promote safe flying practices, respect our flying field, and be considerate of other park users to maintain a positive image of our hobby in the community.

I want to thank each of you for your enthusiasm and dedication to the radio-controlled airplane hobby. Our club's success is a result of the collective efforts and passion of its members. Remember to share your knowledge, help newcomers, and foster an inclusive environment where everyone feels welcome.

Keep your batteries charged, gas tanks filled, and your propellers spinning my fellow pilots. The sky is our playground, let's take RC aviation to new heights.

Despite the positivity and all that being said, there are some things that have the potential to bring the RC hobby down and are things we all should be considering. Please read the 'Feature Article' below called "15 Things Undermining the RC Hobby."

Remember, this is your newsletter and website. If you would like to share something, sell something on our "Classifieds" page or request help from or help out a fellow pilot on our "Help Corner," please reach out accordingly.

Finally, let's remember our friend and fellow pilot Joe Serino, aka Long Island Joe who passed away on 6/23. In the words of his wife and our Secretary/Member Chairperson Ellen Hoffman, "If you feel like you want to honor Joe in some way, I suggest that you go out and perform one little act of kindness each day because that's the way this beautiful man lived his life."

John Scaduto



## **Princeton Rose**Treasurer

Rocking and Rolling ...

Happy to report noteworthy progress in executing our capital improvement plan.

The installation of our new heli field carport is complete and we are grateful for the AMA's support for this project. We also now have streaming video of our runway.

We executed a contract for installing new windows in the press box and are still evaluating options for the walls and floor.

We also executed the installation contract for expanding our solar-charged power system to increase battery charging capacity and power our field camera and weather station.



We are finalizing the design for the solar-charged power system and charging stations and are also working on solutions for flooring under the West runway carports, and the puddling on the Northwest corner of the press box. All this to say that we continue striving to meet the ever-growing challenges and demands ...

Happy flying and continue enjoying this awesome hobby!

Princeton



### Ellen Hoffman Secretary and Membership Chair

A quick note on how to renew your membership with PBRCA.

How to pay online using the "Online Membership Form."

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

- The online membership form contains a 'Submit Form' button at the bottom of the page.
- All 'starred' (\*) items are required and must be filled out in order to submit the form.
- You can sign your name in the signature box using your mouse. Hold down the left mouse button while signing your name in the box. You can use your finger or a stylus to 'sign' on a touch screen device.
- 'Application Type' and 'Membership Type' have drop-down lists to pick type of application or membership.
- Click inside a 'circle' to select a 'multiple-choice' item.
- Be sure to check the boxes for 'I have read the Safety Rules...' and 'I Accept the Terms & Conditions...'
- When you have completed filling out the form, click 'Submit Form.' If you do not have a PayPal account, you will be able to use a credit card to complete the payment.

Thank you all, and as always, fly safely.

Ellen Hoffman Club Secretary and Membership Chair



## **David Spielman Chief Safety Officer**

#### **Chief Safety Officer's Report**

What a great club we have! The members have been warm and welcoming and have shared their experiences and offered their advice to me and others. I've seen experienced pilots share their advice for handling safety on the field and talked about what they would like help with at the field. I am so lucky to be part of PBRCA.

Flight safety is a culture that we share with everyone who comes to our field. We as pilots rely on each other to keep our planes flying and visitors rely on our safe practices to protect them from stray planes and accidents. It takes our entire community to make this work. As chief safety officer I mostly guide people in the right direction because they're already motivated to promote field safety. All of us as pilots should question if we've done the right thing each day we fly and what we can do better. I personally want to go home with all of my fingers and know that I've kept others' safe by flying in control and have taken care of my equipment.

I've been asked by a few pilots on the field to remind everyone to "fly from the pilot's station." There have been a few near misses where pilots flying from the pilot's station in a landing approach see someone at a plane stand with a plane lined up for a takeoff. Crash was averted because both planes were electric and the pilot who was landing could shout and be heard. I would not want to be the one who causes a crash when flying from a plane stand or under the canopies. Just a reminder that we fly from the pilot's station so we and communicate and say what we are going to do.

All pilots crash a plane at one time or another. It's part of the experience. What we do after the crash is important too. Don't go out in the woods or water alone. It's hot and can be difficult navigating in the woods and we don't want an injured pilot to go along with a damaged plane. This weekend I helped retrieve a beautiful large turbine jet that crashed. The jet landed in a tree a few hundred feet off the runway just passed the model boating lake, no one was hurt and there wasn't a fire or leaked fuel.

About six of us dropped what we were doing and joined the pilot to help get the plane back. A quick phone call and another pilot brought rope and an extension pole from the press box. I went back and got water from the press box and more rope and a bag for the stray parts. The plane, 20 feet up in a tree was lassoed and gently lowered, averting more damage. The process took about an hour. My point is that a single person could not have retrieved this plane alone without risking heat exhaustion or injury. Even retrieving a small foamy from the same area has risks that require several people. Ask for help and I bet you will get it.

When going out in the woods for a plane, bring water, a phone, your transmitter, and another person at a minimum. An extension pole and emergency water are usually available in the press box. If you are doing a water rescue, call a board member to get access to the boat shed. You will need to wear a life preserver and have another capable boater to help you.

Fly safe, David Spielman



## Jon Gerber Chief Training Officer

The Palm Beach Radio Control Association has instructors offering <u>no charge</u> lessons to members interested in learning how to fly radio-controlled aircraft.

If you would like to volunteer to be a trainer, please contact me via the following email address; your note will be forwarded to me: pbrca.info@gmail.com

TRAINERS ARE NOT RESPONSIBLE FOR DAMAGE TO YOUR AIRCRAFT



### FEATURE ARTICLES

15 Things Undermining the RC Hobby
A transcript of a video by Tail Heavy Productions
You can watch the video here.

Here are 15 things that have the potential to undermine the RC flying hobby today.

- 1. Boomers who refuse change.
- 2. Rule Nazis insisting that everybody go through a full written and flying exam before they're allowed to fly at the local AMA field; you must be fully checked out to fly your harmless foamy. Meanwhile, the old-timer Chuck who has 76 years of experience with zero flight hours since forgetting his name, can fly at the field no problem since he's friends with the President despite crashing into the only obstacle in a mile radius every flight he takes. Or the safety officer that spends their entire day at the field sitting behind the flight line telling people what they should be doing while they're flying. A little bit of common sense and communication goes a lot further than a giant rule book. Think of getting people into this hobby as a funnel. You want to reduce the bar for entry as low as possible to draw on as many people as you can. Requiring new pilots to take a test to fly their hunk of foam is just giving them another reason to walk away from the hobby. Newcomers or new types of flying are often treated as a scapegoat to any problems a club has with safety.
- 3. The few moments and events that would draw the public into her hobby aren't covered and promoted enough. There is usually practically zero coverage of the best flying events. We as a community should focus on highlighting the coolest parts of the hobby in the hope of showing people why we enjoy it so much and how they can too. Sure, there are the more popular events like Joe Nall, FlightFest, you name it. However, there are a lot better hidden gems and amazing RC fields and flying sites that should be getting more coverage but go unnoticed. Working to find new and modern ways to advertise airplane events is a must.
- 4. DJI quads or drones are a competing hobby one that allows us to capture the cool moments and share them nearly effortlessly. It's a great hobby but lots of people interested in flight often go the DJI turn-key route over flying RC planes. In our opinion this is primarily because they offer a much lower bar for entry not to mention significantly more coverage of them on the Internet.



Ironically, this can also come up to bite us as "Jimothy" takes up his new DJI a few beers deep, and flies over the Las Vegas Strip. Pro tip - the "any exposure is good exposure" rule doesn't apply to the FAA or when you're picking up your child from preschool. DJI drones have been lumped into the same category as RC planes, but they are two vastly different things and should be regulated separately. On the flip side, the drone boom can help the hobby too especially the DJI market. In some cases, the folks that fly these realize they have just consumed the gateway drug into the world of RC. Lots of DJI drone pilots eventually get the bug to want to actually fly an aircraft rather than direct one with a smart controller that suddenly avoids obstacles and then randomly automatically crashes into your garage.

- 5. With the growth of developed land and, "not in my backyard folks," there are becoming fewer and fewer places to fly legally. As an example, think of the full-scale airports being shut down because some rich snob moved in below the final approach corridor, signed papers when they moved in that they knew the airport was there, and has been for a hundred plus years, and then complained endlessly about it, and the airport is shut down. The same thing is happening in RC with developments encroaching on existing flying fields or neighbors complaining that your Turbo Timber is too loud or endangers their emotional support camel. The result, fewer folks being exposed to the gift of RC flight. This combined with guaranteed and promised flying sites becoming more about gatekeeping than open doors, and you create an ever-shrinking niche. Our solution, follow what the FTCA (Flite Test Community Association) is doing and encourage folks to push the FAA to allow us to continue safely flying our Park Flyers where we always have been into the ongoing future. If it was working fine and safely before, what changed overnight to suddenly make it dangerous.
- 6. Local hobby shops are becoming a thing of the past. There's a lot of reasons for this but primarily they're being kicked out of the space by online shopping which offers a far more convenient experience for most folks alongside unbeatable prices. Most of us who have been in the hobby for a while can vividly remember their parents taking them to a hobby shop for the first time and coming home with our first plane. The excitement of going to the hobby shop was the equivalent of a kid waking up on Christmas morning or an adult going to Costco to see what new products were on the shelves. I mean even my first job as a kid was working at a hobby shop. With online stores replacing hobby shops though this hands-on experience will be a thing of the past which in turn reduces the amount of youth excited about the hobby. Because clicking two buttons on the Internet isn't a memory it's just a transaction.
- 7. Mainstream companies pumping out exclusively cheaply made planes that don't last cheapens everyone's experience. While high-end stuff has been raising the bar and quality year after year, mid-range and beginner focused models are approaching an all-time quality low. Look at our reviews. I don't think we put out one that didn't have an incorrectly sized part, broken item, or other issues upon receiving it. On the bright side though a majority of the companies in the RC space will happily replace any defective items you have.



But when you order a plane, and it says it'll arrive on Monday, you hope you can fly it by Tuesday instead of having to wait until the following week for a maiden because your plane didn't come with wing bolts and you have to wait for your parts to arrive.

- 8. The elitism experienced by a significant amount of the community. Every month a new feature gadget gets introduced that you have to have like telemetry readings. "Sir, my old school stopwatch works fine thanks." There's zero reason and need to use telemetry to know your battery level if you don't want to in flight. It's not just about the flashiest gadgets though, the elitism can also be seen through the shame you feel when you show up to the field with a plane that, well, isn't pretty. This is because you fear that people will assume your flying skills based on the condition of your aircraft. Our solution, don't assume, it makes an ass out of you and me. These same people will rain on the new kids parade as well. Sample scenario. New kid, "I just got my first plane!" Elitist grumpy dude, "Hey that's nothing kid. When I learned how to fly, I learned on a 69cc nitrogen-powered plane that I built with my nine fingers."
- 9. Cost of repairs. On that topic, the cost of repairs and replacement parts can add up quickly. Let's face it, crashes happen and when they do it can be expensive to repair or replace broken parts. This can be discouraging for beginners who are still learning how to fly. It's important to offer support and guidance to new pilots so they don't feel like they're in it alone. But there's also a component here that we haven't talked about. Some hot glue and boiling water can turn a pile of foam into a plane that flies just fine again post-crash. Just because you bent the nose doesn't mean it's time to purchase a new plane. You'd be surprised at what some members of our community have been able to bring back to life post-crash.
- 10. The hobby can be intimidating for beginners due to the technical jargon and terminology used. terms like ESC, gyro, and rudder can be confusing for someone who's just starting out. Replacing them with things like speed controller, cheater tool, and misunderstood control surface (respectively) are much more digestible terms for the beginner. We all know the guy who talks to new people using all the more intricate terms and especially stupid acronyms that no one knows or uses in real human conversation. Don't make newbies feel even more intimidated. Help teach them and don't get cocky and feel like you have to show off about how much you know.
- 11. It's cost prohibitive. I don't think we need to expand on this one. If you're in this hobby you probably can't recite a rough number that you've spent on it, but you could probably estimate how many commas. Once again though, don't be that guy who brags to friends about how much he spent on the hobby. It's really not a good look.



- 12. Kids started skipping out on outdoor Hobbies like a radio control and moved indoors towards screen-based ones. There's really not much we can do about this one, it's just one of the many reasons why youth are harder and harder to spot at RC fields. We can only hope that introducing these same gamer boys to simulators like AeroFly, RealFlight, Microsoft Flight Sim, you name it, can spark some form of an interest in going to the actual flying field to try it IRL (in real life) as the gamers say.
- 13. Regulation. When does remote ID go into effect? What the hell is AFRIA? What is the legal standing of the 400-foot altitude restriction, and when can you exceed it? How many nautical miles are you from your closest airport? What's a CBO? Has your flying ever interfered with the operation of a full-scale aircraft? That last question is probably the only one you can answer confidently, and your answer is no. Even if your particular flying situation has been unaffected by the increasing regulation of the FAA in the last 10 years, the constant threat of it putting an end to your flying site is something that many of us never even thought about when this hobby was in its heyday. It's infuriating that the FAA draws no distinction between RC models FPV and GPS assisted camera drones flown by people with one brain cell. And it seems like every year we are asked to write our Congress people and ask them to oppose a draconian bill that would effectively kill the hobby as we know it. Regardless of whether we need regulation, having to hear constant bad news about it is really exhausting.
- 14. Over complication. Nowadays the hobby is more complex than ever with a wide range of radio Brands including Spectrum, Futaba, Jr, Hitec, FR sky, RadioMaster, Fly Sky, Orange TX, and many more knockoff options. These Brands offer various receivers, protocols, speed controllers, servos, and connectors. The variety allows for diverse activities in the hobby, but it can be perplexing for newcomers and challenging for retailers to satisfy everyone's needs.
- 15. Wives taking away our credit cards. Enough said. Look we proposed a lot of problems and not a ton of solutions but that's because this is a deeper problem than two guys you watch on YouTube can solve. Let this video serve as a forum in which our community can discuss Solutions. Sure, we made some jokes, but there's one thing that should be taken seriously, the direction our hobby is headed, if no changes occur.



Tail Heavy Productions (@tailheavyproductions)

https://tailheavyrc.com/



#### **Workshop Safety**

"Model aviation is more than just a hobby. It's a passion; it's a sport; it's a unique view of the world, and it's never been a more exciting time to fly."

We talk a lot about field safety, and I thought it worthwhile to touch on workshop safety. This article was inspired by Terry Dunn's discussion of this topic in the April 2023 Issue of Model Aviation.

Injuries from electric-powered aircraft generally result from victims being struck by the propellers/blades of electric-powered models that unexpectedly spooled up, and oftentimes these incidents occur inside their workshops. These workshop incidents normally include collateral damage to surrounding models and workshop furniture and equipment as the wayward aircraft moves violently and uncontrollably about the workshop. Unlike glow and gas engines that require a series of specific steps to start, electric motors can come alive from a misstep as simple as bumping the throttle stick or reversing the wrong channel, and these missteps are bound to happen at some point.

As a rule of thumb: when the battery/electric power is connected, treat the electric model the same way you would a glow or gas-powered model with the engine running. Now there is a very easy way to avoid the dangers posed by accidental "run-ups" in your workshop. Consider this the number one rule — remove the propeller/blades (in the case of helicopters or drones) whenever you are working on a model that has the battery/electric power connected. Note: This applies even if you are not working on the actual power system. It only requires a few seconds to be safe; therefore, make a habit of this simple task.

Unlike many "wet fuel" engines, electric motors don't stop just because your body parts get in the way of the propeller or blades. Electric motors are quite unforgiving and will continue turning (or try turning) until the ESC is taken to idle/throttle cut, or the battery/electric power is disconnected. There are numerous mistakes that can unintentionally start an electric motor and removing the propeller/blades is the most effective way to avoid workshop injuries with electric-powered model aircraft. So, remember, *always remove the propeller or blades before working on an energized electric model*.

Now, if you decide to intentionally spool up your electric powered aircraft in your workshop with the propeller/blades attached, a sensible thing to do is **to have a method for securely restraining the aircraft** to avoid an unintentional movement that causes bodily injury or property damage. I know that there are instances when you may want to check propeller/motor RPM on fixed-wing models, or blade tracking on helis, and it's very tempting to believe that you can either hold the model, if it's a small one, or get by with a flimsy tie-down. Please "avoid tempting fate." You take a silly risk by doing it and are depending too much on your good luck.

You can be very creative building your model restraint system and the primary goal is to produce an effective system strong enough to prevent your model from moving uncontrollably. For my helis I anchor them to my rolling tool chest by running a metal strap through the skids with bolts on either side of the bird screwed into the top panel of the rolling tool chest. Although this works well, it would be very remiss of me if I didn't acknowledge the vast amount of respect that I have for spinning blades and the high degree of attention given when I spool up the bird. That said, please note that for the larger helis like the "650" in



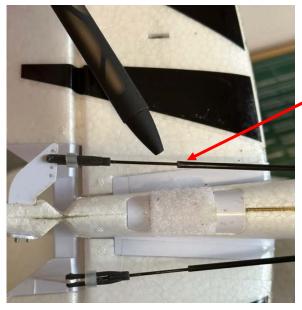
the picture, I never spool it up with the blades attached inside the workshop. To minimize risks from a catastrophic failure, I take it outside and keep a safe distance. So, remember, always have a method for securely restraining the aircraft when spooling up your model with the propeller/blades attached, and always be thinking of minimizing risks from catastrophic failures.

Happy and safe flying!! Princeton



#### Safety starts with the plane. Check your BNF Planes, even the great ones.

Safety often starts with a well-built plane with good tight linkages. That includes bind and fly and any prebuilt type plane. Pay close attention to this in all your planes. There can be a lot of flex in a linkage because of inadequate supporting a pushrod along the length. Sometimes it's so bad that the control surface doesn't move with the servo.



Pushrod won't slide in the fiberglass sleeve. Instead, the fiberglass sleeve moves in the foam fuselage, until a repair

I love my little E-Flite Conscendo Evolution electric glider. It's small, fairly powerful, easy to pack and flies well in moderate wind, but something was set up differently than I'm used to, and it took time to figure it out. The rudder and elevator control surfaces were weak. Chalk it up to cheap servos, right... wrong! It was a tight pushrod that resisted movement. The pushrod guides were tight on the control wire, and I had secured the guides to the foam Fuselage. Big mistake! I had to let them slide on the foam or loosen the guides on the wire.

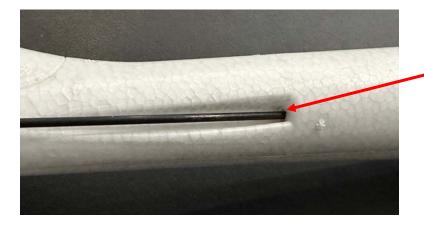


It took a crash to find the problem. Post-crash, the plane functioned properly, or so I thought. It wasn't until I had the plane on the bench that I found the two servos had almost no power to move the elevator and rudder...shocking. I disconnected the linkage at the tail surfaces and flexed both the rudder and elevator looking for the source of stiffness, but both moved freely, or as free as a foam hinge surface can move.



I then disconnected the two arms from the servos and moved the pushrod. What! It barely budged. That's when I found the pushrod didn't work the way I'm used to. I pulled the pushrod from the sleeve with pliers and cut 1/2" off both the ends of the pushrod guides with a sharp wire cutter and reinserted the pushrods. Huge difference! It turned out that the guides were fiberglass, and the ends grabbed the pushrods.

HH built the pushrod with a non-sliding fiberglass sleeve as a stiffener and the whole thing slides in the foam fuselage. The pushrods tend to flex where they exit the fuselage and any glue that gets on the sleeve could overload the servo, potentially causing a receiver brownout which is what happened to me. The classic sliding sleeve approach is more standard on gliders and provides a linkage. If you do opt to leave the sleeves as is, make sure they move freely in the fuselage. Don't apply tape or adhesive that could inhibit free movement.



Fresh from the factory, the fiberglass pushrod sleeve slides in the foam fuselage, not in the guide.

My experience with the Conscendo can be applied to any BNF or PNP plane. Check out your bind and fly plane as if you built it from scratch. Don't assume the linkage moves like you are accustomed to. Do a little disassembly if something seems amiss and make the proper corrections.

When you are checking out any new or recently repaired plane, there are a few things to look for to ensure the linkages are working right. Make sure the servos are well attached to the plane. You may need to tug on them a little. Movement indicates they are not properly attached. Make sure the pushrods move smoothly without resistance. The ailerons and other control surfaces should move easily and not twist. If you've repaired a hinge, you need to do this test and remove excess cement that causes a twist or stops the surface from moving. You want as much power from the servo to work the control surfaces rather than just overcome friction in the linkage and hinge line. These steps will save your plane and keep it looking and flying great.

David Spielman



#### I'm repairing a T-28 post-crash and you can too!



It was a tough day for one of our PBRCA pilots. A beloved plane was set up for landing when something went wrong. Landing gear was down, and the plane just decided it was going elsewhere. About 2 weeks later it was found, and all of the pieces were collected, and the plane dropped off in the shed. There sure were a lot of pieces, but I saw some potential for repair and future flight.

Time to start repairing the T28. It's not super pretty, but it should fly. I started with the wing. I epoxied the spar to the foam and laminated the fiberglass spar back together. There was no breakage, just delamination so I knew I would have a solid spar. Use good sticky epoxy, not the 5-minute stuff, but overnight cure. I pieced the foam back with Foam-Tac. Luckily all the foam was found. I made a new aileron from an old Conscendo wing. The wing seems pretty solid but

shows the scars of surgery. The only missing foam was the one aileron.

All the servos were good, but the clevises were broken on all four servos. This definitely protected the servos from damage. I centered the servos and put on new clevises on all 4 surfaces.

The fuselage was pretty crushed up by the nose so I stripped out the electronics and dunked the nose in hot water. 180 degrees is the limit before hard plastic distorts. I got some movement, and the foam is a bit puffed and has alligator scales. The nose was held under hot water for a total of about 40 minutes off and on over a two-hour period. Most of the original shape returned and I decided this was good enough.







The blow molded motor detail was a bit broken, but three mounting points are still intact, and it looks shabby sheik. The scars of battle.

Gorilla Glue that expands was used to seal a huge split in the fuselage and reattach the wing mounts. Foam tac was used up near the nose to install a few broken pieces of foam. I spent a good hour soaking up glue that wept out of one of the wing mounting screws. My scotch tape masking job did not work on two holes. It took a pile of Qtips and a thin carbon rod to keep it clear.



All the gear was reinstalled in the Fuselage, servos, receiver, motor, ESC and nose gear. Surprisingly, no servos were stripped. The receiver was secured with some silicone adhesive. It's possible the original adhesive failed here and the AS3X receiver broke free, causing the crash. It's solid this time.





Next, I plan to steam some wrinkles out of the wing leading edge and flatten the alligator skin on the nose. Hoping I have some red and black paint. I may make a decal on the printer and glue in place with 3M 77.

I used Foam Tac to create a new hinge for the rudder. Also did that for the flaps and ailerons. Check out the video on the foam tac web site; it's the best way to repair the foam hinges. It remains flexible for a very long time.



Here is the new hinge line for the rudder. After watching the video, I may return to touch up the hinge. A Q-tip with Foam-Tac would smooth out the hinge line.



Here is a detailed video of repairing foam planes. You must use Foam Finish indoors, not the garage. It won't cure in the hot humid garage, and you will have a sticky plane forever. After watching the video, I'm a bit embarrassed by my work, but not too much. That guy is good!

https://www.youtube.com/watch?v=G5lWOaN3Nfk

David Spielman



### 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**

- June 2023: Chris Lavin for his efforts, generosity, and continued work with our new streaming video services and camera.
- June/July Ted Murphy for his endless willingness to help with repairs and specifically this quarter working on a new door to the press box.
- May/June 2023: Ken Wilson for his efforts on resealing the main taxiway.



#### **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 Ellen know your e-mail address and we will update our records (Ellen's email: pbrca.info@gmail.com. If you want your name & phone number removed from our website list, also contact Ellen 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 <u>every</u> aircraft you fly. For more information and registration online go to: <a href="https://faadronezone.faa.gov/#/">https://faadronezone.faa.gov/#/</a>



## SAFETY FIRST!

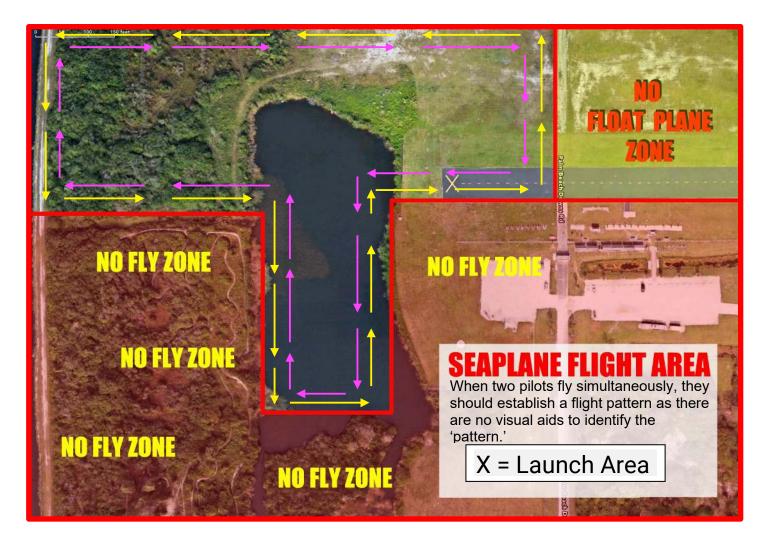


As the park gets more and more popular, we are going to see more and more patrols by the Sheriff's Department. The park speed limit is 25 mph and stop signs mean STOP! Don't risk and expensive ticket by becoming complacent. Also, watch for the Frisbee Golf guys. That group seems to be getting more and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







(THE RECREATIONAL UAS SAFETY TEST)

YOU SHOULD.

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