Pine Barren Modelers R/C Club

April 2025

Club Meeting Highlights

(Remember, these are NOT the minutes, so they don't contain sensitive information. The complete minutes will be sent out before the next meeting).

2 April 2025

All officers and 22 regular members were present. We approved 9 probationary members, plus new member Greg Gnomes joined up.

Field Reports:

Coyle: Dennis said the runway looks good, but needs rolling. The donated plastic chairs were badly weathered, so they've been disposed of. As Coyle still needs a first-aid kit, one will be purchased and installed in a waterproof, metal lock-box (as will a spare camera battery). VP Mark will seal the box.

Temporary Field (Johnson's Pit): It's in good shape. Ron P. volunteered to take the trash out to Locker St. Demolition is underway on the far side of Locker St.

Still no info regarding the gate, nor the two telephone poles that were dropped off near it. Both poles are gone.

Safety Report: All is well. With the warming weather, we're seeing folks bring non-flying 'toys' to the pit. That's fine, but remember: NO R/C cars are allowed in the pits or the parking lot. We have an area for cars and a dedicated track. We can use the runway for cars ONLY if flying is over for the day.

Instructors' Report: Gary brought up an Issue with a member's new plane. That member copied over an existing model, but it didn't copy correctly. Use a template, not a bound model file, and verify ALL functions and settings are correct (*I think I got that right. Ed. Bill*)

Gary also reminded us that working with instructors works!

Treasurer: T-shirts need to be ordered. Ralph sold the last coffee mugs and won't replace them.

Web: Per Dennis, the website had 1990 hits in March and our Facebook group is up to 562 members. Dennis is updating the website and working out details with the new company. He will have more to report at the May meeting.

Club Officers
President—Dennis Spatcher
Vice Pres.—Mark Tilton
Treasurer—Ralph Ferrara
Secretary—Micki Bowne
Safety Officer—Pat Lovenstein

Contact Us:

For website, classified ads, or any other club information, visit our web site at:

https://pbm1727.org

or our Facebook group:

PBM on Facebook

Links to club officer and other e-mails are via the website.

You can also mail us at:

Pine Barren Modelers RC Club
P.O. Box 38
Bayville, NJ 08721

Next Meeting
7 May 2025
Bayville VFW

Old Business

- Clean up 19 April, with rain date of 26 April. Gary S. will cook breakfast and the field will be closed until the work is done. That includes: Blowing off the runway, freshening up lines, organizing boxes, and removing donated planes.
  The donated planes will be on the Ways & Means table at the May meeting. If they don't go, they'll be shown on the Web. If they still don't go, it's the dumpster for them.
- The red (flight) line has been painted, but it needs extending (to be done at cleanup).
- We have the new weather station and it will be installed at the cleanup.
- Indoor flying was another success, so we'll do it again, next year (*The one Friday Micki and I could get there, it snowed...Grrr! Ed. Bill*).
- Thanks to Mark, the windsock is up and the pole is mounted in concrete. (*We hear the video is...entertaining. Ed. Bill*)
- Ralph gave a talk at a Scouts' meeting. Hopefully, they'll be at the Open House.
- The Middle School Carnival and Hobby Expo went well, but not as many kids were at the Carnival as last year. PBM members gave out Open House flyers and manned the display, (including simulators and flying videos). Pictures were sent to our AMA District II VP, Eric Williams.
- PBM is raffling off an E-flite Sportix. Ralph will sell you tickets for $10 each. The winner will be pulled when the last ticket has been sold (only 9 tickets left, as of the meeting!). Question is, what would the club like to see raffled next? A car or a radio? Come to a meeting and give your input!
- The trainer batteries have been taking a beating, so Dennis is ordering new ones.

New Business

- NJ Institute of Technology (NJIT) Flylanders team (https://www.njitflylanders.com/). Every year, this college-level team enters a national competition, designing and flying a model specifically to meet engineering challenges. The club discussed sponsoring the team and at what level.
- Per Dennis, we've applied for an AMA Take Off and Grow Grant. This grant supports clubs who help new fliers enter the Hobby. The funds requested would help pay for trainer plane batteries, Open House food, and a new simulator.
- Open House – Ron Jasper & Gary Deal volunteered for set up and take down, but more volunteers are needed. This is our big chance to impress our neighbors, so, please, help!.
- Jersey R/C Racing Shop in Forked River: We will be hanging a club banner at the shop. Rich B. demoed a rock climbing kit. We voted to buy a set and set it up in the big trailer at the back of the field.
- More improvements are planned and/or underway at The Pit.
  - Adding a second canopy
  - Spectator area benches (Maybe we can use scrap from field tables, or save the wood for the dirt track? This will be decided at the Cleanup).
  - Fence in front of the new canopy. We'll need to use a jackhammer to make holes for the canopy and spectator fence.
- The Ways & Means table was busy (*I counted more than 7 flyable models, plus an assortment of ~~junk~~ treasure from my workshop. Ed. Bill*)
- Reminder that the McGuire AFB Open House is 17/18 May. The Thunderbirds are scheduled to be there.

Upcoming Club Events

- April 19 or 26 – Clean Up Day
- May 10 or 11 – Open House
- June 7 – Warbirds Plus Fun Fly
- July 4 – Night Flight
- July 12 – Float Fly
- August – Pop Up Night Fly – Date TBD
- September 14 – Picnic & Fun Fly
- October 5 – Flea Market

✈ We need volunteers for all events.

✈ Pylon Racing: Paul Meier hasn't yet announced the dates, and the classes are still to be defined.

Models of the Month (No, they aren't all all traditional models, but modelers are inventive!)

(Above) New member Greg Gnomes and his Surveying Drone. He gave a very interesting presentation on what he and his surveying company do with these drones.

(Below) Rich Bombardier - Rock Crawler obstacle course (compare with chair size in background)

(Right) Bill Bowne – Midi Mambo (more in my column).

(Above) Gary Santaniello – Gary lost the canopy to his razorback P51, and no replacements were available. Undeterred, he 3D printed a very nicely fitting replacement! Just needs a little paint!

Bill's Corner

The Midi Mambo

Up until the 1990's, the Sterling kit company of Philadelphia produced a line of wooden airplane and boat model kits. As a kid in the 1960's, I could afford their rubber and some C/L models, but could only dream about the R/C designs. One of those R/C models was the Minnie Mambo, scaled down from Sterling's bigger Mambo designs.

Designed as trainers, Mambos were high-wing, one to three channel models. That is, (1) rudder-only, (2) rudder and throttle, or (3) rudder/elevator/throttle, with the radio being either escapements, reeds, Galloping Ghost (pulse proportional), or early digital proportional. For those on a budget, the Minnie was the most affordable, using the (then) very popular, cheap and reliable Cox Baby Bee Glow engine and a single channel radio.

By the time I learned to fly R/C and could afford Mambos (and their radios), there were many more attractive kits available. While I never got around to buying a kit before the company folded, I never forgot it.

In 2010, I found copies of Mambo plans on the Outerzone web site. So, I downloaded them, scaled them to a convenient size, and built a re-engineered Minnie Mambo. A model of a model, I changed its structure and used MUCH better wood then found in those old die-cut kits! I flew the model for several pleasant years, then sold it to Mike Roselli, to make room for more model designs.

Last Fall, I decided to do another Minnie Mambo. The original kit version was 219 sq. inches; my first re-design was 252 sq. inches, based on the motor and battery combo I used back then. Now, I'm using a larger power combo, so the 'new' Mambo would be 360 sq. in. As my allergies make building with balsa miserable, this larger Mambo would be foam and ply, with no balsa. Plus, as it would be larger than the earlier Mambos, I couldn't see still calling it a "Minnie". Hence, the "Midi" moniker.

Since Mambos were designed as trainers (back when Radio *Controlled* flight was often called Radio *Interrupted* Free Flight*)* the models were designed to be aerodynamically stable – no depending on electronics. Lots of dihedral, a big horizontal stab, and *beaucoup* positive incidence. Dihedral to keep the wings level and work with the rudder to make turns. A big stab to smooth out pitch disturbances and CG shifts, and the positive incidence to make the model climb under power (vital for flight without elevators). Those combined features are great model savers, especially when flying low and fast – just release the sticks and the model IMMEDIATELY snaps into a steep, straight climb.

Again, I modified the engineering when re-drawing the Mambo, (such as replacing the rubber-banded on wing with bolts), but I really tried to keep the aerodynamics unaltered.

I thought it would be a routine model build; after all, it's a simple model, right…Nope.

My first inkling there'd be problems was when I cut the cores. I cut cores from DIY store house insulation foam. As it comes in 4' by 8' sheets, each sheet just under 2" thick, I have to do a lot of cutting down to make core blanks, plus find a lot of storage space for leftover foam. Happily, I still had two usable core blanks left in my supply, so no need to go to the store. Unhappily, my lite ply templates split and both cores wound up with bad leading edges.

Happily (again), I was able to trim about an inch off both LEs, splice on some foam strips, and CAREFULLY re-cut both cores with repaired templates. One oopsie down…

Then came the fuse sides cut from two different sheets of hand-cut foam..of two different thicknesses. Good thing I cut a LOT of foam every time I make sheets! Same thing happened with the horizontal stab – what I'd cut out was too thin to safely use.

Bill's Corner

I still don't know how I wound up cutting the bulkhead at the wing leading edge 1/4" too short, but at least I caught and fixed it before trying to install the wing. Fixing that DID make made drilling for the wing dowel easier.

On the good side, I spent a lot of time mounting the tail feathers, squaring them up with each other and the wing (after the paper covering, so shrinking paper wouldn't warp the fuse). It took a lot of gentle, delicate sanding, but I believe that preparation is why only two clicks of rudder trim were needed on the maiden flight.

Speaking of the maiden flight, that WAS pretty routine. With all that dihedral and no aileron control, taxiing crosswind is pretty much out of the question. So, I put the model on the runway, nose pointed into the wind, and advanced the throttle. The Mambo was off the ground in less than a yard, climbing briskly with it's typical deep-fuselage/high dihedral rocking motion.

As soon as I've trimmed out a new model for level flight, my routine is to climb the proverbial 'two mistakes' high and check out the model's stall. If it's going to have some nasty stall characteristics, I want to learn about them at altitude, not on final! Turns out the Mambo has a very gentle stall and I couldn't quite coax it into a spin (I WILL move the CG back and increase controls throw, though. Intentional spins are fun!).

To give you an idea of how sweetly the Mambo flew, I took off, climbed, did the stall test, a few loops and barrel rolls, then handed the transmitter to Micki. She flew it for a bit, then (reluctantly) handed the transmitter back to me so she could film the landing.

After the successful maiden, I wrote a short building article on the plane and sent the plans (goofs fixed!), building article, and some pictures to the Outerzone. Maybe it'll inspire another builder to try his or her hand at continuing the classic design...how about a giant-scale, gas-engined Maxi Mambo?

As long as they don't ask me to cut the cores!

(Left) Good thing you can't see the foam colors after covering!

(Right) All but the wing covered with newsprint and water-down Titebond II.

(Bottom) Ready for the maiden flight!

RC Field Safety: Best Practices for Safe and Enjoyable Flying

Flying Radio (or Remote) control (RC) aircraft is an exciting hobby for enthusiasts of all ages. Whether flying planes, helicopters, or drones, safety is paramount when operating these models. RC fields are specially designated spaces for flying, but they come with their own set of safety considerations. To ensure a safe and enjoyable experience, it's important to follow some essential best practices. Here's what every RC pilot should know about field safety.

1. Know the Rules of the Field (Ours or one you're visiting)

Before you even start your motor or power up your drone, familiarize yourself with the rules of the RC flying field. Most RC fields have specific guidelines that cover flight zones, no-fly areas, and altitude limits. These rules are in place to protect both the pilots and bystanders, and to ensure that the hobby is enjoyable for everyone. Make sure you:

- Follow designated flight paths.
- Abide by any "no-fly zones" such as areas near roads, homes, or power lines.
- Respect field boundaries and posted signs.

2. Inspect Your Equipment

One of the key aspects of RC field safety is ensuring that your aircraft is in top condition before every flight. An equipment malfunction mid-flight can result in crashes, which could damage your RC vehicle or, worse, injure someone. A pre-flight checklist can help ensure safety:

- Check the battery for proper charge and condition.
- Inspect all moving parts like servos, motors, and control surfaces.
- Test the radio system for proper response and signal strength.
- Ensure your aircraft is balanced and ready for flight.

3. Practice Good Radio Etiquette

At any RC flying field, radio frequency management is crucial, especially in crowded areas. Many RC planes and drones still operate on shared frequencies, and interference can lead to disastrous accidents.

- Confirm your channel or frequency is clear before powering up your aircraft.
- If using modern 2.4GHz radios, ensure your system is bound correctly and performing without interference.
- Always announce your frequency/channel if required by your local field rules to avoid frequency clashes with other pilots.

4. Maintain Awareness of Your Surroundings

Situational awareness is critical when flying RC aircraft. Pilots must be aware not only of their aircraft but also of other people and planes at the field.

- Monitor other pilots' aircraft, especially if they are flying nearby or at similar altitudes.
- Stay clear of runways or landing zones unless you're actively taking off or landing.
- Call out to other fliers when your model enters onto the runway AND make sure the other pilots hear you.
- Keep a safe distance from spectators, animals, and vehicles.
- If you're flying in a group, use spotters to help monitor the flight area and alert you to potential hazards, like people or wildlife entering the flight zone.
- Make sure your spotter understands that their job is NOT to watch your model, but to watch everyone else's AND the surrounding environment.

5. Follow Safe Flying Techniques

When flying your RC aircraft, good technique goes a long way in ensuring safety. Control your aircraft with care and avoid risky maneuvers that could endanger yourself, other pilots, or property.

Take off and land facing into the wind for better control and stability.

Call out to the other fliers when stepping onto the runway area AND when exiting it.

Avoid flying over people, vehicles, or populated areas.

Practice emergency landings in case you lose control or have technical issues.

If you're a beginner, seek out experienced flyers for guidance. They can teach you proper techniques and help you avoid common mistakes.

6. Prepare for Emergencies

Even with the best precautions, accidents happen. Being prepared can minimize damage and injury:

- Know where the nearest first aid kit and fire extinguisher are located.
- Have a plan in case your RC aircraft crashes or lands unexpectedly.
- Stay calm in case of a loss of control and try to steer the aircraft toward a safe landing area, away from people and property.
- When you have an emergency, CALL out and let everyone know. If someone else has an emergency, keep your model away from theirs and let them have first priority for the runway.
- Do not loiter on the runway when fetching a crashed model. Don't run, but clear the runway as quickly as possible.

7. Mind the Weather

Weather conditions can greatly impact the safety of RC flying. Strong winds, rain, and extreme temperatures can make it difficult to control your aircraft and increase the risk of crashes.

- Check weather conditions before heading to the field.
- Avoid flying in high winds, rain, or poor visibility.
- Be mindful of temperature extremes, which can affect battery performance and control surfaces.

8. Respect Fellow Pilots

RC flying is a shared hobby, and a courteous attitude goes a long way in promoting safety. Always give other pilots the space and time they need to fly, land, or make adjustments. If someone is testing or troubleshooting, avoid flying nearby.

Conclusion

By following these simple RC field safety tips, you can ensure not only your safety but also the enjoyment and security of fellow hobbyists. A little preparation and attention to detail go a long way in preventing accidents and mishaps. Whether you're a seasoned flyer or a beginner, safety should always be your first priority when operating any remote-controlled aircraft.

Stay safe, and happy flying!