

"TURBULATOR"

Newsletter
of the Rio Rancho
Radio Control
Flying Club
AMA Club #2770

WATERMAN FIELD

ELEVATION 5840 FEET

35° 17.2'N 106° 44.8'W



Scott & Sonny at the
Star Center indoor Fly



PRESIDENT'S CORNER

"Da Prez Sez"

April already, another month gone and 2016 is moving right along. March was a little unsettled with the cool mornings and windy afternoons. We got a little spoiled with the warmer than normal temps, in Feb. and several light wind days that many took advantage of. That was too good to last as Summer is a little ways away yet. We should be getting ready to do some badly needed field repairs, as the cracks in the runways got a lot bigger this winter. April is the time to do this, weather permitting before the summer heat and active flying starts. See you all at the April meeting.

Coming Events

1. Next Meeting 4 April @ 7:00 at the Wallen Shop
2. Wings of Freedom: Collings Foundation B-17, B-24, B-25, & P-51C will be over at Cutter Aviation at the Sunport April 6th - 8th
3. Library Demo for Kids on 6 Apr from 2:00pm - 3:30pm at Loma Colorado Library.

How do servos work Part 2.

Brand Wars

So who makes the best servos?

Well there's no easy answer to that question and asking it is likely to result in as many people as there are opinions offered.

The reality is that most of the big-name manufacturers produce perfectly good servos that, providing they're matched to the model properly, will provide long and useful service.

When it comes to the no-name servos, most of which originate from China then all bets are off.

Some time ago I began a very comprehensive review of every servo brand/model I could get my hands on and that will be online soon.

Choosing The Right Servo

More important than choosing the right brand of servo is actually choosing the right servo for your model and flying style.

With modern servos spanning the range from featherweight 3g units with only a tiny amount of torque to mammoth heavyweights that can exert over a thousand ounce-inches of power there's really no excuse for using a servo that's not matched properly to your model.

For small models (foamies and the like) small, cheap 5-9g servos do the job just fine. Servos like the HXT900 are incredible value for money and are so cheap you can throw them away when/if they break.

Small heli-fliers can use these budget servos too but unless you're into just hovering around, there are some real benefits to be had from using digital servos instead. A number of companies make fast, strong digital servos that are well

suited to small helis -- but you'll pay extra for that improved performance.

A sport/trainer model up to 5-6 lbs in weight will be ideal for the so-called "standard" servos such as the Futaba 3001/3003, Hitec 425 and a raft of others. While a ball-bearing servo will outlast a non-BB one, many people fly very low-cost (under \$10) servos in these applications with no problems at all.

If you're into aerobatics or 3D flying then digital servos may offer you some benefits in terms of precision, speed and torque. It's also worth considering the use of metal-gears once models get above the 6lb mark as this will reduce the chance of stripping.

Larger helis are also a good candidate for stronger gears and digital amps since the force required (especially for collective/cyclic) can be very high.

Gas planes of 26cc and above really do need metal-gear servos due to the higher levels of vibration encountered and the size/weight of the control surfaces. Once you get into Giant Scale you should be looking at the top-end servos from the likes of Hitec, JR, Savox, Seiko etc. From a performance and safety perspective, it makes no sense to try and save money by using anything less than the best you can afford.

Final Thoughts

It's important to remember that servos are just one link in a long chain of components that effectively connect your transmitter sticks to the control-surfaces on your model.

The failure of any one of the components in that chain can cause disaster.

One of the most common issues is not having enough battery or BEC capacity to handle the servos you're using.

Hi-torque and hi-speed servos (especially digital ones) can draw enormous amounts of current from your system and if your battery or BEC isn't up to the job, bad things will happen.

Originally, Futaba advised against using NiMH batteries with some of its hi-torque servos because the early nickel-metal batteries just weren't up to the task. Fortunately things are much better now and a good quality NiMH pack (of adequate size) will work just fine.

However, anyone who tries to drive a bunch of hi-torque digital servos using nothing more than an AA-sized receiver pack is going to be sorely disappointed with the performance (and wreckage) that results from such folly.

Also make sure that your extensions (if you're using any) are up to the task.

Always use heavy-duty extensions if you can afford to carry the extra weight as these will produce the least loss of torque in your servos. In fact some servos (notably the Futaba 3000 series) will behave very oddly (oscillating and hesitating) if your servo extensions are not up to the job.



Craig Ferguson & uMicro Corsair

For Sale



Ares Gamma 370 pro with radio \$50. Contact Reggie Cards @ reggiecard@q.com



Glass for building table 56x45. FREE Contact Reggie Cards @ reggiecard@q.com

MEETING MINUTES

Minutes from the March 2016 Club Meeting

The meeting was called to order with 21 members present.

Minutes: Accepted as Published

Treasurers Report: Accepted as Presented

Membership Report 31 Paid 2016 Members

Field Report: 1. Ken passed a trash hotline flier to members with a hotline number to report illegal dumping. 2. Garry is working on a solution to our crack repair issues but was not present to report.

Safety: If you go to the field fly in the pilots boxes

Old Business: Committee is still working on evaluating putting a weather station at the field. The current issue is theft and damage protection. Costs would be \$40/month for the Cell line plus about \$150 for the station not including mounting.

New Business: 1. AMA Area club proposed by Mark Johnson. Mark explained what they were looking for and that their goal was to promote Model aviation in the Abq area, Address the Abq city council to re-establish flying in Abq Park and improvements to Maloof Field. He wanted two

members to represent Rio Rancho in the club and Scott Harness and Steve Woodruff volunteered for the position.

3. We are working to support a kids demo at the Rio Rancho Library on 6 April from 2-3:30. Don will contact the AMA Education dept for support and report at the April Mtg. We will need 5 to 6 people to support.

4. Robin Tuchler brought the topic of using an application called ShatsApp so members that get to the field early could post/mass text club members who opt in, the conditions at the field. Robin accepted the task to review the requirements and the how to's to set this system up.

The meeting adjourned at 8:00pm.

We had a new member at the meeting and introduced himself as Doug Williams.

Turbulator:

Editor Don McClelland

We are always looking for articles, pictures and your input!

For comments, or suggestions

Please Email Don at

macmoke1@gmail.com

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RIO RANCHO RC CLUB

AMA Charter #2770

www.rioranchorcflyers.org

Next Club Meeting

April 4th 7:00pm at the Wallen Club House. 5545 Lilac Pl.