March 2018



... an <u>AMA Award of</u> <u>Excellence Club!</u>

Inside this Issue



P.O. Box 2163 Huntsville, AL 35804



Newsletter

Proudly serving the Huntsville community at the Captain Trey Wilbourn Model Airplane Field.

President's Message

The front gate has been replaced. There is a new electric blower in the cart shed. After use, please ensure the battery is placed back in its charger so it will be ready to go for the next user.

Daylight Saving Time is upon us! This will give us all more time for flying in the afternoon and early evening. Take advantage of this and come out to the next club meeting (March 20th) early and show off your latest winter build/project.

Please remember to contact the board (board@rocketcityrc.com) if you are aware of anything that needs attention or you have any suggestions for improvements or activities.

Fly well, fly safe, Bob Templeton President – RCRC, inc



Find your plane's Centre of Gravity

You know how to do this, right?

All credit to Flite Test https://www.flitetest.com/articles/findyour-centre-of-gravity

Most times when folks talk about CG they mean that point on the wing where the plane's manufacturer told them to stick their fingers so they can tell if the plane is tail or nose heavy.

The 'wing' CG is just a little in front of a point where an imaginary vertical line representing ALL the LIFTING forces created by the plane cuts through the wing.

Acting in the opposite direction (due to gravity) is the combined weight of all the plane's parts. Again, to make this easier, this is gathered together into a single force acting through a line which (from bitter experience) always points straight down.

The trick of balancing a plane is to get the two opposing forces 'Lift' & 'weight' to act near-enough through the same vertical line. Though for reasons of stability it is normal to create a slight 'nose heavy' condition that is constantly balanced by a small 'down' force created by the tail surface.

Read the article for more info. $\,\Omega\,$

Time to maiden that new aircraft.

Steps to reduce your risk (and pain).

Full article here.

http://www.theparkpilot.org/parksolutions_checklist

If you are new to the sport, the term preflight may be foreign to you. If you are an experienced pilot, I hope that doing a preflight isn't something that you occasionally do when you feel like it. All pilots should do a preflight inspection before each flight!

If you were never taught

this, shame on your teacher. If you were taught to make a preflight check, but still don't, shame on you. Not only do preflights help keep your aircraft intact for many years of enjoyment, they also protect you and anyone who happens to be in the vicinity when you take off. Preflight checks make flying safe.

One of the most important things to check is the motor/engine. Make sure that it runs well in all throttle positions. All fo the power system components should be inspected. The battery should be fully charged and in good shape. The transmitter and receiver batteries need to be fully charged and hold that charge. The ESC(s) must be correctly operating. The control surfaces should be inspected and tested before flight. Make sure they are moving in the correct directions. Inspecting the props/blades is essential. Cracks or chips could lead to disaster. Replace and that show these signs of wear and have spares on hand.



Why Do Good Cells Go Bad? Credit Fred Herrmann

I received my degree in chemistry back in the 1970's and it's been awhile since I've done any real chemistry, but after my recent bad lipo experience I decided to do a little reading. Lithium is a metal and has a tendency to form small crystalline structures called dendrites in a lithium battery cell. When dendrite whiskers grow long enough they eventually short circuit the cell and self-discharge or even cause spontaneous ignition in extreme cases.

What causes dendrite formation? That's a good question with a lot of possible answers. Some of these answers include: Non-conductive contaminants in the cell anode during manufacture can trigger spontaneous dendrite nucleation -- Insufficient amount of dendrite inhibitor during manufacture -- Dendrite formation appears to prefer low and high cell potentials. (below 3 or above 4.2 volts)

I've seen a lot of people try to revive Lipos with a cell below 3 volts. This is a really bad idea. The longer a lithium cell stays below 3 volts the more likely it is that dendrite formation has occurred to the point where you can no longer charge the cell up to 4.2 volts and the more likely the cell will self-discharge over a short period of time.

Put simply: That lipo you charged yesterday with one cell that wouldn't go over 4.15 volts can lose 50% of its charge overnight. 30 seconds after you leave the ground your LVC (low voltage cutoff) kicks in, you end up in a tree or plugging a new hole in the flying field.

https://www.electronicproducts.com/Power Products/Batteries and Fuel Cells/What are dendrites and why do they cause fires in lithium batteries.aspx



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Before the first flight, have a plan in your mind for what you would like to accomplish. Are there certain maneuvers that you want to try? Know roughly how long your battery will last so you can determine if you have enough time to accomplish your goals.

For a checklist and further information, check out the full Park Pilot article. $\ensuremath{\Omega}$

Call to members for newsletter content.

Send your content to:

<u>newsletter@rocketcityrc.com</u> Ω



Huntsville to Host MultiGP South East Regional Final

2017 brought lots of growth to the new and very popular part of our hobby, drone racing. In response to the growth and the drive to make MultiGP even better, several changes were made to the rules and regional series.

The biggest change was reducing the regions from 14 to 6 and thus making the regional finals a marquee event. Huntsville has be selected to host! More to come, check it all out at

https://www.multigp.com/ Ω



Runway Painting

Have we got it covered? Let the board know what we might be missing! board@rocketcityrc.com



Events Coming In 2018

Tuesday 20 Mar, 6pm Next Club Meeting

5 May US Space & Rocket Center International Drone Day

Need to set up a booth, more discussion needed.

19 May *Club Day* More info coming soon.

9 & 10 Jun Main Airfield *MultiGP Regional Qualifier*

More info coming soon.

30 Jun & 1 Jul TBD MultiGP Regional Final Event in conjunction with Space & Rocket Center, more info coming soon.

7 Jul Airfield & Clubhouse *Swap Meet*

Tentative date, coordinating with other area clubs to avoid conflicted dates.

11 Aug Main Airfield National Model Aviation Day More info coming soon.

Continued on Page 4

Continued from Page 3

8 & 9 Sep Main Airfield *Pattern Competition*

More info coming soon.

Other events?

February Meeting Minutes

2/20/18

Call to order 6:00 pm

Board Members - Wade, Bob, John, Tom Members - 19

Old Business Treasure Report - Passed 12 new members AI - in Hospital Safety - Passed Meeting minutes - Passes Gate Repaired Indoor Flying - Open for free in one year Runway Painting - Avion painting? - Drafts of layout proposed

- With and without RocketCityRC.com

Peter Wick Estate Sale - Prices Reduced

New Business March 11th Daylight Savings Next meeting in the Daylight Weather Station Donation Warren Hunter contact information needed

Multigp - Weekend of june 30th - Atlanta Need Qualifier Vote Passed June 9th - Primary Weekend June 16th - Backup Weekend Will have field reserved entire weekend

Need a Date for Swap Meet

Meeting Adjourned 6:23

Board Meeting 3-6-18

Board Meeting (cont.)

Board Meeting 3/6/18

Multigp regional

Painting of runway

Pattern event on 2nd week of september

Signage for field

Vending machine repairs



4

RCRC Officers

President: Bob Templeton president@rocketcityrc.com 256-479-7378

Vice-President: Al Blair vicepresident@rocketcityrc.com 269-277-0879

Treasurer: John Tubb treasurer@rocketcityrc.com 401-450-9669

Secretary: Wade Sims newsletter@rocketcityrc.com 205-310-4846

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Committee Chairs

Field/Facilities: Wade Sims field@rocketcityrc.com 205-310-4846

Programs: Al Blair 269-277-0879

Publicity: Bob Templeton 256-479-7378

Safety: Al Blair 269-277-0879

Web Admin: Bob Templeton 256-479-7378

Flight Instructors

All Flight Instructors are by appointment only:

John Pieczynski 256-651-6487

John Tubb 401-450-9669

Mike Duncan 256-509-8801

FOR SALE PETER WICK RADIO CONTROL COLLECTION **REDUCED PRICE REVISION**

R2 February 10, 2018 R1 December 9,2017 November 19, 2017

- The below listed items are offered in an "as-is" condition. **Pricing on many items** have been reduced 25%.
- The items may be seen/bought at Jim Fowler's residence at 9627 Waldrop Dr.,SE, Huntsville, on Monday, Tuesday, Friday or Saturday afternoons. Please call ahead for information and/or for confirmation. The telephone number is 256-882-1784.
- The proceeds will go to Peter's education fund for grandchildren.
- T-1 A Carl Goldberg 67" YAK 54 airplane completely assembled with 6 Futaba digital servos; a Futaba R607FS, 7 channel receiver, (2.4 GHz); an OS FS 120, 4 stroke engine with pump, spinner and prop. This aircraft has been flown very little if at all and is in good condition. <u>\$445</u>.
- T-2 A Funtana X100 airplane completely assembled with 6 Futaba digital servos; a Futaba R617FS, 7 channel receiver, (2.4 GHz); an OS FS120, 4 stroke engine with pump, spinner and prop. This aircraft has been flown often but is in fair to good condition. **§225**.
- T-3 Taurus airplane completely assembled with 70" wingspan; 5 Futaba servos; Futaba R168DS 8 channel receiver (72MHz); OS FS 70, 4 stroke engine; flown little if at all. **§210**.
- T-4 CMPro T-34 Mentor ARF airplane, 58" wingspan; new-in-box unassembled. <u>\$110</u>.
- T-5 F8F Bear Cat "Rare Bear" profile foamy airplane; new-in-box unassembled. <u>\$25.</u> T-6 **Sold**
- T-7 XRB SR "Sky Robo" HIRobo helicopter, with transmitter and lithium battery charger in original box. Lithium battery not included; Transmitter uses 8 ea. AA batteries. Heli. has some damage. <u>\$25.</u>
- T-8 ART-TECH RE Hobby Typhoon helicopter, 24.9 rotor diameter, with E-Fly ETC 61-2.4 GHz transmitter. Needs 7.4 or 11.1 V li-po battery and charger. <u>\$50.</u>
- T-9 UDI R/C U817A Quad Copter, 4 channel, 2.4GHz, with transmitter, battery, and charger in carrying box. <u>\$25</u>.
- T-10 Futaba 9C Super Series digital proportional transmitter, model T9 CAP, with a Futaba FASST 2.4GHz TM-7 RF module; includes battery charger and transmitter in metal carrying case. <u>\$210.</u>
- T-11 Spektrum DX6 park flyer system transmitter, 2.4 GHz, 6 channel, 10 model memory, Heli/Air, with battery charger. <u>\$50.</u>

- T-12 ARISTO-CRAFT Hitec Challenger 550 transmitter with 72MHz FM HP M72F, RF module and HP-5RM 72 F, 5 channel receiver. <u>\$25.</u>
- T-13 Electrifly Triton EQ battery charger in case. AC/DC inputs with lithium balancing circuit. Can charge, discharge, and cycle multiple battery types. <u>\$50.</u>
- T-14 Hobbico Accu-cycle charger, conditioner, analyzer for NiCad and NiMH batteries, Rx and Tx. <u>\$35.</u>
- T-15 Hobbico charger, same as item T-14, but w/o charging leads. <u>\$25.</u>
- T-16 O.S. Engines Max 120 AX, 2 stroke engine with muffler, new-in-box. **§190.**
- T-17 O.S. Engines Max 46 AX, 2 stroke engine with muffler. This is the older model of the 46. <u>\$50.</u>
- T-18 Super Tigre G90 2 stroke engine with muffler and some spare parts. <u>\$50.</u>
- T-19 PRO 40, 2 stroke engine with muffler. <u>\$25.</u>
- T-20 K & B 61, 2 stroke engine w/o muffler and glow plug. <u>\$25.</u>
- T-21 ROSSI 60, 2 stroke engine w/o muffler. <u>\$25.</u>
- T-22 ENYA 60, 2 stroke engine w/o muffler. <u>\$25.</u>
- T-23 Varicom Industries Magnum High Torque model engine starter. <u>\$25.</u>
- T-24 SIG Manufacturing Co. KOMET airplane kit in box; 67" wingspan, for .45 to .60 engines; kit materials include balsa, plywood, molded plastic and foam. <u>\$25.</u>
- T-25 thru T-33 **Sold.**