# JCRC FLIGHT LINE

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www.flyjcrc.com

## Johnson City Radio Controllers, Johnson City, TN

February 2007

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#### THE PRESIDENT'S REPORT

Hello Everyone,

Well it's that time of year again for our club to renew our charter with the AMA. We still have membership renewals coming in each week. As a reminder, please get your membership renewal form and copy of your 2007 membership card in to David Bench by the end of the month to avoid a late fee. We have an end of February deadline for a reason. Our club must submit its membership roster and charter renewal to the AMA in March.

Enough business, lets talk about the fun stuff. I am looking forward to spring, summer and fall fly-ins that we normally schedule. Most of you know that in the past several years now we have been fortunate to have many sponsors. I am already getting asked to schedule events with past sponsors and have been contacted by new ones. They want to get our events on their schedule to arrange their support of our club and hobby. In saying that if you are interested in being an event coordinator, please let me know so I can work with you to get things rolling.

Have fun and be safe Eddie

## Next Meeting is:

Tuesday February 27<sup>th</sup>, 2007 6:45 PM at the Johnson City Golden Corral

The deadline for next month's newsletter will be March 10, 2007

## **Notes from the January Meeting....**

These are the highlights of the January meeting.

- 1. A call for volunteers to serve on the Event committee. These folks will be planning events for the coming year and coordinating their dates and times with other local clubs to insure there is no conflict. It will not be necessary that the planners attend the events themselves.
- 2. At the December meeting there was a call for volunteers to repair and recondition our club trainers. This has been done.
- 3. A pin board will be provided for those members using the spread spectrum technology separate from the channel board presently in use.
- 4. A vote was taken to purchase a new weed sprayer for the field. Expenditures for gravel were also authorized in order to keep our present field and drive in good condition.
- 5. There was some discussion regarding the time line on the upper field. Methane levels are still too high for event use and as things stand now it could be as much as two or three years before the club occupies the new area. In the meantime, we can do small improvements
- 6. In the future, workdays will be held on the weekend following the club meeting.
- 7. We will fertilize the field area this year as we will not be moving to the new area in the immediate future.

## Welcome New Members...

Ed Fagel and Grand Son Zack

#### From the Editor...

Since most of us were staying inside, there isn't a lot "new" to report in the way of activities. Please keep me informed of your building projects, items for sale, etc. If you list anything and it sells, please let me know so that I can remove it from the list. Thanks- Ken McMahon

Glendaandkennm23@earthlink.net

423-257-3942

#### Items for Sale...

33% Hanger 9 Extra 300-Ready to fly (less motor)--\$600.00 With B&D 5.1ci twin cyl.- 1100.00

35% Extra 300 L Blue and White Ready to fly with some servos Less motor -- \$500.00 With B&D 5.1 ci twin cyl--1000.00

Call Jerry Black –home-753-5511 or - cell- 418-0887

Avistar 40 Select by Hobbico with everything needed to fly it. I paid around \$400.00 for the plane, battery and other accessories.

Jane Lambert 423.677.2723

3 new Rascal 110" ARFs still in boxes \$300.00 each or \$800.00 for all 3

Danny cell 865-405-0081 Maryville, TN

## **Senior Pattern:**

We have a <u>tentative</u> schedule of events for the SPA's upcoming season:

Cullman, AL April 21-22
Chattanooga, TN May 19-20
Atlanta, GA June 9-10
Asheville, NC July 14-15
Prattville, AL August 18-19
Knoxville, TN (Masters) September 15-16

Check out their website for details

For more information about Senior Pattern go to: <a href="http://www.rcpattern.net/spa/">http://www.rcpattern.net/spa/</a>

## IMAA News ... Chapter 693 http://www.fly-imaa.org



If you are an IMAA member and would like to be added to the JCRC chapter at no charge, contact Ed Fennel and give him your IMAA number so that he can update the membership roster. His number is: (423) 538-9667

## **January Program**

Greg Cowen presented the new Spread Spectrum. This seems to be the wave of the future. More and more information is becoming available about the system, but its primary advantages would be the elimination of frequency overlaps (ie.-no waiting for someone with the same frequency as yours to give it up before you can take off). Another important advantage is that it has a better immunity to interference than what most of us use now. The cost of the radio is comparable to a good mid-range 72 mhz system.

Also, Skip Weller gave a short presentation on his new Zenoah G-26 motor. Comparable in utility to a 4 cycle 1.20, this motor would be a viable option for anyone wanting the convenience (and fuel cost savings) of a gasoline powered motor.

## Tip of the Month...

If you have ever tried to remove the burnt on gunk from your mufflers and engine cooling fins, you know what fun that can be. Vic Koenig has used a fairly new product that does the job well without the usual stench and caustic burns that came with using oven cleaner, or the destruction of the household crock-pot that was the result of the marginally successful method of soaking engines in hot antifreeze.

The product is called Dawn Power Dissolver and is available at Wal-Mart in the same place as the dishwashing detergents. It is a jell and will stay where it is sprayed. It works in about 5 to 10 minutes on a normally dirty muffler/engine. It doesn't discolor the metal as some methods of cleaning do. I have used this stuff and agree with Vic totally—it

does the job and does it well. As a plus, it will clean the bbq grill and other household cooking utensils so it can be budgeted as a household necessity instead of hobby.

Thanks Vic.

## On The Building Board...

Ken Joyner sent this photo of his current project, a Top Flite P-47 Thunderbolt, which he has equipped with retracts, a detailed cockpit interior and working flaps.



He plans to power this plane with a Super Tigre G-75 engine and use a JR6103 with standard 537 servos. This is his first attempt at a scale model and he has been working on it since last August. He states that it is near completion and will be flying before long.

## Just a Reminder

We as a club should always be looking for new members and find ways to introduce this exciting hobby to others. We need to be inviting people, young and old, to come out to the field and experience the hobby for themselves.

## For the Beginner

#### Starting in Electric Flight—Powering Up

Caveat: This information was gleaned from the internet forums on RC Universe. I tried to find information relative to starting out in electric assuming some experience with RC flying in general and a degree of commitment to using electric technology beyond buying a park or indoor flyer. None of the following is based on personal experience, but is the best information I could find and verify through non-commercial sources.....ed.

Brushless motors are the most efficient and powerful for their weight. There are two kinds, outrunners and inrunners. Outrunners are generally slower but make more torque so you can swing a bigger prop directly. They also usually come with handy brackets that make them easy to attach to a firewall. Inrunners are usually very fast and work great for spinning small props for speed applications. They can also come with geared drives (some with multiple gears) so you can swing bigger props more slowly just like an outrunner. They are a little bit more difficult to mount unless it uses the almost standard GWS stick mount. Himax and a few others make inrunners (and outrnners) that are directly compatible with this mount. Take a look at

www.flyingmodels.org/index en.htm for their Great Electric motor test.

One note about picking a motor to fit your plane. The general rule is 100 watts or more per 1lb for 3d flying, around 75 watts per lb for aerobatic flying, and around 60 watts per lb for leisure. To calculate watts multiply volts by amps. The calculator at Diversity gives you the watts, and some manufactures will tell you how many watts their motor is good for. A plane may fly on as little as 50 watts per lb, but will be VARY sluggish.

Now that you have a motor, you need a speed controller--.

The first thing you have to do is figure out how many amps your motor is going to pull at what voltage using what prop. The easiest way to do this is in MotoCalc, a commercially available program, or you might try this calculator

http://brantuas.com/ezcalc/dma1.asp You need to have an idea of how many volts you are going to use before you get started. The standard now is Lithium Polymer (LiPo) in either two cell (referred to as 2s or 2s1p) which runs at 7.4 volts or three cell (referred to as 3s or 3s1p) which runs at 11.1 volts. Basically what you are trying to do is get the highest amount of thrust and/or pitch speed with the lowest amp draw. You do this by changing the prop length, pitch, and motor gearing (if available with your motor). Make sure to check your motor to see what its limits are as far as voltage and amperage so that you don't exceed it. Now that you know how many amps you are going to draw at what volts, you can start looking at speed controllers. First you either need a brushed or brushless controller based on your motor. Second it needs to be able to handle the volts and amps you plan on running. Remember to calculate in 1 amp for powering the servos and receiver if you are running mini servos, more if using standard servos. Allow yourself for some headroom here, no sense frying your speed controller and crashing your plane because you wanted to save a couple of bucks. Finally look at features. The most important of which, especially if you are going to be using LiPo batteries, is voltage cutoff. Make sure it has an adjustable cutoff. I'll explain more later when we get into the batteries. Also make sure it has a battery eliminating circuit (BEC) so you don't have to use a separate battery to power the receiver/servos. A few other noteworthy features are electronic break, adjustable timing, and

Power supply (batteries) will be the subject of next months installment

#### Another Reminder...

soft start/cutoff.

Do Not Pay At the Cashiers Counter when you go to the February meeting. We pay after dinner in the meeting room. The cost is \$7.50 per person plus tip. This is a good savings over paying at the counter.

#### ADDRESS CORRECTION REQUESTED

Vic Koenig 3404 Berkshire Circle Johnson City, TN 37604

#### Notice to Membership

Access to the "Members Only" section of the JCRC Website is as follows:

Username= jcrc (lowercase)

Password= 00 + current gate combination

www.flyjcrc.com

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Tuesday February 27<sup>th</sup>, 2007 6:45 PM at the Johnson City Golden Corral.

## Our Club Sponsors:



2244 N. Roan St. Johnson City, TN (423)610-1010

www.hobbytownofjohnsoncity.com

## **Benedicts Ace Hardware**

3607 N. Roan St Johnson City, TN (423)282-1950

# **Boy's Toys**

1305 Tusculum Blvd. Suite 1 Greeneville, TN 37615 (423) 639-8641