

# “Cornwall Aero Modellers”

Monthly Newsletter

March 2011

## Next Club Meeting

Mon. March 14, 2011  
@ the Legion @ 7:30  
in the basement

[cornwallaeromodellers.ca](http://cornwallaeromodellers.ca)

## Executive:

**President:** Karl Kingston @ 938-9573  
**V-President:** Richard Besner @ 527-3398  
**Secretary:** Roger Belanger @ 931-9524  
**Treasurer:** Richard Besner @ 527-3398  
**Field Mgr.** John Curran @ 933-4175  
**Flight Inst.** Karl Kingston @ 938-9573

## Sponsors:

MiniMax Transportation  
J-Tec Distribution Inc.  
Ted's Hobby Shop  
Multi Doors & Windows  
Leading Edge Hobby Shop  
Cornwall Roof Truss

## Upcoming Events:

Chili Fly on March 19th, 2011  
Host Cook: Richard Besner  
In Maxville weather permitting  
Indoor Flying at the Cornwall Armories  
on March 13<sup>th</sup> 2011  
Annual Mall Show @ Cornwall Square

## Minutes of the March Meeting:

The Meeting brought to order at 7:30 with 11 members present.

## Treasurer's Report:

A detailed Treasurer's report was submitted by the Treasurer.

Last Bank statement.....\$XXXXXXXX  
Income.....\$XXXXXX  
Expenses.....\$XXXXX  
Bank Balance.....\$XXXXXXXX  
plus \$105.00 in shares.

There are 12 paid up members out of a potential of 41 members to-date.  
Motion made to adopt the Financial Report by John Curran.  
Seconded by Cliff Merpaw.  
**CARRIED**

## 2 Minutes of the last Meeting:

The minutes of the last meeting were adopted without discussion.

## 3 Old Business:

Old business was as follows:

### **Mall Show:**

It was proposed by Cliff Merpaw to hold the Mall Show on April 30<sup>th</sup>, 2011.

This date has been agreed to by the Management of Cornwall Square.

A motion was made by Jeb Ward to accept this date for the Mall Show. Seconded by Claude DesJardins. This was accepted unanimously. **CARRIED.**

### **Raffle Prizes:**

Peter Grant brought two of the planes donated by **(Ted's Hobby Shop):**

**A Hangar 9 Twist 40 and a Hangar 9 Funtana X50.**

Thanks were given to Peter for his support of the Club.

It was proposed to purchase an OS.46 AX for the Twist 40 for the "Float Fly" raffle.

It was also proposed to purchase an OS .55 AX for the Funtana X50 for the "Fun Fly raffle.

Moved by John Curran that the Club purchase these items for the raffles. Seconded by Cliff Morris. **CARRIED.**

It was proposed by Cliff Merpaw to have a pre-sale of raffle tickets. Cliff will prepare the Raffle tickets for sale.

It was also agreed to purchase 8 gallons of fuel and other door prizes for a total of \$300.00.

Peter Grant to arrange the above with \$300 of Club funds.

### **Zone Float Fly:**

The Zone Float Fly will be held on July 9<sup>th</sup>, 2011

The City of Cornwall has already been contracted for the amount of \$56.50, to be paid.

### **4 New Business:**

#### **Indoor Winter Flying**

To date the indoor flying has had a poor turnout with an average of 7 pilots per night for an income of \$35.00, while the rental cost is \$45.00.

People are encouraged to participate, whether they fly a plane, a helicopter, free flight or anything. It is worth the \$5.00 just to watch and chew the fat.

#### **Upper Canada Bird Sanctuary**

The Upper Canada Bird Sanctuary has asked our Club to put on a demonstration of R/C Flying (on skis) for the children during the Spring break.

The date (to be confirmed) is March 14<sup>th</sup> from 12.00 noon until 4:00 p.m.

Contact person is Karl Kingston, if you wish to participate.

A map will be sent to members on where to go!

#### **Snow Removal**

The last snowstorm left the entrance totally blocked and somewhat beyond hand shoveling.

Rich Besner has convinced West Front Construction to open the driveway on Saturday (Feb 19<sup>th</sup>) at a really good price.

### Miscellaneous

A new Club has opened up on Ile Perrot called the Blue Max Squadron. This is a 2.4 Ghz. Radio System only, due to the close proximity to the other Club called the "Les Moulins a Vent De L'Ile Perrot". It is also limited to a maximum Engine size of 50 c.c.

For more information contact  
Albert Oroventi  
@ 514- 525- 2436 or  
[beto@videotron.ca](mailto:beto@videotron.ca)

### 6 Adjournment:

The meeting was adjourned at 8:30 on a motion by Jeb Ward.

### Show and Tell:

Karl Kingston brought out for viewing a brand new "Jackal 60" and a micro sized Wright Brothers Twin.  
Doug Geisel brought out a "Blade" helicopter for viewing.

### This and That:

#### Indoor Flying

I guess you could say the attendance

at the Armories for indoor flying has so far been poor with an average of 7 to 10 members coming out to fly. With a sweet deal like \$5.00 for 4 hours flying time, it is hard to understand the poor turnout? Here are the die-hards.

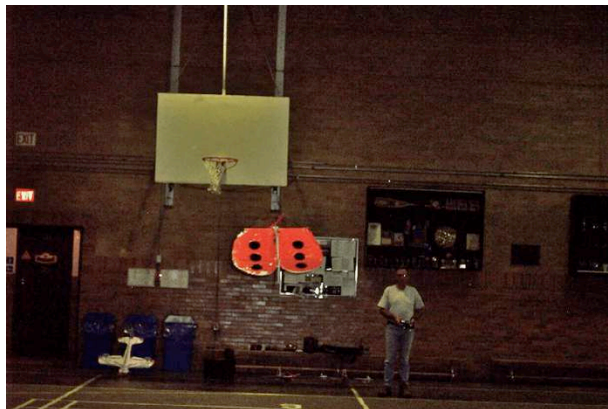
#### Karl Kingston & Claude in back.



#### John Curran



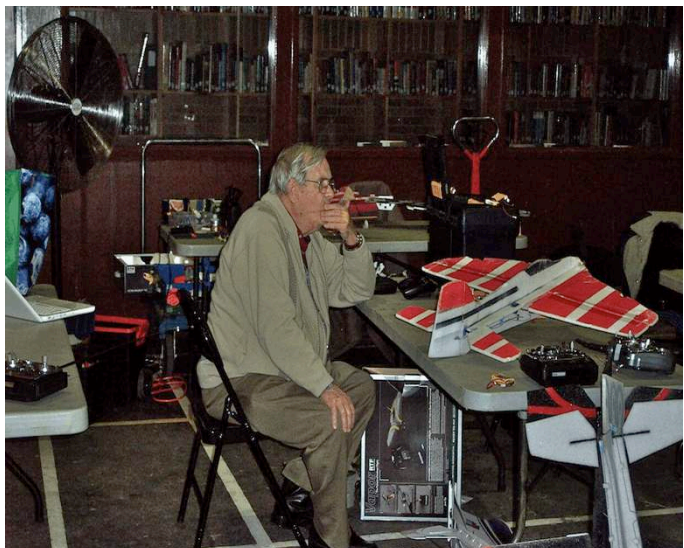
Wayne Porter



John & Karl



Cliff Morris



Half of Taylor Pratt



I have been asking for some input from our members for info or items of interest for the Club newsletter and Roger has kindly come up with this article on batteries. I hope you all enjoy it as much as I did.

### **The New A123 Lithium Iron Phosphate batteries**

From: <http://homepage.mac.com/kmyersefo>

All you wanted to know about these batteries:

These batteries are safer, longer life and more tolerant to abuse.

They are also called nano tech and are available from your local hobby shop, ask Peter Grant.

Read-on:

1.) The cell is cylindrical in an aluminum canister. It has a nominal voltage of 3.3V and a charge voltage of 3.6V. It has a capacity of 2300mAh, and is capable of 30C (69A) continuous discharges and 60C (138A) pulse (10 second) discharges. Each cell weighs 70 grams (2.47 oz). (See specific notes about the APR18650M1)

2.) A special electronic speed controller (ESC) is not needed to run these batteries. The low voltage cutoff should be set to 2.0V per cell or it can be turned off. (KM Note: It is best to fly timed flights with these cells. There is no knee to warn of lowering power. It's a "cliff" and it drops off "right now!")

3.) There are no special instructions for protection during use or charging. Treat it as you would any other battery.

4.) Balancing is an important precaution when using Lithium batteries. Batteries made up of these cells are not as prone to as much individual cell voltage variance as other batteries, but balancing keeps the pack in good health and ensures maximum cycles.

5.) Voltage sag is how much the voltage drops during the course of a discharge. A Nickel Metal battery's voltage sags throughout the complete discharge. A Nickel Metal battery is only operating at full performance for part of the discharge. The batteries being produced by A123 Systems, Inc. show very little voltage sag during the discharge. (KM Note: until the "bottom drops out" at the end)

6.) These batteries have the fastest charge time for any RC battery. They can be charged to full capacity in 15 minutes or less with a charger capable of providing the input amperage and voltage. Charging at these high rates seems to have no effect on the cycle life of the pack.

7.) These batteries are very safe, and abuse tolerant. They have many safety advantages over Lithium Polymer batteries. a.) They are not prone to thermal runaway, which is the leading cause of fire in a Li-Po battery. b.) They will tolerate some amount of over voltage before failing. These batteries should be charged to 3.6V/3.7V per cell. c.) They will tolerate a charge of up to 4.2V per cell with little damage. Charging to 4.2V per cell repeatedly will have negative effects on the pack. Repeated abuse will yield a much lower cycle life, and can result in pack failure. d.) They will also tolerate over discharge. A cutoff voltage of 2.0V per cell is recommended, but these cells will charge up even if discharged to as low as 1.50V per cell. As with over charging, it is not recommended to repeatedly discharge below 2.0V per cell, as it will affect the cycle life and could cause pack failure. e.) These cells are manufactured with a Laser welded aluminum canister. This helps to prevent damage from physical abuse such as dropping or crashing them. Even with this protective canister care should be taken when handling and using any battery.

8.) These batteries can be stored at any state of charge for short periods of time 3-5 days. They can also be stored safely for long periods of time. At a 50% to 100% state of charge, the batteries can be stored for 6 months. They can be stored for up to 24 months if they are charged to 100% state of charge beforehand.

9.) Up to 1000 cycles can be expected before reaching 75% capacity. In an average RC application, expect to see over 300 cycles before noticing any change in the battery pack. (KM Note: This has been independently confirmed by several individuals.)

10.) The battery can be charged immediately after use

Next meeting on Monday March 14<sup>th</sup>. 2011  
@ 7:30 at the Legion Building.  
See you all there.  
Cliff.