



Cornwall Aero Modellers

NEWSLETTER

June 2014

Club Executive

President: Karl Kingston
Vice-president: Rick Besner
Secy/Treasurer: Roger Belanger
Field manager: Wade Flynn
Events: Jack Dikland & Merv Blizzard
News editor: Frank Reaume
Safety Officer: Taylor Pratt
CFI: Karl Kingston

Since the warm weather has arrived, the June 9th meeting was held at the clubhouse. There were 12 members present.

- The treasurer's report was adopted. It appears that club membership for this season will likely not exceed 45.
- A load of gravel has been delivered to the field. Some fill will be needed for the low areas near the trailer before the gravel can be spread.
- There are still a number of tasks to be performed prior to the August fun fly.
- The club float fly will take place on June 21
- Fun fly raffle tickets will be mailed to members, with the suggestion that members purchase their tickets at the fun fly to qualify for Scotiabank matching.

- The Massena r/c club has proposed that each club field a team to compete at their respective fun flies.
- The scale aerobatics committee of MAAC is challenging club members to improve their piloting skills by learning a few new maneuvers each week over the summer. Details of the challenge can be found at these links, taken from the Maac site:

http://maac.ca/docs/2014/sa_poster_final_june_3.pdf

http://maac.ca/docs/2014/sac_week_one.pdf

http://www.maac.ca/docs/2014/sac_week_two.pdf

Spring work day:

A good turnout of members on May 31 resulted in some major accomplishments.



A civic address (16727) for the club entrance



New fence along the west side of the field



Assembly and installation of new Polyjohn restroom

Aerial Photography:

People interested in recording video or still photos from their planes, helicopters, gliders, multirotors, etc. should consider the Mobius action camera. It works nearly as well as the more expensive GoPro, but at much less cost (about 75\$ US from Ebay dealers in Asia). The video quality is superb, as can be demonstrated by samples on YouTube. Your editor has one of these “action cameras” slung beneath his Blade 350QX quadcopter, making aerial video a piece of cake.



Features:

1080P HD Video & Audio Recording

1080P 30FPS or 720P 60FPS Video

Battery life of 80 Minutes

USB port for charging and video transfer

Takes up to 32 GB micro SD Card

Movie flip (180 deg. rotation)

Movie sound (off plus three volume levels)

Photo capture mode with various frame sizes

Time lapse photos with delays between images.

Movie/photo time stamp toggle

TV out (NTSC),

TV display ratio (4:3 or 16:9)

Free GUI program for setting the parameters via PC

Balance Connector AB Clip:

For people using Lipo batteries, it can sometimes be a chore to get a good grip on the balance connector, in order to remove it from a charger or from an extension cord. A snap-on plastic housing, which surrounds the connector, is marketed as the “AB clip”.

This clip is designed to protect the JST-XH type balance connector of the battery from damage, permitting easy and quick connection and disconnection. JST-XH connector is the most popular balance lead in the RC field.



They are relatively inexpensive (about \$1 for a package of five connectors) and are available in all sizes from 2S to 6S. They can be purchased from BuddyRC (www.buddyrc.com) in Columbus, Ohio. They are often available on e-bay as well.

NiMH Battery Tips:

Following Mike C.'s unfortunate experience with a brand-new NiMH pack in his Toledo Special, here are a few notes from No BS Batteries, a well-known supplier of r/c battery packs:

The term 'Formation Charging' describes the initial charge/discharge 'forming' process that fully activates the 'chemical engine' and balances the cells in a new pack. NiMH packs have a particular need for repetitive c/10 charge/cycle conditioning, a 'break-in' procedure needed to get them to full rated capacity. Both

NiMH and Nicad packs benefit from the process and the intent is to make sure that any new pack has been verified to be fully operational and that a 'start-up' capacity number is established for the pack before it's put into service. To 'Form' a new NiMH pack, do three c/10 16-24 hour charges followed by a 300 to 500 ma discharge routine between each charge. In other words: Do a slow charge at the c/10 charge rate, or as close to it as you can reasonably get with your equipment. Charge till the pack is warm, followed by a controlled discharge with a cyclers. Do it 3 times. New Nicad packs should get at least one slow charge followed by a 300 to 500ma discharge. Record the capacity numbers reported by your equipment for comparison cycling as the pack ages. Never check your brain at the door! As one respected modeler put it, "There's nothing more suspect than a new battery pack." Before you fly anybody's pack be certain it's fully operational and safe to fly. Most programmable charger/cyclers allow programming the discharge current and the low voltage cutoff level for the discharge. If using a 250-300ma discharge rate set the cutoff voltage value at 1.0v per cell. If using a 500ma discharge rate set it at .8v per cell. For formation charge/discharge routines and capacity checks on Rx and Tx packs we don't recommend using a discharge rate higher than 500ma (.5) and DON'T discharge under any circumstances below .8v per cell !! Packs with cell impedance ratings below 10 mohms CAN be discharged at 1.0 amps AFTER going through the formation process, BUT NOT BEFORE.