Wing Busters

November 28,2009 Volume 1, Issue 5

Oktoberfest Was Great!

This is coming a little bit late but we wanted to give a big ***Thank You*** to everyone who made the Oktoberfest another success. If you weren't there, you were in the minority and you missed a really good time. The only reason that something like the Oktoberfest comes off is because you are the one who make it happen – from bringing down food, or helping to set up, to just bringing something to fly!

Or, you could even go a bit overboard and bring down your personal gas grill and roast two chickens on site while everyone gets driven crazy with the smell of roasting poultry. Just ask Mark Scott. Thanks a lot, Mark.

Other things that 'make this happen' are when folks like Jeanine and Scott Rutherford volunteer to head up a Toy Donation program for children. The 'optional' landing fee was a toy to be donated to a local Toy Drive at Christmas time. Thanks again to Jeanine and Scott for heading this up!

This first annual Toy Drive netted over 60 gifts that are going to make some children's Christmas a little bit brighter. Take a moment to be proud of yourselves – give yourself an Atta-Boy!

Shed Roof team

We now have a cleaner, dryer shed for Field gear and mowers. On November 1 a crew of fellow Club members headed up by Bill Schwenzfeier converged on the shed to clean it out and put a tarp on the roof to keep things dry this Winter. About 10 bags of trash were tossed out and there's now more room inside for storage. A more permanent roofing fix will be added in the Spring.

This was able to happen in large part because Jim Lane donated a heavy duty pool tarp that was fitted over the roof to keep the rain and snow out over the next several wet months. You would think that this would be an easy job, but given the size and questionable structure of the roof and the upcoming winter winds, Bill had a job on his hands getting this installed, but he and the crew got it done.

Thanks to Bill, Tom Keegan, Kevin King, Mark Sampson, Wayne Penwell, Clem Bairstow, Bill Sorenson, and Chris Howie for your help. And a special thanks to Jim Lane for donating that heavy duty tarp.

Lost & Found Transmitter

For a while we were looking for the owner of a lost 2.4 GHz transmitter that had been left in the Tx impound. It's back in the hands of its owner thanks to Dave Whitney. Dave found that it belonged to Mr. Bob Hobart, a guest flyer from Hanson. Dave helped to get Bob and his Tx together. Thanks, Dave

I'd like to take this time to remind everyone to identify your Tx. Bob Hobart thought the Tx was safe and sound at home until he went to look for it about 3 weeks later. That goes to show how easy it could be to lose track of your Tx. Affix your info either to the Tx's outer case, or inside your battery cover. Just a thought.

YouTube Links

Mark Sarofeen sent along some YouTube links about model and full-scale aviation. Have a look at them. Note that all the URL's start with the prefix:
http://www.youtube.com/watch?v= Thanks, Mark!

http://www.youtube.com/watch?v=slwnO2YTelQ: RC Aviation, 1939-1960
http://www.youtube.com/watch?v=r6fD-F1xYWM : RC Aviation, pre WWII
http://www.youtube.com/watch?v=1VB8f-e17aU :RC Australian Aviation, pre WWII
http://www.youtube.com/watch?v=5aOJj4xP3us : Pre WWII Military Aviation.
http://www.youtube.com/watch?v=gLRLhZJsCh4 – Macchi M.C.72 seaplane racer

Dues Reminder

Yeah, I know. Christmas is coming. You don't need another reminder about spending more money, but this has to do with RC, so that takes out part of the sting. Please get your 2010 Dues mailed in as soon as possible with a copy of your 2010 AMA renewal. Put your <u>current email address</u> on the form (legibly, please). And, if your AMA registration is still in the mail, Jim will accept the online receipt as proof.

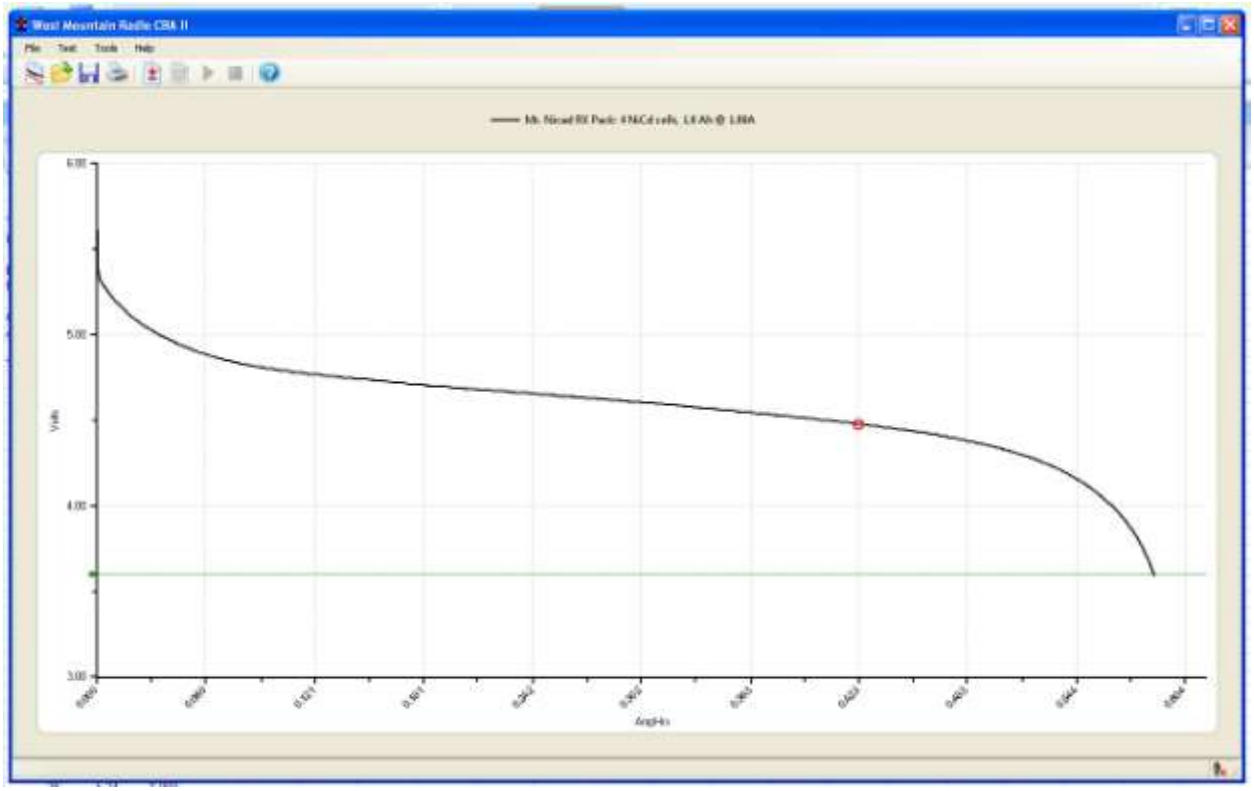
Mark Scott, Take II

Not only is Mark a great chef (See the Oktoberfest article above), he spent one day last week on his front end loader digging out part of the ditch that runs across the parking lot, then filled it with stone. The ditch funnels a lot of water away from the field during a thaw but is a pain in the neck to drive over to park near the fence. We'll see how this fares over the Winter and finish it in the Spring.

NiCad Battery questions

I've been involved in more than one discussion about receiver batteries over the past several weeks, and one question was "what voltage do you stop flying at?" I thought I knew the answer but decided to do a little experiment to double-check what I 'thought' I knew. The result is the graphic discharge curve of a typical receiver pack from a West Mountain Radio CBA (Computerized Battery Analyzer).

The test battery was a new, pre-cycled 4.8VDC 600 mAh pack. Discharge rate was set at 0.5A to imitate a typical load for your average .40 to .60 Sport plane. The discharge plot (below) pointed out some interesting things. I thought that some of you might like to see what the graph was showing.



You can see that the initial charge is well above 5.2V. Once the load is applied, it drops off pretty quickly before flattening out for the majority of the cycle. Toward the end of that discharge curve you will notice a red circle located at 4.5 VDC. At this point, the pack has lost over 420 mAh, or almost 75% of its capacity.

At that red dot, the pack is only 0.3 volts below its nominal voltage but take a close look at that steep slope to the right of the dot, where the pack is about to fall off the edge of the earth, capacity- and voltage-wise. If that battery pack could talk to you, it would be whispering "Be afraid. Be very, *Very* afraid!" This is where you should resist the temptation to go for that fatal 'one last flight'. The pack is losing both voltage and capacity very fast, and that rate is only going to accelerate.

The discharge curve for a 6V pack, like those recommended for some 2.4 GHz receivers, would have similar shape. The red dot would be at 5.6 to 5.7 VDC, right where you should stop flying that 6VDC pack. You'll save your plane and the issues that could result from an uncontrolled runaway plane heading for the pits.

The values given, (i.e., 4.5V and 5.6V) aren't absolute numbers, but they're close. The end result is still the same. If your packs are that low, they're not safe for flight. Stop flying when the pack is well short of this point.

One helpful tool for your flight box is an ESV (Expanded Scale Voltmeter) like the Hobbico Digital Voltmeter (TH Stock No. LXWW16) to check your Tx and Rx packs under load. Other brands/models will also do, the Hobbico is only a suggestion. With optional test leads (LXL339) the meter will also act as a DVM to test other DC voltages up to 20VDC. Make or buy charge leads that suit your particular radio. You don't need the CBA, that's strictly for hopeless gadgeteers [such as yours truly], but consider the ESV if you don't have one. If you're wondering how one of your packs is functioning and don't have an analyzer, I'll be happy to test it for you.

Club Jackets

Members have been asking about price and availability on Club jackets. Rob Lipsett advised us that the Club artwork was on file at Rockland Athletics at 320 Union Street. The store has a red awning and is on the left when coming up from Rt. 123.

RA is not promising anything for Christmas, but they are taking orders for a 'Wish List'. If you order one now to put under the tree, you might have to leave it up for a few extra days. They will try to accommodate you as best they can.

The artwork takes a long time to apply. It has over 56,000 stitches and takes 2-3 hours to run, per jacket. Naturally, they'd like to run several jackets together if they could to minimize setups. The 'Standard' WB jacket that most members have at the field has the artwork on the back and your name embroidered on the left sleeve. You can modify it if you want. The jacket is listed on Page 32 of the 2008 Rennoc catalog as "Style 621 with laydown collar and Black body with Blk/wht/red-B". Sizes are S. M. L, XL, XXL, and XXXL. You can see the catalog on line at http://www.rennoc.com/rennoc/id21.html. Here's the pricing:

- The jacket itself, sans embroidery, costs $35.
- You could supply your own outerwear provided that it's in good enough condition for embroidering.
- Embroidering the artwork on the back is $42.
- Name embroidered on the left sleeve, $4.

If you wish, you can customize the jacket. For example, I supplied my own jacket for RA to embroider. To that I added an American flag on the left sleeve ($4 - $6, they supply the flag), an AMA patch (I supplied it, they sewed it on for $3). I had a 'shield' put on the left front breast consisting of the Club patch (you supply) with name embroidered above it and AMA number embroidered below it, for $14. The recommendation is to stay with the "Standard Wingbusters Jacket".

Rob has tried to get an order up in the past but members just couldn't seem to get coordinated. He gave up in frustration because no one put in an order. If the members want, I'll be happy to coordinate an order but it will have to be cash up front. Or, if you prefer, you can head down to Rockland Athletics on your own and place your own order. As you can see at the Field, they do really nice work!

Winter Airplane Storage

Edited from the St. Paul Model Radio Controllers, Inc., St. Paul, Minnesota

Since the snow will be falling very soon, many AMA members may not be flying for quite some time. For those who don't intend to fly on skis, the following suggestions may help to preserve your model over the winter months and allow you to get back in operation quickly when the snow disappears next season.

Airplane

Be sure to give the entire airplane a thorough cleaning to remove all traces of exhaust residue. Check the covering to be sure that fuel is not creeping under the seams around the firewall and areas around the exhaust outlet, soaking the balsa. If so, make the repairs during the off season while you have some extra time. Check the fuselage and flying surfaces closely for cracks or other damage. Check the servo arms, control horns, clevises, pushrods, and/or control cables for excessive wear or damage.

The airplane can be stored indoors or outdoors in the garage; but the constant cold temperatures can be tough on batteries, but otherwise doesn't seem to cause any problems. The only problem that could occur would be if you stored it in, for example, a workshop that is heated occasionally and then allowed to cool down after use. This could result in damage to the engine because of condensation and probably to the balsa or covering material from temperature changes.

If you store the airplane on a wall, it should not be supported by the nose because this could damage the engine bearings. Support it by the tail structure or similar means. If the wing is removed, do not stand it on end. Support it similar to the way it is normally mounted on the fuselage. Do not leave the weight of the airplane resting on the tires, to prevent flat spots.

Engine

The major concern regarding engine storage is to remove all the glow fuel from the inside of the crankcase and cylinder to prevent rust formation on the bearings, crankshaft, etc. The best advice is to remove the engine from the airplane, remove the glow plug and backplate, and flush the inside out with a solvent such as kerosene.

While the backplate is off, check it over for signs of rust, bearing failure, etc. After cleaning, generously oil the bearings and the cylinder with lubricant such as one of the after-run oils or Marvel Mystery Oil. After it is well oiled, reinstall the backplate and plug and place it in a sealed plastic bag along with the mounting hardware until next season. [Hint: If you can find it, Marvel Mystery Oil *for Air Tools*, if you can find it, is one of the best ARO';s that you can use - Ed].

If you decide not to remove the engine, at least remove the glow plug, pour some oil [or ARO] into the carb, and spin the engine over clockwise to distribute the oil through the bearings. Add oil through the glow plug hole, turn the engine over slowly a few more times and reinstall the glow plug. Remove the propeller if it is made of wood. Put a plastic bag over the engine to keep dust and dirt out. Do the same for electric motors whose magnets will attract any metal particles floating around in the shop area.

Batteries

Ideally you should cycle the transmitter and receiver batteries and record their capacity for reference next season. It is best to leave them on a trickle charger to maintain a charge during the off season. If this is not practical, try to charge them at least every one to two months. When ready to fly again next spring, cycle the batteries first to be sure they have adequate capacity.

Transmitter/Receiver/Servos

Check over the servo wiring and connectors. Connectors that don't have gold-plated contacts are especially prone to corrosion. Replace any that show signs of corrosion on the connectors. Check the output shaft for looseness.

Check the receiver antenna for damage. If there are any doubts, get it fixed or replaced. Extend the transmitter antenna and clean it with alcohol. Collapse the antenna and repeat the cleaning several times. There are contact fingers inside each antenna section that may become coated with oil, preventing the proper contact between sections, greatly reducing the transmitting range.

Fuel

If you have fuel left, be sure it is capped tightly and store it in a cool place out of sunlight. Some recommend against storing fuel in very cold temperatures, but I have not had any problems doing this in the past.

Starter Battery

If you have an electric starter hookup, remove the 12-volt lead acid battery, clean the terminals and check the electrolyte level if it's a 'wet' cell. Add water if necessary. This battery must be charged if stored outdoors during the winter. A monthly charging will keep the battery from freezing and also extend its life.

Miscellaneous

If you have a handful of used rubber bands as I do, throw them out and plan to buy a new box next season. Check your supply of spare glow plugs, props, etc., and make up a parts list to replace those used during the summer. If, during your inspection, you run into problems or there is something you're not sure about, call another club member for advice or suggestions. Make the repairs during the winter and save the warm weather for flying!✈

Courtesy: RCM Magazine
Circa December 1966

RealFlight G5 Upgrade

RealFlight G5 hit the streets in late October. If you bought G4.5 recently, you can upgrade to G5 for cheap $$. If you bought G4.5 after October 1, you can upgrade for free. If you bought it on or after August 1 and before Oct 1, the upgraded is $29.99. You need to provide proof of purchase (RFG4.5 installation guide), original sales receipt, serial number, and a few other things. The upgrade still uses your old Interlink USB controller.

If you purchased G3, G3.5, G4, or G4.5 a while ago, you can also buy the upgrade at TH for $79.99. And if you are starting from scratch, it will cost you $199.95. Head up to www.Realflight.com and click on the "Upgrade to G5" link on the left.

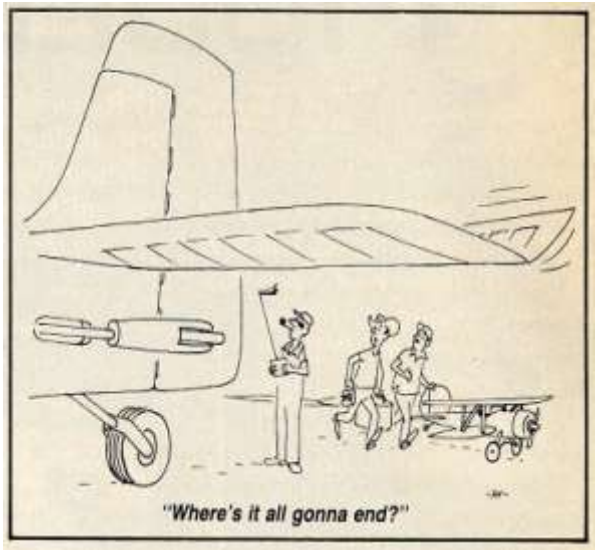
There are five free Add-On files you can download, and six Expansion Packs available for purchase but make sure that your version of RealFlight will work with the Expansion Pack that you want to buy.

RealFlight G5 takes a solid PC to run. Before you put this on your Christmas list, read the specs and *make sure that your PC and video card are up to the task* so that you won't be disappointed.

Winter Parking is in effect

Our new members may not understand what this is all about, so an explanation is in order. During the Winter, the parking lot is basically a swamp. A 'flag-fence' has been put up to block it off to keep folks from getting stuck and digging ruts. Most vehicles won't get out without a tow. For the Winter, you'll have to park about 150 feet away from the Pits and lug your gear down, so pack lightly. You can see ruts already because of the recent rains that we've seen.

We ask that everyone respect this for everyone at the Field. Go easy on yourself and pack your planes accordingly so that you don't have too much to lug back and forth to the pits. Thanks!



Courtesy: RCM Magazine, December 1996

Wingbusters Website:	http://www.wingbusters.org
AMA Website	http://www.modelaircraft.org
AMA District I website	http://www.amadistrict-i.org
Newsletter comments:	n1edm(at)comcast.net

Until next time,
Bob

Wingbusters Newsletter
94 Florence St
Brockton, MA 02301

To: