

# Mountaineer R/C Flying Club

AMA Charter #659

December 2002



Barry Thaxton's new Telemaster

## Club Dues & Xmas Dinner

It is that time again. As discussed at the last meeting, there will be some changes this year with how newsletter cut off dates and gate code changes will occur. Last year was a mess trying to keep up with who paid in regards to getting the newsletter out. We had people paying as late as April. I apologize for having to make this change, but it is simply too time consuming and costly to do it any other way. **This year your dues are due in to Dave by January 31st.** People not paying by this date will not receive a membership card containing the new gate code and will not receive a February newsletter. The gate code will be changed about a week after the February newsletter is published. As voted on earlier this year, there will be no \$5.00 discount this year. The current rates are as follows:

- \$40.00 Regular Member
- \$5.00 Each additional family member  
(max \$50.00 total per family)
- \$10.00 Newsletter only
- \$10.00 Associate Member

Anyone paying after January 31st, who wants a membership card can make a \$5.00 donation to the club and receive it with the next newsletter.

Dues can be hand delivered to Dave at the Xmas dinner or mailed to:

Mountaineer R/C Flying Club  
c/o David Gaines  
114 Heritage Drive  
St. Albans, WV 25177

The Christmas dinner will be held at Texas Steakhouse & Saloon at the South Ridge Shopping Center on Thursday, December 19th at 6:30 PM. This is not a club funded event. You get to pay for what you eat and drink. If you are going to attend, please contact Dave or Kim Gaines so they can notify the restaurant of the head count. Dave's number and email address is on the back page.

*Barry*

## *To PCM or not to PCM, that is the question...*

Seems like this question keeps popping up around the field with little answers. There seems to be some distinction between FM and PCM. There isn't any. Typical FM radios as we like to think of them are PPM (Pulse Proportional Modulation). PCM (Pulse Coded Modulation) is also FM. So if they are both FM, what

*(...continued on page 2)*

Next Meeting and Christmas Dinner  
Thursday, December 19th, 6:30 PM  
Texas Steakhouse at  
South Ridge Shopping Center

- Notify Dave or Kim Gaines if you plan to attend -

## *November 26th Meeting Notes....*

In attendance: Bob Yates, Bob Rowe, Dave Gaines, Steve Craddock, Stan Clark, Rex Spurlock, Darrien and Micheal Gullion, Denny Bostic, Jerry Workman and Barry Thaxton

Election of the officers was short and sweet. Since Denny, Bob and Dave were the only nominees, they won.

Treasury reports we currently have \$451.00 with 7 people having paid their dues. \$18.51 was spent on concrete and \$1060.00 on the new mower.

The new mower is a Murray 20hp, 46" cut with hydrostatic drive. Thanks to Dave for finding a great deal. The mower is currently being stored at Bob Yates' house.

Two reservations have been made for the Xmas dinner. One at Texas Steakhouse and one at the Charhouse. The dates were not available. The vote was for Texas Steakhouse on whatever date it falls on.

Trophies were discussed. It had been mentioned last year that plaques would be given to the recipients to keep. I was agree not to do this and keep things as they are. Dave suggested giving certificates with the trophy presentation. It was agreed to continue the gift certificates as well.

The Bag A Plane contest was briefly discussed and Barry will be making a presentation at the dinner.

The JR/mower deal came up again and got kicked around a while.

Barry made a motion to make January 31st the cutoff date for member dues. Anyone paying after that time will not get a membership card or a newsletter in Feb. Everyone agreed.

Field boundaries were discussed after a recent incident of flying over Mr. Shaffer's house in the left corner of the field. Mr. Shaffer informed us that people have been parking at the gate and coming in the field and flying.

Dave mentioned the possibility of getting a second mower in the \$500 range. I was agree that if a deal like that was found we would take it.

Dave also brought up setting standards for plane size and noise levels. Jerry said he might have a decimeter.

It was generally decided not to make any rule changes, but coming up with some noise level data may be helpful.

Bob Yates moved to adjourn.

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### *(PCM continued....)*

is the difference and which is better?

Which one is better is a matter of personal preference. If you look at the data, there are pros and cons for each. There are claims for better resolution and response from one to the next, but if you use a computer transmitter the playing field is pretty much level.

PPM receivers are prone to visible interference. The common cry "I'm getting hit!" pretty much means it is a PPM receiver. PPM has been around for a long time and is proven. The theory is pretty simple. You move a stick and the transmitter sends a pulse to the receiver, the receiver processes it and moves a servo. If you get interference, the servos just move by themselves.

PCM is much more immune to interference visually. PCM flyers never see the intermittent hit. When a PCM receiver receives invalid data, it simply re-sends it's last good command to the servos. This all happens in a second or less. With PCM receivers you can also program in failsafes for signal loss, such as bringing the throttle back to idle. Folks flying gas engines usually prefer PCM because of the inherent RF problems. The really down side to PCM other than cost, is if you are having a range problem. With a range issue, you may never see the symptoms as you would with PPM. Your plane could merely fly out of range, lock on it's last command assuming no failsafe and fly away.

There are tons of information on this subject available and this is just a very brief overview. If you are really interested, spend some time researching it. Draw your own conclusions. Personally, for most of my planes, PPM is all that I need. Happy landings! ✈



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## Product Warning

A few issues back I talked about digital servos and Hitec's new programmer. Recent experiences by myself have caused me to re-think things. I equipped my new Telemaster with all Hitec 5625 digital servos with the exception of the throttle servo. Yea, I know it was way overkill, but I wanted to test them.



Bob Rowe gave it its maiden flight. During the flight he said he thought he was getting hit or a servo was glitching. After he landed the rudder locked hard over to the left. Convinced it was the servo I replaced it with a 5645 digital servo. I took the next flight the following day and the rudder locked in flight. I managed to get it down.

Next I concluded a bad receiver. I replaced the new Hitec receiver with a Futaba I had been flying in my Magic. As I taxied for this flight my left flap went nuts. Now I was really confused. I started looking on the Internet for any known problems. Sure enough, there are lots of reported incidents with 5625s and other Hitec digital servos, most being fatal to the aircraft.

Hitec tech support denies any problems, but I've been following the message boards on the net and clearly there is a problem. There are some tech notes about servos manufactured before March of this year. If you are using these servos, you might want to research the subject before you have an incident.

## Product Reviews

Looking for a brain teaser? Buy the new Triton charger from Great Planes. This is supposed to be the do it all charger/cycler with support for NiCd, NiMH, Lithium Ion and Lead Acid. I'm sure it will do it all if I could only figure out how.

I bought this unit not so much for my flight pack NiCds, but for some of the electric planes and copters I'm currently playing with. I've burned up way too many batteries with those quick timer type chargers that usually

come with RTF planes like the Merlin.

Another attraction is its ability to handle lead-acid. Which means that the next time I want to charge a flightbox battery, I won't have to go dig through a box looking for the right wall wort. It will be interesting to see if I can fast charge a flightbox battery without destroying it. I'll report on that later.

After working with this unit for about an hour, my first impression is that it is not designed for the person who just wants to charge and cycle flight packs and is definitely not for someone who isn't willing to spend a lot of time learning about batteries. The unit has an elaborate menuing system that takes some time to figure out. The



unit is extremely flexible, maybe too flexible for most. It has memory for 10 battery configurations and well as memory for up to

10 cycles. An optional temperature monitoring sensor is available separately. It does have an automatic charge feature, but with limitations. The manual basically sucks and it doesn't give you any baselines for charging batteries. So if you are clueless like I was about charge and discharge rates, you are going to have to do some research.

Guess my Accu-Cycle Plus and Sirius Pro chargers have spoiled me. They are just about idiot proof. The Triton will happily let you destroy a battery pack. Found that out first hand. When you have to ask yourself "what is that smell?" it is too late.

Street price on this unit is about \$130, but they don't tell you about the hidden costs. Since this is a DC unit, you will have to buy a power supply to use AC. Now for the kicker. The unit requires 12V DC at 13 AMPS! Go price a power supply at Radio Shack and it is going to run you around a 100 bucks. Probably cheaper to go buy an automotive battery and charge it occasionally. So at \$230 total, it isn't that attractive.

I nothing else, I can fast charge my cell phone batteries and other household items.

## Club Contacts

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## Around the Field

Good flying days have been few and far between in the last month. Cold and windy. A couple of new planes showed up, Zach Peters's new U Can Do and I finally got my new Telemaster out.

The Bag A Plane contest ended in a tie which means I'll have to make a judgement call on that one. The cutoff date was November 30th. Too bad, because Bob Rowe and I had the first crash of the new contest season. My twin OV-10 went down hard. Photos will be in next month's newsletter. Since it was my plane and Bob was flying it, I'm awarding each of us a 1/2 point for the 2003 season.

It has been a great year and looking forward to next year..

Happy Holidays!

*Barry*



*Barry's Magic captured in flight  
by Bob Rowe*



**THE FOUNTAIN HOBBY CENTER**  
200 W. Washinaton Street  
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344-1441



*Zach Peters's new U Can Do 3D*



*Barry Thaxton's new Telemaster II 40,  
powered by an OS 70 Surpass II*

