

# Mountaineer R/C Flying Club

AMA Charter #659



June 2002

Bob Rowe's dressed up Somethin Extra ARF

## Club News

Well, here we are again with the newsletter getting out late again. This past month I lost my stepfather and had to bring my mom home from FL. She has Alzheimers so we were forced to place her down in Teays Valley at an assisted living facility. To be honest, my heart really hasn't been into this newsletter but hopefully things will get better and I can do a better job in the future.

The last meeting was some what interesting. The by-laws were eventually voted in. During the meeting tempers got a little hot, but I believe it all worked out. Lets don't forget that this is a club for our enjoyment, we aren't running a multimillion dollar operation here. It is just a hobby and meant to be fun.

The roof on the shelter is now repaired. We were originally dealing with one piece of missing roofing, but the strong winds last month striped off most of the rest of the roofing. I had a buddy of mine do the work. Dave bought some angle pieces to put over the end of the shelter where the wind is tearing it off. We should see about getting it installed before the new roof gets ripped off.

The deck on the mower has been repaired thanks to Dave and Bob Yates I think. Didn't hear who actually did the work, but my guess is that is was them.

**Barry**

## Electric Reviews

I've recently had a chance to play with a few new electric toys I've recently acquired. The new Megatech X-EC Diversion R/C Anywhere and the Ikarus ECO Piccolo helicopter.

A few months ago, Megatech was running adds in the magazines about their new Diversion. I immediately had Cindy at Fountain Hobbies put one on backorder for me. It finally arrived this week. From the description I was hoping that it was something I could tool around the office with. After a couple of flights, I realized that wasn't going to happen.



It is a nice package. It is ready to fly and the transmitter on 27Mhz doubles as a field charger for the flight pack. The Diversion is basically a 2 channel plane. The twin motors are on or off. The stick on the transmitter adjusts the engines speed to determine left or right turns. Attitude is controlled by speed. It is small enough to leave in the trunk of your car. With it's whopping 19" wingspan it doesn't take up much room.

*(...continued on page 2)*



**Next Meeting - Sunday, June 23rd,  
2:00PM at the field.**

## *Meeting Notes from May 19th...*

The meeting started as scheduled. Present were: Bob Yates, Dave & John Gaines, Bob Rowe, Stan Clark, John Clark, Bob Daley, Rex Spurlock, John Dixon, Chunky Cottle, John Goad, Denny Bostic and Barry Thaxton.

Dave gave us the financial report (which I didn't take detailed notes of) stating we currently had \$1371.58 in the bank.

Flying time on Sunday was debated and voted on. Starting flying time on Sundays will now be only after 12:00.

Changing the dues was the next topic on the floor. Previously it had been suggested that we drop the \$5 per discount for paying early. John Dixon suggested a penalty for not paying dues on time. After some debate it was decided and voted on to eliminate the \$5 discount for paying early with no other changes in the dues. Simply put, the dues are \$40 per year and are due by the beginning of each fiscal year (Jan. 1). Prorating for new members is still in effect.

Specific wording of the bylaws is where the meeting turned next.

The first issue was over the elections and the wording in Article 4 concerning secret ballots. After debate it was decided to modify the wording to say that all elections, expulsions, etc., must be by secret ballot.

The next issue concerned definitions of novice flyer, beginning flyer, etc. Things got a little out of hand during this discussion, but after the dust settled it was agreed that a novice flyer will be defined as a person who has not soloed.

A vote was taken and the bylaws with the above changes were accepted. Dave and I will get the finalized version together and the document will be available in the members section of the website.

Discussion once again turned to what to do about JR and getting the Gravelly we bought. Tentative actions were agreed on.

Rowe moved to adjourn.

## *(Electric Reviews continued...)*

The flight characteristics are fairly sluggish and it is a little too fast for flying in the average family room. However, I sort of consider it a challenge to fly. Controlling the speed and direction takes a little patience. I guess I would say you influence it more than fly it.

Charge times for the flight pack are fortunately quick. About 2 to 3 minutes. Flight time is about 5 minutes.

While Megatech states that it is an indoor flyer I think it is better suited to flying it sitting on your deck sipping a cold beer on a hot and calm summers day. Yes, it can be flown with one hand as not to interfere with your beer hand.

The Ikarus ECO Piccolo is a whole other story. If you have ever entertained the idea of flying helicopters, you have to get one of these. I bought mine used off ebay because I figured I'd destroy it and didn't want to waste the time building the kit only to smash it into the fireplace.

I can't say enough about this little machine. It is a joy to play with. I practiced a little using the Real Flight simulator before taking it up for its first flight. With its 20" diameter rotor blades, it is perfect for flying in a large family room. I would recommend putting up all the breakables before flying it through the house.

The coffee table has become its helipad and the end tables are alternate landing sites. I've found it to be very nimble as well as docile when you want it to be. Flight time on fully charged batteries is about 8 minutes, however I'm using previously used battery packs so I don't know their condition.

It uses a 4 channel system. If you have an old Futaba Skysport 4 lying around from your trainer airplane, it is all you need. The downside to this machine is the cost. If you buy it all new, you'll end up with a substantial investment. ✕



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What is realistic speed? It is not a 1/5<sup>th</sup> scale model flying at 1/5<sup>th</sup> of the speed of the full-size aircraft!

The **AMA Contest Regulations Manual** says: "The size and the speed of the maneuvers should reflect the capabilities of the aircraft modeled." The **US Scale Masters Competition Guide** says: "The bank angles and G-loading are consistent with the full-size aircraft." I have had judges (both AMA and Scale Masters) tell me I'm flying too fast, but they had a hard time telling what was correct.

**Kent Walters**, one of the old masters and currently the Scale masters Technical Director has graciously given me permission to use some of his published info in this newsletter column. He puts it this way:

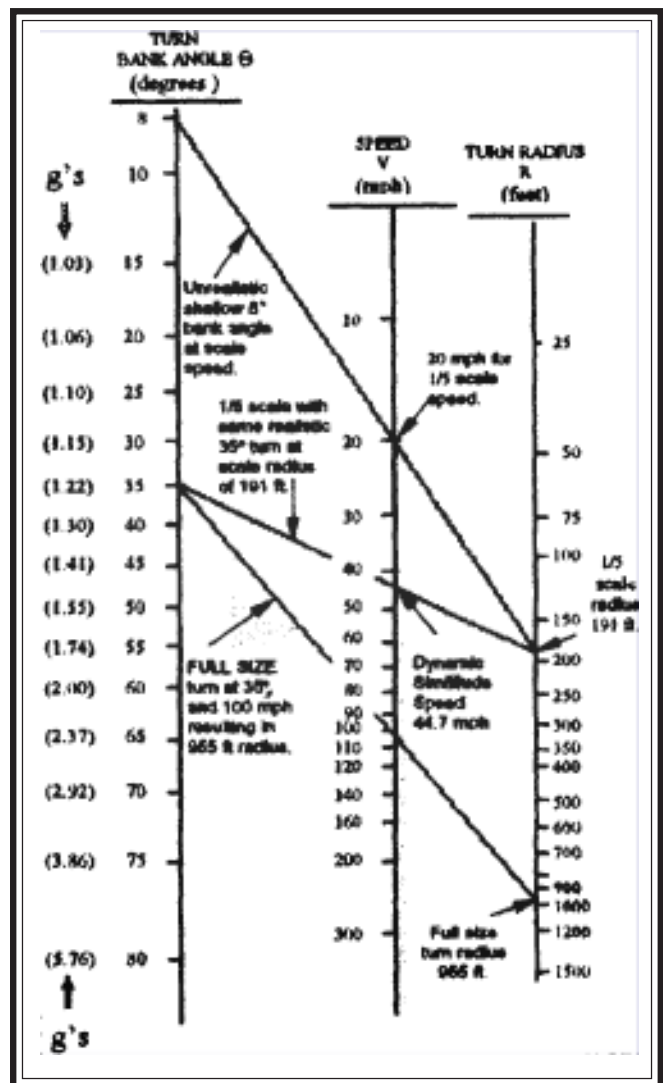
*Flying speed provides both scale-size maneuvers along with prototypical bank angle turns compared to the full size aircraft; this is known as "Maneuver Realism Speed." This is also known as Dynamic Similitude Speed (DSS) that has been used by NASA (the space agency, not the AMA SIG) to predict flight response with scale-sized models. Also it has been used in zoology for animal motion studies including dinosaurs as portrayed in the filming of Jurassic Park!*

Kent goes on to say: **Realism can be described by "If it looks right, it is right for speed as well."** "When comparing model performance to full-size performance. DSS results in the speed required for an identical prototypical bank angle through a scale radius turn maneuver. Bank angle, speed, and turn radius for the prototype influence one another in a coordinated turn.. For example: If the **full-size** aircraft traveling at 100 mph turns at a **35 degree bank angle**, it results in a **1000 foot radius turn**. A **1/5<sup>th</sup> scale** model turning at the same **35 degree bank** and a **DSS of 45 mph** results in a **1/5<sup>th</sup> scale 200 foot radius**." This may also be demonstrated when a line is drawn on the **nomograph** from **35 degrees** to a **200 foot turn radius** where it is found to intersect **speed at 45 mph**. This particular speed to generate these realistic features is the DSS.

Did you follow that? Make the **SIZE** scale-like and the **BANK ANGLE** the same as the full-size aircraft to achieve Realism. If slower scale speed were possible without stalling, it would also conflict with these other realistic flight features. For example scale size turns would look very shallow or almost flat by comparison to full size. Many other maneuver realism features would also be impossible to achieve.

*"DSS provides: improved stability in all axis, prototypical maneuver selection, prototypical g-load appearance, prototypical flight angle of attack, prototypical attitude or bank angle in turns, etc. These 'mechanics-in-motion qualities' also are little controlled by model weight. Scale-speed is a conflicting oddity and does not support the many other visible overall-flight-realism features during scale model flight in our fixed-gravity environment."*

This works with fun-scale or semi-scale models that are just flown every day at the field; it will make all flight look more realistic. The attached graph shows how to apply this to any scale-like aircraft. Next time, some thoughts on other maneuvers, other than a 360 turn, that depend on DSS for realism.



Stan

## Club Contacts

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## Around the Field

It has been a slow month or so at the field. Not a lot of activity, but I haven't been spending as much time there either.

We added some new members. Tom and Tommy Mallory and Pat Howley. The Mallorys are previous members of our club and Pat has been a member at the Hillbillies in the past.

I did witness Chunky working on his Avistar at the field recently, at present rate he should have it ready by next season (sorry Chunky but I had to get a dig in somewhere).

John Clark joined the Bag a Plane club this month after the wing came off of his Advance 40 in flight.



*Rowe and Yates dueling with their Shoestrings*



## THE FOUNTAIN HOBBY CENTER

200 W. Washinaton Street  
Charleston, WV 25302

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## Schedule of Events

August 10&11th - Bob Evans 14th Annual Fly-In  
and Scale Contest  
*Rio Grande, OH*  
August 17&18th - Wally's Squadron's 11th  
Annual RC Fly-in  
*Summersville, WV*  
September 28th - Club Picnic



*John Dixon's new great big Fly Baby*



*Bob Rowe's new Sukhoi*