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At the Meeting

The meeting was called to order after the Christmas Party at 8:52 PM. There were 46 members and prospective members present. The minutes were accepted as corrected. The Treasurer's report was accepted as presented. The Vice President made the role call of prospective members. Geoffrey N. Metzger attended his first meeting and was welcomed to the club. Tony Massini, Barry Prather, and Frank Thompson attended their second meeting. Brian Newton, Emanuel Martin, and Jerry Jones attended their third meeting and were welcomed as full voting members. The President held the annual drawing for Model of the Month, and Bob Lloyd won the prize of \$25.

Brian Newton asked the question of how to get jackets. Bob Kline explained how and where. Tom Voorhis stated that there will be a work party to get the holes fixed on the entry road on the following Saturday. Tom also stated that Jack Klohocker is selling all his planes and equipment. I announced that two planes would be up for auction. These planes are complete and you should be able to charge and fly. These planes were built by Al Koenig and donated by his daughter after his death. The Kaos is complete & ready to go, the other plane is a Tracer, with only three flights on it. The OS 70 four stroke had been pulled out, but is available with the plane. The President asked Bob Lanard to run the raffles. Bob decided because of the amount, to run two 50/50s. Brian Beer won the first, and Dave Morgan the second. Andre Askew won an Extra, Allen Blank won a Super Tiger .40 and Gary McMichen won a gallon of fuel with a loose top. With all the business taken care of, the President wished everyone Happy Holidays and adjourned the meeting at 9:17 PM **Ray McCloy**

Editors note. This will be Ray's last presentation of the business minutes, as he has passed the

torch on to Paul Gross. Ray deserves a large debt of gratitude from the club members for his dedication to this job over many years. Thanks Ray from all of us.

At the Field

I am going to start off this month's "At the Field" with an email that I got from Mike McMichen. Hi Tom, Rich Onorato and I went flying today and were wondering where everyone else was! The wind wasn't too bad, mostly right down the runway. He flew his AT-6 and I flew my Sig purple Extra. Barry Prather and Tony Massimi came out and Barry managed to crash Tony's trainer type airplane on takeoff, (he said the wind got under it and flipped it) and broke the fuse into about three big pieces and ejected the engine. (Major repair job) Rich and I got in about three flights each when he decided it was too cold to continue and we all agreed and packed up and went home. Sorry you couldn't make it but I thought you might like the update.

Like it, I love it! I appreciate all of the help I can get. If anyone witnesses something I missed, drop me an email, or call me and keep everyone updated. These four guys make me feel like a sissy flying in that weather. But from now on, I am not going to let Paul talk me out of going. :-)

Here is the information, as promised last month, on why we start our engines with the plane facing away from the field. When we were flying at Sharpies sand pit, the ground in the pit area was sand, and not just sand, but powdery sand. (I guess you could say our pit was a sand pit. :-)) If we were to start our engines facing the field, the dirt would blow directly into our vehicles, flight boxes, other planes, or anything else behind us. Two other good reasons were: if your plane's motor sped up and the plane got away from you, it could possibly fly into the legs of someone standing on the flight line who would be

concentrating on flying his plane and not be able to see about what's going on behind him. This would probably not only cause him some loss of blood, but also the loss of his airplane. If your plane did get away, it would only cause damage to you or your equipment., and hey, it was your fault anyway!

To counter any loss of blood on your part, we request that you use some kind of restraint while starting your engines, either a tether or flight stand. (I like to put my transmitter right in front of the motor on the right side of the plane, this way if it does get away from me, the spinning propeller will hit the throttle stick knocking it down, thus causing the engine to stop, or at least slow down.) :-) If you are buying this, I have a bridge in Brooklyn I am trying to sell.

Saturday, December the 18th, was the day for our roadwork party, and there was a good turnout. The weather was sunny, not too cold, and no wind, a good day for working and flying. We managed to get all of the repairs to the road that were planned, and we also got in some flying. The club owes a large debt of gratitude to the following members for all of their work. Gus Tahenakos, Dave Morgan, Manny Martin, Jon and Bob Hawkins, Marty Brodack, Karl Kozuh, and Bob Bradshaw. These boys moved a lot of dirt! Thanks again guys for all of your help.

Since there was little to no wind blowing, it was a good day for electrics, and I flew a couple of my bluecor planes. It was great not having the wind blowing them all over the sky. I had made a couple of adjustments to my big blue and yellow E3D plane, and I wanted to see how it was going to fly. I took off, and was real happy with the way the plane was performing, but after doing a couple of loops and rolls, and I was setting up to do some aerobatics when disaster struck.

The motor made a loud noise similar to what it would make if the electronic break came on. This should not have happened, since I had it defeated, and the plane nosed over and went straight in. The plane was pretty much totaled. After retrieving the remains, I checked the controls, and nothing worked. I then checked the battery, and the battery was totally shot. At this point I am guessing, but I think one of the cells developed an internal short, and that was that.

It just dawned on me that writing the newsletter has a major drawback. When something bad happens to one of my planes, my wife Jeanne finds out about it because she is kind enough to proof read this

newsletter before it goes out. Whereas, you guys can sneak the remains in the back door, and no one is the wiser. Anyone want to take over?

This next bit of news was sent to me by Dave Morgan. He claims the he and his nephew Dave went to the field on the 28th. I say claims, because there is no way I was going to be there to witness it, not with the temperature hovering below freezing. Brave souls that they were, they both got in a few flights before their fingers froze up. Dave thinks there should be a hand warmer in the truck, other than the heater. I guess he never heard of the exhaust pipe. ☺ Later on, they were joined by the Prez, Bob Bradshaw, who also got some flying in, and Bob Lanard who got some running in. Thanks for the report Dave.

Unless you have been in a coma, you know that New Years Day broke the high temperature record for this time of year, in this area. There is always a contest among the members to see who can be the first to take off on New Years day, and this year was not going to be the exception. As you should already know, the start time for flying except for Sunday is 10:00 AM, so I arrived at the field around 9:20 so as not to miss the excitement.

Bob Bradshaw, Susan Joo, Steve Blazer, Bob Spies, and Paul Gross were already there ahead of me, with the two Bobs and Steve the only ones who were going to fly. I hadn't really intended on entering the contest, but when I saw who the contestants were, how could I resist. ☺ Paul was the official starter, as well as the video camera man, and when the time got down to a few minutes, Bob, Steve, and I put our planes out on the starting line. Bob Spies was having motor trouble.

At the sound of the gun, figuratively speaking of course, we gunned our engines and tried to be the first off of the ground. Tried to get off of the ground is the key phrase here. Steve's plane veered to the left and then to the right a couple of times before doing a wing over into the weeds, on the right of the field, and breaking off its tail section! Bob's plane did something similar on the left side of the field before flipping over onto its back.

I wasn't expecting my plane to get off the ground in a very short distance, but when I pulled back on the stick it shot straight up like it had rocket assist. When it was obvious that I had won, with very little effort, I announced, "You guys are rank amateurs". This caught Susan just right, and she couldn't

stop laughing. While I was flying around with the sky all to my self, to add insult to injury, Bob Spies got his engine started, took off, and came in second. ☺

Steve Blazer stated that he thought he had taken off first, but a review of the tape showed that I was clearly the winner. Next year we have to have a rule that states that in order to win, you have to at least make one complete circle of the field before you crash, or you can't lay claim to the prize. What was the prize? Being able to call the other contestants rank amateurs, of course. ☺ After regaining control, Susan said that I had so much power, I blew one plane off to the right, and the other off to the left. You gotta love those four strokes. :-)

If you weren't there on Saturday you missed the best day of the year. It was not only warm, but there was little or no wind blowing. The turnout was incredible. I counted twenty-four vehicles, and some had more than one person. There were also some spectators who came out to see the fun. Because there was no wind, there were a lot of blue foamy planes being flown, and Paul Gross started up Barry Newton's turbo jet.

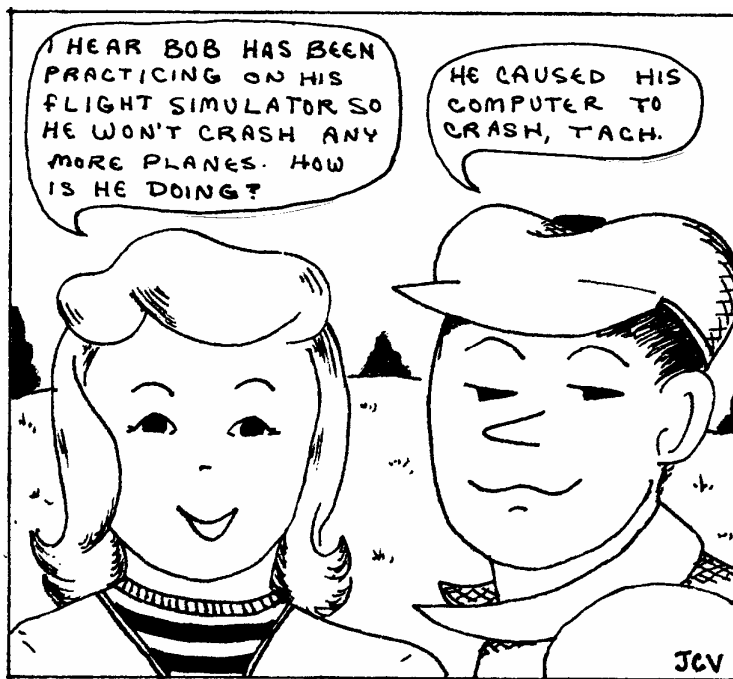
With such a big turn out, there had to be a few crashes. I may have the events a little out of order, but here goes anyway. Andre Askew was flying his King Cobra, when something catastrophic occurred, and the Cobra tried to return to its den. I could be wrong, but it looked like a total loss to me. Tough luck Andre. The next victim was Steve Althouse, who also had something bad go wrong while he was flying his very nice looking Hobbico Extra 300 and it also looks like a total loss. Some days are like that.

Mike McMichen was flying Tony Severino's new Great Planes U-Can-Do-3D, but it couldn't. (Do 3D that is.) What it could do was to break off one side of the vertical stabilizer. With the master at the controls, this is not too bad a thing, and Mike was able to bring the plane in for a very nice landing. Tony was even able to find the tail piece out in the field, and with a little CA and some Duct tape, it will be up and flying in no time.

Bob Bradshaw had his foam 1/2A Mig fanjet up in the air, for what I think was its third flight of the day. Its too bad Bob didn't stop at two flights, because the plane developed radio trouble and went straight down into the farmer's field, with no survivors. It hit the ground so hard the ducted fan broke up, and the nosepiece was six inches under ground.

I mentioned to Bob that he was going to have to get another one of these planes, and he said that he already had.

On a better note, Susan Joo had a new Christmas present, a nice electric trainer, which she was flying around like a pro. If she keeps this up she will be soloing very soon. If you are thinking of getting an electric airplane, this one flies very well. Roy Garrett showed up at the field, after a long absence due to sickness, and he had a new Stinson type of plane with him. Roy was having some engine troubles, due to some plastic residue in the fuel tank, and was unable to get the motor running properly so that he could fly. Bob Lloyd told me that Roy brought it out on Tuesday, after cleaning out the fuel tank, and it flew just fine. Very good Roy!



For Sale

Bob Lloyd has a Blue and White clipped wing Goldberg Anniversary Cub that is .40 size, and he wants only \$100.00 for it. Don't let this bargain get away, call Bob at 856-845-8586, and tell him Tom sent you.

Miscellaneous

This trick uses MonoKote to create some interesting and practical wheel covers. The idea is to cover the outside of the wheel and wrap the material over the edge and into the bead of the rim. This creates an extremely lightweight and strong wheel cover and prevents dirt and debris from entering the wheel. MonoKote is also available in several colors, including chrome and neon colors that will add an attractive look to your plane.

If you are looking for an easy way of transferring patterns for parts, make a photo copy of the difficult part, then take your sealing iron and transfer the image by ironing it on. Photocopies transfer their black toner powder onto paper by ironing it on and melting it into the grain of the paper. If it can be ironed on, it can be ironed off. Set your iron to a medium temperature, and iron the image onto your wood. You may need to experiment with different settings based on the type of wood and paper you are using.

Here is an idea that will prevent flat spots on your airplane tires when storing it for a long time. Find two small blocks of wood that are slightly taller than your airplane tire, and drill a hole through the block large enough for your wheel's axle to fit through. When you're ready to store your plane, slide the storage blocks on the axle next to the wheel. Since the blocks are taller than your airplane wheels, the weight of the plane is resting on the block, not your wheels.

As promised last month, here is some information that might be of use if you are thinking of or are already flying electric airplanes. One of the main problems everyone has is trying to figure out what motor and which speed control to use on that new plane. If you bought a commercially produced plane, either kit or ARF, the manufacturer will usually recommend what motor will go with that plane. Two problems arise here. The first is that you may already have a motor, from another plane, that you would like to use in the new plane but are not sure if it would work. The second problem is that you may want to replace the motor that came with the airplane because it is too weak for your type of flying. (A lot of planes come with a motor as part of the package, and sometimes these motors are just barely adequate.)

There are literally hundreds of electric airplanes on the market now, but most of them are of the Park flyer variety, and the choice of larger planes is still rather small. So, as of right now many people are con-

verting wet motor powered planes to electric. A good example of this is Ray McCloy's converted Tiger Moth. You may also have a plane that has been just taking up space, and you think would be a good plane to convert to electric.

Brushless motors in themselves are not that expensive, but when you add in the brushless speed control, they almost double in price. You don't want to buy an engine that will not suit your purpose, so the question still remains, which one to buy.

There is no sure way to know which motor is going to be the best for any particular plane, but if you follow the formula that I will give you here, you will still be in the ballpark. The formula only consists of two knowns: weight, and power. The weight is the weight of the plane in pounds, and the power is the power that your motor will deliver in watts. For a mild flying trainer or a very light old-timer type airplane, you will need 50 watts of power for each pound of plane. i.e., a four-pound airplane will need 200 watts of power that can be delivered from the motor. If your plane is aerobic, you will need 75 watts of power for each pound, and if you want to go vertical, 100 watts per pound.

How do you figure out how many watts of power a particular motor will put out? Most motors specify what power they will deliver in their advertisement, or spec sheet, or at least they will tell you how many amps the motor can handle. If you multiply the amps (current) times the voltage you are using with your battery, you will get the power in watts. $P(\text{power}) = E(\text{volts}) \times I(\text{current})$.

This formula can also help you to decide what size battery you will want to use with your motor.

If you have a motor which can handle 10 amps, and you are running it with a small propeller and a 5-volt battery, you may only be drawing 5 amps, and thereby not getting all of the power out of the motor that it was designed for. What does this tell you? It tells you that you can probably go to a much larger propeller, and maybe a 10-volt battery, and make that plane really move out.

Once you decide what motor you need, make sure that the speed control will handle the current required to run the motor. If your motor can handle 10 amps, get a controller that will deliver 15, 18, or 20 amps. Most controllers can handle 50% increase in current drain for a few seconds, but why push it? This way, the controller will stay cool, and you will not have to worry about burning out an expensive speed controller.

Speed controllers get bigger as they become able to handle more current, but the added weight is almost insignificant.

If you have access to a computer, you can use a free program which will figure out a lot of parameters for you such as what engine will go with which plane, which motor, which propeller, and which battery. It will even tell you what the estimated flight time will be with a single charge. Go to www.flydma.com, and click on (P-Calc).

To get the most out of your motor, you must have good batteries. By good I mean batteries that are able to deliver the current needed by the motor to be most efficient. Look for batteries that will deliver at least 8C. This is 8 times the rating of the battery. In other words, a battery that has a capacity rating of say 1500 mili amps, would be able to deliver 12000 mili amps (or 12 amps) to the motor. If your battery can't deliver the needed current, the voltage will drop considerably and the motor will not perform as expected. This is not a problem however if you are using a small motor that only draws 3 to 5 amps.

I hear a lot of complaining about the cost of getting into electric, and I don't get it. If you added up the cost of your flight battery, flight box, flight panel, starter motor, glow starter, etc., etc., you won't think electrics are expensive anymore. And that's not even considering fuel, engine, and plane. You weren't worried about expense when you bought that ¼ sized Extra 300 with the gas engine stuck on the front of it, and the eight \$50 servos. This is a hobby, and hobbies are expensive. Enjoy life while you still can.

If you don't know which plane you would like, go to Tower Hobbies, Hobby-Lobby, Hobby People, or www.ezonemag.com. Ezonemag has reviews of new planes every day, and lots of other interesting electric stuff. Click on "Discussions, then pick out the plane or helli you are interested in. Don't miss out on the fun!

While we are on the subject of electric airplanes, as you probably have noticed, the majority of them are made of foam. This makes the following tip, which Bill Hurlock sent me about some foam glue that he likes, very useful. "Tom, the name of the foam glue I was telling you about is called **Hold the Foam** made by Beacon Adhesives. It is available at A. C. Moore, the craft store. The label says it has Instant Grab, is repositionable, and has water clean up. This one is for Styrofoam and there is another one made by the same company for other types of foam that is like a contact cement where you

coat both surfaces and let it dry then press them together." Thanks Bill for that information.

This last tip is from Ray McCloy. It seems that Ray has figured out a way to save on postage. What he does is this: after addressing his envelope, let's use a Christmas card as an example, he then just throws it in the Post office mail box. Here is how he saves. If he doesn't put a stamp on it, he has saved thirty seven cents. I know what you are saying, the post office won't deliver a letter without postage, and will return it to the sender. Well, Ray has that figured out too! He doesn't put a return address on the envelope either. This way if the post office wants to collect their thirty seven cents, they have to deliver the card or letter to the only address they have, the person it was addressed to. They will even add a little sticker of their own to it, a postage due sticker.

Is this a good idea or what? Leave it to Ray to come up with this idea.

Thanks goes to Bob Lloyd for sharing this information with us.

Coming Attractions

This month's business meeting will be held on January 11th at 08:00 pm in the Williamstown American Legion Hall. The bull meeting will be held on January 25th, also at 08:00 pm. Paul Gross promised that he would have some of his own personal videos to show us. Don't get too excited, they are airplane videos. Still, you won't want to miss it.

That's it for this month, I hope you all have a very happy new year, and will be able to make it to the field a lot more, and that you get in a lot of crash free flying. **(WHAT AM I SAYING?)**

Tom Voorhis