

# Horsefeathers!



Official Newsletter of the Billings Flying Mustangs

Volume 27 Number 10

October 2000

## Coming Events

### Next Meeting:

Monday, October 2, 2000  
7:30 P.M.  
828 Main St.

### Billings Events

October 7: Fun Fly Club  
Field Contact: Roxie Klaus,  
245-8208

### Wyoming Events

**June 5 through 10, 2001:**  
IMAA Rally of the Giants.  
Hosted by the Gillette R/C  
club! Contact Noland Bartz,  
307-682-5136 for more  
information.

### Club Officers for 2000

President ..... Rick Koehn  
Vice President .... Dennis Rollins  
Secretary ..... Steve Hergett  
Treasurer ..... Bob Moore

### Reminder:

Club Officer elections are coming soon. It is time to think about who you wish to lead our club next year. Maybe run for office your self.



## Presidents Letter

Yes, I actually made time to have a spot in our newsletter. Last month just finding the time to write the minutes for Steve was a real chore. I'm actually starting this before the previous month's newsletter is in our hands in hopes that I can actually finish it in time for the next one. I must apologize because I know most of you wait with your breath held for my column.

In the evenings I have been doing some reading and have found some interesting things. I was reading a Kit Plane magazine and found an article about a man that built a home-built, full-scale airplane from RC plans. A week or so later I was reading Custom Planes and found an article about the uses of CA glues in home-built, full-scale wooden aircraft. It seems that our hobby/sport is being taken seriously. There was even an article about a company making radial engines for small home-built aircraft. I wonder where they got that idea. I'll just bet many of us would have never guessed that we (the RC crowd) were the ones on the cutting edge.

I have been out to the flying field a few times, but only briefly. This means that I did not bring a plane to fly. There has been a lot of activity when I've been out there and that's good to see. Vergil even offered to let me fly one of his planes or buddy-box me. I may need the buddy cord. Thanks for the offer Vergil. After seeing some flying and some very nice new airplanes, I got the bug again. I have been working on my airplanes late at night, but still can't seem to set aside time to fly.

I know by the time our newsletter comes out the Sheridan fly-in will be over. This is usually one great fly-in. I hope many of you made it. The people down there really make a person feel welcome and there is a bunch of interesting airplanes. I sure missed not being able to go this year.

Unless you want to hear about work that's about all I can think of for now. Keep on flying and using our terrific flying site.

Rick



## Meeting Minutes

September 11, 2000

The meeting was called to order by Vice President Dennis Rollins at 7:30 PM. There were 13 members present. The minutes from the previous meeting were read and approved. Bob Moore gave the Treasurer's report. Bob had some final figures for the Combat meet income. The report was approved.

### Committee reports:

**Club Fun Fly:** Roxie Klaus is the CD for the event this year. It will be held on October 7. Show up early, around 8:00 to test fly your planes. The event will start at 10:00. The hot-dog class and the rookie/sandbagger class will be flown. Roxie would like to have a lunch served also. More details will be available at the next meeting.

**Land Acquisition:** Vergil Jones has been searching for a location in the Fly Creek area approximately 20 miles east of Billings.

**Old Business:** Dennis Rollins made a motion to split the profit 60/40 with the 4-H club. Vergil Jones seconded the motion. Motion passed. The 4-H exchange has been a great help to the Flying Mustangs and we do appreciate their efforts. Leland will present the check to the 4-H group.

**New Business:** Steve Hergett will send in the required information to the RCHTA. Our Club has qualified to apply for prize money made available by RCHTA. A news spot on KTVQ and a nice color photograph submitted by Jim Woodcock in the Billings Gazette promoted the RC hobby. This could earn us up to \$300.

Dick moved to adjourn the meeting. Dennis Winchell seconded the motion. Meeting was adjourned at 8:17 PM.

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### Reminder:

Elections are coming soon. Start thinking about who you want leading our club for 2001. Nominations begin at the November meeting and elections will be during the January meeting.

## Leland's Ramblin's Junk You Can Skip If You're busy



Another month. I forgot that September is always the short month because the meeting is one week late due to the holiday. I hope I made the deadline for Roxie. I guess if you aren't reading this, I didn't?

I got my Spectra glider running and have been having fun with it. I built the Great Planes kit and then thought I missed a good deal when I saw the Hanger 9 Aspire ARF. Ron Beck got the ARF and after comparing the two, I like the kit better. They look a lot alike from a distance but there are quite a few differences.

Here is my review of the kit and the plane. Building went very well with the instructions being clear and essentially correct. Even with my poor building skills I got a plane that looks a lot like the picture on the box. Not a bad start.

I modified the kit to make it easier to travel with and I would recommend my modification for almost every airplane built. I made the Horizontal stabilizer (stab) into a bolt on unit instead of glue down. It was fairly simple after I pondered it for a long time. I took the platform on the rear of the fuse and cut it down 1/8 inch. I made sure the tops of the two sides remained level in this process. I then put a 2 inch wide by chord of the stab piece of 1/8 lite ply and glued this down to the top of the fuse. I drilled and fastened in blind nuts to this platform and placed light weight triangle stock under it to reinforce it. I then took my stock stab and lined it up correctly and drilled holes to match the blind nuts. I hardened the area around the holes with thin CA and dug up 4 screws and it was done. Two advantages came of this configuration 1. The Stab is removable by taking out the 4 screws and popping the elevator clevis and 2. when I broke the stab (see later), it was a cinch to replace. The minor extra weight did no harm as I had to add additional tail weight to balance anyway.

Covering and finishing went easily. Mounting the motor is an integral part of the construction and there is

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*Leland continued from page 2 ...*

ample room. The kit provides the motor, an on off switch for motor control and an arm switch along with a fuse and fuse holder. I installed all this stock and used Futaba mini servos to run the motor on/off switch and the rudder and elevator. I used a standard receiver and a 250 milliamp rx battery. The completed airplane with a 1500 ma motor battery and ready to fly came in at 44 ounces. The box said it should be 47. I was happy with this.

Test flights began with some motor off tosses to check balance and throws. All seemed ready although I had too much throw on all controls but knew I could finesse the controls and manage. I finally got up the courage to launch with the motor but did it by throwing the launch without the motor, getting both hands on the transmitter and then turning on the motor. The bird flew and it was an exciting event to watch it go. So nice and quiet. My first electric flight! After gaining good altitude, I pulled the throttle back and was dead stick. Strangely enough, I could push the throttle back up and restart the engine. Never did that with Glow fuel.

The airplane climbed adequately, glided pretty darn good and even caught some lift now and then. I would glide around (hence the name glider no doubt) and then as it got low, I would turn on the motor and climb back up. There seemed to be enough battery to do this three times and then the fourth time, it just didn't have enough poop to climb but would cruise around a while longer, slowly losing its will to fly.

I didn't like the motor on/off trick because of the torque direction change. When the motor went full on, the plane pulled up rapidly, when it went off the nose dropped. This is all right in the air at altitude but does not help anything when trying to use a little motor to extend a landing. I vowed to research motor controls. More later.

Problems with the kit - The horizontal stab is made up in the cut little sticks and glue them together method. This makes for a light stab but with the soft wood in this kit it also made a fragile stab. On about the third flight, the landing in the grass caused the stab to bend badly. The next flight, broke it. I went to Central and bought a piece of 3/16 balsa and using the old stab as a template, drew a new one, cut it out, sanded the edges and covered it. I took a piece of pre formed elevator wood and made the elevator. It took about one tenth the time as the stick method, was a hundred times stronger and

weighed 1 ounce more. As I had added one and a half ounces of lead on the tail for balance, there was no trade off. I probably won't ever build up one of those stick things again. This slab stab has taken a lot landings since and shows no ill effects.

On a trip to Portland last week, I went over to Tammies Hobbies and looked for the speed control that Central didn't stock. They had a very nice light unit from Great Planes and I bought it. I also bought a Graupner folding prop. One of the beauties of the speed control is it's battery eliminator circuit. Installing this little half ounce circuit eliminated 5 ounces. I didn't need the throttle servo, the throttle on off switch, the arming switch or the receiver battery. Not bad. When I went out to fly it with the motor controller on there I was back to feeling like a pilot. I could actually slow the engine and land easily right where I wanted. I could ease the power on and off and make much better flight. The loss of the weight in the nose from the parts left out let me take the lead off the tail so I made out on both ends.

I have been going to Castle Rock Park and High Sierra Park in the heights to fly it because I like the nice soft grass to land on. I have caught a few tiny thermals but am looking forward to getting into good glider weather and conditions - just as soon as I learn what those conditions look like.

Till next time See ya out flyin'



## Roxie's Rantings

Our last scheduled event for this year is fast approaching. I have had several people ask about the fun fly on October 7. I am still working on events and scoring as I type this but the following is a general idea of what I have in mind.

First it is a pot luck lunch. This means that your entry fee is something to eat. I am planning to bring a pot of chili. Everyone should bring what they want to drink ... alcohol not acceptable until flying is over. You should also bring something that others can eat. Hot dogs / Polish and buns would be a good idea for someone( but not everyone). Hopefully we can finalize the more important food items at the next meeting which is October 2.

As far as events are concerned, I foresee something like this:

### Rookie/Sandbagger:

Taxi through traffic cones: + points for quickest times, cones missed or hit must be repeated.

Take-off, loop, land: + points for quick times and landing within zone, missed loop or landing must be repeated.

Slow pass: + points for time to pass from one pylon to the next without use of flaps or other lift increasing devices.

### Hot Dog Class:

Touch and go: + points for the most touch and goes in one minute, bonus points for touching within the zone

Climb and glide with loops: + points for number of complete loops performed after climbing to a timed altitude.

Mini-pattern: Take off, 1 roll, Immelman turn, Hammerhead, Loop, then land, + points for quickest times.

These are only guides and may be changed before the contest. Other events will most likely be added. The exact rules are still being worked on but will be available to all pilots at the beginning of the event.

Come out and enjoy the day. I plan to start the event at 9:30 to give every one time to test fly and make adjustments to their equipment.

Remember the key words are Fun and Food.

Roxie

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## Your opinion please

I have found an (possible) auxiliary flying site that is only 25 minutes from Lockwood. Easy access off the freeway. South gentle slope to the land - shallow well would keep a grass runway green. Power line on road bordering land. Vergil

## Volunteers needed

Why? I have requested space in the Hobby Building at the next Yellowstone county fair. The display will have to be manned all week to protect our models or explain our hobby or sign up new members. Vergil

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**Billings Flying Mustangs**  
**PO Box 22406**  
**Billings, MT 59107**

**First Class**

**TO:**