



the R/C AEROGRAM

Volume 6 Issue 2 Pages 8 AMA #530 District 11 www.eugenerc.com February 2010

Club Mailing Address: Eugene R/C Aeronauts, PO Box 26344, Eugene, OR. 97402

DUES TIME 2010 is here, PLEASE pay your AMA and ERCA dues ASAP!

ERCA News and Information

Next CLUB Meeting – February 23, 2010, 7:00 pm at Papas Pizza, 11th and Chambers. If you have a building project, bring it with you for "Show and Tell".

At the January Meeting – There were 28 members and guests at the meeting. There are still plenty of tickets available for the fundraiser raffle.

President Khoi Tran - Well guys, the winter is in full swing and flying days are pretty limited. Hope you guys have cool winter projects to share at the club's Show and Tell each month. I was out of town on vacation last month and could not make it to the meeting. Brad filled in and got the club's agenda taken care of nicely.

Flying field - A member was injured at the field, fortunately he was not alone and help was called. If the runway is wet, please walk

with caution. Signs have been posted as to who to call and location of the field.

Pylon Racing - Marty Wittman is the point of contact for organizing pylon racing at the field. If you are interested in becoming involved he wants to hear from you.

Electric guru's column - If you have answers to this months questions PLEASE pass that info along.

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WINTER FLYING RULES

During November, December, January, February Saturday, Sunday & Wednesday

**NO FLYING before 12:00 Noon.
DO NOT ARRIVE BEFORE NOON**

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Meeting minutes are ONLINE at: <http://eugenerc.com/meetings.html>

2010 Meeting Dates

EWEB downtown Eugene:

February 23rd 7:00 pm.
at Papas Pizza, 11th and Chambers
March 23rd 7:00 pm.
April 27th 7:00 pm.
May 25th 7:00 pm.

At the flying field 7:00 pm.

June 22nd, July 27th, August 24th
EWEB downtown Eugene:
September 28th 7:00 pm.
October 26th 7:00 pm.
November 23rd 7:00 p

Check out the menu selection for the [Pylon Racing](#) on our web site.

For the Sake of Safety

--Contributed by Patrick Willis at the expense of the Field Marshal--

Two incidents come to mind for this month's newsletter. Both happened on January 31st. And, then there's the AFV anecdote...

First of all, if you haven't heard yet, we had a member break a leg, (no, not figuratively, this was serious) while retrieving his airplane from the slick, muddy runway. He leaned over to pick up his plane and one of the wheels that fell off it, and his lower leg snapped. Upon approaching him, it was clear that his leg was broken by the odd angle that his toes were pointing compared to the rest of his leg. I could get graphic while describing this, but I'll leave it at that for the sake of those that have weak stomachs. We called an ambulance and, after about 8-10 minutes, medics arrived. In the meantime, we kept our friend as comfortable as possible by putting a mat down under him to help keep him from getting any wetter or colder. He showed some signs of shock due to the nature of the injury and pain, but his friends helped to keep him calm by talking him through it.

Please use EXTRA CAUTION on that runway!! This was the most serious injury that I'm aware of in the club's history. I don't think there is anything the club could have done to prevent this incident, but we should all be extra careful during the rainy seasons due to the hazard that the runway becomes.

Another issue that arose was that I did not know our address. In fact, I remember awhile back that it was suggested that we have the address for our property posted somewhere, maybe a large painted sign outside. In the meantime, Marty wrote down the GPS coordinates for the field and put them on the bulletin board in the clubhouse. For this incident, 9-1-1 was able to use cellular phone triangulation to pinpoint my exact location, (although my directions, I think, were better...just saying).

Second of all, some battery advice: Most transmitters have 8 cell, 9.6V NiCd or NiMh batteries. I know of two radios, the Spektrum

DX6i and DX5e that use fewer cells than that. Other than those, please check your transmitter batteries before each flight either with a volt meter or with the onboard meter/digital display. You should be looking for 9.6V or more. If it goes below that, it's going to drop quickly. I was flying someone else's plane, (no, I'm not going to say whose because I would not want Marty to feel embarrassed) when the transmitter decided to stop transmitting. After a few minutes of flying, the radio beeped a few times and I thought the timer was telling me that the fuel would be running low. So, I called out that I was landing. While I was on final and over the runway, flared, waiting for touchdown, the transmitter made a beeping noise that sounded like a cardio-flatline. I moved the sticks and got no response from the plane. I yelled out that I had no control just before the plane made a little cartwheel just a little north of the runway. The damage was a torn out wing and wing bolt plate, bent landing gear, and a little bit of cosmetic damage. Overall not too bad.

The voltmeter on the transmitter read 6.9 volts. The owner said that before the flight the batteries had checked out okay so perhaps the pack was no longer good.

Did anyone catch the 2nd place video on America's Funniest Videos about a month ago? It was a video of three R/C airplane enthusiasts giving an interview and discussing AMA's liability insurance when a plane suddenly screams into view straight down into the ground behind them. Maybe not the best PR piece for the hobby, but it was amusing nonetheless.

If you have safety concerns, please let me know and we can discuss them in future newsletters. If there is interest, we can make it a monthly column, assuming our Field Marshal doesn't feel like I'm stepping on his toes.

-Pat Willis

Presidents Corner

Well guys, the winter is in full swing and flying days are pretty limited. Hope you guys have cool winter projects to share at the club's Show and Tell each month. I was out of town on vacation last month and could not make it to the meeting. Brad filled in and got the club's agenda taken care of nicely.

Here's my recap: the club approved the 2010 Budget Proposal as presented. The pit area canopy project got approved again with the change in roof design and material. The only issue is that Mike Burgess expects the canopy cover to be taken down during the geese season, dec to feb. I hope Mike might change his mind in the future and let us leave it on for rain cover if fowl season goes south. Brad will engage Frank to stake out and prep the ground for canopy installation next month. Please volunteer to help them with the installation.

We also had a brief discussion about the power project for the field. It appears

that we can get a generator on loan so we can set up power strips for both DC and AC power needs. I will donate \$200 of gift certificates from Home Depot to help with start up costs. We will monitor power use over next few months. At mid year, we will discuss usage and review the budget and see if we can expense for a more permanent power generator vs solar panels installation. I'm confident that members will find it valuable to have electricity at the field.

Regarding the Futaba radio raffle, my understanding is that we will try to sell off the remaining tickets at the pizza meeting so we can proceed with the raffle event. If we have a good turn out, each member will only have to buy a couple tickets to meet the quota. Please attend and show your support. You just might win this nice Futaba 10C 2.4GHz radio.

See you there.

Khoi Tran

Projects Feb 17

Here are a couple pictures of my winter project, a scratch built Shoestring Racer.

Chick Foster



Chick Foster photos

WITH THE WEEKDAY WARRIOR

February 2010

Okay. This month was even worse than last. I have not seen anybody flying on the weekdays at all. I did miss a couple of weeks by being down in Florida, but since my return on 1/27, there has been no activity when I was at the field. I went up there twice, both times on days when it had begun to turn pretty bright by the house here in Northeast Eugene. On one occasion, the field was thoroughly shrouded in fog and on the other in a steady rain. Nobody else was there - and with good reason!

I have only even heard about one happening and that was the demise of Wayne Wahr mund's U-Can-Do. He tells me that the battery pack became unplugged and into the mud went the aeroplane. That new Saito .82, the apple of Wayne's eye, was located a good foot down under the sod. Upon retrieval, the Saito was meticulously cleaned and lubricated before there was an attempt made to turn the shaft. I am happy to report that it was run on Chuck Jenkins's test stand and seems none the worse for the ordeal. A new U-Can-Do is in the works and, yes, Wayne says that the holes in the cowl for needle, exhaust, et al. will be round. Good grief! somebody read last month's column.

If you are wondering how your columnist's R/C project is going, (You were wondering, weren't you?) I am now in the process of planking the front half of the Cavalier's fuselage from the wing trailing edge forward. Planking involves laying on narrow strips of wood, all glued to the formers, stringers, and each other, until the area is completely covered. In this case, the strips are 1/8 x 1/4 and the rea-son for the process is the compound curves that wider pieces of sheet wood could not handle. Some carving and a whole lot of sanding ensues, but the smoothly curved fuselage makes it worthwhile. Aft of the wing, the fuselage shape is kept by fourteen stringers covered, in this case, with silk.

Down in Florida, I came across some interesting flying machines. At Pensacola, the Navy has on display a Brewster SB2A-4, a WWII dive bomber. Never heard of it, you say? Not too surprising; the Brewster Buccaneer was a sorry flop. Brewster was an ill-run company, so much so that President Roosevelt directed the Navy, in 1943, to take it over and straighten it out. The failure of the Buccaneer, however, was not all Brewster's fault. The Navy, in its time-honored tradition, kept changing its mind and the company's attempts to bring an already marginal design up to spec just made things worse. The SB2A's fuel was in a number of small tanks.

The addition self-sealing material cut the fuel load in half and the solution was a big new tank between the cockpits. This made the ship tail-heavy and the engine was moved forward 10" to compensate. Other difficulties followed and, in the end, the Buccaneers saw service only as trainers and in some test programs, such as harrier tests and as radar targets. The British took delivery of 205 "Bermudas" and scrapped most shortly after delivery. All that having been said, the Buccaneer is a handsome aircraft and that extended nose would make balancing a model easier. I'm looking at it as a possible Rubber Scale ship. A long nose is appreciated, because it gets more of the motor up ahead of the CG.

At Polk City, Kermitt Weeks had acquired a Sikorsky S-39B. No, not a helicopter. Before the choppers, Sikorsky built flying boats, many of them amphibians. Pan Am flew Sikorskys before the Martins and Boeings came along. The S-39 was the single-engined amphibian and the one Weeks has is painted to resemble the S-39 that Martin and Osa Johnson flew over 60,000 miles in their explorations in Africa, taking off and landing on rivers and lakes. The wings and tail are silver, with the usual International Orange panel on the top of the wing, but the hull is

WITH THE WEEKDAY WARRIORS continued

painted like a giraffe. Years ago, I had this all schemed out as a Freeflight Scale ship, but the loss of my test field put paid to that idea. Mine was going to have the markings of the plane used by the New York American newspaper in the early 30s. I had good paint-and-markings details from a sheet that the American put out for modelers of the time.

You may remember the Gee Bee R-2 replica that Steve Wolf built in Creswell just about 19 years ago. That is now at Polk City along with replicas of the Model 7 and Model

Y built by others. I missed the tour of the restoration shop - had the time wrong -- so I don't know how their P-35A and L-1 are coming along.

Allegedly, there is some nice weather in the offing, so perhaps there will be a column of real news next month. For now, alas, this is it. I do have the pictures from Florida though and will bring them to the meeting, if you promise not to get tomato sauce on them.

C O'D.

FOR SALE - Visit EugeneRC.com for listings with full descriptions and pictures

=====
Mike Duncan 541-510-7054

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Building Table for Sale - Solid Oak Table-was originally a high end drafting table
Size: 72 x 45. Two drawers (one long one, and one smaller one) Excellent shape, top always protected with piece of sheet rock \$200.00 **Field Box** - with detachable power station Starter, glow plug igniter, and battery included \$40 **Great Planes Extra 300** - 58" wingspan Engine: Super Tiger 90 Servos: Futaba S3004 This is the last plane I built and has never been flown. Engine has been broken in only. This is normally a 40-50 size kit, so the plane will be very fast. \$200.00
Carl Goldberg Anniversary Edition Piper Cubs - 76" Wingspan, Engine: Saito Golden Knight 80 , -Stroke These planes are rough but very fixable. There are two kits included. Servos: None \$150.00 **Piper Cub Floats** - New in box \$25.00 **Tower Hobbies 40** trainer - Engine: Tower Hobbies 46 Servos: Futaba S3004 Only flown once \$110 **OS Max 61** - 2-Stroke with pitts style muffler \$75.00 **OS 40 FP** - 2-Stroke \$40.00
Royal 40 - 2-Stroke New in box \$50.00

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Aaron Bailey 541-514-4162

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1/3 scale laser 200 - Famed needs covering, 96" span, 12" root, 78" from rudder to cowl wheels and pants only, no motor or radio gear. \$300 obo

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Mark 541-588-9884

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Staudacher GS-300 95" - 8.5hp ZDZ80 - 26x10 Carbon, Carbon pants, Gear, Spinner, tail wheel, wing tube. Sell \$3000 Invested 2500

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Doug D. 541-999-1844 (Florence)

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TWIST 40 / EVO .46 OFFERS W/WO Engine.
Reactor 41" Electric Make Offers.

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Jim Emerson emspunkin@msn.com

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Have some Engines For Sale OS FS61 4 cycle W/perry pump excellent, **OS MAX VR 77** D/F engine new in box, HB 40-pdp, Fox 59, K&B 40 (2), **OS MAX 61**, Olson ignition engine complete, Tornado (C/L) engine, Fox 19, Olson 23 ignition engine (2) mostly complete, **OS 45** no carb, **Olson 29** ignition engine, McCoy 29, DENYMITE (1930) complete great condition. Will sell the lot for \$250.00 in Eugene

=====
John Risbrough risbrough@worldnet.att.net 541-767-9883 (Cottage Grove)

=====
Sorpio "Miss Moravia" w/ speed 480 brushed motor and 20 amp speed control. Plane has less than 10 flights and is in like new condition. This is a well built and is a nice slow flier. Paid over \$100.00 new. Asking \$65.00 or best offer.

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Aaron Bailey duneman450@yahoo.com

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Great Planes Super Sportster 40 ARF - with newer Magnum 46 never been crashed no radio gear. \$125.00 **Dont know what it is** but is new with new asp 108, 72" span 59" long no radio gear \$170.00

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Mark Cross 541-741-0180
mchartmann@yahoo.com

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Stinson Reliant - Unbuilt in box, includes extra interior detail kit. \$180, **Hobby Lobby Gee Bee model y Sportster** - ARF 48 in span electric, includes brushless motor,

both brand new in box. \$80, **Carl Goldberg Falcon 56** - Unbuilt in box. \$40, **Heli Max AXE CPV3** helicopter With original box, includes extra battery and charger. \$80, **Kyosho Hein (Tony)** Latest version ARF, brand new in box. \$140

=====
Dan 541-729 8764

=====
OS fx .46 good running motor with a Macs pipe.

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KHOI kmttranmd@hotmail.com

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I'm selling some of my small warbirds. Examples include: **Hangar 9 P40**, **KMP Sea Fury**, **Patriot XL**. They are 60-120 size birds. They can be sold as airframe only or RTF with engines, radio, retracts.

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Mark @ 541-688-0026

=====
WASP electric trainer, with or without ailerons - foam wing and tail feathers very simple construction. \$30

=====
Gar Van Blericom 541-385-9424 cell 541-285-8000 gvanblericom@yahoo.com

=====
I'm selling my last back-up **Funtana 90** that is in virtually mint condition. Owed by the super reliable YS FZ 1.10S engine with a Dave Brown Vortech spinner. Has a brand new JR 6volt 1650mah Nickel Metal pack, Voltwatch installed, (2) Hitech Digital HS5474HB's on the Elevator, Hitech High Torque HS645 metal gear on the rudder, (2) High Torque S9350 metal gears on the Ailerons, and a micro on the throttle. Have almost \$1,000 in building this plane like this. If someone is willing/first to give me \$600, then I will part with one of my babies

FOR SALE - Visit EugeneRC.com for listings with full descriptions and pictures

Projects

Bonzo Update....02-16-2010

The fus is together, the wing is built. I have to add the tips and cut the ailerons in. When I was building the wing I also installed the servo mounts after sheeting one side. Witch takes some planning. Well, not enough planning on my part because when I went to sheet the other side. The servo mounts were on the wrong side!!! I don't like the servos on the top of the wings !! (GRIN) Oh well. No matter how long you been building ,you still make mistakes!!!...



OK. On to the fun stuff.. I am finding out that the plain has to be built all at one time and all in one piece. You say,, How can that be??? Well sense the planes are for a U-Control of a very

small size (28in wing) and the wing is glued to the fus and then the tail is glued and then you build the turtle deck and canopy and then build and install the cowl cheeks (The cowl cheeks also hold down the front of the wing) and then build the front deck along with the cowling (top and bottom) making the plane a one piece airplane. All of witch are built over the wing. Geeee , That would be easy to do, But this wing in 62in and has to come off ,however, It still has to be built in one piece. I do have most of the pieces cut out and fitted. I just haven't figured out yet how this is guna work ? I fit all the pieces on the fus (you got to love pins) ,stand back and look. Then try to figure out were to start? I think I will start with the horizontal and the vertical and build forward. That would be ,Tail feathers, turtle deck, canopy, front deck and cowl cheeks and cowling. In that order. Well, I'm not ready for that yet!!!! I can't get the wing off with

the cowl cheeks on so I got some head scratching to do there !!!! I may have to redesign the front wing mounts !!! Anybody starting to think ARF ,yet??

The one big problem I am having now is what engine do I put in this thing? I have a Sato 91 that I thought would work but as I build and see how big Bonzo is going to be I don't think the 91 will do it!!!. So that brings up other problems. Like firewall to back plate distance. Do I move the firewall back or do I make the cowling longer!! I have measured that distance on my other planes that have gas engines and it varies from 5 1/2 to 6 1/2 inch. Bonzo's plans from firewall to back plate in only 4 1/2inch.

Yep!!! One of many problem of scratch building. Weight and balance has to figure in here also.



I am beginning to see why there are less and less scratch builders out here. However I do enjoy what it take to get one of these in the air.

To Be Continued..... Marty

See the FULL reports and pictures on the EugeneRC.com web site Projects page.

Electric guru Q / A

Here is a **QUESTION** - Some answers for next months newsletter would be nice.

Hello fellow aeronauts,

After an eight year hiatus, I am amazed and somewhat bewildered at the improvements in electric flight technology. For me, Lipo battery ratings seemed a bit misleading when I was trying to pick the correct pack for an airframe.

I searched many websites looking for a simple rule of thumb for selecting a pack of which FMA Direct proved to be very enlightening . They seem to have a lot of information for an electrical novice like myself and I felt it was worth sharing. In paraphrasing ,voltage aside, the mAh rating is only meaningful for a constant rate of drain like a low current flashlight or a transmitter. Meaning, my new 950mAh Lipo Battery has a discharge rate of 0.950Amps for one hour (950 x .001 to convert to Amps). This would be fantastic if the flashlight scenario could power my plane. But as we all know, the throttle thumb is dynamic and tends to move making a constant discharge rates impractical.

As I studied the foil incased cells, I noticed that the manufacture had added a new bonus number that would surely fill me with confidence.

25C. What the heck is "C"? Once again back the web to discover the heart of the mystery. As it happens, "C" means multiple of discharge rate. (I never did find why "c" was used, I guess it made the industry happy.) This meant that my new lipo could produce a theoretical current of $0.950 \times 25 = 23.75$ amps. Okay, now at least I know that can burn

up my 18AMP ESC without to much effort.

A couple of things for my rule of thumb immediately came to mind , one get a bigger ESC or never pull more than 18amps through my existing one, and two, the motor /propeller combination shouldn't exceed 23.75 amps at full power.

A fun fact, which I stumbled upon, is a battery phenomenon called cell depression. This occurs when the energy is sucked out of a battery pack so fast that it can not chemically react fast enough to keep the voltage up to its rating. The motor rpm slows down. Simply said, if my airplane has a brisk take off and runs out of power after few seconds of full throttle sky boring, and then, when throttled back regains power, it's likely to be cell depression.

(This sure seems a lot more complicated than those wonderful little fuel burners I loved so much. After all, if power was an issue I'd just up size the engine and add nitro – problem solved!) Anyway, being armed with the fundamental concept of Lithium Polymer Amperage rating spared me from spending extra cash on ESC's and motor issues. I am currently testing a few motor-prop combinations for Amp usage.

Does anyone have a handle on all those different motor naming configurations? Lots of numbers and what do they mean?

MARK GIESSEN

--- That's All Folks --

Eugene R/C Aeronauts
Newsletter Editor
1618 Gilham Rd.
Eugene, OR. 97401



February 2010

Name
Street
CitySTZip

Renewing Current Member

INVOICE FOR 2010 MEMBERSHIP RENEWAL - EUGENE R/C AERONAUTS
Please fill in the following information and send back with your Dues Remittance

Name _____ Name Tag Request - Clip ____ Pin ____

2010 AMA Membership No. _____ (Name tags are Free)

I certify that I have paid my 2010 AMA Dues. Initial _____

Member Address _____

Member Phone No. _____ Cell: _____

Member Email Address _____

Newsletter Via: Email _____ Regular Mail _____ Do not need to receive newsletter _____

Please enclose your check for \$ 60.00 as a current member renewing for 2010 and
Mail to: Eugene R/C Aeronauts, PO Box 26344, Eugene, Or. 97402.
Or bring this INVOICE and \$60.00 to the Meeting.

Next CLUB Meeting – February 23 – 7:00 pm at Papas Pizza.