



the R/C AEROGRAM

Volume 4 Issue 12 Pages 10 AMA #530 District 11 www.eugenerc.com December 2008

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

No December Meeting

DUES TIME 2009 is coming, PLEASE pay your AMA and ERCA dues EARLY!

ERCA News and Information

Next CLUB Meeting – January 27, 7:00 pm at EWEB. If you have a building project, bring it with you for "Show and Tell".

At the November Meeting – There were 21 members and guests at the meeting.

Al Barrington reported we have 105 members at the end of 2008.

A friendly and timely reminder from our Treasurer Al, "It's dues renewal time!"

New member Matt Meltebeke was welcomed into the club.

A motion was made to purchase the lawn mowing machine from Jeff Engel for \$250 and was passed by majority vote.

The giant scale ground run-up anchors have been installed and work very well.

The February club meeting will be held at Papa's Pizza on Coburg Road. Please plan to have your membership dues (ERCA & AMA) current before or at this meeting.

Show&Tell - John Farkas showed off a new micro copter he picked up at the mall, IR controlled and great for chasing cats :-)

Marty Wittman brought his GIANT Cessna 188 AgWagon builder to show. This is a plane Carl Hensen had started but was unable to finish, Marty is doing a fine job with the finishing detail and hopes to have it ready for flight in the very near future.

Pat Willis displayed a NOS K&B .45 Sportster he recently got for CHEAP.

Election Results:

Officers for 2009

President: Khoi Tran

Vice President: Mel Thompson

Sec/Treasurer: Al Barrington

Safety Officer: Marty Wittman,

Winter Flying Hours - During November, December, January, February - Saturday, Sunday & Wednesday flying start time is 12:00 Noon.

DO NOT ARRIVE BEFORE NOON

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

New pages on EugeneRC.com: **Projects** – **Reviews** – by ERCA members.

Presidents Corner

In the coming year, I plan to resuscitate Khoi's Corner for the newsletter and at monthly meeting. The goal is to share information about different aspects of our hobby and promote more interaction at club meetings.

At the January meeting, I will bring my newly completed Yellow Aircraft Starfire ducted fan jet for show and tell and discuss DF segment of the hobby. I will also collect input from members for discussion at future Khoi's Corner.

For Feb, I've already invited Bill S. from South Lane club to speak at Khoi's

Corner about float flying; how to convert a trainer into a seaplane and share information about Dexter lake weekend flying.

At the January meeting, we will also put a budget together for approval. Please attend the meeting to provide input for club improvement for upcoming year. I promise to keep the monthly discussion about budget/accounting short and sweet, to allow more time to talk about the cool aspects of our hobby.

Khoi Tran
ERCA President 2009

Field Safety

Pit area matting - slick when wet. The rainy season has arrived. The mat is very slick and the moisture has caused it to swell and wrinkle. PLEASE use caution when walking in the pit area.

Projects

Cessna 188 AgWagon

Marty Wittman brought his GIANT Cessna 188 AgWagon to show.

This is a plane Carl Hensen had started but was unable to finish.



Treasurers Corner

Al Barrington reported we have **105** members in good standing at the end of 2008. New member Matt Meltebeke was welcomed into the club. Just a reminder - it's membership renewal time again!

WITH THE WEEKDAY WARRIORS December 2008

I think the Oregon Weather is catching up to us. The rain is still well behind schedule, but the fog has favored us with its presence more than we really need. I'm now (12/15) looking out on 3"-4" of snow - skis, anyone? When I lived in Illinois, a lot of us put them on our planes and continued flying. Okay, that "our" didn't include me. I was not one of the guys who pulled on his snowmobile suit and flew when it was 12 degrees. The clubhouse at the field had a heater in it so the die-hards could come in and warm up a little between flights. I, on the other hand, used to pack things up for the Winter as soon as temperatures below freezing became the norm rather than the exception. I did cut it a little fine one time back in N.J. I was on the downwind leg of my landing pattern when the model disappeared into the fringe of a snow squall. Came out the other side in fine shape though and I was able to land - and conclude my flying for the year then and there.

In the little time I have had at the strip lately, I have seen a couple of interesting machines. Jeff Engel was flying a full-size Pattern type called a Frenzy. The fuselage, however, is so narrow that it only just escapes being a "profile" ship, especially aft of the wing. This is a high-performance bird capable of all the vertical shenanigans beloved of today's aerobatic guys and it's a sharp bird to look at, too. And it's electric. The motor is classed as a "110", which Jeff tells me is the equivalent of a 1.10 cu. in. internal-combustion powerplant.

John Bowhan has been flying an electric ducted-fan machine - and this one flies like blue blazes. The recent article in Model Aviation talked about electric d-f rigs in the \$1000 range, but this one is available, ready to fly, for less than a tenth of that. Now it is a small ship, it is true, but looks like a good introduction to that discipline. I think I've heard talk of two or more other club members getting them with formation flying in mind.

With very large marking differentiating one from the other, I hope. Different serial numbers won't do, really. The model seems to bear a resemblance to what I'll call a "generic" jet fighter. You know, it could be a spot-on copy of some modern marvel - I don't know one jet from another. Oh, I can tell an Me 262 from an SR-71; the Me has the black crosses and swastika. And I recognize the F-16 by that big scoop under the nose, so handy for ingesting mud, if one veers off the runway. Ask Dale Williams. He had mud coming out the tailpipe once down at Short Mountain.

Anthony Dalebout was flying that monster of his, the Liftmeister, the other day. This is the one with the Mahoney 125 in the engineroom and I wonder if that's not the last Mahoney left in service. It was never a terribly popular engine, but, having said that, I must report that this one hauls the Liftmeister around in fine style. Mind you, it is not a "3-D" aeroplane. Anthony gets it up to full speed, hauls back on the stick, climbs about 20' and levels out. That, he says, is the vertical-performance limit on the Liftmeister. The engine is ex-Harry Blodgett and I remember Harry contacting World Engines, the Mahoney distributor, about spare parts. WE told him that they had not even been able to get in touch with the Korean manufacturer for ten years! Now that's an orphan engine. Oh, how did a Korean engine get such an Irish name? It's the name of the head man at World Engines. Can't say I've noticed a WE ad lately. Are they gone, too?

That Liftmeister is a very big model and Mr. Dalebout solved the transport problem that day by bringing it, fully assembled, in a 20' travel trailer. If that seems just a bit over the top to you, consider this: When Anthony comes to fly, he brings his own crowd of spectators and this was a place where they could go to warm up and have a cup of coffee. You have to keep your spectators happy.

WITH THE WEEKDAY WARRIORS continued

Two of our weekday stalwarts had difficulties. The fuel line in Frank Blain's Su 31 came apart and the DL 50 is just so cranky that it won't run without the fuel line. Khoi Tran must have had a problem that kept him from flying his Zeke, but I don't know what. He seemed to arrive and depart faster than the eye could follow although I'll admit that this eye was distracted by other things.

Admission: The Zeke or Mitsubishi A6M, if you'd rather, is one of the WWII machines I'm tired of, like the P-51D. How about an Oscar? It has a long, graceful tail moment - and a nose so short that the rear edge of the cowl is nudging the leading edge of the wing. The world might run out of nose weights before you have it balanced. So a

George, a Frank, and let the Zeke rest in peace.

On my worktable now is a Piper PA-12 for Rubber Scale which is in the process of being covered and should be in a state to test-fly before too long. I'll make a lot of the details such as nay, lights, step, venturi, etc., but not put them on until the testing and trimming flights are complete. The next project is, believe it or not, an P/C ship - a Cavalier Standard, 72" R/O-Assist Old-Timer to replace my retired Red Zephyr. So there, you columnist really is an P/C guy - some of the time.

C.O'D.

KUDOS

Doug McWha - Thanks for your effort as our "*Worm home flattener*".

ERCA CLUB CONTACTS

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Next CLUB Meeting – **January 27**, 7:00 pm at EWEB.

2008 in Review Pictures



2008 in Review Pictures



2008 in Review Excerpts from ERCA Meeting Minutes

January 2008

The ERCA Big Bird Fly will be held on March 1st, 2008.

The March meeting will be held at Papa's Pizza on Coburg Rd. in Eugene

February 2008

For those that fly heli's, specifically Align machines, President Pat announced DeeTee Enterprises has opened a business, in Eugene.

Pat Willis announced he has been reviewing the bylaws he will have them available for review and discussion at the March meeting.

March 2008

The ERCA Big Bird Fly-in, scheduled for March 1st, was cancelled due to weather.

There were 39 members and guests at the Papa's Pizza meeting.

President Pat Willis provided copies of the old and updated bylaws and charter for review.

April 2008

The BIG Bird Fly has been rescheduled for June 14th, 2008. Our annual FUN Fly has been scheduled for August 16th and 17th, 2008.

The new and updated constitution and bylaws were discussed and approved by majority vote. Check the website for details.

May 2008

The BigBird Fly is on for Saturday, June 14th , prize drawing and food during the day.

The map of the permissible airspace for flying is available at the field.

June 2008

The "No pets" rule was reviewed and it was decided that the rule stands as-is. There is no exception to the rule and that includes animals in vehicles.

Some planes have been spotted over and beyond the Burgess home. There is no flying over the Burgess house.

July 2008

Our own Al Barrington announced he, and other members of the Lane County Sheriff's Office, will be walking in the Relay for Life cancer fundraiser. The club voted to sponsor his efforts to the tune of \$100.

August 2008

The mats covering the ground in the pits are shrinking, wrinkled and have rolled edges. The wrinkling was better/safer than the mud pit of before. Walk safely please.

When the ground softens Doug and crew are going to install some run-up anchors for extreme scale planes.

September 2008

Regarding repairing broken propellers. President Pat Willis made it clear to our membership that re-using propellers that had been broken was an unsafe practice and is not permitted.

October 2008

The X wind runway that has been preempted by those farming the adjacent land was discussed again regarding the benefits of "only" filling in the low area south of the current runway, west of the clubhouse. This issue was tabled until Spring 2009.

November 2008

A motion was made to purchase the lawn mowing machine from Jeff Engel for \$250 and was passed by majority vote.

The giant scale ground run-up anchors have been installed and work very well.

The February 2009 club meeting will be held at Papa's Pizza on Coburg Road.

Please plan to have your membership dues (ERCA&AMA) current before or at this meeting. We voted in 2009 club officers:

President – Khoi Tran

Vice President – Mel Thompson

Secretary/Treasurer – Al Barrington

Safety officer- Marty Wittman

Sharing Channels

The 2.4 GHz R/C Revolution (part 2 of 2) by Patrick Willis

DISCLAIMER: *I make no claim to be an expert, but I've learned a few things over the years. Anything I write is my opinion based on my experience. Take it for what it's worth and feel free to disagree. -Pat*

Futaba has long been one of the big names in R/C radio gear and was the first to introduce PCM systems to the market, about 20 years ago. When Spektrum came along, the loyal Futaba fans were left wondering what Futaba had up their sleeves. The wait was a little too long for some folks, who left Futaba and pursued 2.4 with Spektrum. However, Futaba eventually released FASST: a FHSS, (Frequency Hopping Spread Spectrum) module for its frequency module-equipped radios. As an owner of a Futaba 9C, I anxiously awaited the release of the module, only to be disappointed by the module only supporting seven channels.

Since Futaba's 7 channel radio system, the 7C, was not module-based, it did not make much sense to release the module with only seven channels. The Futaba systems boast a single receiver, as opposed to the JR/Spektrum main receiver plus one or more satellite/mini receivers. The Futaba receiver has two short wire antennas and is constantly shifting frequencies, several times per second. Futaba has, since their first 2.4 GHz module was introduced, released additional modules with support for more channels. They have also released the 6EX on 2.4 and the 7C on 2.4 with some software upgrades making it more versatile than it was originally. The 9C is being discontinued and replaced with the 10C, which, although more expensive, is a higher-end radio in the middle/intermediate level of the market. Then there are the 12FG, 12MZ, and 14MZ, which are aimed at those with bigger wallets that want all the features that high-end radios have to offer.

All of these are available on 2.4 GHz using Futaba's FASST technology.

Futaba had some issues early on as well when some receivers overheated unexpectedly. They came out with service bulletins and quickly offered to update all components free of charge.

XPS, (Xtreme Power Systems) sells modules and receiver upgrades only. Their big advantages are that the receivers are small and have only a small, 1 1/2" nub for an antenna that pokes out of the top of the receiver. They also utilize a frequency-hopping technology that predicts noise or interference issues and changes frequencies as needed. They recently came out with a new firmware version that employs FHSS and their original predictive technology, which can be switched to one or the other as desired by the user. XPS remained competitive for those that did not want to spend as much as Spektrum and Futaba were charging. However, there have been reports of unexplained signal loss on the XPS online forums, (as there have been on the other radio manufacturers' forums as well) and some have attributed it to flaws in the XPS system. There have not been any independent, reliable tests done to my knowledge, so these issues may have had nothing to do with XPS specifically.

Airtronics came into the game fairly late; however, they came on strong with an upgrade to their existing 8 channel radio and made it more affordable than the others. Their RDS8000 on 2.4 GHz costs only \$229.00 with receiver, and last I heard they were throwing in an extra receiver at no additional cost. They will soon be releasing a more expensive but feature-rich 10 channel system which makes it look like they are getting back into aircraft systems with a

Sharing Channels continued

vengeance. Their 2.4 GHz technology also uses a FHSS technology. Not as much is known about the Airtronics radios, simply because they have not been out as long, but if internet chatter means anything to you, they may be well worth the wait.

Yours truly has been using XPS in his Futaba 9CAPS radio for over a year. I'm happy with the system and I really don't have any major complaints. It seems to work as advertised in my giant gas-powered planes, electric helicopters, glow helicopters, and glow airplanes. I have not once experienced a lock-out, that I'm aware of. I have tested the re-boot of the receiver on the ground using a battery with little charge left. The LED light on the receiver began to flicker as I moved several high torque digital servos around and around. The LED turned to red while doing so, the controls froze, and then it recovered. This took less than a second each time, leading me to believe that if my batteries became low while airborne, I would likely be able to recover.

So, which should you get? Or, maybe you're wondering, should you get any of them at all? Here are some things to keep in mind:

--Nothing beats a good installation, period!! If you are using a noisy electronic speed controller, gas ignition, or something else that sends out RFI, 2.4 is not the magic cure-all upgrade. I have experienced interference from ESC's and ignition units on 2.4 GHz that were only resolved by cleaning up the installations. You still have to maintain space between ESC's or ignitions and other wiring inside the aircraft. The RFI will travel not through the receiver's antenna but straight through the servo wires to your servos, causing erratic servo movement and/or loss of control all together. ALWAYS RANGE CHECK according to the manufacturer's instructions, with the motor

running and with it turned off, (notice that it was so important that it was in bold, underlined, capitalized, and italicized print!).

--If it ain't broke, why replace it? If your current system works flawlessly without interference, why change? Some of the professionals and all-around hot dog pilots have noticed increase response from some of these systems, and testing data has confirmed that the latency is lower in many of the new systems. Most of us won't notice a difference, but if you think you may, this could be a good reason to upgrade.

--The receivers, modules, and transmitters of the various 2.4 GHz systems are not interchangeable. They all use different proprietary communication protocols; therefore, a Futaba FASST transmitter or module cannot communicate with anything but a Futaba FASST receiver, and the same applies to mixing/matching any of the brands.

--They can be pretty pricey, so why not go with one of the cheaper brands? Well, you may get what you pay for, or you may be plenty happy with them. I only have personal, hands-on experience with the first three mentioned brands, and they all worked very well when used properly.

--If you use high torque digital servos, you will want to switch to 6 volts. Even if you use standard servos, I would recommend switching. No, you don't need a regulator, unless your servo model specifically says it is for 4.8 volts only, (mostly micro servos and some gyro-specific servos for helicopter tail rotor control). This makes it less likely that your new 2.4 GHz receiver will need to re-boot due to low voltage spikes.

If I can be of assistance answering additional questions, please email me at p-willis@msn.com or ask me the next time you see me at the flying field.

GLOSSARY OF TERMS Source: <http://www.spektrumrc.com/DSM/Technology/glossary.aspx>

--- That's All Folks ---

Eugene R/C Aeronauts
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DECEMBER 2008

Name
Address
City, ST Zip

_____ **Renewing Current Member** _____

INVOICE FOR 2009 MEMBERSHIP - EUGENE R/C AERONAUTS

Please fill in the following information and send back with your Dues Remittance

Member Name _____

2009 AMA Membership No. _____

I certify that I have paid my 2009 AMA Dues. Initial _____

Member Address _____

Member Phone No. _____

Member Email Address _____

Newsletter Preference: Email Regular Mail Do not need to receive newsletter

Please enclose your check for \$ 60.00 as a current member renewing for 2009 and
Mail to: Eugene R/C Aeronauts, PO Box 26344, Eugene, Or. 97402.
Or bring this INVOICE and \$60.00 to the Meeting, January 27, 7:00 pm at EWEB.

Newsletter ONLINE at: <http://eugenerc.com/NL/CURRENTNEWSLETTER.pdf>