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***Spring is here!
Lots of events in
this issue, check
out the flyers!***



ROSCOE!

RC REPORT ONLINE

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OFFICE NOTES

Happy Valentine's Day! We LOVE our columnists, subscribers and advertisers!

January flew past me this year! Maybe it was the unusual amounts of snow that fell here in North Alabama that made the days seem to go by so fast. The kids were out of school for a week and underfoot. Volleyball season has begun in the Coberly home, so Cass and I are out and about several weekends a month. Those tournaments will sneak up on you in a heartbeat. By the time you get home and unpack and get the laundry finished; it's time to pack the car again. Time flies!

Chris Handegard is back with us this month and his break! YAY ☺ Continue to pray for him as his recovery progresses from the accident last September.

I posted something on Facebook about this issue being jam-packed! Well, it sure is! You'll see as you click your mouse through the pages. Hope you enjoy it!

Thanks to all the guys that sent along pictures this month for Photo-ops! Much appreciated! It's nice to hear from you and get the opportunity to see what's going on with you and share with our other readers!

Here's a little technical news for you. Some subscribers have been experiencing some issues with Adobe X. At the moment, our site is not compatible with this software. We encourage

you to stay with Adobe 9 for the time being. Also, one of the guys recently told me about Chrome, which is a fairly new internet browser. We will be updating the FAQ page in the near future with instructions on how to turn off the pop-up blocker while using Chrome.

I will repeat this month; communication is the key word for 2011! If you don't contact me about a problem; I can't correct it. It seems that the main issue people have is the inability to login. It's a simple fix. An email is normally all it takes. On rare occasions, a phone call might be needed. The next biggest complaint is regarding the PDF download. Again, I can help you with this. There is no reason, if you have a premium subscription, that you would not be able to download the PDF. I can't stress enough, if there is a problem; please contact me. I want you to be satisfied and be able to enjoy RC Report Online.

We are still socializing on Facebook. Join us!

Kindle users; email me if you would like to receive the Kindle version of the magazine via email. Nook users, the Kindle version is not compatible with your reader. We have yet to look into the Nook, but promise to try and do so soon.

Until next month,

Julia

Smile! You could be the next Winner!



Smiley Face Contest #2 2011!

Throughout this issue we have placed five or more Smiley Face Figures like the one shown here (☺), but as before this page doesn't count. Write us and tell us where at least five are, and you'll be eligible for a random drawing in which the winner will receive a free 12-month Premium Subscription to RC Report Online. The subscription may be used as a renewal or be gifted to someone else. Winners will be selected by a random drawing from all the correct entries received no later than February 28, 2011. No entries will be accepted after this date. Entries must be sent via US mail or E-mail only, and reference the correct contest number in subject line or address. Hobbico employees, RC Report Online employees, columnist and advertisers are ineligible for prizes. No Purchase Required. Valid in USA and Canada only. smileys@rcreport.net Subject line: Smiley Face Contest #1 2011

US Mail: Smiley Face Contest #2, 2011 PO Box 12051 Huntsville, Al 35815

All terms subject to change without notice. This contest is void in any area, state, or locality where taxed or prohibited.

Julia,

There could be more but, I am sure that there are no fewer than eight Smileys in the January issue of RC Report.

Keep up the good work and keep RC Report alive and well.

Respectively,

David Klingensmith

I was disappointed that the prize is no longer an O.S. Engine. I have several O.S. Engines and they are all great, however, I don't have a 55, but I do have the airplane to put it in.

Guess I will have to bite the bullet and just buy one.

Five!

Thanks,

Ken Gardner

Happy Smiley's and New Year to all.

I have 8 smiley's for this Month.

Thanks

Larry Slowiak

Seven!

Ian Forbes

Hi Julia,

Happy New Year to you all at RC Report!

That cruise I told you about last month was the one you saw on the TV news around December 12; our ship was nearly swamped by giant waves on the Mediterranean Sea between Greece and Egypt - people were tossed out of their beds, the furniture all slid across rooms both large and small, glassware was smashed by the hundreds, and we survived it all! It's much easier to control a pitching RC model plane than that wildly tossing ship, especially at 2:15 AM! We did survive it all and I'm back reading the January issue, where I found seven smiley faces!

That's all the excitement I can handle this month,

Frank Maguire

Still loving the smileys! The winner will be contacted and announced in the February issue. The winner will receive a 12-month premium subscription to RC Report Online. Keep searching those articles and columns.

Total Smileys for the January 2011 issue was 8.

December's winner is Norm Deputy, from Warner Robins, Georgia!

Thanks for your submission, Norm!

Julia Coberly



Mail Call

Well, folks keep your questions, comments and jokes coming.

Since school is back in session, here's a little test for you. Blame Dick and Baby for your headache later.

Send in your answers to me at juliac@rcreport.net. Correct answers will be published next month!

- 1) How long did the Hundred Years' War last?
- 2) In what South American country are Panama hats made?
- 3) From which animal do we get cat gut?
- 4) In which month do Russians celebrate the October Revolution?
- 5) What is a camel's hair brush made of?
- 6) The Canary Islands in the Pacific are named after what animal?
- 7) What was King George VI's first name?
- 8) What color is a purple finch?
- 9) Where are Chinese gooseberries from?
- 10) What is the color of the black box in a commercial airplane?

From my old friend, Mel:

Never Argue with a Woman

One morning, the husband returns the boat to their lakeside cottage after several hours of fishing and decides to take a nap.

Although not familiar with the lake, the wife decides to take the boat out. She motors out a short distance, anchors, puts her feet up, and begins to read her book. The peace and solitude are magnificent.

Along comes a Fish and Game Warden in his boat.. He pulls up alongside the woman and says, 'Good morning, Ma'am. What are you doing?' 'Reading a book,' she replies, (thinking, 'Isn't that obvious?') 'You're in a Restricted Fishing Area,' he informs her.

'I'm sorry, officer, but I'm not fishing. I'm reading.'

'Yes, but I see you have all the equipment. For all I know you could start at any moment. I'll have to take you in and write you up.'

'If you do that, I'll have to charge you with sexual assault,' says the woman.

'But I haven't even touched you,' says the Game Warden.

'That's true, but you have all the equipment. For all I know you could start at any moment.' 'Have a nice day ma'am,' and he left.

MORAL:

Never argue with a woman who reads. It's likely she can also think.

PHOTO OPS

Thanks to all of you who sent in pictures this month! It's nice to share! 😊

Hi Julia,

*Here are a couple of photos taken at our
Propsnappers Club field in Scarborough, ME*

The first two were taken last July when we hosted the ACE Academy, a course sponsored by the Portland Jetport and the FAA for young people interested in aviation. We gave them a ground school class and let them all try flying on the buddy box.



The other shows me starting my "Executive Canard" model, built from Flaps Laffert's plans which Ed Moorman sent to me. It was featured in his RC Report column a couple of years ago. The model was test flown by Bill Reeve (also the instructor in photo #2) who is a much better pilot than I, and he found it needed lots of trim, but landed safely.

Frank Maguire, South Portland, ME





Frank Maguire with his Executive Canard

Here are some pictures from the Hico Swap Meet that was held back in December in Hico, TX. It was the BUZZARD BUSTERS eighth year to host this swap meet. Many thanks to Charles Krempin and Sam Maserang for sending in these pictures.

Charles writes:

Another swap meet has come and gone. Number 8 is behind us. We had 45 vendors set up, which is average for us in rural Texas. Actually, considering the economy, there was a lot of buying and selling. One individual showed up with about 20 flyable airplanes and left with none. He was really happy. We want to thank you for the on-line subscriptions to RC Report. We had 6 drawings for them along with drawings for the other donated items. Sometimes we get to fly after the swap meet, but the wind was really howling and no one tried. Again, thank you. Charles Krempin

John Mynster writes:

I saw your call today for pictures of our airplanes, so here is mine. This is a Top Flite Stitson Reliant SR9 with my son Kurt.



Nice looking young man you got there, John and the plane is sweet, too!





*Send your Photo-ops
contributions to*

[Juliatic@rcreport.net!](mailto:Juliatic@rcreport.net)

*We can make you famous
in the RC community!*



~It's Classified~

Non-Commercial Ads

Ads from subscribers are published free of charge for one month on a space available basis. Free ads are limited to one per subscriber per month and may contain up to ten items. Add \$1.00 per each item over ten. Add a photo for \$5.00. Please email your ads to juliac@rcreport.net. Include your name and email address.

Phone numbers are optional. Modeling items only!

Commercial Ads

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ROSCOE, THE RC SKYDIVER

The story goes like this...Isabelle and I were working the event scene, via email and telephone, of course. Because if we went travelling; who would run the office? ☺ During an email conversation with Andy Bowen, he mentioned "Roscoe". Being a dog and a dog person, we went directly to Roscoe being a dog. No, Roscoe is an RC skydiver. His "Dad" (That is the term Andy used, further leading us down the dog trail!) is Kevin Leisy from DeLand, Florida.

So sit back and enjoy a tale of abandonment, rebirth and reactivity.

Once upon a time, began the storyteller...Sometime in late 2009, an abandoned and abused little paratrooper was rescued from certain death by a Good Samaritan in Stuart, FL. That gentleman thought "We can fix him. We can make him better, faster, stronger, prettier. We have the technology"!



So he put him up for adoption because he didn't want to do all that crap.

That's when I stepped in and took him under my wing, so to speak, and began the arduous task of repairing the little guy.

I soon found out that he was pretty badly neglected and it would take too much communication between DeLand and China (or Germany, etc.) to get him back in the air again. So I went to work on engineering a new body and all new electronics and mechanisms. I kept the original canopy, jump suit, and boots.



The best fit, (size and shape) for his body was a shampoo bottle. It was cut in half with the bottom half being the body. I used springs from a local hardware store for his legs – very sturdy

yet forgiving – and screwed his boots on one end, his body on the other. His suit fit perfectly over the new torso. The electronics (receiver, servos and battery) were then fitted inside. A receiver on/off switch was positioned at the bottom of the torso between his legs so he could be turned on and off while inside the compartment of the plane.



Roscoe seems to think “See no evil, be no evil.
Crash = evil.

Our first test was made at our local field (DeLand RC Club) with Charlie Sampsell piloting the skydiver. Charlie thought he looked like a “Roscoe” and the name stuck. Since I usually fly the Miss220, I haven’t had much stick time with Roscoe. Charlie has been the #1 controller with an occasional lucky pilot getting a flight now and then.

Speaking of the plane, he was specifically sized height-wise to fit inside the belly of the scratch-built Miss220. The Miss220 is an enlarged version (220%) of Hobby-Lobby’s Miss2. I was building the Miss220 when I received the skydiver. I knew right away that it would be the perfect carrier for the little guy.



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I've tried making larger scratch-built canopies, which turned out looking pretty nice, but always went back to the original. The smaller one has always seemed to be more responsive.

Roscoe was flown at the 21st Winter Festival of Giants (in DeLand) and will be again this year for the 22nd annual show. He always draws quite a reaction from a crowd!



HAVE YOURSELF AN OILY LITTLE CHRISTMAS OR HUMOR AUSSIE STYLE WITH BRIAN WINCH

THE CHRISTMAS DINNER

This is not a model engine article - far from it - but it was inspired by, partly, my own experience and from comments I have received from RC REPORT ONLINE readers in line with my own feelings. I am not going to write it as a moaning, whining article - more tongue in cheek and a bit of fun, but with a few home truths intertwined. Don't be put off with the start (and descriptions of food preparation) if you're not kitchen oriented - it is just that it is an important part of the story in line with the general background of days slipping behind us - but, believe me, this is not another blasted cooking show.

Before we get into it, a few riders. First off, I am a rather dab hand in the kitchen having worked as a chef (at night) for several years in early days and I also had my own private dinner party business. Apart from my interest in this work (if you like to eat you might as well learn to cook) I was chasing money to start my family career so I worked several jobs at the same time. (I know I mentioned this last month, but you might not have read it and it is important

for this story.). Another consideration is that I am particular in what I eat...not fussy, no way at all, but...whatever I eat (and I have not yet come across anything edible I will not eat); it has to be clean, fresh (where necessary) and prepared correctly. Right then - are we building picture here? Now, another factor of



importance is that, during the Yuletide Festivities, one little favorite of which I am particularly fond is a fruit-mince pie or tart and here we pause for a moment. A fruit mince pie or tart is a shortcrust pastry shell stuffed to overflowing with fruit mince - aka mincemeat. The background of these treats goes way back in the history of

England when the gentry ate pies filled with various fruits and meats - a great combination if done correctly and a way of keeping the meat edible for a reasonable time (no preservatives, refrigeration or other methods of keeping food edible for much more than a few days, at most). Over hundreds of years the recipe has changed due to food preservation methods and refrigerators, but the tradition lingers. The 'mincemeat' (fruit mince) pies are now a small item (about two bites) that are a major part of the Yuletide fare. No meat in them, but in England, the traditional recipe is a variety of dried and fresh fruit homogenized with suet -

the hard fat found around the kidneys and loins of sheep and cattle. I have moved away from suet (many reasons - living is one - suet is a solid, super saturated animal fat) so I use best quality butter (nowhere near as saturated). Mincemeat, amongst food aficionados, is like good wine. Made with the best ingredients it is left to mature in sealed jars - a year or two is common - even longer if you make a large batch. Without getting down to the fine points, my recipe includes (amongst other ingredients) the absolute best quality mixed dried fruit, sharp marmalade jam (homemade), grated green apple, melted grade 'A' butter, caster sugar,



mixed spices and a very generous dose of quality brandy, OP rum and fine old Muscat wine - a very generous dose. The mixture is poured into jars, tapped well to exclude air bubbles, sealed and set aside for about one month. All jars are then opened and a half inch layer of brandy or rum is poured on top and the jars re-sealed. I don't know how long this mixture would last, but I tend to think many years if you 'put it down' like a maturing wine.

The other part of the mince pies/tarts is the pastry and this



is just as important as the quality of the mincemeat. The pastry has to be short - so short it melts in your mouth when you eat it. You should not have any sensation of eating the pastry other than a delightfully soft combination with the mince. If you break off a bit of pastry it should crumble to dust between your fingers. Again, old recipes call for suet crust pastry - more suet used as the shortening ingredient - maybe 'shortening' is correct as it might 'shorten' your life due to cardiovascular problems in the hot climate of Australia. My recipe for the pastry includes butter, rice bran oil, plain flour, custard powder, whole egg, caster sugar, pinch of salt, dash of lemon juice and a splash of brandy. It is kneaded into a ball, wrapped in baking paper and chilled for 2 to 3 hours then rolled - two directions only, never back rolled - between sheets of baking paper, cut into rounds to fit in the pie dishes (aluminum externally coated paper dishes in silicone tart trays) and chilled again for about 30 minutes. The pastries are then filled with about 1-1/2 tablespoons of the mince, pastry lids or strips of pastry on top and then baked until the pastry just colors. Now...that's a mince pie/tart of a quality fit for the most discerning gastronome.



Okay,
so
much
for the
cooking
lesson,
but it
has a
reason
for the

rest of the story.

For a couple of other riders, I do not have a brother, the names and relationships of people

mentioned have
been changed or
fabricated
considerably and
there is a fair bit of
artistic license in
the story even
though, in the main,
it is based on the



truth. Now, following is the reason for the story, which is from my own experience and from that which some readers have told me.

AS IT WAS

Going back a few years the Yuletide season had a lot going for it. Certainly there was an exchange of presents which was a potpourri of luck - you got good stuff or you got bloody ties, socks, handkerchiefs or underpants (mostly the wrong size). But, really, the great part of the festivities was the feasting - several days of eating (over eating) all types of great food, snacks and, if you were that way inclined, a few tipples of certain beverages. The culmination

was...THE CHRISTMAS DINNER! Now, here was a feast. The table would creak with the weight of a big ham, roast turkey, roast pork, so many different vegetable dishes, salads, cold cut meats, cheeses, dressings, fresh bread rolls, mince pies, decorated fruit cake, plum pudding, custard, fruit trifle, fruit salad, fresh fruits, dried fruits, nuts, chocolates, candies, pretzels, potato crisps and whatever else was considered necessary for the feasting. In the center of the table was a massive punchbowl - containing a punch made from (inter alia) ginger ale, fruit juices, finely chopped fruit and the warning that a reasonable drop of Grande Marnier, Kirsch or liqueur Muscat, etc. had been added. Each place

around
d the
table
had
several
plates
, an
array
of



knives, forks, spoons, a large and colorful table napkin plus a large Bon-Bon (aka Christmas cracker.) Everybody seated and thanks was given then the Bon-Bons were pulled with the person on your left to go off with a bang and drop out the crepe paper hat, 'very valuable' plastic trinket and a philosophy or joke printed on a strip of paper.

The turkey, ham and pork were being carved while the Bon-Bon jokes were being read out and discussed then it was into the food. The sounds were much like that of an old English battleground with the clashing of swords and clattering of shields (knives and forks on plates)

and the roar of the combatants (much ado about each food tried). After a while the conversation, “more?” “Yes please,” “just another slice,” “perhaps another spoon of,” “isn’t the (whatever) great this year,” “look, I’ll just have another piece of...,” died down and napkins were removed from wherever you had them to wipe mouths and be laid on empty plates. Time to rest, maybe a couple of nuts, other snacks, a pretzel or two and...a little snooze. As the day cooled, we mostly, moved out into the garden, perhaps a simple bat and ball game, maybe a play with some of the kid’s toys and then it was on again for the evening meal of much the same only, this time, all cold meats and salads. Boy, what a day. I tell you, after a day of feasting like that I did not eat again until....oh, probably, the next morning for breakfast.



I’ll wager that sounds familiar to many readers, and sadly, the next will be familiar with many readers as well when I say that those glorious days are slipping into the past. Fewer and fewer people are taking the trouble and...making lame excuses for not taking the trouble. Let’s look at a typical Christmas dinner just past.

GOING TO A CHRISTMAS DINNER

I should have known that there was a dark cloud on the horizon when Aunt Grace dropped in the week before Christmas day. “You’ve spent so much time helping me with my computer, digital camera and driving me to the airport etc. every time I was taking an overseas trip (she wanders all around the world - oblivious of the possible dangers). I went to a lot of trouble to make you some fruit mince pies, knowing how much you like them.” (Me, inwardly, “moan” - she is not known for her culinary skills - more to the point - for her lack of them.) “I didn’t put the suet fat in the mince like you told me last year, but I did put it into the pastry as it is traditional to use suet pastry. (Traditional? She’s a 6th generation Australian and we think her heritage is Greek.) I remembered what you said about letting the fruit mince mature so I made it a whole 4 days before, but I didn’t put brandy or rum in it - too expensive (she has at least 6 - expensive - overseas trips every year) so I used rum essence. There’s also a lot of mince in each pie - just as you like it.” She handed me a small cardboard box then fluttered off, never to be heard of again until her computer or camera wasn’t behaving or she wanted a lift to the airport.



Later that day I opened the box and it was full of mince pies - all six of them about the size of a golf ball in diameter and ½” thick. I tentatively pressed the top of one and it reminded me of lite ply - hard faced and springy. I lifted the lid and there was, fully, half a small teaspoon of ‘stuff’ that was masquerading as fruit mince. I could smell the rancid suet in the plywood hard pastry - hello indigestion. No way would I or could I eat them, can’t give them to the dogs as sultanas and such in dried fruit are dried grapes and grapes are deadly for dogs (true fact). Good thing I have my ever faithful ‘chooks’ (adult chickens to you people) - they will eat just about everything and are completely impervious to anything edible except avocado (deadly to chickens - another true fact). I reckon if I laid down in my chook yard for a while they would end up eating me. As I went out into the backyard I saw that *&\$%#@ rooster from next door had flown over the fence again and was doing some serious scratching in one of my flower gardens. Not a stone within reach, so here goes, one of Aunt Grace’s mince pies heading his way as a guided missile. Wow! Best throw I’ve made for years. The mince pie clouted the chicken and knocked him for a six - base over apex. If I had been able to run a bit quicker I would have had him and he would have ended in the pot for chicken stew. As it was, he rolled over, staggered back onto his feet, shook his head, squawked and flew back over the fence with my 3 dogs nipping feathers out of his tail. Score one for the mince pie.

I threw the rest of the pies into my chooks, they pecked at them then looked up at me with the question in their eyes, ‘Why are you feeding us flat rocks?’ It was building up to rain that night

so the pies would soften and the chooks could have another go in the morning.

So far, so bad. Next thing it was younger brother on the phone. “We’re having a dinner on Christmas day - you and Shirley will be coming over, won’t you....better than eating on your own.” It was more a demand rather than an invitation and, anyway, we wouldn’t be eating alone - we would be with each other - great company. “Yes, certainly, we are looking forward to it - we have some presents for the kids we wanted to drop off anyway. What would you like us to bring for the dinner?” “How about one of those great wine trifles you make with your collector quality port in it?” I made the mistake, some years back, of letting him taste MY wine trifle with my best port in it. I only make it for me as Shirley isn’t a trifle person so I make her a fruit gateau with a generous serve of Chantilly cream. Seeing as how it is just for me I always use a top shelf vintage port in it. I’m a firm believer from way back that, if a wine, etc. isn’t good enough for drinking it is also useless for cooking.) Well, maybe I can use a reasonable quality port in the trifle instead of my Collector’s Edition Vintage - he certainly won’t know the difference - he usually drinks homebrew beer that would kill a brown dog. Explanation here about killing a brown dog - old Australian saying. Most of the sheep farm dogs are brown kelpies and they work very hard. Problem is that some farmers are not really generous when it comes to feeding the dogs so the kelpies, being always



lean, mean, hungry and opportunists, will eat anything that even faintly resembles food - dead sheep, rabbits, birds, the odd chook found wandering outside the chook pen and other things beyond edible description. Their constitution is such that they can eat almost anything with impunity...and live - hence the saying that something is so bad it would kill a brown dog. Back to the trifle. Me, "Do you want me to set it in French vanilla custard with the fruit in jelly on top?" Him, "Yair, whatever, sounds great, I'll go for that." Me, "How many will be there for the dinner so I know how big to make it?" Him, "Oh, not many (really helpful) but make a big one anyway - we'll eat



it over the next few days." Me, "I'll also bring over a couple of my mince tarts for you to try - the mince is so matured and rummy you will really like them." Him, "Yeah, good - you can try mine in return. I made some yesterday and they turned out not too bad." Now that was a real problem as my brother is a worse cook than Aunt Grace and his statement 'not too bad' is a bit of a worry. Problem is - he doesn't have any chooks to which I could dispose of his tarts. He does, however, have a large Labrador that will eat anything (but must not be given fruit mince - grapes... remember?) While I am here, let's talk about the Labrador.

THE LABRADOR

As it figures in the story quite soon so you need to know his antecedents, so to speak. First off, please understand well that I am a dog person - I would have dozens if I could and I don't hate any dog...it is just that Labradors are not high on my favorites list (have to be careful here in case Julia (dear editor) gets the wrong idea and tells Isabelle - her pooch). *(Isabelle asked me to share with you that she is an exceptional dog, even though she is a Lab. She has but one fault that does not allow her to be a "perfect". ☺ She's takes no offense to you not liking Labs so much since you have never had the pleasure of meeting her. Furthermore, she firmly believes that you would change your opinion, of at least her, once you had spent some time in her company. Julia)* Okay, here's the reason. Having had past experiences with my brother's Lab' I now call it GG. My brother asked me why I did so and I told him it was because the dog was so big it looked like a small 'Gee Gee' - Australian colloquialism for horse. It was a white lie as the GG actually means 'Garbage Guts'. GG is the king of moochers and lounge lizards. When he is not eating something, anything, everything, he reposes on the most comfortable settee, lounge chair or sofa in the house dreaming of when he will, sometime



soon, be eating. Actually, he sleeps with one eye open and I have read that dogs can sleep with one eye open and half their brain active while the other half sleeps. Maybe this is so, maybe not but I do know that GG always has one eye open in case he misses somebody in close proximity with food of any type. On the occasion of food being nearby he will ooze off wherever he is laying and immediately assume the mooching mode... "Please, please, I am so hungry - I haven't eaten for, at least, 10 minutes." He does have one redeeming feature and that is his memory. It is extremely rare that I visit my brother and partake of a meal (in order to look after my digestive system) yet GG



watch my every move and, the minute I sit down at the table he is underneath at my right knee waiting for the food that I pass down to him. Don't get me wrong - I am not a feeder of dogs at the dining table - it's just that he is so convenient when I want to get rid of 'stuff' off my plate that I don't want inside my internal organs. I really don't think the dog has any taste buds as he will swallow anything I pass under to him. One time there was some squashy yellow things on my plate which turned out to be Brussels sprouts that had been boiled for an hour or so. Normally I am very fond of sprouts but I like them green - cooked just for a little while - not slaughtered until they are in a

serious state of decomposition as these ones



appeared to be. This had me worried

for a moment as I was sure GG would not take these on which meant I either had to eat them myself or pour them into my jacket pocket...the one with my car keys and mobile phone.

At the right moment I passed one under the table, and it was gone in a flash, quickly followed by

the other four that were starting to fester on my plate. Right then, you have a good picture in your mind of GG so



let's get back to the Christmas party.

THE DAY OF RECKONING

Well, I spent good time over 4 days making a Pannetone (Italian, yeast risen cake) and I had piped into it a ring of creamy dark Belgian chocolate and another thick ring of super rich French vanilla custard (6 egg yolks, double cream, vanilla pod and citron peel steeped in full cream milk, finest caster sugar and a splash of Angostura Bitters). On the fourth day I also made the wine trifle with a layer of mandarin segments poached in syrup, peach segments in passion fruit syrup, poached sliced mango,

lychees in fruit syrup and maraschino cherries all in a rich, fruity, port wine jelly sitting on top of a thick layer of chocolate cream custard that enclosed the lemon Madeira cake which was generously soaked with a blend of rather good quality sherry and port. Maybe not finger licking as I didn't have my hands in the various mixes it, but I certainly licked a few spoons and bowls.



And so it came to pass that we arrived at my brother's house for the Christmas dinner. The moment I walked through the doorway, GG appeared and 'glued' himself to my right leg - the 'provider' had arrived....me. I gave GG a pat on the head and tickled one ear to re-bond, so to speak - as I knew I was going to need his 'assistance'. My brother remarked, "I don't know what it is with you and that dog...hardly ever bothers when other people visit yet, the moment you step in he is with you every moment." "Oh yes," I said, "dogs know dog people...he knows that I am part of the dog pack and he wants to be in my group." "More likely he wants somebody to share his fleas," said my brother - and there was a fair bit of truth in that as I always came away from his house with a few free loaders jumping in my jeans.

It turned out that we were the only ones who had accepted the invitation (Did the others know something?) so the table was set for four only. "What about your children?" I asked. "Oh," he said, "they don't bother sitting at the table much any time. They just come in and out and grab a bit here and there then back to their rooms to play with their X-Boxes - Pacman - TV games (and other nonsensical electronic games) - besides, they've got loads of candies and crisps so they'll stuff up on them for most of the day." What a shame, I thought to myself - no interaction with other adults and a distinct lack of manners and common courtesies. I

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excused from the table? Of course- what's wrong with me - they never sit at the table.

Talking about tables, looking over the one at which I was about to be seated I noticed just a plate, knife and fork at each place. No napkins (there was an open box of tissues at the far end of the table), no Bon-Bons, no nuts or candy, no drinking glasses, no punch bowl. The complete display consisted of a bowl of sad looking salad - green leaves with a hint of cucumber pieces and...nothing else. We sat down and my brother bought out a tray of mixed meats - ham, turkey



and pork and here we come up against a few more problems. First off, the pork.

Going back to the late 40's, pork was rarely seen on many tables, but when it was, it was generally an inedible, tasteless, indigestible slice of material closer to leather than meat. I have never been able to validate the following information but it was reasonably common knowledge that pork had to

be well cooked. In those days, pigs were fed 'swill'- any cast off, rotten, left over, inedible trimmings and peels of fruit and vegetables, various cooked or raw meat scraps and, the worst, food refuse from restaurants...food scraps, food left or partially eaten by the diners, food that was well past its 'use by' date - in general - they were fed food garbage. The story goes that pork was not subject to health inspections at the abattoirs so there was a concern that you might pick up hydatids (bladder in the flesh containing the larvae of tapeworms - very serious to humans). Meat thermometers (for cooking) were unknown in those days and internal cooking temperature knowledge was a dark art. As such pork was cooked - and cooked - and cooked and then cooked some more. For many years now, by law, it is illegal to feed food scraps to pigs and pork is now a very popular meat. Pork meat is as safe as any other meat we eat and of greatly superior quality to that which we saw in those dark days. Cooked to internally moist is the way to go for a very tasty meal of pork, but....some

people - my brother included - are not convinced so he insists that pork be cooked to a degree of dryness approaching that of the dry chamois wiper that you use for drying off a washed automobile or, as we say here, as dry as the desiccated carcass of a long dead dingo in the desert. (A dingo is similar to your coyote.)

Well, the pork on the plate looked like it might be perfect for me to re-sole my yard boots...if I could drive boot tacks through it.

Not so the turkey meat. It was so rare I expected it to jump off the table any minute and start gobbling. Now, as you probably know, uncooked poultry meat is a sure way to get you

a trip to the hospital - or maybe worse.
Poultry



must be cooked correctly - not overcooked - just cooked correctly so there is no sign of pink flesh or blood. I made a vague mention of the raw turkey to my brother. "Oh yes," he replied, "don't know what happened with that. I took it out of the freezer the night before and put it in the refrigerator, but it was still cold and hard the next day. I thought it would finish thawing in the oven. I cooked it for the time recommended on the label of the plastic pack it was in, but it was still cold inside when I started cutting it. Still, should be okay - after all - I like my steak still red in the middle so the turkey will be just like it." (Well, hello salmonella and maybe a

drop of listeria as well.) I knew it would be useless going any further or telling him that a frozen turkey needs about 4 or 5 days in a refrigerator to thaw correctly. Maybe I could get it off my plate away from other food and feed it to GG who was ready and waiting under the table - in any case, none of it was going into my mouth.



As for the rest of the food, there was a plate of hard boiled eggs with dark rings around the yolks - a ring of sulfur caused by not putting the cooked eggs out of the boiling water straight into iced water. They're still okay to eat, but the flavor is tainted a bit with the sulfur. Next was a plastic container - unopened - of what was labeled -Potato Salad. My brother had purchased it last minute from the Mini Mart - last minute food items sold where you fill your car with petrol. I could see a few vague lumps in it - potato maybe? - but it appeared to be a container full of some sort of liquid that passed for salad dressing - much more liquid than potato. If there had been some bread rolls on the table I might have been able to sop up the dressing, but it looked like the only option was to spoon it up...if you dared to eat it at all.

There was one other dish on the table and it contained spotty green lumps. This was an Aunt Dotty (her name suits her) special. Aunt Dotty has some strange ideas about her 'food' - if you can call it that. I suppose she might be a vegan or something as she insists on eating the same food items that herbivorous animals and seed/grain eating birds eat but certainly will not eat the animals or the birds. I don't see her much - she spends a lot of time being sick or in hospital which is no wonder considering her diet. I looked closer at those strange looking green lumps and noticed they were speckled with red, yellow and purple bits throughout. My brother said the Aunt Dotty had dropped them off on her way to the 24 hour clinic as her 'dodgy' stomach was playing up - again ...as it always is doing. He said that she had told him what they were so he would explain them to me. Basically they were made of millet seed (parakeet food) boiled in wheat grass juice (cow food) with spirulina (fish food) added, chopped dandelion leaves and meadow flowers (more cow food) and the lot was set with agar-agar jelly (bacteria food) and flavored with flower nectar and pollen (bee food). This would be a test for GG. When the moment was right, I picked up a lump and slid it under the table. I felt his moist mouth close on it then movement as GG got up and went outside. Through the open door I could see him burying it in the flower garden - a fitting burial for a sad defeat - something, at last, that GG would not eat, but at least he took it away. I rewarded him with various slices of leathery pork and bleeding turkey which, as is his wont, went straight down without touching the sides of his esophagus. (I really do like this dog - he is so helpful.)

I had not actually eaten much at all and I would have really appreciated a nice bread roll (I like good quality bread.), but the only thing on offer was a slice of supermarket generic sliced bread - well, contradiction of terms - sliced doughy stuff that was completely bereft of character, flavor, texture, crispness of crust or any similarity whatsoever to real bread. Besides, the butter had been left out of the refrigerator by one of the kids and was in a state of liquidity - not financially - it was melty.



There was a bottle of my brother's home brew beer on the table - I could see the 2" of sediment in the bottom - and two bottles - crown sealed - of reddish liquid which I recognized as second cousin Luigi's homemade wine. Honestly, you could use this stuff to kill a wild goat, let alone a brown dog. Some years back I machined up a pasta rolling board for Luigi and he rewarded me with two bottles of red and one bottle of - his version of, Slivovitz - distilled plum brandy (complete with the copper sulfate residue from the old copper tub

in which it was boiled and the (never cleaned) copper condenser through which it flowed and cooled. It was about 98 proof - would knock your socks off if you drank it whilst standing, sitting or laying down. I mixed it 50/50 with petrol and ran it in a gas engine for a gain of 4,000 RPM and a melted piston crown. The red wine was a different matter. I poured some into a shallow bowl and dropped a copper penny in. The penny fizzed like crazy and changed color to a brightness similar to rose gold. At the time, we had a bit of a problem with the kitchen sink drain - it needed a good scour out as it was slow to drain the dish washing water. Half a bottle of Luigi's red was poured down and we heard a gurgling, fizzing and popping for several minutes then a strange sort of 'gulp' sound. I poured a glass of water into the sink and it was down the drain like a flash - not a sign of any resistance (hope the wine didn't attack the 'S' bend in the drain pipe). It was also very good for removing oil stains off concrete and old paint off the fence. I never drank any and I wasn't going to start now. When my brother offered me a drink of his 'brew' or Luigi's red I reminded him that I never drank any form of alcohol when I knew I would be driving a motor vehicle later. Actually, I rarely if ever drink alcohol other than an occasional good red with a midday meal and the occasional snifter of port, Muscat and the like when my brain is fagging during a magazine writing period.



So, none of his drink for me (thank you, said my stomach) so my sister-in-law plonked a can of purple soda pop (we call it 'soft drink') in front of me. It contained - according to the label, 125 grams (half a cup) of sugar - three parts caffeine, some type of chemical flavor, benzoic acid to stop going rotten and bicarbonate of soda to fizz it - no wonder kids are always hyped up. I don't drink this 'lolly water' ('lolly' is candy to you folks) and I certainly do not drink out of cans. Yes, I know, fussy old coot, but - we must maintain some standards in life. My brother noticed my hesitation, and knowing me rather well, asked if I wanted a drinking straw or glass for the drink. No, I don't like drinking through a straw or from a can (not that I ever did) - you never know what you might dredge up from the unseen depths. "I'll have a glass, thank you." I poured a very small amount of the purple fizz into the glass and tasted it. Blah! Certainly not a fine Shiraz or even a Rosé and - for me, not even drinkable. Fortunately for me, one of the kids, during a rush visit to the table, had left an empty pop can close to where I was sitting and, luck of luck, it was the same as the can now festering and fizzing in front of me. Drawing attention to GG in the garden (burying another one of Aunt Dotty's gelatinous lumps - 4 down - 5 to go), I was, as brother and his wife looked and discussed what the Hell the dog was doing,

able to swap my almost full can of fizz for the empty can. This confused the kid when, on his next visit for something from the table, I reminded him that he had not finished his can of sugar water, but - he drank it anyway - in one gulp.

It appeared that the dinner was finished and we adjourned to the outer balcony to overlook the garden (which now concealed 9 pieces of Aunt Dotty's 'adventures with [strange] food') and my brother bought out a slab of his homemade Christmas cake - complete with the deep black base - sunken sultanas and hard crusted top. "Always make my own Christmas cake," he



said, "a lot cheaper than buying one readymade. I use the 'economy dried fruit' from the supermarket (dried up sultanas and currants only - hard and like BB shot), oil from the deep fryer instead of butter - saves wasting it when it changes color - cracked eggs from the poultry farmer down the road (cracked eggs are very cheap - not guaranteed for human consumption...hello again salmonella) and I always add a good teaspoon of brandy (a full teaspoon? - you wild, extravagant fool) to the mix to help it keep for a while." (You add the brandy, rum, whiskey whatever AFTER the cake has cooled and a good half cup is the least. The alcohol is gone in a whiff in the heat of an

oven if you include it in the uncooked mix so - no preservative action.) He went on, "I never bother dressing the cake with almonds or marzipan icing - once you have eaten it you don't appreciate how it looked. (No marzipan! You heathen.) Hmmm - I think I might have cooked it a bit too long as all the fruit has gone to the bottom and...it's a little bit on the dry side." (ALL the fruit - the entire 12 sultanas and 4 currants? They went to the bottom because he did not dust them in flour before adding them to the mix. A bit on the dry side is an understatement....I have seen moister beef jerky than that). He cut himself a generous slab - offered me to 'dig in' - and poured himself a glass of his home brew. As he lifted the bottle, a small slurp of the beer fell on his cake and I, distinctly, heard a 'slirpt' sound as the cake blotted up the liquid. I was saved from the terror of having to eat a piece of that cake (could not give it to GG due to the sultanas - no matter how dry they were) by him going off to get another bottle of 'brew' from his shed refrigerator. The second he was out of sight I tipped some crumbs off the cake plate onto my plate and put on a satisfied look. When he returned he saw the crumbs on the plate I held in a position that he could not miss and he remarked, "Well...how did you find the cake?" "It was just sitting there on the table - I had no trouble finding it." I joked feebly. He guffawed at that and said, "You have always been a good tooth man (keen eater) - you can always home onto the good food." (I think the battery was flat in my homing beacon when it came to that cake.)

I would really have liked a serve of my Pannetone, but early in the proceedings, the kids had grabbed it from the kitchen bench -all

of it - and taken it to the forbidden zone that comprised their bedrooms and play room. My brother said I would retrieve it later as they would just cut a slice or two off it for themselves. Fair suck of the sauce; mate...if anything, those kids are worse than the famous GG when it comes to that type of food. In minutes they would have reduced it to a few crumbs and a smear of chocolate and custard on the plate. In any case, I wouldn't venture into their 'no adults zone' in that part of the house. They have things that snarl, growl and peer at you with red, beady eyes from dark closets...not to mention the wild jungles under their beds.

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ry, but....I couldn't help thinking about my trifle sitting in his refrigerator. Nothing was mentioned about it and I now realized that the gutzing swine was keeping it all for himself and his wife. Oh well, I can always make another for me and...use my really good port in it....perhaps a dram or two of Galway Pipe (would that be sacrilege to some?) Anyway, the best time was upon us - time to get back home as we have animals to feed (me included) so, thanks and all that, nice of you, it will be our home next year (not bloody likely) and look after yourselves (don't choke on my trifle tomorrow).



Back home and the animals tended to, it was time for a rest, a slice or two of nice ham, a bowl of mixed salad, two mince tarts, a small snifter of port and all was well with the world. Even in that simple contentment I still couldn't get the thought out of my mind - what happened to the Christmases we enjoyed so much? Will 'takeaway' food replace all that we know and enjoy? Well, one thing is for sure - whenever I have a working oven, a food mixer and access to prime ingredients, you can always drop in to our home for a feed of real food, and maybe, a mince tart.



Auguste Escoffier shall live forever.

PASSING NOTE

Of course, Christmas is now quickly fading into a memory and the New Year is upon us. The older I get the more this New Year business

confuses me. I just read the date in our daily newspaper and now I am even more confused than before. I'm sure it was Tuesday last Wednesday...or was that Friday that should have been a Saturday? Is my time worn method of remembering the days in the month failing me? I am sure you have your own method and it might be similar to mine, but - please read mine and tell me if it confuses you as well.

Thirty days has September, April, June and no wonder.

All the rest had bread with jam

Excepting Grandma as she rode a tricycle.

Just
how
many
month
s have
28
days
in
them -



that is my question. While you are pondering and calculating the Leap Years, look forward to a good year with plenty of new 'toys' and smooth oily hands.

Best wishes
from
WINCH -
THE WOK
WIZ



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22nd Annual Winter Festival of GIANTS



Friday, February 11th

Saturday, February 12th

Sunday, February 13th, 2011



DeLand Golden Hawks RC Club

60/80 Rules:

Biplanes, 60" wing-span

Monoplanes, 80" wing-span

Documented 1/4 Scale



Sanctioned by:

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No. 11-0101

A portion of the proceeds will be donated to the SHRINERS HOSPITAL FOR CHILDREN

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SCHEDULE OF EVENTS

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11am—8pm Merchandise Check In

SATURDAY—FEB 5
8am—AUCTION STARTS
More Merchandise Check In

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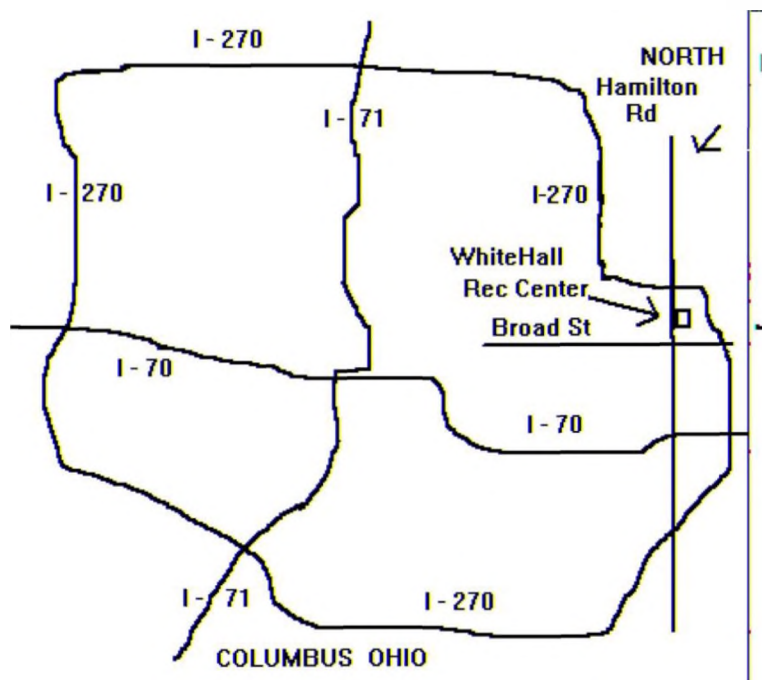
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Bring your items to sell
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2011 Madison County R/C Swap Meet

Date: March 19, 2011

Vendor Setup: 7:30am

Time: 8:30am - Noon

Auction: Noon-1:00pm

The number of Tables is limited so call or email to reserve yours.

WHERE:

Pineview Baptist Church
5614 Highway 53
Harvest, AL 35749
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Raffle, Door Prizes & Concessions!!

Indoor Facility: All Vendors Welcome!!

Admission \$5.00, Ages 7 and under free!!

Tables \$7.00 at door, \$5.00 in advance

Raffle Tickets: \$1 ea, 6 for \$5
13 for \$10 or 30 for \$20.

Directions: Drive to the A on the map!

From I-65W take I-565 E go ~14 miles.
Take AL-255 N (Exit 14) go ~ 6 miles.
- AL -255 is Rideout Rd -
Turn left at AL-53 go ~ 4 miles.

From US 231 (North or South) go West on
US 72 to Jordan Lane (AL 53).
Turn North on Hwy 53 and drive ~ 9 miles.

Entrance to the Pine View Baptist Church is
on the right of AL-53 northbound

Event Director: Ernie Duffey (256) 714-3176
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Northern Connecticut Radio Control Club



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Pre-Registration on Saturday, February 12th, 1:00 pm to 3:00 pm
Open registration on Sunday, February 13, at 8:00 am until NOON

**Doors and Swap Shop open at 8:00 AM on Sunday
Auction begins at 9:00 AM**

Admission \$8.00, under 16 no charge

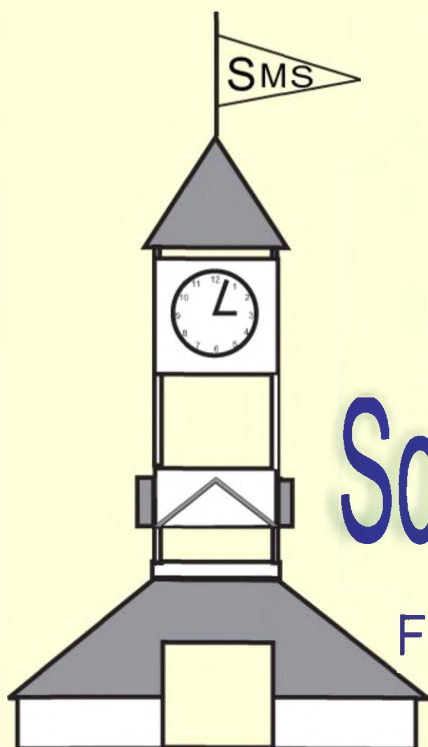
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2011



Two Days of Fun Southeastern Model Show

Friday, March 4th and Saturday, March 5th

The Doors are open 1 to 7 p.m. on Friday and from 8a.m. to 5 p.m. on Saturday



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PHOENIX QM40 CLASSIC

March 5th and 6th, 2011

Site: Speedworld R/C Flyers, Speedworld Motorplex, Phoenix, AZ

www.speedworldrcf.com

TOTAL ENTRIES ARE LIMITED TO 80

**All Entries must be Post Marked on or before Wednesday
February 23rd**

Entry Fees: \$70

Your entry fee must be received for your entry to be confirmed and hold your freq. Based on postmark.

3 pilots per group (frequency) limit.

If all of your "group" are on 2.4 Ghz you will be issued the next available "group" number above 100 for matrix purposes. If one or more of your "group" are on a 72 mhz channel, all of your group will be entered on that Ch.

Info: Jim Allen, 7701 E. Culver, Mesa, AZ 85207 E-Mail: jameseal@earthlink.net

Home Ph 480-984-6446, Cell Ph 480-688-4789

Time Schedule will be Strictly Followed!!!

Saturday

8:00 test flying closes (Inspections to be done on Friday at the field)
8:10 pilots meeting
8:30 first heat starts

Sunday

8:00 test flying closes
8:10 pilots meeting
8:30 first heat starts

NOTE: You must check in by the time Jim leaves the field on Friday and your planes inspected unless you arrange with him otherwise or you WILL NOT BE IN THE MATRIX.

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(623)-933-4000
(Near Windmill Inn)

Windmill Inn
12545 W. Bell Rd.
Surprise, AZ
(623)-583-0133

Holiday Inn Express Hotel & Suites
Surprise
16540 N Bullard
Surprise, AZ 85374
(623)-975-5540

Quality Inn & Suites at Surprise AZ
16741 N. Greasewood St
Surprise, AZ
(623)-583-3500
(Near Windmill Inn)

Motel 6 of Sun City
11133 N. W. Grand
Ave.
Sun City, AZ
(623)-977-1318

Best Western of Sun
City
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DO NOT SEND ENTRIES BY METHODS THAT REQUIRE SIGNATURE ON DELIVERY.

Come enjoy the WARM Phoenix Weather and The Race of the Winter



THE 30th ANNUAL

SUN VALLEY R/C CHAMPIONSHIP

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CAVE BUTTES DAM FLYING SITE
PHOENIX, ARIZONA**

FEBRUARY 19 & 20, 2011

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**ENTRY FEE: SPORTSMAN, INTERMEDIATE,
ADVANCED, MASTERS, F3A \$40.00.
MAKE CHECK PAYABLE TO: SUN VALLEY
FLIERS C/O DAVID BORROW**

**Registration 7:30 to 8:00 am. Pilots meeting 8:00 to 8:15 am.
Flying starts 8:30 am**

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Map to field: WWW.SUNVALLEYFLIERS.COM

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DavidBorrow@Cox.net**

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RCACF



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Dates: Saturday 19 and Sunday 20, 2011

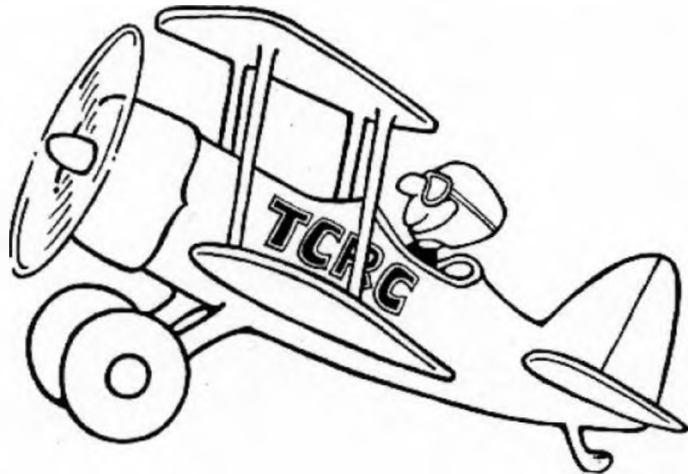
Field Open 7:00 a.m. Registration 8:00 a.m., Start Combat 9:00 a.m.

\$25 1st event - \$40 2 events - \$50 all three

AMA Sanction# 11-0209

<http://www.rcacf.com>

**Cross Point Church
9801 France Ave S
Bloomington, MN**

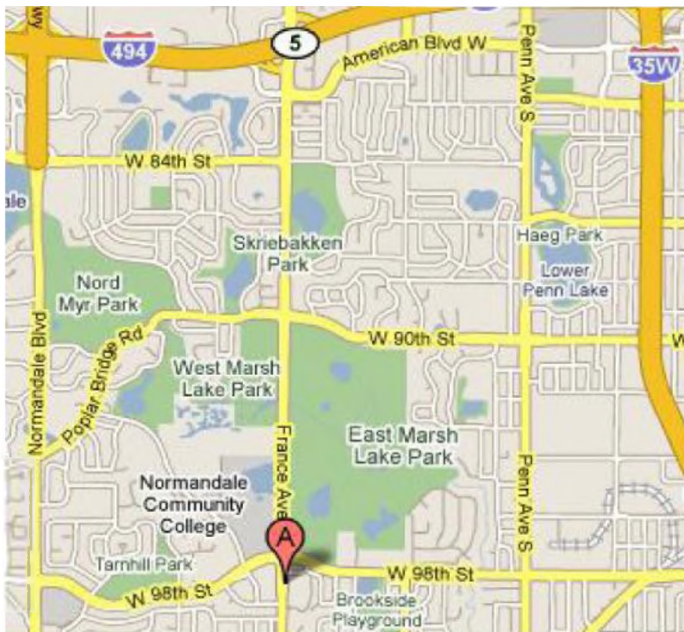


TCRC 35th ANNUAL AUCTION

TWIN CITY RADIO CONTROLLERS – MINNEAPOLIS AMA CLUB #383

SATURDAY - February 12, 2011

More Info online at www.tcrconline.com



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- R/C Airplane Kits
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- R/C Aircraft Related Accessories and R/C Aircraft Support Equipment
- No Cars, No Boats, No unrelated Stuff

Where:

Cross Point Church
9801 France Avenue
Bloomington, Minnesota

When:

REGISTRATION Begins at	8:00 AM
AUCTION Begins at	9:30 AM

Details:

- \$3.00 Admission: *Includes Bidders Card*
- \$ 20.00 MINIMUM OPENING BID (to speed the auction! Nothing will be sold for less than \$20)
- commission of \$5 or 10% whichever is greater
- Seller MUST attach a brief description to Each Item being sold
- Pre-Registration Available for Sellers
- BUYBACKS AT 10% UP TO A MAXIMUM FEE OF \$20

FOR THE COMBAT ENTHUSIAST and FIGHTER PILOT WANNABEE

Greetings everyone and best wishes for a healthy and happy 2011! While things north of the Florida border are still too cold to allow combat contest activity for the most part, here in south Florida we are able to fly in the winter months for the most part. On a personal note, I'm pleased to report that for the first time since a car crash in September 2010 I was able to go to the local flying field and get a couple flights in last weekend, yay! ☺ I still have to take it easy but things are improving.

BE THERE OR BE SQUARE

Events for February are limited to a single contest here in Florida: The "Tangerine Combat Challenge" for Open B, SSC, and 2948 Scale will take place on the 19th and 20th in Apopka, (Orlando Area), hosted by the Radio Control Association of Central Florida. See Event Flier for more details.

Events for March are: No events currently scheduled. Traditionally the "Lone Star Nat's" take place in March but no date has been posted at time of this writing.

Events for April are: 4/9, 10 the 6th Annual "Bushwhacked" Spring Fling for Open B, SSC, and 2948 Scale.



As you can see, things slow way down in the winter months and you have fewer opportunities to cut some streamers before the snow flies, so don't miss out! For the month of January, as you might expect, only here in South Florida is there any combat activity. Sign up, suit up and show up! Here's the link to go to the RCCA's event calendar and sign up: <http://rccombat.net/events/index.asp>

Signing up online prior to the contest date should be done as soon as possible. This helps the event coordinators and contest directors get all the needed supplies, manpower and club resources to make the event run smoothly. Also the scores of those who pre-register are recorded more easily by the National Points System (NPS) score keeper, Randy Hodges, when you sign up online before the contest. Seeing the names of other pilots you may know or want to compete with is a good draw to

encourage participation, so don't be shy! Sign up early!

Be there or be square!

EVENTS DEBRIEF

IRKS Fall Classic

Sunday, November 14, and perfect weather greeted the 6 pilots who came to Cocoa Beach to compete in the 8 rounds of SSC and 4 rounds of scale combat that were scheduled. I was in attendance to take pictures and help out but unfortunately as I mentioned earlier, was not able to join in the competition due to neck injuries from a car accident.



Contest director Don Fourson and several members of the host club, the Indian River Kontrol Society, were on hand to take part and help by judging. Although the turnout was on the small side, the competition was quite spirited. All things considered not too much carnage for an SSC event either.



Craig Buttery flew his new "ZAPDOS" design once again and demonstrated how well it performs with some outstanding flying. Don Fourson used a scratch built design of his own that went from being hard to control to going out of control. Bob Loescher flies a tried and true version of the Georgia Gorilla that he modifies somewhat. Bob has come a long way, in this case literally as he drove down from Ohio to be at the contest! Jim Nadaskay prefers the Battle Axe design and is improving with every competition. But the real standout was Matt Chontos. Flying Scharnell Avengers he racked up enough points to win by several hundred points.



Being able to fly "all up" which means every pilot had a judge made for a quickly progressing event that finished all 8 rounds of SSC by the lunch break. Since there were no frequency conflicts to prevent everyone from flying together, it was a no-brainer that having only 6 competitors required that it be an all up event from start to finish. Thanks to the club volunteers for making that possible!



2948 Scale combat was scheduled to follow. 6 were signed up but right away that dropped to 4 actual competitors. Don Fourson's P-39 Airacobra went for an unsuccessful test flight that caused enough damage to put him out of action and Jim Nadaskay suffered from a similar mishap. Being prepared, test flown and with back up airplanes is a must if you intend to have maximum fun in combat.

The four remaining pilots, Craig Buttery, Ted Cwikiel, Matt Chontos, and Bob Loescher flew 4 rounds with Matt coming out on top by a very wide margin.



We flew 8 rounds of Open B before lunch, took a break and finished with two more rounds before moving into 2948 Scale class. Always my favorite featuring replicas of WWII fighters, we had 6 pilots registered for battle and got under way after a short break to change things over.

For this and other event debriefs with more photos go to <http://rccombat.net/forum/viewtopic.php?f=21&t=13552>.

And also be sure to check out the Palomar Flyers Combat Forum at <http://pfcombat.hyperboards.com/index.php> for some cool combat tips, event debriefs and discussion forums.

FROM THE BENCH

This month I have some very exciting news. It appears that Norvel engines and at long last parts are available again! I have been in contact with Alex Frish in California klondike17@juno.com and he has an order coming in from Russia with all the parts I have been unable to get since Norvel went out of business some years ago!

Most guys who ran Norvels either loved them or hated them. They could be great performers but on the other hand have some inherent quirks that can be a problem if not addressed. In the .25 size range Norvel first came out with the "Big Mig" a plain bearing .25 with a single needle carb that actually ran quite well especially on a mousse can pipe. Later they released an improved design, the "AME .25BB" sporting ball bearings and a 2 needle carburetor.

Norvel was very innovative in their design of these engines incorporating some unique features like a one piece cylinder/head that bolted onto and slid partially inside the crankcase, and a rear cover plate that threaded in rather than bolting on like most other types did. The metallurgy of the cylinder is such that no sleeve or liner is used to simplify the parts required, very innovative.

The head top piece and rear cover threading in, while being a good design has one very important flaw: there has never been a tool available to tighten or loosen the rear cover which has two slots or notches in the cover's rim obviously intended for that purpose. I, and I assume everyone else with a Norvel.25 have been left to our own devices in order to get the cover out or tighten it, which is a must to prevent leaks. Furthermore, if you fail to properly tighten the cover before running and during break in, it can get loose and unscrew itself when running! Not good!

There is a head wrench available from Norvel through Alex, and I have had an aftermarket version someone sold years ago to tighten and loosen the head cover which screws in to hold the glow plug button in place. This also should be tightened before running and during break in to prevent leaks. A Standard glow plug wrench is all that is needed to change the glow plug.

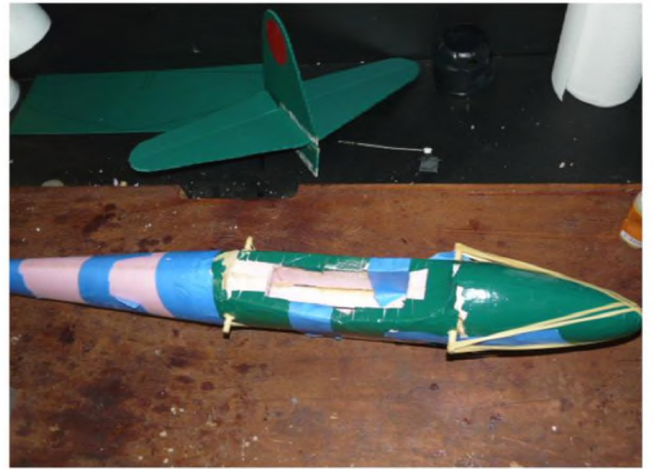
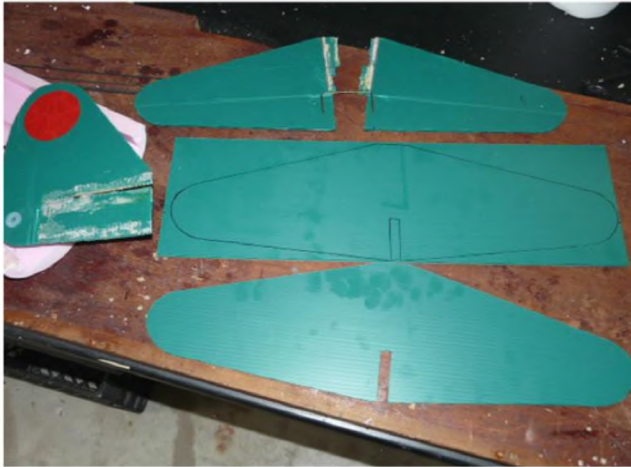
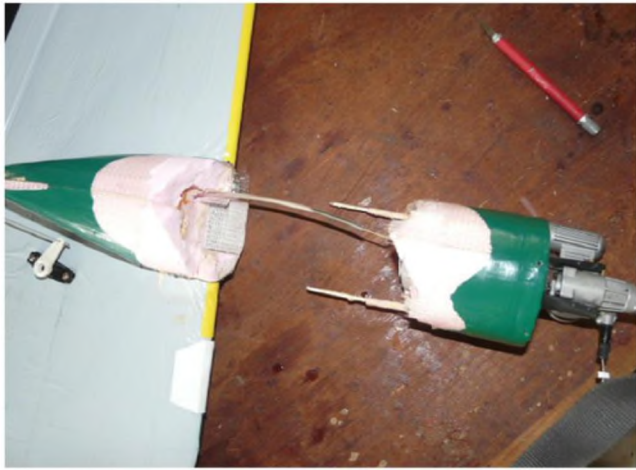
I have designed in AutoCAD a prototype rear cover wrench that will fit both the 30mm AME.25BB and 28mm Big Mig covers. When I looked at an old Cox head/all-in-one wrench I noticed it had exactly the shape I need on one of its ends. A semi-circle with two tabs that lock into the two notches of the rear cover, pretty simple. Unfortunately the Cox wrench is far too

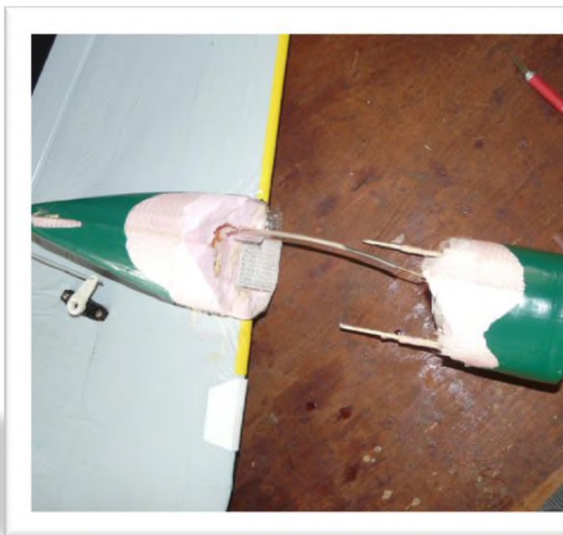
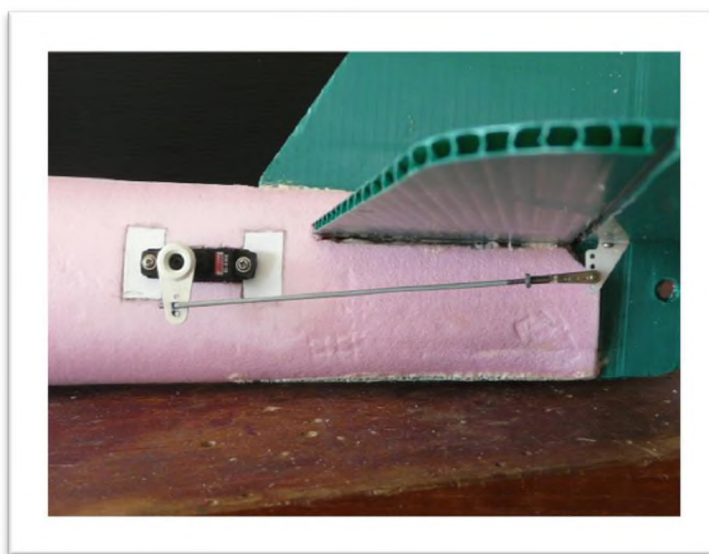
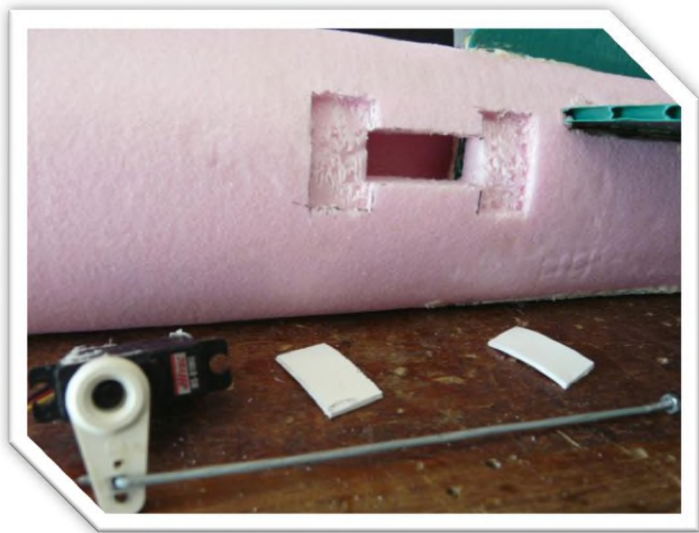
small to fit the rear cover on a .25 so I have to scale the idea up to fit a Norvel. If anyone out there runs Norvels and is interested, send me an e-mail and I'll keep you informed as to the availability of a tool for your back plate!

Well, that's it for this month gang; I hope you enjoyed it and am looking forward to hearing your comments at chandegard@peersonaudio.com. Don't forget to clear your guns before you engage and check your six o'clock frequently!

Watch the pictures, closely...







**Chris has
SKILLS, huh?**

THE OILY HAND: Covering engine topics and working with metal for models. Send your comments or questions to: oilyhand@bigpond.net.au or write to Brian Winch, 33 Hillview Pde, Lurnea NSW 2170. Australia. International Response coupon (Post Office) required if you want a written reply.

OILS ARE OILS

Asking around amongst friends and associates, it is quite evident that very few people are concerned about or know about the oil used in the engine of their car or motorcycle. Generally the choice is left to the mechanic who services the car or the service center for a specific brand of car. These days I would consider that any reputable mechanic or (dealer) service center would use a good quality oil. Not a premium oil, but one that suits your vehicle, does a good job and is available in bulk to registered mechanics. In past times, disreputable mechanics, second hand car dealers and the like would come up with any trick to save a few measly dollars. You wouldn't know if the oil they poured into your car engine was a mixture of bat fat, lizard liver oil and goose grease - second hand oil (I will now change the oil - from this car to that car and from that car to this car.) or not even change the oil at all, but...still charge you for an oil change. If you're shaking your head in doubt - it was (hopefully 'was') the truth. Fact is, oil does not wear out - it just becomes polluted with combustion by-products, airborne dust, metal dust and moisture. If the disreputable mechanic knew the customer had



no idea about the engine or even how to check the oil, he was on a safe bet to use old oil or not change the oil as he knew the owner would never check it. The reason he might change your oil and replace it with other old oil is that he could, under oath if necessary, truthfully swear that he had changed the oil and he used stock oil for the change. His 'stock' oil might be from reputable service garages - oil they had drained from cars - as they were glad to get rid of it by giving it away rather than pay to have it taken away. Later on, the used oil became a useful commodity when several companies were re-refining it. Re-refining oil is now big business - even cooking oils from restaurants and fast food companies are used and many motor specialists recommend it and use it in some very top line vehicles. Not that you would ever know where the oil came from, but I can conjure up a scene with two street rod owners talking about their machines and the oil they use. Red Rod owner, "yeah man - I use Kentucky Fried chicken oil in my motor - it

runs real smooth and the car flies like a bird.” Silver rod owner, “well - I prefer the oil from Barnacle Bill’s Seafood Emporium. He sells a lot of cooked cod and cod has a lot of fish oil which has a lot of Omega 3 in it. That’s got to be great for the big ends in my rod’s engine.”

Is there any appreciable difference between different brands of oils? Does using a very expensive oil make any difference to the life of your car engine? Are the super slick, low viscosity, very low mix ratio oils (expensive) oils better for your two stroke engines? Many questions can be asked and many ‘for’s’ and ‘against’s’ put forward, but the main question remains - the most important factor - is the oil suitable for your particular engine (say, motorcycle, jet ski, snow mobile for example). Is it a recommendation of the manufacturer who knows, intimately, the metals, clearances, operating heat range and use for which your engine was intended. Will you be making changes to the position of the engine in your motorcycle? The airflow over the finning? The loads applied? The settings of the carburetor? Not very likely. You might change the drive ratio to the rear wheel, but that will not affect the engine as the motorcycle has a gear box that takes care of the varying loads. You might fit a fairing to reduce wind and rain effect on you, but it won’t affect the engine as it will not be covered. In essence, you cannot do much at all as a home mechanic to change the factors controlling the engine in your vehicle. All this boils down to the oil you use in your petrol fueled model aircraft engine.

LESS AND LESS

In the beginning days (around 1940) of model aircraft engines, when they were all petrol

fueled, it was common to use 70 weight oil at a ratio of 3:1 - 333 ml per liter of petrol - a percentage of 25...yes, that’s correct, 25% of 70 weight oil, some engines required even more - real oily hand stuff. Obviously the engineering quality of the engines was a far cry from those we enjoy these days. Not only that, oil processing was still rather crude compared to modern methods and the variety of oils was in the very low numbers. What a difference 70 odd years has made.



A range of various synthetic oils for high performance two stroke engines. These are from my fuel cabinet and all have been tested to good effect.

Oils and engines have changed dramatically and it is now common to see an oil ratio of 50:1 recommended and, synthetic oil at that. Though modern and up to the minute we might consider this technology now, in far less than 70 years it will become ‘the dark days of lubricating oils and engines’ much the same as we see the 40’s. Fact is, the dramatic changes are well with us now, established and still progressing at a rapid rate. I’m sure you have heard of ceramic bearings - bearings suitable for incredible speeds, super hot conditions and capable of operating with little more than a sniff of lubrication. These bearings are, already, freely available to modelers for use in model i.c. engines and turbines...you can purchase them from Boca Bearings, as one example

specifically for model engine use. Along the same lines, we hear about plasma coatings, ceramic liners for engines, Titanium oxide surfaces (one example) and materials totally beyond our knowledge and understanding. The technology spreads out far and wide with, generally, great advantages to everybody. Consider one very simple example - far away from internal combustion engines but a part of the modern developments of discussion. Going back a few years, the iron roof on your house and/or shed was corrugated galvanized iron - a ripple formed thin sheet of steel with a zinc coating. Even though good in all weathers, many people still insisted on having the roofs painted - red was most popular. These days the thin sheet of metal is formed in various styles - corrugated, a line and so but the coating is zincalume - a mixture of zinc and aluminum and, if you want it colored, it is powder coated and generally known as Colorbond - a permanently colored material. As we were discussing, new developments bring forth supporting new developments and so it is with this roofing and - popular - fencing material. Roof gutters are made from it but, unlike the old galvanized iron that was expertly soldered at joints, corners, down pipes and the like, solder will not attach to these materials without really specialized application and expensive flux so, neutral cure silicone compound was developed and used by the many liters for, as an example, roof and gutter work. The normal silicone compound cannot be used as it is acetic acid based and this would attack the coating and the metal. If you have need for silicone compound for a job in which metal is involved - any metal - neutral cure silicone is the one to use.



**Neo 100:1 oil - been around for about 20 years.
Works well.**

HOW LOW CAN YOU GO?

I'm talking about developments in low use ratio lubricating oils - do we use them in our model engines? Following is correspondence from a reader who asked about new oils.

"Hi Brian,

(He then said nice things about my magazine column - he must be a nice person.)

I have a question for you, one which you might want to comment on in one of your articles. Here goes:

I have noticed the Fuji Engines, sold by various hobby dealers; show a very expensive synthetic oil called Imvac oil. They claim it can be used at ratios as high as 150:1. They claim, specifically, the following usage ratios.

Break in ratio for the first gallon (4.5 liters) = 50:1

Break in ratio for the second gallon = 100:1.

After this the ratio is 150:1 if the engine is well cooled or a ratio of 100:1 if cooling is marginal - as in a cowling. It is also written in the instructions that, if you choose to use some other brand of oil (not Fuji oil), the oil ratio will drop down to 25:1 for the first gallon then, after that, 40:1 for all future use. As you can see, they are claiming that their own oil is so good that a ratio of 100:1 is OK after break in, possibly even going to 150:1 under ideal conditions. Does this seem possible to you, in regard the Fuji super oil? Also, do you have any comments on other synthetic oils, such as Amsoil, which is claimed to be OK at 100:1 after break in (and in light stress conditions) dropping down to 80:1 for more extreme conditions. These numbers for synthetic oils seem almost magical to me when you compare them to the common ratios of 40:1, more or less for common two stroke oils. Thanks for anything you can offer about this matter.

Bob. C."



There are many very specialized lubricants but you must understand them well before using them.

Well now, I have a few questions myself about this oil ratio question and a few considerations

for any modelers who have thought along these lines. My first question is - why do you want to use a very low amount of oil? I will come back to this question further on so, in the meantime, let's look at the oils and the claims. Dry sump engines such as the majority of two strokes are lubricated, in the main, by the fuel - often referred to as 'petrol' - a mixture of petrol and lubricating oil. This has certain disadvantages in that, firstly, the measurement of oil has to be precise - no hit and miss, particularly if the engine is capable of high performance. Next consideration is that the oil has to be specifically formulated for this application of which there are two different requirements - these being for high performance air cooled engines and high performance water (or liquid) cooled engines. To clear that last classification, you can consider an outboard marine engine to be water cooled but a motor cycle engine generally uses some form of coolant liquid either on its own or mixed with water. The only liquid cooled model engine I can think of at present (other than specific marine engines) is the MVVS that is designed for aircraft use so I will concentrate on high performance air cooled engines.

Another disadvantage seen by some is that the oil does not contribute to the power of the engine - the more oil mixed with the petrol, the less power is gained from the fuel mix. Only those looking for even the most minuscule power increase would be considering this factor.

The oils we use are formulated for motorcycles, two stroke person carrying aircraft engines (Rotax for example), snowmobiles, any other



As you can see - fully synthetic, but this is a wet sump oil - not suitable for combustion as in two stroke fuel.

high performance two stroke engine, but I seriously doubt, none are specifically formulated for model aircraft engines due to, even worldwide, the small amount that would be used by modelers who use petrol powered aircraft. We 'adopt' oils for our use and, generally, rely on the manufacturer to indicate how much oil should be mixed with the petrol. In reality, using the mainstream oils, all our two stroke petrol engines, can be run on the same ratio of oil. As I said with the oils, there are very few of these engines manufactured from the ground up for model use. Why design, develop, cast and machine a piston when they are readily available tried, true and tested. Same with the rings and the conrods. A company specializes in forged connecting rods

and has a proven track record for a high quality product. They are the specialists and have all the equipment for this type of work so...outsource to them to make you rods to your specifications. Engine barrels are a common item that can be produced by a company specializing in that field, bearings come from a bearing supplier and Walbro have just about got the game sewn up as far as carburetors. The oil content in the fuel for these engines is mainly for the piston fit. Get it wrong or forget to put oil in the fuel and it is the piston that will get a sudden urge to be as one with the inner barrel. The needle and ball bearings couldn't care less - they would be quite happy on just petrol. The odd man out, so to speak, is the Saito petrol engine. These engines have plain bearing big and little ends for the conrod plus, they need a drop of oil for the cams and camgears. As such they need more oil than the two strokes with the needle roller conrods and the (first) recommendation was for 20:1. The last engine I reviewed was the latest Saito 30 - 3 ☺ cc - and the recommendation was for 20:1 for running in then 30:1 for general use. Getting back to the high number ratios (lower amount of oil), these oils are for high performance two strokes used in vehicles as I said and here we see the difference and the reason I am reticent to recommend very low oil contents. Virtually nothing changes with the running and operation of the engine in your motorcycle (snowmobile etc.) as the use of the vehicle is controlled by its design. The only load changes encountered are road terrains -hills etc. and how much load you put on the vehicle. Again here, this is controlled to some extent by the design. If a motorcycle is designed to carry a pillion passenger as well as the rider it will have a pillion seat and rear footpegs. It might also have provision for

panniers, top box or a luggage rack. All of these extras are considered when the engine is chosen for the vehicle and the total load is a consideration taken into account when it comes to lubrication for the engine. Not much needs to be changed as extra loading is taken care of by the gearbox. The ratios are designed for the use of the bike so as not to overload the engine. Another factor is cooling and this is taken care of with the finning and lack of obstruction for air to pass over the engine when the vehicle is in motion. Another consideration for each type of motorcycle is its intended use. If it is a commuter type vehicle it will be subject to traveling in traffic, stops and starts at traffic lights, hold ups on the road and even slow traveling so the engine and its cooling fins are designed for this type of operation. I have seen exhaust pipes glowing red near the head on motorcycles in traffic stops when the rider did not consider shutting the engine down. The pipe glowed but the engine kept running. The last consideration is the fuel system. The majority of motorcycle (other vehicles) riders would never even consider 'fiddling' with the carburetor or even know if it was possible to re-tune the fuel system of the engine. The carburetor is set by the manufacturer and there it stays and...a good thing too as a motor cycle or other vehicle engine can suffer the same fate when attempts are made to alter the mixture tuning. They will certainly seize or suffer internal breakage if the tuning is too lean - just like our model engines and that leads right into my feelings about low oil content fuels. Using our model engines we change the load by using different propellers, flight patterns (vertical climbs and the like) and high speed operation. There is no gear box fitted to change down a gear under load so the engine has to cope without any assistance. Next

is the dreaded needle fiddler changing the tuning, running the engine lean, the engine unloading in the air and running super lean so, again, the engine is under fire. Last is the dreaded cowl - the engine is, virtually, wrapped in a blanket with totally inadequate air circulation so it runs up a severe temperature. In all these cases the oil content is quite often the savior of the engine. The engine will overheat but, in most case, the oil content will save it from destruction because we are running a reasonable amount of oil in the fuel. Reduce the oil content and you increase the potential for total destruction. If you can guarantee to yourself that the running conditions for your engine will never be compromised then go for the super low oil content but...I don't like your chances.

My last thoughts on the matter are...why? Will you save heaps of money? Will the engine performance be a gain you will notice or use? Petrol engines don't spew out oil like a methanol engine so this would not be a consideration - our engines don't foul the plugs and carbon is not a worry so...why take the chance?



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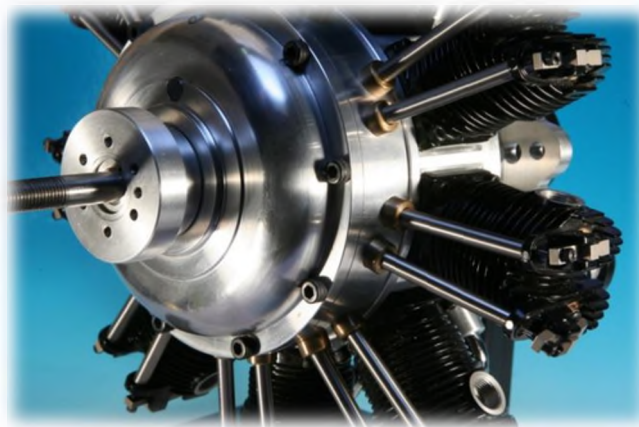
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I have been giving a little assistance to a mate who is building this radial engine from scratch. Saito cylinders used for ease of manufacture.



As you can see here - the quality of his workmanship is quite high. I will report on this further when he finishes it and gets it swinging a propeller.

SLIPPING OFF

Well, that's about my lot, as I have something or other to do - not sure what it is; but there is a pile of work on my workbench so it must be in that pile. We had a bit of excitement here yesterday with 'Scatterbrain', my incapable workshop assistant and the Police Highway Patrol. For a change, the 'weird one' of the two of us (not a word from the back of the class about that) has not been endeavoring to fly in

some way or another as his interest has changed to high performance road vehicles. We have a big turn out here every year for alternate fuel road vehicles. All sorts of vehicles using anything but internal combustion power take part in a long distance race type rally for a big prize and a short moment of fame. Solar power is rather popular as is human power but, generally, it has all been done before - nothing new of any great interest. Well, 'knothead' was reading about the impending rally and decided to enter and he was determined to win. No doubt he intended to use the prize money for more hair brained flying schemes. Here I need to explain something to you so you can grasp the principle he was employing for motive power. For readers who did not have an 'experimenting' childhood, I will explain how we made simple jet engines with plastic soda pop bottles. First off you drilled a small hole in the lid - a neat hole with no ragged edges. Then you ensured the bottle was completely dry inside - very important - and you then poured in a very generous amount of baking soda - bicarbonate of soda - and tilted the bottle so it all went to the bottom corner inside. You then set the bottle horizontal and carefully injected (with an old syringe or fuel tube from a bottle) a good serve of strong vinegar - the very cheap white type as it is almost pure acetic acid. Now the trick was to pour in just enough vinegar so it lay in a pool just below the neck of the bottle. Tilting the bottle just slightly forwards - not enough for the vinegar to pour out - you screwed the lid on really tight. You then placed the bottle in whatever model you had - generally a boat in the water - and tilted the bottle so the vinegar ran down to the soda in the bottom. This caused a violent reaction and generated a lot of gas which shot out the hole in

the lid providing a forward force - a simple jet engine. Sometimes we would just throw the bottles in the water and they would zip and skate around like crazy. I have done the same thing with different shaped plastic drink bottles but sealed the lid without a hole. The gas generated inside made the bottle as rigid as steel but no extra weight and I used 'Zip' ties to secure two bottles to a wire frame for a float type undercarriage for a float plane - almost no displacement for the bottles and certainly tough. Anyway, 'weird brain' collected several hundred pop bottles and made himself an alternate power vehicle. Picture in your mind the letter 'V' lying on one side with that side flat and the other angled upwards. This was the shape of his vehicle. He made a huge V with sheets of plywood, fitted wheels from a pedal cycle - simple steering, a plastic window in the front, a lightweight seat and several hundred pop bottles - all with the necks pointing rearward - in the rear section of the horizontal V. Enlisting the aid of his similarly weirdo mate from down the pig farm, they loaded about 50 pounds of baking soda into the bottles and then, being ultra careful, several gallons of white vinegar and then they secured all the bottle caps with holes in them. They had a potential bomb if this crazy vehicle was tilted forward with all that soda and vinegar. The pig farmer had his flat tray truck out on the road and they planned to load the jet vehicle on that and take it to the start point of the rally. All well and good - chief 'weirdo got into the V car to steer it as 2 I/C weirdo pushed it down the drive to the flat truck. All went well until they came to the drop in the kerb (gutter) that formed the driveway onto the road. The nose of the vehicle dipped suddenly and I could hear this fizzing, bubbling

noise building rapidly. The jet engines were in operation. Just at that moment a friend of mine



Here are the two Harleys we have on trial for police work. Certainly look good. I hope the fizz from the 'fool's' rocket racer hasn't damaged the paint jobs.

(who is still a serving Police officer with the Highway Patrol) was riding up on his new Police Harley (we have two for evaluation) to show me his new machine when the jet car took off down the highway. My Police mate, saw that it was an unregistered road vehicle (and a bit strange) so he took off after it. The jet car was screaming down the Great Western Freeway with the Police cycle in full song after it. A couple of minutes after another HWP cycle turned up and joined the chase then several more joined in and the scream of sirens into the distance was deafening. One thing I did not mention when I told you about making the jet was that some baking sodas have phosphate in them and some vinegars have sugar in them and a mix of baking soda, phosphate, sugar and acetic acid produces two results, alcohol and sticky foam. The last time I saw of the merry chase I could see great plumes of foam flying out of the jet nozzles and plastering the Police vehicles involved in the chase. The alcohol was

not a great problem other than pigeons and other birds were dropping out of the sky - drunk as a skunk and some of these were falling onto the Police vehicles as well. After a while I could no longer see them and after a bit more time the sounds of the wailing sirens slowly grew fainter so I guess they were then into the mountain area heading due west to no man's land. Eventually the fuel in the jets will run out and a load of sticky Cops with their sticky vehicles will have their moment. For me, peace for a while so I'm off downstairs to bend a steel bar into a crankshaft shape - can't be too difficult with a bit of heat and a heavy hammer so, until next time around, keep this thought in mind...

The noblest of animals is the dog. The noblest of dogs is the hot dog - it feeds the hand that bites it.

Another
enthralling
episode
of
something
or other
from
WINCH -
THE
WHIZBANG
WIZ.

*GUYS, DON'T FORGET
YOUR WIVES AND
GIRLFRIENDS WHO SIT
AT HOME ALONE SOME
WEEKENDS WHILE YOU
ARE OUT FLYING!
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MANEUVER OF THE MONTH: RC Figure 8. Last month I taught you the control line figure 8. You do an inside loop, continue until you are going straight up a second time, then reverse the elevator and do an outside loop. Simple and easy, a push on the elevator stick, then a pull. This month, I'll show you the RC figure 8. It makes the same 8 lying on its side as the control line 8, but the control movements are different.

DESCRIPTION OF THE RC Figure 8: You set up and start an inside loop. Before you complete it, in the second half when you are going straight down, you reverse the elevator and start an outside loop. You complete the outside loop portion back to where you started and then reverse the elevator again to complete the eight. In effect, you are doing three quarters of an inside loop, a whole outside loop, then the final quarter of the inside loop. Take a look at the drawing on the maneuver card.

KEYS TO DOING THE RC Figure 8: The last time I taught this maneuver, I stated, "The key to the RC Figure 8 is being able to do a good outside loop and a plane you are confident in." This is still true, but besides that, you need to follow the procedures I have set up. Start by doing a lazy 8 and then progressively get steeper and steeper at the elevator crossover points until you have an RC figure 8.

AIRPLANE SET-UP FOR DOING THE RC Figure 8: If your plane can do the control line eight I described last month, it will be able to do



the RC figure 8. Make sure you can do a full down outside loop without the plane doing a snap roll out of control. You might get tense at the change-over of the controls and put in too much down elevator.

DOING THE RC Figure-8

STANDARD SET-UP: 1. Full power, 2. Parallel to the runway, 3. One and a half to two mistake high.

The RC figure 8 should be started flying down wind. Eights look better done flying with the wind. It's a rule.

RC REPORT MAGAZINE	
TEACH YOURSELF AEROBATICS CARD	RC Figure-8 By Ed Moorman
Description Of The RC Figure-8	
Start an inside loop, but when you are going down on the back side of the loop, you reverse the elevator from up to down and do a complete outside loop. When you are going straight down in the outside loop, you again reverse the elevator direction and do the last quarter of the inside loop.	
Doing the RC Figure-8	
Standard Set-up: Start with our standard set-up. 1. Full power, 2. Parallel to the runway, 3. 1 1/2 mistakes high.	
Step 1: LEARN THE LAZY 8: Make your first RC figure-8 stretched out and sort of flat like a Cuban-8 with the center of the eight at about a shallow dive angle •Fly slightly past yourself and pull up into an inside loop. •After you pass the top and start down, smoothly reverse the elevator to start an outside loop. •After you pass the top of the outside loop and start down, reverse the elevator again to up elevator and recover to level flight. •The down angle doesn't have to be any specific number of degrees, just whatever angle you find comfortable doing the elevator reverse. The first thing you are attempting is to complete the eight.	
The Lazy 8	

What to do:

Step 1: Learn the lazy 8. For you full scale pilots who may have done a lazy 8, that's not what this maneuver is. This is an easy, stretched out eight. If you are an old control line guy like me, it's like the first eight you ever did, a back and forth maneuver. When I first taught this RC maneuver, I said to use a 45 degree dive, but that's not really necessary. Make it 20 or 30 degrees at first. The idea is to get used to changing the elevator direction while the plane is going downward.

Take a look at the Lazy 8 drawing on the RC Report Online Aerobatics Card. What you want to do is to fly just slightly past yourself and start an inside loop at the point labeled "Start." When you are over the top, ease the elevator from up to down and go around a partial outside

loop. Make it lazy and stretch it out as wide as you like. The learning objective here is the feel of the maneuver and changing direction with the elevator at point 3. You push in some down and fly to point 6. It's all downhill from point 6, right.

Step 2: Increase the angle. Keep flying the lazy 8 until you get more comfortable doing the maneuver. When you start feeling confident, begin to steepen the downward angle from point 2 to point 3. Don't overdo it; just increase little by little on successive flights. It takes some practice and there's no need to rush.

Step 3: The RC figure 8. Once you get good and steep, the maneuver changes from a lazy 8 to the RC figure 8. You want to shoot for 90 degrees, but you do need to lead the elevator change a little. As you get to 75-90 degrees down, start changing direction gently. Don't go slam bang from up elevator to down. Make it smooth.

Optional use of the throttle: This step is optional. Some people like to reduce power starting at the top of the inside loop so they don't get going too fast on the downward section where you change from up to down elevator. Most all of my planes are set for fun fly type acro with a lower pitch prop, so I don't worry about the speed building up too quickly. Besides, I'd just as soon not mess with anything else except concentrating on the down elevator push. That's all I need to do it to start thinking about power and run slam into the ground. Practice this one a little higher for starters.

Incentive: Okay, you need to get out and learn this maneuver and get used to changing from up elevator to down in the downward leg. Why? Because next month is going to be the square 8 and it follows the same flight path except with square corners. If you can't do the RC figure 8, you will have a lot of trouble with the square version.

Feature of the Month: Not-So-Tame Cat. When I first saw the TAMEcat several years ago, I thought, "What a great looking plane! I've got to have one of those." It had the distinctive fake twin jet intakes and twin tails of the Grumman F-14 Tomcat. Surely it would fly like a fighter, or at least a Stick. Then I found out it was a disguised trainer with a flat bottom airfoil. They didn't even make it a semi-symmetrical airfoil like the Mach I. I've built Sticks out of old Mach I wings that had semi-symmetrical airfoils and they flew great, but a flat bottom does not offer much in inverted and outside performance. Well, phooey! I lost all interest in the TAMEcat.

Flash forward to a couple of years ago. Richard Deese, the son-in-law of flying buddy, Ugo Ferrari, came out to the field with the new World Models ARF version of the TAMEcat. Looked great. Nice covering and canopy. Maybe they fixed the airfoil. Rats! I was disappointed again; it was still flat bottomed. Richard flew it for a while, then bought a replacement red Stick. The TAMEcat went on the rack in Ugo's shop.

A few weeks ago, Richard, who has just bashed his second red Stick, came out with the TAMEcat. It had been dusted off, had the engine and radio reinstalled and was ready for a flight. I was asked to do the testing honors and

<p>Step 2: INCREASE THE ANGLE. As you get more comfortable with the elevator change-over, start increasing the dive angle before you switch from up to down elevator.</p> <ul style="list-style-type: none"> •Don't overdo it at first. Increase a little each time on successive flights until you are making the change-over going about straight down. It takes some practice and gaining your confidence.
<p>Step 3: THE RC FIGURE 8.</p>
<p style="text-align: center;">The RC Figure 8</p>
<p>Optional: Use the throttle.</p> <ul style="list-style-type: none"> •Some people like to reduce power starting at the top of the inside loop so they don't get going too fast on the downward section where you change from up to down elevator. You can also do the same at the top of the outside loop. Notice that you are not changing power at the same time you change elevator direction. Here are the positions for the power change: •Position 2, reduce power. •Position 3 change elevator control direction. •Position 4, add the power back in. •Position 6, reduce power. •Position 7 is the elevator change-over. •Position 8, add power back in.
<p style="text-align: center;"><i>CLIP OUT-TAKE TO THE FIELD</i> <i>COLLECT THE WHOLE RC REPORT SERIES</i></p>
<p style="text-align: center;">For reprints of Fun Aerobatics or back issues call R/C Report (256) 503-8436</p>
<p>Ed Moorman E-mail: emoorman25@gmail.com</p>

the 'Cat flew like it did before, very nicely. It really is a trainer, but with a sexy, jet fighter-looking fuselage. It has a huge wing area, so it takes off easily and lands slowly.

After the test and trim flight, I was talking to the guys and said that if World Models had made the airfoil a symmetrical one like a Stick, or at least semi-symmetrical, they would have probably sold a zillion of them. I mean, the Stick's color scheme of red covering with white bands and black Maltese Crosses gets old after a while. We sometimes have three or four up at my field at the same time.

Then Flaps pops up and says, “You could take the covering off the bottom, add half ribs and re-cover it. Wouldn’t be that hard.” That was a good idea. A couple of guys did look at him like he was crazy, but they are from the “ARF generation,” and have never “scratch built” a plane.

Then Ugo chimes in and says, “I’ve got one, new-in-the-box that I’ll sell cheap.” Apparently, he and Richard bought two of them, but after they flew the first one, they decided that even though it looked great, it wasn’t as much fun as flying a Stick. Come on, guys, it is a trainer. It says so right on the box. Anyway, they put the extra, new-in-the-box TAMEcat on the shelf.

Ugo and I talked and negotiated a good price for both of us and I became the owner of a World Models TAMEcat ARF kit. Now what to do to make it fly like a Stick or a ‘Not-so-Tame’ Cat.

General ideas of the modification: The first thing I do on any ARF that I am not doing a stock kit review on is to strengthen several areas that might appear weak. A little more epoxy here and there and maybe some triangle stock normally fixes any deficiencies. Second, I look at the hardware to see if the plastic parts are going to be strong enough for my flying style. Some kits come with rather low quality clevises. I prefer the DuBro or Sullivan locking clevis to any other. Third, I want a faster roll rate. Shortening the wing normally helps this. Fourth, this is a trainer with a flat bottom airfoil. This is not good for my type of acro. I’ll implement Flaps’ idea of adding partial bottom ribs to make the airfoil fully symmetrical. Fifth, since the plane has a shoulder wing, it will tend to roll in the direction of the rudder. I’ll need a

correction for this. Since anhedral is out of the question, much too hard with the wide fuselage, I’ll use a below-the-airfoil end plate.



Ed and the finished Not-So-Tame Cat. Power is an OS .55AX. Radio is a JR 9303 with 2.4 module.

Wing construction and modifications:

Joining the wings: The first thing is to join the wing panels. The instructions say to use epoxy, but I like using Gorilla glue on the dihedral brace and epoxy on the root ribs. Gorilla glue foams up as it cures, filling the socket in the wing and giving an excellent bond between the wing and the brace. The problem with Gorilla glue is it tends to force pieces apart unless they are clamped or held together. I use 5-minute epoxy on the plywood root ribs to solve this problem. The fast curing epoxy holds the wing panels together so the slower curing and expanding Gorilla glue can’t force them apart.

Shortening the span: I have flown a lot of 4-Star 40s, 4-Star 60s and similar planes. I have learned from experience that shortening the wing by removing the tip rib and last bay or even two ribs normally makes a plane with an extra large wing area fly better. I did some calculations on the TAMEcat and removing two

ribs and bays would reduce the wing area from 831 square inches of area down to 600 sq in. I have done this before and it will increase the roll rate and keep the plane from floating all over on landing.

Revision: After test flying the Not-So-Tame Cat several times, I have admit that I over did it with the reduction in wing span. It flies fine for me with the short wing, but the landing is a little fast. I believe that cutting off one rib is the correct amount for most fliers.

You'll be cutting off just the tip rib, so locate the second rib in from the tip and remove the covering outboard from this rib to the tip. Now that you can see everything, cut off the wing. The sheeting is only 1/16" balsa, so a knife works well. For the leading edge, trailing edge, the spars and the aileron, I used a saw. A hobby saw doesn't cut deep enough, so I used a hack saw blade in a holder I picked up at Ace Hardware. After cutting the rib from each side, sand the ends of the spars and sheeting. Then add some type of wing tip. This can either be a flat end rib or reinstall the stock wing tips. I used some 1/8" sheet since I am adding end plates later.

These will be downward tip plates extending an inch below the bottom of the airfoil. The downward plates act like anhedral and give roll compensation so the plane doesn't roll with rudder input. I covered using downward plates in a previous column. Refer back to the July 2005 issue if you want to read up on my end plate test.

Finally, it's a good idea to seal the ailerons with clear packing tape.

Changing to a symmetrical airfoil: The next modification is to change the flat bottom, trainer airfoil to a fully symmetrical, acro airfoil. This is the modification that will really turn the TAMEcat trainer into the Not-So Tame Cat, sport acro plane.

Install the wing on the fuselage and lightly bolt it on. Take a marker pen and mark on the wing along the fuselage wing saddle. Remove the wing from the fuselage. Then remove the entire bottom covering from your marked line to the tip.

Next, make a rib template. Take a marker and mark the center of the leading edge and the trailing edge on both wing tips. Stand the wing on its tip on your template material-thin cardboard, poster board, heavy paper-and draw around the airfoil, including the flat bottom. Mark on the template where the centers of the leading and trailing edges are.

Flip the wing over to the other tip and align the centers of the leading and trailing edges. You've made marks on the leading and trailing edges and on the template. These should line up. Now draw around the top of the airfoil. Lay the wing aside and take a look at the airfoil. It should be a fully symmetrical airfoil with the top and bottom curvatures the same. Notice that the center line from the leading and trailing edges is not the same as the flat bottom of the original airfoil. The ribs you cut out are between the original flat bottom and the new, curved bottom. They are not full half-ribs.



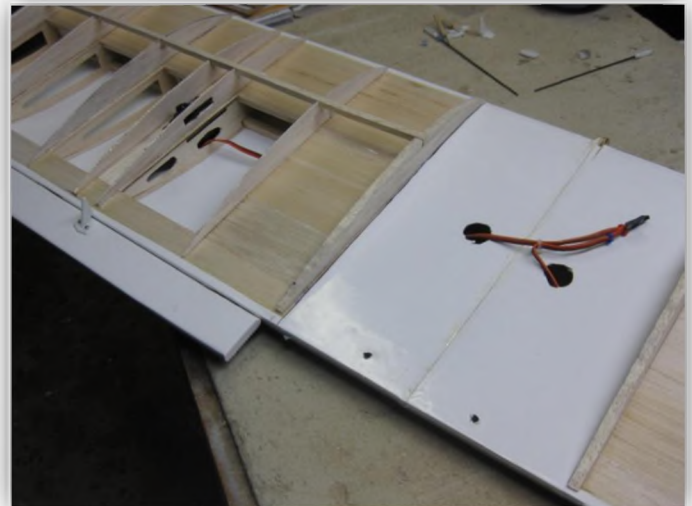
The Not-So-Tame Cat modified, fully symmetrical airfoil. Notice where the where the bottom of the original wing is. Also note the smaller size of the partial ribs. They aren't anywhere near half-ribs.

Cut out one rib for each rib on the wing. Don't forget to cut the notch for the $\frac{1}{4}$ " square spar. I used $\frac{1}{4}$ " for the tip rib and the root rib which fits flush up against the fuselage side. For the other ribs, I used $\frac{1}{16}$ " balsa. We just happened to have those sizes available, so if you have $\frac{3}{32}$ " and $\frac{3}{16}$ " or $\frac{1}{8}$ " just use what you have.

Mount the wing with some Handi-Wrap on the wing saddle area. After you tighten the wing down, smooth the Handi-Wrap down the fuselage side. This is to keep the root rib from being glued to the fuselage as well as the wing. Glue the ribs in place with CA glue and glue the $\frac{1}{4}$ " square spar to the ribs.



The modified wing on the fuselage just after gluing the ribs and spar in place. Notice how the root rib is flush against the fuselage side.



The Not-So-Tame Cat wing removed from the fuselage. Note the original, flat bottom center section. Since only the outer panels have been modified, you won't need to change the wing saddle area in the fuselage to the wing mounting.



I wanted a bright color for the bottom so I could tell which end is up. Flaps had a partial roll of yellow, so I used it. I think it was 21st Century film. It goes on very nicely, but it doesn't stick to the Tuff-Lon covering on the plane very well. It sticks, but it can be peeled off. I normally seal the ailerons with clear packaging tape, so that takes care of the TE. Flaps found some black trim tape and I used it on the leading edge. It looks like it belongs.



The yellow color on the bottom of the wing shows up fairly well in the air. Due to the black leading edge stripe, it can't be seen on the ground. Notice the shorter than stock wing.

Lastly, add your wing tips or the end plates like I did. You are done.

Fuselage modifications: There is nothing really to do to the fuselage. The stab, fins, sub-fins, radio, main gear, nose gear is all just like the stock kit.

Optional Leading Edge eXtensions (LEX) One other thing you'll notice in the photos is the Leading Edge Extensions, or LEXes, as Flaps likes to call them. He loves LEXes. Most of his canard designs have them. He wanted them, so I cut some triangles from 1/4" sheet, covered them with Dove Gray Monokote, added the black trim tape and glued them to the fuselage and jet engine intakes. I think they look pretty good; like something that belongs on a swing wing fighter.



Here you see a side view of the finished plane with the LEX in place.

Engine: For my Not-So-Tame Cat I am using one of my OS .55AXs. I think the OS .55 is a great engine with loads of power for its size and weight. It is definitely a lot more powerful than the Super Tigre .40 in the stock plane I reviewed. It is also a good bit heavier.

Tank: The tank is the one included in the kit. Personally, I like to use different colored fuel tubing for my fuel and pressure lines. This way, I don't get them mixed up when connecting to the engine and muffler. I like green or yellow for pressure and red or purple for fuel, depending on what's available locally. I also normally use an in-line fuel filter on my planes.

Radio: The radio used is a JR 9303 transmitter with a Spectrum 2.4 module and an AR700 ☺ receiver. The servos are Hitec with a digital Hitec 5625 on rudder.

CG: What I like to do with ARFs is to build the plane and install the engine, receiver and aileron servos, then bolt the wing on and check the CG. This will tell me where the battery and the other servos need to go to get the CG where I want it.

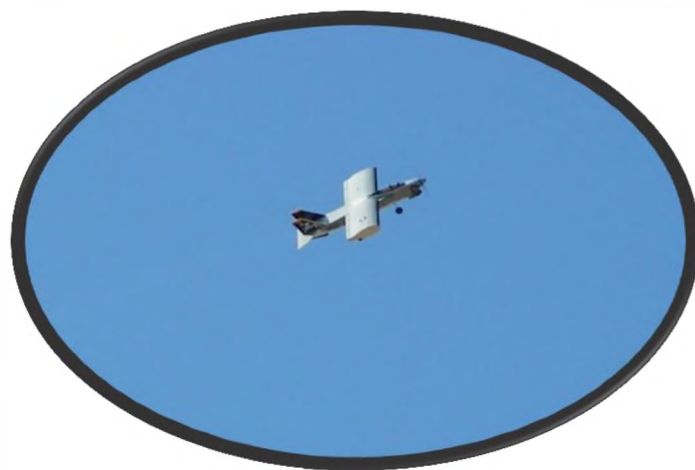
With everything installed per the plans, the CG came out just in front of the main spar which is a little nose heavy, probably because of the heavier engine. I decided to go with this location, since a little nose is safer for a test flight.

Flying: After a picture taking session, I fueled up and checked the controls. The OS started in 1 back flip. I taxied out, lined up and nailed the power. The Not-So-Tame Cat was off and flying. After a few clicks of trim, I put it through the paces. Six flights later, I can say that except for the landings, I am very pleased. Rolls are fast; not a blur, but fast. Inside maneuvers are good. Outsides, due to the symmetrical airfoil, are just the same as the insides. I love outsides. The Not-So-Tame Cat will pull around either direction very tightly. On low rate, I was using flaperons and I noticed some roll off to the right. I'll have to check, but

I think one flaperon is traveling more than the other.



This photo catches the Not-So-Tame Cat at the start of its first takeoff. The cowl was left off for the test flights on the first day.



The Not-So-Tame Cat in flight. It is a much better acro plane than the stock trainer.



The Not-So-Tame Cat on its first landing.



The Not-So-Tame Cat parked on the tarmac.



The Not-So-Tame Cat taxis back in after a successful test flight. Note the angle of the engine to put the exhaust directly under the fuselage. It also makes the engine harder to prime.

More flying and adjusting: After another day's flying, I knew I had to move the CG to the rear. The CG was just in front of the main spar, but I was using a lot of up on landing. The battery was located in the front of the radio compartment. I pulled it loose from the Velcro and moved it, with an extension, back to the very rear of the plane. The CG was better, but still not behind the main spar where I wanted it. Rats! I was going to have to use lead. I stuck a whole strip of stick-on lead right next to the battery. Much better.

The next test flight went great. The rearward CG made all the difference. Maneuvers were about the same, but the landings were much better. The plane would flare instead of coming on down. Keep this in mind if you mod a TAMEcat. Don't let the CG get forward of the main spar of the wing.

Final notes: This was a fun project. Flaps and I love to create new designs and modify kits. Making a trainer fly like an acro plane was a treat.



Until now, I thought this was the original Not-So-Tame Cat.

Sparky's Revolt!

By Tony Coberly

First thing this month is a few words from long time subscriber Dennis Vollrath.

*Just read your mishaps with trying to measure high currents on your electric models. Ouch! Yes, I've got an Astroflight Wattmeter, as well as several very high current precision shunts for this purpose. Next time you are at your local Sears store, take a look at their multimeters. Check out their Craftsman #82369 AC and DC clamp on ammeter. Note that most digital clamp on ammeters are AC only, not useful for our purposes. If you are not familiar with clamp on ammeters, you simply clamp the unit around one of the battery cables. Nothing is disconnected, just clamp the meter around one of the battery leads. This meter has two DC current ranges, 0-40 Amps, and 0-400 Amps. That will cover just about anything you need. It also has thermocouple temperature measuring, and the usual volts and resistance ranges. Not cheap at \$60.00 or so, but in my opinion well worth it. I've checked my meter against my \$350 Fluke 87V meter; it was within about 2-3% or so on DC Amps. Pretty good for a clamp on ammeter, I've used a LOT of them over the past 40 years. (Found that the starter current on my Chevy S10 is around 150 Amps, alternator current on the same truck can hit over 50 Amperes!)
Happy New Year!*

Thanks for the information Dennis. I have been looking for an amp clamp that was less expensive than the \$350.00 of the Fluke. I have been looking for a couple years now, but since the only Sears is across town in the mall, I have not looked there! Well let's get a closer look at this meter and do a bit of testing!

The Craftsman Model 82369 AC/DC digital clamp on ammeter comes with a pair of red and black probe type test leads, and a thermal couple, as well as a small instruction manual. The test leads are 40 inches long with insulating caps on the sharp probe tips. The thermocouple has a 36 inch long lead and is used to measure temperature

The ammeter has a dial for selecting ranges, voltage type being measured and to turn off the tester. The Craftsman model 82369 runs on two AAA dry cell batteries, and they are not included. The digital display on the tester is very easy to read and also has an optional backlight that can be turned on if there is not enough light to read.



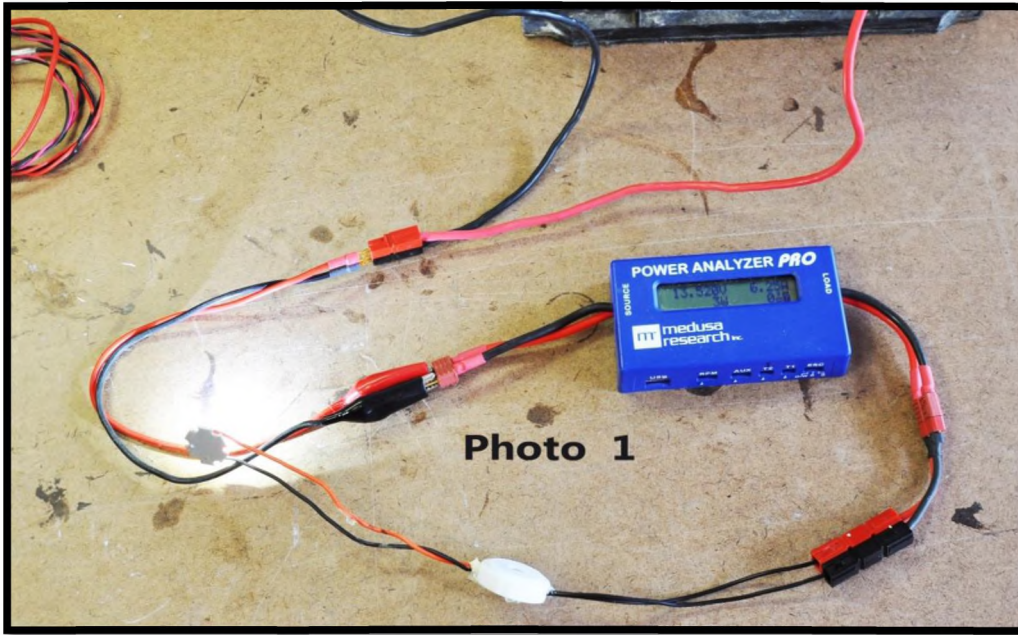


Photo 1

Several other buttons allow for mode and ranging options. Now we can look at the feature that I will be using most; the clamp on the top is the key. Unlike a standard watt meter like Astroflite; there is no actual contact with the wires. No more plugging the battery into the watt meter and then plugging the wattmeter into the speed controller. With this tester you simply put ONE of the battery leads within clamp and read the meter. Let's look at a few tests and see this clamp meter in action.

As an example test, I am going to check the accuracy of the meter as compared to that of my Power analyzer Pro. The setup is very simple. First I am using a car battery as a power supply. I then run a wire with alligator clips on one end and Anderson Power Poles on the other. The Anderson Power Poles then connect to the Power Analyzer source side. For a load I am using a 1Watt high intensity LED. The LED is plugged into the output side of the analyzer. According to the analyzer, the LED is drawing .25 amps. (Photo 1) That is about what I expected to see, but it is amazing the amount of light that this LED puts out! (Notice I didn't point it at the camera!! No reason to blind you!) Okay,

now we can bring the new clamp on tester into the mix.

Now to turn the tester to the correct function, I just rotate the dial to the marked A-DC 40 Amp range position. Now this simply moves the decimal point on the LCD readout to the center position between the four digits displayed. So we can read down to hundredths of an amp, rather than a tenth of an amp when in the A-DC 400Amp position. Now that the correct range is selected, my tester shows a value of -02.45. There is a button above and to the left of

the dial that is used to reset this value the zero. Once done there will still be a bit of fluctuation in the value from 0 to about .05, so we are close enough for basic measuring. Now we just clamp the meter jaws around the red (positive) lead and read the measurement. I had to rearrange a few things in this picture, but you can see that the



Photo 2:

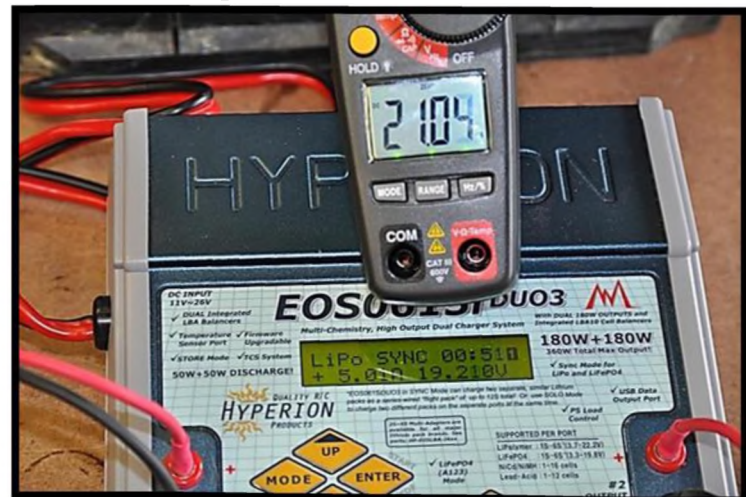
clamp on tester is reading .26 amps, where the Power Pro is fluctuating between .23 and .24 amps. So the accuracy in this case is different by about .02 amps. Considering this is a noncontact current test, I think that is a very acceptable differential. This was a very low current test, so let's try something a bit higher current.

Since I had my 750 watt inverter nearby I decided to use for a testing. I used the same car battery for a power supply and connected the inverter. This inverter is switched, so I flipped the switch and put the meter around the supply wire to get a reading. The inverter draws 1.17 amps just to run the circuitry and fans inside the unit! Why is this important? Well you shouldn't leave the inverter on if you're not using it, or you will end up needing a jump start!

Second test with the inverter is using a 100 watt light bulb plugged into the inverter. The meter shows that the current draw is 8.59 amps. If we plug that into ohms law that means the 8.59 amps times the battery voltage of 13.1 equals 112.53 watts out of the battery. So, using DC supply and an inverter, it takes 112.53 watts to make 100 watts of AC lighting. That means that the inverter has efficiency in the 88% range. That's very good! While I had everything out, I also checked my Dewalt dual port battery charger. While charging two Dewalt 18V NiCd batteries the current being drawn by the inverter was 16.81 amps.



Now a test that directly involves modeling! I took my Hyperion EOS DUO3 charger and connected it to the car battery I have been using. Onto the charger I connected two 5 cell 4000mAh LiPo packs. I set the charger into a Sync Mode where it will charge both packs at the same time, while monitoring the balancing ports for differential. I am charging both backs at a 5 amp charge rate. The picture below shows a current of 21.04 amps out of the source battery. Now you know that if you want to buy a power supply to run this charger, you will need at least a 25 amp to charge these packs, but 35 would be better!



Now for the fun part. Since this tester is so quick and easy to use, you can keep it in your flight box. The next time you ask someone at the filed how

many amps they are drawing, and they respond as expected, “I’m not really sure”, you can whip this tester out and check it for them. Just clip it around the positive battery lead and run the motor up to full throttle. No need to have adapters for adapters to mate up with all the different connectors on the market today. Now I still believe that you need an inline wattmeter for the most accurate measurement, but this is a good quick check tool to have. At \$59.99 it should be in the budget for most intermediate electric flyers!

Tony Coberly
tonyc@rcreport.net

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The Futaba® R6203SB S.Bus receiver is the perfect choice for use with the 3-axis CGY750 gyro or any S.Bus application. The R6203SB high-speed receiver features 3 “normal” channels and one S.Bus channel allowing as many channels as your transmitter has available, if using S.Bus equipment. Don’t let the small size fool you though, it’s a full range FASST receiver with dual antenna diversity and Pre-Vision™ and is high-voltage capable.

FUTL7665 R6203SB Micro Programmable HV Heli Rx Retail:\$99.99 Street:\$79.99

The Futaba R6203SB S.Bus Receiver will be available late March.

We invite you to visit: www.futaba-rc.com

Won't you be my Valentine? Can you feel it? Love is in the air!

If you haven't been watching the news lately, you don't know anything about all the snow we have had during the last month. I've been trying to talk Mom into some boots, but some people don't think that dog foot care is that important. It's not like I wasn't flip-flops, too. I don't think I would enjoy the split toe. You know, with all the webbing between my toes.

Anyway, let's see what's happening in March!

So, Kansas City, MO is the place to be March 5-6, 2011. The KANSAS CITY RC EXTRAVAGANZA will be held at 201 NW Lou Holland Dr. Troy Hamm, the CD, can be reached at: funflyr@juno.com. Visit www.ahmhangar.com for more information. Electric indoor fun fly, 9AM to 8PM on Saturday, and 9AM to 2PM on Sunday with Freestyle contact 12PM Saturday. Raffle prizes, RC and food vendors. Proceeds go to support the Airline History Museum.

Maybe you're looking for a warmer climate? Give Miami a shot March 5. The AMPS HELI FUN FLY will be going on at Club Field. You can email Robert Cox at balsawings@yahoo.com or visit: www.amps-rc.com. Heli fun fly events at AMPS, sport, scale, 3D, and flight instruction as well as food concessions, raffles and an all around fun filled helicopter day. AERO MODELERS OF PERRINE INC



Maybe you're just looking to shop? The 17th Annual Swap Meet and Auction will take place at the Rockford Christian School gym in Rockford, IL, on March 5. Ronald Clemons has all the right answers, Email him at catsrcool345@aol.com. Visit: www.rcflyers.com. Set up 6:30AM, open 8AM. Admission \$5, children under 12 free. 100 tables available, tables \$10 each prepay or \$15 at the door. Silent auction, bidders must stay until auction is over to receive the items bid on.

The 10th Annual Indoor Swap Meet will be held in Eldorado, AR that same day. Jason Cunningham can be reached at jcunningham50@hotmail.com. This is the largest swap meet in the state of Arkansas. Set up 8AM, doors open 9AM to 4PM, admission \$5, women and children under 12 free. Raffle drawings, concession stand on site, non smoking facility, open to sell new and used

products, dealers, hobby shops and public invited. Limited number of tables; contact CD to reserve.

Head out west for the Fabulous Las Vegas Fun Fly on March 11-13. And remember, what happens in Vegas; stays in Vegas...unless you post pictures on Facebook. William Roper will keep your secrets. Email him at lvrc@rockcopter.com. Visit: www.rockcopter.com for more information. Event 705(JSO). This is LVRC annual heli fun fly. There will be 3 levels of contests. There will be lots of vendors, food, and fun things to do. We welcome all to come and see all the fun we have at this event.

The Bong Eagles will be hosting the BONG EAGLES SPRING INDOOR RALLY on March 13, in Racine, WI at Memorial Hall. Jack Boone, CD, can be reached at jboone3@wi.rr.com. Events Cat II 208, 215, 219, 220(JSO). Double Wammy, Delta Dart and Phantom Flash mass launch elimination. No Cal and Scale mass launch. Indoor Towline Glider, Round the Pole Race and Nickel scale events.

Dennis Runge will greet you in Columbus, IN, on March 12, for Johnson County RC Flyers Swap Meet. Email him at drunge96@comcast.net. Tables \$10 in advance, \$12 at the door. Vendor set up 8AM, hours 9AM to 1PM. Admission \$4, door prizes, refreshments. Contact CD to reserve tables.

That same day in Shelby, OH, you can attend the EAGLE SQUADRON SWAP MEET at the Sacred Heart of Jesus Church. Email Norman at ncelae136@aol.com or visit www.eaglesquadronrc.com for more information. Set up 8AM, open 9AM to 2PM.

Admission \$5, tables \$10 each, raffles, food, drink, vendors welcome. For info and table reservations contact CD.

You'll be close to me when you visit Bessemer, AL on March 18-20, for the (C) CENTRAL ALABAMA HELICOPTER FLY IN. David Harkey will show you some Southern hospitality. Email him at dharkey55@bellsouth.net for more information.

SPRING BREAK in Eloy, AZ on March 19. Forget Panama City! You can have all the fun that you can handle at club field with Ralph Hotz and crew! Email him at oldfreeflighter@hotmail.com. Events 101-104-5C, 120, 124, 128, 140-150, 158-162(JSO). NOS events: 1/4A, 1/2A, A, B, C gas NOS rubber: Wakefield, NOS Rubber combined. Classic glider - SAM events: Cabin, pylon combined. National Cup Contest. Sponsor: PHOENIX MODEL AIRPLANE CLUB

If you just can't give up on Florida, head to Ocala, FL, that same day for a swap meet sponsored by the Marion County Cloud Climbers. The meet will be held at St Marks UMC Rec Hall. Thomas Meissner can be reached at mjtf5315@embargmail.com. Advance tables \$8; at the door \$10 (includes 1 admission). General admission \$2, set up 7AM, doors open 8AM to 1PM. Coffee and sweets available.

RCer's suffer March Madness, too...well, a March Madness Swap Meet! Join Matt Denham on March 19, in Converse, IN, at the Converse Gym. Email Matt at mattsrc57@yahoo.com. Anything RC to buy, sale, trade, swap. 9AM to 12PM. Tables \$10 in advance (must be paid for by 03/12/11), and

\$12 at the door. Door admission \$4, women and children free.

In the meantime, here are a few more snow pictures to share with you. Looking for something spicy? Head to Crowley, LA on March 26-27, for the (C) CAJUN HELI FEST held at Rams Field. Eric Babineaux (Loving that last name, Eric!) is the CD and can be reached at ebabincaux@bissalamis.com. Visit: www.ramsrcclub.com. Landing fee \$25. RVs welcome, no hook ups. Vendors welcome. Saturday night pilot's party and dinner.

The RHINEBECK SOUTH JAMBOREE will take place in Delray Beach, FL on March 26 at the W Delray Beach Regional Park. Michael Allen Knight can be reached at mknight@msn.com. This contest is for scale aircraft flown before 12/31/1939. All types are welcome. Questionable aircraft must have documentation to prove operation dates. This is for early WWII aircraft. Registration will begin March 26, at 8AM or online at PBRCA website. Registration \$20.

In Oakdale, CA, that same day, the 15TH ANNUAL SPRING SWAP MEET will take place at Club Field. Email Paul Klahn at pbklahn@sbcglobal.net or visit: www.rcflyersunlimited.com for more information. Please join the Radio Control Flyers Unlimited for our 15th annual spring swap meet from 8AM until we're done. Seller's spaces \$15, sorry, no commercial sales. Visit website for directions. Sponsor: RC FLYERS UNLIMITED INC

All the way across the country on the same day, in Hamburg, PA, the (E) TRI COUNTY WINGSNAPPERS SWAP MEET will be held

at the Hamburg Field House. Michael Renzi, CD, can be reached at mrenz66@yahoo.com. Visit: www.tcws.org for more information. Vendor set up 6AM; doors open to public 8AM. Admission \$5, table rentals wall \$12, aisle \$7. Food available.



That's about all I have for you this month! Have fun! Spring will be here before you know it!

Let me hear from you! Send in your event information by email, via the office: juliac@rcreport.net, with information concerning upcoming events that you are aware of – no matter how big or small! Attach a flyer, too! If you don't tell the RC world about it, the RC world will never know to visit and fly with you in your part of the country! And don't you want to make new friends?

Isabelle

Click on over to page 71 for some snow pictures from our recent blizzard. ☺



Ginger and Moo looking for their ball. Do you see it?



Mom's Japanese Maple covered in snow.



Moo and her version of a raspberry!



Scotchie trying to find his way out of the back yard.





O.S. MAX-65AX

Brian Winch

CONFIGURATION	Ringless two stroke.	FUEL	common range of fuels
DISPLACEMENT	10.63 cc	SHAFT THREAD	UNF 5/16-24
BORE	24.0 mm	SUPPLIED WITH	OS 8 plug, muffler, needle valve extension, instructions and decals
STROKE	23.5 mm	AVAILABLE FROM:	Tower Hobbies and local hobby shops everywhere.
WEIGHT	497 g		
STATED POWER	1.75 ps		
R.P.M. RANGE	2,500 - 16,000		
PROP' RANGE	12 x6 - 15 x 6 tested		

FOREWORD

Almost a pleasant trip back into the past. In the early days of proportional radio control, the most commonly used engine was the OS MAX-40 RC (1972) - an extremely reliable and popular engine. When you decided to move up a size in models the common choice was the OS MAX-60FSR (1974) - a powerful and reliable engine that could be killed only with the use of brute force - in fact, many are still in use today. Currently, we are in a bit of a craze to have bigger and bigger engines, but...I have noticed a gradual tapering off lately as readers of my articles and reviews have been, increasingly, asking my opinion on engines around the .60 size - 10 cc engines. They are looking for uncomplicated flying with a model that will easily fit in a car and an engine that will not cost a great amount both for it, the propellers it uses, the fuel tank and the fuel to fill the tank.



The parts that make up the muffler

There is certainly a lot to be said for a moderate size model - lower cost, easier to build and enjoyable to fly. One factor, though, that is quite important - the engine must be reliable, have good power and reasonable longevity. Well then, let me introduce you to the O.S. AX

65 - the current version of a very old favorite...a thoroughbred with a long pedigree. Obviously there are a few changes from the first .60 as well as the previous .61FX series, but they are all part of the O.S. policy of maintaining the standard of quality and making available to modelers of the world the latest technology for model internal combustion engines. Some examples of the changes include the ABL internal bore - Advanced Bimetallic Liner (more on this further on) - a change in the cylinder shape for even temperature control - the 61D carburetor with the rear angled main needle - the standard E-4010A silencer with a very internal baffle plus, as an optional extra, the E-4050 Pitts type muffler which is an absolute winner - again, more on this further on.



The muffler assembled

The latter day technology of engine design with new alloys, metallic coatings, very closely controlled rates of metal expansion and the extremely accurate fits and clearances presents to us an engine that has a very high tolerance for either high speed or extreme load. Early engines would run at very high speeds, but if they were loaded down you could expect, at least, overheating or mechanical failure. It was simpler with an engine designed for heavier

loading....it just wouldn't run at high speed or, if you ran it load free (with a flywheel for example) it would simply disintegrate. This review engine has the potential to reach - and run at - 16,000 RPM (if you have the need for speed) yet it can also run with a very considerable load and, as my figures indicate, the engine temperature was LOWER under the load. In the interests of quiet operation by reducing the RPM and propeller tip speed, plus very even flying speed in certain models, I used a 12.5 inch diameter x 11.5 inch pitch propeller plus a 13.5 x 13.3 and the engine was signing along nice as you like without even a hint of protest. Obviously the RPM was lower than the recommended props at 5,660 13.5 x 13.3 and the head temperature (taken at the rear of the head) was 101 degrees compared to 113 at 12,000 plus RPM, but that propeller was pushing back a tremendous amount of air. Also, as a bonus, the operation greatly reduced the noise of both the exhaust and the propeller. It is well worth carrying out some realistic tests with different propellers in a model - you might be very surprised with the results.

ON TEST

It has been very pleasing for me in recent times to have modelers tell me that they, also, started a new engine first flick out of the box. There have always been a few detractors who questioned my reports that a (so and so) engine started first flick out of the box. Not putting my own stocks up, it would be fair to say I do have considerable experience (after a lot of years) in starting and running engines. As many experienced modelers know, there is a feel and an indication an engine is going to start - 'next flick' and, most of the time, the feeling is

justified. The higher quality engines are always easy to start, but O.S. has made it an art form, so to speak. If you know the correct procedure you could bet on their engines starting 'right out of the box', so much so that my claims don't have much gloss any more as it is such common practice for so many modelers to start their engines with little or no effort either by a forward or back flick. The day prior to me writing up this review I was at a float fly club day and I watched a father and son team with their large OS 120FS powered scale model starting up for the first flight of the day. Tank filled, 3 or 4 flicks to prime the engine and the son grasped the spinner with two fingers, gave it a half hearted spin backwards (against compression) and the engine was instantly purring away, ready to go. Quite similar to my starting of the review engine on the bench as you will read in my bench notes following.



The piston is quite long for stability.

Back flick - first hit start and much the same throughout the full testing procedure with the engine hot or cooled. The engine had a very good sound - very low for a 10cc engine and no mechanical rattle. Without touching the idle mixture adjustment (as factory set), the idle was

low, smooth, steady and the transition was rapid without any gagging or hesitation. With each start I could hear the slight squeak of the piston in the liner but there was no pinch as such due to the super slick liner surface. The engine was extremely user friendly with no bites, kickbacks or nasty surprises, vibration was very low and, after a lot of running (I extended my usual propeller size testing.), the engine looked like it had just been taken from the box.



Note the steel spacer on the shaft behind the propeller drive hub.



Quite a change from what we generally see.

My checks with the laser spot temperature gauge indicated a very even temperature with measurements taken at the front and rear of the

head - to do with the cylinder shape and layout of the cooling fins.

We will now examine the make up of the engine.

MAINCASE SECTION

Reasonably standard design one piece case made up of the sump section with side mounting beams, ribbed front housing with two ball bearings and the intake manifold, finned outer barrel incorporating the exhaust manifold and the rear section sealed by a back cover which, itself, is sealed by a small section O ring.

The mounting beams are of the pillar style having two very thick pillars each side of the case and each pair is joined by a thinner web. This allows for very heavy duty mounts - 6.8mm tapering to 6.5 - but without the extra weight of a full beam of those dimensions.

The front housing is minimum weight with maximum rigidity having 3 webs both sides from the front of the rear bearing housing to the rear of the front bearing housing. In this section of the case it is quite important to maintain rigidity but not at the expense of extra weight. As your model turns in any direction there is a gyroscopic force on the crankshaft that becomes a flexural load and it is this load that destroys bearings if the front housing cannot contain the minuscule movement. By having the webs both sides, any movement would have to pull them on one side and compress them on the other - easy to see that the flexing is not going to be a big concern. Much the same for vertical (up and down) movement as there is a pronounced web on the underside and the integrity of the braced intake manifold on the top. Nice design work.

As is with all O.S. Engines, the casting is of excellent quality, the aluminum alloy of the highest grade for this purpose and the machining flawless.

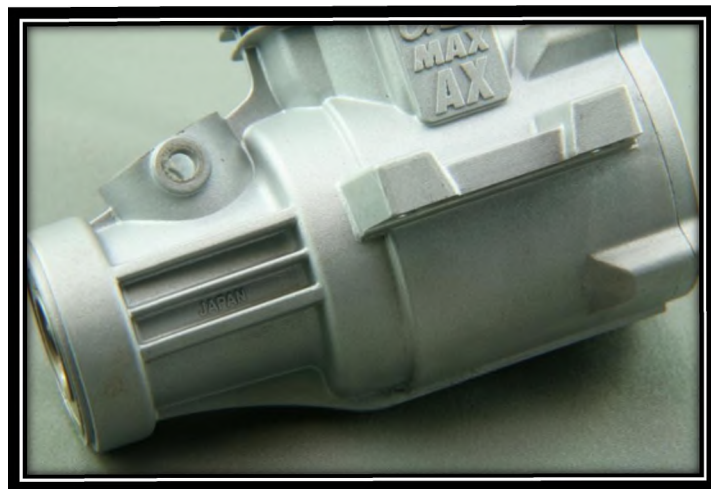


All controls and connection together and...away from the propeller.

A note here about the profile shape of the cylinder and the finning arrangement. Without a photo (there is one) it is hard to define the profile shape other than tapering towards the front with a mild streamline appearance. The appeal to me is the distribution of the metal mass and the finning. The front face of a model aircraft engine is the coolest zone as it is facing and moving into the wind plus a little bit of propeller wash (though, not as much benefit from the prop as you might think). The rear of the cylinder is in almost stagnant air, close to the firewall and subject to a lot more heat than the front. As such there is uneven heating that leads to premature wear and, in some cases, component failure. Here we have minimum mass and finning towards the front and maximum of both at the rear - a recipe for a reasonably even temperature for the all important cylinder, liner and piston.

The head is a neat and deep fit over the 3 mm thick liner rim and the seal is assisted by a 0.20

mm thick brass shim. Five headbolts hold the lot together.



All the ribs provide excellent support for the front housing.

PISTON, LINER & CRANKSHAFT

The 1.9 mm wall thickness liner is machined in brass and it has the super slick double coating I mentioned in the foreword of this review. A lot of experimenting and development goes into the coatings on the liners of a very wide range of engines - full size and model - is the quest for a super slick finish and extra long life characteristics. The long life is, mostly, for our benefit (and it enhances the reputation of the manufacturer) and the slickness is for the benefit of the manufacturer and, of course, the user gains as well. By having incredibly slippery contact surfaces in an engine, power robbing friction is greatly reduced. If you were to study some friction figures in this area, you would be really surprised at how much power is lost to this factor. The coating used for this engine is ABL - Advanced Bi-Metallic Liner, a double layer process that has proven to be more durable, evenly spread and extremely slippery for maximum precision for the piston liner fit

and a greatly reduced drag coefficient. Slippery as wet glass and more power.

The piston is machined from stock bar aluminum alloy that is tough, thermally stable and has a finish that is as smooth as the liner in which it runs.

The conrod is of the popular I beam profile, fully machined from stock material, bushed both ends with bronze sleeves and adequately drilled for oil ingress. A proven tough customer.

The crankshaft is like all O.S. rods - nice enough to put on the shelf for an ornament. Super sturdy with a 17 mm main journal and a 5/6 inch threaded section, it has an even more pronounced over balanced counterweight than I have seen previously. At 8.25 mm thick, there is quite a considerable mass that, due to its new shape, would absorb a lot of normal engine vibration and this was quite evident in the smooth running of the engine on the test bench. In days long gone we used to use a propeller with one blade heavier and in line with the piston at TDC for a similar effect - smoother running. You will be surprised at how smooth this engine runs.

Propeller drive hub is 28.2 mm in diameter and it is driven by the D shape method - the hole is a fat D that fits neatly on the D section of the shaft. A 1.6 mm thick steel spacer behind the drive hub provides rub clearance but still allows the skirt of the hub to shield the front bearing from dust. Tapered face steel prop washer, standard 12 mm AF nut. Sturdy and neat.

CARBURETTOR AND MUFFLERS

The carburetor is the newest style 61D series with the main and idle mix controls at the same end and both the main needle and inlet nipple slanting well towards the rear - well away from the propeller arc. A very smooth operating system that needs little if any attention (needle fiddlers note this) and, with the occasional clean, it will fuel your engine without fault for many hundreds of hours. Unless you are really 100% sure you need to, don't alter the idle mix as it is set correctly in the factory and the engine will idle long and reliably at the pre-set setting. My new rule - 'Don't fiddle with it - fly it.'

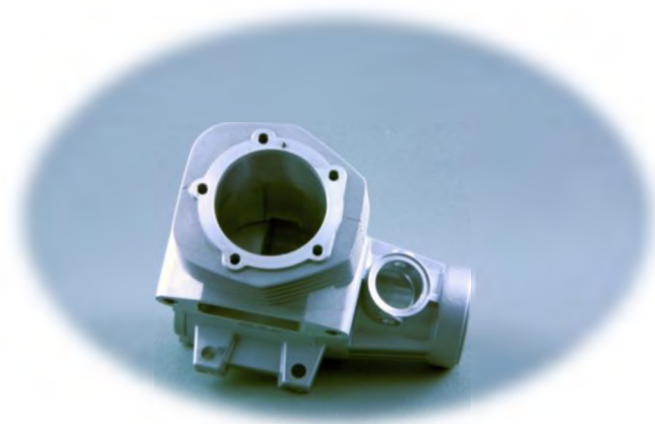


Head shape to match the barrel. Note the flush fit of the OS 8 plug.

The E-4010 muffler is the familiar two stroke style and it is fitted with an inner cone for a reduced sound effect - it is quite effective so don't remove it. The O ring sealed rear section can be rotated to suit your application and I can assure you - I cannot see you having any problems with the muffler assembly bolt - the long one that holds it all together. This bolt is subject to considerable and constant heat which can lead to problems of expansion and loosening if the bolt shaft is a bit light on in diameter. At 4.3 mm diameter with a 5 mm

rolled thread - I am confident it will be quite adequate for the job.

PITTS MUFFLER



The barrel shape from the top. Note also the beam mounts.



Inside the Pitts showing the internal ribs.



Pitts muffer - note the ribs.

The optional O.S. E-4050 Pitts type muffer will be a design for others to emulate. All cast aluminum alloy construction in two vertical halves; it has a unique interior design. As most modelers would know, Pitts mufflers are quite loud in operation and most of the noise volume stems from the thin wall section (metallic pinging) and the 'blat' effect of the hot charge of exhaust bashing against the inner surface of the outer wall. Firstly, the cast construction dims the ring and, inside, the inner face of the outer wall is deeply ribbed with tapered fins set vertically and these are complemented by horizontal fins on the outer surface. I was most impressed with the design and, later, with the effectiveness of the muffer in reducing the exhaust sound and the absence of the metallic clatter. The two halves are held together with 4 caphead bolts which I undid to separate the sections for photographing purposes. Not a chance. The sections are a very close fit and have been glue sealed with a very strong and heat proof sealer. Short of extreme heat and instruments of force, the sections are going to stay together. As a thought, I tried again after the test running but came up against the same resistance to part the sections. Well, leave well enough alone, it is not going to fall to pieces and it certainly does not leak around the seam.

If you have application for a Pitts muffer I highly recommend that you consider this one for the AX 65 engine and several other engines that I know it will fit.



Pitts muffler - note the ribs.

ON THE BENCH

The engine was test run on the December 13, 2010 with the temperature at 27 degrees C and humidity at 58%. Fuel was Coolpower blue at 20%, nitro at 10% and methanol at 70%. The head temperature with the 12 x 6 propeller at 12,305 RPM was 113 degrees C and with the 13.5 x 13.3 propeller at 5,660 RPM it was 101 degrees C taken at the rear of the head.

PROPELLER TESTS

All APC propellers used.

12 x 6	12305	1790 Idle
12 x 7	11620	
12 x 8	10838	
13 x 6	11415	
13 x 8	9685	
14 x 6	9548	1342 Idle
15 x 4	8944	
15 x 6	8389	
12.5 x 11.5 Pattern	8278	
13.5 x 13.3 Pattern	5660	



Slotted & Phillips

Precision 7 Pc. Set

Slotted 1.5mm, 2.0mm, 2.5mm,
3.0mm

Phillips #00, #0, #1

Set #26190 \$26.98

- Exact Fit Precision Machined Tips
- Wiha High Performance CRM72 Tool Steel Blades
- Through hardened for optimum torque performance
- Micron Vapor Hard Chromed finish
- Handles Proportioned to Blade Size Slim & tapered
- Finger Control Cap for precise turning
- Guaranteed Quality - Made in Germany



The WiHa precision tool set is a very nice Phillips and slotted set of screwdrivers. I actually found these at my local hobby shop, and they just felt good. The first thing I like is the handles. The red top swivels and the handle shaft is a tough solid plastic with just enough texture to grab onto. I have several like these in my bench, but they are the Eflite rubber handle type. The rubber handles on the Eflite screwdrivers are soft and nice, but after you get some fuel on them the rubber material degrades and falls apart. The second think I like about these WiHa tools is the blades themselves. The steel shaft is much stronger than others like them. If you try to bend the shaft you immediately notice the rigidity. Now you shouldn't be prying with screwdrivers,

especially ones this small, but it is just nice to feel the strength. The shafts have a look of being bead blasted in that there is a texture to them as well. This small texture goes all the way to the end of the driver and allows it to bit into the screws better.

This basic set of precision tools is my first set from WiHa, but it will not be my last. I said before that I found them at my local hobby shop, but if you go to their website you can see that there are thousands of tools available. Yes they cost a little more, but you set what you pay for!

Tony Coberly

tonyc@rcreport.net

UMX

BEAST

Bind-N-Fly



**By
E-flite**

Wingspan 14.7 in (372mm)

Length 15.7 in (400mm)

Weight 2.0 Oz (57 g)

Onboard RX Spektrum AR6400LBL

Ultra Micro Receiver and 2-1.7 g Linear Servos

Battery 180mAh 2S 20C Li-Po

E-flite 120 Brushless Motor

2S 7.4V Li-Po Battery Charger

Manual: Eng/ Spanish 60-5.5x8.5in pages

Type: Aerobatic micro airplane

Retail: \$219.99

Street price: \$169.99

Required: Dual Rate equipped DSM2 compatible transmitter

Building required: NONE

Flying skills required: Intermediate

<http://www.horizonhobby.com/Beast UMX>

The UMX Beast is the micro version of the brain child of Quique Somenzini and licensed by the designer of the full scale beast Kevin Kimball. The micro sized Beast is designed for extreme full scale aerobatics, in the most micro of size. The two cell LiPo paired with the brushless 180BL motor make the Beast quite the performer. Let's look at the box and get to building....well no building required....assembling....well nothing to assemble either....well at least we can charge the battery while we look at the Beast.

The Beast is packaged in a square box with very specific foam standoff mounts that hold the model secure. (This is now commonplace with the E-flite micro sized bind and fly models.)



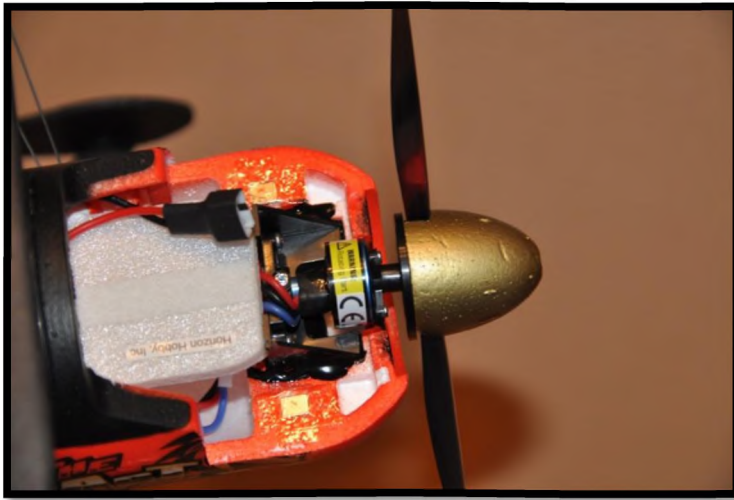
In the box we have the Beast, of course, but we also have a two cell LiPo from E-flite that is equipped with only a balance connector. The 120 mAh 20C pack is small and light at only 9 grams with the Velcro dot attached. The battery connector is a balance type connector, but it is different than any other balance connector I have seen. According to the website the connector is a

THP connector. Here we go again, another NEW connector! How many ways can we find to connector a battery.



Also in the box, there is a two-cell LiPo Celectra battery charger. This is a simple plug and go charger that has no display or anything. The charger has a small set of alligator clips that connect to a 12 volt power supply or battery. The battery simply plugs into the port on the charger. A simple push of the button starts the charging process. The red and green LED let us know the status of the charging process. Red blinking means the pack is charging, both red and green blinking mean balancing, and finally a solid green means charge complete. If both led's are flashing rapidly, then there has been an error. In case you forget what the led's mean, the instructions are printed on the back.





Okay, now to the radio system. I am using my Futaba 12FG transmitter with Spektrum module installed. The binding process is very simple and outlined in the manual. We just power up the Beast without the transmitter turned on. We need to wait 5 seconds until the light on the receiver begins to blink rapidly. Now I just power on the transmitter while holding in the button on the back of the module until the light on the receiver goes solid. Now the receiver and transmitter module are bound and we can program the transmitter as outlined in the manual. The low rate and high settings are set, along with the recommended exponential. Now to balance the Beast and get ready to go fly.

The recommended balance point is 18mm behind the leading edge per the manual. There is plenty of room in the battery area beneath the cowling to move the battery until the 18mm point is achieved.

Flying the Beast is just plain fun! The brushless motor is plenty powerful to hang on

the prop for at least several seconds. Any aerobatic maneuver is done easily, with the 3D maneuvers needing a little more stick jamming to get it done. I do wish that we could get a little more throw in the controls, but that will require adjustment of the wires on the control horns. Indoor flying of the Beast is not recommended for the first few flights. Get yourself some stick time before you go to the gym. You will need a full size gym for the Beast!

The UMX Beast BNF is ready to impress the intermediate to advanced pilot for many flights to come. Indoors if the gym is full sized, or outdoor with calm winds and you are set to go!



Tony Coberly

tonyc@rcreport.net

