The L-39 Albatross, She Flies !!
From: Grant Calkins
CasinoOp@worldnet.att.net

The caravan carrying the Calkins-Cannon consortium (Grant Calkins and Ray Cannon) left Camarillo, CA in the pitch dark at 5 A.M. bound for the model flying field at Edwards AFB on the edge of California's Mojave desert. Contained in the hold of Ray's Dodge Caravan was precious cargo indeed - three electric ducted fan (EDF) airplanes, two of which were headed for their maiden flight. The destination field is very special. It is 2 miles of flat dry lake, within the boundary of historic Edwards AFB, and hot as a pistol in Late July. As the van proceeded out of cool Camarillo, the various flight batteries were charging and the pilots quietly wondered what was in store for these one-of-a-kind scale models so carefully crafted and assembled over the many months. We would soon find out.

Two hours, and about 40 degrees later, we pulled into the flying site. Tony Frakowiak, master R/C pilot, employee of the Dryden Flight Test Center at Edwards, and fellow member of Muroc Model Masters R/C club, was there to greet the consortium. Tony would be maiden-flying the two brand-new models for us, but was currently occupied flying his Bandit turbine jet through "camera runs" 20' off the deck at about 150 mph. Our planes were:

1. Ray Cannon's magnificent XB-70 bomber, 8' long, 13 lb., and featuring 4 WeMoTec-Plettenberg power plants providing over 5 lb. of thrust from 28x2000 mAh NiMH batteries. It is painted white with black trim just like the real thing, with retracts and closing doors, it is a seriously excellent model cad-designed by Ray and requiring over 6 months to build.

2. Grant's, 48" WS, 49 oz L-39 Albatross with it's 11x2000 mAh NiMH battery, and powered by a single WeMoTec-Velkom power plant drawing 240 watts. A scale model of the famous Chek jet trainer, done in white and gray with fluorescent wing and tail tips.

3. (non maiden light) Grant's A-10 Thunderbolt (the 'Warthog') with two cut down WeMoTec impellers driven by hot speed 480 motors custom assembled by Jim Winters of Tucson, AZ. This plane has flown several times, and is a proven scale-
but-docile model that turns heads whenever it flies.

As Tony landed the Bandit, Grant filled the sky with Warthog while Ray readied the XB-70. This plane is a crowd magnet, and Ray was busy answering questions from civilian and Air Force people alike who had wondered onto the lakebed at 7 A.M. before proceeding to work at the base 14 miles away. There had been a concern that the B-70 was "too heavy on the nose" to ROG, but only trying would tell.

When all was ready, Tony applied full power and the cobra-like bomber started down the lakebed, gathering speed. It steered perfectly on the ground. But unfortunately, the nose-heavy fear was well founded, as the plane refused to lift its slender nose. Another try gave the same result, and so, despite the urging of the ever-gathering crowd, the XB-70 was "hangared" to await modest rework back at the shop.

The L-39 was next up. This model requires a bungee launch, so Calkins strolled across the ever-hotter lakebed to drive the stake. A second safety stake was also used 6” from the first (we didn't want an accidental flying stake heading for the launch personnel). With Tony applying a "little up" and full power, Ray let go of the L-39 and the model rocketed across the lakebed surface and leaped skyward in about 20 feet. It flew off the bungee and continued pointing up ward until Tony leveled off around 100 feet. This plane is a rocket, even in 95 degree air at 2700 ft altitude! Tony throttled back and flew some "camera runs" while Grant and Ray were busy taking video, digital stills, and film shots like mad. The plane, now a proven flyer, Tony settled the model back onto the surface as smooth as a baby's bottom. No major flight issues, but a little less low-rate aileron would be helpful.

Two flights, one gallant attempt, no broken models, and Calkins and Cannon headed for the traditional maiden-flight watering hole in nearby Rosamond called the Skillet. Being just 10:30 am the fare called for the Jackass Kick'en omelets with grits all around. Three hours and only a little heartburn later, the Consortium had left the 105 degree desert behind and was back in cool Camarillo looking forward to new challenges.

Grant Calkins and Ray Cannon
Channel Islands Condors, Muroc Model Masters at Edwards AFB, California

(A while back, Keith drew up this diagram and made the following notes for this twin wiring diagram. Please note that the motor leads in the diagram are considerably shorter than would be in real life, and the motors are turned 90 degrees from "normal."

Notes:
1. It is important to use two digital 204 controllers, so that the motors will be in sync.

Improved Setup for High Cell Count Twins
Keith Shaw
2. Both packs must be the same number of cells, cell type and age.

3. If you have two 112D chargers, both packs can be charged at the same time. It is okay to charge them one at a time as well.

4. Before flight, arm pack A and make sure the motors start. Then, disarm pack A and arm pack B. Check to make sure the motors run. Rearm pack A and go fly.

   This is about the only practical way to run two 40’s, particularly if you want to use more than 18 cell motors.

   The packs, wiring, switches, charge jacks and controllers are in the fuselage or center of the wing with long wires out to motors in nacelles.

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Swedish Casa 212 Aviocar now flying!
From: Bertil Klintbom  bkm@algonet.se

Dear Ken,

Here are some photographs of my Casa now fully test flown. I use 2 speed 400 with mini-olympus gearboxes, low budget but well performing. I get 9-10 minutes from a 8 cell 2400 mAh nicad. The model is a stable and excellent flyer. I have had no problems at all during the test flights with the models behavior. On the contrary, on the first flight I flew large circles to check out the model. After about 5 minutes the model suddenly felt harder to turn to the left. I made a full left hand circle and landed. When the model had stopped on the ground the right hand propeller continued to turn and I realized
that I had lost the motor shaft gear and that the propeller was freewheeling! The set screw was not tightened enough. The model does fly very well, and I think it is a 100% success.
Best regards, Bertil Klintbom, SWEDEN

Cutie Power

(Last month I reviewed the SR Batteries Cutie and gave some alternate power suggestions. Bernard Cawley sent an email with the following suggestion for a brushless system. KM)

Another choice to add to your suggested power systems: Jeti Phasor 15-4 and 30A controller. It would pull the Cutie up in a BIG hurry and swing a bit more prop than the MM.
I'm using an APC 9X4.5 thin E prop on 7 cells on the 15-4 in the Electric Scout. To get the current draws you want (25A), that would be a good place to start on 6 cells.

(Remember folks, we are not suggesting “over-powering” this model to “improve” it. It is excellent as a park flier the way it is. This is only if you want a plane to fly in a mixed environment or a “sportier” 3-channel plane. You will give up some of its docile flight characteristics if you go to a heavier power system. KM)

The September & October Flying Meetings

Both meetings were held at the Midwest R/C Society Flying field on 5 Mi. Rd.
The September meeting found us with some of the very best flying weather of the year. Sunny skies, warm and light breezes. There were a lot of different types of planes in the air at all times. We also added a new member. Welcome aboard Roger!
Saturday, October 13 did not promise to be as good a day. The cloud cover was heavy, and the ceiling a little low. Right Don? But… it turned out to be an excellent day. Even though the weather was so iffy, there were about a dozen pilots and a lot of aircraft present. While the winds were light to moderate, that didn’t bother the pilots present. We broke around noon for a field lunch; hotdogs, chips and soda. There was more flying, until the rain drops appeared at about 1:30.
Now we can look forward to our Michigan building season, indoor flying at the Oakland Yard, and April, when we start up our flying meetings once again.

SKS Mid-America Video Ready!
The SKS video of the Mid-America Electric Flies 2001 is ready. It is an excellently produced video and can be purchased for $19.95 + S&H.
U.S. Call Toll Free: 1-800-988-6488
or
SKS Video Productions
85 PINE ROAD
ABBOTTSTOWN, PA 17301 USA
By Fax: 1-717-259-6379
Or on the Web at: www.sksvideo.com
I’d like to suggest that this would make an excellent holiday gift. Hint, hint!

Pacific e Scale Championships
From: Doug Burt flyinace@direct.ca

Here are the results of the Pacific e Scale Championships held out here in Chilliwack, BC on July 28-29, 2001. Unfortunately the weather was absolutely horrible on Friday and most of Saturday so attendance was way down from what we had anticipated but nevertheless we managed to fill all categories and hold an official event. Here’s the results;

Sport Scale
Static Judging
1. Gerard McHale, Blackburn Monoplane
2. Darren Bos, Santos-Dumont Demoiselle
3. Jamie McBride, Porterfield Collegiate
Flight Judging
1. Gerard McHale
2. Darren Bos
3. Jamie McBride
Aggregate Totals:
1. Gerard McHale
2. Darren Bos
3. Jamie McBride

Stand-Off Scale
Static Judging
1. Hal Norrish, DeHavilland Buffalo
2. Gerard McHale, DeHavilland Beaver
3. Todd Long, Ivan Pettigrew (Team), Auster

Please Send Ampeer Subscriptions or Renewals to:
Ken Myers
1911 Bradshaw Ct.
Walled Lake, MI 48390
December 2001

Flight Judging
1. Gerard McHale
2. Hal Norrish
3. Todd Long, Ivan Pettigrew

Aggregate Totals:
1. Hal Norrish
2. Gerard McHale
3. Todd Long/I.Pettigrew

Expert Scale

Static Judging
1. Bob Benjamin, Aeronca "K"
2. Ivan Pettigrew, Mosquito TIII Trainer
3. Bob Benjamin, Bowers FlyBaby

Flight Judging
1. Bob Benjamin, Aeronca
2. Bob Benjamin, FlyBaby
3. Ivan Pettigrew

Aggregate Totals:
1. Bob Benjamin, Aeronca
2. Ivan Pettigrew
3. Bob Benjamin, FlyBaby

Results are posted on-line with photos at http://www.canadianelectricflight.com
I would also like to thank MaxCim Motors, Astro Flight, MEC, Bob Banka's Scale Documentation, Bob Benjamin's FlightImages, Todd's Models and BSI Adhesives very much for graciously contributing prizes for our event. See you again next year...

Doug Burt, CD
Pacific e Scale Championships

Upcoming EFO Meeting

The December EFO meeting will be starts with refreshments at Ken’s house about 7:00 P.M. on Saturday, December 8, and then it will be moving to the Oakland Yard for some spectating and indoor flying. As in the past, the EFO will pay the fee for spectators, but you’ll need to pay your own fee for flying, or be a member of the Oakland Yard Flying Club. Every one, EFO member or not, is invited to join us for this fun evening starting at Ken's house in Walled Lake, MI.

With the success of last year’s aviation club Oakland Yard has again made time available in our 72,000 square foot dome for individuals interested in model aviation. Models range from delicate rubber powered airplanes to full contact radio controlled Zagi’s. Parkflyers and slowflyers are the fastest growing part of the R/C hobby. Come check out these cool little airplanes. Indoor R/C is a ton of fun. Don’t miss out!!!!

Oakland Yard allows the following types of models:
1) Free flight: C02, electric, rubber, hand launch
2) Radio Control (No combustion engines) - All R/C pilots must be members of the AMA. Membership can be obtained by calling (1-800-IFLYAMA).

The cost is cheap for such an opportunity! Where else can you fly a model in the dead of winter?
Returning members $130.00
New members $150.00
Individual visit $15.00
Spectators $1.00

Members get:
1. Free Aviation Club polo shirt
2. Free soda and coffee each visit
3. 30% savings over individual visit price.

Schedule
Saturday, November 3rd, 8:00pm-12:00am
Saturday, November 17th, 8:00pm - 12:00am
Saturday, December 8th, 8:00pm -12:00am
Wednesday, December 26th, FUN FLY (FF 6pm - 8:30pm R/C 8:30pm-1 1:00pm)
Saturday, December 29th, 8:00pm – 12:00am
Saturday, January 12th, 8:00pm - 12:00pm
Saturday, January 26th, 8:00pm - 12:00am
Saturday, February 9th, 8:00pm -12:00am
Saturday, February 23rd, 8:00pm -12:00am
Saturday, March 9th, 8:00pm-12:00am
Saturday, March 23rd, 8:00pm-12:00am
Saturday, April 6th, 8:00pm - 12:00am
Saturday, April 20th, 8:00pm-12:00am

Remember Oakland Yard is available for special events. Need a place for club meetings? Contact Dave for availability or to offer suggestions and ideas.

Model Aviation Winter ‘01 - ‘02
Oakland Yard
248.673.0100
5328 Highland Rd.
Waterford, MI 48327

2nd Annual ‘Reindeer Fun Fly’
December 26th
The Saga of the PT Electric or A Little Problem Solving

(I hope to show, with this exchange of emails, how we can work together to come up with a good power selection for a given model. It all started with an email from Merle. KM)

Subj: P. T. Electric
From: Merle Davies mp_davies@yahoo.com

Hi Ken,

Last Sunday I had motor power problems with my "P. T. Electric" flyer. With a Sanyo 7 X 1500 mah battery pack the model would not climb after three (3) hand launches. Finally ended up as a front end repair job. Aircraft has not been flown in two years, battery pack was recycled before use, with installed motor, a Great Planes "Thrust Master" 05 supplied with the kit. Some of my peers suggested replacing the motor for more needed power.

I have on hand a OLDER "Astro 05" with the "fit-around" white plastic mounting, purchased at a Swap Shop, and a Astor Cobalt 05, NEW, and unused. I would be interested in your comments on a replacement to correct my power problem. Either motor will require rebuilding the motor mounting facilities. Thanks for your help.

Hi Merle,

Let's see if we can figure out what to do. First, I need a little information.

What brand and model type speed controller are you using?
What brand/type of connectors are you using?
What charger do you have?
Did you slow charge your pack before using it, after its layover?

This will help us get a start on it.

What brand and model type speed controller are you using?........" FX 35 DIGITAL "
What brand/type of connectors are you using?........SERMOS CONNECTORS
What charger do you have?......ROBBIE "INFINITY" MODEL 1...PEAK CHARGER.
Did you slow charge your pack before using it, after its layover? NO "SLOW CHARGE", ONLY FOUR RECYCLE SEQUENCES. WHAT CHARGE ON PACK BEING USED ?

This brings us down to two things, either the speed control or the motor.
You can check out the speed control, as I mentioned above. One thing I forgot to ask is what prop, diameter and brand are you using?

WINDSOR ELECTRIC, PLASTIC PROPELLER 8X4.

You didn't say whether or not moving the throttle trim on the transmitter, with the throttle set at high changed the RPM. Did it?
I did some calculations today using the estimated data for the Thrustmaster:
Kv = 1890
Ra = 0.125
Io = 2.3

I found that a 9x5 prop should still work safely direct drive. That surprised me! You might want to give that a try. If you have access to a 9x5 APC or 9x5 electric APC, give it a try. You have nothing to lose, since you are thinking about replacing the motor.
This should "fly" the plane.
I do hope that you realize that Great Planes has not recommended the correct power system for this plane. If you are going to use that motor, it should be geared 2.22:1 using the Olympus Belt-Drive, 10 cells and a 10x7 prop. This also means that a BEC type controller can't be used, unless the BEC is disabled and a 270 mAh Rx pack is used. That shouldn't be a problem, as the AUW (all up weight) should end up around 62 oz., and the wing loading only near 18 oz./sq.ft. Not bad at all for a trainer.
Right now I'd say try a 9x5 prop and see what you think. Secondly, pick up the Olympic Belt-Drive and a 10x7 prop, aeronaut or APC electric and give it a try after modifying the mounting for the belt-drive. This will give you some things to do. Let me know what happens, please. Remember that you can disable the BEC on the FX-35D when using a 270 mAh Rx pack.

Utilized a wet, non fly Sunday, to be with a wise club member checking my "PT Electric" A comparison of two like motors resulted in the crashed motor having the lesser power of the two motors under test. Will install a Astro 05 Direct Drive motor as a replacement when rebuilding. Thanks for your help. Merle

Live in Canada?

(It's been a while since I mentioned our good friends living east of here. KM)
The Electric Model Flyers of Southern Ontario (EMFSO) is the first electric model flying club in Canada. We are a non-profit organization devoted exclusively to promoting and supporting electric powered flight. Anyone interested is encouraged to join the club and share knowledge with fellow members of all skill levels and focuses. We have about 200 members, mostly in and around the Greater Toronto Area, and we have many fun flies, both indoor and out, several workshops and meetings, and we publish a newsletter about 5 or 6 times a year. Membership is $15 Cdn for Canadians and $15US to non-Canadians.

You can visit their Web site at:
http://www.emfso.org

St. Julie Fun Fly
From: Scott Black  sblack@progression.net

Here are a few of the outstanding airplanes that we had at the Quebec Electric Fun fly, hosted by the C2VM club and CD’d by Paul St. Arneau.

It was a small get together which made it in a way even more fun. No waiting for a pin, miles of sod, no clouds no wind, tons of cool planes to fly and watch and some racing too.

Here is a brief description of the airplanes:

EAM Mig 17, J.C. Terrataz, Aveox 1409/2Y, 12 - 1250 cells

Kress F-15, Paul Penna, Plett 200/20/6, 10 1250 SCRs, MF480

F86 (scratch built), S. Black, Hacker B50-13L, 16 CP1700s, HW609 fan

Great Planes CAP, Louis Dionne, Astro 40 Geared, 18 2400 SCRs (I think)

Caprise pattern ship (scratch built), S. Black, Astro 05BL, 8 CP1700s

Comet on launch and in the air.
Hello,

First thanks for your online magazine, always good and informing....interesting to read......but I must take exception with your editorial about model memories stored on computer radios causing accidents. It is the people behind the radio who are responsible for their radios and for seeing that they have the correct memory for the particular model they are about to use. (Couldn’t agree with you more! KM)

I have done my fair share of stupid things in 50 years of modeling and I accept responsibility for them. I definitely do not blame them on the computer radio. A bad workman always blames his tools. It was a valid expression pre-computer era and is STILL valid today.

Thanks,
Urs Szymanski – Switzerland

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Hello Ken,

Your editorial on the use of transmitters with more than one plane on them was well put. I can tell you from experience that I have, several times, tried to fly with the wrong plane programmed in. In one case, before I went into electrics, I spent over an hour in the hot sun trying to find out why I had no throttle on my 1/4 scale Sig Cub. Fortunately, because it ran only at full throttle I never attempted to fly. Once or twice this summer myself and one of my close flying buddies have had the motor turn on without warning ... dangerous. You have to be extremely careful, from a safety standpoint if nothing else, and to prevent an unexpected crash as well.

I enjoyed your comments on “park flyers” and while I believe there is some danger from an interference aspect, the most unfortunate part is that we do have, as you mentioned, some “lone wolves (wolves?)” who miss all the benefits of associating with other model builders.

Some great photos in this issue and it looks like electric is here to stay.

Regards,
John Rossetti

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From: Greg Potter Potter.Greg@saugov.sa.gov.au

Ken,

I've seen a flyer who uses multiple transmitters pick up the wrong transmitter for the model he was trying to fly. You can't make everything idiot proof. People make mistakes whether it's setting the wrong model memory, picking up the wrong TX, forgetting to switch the RX on, forgetting to hook up the elevator push-rod on a removable tailplane (I've done this one twice), putting in mismatching crystals etc. etc. It's not the transmitter that causes the problem!

I could not afford to fly all the different models I fly if I did not use a multi-memory transmitters, and yes I have done the “wrong model” trick, fortunately with only minor damage. The model I had selected incorrectly had reverse elevator and rudder movements to the one I was trying to fly.

If you use one of these transmitters, you just have to a have a routine that as soon as you switch on you go to model selection.

I like the Multiplex because it has 99 model memories, and as soon as you select a new model memory, it takes you straight to the trim setting screen to show you where the trims were set the last time you
used that memory (much better than the JR method). I'd have to have about 10 different transmitters (maybe more) to cope with all my different models.

However I agree with you about the parkfliers. While I fly on my own many times I enjoy the company of other flyers at a club field or a contest. I think all new R/C flyers should have some level of instruction regardless of what they are flying but how do you enforce it?

I found Allan Flowers email address, it was on one of his web pages that I had not looked at initially. Have you seen one of his Fokker DVIII kits close-up? (Sorry, no, but they sure “look good” on paper. KM)

Regards,
Greg Potter

From: Steve Moskal cometkid@flash.net

Hi Ken,

Great job with the September issue.

I understand your Luddite editorial on programmable transmitters. But, some of us get talked into the ever-greater, cooler, modern concepts by other well-meaning club members. I was talked into buying an Airtronics Stylus at Toledo three years ago because:
A) It was being sold by a vendor at a great price and
B) My club member friend said "It's the only radio you'll ever need from now on."

OK, so I brought it home and discovered that I needed a 50 model memory card and a sailplane feature card (I should explain that the se radios with their many mixes and switches are needed by fliers of modern full-house sailplanes. And...sigh, I was talked into buying a used Emerald sailplane from a club member who was almost giving it away.) and I learned another lesson. If you want to fly a Zagi 400 with elevons, you must have a 7 channel RX. This radio system needs to have channels 1 and 7 if you desire elevon mixing! Ouch!

Well, I find that flying the modern full-house sailplane isn't for me. It is most definitely not as relaxing as an RES or Nostalgia Class (I'm 55 years old, so I actually remember all the Nostalgia-legal sailplanes!) glider.

This season all, and I mean ALL, my electric choices were instant rekits. I flew a Kyosho T-33 twice and crashed it twice - all from a cruise. I mean no rolls or loops. It just snapped in. And the MultiPlex TwinJet mashed into the ground when I got it in the sun and was disoriented.

So, what's left? My Playboy Cabin Old timer, my Zagi 400 (My slope Zagi's need north winds on the closest slope to me - the dunes at Warren, MI.) and a Pico Stick.

Which is a neat segue into the Park Flyer piece you wrote. When I was flying my Stick at a soccer field a 30ish walker stopped and asked me where and how to get one. He'd "always wondered how they flew after seeing one in the Sharper Image catalog." No fears that this man will turn into a lifelong modeler, Ken. 'Cause only a lifelong model builder could put up with all that I've done and still come back for more punishment i.e. - try to learn and build new models. So, foolish lad that I am, I've just finished a Speed 280 powered (see attached) Facetmobile. (pictured below) Wish me luck!

Steve

From: Stefan Vorkoetter stefan@capable.ca

Dear Ken (Luddite) Myers:

I agree with you about the problem of selecting the wrong model in a computerized transmitter. This hasn't happened to me, and there are a few things I do to avoid it being a problem if it ever does.

First, I set up all my models relatively similarly. Most importantly, all the control throws are in the same direction. I use the computerized features to add things like mixing, rates, and support for special features (like the camera on my Riser 100). Therefore, if I do fly with the wrong model memory, at worst things will respond slightly differently than I'm used to, but the model will still be safely flyable.

Second, although the transmitter allows me to name models, I also put the program number on the rudder of the model.

One exception: I've modified my Great Planes Spectra to have a V-tail, so that model is programmed with a V-tail mix. But even a cursory control surface check immediately shows that I'm using the wrong program in that
By the way, if you're setting up a model, and a control surface moves the wrong way, and there's no room to change the linkage so that it can move the right way without reversing it at the transmitter, there's an easy fix: change servo brands. Futaba servos rotate the opposite direction of JR and Airtroics servos. I'm a JR guy, but I have a few Futaba servos (actual Futaba brand - Hitec servos with Futaba plugs rotate the same way as JR servos) that I use for such situations.

Stefan Vorkoetter

**MachineWorks NorthWest – CockpitMaster**

CockpitMaster is available direct from www.cockpitmaster.com

We have a downloadable version (49.95$) and CD version (57.95$)

We also have a new Sim coming up, "Backyard Edition", focusing solely on small electrics, starting at 29.95$ for the download version.

CockpitMaster RC Simulator is a made by MachineWorks NorthWest LLC

Happy Holidays
And Have a Great New Year
From Your Friends,
The EFO

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The Next Meeting:
Date: Saturday, Dec. 8, 2001 Time: 7:00 P.M.
Ken Myers's house, Walled Lake, MI & Oakland Yard