



Hangar Talk

Volume 16, Issue 4

April 2005

****!*** NEXT CLUB MEETING: Thursday
April 28th 2005 at Johnsons Auto Plaza located on the corner of 136th and
US HWY 85, 7:00 p.m. **!*****

From the President

Hello all. This month's president's letter will be brief. I would like to extend an apology to all in attendance at the last club meeting for my unprofessional conduct. Sometimes in the heat of the moment people tend to lose their composure. I lost mine and for that I am very sorry. I would like to apologize to Dannie Forroux, most of all, for letting it get personal. No matter what my grievance is I should never let it get personal.

One issue that was brought up at the meeting that we will be following up on is the runway. There is an area at the South end of the runway that is sinking in. It can be hazardous to your equipment during takeoff and landing, so use caution if you're on that end of the runway! Something the board will be doing prior to the April meeting is reviewing the damage and coming up with a plan to fix it when the weather gets warm enough. You should be hearing more about that at the next meeting. Until then, watch out for the dip!

A plea to the membership: Please come to the meetings and stay involved in your club. I realize some of you cannot make it to evening meetings due to uncontrollable circumstances, and we can all appreciate that. However, we cover the meeting's happenings fairly well in the newsletter/minutes and if there's an area you'd like to help in, please contact one of the board members and we'll gladly get you involved. We tend to be a club of many governed by few. You can volunteer to take responsibility to make changes and to help with any changes we try to make. Head up a committee or offer to help someone with a task or project. It appears to me that the officers and board members tend to do most of the work instead of most of the leading. We can't let this happen. We need solutions along with any complaints or issues at the meetings. Volunteer to solve the problem not just bring it to light.

Thanks for your continued support, see you at the April meeting and **Good Flying!**

Johnn Dodge

Meeting Minutes

Miniature Aero Sportsters

Meeting Minutes March 24, 2005

Welcome New Members & Visitors – *No new members or visitors this month.*

Members in Attendance – *This month's meeting attendees were:*

Tom Glaess	Bob Bubnich
Dennis Lesondak	Andy Prideaux
Barry McGee	Earl Keffer
Louise McGee	Johnn Dodge
Roy McGee	Michelle Dodge
Vince Gutschalk	Gary Hodges
Greg Hight	Steve Schwandt
Dannie Fourroux	
Ron Martin	

Treasurer's Report

- MAS Regular Account - \$3509.92
 - MAS Runway Account - \$5874.96
 - MAS Savings Account - \$2383.60
 - Total \$11768.48
- Disbursements for the month: AMA \$90.00 (2005 charter renewal)
 Adams County Treasurer \$194.84 (taxes)

Club Officer Opening – Well we have good news and bad news. The good news is that Andy Prideaux, our Vice President, was offered a job in Baltimore doing cancer research at Johns Hopkins. It's an offer he can't refuse. The bad news is that we'll be losing our vice president. Bring your nominations or volunteers to the April meeting for discussion and/or decision on filling this officer position.

Andy, we've really enjoyed having you in our club. You've brought a lot of good ideas to the table and everyone has enjoyed flying with you at the field. We wish you all the best in your new opportunity and hope that you'll come visit us when you make it back this way!!

Non-Profit Status – As of 2/15/05 we are in good standing with our non-profit status with the state. Vince brought in a certificate the club had from years back inquiring if the club would receive the same kind of documentation. That information was not given when the articles of reinstatement were filed so Michelle is going to follow up with the state to get more information. An update will be presented at the April meeting. Anything requiring immediate attention will of course be brought to the board's attention if necessary.

Maintenance – The gate is UP!!! **Many, many thanks to Roger George.** He donated the gate and his time to install it at the field. Once the lock is added to the gate, the combination will remain the same as it was in 2004. We all hope you're enjoying your retirement, Roger. Congratulations!!!!

Runway – There is a large dip at the South end of the runway. This proves to be a hazard to pilots and their planes and maintenance of the runway needs to be reviewed. Prior the next club meeting in April, the board will meet at the field, review the damage, and bring back recommendations to the club at the April meeting.

Dues Increase – No, we're not increasing the dues!! It was asked at the last monthly meeting to provide documentation of the club's dues going as high as \$90. Earl brought in a copy of the September 2000 newsletter, which documents a vote. The club voted that with the dues at \$50 there would be a \$10 per year increase for the duration of our lease. The lease was/is for 5 years and we are currently in that fifth year, hence the rise in dues to \$90 over the past four years.

There was a heated discussion regarding the dues increase documentation and the fixing of the runway. We have an internal copy of our club's meeting minutes with details. If you would like a copy of the extended internal minutes please let Michelle know.

AMA Charter (FYI) – Michelle has completed the 2005 charter packet.

Flyers – Gary has prototype. He brought it to the meeting and they look great. There are a few minor changes to them and we can print them up for distribution.

Club Apparel – John checked with the vendor he uses and we can get quality, embroidered hats for around \$7-10 each providing we order 144. Considering how much hats are in stores these days (\$15-20), the price is very reasonable and we can even sell them for fundraisers or give them as prizes at our fun-flys! The question was brought up whether to keep the same colors as we've had before; yellow with blue letters. Everyone agrees we ought to keep our same colors, but perhaps switch them. We can have blue hats with yellow letters. Food for thought anyway... Vince is still going to check with the vendor in Aurora we have used before to get some prices.

Kids Day – The club agrees that we need to have another kids day at the field. Before anyone takes this job over we're going to check with Roger George and Mark Hoffstatter to see if they want to head up the project as Roger has in the past and Mark was specifically asking about it recently.

We did discuss using the city's recreation departments as resources to get kids out to the field. We can hold demonstrations and/or do buddy-flying. The Thornton Rec. Center has control line flying on Sundays. We might think about getting involved with that event to gain a little more exposure for the club. Everyone agreed that there should be a minimum age requirement. Kids being at least 8 years old seemed to agree with everyone.

Whenever we do decide when our kids day and/or any other events will take place, we can advertise the information on our own website, have it updated on the District 9 website, and we can even contact local papers to place ads if needed.

AMA Leader Club Awards – We have an opportunity to apply to the AMA to be a leader club. These awards can be earned by any AMA Chartered Club by meeting certain standards of community service and activity. When a club qualifies the club receives a certificate from AMA Headquarters, a gold, silver or bronze finished pin for each current club member in the first year, published recognition in *Model Aviation* and listing on AMA website, and inclusion in the annual list of Leader Clubs.

Everyone at this month's meeting should have received a copy of the letter and application for acquiring leader club status. We are going to follow up on applying for this status with the AMA.

Raffle – No Bill, no raffle. ☹ We missed you Bill.

From the editor

With the current price of gasoline I thought a park flyer review was in order.

Park Zone Super Decathlon review from RC Universe

Contributed by: Greg Covey

http://www.rcuniverse.com/magazine/article_display.cfm?article_id=492

After seeing this great looking plane in the magazine and on-line promotions, I decided to review the ParkZone Super Decathlon RTF plane. The covering scheme not only looked fantastic but it is just the right combination of colors that I love to see for great flying orientation!

You won't need anything to get this plane up and into the sky. ParkZone has included everything right in the box.

Here are the features of the Super Decathlon:

- Realistic features and scale appearance
- Proportional elevator, rudder, and throttle
- Mode-Change Flight Control System allows users to fly in two modes
- All components needed for flight are included in one box so you can get up and fly fast!
- Docile flight characteristics allow you to do large field moves within a small field of space
- Reusable 27 MHz proprietary radio system with Rx/speed control module and separate 5-wire servo motors
- One-piece wing with scale wing struts
- Gear-reduced 370 class motor with large propeller
- Stainless steel landing gear, including wheel pants

Everything you need is supplied in the box. This includes the RTF plane, transmitter, flight pack, peak charger, and support hardware. The box even includes AA-size batteries for the transmitter!

It takes longer to charge the 7-cell, 600mAh NiMH flight pack than it does to assemble the plane. I simply installed the eight AA batteries into the transmitter and then pushed on the pre-finished landing gear into the fuselage bottom.

The control linkage comes ready to go on the lowest throw setting. Since the transmitter has a dual-rate switch, I decided to increase the throw range by moving both the elevator and rudder clevises to the 3rd hole from the end of the control horns. The clevis was re-adjusted outward (by unscrewing it a few turns) to re-center the control surfaces after first centering the transmitter trim tabs.



A look around the fuselage reveals the radio components and geared power system

A look inside the fuselage reveals the radio components. The ESC is integrated with the receiver in an assembly that can be pulled up for changing the jumper settings. The Super Decathlon stock settings were what I wanted to use so no jumpers needed to be changed.

Jumper settings were provided for the following features:

Jumper 1 - Mix of Elevator and Rudder:

You can add the jumper to utilize software that will allow a slight mix of elevator and rudder. In this mode, when rudder input is given, a slight amount of up elevator is added. By doing this, the nose of the airplane will be more likely to “stay up” when rudder input is given. This can be of great help to pilots that are transitioning from 2 to 3 channel aircraft and are not used to pitch control.

Jumper 2 - V-Tail/Standard Tail:

Tail control: Your Super Decathlon comes with the plane set for conventional “T” tail control. If you remove the jumper, you will switch the control to “V” tail function. This would allow you to transfer the radio system to a “V” tailed aircraft, such as the ParkZone™ Slo-V™, or elevon equipped aircraft such as the ParkZone™ F-27 Stryker™.

Jumper 3 - Auto Cutoff:

Auto Cut-Off: Your Super Decathlon comes with the jumper included in the third port. This sets the auto cut-off to function with 6-8 cell Ni-MH battery packs. If you remove the jumper, the auto cut-off will function with a 9 cell Ni-MH battery pack or a 3S LiPo battery pack.

When your Super Decathlon goes into auto cut-off, prepare to land immediately. You will maintain control of steering and pitch, but not have access to throttle at this time. You can “blip” the throttle to try to re-arm, but only attempt this once as you are preparing to land.

My Super Decathlon was ready to fly before the battery finished charging. It looked great right out of the box and I was anxious to give it a test fly. The wing measured 35" by 6" so the wingarea was about 210 sq. in. The wingloading would be $19.2/(210/144)$ or 13oz/sq. ft. which is a bit high, but functional, for a geared Speed 300 plane.



Although the plane was suppose to weigh 16oz (flying weight), I measured 15.6oz for the empty plane and 3.6oz for the 7-cell, 600mAh NiMH pack. My plane weighed 19.2oz ready to fly. This additional 20% in weight could play a factor in how well the plane performed with a geared Speed 370 (aka Speed 300) power system.

The maiden flight was on a cold grey day with temperatures around 35 degrees

I flew the Super Decathlon on a cold grey day with a moderate wind. The temperature was around 35 degrees F. The wind seemed to change directions and the speed was 5-15mph. Obviously, these conditions were less than desired.

On my maiden flight, I was both impressed and a bit disappointed. I was impressed that the plane flew straight with neutral trim settings on the control surfaces and transmitter trim tabs. Since most of the flight was at full power, I was a bit disappointed in the power system.

Although I knew that the plane would fly better under nicer weather conditions, I decided to investigate the power system

Cowl Removal

A single screw holds the cowl in place along with some double-sided tape on the sides

The prop removes easy by pulling off the spinner and unscrewing the nut. The cowl can be removed with a single screw after first peeling off the black sticker. The side decals must be either cut or peeled back. I choose to cut mine at the cowl edge. The cowl sides must be pulled out to break the hold of the double-sided tape.

The power system looked neat and easy to repair. Note that the motor is reversed so that it can still spin in the forward (CCW) direction in the gearbox. I thought this was a clever design overall. A 0.1oz nut was wedged onto a plastic post in the front of the cowl. This was most likely a fine adjustment to the CG. Since my plane flew perfectly straight when the control surfaces were at neutral, I feel that ParkZone did a good job in both balancing the plane and obtaining the correct thrust angle.

Since I could not easily measure the current with the 7-cell, 600mAh NiMH pack, I decided to put the front end back together and give it another test flight. Perhaps I would see more power once the NiMH pack and gearbox had a few flights on them.

Test Flight #2:

I found a way to connect my watt meter using a series of adapters. The stock ParkZone connectors are not my normal choice for other planes.

The stock setup measured as follows using the 3.6oz, 600mAh, 7-cell pack:

- 5.8amps, 43 watts, stock prop (perhaps an 8x6)
- 5.8amps, 43 watts, GWS 9x4.7 SF prop
- 7.0amps, 47 watts, GWS 10x4.7 SF prop

In essence, the stock setup, although properly designed, is a bit low in power for this plane at 36 watts/lb. The change to a GWS 10x4.7 prop provides an additional 10% more power but also taxes the motor more. This may be ok due to in-flight unloading of about 10%.

I also tried a few 2-cell Lithium packs with the GWS 10x4.7 prop:

- 6.3amps, 40 watts using 3.0oz Kokam 1500mAh pack
- 6.3amps, 40 watts using 1.6oz ThunderPower 860mAh pack

Of the two Lithium packs I tested, the lighter weight ThunderPower pack reduces the flying weight by 2oz or about 11% at 17.2oz.

While the plane would certainly fly easier in a calm summer morning, the cold temperatures in a New England winter season put greater demands on the power system. Perhaps a GWS 10x8 prop combined with a lighter 2-cell Lithium pack would supply the easiest upgrade for increased power and reduced weight. The upgraded power system could deliver about 50 watts/lb. with a lighter wingloading.

Fortunately, the weekend weather was much better! It was 28 degrees outside with an easterly wind about 8-10mph. I had a relatively clear parking lot at work on the weekend, which was mostly snow free, so I ROG'ed it right from the pavement and easily cleared the 8' snow banks created from plowing earlier in the week.

I finally had a good time with my Super Decathlon! I took off into the wind with authority and I could throttle back for some cruising around. After flying for about 5 minutes, I decided to bring it in early so that I had enough power for a safety pull-out, if needed. I managed to land the plane right in the small parking lot without incident so I took a chance and ROG'd it a second time, again with no problem. After a few quick circles, I came in for a second near perfect landing. Landings seemed very easy by simply reducing throttle and watching the plane slowly descend into the parking lot area. As the plane approached the ground, I flared the elevator up a bit.

I didn't have any problem with ground clearance when using my 10x4.7 prop but the landing gear mains are a bit soft requiring a reasonably soft approach. Overall, I walked away pleased with the model and decided it was time to take some video

On a tip from a fellow RCU member, I decided to try a Venom VMG Fireball Micro 370P Motor from Tower Hobbies.

The new measurements with the Venom Fireball 370P motor show that it is only a slightly hotter wind. The construction looked similar to the stock Speed 300 motor although the Venom Fireball motor did have additional cooling vents in the case which cleared the stock gearbox. This should provide excellent cooling when pushing the motor for better performance.

The Venom Fireball setup measured as follows using the stock 3.6oz, 600mAh, 7-cell pack:

- 6.3amps, 47 watts, stock 8x4 prop
- 6.5amps, 47 watts, GWS 9x4.7 SF prop
- 7.7amps, 52 watts, GWS 9x7 SF prop

The motor swap did require the use of a pinion puller and some green Loctite to keep the original pinion gear on the new Fireball motor. This is not the easiest modification for people to attempt so I recommend caution. The result appears to be an increase of about 5 watts using a smaller GWS 9x7 prop which will help with ground clearance.

The ParkZone Super Decathlon is a great-looking model that comes in a complete Ready-To-Fly (RTF) package. The plane is RTF in less time than it takes to charge the battery. I did find the weight of the plane to be well over the manufacturer's specification. The additional 20% in weight, combined with the cold winter climate of upstate NY, created a marginal amount of power requiring full throttle for most of the flight. A simple prop change to a larger size produced much better results without undue stress on the motor. Additional modifications were tested and are listed below in order of simplicity.

- Swap stock 8x4 prop with 10x4.7 SF prop for 10% increase in power

- Swap stock 7-cell battery with 2-cell Lithium pack for 11% decrease in weight
- Swap stock motor with Venom Fireball 370P and 9x7 SF prop for a 21% increase in power

Although my model required a minor increase in power to fly well in cold weather conditions, I would recommend that you fly it stock first before considering any modifications. Whether airborne or on the ground, I love the look of my Super Decathlon! It flies well in a small field and transports easily when I see a good weather report in the morning before going to work

TOO MUCH, TOO SOON

<http://www.mindspring.com/~cramskill/inkclay.htm>

-by Clay Ramskill

He'd done this several times before -- it was a real crowd-pleaser. Take off and immediately pull nearly vertical, climbing out almost straight up.

Aligning the 60-size "stick" with the runway, he gunned the powerful .90 4-stroke, then yanked the stick back. With a roar, the Ugly Stick pointed its nose up, but only mushed forward, barely climbing. Completely stalled. The nose began a sickening dive to the left. "I ain't got it!" he shouted as the plane crashed.

Radio problem? CG problem?

No.

All too often we see the above scenario -- after the trainer, a relatively "hot" airplane, with lots of power. And often as not, the appropriate warning sign is there -- the trainer was crashed, not worn out or sold. Then the relatively inexperienced pilot gets a "hot" plane, or an appropriate intermediate plane, but overpowered.

Perhaps there should be an intermediate training program, too. So that a pilot knows he must be able to use appropriate rudder with a strong engine. So he knows that the stall characteristics of an Extra are not the same as on his trusty Eagle 3. So that he knows how to recover from a deep stalled attitude. So that he knows not to get into that deep stall 10' above the runway.

It's bad enough that some individuals end up crashing some awfully nice hardware before they even get the chance to appreciate it properly. There is a safety factor involved also. The fewer crashes, the less likely a crash will occur in the pits, on a car, or someone's head.

Newer pilots need a bit of coaching -- sometimes they need the brutal hard facts: "Son, that plane's too much for you right now." They need some patience -- to take some time to really learn flying on a trainer or intermediate plane before moving up to "heavy iron."

More experienced flyers need to be more involved with the less experienced -- help them get the skills they need before they get into trouble.



Classifieds:

CLUB OFFICERS

President	Johnn Dodge	3036541912
VP	open	
Secretary/Treasurer	Michelle Dodge	3036541912

BOARD OF DIRECTORS

Earl Keffer	3034573062
Tom Glaess	
Steve Schwandt	
Gary Hodges	

UPCOMING EVENTS

March 24 th	Meeting	7:00 pm
April 28th	Meeting	7:00 pm
May 26 th	Meeting	7:00 pm
June 23 rd	Meeting	7:00 pm
July 28 th	Meeting	7:00 pm
August 25th	Meeting	7:00 pm

DIA Weather Line

303-342-0838

(Wind direction and speed will be given)

WEB page:

<http://home.comcast.net/~tqlaess/>.



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Serving the Northeast Denver Area the Miniature Aero Sportsters flying site sits on 100 acres with a 400 foot paved runway. The club is open to all who have a current AMA membership. The Miniature Aero Sportsters consists of a group of individuals with a common interest in radio control aircraft. Club meetings are on the 4th Thursday of the month at Johnson Auto Plaza is located at 12410 E. 136th Ave., at the corner of Hwy 86 and 136th Ave. Meetings start promptly at 7:00 pm. All M.A.S. club members are encouraged to attend meetings, and to become actively involved in the club's activities. Annual membership dues are \$90. There is a \$100 runway fee charged to all new members. For membership information email us at miniatureaerosportsters@msn.com. Or stop by the field on any Saturday or Sunday.

All articles or items of interest should be submitted to me by the 1st Wednesday of the month. Newsletter editor (that's ME) reserves the right to accept, refuse and edit all articles submitted for publication. Articles or items submitted after the deadline will be included in the following month's newsletter. Send or deliver articles to:

Gary Hodges
gbhodes58@msn.com

Published articles reflect the author's opinion and may or may not reflect those of the club in general, its officers, or the newsletter editor.

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