Message from President Jack Steinhauser

Happy Holidays everyone!

As I write this month’s newsletter, it is cold and dark outside, with snow piling up in a thick blanket. Truly, winter is here!

The events held at Suhaka Field this past flying season, including three massive air shows, a fun fly, and three evening flys, are a fading memory. I remember, also, the hours spent at the field, launching aircraft into the bright blue sky for many, many flights. This past year I enjoyed flying a broad cross-section of aircraft, from scale electric warbirds, to electric aerobats, flying wings, gas and glow-powered warbirds, gas and glow-powered sport planes, and an incredible gas-powered 3D aircraft. It brings a smile to my face to think back on those many hours of fun in the sky, and camaraderie with my fellow club members. We truly had a blast! I cannot think of any thing I have ever done that compares in terms of enjoyment and satisfaction.
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>BBQ</th>
<th>Time of Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/14/2015</td>
<td>DRCE Board Meeting</td>
<td></td>
<td>6:30 - 8:00 p.m.</td>
<td>Perfect Landing</td>
</tr>
<tr>
<td>1/21/2015</td>
<td>January Club Meeting</td>
<td></td>
<td>6:30 - 8:00 p.m.</td>
<td>Colpar Hobbies</td>
</tr>
<tr>
<td>2/18/2015</td>
<td>February Club Meeting</td>
<td></td>
<td>6:30 - 8:00 p.m.</td>
<td>Colpar Hobbies</td>
</tr>
<tr>
<td>2/21/2015</td>
<td>Aeromodeling at the Hanger</td>
<td></td>
<td>10:00 - 4:00 p.m.</td>
<td>Wings over Rockies</td>
</tr>
<tr>
<td>3/18/2015</td>
<td>March Club Meeting</td>
<td></td>
<td>6:30 - 8:00 p.m.</td>
<td>Colpar Hobbies</td>
</tr>
<tr>
<td>4/11/2015</td>
<td>April Maintenance Day</td>
<td></td>
<td>8:30 to 10:00 a.m.</td>
<td>Suhaka Field</td>
</tr>
<tr>
<td>4/15/2015</td>
<td>April Club Meeting</td>
<td></td>
<td>6:30 - 8:00 p.m.</td>
<td>Colpar Hobbies</td>
</tr>
<tr>
<td>5/16/2015</td>
<td>May Maintenance Day</td>
<td></td>
<td>8:30 to 10:00 a.m.</td>
<td>Suhaka Field</td>
</tr>
<tr>
<td>5/20/2015</td>
<td>May Club Meeting</td>
<td></td>
<td>6:30 - 8:00 p.m.</td>
<td>Colpar Hobbies</td>
</tr>
<tr>
<td>6/13/2015</td>
<td>June Maintenance Day</td>
<td>BBQ</td>
<td>8:30 to 10:00 a.m.</td>
<td>Suhaka Field</td>
</tr>
<tr>
<td>6/17/2015</td>
<td>June Club Meeting</td>
<td></td>
<td>6:30 - 8:00 p.m.</td>
<td>Colpar Hobbies</td>
</tr>
<tr>
<td>6/20/2015</td>
<td>June Air Show</td>
<td>BBQ</td>
<td>10:00 a.m. to 12:30 p.m.</td>
<td>Suhaka Field</td>
</tr>
<tr>
<td>6/25/2015</td>
<td>June BBQ and Evening Flying</td>
<td>BBQ</td>
<td>6:00 - 9:30 p.m.</td>
<td>Suhaka Field</td>
</tr>
<tr>
<td>7/11/2015</td>
<td>July Maintenance Day</td>
<td></td>
<td>8:30 to 10:30 a.m.</td>
<td>Suhaka Field</td>
</tr>
<tr>
<td>7/15/2015</td>
<td>July Club Meeting</td>
<td></td>
<td>6:30 - 8:00 p.m.</td>
<td>Colpar Hobbies</td>
</tr>
<tr>
<td>7/18/2015</td>
<td>July Air Show</td>
<td>BBQ</td>
<td>10:00 a.m. to 12:30 p.m.</td>
<td>Suhaka Field</td>
</tr>
<tr>
<td>7/23/2015</td>
<td>July BBQ and Evening Flying</td>
<td>BBQ</td>
<td>6:00 - 9:30 p.m.</td>
<td>Suhaka Field</td>
</tr>
<tr>
<td>8/15/2015</td>
<td>August Maintenance Day</td>
<td></td>
<td>8:30 to 10:30 a.m.</td>
<td>Suhaka Field</td>
</tr>
<tr>
<td>8/19/2015</td>
<td>August Club Meeting</td>
<td></td>
<td>6:30 - 8:00 p.m.</td>
<td>Colpar Hobbies</td>
</tr>
<tr>
<td>8/22/2015</td>
<td>August Air Show</td>
<td>BBQ</td>
<td>10:00 a.m. to 12:30 p.m.</td>
<td>Suhaka Field</td>
</tr>
<tr>
<td>8/27/2015</td>
<td>August BBQ and Evening Flying</td>
<td>BBQ</td>
<td>6:00 - 9:30 p.m.</td>
<td>Suhaka Field</td>
</tr>
<tr>
<td>9/16/2015</td>
<td>September Club Meeting</td>
<td></td>
<td>6:30 - 8:00 p.m.</td>
<td>Colpar Hobbies</td>
</tr>
<tr>
<td>10/17/2015</td>
<td>October Fun Fly</td>
<td>BBQ</td>
<td>9:30 a.m. - 12:30 p.m.</td>
<td>Suhaka Field</td>
</tr>
<tr>
<td>10/21/2015</td>
<td>October Club Meeting</td>
<td></td>
<td>6:30 - 8:00 p.m.</td>
<td>Colpar Hobbies</td>
</tr>
<tr>
<td>10/29/2015</td>
<td>End-of-Year Dinner Party</td>
<td></td>
<td>5:30 - 8:30 p.m.</td>
<td>Athenian Restarant</td>
</tr>
<tr>
<td>11/18/2015</td>
<td>November Club Meeting</td>
<td></td>
<td>6:30 - 8:00 p.m.</td>
<td>Colpar Hobbies</td>
</tr>
<tr>
<td>12/16/2015</td>
<td>December Club Meeting</td>
<td></td>
<td>6:30 - 8:00 p.m.</td>
<td>Colpar Hobbies</td>
</tr>
</tbody>
</table>
Club Elected Officers

President
Jack Steinhauser
303-324-5054 jacksteinhauser@comcast.net

Vice President
Joe Bolognese
303-810-6086 JBolo@comcast.net

Secretary
John Dickens
303-617-6044 jcdickens68@hotmail.com

Treasurer
Sid Gates
303-757-7019 sid@sidgates.us

Safety Officer
Eric Sunderwirth
303-719-0973 eric_346@msn.com

Appointed Positions

Director - Airfield Maintenance
Bob Brelsford
303-340-1025 Brelsford@comcast.net

Director - Special Projects
Joe Apice
303-435-0355 rcflyer58.ja@gmail.com

Chief Flight Instructor
Richard “Doc” Hamilton
303-781-5959 r1ham@msn.com

Director – Helicopter Operations
Stephen Lantz
303-400-9789 stephenlantz@comcast.net

Web Master
Marty Miller
303-369-6177 moonlightdesign@qwestoffice.net

DRCE Member-At-Large
Bob Pash
303-751-0493 RPashMD@yahoo.com

Director—Public Relations and Outreach
Ron Cox
317-410-2587 w9kfb1@mac.com

Director—Membership
Seth Buxton
720-722-3080 setht3@hotmail.com
Jack Steinhauser reported that attendees had a good time at our October 29th End-of-Year Party at the Athenian Restaurant. We got to know each other better and he suggested that more members should attend next year.

The Park has approved our new ten-year lease. Jack described the improvements in the lease.

Now that we have a long term lease, Jack said that the club could start planning improvements our airfield facilities. The members suggested the following improvements: barriers for pilot pads, shade structures, Mullen weed removal, multiple prairie dog treatments, solve the mud problem in the helicopter area, provide advance pilot training, and provide fewer airshows and more fun flies.

**Vice President’s Report**

Joe Bolognese was absent. Jack Steinhauser said that Joe would bring new samples of embroidered hats to the December meeting.

**Secretary and Director of Flight Training Reports**

John Dickens had nothing to report.

**Treasurer’s Report**

Sid Gates gave balances for our three bank accounts: Runway Fund, Runway Maintenance, and Operating Fund. A notice will be sent out to remind members to pay their 2016 membership dues.

**Safety Officer’s Report**

Eric Sunderwirth reported that the ribbons on the Windicators were starting to rot and needed to be replaced.

**Director – Airfield Maintenance**

Bob Brelsford reported that the windsock is damaged and is no longer accurate. It was recommended that the windsock be replaced for $30 in the Spring at the start of the new flying season.

**Member at Large**

Bob Pash reported that the flying of electric and glow powered airplanes has been disrupted by 3D flying over the runway and the noise from large gasoline powered airplanes. A discussion involving moving 3D flying away from the runway, time limits for large gasoline powered airplanes, and enforcing our airfield noise limits took place. It was suggested that more dialog between the pilots of different types of airplanes should be able to resolve these issues.

**Events**

None

**Old & New Business**

An amendment was proposed at the October meeting to remove the term limits from our bylaws so Jack Steinhauser could run for a third term as President. This was necessary since no other club member wanted to run for President. On November 1st, John Dickens sent an email to the membership which stated the following:

“Proposed Bylaws Amendment

Page 2, Article 3, Section 2 Tenure, Delete last sentence which was:

“The President and Vice President shall not serve more than two consecutive terms.”

The revised Section 2 Tenure will now be:

“All officers shall serve for one year beginning with the January 1st after the election and ending December 31st.”

This proposed amendment will be voted on at the November meeting which will take place at Colpar’s Hobby Town, 1915 South Havana Street, Aurora, Colorado on November 18, 2015 at 6:30 PM. The amendment will be approved if it receives an affirmative vote by two thirds of the active members present at the meeting. These procedures are described in the bylaws on page 8, Article 8, Section 2, Paragraph C.”
John asked for a show of hands to vote on the amendment. Thirteen members approved the amendment and one member abstained. The amendment was approved.

Jack asked Bob Pash of the Nomination Committee to conduct the vote on the 2016 candidates. The candidates are:

President – Jack Steinhauser
Vice President – Dan Kellogg
Secretary – Seth Rice
Treasurer – John Dickens
Safety Officer – Bob Pash
Maintenance Officer – Seth Buxton

It was decided to vote on the candidates as a group. The members present unanimously elected the candidates for the 2016 term.

Show & Tell
None

Auction
Eric Sunderwirth conducted the auction.
Triton Battery Charger for LiPo, NiMH, NiCd, & lead acid batteries with 24V and 5A capabilities was won by Richard Bueno with a bid of $5.
Electric Motor (900KV, 11.1V, 10A, & 110W) for 14-26 ounce airplanes was won by Len Roderick with a bid of $5.
Hobbico Deluxe Power Panel, for starter, pump, & glow plug was won by Len Roderick with a bid of $5.

Door Prizes
John Dickens ran the door prize event for the evening. The following were the results of the door prizes:
1. Helping Hands – Bob Smith
2. Monokote Trim, Cub Yellow – Len Roderick
3. Head Lamp – Manuel Barnett
4. 5 Minute Epoxy – Sid Gates
5. Colpar $10 Gift Card – Bob Brelsford
6. CA Glue – Hector Rodriguez
7. Pocket Ruler – Bob Pash
8. Caliper 6 inch – Jim Darden

Donation Table
Many items from the estate of Larry Everett were displayed. The Donation Jar collected $6.

Next Meeting
The next meeting will be December 16, 2015 at Colpar Hobbies.

Adjournment
Meeting was adjourned at 8:02 P.M.
Now, in the short days and long nights of the winter-time, is the time to prepare for another season of fun in the sun.

I have not made as much progress in repairs and new builds as I had hoped by this point in the building season. A combination of too many family events, and some significant business has distracted me.

Among the family events was a trip to Newport, Rhode Island, during Thanksgiving week to witness and celebrate the graduation of my son, Rob, from U.S. Navy Officer Candidate School. Rob graduated in the top ten percent of his class, and is heading for pilot training in Pensacola in January. We are all immensely proud of his success at OCS, and look forward to following his progress through the two years of pilot training that he is about to start. Rob’s top choice as far as aircraft types is jets; he does have a shot at flying either the F-18 or F-35. He is also excited about the prospect of flying helicopters or maritime patrol aircraft. In his view, there are no bad choices; he will take what he gets, and make the best of it. You can be sure that dear old Dad will be adding some Navy aircraft to his RC fleet in honor of Rob!

AMA District IX Meeting

Today, I joined club members Sid Gates and Dan Kellogg in attending the annual District IX meeting held for officers of Front Range Clubs that are sponsored by the Academy of Model Aeronautics. The meeting was chaired by Assistant Vice Presidents Tom Neff and Rick McCaskill. Tom and Rick made presentations on AMA benefits, including insurance, the leadership certificates available through AMA, and new publications of the AMA.

One very interesting program the AMA has introduced is called “USA 4 STEM”. This is a community outreach program targeted to high school age students that are interested in Science-Technology-Engineering-Mathematics (“STEM”). The program includes curricula on the basics of modeling, aerodynamics, weather, the National Airspace System, radio-controlled flight, and operating a Unmanned Aerial System. Each team of four to eight students actually builds a complete Unmanned Aerial System.
using quadcopter technology. The program climaxes with a simulated search and rescue effort using the quadcopter that each team has built. For more information on this innovative and exciting initiative sponsored by your AMA, go to www.uas4stem.org.

Registration Requirements for Drones are Coming

Another item shared at the District IX meeting was a report of a Task Force established to recommend rules regarding registration of “small Unmanned Aerial Systems”. This is a Pandora’s box for the RC modeling community. Although it seems that the impetus for this rulemaking effort is the proliferation of quadcopter-with-remote-viewing-capability technology, it seems to me after reading the report that the FAA is heading towards making all operators of radio-controlled aircraft register with the FAA. After all, what radio-controlled aircraft is not an “Unmanned Aerial System”? The final report is 14 pages of fairly dense text. I will send out the report with this newsletter so that all members can see what is being proposed. The key elements that are being recommended to the FAA by the Task Force are as follows:

1. Small Unmanned Aerial Systems (sUAS) are defined as all model aircraft between 250 grams (approximately 9 ounces) and 55 pounds.

2. All operators of sUAS that are 13 and older must register with the FAA prior to operating their aircraft. Registration will be by electronic registration on the web and include name and street address. Telephone number and email address are optional. Parents or guardians of those younger than 13 and operating sUAS will be required to register in their stead.

3. Registrants will receive an FAA-issued registration number. Registrants are required to attach this number to each sUAS, or provide the FAA with the aircraft’s serial number.

My opinion of all this is that the Task Force has been hurried through a process to satisfy some clueless high-level bureaucrat, and produce a poorly-thought through set of recommendations. I understand the goal of safety of the National Airspace System, but the recommendations, if enacted, are going to produce a huge backlash from the general public that is purchasing massive quantities of the small, quad-copter devices sold at places like Walmart. It doesn’t take much to get to 9 ounces of aircraft, so many customers are going to be affected.

Worst of all, there is no upside to users, other than the ostensible requirement that they educate themselves on such topics as the National Airspace System, RC models, safe operation of RC models, etc. It ain’t gonna happen. Most users will barely read the operating instructions for the model… The stated purpose of the rule is to “link incidents to users”. The FAA is basically sending a message to potential new entrants to the hobby: “If your $250 quad copter causes somebody a problem, we want to be able to nail you for it.” Failure to register, under the current system of penalties, could carry a penalty of $25,000 or more. More great governing from your friends at the Obama Administration!

The AMA feels like it was steamrolled by the Task Force process, and believes that the existing laws exempting model aircraft from regulation by the FAA have been completely ignored. They plan to file suit to oppose any implementation of the rulemaking by the FAA. Stay tuned!

What Battery Should I Buy for my EDF Jet?

For those of you who have migrated from propellor-driven aircraft to electric-ducted fan jets, one of the first things you notice is how energy-hungry these powerplants are. Jets are cool, they go fast and the high-blade count fans (9-14 blade) sound a great deal like real jets flying over on their final approach to Centennial. However, that coolness comes at a price. You have to power those electric
2013 LIPO Battery Comparison Study Results

PRODUCT REVIEW BY MCSGUY- Prices shown are sellers list as of 4/16/13.
the comments below are my opinions only and are based on a very small test sample of each brand so results may vary within a brand but the QC reveal doesn’t lie.

DINOGY 5100mah 65C - $144.00 - www.dinogylipos.com

Dinogy exploded out of the chute with a devastating 19.4lbs of thrust which was half a pound more than Thunder Powers 7700mah 65C’s could manage. However they gave a some of it back with a 3lb sag at the 10 second mark of the 1st segment. Recovering very quickly Dinogy still garnered a very respectable 17.8lbs finish on the 1st segment. Maintaining over 17lbs of thrust through out the run I would say that Dinogy is a serious contender. Also one of the better packs for cell matching. The cell voltage profile was exceptionally tight across the board. Dinogy is a definite buy in my opinion.

GENSACE 5500mah 25C - $111.86 - www.hobbypartz.com

What can you say bad about a 25C pack the kicked Thunderpowers 65C $250 a$$ in every category at less then half the cost? Undoubtedly the ultimate sleeper. Starting out at an excellent 18.4lbs of thrust, it settled down to a stable 17.5lb average on the 1st segment and finished the second not much below that. A stable, consistent performer. Excellent cell matching, almost as good as the Dinogy. These are the best buy, if you are ever able to catch them in stock buy all you can afford before the magic runs out of the bottle.


Just what you would expect from Hyperion. A solid 18.8lb start holding an excellent average of 18lbs through out the 1st segment. It peaked at 18.3 on the second segment with a solid 17.8lb average and an average 17.4lb finish. Remarkable cell matching on one of the packs, the other being "only" exceptional. Compare these to the Thunder Powers 6600mah "65C"s at 75% of the cost. If you want a premium pack these are your choice. The quality control appears exceptional and you actually get what you pay for- what a concept.

TURNINGY ZIPPY 5000mah 40C - $59.11 - www.hobbyking.com

Disqualified during the earlier high amperage "Constant Resistant" portion of the testing series. Even though the amps never exceeded it’s rated capacity the qualifier pack puffed like a marsh mellow.

Genesis 5000mah 55C - $127.00 - www.bananahobby.com

Another disqualified loser during the CR test phase, literally puffed like a balloon at 2/3rds of its C rating. Thinking it might be a fluke I purchased a couple 5500/55C's to give them another shot but one of the packs arrived with a dead cell that wouldn't hold a charge. Maybe just bad luck but that level of quality control eliminates them from my Christmas list.

Nano A-SPEC 5000mah 65C - $129.99 - www.hobbyking.com

Surprising performance, a powerful 18.7lbs high on segment one thrust, it held an average of 18lbs with a second segment finish averaging 17.5lbs with a 17.9lb high. These packs are very solid performers and also show excellent quality control with precise cell matching. Turnigy may have turned a corner with the A-Specs. Priced on the low end, if it turns out the packs are capable of this kind of performance long term they will become recognized as one of the premier brands. An excellent buy. Even though I typically avoid all things Turnigy when it comes to my jets I’m planning on add-
ing a few more of these to my cooler. Highly recommended, well worth the price.

REVOLECTRIX 5000mah 60C - $124.90 + import duty fees - [www.store.revolectrix.com](http://www.store.revolectrix.com)

Stable output across both segments. High mark on segment one of 17.9lbs with a 17.7lb average and 17.7lbs on segment two with a 17.5lb average. Almost a straight line of power output across both segments. One of the packs suffers from a weak cell and a marginal cell profile while the other pack displays arguably the best cell matching of the bunch. Too bad the quality control (or resiliency) of Pack "A" wasn't up to par. Regardless, the staying power was exceptional. They are still one of my favorites but I have to confess that I've lost some of my initial respect for them. Regardless, still a good buy in my opinion.

THUNDER POWER 5000mah 65C - $249.99 - [www.aero-model.com](http://www.aero-model.com)

Pretty good performance for $100 packs. Abysmal if you paid over twice that amount like I did. A 17.7lb start dropped rapidly to 16.6lbs, I can't believe these packs are in the bottom in every catagory on the performance summary. The second segment only averaged 16.7lbs. Even the pack that looked up to par shows sloppy cell matching and the cell profile in the other was what I would expect from Turnigy. Voltage persistance fell clear off the chart! Can you spell "Rip Off"? I'm sure there's a good reason TP now requires a 50% fee to replace even a pristine looking brand new pack with a bad cell (I speak from bitter experience). They would probably go broke if they still gave the warranty support they built the brand name on. I do not recommend these packs.

If you haven't noticed I have a bad attitude towards TP, but for good reason. I loaded up on their packs trusting in their reputation and I have been disappionted at every turn by every pack size, both on the bench and in the air. The testing shows that when TP labeled these packs as 65C- by any reasonable metric - they lied. Every last one of the (4) 5000mah packs I strapped on melted the 4mm cross link connectors clean off the packs at around 33C! I would avoid these packs at half the price especially since TP does not appear to be standing behind their brand the way they used to.

THUNDER POWER 6600mah 65C - $349.99 - [www.aero-model.com](http://www.aero-model.com)

More disappointment from Thunder Power. At 18.1lbs of starting thrust and a 30 second drop to 17.3lbs. For $340 6600/65C packs, these well and truly suck. Compare these to the results on Hyperions 35C's to see what I mean. Both TP packs show poor cell quality, the matching is poor at best and even 6600mah's couldn't keep the voltage persistance from dragging on the floor. The finish voltage on pack "B" was only 21.07 volts with the lowest cell at a miserable 3.46 volts. The real shame is I bought six of these packs thinking they wouldn't let me down. All I got to say is Thunder Power buyers beware.

THUNDER POWER 7700 65C - $434.99 - [www.aero-model.com](http://www.aero-model.com)

Thunder Power's top of the line packs will set you back over $400. They produced 18.9lbs of thrust coming out, averaged a powerful 18.6lb average over the first segment and an 18lb average over the second segment and they run cool as ice. These are the packs I'll be flying in the Velox, the jet I'm using for the testing. Voltage persistance was good but I did expect better on the QC side of cell matching. The cell voltage spread was pretty sloppy, not on par with Hyperion, Donogy or GensAce 25C. In keeping with the Thunder Power QC slide a resistance connection on the power lead on one of the packs got so hot is blistered through the shrink tube and end cover. All I can say is since I own four of the packs I'll use em but if I had it to do over again I'd put a couple of 4000mah Hyperion's in series and really have something. I would classify the TP 7700's as over priced.

GENSACE 5300mah 60C - $109.95 - [www.hobbypartz.com](http://www.hobbypartz.com)
2013 LIPO Battery Comparison Study Results

Pretty good performance, came out at 17.8lbs of thrust and averaged 17.5lbs across both segments. Pretty impressive straight line power output however they ran hot with 48 degree temp rise to 123.4 degrees F in 90 seconds even with a 30 second cool down period in the middle. Also voltage persistance was dragging on the bottom with a low of 3.387 on one of the cells on Pack "A". Cell matching could have been better. Considering the 25C version killed this pack in every catagory it’s hard to justify these being labeled at 60C. I was not impressed.

HAIYIN 5000mah 40C - $92.00 - www.haiyinstore.com
One Word describes the Haiyin performance: embarrassing. After the first 5 seconds the output sagged to only 14lbs of thrust and the recovery was slow and seemingly painful. There’s no reason to talk about anything further because the temperature rose to 147 degrees. The 70 degree temp rise was the highest I’ve run across. The remarkable thing is there is no puff, the packs are tight. So probably just a victim of a bad pack getting out the door because the cell voltage profile on pack "B" looked as good as pack "A" looked bad. But as far as I, the customer, is concerned I have experienced a 50% failure rate. Obviously nobody at Haiyin is checking what they are shipping out the door. Guess they figure if Thunder Power can get away with it why can't they. (I know, that was uncalled for but I did pay alot of money for the right to sound petty 😐)
Personally, I would avoid these packs.

GLACIER 5300mah 35C - $109.95 - www.buddyrc.com
Wow! I wasn’t expecting what came out of the Glacier’s. You could almost put a ruler across the WOT segments’ thrust curves. They stack up well with 18.4lbs of thrust out the chute with a better then most 17.8lb average across segment one. A 17.5lb average over segment two reflects some of the best cell matching of the test group. Like the GensAce 25C, the Glaciers holds it’s own against packs sporting 60 or 65C labels. Voltage persistance with pretty good bottoming out at 21.2 for both packs. The lowest cell in both packs were exactly the same to the second decimal place: 3.529 on pack "A" and 3.520 on pack "B" (did I mention the cell matching was excellent?). I am impressed. If these babies end up holding their oats for a couple hundred cycles we have a new quality leader in the industry. I don’t mean to belabor the point but compare Glacier’s absolutely picture perfect output graphs against the rest to see what I mean. A decent buy at twice the price a super buy at $110

Turnigy Nano-tech 5000mah 65C - $116.70 - www.hobbyking.com
They performed better then I expected putting out a fairly straight output line starting with 18.2lbs of thrust and averaging a very respectable 17.8lb over segment one. Segment two had a high of 17.5lbs with an average of 17.3lbs. One of the packs showed fairly decent cell matching but the other was not so good. This caused pack "B"s voltage to drag along the floor at 21v which will just get you by. With only a $13 difference the A-Spec should make this pack obsolete.
turbines with 4, 5, 6, 8 or 12 cells of high-output batteries. The manufacturers will label their high-end batteries with “C” ratings of “65-90”, which is ridiculous. Do the math. If a 5000 mAh battery was really putting out juice at 65 times its nominal “C” rating it would be pushing out (5 amps x 65 = 325 amps). That amount of amperage would melt the solder on the connectors, bringing the flight of your beautiful EDF to an abrupt and messy end.

Long time member Sid Gates forwarded to me a very interesting study performed by a fellow modeler who enjoys high-performance EDF jets and was asking himself the following question:

I question whether buying a Thunder Power is worth its cost if an alternative brand consistently performs better and is half the price. I wanted to know if 60 and 65C ratings were just hype. I’ve considered different ways to test batteries and evaluated what to look for to determine if a battery is actually putting out “60C” for example. I could find no definition for measuring “C” rating. Battery manufacturers never, ever, ever talk about it so there’s probably a lot of hype going on.

We decided the only way to get some answers was to put a few batteries under a serious high load and see what squeezes out

You can follow the whole thread and many test results by starting with this link:


For convenience, I have published a summary of some of the findings and comments by battery brand and type on the preceding three pages. Please note that the study results were published in April of 2013. Things may have changed substantially since then in the world of batteries. However, I was pleased to see that there were some relatively inexpensive brands that fared well in the testing. It was interesting to note that the vaunted Thunder Power batteries did not do well in the testing.

I hope this information is helpful to members considering making investments in some serious LIPO batteries.

Getting Along with Each Other on the Flight Line

At our last meeting there were several members, who typically fly small electric planes, that objected to the “take over” of the field by a group of seven pilots with large 3D aircraft on Sunday, November 14. The electric pilots complained that the 3D pilots dominated the airspace with long flights of their noisy gas-powered planes, including hovering over or near to the runway. I happened to be at the field, flying my medium-sized 3D aircraft. Being an aficionado of both small electric, and larger gas-powered 3D planes I see both sides of the argument. Three of the 3D pilots were members of our club, the others were friends, AMA members and obviously excellent pilots.

The tension that exists between pilots of small electric and large gas-powered planes is inevitable. The two types of planes are not very compatible in the air. The electric pilots are naturally intimidated by the large gassers, and the pilots of the large gassers, who have thousands of $ invested in their planes, and years of practice to develop their flying skills, are understandably nervous about their plane being damaged by an inexpensive foamy.

I did communicate the concerns of the electric pilots to the three 3D pilots that are members of our club, and received responses from each of them. Of these, the response from member Gary Gillis was the most comprehensive and thoughtful. I have published Gary’s response on the page following my letter for all members to read.

My takeaway from this experience is that we all need to be aware when pilots with planes of vastly different performance characteristics show up and want to fly at Suhaka Field. If the pilots are all members of our club, it is my hope that they can
President’s Message (continued from page 11)

get together and discuss how to best share the airspace and time available to fly. An understanding that different groups will each have an appropriate window of time to fly their type of aircraft seems to be a reasonable way of avoiding upset and discord.

If pilots who are not members of our club show up and a potential problem becomes evident, I would expect any officers or leadership team members present to approach the visiting pilots and reach an understanding of how all pilots are going to fly together.

At the end of the day the coexistence of pilots with vastly different aircraft boils down to a shared understanding of basic safety rules, common sense and mutual respect. If pilots are all willing to adopt a pragmatic, respectful attitude, we should be able to share the airspace and time limits we all have in a peaceful and friendly manner.

Planning for 2016

In early January I plan to convene a meeting of the retiring, continuing and new officers of your club to assemble a plan for calendar year 2016. This plan will include objectives for things such as safety, finances, maintenance and infrastructure improvements. At our November meeting, we gave all members present the opportunity to voice their suggestions for the club in the next year. Many of the members present expressed the view that additional, permanent shade shelters would be a great improvement to our facilities. These suggestions will be considered by the new Board, with the advice of the retiring Board, at our upcoming meeting. I hope and expect that the result of this will be a plan for 2016 to present at our January meeting.

Wishing all of you a healthy and happy Holiday season! I hope that Santa brings you what you want, and that the cold weather provides ample time to fix, and build, your fleet up for the 2016 Flying Season!

Sincerely,
Jack Steinhauser
President, Denver R/C Eagles Flying Club
Gentlemen,

I would like to share my thoughts on the concerns that were presented in Jack's email:

1) Long Flights: I use a transmitter timer on every one of my flights. It is set to beep at 11 minutes allowing me 2 minutes to land. That means I am physically in the air 12-13 minutes. Compared to electrics, flow fuel, or other gas powered airplanes, that is clearly a reasonable flight time.

2) Noise: After researching my muffler options for my DA70 twin with Desert Aircraft - the manufacturer of my motor - noise control was a major factor in my muffler selection. I live in the homes behind Bellevue and can hear motors running from my home. As a home owner and as a club member, I am sensitive about noise. I selected the Slimline muffler because it features an internal baffling system that quiets the motor considerably. Other pilots who fly gas motors may not have internal baffling, causing their mufflers to be louder. I welcome someone authorized within the club with the right equipment to take sound readings on my airplane. I am confident that I not only meet AMA guidelines, I will exceed them.

3) Pilot Safety: I have been involved with the Denver R/C Eagles for 42 years and have never had a rule violation or safety issue presented to me during this time. Although my passion is 3D, I follow the rules, practices, and guidelines detailed by the club and the AMA.

4) Allowing Other Flyers Time & Space To Fly: As individual Pilots and as a group of guys that like to fly together, we are sensitive to this issue. I thought we did a good job of "staging" when we flew and we never were all up at the same time. We communicated between ourselves and with other non 3D Pilots.

I welcome constructive criticism about my airplane and my flying. I can be contacted by phone or email directly. I am confident that we can work out any concerns that some Pilots voiced at the recent meeting. 3D Pilots and non 3D Pilots can co-exist if we communicate.

Thank you for listening.
My Best,
Gary Gillis
720-280-2000
Equipment for Sale by Tory Foster

I purchased a lot of new in box equipment from a company that is no longer building UAS and I have taken what I need and now have a lot of equipment I am trying to sell.

The equipment is all new-in-box items, and I have pictures of everything. I am also willing to take a really good price for it and the person that buys the most gets the best price. I am at this point just trying to keep my wife from being mad that it looks like we have a hobby store in our house.

My asking prices are, to my knowledge, a pretty good deal as I would like to help local people out and know they will be getting a good deal. I am no hobby store and don't want to be but I would appreciate not having a "hobby store extra bedroom" as my wife calls it. I have put the item description along with the pricing below. I am not sure if I can send all pictures at one time so I will only put the items with each picture and might be sending multiple emails. Please feel free to let me know if you have any questions or if you are needing any more detail. Also, being that most people should all be here locally I am willing to meet them rather than them having to pay shipping. I am also willing to take cash or payment via PayPal. I am also open to offers.

- Tiger Motor MN4010-9 580kv- 30 left-$65 each
- Tiger Motor MN3110 700kv-50 left-$45 each
- Tiger Motor GB2208 Gimbal Motor-6 left- $20 each
- Walkera Devo 12s with RX1202 receiver-4 left-$270 each
- Walkera Devo 7 with RX1002 Receiver-28 left-$40 each
- Walkera Telemetry Module-46 left-$20 each
- Spektrum Telemetry Module TM1000-4 left-$40 each
- Skyzone TX51W Video Transmitter-4 left- $40 each

I greatly appreciate you putting it in the news letter. Make sure to please let me know if there is anything else you need from me and also if you have any other questions. My email and phone are both listed below

Thank you,
Tory Foster
tjfoster09@gmail.com
317-538-0966