



# DCRC Club Newsletter

[www.dc-rc.org](http://www.dc-rc.org)

[www.dc-rc.org](http://www.dc-rc.org)

AMA CHARTER CLUB No. 329

VOLUME 52

NUMBER 10

OCTOBER 2006

## The McDaniel's family create another memorable Bealeton Fly In!!



DCRC Club Meeting  
100 Maryland Avenue

Rockville, MD

October 20, 2006

**7:30 PM**

Elections &  
Program by Roy Day



*Meeting Program: Bush Flying In Alaska.*

*Roy Day will recount some personal experiences flying with bush pilots in Alaska and show a video of flying techniques used by bush pilots to get in and out of incredibly small spaces.*

**PRESIDENT: Walt Gallagher**

V.P.: Kevin Jackson  
County Liaison: Jim McDaniel

**BOARD OF DIRECTORS**

Scott Davies 301-770-9150  
Mike Dooley 301-843-8818  
Andy Finizio 301-983-8557  
Walt Gallagher 301-253-4074  
Allan Hoffman 301-845-8485  
Kevin Jackson 301-963-6091  
Jim McDaniel 301-916-0366  
Mike Peizer 301-589-8299  
Nir Schweizer 301-972-2248

**TREASURER:**

Scott Davies

**MEMBERSHIP SECRETARY:**

Andy Kane  
305 Natick Court  
Silver Spring, MD 20905-5875

**RECORDING SECRETARY:**

Mike Peizer

**SHOW TEAM MANAGER:**

Jim McDaniel &  
Allan Hoffman

**NEWSLETTER EDITOR:**

Andy Kane 301-785-3022  
drceditor@aol.com

**MEETING PROGRAM COORDINATOR:**

Kevin Jackson

*The DC/RC Newsletter is published monthly by the District of Columbia Radio Control Inc. Deadline for submitting materials for publication is the last Friday of each month. Any part of the newsletter may be reproduced for non-profit purposes unless otherwise noted. Please credit the Newsletter and Author if named. Articles may not reflect the opinion of the club, but that of the author.*

**Visit us on the web:**  
[www.dc-rc.org](http://www.dc-rc.org)

*Did you know that any airplane brought in to the model shop will receive 3 free raffle tickets. Bring in your models each month for your free tickets, and to share ideas.*

**TABLE OF CONTENTS**

BEALTON PHOTO SHOOT	PAGE 2
PRESIDENT TO PRESIDENT	PAGE 3
THE GOOD STUFF	PAGE 4
CLUB MEETING MINUTES	PAGE 5
CALENDAR	PAGE 6
F6F VS ZERO/FROM BEALTON	PAGE 7
BACK COVER	

COVER, THE McDANIELS FAMILY PULLS OFF ANOTHER GREAT BEALTON EVENT.  
PHOTO BY ANDY

# DCRC Bealeton Fly In September 8-10, 2006

Photos by Andy and Nir



1/4 scale Model ready for Take-off



DCRC Air Show Team



Three Stearman's on the approach



Rare Full Scale Beech Staggerwing



Bealeton Work Crew



Typical flight line all weekend



Joe doing his walk around



Andy, Joe and Nir flying foamies

## Board Meeting Minutes

BY WALT GALLAUGHER



The meeting, held at the home of Jim McDaniel, was called to order by president Walt Gallagher at 7:42 PM. In attendance were Walt Gallagher, Andy Kane, Allan Hoffman, Jim McDaniel, Andy Finizio, Mike Dooley, Scott Davies, Dave McQueeney and Michael Peizer.

Walt said there were two issues to be dealt with tonight. The first issue was to appoint someone to serve out Kevin Jackson's term of office. Allan Hoffman moved to appoint Dave McQueeney to finish Kevin's term. Scott Davies seconded the motion. No other nominations were forthcoming. The vote to appoint Dave McQueeney to the rest of Kevin's term was passed unanimously.

There was some discussion concerning a point of order as to how the election of Board members should be conducted at the next monthly meeting. It was concluded that since there are only three nominees to fill three vacancies, the vote could be by acclamation.

Next, Jim McDaniel presented the draft budget for next year, along with some other housekeeping chores such as assigning Board meeting dates to the Board members and explaining workings of the phone tree.

The proposed budget was presented alongside this year's budget, line item by line item, with an occasional issue being discussed. After Jim's presentation, there was some additional discussion about a few of the budget items, with the general consensus being that the proposed budget was reasonable. Walt asked if there were any other comments, and none were forthcoming. Minor changes will be incorporated into the final budget and it will be presented for approval at the next Board meeting.

Walt reminded us that, in November, the Board has to present the new budget to the members at the monthly meeting. Scott Davies replied that he is already preparing the budget presentation for November.

**Awards & Field Improvement:** Allan Hoffman would like to find a non-Board member or two to coordinate programs

for the monthly meetings. Allan suggested a couple of people the Board could approach to help with this issue. Walt agreed to contact one of the people Allan suggested. Allan firmly believes the Board needs help with this issue to try and bring some fresh ideas to the monthly meeting presentations.

**Field Maintenance:** Mike Dooley reported the transmitter impound is the only remaining item on the maintenance list. It needs to be overhauled but probably not until next spring.

**Flight Instruction:** Michael Peizer reported it is time to replace some flight instruction support equipment and steps will be taken soon to do so.

**Events:** Jim McDaniel reported Bealeton was a good event this year. The net budget for Bealeton this year was \$1300.00. Of that amount only \$834.00 was spent. That means we came in \$466.00 under budget! We saved a good deal of money on the event and people still had a good time.

Andy Finizio reported Oktoberfest would be a fun fly. Bring a plane and join in the fun. The event will start a bit earlier this year.

**Treasurer:** Scott Davies reported one expense over \$100.00.

**Membership & Newsletter:** Andy Kane had no issues to speak of. He is all set to proceed into the next year in his roles as Membership Director and Newsletter Editor, and other duties as assigned.

As the newsletter editor, Andy may push for more newsletters by email rather than hard copy, in order to save more money for the club.

**Web Master:** Tom Pfarr has generously consented to take over duties as web master from Kevin Jackson. Kevin and Tom will work together to make the transition a smooth one.

**New Business:** Allan Hoffman congratulated Walt Gallagher for his excellent service as president for the past few years. The Board heartily agreed with Allan's assessment. The meeting was adjourned at 9:41 PM.

### My name is Bill Fetter

I have been a modeler and RC flyer for most of my life and am now giving up the hobby and would like to get rid of my planes, engines, kits etc. I have several built planes in .60 size and 1/4 scale: 2 Cubs, 1/4 and 1/5 scale, 1/4 scale Aero. Champ; 1/4 scale Zlin Z50L; Platt Jungmeister-never flown; 60 size Dalotel that I can think of while writing this. I have kits, plans and engines from .049 up to Super Tigre 2500 including 4-strokes, some of them are new and most are OS, Super Tigre or Webras. All have been well cared for. I also have a model magazine collection going back to the 1950's. The radios are probably not current since I haven't flown for a while. Prices for everything will be right as these things should go to guys who are currently active.

You are both probably active in clubs and would appreciate if you would pass the word. I have a lot of stuff and it would be best if someone or several people could take a look at it all.

I live in Ellicott City and my work phone number is 410 910-0633.

Even if you are not interested, I'd appreciate it if you would pass on this email to someone who might be.

Thank you very much.

Bill Fetter

### Recognized for Flying Skills!

Ten-year-old Empire Hobby pilot Kyle Stacy, AMA number 790921, had the opportunity for the flight of a lifetime. ABC contacted Kyle and his father Ray Stacy about appearing on the new reality show, Master of Champions. The show, which is about people who possess unique or special skills for various activities, will feature Kyle on an episode that is scheduled to air on a Thursday in late July.

Scott Larson, producer of the show Fear Factor, contacted Kyle after learning of his exceptional RC helicopter piloting skills through Internet forums. The producers of the show will have Kyle and his T-Rex helicopter compete against seasoned helicopter pilot Bryce Hatfield for the title Master of Champions by assigning specific challenges to each pilot. Kyle and his family were flown to Los Angeles for four days to practice for the challenge and shoot the show.

Kyle has been flying helicopters with his dad for 3-1/2 years. He is currently the youngest member of Team JR. Be sure to watch as Kyle demonstrates his piloting skills on Master of Champions. Additional information regarding Kyle can be found on his Web page: [www.kylerocks.com](http://www.kylerocks.com).

## THE GOOD STUFF

By Don Gray



I trust everyone survived Washington's typical August weather, usually referred to as the three H's (hot, humid and hazy). Hopefully it will cool off by the time our Oktoberfest rolls around at the end of this month - Saturday, September 30th.

This month we are covering some of the electric models being flown at the field. Not only are electric airplanes becoming more popular, more and more electric-powered helicopters are also becoming popular, from the very small indoor types to the full 3-D 90-size power houses. The larger ones don't come cheap, especially when equipping them with LiPo's. However the good news is that in general, batteries and brushless motors coming down in price.

Tim Miller's new T-Rex 450 SE is one example of the new generation of electric Helios. Watching it fly assures me that it has all the performance for the advanced pilot, including full 3-D. Tim is using an upgraded



Align brushless motor and a Perlite 2100 3S Lipo battery. The flying weight is 720 gm. or about 25 oz. The model is equipped with a Futaba receiver and 401 gyro, and Hitec HS-56 servos. It is set up with Cyclic/Collective Pitch Mixing (CCPM). Average flying time is about 7 minutes.



Roy Day has been flying electrics for many years and he recently brought out his Ultrafly Models Ultimate Bipe. The foamie as a

33<sup>2</sup> wingspan and also has an all-up flying weight of 25 oz. For power, Roy is using Hacker A20-20L out runner, a 25 Amp. ESC and a 3-cell 2100 mAh Li-Po, both



from Modelsports. The flight pack consists of a FMA M-5 receiver and Micro Tower Pro servos Roy obtained at a Toledo swap shop for \$7 each. For those of you who need to know, Roy says that the maximum power is approximately 132 Watts (12 amps x 11volts), which yields about 84 Watts/lb. Roy won this model last year at one of the monthly club raffles and this is his first experience with foamies. The Ultimate has a symmetrical airfoil and a 3-dimensional fuselage. Only the tail feathers are sheet foam.

Roy adds that the kit is very complete and includes clear illustrations with the instructions. It comes with stick-on decals, which he says are not entirely satisfactory. The kit comes with a tube of gel glue, which contains enough for assembly and even a few repairs. Roy said that he had a chance to find out that repairs are easy after snagging one of the tables at the field. He adds, "the little Hacker A20 provides plenty of performance for acrobatics, more than I can use. I found the white and blue colors difficult to see on a hazy morning so I stripped off the blue decals on the top wing and the horizontal stabilizer and replaced them with some orange Ultracote. The Ultracote goes on OK at a temperature of 250 degrees. Now, visibility is greatly improved for me. Overall, I'd say the kit is well-designed and fun to fly."

Those of us who started flying electrics back in the early to mid eighties were lucky to get a model to fly horizontally much less vertically. My first electric model was (is) a Playboy kited by Leisure Electronics. Roland Boucher, the brother of Bob Boucher of Astro Flight fame founded Leisure Electronics. I built the model around 1985. The wingspan is 67 inches, which is 85% of the original free flight Playboy Senior introduced in 1940. The model was powered by a Leisure LT-50 brushed motor using a 2.5:1 gearbox. The motor was later replaced with a generic 05 can motor that I purchased for \$2.50 (2 for \$6 including shipping) from a store called Ax Man Sur-

plus in St. Paul. The original batteries consisted of 6-1700 mAh Ni-Cads plus 4-250 mAh cells for the receiver and servos. The two batteries have since been replaced with a single 3-cell 2100 Thunder Power LiPo pack and BEC-equipped ESC. The original weight was close to 38 oz. Although I have not reweighed the model since converting to LiPos, I would estimate it has lost several ounces. The model will thermal and on one occasion I had to bring it down after over an hour because I had not charged the receiver pack. With only rudder and elevator, an under cambered wing and lifting stab, near calm conditions



are best for flying. A couple years back I was flying it and decided to sit in one of those relaxing folding chairs, you know, the ones with the footrest. Before I realized, I had dropped off to sleep, apparently not for long; but when I awoke I did not see or hear the model. When the power is down during cruise, it makes very little noise. Anyway, as I started to panic, I looked up over the brim of my hat and there is was just doing its thing as it was circling at a safe altitude. Who says you need a radio to fly these things? Don't forget to come to Oktoberfest on the 30th. Why don't you treat yourself and your family to this great (and free) club event and make it the largest turnout yet. Until next month.

I used to be a member of DCRC some years ago until my plane got out of control and was lost. I have some parts and tools that are of no use to me. I am willing to give them free to anyone from the club who can use them or donate them to the club.

I have:

- 1) Futaba Skysport 4 channel FM radio (channel 60) with charger (no servos or receiver)
- 2) Du Bro Kwik Start glo-plug ignitor and charger
- 3) Hobbico sealing iron in very good condition
- 4) New wood prop (Zinger 9x5)

Interested people can email me at [sudhirv4rma@yahoo.com](mailto:sudhirv4rma@yahoo.com) or call me on (301)514-9167

Sincerely Sudhir

## Club Meeting Minutes

BY MIKE PEIZER



The meeting was called to order by president Walt Gallagher on 8/18/06 at 7:37 PM.

**New Members:** Herb Weinberg was a member a long time ago and now he is rejoining.

Walt announced that Jim McDaniel, Allen Hoffman and Walt Gallagher's terms are up this fall. Nominations for the three positions being vacated are next month at the monthly meeting.

Andy Kane reported on the 4H Club demonstration at the Montgomery County Fair and the DCRC Demo Team's program. Doug, Nir and Andy had some planes on display, and did some flying for the crowd.

David Drazin reported the demonstration for the Cub Scouts did not happen.

**Webmaster:** Kevin Jackson reported the newsletter has been posted on the web site. Kevin went on to report that the Interference around channel 23 or 24 is from a medical pager system. He needs to find the center frequency and then he can determine what channels are actually being affected. The signal is incredibly strong. He plans to finish up the work this weekend.

**Community & Public Relations & County Liaison:** Jim McDaniel reported that he was unable to participate in the demonstration at the Montgomery County Fair, but Andy Kane was able to take over and the demonstration happened.

It turned out the HGTV people were looking for a large indoor space for free to demo a small airplane for a show they were doing.

The runway resealing has been done and it looks very good. The contractor apologized for the quality of the runway lining, but they look better than they ever have before.

The aprons and taxiways are waiting to be done. The county agreed to the idea of DCRC sealing the runway and then they would do the taxiways. They need a permit and they are working on it. Budget wise, we are tied to SoccerPlex and there is some sort of issue. No permit will be forthcoming until the issue is resolved.

The managed deer hunt is scheduled again this season for November 18, December 2 and January 5.

Lastly, Bealeton is scheduled for September 8, 9 and 10.

**Treasurer:** Scott Davies reported no checks were written in the past month.

**Membership & Newsletter:** Andy Kane reported DCRC currently has 230 members. He needs material for the newsletter.

**New Business:** Andy Kane had a few announcements. Doug's Hobby Shop Sept is

having a sale on September 2, when everything in the store will be 40% off. September 16 and 17 is the date for the SWAP Modelers of Baltimore R/C Fly-In. There will be open flying each day, along with demos. NVRC is hosting an event in September at the farm club.

Jim McDaniel gave some of the details about the Bealeton event on September 8, 9 and 10. It's an IMAA sanctioned event. Dinner will be provided by a different caterer and at a different venue this year. This marks the 30<sup>th</sup> year for the Bealeton event. The local R/C club has as shut down operations for the duration to avoid any chance of interference. A full scale Giles 202 will be there Saturday to perform. September 30<sup>th</sup> is the new date for Oktoberfest. Andy Kane is cooking for the event.

Wings over Williamsport at Lockhaven Airport in Pennsylvania, home of the piper cub was last weekend. They had about 58 pilots and 100 airplanes. It was a great weekend. Lots of guys from DCRC went to the event and they all had a great time. It is becoming a very popular and well-attended event. Mark your calendar for the second weekend in August 2007 if you want to attend next year. It's well worth it.

Walt Rubino, an old member of DCRC wrote Don Gray and told him about being attacked on Capitol Hill. Walt is recovering. Don has his email address and would be happy to share it with anyone who would like to write wish Walt well.

**Model shop:** Fred Nielsen showed how to repair scratches in a model canopy by using an acrylic formula vinyl floor wax that fills the scratches and makes the canopy look like new.

David Drazin showed a free flight simulator called FMS that is downloadable from the web. It's not as sophisticated as some of the other programs, but it's free.

**Program:** Don Gray gave a presentation on the Old Rhinebeck Flying Circus in upstate New York run by Cole Palen. He described the operation of WWI aircraft and then showed a video about the Old Rhinebeck Flying Circus. It's quite a place and truly a labor of love on the part of Cole Palen.

The meeting was adjourned at 9:45PM.

### **September club meeting minutes:**

The meeting was called to order by president Walt Gallagher on 9/15/06 at 7:37 PM.

Walt announced that Kevin Jackson provided several of the raffle items. The club provided the Professional Power Station.

Congratulations to Jim McDaniel and Andy Kane for the Bealeton event. There were 65 registered fliers and 114 airplanes counted at the event. Jim and company did an extremely good job with the demonstration.

The 4H club demonstration went well, as evidenced by the two young people who wrote letters thanking the club for their efforts.

DCRC received a request from an assistant professor at GW for someone from DCRC to help check out a UAV they are designing. Walt passed the letter around the room so anyone who might want to help out could get in touch.

**Webmaster:** Kevin Jackson reported that he is leaving the area for Orlando, Florida. He got a job offer he couldn't refuse. Kevin expressed his sorrow at leaving DCRC. He said Tom Pfarr has agreed to take over the web site. Last but not least, Kevin went to Baltimore and took the oath to become a citizen of the U. S.

**Community & Public Relations & County Liaison:** Jim McDaniel reported we had 125 airplanes at the Bealeton event and no less than four father/son teams participated. It was interesting to note that the DCRC planes were the quietest airplanes at the event. Hats off to all the DCRC fliers who are doing a good job of keeping their airplanes quiet.

Final numbers are still being tallied, but we did very well this year. We did not go over budget. This past year, the Flying Circus built a pavilion so we didn't have to rent a tent. Fifi's Café catered the dinner.

On managed deer hunt days be sure to close the gate behind you when you come in or go out. If you lose a plane in the woods, don't just go after it. Call the phone number posted at the field and notify the hunters of the downed plane and follow their instructions.

**Membership & Newsletter:** Andy Kane reported we have 235 paid members as of today.

There was no newsletter published this month because there was no news.. On the bright side, we saved about 8% on the newsletter budget!

**Events:** Andy Finizio reported Oktoberfest has been rescheduled for September 30<sup>th</sup>. The food is free. It's a fun fly event so come out and join in the fun. Andy Kane is cooking.

At Bealeton, Bliss Teague presented Andy Kane with an AMA award for his contributions to the hobby.

**Flight Instruction:** Michael Peizer reported that flight instruction goes on as always and the next session is tomorrow.

**Treasurer:** Scott Davies reported one expense over \$100.00 to Minute Man Press for printing of the newsletter

**New Business:** Jim McDaniel made a call and the trashcan that Don Gray asked about at the last meeting has been replaced.

Once again, Jim mentioned the noise levels at Bealeton and how the DCRC planes seemed to be quieter than the other aircraft. Walt, Nir and all those who have worked to reduce the noise levels at DCRC are to be commended.

The next order of business was opening the floor for nominations for the three Board member positions opening up. The three

Board members whose terms are expiring are Walt Gallagher, Jim McDaniel and Allan Hoffman. Kevin Jackson is moving to Orlando, Florida and will be resigning his position on the Board. The Board will appoint someone to finish out his term.

The floor was opened for nominations. Andy Finizio nominated Andy Kane. Charlie Calvert seconded the nomination. Charlie Calvert nominated Jim McDaniel. Eric Mohn seconded the nomination. Don Gray nominated Walt Gallagher. Walt thanked Don but declined the nomination citing the need for a break. Fred Nielsen nominated Allan Hoffman. Kevin Jackson seconded the nomination. Ed Haller moved to close the nominations. Charlie seconded the motion. The nominations were closed. Next month the members will elect three new Board members. Since there are three positions open and three nominations, the vote will be by acclamation.

**Raffle:** A Team Line HAL-2100 Autopilot was won by Jim McDaniel, who donated it to the Oktoberfest raffle.

Another Team Line HAL-2100 Autopilot was won by David Littleton, who donated it to the Oktoberfest raffle.

An OS Max .40 LA engine was won by Roy Day, who gave it back to be raffled off again. This time Don Sassaman won it.

Paul Bastek won a Hobbico soldering iron and he too, donated it to the Oktoberfest raffle.

Jeremy Greenberg won a Professional Power Station.

Next, Jim McDaniel introduced the Al Monska award. It is one of the most distinguished awards given by DCRC. In March the Monska committee got together and chose a person to receive the award. Jim presented Kevin Jackson with his permanent plaque and Kevin returned the Al Monska award so it could be passed on to the newest recipient. Charlie Calvert came forward and described to those members present who Al Monska was and why the award was named after him. The award is only presented when the committee has determined that they have found a worthy recipient. Without further ado, Charlie Calvert presented the award to Andy Finizio.

**Model Shop:** Terry Lamb showed some of the jigs and parts of the new 40% WACO he is fabricating for RCS. Terry's goal is to bring the plane in at less than 55 pounds to comply with AMA rules. Anyone who wants to come to his shop and see how these planes are built is welcome to come. Just call first.

**Program:** The program was a video on the construction of a J-3 Cub. It was an old film, but it was very interesting to see how the J-3 was constructed.

The meeting was adjourned at 9:45PM.

## Murphy's Laws Revisited

by Al Coelho

Murphy had some laws; here are some of Al's.

1. Law of mechanical repair: after your hands become coated with grease your nose will begin to itch or you'll have to go to the bathroom.

2. Law of tools: any tool, when dropped, will roll to the least accessible corner.

3. Law of probability: the probability of being watched is directly proportional to the stupidity of your act.

4. Law of the telephone: when you dial a wrong number, you never get a busy signal.

5. Law of the alibi: if you tell the boss you were late for work because you had a flat tire, the very next morning you will have a flat tire.

6. Law of lanes: if you change lanes in traffic, the one you were in will start to move faster than the one you are in now.

7. Law of likeability: as soon as you find a product that you really like, they will stop making it.

8. Law of close encounters: the probability of meeting someone you know increases when you are with someone you don't want to be seen with.

9. Law of the result: when you try to prove to someone that something won't work, it will.

10. Law of biomechanics: the severity of the itch is inversely proportional to the reach.

11. Law of carpets: the chances of an open-faced jam sandwich landing face down on a floor covering is directly correlated to the newness, color, and cost of the carpet.

12. Law of logical argument: anything is possible if you don't know what you are talking about.

## Calendar of Events

### October

4-7	Don Lowe Masters, Greenville, SC
7	PGRC Open House Bowie, MD
7	Westminster Annual Big Bird Fly IN. <a href="http://www.flywam.org">www.flywam.org</a>
13-15	Full Scale B17 and B25 At Gaithersburg, Airport, MD Rides available
14	DCRC Training, Germantown, MD
15	NVRC Auction Vienna, VA <a href="http://www.1nvrc.com">www.1nvrc.com</a>
18-22	Scales Masters Championship, Muncie IN
20	DCRC Club Meeting/W.Gallagher Elections!
20-21	Warbird fly in, Charles County RC Brandywine, MD
24-29	Tucson Aerobatic Shootout, Tucson, AZ
28	DCRC Training, Germantown, MD

### November

11	DCRC Training, Germantown, MD
17	DCRC Club Meeting
18	Managed DEER Hunt, Please keep the gate closed. Field is open, No retrieval of downed planes allowed without escort.

### December

2	Managed DEER Hunt, Please keep the gate closed. Field is open, No retrieval of downed planes allowed without escort.
15	DCRC Club Meeting

### January 2007

5	Managed DEER Hunt, Please keep the gate closed. Field is open, No retrieval of downed planes allowed without escort.
---	--

# F-6-F vs. Zero

By Roy Day

A breakthrough in knowledge of the Zero came when the US captured a flight worthy Zero in the Aleutians in June 1942. Exhaustive flight tests by US pilots showed the Zero to have excellent maneuverability at speeds less than 150 MPH. However, aileron control became sluggish at 180 MPH and practically ineffective at 230 MPH. The top speed in a dive was about 350 MPH compared to the top dive speed of the Navy Grumman F6F fighter of 515 MPH. Furthermore, the Zero was built of a type of aluminum that was very brittle. A burst of machine gun fire or a 20 mm

cannon shot in the aft fuselage was all that was needed to break up the airplane. There was also no armor to protect the pilot as was customary in Allied fighters.

Once these weaknesses of the Zero were known and understood, the US and other Al-

of the war the Grumman F6F Hellcat kill ratio against the Zero was 19 to 1! In addition, the US brought out the F4U Corsair and the Lockheed P-38 which were definitely superior to the Zero.

The question is why didn't the Japanese upgrade the Zero during the war as losses mounted? Both the Allied and German fighters were upgraded during the war years. For example, the horsepower of the Spitfire was nearly doubled from that of the early airplanes. In contrast the Zero only gained about 200 HP in an engine upgrade. Late in the war the Zero incorporated armor protection for the pilot and self-sealing fuel tanks but these



lied pilots changed their aerial tactics to diving rolling attacks on the Zero. By the Fall of 1942, only a few months after the capture and test of the Zero, Grumman F4F Wildcats using these new tactics destroyed most of the Zeros over Guadalcanal. This was in spite of the fact that the F4F was older in design but was more rugged and heavily armed. Navy and Marine pilots flying the F4F's were instructed not to allow the Zeros to use their excellent aerobatic advantages but to "dive at full throttle and roll." As the Pacific War continued aerial tactics against the Zero were refined and gained even more successes for the US. By the end

only subtracted from the small performance margin gained by the engine upgrade. The basic problem seemed to be the Japanese Imperial Navy's insistence on long range and maximum maneuverability (low wing loading). Also, as the war continued the heavy Japanese pilot losses were replaced by poorly trained ones which further aggravated the declining combat record of the Zero.

Was the Zero as invincible as reported by some? No, not at all.

It was a good fighter for the old style of dog fighting but no match for the Allied fighters once they altered their aerial combat tactics to exploit the weaknesses of the Zero.

# More from Bealeton



Eric and his new CAP 232 "Big Red"



Bob Klenke and Family



Hey Folks its show time, and this time the banner worked

Doug, Dave and Dave

Andy Kane  
305 Natick Court  
SILVER SPRING MD 20905-5875

FIRST CLASS MAIL



**SEND TO:**

**October  
2006**



Allan just wants to fly



I think the control line string broke,  
Better get the magnet



Thanks to Magneto Man, Walt,  
he had the magnet.



The DCRC Air Show Team presents: "The Break-away U Control Act" This control Line act starts by Allan, begging to fly, Charlie finally lets him, the control line plane flown by Doug, goes round and round until Allan gets dizzy and falls down and the plane breaks away, flying out of control. Everybody calls for the Magneto to try to coax the plane back down, and finally the plane is brought in for a landing, thanks to Allan, Doug and Walt "Magneto Man"