

EXTRA! EXTRA! Read all about it! Get the latest scoop on R/C Helicopters.

CHOPPER NEWS

All of your helicopter needs and expert help are as close as your local hobby shop!!!

“United We Stand”

“Let’s Roll”

Northern Illinois Radio Control Helicopter Assoc.

One of

The World’s Largest R/C Helicopter Clubs

AMA CHARTER NO.2099

June, 2002

**Next Club Meeting, 7:00 pm Tuesday, June
11th**

Next Meeting At Our field in Addison, at 7pm

Editorial

Just a reminder that our next three meetings, June, July, and August, will be held at our flying field in Addison. Summer meetings start time is 7:00 pm. A lot of us show up right after work to get in a few flights before the meeting.

It all started with a tabletop drum roll by Steve Hubbard and Rob Rinn to introduce our biggest

club drawing of the year, one winner takes all, the whole enchilada, all 500 smackeroos. AND THE WINNER IS-----Terry King!!! I think Terry said he was going to save the money for repair parts for his new Vigor. Enjoy!!

The raffle idea as you remember was the baby of Ron Kwilinski. Ron ran a flawless raffle, made one member (Terry) very happy and also made buckets of money for the club. Great idea!! Thanks, Ron. Now let's see how many times we can go to the well.

Paul Girard, our Membership Chairman, has done a great job for us. He single-handedly pushed for more members to get their newsletter via email thus saving the club a bundle of money and as an added bonus we now have a "correct" membership list. Paul also jumps through hoops for this editor and all at only a moment's notice. Great job, Paul!!! Many thanks and keep up the good work!!!

If you do not have your DuPage County field permit, now is the time. On 5/11, yours truly was asked to produce a permit for our forest preserve flying field in Addison. The permit checkers are out and about so get your permit now. This is a special use field for helicopters only and could be closed if the number of permits issued does not reflect a large enough group use to keep the field open. Please encourage any of your non-member friends to get their permit and help us keep this great field!!! We sure do not want to lose this manicured site and be a second-class hobbyist at some airplane field. You never know how good you got it until you lose it. Call 630-933-7200 for more details on getting a permit. A word to the wise, I think I remember him saying, "no first time warning this year". Marty

President's Message

This month starts our field meetings. For the next 3 months we will meet at the field. The start time is 7:00pm and the meetings will focus more on flying and set up than our meetings at John's. I plan to have the FMA Co-Piloted Raptor at this meeting and give a demonstration on the actual flying of this neat little device. Don't miss this one. It could be fun **and** educational. The Crash and Smash will still take place and be voted on. The monthly raffle will still be held and when it gets too dark to continue we will retire to John's for pizza and a couple of beers to wash down the 30% nitro that hangs in the air. I will have raffle tickets for Al's Fun Fly. This will be one of your last chances to pre-purchase tickets before the fun fly. By the way, I have bought some tickets and fully expect to win the Vigor CS. I hope my luck holds out! Soft Landing! Terry

VP Message

Let's hope for good weather for this month's meeting. It will be at the field. I'm looking forward to seeing Terry's FMA attitude control equipped Raptor fly at the meeting this month. From what I hear, it can really make things easier. Mark

Vicious Circle by Mark

No, the vicious circle is not a new 3D maneuver. It's only my way of describing the one-piece clutch design used on many helicopters. The clutch in my Raptor broke a while ago, so I took the opportunity to do a little stress analysis on the design of the heavy duty Quick clutch. It's hard to be exact given the circular geometry of the clutch, but one can still make some assumptions and get pretty close. Even in a perfect world with perfectly refined equations for the problem at hand, the real strength of a given material will cause failure variations. Anyway, what popped out of the formulas I chose to use wouldn't surprise those who have put a lot of flights on a Raptor. The heavy-duty clutch design is marginal and the stock design just plain stinks. The basic problem is that the clearance required between the clutch and the liner (that allows us to start and idle the engine) usually results in too much flex in the clutch. The trick for long clutch life is to shoot for as little clearance as you can get and still be able to start the engine safely. Given even very small clearances between the clutch liner and the clutch, the stock design will exceed the stress limit of any common steel. It's only a matter of time before it fails. Now I feel very lucky to have gotten over 200 flights on a tightly setup stock clutch (still only about 30 hours). The heavy-duty design with the milled ovals (rather than the stocker's drilled holes) is far superior from a designer's point of view. In fact, it's almost good enough to really last. But not quite. The clutch/liner clearance, the precision of the slot, and the quality of the steel would make or break this design - it's right on the edge. Another 1/16" to 1/8" of slot length should make all the difference in clutch life. But a longer slot may cause early engagement problems, which could cause people to set them up with more clearance, which would cause them to break again. It's sort of a vicious circle.

Of Hummingbirds and Helicopters by Mark

Thanks to Marty for the reminder about hummingbirds coming around about now. We hung out a hummingbird feeder, and in less than a minute, one of the little fellas came by for a feeding. My boys were thrilled. I've always admired the hummingbird, so for this newsletter I thought I'd see if there were any interesting comparisons between them and our beloved helicopters. Each year on their migration, our "local" ruby throated hummingbirds fly 500 miles across the Gulf of Mexico, nonstop. These birds weigh only 3 grams apiece. Gram for gram, a 30 sized heli would have to fly 18 times around the world, or the equivalent distance of to the moon and back WITHOUT REFUELING to equal this. (Orval, I tried to figure out how much fuel your Vigor would need for this, but my calculator has only ten digits!) One other factoid: Even though a hummingbird's wings beat at over 4000 times per minute (about double the head speed of a heli), you'll never see one that flies anything but glass smooth!

Editor: It is easier to keep their sugar drink fresh if you make up about a quart batch of 3 parts water to 1 part sugar (a large water glass works great) and keep it in your refrigerator. They know fresh sugar water from sweet mold. Rinse and replace every two or three days with the

amount you think they will use in the same time period.

If you can hold perfectly still and I mean not even one blink, they will drink right out of your hand while you hold the feeder at eye level. After a time you will come to recognize their friendly chirp as a cognizant thank you.

NIRCHA members

It was asked at the May meeting if we could include the info on the by-laws in the newsletter. Our current By-laws were published in the May newsletter. We were planning on publishing the AMA sample By-laws in the June

Newsletter, but they would take up the whole newsletter. This would not be fair to Marty as we know he loves slaving over a hot computer to put together his fantastic monthly newsletter. This presented us with a problem! I said to myself, "Self, what would be the easiest, quickest, AND cheapest way to accomplish this task?" As I sat at my desk and kinda stared off in never, never land my computer spoke up and said, You Got Mail! Well it don't take a 2x4 upside of my head to show me the light bulb. How bout I email it to everyone that has a puter. So attached to this email is the 7 pages of the AMA sample By-laws in Microsoft Word format. Please take the time to read them and if something jumps out at you, that you like, or dislike, highlight it or make a note and let one of us officers know. Thanks, Terry King

An Email From Ross to Terry

Excerpt Taken From May 2002 NewsletterWell, I plan to tell you. I piled my main Raptor up. I'm blaming it on a glitch, but I could not find anything wrong, and my glitch counter did not show a glitch had occurred. This would leave a reasonable person to conclude that maybe a glitch did not cause the crash. Maybe it was the thumb-brain connection that suffered the glitch. Anyway, back to the purpose of this article. I cracked..... Terry

Terry,

If you believe that the radio was not functioning during your crash and the glitch counter did not have any counts you need to consider an interruption in power supply. The power may have gone out intermittently with the vibration of the helicopter. At that point the glitch

counter will go through its startup process and not have any glitches counted. I would check your wiring and switch carefully. Ross

Checking Switches and Batteries

By Terry King

After my crash last month Ross emailed me that the problem could be in my switch or battery for my helicopter. I really hate to say this but I did not even give the battery/switch a thought. I looked at my BC6 after the crash and it was not blinking so I ruled out a glitch or receiver problem. If I had actually thought about it, the battery or switch could have failed and once the heli hit the ground it jarred it back to making a connection and the BC6 will reset itself (on power up) and by the time I got to the crash would have been a steady light. Meaning no problems. With that in mind I grounded that heli until I could check it out.

The process of checking these two items made me think that it would be good to know what all is entailed in this. That is why you are reading this article. I use the HD JR switches with the charge jack built into the switch housing. So the first step is to remove the battery and switch from the helicopter. Then I took an exacto knife and cut the 1st layer of wrap off the battery. This leaves the ends of the batteries exposed for inspection. Check each tab to make sure it is securely fastened to the battery. Check the solder connections for the positive (red) lead and the negative (black lead) to ensure the connections are solid. Make sure there is no question in your mind that all the connections are good. Then you can hook the end up to a meter or just plug it into your ESV. Pull on every wire, connection; solder joint while you are watching the meter (ESV) if you meter or ESV shows a drop when you move a wire that is your problem. You can also go along the length of the wire lead and bend it every ¼ to ½ inch to check for a broken wire. If everything checks out okay, use some blade shrink-wrap and place the sleeve over the battery pack and shrink with a hot air gun or hair dryer.

The switch is next, hook your checked out battery to the switch and hook the receiver end of your switch to the meter or ESV. Turn the switch on/off several times to ensure that it is working correctly. Then pull on the wires, connections, etc. Pay close attention to the area where the wires exit the switch housing, as this is the usual place for a wire to break. Try tapping on the switch, holding it upside down and sideways, and shaking it. If a problem did not show up you might want to consider changing the switch anyway. They are cheap and you already have it out. The same could be said for the battery. The choice would be yours

Safety is a BIG Issue

Radio Control is generally considered a safe hobby. For the most part it is, but there are so many things that could go wrong not only in Helicopter RC but in other forms as well. May 16th Roger Wallace was killed in Tucson, Arizona by his own airplane. It is reported the 60-year-old Wallace lost sight of the plane in the sun and it crashed into his chest. This was not a 20 pound plane. It weighed only **6 pounds**. This is a very sad thing to happen. I feel sorry for his family to lose someone to a hobby, to something that most people would consider a SAFE hobby. The fact remains that everything can be dangerous and that the utmost care must be taken to ensure that our models are "airworthy". Look your models over very carefully; make sure you stack the deck as far in your favor as you can. Roger Wallace gave up a hobby that he thought was too dangerous to fly model airplanes. This hobby was Drag Racing! Terry King

Email from Patrick

Dear Martin,

There is a fine point of membership and flying helicopters that was not mentioned to me when I signed on. I have listened for it to be announced at the meetings I've attended. I have searched the club's web site to no avail. Nowhere have I heard or seen mentioned the secret to NIRCHA's time management.

NO KIDDING!! I think this to be an important enough topic to be included in the By-Laws. It should be mandatory that all new novice pilots be given this secret. I want to know how you guys do it.

Ever since the danger of frostbite was gone for the year, I have been chomping at the bit to get off the ground. Or, in my case, at least be able to watch the blades spin around real fast. I've had days when I've scheduled my work around getting my Shuttle started up, only to wake up in the morning to see the Stars and Stripes waving horizontally, with a good 25 mph wind blowing it proudly.

Now I have tried flying on Real Flight with a gusty 25 mph wind set up in the weather section, and I have had some really spectacular crashes. This has shown me that I'm not ready for that type of repair work yet. So, down into the basement I go, unplugging the chargers, wiping the dust off the blades, and sighing a lot.

The weather, work, wife, kids, house, yard have all conspired against me. Afternoons when I've had a little time, and my batteries charged, the oldest daughter walks in announcing that she's going to need a ride to the game and "Oh yeah! Could we pick up a couple of other players on the way?" Wife is asking me more often if I still have plans to finish the basement this summer, and oh yeah, how about the ceramic tile in the kitchen?

And then there's work. I'm a self-employed real estate appraiser, so there goes a lot of time right there having to make some sort of living. My clients have no sense of right or wrong most of the time. Thinking that since the only time they are available is Saturday morning that it's perfectly ok to take me away from something really important, like getting out to the field. I get even by basing my fees on how nice the weather is.

So how about it? How do you guys do it? I've had to figure that I've either fallen into a group of very wealthy individuals, who've paid to have themselves cloned, or there are some geniuses who have either mastered time management, or time travel. So I want to know, how do you guys do it?

Looking to burn some gas,

Patrick Dennis

Editor: I know this can be a complex issue but I do have the secret and I will share it with you. Patrick, set your alarm clock to 6 am on Sunday. Leap out of bed, tiptoe out of the house, and get to the field by 7 or 7:30am and fly until you think your family is crawling out of bed. Now listen-up, this is the most important part!!! You must take the wife out to lunch on the days that you fly!! Equally important, if you do not fly, you do not go out to lunch under any circumstances!! Your wife will over time come to relate your flying as a pleasant experience and unknowingly insist that you go to the field thinking that she is doing this only for your well being. Problem solved, see you Sunday!!!

FMA Co-Pilot Product Review by Terry King

The FMA Co-Pilot is an infrared type of sensor. It measures the temperature difference between the sky and the ground to establish its reference points, unlike some of the other Auto-Pilots that use the light difference for reference points. This simply means that it SHOULD work better under less than ideal conditions than some of the other units. Less than ideal means, the sky could be cloudy, or it could be dark outside and still be used, (think.... night flying for the first time?) What does infrared really mean? Beats me, I know that if you follow the set up/installation procedure it does work. Is it worth the money? That would be for people to decide for themselves. I ordered mine direct from FMA for \$119.95 plus shipping. It, like other things is an aid to help us learn. It will not revolutionize flying model helicopters but, like

the Computer helicopter radio, Simulator, and Heading hold Gyro, it will make it easier to learn to hover, or try that first stall turn. So let's get right to the installation and see what happens.

Step #1. Mount sensor and Calibration button: Follow the directions, I used an old horizontal fin and boom mount cut down to fit the sensor. On helis you mount the sensor diagonally. Figure where to put the interface box and drill a hole for the Calibration button close enough to the interface so the wires reach. I used Velcro for both the sensor and interface box. Please follow the directions if you are going to mount the sensor directly to the boom. If your sensor fell off while you are flying I'm pretty sure you would not be able to control it and the minimum result would be to crash your helicopter, but an out of control heli can be very dangerous.

Step #2. Make all the proper connections. A 24-inch cable plugs between the sensor and interface box. Shorter and longer cables are available from FMA. The Calibration button plugs into the interface box. The Elevator and Aileron servos also plug into the interface box. There are 3 leads coming out of the interface box that plug into your receiver. The Aileron and Elevators leads plug into their respective channel on the receiver. The last lead is a control lead. This is plugged into a spare channel to control the sensitivity of the Co-Pilot. How this is done would depend on your radio. I plugged mine into channel #7 and activated the Aux2 switch for channel #7. This way I can turn it off and on as needed. The sensitivity is adjusted using the pot on the interface box. Another method is to assign it to an unused proportional channel that is controlled by a lever or rotary knob. The last method is to not hook up the control wire and fly with the Co-Pilot on all the time. The first and last methods require you to manually adjust the sensitivity on the interface box. The rotary method allows in-flight adjustment of sensitivity.

Step #3 There are 4 switches on this unit. Switch #1 is an Aileron reverse. If the Ailerons are reversed you use this switch to correct it. #2 switch is the elevator switch same as switch #1 except it is for the elevator. Switch #3 needs to be set to the off position for helicopters. Switch #4 will be switched only if your 2nd test is backwards.

Step #4 Verify set-up: Turn on Radio, Push and hold Calibration button, then turn on switch for the helicopter. The swash plate will wiggle (cycle) to verify that the Co-Pilot is functioning. If you are using the remote on/off or proportional control, rotate knob or flip the assigned switch: If the swash plate wiggles one time Co-pilot is ON if it wiggles twice Co-Pilot is OFF. Set it up so it is on (one wiggle) and block one forward eye with your hand, the swash plate should tilt away from your hand in the opposite direction. If it doesn't change switches #1 & 2 until it does. Then push Calibration button once and block the other forward eye with your hand. It should tilt away from your hand in the opposite direction. If it doesn't then change switch #4.

Step #5 Calibrate for flying. Turn on Radio and Heli. Lay heli on its side with mainshaft parallel to ground. Do not stand directly over the eyes on the sensor. Push Calibrate button one time. After a short delay the swash plate will wiggle (cycle) count the times it wiggles and that is your calibration number. FMA recommends that you not use Co-Pilot unless you get a calibration number of 3 or more. Then stand the heli on its skids and make sure the tailboom is level. Then step back 10 feet and move Aileron stick. This will complete the flying calibration. It actually took longer to type this up than it did to perform the first 5 steps. Next it's off to give it a try,

I have found out that the calibration process is **VERY** critical to how well it performs. I intentionally set it up and calibrated it not level. When I took off I had to hold the stick opposite of the direction it wanted to fly just to keep it in a hover. This would not be a good situation for someone just learning. The solution is to go to the hardware store and buy a round bubble level. It is about the size of a quarter and is a couple of bucks. When you calibrate, hold the mainshaft as close to parallel to the ground as you can, then when you set it on the skids put the round level on the tail fin and get it exactly level both directions, then finish the calibration and fly.

With the sensitivity turned all the way up, the co-pilot will fight your every move, BUT if you let go of the right stick it will go into a hover no matter what the orientation is. If you turn the sensitivity down a little bit you end up controlling more of the flight. I could see this being a good training aid to help in uncomfortable situations, like nose in learning. When you try to learn nose in without the Co-Pilot you turn the nose towards you, hold it as long as you can, then turn the tail back towards you and repeat. With the Co-Pilot you turn the nose towards you, when you give it the wrong input (and you will) you let go of the right stick and let it correct itself, then you try again. Once you get comfortable with nose in, turn the sensitivity down a little so you have to do more controlling. Used this way you should be able to learn nose in hovering, side in hovering (both sides), and general hovering controls. Once you start into forward flight you could use this as a "safe zone" until you are better able to view and respond to different orientations.

This would also help the new pilot master the wind. Wind can be very intimidating and the Co-Pilot will help maintain the hover during windy days when a new flyer says, "it's too windy for me to fly today". The Co-Pilot will hold the helicopter level. It will not hold it perfectly still. It will drift a little in one direction. It will NOT avoid an obstacle like a tree or a pole.

In Conclusion:

The FMA Co-Pilot did do a very good job of leveling the helicopter even in the most awkward attitudes. The cost could be very easily justified by a couple of crashes while trying to hover. With that said there should be some cautions stated. The Co-Pilot will not make an improperly set up helicopter fly properly. There is no substitute for experience. You should seek experienced help in getting your helicopter set up correctly before you attempt to fly it, with or without the FMA Co-Pilot. When used in conjunction with a qualified person to check and trim your helicopter I feel that the FMA Co-Pilot could make it easier to learn the basic hovering skills needed to be able to control a RC helicopter Safely.

Scaled Down to Size

A Fictional Story—Sent in by Jeff Torsrud

Part Two of Three

This is a reprint of an article from the Northern Helicopter Modelers Club of New Zealand. Reprinted with the permission of Neil Harker, president. Story written by Andrew Roberts.

Herman is a model helicopter pilot on holiday in New Zealand from his home in Latwania (don't try to find it in your school Atlas, I made it up.) He has difficulty with the English language but has vast amounts of money due to a favorable exchange rate. His is very unusual in that he learned to hover by merely watching Don (a local) fly. Now read on.

Herman was at the field early. He had a new BK-117 fuselage fitted to his helicopter and was flying around the sky. Don arrived just as Herman was landing. Herman shut the model down and carried it back to his Ferrari. He saw Don and smiled.

“Hello my friend Don,” said Herman.

“Hi,” Don nodded to the new fuselage, “I like the new fuzz. Where did you get it?” he asked.

“Oh, I not shave today. Thank you Don. You look pretty good too,” Herman replied. Then he asked, “You like my new helicopter outsides, yes?” Don frowned then realized what Herman was thinking. “No, I meant....oh, don't worry. Yes, it looks great.”

Don looked at the work that had gone into the model. It was painted bright pink and the detail included interior instruments, joystick and collective lever, a pilot and rear cargo doors which opened and closed with a servo. He was impressed but hated the coloring. "I bet it cost a packet."

"No, I pay only a few dollars to man who build it. I just did the insides."

Don knew when Herman said a few dollars it actually meant a large number of them.

He wanted to make sure Herman had checked the installation before closing up the fuselage.

"So, did you check your ball links before you put it inside?" asked Don.

"That's a very personal question Don," said Herman indignantly. "I know we are friend but..."

"No," interrupted Don. "I mean the ball links on the helicopter. You know, at the end of the push rods."

Don pointed to the ball links visible on the rotor head. "These," he said in exasperation.

"Oh," Herman blushed. "Ball links, right, OK Don. Yes, ball links are all OK, ha ha."

Don smiled. "And is the Gyro secure. I mean, did you make sure the Gyro is stuck down well." Don hoped he was making himself clear. He was relieved to see Herman nodding his head.

"Yes, no problems Gyro is stuck to seat. Why you ask?" Herman asked.

"It's important to make sure that everything is secure in an enclosed fuselage." Don thought about Herman's answer. "What did you mean by the Gyro is stuck to the seat?" he asked.

"Gyro, he is stuck to seat. I use super glue. See he is stuck to seat."

Herman poked his finger through the window and prodded the little 12 inch pilot.

Don knelt down and squinted through the window at the little pilot. Sure enough the pilot was wearing grey overalls with the name 'Gyro' embroidered in tiny letters on the top left pocket. Don grinned. "Actually, I meant the Gyro-stabilizer." Herman frowned. "You know, the tail rotor Gyro?" More frowns. "Umm, the Auto-pilot?"

"Ha ha, You not have Auto-pilot on model helicopter. Funny Don," laughed Herman.

Don tried one last time. "It's two black boxes with lots of wires. You put it in between the receiver and the rudder servo to help control the helicopter's tail." Don tried to peer in the model's windows to see if he could see the helicopter mechanics.

"You mean like this?" Herman pulled a Gyro out of his pocket and held it out for Don to see.

"But, that's your Gyro. So, what's in the model?" Don asked.

"You know, I wonder what this is for. Man in shop say I need it but I not understand why, so I keep it in pocket for rainy day."

Don realized that Herman must have always flown without a Gyro. "It can help you fly the helicopter, but I guess you don't need to worry about it." He was getting used to Herman.

Don took a closer look at the model and realized that there were two tail rotor fitted. "It looks good Herman, but full sized helicopters don't have twin tail rotors. A few models are fitted with them, but it spoils the look on a scale model," Don said. Then, under his breath, he added "and nobody would paint a real helicopter pink."

No, I think you wrong my friend Don," Herman replied. "You see I..."

"Look Herman," Don interrupted. "I have seen a few helicopters in my time and a BK-117 has just one tail rotor on the left hand side."

Just then a full sized helicopter flew over and began its descent to land in front of the two

modelers.

Don was struck dumb. The helicopter was a bright pink BK-117. As it came closer he saw that it had twin tail rotors fitted.

“I am sorry my friend Don. I not tell you about friend with new helicopter. It is how you say, expendable?”

“I think you mean experimental,” Don said quietly.

As he stood staring, the rotor blades slowed and the pilot got out and walked toward them. He was wearing grey overalls with the name ‘Gyro’ embroidered on his top left pocket. Don shock his head disbelievingly, then looked at Herman. He was smiling and waving to the pilot. Don smiled too.

----- To be Continued Next Month-----

Interesting email from Terry

Marty,

Check this link out. The Diamond Dust is the plane that Steve flies. This would be close to the Razor with a front mounted (tractor) prop. Maybe use this for your wing on the jet spad?

<http://www.rccombat.com/forum/topic.asp?>

TOPIC_ID=4315&FORUM_ID=22&CAT_ID=12&Topic_Title=DDust&Forum_Title=Simple+Plastic+Airplane+Designs

Here is another link to a PT Cruiser with a 426 Hemi crate motor, www.Hemicruiser.com

Terry

Í Good Eats by Chef Marty Í

My never-ending quest for the perfect crab cakes may be over. These are the crab cakes to end all crab cakes. They are grilled instead of fried. Judge for yourself.

Smokey Joe's Crab Cakes

Taken from Weber's Big Book of Grilling by Jamie Purviance and Sandra S. McRae, published by Chronicle Books.

Ingredients: 12 ounces fresh, frozen, *or* canned cooked lump crabmeat, $\frac{3}{4}$ C plain bread crumbs, $\frac{1}{2}$ C finely diced red bell pepper, 4 green onions (white part only), finely chopped, 3 tbs. Mayonnaise, 2 tsp. Dijon mustard, $\frac{1}{4}$ tsp. Hot pepper sauce, $\frac{1}{4}$ tsp. Kosher salt, $\frac{1}{8}$ tsp. freshly ground black pepper.

To make the crab cakes: In a colander drain the crabmeat (if frozen, allow to defrost) and pat dry with paper towels. In a medium bowl flake the crabmeat with a fork and discard any shell or cartilage. Add the remaining crab cake ingredients and mix gently but thoroughly. Shape into 8 small cakes, about 3 inches in diameter and $\frac{3}{4}$ inch thick. Place the cakes on a plate, cover with plastic wrap, and refrigerate for 30 minutes to 2 hours so they hold together on the grill.

Lightly brush or spray both sides of the crab cakes with vegetable oil. Grill over *Direct High* heat until the breadcrumbs are toasted, 6 to 8 minutes, carefully turning with a wide spatula once halfway through grilling time. Place 2 warm crab cakes on each plate and serve with a lemon wedge.

Makes 4 servings.

Editor: I found the cooking time for cooked canned crab might be a little long and it made 6 crab cakes not 8.

ô-----

What to Say When Your Wife Asks, “Did You Crash Again, Bunkie?”

- (1) No, Honey, I always keep my helicopter in a bushel basket when I’m cleaning it!
- (2) No, Honey, the helicopter is in the trunk of the car and I’ll bring it in later!
- (3) No, Honey, you always have to get new blades after so many hours of flying!
- (4) No, Honey, this helicopter never had a tail rotor!
- (5) No, Honey, those slightly damaged parts are optional and not really needed!
- (6) No, Honey, not really, just a slight mishap and five dollars will make it as good as new!
- (7) No, Honey, but just for fun I might go to the hobby shop and look around a little!
- (8) No, Honey, but, if you want, now might be a good time to start thinking about my birthday!
- (9) No, Honey, but I might go to the hobby shop and pick up one of those new \$49 helicopters!
- (10) No, Honey, but I just won a brand new helicopter at our club meeting!

õ-----

Note: The above ten answers have been field-tested and will work most times!!!

Editor: I probably should not run this every year but I am the Editor and I get a big kick out of it. On a serious note, it has helped my Sidekick out of a tight spot and I know he keeps a copy with him at all times.

Event Calendar

News Flash: It is one of the up-and-coming Fun Flies of the year. Our annual NIRCHA Fun Fly, September 14th and 15th. Mark it on your calendar right now. We will have the same great food as last year with our renowned Chef Neil and his talented trainee. I give the food, burgers and chips, an unabashed, 2 Beer Steins*. All are welcome! Let's try for a 100% club turn out. Drag racing, Auto contest, and bomb drop are among some of the activities planned. Lots of great prizes. Our masterful Terry King will CD this event and can be contacted at 815-547-7016. More on this Event as the story develops.

Bulletin: Take note, at its new location, the big event, the must see or fly in of the year will be here before we know it with all the big name flight demo pilots. The Al Fuchs Memorial Helicopter Fun Fly will be held at its new location, the model airplane field just off of Campton Hills Rd. at the Fox Valley Aero Club site in St. Charles with overnight RV parking and lots of great prizes. I believe they had 100 entries last year at its old location at Fermi Lab, and they are expecting an even larger number in St. Charles. Some of the events this year are Drag Racing, Auto Contest, and Night Fly. Flight Demo's will be by Team JR - Dave Storey, Futaba - Scott Cathy, Kyosho - Dwight Shilling, Miniature Aircraft - Ross Van Dorpe, Al's Hobby Shop, Thunder Tiger, Hirobo Representative – Jeff Rankin.

Hot food right off the grill is available at the field. When it was at Fermi Lab I gave it 2 Beer Steins* for taste and presentation, a relaxed back yard fare, with hot dogs done to a turn and a wide choice of condiments. Don't forget their 4 Beer Stein*, succulent roast pig dinner which is included with the 25 dollar entry fee. The fun fly will be on the weekend of June 22nd and 23rd. Registration is from Saturday 8:30 to 5:00 and Sunday 8:30 to 12:00. You will not want to miss this fun time, and all are welcome. Let's try for 100% club participation. This news story is still developing with more detailed information to follow next month or call Cindy at (630)-832-4908 or email rc@alshobbyshop.com.

On July 11th through the 13th, in St. Charles, The 9th annual Festival of Giants. A hundred or

more of some of the finest giant scale airplanes in the country will be on hand. Same site location as Al Fuchsen Memorial Fun Fly held in June. Sponsor, Fox Valley Aero Club. This event is a must see and whatever you do, do not forget your camera. If you see this once you will go every year. Great grilled food available, I give it 2 Beer Steins*.

*1 Beer Stein = palatable, 2 Beer Steins = interesting, 3 Beer Steins = mouth-watering, 4 Beer Steins = lip smacking

For Sale, Lots of Good Stuff

For Sale: USED:RealFlight Deluxe with Transmitter Interface and Generation 2 Upgrade. Asking \$95.00 NEW:RealFlight Generation 2 with Mode 2 Transmitter. Asking \$175.00 If interested call Ed (I have an answering machine) 773-239-2470 or emkoman@juno.com

Thank you, Ed

For Sale: OS Max .32 SX less than 3 gallons, excellent cond. asking \$80.00 plus Shipping - JR Flight Pack - (5) 507 servos upgraded to 517, R600 6 channel receiver less crystal, JR 1100 mAh battery, on/off switch harness, excellent condition asking \$ 150.00 plus shipping

- Hobbico Volt Watch - very little use - asking \$8.00 plus shipping. If interested please email Rod at DaRaceNGuy@aol.com or call (312) 853-5740. Thanks, Rod Laureano

For Sale: Lite Machine, it has a Sport Piezo Gyro, Hitech radio. New parts include: motor, clutch, tail boom, main blades, main shaft gear, and canopy, pretty much all of it is new. Have extra engine and other parts too. Asking \$500.00 please page or e-mail Jorge, Pg. (708) 378-1351 e-mail jrealty@juno.com

Want to Send Emails to our Leaders in Congress?

To contact any one of our Kings or Queens in Congress use this web site www.visa.com/juan/congress. Today they much prefer an email to snail mail and they will love to hear your views on any topic. They know that each email they receive represents hundreds, if not thousands, of

other people with similar views who won't take the time to make their thoughts known. In short, your one email carries much more weight than you think. Keeping our public servants on their toes is a good thing!!!

NORTHERN ILLINOIS RC HELICOPTER ASSOC.

AMA CHARTER NO. 2099

We are actively looking for new members to join our Radio Control Helicopter Club. All that is required is an interest in R/C helicopters, field permit, and a \$20 membership fee. Please feel free to join us at one of our meetings to become a member or just for a visit. We hope to see you at the next meeting. Our Club web page is: www.nircha.com and is maintained by Web Guys, Rich Erikson and Kevin Cashman.

Meetings are held the 2nd Tuesday of every month, at 7:30pm, at John's Pizzeria, 100 E. Lake St., Addison, IL (1/2 block East of the intersection of Addison Rd and Lake St.). During the summer, the monthly meetings are held at the flying field, June, July, and August.

Our Forest Preserve Flying field is located on Grace St., Addison, and one mile north of North Ave. Field permits can be obtained by calling 630-933-7200.

Club Officers

President	Terry King	815-
	547-7016	

Vice President	Mark Clausen
	815-325-1565

Secretary	Neil Nesheim	630-
	351-4002	

Treasurer	Robb
Rinn	630-906-1731

Newsletter

Editor/publisher	Marty Davis
------------------	-------------

630-377-1865

#1 Proofreader
630-377-1865

Linda Davis

Web Site

The Web Guys

Rich Erikson and Kevin Cashman
www.nircha.com

Membership

Chairman
(773)-774-2365

Paul Girard