

Wine Country Flier



Next meeting: 18 October, 7:30 P.m.
Veterans Memorial Bldg. (Northwest Room) Across from Fairgrounds

Get there early for your free door prize raffle ticket!

www.wcflyers.com

Promoting Model Aviation in Sonoma County

2005 Club Officers:

President:	Guy Nicholas	(707) 544-2141	Guy@Gui-Soft.com
Vice President:	Brody Carlson	(707) 545-8272	brody@connectionsit.com
Secretary:	Larry Miller	(707) 577-0496	exefire@aol.com
Treasurer:	Brian Blackburn	(707) 527-9645	bblackburn@santarosa.edu
Member @ Large	John Reade	(707) 545-9831	john.e.ream@gte.net

2005 Board Members:

Gary Child	(707) 579-2325	garychild@sbcglobal.net
Steve Cole	(707) 566-8838	stevecole@awesomehobbies.com
Rob Jensen	(707) 544-2827	Hangar1@Sonic.net
Mike Cracchiolo	(707) 291-2739	vdubbub@hotmail.com
Phil Leech	(707) 538-8557	leechstudios@sonic.net

Newsletter and Website

Newsletter Team:

Guy Nicholas, Phil Leech, Larry Miller, Sid Maxwell, Red Jensen

Website:

Patrick O'Halloran



Presidents Report

Guy Nicholas

I am sorry to report the passing of Phil Leech's mother. Phil is an extremely nice guy and a great asset to the club and my thoughts are with him in his time of need.

I don't know the name of the gentleman who snapped this month's cover photo, but boy does he have timing! I don't have all the gory details of the event but basically this is a high wing boat plane that took a bit of a hard landing. The plane popped back out and suffered no damage! Coolness!

I attended a Heli fun fly up in Sacramento this month and they had a full scale water drop on our flight runway...expensive way to keep down the dust ☺



One thing about this fun fly that is of special interest to me is the field they have. I think it is very cool. They have a paved North/South runway with airplane stations facing East. On the North end of the field are several heli flight stations. Both types of aircraft can fly at the same time without bothering each other. Plus they are sitting on or very near the old Mather AFB field, so they are really out in the middle of nowhere with no possibility of complaints from anyone. Very nice. I bring this up as there

are a few possible places we could be getting a flight field and we really should have some sort of plan for how our dream field would be laid out. I realize that we won't necessarily be given a piece of land that is conducive to our dream field, and I also realize that our field current field is setup in accordance with the AMA guidelines, but that doesn't mean it really meets our needs. So, at this month's meeting we are going to gather together a committee consisting of both plankers and rotor-heads to draw up some sort of general plan which we can use when confronted by some generous field giver. It will be important to write up a set of guidelines and then draw up some basic plans from that. If a field is given to us that won't exactly fit our plans, we can refer to the guidelines and make the right compromises.

The Board was recently informed of a few incidents whereby an individual was asked to share his frequency pin. Surprisingly, the individual refused to relinquish the pin and continued to fly several flights in a row while the other person sat on the sidelines and waited! Truthfully, I find it sad and disturbing that I have to bring this up here. Let me state here, for the record, the policy on frequency control.

When you come to the flying field you are to immediately put your transmitter(s) in the impound shed. When you are ready to fly:

1. Exchange your transmitter and pin for your AMA card.
2. Go fly.
3. Once you are done with your SINGLE flight, you return your transmitter and pin to the impound shed. If no one else wants your frequency, you may proceed to step 1.

I know that 99% of the club follows these guidelines and I am sorry to have wasted the preceding space with such trite information, but I wanted to ensure we are all on the same page.

Have a great month and see you at the field!

WCF Board Meeting

10/4/05
By Larry Miller

- The meeting was called to order at 7:00 pm by Chairman Guy Nicholas.
- Members present were Treasurer Brian Blackburn, Secretary Larry Miller, Safety Officer John Reade, Vice President Brody Carlson, Gary Child, Phil Leech, Mike Cracchiolo, and Steve Cole.
- The first item of business was planning for the Christmas party. We determined how much we will be spending and discussed the number of awards and gifts we will present. There will be something for everyone including the ladies. Phil will be working on the flyer with Larry Frank and it should be in the mail soon.
- It was brought up that the year is winding down and soon it will be time to renew our membership so dues notifications will also be going out soon.
- We also want to remind everyone that at the next general membership meeting we will be taking nominations for new club officers for next year. If you're interested in helping run the club, be sure to attend.
- The awards for the highest points for pylon racing will be handed out at the Christmas party by Red Jensen.
- Steve (and a lot of other flyers) would like to see the trees at the north end of our runway topped so he will be contacting Jeff Kowell, our resident tree trimmer, about getting this done.
- It was brought up that some of our flyers are still flying out too far north over the houses below. If this does not stop, we will have to resort to more drastic measures other than just the verbal warnings we have issued in the past.
- It was also noted that a few people are reluctant to give up their frequency pin after a flight. Common courtesy and club rules state that when you are done with a flight, return the pin to the frequency board along with your transmitter so that someone else is able to fly.

-There being no more business, the meeting was adjourned at 8:30 pm.

Respectfully submitted,
Larry Miller, Sec.

WCF General Meeting

9/20/05
By Larry Miller

- The meeting was called to order at 7:30 pm by President Guy Nicholas.
- We had 26 members present.
- The free door prize drawing for the monthly gallon of fuel was held with Sid "The Airman" Maxwell taking it home this month.
- Treasurer Brian Blackburn gave his monthly report to the membership.
- The Secretary's report was accepted as printed in the last newsletter.
- Safety Officer John Reade gave his monthly report.
- A report on the PCAM Air Show was given by Phil Leech.
- Phil also reviewed the recent Neil Taylor picnic and fly in held at the field. The food this year was outstanding, especially the hamburgers, and we were treated to some great 3D flying by Joe Hunt. This year's recipient of the annual Neil Taylor award for his contributions to the club and modeling in general went to Guy Nicholas. He has done a terrific job as president as well as being a great guy.
- John Lehtio reported that we had another break-in at the field. From now on we will not keep anything of value off the field.
- Phil reported that Cattleman's restaurant screwed up our reservation for the Christmas party so we were rescheduled for December 17th from 7:30 to 10:30.
- Sid reported on his progress on finding another flying field for the future. He said that the county welcomes our participation in the planning of the Tolay Lake park project in southern Sonoma County off Lakeville Highway. He has also talked to the folks at the Salvation Army. They enjoy having us

use their lake for float flying and would possibly be interested in us establishing a permanent site for flying our land based planes on their property if a suitable spot can be found. We will certainly be looking into this possibility.

-Sid gave a review of the last float fly and reminded everyone of another one coming up next week. He also reported that he will be replacing the cloth on some of the tables at the field. Some of them are becoming a little beat up.

-A video of our performance at the last PCAM Air Show was enjoyed by the members which, by the way, was filmed by former member Ron Alvestal.

-Bob Film donated a 3 day, 2 night stay at a Point Arena Lighthouse cottage, a \$500 value, for a blind auction. Drawing to be held at the end of the meeting.

-Mike Cracchiolo went over the prizes for tonights raffle.

-The members lined up to buy raffle tickets and the twenty dollar bills were flying everywhere. The first lucky ticket drawn belonged to John Lehtio who picked out the electric powered Edge 540 followed by Paul Swank who grabbed the OS .46 AX engine. Sid had the next ticket and he picked the Extra 300 ARF. Richard Coleman got a tach-volt meter combo and Merle McGregor won some epoxy. John Stoufer won a glow charger and John Reade got a fuel tank. There were several other winners and then there were the much sought after hinges. We had two winners this time. Mike Cracchiolo got the CA hinges and Brian Blackburn won the hinge tape.

-Merle McGregor submitted the highest bid for the Point Arena Lighthouse stay so he and his family will off on a nice vacation soon. Congratulations, Merle.

-There being no more business, the meeting was adjourned at 9:00 pm.

Respectfully submitted,
Larry Miller, Sec.

DOD FLY-IN

Joe Hunt, the guy who flew the really cool 3D demo at PCAM (see the Sept. edition of the newsletter) sent me the following note. Get on up there and check it out!

Thinking about DOD FLY-IN 2005 #3

I'm thinking about a FLY-IN with a twist... an IMAC Clinic on Saturday morning ending in a simulated IMAC contest... this will be for Basic and Sportsman only... and will include trophies through 3rd place in each class. Maybe try to get it done by 1am for afternoon open flying. We might even have a Freestyle contest on Sunday if there is enough interest. Other than that it will be open flying. And, of course we'll have the usual great location, great food, and friendly easy going vibe!

October 14-16, 2005!

Joe

downonthedeck.com

FLOAT FLY AT SAL LAKE

Because of the great weather we are having, we decided to have one more, "Day on the Pond", float fly at Sal Lake. So on October 22, 2005 we will go to Sal Lake one more time for the last float fly of the year. Deli lunch will be served, if we prefer and cold drinks will be available. Don't forget to bring a chair for yourself and a table for your plane. Get your frequency pin at the field before you go to Sal Lake because the field will be open that day. I will sign everyone up at the Salvation Army main building. So get your float planes ready and come out for the time of your life at Sal Lake...
Sid Maxwell.

Help a kid out

By Guy Nicholas

I am sure most of you know Mike Beito and his son Michael. You may also recall that Mike suffered a stroke a few months back

and for the time being is not flying. Michaels mother Penny sent us a note recently saying he would love to come to the field and asked if anyone would like to pick him up sometime and bring him up for some flying. Michaels number in Windsor is 838-4072. I know it is on the way to the field for a lot of us and it is always nice to help out the young 'uns.

My Summer Project

By Leo Shvarzberg

Some of you may have seen me recently flying my Raptor 30 while wearing weird-looking glasses and checking out something on the laptop PC which I brought to the field. For the most vigilant of you the answer is: "No, I was not collecting intelligence data for the Russian KGB". I was testing the RC helicopter downlink telemetry system which I developed as a part of the design contest supported by the magazine Circuit Cellar and a semiconductor company Freescale. I am proud to report that I got the third place in the contest (trust me; there were more than three participants).

The picture below shows my Raptor 30 with the telemetry module installed in its nose section (a white box below the radio).



Figure 1. Model Helicopter Raptor 30 Equipped with Telemetry Module.

Figure 2 shows the content of the on-board telemetry box. As required by the contest

rules I used radio components and sensors from Freescale in my design.

The on-board downlink telemetry module collects the following information:

RC aircraft roll attitude angle. X-channel of MMA6161Q XY –Axis acceleration sensor is used to gather and process this information

RC aircraft pitch attitude angle. Y-channel of MMA6161Q XY Axis acceleration sensor is used to gather and process this information.

RC aircraft inverted attitude angle. MMA1260D – Z Axis acceleration sensor is used to gather and process this information.

This information is necessary in order to establish whether the aircraft is in inverted (upside down) position. This is usually happens when performing aerobatic maneuvers such as inside or outside loops or barrel rolls.

RC aircraft receiver battery charge status. One of ADC of MC9S08GT60 and a simple voltage follower and resistor divider circuit are used for processing of this information

Downlink signal strength indication. This information is obtained by reading appropriate registers of the MC13192 transceiver.

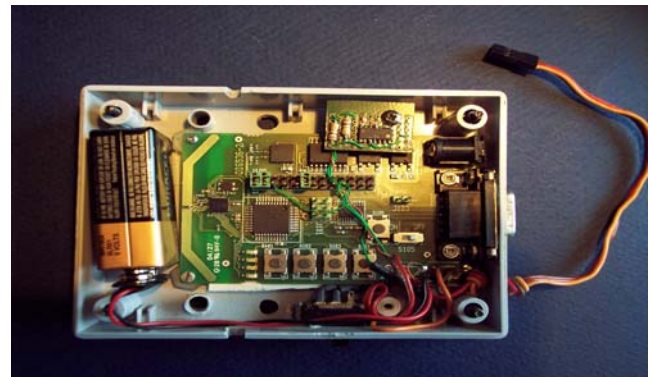


Figure 2. On-Board Telemetry Module

As shown on Figure 3, the complete telemetry system includes on-board and ground based telemetry modules which communicate over ZigBee radio link. In addition to downlink telemetry modules the system also includes the laptop PC, 2.4 GHz video camera installed on board of RC helicopter, 2GHz video receiver, USB video controller module and RC control transmitter.

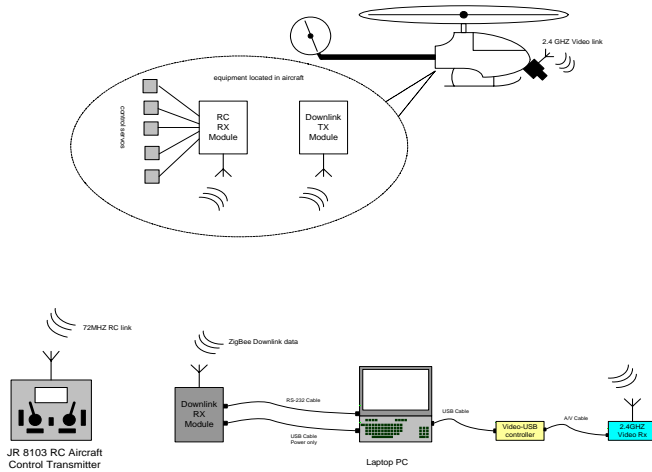


Figure 3. The system block diagram

The telemetry module located on the helicopter collects the data from the sensors. These data reflect the position attitude of the aircraft such as pitch and bank angles. This data is beamed to Earth and picked up by the receive telemetry module. This module transmits this data to the laptop PC over the serial RS-232 link. The PC runs the user interface program that I wrote. This program displays the “Digital Cockpit” shown below. As seen on Figure 3, I also installed 2.4GHz wireless video camera which functions independently from the downlink telemetry module and displays video picture “as seen from the helicopter” on the same laptop PC.

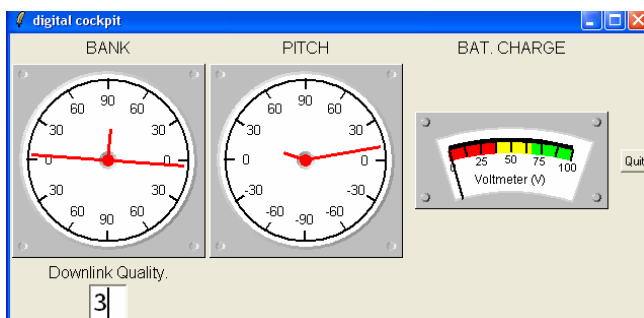


Figure 4. Screenshot of Digital Cockpit Application

As you can see, there is a lot of room for improvement in this design. I need to add a sensor for reading engine RPM, temperature and the aircraft altitude and airspeed sensors.

I plan to implement all of this in the near future, once I finish upgrading my Raptor 30 to size 50 heli. Another idea which I am

investigating is to display the cockpit on Eye Top video glasses.

The complete story featuring this design will be published in the December 2005 issue of Circuit Cellar magazine. Stay Tuned.

Meanwhile, if in the future you see me wearing weird glasses again, please do not call FBI.

Training Issues: How to Choose a Flight Instructor

by Jack Frost

Question: What is the most important decision any pilot can make?

Answer: When not to fly...

Explanation: If the pilot isn't ready, if the equipment isn't ready, or if the conditions aren't right—do not fly!

These are good words to go by, no matter what kind of airplanes you fly—whether they are full scale or models.

Are you an RC instructor? How did you get the job? Were you asked by your club president? Were you the only one willing to do it? Do you like the prestige of being a club instructor? Are you the best instructor in your club?

People vary greatly on their ideas of what makes a good instructor. Some think that good instructors are born and possess a kind of charismatic presence that results in highly motivated learners. This view tends to result in instructors that are more likely to credit their own performance as the key to learning instead of the ability of the learner.

Some believe that instructional ability is something acquired, involving training, discipline, and a good deal of patience. They strive for instructional excellence, and assess their effectiveness by how well the learner performs.

Most agree, however, that good instructors share a love for instructing and learning, and that a good instructor must be a learner and

must possess strong motives and a positive attitude toward learning.

There is a tie between effective instruction and effective learning, but instructors only enhance learning. They set up a situation that provides the student with the opportunity to learn. Effective instructors are often those who look for ways of matching individual learning styles to their own instructional style.

The measurement of an instructor should not be how few hours, or how few flights it took for his/her student to solo, but instead, what skills, what presence of mind, and what judgment that student can demonstrate.

So what things constitute a good instructor?

Besides being a qualified pilot, there are other important attributes that need to be considered. The following list includes various traits that are important in choosing an instructor:

- Good communicator
- Patient and even-tempered
- Reliable
- Consistent
- Dedicated
- Good teaching skills
- Team player
- Thorough knowledge of equipment
- Thorough knowledge of safety issues
- Good preflight skills
- Good piloting skills
- Ability to judge piloting skills
- Good at balancing praise and criticism

This list is not all inclusive, but it is a start. If you have questions about becoming an instructor, selecting instructors for your club, or choosing an instructor to teach you to fly, contact me at (765) 287-1256 ext. 515.

ROCKETS FOR SALE

Gil DeLagnes has a bunch of rockets for sale including:

15 Rockets
180 Motors
2 Launch Pads
Tools, Igniters, all kinds of extra parts

This is \$485.00 worth of rocket gear for the sacrifice price of \$185.00!

Call Gil in Windsor at 837-9496.

Fast Charging: Will it Harm My Packs?

by C. Scholefield

First, let's define fast charge. The industry standard is any charge rate that will charge the cells in one hour or less. This fast charge capability thing is very interesting. Almost all Ni-Cds manufactured today for RC systems can accept fast charge (up to C rate, that's the rate at which you can charge the cells in approximately one hour).

Cells that are specifically sold as fast chargeable go through another step in the process. This step involves charging a sample from the production lot, and then measuring the end of charge voltage. Cells with the highest end of charge voltage are then analyzed for internal pressure. If the internal pressure is acceptable—that is not above a preset limit—the whole production lot is blessed as being fast chargeable. Of course this adds a finite amount of cost to the cell as they must be “formed” prior to being shipped in order to be fast chargeable. Cells not destined for fast charge applications are shipped “unformed” by some manufacturers. The first charge after the assembly is what “forms” the cell. When you charge your RC system packs for the first time you are “forming” them. That is why the instructions tell you to charge the packs for 16 to 24 hours before you first use the system.

So in most instances you are safe fast charging the RC packs (transmitter or receiver) on the market if you first make sure they get a good first cycle formation charge—24 hours at a slow rate.

Where the problems arise is that some of the fast charge systems available are a little

sloppy when it comes to terminating the fast charge, or they are pushing the cells too hard (higher than the C rate charge) and then damage occurs.

As a rule of thumb if your packs are not getting hot (slightly warm is okay) you are not damaging them in the fast-charge process. When pushing too much current into cells not designed to accept it there is the risk of driving the cells above 1.6 volts (the hydrogen-over-voltage point) and electrolyzing the water in the electrolyte and generating hydrogen. This is a cumulative event and repeated fast charge at these rates will result in sufficient accumulation of hydrogen to cause the cells to vent. When they do vent, there is a chance that the chemical balance will be disturbed and the cell capacity will fade.

Understand that the pack may not be fully charged when the fast charge terminates. It is a good practice, if you are going to fast charge frequently, to top off the packs using the slow charger. This will bring all cells to the same state of charge and "balance" the pack. Otherwise the cell that is not fully charged will be the limiting cell on the next discharge. This continues until there is a major unbalance in the pack and one cell can be driven into reverse (if you don't crash first).

EVENTS CALENDAR 2005



April 10	Pylon Races
May 1	Pylon Races
May 14	Model Air Show
May 21	Float Fly Practice at Sal Lake
May 28	Castle Air Base Fun Fly Atwater, Ca.
June 4	Float Fly Practice at Sal Lake
June 11	Float Fly at Redding, Ca.
June 19	Pylon Races
June 25	Learn to Fly Day
July 4	Day on the Pond
July 9	WCF Swap Meet at Santa Rosa, Ca.
July 17	Pylon Races
July 23	Larry Frank Fun Fly
Aug 14	Pylon Races
Aug 20-21	PCAM Santa Rosa Airport
Sept 5	Day on the Pond
Sept 11	Neil Taylor Fun Fly
Sept 14 – 18	Reno Air Races, Reno, Nev.
Oct 2	Pylon Races
Nov 16	Pylon Races
Dec 17	WCF Christmas Party Santa Rosa



**P.O. BOX 4198
SANTA ROSA, CA 95402**