



The Air Bubble

The Newsletter of the
ChicagoLand Glider Council

Est. January 17th, 1937

- Feb 2014 -

Board of Directors

President - Herb Killan

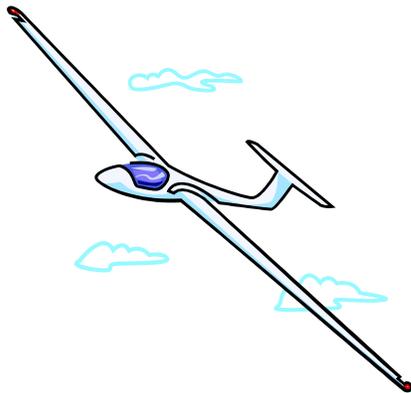
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Treasurer - Jeffrey Mack

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Newsletter Editor - John DeRosa

<http://chicagolandglidercouncil.com>



Next CLGC Meeting "Supersonic Aerodynamic Analysis"

Speakers: Dr. Simon Ho
Don't Miss It!!

Tuesday, February 11, 7:30PM
Herrick Junior High School

Synopsis: Traditionally, wind tunnel testing and sled experiments have been used to study the aerodynamic characteristics of the fighter aircrafts and pilot ejection seats. However, these methods can be very expensive and limit the number of concepts and conditions to be analyzed. The advances seen in simulations today open a new area for their applications in aerospace engineering – as a tool fully complementary to test and measurement in a "Concurrent Simulation and Test" process. Computational aerodynamic analyses are performed to characterize the aerodynamic performance of various designs, provide aerodynamic loads for structural analysis, and estimate surface pressure signatures for acoustic analysis. This process continues through data analysis to finalize design recommendations.

Dr. Simon Ho has 30 years' experience in the field of computational modeling of fluid, thermal and structural systems. In fact, he uses many tools that he has developed on his own for specific applications. He has written a dozen technical peer reviewed papers, is an inventor of seven granted patents, and also a licensed Professional Engineer. Simon holds a BS from National Cheng Kung University in Taiwan, plus MS and PhD degrees from the University of Arizona, all in mechanical engineering. The work that Simon has done on fluid, thermal and structural modeling has been a key element in optimizing many designs and minimizing the potential for problems during installation and start-up.

2014 CLGC Youth Grant!! Deadline March 1, 2014!!

Applications are being taken for the 2014 CLGC Youth Grant of \$500. The applicant must meet all of the following requirements:

- Complete the application form (attached below).
- Be a member in good standing of the ChicagoLand Glider Council as of January 1st, 2014 and,
- Be between the ages of 14 and 21 (inclusive) as of January 1st, 2014 and,
- Reside within 50 miles of Chicago and,
- Did not receive the previous year's \$500 grant (but you might win a secondary grant) and,

- Obtain a written recommendation from a Certified Flight Instructor Glider (CFIG) who is familiar with the applicant's qualifications and,
- Write an original essay of 500-1000 words on "What Soaring Means to Me..." and,
- Send all necessary documentation to the committee **no later than midnight, March 1st, 2014**

See <http://chicagolandglidercouncil.com/grant> for more details.

2014 CLGC Dues Are Due!

Please send in your ChicagoLand Glider Council dues no later than January 1, 2014. The dues are \$10 for the 2014 calendar year. Reminder that for the following clubs' members, your CLGC dues are included in your membership; Chicago Glider Club, Sky Soaring Glider Club and Windy City Soaring Association.

The 2014 membership renewal form can be found at the end of this newsletter. Please complete it and send your dues payment via check or money order to;

ChicagoLand Glider Council
5115 Carpenter St.
Downers Grove, IL 60515

Thank you for your support!

CLGC's New Treasurer!

Please welcome Jeff Mack as the new treasurer for the ChicagoLand Glider Council. The CLGC board and the membership thanks John O'Brien for his many years of service.

First Flight of the Year

By Burt Compton CFIG

From: BURT COMPTON <BURTCOMPTON@AOL.COM>
To: John H DeRosa
Date: 01/07/2014 12:26 PM
Subject: Re: ChicagoLand Glider Council NEWSLETTER!

Hi John, Perhaps this would be appropriate for the ChicagoLand Newsletter . . .

YOUR FIRST FLIGHT OF THE NEW YEAR

The Soaring Safety Foundation (SSF), the training and safety arm of the Soaring Society of America, encourages all US glider pilots of all experience levels to make their "first flight" of the year with an instructor.

This does not necessarily mean you must fly on January 1, just schedule something more extensive than a one-flight "field check" with a CFIG at your local soaring operation when the weather allows.

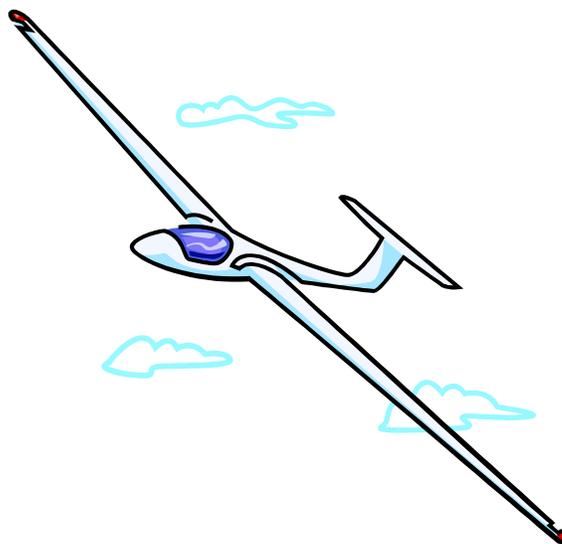
Review more than just how to get around the pattern and please note that it is not always the student pilots who are having accidents. Not by a long-shot. Reports show quite a few "experienced" pilots and even CFIG's are making serious mistakes that result in accidents. Indeed two FAA Designated Pilot Examiners perished in recent years (but not while giving a checkride.)

So make it a priority to schedule ground and flight sessions to review items such as your assembly and pre-takeoff checklists, glider-towplane procedures, causes and options regarding Premature Termination of Tow (PT3), all signals, slack towrope recoveries, goal-oriented landing patterns, preventing takeoff roll and landing roll-out loss of control accidents, stall recognition and spin characteristics of the gliders you may fly in the coming year. Yep, it may take more than one flight!

Maintain the balance of fun and safety.

Stay proficient (much more than "current".)

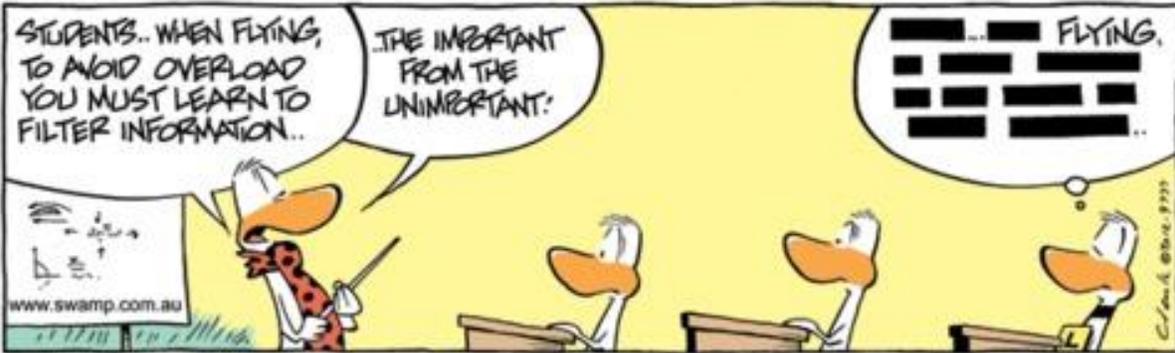
Consider flying with an instructor on your "first flight" of the new year, or anytime you feel your skills may require a second opinion.
Just ask!



Cartoons from "Chicken Wings"

CHICKEN WINGS®

BY MICHAEL AND STEFAN STRASSER



CHICKEN WINGS®

BY MICHAEL AND STEFAN STRASSER



CHICKEN WINGS®

BY MICHAEL AND STEFAN STRASSER



Electronics Review

G.T. Power RC – 130 Amp

High Precision Watt Meter and Power Analyzer

By John DeRosa

I take time each winter to test my four glider batteries via the bench testing procedure shown in the February 2012 issue of the Soaring Society of America Magazine (<http://aviation.derosaweb.net/#batterytest>). The key measuring instruments are an inexpensive voltmeter and a resistor “artificial” load as shown below.



The missing key ingredient in this setup was measuring current which would be especially useful for testing in my glider. However, this would require a second meter and some “breakout” cabling. To simplify this I purchased a very cool little device that meets all my needs and then some. This is the “High Precision Watt Meter and Power Analyzer” shown below manufactured by G.T. Power Rc.



This inexpensive (about \$30) and small (85x42x25 mm and 82g) device displays both real time voltage (to 60Vdc), current (to 130A) and wattage – plus measurements over time of amps, volts and watts (see details below). Cool!

While this device was designed specifically for the measurement needs of the growing battery powered radio control (RC) hobby scene, this was perfect for my testing. I added the appropriate male/female connectors so I can easily insert this meter between my battery and my “load”.

During bench testing, my load is a 12Ω resistor (50W) giving me a nominal 1A (at 12Vdc) current draw. The actual current draw varies depending on the voltage of the battery - 1.1A at 13Vdc (just off the charger) and 0.9A at 11Vdc (nearly dead).

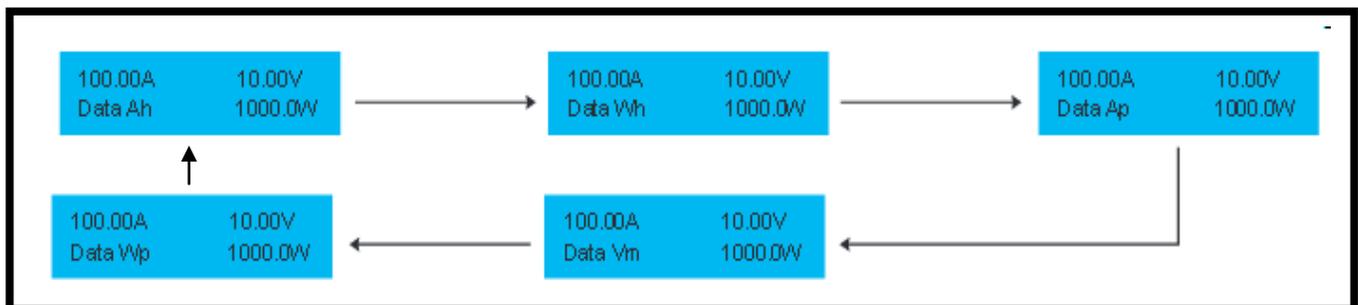
In my glider I have constant battery load from my recorder and PDA/PNA plus my radio (transceiver - when not receiving or transmitting). I am very interesting in measuring over time the intermittent, but quite significant, loads from devices such as transponders, transceivers and FLARMs when active.

Power Analyzer Display: The top row of the LCD screen displays instantaneous amperage and DC voltage. The bottom right hand reading is the instantaneous power reading of watts (equals volts times amps).

The bottom left hand reading is a rotating number which displays the following time based values referred to as the “Data Queue” (see image below);

- **Amp-hours (Ah)** - The displayed value is the total charge in Amp-hours delivered since startup.
- **Watt-hours (Wh)** - The displayed value is the total energy delivered in Watt-hours since startup.
- **Peak Amps (Ap)** - Peak Amps value (AP) displayed is the maximum current drawn from the LOAD side, since startup. Peaks lasting only a fraction of a second, can be captured.
- **Peak Watts (Wp)** - The displayed Peak Watts value (Wp) is the maximum power drawn on the LOAD side, since startup.
- **Minimum Volts (Vm)** - The displayed Minimum Volts value (Vm) is the minimum voltage (or “sag”) measured on the SOURCE side, since startup.

All-in-all this is one great little device to have in my tool box.



Directions to the CLGC Meeting Location

At Herrick Junior High School located at
4435 Middaugh Rd, Downers Grove, IL.

Detailed directions are available at;

<http://tinyurl.com/CLGCDIRECTIONS>

Complete details at can be found at

<http://chicagolandglidercouncil.com/grant>

Upcoming 2014 Aviation Events

- ❖ **February 11 - CLGC Monthly Meeting**
 - **Topic TBD**
 - ❖ February 27 - March 1 – SSA Convention, Reno, NV
 - ❖ March 1 – CLGC Youth Grant Submission Deadline
 - ❖ **March 11 - CLGC Monthly Meeting**
 - **Phoenix Motorglider**
 - ❖ **April 8 - CLGC Monthly Meeting**
 - **Topic TBD**
-
-

Newsletter Contributions?

Pictures? Accomplishments?
Suggestions? Articles?
Speaker Topics?

Please let us know! If you have anything that you would like to have included in future newsletters or meetings.

PLEASE send them to JOHN@DEROSAWEB.COM or call 847-844-8776.

CLGC Newsletter Archive Old CLGC Newsletters Needed!!

Did you know that there is an archive of CLGC newsletters dating back to 2001 on the CLGC web site? Take a look.
<http://chicagolandglidercouncil.com/newsletter.htm>.

Do you have any old CLGC newsletters? We would love to scan them in for the archives. Contact John DeRosa at john@derosaweb.com.

Moved? New Email?

Please let us know to keep our database up to date.

Send an email to JOHN@DEROSAWEB.COM

or call 847-844-8776 Thanks!!

~ Contest Time ~ Who is this Famous Aviator?



Hint: No one guessed last month so here she flies again → south!

Contest Time Answers from
Previous Newsletters

Dec, 2013 – “Wrong Way” Corrigan →





**2014 ChicagoLand Glider Council
Membership/Renewal Application & Change of Information Form**

Membership Renewal Due Date: January 1, 2014

Please mail this form with a check or money order for \$10
made payable to "ChicagoLand Glider Council" to:

**ChicagoLand Glider Council
5115 Carpenter St.
Downers Grove, IL 60515**

Your Name _____

Your Address _____

City _____ State _____ Zip _____

Email Address (**please print very clearly**) _____

Phone Number(s) Home _____ Work _____ Cellular _____

Primary Airport and/or Club where you fly _____

Pilot ratings that you hold (student, private, commercial, instructor, etc) _____

Type of Glider(s) that you own _____

Please check the appropriate box(es) below

New Member Membership Renewal Change of Street Address Change of E-Mail Address

Change of Telephone Change of Glider/Airport Information

ChicagoLand Glider Council

2014 Soaring Youth Grant

The ChicagoLand Glider Council Grant program is hosted under the auspices of the membership of the council and is paid by their dues. A primary grant of **\$500** is awarded each year. Other secondary grant(s) may be awarded based on merit. This grant will be paid directly to the recipient's home soaring operation and placed "on account" for use by the recipient for their continuing soaring education.

Application Requirements: The applicant must meet all of the following requirements:

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- Be between the ages of 14 and 21 (inclusive) as of January 1st, 2014 and,
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- Write an original essay of 500-1000 words on "What Soaring Means to Me..." and,
- Send all necessary documentation to the email address and surface mail address shown below **no later than midnight, March 1st, 2014.**

Applicant Information

Name _____

Current Age: _____ Birth date: _____ / _____ / _____

Address: _____

City/State & Zip: _____ Phone: _____

Soaring Location(s): _____

Submit this application and all required documentation to the ChicagoLand Glider Council Grant Committee via the email address listed below (required) or via the surface mail address below. The application and documentation must be received **no later than March 1st, 2014.**

The ChicagoLand Glider Council Grant Committee consists of the board of the ChicagoLand Glider Council. Decisions of the committee are final. Grantee(s) will be announced at the regular CLGC meeting during March or April.

Applications and other information is available at <http://chicagolandglidercouncil.com/grant>. Good luck!

Email to: john@derosaweb.com

Surface Mail to;

<p>ChicagoLand Glider Council Grant Committee c/o John DeRosa 35W529 Parsons Rd West Dundee, IL 60118</p>
