

# Chicagoland Glider Council Newsletter

### Chicagoland Glider Council

Volume 2, Issue I November 2003

# October Meeting Launches Cabin Fever Season

With the soaring season winding down, the first 2003/2004 CLGC meeting convened. Due to the Cubs playoff that night (wait'l next year!), only a handful of loyal members GPS'd their way to the Herrick Middle School auditorium.

Inaugural President Scott Wolf's agenda included 2003 highlights, safety, election of a Secretary, snacks at Café Spreitzer, and door prizes. Reports from area gliderports indicated a fine season with no injuries, marred at Hinckley Soaring by the loss of a 2-33 to a suddden



N2639H after encounter with Terminator-class thunderstorm



Photo of actual 39H Terminator

thunderstorm (see photo), and two broken Grob 103 canopies.

A safety review prompted discussion about the merits of Mode C transponders, especially at Chicago Glider, where Midway Dodge'm is played regularly.

Sky Soaring expressed interest in the CGC spot landing contests.

It was mentioned that Sylvania Soaring has now purchased and moved to Beloit Airport.

Jim Short reported on management developments in the SSA

and particular success at alleviating soaring restrictions in the TFR area around Camp David, VA.

The Windy City club noted their expanding membership and fleet, with a **PW-5** joining the **K-21**.

#### Secretary Elected

Don Berk was elected CLGC Secretary unopposed. **Bio:** Don interned as a rope runner for six years at Hinckley Soaring before becoming an owner, after which he continued to intern as a rope runner. A USAF veteran, he was an executive with Barber-Greene, Tellabs and AC Nielsen before starting his own company, which he sold in 1998 to run ropes full time. He attended Cornell University and Bennington College and earned a BA and MFA. A CFIG, he has logged 1,500 glider flights plus 400 hours in SEL, mostly in taildraggers.

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**Sinus** and **Virus**. Do we need vaccinations?

**Map** to Herrick School 4 for CLGC meetings

### Classifieds 3

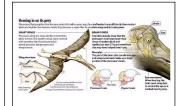
CLGC Officers 4

CLGC newsletter con- 4 tacts

Map to Herrick School 4

Check out the Web for the latest on the pterodactyl, the "leanest, meanest, flying machine" ever...

http://www.chicagotribune.com/news/nationworld/chi-0310300203oct30,1,5071504.st ory?coll=chi-homepagepromo451-fea



# **CLGC Plans Gangbuster Meeting Schedule!**

Tentative Events (subject to change)

Oct 14, 2003 —Celebrating the 2003 Season and the Cubs' Victory! (Revised Oct 15, 9:00 PM)

Nov 18, 2003 — Dave Voggasser discusses airspace and TFR. Is Class G "Glider Only?"

Dec 16, 2003 —CGC will display their Duo Discus in the Herrick School Auditorium!

Jan 13, 2004 —Sky Soaring presentation on "Retiring Early On Your Real Estate Investments."

Feb 10, 2004 —Al Freedy reads excerpts from his book, "Slack Line Recovery Techniques," 820 pages, \$69.95, cash only, signed copies available for slight additional charge.

Mar 09, 2004 — Panel discussion on whether it's better to box the wake clockwise or counterclockwise. Results of a vote will be announced at the 2004 SSA Convention.

Apr 13, 2004—Hot topic! Modifying the SGS 2-33 for water ballast...race with the pros!

Door prizes at every meeting! Plan to attend!!

#### **Apis At CGC**

#### By Duane Eisenbeiss

On Sat, Aug 23, 2003 Robert Mudd the dealer/importer of the Apis sailplane brought the I3 meter version to the CGC field for all to see. The Apis was designed to be sold as a kit. Due to some demand it is now also offered as a completed sailplane. The ship that Robert brought to the field was a kit that he had completed. He stated that 4 kits had been completed in the USA and are now flying. The Apis sailplane is also offered in I5-M and I5-M self launch versions. The price of the I3-M sailplane kit is \$16,360, the ready to fly option is \$22,306. The I5-M kit is \$18,556 and the ready to fly version is \$24,442. Of course these figures depend on the current value of the US dollar.

The ship is a very nice looking fiberglass constructed sailplane. It uses full span flaperons (ailerons and flaps). The flaps can be moved to positive settings to help the climb and to negative settings to help with high speed penetration. There are Schempp-Hirth type airbrakes on the upper surface of the wing for glide path control. Pitch is controlled by an elevator, not a full flying stabilizer.

I was not around to see the assembly of the ship, but, I did observe the disassembly. The disassembly went quite easy. I am sure that the assembly would be just as easy. All of the controls connect automatically, a nice safety feature. Each wing half weighs about 75 pounds, 45 pounds at the root and about 30 at the tip. The empty weight is around 300 pounds. The max gross weight is listed as 540 pounds. Some performance numbers given by the designers are as follows:

Stall: 26 kts
Max L/D: 38:1 @ 48 kts
Red Line: 121 kts

Observing the ship while it was being disassembled I noticed the excellent construction and finish. After congratulating Robert on the fine job of building the ship he informed me that the kit comes with all of the fiberglass construction completed! The builder of the kit does not have to do any fiberglass work for structural components of the sailplane. This should be a great relief for any potential kit builder not experienced in fiberglass construction. And the components are painted. The builder must cut out and mount several small parts and install the controls. The parts that require precision located holes have the holes pre-drilled. I believe the most time consuming part of the project would be the mounting of the canopy Plexiglas to the canopy frame.

Robert informs potential buyers that it will take about 400 hours of work to get the kit ready to fly. One advantage to doing all of that work (besides the fun and really knowing your ship) is that it qualifies the ship to be licensed in the Experimental-Amateur built category. Imagine, a "kit" with all of the hard, but very important, structural work already completed!

When approaching the ship you first notice that it is a good looking sailplane. It does not have the look of a low cost home built. The construction and finish look nice, giving one confidence for a first flight. Even the interior of the cockpit of this ship looked nice. Of course much of that depends on the effort of the builder. The seat is of the type where ones knees are a little higher than ones hips. This is the type seat that seems to be used in all newer European sailplanes to protect against sliding under the seat belt during a sudden stop. The seat pan is wide enough that I was comfortable. Later Don Kroesch flew the ship and his 6-foot plus height did not require the rudder pedals to be all the way forward. The seating position was adjusted by placing cushions behind the seat back (or removing them) as required.

The airbrake handle is located on the left side of the cockpit. It has a short travel so there is no concern about your elbow hitting or being jammed between your body and the cockpit wall. Full extension of the airbrake handle actuates the wheel brake. The flap handle and trim tab handle are located below the airbrake handle but somewhat further aft. This makes them a little difficult to use. Robert reported that it is planned to relocate them further forward in future kits. In addition to the zero flap position, there are two notches for positive and two notches for negative flaps. Since the ship has a fixed gear, there is no gear handle. While "bouncing" the wing a little before one of the take-offs I noticed that the resonance frequency of the wing was unusually high for a fiberglass wing. Robert then informed me that the resonance frequency was 245 cycles/min. That is representative of a very stiff (strong?) wing.

Before take-off Robert advised that the take-off roll would be very short. Even with that warning the ship jumped off the ground way before I expected it to. A 235 HP Pawnee was used as the towplane. For a first flight, especially for a low time pilot, I would recommend that the towpilot be requested to use a slower initial acceleration than usual with heavier sailplanes. A tow speed of about 65 kts was used for the aerotow. A rate of climb of about 1200ft/min was maintained behind the Pawnee. The use of a positive flap setting helps maintain visual contact of the towplane. If the first notch is not enough, the second notch will provide even more nose down effect.

After release I flew around until I blundered into a thermal. The Apis climbed quite readily. The ship is quite agile. It has the feel of a good Standard Class ship. The ailerons are quite sensitive. Measurement of the roll rate going from 45 degrees left to 45 degrees right at 50 kts gave about 3 I/2 seconds (without a stopwatch). The rudder has sufficient authority to keep the string centered through out the turns. The aileron control seemed a little stiff to me. Later on the ground it was determined that the right flaperon was rubbing an aerodynamic fence. The rudder pedals provide little to no feedback pressure when pushed. This could lead to some over controlling. I would prefer some positive feedback pressure. This is a minor point as it is something that one could easily become accustomed to after a few flights. A low time pilot, however, should be made aware of this before a first flight. The ailerons, elevator, and rudder seemed well "balanced" in their sensitivity. Since the ship was relatively new I did not fly faster than 80 kts. At that speed the ship felt quite steady and easy to control. Using the two negative flap settings between 60 and 80 kts gave the impression that the Apis has fairly descent penetration even though it has such a light wing loading.

When the airbrakes are extended there is a very slight nose down tendency. This is desirable to prevent the speed from decreasing unintentionally. With the airbrakes extended at 60 kts the rate of descent is about 1200 ft/min. That should be adequate for most any approach. The ship felt very comfortable in the pattern and for a first landing. Not being used to the ship I flew the pattern at 60 kts, final at 55 kts, and slowed to about 50 kts over the fence". Even with these speed (which are a little faster than required) the landing roll on the grass runway was about 300 feet with out the use of the wheel brake.

All in all, the Apis was very enjoyable to fly. The performance seems that it would be similar to the previous generation of Standard Class sailplanes (i.e.: Libelle, Standard Cirrus, LS-I). For a little more money than one of the older ship you can have a ship whose structure is new, not 20 - 30 years old. And the ship just might be competitive in the Sport Class.

Additional information can be obtained from the Apis web site: http://apisgliders.com

# Pipistrel Aircraft Discovers Double Agent In Marketing Department

"He tell us these are hottest brand names in aviation," complained Yosef Kalinchek, chairman of Pipistrel, after firing the company's marketing director, who turned out to be a secret employee of its main competitor. "We name our beautiful airplanes "Sinus" and "Virus" like he tell us—graphics, brochures, everything.—now what we do? We make laughingstock!"

The latest Pipistrel press release (seriously, now) is shown below:

Classic Clean Lines mean excellent aircraft performance The Pipistrel - Sinus and Virus Motorgliders are now available in Australia and New Zealand, they are Type Certified and approved and when registered through the Australian Ultralight Federation they can be used for training, hire or general private flying, if they are registered through the Gliding Federation of Australia they can be used for general flying and training of the aircraft owners.

The Pipistrel Sinus and Virus are the world's first Ultralight certified composite two seater motorgliders. Made from JAR 22 long life composite materials both aircraft are economical to buy and own, and simple to fly and maintain.

The clean design, low drag and superb construction make these designs some of the most economical aircraft ever made.

Running on the Rotax 582 engine, the Sinus has a minimum range of 850 kms and the full potential is realised when the standard propeller is feathered to 90 degrees and the engine switched off. The Sinus will glide at around 32:1 when flown with one person and 28:1 when flown two-up, the unique side-by-side seating position make the aircraft ideal for training.

The Sinus and Virus are only available as fully built Type Certified Aircraft, they are not available as kits, each aircraft is manufactured, certified and test flown by the Slovenian manufacturer before stripping down into a 40 foot sea container for the month long sea journey to Australia and New Zealand. http://www.pipistrel.si/





Sinus Virus

## **Classified Ads**

L33 Solo, 1995, 350TT, excellent condition, stored in trailer, radio, audio vario, full tow-out gear, more... \$25,000. Chicago. IL

Email: CurtL33@aol.com

Website: www.hometown.aol.com/curtl33/myhomepage/l33.html



L33 Solo...Contact Curt Lewis

# Chicagoland Glider Council

## ...where the rubber meets the grass

President: Scott Wolf Vice-president: John Harrison Treasurer: John DeRosa Secretary: Don Berk

For submissions and to place classified ads Phone: 630-466-0741 Fax: 775-218-4738 donaldberk@hotmail.com

# **CLGC Meeting Schedule**

Oct 14, 2003 Nov 18, 2003 Dec 16, 2003 Jan 13, 2004 Feb 10, 2004

Mar 09, 2004

Apr 13, 2004

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